



The Goldman Sachs Group, Inc. and Goldman Sachs Bank USA

# 2015 Annual Dodd-Frank Act Stress Test Disclosure

March 2015

## **2015 Annual Dodd-Frank Act Stress Test Disclosure for The Goldman Sachs Group, Inc.**

### **Overview and requirements**

Section 165(i)(2) of the Dodd-Frank Wall Street Reform and Consumer Protection Act (the “Dodd-Frank Act”) and related regulations require large bank holding companies with total consolidated assets of \$50 billion or more, including The Goldman Sachs Group, Inc. (referred to herein as “Group Inc.,” “we,” “us,” “our” or “the firm”), to conduct two stress tests each year. In the Dodd-Frank Act stress test (“DFAST”) conducted annually (“Annual DFAST”) and currently completed in January of each year, we are required to conduct stress tests using a set of macroeconomic scenarios (supervisory baseline, supervisory adverse and supervisory severely adverse) developed by the Board of Governors of the Federal Reserve System (“Federal Reserve Board”). For the mid-cycle DFAST (“Mid-Cycle DFAST”) currently completed in July of each year, we are required to conduct stress tests under a set of internally developed macroeconomic scenarios (internal baseline, internal adverse and internal severely adverse). The results of both stress tests are submitted to the Federal Reserve Board.

In addition, as part of our capital plan submitted to the Federal Reserve Board in connection with its annual Comprehensive Capital Analysis and Review (“CCAR”), we are also required to assess our capital adequacy under internally developed baseline and severely adverse scenarios. Stress testing is an integral component of our internal capital adequacy assessment and is incorporated into our internal processes to assess our capital adequacy and to ensure that the firm holds an appropriate amount of capital relative to the risks of our businesses.

We are currently required to publish a summary of the Annual DFAST results based on the Federal Reserve Board’s severely adverse scenario within 15 days of the Federal Reserve Board’s Annual DFAST disclosure, and a summary of the Mid-Cycle DFAST results based on our internally developed severely adverse scenario by August 4<sup>th</sup>, 2015.

In October 2014, the Federal Reserve Board issued a final rule modifying the regulations for capital planning and stress testing. The modifications change the dates for submitting the capital plan and stress test results beginning with the 2016 cycle and include a limitation on capital distributions to the extent that actual capital issuances are less than the amount indicated in the capital plan submission.

The planning horizon for the 2015 Annual DFAST is the fourth quarter of 2014 through the fourth quarter of 2016. Per the Federal Reserve Board’s instructions, we are required to calculate our Tier 1 common ratio for each quarter of the planning horizon under risk-based capital regulations of the Federal Reserve Board that are based on the Basel I Capital Accord of the Basel Committee on Banking Supervision, and incorporate the revised market regulatory capital requirements, which became effective on January 1, 2013 (“Basel I-based Capital Rules”).

In addition, we are required to calculate our 2015 Annual DFAST results reflecting certain aspects of the Federal Reserve Board’s revised risk-based capital and leverage regulations (“Revised Capital Framework”), subject to certain transitional provisions. These regulations are largely based on the Basel Committee’s final capital framework for strengthening international capital standards (Basel III) and also implement certain provisions of the Dodd-Frank Act.

Given these requirements, our calculation of capital ratios for the 2015 Annual DFAST requires three different methodologies:

#### **1. Basel I-based Capital Rules (“Basel I”):**

We are required to compute a Tier 1 common ratio for each quarter of the planning horizon based on Basel I.

## **2. Hybrid Capital Rules:**

The Hybrid Capital Rules require us to calculate regulatory capital utilizing the Revised Capital Framework subject to transitional provisions, and risk-weighted assets (“RWAs”) in accordance with Basel I, adjusted for certain items related to capital deductions under the Basel I-based definition of regulatory capital and for the phase-in of new capital deductions, and are only applicable in 2014. The Tier 1 leverage ratio calculation uses the Revised Capital Framework definition of Tier 1 capital (subject to transitional provisions) in the numerator, and average adjusted total assets (which includes adjustments for certain capital deductions) in the denominator. The firm is required to compute Common Equity Tier 1 (which is different in certain respects from the Tier 1 common ratio under Basel I), Tier 1 capital, Total capital and Tier 1 leverage ratios for 2014 under the Hybrid Capital Rules.

## **3. Standardized Capital Rules:**

We are also required to calculate capital ratios under Standardized Capital Rules. These utilize the Revised Capital Framework definition of capital, and RWAs calculated under the Standardized approach and market risk rules set out in the Revised Capital Framework (together, the Standardized Capital Rules), which became effective as of January 1, 2015. Capital and RWAs under the Standardized Capital Rules are both subject to transitional provisions. Similar to the Hybrid Capital Rules, the Tier 1 leverage ratio calculation also uses the Revised Capital Framework definition of Tier 1 capital (subject to transitional provisions) in the numerator, and average adjusted total assets (which includes adjustments for certain capital deductions) in the denominator. We are required to compute Common Equity Tier 1, Tier 1 capital, Total capital and Tier 1 leverage ratios for all quarters of 2015 and 2016 under the Standardized Capital Rules.

## **Minimum Regulatory Capital Ratio Requirements**

The table below presents the current minimum regulatory capital ratio requirements that apply to the firm over the planning horizon:

	<b>Q4 2014</b>	<b>2015</b>	<b>2016</b>
Tier 1 common ratio	5.0%	5.0%	5.0%
Common Equity Tier 1 ratio	4.0%	4.5%	4.5%
Tier 1 capital ratio	5.5%	6.0%	6.0%
Total capital ratio	8.0%	8.0%	8.0%
Tier 1 leverage ratio	4.0%	4.0%	4.0%

## **Summary of Results**

The following table summarizes the results of our calculations under the Federal Reserve Board’s severely adverse scenario over the planning horizon, including the instantaneous global market shock and counterparty default scenario applied to our trading and counterparty exposures.

These results incorporate the following capital action assumptions as prescribed by the Federal Reserve Board’s DFAST rules:

- Actual capital actions for the fourth quarter of 2014;
- For each of the remaining quarters in the planning horizon:
  - Common stock dividends equal to the quarterly average dollar amount of common stock dividends that were paid in the first quarter of 2014 through and including the fourth quarter of 2014; and
  - Payments on any other instrument that is eligible for inclusion in the numerator of a regulatory capital ratio equal to the stated dividend, interest, or principal due on such instrument during the quarter.

Other than as described above, these results do not include any requested capital actions that may be incorporated into our 2015 CCAR submission.

2015 Annual DFAST Results

Projected Capital Ratios, RWAs, Pre-Provision Net Revenues ("PPNR"), Losses, Net (Loss)/Income Before Taxes and Loan Losses

The Goldman Sachs Group, Inc. Estimates in the Federal Reserve Board's Severely Adverse Scenario

These results are calculated using capital action assumptions required by the DFAST rules. All projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts.

Actual Q3 2014 and Projected Capital Ratios through Q4 2016 under the Federal Reserve Board's Severely Adverse Scenario			
	Actual Q3 2014	Stressed Capital Ratios	
		Ending	Lowest
Tier 1 common ratio (%) <sup>1</sup>	15.2	13.7	12.0
Common Equity Tier 1 ratio (%) <sup>2</sup>	15.1	9.8	9.3
Tier 1 capital ratio (%) <sup>2</sup>	17.0	11.3	10.7
Total capital ratio (%) <sup>2</sup>	19.8	13.5	13.0
Tier 1 leverage ratio (%) <sup>2</sup>	9.0	7.8	7.2

<sup>1</sup> Capital ratio presented under Basel I.

<sup>2</sup> Common Equity Tier 1, Tier 1 capital, Total capital and Tier 1 leverage ratios are calculated under the Hybrid Capital Rules for Q4 2014 and under the Standardized Capital Rules for Q1 2015 to Q4 2016. Lowest calculated capital ratio from Q4 2014 to Q4 2016 is presented in the table.

Actual Q3 2014 and Projected Q4 2016 RWAs under the Federal Reserve Board's Severely Adverse Scenario			
	Actual Q3 2014	Projected Q4 2016	
		Basel I	Standardized Capital Rules
RWAs (dollars in billions)	432.0	402.1	562.5

Projected Loan Losses by Type of Loan from Q4 2014 through Q4 2016 under the Federal Reserve Board's Severely Adverse Scenario		
	Dollars in billions	Portfolio Loss Rates (%) <sup>1</sup>
Loan Losses	\$1.9	4.5%
First Lien Mortgages, Domestic	0.0	2.0
Junior Liens and HELOCs, Domestic	0.0	1.7
Commercial and Industrial	1.3	10.3
Commercial Real Estate, Domestic	0.1	3.8
Credit Cards	-	-
Other Consumer	0.0	0.3
Other Loans	0.5	2.1

<sup>1</sup> Loan losses and average loan balances used to calculate portfolio loss rates exclude loans and loan commitments accounted for under the fair value option.

Projected PPNR, Losses and Net (Loss)/Income Before Taxes from Q4 2014 through Q4 2016 under the Federal Reserve Board's Severely Adverse Scenario		
	Dollars in billions	Percentage of Average Assets (%)
PPNR <sup>1</sup>	\$7.5	0.9%
Other Revenue	-	
Less:		
Provision for Loan Losses	2.1	
Realized Losses/(Gains) on Securities	-	
Trading and Counterparty Losses <sup>2</sup>	19.1	
Other Losses/(Gains) <sup>3</sup>	1.9	
Equals:		
Net (Loss)/Income Before Taxes	(15.6)	(1.9)

<sup>1</sup> PPNR includes net revenues ("revenues") and operating expenses (including operational risk events, mortgage put-back expenses and other real estate owned costs).

<sup>2</sup> Trading and counterparty losses include mark-to-market losses, trading incremental default risk losses on positions held at fair value and changes in credit valuation adjustment ("CVA") as a result of the global market shock, in addition to the impact of the counterparty default scenario.

<sup>3</sup> Other losses/(gains) primarily includes projected changes in the fair value of certain loans and loan commitments accounted for under the fair value option, which are not subject to the global market shock per the Federal Reserve Board's instructions.

Based on the Federal Reserve Board's severely adverse scenario, the most significant drivers of the changes in the firm's regulatory capital ratios over the planning horizon, when compared with actual regulatory capital ratios as of the third quarter of 2014 and the Tier 1 common ratio under the 2015 Annual DFAST are:

- Increased RWAs resulting from the requirement to project RWAs based on the Standardized Capital Rules;
- Trading and counterparty losses and other losses, which include both the global market shock and the counterparty default scenario, are included in our net (loss)/income projections. However, based on the Federal Reserve Board's instructions, we did not incorporate the impact of the global market shock and the counterparty default scenario on our balance sheet or RWA projections, and did not reflect management actions as a result of the global market shock and the counterparty default scenario, which further increased the impact on our capital ratios; and
- Lower Pre-Provision Net Revenues ("PPNR") over the planning horizon primarily due to decreased net revenues ("revenues") and increased operational risk losses

The results above are not indicative of the Federal Reserve Board's calculations of the firm's regulatory capital ratios under its CCAR 2015 supervisory stress tests. The Federal Reserve Board has separately published its results for the supervisory stress test results under Annual DFAST capital actions. On March 11, 2015, the Federal Reserve Board is expected to publish its calculations for the supervisory stress test results under CCAR requested capital actions.

### **Material Risks Captured in the Stress Test**

#### **Market Risk:**

Market risk is the risk of loss in the value of our inventory, as well as certain other financial assets and financial liabilities, due to changes in market conditions. We 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. Categories of market risk include the following:

- Interest rate risk: results from exposures to changes in the level, slope and curvature of yield curves, the volatilities of interest rates, mortgage prepayment speeds and credit spreads;
- Equity price risk: results from exposures to changes in prices and volatilities of individual equities, baskets of equities and equity indices;
- Currency rate risk: results from exposures to changes in spot prices, forward prices and volatilities of currency rates; and
- Commodity price risk: results from exposures to changes in spot prices, forward prices and volatilities of commodities, such as crude oil, petroleum products, natural gas, electricity, and precious and base metals.

Market risk is incorporated into our 2015 Annual DFAST results under the Federal Reserve Board's severely adverse scenario via the global market shock and the macroeconomic scenario. The global market shock is applied to our fair value trading and certain banking book positions with changes in the fair value being reflected in our revenue projections.

We further stress our positions based on the prescribed changes in macroeconomic variables and asset values over the planning horizon. As applicable, we recover some of these losses in this scenario as a result of improving macroeconomic variables and asset values during the latter part of the planning horizon.

#### **Credit Risk:**

Credit risk represents the potential for loss due to the default or deterioration in credit quality of a counterparty (e.g., an over-the-counter ("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 is incorporated into our 2015 Annual DFAST results under the Federal Reserve Board's severely adverse scenario via the global market shock, the counterparty default scenario and the macroeconomic scenario. The global market shock includes counterparty credit losses (i.e., credit valuation adjustments ("CVA")). Projections for CVA over the planning horizon are also included in our revenue projections under this scenario.

The counterparty default scenario is recognized in the first quarter of the planning horizon.

Credit risk is also incorporated into our projections for changes in provisions and loan losses in our accrual loan portfolio. We utilize a model that estimates losses based on projections of exposure at default, loss given default, probability of default and ratings migration for loans in the accrual portfolio. We also include projections of estimated defaults and associated losses on our fair value loans.

### **Operational Risk:**

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.

Operational risk, including litigation-related losses, is incorporated into our 2015 Annual DFAST results with losses estimated based on the firm's historical operational risk experience, relevant internal factors, scenario analysis, recent industry matters and the assumed conditions of the Federal Reserve Board's severely adverse scenario. Operational risk losses are included within non-compensation expense projections over the planning horizon.

### **Liquidity Risk:**

Liquidity is of critical importance to financial institutions. We have 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.

For purposes of our 2015 Annual DFAST, we analyze how we would manage our balance sheet through the duration of a severe crisis and we include assumptions regarding our ability to access the secured and unsecured funding markets to generate incremental liquidity. Our 2015 Annual DFAST results take liquidity risk into account by projecting potential liquidity outflows due to the Federal Reserve Board's severely adverse scenario environment (e.g., draws on unfunded commitments and secured and unsecured funding roll-offs without replacement) and the impact of these outflows on our liquidity position and balance sheet.

### **Description of Our Projection Methodologies**

#### **PPNR:**

PPNR includes revenues and operating expenses.

#### **Revenues:**

We project revenues for each of our business segments, including Investment Banking, Institutional Client Services, Investing & Lending and Investment Management.

#### **Investment Banking**

The firm provides a broad range of investment banking services to a diverse group of corporations, financial institutions, investment funds and governments. Services include strategic advisory assignments with respect to mergers and acquisitions, divestitures, corporate defense activities, restructurings, spin-offs and risk management, and debt and equity underwriting of public offerings and private placements, including local and cross-border transactions, as well as derivative transactions directly related to these activities.

### **Institutional Client Services**

The firm facilitates client transactions and makes markets in fixed income, equity, currency and commodity products, primarily with institutional clients such as corporations, financial institutions, investment funds and governments. The firm also makes markets in and clears client transactions on major stock, options and futures exchanges worldwide and provides financing, securities lending and other prime brokerage services to institutional clients.

### **Investing & Lending**

The firm invests in and originates loans to provide financing to clients. These investments and loans are typically longer-term in nature. The firm makes investments, some of which are consolidated, directly and indirectly through funds that the firm manages, in debt securities and loans, public and private equity securities and real estate entities.

### **Investment Management**

The firm 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. The firm also offers wealth advisory services, including portfolio management and financial counseling, and brokerage and other transaction services to high-net-worth individuals and families.

When projecting these business segment revenues, we utilize multiple approaches, including models based on regression analyses, management judgment and projecting the impact of re-pricing inventory due to the projected changes in asset values under the Federal Reserve Board's severely adverse scenario. We also incorporate the impact of broader industry performance during historical stressed periods to help guide management judgment regarding our future performance in the assumed stressed operating environment. The projected revenues under the Federal Reserve Board's severely adverse scenario are an aggregation of projected revenues for each of these business segments.

### **Expenses:**

Operating expense projections over the planning horizon include compensation and benefits and non-compensation expenses.

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 revenues, overall financial performance, the structure of our share-based compensation programs and the external environment.

Non-compensation expenses include certain expenses that vary with levels of business activity, such as brokerage, clearing, exchange and distribution fees and market development costs. Non-compensation expenses also include expenses that relate to our global footprint and overall headcount levels. Such expenses include depreciation and amortization, occupancy and communication and technology costs. In addition, non-compensation expenses incorporate any projected impairments as well as operational risk losses, including litigation reserves (and corresponding legal fees), business disruption costs, mortgage repurchase estimates, external / internal fraud costs, execution / processing errors, and damage to physical assets.

### **Provisions and Loan Losses:**

Provisions and loan losses are projected over the planning horizon using a comprehensive, model-based approach. The model estimates losses based on projections of exposure at default, loss given default, probability of default and ratings migration for loans in the accrual portfolio.

### **Trading and Counterparty Losses:**

Trading and counterparty losses include mark-to-market losses, trading incremental default risk losses on positions held at fair value and changes in CVA as a result of the global market shock, in addition to the impact of the counterparty default scenario. We use the firm's existing stress testing and risk management infrastructure to calculate the impact of the global market shock and to quantify the impact of the counterparty default scenario.

### **Other Losses:**

Other losses primarily includes projected changes over the planning horizon in the fair value of certain loans and loan commitments accounted for under the fair value option, which are not subject to the global market shock per the Federal Reserve Board's instructions.

### **Balance Sheet:**

Balance sheet projections are based on the macroeconomic environment and incorporate input from businesses on growth assumptions and planned activity, changes to carrying values as a result of mark-to-market, as well as management judgment as to how the firm would manage its balance sheet, funding and liquidity over the planning horizon.

Per the Federal Reserve Board's instructions, the impact of the global market shock and the counterparty default scenario are not incorporated into our balance sheet projections under the Federal Reserve Board's severely adverse scenario.

### **Capital and RWAs:**

Capital projections incorporate projected net earnings, other changes in equity and capital deductions over the planning horizon, as well as the impact of the fourth quarter of 2014 actual capital actions and assumed capital actions required by the DFAST rules for the first quarter of 2015 through and including the fourth quarter of 2016. Projected RWAs reflect the impact of the macroeconomic environment; for example, changes in volatility and credit spreads are incorporated into our calculation of projected RWAs. Additionally, projected RWAs and capital deductions are also impacted by the projected size and composition of our balance sheet over the planning horizon.

As noted above, we have calculated capital ratios under Basel I, the Hybrid Capital Rules in 2014 and the Standardized Capital Rules in 2015 and 2016, including transitional provisions where appropriate.

### **2015 Annual Dodd-Frank Act Stress Test Disclosure for Goldman Sachs Bank USA**

DFAST rules also require Goldman Sachs Bank USA ("GS Bank USA") to conduct stress tests on an annual basis.

GS Bank USA is a wholly-owned subsidiary of Group Inc. The Dodd-Frank Act requires stress test results of any subsidiary depository institution to be disclosed along with the stress test results of the bank holding company parent.

For the 2015 Annual DFAST, the required capital ratios and the planning horizon for GS Bank USA are consistent with those for Group Inc.

The following table summarizes the results of GS Bank USA's 2015 Annual DFAST based on the Federal Reserve Board's severely adverse scenario.

2015 Annual DFAST Results - GS Bank USA

	Actual Q3 2014	Stressed Capital Ratios	
		Ending	Lowest
Tier 1 common ratio (%) <sup>1</sup>	15.2	13.1	12.1
Common Equity Tier 1 ratio (%) <sup>2</sup>	15.0	9.2	8.4
Tier 1 capital ratio (%) <sup>2</sup>	15.0	9.2	8.4
Total capital ratio (%) <sup>2</sup>	16.6	10.5	9.8
Tier 1 leverage ratio (%) <sup>2</sup>	17.9	16.0	15.0

<sup>1</sup> Capital ratio presented under Basel I.

<sup>2</sup> Common Equity Tier 1, Tier 1 capital, Total capital and Tier 1 leverage ratios are calculated under the Hybrid Capital Rules for Q4 2014 and under the Standardized Capital Rules for Q1 2015 to Q4 2016. Lowest calculated capital ratio from Q4 2014 to Q4 2016 is presented in the table.

The most significant drivers of the changes in GS Bank USA's regulatory capital ratios are consistent with those of Group Inc. except that GS Bank USA was not required to include the counterparty default scenario in its stress test. Potential capital planning initiatives are also included in GS Bank USA's results.

More information on the CCAR and DFAST stress tests, as well as the Federal Reserve Board's severely adverse scenario, is available on the Federal Reserve Board's website at <http://www.federalreserve.gov>.