## Introduction

The Goldman Sachs Group, Inc. (Group Inc.) 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 high-net-worth 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., a Delaware corporation, and its consolidated subsidiaries.

References to "the 2013 Form 10-K" are to our Annual Report on Form 10-K for the year ended December 31, 2013. All references to 2013, 2012 and 2011 refer to our years ended, or the dates, as the context requires, December 31, 2013, December 31, 2012 and December 31, 2011, 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 and leverage 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 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 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 discussed below under "Certain Risk Factors That May Affect Our Businesses" as well as "Risk Factors" in Part I, Item 1A of the 2013 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 2013 Form 10-K.

## Executive Overview

The firm generated net earnings of $8.04 billion for 2013, compared with $7.48 billion for 2012 and $4.44 billion for 2011. Our diluted earnings per common share were $15.46 for 2013, compared with $14.13 for 2012 and $4.51 for 2011. Return on average common shareholders' equity (ROE) [1] was 11.0% for 2013, compared with 10.7% for 2012 and 3.7% for 2011.

Book value per common share increased approximately 5% to $152.48 and tangible book value per common share [2] increased approximately 7% to $143.11 compared with the end of 2012. [3] During the year, the firm repurchased 39.3 million shares of its common stock for a total cost of $6.17 billion, while maintaining strong capital levels. Our Tier 1 capital ratio was 16.7% and our Tier 1 common ratio [4] was 14.6% as of December 2013 (in each case under Basel I and also reflecting the revised market risk regulatory capital requirements which became effective on January 1, 2013).

The firm generated net revenues of $34.21 billion for 2013. These results reflected significantly higher net revenues in Investment Banking, as well as higher net revenues in Investing & Lending and Investment Management compared with 2012. These increases were offset by lower net revenues in Institutional Client Services compared with 2012.

An overview of net revenues for each of our business segments is provided below.

### Investment Banking

Net revenues in Investment Banking increased significantly compared with 2012, reflecting significantly higher net revenues in Underwriting, due to strong net revenues in both equity and debt underwriting. Net revenues in equity underwriting were significantly higher compared with 2012, reflecting an increase in client activity, particularly in initial public offerings. Net revenues in debt underwriting were significantly higher compared with 2012, principally due to leveraged finance activity. Net revenues in Financial Advisory were essentially unchanged compared with 2012.

### Institutional Client Services

Net revenues in Institutional Client Services decreased compared with 2012, reflecting lower net revenues in both Fixed Income, Currency and Commodities Client Execution and Equities.

The decrease in Fixed Income, Currency and Commodities Client Execution compared with 2012 reflected significantly lower net revenues in interest rate products compared with a solid 2012, and significantly lower net revenues in mortgages compared with a strong 2012. In addition, net revenues in currencies were slightly lower, while net revenues in credit products and commodities were essentially unchanged compared with 2012. Fixed Income, Currency and Commodities Client Execution operated in a generally challenging environment during much of 2013, as macroeconomic concerns and uncertainty led to challenging market-making conditions and generally lower levels of activity.

1. See "Results of Operations — Financial Overview" below for further information about our calculation of ROE.

2. 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. See "Equity Capital — Other Capital Metrics" below for further information about our calculation of tangible book value per common share.

3. In October 2013, Berkshire Hathaway Inc. and certain of its subsidiaries (collectively, Berkshire Hathaway) exercised in full the warrant to purchase shares of the firm's common stock, which required net share settlement and resulted in a reduction of approximately 3% to both book value per common share and tangible book value per common share. See "Equity Capital — Equity Capital Management" below for further information about the Berkshire Hathaway warrant.

4. Tier 1 common ratio is a non-GAAP measure and may not be comparable to similar non-GAAP measures used by other companies. See "Equity Capital — Consolidated Regulatory Capital Ratios" below for further information about our Tier 1 common ratio.

The decrease in Equities compared with 2012 was due to the sale of our Americas reinsurance business [1] in 2013 and the sale of our hedge fund administration business in 2012. Net revenues in equities client execution (excluding net revenues from our Americas reinsurance business) were higher compared with 2012, including significantly higher net revenues in cash products, partially offset by significantly lower net revenues in derivatives. Commissions and fees were slightly higher compared with 2012. Securities services net revenues were significantly lower compared with 2012, primarily due to the sale of our hedge fund administration business in 2012 (2012 included a gain on sale of $494 million). During 2013, Equities operated in an environment characterized by a significant increase in global equity prices, particularly in Japan and the U.S., and generally lower volatility levels.

The net loss attributable to the impact of changes in our own credit spreads on borrowings for which the fair value option was elected was $296 million ($220 million and $76 million related to Fixed Income, Currency and Commodities Client Execution and equities client execution, respectively) for 2013, compared with a net loss of $714 million ($433 million and $281 million related to Fixed Income, Currency and Commodities Client Execution and equities client execution, respectively) for 2012.

### Investing & Lending

Net revenues in Investing & Lending increased compared with 2012, reflecting a significant increase in net gains from investments in equity securities, driven by company-specific events and stronger corporate performance, as well as significantly higher global equity prices. In addition, net gains and net interest income from debt securities and loans were slightly higher, while other net revenues, related to our consolidated investments, were lower compared with 2012.

### Investment Management

Net revenues in Investment Management increased compared with 2012, reflecting higher management and other fees, primarily due to higher average assets under supervision. During the year, total assets under supervision increased $77 billion to $1.04 trillion. Long-term assets under supervision increased $81 billion, including net inflows of $41 billion [2], reflecting inflows in fixed income and equity assets, partially offset by outflows in alternative investment assets. Net market appreciation of $40 billion during the year was primarily in equity assets. Liquidity products decreased $4 billion.

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 a further discussion of the factors that may affect our future operating results, see "Certain Risk Factors That May Affect Our Businesses" below, as well as "Risk Factors" in Part I, Item 1A of the 2013 Form 10-K.

1. In April 2013, we completed the sale of a majority stake in our Americas reinsurance business and no longer consolidate this business. Net revenues related to the Americas reinsurance business were $317 million for 2013 and $1.08 billion for 2012. See Note 12 to the consolidated financial statements for further information about this sale.

2. Fixed income flows for 2013 include $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.

## Business Environment

Real gross domestic product (GDP), although generally rising, appeared to remain subdued in most major economies. Market sentiment improved in advanced economies, supported by better private sector growth prospects in the United States and signs of a turnaround in the Euro area, while monetary policy generally remained accommodative. Improvements in the U.S. economy reflected favorable developments in unemployment and housing, even though a reduction in fiscal spending weighed on growth. These improvements resulted in tighter credit spreads, significantly higher global equity prices and generally lower levels of volatility. However, signals during the year from the U.S. Federal Reserve that it would begin tapering its asset purchase program contributed to a rise in U.S. interest rates and a more challenging environment, particularly for emerging markets. In addition, continued political uncertainty, particularly the political debate in the United States surrounding the government shutdown and a potential breach of the debt ceiling, generally resulted in heightened risk aversion. These concerns also weighed on investment banking activity as industry-wide mergers and acquisitions activity declined compared with 2012. Industry-wide equity underwriting activity improved and industry-wide debt underwriting activity remained solid. For a further discussion of how market conditions may affect our businesses, see "Certain Risk Factors That May Affect Our Businesses" below as well as "Risk Factors" in Part I, Item 1A of the 2013 Form 10-K.

### Global

During 2013, real GDP growth appeared to decline in many advanced economies and emerging markets. In advanced economies, the slowdown primarily reflected a decline in fixed investment growth in the United States and continued weakness in the Euro area. In emerging markets, growth in domestic demand decreased and current account balances worsened. Unemployment levels declined in some economies compared with 2012, including the United States, but increased in others, particularly in the Euro area. The rate of unemployment continued to remain elevated in many advanced economies. During 2013, the U.S. Federal Reserve, the Bank of England and the Bank of Japan each left policy interest rates unchanged, while the European Central Bank reduced its policy interest rate. In December 2013, the U.S. Federal Reserve announced that it would begin to scale back its asset purchase program by $10 billion to $75 billion per month. The U.S. dollar weakened against both the Euro and the British pound, while it strengthened significantly against the Japanese yen.

### United States

In the United States, real GDP increased by 1.9% in 2013, compared with an increase of 2.8% in 2012. Growth decelerated on the back of a significant contraction in federal government spending as a result of sequestration, as well as a slowdown in fixed investment. House prices, house sales and housing starts increased, although the rise in U.S. bond yields drove mortgage interest rates higher. Industrial production expanded in 2013, but at a slower pace than in the previous year. Although political uncertainty around the federal government shutdown led to some temporary deterioration, business and consumer confidence generally improved during the year, primarily reflecting continued improvement in the private sector. Measures of inflation were lower compared with 2012. The unemployment rate declined during 2013, but remained elevated. The U.S. Federal Reserve maintained its federal funds rate at a target range of zero to 0.25% during the year and announced in December 2013 a reduction in its monthly program to purchase U.S. Treasury securities and mortgage-backed securities. In addition, the U.S. Federal Reserve affirmed its commitment to keep short-term interest rates exceptionally low for some time, even after the unemployment rate falls to 6.5% or inflation rises materially. The yield on the 10-year U.S. Treasury note rose by 126 basis points during 2013 to 3.04%. In equity markets, the NASDAQ Composite Index, the S&P 500 Index and the Dow Jones Industrial Average increased by 38%, 30% and 26%, respectively, during 2013.

### Europe

In the Euro area, real GDP declined by 0.4% in 2013, compared with a decrease of 0.6% in 2012. The contraction was principally due to continued weakness in domestic demand, primarily reflecting further declines in fixed investment and consumer spending. Business and consumer confidence remained at low levels and measures of core inflation decelerated further during the year. The unemployment rate remained elevated, particularly in Italy and Spain. Political uncertainty in Italy and the debt crisis in Cyprus temporarily increased market volatility earlier in the year, while private sector lending conditions remained very tight in periphery countries. To address these issues, the European Central Bank decreased its main refinancing operations rate by 50 basis points to 0.25%, and adopted forward guidance for the future path of interest rates as a new part of its monetary policy tools. The Euro appreciated by 5% against the U.S. dollar. In the United Kingdom, real GDP increased by 1.8% in 2013, compared with an increase of 0.3% in 2012. The Bank of England maintained its official bank rate at 0.50% and also introduced forward guidance for the future path of interest rates, contingent on the evolution of employment and inflation. The British pound appreciated by 2% against the U.S. dollar. Long-term government bond yields generally increased during the year, except in the periphery countries where yields fell. In equity markets, the DAX Index, the CAC 40 Index, the Euro Stoxx 50 Index and the FTSE 100 Index increased by 25%, 18%, 18% and 14%, respectively, during 2013.

### Asia

In Japan, real GDP increased by 1.6% in 2013, compared with an increase of 1.4% in 2012. Growth was supported by significant increases in private housing investment and in public fixed investment. However, the trade balance continued to deteriorate during 2013. Measures of inflation turned positive during the year, but remain far from the Bank of Japan's newly adopted 2% inflation target. In addition, the Bank of Japan, under new leadership, introduced a new program of quantitative and qualitative monetary easing, which included a significant increase in the size and mandate of its asset purchases, as well as a commitment to a more targeted communication strategy. The Bank of Japan also changed its main operating target for money market operations from the uncollateralized overnight call rate to the monetary base, which is set to increase annually by approximately 60-70 trillion yen. The yield on 10-year Japanese government bonds fell by 5 basis points during the year to 0.74%. The Japanese yen depreciated by 21% against the U.S. dollar and, in equity markets, the Nikkei 225 Index increased by 57%. In China, real GDP increased by 7.7% in 2013, broadly in line with the increase in the previous year, although impacted by less supportive monetary policies and tightening financial conditions. Measures of inflation remained moderate and The People's Bank of China kept the reserve requirement ratio unchanged. The Chinese yuan appreciated by 3% against the U.S. dollar and, in equity markets, the Shanghai Composite Index fell by 7%. In India, real GDP increased by an estimated 4.7% in 2013, compared with an increase of 5.1% in 2012. Growth decelerated, primarily reflecting a further softening in domestic demand growth and only slight improvements in the current account balance. The rate of wholesale inflation declined compared with 2012. The Indian rupee depreciated by 12% against the U.S. dollar, while, in equity markets, the BSE Sensex Index increased by 9%. Equity markets in Hong Kong and South Korea were slightly higher, as the Hang Seng Index increased by 3% and the KOSPI Composite Index increased by 1% during 2013.

### Other Markets

In Brazil, real GDP increased by an estimated 2.2% in 2013, compared with an increase of 1.0% in 2012. Growth accelerated on the back of increasing domestic demand and fixed investment. The Brazilian real depreciated by 15% against the U.S. dollar and, in equity markets, the Bovespa Index decreased by 15% during 2013. In Russia, real GDP increased by 1.3% in 2013, compared with an increase of 3.4% in 2012. This slowdown primarily reflected a decline in domestic demand growth and a contraction in investment growth, particularly during the middle of the year. The Russian ruble depreciated by 8% against the U.S. dollar, while, in equity markets, the MICEX Index increased by 2% during 2013.

## 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. Valuation adjustments are generally based on market evidence.

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 2013 and December 2012, level 3 assets represented 4.4% and 5.0%, respectively, of our total assets. 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.

**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 that are independent of the revenue-producing units. 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., broker 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.** The firm's independent model validation group, consisting of quantitative professionals who are separate from model developers, performs an independent model approval process. This process incorporates a review of a diverse set of model and trade parameters across a broad range of values (including extreme and/or improbable conditions) in order to critically evaluate:

- the model's suitability for valuation and risk management of a particular instrument type;
- the model's accuracy in reflecting the characteristics of the related product and its significant risks;
- the suitability of the calculation techniques incorporated in the model;
- the model's consistency with models for similar products; and
- the model's sensitivity to input parameters and assumptions.

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.

**Level 3 Financial Assets at Fair Value.** The table below presents financial assets measured at fair value and the amount of such assets that are classified within level 3 of the fair value hierarchy.

Total level 3 financial assets were $40.01 billion and $47.10 billion as of December 2013 and December 2012, respectively.

See Notes 5 through 8 to the consolidated financial statements for further information about changes in level 3 financial assets and fair value measurements.

| | As of December 2013 | | As of December 2012 | |
|---|---|---|---|---|
| *in millions* | Total at Fair Value | Level 3 Total | Total at Fair Value | Level 3 Total |
| Commercial paper, certificates of deposit, time deposits and other money market instruments | $ 8,608 | $ — | $ 6,057 | $ — |
| U.S. government and federal agency obligations | 71,072 | — | 93,241 | — |
| Non-U.S. government and agency obligations | 40,944 | 40 | 62,250 | 26 |
| Mortgage and other asset-backed loans and securities: | | | | |
| Loans and securities backed by commercial real estate | 6,596 | 2,692 | 9,805 | 3,389 |
| Loans and securities backed by residential real estate | 9,025 | 1,961 | 8,216 | 1,619 |
| Bank loans and bridge loans | 17,400 | 9,324 | 22,407 | 11,235 |
| Corporate debt securities | 17,412 | 2,873 | 20,981 | 2,821 |
| State and municipal obligations | 1,476 | 257 | 2,477 | 619 |
| Other debt obligations | 3,129 | 807 | 2,251 | 1,185 |
| Equities and convertible debentures | 101,024 | 14,685 | 96,454 | 14,855 |
| Commodities | 4,556 | — | 11,696 | — |
| Total cash instruments | 281,242 | 32,639 | 335,835 | 35,749 |
| Derivatives | 57,879 | 7,076 | 71,176 | 9,920 |
| Financial instruments owned, at fair value | 339,121 | 39,715 | 407,011 | 45,669 |
| Securities segregated for regulatory and other purposes | 31,937 | — | 30,484 | — |
| Securities purchased under agreements to resell | 161,297 | 63 | 141,331 | 278 |
| Securities borrowed | 60,384 | — | 38,395 | — |
| Receivables from customers and counterparties | 7,416 | 235 | 7,866 | 641 |
| Other assets [1] | 18 | — | 13,426 | 507 |
| **Total** | $600,173 | $40,013 | $638,513 | $47,095 |

1. December 2012 consists of assets classified as held for sale related to our Americas reinsurance business, in which a majority stake was sold in April 2013, primarily consisting of securities accounted for as available-for-sale and insurance separate account assets. See Notes 3 and 12 to the consolidated financial statements for further information about the sale of our Americas reinsurance business.

**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 annually in the fourth quarter for impairment, 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 would be performed by comparing the estimated fair value of each reporting unit with its estimated net book value.

During the fourth quarter of 2013, we assessed goodwill for impairment. The qualitative assessment required management to make judgments and to evaluate several factors, which included, but were not limited to, macroeconomic conditions, industry and market considerations, cost factors, overall financial performance, entity-specific events, events affecting reporting units and sustained changes in our stock price. Based on our evaluation of these factors, we determined that it was more likely than not that the fair value of each of the reporting units exceeded its respective carrying amount, and therefore, we determined that goodwill was not impaired and that a quantitative goodwill impairment test was not required.

If we experience a prolonged period of weakness in the business environment or financial markets, our goodwill could be impaired in the future. In addition, significant changes to critical inputs of the goodwill impairment test (e.g., cost of equity) 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.

**Identifiable Intangible Assets.** We amortize our identifiable intangible assets over their estimated lives 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 lives of our identifiable intangible assets by major asset class.

A prolonged 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 customer contracts and relationships. Management judgment is required to evaluate whether indications of potential impairment have occurred, and to test intangibles for impairment if required.

An impairment loss, 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 12 to the consolidated financial statements for impairments of 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.

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 on 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 estimate and provide for potential liabilities that may arise out of tax audits to the extent that uncertain tax positions fail to meet the recognition standard under FASB Accounting Standards Codification 740. See Note 24 to the consolidated financial statements for further information about accounting for income taxes.

## 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 "Certain Risk Factors That May Affect Our Businesses" below and "Risk Factors" in Part I, Item 1A of the 2013 Form 10-K for a further discussion of the impact of economic and market conditions on our results of operations.

### Financial Overview

The table below presents an overview of our financial results.

| | Year Ended December | | |
|---|---|---|---|
| *$ in millions, except per share amounts* | **2013** | 2012 | 2011 |
| Net revenues | **$34,206** | $34,163 | $28,811 |
| Pre-tax earnings | **11,737** | 11,207 | 6,169 |
| Net earnings | **8,040** | 7,475 | 4,442 |
| Net earnings applicable to common shareholders | **7,726** | 7,292 | 2,510 |
| Diluted earnings per common share | **15.46** | 14.13 | 4.51 [2] |
| Return on average common shareholders' equity [1] | **11.0%** | 10.7% | 3.7% [2] |

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.

| | Average for the Year Ended December | | |
|---|---|---|---|
| *in millions* | **2013** | 2012 | 2011 |
| Total shareholders' equity | **$77,353** | $72,530 | $72,708 |
| Preferred stock | **(6,892)** | (4,392) | (3,990) |
| **Common shareholders' equity** | **$70,461** | $68,138 | $68,718 |

2. Excluding the impact of the preferred dividend of $1.64 billion in the first quarter of 2011 (calculated as the difference between the carrying value and the redemption value of the preferred stock), related to the redemption of our 10% Cumulative Perpetual Preferred Stock, Series G (Series G Preferred Stock) held by Berkshire Hathaway, diluted earnings per common share were $7.46 and ROE was 5.9% for 2011. We believe that presenting our results for 2011 excluding this dividend is meaningful, as it increases the comparability of period-to-period results. Diluted earnings per common share and ROE excluding this dividend are non-GAAP measures and may not be comparable to similar non-GAAP measures used by other companies. The tables below present the calculation of net earnings applicable to common shareholders, diluted earnings per common share and average common shareholders' equity excluding the impact of this dividend.

| *in millions, except per share amount* | Year Ended December 2011 |
|---|---|
| Net earnings applicable to common shareholders | $ 2,510 |
| Impact of the Series G Preferred Stock dividend | 1,643 |
| Net earnings applicable to common shareholders, excluding the impact of the Series G Preferred Stock dividend | 4,153 |
| Divided by: average diluted common shares outstanding | 556.9 |
| Diluted earnings per common share, excluding the impact of the Series G Preferred Stock dividend | $ 7.46 |

| *in millions* | Average for the Year Ended December 2011 |
|---|---|
| Total shareholders' equity | $72,708 |
| Preferred stock | (3,990) |
| Common shareholders' equity | 68,718 |
| Impact of the Series G Preferred Stock dividend | 1,264 |
| Common shareholders' equity, excluding the impact of the Series G Preferred Stock dividend | $69,982 |

### Net Revenues

**2013 versus 2012.** Net revenues on the consolidated statements of earnings were $34.21 billion for 2013, essentially unchanged compared with 2012. 2013 included significantly higher investment banking revenues, as well as higher other principal transactions revenues and investment management revenues. In addition, commissions and fees were slightly higher compared with 2012. These increases were offset by lower market-making revenues and lower net interest income compared with 2012.

**2012 versus 2011.** Net revenues on the consolidated statements of earnings were $34.16 billion for 2012, 19% higher than 2011, reflecting significantly higher other principal transactions revenues, as well as higher market-making revenues, investment banking revenues and investment management revenues compared with 2011. These increases were partially offset by significantly lower net interest income and lower commissions and fees compared with 2011.

### Non-interest Revenues

#### Investment banking

During 2013, investment banking revenues reflected an operating environment generally characterized by improved industry-wide equity underwriting activity, particularly in initial public offerings, as global equity prices significantly increased during the year. In addition, industry-wide debt underwriting activity remained solid, and included significantly higher leveraged finance activity, as interest rates remained low. However, ongoing macroeconomic concerns continued to weigh on investment banking activity as industry-wide mergers and acquisitions activity declined compared with 2012. If macroeconomic concerns continue and result in lower levels of client activity, investment banking revenues would likely be negatively impacted.

**2013 versus 2012.** Investment banking revenues on the consolidated statements of earnings were $6.00 billion for 2013, 22% higher than 2012, reflecting significantly higher revenues in underwriting, due to strong revenues in both equity and debt underwriting. Revenues in equity underwriting were significantly higher compared with 2012, reflecting an increase in client activity, particularly in initial public offerings. Revenues in debt underwriting were significantly higher compared with 2012, principally due to leveraged finance activity. Revenues in financial advisory were essentially unchanged compared with 2012.

**2012 versus 2011.** Investment banking revenues on the consolidated statements of earnings were $4.94 billion for 2012, 13% higher than 2011, reflecting significantly higher revenues in underwriting, due to strong revenues in debt underwriting. Revenues in debt underwriting were significantly higher compared with 2011, primarily reflecting higher revenues from investment-grade and leveraged finance activity. Revenues in equity underwriting were lower compared with 2011, primarily reflecting a decline in industry-wide initial public offerings. Revenues in financial advisory were essentially unchanged compared with 2011.

#### Investment management

During 2013, investment management revenues reflected an operating environment generally characterized by improved asset prices, particularly in equities, resulting in appreciation in the value of client assets. In addition, the mix of average assets under supervision shifted slightly compared with 2012 from liquidity products to long-term assets under supervision, primarily due to growth in equity and fixed income assets. In the future, if asset prices were to decline, or investors favor asset classes that typically generate lower fees or investors withdraw their assets, investment management revenues would likely be negatively impacted. In addition, continued concerns about the global economic outlook could result in downward pressure on assets under supervision.

**2013 versus 2012.** Investment management revenues on the consolidated statements of earnings were $5.19 billion for 2013, 5% higher than 2012, reflecting higher management and other fees, primarily due to higher average assets under supervision.

**2012 versus 2011.** Investment management revenues on the consolidated statements of earnings were $4.97 billion for 2012, 6% higher than 2011, due to significantly higher incentive fees, partially offset by slightly lower management and other fees.

#### Commissions and fees

During 2013, commissions and fees reflected an environment characterized by higher average daily volumes in listed cash equities in Asia and Europe and lower average daily volumes in listed cash equities in the United States, and generally lower volatility levels compared with 2012. If market volumes were to decline, commissions and fees would likely be negatively impacted.

**2013 versus 2012.** Commissions and fees on the consolidated statements of earnings were $3.26 billion for 2013, slightly higher than 2012, primarily reflecting higher commissions and fees in Asia and Europe. During 2013, our average daily volumes were higher in Asia and Europe and lower in the United States compared with 2012, consistent with listed cash equity market volumes.

**2012 versus 2011.** Commissions and fees on the consolidated statements of earnings were $3.16 billion for 2012, 16% lower than 2011, reflecting lower commissions and fees in the United States, Europe and Asia. Our average daily volumes during 2012 were lower in each of these regions compared with 2011, consistent with listed cash equity market volumes.

### Market making

"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. Market-making activities are included in our Institutional Client Services segment.

During 2013, market-making revenues reflected a challenging operating environment that required continual reassessment of the outlook for the global economy, as uncertainty about when the U.S. Federal Reserve would begin tapering its asset purchase program, as well as constant global political risk and uncertainty, were interspersed with improvements in the U.S. economy over the course of the year. As a result, our clients' risk appetite and activity levels fluctuated during 2013. Compared with 2012, activity levels were generally lower, global equity prices significantly increased and credit spreads tightened. If macroeconomic concerns continue over the long term, market-making revenues would likely continue to be negatively impacted.

**2013 versus 2012.** Market-making revenues on the consolidated statements of earnings were $9.37 billion for 2013, 17% lower than 2012. The decrease compared with 2012 was primarily due to significantly lower revenues in equity products, mortgages and interest rate products, as well as lower revenues in currencies. The decrease in equity products was due to the sale of our Americas reinsurance business in 2013, the sale of our hedge fund administration business in 2012 (2012 included a gain on sale of $494 million) and lower revenues in derivatives, partially offset by significantly higher revenues in cash products compared with 2012. Revenues in commodities were higher, while revenues in credit products were essentially unchanged compared with 2012. In December 2013, we completed the sale of a majority stake in our European insurance business and recognized a gain of $211 million.

**2012 versus 2011.** Market-making revenues on the consolidated statements of earnings were $11.35 billion for 2012, 22% higher than 2011, primarily reflecting significantly higher revenues in mortgages and higher revenues in interest rate products, credit products and equity cash products, partially offset by significantly lower revenues in commodities. In addition, market-making revenues included significantly higher revenues in securities services compared with 2011, reflecting a gain of $494 million on the sale of our hedge fund administration business.

### Other principal transactions

"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. Other principal transactions are included in our Investing & Lending segment.

During 2013, other principal transactions revenues generally reflected favorable company-specific events and strong corporate performance, as well as the impact of significantly higher global equity prices and tighter corporate credit spreads. However, concerns about the outlook for the global economy and uncertainty over financial regulatory reform continue to impact the global marketplace. If equity markets decline or credit spreads widen, other principal transactions revenues would likely be negatively impacted.

**2013 versus 2012.** Other principal transactions revenues on the consolidated statements of earnings were $6.99 billion for 2013, 19% higher than 2012, reflecting a significant increase in net gains from investments in equity securities, driven by company-specific events and stronger corporate performance, as well as significantly higher global equity prices. In addition, net gains from debt securities and loans were slightly higher, while revenues related to our consolidated investments were lower compared with 2012.

**2012 versus 2011.** Other principal transactions revenues on the consolidated statements of earnings were $5.87 billion for 2012 compared with $1.51 billion for 2011. The increase compared with 2011 reflected a significant increase in net gains from investments in equity securities, primarily in public equities, principally due to the impact of an increase in global equity prices during 2012 after equity prices in Europe and Asia declined significantly during 2011. Net gains from equity securities included a gain in 2012 and a loss in 2011 related to our investment in the ordinary shares of Industrial and Commercial Bank of China Limited (ICBC). The increase compared with 2011 also reflected a significant increase in net gains from debt securities and loans, primarily due to approximately $1 billion of unrealized losses related to relationship lending activities, including the effect of hedges, in 2011 and the impact of a more favorable credit environment as credit spreads tightened during 2012 after widening during 2011. These increases were partially offset by lower revenues related to our consolidated investments.

### Net Interest Income

**2013 versus 2012.** Net interest income on the consolidated statements of earnings was $3.39 billion for 2013, 13% lower than 2012. The decrease compared with 2012 was primarily due to lower average yields on financial instruments owned, at fair value, partially offset by lower interest expense on financial instruments sold, but not yet purchased, at fair value and collateralized financings.

**2012 versus 2011.** Net interest income on the consolidated statements of earnings was $3.88 billion for 2012, 25% lower than 2011. The decrease compared with 2011 was primarily due to lower average yields on financial instruments owned, at fair value and collateralized agreements.

See "Statistical Disclosures — Distribution of Assets, Liabilities and Shareholders' Equity" for further information about our sources of net interest income.

### 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.

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

| | Year Ended December | | |
|---|---|---|---|
| *$ in millions* | **2013** | 2012 | 2011 |
| Compensation and benefits | **$12,613** | $12,944 | $12,223 |
| Brokerage, clearing, exchange and distribution fees | **2,341** | 2,208 | 2,463 |
| Market development | **541** | 509 | 640 |
| Communications and technology | **776** | 782 | 828 |
| Depreciation and amortization | **1,322** | 1,738 | 1,865 |
| Occupancy | **839** | 875 | 1,030 |
| Professional fees | **930** | 867 | 992 |
| Insurance reserves [1] | **176** | 598 | 529 |
| Other expenses | **2,931** | 2,435 | 2,072 |
| Total non-compensation expenses | **9,856** | 10,012 | 10,419 |
| **Total operating expenses** | **$22,469** | $22,956 | $22,642 |
| Total staff at period-end | **32,900** | 32,400 | 33,300 |

1. Related revenues are included in "Market making" in the consolidated statements of earnings.

**2013 versus 2012.** Operating expenses on the consolidated statements of earnings were $22.47 billion for 2013, 2% lower than 2012. Compensation and benefits expenses on the consolidated statements of earnings were $12.61 billion for 2013, 3% lower compared with $12.94 billion for 2012. The ratio of compensation and benefits to net revenues for 2013 was 36.9% compared with 37.9% for 2012. Total staff increased 2% during 2013.

Non-compensation expenses on the consolidated statements of earnings were $9.86 billion for 2013, 2% lower than 2012. The decrease compared with 2012 included a decline in insurance reserves, reflecting the sale of our Americas reinsurance business, and a decrease in depreciation and amortization expenses, primarily reflecting lower impairment charges and lower operating expenses related to consolidated investments. These decreases were partially offset by an increase in other expenses, due to higher net provisions for litigation and regulatory proceedings, and higher brokerage, clearing, exchange and distribution fees. Net provisions for litigation and regulatory proceedings for 2013 were $962 million (primarily comprised of net provisions for mortgage-related matters) compared with $448 million for 2012 (including a settlement with the Board of Governors of the Federal Reserve System (Federal Reserve Board) regarding the independent foreclosure review). 2013 included a charitable contribution of $155 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.

**2012 versus 2011.** Operating expenses on the consolidated statements of earnings were $22.96 billion for 2012, essentially unchanged compared with 2011. Compensation and benefits expenses on the consolidated statements of earnings were $12.94 billion for 2012, 6% higher compared with $12.22 billion for 2011. The ratio of compensation and benefits to net revenues for 2012 was 37.9%, compared with 42.4% for 2011. Total staff decreased 3% during 2012.

Non-compensation expenses on the consolidated statements of earnings were $10.01 billion for 2012, 4% lower compared with 2011. The decrease compared with 2011 primarily reflected lower brokerage, clearing, exchange and distribution fees, lower occupancy expenses and a decrease in depreciation and amortization expenses, principally due to lower impairment charges. In addition, market development expenses and professional fees declined compared with 2011, primarily reflecting the impact of expense reduction initiatives. These decreases were partially offset by higher other expenses and increased insurance reserves related to our reinsurance business. The increase in other expenses compared with 2011 primarily reflected higher net provisions for litigation and regulatory proceedings and higher charitable contributions. Net provisions for litigation and regulatory proceedings were $448 million during 2012 (including a settlement with the Federal Reserve Board regarding the independent foreclosure review) compared with $175 million for 2011. Charitable contributions were $225 million during 2012, including $159 million to Goldman Sachs Gives, our donor-advised fund, and $10 million to The Goldman Sachs Foundation, compared with $163 million during 2011, including $78 million to Goldman Sachs Gives and $25 million to The Goldman Sachs Foundation. Compensation was reduced to fund the charitable contribution to Goldman Sachs Gives. The firm asks its participating managing directors to make recommendations regarding potential charitable recipients for this contribution.

## Provision for Taxes

The effective income tax rate for 2013 was 31.5%, down from 33.3% for 2012. The decrease from 33.3% to 31.5% was primarily due to a determination that certain non-U.S. earnings will be permanently reinvested abroad.

The effective income tax rate for 2012 was 33.3%, up from 28.0% for 2011. The increase from 28.0% to 33.3% was primarily due to the earnings mix and a decrease in the impact of permanent benefits.

The rules related to the deferral of U.S. tax on certain non-repatriated active financing income expired effective December 31, 2013. This change is not expected to have a material impact on our financial condition, results of operations or cash flows for the year ending December 2014.

## Segment Operating Results

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

| | | Year Ended December | | |
|---|---|---|---|---|
| *in millions* | | **2013** | 2012 | 2011 |
| **Investment Banking** | Net revenues | **$ 6,004** | $ 4,926 | $ 4,355 |
| | Operating expenses | **3,475** | 3,330 | 2,995 |
| | **Pre-tax earnings** | **$ 2,529** | $ 1,596 | $ 1,360 |
| **Institutional Client Services** | Net revenues | **$15,721** | $18,124 | $17,280 |
| | Operating expenses | **11,782** | 12,480 | 12,837 |
| | **Pre-tax earnings** | **$ 3,939** | $ 5,644 | $ 4,443 |
| **Investing & Lending** | Net revenues | **$ 7,018** | $ 5,891 | $ 2,142 |
| | Operating expenses | **2,684** | 2,666 | 2,673 |
| | **Pre-tax earnings/(loss)** | **$ 4,334** | $ 3,225 | $ (531) |
| **Investment Management** | Net revenues | **$ 5,463** | $ 5,222 | $ 5,034 |
| | Operating expenses | **4,354** | 4,294 | 4,020 |
| | **Pre-tax earnings** | **$ 1,109** | $ 928 | $ 1,014 |
| **Total** | **Net revenues** | **$34,206** | $34,163 | $28,811 |
| | **Operating expenses** | **22,469** | 22,956 | 22,642 |
| | **Pre-tax earnings** | **$11,737** | $11,207 | $ 6,169 |

Total operating expenses in the table above include the following expenses that have not been allocated to our segments:

- charitable contributions of $155 million for 2013, $169 million for 2012 and $103 million for 2011; and
- real estate-related exit costs of $19 million for 2013, $17 million for 2012 and $14 million for 2011. Real estate-related exit costs are included in "Depreciation and amortization" and "Occupancy" in the consolidated statements of earnings.

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 discussion of segment operating results follows.

## 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, risk management, restructurings and spin-offs, and derivative transactions directly related to these client advisory assignments.

**Underwriting.** Includes public offerings and private placements, including domestic and cross-border transactions, 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.

| | Year Ended December | | |
|---|---|---|---|
| *in millions* | **2013** | 2012 | 2011 |
| Financial Advisory | **$1,978** | $1,975 | $1,987 |
| Equity underwriting | **1,659** | 987 | 1,085 |
| Debt underwriting | **2,367** | 1,964 | 1,283 |
| Total Underwriting | **4,026** | 2,951 | 2,368 |
| Total net revenues | **6,004** | 4,926 | 4,355 |
| Operating expenses | **3,475** | 3,330 | 2,995 |
| **Pre-tax earnings** | **$2,529** | $1,596 | $1,360 |

The table below presents our financial advisory and underwriting transaction volumes. [1]

| | Year Ended December | | |
|---|---|---|---|
| *in billions* | **2013** | 2012 | 2011 |
| Announced mergers and acquisitions | **$ 625** | $ 739 | $ 616 |
| Completed mergers and acquisitions | **633** | 575 | 656 |
| Equity and equity-related offerings [2] | **91** | 57 | 55 |
| Debt offerings [3] | **280** | 242 | 206 |

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.

**2013 versus 2012.** Net revenues in Investment Banking were $6.00 billion for 2013, 22% higher than 2012.

Net revenues in Financial Advisory were $1.98 billion, essentially unchanged compared with 2012. Net revenues in Underwriting were $4.03 billion, 36% higher than 2012, due to strong net revenues in both equity and debt underwriting. Net revenues in equity underwriting were significantly higher compared with 2012, reflecting an increase in client activity, particularly in initial public offerings. Net revenues in debt underwriting were significantly higher compared with 2012, principally due to leveraged finance activity.

During 2013, Investment Banking operated in an environment generally characterized by improved industry-wide equity underwriting activity, particularly in initial public offerings, as global equity prices significantly increased during the year. In addition, industry-wide debt underwriting activity remained solid, and included significantly higher leveraged finance activity, as interest rates remained low. However, ongoing macroeconomic concerns continued to weigh on investment banking activity as industry-wide mergers and acquisitions activity declined compared with 2012. If macroeconomic concerns continue and result in lower levels of client activity, net revenues in Investment Banking would likely be negatively impacted.

During 2013, our investment banking transaction backlog increased significantly due to significantly higher estimated net revenues from both potential advisory transactions and potential underwriting transactions. The increase in underwriting reflects significantly higher estimated net revenues from potential equity underwriting transactions, primarily in initial public offerings, and higher estimated net revenues from potential debt underwriting transactions, principally from leveraged finance activity.

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.

Operating expenses were $3.48 billion for 2013, 4% higher than 2012, due to increased compensation and benefits expenses, primarily resulting from higher net revenues. Pre-tax earnings were $2.53 billion in 2013, 58% higher than 2012.

**2012 versus 2011.** Net revenues in Investment Banking were $4.93 billion for 2012, 13% higher than 2011.

Net revenues in Financial Advisory were $1.98 billion, essentially unchanged compared with 2011. Net revenues in Underwriting were $2.95 billion, 25% higher than 2011, due to strong net revenues in debt underwriting. Net revenues in debt underwriting were significantly higher compared with 2011, primarily reflecting higher net revenues from investment-grade and leveraged finance activity. Net revenues in equity underwriting were lower compared with 2011, primarily reflecting a decline in industry-wide initial public offerings.

During 2012, Investment Banking operated in an environment generally characterized by continued concerns about the outlook for the global economy and political uncertainty. These concerns weighed on investment banking activity, as completed mergers and acquisitions activity declined compared with 2011, and equity and equity-related underwriting activity remained low, particularly in initial public offerings. However, industry-wide debt underwriting activity improved compared with 2011, as credit spreads tightened and interest rates remained low.

During 2012, our investment banking transaction backlog increased due to an increase in potential debt underwriting transactions, primarily reflecting an increase in leveraged finance transactions, and an increase in potential advisory transactions. These increases were partially offset by a decrease in potential equity underwriting transactions compared with the end of 2011, reflecting uncertainty in market conditions.

Operating expenses were $3.33 billion for 2012, 11% higher than 2011, due to increased compensation and benefits expenses, primarily resulting from higher net revenues. Pre-tax earnings were $1.60 billion in 2012, 17% higher than 2011.

### 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.

We generate market-making revenues in these activities in three ways:

- In large, highly liquid markets (such as markets for U.S. Treasury bills or certain mortgage pass-through certificates), we execute a high volume of transactions for our clients for modest spreads and fees.
- 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.
- 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).

Given the focus on the mortgage market, our mortgage activities are further described below.

Our activities in mortgages include 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.

We buy, hold and sell long and short mortgage positions, primarily for market making for our clients. Our inventory therefore changes based on client demands and is generally held for short-term periods.

See Notes 18 and 27 to the consolidated financial statements for information about exposure to mortgage repurchase requests, mortgage rescissions and mortgage-related litigation.

**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 over-the-counter 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.

| | Year Ended December | | |
|---|---|---|---|
| *in millions* | **2013** | 2012 | 2011 |
| Fixed Income, Currency and Commodities Client Execution | **$ 8,651** | $ 9,914 | $ 9,018 |
| Equities client execution [1] | **2,594** | 3,171 | 3,031 |
| Commissions and fees | **3,103** | 3,053 | 3,633 |
| Securities services | **1,373** | 1,986 | 1,598 |
| Total Equities | **7,070** | 8,210 | 8,262 |
| Total net revenues | **15,721** | 18,124 | 17,280 |
| Operating expenses | **11,782** | 12,480 | 12,837 |
| **Pre-tax earnings** | **$ 3,939** | $ 5,644 | $ 4,443 |

1. In April 2013, we completed the sale of a majority stake in our Americas reinsurance business and no longer consolidate this business. Net revenues related to the Americas reinsurance business were $317 million for 2013, $1.08 billion for 2012 and $880 million for 2011. See Note 12 to the consolidated financial statements for further information about this sale.

**2013 versus 2012.** Net revenues in Institutional Client Services were $15.72 billion for 2013, 13% lower than 2012.

Net revenues in Fixed Income, Currency and Commodities Client Execution were $8.65 billion for 2013, 13% lower than 2012, reflecting significantly lower net revenues in interest rate products compared with a solid 2012, and significantly lower net revenues in mortgages compared with a strong 2012. The decrease in interest rate products and mortgages primarily reflected the impact of a more challenging environment and lower activity levels compared with 2012. In addition, net revenues in currencies were slightly lower, while net revenues in credit products and commodities were essentially unchanged compared with 2012. In December 2013, we completed the sale of a majority stake in our European insurance business and recognized a gain of $211 million.

Net revenues in Equities were $7.07 billion for 2013, 14% lower compared with 2012, due to the sale of our Americas reinsurance business [1] in 2013 and the sale of our hedge fund administration business in 2012. Net revenues in equities client execution (excluding net revenues from our Americas reinsurance business) were higher compared with 2012, including significantly higher net revenues in cash products, partially offset by significantly lower net revenues in derivatives. Commissions and fees were slightly higher compared with 2012, reflecting higher commissions and fees in Asia and Europe, partially offset by lower commissions and fees in the United States. Our average daily volumes during 2013 were higher in Asia and Europe and lower in the United States compared with 2012, consistent with listed cash equity market volumes. Securities services net revenues were significantly lower compared with 2012, primarily due to the sale of our hedge fund administration business in 2012 (2012 included a gain on sale of $494 million). During 2013, Equities operated in an environment characterized by a significant increase in global equity prices, particularly in Japan and the U.S., and generally lower volatility levels.

The net loss attributable to the impact of changes in our own credit spreads on borrowings for which the fair value option was elected was $296 million ($220 million and $76 million related to Fixed Income, Currency and Commodities Client Execution and equities client execution, respectively) for 2013, compared with a net loss of $714 million ($433 million and $281 million related to Fixed Income, Currency and Commodities Client Execution and equities client execution, respectively) for 2012.

During 2013, Institutional Client Services operated in a challenging environment that required continual reassessment of the outlook for the global economy, as uncertainty about when the U.S. Federal Reserve would begin tapering its asset purchase program, as well as constant global political risk and uncertainty, were interspersed with improvements in the U.S. economy over the course of the year. As a result, our clients' risk appetite and activity levels fluctuated during 2013. Compared with 2012, activity levels were generally lower, global equity prices significantly increased and credit spreads tightened. If macroeconomic concerns continue over the long term, net revenues in Fixed Income, Currency and Commodities Client Execution and Equities would likely continue to be negatively impacted.

Operating expenses were $11.78 billion for 2013, 6% lower than 2012, due to decreased compensation and benefits expenses, primarily resulting from lower net revenues, and lower expenses as a result of the sale of a majority stake in our Americas reinsurance business in April 2013. These decreases were partially offset by increased net provisions for litigation and regulatory proceedings, primarily comprised of net provisions for mortgage-related matters, and higher brokerage, clearing, exchange and distribution fees. Pre-tax earnings were $3.94 billion in 2013, 30% lower than 2012.

**2012 versus 2011.** Net revenues in Institutional Client Services were $18.12 billion for 2012, 5% higher than 2011.

Net revenues in Fixed Income, Currency and Commodities Client Execution were $9.91 billion for 2012, 10% higher than 2011. These results reflected strong net revenues in mortgages, which were significantly higher compared with 2011 in both residential and commercial products. In addition, net revenues in credit products and interest rate products were solid and higher compared with 2011. The increase in mortgages, credit products and interest rates primarily reflected the impact of improved market-making conditions, including tighter credit spreads, compared with 2011. These increases were partially offset by significantly lower net revenues in commodities and slightly lower net revenues in currencies. The decrease in commodities primarily reflected more challenging market-making conditions, in part driven by lower levels of market volatility.

1. In April 2013, we completed the sale of a majority stake in our Americas reinsurance business and no longer consolidate this business. Net revenues related to the Americas reinsurance business were $317 million for 2013, $1.08 billion for 2012 and $880 million for 2011. See Note 12 to the consolidated financial statements for further information about this sale.

Net revenues in Equities were $8.21 billion for 2012, essentially unchanged compared with 2011. Net revenues in securities services were significantly higher compared with 2011, reflecting a gain of $494 million on the sale of our hedge fund administration business. In addition, equities client execution net revenues were higher than 2011, primarily reflecting significantly higher results in cash products, principally due to increased levels of client activity. These increases were offset by lower commissions and fees, reflecting declines in the United States, Europe and Asia. Our average daily volumes during 2012 were lower in each of these regions compared with 2011, consistent with listed cash equity market volumes. During 2012, Equities operated in an environment generally characterized by an increase in global equity prices and lower volatility levels.

The net loss attributable to the impact of changes in our own credit spreads on borrowings for which the fair value option was elected was $714 million ($433 million and $281 million related to Fixed Income, Currency and Commodities Client Execution and equities client execution, respectively) for 2012, compared with a net gain of $596 million ($399 million and $197 million related to Fixed Income, Currency and Commodities Client Execution and equities client execution, respectively) for 2011.

During 2012, Institutional Client Services operated in an environment generally characterized by continued broad market concerns and uncertainties, although positive developments helped to improve market conditions. These developments included certain central bank actions to ease monetary policy and address funding risks for European financial institutions. In addition, the U.S. economy posted stable to improving economic data, including favorable developments in unemployment and housing. These improvements resulted in tighter credit spreads, higher global equity prices and lower levels of volatility. However, concerns about the outlook for the global economy and continued political uncertainty, particularly the political debate in the United States surrounding the fiscal cliff, generally resulted in client risk aversion and lower activity levels. Also, uncertainty over financial regulatory reform persisted.

Operating expenses were $12.48 billion for 2012, 3% lower than 2011, primarily due to lower brokerage, clearing, exchange and distribution fees, and lower impairment charges, partially offset by higher net provisions for litigation and regulatory proceedings. Pre-tax earnings were $5.64 billion in 2012, 27% higher than 2011.

### Investing & Lending

Investing & Lending includes our investing activities and the origination of loans to provide financing to clients. These investments, some of which are consolidated, and loans are typically longer-term in nature. We make investments, directly and indirectly through funds 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.

| | Year Ended December | | |
|---|---|---|---|
| *in millions* | **2013** | 2012 | 2011 |
| Equity securities | **$3,930** | $2,800 | $ 603 |
| Debt securities and loans | **1,947** | 1,850 | 96 |
| Other | **1,141** | 1,241 | 1,443 |
| Total net revenues | **7,018** | 5,891 | 2,142 |
| Operating expenses | **2,684** | 2,666 | 2,673 |
| **Pre-tax earnings/(loss)** | **$4,334** | $3,225 | $ (531) |

**2013 versus 2012.** Net revenues in Investing & Lending were $7.02 billion for 2013, 19% higher than 2012, reflecting a significant increase in net gains from investments in equity securities, driven by company-specific events and stronger corporate performance, as well as significantly higher global equity prices. In addition, net gains and net interest income from debt securities and loans were slightly higher, while other net revenues, related to our consolidated investments, were lower compared with 2012. If equity markets decline or credit spreads widen, net revenues in Investing & Lending would likely be negatively impacted.

Operating expenses were $2.68 billion for 2013, essentially unchanged compared with 2012. Operating expenses during 2013 included lower impairment charges and lower operating expenses related to consolidated investments, partially offset by increased compensation and benefits expenses due to higher net revenues compared with 2012. Pre-tax earnings were $4.33 billion in 2013, 34% higher than 2012.

**2012 versus 2011.** Net revenues in Investing & Lending were $5.89 billion for 2012 compared with $2.14 billion for 2011. The increase compared with 2011 reflected a significant increase in net gains from investments in equity securities, primarily in public equities, principally due to the impact of an increase in global equity prices during 2012 after equity prices in Europe and Asia declined significantly during 2011. Net gains from equity securities included a gain of $408 million in 2012 and a loss of $517 million in 2011 related to our investment in the ordinary shares of ICBC. The increase compared with 2011 also reflected a significant increase in net gains from debt securities and loans, primarily due to approximately $1 billion of unrealized losses related to relationship lending activities, including the effect of hedges, in 2011 and the impact of a more favorable credit environment as credit spreads tightened during 2012 after widening during 2011. These increases were partially offset by lower other net revenues, principally related to our consolidated investments.

Operating expenses were $2.67 billion for 2012, essentially unchanged compared with 2011. Pre-tax earnings were $3.23 billion in 2012, compared with a pre-tax loss of $531 million in 2011.

## 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 markets 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 40 basis points for 2013, 39 basis points for 2012 and 41 basis points for 2011.

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. Incentive fees are recognized only when all material contingencies are resolved.

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

| | Year Ended December | | |
|---|---|---|---|
| *in millions* | **2013** | 2012 | 2011 |
| Management and other fees | **$4,386** | $4,105 | $4,188 |
| Incentive fees | **662** | 701 | 323 |
| Transaction revenues | **415** | 416 | 523 |
| Total net revenues | **5,463** | 5,222 | 5,034 |
| Operating expenses | **4,354** | 4,294 | 4,020 |
| **Pre-tax earnings** | **$1,109** | $ 928 | $1,014 |

The tables below present our period-end assets under supervision (AUS) by asset class and by distribution channel, as well as a summary of the changes in our assets under supervision.

| | As of December | | |
|---|---|---|---|
| *in billions* | **2013** | 2012 | 2011 |
| Assets under management | **$ 919** | $ 854 | $ 828 |
| Other client assets | **123** | 111 | 67 |
| **Total AUS** | **$1,042** | $ 965 | $ 895 |
| **Asset Class** | | | |
| Alternative investments [1] | **$ 142** | $ 151 | $ 148 |
| Equity | **208** | 153 | 147 |
| Fixed income | **446** | 411 | 353 |
| Long-term AUS | **796** | 715 | 648 |
| Liquidity products | **246** | 250 | 247 |
| **Total AUS** | **$1,042** | $ 965 | $ 895 |
| **Distribution Channel** | | | |
| Directly distributed: | | | |
| Institutional | **$ 363** | $ 343 | $ 294 |
| High-net-worth individuals | **330** | 294 | 274 |
| Third-party distributed: | | | |
| Institutional, high-net-worth individuals and retail | **349** | 328 | 327 |
| **Total AUS** | **$1,042** | $ 965 | $ 895 |

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

| | Year Ended December | | |
|---|---|---|---|
| *in billions* | **2013** | 2012 | 2011 |
| Balance, beginning of year | **$ 965** | $895 | $917 |
| Net inflows/(outflows) | | | |
| Alternative investments | **(13)** | 1 | (1) |
| Equity | **13** | (17) | (5) |
| Fixed income | **41** | 34 | (9) |
| Long-term AUS net inflows/(outflows) | **41** [1] | 18 [2] | (15) [3] |
| Liquidity products | **(4)** | 3 | (12) |
| Total AUS net inflows/(outflows) | **37** | 21 | (27) |
| Net market appreciation/(depreciation) | **40** | 49 | 5 |
| **Balance, end of year** | **$1,042** | $965 | $895 |

1. Fixed income flows for 2013 include $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.
2. Includes $34 billion of fixed income asset inflows in connection with our acquisition of Dwight Asset Management Company LLC and $5 billion of fixed income and equity asset outflows related to our liquidation of Goldman Sachs Asset Management Korea Co., Ltd.
3. Includes $6 billion of asset inflows across all asset classes in connection with our acquisitions of Goldman Sachs Australia Pty Ltd and Benchmark Asset Management Company Private Limited.

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

| | Average for the Year Ended December | | |
|---|---|---|---|
| *in billions* | **2013** | 2012 | 2011 |
| Alternative investments | **$ 145** | $149 | $152 |
| Equity | **180** | 153 | 162 |
| Fixed income | **425** | 384 | 353 |
| Long-term AUS | **750** | 686 | 667 |
| Liquidity products | **235** | 238 | 240 |
| **Total AUS** | **$ 985** | $924 | $907 |

**2013 versus 2012.** Net revenues in Investment Management were $5.46 billion for 2013, 5% higher than 2012, reflecting higher management and other fees, primarily due to higher average assets under supervision. During the year, total assets under supervision increased $77 billion to $1.04 trillion. Long-term assets under supervision increased $81 billion, including net inflows of $41 billion [1], reflecting inflows in fixed income and equity assets, partially offset by outflows in alternative investment assets. Net market appreciation of $40 billion during the year was primarily in equity assets. Liquidity products decreased $4 billion.

During 2013, Investment Management operated in an environment generally characterized by improved asset prices, particularly in equities, resulting in appreciation in the value of client assets. In addition, the mix of average assets under supervision shifted slightly compared with 2012 from liquidity products to long-term assets under supervision, primarily due to growth in equity and fixed income assets. In the future, if asset prices were to decline, or investors favor asset classes that typically generate lower fees or investors withdraw their assets, net revenues in Investment Management would likely be negatively impacted. In addition, continued concerns about the global economic outlook could result in downward pressure on assets under supervision.

Operating expenses were $4.35 billion for 2013, up slightly compared to 2012, due to increased compensation and benefits expenses, primarily resulting from higher net revenues. Pre-tax earnings were $1.11 billion in 2013, 20% higher than 2012.

**2012 versus 2011.** Net revenues in Investment Management were $5.22 billion for 2012, 4% higher than 2011, due to significantly higher incentive fees, partially offset by lower transaction revenues and slightly lower management and other fees. During 2012, assets under supervision increased $70 billion to $965 billion. Long-term assets under supervision increased $67 billion, including net inflows of $18 billion [2], reflecting inflows in fixed income assets, partially offset by outflows in equity assets. Net market appreciation of $49 billion during 2012 was primarily in fixed income and equity assets. In addition, liquidity products increased $3 billion.

During 2012, Investment Management operated in an environment generally characterized by improved asset prices, resulting in appreciation in the value of client assets. However, the mix of average assets under supervision shifted slightly from asset classes that typically generate higher fees, primarily equity and alternative investment assets, to asset classes that typically generate lower fees, primarily fixed income assets, compared with 2011.

Operating expenses were $4.29 billion for 2012, 7% higher than 2011, due to increased compensation and benefits expenses. Pre-tax earnings were $928 million in 2012, 8% lower than 2011.

### 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.

## Regulatory Developments

Our businesses are subject to significant and evolving regulation. The U.S. Dodd-Frank Wall Street Reform and Consumer Protection Act (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 other regulators and policy makers worldwide. The Dodd-Frank Act and these other reforms may affect our businesses. 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.

See "Business — Regulation" in Part I, Item 1 of the 2013 Form 10-K for more information on the laws, rules and regulations and proposed laws, rules and regulations that apply to us and our operations. In addition, see "Equity Capital — Revised Capital Framework" below and Note 20 to the consolidated financial statements for information about regulatory developments as they relate to our regulatory capital, leverage and liquidity ratios.

### Impact of Increased Regulation and Restriction on Certain Activities

There has been increased regulation of, and limitations on, our activities, including the Dodd-Frank 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 are increased regulation of, and restrictions on, over-the-counter (OTC) derivatives markets and transactions, particularly related to swaps and security-based swaps.

1. Fixed income flows for 2013 include $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.

2. Includes $34 billion of fixed income asset inflows in connection with our acquisition of Dwight Asset Management Company LLC and $5 billion of fixed income and equity asset outflows related to our liquidation of Goldman Sachs Asset Management Korea Co., Ltd.

**Volcker Rule.** In December 2013, the final rules to implement the provisions of the Dodd-Frank Act referred to as the "Volcker Rule" were adopted. We are required to be in compliance with the rule (including the development of an extensive compliance program) by July 2015 with certain provisions of the rule subject to possible extensions through July 2017.

The Volcker rule prohibits "proprietary trading," but will allow activities such as underwriting, market making and risk-mitigation hedging. In anticipation of the final rule, we evaluated this prohibition and determined that businesses that engage in "bright line" proprietary trading were most likely to be prohibited. In 2010 and 2011, we liquidated substantially all of our Global Macro Proprietary and Principal Strategies trading positions.

Based on what we know as of the date of this filing, we do not expect the impact of the prohibition of proprietary trading to be material to our financial condition, results of operations or cash flows. However, the rule is highly complex, and its impact will not be known until market practices are fully developed.

In addition to the prohibition on proprietary trading, 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 as described below under "— Transactions with Affiliates." Covered funds include our private equity funds, certain of our credit and real estate funds, and our hedge funds. 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 anticipation of the final rule, we limited our initial investment in certain new covered funds to 3% of the fund's net asset value.

We continue to manage our existing funds, taking into account the transition periods under the Volcker Rule. As a result, in March 2012, we began redeeming certain interests in our hedge funds and will continue to do so.

For certain of our covered funds, in order to be compliant with the Volcker Rule by the prescribed compliance date, to the extent that the underlying investments of the particular funds are not sold, the firm may be required to sell its investments in such funds. If that occurs, the firm may receive a value for its investments that is less than the then carrying value as there could be a limited secondary market for these investments and the firm may be unable to sell them in orderly transactions.

Although our net revenues from investments in our private equity, credit, real estate and hedge funds may vary from period to period, our aggregate net revenues from these investments were not material to our aggregate total net revenues over the period from 1999 through 2013.

**Swap Dealers and Derivatives Regulation.** The Dodd-Frank Act also provides for significantly increased regulation of and restrictions on derivative markets, and we have registered certain subsidiaries as "swap dealers" under the U.S. Commodity Futures Trading Commission (CFTC) rules. See "Business — Regulation" in Part I, Item 1 of the 2013 Form 10-K for a discussion of the requirements imposed by the Dodd-Frank Act and the status of SEC and CFTC rulemaking, as well as non-U.S. regulation, in this area. The full application of new derivatives rules across different national and regulatory jurisdictions has not yet been fully established.

## 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.

Although our balance sheet fluctuates on a day-to-day basis, our total assets at quarterly 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:

- quarterly planning;
- business-specific limits;
- monitoring of key metrics; and
- 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 and capital levels 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;
- to ensure that our projected assets are supported by an adequate amount and tenor of funding and that our projected capital and liquidity metrics are within management guidelines and regulatory requirements; 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. These constraints include the firm's liability profile and equity capital levels, maturities and plans for new debt and equity issuances, share repurchases, deposit trends and secured funding transactions.

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 metrics and discuss expectations for the upcoming quarter. The specific metrics reviewed include 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 and capital projections, and projected capital and liquidity metrics, is reviewed 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 generally 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.

**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, risk measures and capital usage. We allocate assets to businesses and review and analyze movements resulting from new business activity as well as market fluctuations.

**Scenario Analyses.** We conduct scenario analyses to determine how we would manage the size and composition of our balance sheet and maintain appropriate funding, liquidity and capital positions in a variety of situations:

- These scenarios cover short-term and long-term time horizons using various macroeconomic and firm-specific assumptions. We use these analyses to assist us in developing longer-term funding plans, including the level of unsecured debt issuances, the size of our secured funding program and the amount and composition of our equity capital. We also consider any potential future constraints, such as limits on our ability to grow our asset base in the absence of appropriate funding.
- Through our capital planning and stress testing process, which incorporates our internally designed stress tests and those required under the CCAR and Dodd-Frank Act Stress Tests (DFAST) as well as our resolution and recovery planning, we further analyze how we would manage our balance sheet and risks through the duration of a severe crisis, and we develop plans to access funding, generate liquidity, and/or redeploy or issue equity capital, as appropriate.

### 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.

Below is a description of the captions in the following table, which presents this balance sheet allocation.

**Excess Liquidity and Cash.** We maintain substantial excess liquidity to meet a broad range of potential cash outflows and collateral needs in the event of a stressed environment. See "Liquidity Risk Management" below for details on the composition and sizing of our excess liquidity pool or "Global Core Excess" (GCE). In addition to our excess liquidity, 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 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.

| | As of December | |
|---|---|---|
| *in millions* | **2013** | 2012 |
| Excess liquidity (Global Core Excess) | **$184,070** | $174,622 |
| Other cash | **5,793** | 6,839 |
| **Excess liquidity and cash** | **189,863** | 181,461 |
| **Secured client financing** | **263,386** | 229,442 |
| Inventory | **255,534** | 318,323 |
| Secured financing agreements | **79,635** | 76,277 |
| Receivables | **39,557** | 36,273 |
| Institutional Client Services | **374,726** | 430,873 |
| Public equity [1] | **4,308** | 5,948 |
| Private equity | **16,236** | 17,401 |
| Debt [2] | **23,274** | 25,386 |
| Receivables and other [3] | **17,205** | 8,421 |
| Investing & Lending | **61,023** | 57,156 |
| **Total inventory and related assets** | **435,749** | 488,029 |
| **Other assets** | **22,509** | 39,623 [4] |
| **Total assets** | **$911,507** | $938,555 |

1. December 2012 includes $2.08 billion related to our investment in the ordinary shares of ICBC, which was sold in the first half of 2013.
2. Includes $15.76 billion and $16.50 billion as of December 2013 and December 2012, respectively, of direct loans primarily extended to corporate and private wealth management clients that are accounted for at fair value.
3. Includes $14.90 billion and $6.50 billion as of December 2013 and December 2012, respectively, of loans held for investment that are accounted for at amortized cost, net of estimated uncollectible amounts. Such loans are primarily comprised of corporate loans and loans to private wealth management clients.
4. Includes assets related to our Americas reinsurance business classified as held for sale, in which a majority stake was sold in April 2013. See Note 12 to the consolidated financial statements for further information.

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 the 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 excess liquidity and cash, secured client financing and other assets.

| | As of December 2013 | | | | | |
|---|---|---|---|---|---|---|
| *in millions* | **Excess Liquidity and Cash** [1] | **Secured Client Financing** | **Institutional Client Services** | **Investing & Lending** | **Other Assets** | **Total Assets** |
| Cash and cash equivalents | **$ 61,133** | **$ —** | **$ —** | **$ —** | **$ —** | **$ 61,133** |
| Cash and securities segregated for regulatory and other purposes | **—** | **49,671** | **—** | **—** | **—** | **49,671** |
| Securities purchased under agreements to resell and federal funds sold | **64,595** | **61,510** | **35,081** | **546** | **—** | **161,732** |
| Securities borrowed | **25,113** | **94,899** | **44,554** | **—** | **—** | **164,566** |
| Receivables from brokers, dealers and clearing organizations | **—** | **6,650** | **17,098** | **92** | **—** | **23,840** |
| Receivables from customers and counterparties | **—** | **50,656** | **22,459** | **15,820** | **—** | **88,935** |
| Financial instruments owned, at fair value | **39,022** | **—** | **255,534** | **44,565** | **—** | **339,121** |
| Other assets | **—** | **—** | **—** | **—** | **22,509** | **22,509** |
| **Total assets** | **$189,863** | **$263,386** | **$374,726** | **$61,023** | **$22,509** | **$911,507** |

| | As of December 2012 | | | | | |
|---|---|---|---|---|---|---|
| *in millions* | Excess Liquidity and Cash [1] | Secured Client Financing | Institutional Client Services | Investing & Lending | Other Assets | Total Assets |
| Cash and cash equivalents | $ 72,669 | $ — | $ — | $ — | $ — | $ 72,669 |
| Cash and securities segregated for regulatory and other purposes | — | 49,671 | — | — | — | 49,671 |
| Securities purchased under agreements to resell and federal funds sold | 28,018 | 84,064 | 28,960 | 292 | — | 141,334 |
| Securities borrowed | 41,699 | 47,877 | 47,317 | — | — | 136,893 |
| Receivables from brokers, dealers and clearing organizations | — | 4,400 | 14,044 | 36 | — | 18,480 |
| Receivables from customers and counterparties | — | 43,430 | 22,229 | 7,215 | — | 72,874 |
| Financial instruments owned, at fair value | 39,075 | — | 318,323 | 49,613 | — | 407,011 |
| Other assets | — | — | — | — | 39,623 | 39,623 |
| Total assets | $181,461 | $229,442 | $430,873 | $57,156 | $39,623 | $938,555 |

1. Includes unencumbered cash, U.S. government and federal agency obligations (including highly liquid U.S. federal agency mortgage-backed obligations), and German, French, Japanese and United Kingdom government obligations.

As of December 2013, total assets decreased $27.05 billion from December 2012 due to a decrease in assets related to institutional client services and other assets, partially offset by an increase in secured client financing and excess liquidity and cash. Assets related to institutional client services decreased $56.15 billion primarily due to a decrease in financial instruments owned, at fair value as a result of decreases in U.S. government and federal agency obligations, non-U.S. government and agency obligations, derivatives and commodities. In addition, other assets decreased $17.11 billion primarily due to the sale of a majority stake in our Americas reinsurance business in April 2013. Secured client financing increased $33.94 billion reflecting an increase in collateralized agreements, primarily due to an increase in client activity. Excess liquidity and cash also increased $8.40 billion reflecting an increase in collateralized agreements, partially offset by a decrease in cash and cash equivalents.

## Balance Sheet Analysis and Metrics

As of December 2013, total assets on our consolidated statements of financial condition were $911.51 billion, a decrease of $27.05 billion from December 2012. This decrease was primarily due to a decrease in financial instruments owned, at fair value of $67.89 billion, primarily due to decreases in U.S. government and federal agency obligations, non-U.S. government and agency obligations, derivatives and commodities, and a decrease in other assets of $17.11 billion, primarily due to the sale of a majority stake in our Americas reinsurance business in April 2013. These decreases were partially offset by an increase in collateralized agreements of $48.07 billion, due to firm and client activity.

As of December 2013, total liabilities on our consolidated statements of financial condition were $833.04 billion, a decrease of $29.80 billion from December 2012. This decrease was primarily due to a decrease in other liabilities and accrued expenses of $26.35 billion, primarily due to the sale of a majority stake in both our Americas reinsurance business in April 2013 and our European insurance business in December 2013, and a decrease in collateralized financings of $9.24 billion, primarily due to firm financing activities. This decrease was partially offset by an increase in payables to customers and counterparties of $10.21 billion.

As of December 2013, our total securities sold under agreements to repurchase, accounted for as collateralized financings, were $164.78 billion, which was 5% higher and 4% higher than the daily average amount of repurchase agreements during the quarter ended and year ended December 2013, respectively. The increase in our repurchase agreements relative to the daily average during 2013 was primarily due to an increase in client activity at the end of the period. As of December 2012, our total securities sold under agreements to repurchase, accounted for as collateralized financings, were $171.81 billion, which was essentially unchanged and 3% higher than the daily average amount of repurchase agreements during the quarter ended and year ended December 2012, respectively. The increase in our repurchase agreements relative to the daily average during 2012 was primarily due to an increase in firm financing activities at the end of the period. 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 on our assets, unsecured long-term borrowings, shareholders' equity and leverage ratios.

| | As of December | |
|---|---|---|
| *$ in millions* | **2013** | 2012 |
| Total assets | **$911,507** | $938,555 |
| Unsecured long-term borrowings | **$160,965** | $167,305 |
| Total shareholders' equity | **$ 78,467** | $ 75,716 |
| Leverage ratio | **11.6x** | 12.4x |
| Debt to equity ratio | **2.1x** | 2.2x |

**Leverage ratio.** 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 "Equity Capital — Consolidated Regulatory Capital Ratios" below, and further described in Note 20 to the consolidated financial statements.

**Debt to equity ratio.** The debt to equity ratio equals unsecured long-term borrowings divided by total shareholders' equity.

### 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 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 GCE.

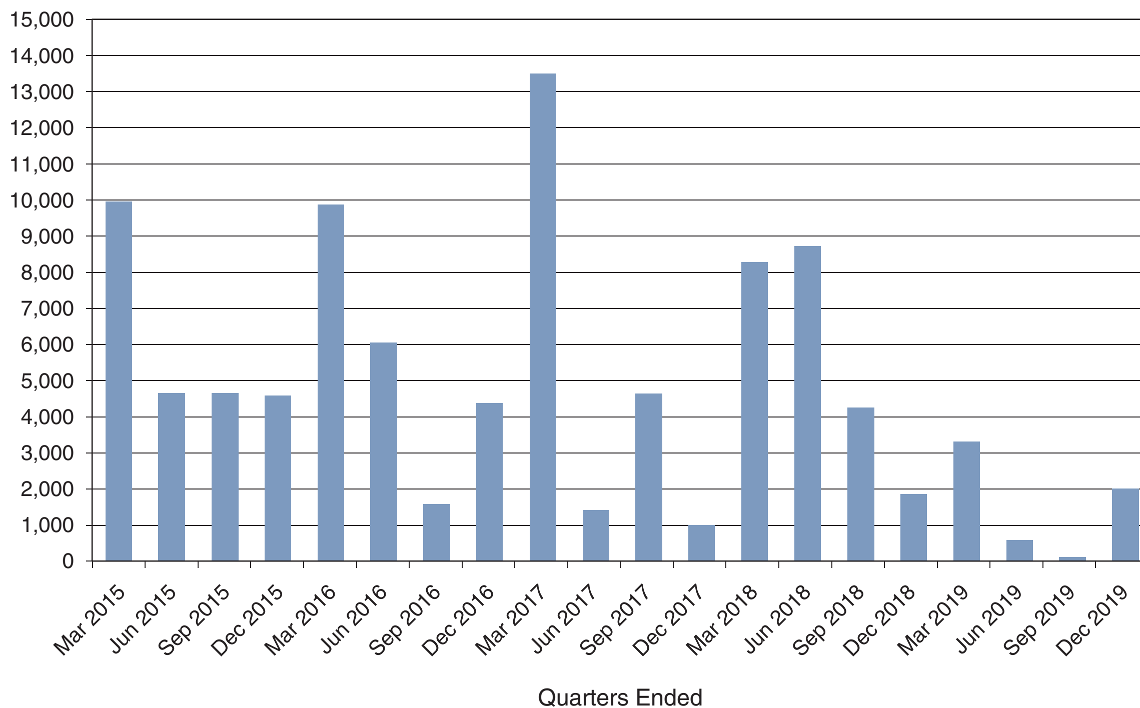
We seek to raise secured funding with a term appropriate for the liquidity of the assets that are being financed, and we seek longer maturities for secured funding collateralized by asset classes that may be harder to fund on a secured basis especially during times of market stress. Substantially all 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 GCE, exceeded 100 days as of December 2013.

A majority of our secured funding for securities not eligible for inclusion in the GCE is executed through term repurchase agreements and securities lending contracts. We also raise financing through other types of collateralized financings, such as secured loans and notes.

GS Bank USA 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 GCE. 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 through the fourth quarter of 2019 as of December 2013.




The weighted average maturity of our unsecured long-term borrowings as of December 2013 was approximately eight 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 substantial portion of our 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.** As part of our efforts to diversify our funding base, deposits have become a more meaningful share of our funding activities mainly through GS Bank USA and Goldman Sachs International Bank (GSIB). The table below presents the type and sources of our deposits.

| | As of December 2013 | |
|---|---|---|
| | Type of Deposit | |
| *in millions* | Savings and Demand [1] | Time [2] |
| Private bank deposits [3] | $30,475 | $ 212 |
| Certificates of deposit | — | 19,709 |
| Deposit sweep programs [4] | 15,511 | — |
| Institutional | 33 | 4,867 |
| **Total [5]** | **$46,019** | **$24,788** |

1. Represents deposits with no stated maturity.
2. Weighted average maturity of approximately three years.
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 2013 were approximately $41.22 billion.

**Unsecured Short-Term Borrowings.** A significant portion of our short-term borrowings was originally long-term debt that is scheduled to mature within one year of the reporting date. We use short-term borrowings to finance liquid assets and for other cash management purposes. We issue hybrid financial instruments, commercial paper and promissory notes.

As of December 2013, our unsecured short-term borrowings, including the current portion of unsecured long-term borrowings, were $44.69 billion. See Note 15 to the consolidated financial statements for further information about our unsecured short-term borrowings.

## Equity Capital

Capital adequacy is of critical importance to us. Our objective is to be conservatively capitalized in terms of the amount and composition of our equity base, both relative to our risk exposures and compared to external requirements and benchmarks. Accordingly, we have in place a comprehensive capital management policy that provides a framework and set of guidelines to assist us in determining the level and composition of capital that we target and maintain.

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, conditions in the financial markets, and assessments of potential future losses due to adverse changes in our business and market environments. Our capital planning and stress testing process incorporates our internally designed stress tests and those required under CCAR and DFAST, and is also designed to identify and measure material risks associated with our business activities, including market risk, credit risk and operational risk. We project sources and uses of capital given a range of business environments, including stressed conditions. In addition, as part of our comprehensive capital management policy, we maintain a contingency capital plan that provides a framework for analyzing and responding to an actual or perceived capital shortfall.

As required by the Federal Reserve Board's annual CCAR guidelines, U.S. bank holding companies with total consolidated assets of $50 billion or greater submit capital plans for review by the Federal Reserve Board. The purpose of the Federal Reserve Board's review is to ensure that these institutions have a robust, forward-looking capital planning process that accounts for their unique risks and that permits continued operations during times of economic and financial stress.

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

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

As part of our initial 2013 CCAR submission, the Federal Reserve Board informed us that it did not object to our proposed capital actions, including the repurchase of outstanding common stock, a potential increase in our quarterly common stock dividend and the possible issuance, redemption and modification of other capital securities through the first quarter of 2014. As required by the Federal Reserve Board, we resubmitted our 2013 capital plan in September 2013, incorporating certain enhancements to our stress testing process. In December 2013, the Federal Reserve Board informed us that it did not object to our resubmitted capital plan. We submitted our 2014 CCAR to the Federal Reserve in January 2014 and expect to publish a summary of our annual DFAST results in March 2014. See "Business — Available Information" in Part I, Item 1 of the 2013 Form 10-K.

In addition, we submitted the results of our mid-cycle DFAST to the Federal Reserve Board in July 2013 and published a summary of our mid-cycle DFAST results under our internally developed severely adverse scenario in September 2013. Our internally developed severely adverse scenario is designed to stress the firm's risks and idiosyncratic vulnerabilities and assess the firm's pro-forma capital position and ratios under the hypothetical stressed environment. We provide additional information on our internal stress testing process, our internally developed severely adverse scenario used for mid-cycle DFAST and a summary of the results on our web site as described under "Business — Available Information" in Part I, Item 1 of the 2013 Form 10-K.

Our consolidated regulatory capital requirements are determined by the Federal Reserve Board, as described below.

As of December 2013, our total shareholders' equity was $78.47 billion (consisting of common shareholders' equity of $71.27 billion and preferred stock of $7.20 billion). As of December 2012, our total shareholders' equity was $75.72 billion (consisting of common shareholders' equity of $69.52 billion and preferred stock of $6.20 billion). See "— Consolidated Regulatory Capital Ratios" below for information regarding the impact of regulatory developments.

### Consolidated Regulatory Capital

The Federal Reserve Board is the primary regulator of Group Inc., a bank holding company under the Bank Holding Company Act of 1956 (BHC Act) and a financial holding company under amendments to the BHC Act effected by the U.S. Gramm-Leach-Bliley Act of 1999. As a bank holding company, we are subject to consolidated risk-based regulatory capital requirements. These requirements are computed in accordance with the Federal Reserve Board's risk-based capital regulations which, as of December 2013, were based on the Basel I Capital Accord of the Basel Committee and also reflected the Federal Reserve Board's revised market risk regulatory capital requirements which became effective on January 1, 2013. These capital requirements are expressed as capital ratios that compare measures of capital to risk-weighted assets (RWAs). The capital regulations also include requirements with respect to leverage. The firm's capital levels are also subject to qualitative judgments by its regulators about components of capital, risk weightings and other factors. Beginning January 1, 2014, the Federal Reserve Board implemented revised consolidated regulatory capital and leverage requirements.

See Note 20 to the consolidated financial statements for additional information regarding the firm's current RWAs, required minimum capital ratios and the Revised Capital Framework (defined below).

### Consolidated Regulatory Capital Ratios

The table below presents information about our regulatory capital ratios and Tier 1 leverage ratio under Basel I, as implemented by the Federal Reserve Board. The information as of December 2013 reflects the revised market risk regulatory capital requirements. The information as of December 2012 is prior to the implementation of these revised market risk regulatory capital requirements. In the table below:

- Equity investments in certain entities primarily represent a portion of our nonconsolidated equity investments.
- Disallowed deferred tax assets represent certain deferred tax assets that are excluded from regulatory capital based upon an assessment which, in addition to other factors, includes an estimate of future taxable income.
- Debt valuation adjustment represents the cumulative change in the fair value of our unsecured borrowings attributable to the impact of changes in our own credit spreads (net of tax at the applicable tax rate).
- Other adjustments within our Tier 1 common capital include net unrealized gains/(losses) on available-for-sale securities (net of tax at the applicable tax rate), the cumulative change in our pension and postretirement liabilities (net of tax at the applicable tax rate) and investments in certain nonconsolidated entities.
- 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, or discounted, upon reaching a remaining maturity of five years. See Note 16 to the consolidated financial statements for additional information about our subordinated debt.

| | As of December | |
|---|---|---|
| *$ in millions* | 2013 | 2012 |
| Common shareholders' equity | $ 71,267 | $ 69,516 |
| Goodwill | (3,705) | (3,702) |
| Identifiable intangible assets | (671) | (1,397) |
| Equity investments in certain entities | (3,314) | (4,805) |
| Disallowed deferred tax assets | (498) | (1,261) |
| Debt valuation adjustment | 10 | (180) |
| Other adjustments | 159 | (124) |
| **Tier 1 Common Capital** | 63,248 | 58,047 |
| Perpetual non-cumulative preferred stock | 7,200 | 6,200 |
| Junior subordinated debt issued to trusts [1] | 2,063 | 2,750 |
| Other adjustments | (40) | (20) |
| **Tier 1 Capital** | 72,471 | 66,977 |
| Qualifying subordinated debt | 12,773 | 13,342 |
| Junior subordinated debt issued to trusts [1] | 687 | — |
| Other adjustments | 172 | 87 |
| **Tier 2 Capital** | 13,632 | 13,429 |
| **Total Capital** | $ 86,103 | $ 80,406 |
| **Credit RWAs** | $268,247 | $287,526 |
| **Market RWAs** | 164,979 | 112,402 |
| **Total RWAs** | $433,226 | $399,928 |
| **Tier 1 Common Ratio [2]** | 14.6% | 14.5% |
| **Tier 1 Capital Ratio** | 16.7% | 16.7% |
| **Total Capital Ratio** | 19.9% | 20.1% |
| **Tier 1 Leverage Ratio [3]** | 8.1% | 7.3% |

1. On January 1, 2013, we began to incorporate the Dodd-Frank Act's phase-out of regulatory capital treatment for junior subordinated debt issued to trusts by allowing for only 75% of these capital instruments to be included in Tier 1 capital and 25% to be designated as Tier 2 capital in the calculation of our current capital ratios. In July 2013, the Agencies finalized the phase-out provisions of these capital instruments. See Note 16 to the consolidated financial statements for additional information about the junior subordinated debt issued to trusts.
2. The Tier 1 common ratio equals Tier 1 common capital divided by RWAs. We believe that the Tier 1 common ratio is meaningful because it is one of the measures that we, our regulators and investors use to assess capital adequacy. The Tier 1 common ratio is a non-GAAP measure and may not be comparable to similar non-GAAP measures used by other companies.
3. See Note 20 to the consolidated financial statements for additional information about the firm's Tier 1 leverage ratio.

Our Tier 1 capital ratio was 16.7%, unchanged compared with December 2012 primarily reflecting an increase in RWAs, offset by an increase in Tier 1 capital. The increase in RWAs was primarily driven by the implementation of the revised market risk regulatory capital requirements. These requirements are a significant part of the regulatory capital changes that will ultimately be reflected in our Basel III capital ratios.

The table below presents the changes in Tier 1 common capital, Tier 1 capital and Tier 2 capital during 2013 and 2012.

| *in millions* | Year Ended December 2013 | Year Ended December 2012 |
|---|---|---|
| **Tier 1 Common Capital** | | |
| Balance, beginning of period | **$58,047** | $55,162 |
| Increase in common shareholders' equity | **1,751** | 2,237 |
| (Increase)/decrease in goodwill | **(3)** | 100 |
| Decrease in identifiable intangible assets | **726** | 269 |
| (Increase)/decrease in equity investments in certain entities | **1,491** | (249) |
| (Increase)/decrease in disallowed deferred tax assets | **763** | (188) |
| Change in debt valuation adjustment | **190** | 484 |
| Change in other adjustments | **283** | 232 |
| Balance, end of period | **$63,248** | $58,047 |
| **Tier 1 Capital** | | |
| Balance, beginning of period | **$66,977** | $63,262 |
| Net increase in Tier 1 common capital | **5,201** | 2,885 |
| Increase in perpetual non-cumulative preferred stock | **1,000** | 3,100 |
| Change in junior subordinated debt issued to trusts | **—** | (2,250) |
| Redesignation of junior subordinated debt issued to trusts | **(687)** | — |
| Change in other adjustments | **(20)** | (20) |
| Balance, end of period | **72,471** | 66,977 |
| **Tier 2 Capital** | | |
| Balance, beginning of period | **13,429** | 13,881 |
| Decrease in qualifying subordinated debt | **(569)** | (486) |
| Redesignation of junior subordinated debt issued to trusts | **687** | — |
| Change in other adjustments | **85** | 34 |
| Balance, end of period | **13,632** | 13,429 |
| **Total Capital** | **$86,103** | $80,406 |

See "Business — Regulation" in Part I, Item 1 of the 2013 Form 10-K and Note 20 to the consolidated financial statements for additional information about our regulatory capital ratios and related regulatory requirements, including pending and proposed regulatory changes.

### Risk-Weighted Assets

RWAs under the Federal Reserve Board's risk-based capital requirements are calculated based on measures of credit risk and market risk.

RWAs for credit risk reflect amounts for on-balance-sheet and off-balance-sheet exposures. Credit risk requirements for on-balance-sheet assets, such as receivables and cash, are generally based on the balance sheet value. Credit risk requirements for securities financing transactions are determined based upon the positive net exposure for each trade, and include the effect of counterparty netting and collateral, as applicable. For off-balance-sheet exposures, including commitments and guarantees, a credit equivalent amount is calculated based on the notional amount of each trade. Requirements for OTC derivatives are based on a combination of positive net exposure and a percentage of the notional amount of each trade, and include the effect of counterparty netting and collateral, as applicable. All such assets and exposures are then assigned a risk weight depending on, among other things, whether the counterparty is a sovereign, bank or a qualifying securities firm or other entity (or if collateral is held, depending on the nature of the collateral).

As of December 2012, RWAs for market risk were determined by reference to the firm's Value-at-Risk (VaR) model, supplemented by the standardized measurement method used to determine RWAs for specific risk for certain positions. Under the Federal Reserve Board's revised market risk regulatory capital requirements, which became effective on January 1, 2013, the methodology for calculating RWAs for market risk was changed. RWAs for market risk are determined using VaR, stressed VaR, incremental risk, comprehensive risk and a standardized measurement method for specific risk.

VaR is the potential loss in value of inventory positions, as well as certain other financial assets and financial liabilities, due to adverse market movements over a defined time horizon with a specified confidence level. For both risk management purposes and regulatory capital calculations we use a single VaR model which captures risks including interest rates, equity prices, currency rates and commodity prices. VaR used for regulatory capital requirements (regulatory VaR) differs from risk management VaR due to different time horizons and confidence levels (10-day and 99% for regulatory VaR vs. one-day and 95% for risk management VaR), as well as differences in the scope of positions on which VaR is calculated. Stressed VaR is the potential loss in value of inventory positions during a period of significant market stress. Incremental risk is the potential loss in value of non-securitized inventory positions due to the default or credit migration of issuers of financial instruments over a one-year time horizon. Comprehensive risk is the potential loss in value, due to price risk and defaults, within the firm's credit correlation positions. The standardized measurement method is used to determine RWAs for specific risk for certain positions by applying supervisory defined risk-weighting factors to such positions after applicable netting is performed.

We provide additional information on regulatory VaR, stressed VaR, incremental risk, comprehensive risk and the standardized measurement method for specific risk on our web site as described under "Business — Available Information" in Part I, Item 1 of the 2013 Form 10-K.

The table below presents information on the components of RWAs within our consolidated regulatory capital ratios, which were based on Basel I, as implemented by the Federal Reserve Board, and also reflected the revised market risk regulatory capital requirements.

| *in millions* | As of December 2013 |
|---|---|
| **Credit RWAs** | |
| OTC derivatives | $ 94,753 |
| Commitments and guarantees [1] | 47,397 |
| Securities financing transactions [2] | 30,010 |
| Other [3] | 96,087 |
| **Total Credit RWAs** | 268,247 |
| **Market RWAs** | |
| Regulatory VaR | 13,425 |
| Stressed VaR | 38,250 |
| Incremental risk | 9,463 |
| Comprehensive risk | 18,150 |
| Specific risk | 85,691 |
| **Total Market RWAs** | 164,979 |
| **Total RWAs [4]** | $433,226 |

1. Principally includes certain commitments to extend credit and letters of credit.
2. Represents resale and repurchase agreements and securities borrowed and loaned transactions.
3. Principally includes receivables from customers, certain loans, other assets, and cash and cash equivalents.
4. Under the current regulatory capital framework, there is no explicit requirement for Operational risk.

The table below presents the changes in these RWAs from December 31, 2012 to December 31, 2013.

| in millions | Period Ended December 2013 |
|---|---|
| **Risk-Weighted Assets** | |
| Balance, December 31, 2012 | $399,928 |
| **Credit RWAs** | |
| Decrease in OTC derivatives | (12,516) |
| Increase in commitments and guarantees | 1,390 |
| Decrease in securities financing transactions | (17,059) |
| Change in other | 8,906 |
| **Change in Credit RWAs** | (19,279) |
| **Market RWAs** | |
| Increase related to the revised market risk rules | 127,608 |
| Decrease in regulatory VaR | (2,038) |
| Decrease in stressed VaR | (13,700) |
| Decrease in incremental risk | (17,350) |
| Decrease in comprehensive risk | (9,568) |
| Decrease in specific risk | (32,375) |
| **Change in Market RWAs** | 52,577 |
| **Total RWAs, end of period** | $433,226 |

Credit RWAs decreased $19.28 billion compared with December 2012, primarily due to a decrease in securities financing exposure. Market RWAs increased by $52.58 billion compared with December 2012, reflecting the impact of the revised market risk regulatory capital requirements, which became effective on January 1, 2013, partially offset by, among other things, a decrease in specific risk due to a decrease in inventory.

We also attribute RWAs to our business segments. As of December 2013, approximately 80% of RWAs were attributed to our Institutional Client Services segment and substantially all of the remaining RWAs were attributed to our Investing & Lending segment.

### Revised Capital Framework

The Agencies have approved revised risk-based capital and leverage ratio regulations establishing a new comprehensive capital framework for U.S. banking organizations (Revised Capital Framework). These regulations are largely based on the Basel Committee's December 2010 final capital framework for strengthening international capital standards (Basel III), and significantly revise the risk-based capital and leverage ratio requirements applicable to bank holding companies as compared to the previous U.S. risk-based capital and leverage ratio rules, and thereby, implement certain provisions of the Dodd-Frank Act.

Under the Revised Capital Framework, Group Inc. is an "Advanced approach" banking organization. See Note 20 to the consolidated financial statements for further information about the Revised Capital Framework, including the difference between the "Standardized approach" and the Basel III Advanced approach.

**Estimated Capital Ratios.** We estimate that the firm's ratio of Basel III Common Equity Tier 1 (CET1) to RWAs calculated under the Basel III Advanced approach (Basel III Advanced CET1 ratio) as of December 2013 would have been 9.8% on a fully phased-in basis (i.e., after the expiration of transition provisions). The estimate of the Basel III Advanced CET1 ratio will continue to evolve as we assess the details of these rules and discuss their interpretation and application with our regulators.

Management believes that the estimated Basel III Advanced CET1 ratio is meaningful because it is one of the measures that we, our regulators and investors use to assess capital adequacy. The estimated Basel III Advanced CET1 ratio is a non-GAAP measure as of December 2013 and may not be comparable to similar non-GAAP measures used by other companies (as of that date). It will become a formal regulatory measure for the firm on April 1, 2014.

The table below presents a reconciliation of our common shareholders' equity to the estimated Basel III Advanced CET1 on a fully phased-in basis.

| $ in millions | As of December 2013 |
|---|---|
| Common shareholders' equity | $ 71,267 |
| Goodwill | (3,705) |
| Identifiable intangible assets | (671) |
| Deferred tax liabilities | 908 |
| Goodwill and identifiable intangible assets, net of deferred tax liabilities | (3,468) |
| Deductions for investments in nonconsolidated financial institutions [1] | (9,091) |
| Other adjustments [2] | (489) |
| **Basel III CET1** | **$ 58,219** |
| **Basel III Advanced RWAs** | **$594,662** |
| **Basel III Advanced CET1 Ratio** | **9.8%** |

1. This deduction, which represents the fully phased-in requirement, is the amount by which our investments in the capital of nonconsolidated financial institutions exceed certain prescribed thresholds. During both the transitional period and thereafter, no deduction will be required if the applicable proportion of our investments in the capital of nonconsolidated financial institutions falls below the prescribed thresholds.
2. Principally includes credit valuation adjustments on derivative liabilities and debt valuation adjustments, as well as other required credit risk-based deductions.

In addition, beginning with the first quarter of 2015, subject to transitional provisions, we will also be required to disclose ratios calculated under the Standardized approach. Our estimated CET1 ratio under the Standardized approach (Standardized CET1 ratio) on a fully phased-in basis was approximately 60 basis points lower than our estimated Basel III Advanced CET1 ratio in the table above.

Both the Basel III Advanced CET1 ratio and the Standardized CET1 ratio are subject to transitional provisions. Reflecting the transitional provisions that became effective January 1, 2014, our estimated Basel III Advanced CET1 ratio and our estimated Standardized CET1 ratio are approximately 150 basis points higher than the respective CET1 ratios on a fully phased-in basis as of December 2013.

Effective January 1, 2014, Group Inc.'s capital and leverage ratios are calculated under, and subject to the minimums as defined in, the Revised Capital Framework. The changes to the definition of capital and minimum ratios, subject to transitional provisions, were effective beginning January 1, 2014. RWAs are based on Basel I Adjusted, as defined in Note 20 to the consolidated financial statements. The firm will transition to Basel III beginning on April 1, 2014. Including the impact of the changes to the definition of regulatory capital and reflecting the transitional provisions effective in 2014, our estimated CET1 ratio (CET1 to RWAs on a Basel I Adjusted basis) as of December 2013 would have been essentially unchanged as compared to our Tier 1 common ratio under Basel I.

**Regulatory Leverage Ratios.** The Revised Capital Framework increased the minimum Tier 1 leverage ratio applicable to us from 3% to 4% effective January 1, 2014.

In addition, the Revised Capital Framework will introduce a new Tier 1 supplementary leverage ratio (supplementary leverage ratio) for Advanced approach banking organizations. The supplementary leverage ratio compares Tier 1 capital (as defined under the Revised Capital Framework) to a measure of leverage exposure, defined as the sum of the firm's assets less certain CET1 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 3%, effective January 1, 2018, but with disclosure required beginning in the first quarter of 2015. In addition, subsequent to the approval of the Revised Capital Framework, the Agencies issued a proposal to increase the minimum supplementary leverage ratio requirement for the largest U.S. banks (those deemed to be global systemically important banking institutions (G-SIBs) under the Basel G-SIB framework). These proposals would require the firm and other G-SIBs to meet a 5% supplementary leverage ratio (comprised of the minimum requirement of 3% plus a 2% buffer). As of December 2013, our estimated supplementary leverage ratio based on the Revised Capital Framework approximates this proposed minimum.

In addition, the Basel Committee recently finalized revisions that would increase the size of the leverage exposure for purposes of the supplementary leverage ratio, but would retain a minimum supplementary leverage ratio requirement of 3%. It is not known with certainty at this point whether the U.S. regulators will adopt this revised definition of leverage into their rules and proposals for the supplementary leverage ratio.

### Other Developments

The Basel Committee and the Financial Stability Board (established at the direction of the leaders of the Group of 20) have also recently issued several consultative papers which propose further changes to capital regulations. In particular, the Basel Committee has issued consultation papers on a "Fundamental Review of the Trading Book" and "Revisions to the Securitization Framework" that could have an impact on the level of the firm's RWAs and regulatory capital ratios.

The European Union (EU) finalized legislation to implement Basel III, which became effective on January 1, 2014. The Dodd-Frank Act, other reform initiatives proposed and announced by the Agencies, the Basel Committee, and other governmental entities and regulators (including the EU and the U.K.'s Financial Services Authority (FSA) which was replaced by the Prudential Regulation Authority and the Financial Conduct Authority (FCA) on April 1, 2013) are not in all cases consistent with one another, which adds further uncertainty to the firm's future capital, leverage and liquidity requirements, and those of the firm's subsidiaries.

The Dodd-Frank Act contains provisions that require the registration of all swap dealers, major swap participants, security-based swap dealers and major security-based swap participants. The firm has registered certain subsidiaries as "swap dealers" under the CFTC rules, including GS&Co., GS Bank USA, Goldman Sachs International (GSI), and J. Aron & Company. These entities and other entities that would require registration under the CFTC or SEC rules will be subject to regulatory capital requirements, which have not been finalized by the CFTC and SEC.

### Capital Planning and Stress Testing Process

Our capital planning and stress testing process incorporates our internally designed stress tests and those required under CCAR and DFAST. The process is designed to identify and measure material risks associated with our business activities. We also attribute capital usage to each of our businesses and maintain a contingency capital plan.

**Stress Testing.** Our stress testing process incorporates an internal capital adequacy assessment with the objective of ensuring that the firm is appropriately capitalized relative to the risks in our business. As part of our assessment, we project sources and uses of capital given a range of business environments, including stressed conditions. Our stress scenarios incorporate our internally designed stress tests and those required under CCAR and DFAST and are designed to capture our specific vulnerabilities and risks and to analyze whether the firm holds an appropriate amount of capital. Our goal is to hold 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 the overall risk management structure, governance and policy framework of the firm.

**Internal Risk-Based Capital Assessment.** As part of our capital planning and stress testing process, we perform an internal risk-based capital assessment. This assessment incorporates market risk, credit risk and operational risk. Market risk is calculated by using 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.

**Capital Attribution.** We attribute capital usage to each of our businesses based upon regulatory capital requirements as well as our internal risk-based capital assessment. We manage the levels of our capital usage based upon the established balance sheet and risk limits.

**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 ensuring timely communication with external stakeholders.

### 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. GS&Co., GSI and GSIB have been assigned long- and short-term issuer ratings by certain credit rating agencies. GS Bank USA has also been assigned long- and short-term issuer ratings, as well as ratings on its 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, GS&Co., GSI and GSIB.

### 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 minimum capital requirements that are calculated in a manner similar to those applicable to bank holding companies and computes its risk-based capital ratios in accordance with the regulatory capital requirements applicable to state member banks, which, as of December 2013, were based on Basel I, and also reflected the revised market risk regulatory capital requirements as implemented by the Federal Reserve Board. The capital regulations also include requirements with respect to leverage. See Note 20 to the consolidated financial statements for further information about GS Bank USA's regulatory capital ratios. GS Bank USA is also subject to the Revised Capital Framework, beginning January 1, 2014.

In addition to revisions to the risk-based capital ratios, GS Bank USA is now subject to a 4% minimum Tier 1 leverage ratio requirement, and as an Advanced approach banking organization, will be subject to a new minimum supplementary leverage ratio (as described above) of 3% effective January 1, 2018.

Shortly after the approval of the Revised Capital Framework, the Agencies issued a proposal that also requires that U.S. insured depository institution subsidiaries of U.S. G-SIBs, such as GS Bank USA, meet a "well-capitalized" supplementary leverage ratio requirement of 6%. If these proposals are enacted as proposed, these higher requirements would be effective beginning January 1, 2018. As of December 2013, GS Bank USA's estimated supplementary leverage ratio based on the Revised Capital Framework approximates this proposed minimum.

In addition, the Basel Committee's recently finalized revisions regarding the supplementary leverage ratio discussed above may also be applicable to GS Bank USA.

See Note 20 to the consolidated financial statements for further information about the Revised Capital Framework as it relates to GS Bank USA and incremental capital requirements for domestic systemically important banking institutions.

For purposes of assessing the adequacy of its capital, GS Bank USA also performs an internal capital adequacy assessment which is similar to that performed by Group Inc. 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 annual DFAST stress results to the Federal Reserve in January 2014 and expects to publish a summary of its results in March 2014. GS Bank USA's capital levels and prompt corrective action classification are subject to qualitative judgments by its regulators about components of capital, risk weightings and other factors.

**GSI.** Our regulated U.K. broker-dealer, GSI, is one of the firm's principal non-U.S. regulated subsidiaries and is regulated by the PRA and the FCA. As of December 2013 and December 2012, GSI was subject to capital regulations, which were based on the Basel Committee's June 2006 Framework (Basel II) as modified by the Basel Committee's February 2011 Revisions to the Basel II market risk framework and as implemented in the European Union through the Capital Requirements Directives. As of December 2013 and December 2012, GSI had a Tier 1 capital ratio of 14.4% and 11.5%, respectively, and a Total capital ratio of 18.5% and 16.9%, respectively. The minimum Tier 1 capital ratio under PRA rules was 4%, and the minimum Total capital ratio was 8%. The PRA has significantly revised its capital regulations effective beginning January 1, 2014; the revised regulations are largely based on Basel III and, similar to the Revised Capital Framework, also introduce leverage ratio reporting requirements.

**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 and the potential impact of regulatory reform.

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 2013 and December 2012, Group Inc.'s equity investment in subsidiaries was $73.39 billion and $73.32 billion, respectively, compared with its total shareholders' equity of $78.47 billion and $75.72 billion, respectively.

**Guarantees of Subsidiaries.** Group Inc. has guaranteed the payment obligations of GS&Co., GS Bank USA, and Goldman Sachs Execution & Clearing, L.P. (GSEC) 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. In connection with this guarantee, Group Inc. also agreed to pledge to GS Bank USA certain collateral, including interests in subsidiaries and other illiquid assets.

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.

### Equity Capital Management

We principally manage our 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 and subject to approval of the Federal Reserve Board. We manage our capital requirements principally by setting limits on balance sheet assets and/or limits on risk, in each case both at the consolidated and business levels. We attribute capital usage to each of our businesses based upon our regulatory capital requirements, as well as our internal risk-based capital assessment. We manage the levels of our capital usage based upon the established balance sheet and risk limits.

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.

**Berkshire Hathaway Warrant.** On October 1, 2013, Berkshire Hathaway exercised in full a warrant to purchase shares of the firm's common stock. The warrant, as amended in March 2013, required net share settlement, and the firm delivered 13.1 million shares of common stock to Berkshire Hathaway on October 4, 2013. The number of shares delivered represented the value of the difference between the average closing price of the firm's common stock over the 10 trading days preceding October 1, 2013 and the exercise price of $115.00 multiplied by the number of shares of common stock (43.5 million) covered by the warrant. The impact to both the firm's book value per common share and tangible book value per common share was a reduction of approximately 3%.

**Share Repurchase Program.** We seek to 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, the amounts and timing of which are determined primarily by our current and projected capital positions, but which may also be influenced by general market conditions and the prevailing price and trading volumes of our common stock.

On April 15, 2013, the Board of Directors of Group Inc. (Board) authorized the repurchase of an additional 75.0 million shares of common stock pursuant to the firm's existing share repurchase program. As of December 2013, under the share repurchase program approved by the Board, we can repurchase up to 57.2 million additional shares of common stock; however, any such repurchases are subject to the approval of 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 2013 Form 10-K and Note 19 to the consolidated financial statements for additional information on our repurchase program and see above for information about the annual CCAR.

### Other Capital Metrics

The table below presents information on our shareholders' equity and book value per common share.

| | As of December | |
|---|---|---|
| *in millions, except per share amounts* | **2013** | 2012 |
| Total shareholders' equity | **$78,467** | $75,716 |
| Common shareholders' equity | **71,267** | 69,516 |
| Tangible common shareholders' equity | **66,891** | 64,417 |
| Book value per common share | **152.48** | 144.67 |
| Tangible book value per common share | **143.11** | 134.06 |

**Tangible common shareholders' equity.** 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.

The table below presents the reconciliation of total shareholders' equity to tangible common shareholders' equity.

| | As of December | |
|---|---|---|
| *in millions* | **2013** | 2012 |
| Total shareholders' equity | **$78,467** | $75,716 |
| Deduct: Preferred stock | **(7,200)** | (6,200) |
| Common shareholders' equity | **71,267** | 69,516 |
| Deduct: Goodwill and identifiable intangible assets | **(4,376)** | (5,099) |
| **Tangible common shareholders' equity** | **$66,891** | $64,417 |

**Book value and tangible book value per common share.** Book value and tangible book value per common share are based on common shares outstanding, including restricted stock units granted to employees with no future service requirements, of 467.4 million and 480.5 million as of December 2013 and December 2012, respectively. We believe that tangible book value per common share (tangible common shareholders' equity divided by common shares outstanding) 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.

## 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.

The table below presents where a discussion of our various off-balance-sheet arrangements may be found in the 2013 Form 10-K. In addition, see Note 3 to the consolidated financial statements for a discussion of our consolidation policies.

| Type of Off-Balance-Sheet Arrangement | Disclosure in Form 10-K |
|---|---|
| Variable interests and other obligations, including contingent obligations, arising from variable interests in nonconsolidated VIEs | See Note 11 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 as of December 2013.

| *in millions* | 2014 | 2015-2016 | 2017-2018 | 2019-Thereafter | Total |
|---|---|---|---|---|---|
| **Amounts related to on-balance-sheet obligations** | | | | | |
| Time deposits | $ — | $ 6,554 | $ 4,626 | $ 4,481 | $ 15,661 |
| Secured long-term financings [1] | — | 5,847 | 943 | 734 | 7,524 |
| Unsecured long-term borrowings [2] | — | 45,706 | 43,639 | 71,620 | 160,965 |
| Contractual interest payments [3] | 6,695 | 12,303 | 5,252 | 36,919 | 61,169 |
| Subordinated liabilities issued by consolidated VIEs | 74 | — | — | 403 | 477 |
| **Amounts related to off-balance-sheet arrangements** | | | | | |
| Commitments to extend credit | 15,069 | 24,214 | 43,356 | 4,988 | 87,627 |
| Contingent and forward starting resale and securities borrowing agreements | 34,410 | — | — | — | 34,410 |
| Forward starting repurchase and secured lending agreements | 8,256 | — | — | — | 8,256 |
| Letters of credit | 465 | 21 | 10 | 5 | 501 |
| Investment commitments [4] | 1,359 | 5,387 | 20 | 350 | 7,116 |
| Other commitments | 3,734 | 102 | 54 | 65 | 3,955 |
| Minimum rental payments | 387 | 620 | 493 | 1,195 | 2,695 |
| Derivative guarantees | 517,634 | 180,543 | 39,367 | 57,736 | 795,280 |
| Securities lending indemnifications | 26,384 | — | — | — | 26,384 |
| Other financial guarantees | 1,361 | 620 | 1,140 | 1,046 | 4,167 |

1. The aggregate contractual principal amount of secured long-term financings for which the fair value option was elected exceeded the related fair value by $154 million.
2. Includes $7.48 billion of adjustments to the carrying value of certain unsecured long-term borrowings resulting from the application of hedge accounting. In addition, the aggregate contractual principal amount of unsecured long-term borrowings (principal and non-principal-protected) for which the fair value option was elected exceeded the related fair value by $92 million.
3. 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 2013. Includes stated coupons, if any, on structured notes.
4. $5.66 billion of commitments to covered funds (as defined by the Volcker Rule) are included in the 2014 and 2015-2016 columns. We expect that substantially all of these commitments will not be called.

In the table above:

- 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 holder are excluded and 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 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.

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 2013, our unsecured long-term borrowings were $160.97 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 2013, our future minimum rental payments net of minimum sublease rentals under noncancelable leases were $2.70 billion. These lease commitments, principally 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 2013, total occupancy expenses for space held in excess of our current requirements were not material. In addition, for 2013, we incurred exit costs of $19 million related to our office space. 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 and Risk Factors

Risks are inherent in our business and include liquidity, market, credit, operational, legal, regulatory and reputational risks. For a further discussion of 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 a further discussion of our areas of risk, see "— Liquidity Risk Management," "— Market Risk Management," "— Credit Risk Management," "— Operational Risk Management" and "Certain Risk Factors That May Affect Our Businesses" below.

## 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, 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 and operational 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 managers lead and participate in risk-oriented committees, as do the leaders of our independent control and support functions — including those in Compliance, Controllers, our Credit Risk Management department (Credit Risk Management), Human Capital Management, Legal, our Market Risk Management department (Market Risk Management), Operations, our Operational Risk Management department (Operational Risk Management), Tax, Technology and Treasury.

The firm's 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 the firm's 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 the firm's 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 setting credit and market risk limits at a variety of levels and monitoring these limits on a daily basis. 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 "Market Risk Management" and "Credit Risk Management" for further information on our risk limits.

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 the firm's 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 the firm 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 the most senior leaders of the firm, 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.

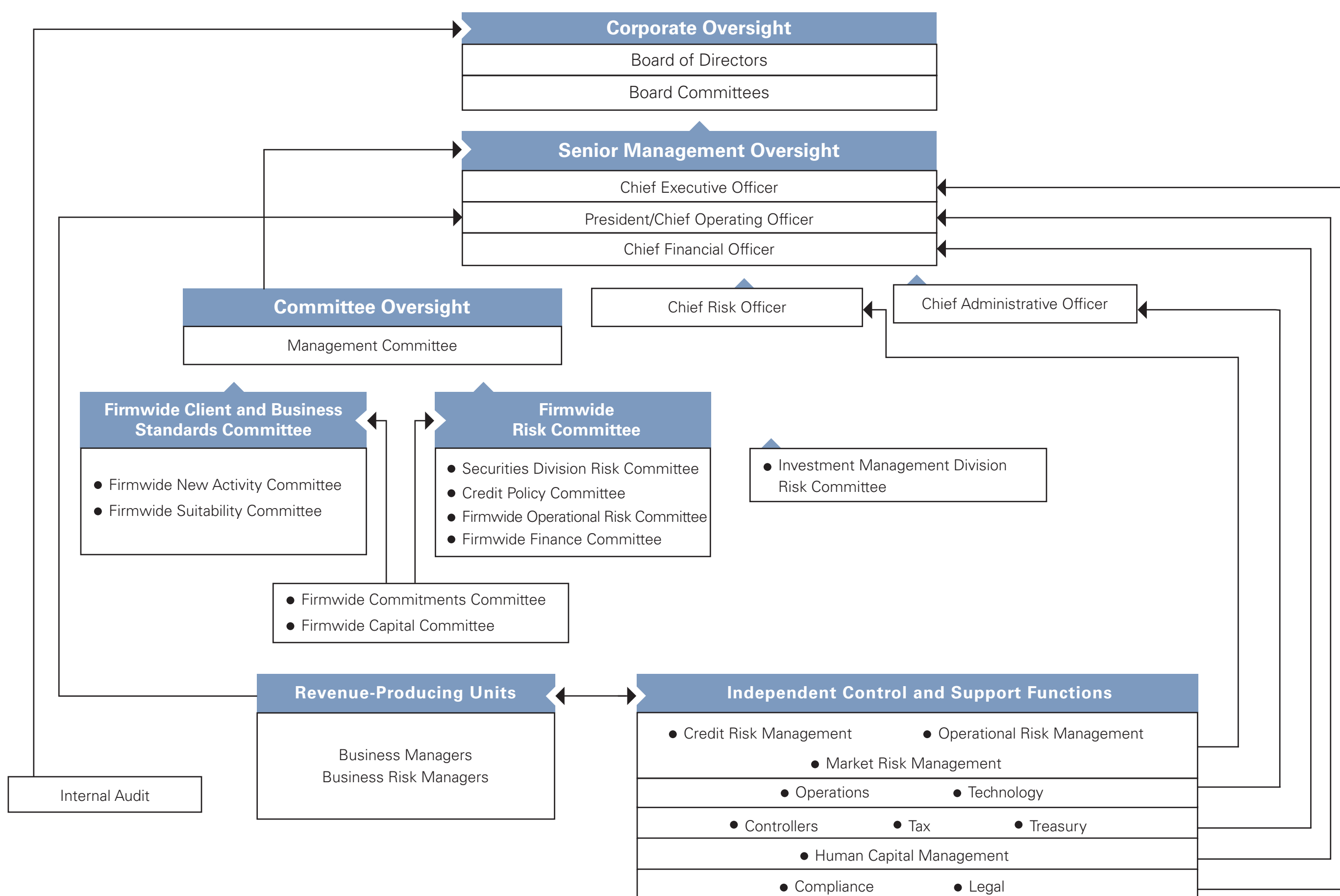
### Structure

Ultimate oversight of risk is the responsibility of the firm's Board. The Board oversees risk both directly and through its committees, including its Risk Committee. The Risk Committee consists of all of our independent directors. 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 the firm's 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 financial officer, the general counsel and the chief administrative officer, are responsible for day-to-day oversight or monitoring of risk, as discussed 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.

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 control and support functions.




**Management Committee.** The Management Committee oversees the global activities of the firm, including all of the firm's independent control and support functions. It provides this oversight directly and through authority delegated to committees it has established. This committee is comprised of the most senior leaders of the firm, and is chaired by the firm's chief executive officer. The Management Committee has established various committees with delegated authority and the chairperson of the Management Committee appoints the chairpersons 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 the firm's 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 Subcommittee of the Corporate Governance, Nominating and Public Responsibilities Committee of the Board. This committee has established the following two risk-related committees that report to it:

- **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 the firm's head of operations/chief operating officer for Europe, Middle East and Africa and the chief administrative officer of our Investment Management Division, who are appointed by the Firmwide Client and Business Standards Committee chairperson.
- **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 firm committees. This committee is co-chaired by the deputy head of our Global Compliance Division and the co-head of our Investment Management Division, who are appointed by the Firmwide Client and Business Standards Committee chairperson.

**Firmwide Risk Committee.** The Firmwide Risk Committee is globally responsible for the ongoing monitoring and management of the firm's financial risks. Through both direct and delegated authority, the Firmwide Risk Committee approves firmwide, product, divisional and business-level limits for both market and credit risks, approves sovereign credit risk limits and reviews results of stress tests and scenario analyses. This committee is co-chaired by the firm's chief financial officer and a senior managing director from the firm's executive office, and reports to the Management Committee. The following four committees report to the Firmwide Risk Committee. The chairperson of the Securities Division Risk Committee is appointed by the chairpersons of the Firmwide Risk Committee; the chairpersons of the Credit Policy and Firmwide Operational Risk Committees are appointed by the firm's chief risk officer; and the chairpersons of the Firmwide Finance Committee are appointed by the Firmwide Risk Committee.

- **Securities Division Risk Committee.** The Securities Division Risk Committee sets market risk limits, subject to overall firmwide risk limits, for the Securities Division based on a number of risk measures, including but not limited to VaR, stress tests, scenario analyses and balance sheet levels. This committee is chaired by the chief risk officer of our Securities Division.
- **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 chaired by the firm's chief credit 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 a managing director in Operational Risk Management.
- **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 GCE. This committee is co-chaired by the firm's chief financial officer and the firm's global treasurer.

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 the firm's 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 firm's senior strategy officer and the co-head of Global Mergers & Acquisitions, who are appointed by the Firmwide Client and Business Standards Committee chairperson.
- **Firmwide Capital Committee.** The Firmwide Capital Committee provides approval and oversight of debt-related transactions, including principal commitments of the firm's 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 firm's global treasurer and the head of credit finance for Europe, Middle East and Africa who are appointed by the Firmwide Risk Committee chairpersons.

**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. The head of Investment Management Division risk management is the chair of this committee. The Investment Management Division Risk Committee reports to the firm's chief risk officer.

### Conflicts Management

Conflicts of interest and the firm's 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 the firm's policies and procedures, is shared by the entire firm.

We have a multilayered approach to resolving conflicts and addressing reputational risk. The firm's senior management oversees policies related to conflicts resolution. The firm's senior management, the Business Selection and Conflicts Resolution Group, the Legal Department and Compliance Division, the Firmwide Client and Business Standards Committee and other internal committees all play roles in the formulation of policies, standards and principles and assist 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.

At the transaction level, various people and groups have roles. As a general matter, the Business Selection and Conflicts Resolution Group reviews all financing and advisory assignments in Investment Banking and certain investing, lending and other activities of the firm. Various transaction oversight committees, such as the Firmwide Capital, Commitments and Suitability Committees and other committees across the firm, also review new underwritings, loans, investments and structured products. These committees work with internal and external lawyers and the Compliance Division 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.

## Liquidity Risk Management

Liquidity is of critical importance to financial institutions. Most of the failures of financial institutions have occurred in large part due to insufficient liquidity. Accordingly, the firm has in place a comprehensive and conservative set of liquidity and funding policies to address both firm-specific and broader industry or market liquidity events. 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.

We manage liquidity risk according to the following principles:

**Excess Liquidity.** We maintain substantial excess liquidity to meet a broad range of potential cash outflows and collateral needs in a stressed environment.

**Asset-Liability Management.** We assess anticipated holding periods for our assets and their expected liquidity in a stressed environment. We manage the maturities and diversity of our funding across markets, products and counterparties, and seek to maintain liabilities of appropriate tenor relative to our asset base.

**Contingency Funding Plan.** We maintain a contingency funding plan to provide a framework for analyzing and responding to a liquidity crisis situation or periods of market stress. This framework sets forth the plan of action to fund normal business activity in emergency and stress situations. These principles are discussed in more detail below.

### Excess Liquidity

Our most important liquidity policy is to pre-fund our estimated potential cash and collateral needs during a liquidity crisis and hold this excess liquidity in the form of unencumbered, highly liquid securities and cash. We believe that the securities held in our global core excess 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.

As of December 2013 and December 2012, the fair value of the securities and certain overnight cash deposits included in our GCE totaled \$184.07 billion and \$174.62 billion, respectively. Based on the results of our internal liquidity risk model, discussed below, 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 2013 and December 2012 was appropriate.

The table below presents the fair value of the securities and certain overnight cash deposits that are included in our GCE.

| | Average for the Year Ended December | |
|---|---|---|
| *in millions* | **2013** | 2012 |
| U.S. dollar-denominated | **$136,824** | $125,111 |
| Non-U.S. dollar-denominated | **45,826** | 46,984 |
| **Total** | **$182,650** | $172,095 |

The U.S. dollar-denominated excess 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 excess 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 excess liquidity 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, such as less liquid unencumbered securities or committed credit facilities, in our GCE.

The table below presents the fair value of our GCE by asset class.

| *in millions* | Average for the Year Ended December 2013 | 2012 |
|---|---|---|
| Overnight cash deposits | $ 61,265 | $ 52,233 |
| U.S. government obligations | 76,019 | 72,379 |
| U.S. federal agency obligations, including highly liquid U.S. federal agency mortgage-backed obligations | 2,551 | 2,313 |
| German, French, Japanese and United Kingdom government obligations | 42,815 | 45,170 |
| **Total** | $182,650 | $172,095 |

Our GCE is held by Group Inc. and our major broker-dealer and bank subsidiaries, as presented in the table below.

| *in millions* | Average for the Year Ended December 2013 | 2012 |
|---|---|---|
| Group Inc. | $ 29,752 | $ 37,405 |
| Major broker-dealer subsidiaries | 93,103 | 78,229 |
| Major bank subsidiaries | 59,795 | 56,461 |
| **Total** | $182,650 | $172,095 |

Our GCE 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.
- 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 believe that our GCE 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.

In order to determine the appropriate size of our GCE, we use an internal liquidity model, referred to as the Modeled Liquidity Outflow, which captures and quantifies the firm's liquidity risks. We also consider 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 distribute our GCE across entities, 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.

We maintain our GCE to enable us to meet current and potential liquidity requirements of our parent company, Group Inc., and its subsidiaries. The Modeled Liquidity Outflow incorporates a consolidated requirement for the firm 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 incorporates a broader assessment of standalone liquidity requirements for other subsidiaries and we hold a portion of our GCE directly at Group Inc. to support such requirements. In addition to the GCE, we maintain operating cash balances in several of our other operating entities, primarily for use in specific currencies, entities, or jurisdictions where we do not have immediate access to parent company liquidity.

In addition to our GCE, we have a significant amount of other unencumbered cash and financial instruments, including other government obligations, high-grade money market securities, corporate obligations, marginable equities, loans and cash deposits not included in our GCE. The fair value of these assets averaged $90.77 billion for 2013 and $87.09 billion for 2012. We do not consider these assets liquid enough to be eligible for our GCE liquidity pool and therefore conservatively do not assume we will generate liquidity from these assets in our Modeled Liquidity Outflow.

**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.
- A firm-specific crisis potentially triggered by material losses, reputational damage, litigation, executive departure, and/or a ratings downgrade.

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

- Liquidity needs over a 30-day scenario.
- A two-notch downgrade of the firm's 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 government funding facilities. Although we have access to various central bank funding programs, we do not assume reliance on them as a source of funding in a liquidity crisis.
- We do not assume asset liquidation, other than the GCE.

The Modeled Liquidity Outflow is calculated and reported to senior management on a daily basis. We regularly refine our model to reflect changes in market or economic conditions and the firm's business mix.

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 roll over 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 the firm's 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 serve as a funding source for long positions.

### *Unfunded Commitments*

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

### *Other*

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

## 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 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 — 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. 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.
- 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 the firm maintains sufficient liquidity to fund its assets and meet its contractual and contingent obligations in normal times as well as during periods of market stress. Through our dynamic balance sheet management process (see "Balance Sheet and Funding Sources — Balance Sheet Management"), 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 GCE in order to avoid reliance on asset sales (other than our GCE). 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 key benefit of this approach to subsidiary funding is greater flexibility to meet the funding requirements of various subsidiaries over time. 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 company or other subsidiaries. In particular, many of our subsidiaries are subject to laws that authorize regulatory bodies to block or reduce the flow of funds from those subsidiaries to Group Inc. Regulatory action of that kind could impede access to funds that Group Inc. needs to make payments on its obligations. Accordingly, we assume that the capital provided to our regulated subsidiaries is not available to Group Inc. or other subsidiaries and any other financing provided to our regulated subsidiaries is not available until the maturity of such financing.

Group Inc. has provided substantial amounts of equity and subordinated indebtedness, directly or indirectly, to its regulated subsidiaries. For example, as of December 2013, Group Inc. had $31.40 billion of equity and subordinated indebtedness invested in GS&Co., its principal U.S. registered broker-dealer; $26.40 billion invested in GSI, a regulated U.K. broker-dealer; $2.26 billion invested in GSEC, a U.S. registered broker-dealer; $2.82 billion invested in GSJCL, a regulated Japanese broker-dealer; $20.04 billion invested in GS Bank USA, a regulated New York State-chartered bank; and $3.50 billion invested in GSIB, a regulated U.K. bank. Group Inc. also provided, directly or indirectly, $75.77 billion of unsubordinated loans and $9.93 billion of collateral to these entities, substantially all of which was to GS&Co., GSI and GS Bank USA, as of December 2013. In addition, as of December 2013, Group Inc. had significant amounts of capital invested in and loans to its other regulated subsidiaries.

### Contingency Funding Plan

The Goldman Sachs contingency funding plan sets out the plan of action we would use to fund business activity in crisis situations and periods of market stress. The 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 the firm's potential responses if our assessments indicate that the firm has entered a liquidity crisis, which include funding 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.

### Proposed Liquidity Framework

The Basel Committee on Banking Supervision's international framework for liquidity risk measurement, standards and monitoring calls for imposition of a liquidity coverage ratio, designed to ensure that banks and bank holding companies maintain an adequate level of unencumbered high-quality liquid assets based on expected cash outflows under an acute liquidity stress scenario, and a net stable funding ratio, designed to promote more medium- and long-term funding of the assets and activities of these entities over a one-year time horizon. Under the Basel Committee framework, the liquidity coverage ratio would be introduced on January 1, 2015; however, there would be a phase-in period whereby firms would have a 60% minimum in 2015 which would be raised 10% per year until it reaches 100% in 2019. The net stable funding ratio is not expected to be introduced as a requirement until January 1, 2018.

In addition, the Office of the Comptroller of the Currency, the Federal Reserve Board and the FDIC have issued a proposal on minimum liquidity standards that is generally consistent with the Basel Committee's framework as described above, but, with certain modifications to the high-quality liquid asset definition and expected cash outflow assumptions, and accelerated transition provisions. In addition, under the proposed accelerated transition timeline, the liquidity coverage ratio would be introduced on January 1, 2015; however, there would be an accelerated U.S. phase-in period whereby firms would have an 80% minimum in 2015 which would be raised 10% per year until it reaches 100% in 2017.

The firm will continue to evaluate the impact to our risk management framework going forward. While the principles behind the new frameworks proposed by the Basel Committee and the Agencies are broadly consistent with our current liquidity management framework, it is possible that the implementation of these standards could impact our liquidity and funding requirements and practices.

## 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 "Certain Risk Factors That May Affect Our Businesses" below and "Risk Factors" in Part I, Item 1A of the 2013 Form 10-K for a discussion of the risks associated with a reduction in our credit ratings.

During the fourth quarter of 2013, as part of a reassessment of its government support assumptions related to the eight largest U.S. bank holding companies, Moody's Investors Service (Moody's) lowered Group Inc.'s ratings on long-term debt (from A3 to Baa1) and subordinated debt (from Baa1 to Baa2). The table below presents the unsecured credit ratings and outlook of Group Inc.

| | As of December 2013 | | | | | |
|---|---|---|---|---|---|---|
| | Short-Term Debt | Long-Term Debt | Subordinated Debt | Trust Preferred [1] | Preferred Stock | Ratings Outlook |
| DBRS, Inc. | R-1 (middle) | A (high) | A | A | BBB [3] | Stable |
| Fitch, Inc. | F1 | A [2] | A- | BBB- | BB+ [3] | Stable |
| Moody's | P-2 | Baa1 [2] | Baa2 | Baa3 | Ba2 [3] | Stable |
| Standard & Poor's Ratings Services (S&P) | A-2 | A- [2] | BBB+ | BB+ | BB+ [3] | Negative |
| Rating and Investment Information, Inc. | a-1 | A+ | A | N/A | N/A | Negative |

1. Trust preferred securities issued by Goldman Sachs Capital I.

2. Includes the senior guaranteed trust securities issued by Murray Street Investment Trust I and Vesey Street Investment Trust I.

3. Includes Group Inc.'s non-cumulative preferred stock and the APEX issued by Goldman Sachs Capital II and Goldman Sachs Capital III.

The table below presents the unsecured credit ratings of GS Bank USA, GS&Co., GSI and GSIB. On February 21, 2014, Moody's assigned GSIB a rating of A2 for long-term debt and long-term bank deposits and P-1 for short-term debt and short-term bank deposits.

| | As of December 2013 | | | |
|---|---|---|---|---|
| | Short-Term Debt | Long-Term Debt | Short-Term Bank Deposits | Long-Term Bank Deposits |
| Fitch, Inc. | | | | |
| GS Bank USA | F1 | A | F1 | A+ |
| GS&Co. | F1 | A | N/A | N/A |
| GSI | F1 | A | N/A | N/A |
| GSIB | F1 | A | N/A | N/A |
| Moody's | | | | |
| GS Bank USA | P-1 | A2 | P-1 | A2 |
| GSI | P-1 | A2 | N/A | N/A |
| S&P | | | | |
| GS Bank USA | A-1 | A | N/A | N/A |
| GS&Co. | A-1 | A | N/A | N/A |
| GSI | A-1 | A | N/A | N/A |
| GSIB | A-1 | A | N/A | N/A |

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 the assumed level of government support.

Certain of the firm's 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 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. We allocate a portion of our GCE 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.

| | As of December | |
|---|---|---|
| *in millions* | **2013** | 2012 |
| Additional collateral or termination payments for a one-notch downgrade | **$ 911** | $1,534 |
| Additional collateral or termination payments for a two-notch downgrade | **2,989** | 2,500 |

## 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 excess 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 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 held for investment and repurchases of common stock.

**Year Ended December 2012.** Our cash and cash equivalents increased by $16.66 billion to $72.67 billion at the end of 2012. We generated $9.14 billion in net cash from operating and investing activities. We generated $7.52 billion in net cash from financing activities from an increase in bank deposits, partially offset by net repayments of unsecured and secured long-term borrowings.

**Year Ended December 2011.** Our cash and cash equivalents increased by $16.22 billion to $56.01 billion at the end of 2011. We generated $23.13 billion in net cash from operating and investing activities. We used net cash of $6.91 billion for financing activities, primarily for repurchases of our Series G Preferred Stock and common stock, partially offset by an increase in bank deposits.

## 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. The firm employs 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.
- 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.

### 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 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.

Market Risk Management, which is independent of the revenue-producing units and reports to the firm's 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 the firm's global businesses.

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.

Managers in revenue-producing units and Market Risk Management discuss market information, positions and estimated risk and loss scenarios on an ongoing basis.

### Risk Measures

Market Risk Management produces risk measures and monitors them against market risk limits set by our firm's risk committees. These measures reflect an extensive range of scenarios and the results are aggregated at trading desk, 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 positions 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.
- 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 5 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.

### Stress Testing

Stress testing is a method of determining the effect on the firm of various hypothetical stress scenarios. 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 the firm's 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 a single corporate entity, which captures the risk of large or concentrated exposures.

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 — Capital Planning and Stress Testing Process" 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 the firm's routine risk management process and on an ad hoc basis in response to market events or concerns. Stress testing is an important part of the firm's 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, product and business) 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 the firm's 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 Firmwide Risk Committee sets market risk limits at firmwide and product levels and our Securities Division Risk Committee sets sub-limits for market-making and investing activities at a business level. The purpose of the firmwide limits is to assist senior management in controlling the firm's 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 trading 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 Securities Division Risk Committee 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 reported to the appropriate risk committee and a discussion takes place with the relevant desk managers, after which either the risk position is reduced or the risk limit is temporarily or permanently increased.

### Model Review and Validation

Our VaR and stress testing models are subject to review and validation by our independent model validation group at least annually. This review includes:

- a critical evaluation of the model, its theoretical soundness and adequacy for intended use;
- verification of the testing strategy utilized by the model developers to ensure that the model functions as intended; and
- verification of the suitability of the calculation techniques incorporated in the model.

Our VaR and stress testing models are regularly reviewed and enhanced in order to incorporate changes in the composition of positions included in the firm's market risk measures, as well as variations in market conditions. Prior to implementing significant changes to our assumptions and/or models, we perform model validation and test runs. Significant changes to our VaR and stress testing models are reviewed with the firm's chief risk officer and chief financial officer, and approved by the Firmwide Risk Committee.

We evaluate the accuracy of our VaR model through daily backtesting (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.

### 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.

#### Average Daily VaR

| *in millions* | Year Ended December | | |
|---|---|---|---|
| **Risk Categories** | **2013** | 2012 | 2011 |
| Interest rates | **$ 63** | $ 78 | $ 94 |
| Equity prices | **32** | 26 | 33 |
| Currency rates | **17** | 14 | 20 |
| Commodity prices | **19** | 22 | 32 |
| Diversification effect | **(51)** | (54) | (66) |
| **Total** | **$ 80** | $ 86 | $113 |

Our average daily VaR decreased to $80 million in 2013 from $86 million in 2012, primarily reflecting a decrease in the interest rates category principally due to lower levels of volatility and decreased exposures. This decrease was partially offset by an increase in the equity prices category principally due to increased exposures.

Our average daily VaR decreased to $86 million in 2012 from $113 million in 2011, reflecting a decrease in the interest rates category due to lower levels of volatility, decreases in the commodity prices and currency rates categories due to reduced exposures and lower levels of volatility, and a decrease in the equity prices category due to reduced exposures. These decreases were partially offset by a decrease in the diversification benefit across risk categories.

#### Year-End VaR and High and Low VaR

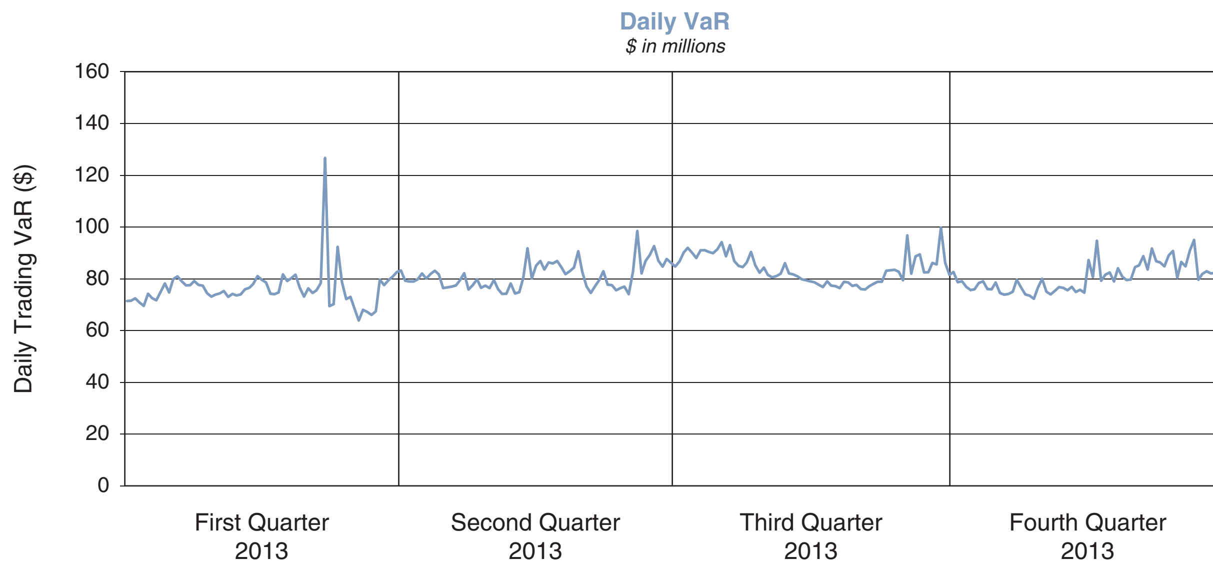
| *in millions* | As of December | | Year Ended December 2013 | |
|---|---|---|---|---|
| **Risk Categories** | **2013** | 2012 | **High** | **Low** |
| Interest rates | **$ 59** | $ 64 | **$ 77** | **$54** |
| Equity prices | **35** | 22 | **90** [1] | **20** |
| Currency rates | **16** | 9 | **37** | **9** |
| Commodity prices | **20** | 18 | **25** | **13** |
| Diversification effect | **(45)** | (42) | | |
| **Total** | **$ 85** | $ 71 | **$127** | **$64** |

1. Reflects the impact of temporarily increased exposures as a result of equity underwriting transactions.

Our daily VaR increased to $85 million as of December 2013 from $71 million as of December 2012, primarily reflecting increases in the equity prices and currency rates categories, principally due to increased exposures. These increases were partially offset by a decrease in the interest rates category primarily due to decreased exposures.

During 2013 and 2012, the firmwide VaR risk limit was not exceeded and in each year it was reduced on one occasion due to lower levels of volatility.

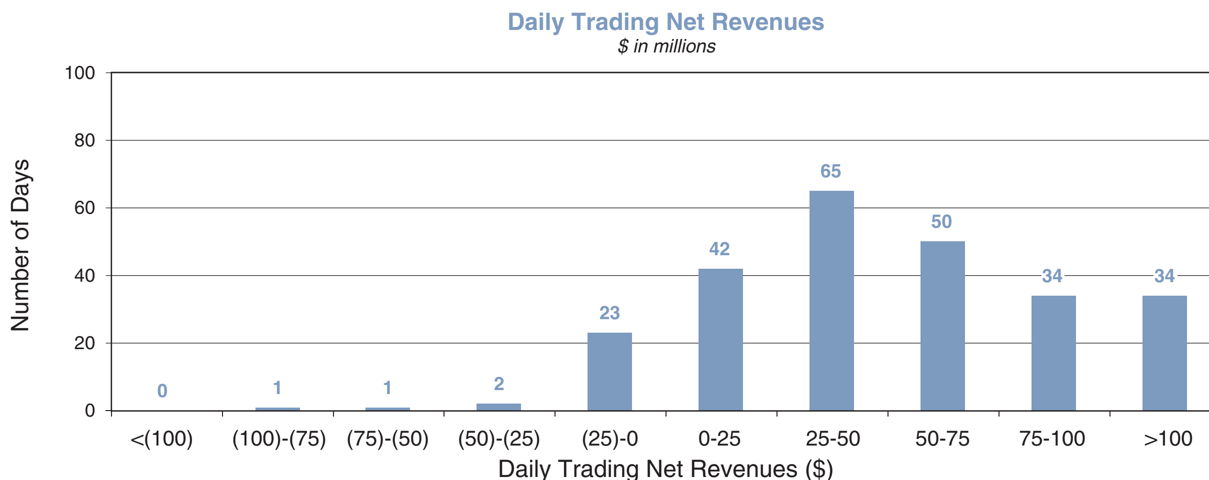
The chart below reflects the VaR over the last four quarters.




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 2013 or 2012 (i.e., a VaR exception).

During periods in which the firm has 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. In addition, VaR backtesting is performed against total daily market-making revenues, including bid/offer net revenues, which are more likely than not to be positive by their nature.

The chart below presents the frequency distribution of our daily trading net revenues for substantially all positions included in VaR for 2013.



### 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.

| Asset Categories | 10% Sensitivity | |
|---|---|---|
| | Amount as of December | |
| *in millions* | **2013** | 2012 |
| Equity [1] | **$2,256** | $2,471 |
| Debt | **1,522** | 1,676 |
| **Total** | **$3,778** | $4,147 |

1. December 2012 includes $208 million related to our investment in the ordinary shares of ICBC, which was sold in the first half of 2013.

**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 $4 million and $3 million (including hedges) as of December 2013 and December 2012, respectively. 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 $8 million and $7 million (including hedges) as of December 2013 and December 2012, 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.** As of December 2013 and December 2012, the firm had $14.90 billion and $6.50 billion, respectively, of loans held for investment which were accounted for at amortized cost and included in "Receivables from customers and counterparties," substantially all of which had floating interest rates. As of December 2013 and December 2012, the estimated sensitivity to a 100 basis point increase in interest rates on such loans was $136 million and $62 million, respectively, of additional interest income over a 12-month period, which does not take into account the potential impact of an increase in costs to fund such loans. See Note 8 to the consolidated financial statements for further information about loans held for investment.

## Financial Statement Linkages to Market Risk Measures

The firm employs 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 statement of financial condition and the market risk measures used to assess those assets and liabilities. Certain categories on the consolidated statement of financial condition are incorporated in more than one risk measure.

| Categories on the Consolidated Statement of Financial Condition Included in Market Risk Measure | Market Risk Measure |
|---|---|
| Securities segregated for regulatory and other purposes, at fair value | • VaR |
| Collateralized agreements<br>• Securities purchased under agreements to resell, at fair value<br>• Securities borrowed, at fair value | • VaR |
| Receivables from customers and counterparties<br>• Certain secured loans, at fair value<br>• Loans held for investment, at amortized cost | • VaR<br>• Interest Rate Sensitivity |
| Financial instruments owned, at fair value | • VaR<br>• 10% Sensitivity Measures<br>• Credit Spread Sensitivity — Derivatives |
| Collateralized financings<br>• Securities sold under agreements to repurchase, at fair value<br>• Securities loaned, at fair value<br>• Other secured financings, at fair value | • VaR |
| Financial instruments sold, but not yet purchased, at fair value | • VaR<br>• Credit Spread Sensitivity — Derivatives |
| Unsecured short-term borrowings and unsecured long-term borrowings, at fair value | • VaR<br>• Credit Spread Sensitivity — Borrowings |

## Other Market Risk Considerations

In addition, as of December 2013 and December 2012, 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" in the consolidated statements of financial condition. Direct investments in real estate are accounted for at cost less accumulated depreciation. See Note 12 to the consolidated financial statements for information on "Other assets."

## 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 the firm's 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. The firm also enters into derivatives to manage market risk exposures. Such derivatives also give rise to credit risk which is monitored and managed by Credit Risk Management.

Policies authorized by the Firmwide Risk Committee and the Credit Policy Committee prescribe the level of formal approval required for the firm to assume credit exposure to a counterparty across all product areas, taking into account any applicable netting provisions, collateral or other credit risk mitigants.

### 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 the firm's 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. A credit review is an independent judgment about the capacity and willingness of a counterparty to meet its financial obligations. For substantially all of our credit exposures, the core of our process is an annual counterparty review. A counterparty review is a written analysis of a counterparty's business profile and financial strength resulting in an internal credit rating which represents the probability of default on financial obligations to the firm. The determination of internal credit ratings incorporates assumptions with respect to the counterparty's future business performance, the nature 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 an event of non-payment by a counterparty. For derivatives and securities financing transactions, the primary measure is potential exposure, which is 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 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 also monitor credit risk in terms of current exposure, which is the amount presently owed to the firm after taking into account applicable netting and collateral.

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 appetites for a given counterparty or group of counterparties. Limits for industries and countries are based on the firm's risk tolerance and are designed to allow for regular monitoring, review, escalation and management of credit risk concentrations.

### Stress Tests/Scenario Analysis

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 the firm's market and liquidity risk functions.

### 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 the firm 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.

When we do not have sufficient visibility into a counterparty's financial strength or when we believe a counterparty requires support from its parent company, 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 2013, our credit exposures decreased as compared with December 2012, primarily reflecting decreases in OTC derivatives, cash and securities financing exposures, partially offset by an increase 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 from December 2012, primarily reflecting an increase in loans and lending commitments. During 2013, counterparty defaults primarily occurred within OTC derivatives and loans and lending commitments. The number of counterparty defaults during 2013 remained low and was less than 0.5% of all counterparties. Counterparty defaults were higher in 2013 (there were approximately 10 additional defaults compared with 2012), primarily related to OTC derivatives. Estimated losses associated with these defaults were higher compared with the prior year and were not material to the firm.

The firm's 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.** The firm's credit exposure on OTC derivatives arises primarily from our market-making activities. The firm, as a market maker, enters into derivative transactions to provide liquidity to clients and to facilitate the transfer and hedging of their risks. The firm also enters 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.

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, the firm includes 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 tables below present the distribution of our exposure to OTC derivatives by tenor, based on expected duration for mortgage-related credit derivatives and generally on remaining contractual maturity for other derivatives, both before and after the effect of collateral and netting agreements. 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 in the tables below 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. The categories shown reflect our internally determined public rating agency equivalents.

| | As of December 2013 | | | | | | |
|---|---|---|---|---|---|---|---|
| *in millions*<br>**Credit Rating Equivalent** | 0 - 12 Months | 1 - 5 Years | 5 Years or Greater | Total | Netting | OTC Derivative Assets | Net Credit Exposure |
| AAA/Aaa | $ 473 | $ 1,470 | $ 2,450 | $ 4,393 | $ (2,087) | $ 2,306 | $ 2,159 |
| AA/Aa2 | 3,463 | 7,642 | 29,926 | 41,031 | (27,918) | 13,113 | 8,596 |
| A/A2 | 12,693 | 25,666 | 29,701 | 68,060 | (48,803) | 19,257 | 11,188 |
| BBB/Baa2 | 4,377 | 10,112 | 24,013 | 38,502 | (29,213) | 9,289 | 5,952 |
| BB/Ba2 or lower | 2,972 | 6,188 | 4,271 | 13,431 | (5,357) | 8,074 | 6,381 |
| Unrated | 1,289 | 45 | 238 | 1,572 | (9) | 1,563 | 1,144 |
| **Total** | $25,267 | $51,123 | $ 90,599 | $166,989 | $(113,387) | $53,602 | $35,420 |

| | As of December 2012 | | | | | | |
|---|---|---|---|---|---|---|---|
| *in millions*<br>**Credit Rating Equivalent** | 0 - 12 Months | 1 - 5 Years | 5 Years or Greater | Total | Netting | OTC Derivative Assets | Net Credit Exposure |
| AAA/Aaa | $ 494 | $ 1,934 | $ 2,778 | $ 5,206 | $ (1,476) | $ 3,730 | $ 3,443 |
| AA/Aa2 | 4,631 | 7,483 | 20,357 | 32,471 | (16,026) | 16,445 | 10,467 |
| A/A2 | 13,422 | 26,550 | 42,797 | 82,769 | (57,868) | 24,901 | 16,326 |
| BBB/Baa2 | 7,032 | 12,173 | 27,676 | 46,881 | (32,962) | 13,919 | 4,577 |
| BB/Ba2 or lower | 2,489 | 5,762 | 7,676 | 15,927 | (9,116) | 6,811 | 4,544 |
| Unrated | 326 | 927 | 358 | 1,611 | (13) | 1,598 | 1,259 |
| Total | $28,394 | $54,829 | $101,642 | $184,865 | $(117,461) | $67,404 | $40,616 |

**Lending and Financing Activities.** We manage the firm's 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.** The firm's 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. The firm's 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.** The firm enters 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. The firm bears 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. The firm also has 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 manage our credit risk on securities financing transactions using the credit risk process, measures, limits and risk mitigants described above. We had approximately $29 billion and $37 billion as of December 2013 and December 2012, respectively, of credit exposure related to securities financing transactions reflecting both netting agreements and collateral that management considers when determining credit risk.
- **Other Credit Exposures.** The firm is exposed to credit risk from its receivables from brokers, dealers and clearing organizations and customers and counterparties. Receivables from brokers, dealers and clearing organizations are primarily comprised of initial cash 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 $18 billion as of both December 2013 and December 2012, and was primarily comprised of initial margin (both cash and securities) placed with clearing organizations.

  In addition, the firm extends other loans and lending commitments to its private wealth clients that are generally longer-term in nature and are primarily secured by residential real estate or other assets. The gross exposure related to such loans and lending commitments was approximately $11 billion and $7 billion as of December 2013 and December 2012, respectively. The fair value of the collateral received against such loans and lending commitments exceeded the gross exposure as of both December 2013 and December 2012.

### Credit Exposure by Industry, Region and Credit Quality

The tables below present the firm's credit exposures related to cash, OTC derivatives, and loans and lending commitments (excluding Securities Financing Transactions and Other Credit Exposures above) broken down by industry, region and credit quality.

### Credit Exposure by Industry

| in millions | Cash | | OTC Derivatives | | Loans and Lending Commitments [1] | |
|---|---|---|---|---|---|---|
| | As of December | | As of December | | As of December | |
| | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 |
| Asset Managers & Funds | $ 91 | $ — | $10,812 | $10,552 | $ 2,075 | $ 1,673 |
| Banks, Brokers & Other Financial Institutions | 9,742 | 10,507 | 11,448 | 21,310 | 11,824 | 6,192 |
| Consumer Products, Non-Durables & Retail | — | — | 3,448 | 1,516 | 16,477 | 13,304 |
| Government & Central Banks | 51,294 | 62,162 | 13,446 | 14,729 | 1,897 | 1,782 |
| Healthcare & Education | — | — | 2,157 | 3,764 | 12,283 | 7,717 |
| Insurance | — | — | 2,771 | 4,214 | 3,085 | 3,199 |
| Natural Resources & Utilities | — | — | 4,781 | 4,383 | 17,970 | 16,360 |
| Real Estate | 6 | — | 388 | 381 | 8,550 | 3,796 |
| Technology, Media, Telecommunications & Services | — | — | 2,124 | 2,016 | 16,740 | 17,674 |
| Transportation | — | — | 673 | 1,207 | 6,729 | 6,557 |
| Other | — | — | 1,554 | 3,332 | 7,695 | 4,650 |
| **Total** | $61,133 | $72,669 | $53,602 | $67,404 | $105,325 | $82,904 |

### Credit Exposure by Region

| in millions | Cash | | OTC Derivatives | | Loans and Lending Commitments [1] | |
|---|---|---|---|---|---|---|
| | As of December | | As of December | | As of December | |
| | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 |
| Americas | $54,470 | $65,193 | $21,423 | $32,968 | $ 77,710 | $59,792 |
| Europe, Middle East and Africa | 2,143 | 1,683 | 25,983 | 26,739 | 25,222 | 21,104 |
| Asia | 4,520 | 5,793 | 6,196 | 7,697 | 2,393 | 2,008 |
| **Total** | $61,133 | $72,669 | $53,602 | $67,404 | $105,325 | $82,904 |

### Credit Exposure by Credit Quality

| in millions | Cash | | OTC Derivatives | | Loans and Lending Commitments [1] | |
|---|---|---|---|---|---|---|
| | As of December | | As of December | | As of December | |
| **Credit Rating Equivalent** | 2013 | 2012 | 2013 | 2012 | 2013 | 2012 |
| AAA/Aaa | $50,519 | $59,825 | $ 2,306 | $ 3,730 | $ 3,079 | $ 2,179 |
| AA/Aa2 | 2,748 | 6,356 | 13,113 | 16,445 | 7,001 | 7,220 |
| A/A2 | 6,821 | 5,068 | 19,257 | 24,901 | 23,250 | 21,901 |
| BBB/Baa2 | 527 | 326 | 9,289 | 13,919 | 30,496 | 26,313 |
| BB/Ba2 or lower | 518 | 1,094 | 8,074 | 6,811 | 41,114 | 25,291 |
| Unrated | — | — | 1,563 | 1,598 | 385 | — |
| **Total** | $61,133 | $72,669 | $53,602 | $67,404 | $105,325 | $82,904 |

1. Includes approximately $23 billion and $12 billion of loans as of December 2013 and December 2012, respectively, and approximately $82 billion and $71 billion of lending commitments as of December 2013 and December 2012, respectively. Excludes certain loans and related lending commitments that are risk-managed as part of market risk using VaR and sensitivity measures.

## Selected Country Exposures

There have been continuing concerns about European sovereign debt risk and its impact on the European banking system and a number of European member states have experienced significant credit deterioration. The most pronounced market concerns relate to Greece, Ireland, Italy, Portugal and Spain. The tables below present our credit exposure (both gross and net of hedges) to all sovereigns, financial institutions and corporate counterparties or borrowers in these countries. Credit exposure represents the potential for loss due to the default or deterioration in credit quality of a counterparty or borrower. In addition, the tables include the market exposure of our long and short inventory for which the issuer or underlier is located in these countries.

Market exposure represents the potential for loss in value of our inventory due to changes in market prices. There is no overlap between the credit and market exposures in the tables below.

The country of risk is determined by the location of the counterparty, issuer or underlier's assets, where they generate revenue, the country in which they are headquartered, and/or the government whose policies affect their ability to repay their obligations.

| | As of December 2013 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Credit Exposure | | | | | | | | Market Exposure | | | |
| *in millions* | Loans | OTC Derivatives | Other | Gross Funded | Hedges | Total Net Funded Credit Exposure | Unfunded Credit Exposure | Total Credit Exposure | Debt | Equities and Other | Credit Derivatives | Total Market Exposure |
| Greece | | | | | | | | | | | | |
| Sovereign | $ — | $ 233 | $ — | $ 233 | $ (72) | $ 161 | $ — | $ 161 | $ 12 | $ — | $ (2) | $ 10 |
| Non-Sovereign | — | 6 | — | 6 | — | 6 | — | 6 | 10 | 3 | 3 | 16 |
| **Total Greece** | — | 239 | — | 239 | (72) | 167 | — | 167 | 22 | 3 | 1 | 26 |
| Ireland | | | | | | | | | | | | |
| Sovereign | — | 7 | 125 | 132 | — | 132 | — | 132 | (48) | — | (162) | (210) |
| Non-Sovereign | 373 | 356 | 127 | 856 | (5) | 851 | 41 | 892 | 291 | 91 | 108 | 490 |
| **Total Ireland** | 373 | 363 | 252 | 988 | (5) | 983 | 41 | 1,024 | 243 | 91 | (54) | 280 |
| Italy | | | | | | | | | | | | |
| Sovereign | — | 1,704 | 2 | 1,706 | (1,691) | 15 | — | 15 | 371 | — | 62 | 433 |
| Non-Sovereign | 10 | 527 | 195 | 732 | (31) | 701 | 660 | 1,361 | 361 | (13) | (794) | (446) |
| **Total Italy** | 10 | 2,231 | 197 | 2,438 | (1,722) | 716 | 660 | 1,376 | 732 | (13) | (732) | (13) |
| Portugal | | | | | | | | | | | | |
| Sovereign | — | — | 103 | 103 | — | 103 | — | 103 | (27) | — | (73) | (100) |
| Non-Sovereign | — | 16 | 20 | 36 | — | 36 | — | 36 | 126 | — | (112) | 14 |
| **Total Portugal** | — | 16 | 123 | 139 | — | 139 | — | 139 | 99 | — | (185) | (86) |
| Spain | | | | | | | | | | | | |
| Sovereign | — | 52 | — | 52 | — | 52 | — | 52 | 930 | — | 223 | 1,153 |
| Non-Sovereign | 1,025 | 230 | 65 | 1,320 | (93) | 1,227 | 855 | 2,082 | 1,490 | 158 | (1,144) | 504 |
| **Total Spain** | 1,025 | 282 | 65 | 1,372 | (93) | 1,279 | 855 | 2,134 | 2,420 | 158 | (921) | 1,657 |
| **Total** | $1,408 [1] | $3,131 [2] | $637 | $5,176 | $(1,892) [3] | $3,284 | $1,556 | $4,840 | $3,516 | $239 | $(1,891) [3] | $1,864 |

1. Principally consists of loans collateralized by cash, securities and real estate.

2. Includes the benefit of $4.4 billion of cash and U.S. Treasury securities collateral and excludes non-U.S. government and agency obligations and corporate securities collateral of $254 million.

3. Includes written and purchased credit derivative notionals reduced by the fair values of such credit derivatives.

| | As of December 2012 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Credit Exposure | | | | | | | | Market Exposure | | | |
| *in millions* | Loans | OTC Derivatives | Other | Gross Funded | Hedges | Total Net Funded Credit Exposure | Unfunded Credit Exposure | Total Credit Exposure | Debt | Equities and Other | Credit Derivatives | Total Market Exposure |
| Greece | | | | | | | | | | | | |
| Sovereign | $ — | $ — | $ — | $ — | $ — | $ — | $ — | $ — | $ 30 | $ — | $ — | $ 30 |
| Non-Sovereign | — | 5 | 1 | 6 | — | 6 | — | 6 | 65 | 15 | (5) | 75 |
| Total Greece | — | 5 | 1 | 6 | — | 6 | — | 6 | 95 | 15 | (5) | 105 |
| Ireland | | | | | | | | | | | | |
| Sovereign | — | 1 | 103 | 104 | — | 104 | — | 104 | 8 | — | (150) | (142) |
| Non-Sovereign | — | 126 | 36 | 162 | — | 162 | — | 162 | 801 | 74 | 155 | 1,030 |
| Total Ireland | — | 127 | 139 | 266 | — | 266 | — | 266 | 809 | 74 | 5 | 888 |
| Italy | | | | | | | | | | | | |
| Sovereign | — | 1,756 | 1 | 1,757 | (1,714) | 43 | — | 43 | (415) | — | (603) | (1,018) |
| Non-Sovereign | 43 | 560 | 129 | 732 | (33) | 699 | 587 | 1,286 | 434 | 65 | (996) | (497) |
| Total Italy | 43 | 2,316 | 130 | 2,489 | (1,747) | 742 | 587 | 1,329 | 19 | 65 | (1,599) | (1,515) |
| Portugal | | | | | | | | | | | | |
| Sovereign | — | 141 | 61 | 202 | — | 202 | — | 202 | 155 | — | (226) | (71) |
| Non-Sovereign | — | 44 | 2 | 46 | — | 46 | — | 46 | 168 | (6) | (133) | 29 |
| Total Portugal | — | 185 | 63 | 248 | — | 248 | — | 248 | 323 | (6) | (359) | (42) |
| Spain | | | | | | | | | | | | |
| Sovereign | — | 75 | — | 75 | — | 75 | — | 75 | 986 | — | (268) | 718 |
| Non-Sovereign | 1,048 | 259 | 23 | 1,330 | (95) | 1,235 | 733 | 1,968 | 1,268 | 83 | (186) | 1,165 |
| Total Spain | 1,048 | 334 | 23 | 1,405 | (95) | 1,310 | 733 | 2,043 | 2,254 | 83 | (454) | 1,883 |
| Total | $1,091 [1] | $2,967 [2] | $356 | $4,414 | $(1,842) [3] | $2,572 | $1,320 | $3,892 | $3,500 | $231 | $(2,412) [3] | $ 1,319 |

1. Principally consists of loans for which the fair value of collateral exceeds the carrying value of such loans.

2. Includes the benefit of $6.6 billion of cash and U.S. Treasury securities collateral and excludes non-U.S. government and agency obligations and corporate securities collateral of $357 million.

3. Includes written and purchased credit derivative notionals reduced by the fair values of such credit derivatives.

We economically hedge our exposure to written credit derivatives by entering into offsetting purchased credit derivatives with identical underlyings. Where possible, we endeavor to match the tenor and credit default terms of such hedges to that of our written credit derivatives. Substantially all purchased credit derivatives included above are bought from investment-grade counterparties domiciled outside of these countries and are collateralized with cash, U.S. Treasury securities or German government agency obligations. The gross purchased and written credit derivative notionals across the above countries for single-name and index credit default swaps (included in 'Hedges' and 'Credit Derivatives' in the tables above) were $154.6 billion and $148.2 billion, respectively, as of December 2013, and $179.4 billion and $168.6 billion, respectively, as of December 2012. Including netting under legally enforceable netting agreements, within each and across all of the countries above, the purchased and written credit derivative notionals for single-name and index credit default swaps were $22.3 billion and $15.8 billion, respectively, as of December 2013, and $26.0 billion and $15.3 billion, respectively, as of December 2012. These notionals are not representative of our exposure because they exclude available netting under legally enforceable netting agreements on other derivatives outside of these countries and collateral received or posted under credit support agreements.

In credit exposure above, 'Other' principally consists of deposits, secured lending transactions and other secured receivables, net of applicable collateral. As of December 2013 and December 2012, $11.9 billion and $4.8 billion, respectively, of secured lending transactions and other secured receivables were fully collateralized.

For information about the nature of or payout under trigger events related to written and purchased credit protection contracts see Note 7 to the consolidated financial statements.

To supplement our regular stress tests, we conduct tailored stress tests on an ad hoc basis in response to specific market events that we deem significant. For example, in response to the Euro area debt crisis, we conducted stress tests intended to estimate the direct and indirect impact that might result from a variety of possible events involving certain European member states, including sovereign defaults and the exit of one or more countries from the Euro area. In the stress tests, described in "Market Risk Management — Stress Testing" and "Credit Risk Management — Stress Tests/Scenario Analysis," we estimated 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. The parameters of these shocks varied based on the scenario reflected in each stress test. We also estimated the indirect impact on our exposures arising from potential market moves in response to the event, such as the impact of credit market deterioration on corporate borrowers and counterparties along with the shocks to the risk factors described above. We reviewed 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.

Euro area exit scenarios included analysis of the impacts on exposure that might result from the redenomination of assets in the exiting country or countries. We also tested our operational and risk management readiness and capability to respond to a redenomination event. Constructing stress tests for these scenarios requires many assumptions about how exposures might be directly impacted and how resulting secondary market moves would indirectly impact such exposures. Given the multiple parameters involved in such scenarios, losses from such events are inherently difficult to quantify and may materially differ from our estimates.

See "Liquidity Risk Management — Modeled Liquidity Outflow," "Market Risk Management — Stress Testing" and "Credit Risk Management — Stress Tests/Scenario Analysis" for further discussion.

## 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. 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, along with the support of regional or entity-specific working groups or committees, 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 the firm's 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:

- the training, supervision and development of our people;
- the 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, the firm's 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 Basel II 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.

### 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.

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
- the 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 our 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.

## Certain Risk Factors That May Affect Our Businesses

We face a variety of risks that are substantial and inherent in our businesses, including market, liquidity, credit, operational, legal, regulatory and reputational risks. For a discussion of how management seeks to manage some of these risks, see "Overview and Structure of Risk Management." A summary of the more important factors that could affect our businesses follows. For a further discussion of these and other important factors that could affect our businesses, financial condition, results of operations, cash flows and liquidity, see "Risk Factors" in Part I, Item 1A of the 2013 Form 10-K.

- Our businesses have been and may continue to be adversely affected by conditions in the global financial markets and economic conditions generally.
- 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.
- 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.
- Our market-making activities have been and may be affected by changes in the levels of market volatility.
- Our investment banking, client execution and investment management businesses have been adversely affected and may continue to 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 management business may be affected by the poor investment performance of our investment products.
- We may incur losses as a result of ineffective risk management processes and strategies.
- 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.
- Conflicts of interest are increasing and a failure to appropriately identify and address conflicts of interest could adversely affect our businesses.
- Group Inc. is a holding company and is dependent for liquidity on payments from its subsidiaries, many of which are subject to restrictions.
- 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.
- Concentration of risk increases the potential for significant losses in our market-making, underwriting, investing and lending activities.
- The financial services industry is both highly competitive and interrelated.
- 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.
- Derivative transactions and delayed settlements may expose us to unexpected risk and potential losses.
- Our businesses may be adversely affected if we are unable to hire and retain qualified employees.
- Our businesses and those of our clients are subject to extensive and pervasive regulation around the world.
- We may be adversely affected by increased governmental and regulatory scrutiny or negative publicity.
- A failure in our operational systems or infrastructure, or those of third parties, could impair our liquidity, disrupt our businesses, result in the disclosure of confidential information, damage our reputation and cause losses.
- 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.
- The growth of electronic trading and the introduction of new trading technology may adversely affect our business and may increase competition.
- Our commodities activities, particularly our physical commodities activities, subject us to extensive regulation, potential catastrophic events and environmental, reputational and other risks that may expose us to significant liabilities and costs.
- 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.
- 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.