



Dodd-Frank Act Stress Test 2014: Supervisory Stress Test Methodology and Results

March 2014

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM



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Errata

The Federal Reserve revised this report on March 24, 2014, to address inconsistencies in the treatment of the fourth quarter 2013 actual capital actions and assumptions about preferred and employee compensation-related issuance over the course of the planning horizon. A minor technical correction was also made to tier 2 capital. The changes do not affect the projections of pre-provision net revenue, other revenue, provisions, loan losses and loan loss rates, realized losses/gains on securities, trading and counterparty losses, other losses/gains, net income before taxes, other comprehensive income, or accumulated other comprehensive income included in capital.

The revisions are shown in the tables found in new [Appendix E](#) and are reflected in the following tables and figures republished in this revised version of the report:

Tables 2, 3, 4, 8, 9, 10, and C.1.A through C.30.B

Figures 9, 10, 15, and 16

In addition, the following revisions were made to the text in this report:

On page 23, column 2, first full paragraph, the second sentence was incorrect in the report published on March 20, 2014, and should have read “Overall, the total amount of tier 1 common capital held by the 30 BHCs is estimated to fall \$286 billion, or about 30 percent, from the third quarter of 2013 to the end of 2015 under the severely adverse scenario.” Due to the subsequent revision of the report, the first number in this sentence has been revised to \$283 billion.

On page 23, column 2, first full paragraph, the numbers in the third sentence have been revised from 2.3 percentage points and 4.1 percentage points to 2.5 percentage points and 4.6 percentage points, respectively.

On page 39, column 1, first full paragraph, the second sentence was incorrect in the report published on March 20, 2014, and should have read “Overall, the total amount of tier 1 common capital held by the 30 BHCs is estimated to increase by \$2.8 billion, or less than 1 percent, from the third quarter of 2013 to the end of 2015 under the adverse scenario.” Due to the subsequent revision of the report, the numbers in this sentence have been revised to \$5.9 billion and 1 percent, respectively.

On page 39, column 1, first full paragraph, the numbers in the fourth sentence have been revised from 1.8 and 2.0 percentage points to 2.2 and 2.5 percentage points, respectively.

On page 39, column 1, first full paragraph, the number in the fifth sentence has been revised from 0.9 percentage point to 1.1 percentage point.

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Executive Summary

The Federal Reserve expects large, complex bank holding companies (BHCs) to have sufficient capital to continue lending to support real economic activity while meeting their financial obligations, even under stressful economic conditions. Stress testing is one tool that helps bank supervisors measure whether a BHC has enough capital to support its operations throughout periods of stress. The Federal Reserve previously highlighted its use of stress testing as a means to assess a financial institution's capital sufficiency during periods of stress with its 2009 Supervisory Capital Assessment Program (SCAP) and since 2011 through the annual Comprehensive Capital Analysis and Review (CCAR) exercise.¹

In the wake of the 2007–09 financial crisis, the Congress enacted the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act).² The Dodd-Frank Act requires the Federal Reserve to conduct an annual stress test of large BHCs and all nonbank financial companies designated by the Financial Stability Oversight Council (FSOC) for Federal Reserve supervision. The Federal Reserve in the annual stress test is to evaluate whether these companies have sufficient capital to absorb losses resulting from stressful economic and financial market conditions. The Dodd-Frank Act also requires BHCs and other financial companies supervised by the Federal Reserve to conduct their own stress tests. Together, the Dodd-Frank Act supervisory stress tests and the company-run stress tests are intended to provide company management and boards of directors, the public, and supervisors with forward-looking information to help gauge the potential effect

of stressful conditions on capital adequacy of these large banking organizations.

The Federal Reserve adopted rules implementing these requirements in October 2012.³ Last year, to allow a phase-in of the provisions of the Federal Reserve's Dodd-Frank Act stress test (DFAST) rules, only the 18 BHCs that previously participated in the SCAP were required to conduct company-run stress tests and were subject to the Federal Reserve's supervisory stress test. During the current stress test cycle (DFAST 2014), which began on October 1, 2013, the Federal Reserve has conducted supervisory stress tests on all BHCs with \$50 billion or more in total consolidated assets, a total of 30 BHCs, using scenarios that the Federal Reserve designed (supervisory scenarios).⁴ These BHCs were also required to conduct company-run stress tests under the supervisory scenarios. Both the supervisory and company-run stress tests are also integrated into the Federal

³ See 12 CFR Part 252.

⁴ The 30 BHCs that participated in the 2014 Dodd-Frank Act stress test are Ally Financial Inc.; American Express Company; Bank of America Corporation; The Bank of New York Mellon Corporation; BB&T Corporation; BBVA Compass Bancshares, Inc.; BMO Financial Corp.; Capital One Financial Corporation; Citigroup, Inc.; Comerica Incorporated; Discover Financial Services; Fifth Third Bancorp; The Goldman Sachs Group, Inc.; HSBC North America Holdings Inc.; Huntington Bancshares Inc.; JPMorgan Chase & Co.; Keycorp; M&T Bank Corporation; Morgan Stanley; Northern Trust Corp.; The PNC Financial Services Group, Inc.; RBS Citizens Financial Group, Inc.; Regions Financial Corporation; Santander Holdings USA, Inc.; State Street Corporation; SunTrust Banks, Inc.; U.S. Bancorp; UnionBanCal Corp.; Wells Fargo & Company; and Zions Bancorp. TD Bank US Holding Company and BancWest Corporation are not subject to Dodd-Frank Act stress testing until October 1, 2015, under the Board's stress test rule. See 12 CFR 252.43(a)(3). In addition, Deutsche Bank Trust Corporation has received an extension from compliance with the stress test rule until June 30, 2014. In 2013, the FSOC designated three nonbank financial companies for consolidated supervision by the Federal Reserve and enhanced prudential standards: American International Group, Inc., General Electric Capital Corporation, Inc., and Prudential Financial, Inc. All nonbank covered companies designated by the FSOC will be required to conduct their first stress test in the calendar year after the year in which the company becomes subject to the Board's minimum regulatory capital requirements, unless the Board accelerates or extends the compliance date.

¹ The CCAR is an annual exercise by the Federal Reserve to ensure that institutions have robust, forward-looking capital planning processes that account for their unique risks and sufficient capital to continue operations throughout times of economic and financial stress. As part of the CCAR, the Federal Reserve evaluates institutions' capital adequacy, internal capital adequacy assessment processes, and their plans to make capital distributions, such as dividend payments or stock repurchases, and other actions that affect capital.

² See 12 USC 5365(i)(1).

Reserve's assessment of capital adequacy under CCAR.

This report describes hypothetical, stressful macroeconomic and financial market scenarios designed by the Federal Reserve; provides an overview of the analytical framework and methods used to generate the projections of balance sheets, net income, and the resulting post-stress capital ratios for each of the 30 BHCs; and discloses the results of the 2014 Dodd-Frank Act supervisory stress test. The Federal Reserve introduced several key changes and improvements to the DFAST in 2014. Specifically, this year, the Federal Reserve independently projected the balance sheet and risk-weighted assets (RWAs) of each BHC that participated in the stress test. By comparison, in past supervisory stress tests, the Federal Reserve used the balance sheet and RWA projections provided by each BHC in its company-run stress test. This improvement promotes greater comparability of the supervisory stress tests across BHCs. Also this year, the Federal Reserve incorporated into DFAST the revised regulatory capital framework that implements the Basel III regulatory capital reforms. The capital ratios calculated in the stress test reflect the phase-in of the revised capital framework. Finally, in this report, the Federal Reserve is disclosing the results of the supervisory stress test conducted under the adverse scenario for each company, in addition to the results under the severely adverse scenario that were disclosed in previous stress tests. The adverse scenario contains valuable information about a different set of conditions that can pose a risk to capital adequacy at the BHCs.

The disclosure of stress test results informs market participants and the public, enhances transparency, and promotes market discipline. The projections provide a horizontal perspective on the capital positions of these firms by incorporating detailed information about the risk characteristics associated with each BHC's business activities and by using a consistent approach across all the BHCs. This approach helps to facilitate a comparison of results across firms. The Federal Reserve also believes that providing information about the methodology used to produce the results offers useful context to interpret those results.

The projections in DFAST were calculated using input data provided by the 30 BHCs and a set of models

developed or selected by the Federal Reserve⁵ and are based on hypothetical, stressful macroeconomic and financial market scenarios developed by the Federal Reserve. The severely adverse scenario features a deep recession in the United States, Europe, and Japan, significant declines in asset prices and increases in risk premia, and a marked economic slowdown in developing Asia. The adverse scenario is characterized by a weakening in economic activity across all of the economies included in the scenario, combined with a global aversion to long-term fixed-income assets, that brings about rapid rises in long-term rates and steepening yield curves in the United States and globally. In addition to the two common sets of macroeconomic scenarios, a subset of BHCs was also subject to two additional components of the adverse and severely adverse scenarios—namely, the global market shock and counterparty default components. The global market shock was applied to six BHCs with large trading and private-equity exposures.⁶ The counterparty default component, under which the BHC's largest counterparty is assumed to default, was applied to eight BHCs with substantial trading or custodial operations.⁷

The models used in DFAST project the balance sheet, net income, and resulting post-stress capital ratios for each BHC over a nine-quarter planning horizon starting in the fourth quarter of 2013 and extending through the end of 2015. The Federal Reserve's projections should not be interpreted as expected or likely outcomes for these firms but rather as possible results under hypothetical, stressful conditions. These projections incorporate a number of conservative modeling assumptions but do not make explicit behavioral assumptions about the possible actions of a BHC's creditors and counterparties in the scenario, except through the scenario's character-

⁵ A list of providers of the proprietary models and data used by the Federal Reserve in connection with DFAST 2014 is available in [appendix B](#).

⁶ The six BHCs subject to the global market shock are Bank of America Corporation; Citigroup, Inc.; The Goldman Sachs Group, Inc.; JPMorgan Chase & Co.; Morgan Stanley; and Wells Fargo & Company. See 12 CFR 252.44(b); see also 12 CFR 252.54(b)(2)(i).

⁷ The eight BHCs subject to the counterparty default component are Bank of America Corporation; The Bank of New York Mellon Corporation; Citigroup, Inc.; The Goldman Sachs Group, Inc.; JPMorgan Chase & Co.; Morgan Stanley; State Street Corporation; and Wells Fargo & Company. See 12 CFR 252.44(b); see also 12 CFR 252.44(b)(2)(ii).

izations of financial asset prices and economic activity.

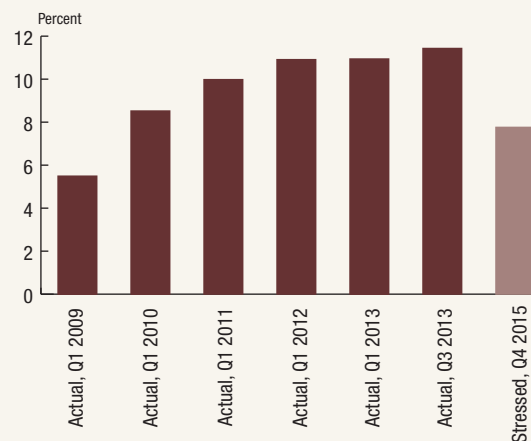
The projections reflect assumptions about capital distributions prescribed in the Dodd-Frank Act stress test rule. For the first quarter of the planning horizon, capital actions for each BHC are assumed to be the actual actions taken by the BHC during that quarter. Over the remaining eight quarters of the planning horizon, each BHC is assumed to maintain its common stock dividend payments at the same level as the quarterly average in the previous year (that is, the first quarter of the planning horizon and the preceding three calendar quarters) and pay scheduled dividend, interest, or principal payments on any other capital instrument eligible for inclusion in the numerator of a regulatory capital ratio. However, repurchases of such capital instruments and issuance of stock is assumed to be zero except for common-stock issuance associated with expensed employee compensation.⁸

The results of these projections suggest that, in the aggregate, the 30 BHCs would experience substantial losses under both the adverse and the severely adverse scenarios. Over the nine quarters of the planning horizon, losses at the 30 BHCs under the severely adverse scenario are projected to be \$501 billion, including losses across loan portfolios, losses from credit impairment on securities held in the BHCs' investment portfolios, trading and counterparty credit losses from the global market shock, and other losses. Projected net revenue before provisions for loan and lease losses (pre-provision net revenue, or PPNR) at the 30 BHCs over the nine quarters of the planning horizon under the severely adverse scenario is \$316 billion, which is net of \$151 billion of losses related to operational-risk events and mortgage repurchases, and expenses related to disposition of owned real estate. Losses from operational-risk events include potential costs from unfavorable litigation outcomes and reflect elevated litigation risk and the associated increase in legal reserves observed in recent years. Taken together, the high projected losses and low projected PPNR at the 30 BHCs results in projected net income before taxes of -\$217 billion under the severely adverse scenario.

These net income projections result in substantial projected declines in regulatory capital ratios for nearly all of the BHCs under the severely adverse scenario. For BHCs with total consolidated assets greater than \$250 billion and those with significant foreign expo-

⁸ See 12 CFR 252.56(b)(2).

Figure 1. Historical and stressed tier 1 common ratio



Note: Aggregate capital ratios for 29 of the participating BHCs.

Source: FR Y-9C and supervisory estimates under the severely adverse scenario. The aggregate tier 1 common ratio does not include Santander Holdings USA, which did not file the FR Y-9C until 2012. Santander's exclusion decreased the aggregate ratio about 1 to 2 basis points.

ures (advanced approaches BHCs⁹), the decline in regulatory capital ratios, except for the tier 1 common ratio, in part reflects the gradual phasing-in of adjustments to Tier 1 capital for certain accumulated other comprehensive income (AOCI) items under the revised capital framework starting in 2014 (see box 1). Fair value losses on AFS securities lead to -\$24 billion in other comprehensive income for advanced approaches BHCs. Other comprehensive income does not affect the tier 1 common ratio, as it is based on the capital framework in place as of October 1, 2013.

As illustrated in [figure 1](#), the aggregate tier 1 common ratio would fall from an actual 11.5 percent in the third quarter of 2013 to a post-stress level of 7.8 percent in the fourth quarter of 2015. The decline in part reflects assumed capital actions prescribed in the Dodd-Frank Act stress test rule.

In the adverse scenario, losses at the 30 BHCs over the nine quarters of the planning horizon are projected to be \$355 billion. As with the severely adverse

⁹ For purposes of DFAST 2014, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance-sheet foreign exposure of at least \$10 billion as of December 31, 2013. The advanced approaches BHCs in DFAST 2014 are American Express Company, Bank of America Corporation, The Bank of New York Mellon Corporation, Capital One Financial Corporation, Citigroup, Inc., The Goldman Sachs Group, Inc., HSBC North America Holdings, Inc., JPMorgan Chase & Co., Morgan Stanley, Northern Trust Corporation, The PNC Financial Services Group, Inc., State Street Corporation, U.S. Bancorp, Wells Fargo & Company.

scenario, these losses include losses across loan portfolios, losses from credit impairment on securities held in the BHCs' investment portfolios, trading and counterparty credit losses from the global market shock, and other losses. Projected PPNR at the 30 BHCs over the nine quarters of the planning horizon under the adverse scenario is \$444 billion, which is net of \$130 billion in losses related to operational-risk events and mortgage repurchases, and expenses related to disposition of owned real estate. Losses from operational-risk events under the adverse scenario also reflect elevated litigation risk. Projected PPNR under the adverse scenario is about 40 percent higher than under the severely adverse scenario, largely due to the much steeper yield curve assumed in the scenario. Projected net income before taxes

totals \$92 billion at the 30 BHCs, under the adverse scenario.

These positive net income projections are in part offset by negative AOCI for advanced approaches BHCs over the planning horizon, which combined result in moderate projected declines over the planning period in the aggregate regulatory capital ratios across the 30 BHCs. Fair value losses on AFS securities lead to -\$103 billion in other comprehensive income for advanced approaches BHCs. Under the adverse scenario, the aggregate tier 1 common ratio would fall 180 basis points to its minimum over the planning horizon of 9.7 percent and be 70 basis points lower for a post-stress level of 10.8 percent in the fourth quarter of 2015.

Dodd-Frank Act Stress Testing

To provide context to the Federal Reserve's Dodd-Frank Act supervisory stress test results, the following sections contain an overview of the Federal Reserve's Dodd-Frank Act stress test rules, focusing on the process for the supervisory stress tests and the requirements for company-run stress tests for covered companies.¹⁰

Supervisory Stress Tests

Under the Federal Reserve's Dodd-Frank Act stress test rules, the Federal Reserve conducts annual supervisory stress tests to evaluate whether a covered company has the capital, on a total consolidated basis, necessary to absorb losses and continue its operations by maintaining ready access to funding, meeting its obligations to creditors and other counterparties, and continuing to serve as a credit intermediary under stressful economic and financial market conditions. As part of this supervisory stress test for each company, the Federal Reserve projects the balance sheet, net income, and resulting post-stress capital levels, regulatory capital ratios, and the tier 1 common ratio under three scenarios (baseline, adverse, and severely adverse) using data as of September 30.

The stress test rules feature a common set of scenarios for all companies in the supervisory stress test. However, the Federal Reserve may use additional scenarios or components of scenarios for all or a subset of the companies to capture salient sources of risk, and these scenarios may use data from dates other than the end of the third quarter. This year, the Federal Reserve applied the global market shock to six BHCs with large trading and private equity exposures and a counterparty default component to eight BHCs with substantial trading and custodial operations.

¹⁰ A "covered company" includes any bank holding company with total consolidated assets of \$50 billion or more and each non-bank financial company that the Financial Stability Oversight Council has designated for supervision by the Board.

Finally, the Dodd-Frank Act requires the Federal Reserve to disclose a summary of the results of its supervisory stress test.¹¹

Company-Run Stress Tests

As required by the Dodd-Frank Act, the Federal Reserve's stress test rules covered companies to conduct two company-run stress tests each year. In conducting the "annual" test, covered companies use data as of September 30 and reports their stress test results to the Federal Reserve by January 5.¹² In addition, covered companies must conduct a "mid-cycle" test and report the results to the Federal Reserve by July 5. The Dodd-Frank Act stress test rules align the timing of annual company-run stress tests with the annual supervisory stress tests of covered companies.

In their annual stress tests, covered companies must use the scenarios provided by the Federal Reserve. Each year, the Federal Reserve will provide at least three scenarios—baseline, adverse, and severely adverse—that are identical to the scenarios the Federal Reserve uses in the annual supervisory stress tests of companies.¹³ By providing a common set of scenarios to all companies, the results of company-run and supervisory stress tests will be comparable across com-

¹¹ 12 U.S.C. 5365(i)(1)(B)(v).

¹² Under the Dodd-Frank Act, all financial companies with more than \$10 billion in total consolidated assets that are supervised by a primary federal financial regulatory agency are required to conduct an annual company-run stress test. However, only the covered companies are subject to the additional mid-cycle stress test and the supervisory stress test. For the stress test cycle that began October 1, 2013, there are 37 bank and thrift subsidiaries of the covered companies that are conducting Dodd-Frank Act stress tests under rules separately finalized by the Board, the Office of the Comptroller of the Currency, and the Federal Deposit Insurance Corporation. Apart from the covered company subsidiaries, there are an additional 42 BHCs and 57 banks and thrifts with between \$10 and \$50 billion in assets and 4 banks and thrifts with \$50 billion or greater in assets conducting Dodd-Frank Act stress tests under those rules.

¹³ Under the stress test rules, the Federal Reserve will provide the scenarios to companies no later than November 15 each year. See 12 CFR 252.54(b)(1); 12 CFR 252.14(b)(1).

panies. To further enhance comparability, the supervisory stress tests and company-run stress tests conducted under the Dodd-Frank Act stress test rules use the same capital action assumptions.¹⁴

¹⁴ 12 CFR 252.156(b).

Finally, each covered company must publicly disclose a summary of the results of its company-run stress test under the severely adverse scenario provided by the Federal Reserve.

Supervisory Scenarios

On November 1, 2013, the Federal Reserve released three supervisory stress-test scenarios: baseline, adverse, and severely adverse.¹⁵ This section describes the adverse and severely adverse scenarios that are the basis for the projections contained in this report. These scenarios were developed in a manner consistent with the Board's Policy Statement on the Scenario Design Framework for Stress Testing.¹⁶

It is important to note that the adverse and severely adverse scenarios are not forecasts, but rather hypothetical scenarios designed to assess the strength of banking organizations and their resilience to an adverse economic environment. The severely adverse scenario is characterized by a substantial weakening in economic activity across all of the economies included in the scenario. In addition, the scenario features a significant reversal of recent improvements to the U.S. housing market and the euro area outlook. The adverse scenario is characterized by a weakening in economic activity across all of the economies included in the scenario, combined with a global aversion to long-term fixed-income assets that brings about rapid rises in long-term rates and steepening yield curves in the United States and in the four countries or country blocks (the euro area, the United Kingdom, developing Asia, and Japan) represented in the scenario.

Both scenarios include trajectories for 28 variables. These include 16 variables that capture economic activity, asset prices, and interest rates in the U.S. economy and financial markets and three variables (real gross domestic product (GDP) growth, inflation, and the U.S./foreign currency exchange rate) in each of the four countries/country blocks.

¹⁵ See Board of Governors of the Federal Reserve System (2013), "2014 Supervisory Scenarios for Annual Stress Tests Required under the Dodd-Frank Act Stress Testing Rules and the Capital Plan Rule" (Washington: Board of Governors, November 1), www.federalreserve.gov/newsevents/press/bcreg/20131101a.htm for additional information and for the details of the supervisory scenarios.

¹⁶ 12 CFR part 252, appendix A.

Severely Adverse Scenario

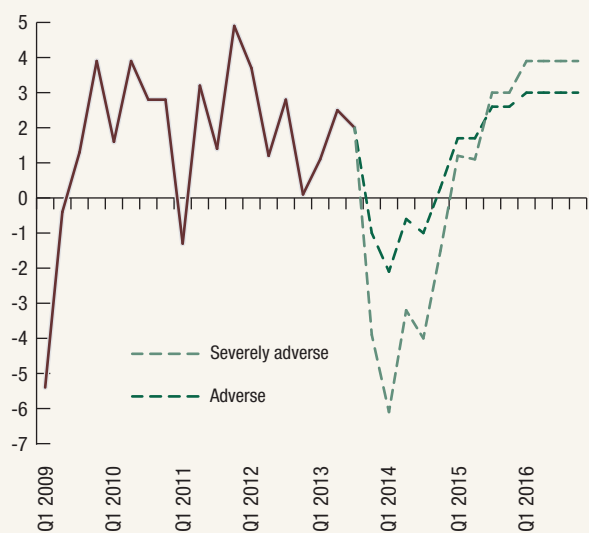
Figures 2 through 6 illustrate the hypothetical trajectories for some of the key variables describing U.S. economic activity and asset prices as well as global economic growth under the severely adverse scenario. As the figures show, real GDP declines nearly 4¾ percent between the third quarter of 2013 and the end of 2014; over this period, the four-quarter percent change in the consumer price index (CPI) declines to less than 1 percent before moving back up to 1½ percent from the end of 2015 through 2016. The unemployment rate increases 4 percentage points from the third quarter of 2013, peaking at 11¼ percent in the middle of 2015. Equity prices fall nearly 50 percent over the course of the recession, and the equity market volatility index reaches a peak of 68 percent. House prices decline 25 percent during the scenario period, while commercial real estate prices decline nearly 35 percent at their trough. A slow recovery takes hold in 2015, and real GDP expands 2 percent that year and nearly 4 percent in 2016. The international component of the severely adverse scenario features recessions in the euro area, the United Kingdom, and Japan and below-trend growth in developing Asia.

The severely adverse scenario is similar to the 2013 severely adverse scenario. As compared with last year's severely adverse scenario, this year's severely adverse scenario features a larger decline in U.S. house prices, a lower peak U.S. unemployment rate, and a more substantial slowdown in developing Asia and, as a consequence, Japan.

Adverse Scenario

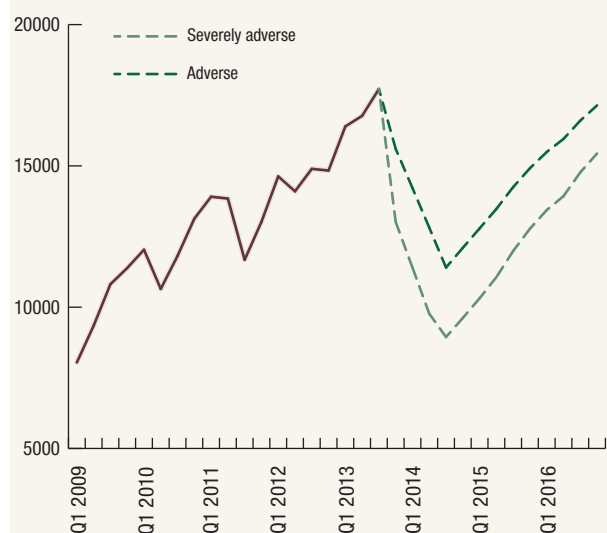
Figures 2 through 5 and 7 illustrate the hypothetical trajectories for some of the key variables describing U.S. economic activity and asset prices as well as global economic growth under the adverse scenario. As the figures show, the level of real GDP declines approximately 1 percent between the third quarter of 2013 and the end of 2014; over this period, the unem-

Figure 2. Real GDP growth rate, Q1 2009–Q4 2016



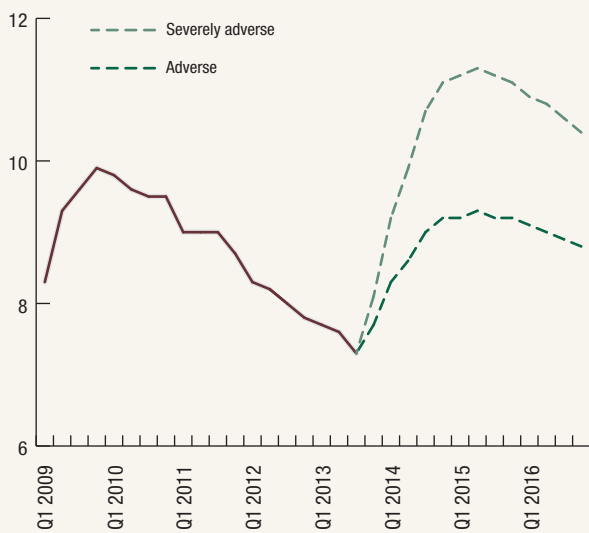
Source: Bureau of Economic Analysis and Federal Reserve assumptions in the supervisory scenarios.

Figure 4. Dow Jones Stock Market Index, end of quarter, Q1 2009–Q4 2016



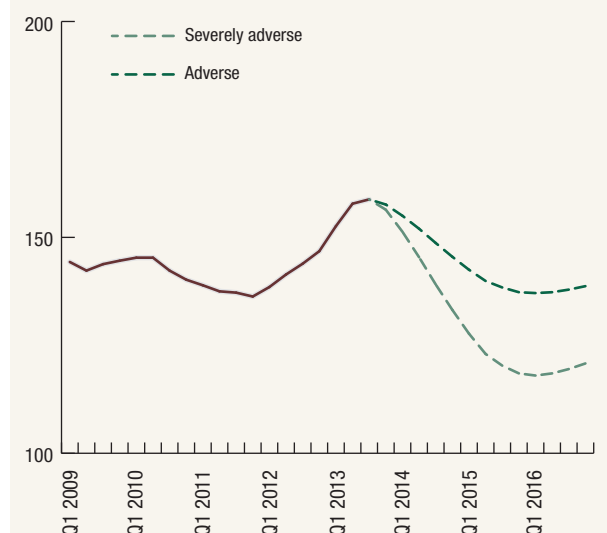
Source: Dow Jones and Federal Reserve assumptions in the supervisory scenarios.

Figure 3. Unemployment rate, Q1 2009–Q4 2016



Source: Bureau of Economic Analysis and Federal Reserve assumptions in the supervisory scenarios.

Figure 5. National House Price Index, Q1 2009–Q4 2016



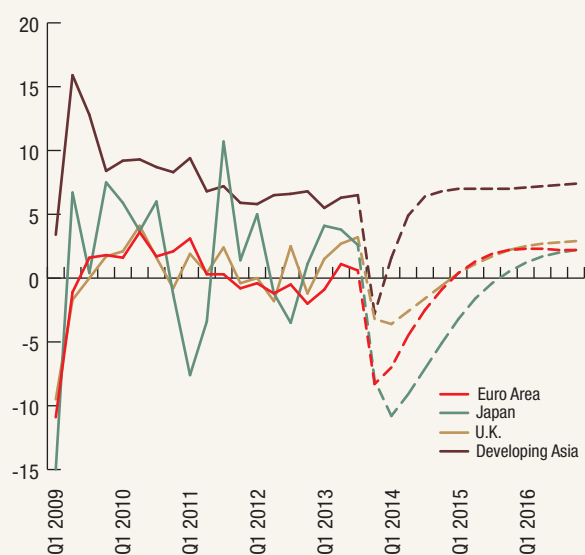
Source: CoreLogic (seasonally adjusted by Federal Reserve) and Federal Reserve assumptions in the supervisory scenarios.

ployment rate rises to 9¼ percent. There is an initial slowing in CPI inflation before it picks up and returns to 2 percent by the middle of 2015. Equity prices fall 36 percent by the middle of 2014 and the equity market volatility index doubles from its third-quarter 2013 level to 35 percent at the start of the scenario. House prices and commercial real estate prices decline approximately 10 percent and 20 per-

cent, respectively, before stabilizing and starting to rise in early 2016. A slow recovery begins in 2015, with GDP rising 2 percent that year and nearly 3¼ percent in 2016.

Reflecting the weaker economy, short-term interest rates remain near zero over the scenario period. An assumed aversion to long-term debt instruments

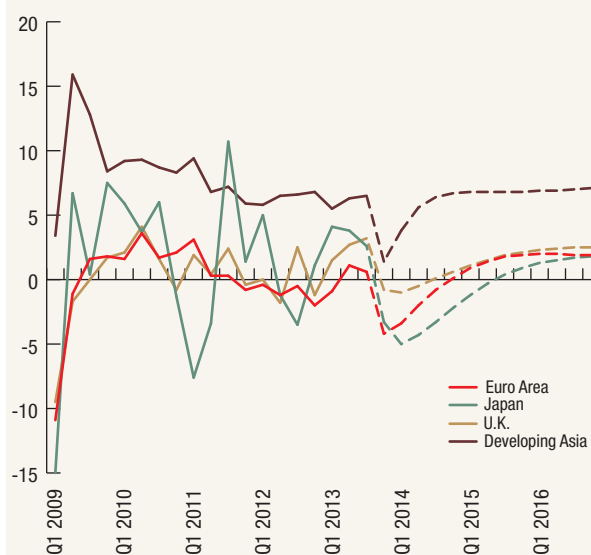
Figure 6. Real GDP growth in four country/country block areas in the severely adverse scenario, Q1 2009–16



Note: 3Q 2013 data based on Federal Reserve calculations using available data as of October 25, 2013.

Source: Federal Reserve calculations based on official sector sources and Federal Reserve assumptions in the severely adverse scenario.

Figure 7. Real GDP growth in four country/country block areas in the adverse scenario, Q1 2009–16



Note: 3Q 2013 data based on Federal Reserve calculations using available data as of October 25, 2013.

Source: Bureau of Economic Analysis and Federal Reserve assumptions in the adverse scenario.

results in a sharp increase in the yield on the long-term Treasury bond to 5¾ percent by the end of 2014. With short-term interest rates flat, this increase results in a steepening of the yield curve of approximately 300 basis points by the end of 2014.

Global Market Shock and Counterparty Default Component

The stress test results for six BHCs with large trading and private-equity exposures include the effect of a global market shock on the value of these positions in the adverse and severely adverse scenarios.¹⁷ In addition, the results of the same six BHCs and two other BHCs with substantial trading or custodial operations include the losses that may arise from the default of the BHC's largest counterparty (counterparty default component) in the adverse and severely adverse scenarios.¹⁸ Under the counterparty default component, the global market shock extends to

BHCs' counterparty exposures to project potential losses from the default of their largest counterparty.¹⁹ The Federal Reserve published the global market shocks for the adverse and severely adverse scenarios on November 12, 2013; the as-of date for positions and exposures for the global market shock and the counterparty default was October 16, 2013.

The global market shock is a set of one-time, hypothetical shocks to a broad range of risk factors. Generally, these shocks involve large and sudden changes in asset prices, rates, and spreads, reflecting general market stress and heightened uncertainty.²⁰

The global market shock for the severely adverse scenario is built around four key themes. First, globally, government and sovereign yield curves undergo marked shifts in level and shape. In most advanced economies, long-term rates rise sharply while short-term rates remain essentially unchanged. In emerging economies and peripheral euro economies, both

and the Board will respond to the BHC in writing within 14 calendar days of receipt of the BHCs request.

¹⁷ See 12 CFR 252.44(b); see also 12 CFR 252.54(b)(2)(i).

¹⁸ On September 30, 2013, the Federal Reserve notified eight BHCs with significant trading or custodial operations that they would be subject to a counterparty default component. Under the Dodd-Frank stress testing rule, within 14 calendar days of receipt of the notification, the BHCs may request in writing that the Board reconsider the requirement that the BHC include additional components or additional scenarios in its stress test,

¹⁹ The largest counterparty is selected based on the net stressed exposures across derivative and securities financing transactions. Net stressed exposures are calculated by revaluing exposures and collateral using the global market shock.

²⁰ See www.federalreserve.gov/bankinforeg/CCAR-2014-Severely-Adverse-Market-Shocks-data.xlsx and www.federalreserve.gov/bankinforeg/CCAR-2014-Adverse-Market-Shocks-data.xlsx.

short-term and long-term rates rise. Second, spreads on emerging market sovereign and corporate bonds widen, reflecting credit shocks that are more severe than those experienced during the second half of 2008. Third, the euro area experiences a credit crisis, manifested by sharp increases in government yields and various credit spreads. Finally, market moves in

all other asset classes and risk factors closely mirror the experience of the second half of 2008.

The global market shock for the adverse scenario consists of market moves that are, by and large, similar in structure but not as severe as those assumed in the severely adverse scenario.

Supervisory Stress Test Framework and Model Methodology

Analytical Framework

The effect of the supervisory scenarios on the regulatory capital ratios of the 30 BHCs is estimated by projecting the balance sheet, RWAs, and net income for each BHC over a nine-quarter planning horizon ending in the fourth quarter of 2015.

Projected net income is combined with the capital action assumptions prescribed in the Federal Reserve's Dodd-Frank Act stress test rules to project changes in equity capital. Changes in equity capital drive changes in regulatory capital, which combined with projected RWAs and assets, determine changes in regulatory capital ratios. This approach is consistent with U.S. generally accepted accounting principles (GAAP) and regulatory capital rules and provides a perspective on the capital of the BHCs and on the primary determinants of the projected changes in capital over time (earnings and capital actions).

Projected net income for the 30 BHCs is generated from individual projections of revenue, expenses, and various types of losses and provisions that flow into pre-tax net income, including:

- loan losses and changes in the allowance for loan and lease losses (ALLL);
- losses on loans held for sale (HFS) and measured under the fair-value option (FVO);
- other-than-temporary impairment (OTTI) losses on investment securities;
- expenses related to operational-risk events, including potential costs from unfavorable litigation outcomes;
- expenses related to the disposition of foreclosed properties;
- expenses related to demands by mortgage investors to repurchase loans deemed to have breached representations and warranties or related to litigation (mortgage repurchase/put-back losses);
- for BHCs with large trading and private equity exposures, losses on those exposures resulting from a global market shock; and,
- for BHCs with substantial trading or custodial operations, losses from the default of their largest counterparty.

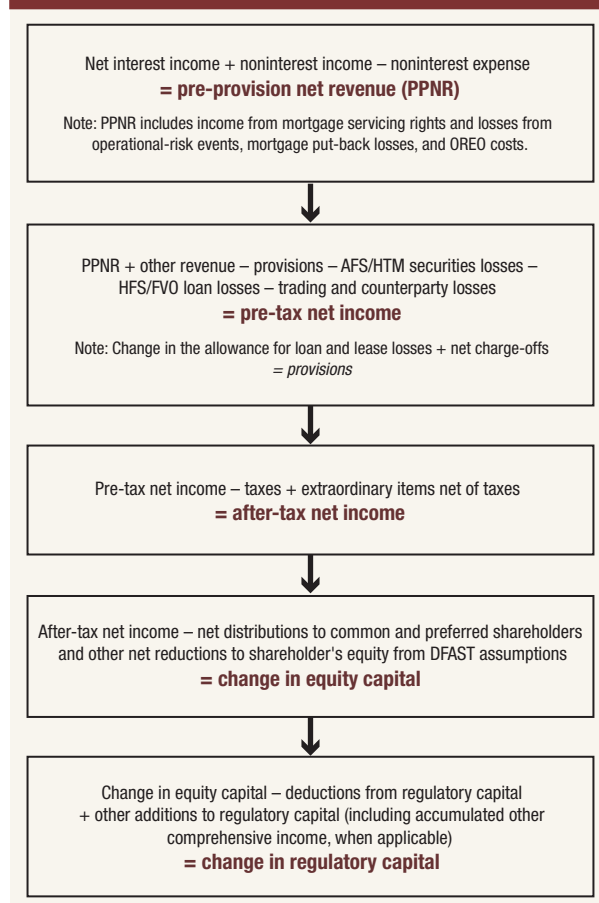
Projected pre-tax net income, in turn, flows into a calculation of regulatory capital measures that accounts for taxes and deductions that limit the recognition of certain intangible assets and impose other restrictions, as specified in U.S. regulatory capital guidelines.²¹ The projections incorporate changes in the calculation of regulatory capital over the planning horizon as phased in under the Board's revised regulatory capital framework. Figure 8 illustrates the framework used to calculate changes in net income and regulatory capital.

The framework begins with a projection of PPNR, which equals projected net interest income plus non-interest income minus noninterest expense. Consistent with U.S. GAAP, the PPNR projection incorporates projected losses generated by operational-risk events such as fraud, computer system or other operating disruptions, and litigation-related costs; mortgage repurchase losses; and expenses related to the disposition of foreclosed properties (other real estate owned (OREO) expenses).

The PPNR projection flows into the projection of pre-tax net income, which equals the PPNR projection, plus other revenue, minus provisions to the ALLL, OTTI losses on securities, losses on trading and counterparty positions from the global market shock, losses from the largest counterparty default, and losses on loans held for sale and measured under the fair-value option. Net income projections also incorporate extraordinary items.

Provisions for loan and lease losses equal projected loan losses for the quarter plus the amount needed

²¹ See generally 12 CFR part 225, appendix A; 12 CFR part 217.

Figure 8. Projecting net income and regulatory capital

for the ALLL to be at an appropriate level at the end of the quarter, which is a function of projected future loan losses. The amount of provisions over and above loan losses may be negative—representing a drawdown of the ALLL (an ALLL release, increasing net income)—or positive—representing a need to build the ALLL (an additional provision, decreasing net income) during the quarter.

Projected loan losses for the quarter are estimated separately for different categories of loans, based on the type of obligor (e.g., consumer or commercial and industrial), collateral (e.g., residential real estate, commercial real estate), loan structure (e.g., revolving credit lines), and accounting treatment (accrual or fair value). These categories generally follow the major regulatory report classifications, though some loss projections are made for more granular loan cat-

egories than those included on BHC regulatory reports.²²

Because the loss projections follow U.S. GAAP and regulatory guidelines, they incorporate any differences in the way these guidelines recognize income and losses based upon where assets are held on the BHCs' balance sheets. As a result, losses projected for similar or identical assets held in different portfolios can sometimes differ. For example, losses on loans held in accrual portfolios equal credit losses due to failure to pay obligations (cash flow losses resulting in net charge-offs). For similar loans that are held for sale, projected losses represent the change in the market value on the underlying asset under the supervisory scenarios.

Both changes in the fair value of AFS securities and OTTI losses on securities are projected over the nine-quarter planning horizon. Under U.S. GAAP, changes in the fair value of AFS securities are reflected in changes in AOCI but do not flow through net income. For DFAST, AOCI is gradually phased into the calculation of tier 1 capital for advanced approaches BHCs starting in 2014, consistent with the revised regulatory capital rules (for more information on OCI and AOCI in DFAST 2014, see [box 1](#)). In addition, if a security becomes OTTI then all or a portion of the difference between the fair value and amortized cost of the security must be recognized in earnings.²³ Consistent with U.S. GAAP, OTTI projections incorporate other-than-temporary differences between book value and fair value due to credit impairment. The projections, however, do not incorporate differences reflecting changes in liquidity or market conditions. As with the accrual loan portfolio, loss projections for different categories of securities are made based on obligor, collateral or underlying cash flow, and security structure. These categories include various types of securitized obligations (e.g., commercial and residential mortgage-backed securities), corporate bonds, municipal bonds, and sovereign bonds.

For the six BHCs with large trading and private-equity exposures, losses on trading and private equity

²² See Consolidated Financial Statements for Bank Holding Companies (FR Y-9C). www.federalreserve.gov/apps/reportforms/default.aspx.

²³ A security is considered impaired when the fair value of the security falls below its amortized cost.

Box 1. Accumulated Other Comprehensive Income in Regulatory Capital

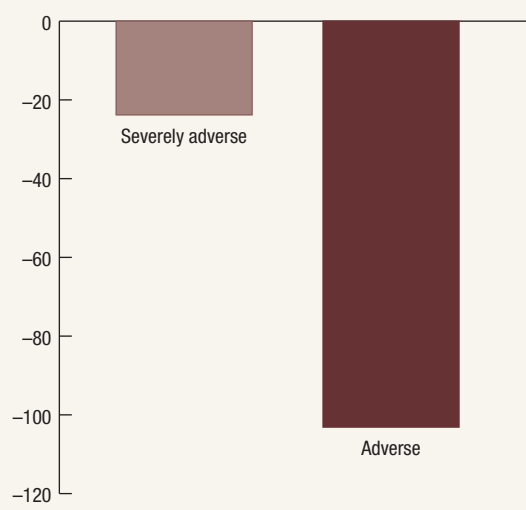
BHCs with total consolidated assets of \$250 billion or more or on-balance-sheet foreign exposures of \$10 billion or more (advanced approaches BHCs) must include a percentage of certain accumulated other comprehensive income (AOCI) items in their regulatory capital beginning in the second quarter of the planning horizon (the first quarter of 2014). Under the transition provisions of the revised capital framework, regulatory capital for advanced approaches BHCs must include 20 percent of eligible AOCI in 2014 and 40 percent in 2015. Non-advanced approaches BHCs may elect to opt out of including AOCI in capital. For the purpose of DFAST 2014, the Federal Reserve assumed that all non-advanced approaches BHCs would opt out of including AOCI.

The AOCI eligible for inclusion in capital is composed of four elements (1) actuarial gain and losses on defined contribution pension plans, (2) unrealized gains and losses on qualifying cash flow hedges,¹ (3) foreign currency translation adjustments, and (4) unrealized gains and losses on AFS securities and also on HTM securities that have experienced OTTI. The value of AOCI at the beginning of the planning horizon for each of these elements is reported on the FR Y-9C. For DFAST 2014, AOCI over the planning horizon is assumed to be constant for the first three elements, while AOCI due to unrealized gains and losses on securities is assumed to move over the planning horizon with the supervisory scenarios. Specifically, unrealized gains and losses equals the difference between the fair value of the securities, as estimated by the AFS fair value model, and the amortized cost of the securities, which has been adjusted for OTTI using the OTTI models.² Quarterly changes in unrealized gains and

losses are recognized net of taxes as other comprehensive income (OCI), which contributes directly to changes in AOCI.

Over the planning horizon, unrealized gains and losses at the advanced approaches BHCs move with the path of Treasury yields. Five-year Treasury yields in the severely adverse scenario decline about 1 percentage point to 0.6 percent, but due to an assumed aversion to long-term debt instruments, yields in the adverse scenario increase about 3 percentage points to 4.6 percent by Q4 2014. As a result, OCI estimated for advanced approaches BHCs is projected to be -\$24 billion under the severely adverse scenario and -\$103 billion under the adverse scenario.

Figure A. Aggregate OCI over the planning horizon in the severely adverse and adverse scenarios



¹ Unrealized gains and losses on cash flow hedges for items not recognized at fair value on the balance sheet are excluded from capital.

² Detailed descriptions of the AFS fair value model and the OTTI models are available in appendix B.

positions, and from credit valuation adjustment (CVA) are projected assuming an instantaneous re-pricing of positions under the global market shock. Losses related to the global market shock are assumed to occur in the first quarter of the planning horizon. No subsequent recoveries on these positions are assumed, nor are there offsetting changes such as reductions in compensation or other expenses in reaction to the global market shock. In addition,

losses from potential defaults of obligors underlying BHCs' trading positions are projected over the nine-quarter planning horizon, and the incremental losses above mark-to-market losses are projected.

In addition, the losses associated with the instantaneous and unexpected default of the largest counterparty across their derivatives and securities financing transaction (SFT) activities are projected for each of

eight BHCs with substantial trading or custodial operations.²⁴ Similar to the global market shock component, the counterparty default component is treated as an add-on to the macroeconomic conditions and financial market environment specified in the adverse and severely adverse scenarios. All losses and any assumed recoveries are assumed to occur in the first quarter of the planning horizon. The recovery value equals the value at the time of default as reflected in market prices.

The projections of revenues, expenses, and losses are based on the Federal Reserve's projections of the balance sheet for each BHC over the planning horizon. These balance sheet projections are derived using a common framework for determining the impact of the scenarios on balance sheet growth, and incorporate assumptions about credit supply that limit aggregate credit contraction (see [box 2](#)). Any new loan balances implied by the balance sheet projections are generally assumed to have the same risk characteristics as loans held by the BHC at the start of the planning period.

Balance sheet projections incorporated expected changes to a BHC's business plan, such as mergers, acquisition, and divestitures, that are likely to have a material impact on the its capital adequacy and funding profile. BHC-submitted data were used to adjust the projected balance sheet in the quarter when the change was expected to occur. Once adjusted, assets were assumed to grow at the same rate as the pre-adjusted balance sheet. Only divestitures that were either completed or contractually agreed upon before January 6, 2014, were incorporated. The inclusion of the effects of such expected changes to a BHC's business plan does not—and is not intended to—express a view on the merits of such proposals and is not an approval or non-objection to such plans.

After-tax net income (or loss) is calculated by applying a consistent tax rate to pre-tax net income (or loss) for all BHCs.²⁵ Along with each BHC's assumed capital actions under the Federal Reserve's Dodd-Frank Act stress test rules, after-tax net

income is the primary determinant of projected changes in equity capital which, in turn, determines projected changes in the regulatory capital measures. Capital ratios are calculated using assets and RWAs projected by the Federal Reserve.

Modeling Design and Implementation

The Federal Reserve's projections of revenue, expenses, and various types of losses and provisions that flow into pre-tax net income are based on data provided by the 30 BHCs participating in DFAST 2014 and on models developed or selected by Federal Reserve staff and reviewed by an independent group of Federal Reserve economists and analysts.²⁶ The models are intended to capture how the balance sheet, RWAs, and net income of each BHC are affected by the macroeconomic and financial conditions described in the supervisory scenarios and by characteristics of the BHCs' loans and securities portfolios; trading, private equity, and counterparty exposures from derivatives and SFTs; business activities; and other relevant factors.²⁷

The FR Y-14 Report

The Federal Reserve collects detailed data on PPNR, loans, securities, trading and counterparty risk, and losses related to operational-risk events on the FR Y-14 report, which includes a set of schedules (the FR Y-14M, FR Y-14Q, and FR Y-14A) collected monthly, quarterly, or annually.²⁸ Over the past year, several changes have been made to the FR Y-14 report. Most of the changes affected the FR Y-14A, which was revised to reflect the Federal Reserve's revised regulatory capital framework. Also, additional counterparty items were added related to SFTs and repurchase agreements to support loss estimation for the counterparty default component of the supervisory scenarios.

Each of the 30 BHCs participating in DFAST 2014 submitted FR Y-14M and FR Y-14Q schedules (as of September 30, 2013) in October and November of 2013 and submitted FR Y-14A schedules on Janu-

²⁴ For six BHCs with large trading and private equity exposures, losses from the large counterparty default component replace losses in DFAST 2013 and CCAR 2013 associated with the incremental default risk of their counterparties.

²⁵ For a discussion of the effect of changing this tax rate assumption on the post stress tier 1 common ratio, see box 2 of Board of Governors of the Federal Reserve System (2013), "Dodd-Frank Act Stress Test 2013: Supervisory Stress Test Methodology and Results," available at www.federalreserve.gov/newsevents/press/bcreg/20130307a.htm.

²⁶ For more information, see www.federalreserve.gov/aboutthefed/mvc.htm.

²⁷ In some cases, the loss models estimated the effect of local-level macroeconomic data, which were projected based on their historical covariance with national variables included in the supervisory scenarios.

²⁸ The FR Y-14 schedules are available at www.federalreserve.gov/apps/reportforms/default.aspx.

Box 2. Federal Reserve Balance Sheet and RWA Projections

For DFAST 2014, the Federal Reserve independently projected bank holding company (BHC) balance sheets and risk-weighted assets (RWAs) under the supervisory scenarios. Independent balance projections permit a more consistent analysis across BHCs, one that features common assumptions regarding total borrowing by households and businesses and firms' market shares. In particular, making independent balance sheet projections allows the Federal Reserve to conduct the stress tests under the assumption that BHCs continue to serve as credit intermediaries, even under severely adverse conditions.

The Federal Reserve projection of BHC balance sheets begins with a set of models that relate total assets in the banking industry and important sub-components, such as total loans and non-loan assets, to nominal GDP and other macroeconomic factors, including a measure of loan supply. These relationships are estimated using aggregate data and are used to project the growth in industry assets and its subcomponents over the planning horizon under each of the supervisory scenarios (See figure A). In the adverse and severely adverse scenarios, the measure of loan supply is assumed to remain at its long-run historical average over the planning horizon. This assumption ensures that loan supply does not contract during the stress period; relaxing this assumption would significantly reduce the projection of loan growth over the planning horizon in the severely adverse scenario.

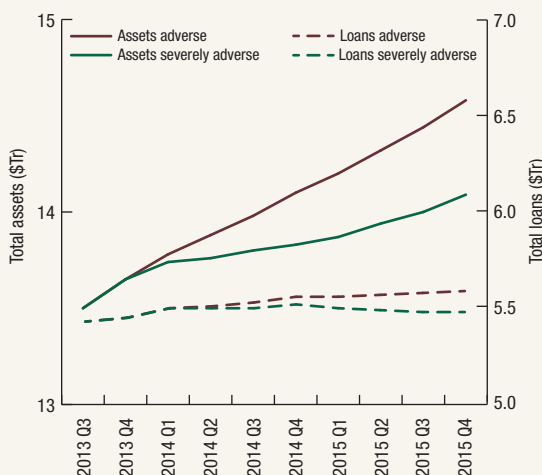
Industry assets, loans, and trading assets are allocated to each BHC based on its shares of these positions at the beginning of the planning horizon. All types of loans at all BHCs are assumed to grow at the same rate, which means that the mix of loans at each BHC is constant over the planning horizon. This assumption ensures that each BHC's loan risk profile throughout the planning horizon is driven primarily by its outstanding business mix on the stress test as-of date. Trading assets are assumed to grow at the growth rate of total assets, adjusted for changes in mark-to-market values reflecting industrywide trading asset composition, while non-loan assets other than trading assets and securities grow at the same rate for all BHCs. Securities growth at each BHC is set so that total asset growth equals the projected rate given the growth of other types of assets at that firm.

The Federal Reserve's projection of BHCs' balance sheets also affects regulatory capital ratios through the denominator of these ratios—RWAs and average total assets. Based on the projection of BHC

balance sheets, two components of RWAs were estimated: market RWAs and credit RWAs. Market RWAs reflect the market and credit risk exposures in the BHCs' portfolios of trading assets, while credit RWAs primarily reflect credit risk exposures in the BHCs' loan, derivatives, and other portfolios. Credit RWAs was calculated both under the capital framework that was in effect as of October 1, 2013, (general approach RWAs) and under the revised capital framework implementing the Basel III regulatory capital regime in the United States (standardized approach RWAs). The weights used to calculate credit RWAs were held fixed throughout the planning horizon to reflect an assumption that the credit portfolio's underlying risk features remain constant throughout the horizon; as a result, changes in credit RWAs over the planning horizon primarily reflect the balance sheet asset growth projections for loans, securities, and other assets.

Market RWAs can be broken down into components that are cyclical and, therefore, are expected to evolve over the planning horizon according to financial market conditions and those that are not. The first group, which includes value at risk and the incremental risk charge, are projected based on the volatility of the trading portfolio of the BHCs. The second group, which includes stressed value at risk, the specific risk charge, and the comprehensive risk charge, are assumed to evolve according to projections of the BHCs' trading assets.

Figure A. Total assets and loans, by scenario



Note: Total assets and loans for the 30 participating BHCs.

ary 6, 2014.²⁹ These data—along with data collected in other regulatory reports and gathered from other proprietary third-party data sources—were used in the supervisory models of revenues, expenses, and losses. Balance sheets and RWAs were projected based on historical data from the Federal Reserve’s Z.1 statistical release (Financial Accounts of the United States), FR Y-9C report, and FR Y-14 schedules.³⁰

Quarterly loan losses are projected using information collected on the FR Y-14 about the BHCs’ loan portfolios, including borrower characteristics, collateral characteristics, characteristics of the loans or credit facilities, amounts outstanding and yet to be drawn down (for credit lines), payment history, and current payment status. Loan portfolio data are reported either monthly (for domestic retail credit card and residential mortgages) or quarterly (all other retail and wholesale portfolios). Data are collected on individual loans or credit facilities for wholesale loan, domestic retail credit card, and residential mortgage portfolios and are collected on segments of the loan portfolios for other domestic and international retail portfolios (for example, segments defined by loan-to-value (LTV) ratio, geographic location, and borrower credit score).

Losses on securities held in the AFS and held to maturity (HTM) portfolios are estimated using securities data collected quarterly at the individual security (CUSIP) level, including the amortized cost, market value, and any OTTI taken on the security to date.

BHCs were required to submit detailed loan and securities information for all material portfolios, where the portfolio is deemed to be “material” if the size of the portfolio exceeds either 5 percent of the BHC’s tier 1 capital or \$5 billion. The portfolio categories are defined in the FR Y-14M and Y-14Q instructions. For portfolios falling below these thresholds, the BHCs had the option to submit or not submit the detailed data. Portfolios for which the Federal Reserve did not receive detailed data were assigned a loss rate equal to a high percentile of the loss rates projected for BHCs that did submit data for that category of loan or security.

The Federal Reserve made considerable efforts to validate BHC-reported data, and requested resubmissions of data as needed. However, in certain instances, BHC-reported data remained insufficient or were deemed unreliable to produce supervisory estimates. In such instances, loans with insufficient or unreliable data received a loss rate at or near the 90th percentile of the loss rates projected for the relevant loan segment at the BHCs that did provide reliable data. In some instances where certain data elements were reported as missing values, these missing data were assigned conservative values (e.g., high LTV values or low credit scores).³¹ These assumptions are intended to reflect a conservative view of the risk characteristics of the portfolios, given insufficient information to make more risk-sensitive projections.

Losses related to the global market shock and the counterparty default components are projected using information on trading, derivatives and SFT exposures, private equity holdings, and certain other assets subject to fair-value accounting held by BHCs with large trading operations. The FR Y-14 schedules collect BHC-estimated sensitivities of trading positions, private equity, and other fair-value assets held in the trading book to the set of risk factors specified by the Federal Reserve. These risk factors include changes in a wide range of U.S. and global market rates and asset prices as well as volatilities of those rates and prices. The specific risk factors are those judged to be most relevant to the positions held by the BHCs. The schedules also collect information on the BHC’s counterparty exposures, revalued with respect to these risk factors both for segments of counterparties and for individual counterparties. Additionally, supplementary schedules were used to collect information specific to the counterparty default component as well as eurozone holdings and exposures. These data, which are collected for positions in the trading and private-equity portfolios held by the BHCs and counterparty exposures, are as of market close October 16, 2013.

Most components of PPNR are projected using data on historical revenues and operating and other non-credit-related expenses reported on the FR Y-9C report, which contains consolidated income

²⁹ In preparation for DFAST 2014, the 12 BHCs that did not previously participate in DFAST began submitting the FR Y-14M and FR Y-14Q schedules in late 2012.

³⁰ *Financial Accounts of the United States (Z.1)* is available at www.federalreserve.gov/releases/z1/.

³¹ The method of applying conservative assumptions to certain risk segments was used only in cases in which the data-related issues were isolated in such a way that the remainder of the portfolio could be readily modeled using the existing supervisory framework.

statement and balance sheet information for each BHC (including components of interest income, non-interest income, and noninterest expenses).³² Separate data are collected on the FR Y-14 about mortgage loans that were sold or securitized and the BHCs' historical losses related to operational-risk events to project losses from mortgage repurchase and operational-risk events under the supervisory scenarios.

Finally, changes in regulatory capital ratios over the planning horizon are calculated incorporating Federal Reserve projections of RWA and balance-sheet composition.

Balance Sheet, Loss, Revenue, and Expense Models

The data collected from the BHCs, along with data collected in other regulatory reports; proprietary industry data; and the variables defining the supervisory scenarios, are inputs into a series of models used to project the balance sheet, losses, revenues, and expenses for each BHC over the planning horizon. These models were either developed by Federal Reserve analysts and economists or are third-party models used by Federal Reserve staff.³³ In some cases, the projections of certain types of losses made by the Federal Reserve use as an input sensitivities generated by the BHCs using their internal risk-measurement models.

In general, the models were developed using pooled historical data from many financial institutions, either supervisory data collected by the Federal Reserve or proprietary industry data. As a result, the estimated parameters reflect the typical or industry-average response to variation in the macroeconomic and financial market variables and portfolio-specific and instrument-specific characteristics.

This industrywide modeling approach reflects the challenge of estimating separate, statistically robust models for each of the 30 BHCs. This approach also reflects the desire of the Federal Reserve not to assume that historical BHC-specific results will prevail in the future if those results cannot be explained

by consistently observable variables incorporated into a robust statistical model. Thus, BHC-specific factors are incorporated through detailed portfolio and business-activity data, such as that provided on the FR Y-14, that are inputs to the models, but the estimated relationships between these variables, the macroeconomic and financial market factors defined in the supervisory scenarios, and revenue or losses are the same for all BHCs. This means that the projections made by the Federal Reserve will not necessarily match or mirror similar projections made by individual BHCs, which will incorporate diverse approaches that capture the effect of portfolio characteristics and other economic factors.

The Federal Reserve deviated from the industrywide modeling approach only in a very limited number of cases, in which the historical data used to estimate the model were not sufficiently granular to reliably capture cross-firm differences in loss, expense, or revenue-generating characteristics. In these cases, BHC-specific indicator variables (fixed effects) were included in the models.

The models developed internally by the Federal Reserve draw on economic research and analysis and industry practice in modeling the impact of borrower, instrument, collateral characteristics, and macroeconomic factors on revenue, expenses, and losses. The modeling approaches build on work done by the Federal Reserve in previous stress tests, but in some cases, the models represent significant refinement and advancement of earlier work, reflecting advances in modeling technique, richer and more detailed data over which to estimate the models, and longer histories of performance in both adverse and more benign economic settings.

In a few cases, these efforts resulted in new models that were implemented in DFAST 2014. These new models and other models used are described in greater detail in [appendix B](#). Overall, the Federal Reserve continues to move toward an overall modeling framework that is increasingly independent of BHC projections.

The models were reviewed by an independent model validation team composed of economists and analysts from across the Federal Reserve System, with a focus on the design, estimation, and implementation of the models. Model reviewers were primarily Federal Reserve subject matter experts who were not involved in model development and who reported to a different oversight group than model developers. In

³² The FR Y-9C report is available at www.federalreserve.gov/apps/reportforms/default.aspx.

³³ A list of providers of the proprietary models and data used by the Federal Reserve in connection with DFAST 2014 is available in [appendix B](#).

addition, Federal Reserve analysts developed industrywide loss and PPNR projections—capturing the potential revenue and losses of the banking industry

as a whole in a stressed macroeconomic environment—for use as reference points in assessing model outputs across the 30 BHCs.

Revised Capital Framework

On July 2, 2013, the Board approved a revised capital framework that implements the Basel III regulatory capital reforms and certain changes required by the Dodd-Frank Act (revised capital framework).³⁴ The revised capital framework affects the calculation of the regulatory capital ratios in the Dodd-Frank Act stress test because in the supervisory stress test each BHC's regulatory capital ratios for each projection quarter of the planning horizon are calculated *in accordance with the regulatory capital requirements that will be in effect during that quarter*.³⁵ The remainder of this section describes the changes to the capital ratios associated with the phase-in of the revised capital framework.

As a result of the phase-in of the revised capital framework, the definition of regulatory capital (the numerators of the capital ratios) and the calculation of RWAs (the denominator of some of the regulatory capital ratios) vary over the nine-quarter stress test horizon. In addition, a new regulatory capital ratio—the common equity tier 1 ratio—was introduced during the course of the nine-quarter planning horizon.

Table 1 shows the applicability of the common equity tier 1 ratio and the rules used to calculate the numerators and denominators of the capital ratios for each BHC. For the first quarter of the planning horizon—the fourth quarter of 2013—three regulatory capital ratios are calculated for all BHCs: the tier 1 capital ratio, the total capital ratio, and the tier 1 leverage ratio.³⁶ The tier 1 and total capital ratios are defined as tier 1 capital and total capital, respectively,

³⁴ See *Regulatory Capital Rules: Regulatory Capital, Implementation of Basel III, Capital Adequacy, Transition Provisions, Prompt Corrective Action, Standardized Approach for Risk-Weighted Assets, Market Discipline and Disclosure Requirements, Advanced Approaches Risk-Based Capital Rule, and Market Risk Capital Rule* (July 2, 2013), 78 FR 62018 (October 11, 2013).

³⁵ See 79 FR 13498 (March 11, 2014).

³⁶ Tier 1 capital consists of common equity tier 1 capital and additional tier 1 capital, which includes additional tier 1 capital instruments (including qualifying non-cumulative perpetual preferred stock instruments), related surplus, and limited amounts of tier 1 minority interest, minus applicable regulatory adjustments and deductions. See 12 CFR 217.2 and 12 CFR

divided by RWAs, while the tier 1 leverage ratio equals tier 1 capital divided by average total assets.

For Q4 2013, tier 1 and total capital are calculated based on the regulatory capital rules in place before adoption of the revised capital framework (Basel I-based capital rules), and RWAs are calculated using the “general risk-based capital approach” in those rules.

Beginning in the second quarter of the stress test horizon (the first quarter of 2014), the DFAST capital ratios for advanced approaches BHCs, other than the tier 1 common ratio, reflect the definitions of regulatory capital under the revised capital framework. For other BHCs, the revised definition of capital does not occur until the sixth quarter of the planning horizon (the first quarter of 2015). The new definitions of capital include changes to certain limitations on the instruments that can be included in regulatory capital and the items that must be deducted, such as intangible assets like goodwill.

The revised capital framework also introduces a new regulatory capital ratio beginning in 2014—the common equity tier 1 ratio.³⁷ This ratio equals common equity tier 1 capital divided by RWAs, where common equity tier 1 equals the common stock instruments and related surplus, retained earnings, AOCI for advanced approaches BHCs, and limited amounts

217.20(c). Total capital consists of tier 1 and tier 2 capital, which includes tier 2 capital instruments (including qualifying subordinated debt instruments), related surplus, and limited amounts of total capital minority interest and the allowance for loan and lease losses. See 12 CFR part 217, sections 2 and 20(d).

³⁷ Common equity tier 1 capital includes common stock instruments and related surplus, retained earnings, AOCI, and limited amounts of common equity tier 1 minority interest, minus applicable regulatory adjustments and deductions. Items that are fully deducted from common equity tier 1 capital include goodwill, other intangible assets (excluding mortgage servicing assets) and certain deferred tax assets; items that are subject to limits in common equity tier 1 capital include mortgage servicing assets, eligible deferred tax assets, and certain significant investments. See 12 CFR 217.20(b), 12 CFR 217.22(a), and 12 CFR 217.22(d).

Table 1. Applicable capital ratios and calculations in the 2014 Dodd-Frank Act stress tests

Capital ratio	Aspect of ratio	Q4 2013	2014	2015
Advanced approaches BHCs				
Common equity tier 1 ratio	Capital in numerator	n/a	Revised capital framework	Revised capital framework
	Denominator	n/a	General approach RWAs	Standardized approach RWAs
Tier 1 ratio	Capital in numerator	Basel I-based capital	Revised capital framework	Revised capital framework
	Denominator	General approach RWAs	General approach RWAs	Standardized approach RWAs
Total capital ratio	Capital in numerator	Basel I-based capital	Revised capital framework	Revised capital framework
	Denominator	General approach RWAs	General approach RWAs	Standardized approach RWAs
Tier 1 leverage ratio	Capital in numerator	Basel I-based capital	Revised capital framework	Revised capital framework
	Denominator	Average assets	Average assets	Average assets
Tier 1 common ratio	Capital in numerator	Basel I-based capital	Basel I-based capital	Basel I-based capital
	Denominator	General approach RWAs	General approach RWAs	General approach RWAs
Other BHCs				
Common equity tier 1 ratio	Capital in numerator	n/a	n/a	Revised capital framework
	Denominator	n/a	n/a	Standardized approach RWAs
Tier 1 ratio	Capital in numerator	Basel I-based capital	Basel I-based capital	Revised capital framework
	Denominator	General approach RWAs	General approach RWAs	Standardized Approach RWAs
Total capital ratio	Capital in numerator	Basel I-based capital	Basel I-based capital	Revised capital framework
	Denominator	General approach RWAs	General approach RWAs	Standardized approach RWAs
Tier 1 leverage ratio	Capital in numerator	Basel I-based capital	Basel I-based capital	Revised capital framework
	Denominator	Average assets	Average assets	Average assets
Tier 1 common ratio	Capital in numerator	Basel I-based capital	Basel I-based capital	Basel I-based capital
	Denominator	General approach RWA	General approach RWA	General approach RWA

"Basel I-based capital" indicates that regulatory capital is calculated under the rules in place before the implementation of the revised capital framework (see 12 CFR part 225, appendix A). "Revised capital framework" indicates that regulatory capital is calculated under the revised capital framework. "General Approach RWAs" indicates that risk-weighted assets are calculated using the approach under the general risk-based capital rules (see 12 CFR part 225, appendix A) while "Standardized Approach RWAs" indicates that risk-weighted assets are calculated using the standardized approach under the revised capital framework. The "n/a" indicates that the capital ratio was not calculated for that time period. For purposes of DFAST 2014, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance-sheet foreign exposure of at least \$10 billion as of December 31, 2013.

of common equity tier 1 minority interest, minus applicable regulatory adjustments and deductions. This ratio was calculated for advanced approaches BHCs starting in the second quarter of the stress test horizon (Q1 2014), and for all other BHCs participating in the Dodd-Frank Act stress tests starting in the last year of the stress test horizon (2015).

Starting in 2015, the revised capital framework introduces a new standardized approach for risk weighting assets, which will replace the calculation of risk weights using the general risk-based capital approach. For this stress test cycle, the denominator of each BHC's capital ratios, other than the tier 1 common ratio, was calculated using the general approach for the first five quarters of the planning horizon (for the fourth quarter of 2013 through the last quarter of 2014) and was calculated using the standardized approach for the last four quarters of the planning horizon (for all quarters in 2015). By comparison, the tier 1 common capital ratio is calculated using the general approach in place as of October 1, 2013, for all nine quarters of the planning horizon.

The results for DFAST 2014 continue to include the tier 1 common capital ratio.³⁸ The tier 1 common capital ratio equals the common equity portion of tier 1 capital divided by RWAs. The tier 1 common ratio differs from the common equity tier 1 ratio because (1) for advanced approaches companies, most elements of AOCI flow through to common equity tier 1, but not to tier 1 common capital; (2) more assets are subject to deduction from common equity tier 1 capital than from tier 1 common capital, including investments in unconsolidated financial institutions and all deferred tax assets that arise from operating losses and tax credit carry forwards; and, (3) beginning in 2015, the denominators of the two ratios will use different approaches for calculating RWAs. Preserving the tier 1 common ratio maintains consistency with previous stress testing cycles during the phase-in of the new common equity tier 1 capital ratio.

³⁸ See 79 FR 13498 (March 11, 2014).

Supervisory Stress Test Results

This section describes the Federal Reserve's projections of losses, revenue, expenses, and capital positions for the 30 BHCs participating in DFAST 2014. The projections presented in this section are based on the adverse and severely adverse scenarios developed by the Federal Reserve.

The results include projections of five post-stress capital ratios for each of the 30 BHCs over the nine-quarter planning horizon spanning the fourth quarter of 2013 to the end of 2015. The first is the ratio of the common equity component of tier 1 capital to RWAs (the tier 1 common ratio), calculated based on the capital rules in effect prior to the revised capital framework. The second is a new ratio defined in the revised capital rules: the ratio of common equity tier 1 capital to RWAs (the common equity tier 1 ratio). The final three ratios are: the ratio of tier 1 capital to RWAs (the tier 1 risk-based capital ratio), the ratio of total regulatory capital to RWAs (the total risk-based capital ratio), and the ratio of tier 1 capital to average assets (the tier 1 leverage ratio). The results also include projections of RWAs and the components of net income before taxes, including revenues, provisions, and losses, as well as components of loan losses.

These results are presented both in the aggregate for the 30 BHCs and for individual BHCs. The aggregate results provide a sense of the stringency of the adverse and severely adverse scenario projections and the sensitivities of losses, revenues, and capital at these BHCs as a group to the stressed economic and financial market conditions contained in those scenarios. The range of results across individual BHCs reflects differences in business focus, asset composition, revenue and expense sources, as well as differences in portfolio risk characteristics. The comprehensive results for individual BHCs are reported in [appendix C](#).

Severely Adverse Scenario

Stressed Regulatory Capital Ratios and Risk-Weighted Assets

The projections suggest significant declines in regulatory capital ratios for nearly all the BHCs under the severely adverse scenario. Overall, the total amount of tier 1 common capital held by the 30 BHCs is estimated to fall more than \$283 billion, or about 30 percent, from the third quarter of 2013 to the fourth quarter of 2015 under the severely adverse scenario. As shown in [table 2](#), in the aggregate each of the four capital ratios calculated in the third quarter of 2013 decline over the course of the planning horizon, with year-end 2015 levels ranging from 2.5 percentage points to 4.6 percentage points lower than at the start of the planning horizon. [Table 3](#) presents these ratios for each of the 30 BHCs.

The changes in post-stress regulatory capital ratios vary considerably across BHCs (see [figures 9 and 10](#) and [table 3](#)). Overall, post-stress regulatory capital ratios decline from the beginning to the end of the planning horizon for all but two of the BHCs. The post-stress capital ratios incorporate Federal Reserve projections of the levels of total average assets and RWAs over the planning horizon. Declines in regulatory capital ratios in part reflect an increase in RWAs over the planning horizon. In the severely adverse scenario, aggregate RWAs for the 30 BHCs is projected to increase \$281 billion, or 3.4 percent, over the planning horizon under the current general approach for RWAs calculations.

Projected Losses

The Federal Reserve's severely adverse scenario projections estimate that the 30 BHCs as a group would

experience significant losses under the severely adverse scenario. In this scenario, losses are projected to be \$501 billion for the 30 BHCs in the aggregate over the nine quarters of the planning horizon. These losses include \$366 billion in accrual loan portfolio losses, \$7 billion in OTTI and other realized securities losses, \$98 billion in trading and/or counterparty losses at the eight BHCs with substantial trading or custodial operations, and \$29 billion in additional losses from items such as loans booked under the fair-value option. Table 2 presents these results in the aggregate, while table 5 presents them individually for each of the 30 BHCs.

The biggest sources of loss are accrual loan portfolios and trading and counterparty positions subject to the global market shock and counterparty default component. Together, these account for nearly 93 percent of the projected losses for the 30 BHCs under the severely adverse scenario (figure 11).

Loan Losses

Projected losses on consumer-related lending—domestic residential mortgages, credit cards, and other consumer loans—represent 63 percent of projected loan losses and 46 percent of total projected losses for the 30 BHCs (see figure 12 and table 6). This is consistent with both the share of these types of loans in the BHCs' loan portfolios—these loans represent about half of the accrual loan portfolio at these firms as of the third quarter of 2013—and with the severely adverse scenario, which features high unemployment rates and significant declines in housing prices. Losses on domestic residential mortgage loans, including both first liens and junior liens/home equity lines of credit (HELOC), is the single largest category of losses, at \$106 billion, representing 29 percent of total projected loan losses. Projected losses on credit card portfolios—at \$93 billion—is the second largest category, representing 25 percent. The next largest category is projected losses on commercial and industrial loans, at \$62 billion.

For the 30 BHCs as a group, the nine-quarter cumulative loss rate for all accrual loan portfolios is 6.9 percent, where the loss rate is calculated as total projected loan losses over the nine quarters of the planning horizon divided by average loan balances over the horizon. This rate is high by historical standards, and more severe than any U.S. recession since the 1930s. As illustrated in figure 12, total loan loss rates vary significantly across BHCs, ranging

between 1.6 percent and 15.2 percent across these institutions.

The differences in total loan loss rates across the BHCs reflect differences in loan portfolio composition and differences in risk characteristics for each type of lending across these firms. Loan portfolio composition matters because projected loss rates vary significantly by loan type.³⁹ In the aggregate, nine-quarter cumulative loss rates range between 2.7 percent on other loans and 15.2 percent on credit cards, reflecting both differences in typical performance of these loans—some loan types tend to generate higher losses, though generally also higher revenue—and differences in the sensitivity of different types of lending to the severely adverse scenario. In particular, lending categories whose performance is sensitive to unemployment rates or housing prices may experience high stressed loss rates due to the considerable stress on these factors in the severely adverse scenario.

Figures D.1 through D.7 present the nine-quarter cumulative loss rates on seven different categories of loans for each of the 30 BHCs. There are significant differences across BHCs in the projected loan loss rates for similar types of loans. For example, while the median projected loss rate on domestic first-lien residential mortgages is 4.0 percent, the rates among BHCs with first-lien mortgage portfolios vary from a low of 0.8 percent to a high of 16.7 percent. Similarly, for commercial and industrial loans, the range of projected loss rates is from 2.8 percent to 13.2 percent, with a median of 4.9 percent. Projected loss rates on most loan categories show similar dispersion across BHCs.⁴⁰

Differences in projected loss rates across BHCs primarily reflect differences in loan characteristics, such as loan-to-value ratios or debt service coverage ratios, and borrower characteristics, such as credit ratings or credit scores. In addition, some BHCs have taken write-downs on portfolios of impaired loans either purchased or acquired through mergers. Losses on these loans are projected using the same loss models used for loans of the same type, and the resulting loss projections are reduced by the amount of such write-

³⁹ The loan categories are defined to be generally consistent with categories on the FR Y-9 C reports.

⁴⁰ Losses are calculated based on the exposure at default, which includes both outstanding balances and any additional draw-down of the credit line that occurs prior to default, while loss rates are calculated as a percent of average outstanding balances over the planning horizon. See appendix B for more detail on the models used to project net income and stressed capital.

downs. For these BHCs, projected loss rates will be lower than for BHCs that hold similar loans that have not been subject to purchase-related write-downs.

Losses on Trading, Private Equity, SFT, and Derivatives Positions

The severely adverse scenario results include \$98 billion in trading losses from the global market shock at the six BHCs with large trading and private-equity exposures and losses from the counterparty default component at the eight BHCs with substantial trading or custodial operations. Trading and counterparty losses range between \$1 billion and \$24 billion across the eight BHCs (see table 5), with the largest losses at those BHCs with the most significant trading activities that were subject to both the global market shock and the counterparty default component. Even so, the relative size of losses across firms depends not on nominal portfolio size but rather on the specific risk characteristics of each BHC's trading positions, inclusive of hedges. Importantly, projected losses related to the global market shock and the counterparty default component are based on the trading positions and counterparty exposures held by these firms on a single date (October 16, 2013) and could have differed, perhaps significantly, over the nine-quarter planning horizon, if they had been based on trading positions as of a different date.

Projected Pre-provision Net Revenue and Net Income

In the aggregate, the 30 BHCs are projected to generate \$316 billion in PPNR cumulatively over the nine quarters of the planning horizon, equal to 2.3 percent of their combined average assets (see table 2). Relatively low PPNR projections reflect low levels of net interest income because of the effect of low interest rates and flattening of the yield curve in the early part of the severely adverse scenario, given the BHCs' current and projected balance sheet composition. The results also reflect low levels of noninterest income, consistent with the falling asset prices and sharply contracting economic activity in the severely adverse scenario. In addition, the PPNR projections incorporate expenses stemming from estimates of elevated levels of losses from operational-risk events such as fraud, employee lawsuits, litigation-related expenses, or computer system or other operating disruptions and expenses related to put-backs of mort-

gages, netted against mortgage put-back reserves already taken by the BHCs.⁴¹

The ratio of projected cumulative PPNR to average assets varies across BHCs (see figure 13 and table 5). A significant portion of this variation reflects differences in business focus across the institutions. For instance, the ratio of PPNR to assets tends to be higher at BHCs focusing on credit-card lending, reflecting the higher net interest income that credit cards generally produce relative to other forms of lending.⁴² Importantly, lower PPNR rates do not necessarily imply lower net income, since the same business focus and revenue risk characteristics determining differences in PPNR across firms could also result in offsetting differences in projected losses across BHCs.

Projected PPNR and losses are the primary determinants of projected net income. Table 2 presents aggregate projections of the components of pre-tax net income, including provisions into the ALLL and one-time income and expense and extraordinary items, under the severely adverse scenario. Table 5 presents these projections for each of the 30 BHCs. The projections are cumulative for the nine quarters of the planning horizon.

Of note, following U.S. GAAP, the net income projections incorporate loan losses indirectly through provisions, which equal projected loan losses plus the amount needed for the ALLL to be at an appropriate level at the end of each quarter. The \$399 billion in total provisions reported in table 2 is the result of \$366 billion in net charge-offs and a reserve build of more than \$32 billion. Table 2 is cumulative over the planning horizon, and masks variation in the ALLL during the course of the nine quarters. Specifically, the projected ALLL increases during the early quarters of the planning horizon, given the increased economic stress in the severely adverse scenario, and then partially retraces this increase as the economic stress abates.

⁴¹ These estimates are conditional on the hypothetical adverse and severely adverse scenario and on conservative assumptions. They are not a supervisory estimate of the BHCs' current or expected legal liability.

⁴² As noted, credit-card lending also tends to generate relatively high loss rates, so the higher PPNR rates at these BHCs do not necessarily indicate higher profitability.

The Federal Reserve's projections of pre-tax net income under the severely adverse scenario imply negative net income at most of the 30 BHCs individually, and for the BHCs as a group, over the nine-quarter planning horizon. As table 2 shows, projected net income before taxes (pre-tax net income) is an aggregate net loss of \$217 billion over the planning horizon for the 30 BHCs.

Figure 14 illustrates the ratio of pre-tax net income to average assets for each of the 30 BHCs. The ratio ranges between -5.1 percent and 3.9 percent. Projected cumulative net income for most of the BHCs

(23 of 30) is negative over the planning horizon. Differences across the firms reflect differences in the sensitivity of the various components of net income to the economic and financial market conditions in the supervisory scenarios. Projected net income for the eight BHCs subject to global market shock and/or the counterparty default component includes the effect of those additional scenario components in the adverse and severely adverse scenarios, introducing some additional variation in projected net income between these eight BHCs and the other firms participating in DFAST 2014.

Table 2. 30 participating bank holding companies

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses

Federal Reserve estimates in the severely adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	11.5	7.8	7.6
Common equity tier 1 capital ratio (%) ²	n/a	7.9	7.9
Tier 1 risk-based capital ratio (%)	12.9	8.5	8.5
Total risk-based capital ratio (%)	15.6	11.0	11.0
Tier 1 leverage ratio (%)	8.4	5.9	5.9

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	366.1	6.9
First-lien mortgages, domestic	62.8	5.7
Junior liens and HELOCs, domestic	43.5	9.6
Commercial and industrial ²	62.3	5.4
Commercial real estate, domestic	48.9	8.4
Credit cards	93.0	15.2
Other consumer ³	32.5	6.0
Other loans ⁴	23.2	2.7

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small and medium enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	8,374.5	8,655.7	9,432.4

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	315.9	2.3
Other revenue ³	0.0	
<i>less</i>		
Provisions	398.6	
Realized losses/gains on securities (AFS/HTM)	7.0	
Trading and counterparty losses ⁴	98.1	
Other losses/gains ⁵	29.3	
<i>equals</i>		
Net income before taxes	-217.1	-1.6
Memo items		
Other comprehensive income ⁶	-23.8	
<i>Other effects on capital</i>	Q4 2014	Q4 2015
AOCI included in capital (billions of dollars) ⁷	-11.6	-21.8

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs as only those BHCs include AOCI in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt out of including AOCI in their capital calculations.

**Table 3. Projected stressed capital ratios in the severely adverse scenario, Q4 2013 to Q4 2015:
All bank holding companies**

Federal Reserve estimates in the severely adverse scenario

Bank holding company	Tier 1 common ratio (%)			Common equity tier 1 ratio (%) ¹		Tier 1 risk-based capital ratio (%)			Total-risk based capital ratio (%)			Tier 1 leverage ratio (%)		
	Actual Q3 2013	Ending	Minimum	Ending	Minimum	Actual Q3 2013	Ending	Minimum	Actual Q3 2013	Ending	Minimum	Actual Q3 2013	Ending	Minimum
Ally Financial Inc.	7.9	6.3	6.3	7.3	7.3	15.4	9.1	9.1	16.4	10.6	10.6	13.2	7.9	7.9
American Express Company	12.8	14.0	12.1	14.0	12.9	12.8	14.0	12.3	14.7	15.4	14.1	10.7	11.6	10.1
Bank of America Corporation	11.1	6.0	5.9	6.8	6.8	12.3	6.8	6.8	15.4	9.2	9.2	7.8	4.4	4.4
The Bank of New York Mellon Corporation	14.1	16.1	13.1	15.0	13.8	15.8	16.1	14.7	16.8	16.3	15.3	5.6	6.6	5.3
BB&T Corporation	9.4	8.4	8.4	8.1	8.1	11.3	9.8	9.8	13.9	11.6	11.6	9.0	8.0	8.0
BBVA Compass Bancshares, Inc.	11.6	8.5	8.5	8.6	8.6	11.8	8.6	8.6	14.1	10.6	10.6	10.2	7.5	7.5
BMO Financial Corp.	10.8	7.6	7.6	8.9	8.9	10.8	8.9	8.5	15.2	12.5	12.4	7.9	6.5	6.0
Capital One Financial Corporation	12.7	7.8	7.8	8.0	8.0	13.1	8.4	8.4	15.3	10.1	10.1	10.1	6.7	6.7
Citigroup Inc.	12.7	7.2	7.2	9.3	9.3	13.6	9.3	9.3	16.7	11.9	11.9	8.1	5.7	5.7
Comerica Incorporated	10.7	8.6	8.6	8.4	8.4	10.7	8.4	8.4	13.4	10.2	10.2	10.9	8.6	8.6
Discover Financial Services	14.7	13.7	13.2	13.1	12.5	15.6	13.9	13.3	17.9	15.7	15.2	13.7	12.1	11.9
Fifth Third Bancorp	9.9	8.4	8.4	7.9	7.9	11.1	8.7	8.7	14.3	11.8	11.8	10.6	8.5	8.5
The Goldman Sachs Group, Inc.	14.2	9.2	6.9	7.5	6.6	16.3	8.4	7.3	19.4	10.8	9.5	7.9	5.3	4.9
HSBC North America Holdings Inc.	14.7	6.6	6.6	9.4	9.4	17.1	9.4	9.4	26.5	18.2	18.2	7.8	4.4	4.4
Huntington Bancshares Incorporated	10.9	7.4	7.4	7.9	7.9	12.4	8.5	8.5	14.7	10.8	10.8	10.9	7.5	7.5
JPMorgan Chase & Co.	10.5	6.7	6.3	6.5	6.5	11.7	7.1	7.1	14.3	9.3	9.3	6.9	4.6	4.6
KeyCorp	11.2	9.3	9.2	9.3	9.3	11.9	9.6	9.6	14.4	11.9	11.9	11.3	9.2	9.2
M&T Bank Corporation	9.1	6.2	6.2	6.7	6.7	11.9	7.9	7.9	15.1	11.0	11.0	10.7	7.0	7.0
Morgan Stanley	12.6	7.6	6.1	7.8	7.1	15.3	7.9	7.1	16.1	9.9	8.9	7.3	4.6	4.5
Northern Trust Corporation	13.1	11.7	11.7	10.6	10.6	13.6	10.7	10.7	14.9	13.7	13.7	8.3	7.1	7.1
The PNC Financial Services Group, Inc.	10.3	9.0	9.0	7.5	7.5	12.2	9.1	9.1	15.6	11.8	11.8	11.1	8.8	8.8
RBS Citizens Financial Group, Inc.	13.9	10.7	10.7	10.7	10.7	14.0	10.9	10.9	16.3	13.5	13.5	12.1	9.5	9.5
Regions Financial Corporation	11.0	9.0	8.9	9.3	9.3	11.5	9.5	9.5	14.5	12.0	12.0	9.9	8.2	8.1
Santander Holdings USA, Inc.	13.7	7.3	7.3	6.7	6.7	14.4	10.0	8.9	16.5	12.8	11.2	12.4	8.9	7.8
State Street Corporation	15.5	14.7	13.3	11.9	11.4	17.3	12.8	12.2	19.8	14.8	14.3	7.2	7.0	6.3
SunTrust Banks, Inc.	9.9	9.0	8.8	8.5	8.4	11.0	9.0	8.9	13.0	10.9	10.9	9.5	7.8	7.8
U.S. Bancorp	9.3	8.3	8.2	7.6	7.5	11.2	9.2	9.1	13.3	11.1	11.0	9.6	8.1	8.1
UnionBanCal Corporation	11.1	8.1	8.1	8.2	8.2	11.2	8.2	8.2	13.1	10.4	10.4	10.2	7.6	7.6
Wells Fargo & Company	10.6	8.2	8.2	7.4	7.4	12.1	8.5	8.5	15.1	12.0	12.0	9.8	7.0	7.0
Zions Bancorporation	10.5	3.6	3.6	4.6	4.6	13.1	5.4	5.4	14.8	7.2	7.2	10.6	4.5	4.5
30 participating bank holding companies	11.5	7.8	7.6	7.9	7.9	12.9	8.5	8.5	15.6	11.0	11.0	8.4	5.9	5.9

Note: The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

¹ Advanced approaches bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

Table 4. Projected minimum tier 1 common ratio, Q4 2013 to Q4 2015: All bank holding companies

Federal Reserve estimates in the severely adverse scenario

Bank holding company	Stressed ratios with DFA stress testing capital action assumptions
Ally Financial Inc.	6.3
American Express Company	12.1
Bank of America Corporation	5.9
The Bank of New York Mellon Corporation	13.1
BB&T Corporation	8.4
BBVA Compass Bancshares, Inc.	8.5
BMO Financial Corp.	7.6
Capital One Financial Corporation	7.8
Citigroup Inc.	7.2
Comerica Incorporated	8.6
Discover Financial Services	13.2
Fifth Third Bancorp	8.4
The Goldman Sachs Group, Inc.	6.9
HSBC North America Holdings Inc.	6.6
Huntington Bancshares Incorporated	7.4
JPMorgan Chase & Co.	6.3
KeyCorp	9.2
M&T Bank Corporation	6.2
Morgan Stanley	6.1
Northern Trust Corporation	11.7
The PNC Financial Services Group, Inc.	9.0
RBS Citizens Financial Group, Inc.	10.7
Regions Financial Corporation	8.9
Santander Holdings USA, Inc.	7.3
State Street Corporation	13.3
SunTrust Banks, Inc.	8.8
U.S. Bancorp	8.2
UnionBanCal Corporation	8.1
Wells Fargo & Company	8.2
Zions Bancorporation	3.6

Note: The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of capital ratios. The minimum stressed ratios (%) are the lowest quarterly ratios from Q4 2013 to Q4 2015 in the severely adverse scenario.

Source: Stressed ratios with Dodd-Frank Act capital action assumptions through Q4 2015.

Figure 9. Minimum tier 1 common ratio in the severely adverse scenario

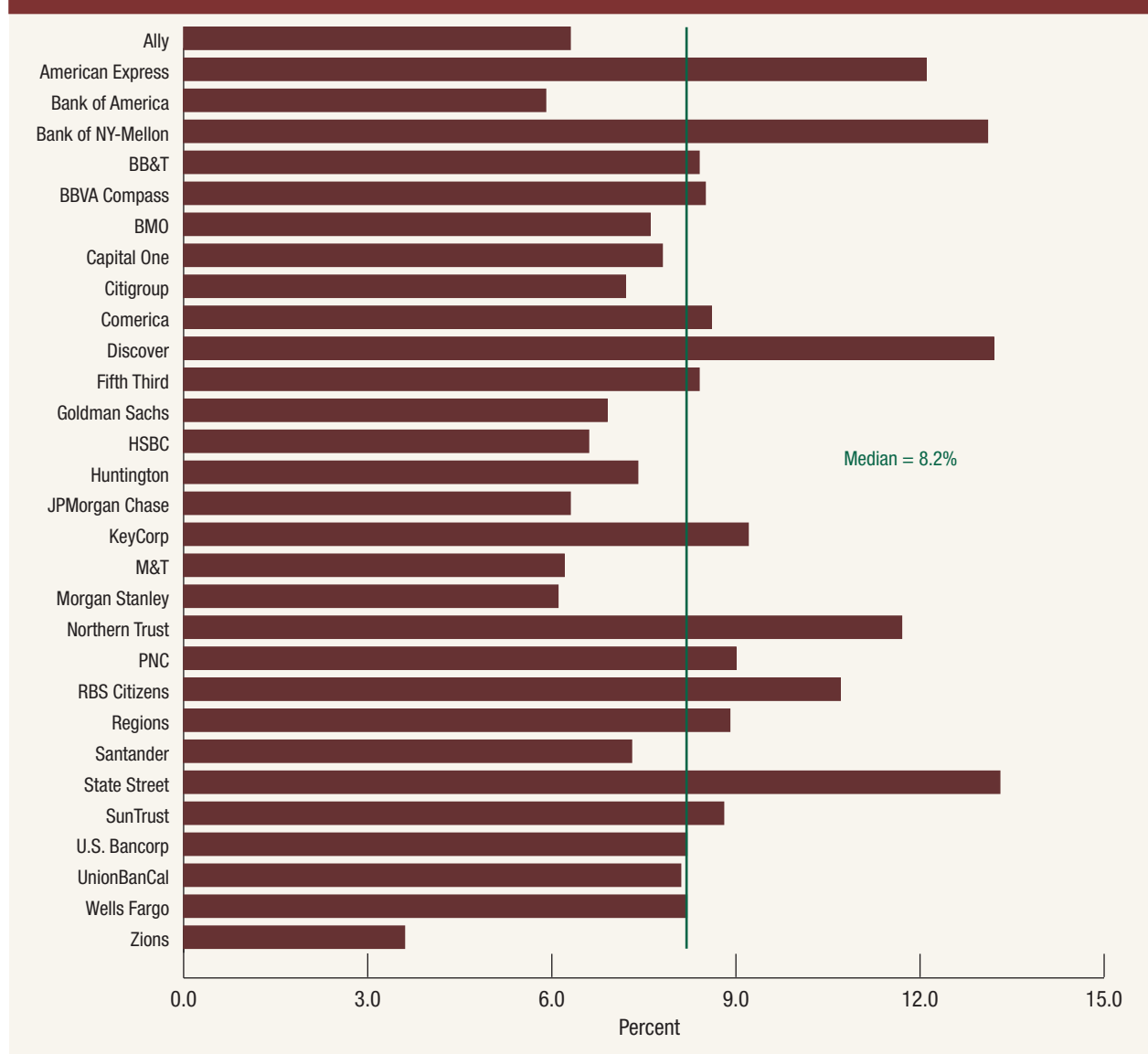


Figure 10. Change from Q3 2013 to minimum tier 1 common ratio in the severely adverse scenario

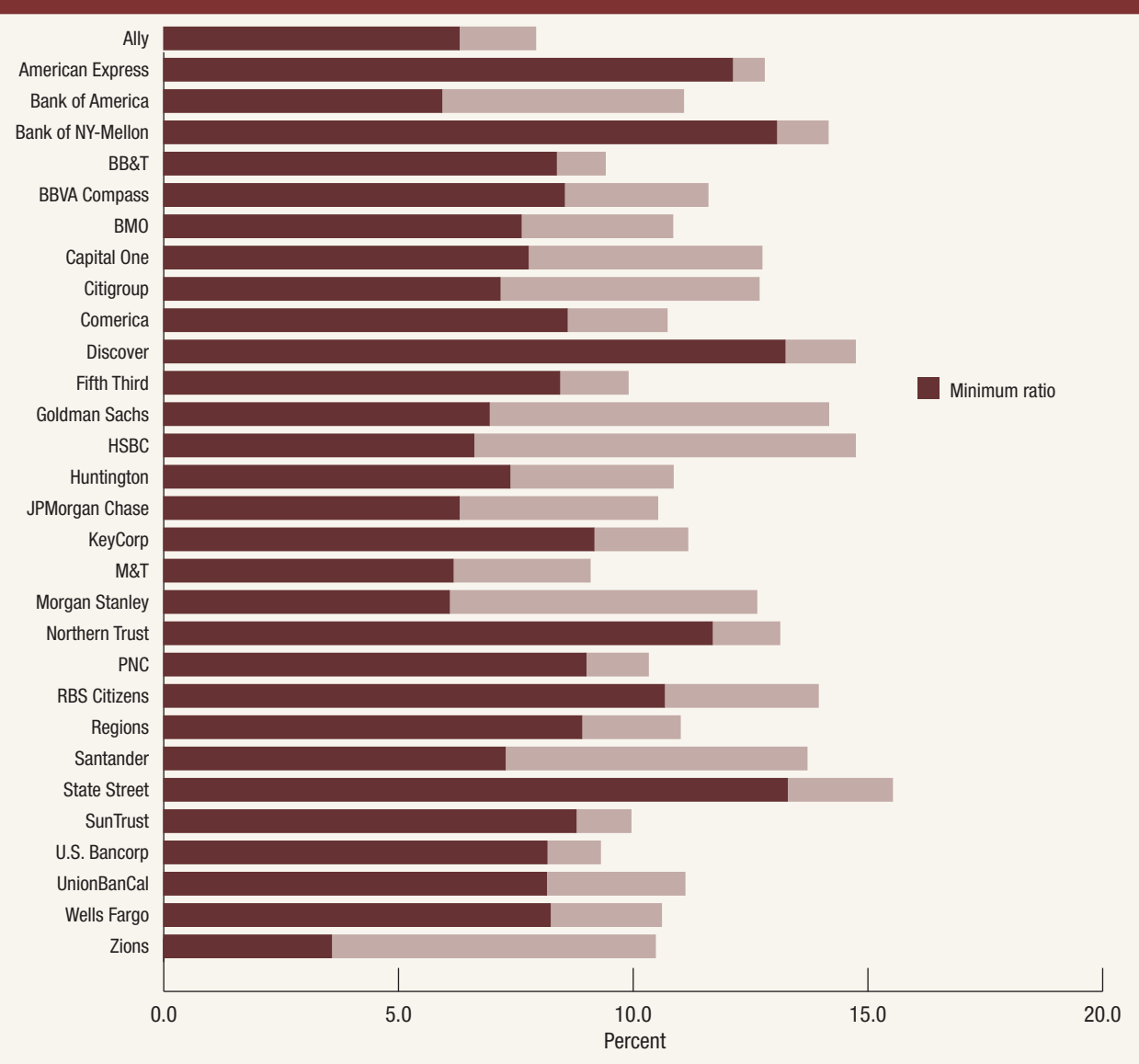


Table 5. Projected losses, revenues, and net income before taxes through Q4 2015: All bank holding companies

Federal Reserve estimates in the severely adverse scenario

Billions of dollars

Bank holding company	Sum of revenues		Minus sum of provisions and losses				Equals	Memo items	Other effects on capital
	Pre-provision net revenue ¹	Other revenue ²	Provisions	Realized losses/gains on securities (AFS/HTM)	Trading and counterparty losses ³	Other losses/gains ⁴	Net income before taxes	Other comprehensive income ⁵	AOCI included in capital ⁶ (Q4 2015)
Ally Financial Inc.	3.6	0.0	5.7	0.6	0.0	0.0	-2.7	0.0	0.0
American Express Company	20.9	0.0	14.9	0.0	0.0	0.0	6.0	-0.4	-0.7
Bank of America Corporation	31.4	0.0	57.0	0.5	15.8	7.1	-49.1	-1.8	-3.5
The Bank of New York Mellon Corporation	8.3	0.0	0.8	0.2	1.3	0.1	6.0	-0.1	-0.6
BB&T Corporation	7.0	0.0	5.5	0.0	0.0	0.1	1.4	0.0	0.0
BBVA Compass Bancshares, Inc.	1.2	0.0	2.8	0.0	0.0	0.1	-1.8	0.0	0.0
BMO Financial Corp.	1.5	0.0	3.5	0.0	0.0	0.2	-2.1	0.0	0.0
Capital One Financial Corporation	21.2	0.0	26.9	0.1	0.0	0.2	-6.0	-0.6	-0.6
Citigroup Inc.	32.5	0.0	55.7	1.3	16.1	5.2	-45.7	-0.6	-7.7
Comerica Incorporated	1.1	0.0	2.3	0.0	0.0	0.0	-1.2	0.0	0.0
Discover Financial Services	12.0	0.0	11.4	0.0	0.0	0.0	0.6	0.0	0.0
Fifth Third Bancorp	4.7	0.0	4.5	0.1	0.0	0.0	0.1	0.0	0.0
The Goldman Sachs Group, Inc.	4.9	0.0	2.1	0.0	19.8	6.0	-23.0	0.0	-0.2
HSBC North America Holdings Inc.	-1.1	0.0	8.5	0.1	0.0	1.1	-10.7	0.9	0.1
Huntington Bancshares Incorporated	1.5	0.0	2.3	0.0	0.0	0.2	-1.0	0.0	0.0
JPMorgan Chase & Co.	48.8	0.0	59.1	1.3	24.2	1.8	-37.6	-6.6	-2.5
KeyCorp	2.5	0.0	3.1	0.0	0.0	0.4	-1.0	0.0	0.0
M&T Bank Corporation	3.9	0.0	4.8	0.0	0.0	0.1	-0.9	0.0	0.0
Morgan Stanley	0.4	0.0	2.2	0.0	13.3	2.1	-17.3	-0.2	-0.5
Northern Trust Corporation	2.7	0.0	3.0	0.0	0.0	0.0	-0.4	0.3	-0.0
The PNC Financial Services Group, Inc.	10.8	0.0	11.3	0.3	0.0	0.4	-1.1	-1.5	-0.6
RBS Citizens Financial Group, Inc.	3.2	0.0	5.7	0.1	0.0	0.2	-2.6	0.0	0.0
Regions Financial Corporation	4.3	0.0	5.6	0.0	0.0	0.1	-1.4	0.0	0.0
Santander Holdings USA, Inc.	5.6	0.0	8.0	0.0	0.0	0.0	-2.4	0.0	0.0
State Street Corporation	4.8	0.0	0.6	0.4	1.7	0.0	2.1	-2.0	-0.8
SunTrust Banks, Inc.	5.8	0.0	6.1	0.0	0.0	0.9	-1.2	0.0	0.0
U.S. Bancorp	20.6	0.0	17.1	0.0	0.0	0.4	3.1	-0.7	-0.8
UnionBanCal Corporation	0.8	0.0	4.1	0.4	0.0	0.0	-3.7	0.0	0.0
Wells Fargo & Company	50.7	0.0	61.6	1.2	5.9	2.5	-20.5	-10.6	-3.3
Zions Bancorporation	0.2	0.0	2.8	0.3	0.0	0.0	-2.9	0.0	0.0
30 participating bank holding companies	315.9	0.0	398.6	7.0	98.1	29.3	-217.1	-23.8	-21.8

Note: These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, or net income before taxes. Estimates may not sum precisely due to rounding.

¹ Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

² Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

³ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁴ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁵ Other comprehensive income is only calculated for advanced approaches BHCs as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁶ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt out of including AOCI in their capital calculations.

Figure 11. Projected losses in the severely adverse scenario

Billions of dollars

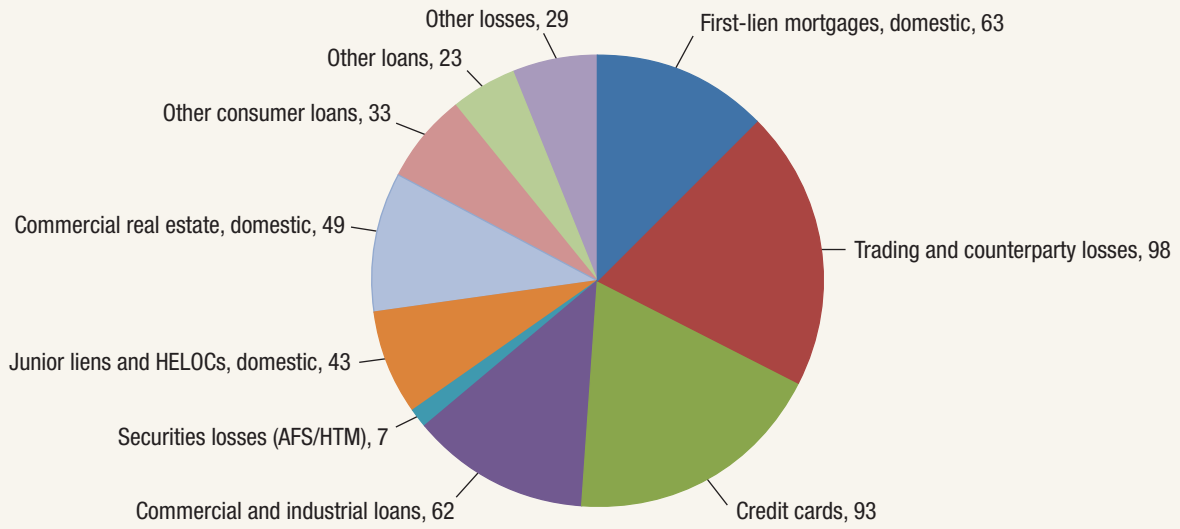
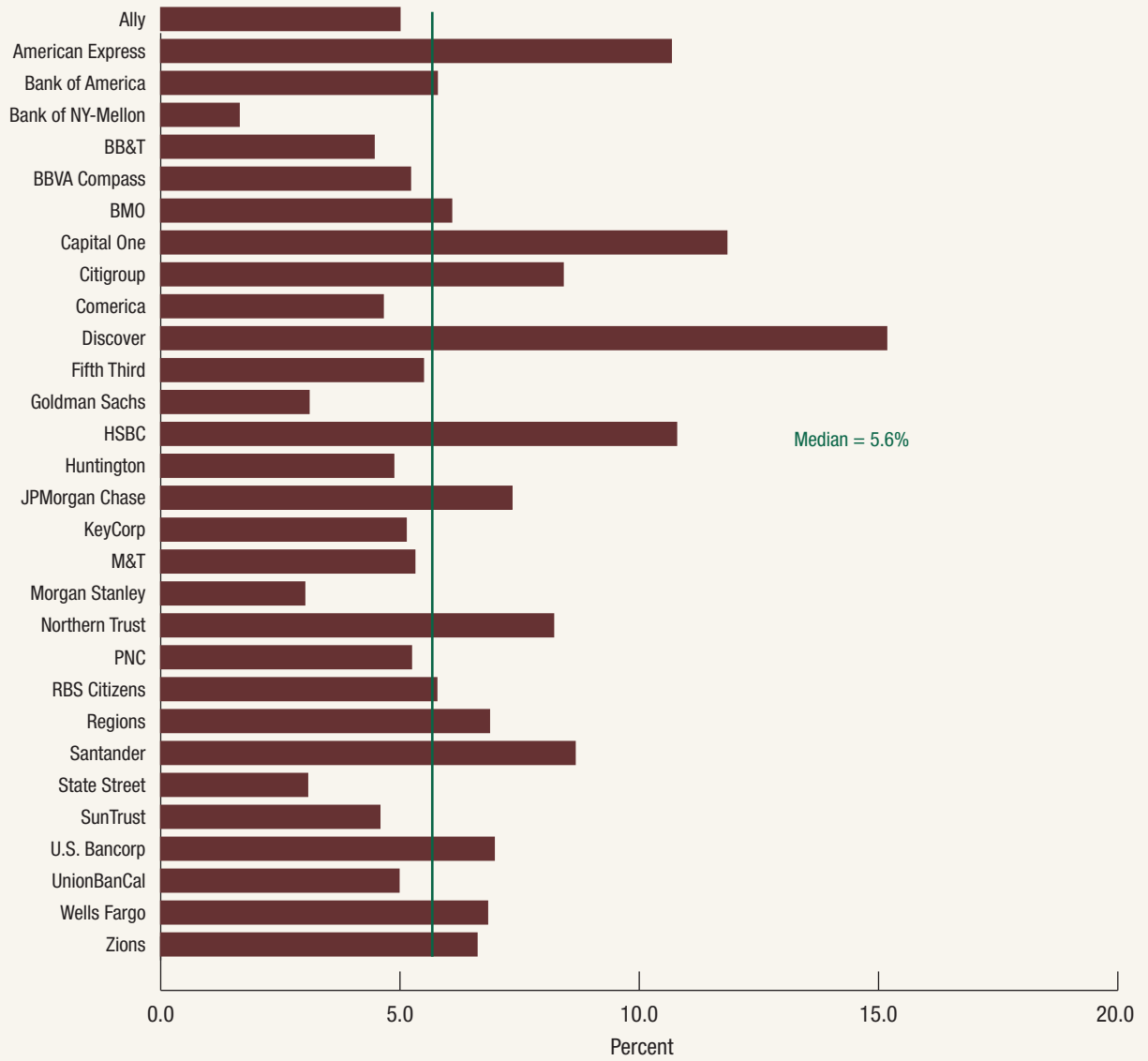


Figure 12. Total loan loss rates in the severely adverse scenario



Estimates are for nine quarter period from Q4 2013 to Q4 2015 as a percent of average balances.

Table 6. Projected loan losses by type of loan for Q4 2013 through Q4 2015: All bank holding companies

Federal Reserve estimates in the severely adverse scenario

Billions of dollars

Bank holding company	Loan losses	First lien mortgages, domestic	Junior liens and HELOCs, domestic	Commercial and industrial	Commercial real estate, domestic ¹	Credit cards	Other consumer ²	Other loans ³
Ally Financial Inc.	5.0	0.4	0.2	1.4	0.1	0.0	2.9	0.0
American Express Company	11.4	0.0	0.0	3.7	0.0	7.7	0.0	0.1
Bank of America Corporation	54.9	12.7	9.9	8.2	5.6	13.7	2.7	2.1
The Bank of New York Mellon Corporation	0.8	0.1	0.0	0.1	0.1	0.0	0.0	0.4
BB&T Corporation	5.2	0.8	0.3	0.7	1.9	0.3	0.9	0.2
BBVA Compass Bancshares, Inc.	2.6	0.3	0.2	0.6	1.1	0.1	0.1	0.1
BMO Financial Corp.	3.3	0.6	0.4	0.8	0.8	0.1	0.2	0.5
Capital One Financial Corporation	22.8	1.4	0.2	1.4	1.3	15.0	3.1	0.4
Citigroup Inc.	55.5	6.8	4.6	7.5	1.1	24.8	6.1	4.7
Comerica Incorporated	2.1	0.1	0.1	0.8	0.8	0.0	0.0	0.3
Discover Financial Services	9.5	0.0	0.0	0.0	0.0	8.3	1.2	0.0
Fifth Third Bancorp	4.8	0.7	0.7	1.6	0.9	0.4	0.3	0.3
The Goldman Sachs Group, Inc.	1.6	0.0	0.0	0.5	0.3	0.0	0.0	0.8
HSBC North America Holdings Inc.	10.0	6.8	1.0	0.7	1.1	0.1	0.1	0.3
Huntington Bancshares Incorporated	2.1	0.3	0.4	0.6	0.6	0.0	0.2	0.0
JPMorgan Chase & Co.	54.2	8.9	8.9	8.8	5.0	14.4	2.4	5.8
KeyCorp	2.9	0.2	0.4	0.7	0.7	0.1	0.4	0.2
M&T Bank Corporation	4.0	0.8	0.4	0.6	1.8	0.1	0.2	0.1
Morgan Stanley	1.7	0.1	0.0	0.8	0.2	0.0	0.1	0.5
Northern Trust Corporation	2.4	0.4	0.4	0.5	0.4	0.0	0.0	0.7
The PNC Financial Services Group, Inc.	10.1	0.6	1.3	3.4	3.1	0.5	0.8	0.4
RBS Citizens Financial Group, Inc.	4.9	0.4	2.0	0.9	0.9	0.2	0.4	0.1
Regions Financial Corporation	5.2	0.9	0.8	1.0	1.9	0.2	0.2	0.3
Santander Holdings USA, Inc.	6.4	0.4	0.3	0.5	1.7	0.0	3.4	0.1
State Street Corporation	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.4
SunTrust Banks, Inc.	5.7	1.3	1.2	1.6	0.8	0.1	0.5	0.2
U.S. Bancorp	15.6	1.3	1.0	4.2	4.3	2.8	1.1	0.9
UnionBanCal Corporation	3.4	0.8	0.1	0.7	1.5	0.0	0.0	0.3
Wells Fargo & Company	55.1	15.7	8.5	9.4	9.4	4.2	5.0	2.9
Zions Bancorporation	2.5	0.0	0.1	0.7	1.5	0.0	0.0	0.1
30 participating bank holding companies	366.1	62.8	43.5	62.3	48.9	93.0	32.5	23.2

Note: These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected loan losses.

¹ Commercial and industrial loans include small and medium enterprise loans and corporate cards.

² Other consumer loans include student loans and automobile loans.

³ Other loans include international real estate loans.

Table 7. Projected loan losses by type of loan for Q4 2013 through Q4 2015: All bank holding companies

Federal Reserve estimates in the severely adverse scenario

Percent of average balances¹

Bank holding company	Loan losses	First lien mortgages, domestic	Junior liens and HELOCs, domestic	Commercial and industrial	Commercial real estate, domestic ²	Credit cards	Other consumer ³	Other loans ⁴
Ally Financial Inc.	5.0	6.0	9.9	4.1	4.8	0.0	5.2	3.9
American Express Company	10.7	0.0	0.0	11.4	0.0	10.6	0.0	4.5
Bank of America Corporation	5.8	4.9	10.3	3.8	8.9	13.4	3.5	1.6
The Bank of New York Mellon Corporation	1.6	2.3	11.7	5.1	8.6	0.0	0.5	1.0
BB&T Corporation	4.5	2.4	4.8	4.4	6.2	15.2	6.3	2.0
BBVA Compass Bancshares, Inc.	5.2	2.2	9.1	4.2	10.3	18.9	4.9	2.1
BMO Financial Corp.	6.1	6.7	7.2	5.1	9.7	15.2	2.7	5.1
Capital One Financial Corporation	11.8	3.9	10.0	7.6	6.4	20.5	9.7	3.5
Citigroup Inc.	8.4	7.2	13.5	4.9	10.5	17.0	14.0	2.6
Comerica Incorporated	4.7	4.3	5.8	3.0	7.5	0.0	8.4	7.1
Discover Financial Services	15.2	0.0	14.9	13.2	35.4	16.4	10.2	4.5
Fifth Third Bancorp	5.5	5.2	7.4	4.9	9.4	18.9	2.6	3.1
The Goldman Sachs Group, Inc.	3.1	7.5	10.9	9.5	10.0	0.0	3.3	1.8
HSBC North America Holdings Inc.	10.8	16.7	18.3	2.8	12.6	16.4	10.8	2.2
Huntington Bancshares Incorporated	4.9	4.0	6.0	4.8	6.9	8.1	3.3	2.4
JPMorgan Chase & Co.	7.3	6.6	11.7	7.0	6.7	12.7	4.4	3.6
KeyCorp	5.1	4.1	5.2	3.8	8.8	16.8	8.8	2.2
M&T Bank Corporation	5.3	3.9	7.1	4.0	6.9	16.5	6.2	2.4
Morgan Stanley	3.0	1.0	11.1	8.9	9.4	0.0	0.6	2.0
Northern Trust Corporation	8.2	4.7	17.5	8.1	11.3	0.0	17.9	7.8
The PNC Financial Services Group, Inc.	5.2	2.3	4.9	5.7	10.1	14.3	3.6	1.7
RBS Citizens Financial Group, Inc.	5.8	3.3	9.9	3.9	8.4	16.0	3.1	2.4
Regions Financial Corporation	6.9	6.4	8.0	4.9	11.2	16.9	6.2	2.6
Santander Holdings USA, Inc.	8.7	4.3	4.8	3.9	9.5	16.4	13.3	4.3
State Street Corporation	3.1	0.0	0.0	6.9	26.2	0.0	0.0	2.7
SunTrust Banks, Inc.	4.6	4.8	7.7	4.7	5.6	13.6	2.7	1.5
U.S. Bancorp	7.0	2.5	6.3	8.2	11.2	16.2	4.2	4.3
UnionBanCal Corporation	5.0	3.2	3.2	3.9	10.1	0.0	13.2	3.9
Wells Fargo & Company	6.8	6.7	9.8	6.0	7.9	16.4	5.7	2.9
Zions Bancorporation	6.6	0.8	5.0	6.7	8.3	16.2	10.7	4.8
30 participating bank holding companies	6.9	5.7	9.6	5.4	8.4	15.2	6.0	2.7

Note: These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected loan losses.

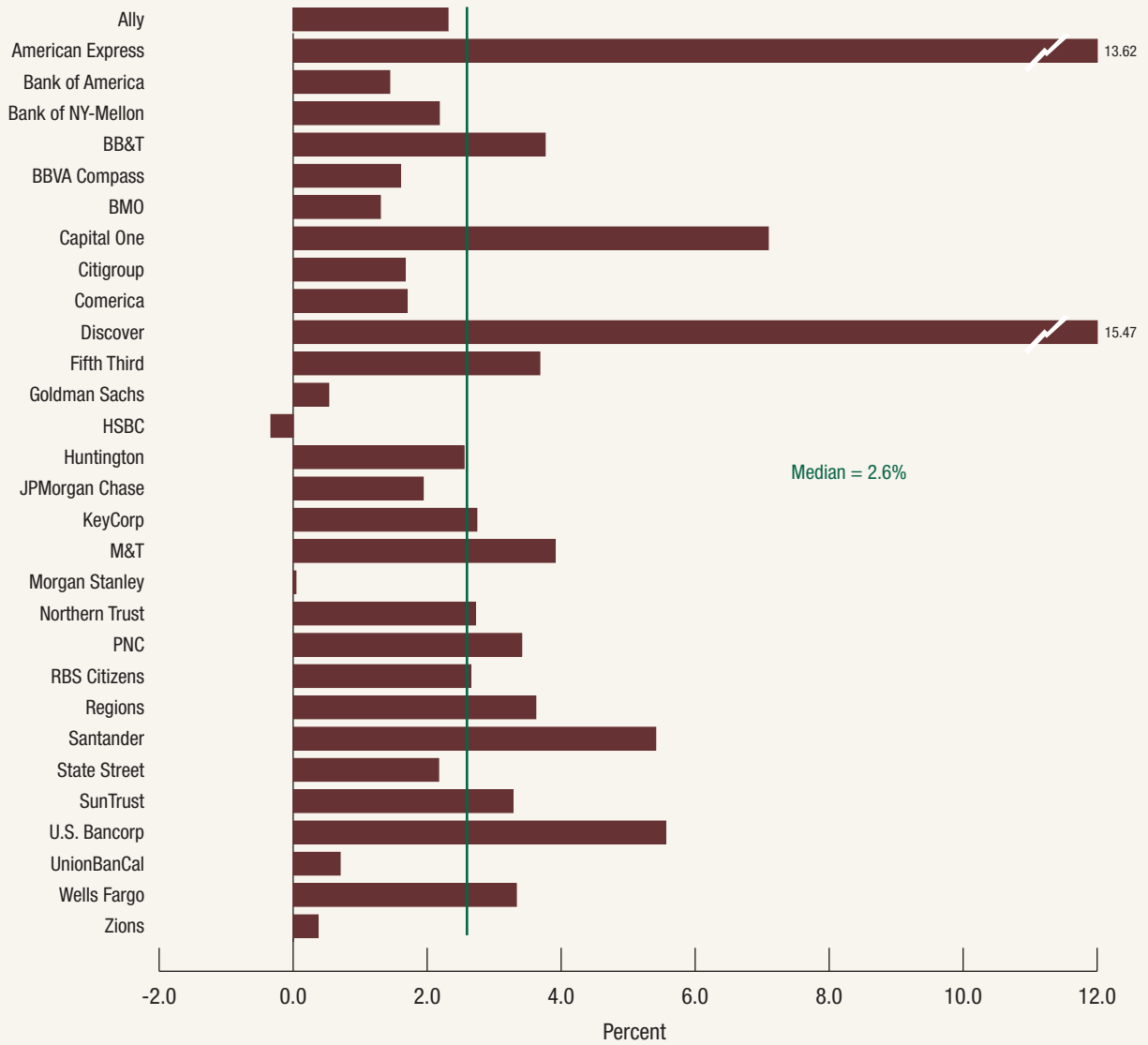
¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small and medium enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

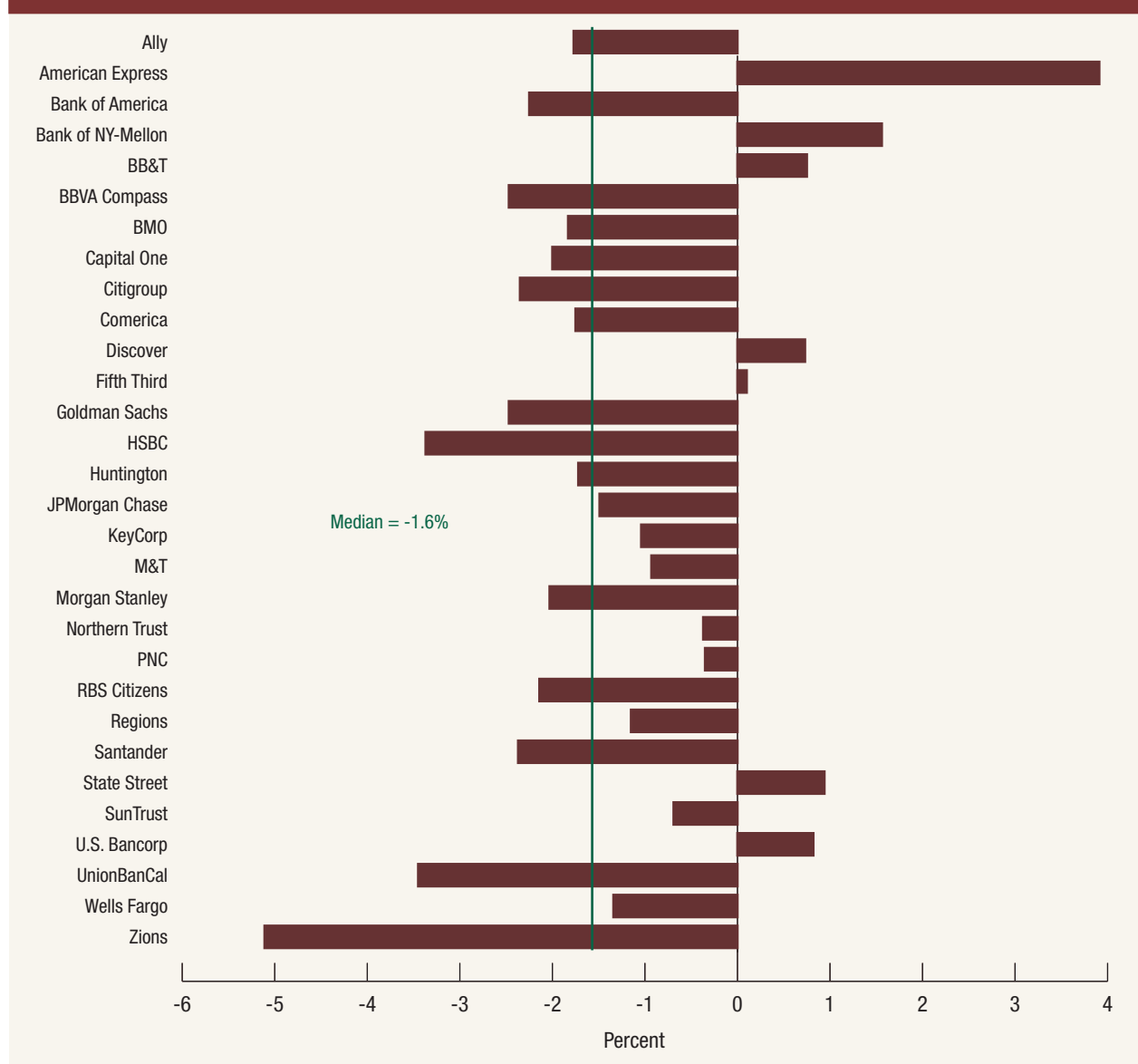
⁴ Other loans include international real estate loans.

Figure 13. PPNR rates in the severely adverse scenario



Note: Estimates are for the nine-quarter period from Q4 2013 to Q4 2015 as a percent of average assets.

Figure 14. Pre-tax net income rates in the severely adverse scenario



Adverse Scenario

Stressed Regulatory Capital Ratios and Risk-Weighted Assets

The adverse scenario projections suggest moderate declines in aggregate regulatory capital ratios for the 30 BHCs. Overall, the total amount of tier 1 common capital held by the 30 BHCs is estimated to increase by \$5.9 billion, or about 1 percent, from the third quarter of 2013 to the end of 2015 under the adverse scenario. As shown in [table 8](#), the average tier 1 common ratio is projected to fall 1.8 percentage points to its minimum over the planning horizon and to be 0.7 percentage point lower at the end of the planning horizon. In addition, at the end of the planning horizon, the tier 1 risk-based capital ratio and the total risk-based capital ratio are 2.2 and 2.5 percentage points lower than at the start of the planning horizon, respectively. The tier 1 leverage ratio is projected to decline 1.1 percentage point over the planning horizon. Finally, the common equity tier 1 capital ratio reaches a minimum of 9.3 percent, before increasing to 10.0 percent at the end of the planning horizon.

The projected decreases in post-stress regulatory capital ratios are smaller than those under the severely adverse scenario, reflecting the less severe macroeconomic conditions assumed in the adverse scenario and the steepening yield curve that benefits most BHCs' PPNR by generating increased net interest income. As compared to the severely adverse scenario, the adverse scenario projections imply higher aggregate net income driven by higher PPNR and lower losses, offset to some extent by significantly higher projected unrealized losses on securities, which negatively affect advanced approaches BHCs. Offsetting somewhat the effect of higher aggregate net income on capital, the adverse scenario also features more robust projected balance sheet and risk-weighted asset growth than the severely adverse scenario, which on net tends to reduce post-stress capital ratios.

Projected Losses

The Federal Reserve's projections suggest that the 30 BHCs as a group would face elevated losses under the adverse scenario, though not as large as the losses under the severely adverse scenario. In this scenario, total losses are projected to equal \$355 billion for the 30 BHCs over the nine-quarter planning horizon. These losses include \$267 billion in accrual loan

losses, \$7 billion in OTTI and other realized securities losses, \$57 billion in losses from the global market shock and the largest counterparty default components, and \$25 billion in additional losses from items such as loans booked under the fair value option. [Table 8](#) presents these results in the aggregate, while [table 11](#) presents them individually for each of the 30 BHCs. All of these aggregate loss amounts are lower than those projected under the severely adverse scenario, once again reflecting the relatively less stressful macroeconomic and financial market conditions assumed in the adverse scenario.

Loan Losses

As in the severely adverse scenario, the accrual loan portfolio is the largest source of losses in the adverse scenario, accounting for \$267 billion of the \$355 billion in total projected losses for the 30 BHCs under the adverse scenario. The lower peak unemployment rate and more moderate residential and commercial real estate price declines in the adverse scenario result in lower projected accrual loan losses on consumer and real estate-related loans. The nine-quarter loan loss rate of 5.0 percent is below the peak industry-level rate reached during the recent financial crisis but still higher than the rate during any other time period since the Great Depression of the 1930s. As in the severely adverse scenario results, there is considerable diversity across firms in projected loan loss rates, both in the aggregate and by loan type (see [figures 18 and D.8 to D.14](#)).

Losses on Trading, Private Equity, and Derivatives Positions

Projected losses resulting from the impact of the global market shock and the largest counterparty default on trading, private equity, and counterparty exposures for the eight BHCs with large trading or custodial operations equal \$57 billion under the adverse scenario. These losses are slightly more than half those projected under the severely adverse scenario, reflecting the less severe market shocks assumed in the global market shock component of the adverse scenario.

Projected Pre-provision Net Revenue and Net Income

As shown in [table 8](#), aggregate PPNR is projected to equal \$444 billion for the 30 BHCs under the adverse scenario, equal to 3.2 percent of average projected assets for these firms. Under the adverse scenario, projected PPNR is bolstered by high projected net

interest income, driven largely by the increasing long-term interest rates and yield curve steepening assumed in the scenario as well as by moderate loan portfolio growth over the planning horizon. As compared to the severely adverse scenario, PPNR is also strengthened by lower projected operational risk and mortgage repurchase losses, with the latter being consistent with the adverse scenario's more moderate housing price decline. As in the severely adverse scenario, projected ratios of PPNR to assets vary significantly across the 30 BHCs, reflecting differences in business focus as well as differences in sensitivities to the conditions assumed in the Federal Reserve's adverse scenario (see [figure 19](#)).

In the aggregate, the 30 BHCs are projected to have cumulative pre-tax net income of \$92 billion over the nine-quarter planning horizon under the adverse scenario. About three-quarters of the individual BHCs are also projected to have positive cumulative pre-tax net income, though most experience at least two quarters of negative net income during the planning horizon (see [table 11](#) and [figure 20](#)). The higher net income as compared to the severely adverse scenario projections reflects the combination of higher projected PPNR and lower projected losses, especially on trading, private equity, and counterparty positions, and on the accrual loan portfolio. The \$263 billion in

total provisions reported in [table 2](#) is the result of more than \$266 billion in net charge-offs and a small reserve release of \$3 billion.

While aggregate pre-tax net income under the adverse scenario is positive, it is low relative to historical standards, with an implied nine-quarter return on assets (ROA) of 0.7 percent, as compared to approximately 2 percent for these BHCs on a nine-quarter basis since 2010. As shown in [figure 20](#), projected nine-quarter ROA under the adverse scenario ranges between -1.9 and 7.1 percent for the 30 BHCs.

As described in [box 1](#), unrealized gains and losses on securities held in the AFS portfolio affect regulatory capital through AOCI. Under the revised capital framework being phased in during 2014 and 2015, a portion of AOCI is included in regulatory capital for advanced approaches BHCs. Higher long-term interest rates and wider credit spreads assumed in the scenario result in -\$103 billion of OCI over the nine quarters of the planning horizon for the advanced approaches BHCs. Reflecting the gradual phasing-in of AOCI in the revised capital framework for advanced approaches BHCs, -\$32 billion (20 percent of total) and -\$54 billion (40 percent of total) in AOCI are included in post-stress regulatory capital as of Q4 2014 and Q4 2015, respectively.

Table 8. 30 participating bank holding companies

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses

Federal Reserve estimates in the adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	11.5	10.8	9.7
Common equity tier 1 capital ratio (%) ²	n/a	10.0	9.3
Tier 1 risk-based capital ratio (%)	12.9	10.7	10.0
Total risk-based capital ratio (%)	15.6	13.1	12.6
Tier 1 leverage ratio (%)	8.4	7.3	6.9

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	266.5	5.0
First-lien mortgages, domestic	39.0	3.5
Junior liens and HELOCs, domestic	32.2	7.1
Commercial and industrial ²	43.3	3.7
Commercial real estate, domestic	32.0	5.5
Credit cards	77.0	12.4
Other consumer ³	27.4	5.0
Other loans ⁴	15.6	1.8

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small and medium enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	8,374.5	8,917.6	9,638.8

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	444.3	3.2
Other revenue ³	0.0	
<i>less</i>		
Provisions	263.4	
Realized losses/gains on securities (AFS/HTM)	6.6	
Trading and counterparty losses ⁴	57.4	
Other losses/gains ⁵	24.5	
<i>equals</i>		
Net income before taxes	92.4	0.7
Memo items		
Other comprehensive income ⁶	-103.1	
<i>Other effects on capital</i>	<i>Q4 2014</i>	<i>Q4 2015</i>
AOCI included in capital (billions of dollars) ⁷	-32.3	-53.5

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs as only those BHCs include AOCI in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt out of including AOCI in their capital calculations.

**Table 9. Projected stressed capital ratios in the adverse scenario, Q4 2013 to Q4 2015:
All bank holding companies**

Federal Reserve estimates in the adverse scenario

Bank holding company	Tier 1 common ratio (%)			Common equity tier 1 ratio (%) ¹		Tier 1 risk-based capital ratio (%)			Total-risk based capital ratio (%)			Tier 1 leverage ratio (%)		
	Actual Q3 2013	Ending	Minimum	Ending	Minimum	Actual Q3 2013	Ending	Minimum	Actual Q3 2013	Ending	Minimum	Actual Q3 2013	Ending	Minimum
Ally Financial Inc.	7.9	10.0	7.6	9.4	8.8	15.4	11.9	10.6	16.4	13.3	11.8	13.2	10.2	8.9
American Express Company	12.8	16.3	12.5	16.2	13.9	12.8	16.2	12.5	14.7	17.6	14.4	10.7	13.2	10.4
Bank of America Corporation	11.1	11.1	8.7	9.6	8.5	12.3	10.3	8.8	15.4	12.5	11.4	7.8	6.6	5.7
The Bank of New York Mellon Corporation	14.1	17.6	13.6	15.1	13.3	15.8	16.1	14.3	16.8	16.3	14.7	5.6	6.6	5.4
BB&T Corporation	9.4	10.2	9.1	9.9	9.3	11.3	11.6	11.0	13.9	13.2	13.0	9.0	9.3	8.7
BBVA Compass Bancshares, Inc.	11.6	11.4	11.1	11.1	10.8	11.8	11.1	10.9	14.1	12.8	12.8	10.2	9.5	9.5
BMO Financial Corp.	10.8	10.4	9.9	11.3	11.1	10.8	11.3	9.9	15.2	14.4	13.8	7.9	8.2	6.9
Capital One Financial Corporation	12.7	12.2	11.7	10.7	10.0	13.1	11.0	10.3	15.3	12.8	12.2	10.1	8.7	8.4
Citigroup Inc.	12.7	10.6	9.7	11.7	11.1	13.6	11.7	11.1	16.7	14.2	13.7	8.1	7.0	6.6
Comerica Incorporated	10.7	10.5	10.3	10.2	10.0	10.7	10.2	10.0	13.4	11.5	11.5	10.9	10.2	10.2
Discover Financial Services	14.7	16.0	13.9	15.4	14.2	15.6	16.2	14.7	17.9	17.9	16.9	13.7	13.8	12.8
Fifth Third Bancorp	9.9	10.1	9.2	9.6	9.1	11.1	10.5	10.0	14.3	12.9	12.7	10.6	10.0	9.6
The Goldman Sachs Group, Inc.	14.2	10.4	9.6	8.3	8.2	16.3	9.4	9.1	19.4	11.7	11.5	7.9	5.7	5.6
HSBC North America Holdings Inc.	14.7	11.1	11.1	11.7	11.6	17.1	12.2	12.2	26.5	20.7	20.7	7.8	5.6	5.6
Huntington Bancshares Incorporated	10.9	9.9	9.5	9.6	9.4	12.4	10.5	10.3	14.7	12.7	12.7	10.9	9.2	9.2
JPMorgan Chase & Co.	10.5	9.5	8.7	8.4	7.8	11.7	9.2	8.5	14.3	11.1	10.8	6.9	5.8	5.4
KeyCorp	11.2	11.2	10.5	10.9	10.5	11.9	11.4	10.9	14.4	13.3	13.0	11.3	10.7	10.4
M&T Bank Corporation	9.1	10.2	8.7	9.3	9.0	11.9	10.5	10.1	15.1	13.5	13.4	10.7	9.2	9.1
Morgan Stanley	12.6	9.4	8.9	8.6	8.4	15.3	9.0	8.7	16.1	10.9	10.6	7.3	5.0	4.9
Northern Trust Corporation	13.1	13.1	12.6	11.5	11.1	13.6	11.6	11.2	14.9	14.2	14.0	8.3	7.6	7.4
The PNC Financial Services Group, Inc.	10.3	10.9	10.2	9.4	8.7	12.2	10.9	10.2	15.6	13.4	13.1	11.1	10.4	9.9
RBS Citizens Financial Group, Inc.	13.9	13.4	13.0	12.8	12.5	14.0	12.9	12.6	16.3	15.4	15.2	12.1	11.2	11.0
Regions Financial Corporation	11.0	11.7	10.7	11.5	10.8	11.5	11.8	11.2	14.5	14.3	13.8	9.9	10.1	9.5
Santander Holdings USA, Inc.	13.7	9.5	8.5	8.6	8.1	14.4	11.9	9.9	16.5	14.7	11.8	12.4	10.5	8.9
State Street Corporation	15.5	17.1	13.9	12.8	11.2	17.3	13.5	11.8	19.8	15.4	13.7	7.2	7.3	6.5
SunTrust Banks, Inc.	9.9	11.1	9.7	10.7	10.0	11.0	11.4	10.6	13.0	13.2	12.6	9.5	9.8	9.2
U.S. Bancorp	9.3	10.5	9.1	9.6	8.6	11.2	11.2	10.2	13.3	13.0	12.1	9.6	9.7	9.0
UnionBanCal Corporation	11.1	11.6	11.4	11.3	11.1	11.2	11.3	11.1	13.1	13.1	13.0	10.2	10.4	10.3
Wells Fargo & Company	10.6	10.7	10.0	9.4	8.8	12.1	10.6	9.9	15.1	14.3	13.6	9.8	8.6	8.2
Zions Bancorporation	10.5	7.3	7.3	7.5	7.5	13.1	8.9	8.9	14.8	10.7	10.7	10.6	7.2	7.2
30 participating bank holding companies	11.5	10.8	9.7	10.0	9.3	12.9	10.7	10.0	15.6	13.1	12.6	8.4	7.3	6.9

Note: The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

¹ Advanced approaches bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

Table 10. Projected minimum tier 1 common ratio, Q4 2013 to Q4 2015: All bank holding companies
Federal Reserve estimates in the adverse scenario

Bank holding company	Stressed ratios with DFA stress testing capital action assumptions
Ally Financial Inc.	7.6
American Express Company	12.5
Bank of America Corporation	8.7
The Bank of New York Mellon Corporation	13.6
BB&T Corporation	9.1
BBVA Compass Bancshares, Inc.	11.1
BMO Financial Corp.	9.9
Capital One Financial Corporation	11.7
Citigroup Inc.	9.7
Comerica Incorporated	10.3
Discover Financial Services	13.9
Fifth Third Bancorp	9.2
The Goldman Sachs Group, Inc.	9.6
HSBC North America Holdings Inc.	11.1
Huntington Bancshares Incorporated	9.5
JPMorgan Chase & Co.	8.7
KeyCorp	10.5
M&T Bank Corporation	8.7
Morgan Stanley	8.9
Northern Trust Corporation	12.6
The PNC Financial Services Group, Inc.	10.2
RBS Citizens Financial Group, Inc.	13.0
Regions Financial Corporation	10.7
Santander Holdings USA, Inc.	8.5
State Street Corporation	13.9
SunTrust Banks, Inc.	9.7
U.S. Bancorp	9.1
UnionBanCal Corporation	11.4
Wells Fargo & Company	10.0
Zions Bancorporation	7.3

Note: The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of capital ratios. The minimum stressed ratios (%) are the lowest quarterly ratios from Q4 2013 to Q4 2015 in the adverse scenario.

Source: Stressed ratios with Dodd-Frank Act capital action assumptions through Q4 2015.

Table 11. Projected losses, revenues, and net income before taxes through Q4 2015: All bank holding companies

Federal Reserve estimates in the adverse scenario

Billions of dollars

Bank holding company	Sum of revenues		Minus sum of provisions and losses				Equals	Memo items	Other effects on capital
	Pre-provision net revenue ¹	Other revenue ²	Provisions	Realized losses/gains on securities (AFS/HTM)	Trading and counterparty losses ³	Other losses/gains ⁴	Net income before taxes	Other comprehensive income ⁵	AOCI included in capital ⁶ (Q4 2015)
Ally Financial Inc.	5.3	0.0	4.1	0.4	0.0	0.0	0.8	0.0	0.0
American Express Company	22.6	0.0	11.5	0.0	0.0	0.0	11.1	-0.6	-0.8
Bank of America Corporation	56.2	0.0	36.2	0.6	8.0	6.0	5.4	-20.2	-10.8
The Bank of New York Mellon Corporation	11.3	0.0	0.4	0.2	0.6	0.1	10.0	-4.4	-2.3
BB&T Corporation	9.6	0.0	3.4	0.0	0.0	0.2	6.0	0.0	0.0
BBVA Compass Bancshares, Inc.	2.0	0.0	1.7	0.0	0.0	0.1	0.2	0.0	0.0
BMO Financial Corp.	2.4	0.0	2.2	0.0	0.0	0.2	0.0	0.0	0.0
Capital One Financial Corporation	25.3	0.0	20.7	0.0	0.0	0.1	4.5	-2.7	-1.4
Citigroup Inc.	46.0	0.0	39.4	1.5	9.5	5.4	-9.8	-12.9	-12.7
Comerica Incorporated	1.9	0.0	1.2	0.0	0.0	0.0	0.7	0.0	0.0
Discover Financial Services	12.9	0.0	9.7	0.0	0.0	0.0	3.2	0.0	0.0
Fifth Third Bancorp	6.4	0.0	2.8	0.1	0.0	0.0	3.5	0.0	0.0
The Goldman Sachs Group, Inc.	4.7	0.0	1.4	0.0	13.8	4.9	-15.4	0.0	-0.2
HSBC North America Holdings Inc.	3.0	0.0	5.6	0.0	0.0	0.5	-3.2	-3.0	-1.5
Huntington Bancshares Incorporated	2.3	0.0	1.6	0.0	0.0	0.3	0.4	0.0	0.0
JPMorgan Chase & Co.	68.1	0.0	36.5	1.5	12.7	1.9	15.6	-19.9	-7.8
KeyCorp	3.8	0.0	2.1	0.0	0.0	0.3	1.4	0.0	0.0
M&T Bank Corporation	5.3	0.0	3.3	0.0	0.0	0.1	1.9	0.0	0.0
Morgan Stanley	1.5	0.0	1.5	0.0	8.6	2.2	-10.7	-2.0	-1.2
Northern Trust Corporation	3.3	0.0	2.0	0.0	0.0	0.0	1.3	-0.5	-0.3
The PNC Financial Services Group, Inc.	15.3	0.0	6.6	0.2	0.0	0.3	8.2	-3.5	-1.4
RBS Citizens Financial Group, Inc.	5.0	0.0	4.0	0.0	0.0	0.1	0.8	0.0	0.0
Regions Financial Corporation	6.0	0.0	3.6	0.0	0.0	0.1	2.4	0.0	0.0
Santander Holdings USA, Inc.	6.7	0.0	5.9	0.0	0.0	0.0	0.8	0.0	0.0
State Street Corporation	7.5	0.0	0.4	0.3	0.9	0.0	5.9	-4.9	-2.0
SunTrust Banks, Inc.	8.5	0.0	3.8	0.0	0.0	0.5	4.2	0.0	0.0
U.S. Bancorp	26.6	0.0	11.2	0.0	0.0	0.4	15.0	-3.1	-1.8
UnionBanCal Corporation	2.3	0.0	2.2	0.4	0.0	0.0	-0.3	0.0	0.0
Wells Fargo & Company	71.7	0.0	36.9	0.9	3.3	0.9	29.7	-25.5	-9.3
Zions Bancorporation	0.7	0.0	1.6	0.3	0.0	0.0	-1.1	0.0	0.0
30 participating bank holding companies	444.3	0.0	263.4	6.6	57.4	24.5	92.4	-103.1	-53.5

Note: These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, or net income before taxes. Estimates may not sum precisely due to rounding.

¹ Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

² Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

³ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁴ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁵ Other comprehensive income is only calculated for advanced approaches BHCs as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁶ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt out of including AOCI in their capital calculations.

Figure 15. Minimum tier 1 common ratio in the adverse scenario

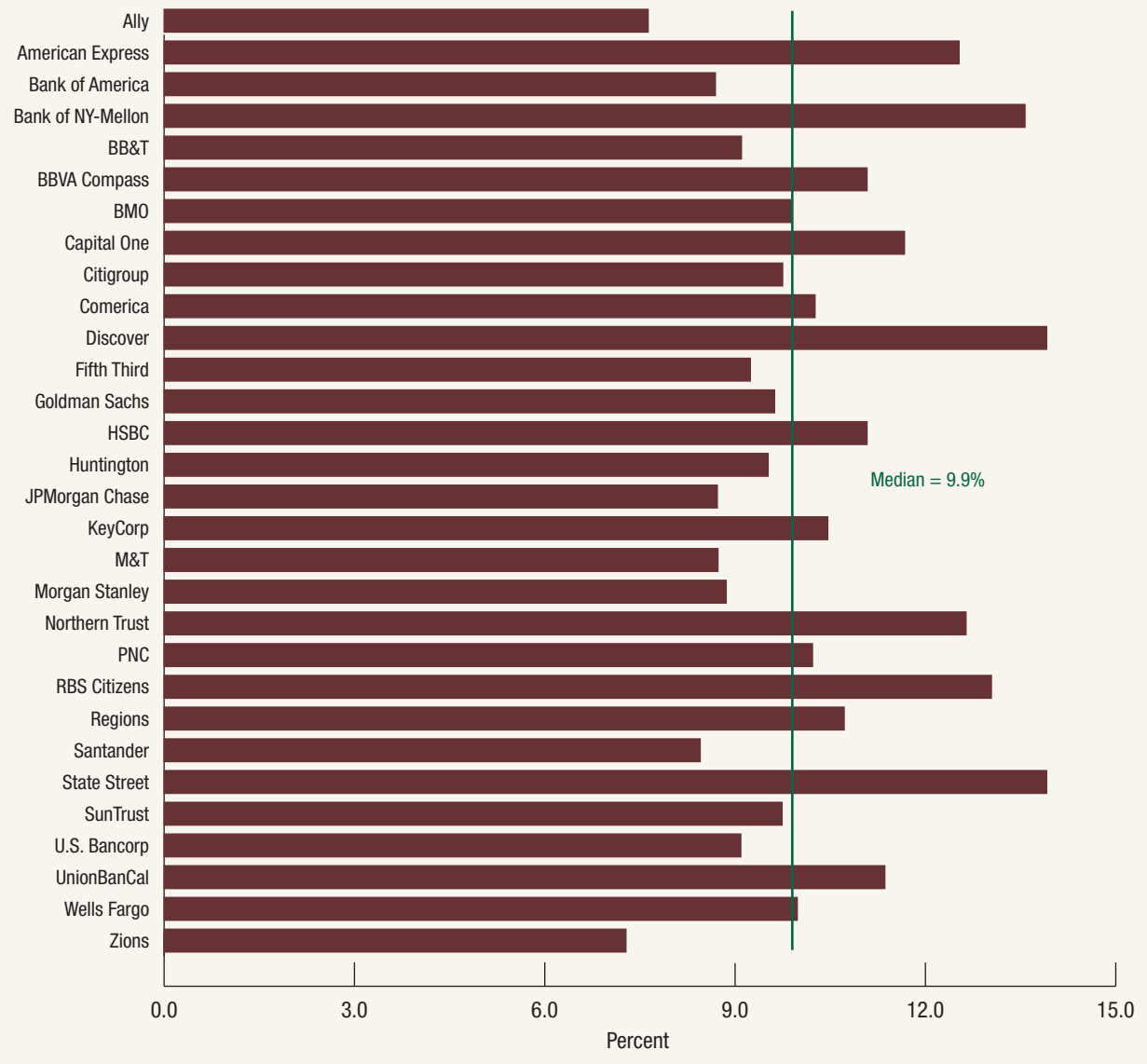
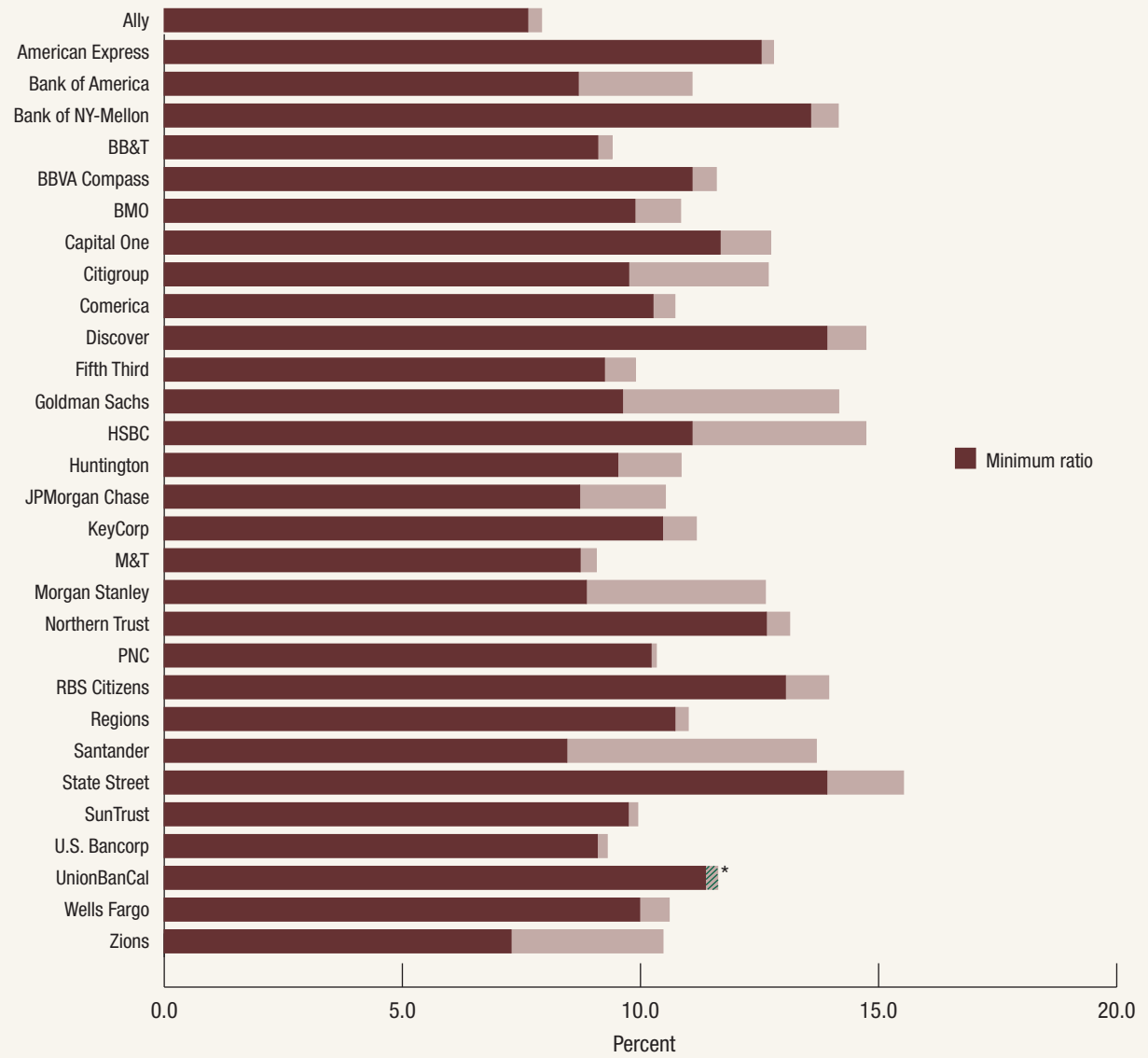


Figure 16. Change from Q3 2013 to minimum tier 1 common ratio in the adverse scenario



* Hash pattern indicates that the minimum tier 1 common ratio over the planning horizon is larger than the Q3 2013 tier 1 common ratio.
 Note: Estimates are for the nine quarter period from Q4 2013 to Q4 2015 as a percent of average balances.

Figure 17. Projected losses in the adverse scenario

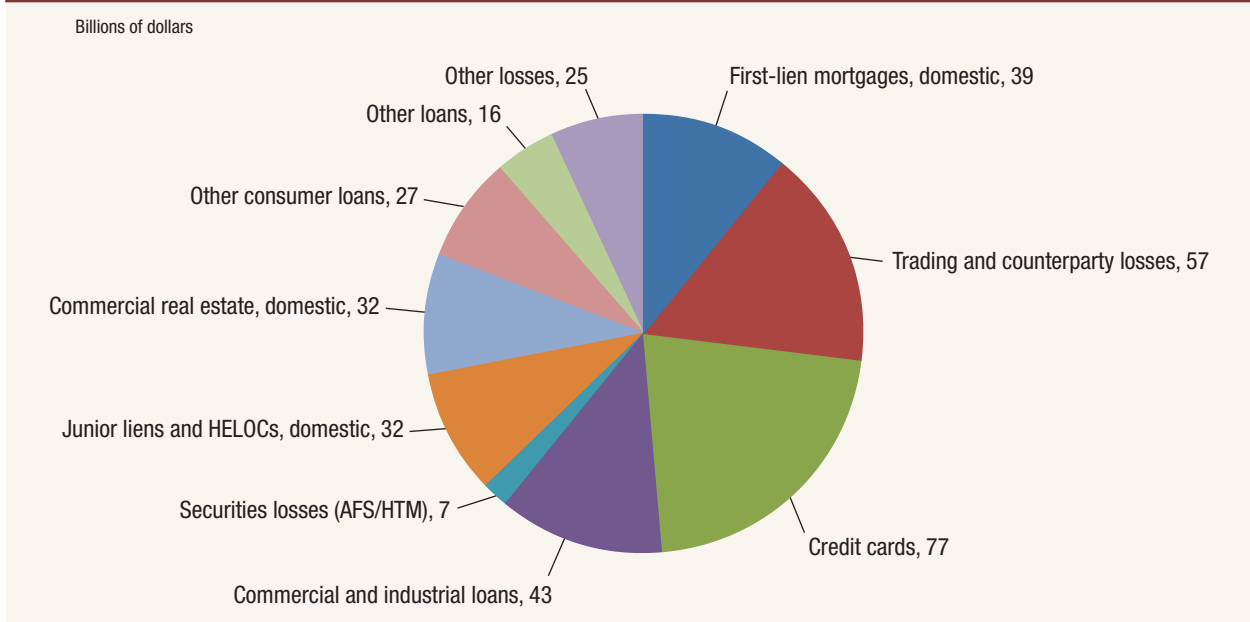
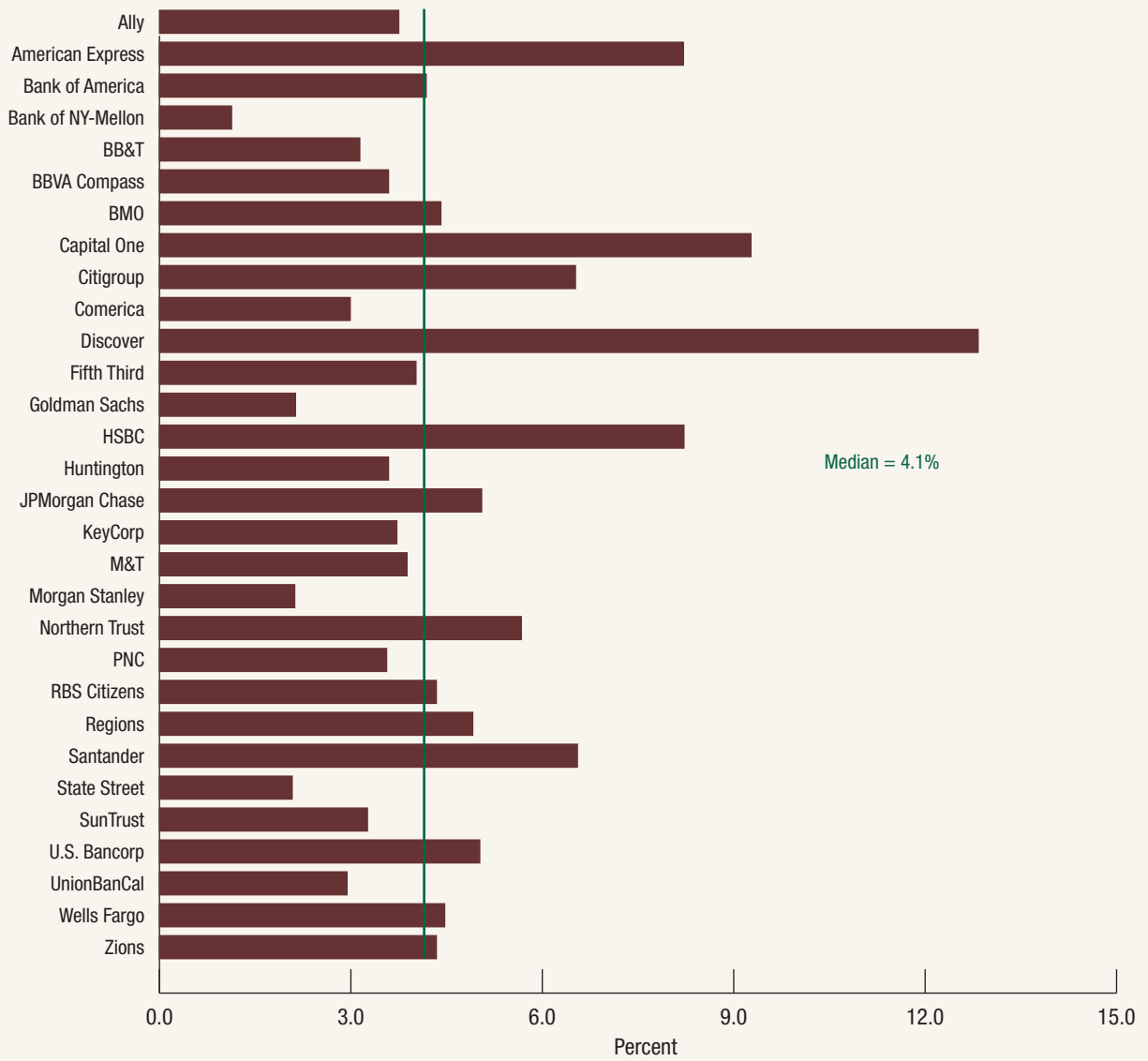
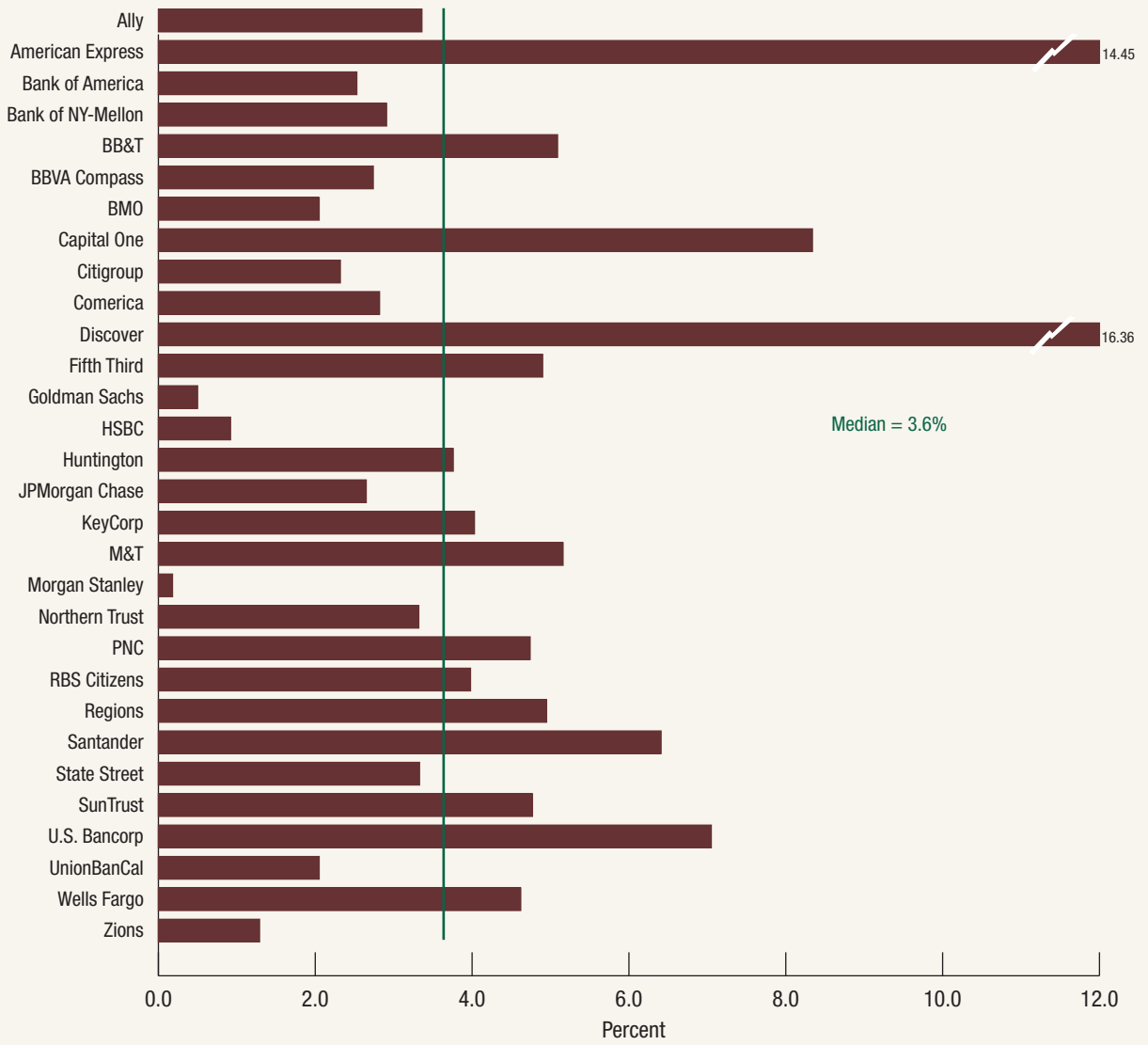


Figure 18. Total loan loss rates in the adverse scenario



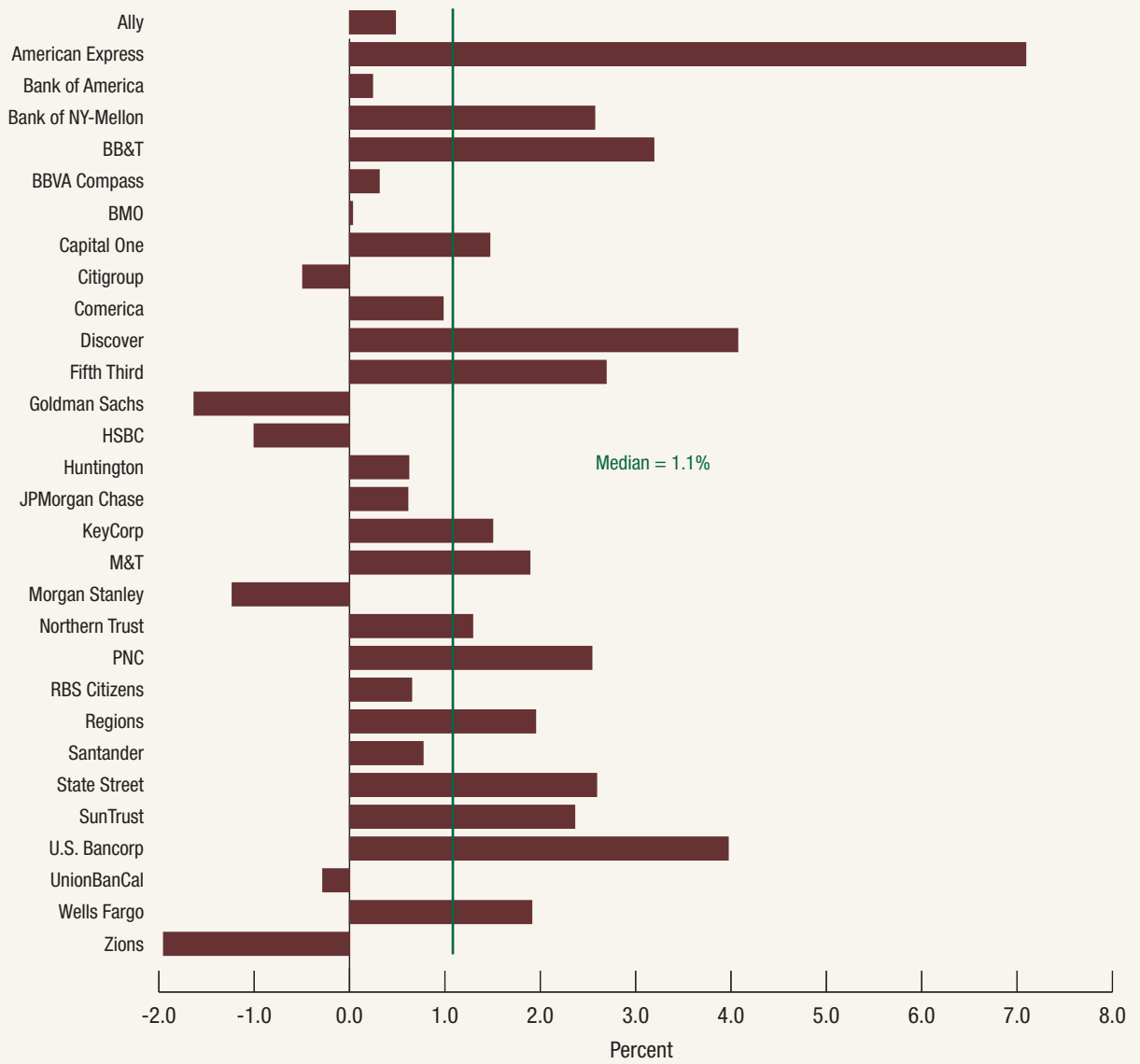
Note: Estimates are for the nine-quarter period from Q4 2013 to Q4 2015 as a percent of average balances.

Figure 19. PPNR rates in the adverse scenario



Note: Estimates are for the nine-quarter period from Q4 2013 to Q4 2015 as a percent of average assets.

Figure 20. Pre-tax net income rates in the adverse scenario



Note: Estimates are for the nine-quarter period from Q4 2013 to Q4 2015 as a percent of average assets.

Table 12. Projected loan losses by type of loan for Q4 2013 through Q4 2015: All bank holding companies

Federal Reserve estimates in the adverse scenario

Billions of dollars

Bank holding company	Loan losses	First lien mortgages, domestic	Junior liens and HELOCs, domestic	Commercial and industrial	Commercial real estate, domestic ¹	Credit cards	Other consumer ²	Other loans ³
Ally Financial Inc.	3.8	0.3	0.2	0.9	0.1	0.0	2.3	0.0
American Express Company	8.9	0.0	0.0	2.7	0.0	6.1	0.0	0.1
Bank of America Corporation	40.0	8.9	7.2	5.3	3.6	11.2	2.2	1.5
The Bank of New York Mellon Corporation	0.6	0.1	0.0	0.1	0.1	0.0	0.0	0.3
BB&T Corporation	3.7	0.5	0.2	0.5	1.3	0.2	0.7	0.2
BBVA Compass Bancshares, Inc.	1.8	0.2	0.2	0.4	0.7	0.1	0.1	0.1
BMO Financial Corp.	2.4	0.4	0.4	0.5	0.6	0.1	0.2	0.3
Capital One Financial Corporation	18.0	0.5	0.2	1.0	0.9	12.7	2.5	0.2
Citigroup Inc.	43.4	4.8	3.4	5.4	0.7	20.6	5.4	3.2
Comerica Incorporated	1.3	0.0	0.1	0.5	0.5	0.0	0.0	0.2
Discover Financial Services	8.1	0.0	0.0	0.0	0.0	7.0	1.1	0.0
Fifth Third Bancorp	3.6	0.5	0.6	1.1	0.6	0.3	0.3	0.2
The Goldman Sachs Group, Inc.	1.1	0.0	0.0	0.4	0.2	0.0	0.0	0.6
HSBC North America Holdings Inc.	7.7	5.4	0.8	0.4	0.7	0.1	0.1	0.2
Huntington Bancshares Incorporated	1.6	0.2	0.3	0.4	0.4	0.0	0.2	0.0
JPMorgan Chase & Co.	37.6	4.6	6.3	6.1	3.1	11.8	2.0	3.7
KeyCorp	2.1	0.2	0.3	0.5	0.5	0.1	0.4	0.1
M&T Bank Corporation	2.9	0.6	0.4	0.4	1.2	0.0	0.2	0.1
Morgan Stanley	1.2	0.0	0.0	0.6	0.1	0.0	0.1	0.4
Northern Trust Corporation	1.7	0.2	0.3	0.3	0.3	0.0	0.0	0.5
The PNC Financial Services Group, Inc.	6.9	0.4	0.9	2.2	2.0	0.4	0.7	0.3
RBS Citizens Financial Group, Inc.	3.7	0.3	1.6	0.6	0.6	0.2	0.3	0.1
Regions Financial Corporation	3.8	0.7	0.6	0.7	1.3	0.1	0.2	0.2
Santander Holdings USA, Inc.	4.9	0.3	0.2	0.3	1.1	0.0	2.8	0.0
State Street Corporation	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3
SunTrust Banks, Inc.	4.1	0.9	1.0	1.1	0.5	0.1	0.4	0.1
U.S. Bancorp	11.3	0.9	0.8	2.9	2.8	2.3	0.9	0.7
UnionBanCal Corporation	2.0	0.4	0.1	0.5	1.0	0.0	0.0	0.2
Wells Fargo & Company	36.3	7.6	6.1	6.8	6.2	3.5	4.2	1.9
Zions Bancorporation	1.7	0.0	0.1	0.5	1.0	0.0	0.0	0.1
30 participating bank holding companies	266.5	39.0	32.2	43.3	32.0	77.0	27.4	15.6

Note: These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected loan losses.

¹ Commercial and industrial loans include small and medium enterprise loans and corporate cards.

² Other consumer loans include student loans and automobile loans.

³ Other loans include international real estate loans.

Table 13. Projected loan losses by type of loan for Q4 2013 through Q4 2015: All bank holding companies

Federal Reserve estimates in the adverse scenario

Percent of average balances¹

Bank holding company	Loan losses	First lien mortgages, domestic	Junior liens and HELOCs, domestic	Commercial and industrial	Commercial real estate, domestic ²	Credit cards	Other consumer ³	Other loans ⁴
Ally Financial Inc.	3.8	4.1	6.9	2.8	3.0	0.0	4.2	2.3
American Express Company	8.2	0.0	0.0	8.3	0.0	8.4	0.0	2.9
Bank of America Corporation	4.2	3.4	7.3	2.4	5.6	10.9	2.9	1.1
The Bank of New York Mellon Corporation	1.1	1.0	9.0	4.4	5.5	0.0	0.6	0.7
BB&T Corporation	3.1	1.6	3.6	3.1	4.2	12.3	4.9	1.3
BBVA Compass Bancshares, Inc.	3.6	1.4	7.5	2.8	6.7	15.0	4.0	1.5
BMO Financial Corp.	4.4	4.5	6.4	3.5	6.8	12.2	2.2	3.6
Capital One Financial Corporation	9.3	1.4	8.2	5.4	4.3	17.1	7.9	2.1
Citigroup Inc.	6.5	5.0	9.8	3.6	6.5	14.0	12.3	1.7
Comerica Incorporated	3.0	2.5	4.4	1.9	4.8	0.0	7.2	4.3
Discover Financial Services	12.8	0.0	9.2	10.2	34.8	13.8	9.1	2.6
Fifth Third Bancorp	4.0	4.3	6.2	3.2	6.3	15.0	2.1	2.3
The Goldman Sachs Group, Inc.	2.1	2.5	8.5	6.1	6.3	0.0	2.9	1.3
HSBC North America Holdings Inc.	8.2	13.2	15.5	1.8	8.0	13.5	9.5	1.4
Huntington Bancshares Incorporated	3.6	2.7	5.2	3.5	4.8	8.1	2.6	1.5
JPMorgan Chase & Co.	5.1	3.4	8.2	4.8	4.1	10.3	3.7	2.3
KeyCorp	3.7	3.5	4.1	2.4	5.9	13.8	7.5	1.5
M&T Bank Corporation	3.9	3.0	5.9	2.9	4.6	13.5	4.7	1.6
Morgan Stanley	2.1	0.5	8.3	6.4	6.1	0.0	0.6	1.4
Northern Trust Corporation	5.7	3.0	13.8	5.5	7.5	0.0	15.9	5.3
The PNC Financial Services Group, Inc.	3.6	1.5	3.3	3.8	6.6	11.6	3.0	1.1
RBS Citizens Financial Group, Inc.	4.3	2.4	8.1	2.6	5.6	13.4	2.6	1.5
Regions Financial Corporation	4.9	4.5	6.4	3.3	7.6	13.5	5.1	1.8
Santander Holdings USA, Inc.	6.5	3.1	3.6	2.7	6.3	13.4	10.9	2.9
State Street Corporation	2.1	0.0	0.0	4.2	16.1	0.0	0.0	1.9
SunTrust Banks, Inc.	3.3	3.2	6.5	3.0	3.6	10.7	2.2	0.9
U.S. Bancorp	5.0	1.7	4.7	5.8	7.3	13.3	3.3	3.2
UnionBanCal Corporation	2.9	1.4	1.7	2.5	6.5	0.0	11.3	2.4
Wells Fargo & Company	4.5	3.2	7.0	4.3	5.2	13.5	4.7	1.9
Zions Bancorporation	4.3	0.3	3.5	4.5	5.4	13.3	9.1	3.2
30 participating bank holding companies	5.0	3.5	7.1	3.7	5.5	12.4	5.0	1.8

Note: These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected loan losses.

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small and medium enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Appendix A: Supervisory Scenarios

This appendix includes the adverse and severely adverse scenarios provided by the Federal Reserve.

It is important to note that the adverse and severely adverse scenarios are not forecasts but rather are hypothetical scenarios designed to assess the strength of banking organizations and their resilience to adverse economic environments.

Table A.1. Supervisory severely adverse scenario: Domestic

Date	Real GDP growth	Nominal GDP growth	Real disposable income growth	Nominal disposable income growth	Un-employment rate	CPI inflation rate	3-month Treasury rate	5-year Treasury yield	10-year Treasury yield	BBB corporate yield	Mortgage rate	Prime rate	Dow Jones Total Stock Market Index	House Price Index	Commercial Real Estate Price Index	Market Volatility Index (VIX)
Q1 2001	-1.1	1.4	3.5	6.3	4.2	3.9	4.8	4.9	5.3	7.4	7.0	8.6	10645.9	112.4	140.8	32.8
Q2 2001	2.1	5.0	-0.3	1.6	4.4	2.8	3.7	4.9	5.5	7.5	7.1	7.3	11407.2	114.5	140.0	34.7
Q3 2001	-1.2	0.1	9.8	10.1	4.8	1.1	3.2	4.6	5.3	7.3	7.0	6.6	9563.0	116.7	143.7	43.7
Q4 2001	1.0	2.2	-4.9	-4.6	5.5	-0.3	1.9	4.2	5.1	7.2	6.8	5.2	10707.7	119.1	137.9	35.3
Q1 2002	3.8	5.1	10.1	10.9	5.7	1.3	1.7	4.5	5.4	7.6	7.0	4.8	10775.7	121.3	139.7	26.1
Q2 2002	2.2	3.8	2.0	5.2	5.8	3.2	1.7	4.5	5.4	7.6	6.8	4.8	9384.0	124.3	137.4	28.4
Q3 2002	1.9	3.8	-0.5	1.5	5.7	2.2	1.6	3.4	4.5	7.3	6.3	4.8	7773.6	127.8	140.9	45.1
Q4 2002	0.2	2.4	1.9	3.8	5.9	2.4	1.3	3.1	4.3	7.0	6.1	4.5	8343.2	130.4	144.2	42.6
Q1 2003	2.0	4.6	1.2	4.1	5.9	4.2	1.2	2.9	4.2	6.5	5.8	4.3	8051.9	133.3	148.7	34.7
Q2 2003	3.8	5.1	5.9	6.3	6.1	-0.7	1.0	2.6	3.8	5.7	5.5	4.2	9342.4	136.0	151.2	29.1
Q3 2003	6.9	9.4	6.7	9.3	6.1	3.0	0.9	3.1	4.4	6.0	6.0	4.0	9649.7	139.7	152.2	22.7
Q4 2003	4.6	6.7	1.6	3.3	5.8	1.5	0.9	3.2	4.4	5.8	5.9	4.0	10799.6	144.3	150.1	21.1
Q1 2004	2.4	6.0	2.9	6.1	5.7	3.4	0.9	3.0	4.1	5.5	5.6	4.0	11039.4	149.9	155.8	21.6
Q2 2004	3.1	6.6	4.0	7.0	5.6	3.2	1.1	3.7	4.7	6.1	6.2	4.0	11144.6	156.2	162.6	20.0
Q3 2004	3.6	6.2	2.1	4.5	5.4	2.6	1.5	3.5	4.4	5.8	5.9	4.4	10893.8	161.9	173.9	19.3
Q4 2004	3.4	6.4	5.1	8.4	5.4	4.4	2.0	3.5	4.3	5.4	5.7	4.9	11951.5	167.5	178.4	16.6
Q1 2005	4.4	8.3	-3.8	-1.8	5.3	2.0	2.5	3.9	4.4	5.4	5.8	5.4	11637.3	175.7	179.6	14.6
Q2 2005	2.2	5.1	3.2	6.0	5.1	2.7	2.9	3.9	4.2	5.5	5.7	5.9	11856.7	183.3	186.5	17.7
Q3 2005	3.3	7.3	2.1	6.6	5.0	6.2	3.4	4.0	4.3	5.5	5.8	6.4	12282.9	189.5	190.8	14.2
Q4 2005	2.2	5.5	3.3	6.6	5.0	3.8	3.8	4.4	4.6	5.9	6.2	7.0	12497.2	194.4	199.6	16.5
Q1 2006	4.9	8.2	9.5	11.5	4.7	2.1	4.4	4.6	4.7	6.0	6.2	7.4	13121.6	198.9	203.0	14.6
Q2 2006	1.3	4.6	0.6	3.7	4.6	3.7	4.7	5.0	5.2	6.5	6.6	7.9	12808.9	199.0	211.9	23.8
Q3 2006	0.4	3.2	1.2	4.1	4.6	3.8	4.9	4.8	5.0	6.4	6.6	8.3	13322.5	196.9	224.2	18.6
Q4 2006	3.2	4.6	5.3	4.6	4.4	-1.6	4.9	4.6	4.7	6.1	6.2	8.3	14215.8	197.3	221.1	12.7
Q1 2007	0.3	4.8	2.7	6.5	4.5	4.0	5.0	4.6	4.8	6.1	6.2	8.3	14354.0	195.6	233.3	19.6
Q2 2007	3.1	5.4	0.8	4.0	4.5	4.6	4.7	4.7	4.9	6.3	6.4	8.3	15163.1	191.3	241.5	18.9
Q3 2007	2.7	4.1	1.0	3.3	4.7	2.6	4.3	4.5	4.8	6.5	6.6	8.2	15317.8	185.9	257.8	30.8
Q4 2007	1.5	3.3	0.3	4.4	4.8	5.0	3.4	3.8	4.4	6.4	6.2	7.5	14753.6	180.2	260.2	31.1
Q1 2008	-2.7	-0.5	2.9	6.5	5.0	4.4	2.1	2.8	3.9	6.5	5.9	6.2	13284.1	174.1	253.6	32.2
Q2 2008	2.0	4.0	8.7	13.3	5.3	5.3	1.6	3.2	4.1	6.8	6.1	5.1	13016.4	166.3	242.1	24.1
Q3 2008	-2.0	0.7	-8.8	-5.0	6.0	6.3	1.5	3.1	4.1	7.2	6.3	5.0	11826.0	159.6	246.8	46.7
Q4 2008	-8.3	-7.8	2.5	-3.2	6.9	-8.9	0.3	2.2	3.7	9.4	5.8	4.1	9056.7	152.0	231.9	80.9
Q1 2009	-5.4	-4.5	-1.4	-3.6	8.3	-2.6	0.2	1.9	3.2	9.0	5.1	3.3	8044.2	144.3	211.2	56.7
Q2 2009	-0.4	-1.1	3.0	4.9	9.3	2.0	0.2	2.3	3.7	8.2	5.0	3.3	9342.8	142.3	175.4	42.3
Q3 2009	1.3	1.2	-4.0	-1.6	9.6	3.5	0.2	2.5	3.8	6.8	5.1	3.3	10812.8	143.8	158.7	31.3
Q4 2009	3.9	5.1	-0.1	2.6	9.9	3.1	0.1	2.3	3.7	6.1	4.9	3.3	11385.1	144.6	158.0	30.7
Q1 2010	1.6	3.0	0.3	1.7	9.8	0.7	0.1	2.4	3.9	5.8	5.0	3.3	12032.5	145.3	153.2	27.3
Q2 2010	3.9	5.8	5.3	5.8	9.6	-0.2	0.1	2.3	3.6	5.6	4.9	3.3	10645.8	145.3	168.8	45.8
Q3 2010	2.8	4.7	1.9	3.1	9.5	1.4	0.2	1.6	2.9	5.1	4.4	3.3	11814.0	142.3	171.1	32.9
Q4 2010	2.8	4.9	2.6	4.8	9.5	3.0	0.1	1.5	3.0	5.0	4.4	3.3	13131.5	140.2	177.8	23.5
Q1 2011	-1.3	0.3	5.0	8.2	9.0	4.4	0.1	2.1	3.5	5.4	4.8	3.3	13908.5	138.9	184.8	29.4
Q2 2011	3.2	5.9	-0.4	3.3	9.0	4.7	0.0	1.8	3.3	5.1	4.7	3.3	13843.5	137.5	181.8	22.7
Q3 2011	1.4	3.9	1.6	3.9	9.0	2.9	0.0	1.1	2.5	4.9	4.3	3.3	11676.5	137.2	182.0	48.0
Q4 2011	4.9	5.4	-0.6	0.8	8.7	1.4	0.0	1.0	2.1	5.0	4.0	3.3	13019.3	136.3	195.2	45.5
Q1 2012	3.7	5.8	4.6	6.9	8.3	2.3	0.1	0.9	2.1	4.7	3.9	3.3	14627.5	138.5	193.5	23.0
Q2 2012	1.2	3.0	1.8	2.9	8.2	1.0	0.1	0.8	1.8	4.5	3.8	3.3	14100.2	141.4	193.7	26.7
Q3 2012	2.8	4.9	-0.6	1.1	8.0	2.1	0.1	0.7	1.6	4.2	3.6	3.3	14894.7	143.9	201.1	20.5
Q4 2012	0.1	1.6	9.0	10.7	7.8	2.2	0.1	0.7	1.7	3.9	3.4	3.3	14834.9	146.8	203.2	22.7
Q1 2013	1.1	2.8	-7.9	-7.0	7.7	1.4	0.1	0.8	1.9	4.0	3.5	3.3	16396.2	152.6	205.4	19.0
Q2 2013	2.5	3.1	3.5	3.4	7.6	0.0	0.1	0.9	2.0	4.1	3.7	3.3	16771.3	157.8	214.3	20.5
Q3 2013	2.0	4.7	1.7	4.3	7.3	2.3	0.0	1.5	2.7	4.9	4.4	3.3	17718.3	158.8	217.0	17.0
Q4 2013	-3.9	-2.0	-0.5	0.1	8.1	0.5	0.1	0.8	1.0	5.0	4.4	3.3	13016.5	156.4	219.7	67.9
Q1 2014	-6.1	-4.0	-2.4	-1.9	9.2	0.4	0.1	0.6	1.0	5.8	4.4	3.3	11402.6	151.3	211.2	61.3
Q2 2014	-3.2	-1.9	0.1	0.8	9.9	0.8	0.1	0.6	1.1	6.1	4.4	3.3	9769.1	145.4	194.5	65.7

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Table A.1.—*continued*

Date	Real GDP growth	Nominal GDP growth	Real disposable income growth	Nominal disposable income growth	Unemployment rate	CPI inflation rate	3-month Treasury rate	5-year Treasury yield	10-year Treasury yield	BBB corporate yield	Mortgage rate	Prime rate	Dow Jones Total Stock Market Index	House Price Index	Commercial Real Estate Price Index	Market Volatility Index (VIX)
Q3 2014	-4.0	-2.6	-1.1	-0.2	10.7	0.8	0.1	0.6	1.1	6.2	4.4	3.3	8943.3	139.1	175.5	57.9
Q4 2014	-1.5	-0.3	-0.5	0.5	11.1	1.1	0.1	0.6	1.3	6.1	4.4	3.3	9616.9	133.2	161.3	42.1
Q1 2015	1.2	2.5	1.2	2.5	11.2	1.5	0.1	0.6	1.3	5.8	4.3	3.3	10314.4	127.7	150.3	34.1
Q2 2015	1.1	2.2	1.0	2.2	11.3	1.4	0.1	0.6	1.4	5.6	4.3	3.3	11061.2	123.0	143.9	27.7
Q3 2015	3.0	4.1	1.4	2.8	11.2	1.6	0.1	0.6	1.5	5.3	4.2	3.3	11987.2	120.3	141.6	21.8
Q4 2015	3.0	4.0	1.6	2.9	11.1	1.6	0.1	0.6	1.6	5.1	4.2	3.3	12775.4	118.5	141.5	19.3
Q1 2016	3.9	4.9	2.0	3.2	10.9	1.6	0.1	0.6	1.7	5.1	4.3	3.3	13434.8	118.0	142.3	17.9
Q2 2016	3.9	4.8	2.2	3.4	10.8	1.6	0.1	0.6	1.8	5.1	4.3	3.3	13927.1	118.5	144.5	17.8
Q3 2016	3.9	4.8	1.8	3.0	10.6	1.6	0.1	0.6	1.9	4.9	4.3	3.3	14769.2	119.5	147.2	15.2
Q4 2016	3.9	4.7	2.0	3.1	10.4	1.5	0.1	0.6	2.0	4.8	4.3	3.3	15436.8	120.8	150.2	14.9

Note: Refer to [Data Notes](#) for more information on variables.

Table A.2. Supervisory severely adverse scenario: International

Date	Euro area real GDP growth	Euro area inflation	Euro area bilateral dollar exchange rate (\$/euro)	Developing Asia real GDP growth	Developing Asia inflation	Developing Asia bilateral dollar exchange rate (F/USD, index, base = 2000 Q1)	Japan real GDP growth	Japan inflation	Japan bilateral dollar exchange rate (yen/USD)	U.K. real GDP growth	U.K. inflation	U.K. bilateral dollar exchange rate (USD/pound)
Q1 2001	3.7	1.1	0.9	3.9	1.6	105.9	2.7	-1.2	125.5	3.1	0.1	1.4
Q2 2001	0.3	4.1	0.8	6.0	2.0	106.0	-0.9	-0.3	124.7	2.7	3.1	1.4
Q3 2001	0.4	1.4	0.9	4.7	1.3	106.3	-4.3	-1.1	119.2	1.9	1.0	1.5
Q4 2001	0.7	1.7	0.9	7.0	-0.2	106.7	-0.5	-1.4	131.0	0.5	0.0	1.5
Q1 2002	0.5	3.0	0.9	7.4	0.3	107.2	-0.7	-2.7	132.7	2.2	1.9	1.4
Q2 2002	2.3	2.0	1.0	9.0	0.7	104.7	4.0	1.7	119.9	3.0	0.9	1.5
Q3 2002	1.1	1.6	1.0	4.9	1.5	105.4	2.6	-0.7	121.7	3.4	1.4	1.6
Q4 2002	0.2	2.4	1.0	6.4	0.7	104.4	1.6	-0.4	118.8	4.3	1.9	1.6
Q1 2003	-0.3	3.3	1.1	7.0	3.2	105.4	-2.1	-1.6	118.1	2.1	1.6	1.6
Q2 2003	0.3	0.3	1.2	2.8	1.2	103.9	4.9	1.7	119.9	5.4	0.3	1.7
Q3 2003	1.8	2.2	1.2	13.4	0.1	102.6	1.7	-0.7	111.4	5.2	1.7	1.7
Q4 2003	2.9	2.2	1.3	11.9	5.5	103.3	4.3	-0.6	107.1	5.3	1.7	1.8
Q1 2004	2.0	2.3	1.2	4.6	4.2	101.4	4.3	-0.9	104.2	2.7	1.3	1.8
Q2 2004	2.2	2.4	1.2	6.2	3.9	102.7	-0.3	1.1	109.4	1.8	1.0	1.8
Q3 2004	1.5	2.0	1.2	8.7	4.0	102.7	0.6	0.1	110.2	0.3	1.1	1.8
Q4 2004	1.3	2.4	1.4	8.1	0.7	99.0	-1.0	1.7	102.7	2.7	2.4	1.9
Q1 2005	0.9	1.5	1.3	7.9	2.9	98.7	0.9	-2.7	107.2	3.1	2.6	1.9
Q2 2005	2.8	2.2	1.2	7.3	1.6	99.0	5.2	-1.3	110.9	5.3	1.9	1.8
Q3 2005	2.6	3.2	1.2	9.8	2.6	98.6	1.5	-1.1	113.3	3.9	2.7	1.8
Q4 2005	2.6	2.5	1.2	10.8	1.7	98.1	0.7	0.6	117.9	5.3	1.4	1.7
Q1 2006	3.7	1.7	1.2	12.0	2.4	96.8	1.8	1.3	117.5	1.5	1.9	1.7
Q2 2006	4.5	2.5	1.3	7.9	3.3	96.8	1.6	-0.1	114.5	1.4	3.0	1.8
Q3 2006	2.6	2.0	1.3	8.7	2.0	96.4	-0.2	0.5	118.0	1.0	3.3	1.9
Q4 2006	4.4	0.9	1.3	11.0	4.0	94.6	5.2	-0.4	119.0	3.1	2.6	2.0
Q1 2007	3.2	2.2	1.3	14.7	3.7	94.0	4.1	-0.2	117.6	4.0	2.6	2.0
Q2 2007	1.9	2.3	1.4	10.0	5.1	92.0	0.5	0.0	123.4	5.3	1.6	2.0
Q3 2007	2.4	2.1	1.4	8.9	7.6	90.7	-1.4	0.1	115.0	5.0	0.3	2.0
Q4 2007	1.6	4.9	1.5	10.7	5.8	89.4	3.4	2.2	111.7	0.4	4.0	2.0
Q1 2008	2.3	4.2	1.6	8.6	7.9	88.0	2.7	1.3	99.9	0.6	3.7	2.0
Q2 2008	-1.6	3.2	1.6	7.5	6.2	88.6	-4.8	1.4	106.2	-3.6	5.5	2.0
Q3 2008	-2.4	3.2	1.4	3.8	2.8	91.3	-4.0	3.8	105.9	-5.6	5.9	1.8
Q4 2008	-6.7	-1.4	1.4	0.4	-0.6	92.0	-12.4	-2.2	90.8	-8.3	0.6	1.5
Q1 2009	-10.9	-1.1	1.3	3.4	-1.2	94.0	-15.0	-3.6	99.2	-9.5	-0.1	1.4
Q2 2009	-1.1	0.0	1.4	15.9	2.4	92.1	6.7	-1.7	96.4	-1.7	2.0	1.6
Q3 2009	1.6	1.2	1.5	12.8	4.9	91.1	0.4	-1.2	89.5	0.0	3.7	1.6
Q4 2009	1.8	1.6	1.4	8.4	5.2	90.5	7.5	-1.5	93.1	1.7	3.1	1.6
Q1 2010	1.6	1.7	1.4	9.2	5.0	89.7	5.9	0.7	93.4	2.1	4.0	1.5
Q2 2010	3.6	2.0	1.2	9.3	3.4	90.8	3.7	-1.0	88.5	4.1	3.0	1.5
Q3 2010	1.7	1.8	1.4	8.7	3.9	88.2	6.0	-1.7	83.5	1.6	2.6	1.6
Q4 2010	2.1	2.5	1.3	8.3	7.8	87.3	-1.3	1.2	81.7	-0.8	4.0	1.5
Q1 2011	3.1	3.5	1.4	9.4	6.4	86.4	-7.6	-0.8	82.8	1.9	6.6	1.6
Q2 2011	0.3	3.2	1.5	6.8	5.9	85.2	-3.4	-0.5	80.6	0.4	4.4	1.6
Q3 2011	0.3	1.7	1.3	7.2	5.9	87.2	10.7	0.7	77.0	2.4	4.2	1.6
Q4 2011	-0.8	3.3	1.3	5.9	2.9	87.1	1.4	-0.4	77.0	-0.4	3.4	1.6
Q1 2012	-0.4	2.5	1.3	5.8	2.8	86.2	5.0	1.2	82.4	0.0	1.8	1.6
Q2 2012	-1.2	2.4	1.3	6.5	4.0	87.9	-1.2	-0.7	79.8	-1.8	1.7	1.6
Q3 2012	-0.5	2.1	1.3	6.6	2.7	86.1	-3.5	-1.5	77.9	2.5	3.0	1.6
Q4 2012	-2.0	2.2	1.3	6.8	3.5	85.8	1.1	0.0	86.6	-1.2	4.0	1.6
Q1 2013	-0.9	0.7	1.3	5.5	3.9	86.1	4.1	-0.4	94.2	1.5	2.3	1.5
Q2 2013	1.1	0.6	1.3	6.3	3.0	87.0	3.8	0.8	99.2	2.7	1.5	1.5
Q3 2013	0.6	1.9	1.4	6.5	3.9	87.2	2.6	3.1	98.3	3.2	3.1	1.6

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Table A.2.—*continued*

Date	Euro area real GDP growth	Euro area inflation	Euro area bilateral dollar exchange rate (\$/euro)	Developing Asia real GDP growth	Developing Asia inflation	Developing Asia bilateral dollar exchange rate (F/USD, index, base = 2000 Q1)	Japan real GDP growth	Japan inflation	Japan bilateral dollar exchange rate (yen/USD)	U.K. real GDP growth	U.K. inflation	U.K. bilateral dollar exchange rate (USD/pound)
Q4 2013	-8.3	-1.0	1.2	-2.8	1.4	105.0	-8.0	-4.9	95.3	-3.2	-0.4	1.4
Q1 2014	-7.0	-1.2	1.1	1.6	0.5	104.7	-10.8	-3.9	96.9	-3.6	-0.6	1.4
Q2 2014	-4.5	-1.3	1.1	4.9	0.2	103.9	-9.1	-3.9	98.2	-2.6	-0.7	1.4
Q3 2014	-2.5	-1.0	1.1	6.4	0.2	102.9	-7.1	-3.5	99.4	-1.6	-0.5	1.4
Q4 2014	-0.9	-0.6	1.1	6.8	0.2	101.6	-5.1	-3.1	100.5	-0.6	-0.2	1.4
Q1 2015	0.4	-0.3	1.1	7.0	0.2	98.8	-3.2	-2.7	100.3	0.4	0.2	1.4
Q2 2015	1.3	0.1	1.1	7.0	0.3	96.1	-1.6	-2.4	100.1	1.1	0.5	1.4
Q3 2015	1.9	0.3	1.1	7.0	0.5	93.5	-0.4	-1.9	100.0	1.7	0.8	1.4
Q4 2015	2.2	0.5	1.1	7.0	0.8	91.1	0.5	-1.4	99.9	2.2	1.1	1.4
Q1 2016	2.3	0.7	1.1	7.1	1.2	89.8	1.2	-0.9	99.6	2.5	1.3	1.4
Q2 2016	2.3	0.8	1.2	7.2	1.5	88.8	1.7	-0.4	99.4	2.7	1.4	1.4
Q3 2016	2.2	0.9	1.2	7.3	1.8	88.0	2.0	-0.1	99.2	2.8	1.5	1.4
Q4 2016	2.2	1.0	1.2	7.4	2.0	87.3	2.2	0.2	99.0	2.9	1.7	1.4

Note: Refer to [Data Notes](#) for more information on variables.

Table A.3. Supervisory adverse scenario: Domestic

Date	Real GDP growth	Nominal GDP growth	Real disposable income growth	Nominal disposable income growth	Un-employment rate	CPI inflation rate	3-month Treasury rate	5-year Treasury yield	10-year Treasury yield	BBB corporate yield	Mortgage rate	Prime rate	Dow Jones Total Stock Market Index	House Price Index	Commercial Real Estate Price Index	Market Volatility Index (VIX)
Q1 2001	-1.1	1.4	3.5	6.3	4.2	3.9	4.8	4.9	5.3	7.4	7.0	8.6	10645.9	112.4	140.8	32.8
Q2 2001	2.1	5.0	-0.3	1.6	4.4	2.8	3.7	4.9	5.5	7.5	7.1	7.3	11407.2	114.5	140.0	34.7
Q3 2001	-1.2	0.1	9.8	10.1	4.8	1.1	3.2	4.6	5.3	7.3	7.0	6.6	9563.0	116.7	143.7	43.7
Q4 2001	1.0	2.2	-4.9	-4.6	5.5	-0.3	1.9	4.2	5.1	7.2	6.8	5.2	10707.7	119.1	137.9	35.3
Q1 2002	3.8	5.1	10.1	10.9	5.7	1.3	1.7	4.5	5.4	7.6	7.0	4.8	10775.7	121.3	139.7	26.1
Q2 2002	2.2	3.8	2.0	5.2	5.8	3.2	1.7	4.5	5.4	7.6	6.8	4.8	9384.0	124.3	137.4	28.4
Q3 2002	1.9	3.8	-0.5	1.5	5.7	2.2	1.6	3.4	4.5	7.3	6.3	4.8	7773.6	127.8	140.9	45.1
Q4 2002	0.2	2.4	1.9	3.8	5.9	2.4	1.3	3.1	4.3	7.0	6.1	4.5	8343.2	130.4	144.2	42.6
Q1 2003	2.0	4.6	1.2	4.1	5.9	4.2	1.2	2.9	4.2	6.5	5.8	4.3	8051.9	133.3	148.7	34.7
Q2 2003	3.8	5.1	5.9	6.3	6.1	-0.7	1.0	2.6	3.8	5.7	5.5	4.2	9342.4	136.0	151.2	29.1
Q3 2003	6.9	9.4	6.7	9.3	6.1	3.0	0.9	3.1	4.4	6.0	6.0	4.0	9649.7	139.7	152.2	22.7
Q4 2003	4.6	6.7	1.6	3.3	5.8	1.5	0.9	3.2	4.4	5.8	5.9	4.0	10799.6	144.3	150.1	21.1
Q1 2004	2.4	6.0	2.9	6.1	5.7	3.4	0.9	3.0	4.1	5.5	5.6	4.0	11039.4	149.9	155.8	21.6
Q2 2004	3.1	6.6	4.0	7.0	5.6	3.2	1.1	3.7	4.7	6.1	6.2	4.0	11144.6	156.2	162.6	20.0
Q3 2004	3.6	6.2	2.1	4.5	5.4	2.6	1.5	3.5	4.4	5.8	5.9	4.4	10893.8	161.9	173.9	19.3
Q4 2004	3.4	6.4	5.1	8.4	5.4	4.4	2.0	3.5	4.3	5.4	5.7	4.9	11951.5	167.5	178.4	16.6
Q1 2005	4.4	8.3	-3.8	-1.8	5.3	2.0	2.5	3.9	4.4	5.4	5.8	5.4	11637.3	175.7	179.6	14.6
Q2 2005	2.2	5.1	3.2	6.0	5.1	2.7	2.9	3.9	4.2	5.5	5.7	5.9	11856.7	183.3	186.5	17.7
Q3 2005	3.3	7.3	2.1	6.6	5.0	6.2	3.4	4.0	4.3	5.5	5.8	6.4	12282.9	189.5	190.8	14.2
Q4 2005	2.2	5.5	3.3	6.6	5.0	3.8	3.8	4.4	4.6	5.9	6.2	7.0	12497.2	194.4	199.6	16.5
Q1 2006	4.9	8.2	9.5	11.5	4.7	2.1	4.4	4.6	4.7	6.0	6.2	7.4	13121.6	198.9	203.0	14.6
Q2 2006	1.3	4.6	0.6	3.7	4.6	3.7	4.7	5.0	5.2	6.5	6.6	7.9	12808.9	199.0	211.9	23.8
Q3 2006	0.4	3.2	1.2	4.1	4.6	3.8	4.9	4.8	5.0	6.4	6.6	8.3	13322.5	196.9	224.2	18.6
Q4 2006	3.2	4.6	5.3	4.6	4.4	-1.6	4.9	4.6	4.7	6.1	6.2	8.3	14215.8	197.3	221.1	12.7
Q1 2007	0.3	4.8	2.7	6.5	4.5	4.0	5.0	4.6	4.8	6.1	6.2	8.3	14354.0	195.6	233.3	19.6
Q2 2007	3.1	5.4	0.8	4.0	4.5	4.6	4.7	4.7	4.9	6.3	6.4	8.3	15163.1	191.3	241.5	18.9
Q3 2007	2.7	4.1	1.0	3.3	4.7	2.6	4.3	4.5	4.8	6.5	6.6	8.2	15317.8	185.9	257.8	30.8
Q4 2007	1.5	3.3	0.3	4.4	4.8	5.0	3.4	3.8	4.4	6.4	6.2	7.5	14753.6	180.2	260.2	31.1
Q1 2008	-2.7	-0.5	2.9	6.5	5.0	4.4	2.1	2.8	3.9	6.5	5.9	6.2	13284.1	174.1	253.6	32.2
Q2 2008	2.0	4.0	8.7	13.3	5.3	5.3	1.6	3.2	4.1	6.8	6.1	5.1	13016.4	166.3	242.1	24.1
Q3 2008	-2.0	0.7	-8.8	-5.0	6.0	6.3	1.5	3.1	4.1	7.2	6.3	5.0	11826.0	159.6	246.8	46.7
Q4 2008	-8.3	-7.8	2.5	-3.2	6.9	-8.9	0.3	2.2	3.7	9.4	5.8	4.1	9056.7	152.0	231.9	80.9
Q1 2009	-5.4	-4.5	-1.4	-3.6	8.3	-2.6	0.2	1.9	3.2	9.0	5.1	3.3	8044.2	144.3	211.2	56.7
Q2 2009	-0.4	-1.1	3.0	4.9	9.3	2.0	0.2	2.3	3.7	8.2	5.0	3.3	9342.8	142.3	175.4	42.3
Q3 2009	1.3	1.2	-4.0	-1.6	9.6	3.5	0.2	2.5	3.8	6.8	5.1	3.3	10812.8	143.8	158.7	31.3
Q4 2009	3.9	5.1	-0.1	2.6	9.9	3.1	0.1	2.3	3.7	6.1	4.9	3.3	11385.1	144.6	158.0	30.7
Q1 2010	1.6	3.0	0.3	1.7	9.8	0.7	0.1	2.4	3.9	5.8	5.0	3.3	12032.5	145.3	153.2	27.3
Q2 2010	3.9	5.8	5.3	5.8	9.6	-0.2	0.1	2.3	3.6	5.6	4.9	3.3	10645.8	145.3	168.8	45.8
Q3 2010	2.8	4.7	1.9	3.1	9.5	1.4	0.2	1.6	2.9	5.1	4.4	3.3	11814.0	142.3	171.1	32.9
Q4 2010	2.8	4.9	2.6	4.8	9.5	3.0	0.1	1.5	3.0	5.0	4.4	3.3	13131.5	140.2	177.8	23.5
Q1 2011	-1.3	0.3	5.0	8.2	9.0	4.4	0.1	2.1	3.5	5.4	4.8	3.3	13908.5	138.9	184.8	29.4
Q2 2011	3.2	5.9	-0.4	3.3	9.0	4.7	0.0	1.8	3.3	5.1	4.7	3.3	13843.5	137.5	181.8	22.7
Q3 2011	1.4	3.9	1.6	3.9	9.0	2.9	0.0	1.1	2.5	4.9	4.3	3.3	11676.5	137.2	182.0	48.0
Q4 2011	4.9	5.4	-0.6	0.8	8.7	1.4	0.0	1.0	2.1	5.0	4.0	3.3	13019.3	136.3	195.2	45.5
Q1 2012	3.7	5.8	4.6	6.9	8.3	2.3	0.1	0.9	2.1	4.7	3.9	3.3	14627.5	138.5	193.5	23.0
Q2 2012	1.2	3.0	1.8	2.9	8.2	1.0	0.1	0.8	1.8	4.5	3.8	3.3	14100.2	141.4	193.7	26.7
Q3 2012	2.8	4.9	-0.6	1.1	8.0	2.1	0.1	0.7	1.6	4.2	3.6	3.3	14894.7	143.9	201.1	20.5
Q4 2012	0.1	1.6	9.0	10.7	7.8	2.2	0.1	0.7	1.7	3.9	3.4	3.3	14834.9	146.8	203.2	22.7
Q1 2013	1.1	2.8	-7.9	-7.0	7.7	1.4	0.1	0.8	1.9	4.0	3.5	3.3	16396.2	152.6	205.4	19.0
Q2 2013	2.5	3.1	3.5	3.4	7.6	0.0	0.1	0.9	2.0	4.1	3.7	3.3	16771.3	157.8	214.3	20.5
Q3 2013	2.0	4.7	1.7	4.3	7.3	2.3	0.0	1.5	2.7	4.9	4.4	3.3	17718.3	158.8	217.0	17.0
Q4 2013	-1.0	0.7	2.7	3.7	7.7	1.1	0.1	2.7	3.5	6.5	5.4	3.3	15605.5	157.6	219.7	35.3
Q1 2014	-2.1	0.0	1.6	2.7	8.3	1.1	0.1	3.3	4.2	7.5	6.3	3.3	14216.2	155.0	216.7	31.7
Q2 2014	-0.6	0.8	2.4	3.6	8.6	1.3	0.1	3.9	5.0	8.4	7.0	3.3	12815.7	152.0	208.0	33.7

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Table A.3.—*continued*

Date	Real GDP growth	Nominal GDP growth	Real disposable income growth	Nominal disposable income growth	Unemployment rate	CPI inflation rate	3-month Treasury rate	5-year Treasury yield	10-year Treasury yield	BBB corporate yield	Mortgage rate	Prime rate	Dow Jones Total Stock Market Index	House Price Index	Commercial Real Estate Price Index	Market Volatility Index (VIX)
Q3 2014	-1.0	0.7	1.3	2.6	9.0	1.4	0.1	4.5	5.7	9.2	7.8	3.3	11402.7	148.7	198.5	31.4
Q4 2014	0.3	1.8	0.4	1.8	9.2	1.6	0.1	4.6	5.8	9.1	7.8	3.3	12099.4	145.5	189.5	27.2
Q1 2015	1.7	3.4	0.7	2.4	9.2	1.9	0.1	4.5	5.7	8.8	7.8	3.3	12786.4	142.5	182.2	24.6
Q2 2015	1.7	3.1	0.4	2.0	9.3	1.9	0.1	4.4	5.5	8.5	7.6	3.3	13475.9	139.9	176.4	22.6
Q3 2015	2.6	4.1	0.6	2.3	9.2	2.0	0.1	4.2	5.3	8.1	7.4	3.3	14249.3	138.4	175.2	20.2
Q4 2015	2.6	4.1	0.7	2.4	9.2	1.9	0.1	4.0	5.1	7.7	7.2	3.3	14916.7	137.3	175.3	19.2
Q1 2016	3.0	4.6	0.9	2.6	9.1	2.0	0.1	3.7	4.9	7.5	7.1	3.3	15490.6	137.1	175.9	18.7
Q2 2016	3.0	4.5	1.2	2.9	9.0	2.0	0.1	3.5	4.8	7.3	6.9	3.3	15952.9	137.3	177.3	18.8
Q3 2016	3.0	4.5	1.2	2.9	8.9	2.0	0.1	3.4	4.7	7.0	6.8	3.3	16601.7	137.9	179.0	17.5
Q4 2016	3.0	4.6	1.3	3.0	8.8	2.0	0.1	3.2	4.6	6.8	6.6	3.3	17139.0	138.7	180.9	17.4

Note: Refer to [Data Notes](#) for more information on variables.

Table A.4. Supervisory adverse scenario: International

Date	Euro area real GDP growth	Euro area inflation	Euro area bilateral dollar exchange rate (\$/euro)	Developing Asia real GDP growth	Developing Asia inflation	Developing Asia bilateral dollar exchange rate (F/USD, index, base = 2000 Q1)	Japan real GDP growth	Japan inflation	Japan bilateral dollar exchange rate (yen/USD)	U.K. real GDP growth	U.K. inflation	U.K. bilateral dollar exchange rate (USD/pound)
Q1 2001	3.7	1.1	0.9	3.9	1.6	105.9	2.7	-1.2	125.5	3.1	0.1	1.4
Q2 2001	0.3	4.1	0.8	6.0	2.0	106.0	-0.9	-0.3	124.7	2.7	3.1	1.4
Q3 2001	0.4	1.4	0.9	4.7	1.3	106.3	-4.3	-1.1	119.2	1.9	1.0	1.5
Q4 2001	0.7	1.7	0.9	7.0	-0.2	106.7	-0.5	-1.4	131.0	0.5	0.0	1.5
Q1 2002	0.5	3.0	0.9	7.4	0.3	107.2	-0.7	-2.7	132.7	2.2	1.9	1.4
Q2 2002	2.3	2.0	1.0	9.0	0.7	104.7	4.0	1.7	119.9	3.0	0.9	1.5
Q3 2002	1.1	1.6	1.0	4.9	1.5	105.4	2.6	-0.7	121.7	3.4	1.4	1.6
Q4 2002	0.2	2.4	1.0	6.4	0.7	104.4	1.6	-0.4	118.8	4.3	1.9	1.6
Q1 2003	-0.3	3.3	1.1	7.0	3.2	105.4	-2.1	-1.6	118.1	2.1	1.6	1.6
Q2 2003	0.3	0.3	1.2	2.8	1.2	103.9	4.9	1.7	119.9	5.4	0.3	1.7
Q3 2003	1.8	2.2	1.2	13.4	0.1	102.6	1.7	-0.7	111.4	5.2	1.7	1.7
Q4 2003	2.9	2.2	1.3	11.9	5.5	103.3	4.3	-0.6	107.1	5.3	1.7	1.8
Q1 2004	2.0	2.3	1.2	4.6	4.2	101.4	4.3	-0.9	104.2	2.7	1.3	1.8
Q2 2004	2.2	2.4	1.2	6.2	3.9	102.7	-0.3	1.1	109.4	1.8	1.0	1.8
Q3 2004	1.5	2.0	1.2	8.7	4.0	102.7	0.6	0.1	110.2	0.3	1.1	1.8
Q4 2004	1.3	2.4	1.4	8.1	0.7	99.0	-1.0	1.7	102.7	2.7	2.4	1.9
Q1 2005	0.9	1.5	1.3	7.9	2.9	98.7	0.9	-2.7	107.2	3.1	2.6	1.9
Q2 2005	2.8	2.2	1.2	7.3	1.6	99.0	5.2	-1.3	110.9	5.3	1.9	1.8
Q3 2005	2.6	3.2	1.2	9.8	2.6	98.6	1.5	-1.1	113.3	3.9	2.7	1.8
Q4 2005	2.6	2.5	1.2	10.8	1.7	98.1	0.7	0.6	117.9	5.3	1.4	1.7
Q1 2006	3.7	1.7	1.2	12.0	2.4	96.8	1.8	1.3	117.5	1.5	1.9	1.7
Q2 2006	4.5	2.5	1.3	7.9	3.3	96.8	1.6	-0.1	114.5	1.4	3.0	1.8
Q3 2006	2.6	2.0	1.3	8.7	2.0	96.4	-0.2	0.5	118.0	1.0	3.3	1.9
Q4 2006	4.4	0.9	1.3	11.0	4.0	94.6	5.2	-0.4	119.0	3.1	2.6	2.0
Q1 2007	3.2	2.2	1.3	14.7	3.7	94.0	4.1	-0.2	117.6	4.0	2.6	2.0
Q2 2007	1.9	2.3	1.4	10.0	5.1	92.0	0.5	0.0	123.4	5.3	1.6	2.0
Q3 2007	2.4	2.1	1.4	8.9	7.6	90.7	-1.4	0.1	115.0	5.0	0.3	2.0
Q4 2007	1.6	4.9	1.5	10.7	5.8	89.4	3.4	2.2	111.7	0.4	4.0	2.0
Q1 2008	2.3	4.2	1.6	8.6	7.9	88.0	2.7	1.3	99.9	0.6	3.7	2.0
Q2 2008	-1.6	3.2	1.6	7.5	6.2	88.6	-4.8	1.4	106.2	-3.6	5.5	2.0
Q3 2008	-2.4	3.2	1.4	3.8	2.8	91.3	-4.0	3.8	105.9	-5.6	5.9	1.8
Q4 2008	-6.7	-1.4	1.4	0.4	-0.6	92.0	-12.4	-2.2	90.8	-8.3	0.6	1.5
Q1 2009	-10.9	-1.1	1.3	3.4	-1.2	94.0	-15.0	-3.6	99.2	-9.5	-0.1	1.4
Q2 2009	-1.1	0.0	1.4	15.9	2.4	92.1	6.7	-1.7	96.4	-1.7	2.0	1.6
Q3 2009	1.6	1.2	1.5	12.8	4.9	91.1	0.4	-1.2	89.5	0.0	3.7	1.6
Q4 2009	1.8	1.6	1.4	8.4	5.2	90.5	7.5	-1.5	93.1	1.7	3.1	1.6
Q1 2010	1.6	1.7	1.4	9.2	5.0	89.7	5.9	0.7	93.4	2.1	4.0	1.5
Q2 2010	3.6	2.0	1.2	9.3	3.4	90.8	3.7	-1.0	88.5	4.1	3.0	1.5
Q3 2010	1.7	1.8	1.4	8.7	3.9	88.2	6.0	-1.7	83.5	1.6	2.6	1.6
Q4 2010	2.1	2.5	1.3	8.3	7.8	87.3	-1.3	1.2	81.7	-0.8	4.0	1.5
Q1 2011	3.1	3.5	1.4	9.4	6.4	86.4	-7.6	-0.8	82.8	1.9	6.6	1.6
Q2 2011	0.3	3.2	1.5	6.8	5.9	85.2	-3.4	-0.5	80.6	0.4	4.4	1.6
Q3 2011	0.3	1.7	1.3	7.2	5.9	87.2	10.7	0.7	77.0	2.4	4.2	1.6
Q4 2011	-0.8	3.3	1.3	5.9	2.9	87.1	1.4	-0.4	77.0	-0.4	3.4	1.6
Q1 2012	-0.4	2.5	1.3	5.8	2.8	86.2	5.0	1.2	82.4	0.0	1.8	1.6
Q2 2012	-1.2	2.4	1.3	6.5	4.0	87.9	-1.2	-0.7	79.8	-1.8	1.7	1.6
Q3 2012	-0.5	2.1	1.3	6.6	2.7	86.1	-3.5	-1.5	77.9	2.5	3.0	1.6
Q4 2012	-2.0	2.2	1.3	6.8	3.5	85.8	1.1	0.0	86.6	-1.2	4.0	1.6
Q1 2013	-0.9	0.7	1.3	5.5	3.9	86.1	4.1	-0.4	94.2	1.5	2.3	1.5
Q2 2013	1.1	0.6	1.3	6.3	3.0	87.0	3.8	0.8	99.2	2.7	1.5	1.5
Q3 2013	0.6	1.9	1.4	6.5	3.9	87.2	2.6	3.1	98.3	3.2	3.1	1.6

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Table A.4.—*continued*

Date	Euro area real GDP growth	Euro area inflation	Euro area bilateral dollar exchange rate (\$/euro)	Developing Asia real GDP growth	Developing Asia inflation	Developing Asia bilateral dollar exchange rate (F/USD, index, base = 2000 Q1)	Japan real GDP growth	Japan inflation	Japan bilateral dollar exchange rate (yen/USD)	U.K. real GDP growth	U.K. inflation	U.K. bilateral dollar exchange rate (USD/pound)
Q4 2013	-4.2	0.1	1.2	1.4	2.3	96.9	-3.3	-1.9	97.9	-0.8	0.9	1.4
Q1 2014	-3.4	0.0	1.2	3.8	1.9	96.9	-5.0	-1.2	99.7	-1.0	0.7	1.4
Q2 2014	-2.0	-0.1	1.2	5.6	1.8	96.5	-4.3	-1.2	101.2	-0.5	0.6	1.4
Q3 2014	-0.8	0.1	1.2	6.4	1.8	96.0	-3.3	-1.0	102.5	0.1	0.7	1.4
Q4 2014	0.1	0.3	1.2	6.7	1.8	95.2	-2.2	-0.8	103.7	0.6	0.8	1.4
Q1 2015	0.9	0.5	1.2	6.8	1.7	93.1	-1.2	-0.7	103.6	1.1	1.0	1.4
Q2 2015	1.4	0.7	1.2	6.8	1.7	91.0	-0.3	-0.6	103.5	1.5	1.2	1.4
Q3 2015	1.8	0.9	1.2	6.8	1.7	88.9	0.4	-0.4	103.4	1.9	1.4	1.4
Q4 2015	1.9	1.0	1.2	6.8	1.9	87.1	0.9	-0.1	103.4	2.1	1.5	1.4
Q1 2016	2.0	1.1	1.2	6.9	2.1	86.2	1.3	0.2	103.0	2.3	1.6	1.4
Q2 2016	2.0	1.1	1.2	6.9	2.3	85.5	1.5	0.5	102.7	2.4	1.7	1.4
Q3 2016	1.9	1.2	1.2	7.0	2.5	85.0	1.7	0.7	102.4	2.5	1.7	1.4
Q4 2016	1.9	1.3	1.2	7.1	2.6	84.5	1.8	0.9	102.1	2.5	1.8	1.4

Note: Refer to [Data Notes](#) for more information on variables.

Data Notes

Sources for data through 2013:Q3 (as released through 10/25/2013). The 2013:Q3 values of variables marked with an asterisk (*) are projected.

***U.S. real GDP growth:** Percent change in real gross domestic product at an annualized rate, Bureau of Economic Analysis.

***U.S. nominal GDP growth:** Percent change in nominal gross domestic product at an annualized rate, Bureau of Economic Analysis.

***U.S. real disposable income growth:** Percent change in nominal disposable personal income divided by the price index for personal consumption expenditures at an annualized rate, Bureau of Economic Analysis.

***U.S. nominal disposable income growth:** Percent change in nominal disposable personal income at an annualized rate, Bureau of Economic Analysis.

U.S. unemployment rate: Quarterly average of monthly data, Bureau of Labor Statistics.

***U.S. CPI inflation:** Percent change in the Consumer Price Index at an annualized rate, Bureau of Labor Statistics.

U.S. 3-month Treasury rate: Quarterly average of 3-month Treasury bill secondary market rate discount basis, Federal Reserve Board (FRB).

U.S. 5-year Treasury yield: Quarterly average of the yield on 5-year U.S. Treasury bonds, constructed for FRB/US model by Federal Reserve staff based on the Svensson smoothed term structure model; see Lars E. O. Svensson (1995), “Estimating Forward Interest Rates with the Extended Nelson-Siegel Method,” *Quarterly Review*, no. 3, Sveriges Riksbank, pp. 13–26.

U.S. 10-year Treasury yield: Quarterly average of the yield on 10-year U.S. Treasury bonds, constructed for FRB/US model by Federal Reserve staff based on the Svensson smoothed term structure model; see Lars E. O. Svensson (1995), “Estimating Forward Interest Rates with the Extended Nelson-Siegel Method,” *Quarterly Review*, No. 3, Sveriges Riksbank, pp. 13–26.

U.S. BBB corporate yield: Quarterly average of the yield on 10-year BBB-rated corporate bonds, con-

structed for FRB/US model by Federal Reserve staff using a Nelson-Siegel smoothed yield curve model; see Charles R. Nelson and Andrew F. Siegel (1987), “Parsimonious Modeling of Yield Curves,” *Journal of Business*, vol. 60, pp. 473–89). Data prior to 1997 are based on the WARGA database. Data after 1997 are based on the Merrill Lynch database.

U.S. mortgage rate: Quarterly average of weekly series of Freddie Mac data.

U.S. prime rate: Quarterly average of monthly series, Federal Reserve Board.

U.S. Dow Jones Total Stock Market (Float Cap) Index: End of quarter value, Dow Jones.

***U.S. House Price Index:** CoreLogic, index level, seasonally adjusted by Federal Reserve staff.

***U.S. Commercial Real Estate Price Index:** From the Financial Accounts of the United States, Federal Reserve Board (Z.1 release); the series corresponds to the data for price indexes: Commercial Real Estate Price Index (series FI075035503.Q)

U.S. Market Volatility Index (VIX): Chicago Board Options Exchange, converted to quarterly by using the maximum value in any quarter.

***Euro area real GDP growth:** Staff calculations based on Statistical Office of the European Communities via Haver, extended back using ECB Area Wide Model dataset (ECB Working Paper series no. 42).

Euro area inflation: Staff calculations based on Statistical Office of the European Community via Haver.

***Developing Asia real GDP growth:** Staff calculations based on Bank of Korea via Haver; Chinese National Bureau of Statistics via CEIC; Indian Central Statistical Organization via CEIC; Census and Statistics Department of Hong Kong via CEIC; and Taiwan Directorate-General of Budget, Accounting, and Statistics via CEIC.

Developing Asia inflation: Staff calculations based on Chinese National Bureau of Statistics via CEIC; Indian Ministry of Statistics and Programme Implementation via Haver; Labour Bureau of India via CEIC; National Statistical Office of Korea via CEIC; Census and Statistics Department of Hong Kong via CEIC; and Taiwan Directorate-General of Budget, Accounting, and Statistics via CEIC.

***Japan real GDP growth:** Cabinet Office via Haver.

Japan inflation: Ministry of Internal Affairs and Communications via Haver.

U.K. real GDP growth: Office for National Statistics via Haver.

U.K. inflation: Staff calculations based on Office for National Statistics (uses Retail Price Index to extend series back to 1960) via Haver.

Exchange rates: Bloomberg.

Appendix B: Models to Project Net Income and Stressed Capital

This appendix describes the models used to project stressed capital ratios and pre-tax net income and its components for the 30 BHCs subject to DFAST 2014.⁴³ The models fall into five broad categories:

1. Models to project losses on loans held in the accrual loan portfolio. Loans in the accrual loan portfolio are those measured under accrual accounting, rather than fair-value accounting.
2. Models to project other types of losses, including those from changes in fair value on loans held for sale or measured under the fair-value option; losses on securities, trading, and counterparty exposures; losses related to operational-risk events; and mortgage repurchase/put-back losses.
3. Models to project the components of PPNR (revenues and non-credit-related expenses).
4. Models to project balance sheet items and risk-weighted assets (RWAs).
5. The model to project capital ratios, given projections of pre-tax net income, assumptions for determining provisions into the ALLL, and assumed capital actions under the Dodd-Frank Act stress test rule.

⁴³ In connection with DFAST 2014, and in addition to the models developed and data collected by the Federal Reserve, the Federal Reserve used proprietary models or data licensed from the following providers: Andrew Davidson & Co., Inc.; BlackRock Financial Management, Inc.; Bloomberg Finance L.P.; CB Richard Ellis, Inc.; Chicago Board Options Exchange; Commodity Research Bureau; CoreLogic Solutions, LLC; Equifax Information Services LLC; Fitch Solutions, Inc.; Intex Solutions, Inc.; Investortools, Inc.; McDash Analytics, LLC, a wholly owned subsidiary of Lender Processing Services, Inc.; Markit Group; Moody's Analytics, Inc.; Morningstar Credit Ratings, LLC; Municipal Securities Rulemaking Board; The Organisation for Economic Co-operation and Development; Reis, Inc.; and Standard & Poor's Financial Services LLC. In addition, with respect to the global market shock component of the adverse and severely adverse scenarios, the Federal Reserve used proprietary data licensed from the following providers: Bank of America Corporation; Barclays Bank PLC; Bloomberg Finance L.P.; CoreLogic, Inc.; Intex Solutions, Inc.; JPMorgan Chase & Co.; Lender Processing Services, Inc.; Markit Group; Moody's Analytics, Inc.; New York University; Standard & Poor's Financial Services LLC; and Thomson Reuters LLC.

A majority of the models described here were refined incrementally over the past year. However, some of the models were either changed substantially or newly implemented for DFAST 2014, including the home equity model, the available-for-sale (AFS) securities fair-value model, the fair-value loan model, the counterparty default model, and the balance sheet and RWA models.

Losses on the Accrual Loan Portfolio

More than a dozen individual models are used to project losses on loans held in the accrual loan portfolio. The individual loan types modeled can broadly be divided into wholesale loans, such as commercial and industrial (C&I) loans and commercial real estate (CRE) loans, and retail loans, including various types of residential mortgages, credit cards, student loans, auto loans, small business loans, and other consumer lending. In some cases, these major categories comprise several subcategories, each with its own loss projection model, but the models within a subcategory are similar in structure and approach. The models project losses using detailed loan portfolio data provided by the BHCs on the FR Y-14 report.

Two general approaches are taken to model losses on the accrual loan portfolio. In the first approach—an approach broadly used for DFAST 2014—the models estimate expected losses under the macroeconomic scenario—that is, they project the probability of default (PD), loss given default (LGD), and exposure at default (EAD) for each quarter of the planning horizon. Expected losses in quarter t are the product of these three components:

$$Loss_t = PD_t * LGD_t * EAD_t$$

PD is generally modeled as part of a transition process in which loans move from one payment status to another (e.g., from current to delinquent) in response to economic conditions. Default is the last possible transition and PD represents the likelihood that a

loan will default during a given period. The number of payment statuses and the transition paths modeled differ by loan type.

LGD is typically defined as a percentage of EAD and is based on historical data. For some loan types, LGD is modeled as a function of borrower, collateral, or loan characteristics and the macroeconomic variables from the supervisory scenarios. For other loan types, it is assumed to be a fixed percentage for all loans in a category. Finally, the approach to EAD varies by loan type and depends on whether the outstanding loan amount can change between the current period and the period in which the loan defaults (e.g., for lines of credit).

In the second approach, the models capture the historical behavior of net charge-offs relative to changes in macroeconomic and financial market variables and loan portfolio characteristics.

The loss models primarily focus on losses arising from loans in the accrual loan portfolio as of September 30, 2013. The loss projections also incorporate losses on loans originated after the planning horizon begins. These incremental loan balances are calculated based on the Federal Reserve's projections of loan balances over the planning horizon. These balances are assumed to have the same risk characteristics as those of the loan portfolio as of September 30, 2013, with the exception of loan age in the retail and commercial real estate portfolios, where seasoning is incorporated. This is a simple, but generally conservative, assumption. Loss projections also incorporate losses on loans acquired through mergers or purchase after the planning horizon begins. Additional information provided by the BHCs about the size and composition of acquired loan portfolios was used to estimate losses on acquired portfolios.

Loss projections generated by the models are adjusted to take account of purchase accounting treatment, which recognizes discounts on impaired loans acquired during mergers, and any other write-downs already taken on loans held in the accrual loan portfolio. This latter adjustment ensures that losses related to these loans are not double-counted in the projections.

Wholesale Lending: Corporate Loans

Losses stemming from default on corporate loans are projected at the loan level using an expected loss modeling framework. Corporate loans consist of a

number of different categories of loans, as defined by the FR Y-9C. The largest group of these loans include commercial and industrial (C&I) loans, which are generally defined as loans to corporate or commercial borrowers with more than \$1 million in committed balances that are "graded" using a BHC's corporate loan rating process.⁴⁴

The PD for a C&I loan is projected over the planning horizon by first calculating the loan's PD at the beginning of the planning horizon and then projecting it forward using an equation that relates historical changes in PD to changes in the macroeconomic environment. The PD as of September 30, 2013, is calculated for every C&I loan in a BHC's portfolio using detailed, loan-level information submitted by the BHC. For publicly traded borrowers, a borrower-specific PD, based on the expected default frequency, is used. For other borrowers, the PD is estimated based on the BHC's internal credit rating, which is converted to a standardized rating scale. Loans that are 90 days past due, in non-accrual status, or that have an ASC 310-10 reserve as of September 30, 2013, are assigned a PD of 100 percent.

Quarterly changes in the PD after the third quarter of 2013 are projected over the planning horizon using a series of equations that relate historical changes in the average PD as a function of changes in macroeconomic variables, including changes in real GDP, the unemployment rate, and the spread on BBB-rated corporate bonds. The equations are estimated separately by borrower industries, credit quality categories, and countries.

The LGD for a C&I loan at the beginning of the planning horizon is determined by the line of business, seniority of lien (if secured), country, and ASC 310-10 reserve, if applicable. The LGD is then projected forward by relating the change in the LGD to changes in the PD. In the model, the PD is used as a proxy for economic conditions, and, by construct, increases in PD generally lead to higher LGDs.

The EAD for closed-end C&I loans is assumed to equal the loan's outstanding balance. The EAD for C&I revolving lines of credit equals the sum of the funded balance and a portion of the unfunded commitment, which reflects the amount that is likely to be drawn down by the borrower in the event of

⁴⁴ All definitions of loan categories and default in this appendix are definitions used for the purposes of the supervisory stress test models and do not necessarily align with general industry definitions or classifications.

default. This drawdown amount was estimated based on the historical drawdown experience for defaulted U.S. syndicated loans that are in the Shared National Credit (SNC) database.⁴⁵ The EAD for standby letters of credit and trade finance credit are conservatively assumed to equal the total commitment.

Other corporate loans that are similar in some respects to C&I loans are modeled using the same framework. These loans include owner-occupied commercial real estate loans, capital equipment leases, loans to depositories, and other loans.⁴⁶ Projected losses on owner-occupied commercial real estate loans are disclosed in total CRE losses, while projected losses for the remaining other corporate loans are disclosed in the other loans category.

Wholesale Lending: Commercial Real Estate Mortgages

CRE mortgages are loans collateralized by domestic and international multifamily or nonfarm, non-residential properties, and construction and land development loans (C&LD), as defined by the FR Y-9C. Losses stemming from default on CRE mortgages are projected at the loan level using an expected-loss modeling framework.

The PD model for CRE mortgages is a hazard model of the probability that a loan transitions from current to default status, given the characteristics of the loan as well as macroeconomic variables such as house prices and CRE vacancy rates, at both the geographic market and national level. Once defaulted, the model assumes the loan does not re-perform; the effect of re-performance on the estimated loan loss is captured in the LGD model. A CRE mortgage loan is considered in default if it is 90 days past due, in non-accrual status, has an ASC 310-10 reserve, or had a very low internal credit rating at the most recent time its maturity was extended. The effect of loan maturity on the PD is estimated to be different for income-producing and C&LD loans, and is estimated separately for each loan type using historical FR Y-14 data. However, the effect of other loan characteristics and the macroeconomic variables is

⁴⁵ SNCs have commitments of greater than \$20 million and are held by three or more regulated participating entities. See www.federalreserve.gov/bankinfo/reg/snc.htm for additional information about SNCs.

⁴⁶ The corporate loan category also includes loans that are dissimilar from typical corporate loans, such as securities lending and farmland loans, which are generally a small share of BHC portfolios. For these loans, a conservative and uniform loss rate based on analysis of historical data was assigned.

assumed to be the same for income-producing properties and C&LD loans and is estimated using a single model for both types of loans using historical CMBS data.

The LGD for CRE mortgages is estimated using Y-14 data on ASC 310-10 reserves. The model first estimates the probability that a defaulted loan will have losses as a function of loan characteristics and macroeconomic variables, and then, using loans with losses, estimates the loss on the CRE mortgage, as a function of the expected probability of loss, characteristics of the loan, and macroeconomic variables. Finally, the EAD for CRE mortgages is assumed to equal the loan's outstanding balance for amortizing loans and the full committed balance for C&LD loans.

Retail Lending: Residential Mortgages

Residential mortgages held in BHC portfolios include first and junior liens, either closed-end loans or revolving credits, that are secured by one-to-four-family residential real estate as defined by the FR Y-9C. Losses stemming from default on residential mortgages are projected at the loan level using an expected-loss modeling framework.⁴⁷

The PD model for first-lien residential mortgages estimates the probability that a loan transitions to different payment statuses, including current, delinquent, default, and paid off. Separate PD models are estimated for three types of closed-end, first-lien mortgages: fixed-rate, adjustable-rate, and option adjustable-rate mortgages. The PD model specification varies somewhat by loan type, but in general, each model estimates the probability that a loan transitions from one payment state to another (e.g., from current to delinquent or from delinquent to default) over a single quarter, given the characteristics of the loan, borrower, and underlying property as well as macroeconomic variables such as local house prices, the statewide unemployment rate, and interest rates.⁴⁸ Origination vintage effects are also included in part to capture unobserved characteristics of loan quality. The historical data used to estimate this model are industrywide, loan-level data from many banks and

⁴⁷ To predict losses on new originations over the planning horizon, newly originated loans are assumed to have the same risk characteristics as the existing portfolio, with the exception of the loan age and delinquency status.

⁴⁸ The effects of loan modification and evolving modification practices are captured in the probability that a delinquent loan transitions back to current status (re-performing loans).

mortgage loan originators. These estimated PD models are used to simulate default for each loan reported by each BHC under the supervisory scenarios. Loans that are 180 days or more past due as of September 30, 2013, are considered in default and are assigned a PD of 100 percent.

The LGD for residential mortgages is estimated using two models. One model estimates the amount of time that elapses between default and real estate owned (REO) disposition (timeline model), while the other relates characteristics of the defaulted loan, such as the property value at default, to one component of losses net of recoveries—the proceeds from the sale of the property net of foreclosure expenses (loss model).⁴⁹ These net proceeds are calculated from historical data on loan balances, servicer advances, and losses from defaulted loans in private-label mortgage-backed securities (RMBS). These RMBS data are also used to estimate the LGD loss model separately for prime jumbo loans, subprime, and alt-A loans.⁵⁰

Finally, using the elapsed time between default and REO disposition estimated in the timeline model, total estimated losses are allocated into credit losses on the defaulted loans, which are fully written down at the time of default, or net losses arising from the eventual sale of the underlying property (other real estate owned—or OREO—expenses), which flow through PPNR. House price changes from the time of default to foreclosure completion (REO acquisition) are captured in LGD, while house price changes after foreclosure completion and before sale of the property are captured in OREO expenses. The LGD for loans already in default as of September 30, 2013, includes further home price declines through the point of foreclosure.

Home equity loans (HELs) are junior-lien, closed-end loans, and home equity lines of credit (HELOCs) are revolving open-end loans extended under lines of credit, both secured by one-to-four-family residential real estate as defined by the FR Y-9C. Losses stemming from default on HELs and HELOCs are pro-

jected at the loan level in an expected loss framework that is similar to first-lien mortgages, with a few differences. For second-lien HELs and HELOCs that are current as of September 30, 2013, but are behind a seriously delinquent first-lien, the model assumes elevated default rates under the supervisory scenarios. In addition, most HELOC contracts require only payment of interest on the outstanding line balance during the period when the line can be drawn upon (draw period). When the line reaches the end of its draw period (end-of-draw), the outstanding line balance either becomes immediately payable or converts to a fully amortizing loan. HELOCs that reach the end-of-draw period are assumed to prepay at a higher rate just prior to end-of-draw and to default at a higher rate just after end-of-draw than HELOCs that are still in their draw period. The LGD for HELs and HELOCs is estimated using data from private-label mortgage-backed securities, using the same models used for closed-end first-lien, but the estimated total mortgage losses for properties with a defaulted HEL or HELOC are allocated based on the lien position. Finally, for HELOCs, EAD is conservatively assumed to equal the credit limit.

Retail Lending: Credit Cards

Credit cards include both general purpose and private-label credit cards, as well as charge cards, as defined by the FR Y-9C. Credit card loans extended to individuals are included in retail credit cards, while credit cards loans extended to businesses and corporations are included in other retail lending and are modeled separately. Losses stemming from defaults on credit cards are projected at the loan level using an expected-loss modeling framework.

The PD model for credit cards estimates the probability that a loan transitions from delinquency status to default status, given the characteristics of the account and borrower as well as macroeconomic variables such as unemployment. When an account defaults, it is assumed to be closed and does not return to current status. Credit card loans are considered in default when they are 120 days past due. Because the relationship between the PD and its determinants can vary with the initial status of the account, separate transition models are estimated for accounts that are current and active, current and inactive accounts, and delinquent accounts. In addition, because this relationship can also vary with time horizons, separate transition models are estimated for short-, medium-, and long-term horizons. The historical data used to estimate this model are industry-

⁴⁹ Other components of losses net of recoveries are calculated directly from available data. Private mortgage insurance is not incorporated into the LGD models. Industry data suggest that insurance coverage on portfolio loans is infrequent, and cancellation or nullification of guarantees was a common occurrence during the recent downturn.

⁵⁰ The differences between characteristics of mortgages in RMBS and mortgages in bank portfolios, such as loan-to-value ratio (LTV), are controlled for by including various risk characteristics in the LGD model, such as original LTV ratio, credit score, and credit quality segment (prime, alt-A, and subprime).

wide, loan-level data from many banks, and separate models were estimated for bank cards and charge cards. The PD model is used to forecast the PD for each loan reported by each BHC in the Y-14M report.

The LGD for credit cards is assumed to be a fixed percentage and is calculated separately for bank cards and charge cards based on historical industry data on LGD during the most recent economic downturn. The EAD for credit cards equals the sum of the amount outstanding on the account and a portion of the credit line, which reflects the amount that is likely to be drawn down by the borrower between the beginning of the planning horizon and the time of default. This drawdown amount is estimated as a function of account and borrower characteristics. Because this relationship can vary with the initial status of the account and time to default, separate models are estimated for current and delinquent accounts and for accounts with short-, medium-, and long-term transition to default. For accounts that are current, separate models were also estimated for different credit-line-size segments.

Retail Lending: Auto

Auto loans are consumer loans extended for the purpose of purchasing new and used automobiles and light motor vehicles as defined by the FR Y-9C. Losses stemming from default in auto retail loan portfolios are projected at the portfolio segment level using an expected loss framework.

The PD model for auto loans estimates the probability that a loan transitions from either a current or delinquent status to default status, given the characteristics of the loan and borrower as well as macroeconomic variables such as house prices and the unemployment rate (which, in some cases, are interacted with loan and borrower characteristics to allow for greater sensitivity to stressful conditions in high-risk segments). Default on auto loans is defined based on either the payment status (120 days past due), actions of the borrower (bankruptcy), or the lender (repossession). Because the relationship between the PD and its determinants can vary with the initial status of the account, separate transition models are estimated for accounts that are current and delinquent accounts. The historical data used to estimate this model are loan-level, credit bureau data.

The LGD for auto loans is estimated given the characteristics of the loan as well as macroeconomic vari-

ables. The historical data used to estimate this model are pooled, segment-level data provided by the BHCs on the FR Y-14Q. The EAD for auto loans is based on the typical pattern of amortization of loans that ultimately defaulted in historical credit bureau data. The estimated EAD model captures the average amortization by loan age for current and delinquent loans over nine quarters.

Retail Lending: Other Retail Lending

Other retail lending includes the small business loan portfolio, the other consumer loan portfolio, the student loan portfolio, the business and corporate credit card portfolio, and international retail portfolio. Losses due to default on other retail lending are forecast by modeling net charge-off rates as a function of portfolio risk characteristics and macroeconomic variables. This model is then used to predict future charge-offs consistent with the macroeconomic variables provided in the supervisory scenarios.⁵¹ The predicted net charge-off rate is applied to balances projected by the Federal Reserve to estimate projected losses. Default is defined as 90 days or more past due for domestic and international other consumer loans and 120 days or more past due for student loans, small business loans, corporate cards, and international retail portfolios. The net charge-off rate is modeled in a system of equations that also includes the delinquency rate and the default rate. In general, each rate is modeled in an autoregressive specification that also includes the rate in the previous delinquency state, characteristics of the underlying loans, macroeconomic variables and, in some cases, seasonal factors. The models are specified to implicitly capture roll-rate dynamics. In some cases, the characteristics of the underlying loans, such as dummy variables for each segment of credit score at origination, are also interacted with the macroeconomic variables to capture differences in sensitivities across risk segments to changes in the macroeconomic environment. Each retail product type is modeled separately and, for each product type, economic theory and the institutional characteristics of the product guide the inclusion and lag structure of the macroeconomic variables in the model.

Because of data limitations and the relatively small size of these portfolios, the net charge-off rate for each loan type is modeled using industry-

⁵¹ An exception is made for the government-guaranteed portion of BHCs' student loan portfolios, to which an assumed monthly PD of 1.5 percent and LGD of 3 percent is applied.

wide, monthly data at the segment level. For most portfolios, these data are collected on the FR Y-14Q Retail schedule, which segments each portfolio by characteristics such as borrower credit score; loan vintage; type of facility (e.g., installment versus revolving); and, for international portfolios, geographic region.⁵²

Charge-off rates are projected by applying the estimated system of equations to each segment of the BHC's loan portfolio as of September 30, 2013. The portfolio level charge-off rate equals the dollar-weighted average of the segment-level charge-off rates.⁵³ These projected charge-off rates are applied to the balances projected by the Federal Reserve to calculate portfolio losses.

Loan-Loss Provisions for the Accrual Loan Portfolio

Losses on the accrual loan portfolio flow into net income through provisions for loan and lease losses. Provisions for loan and lease losses equal projected loan losses for the quarter plus the amount needed for the ALLL to be at an appropriate level at the end of the quarter, which is a function of projected future loan losses. The appropriate level of ALLL at the end of a given quarter is generally assumed to be the amount needed to cover projected loan losses over the next four quarters.⁵⁴ Because this calculation of ALLL is based on projected losses under the adverse or severely adverse scenarios, it may differ from a BHC's actual level of ALLL at the beginning of the planning horizon, which is based on the BHC's assessment of future losses in the current economic environment. Any difference between these two measures of ALLL is smoothed into the provisions projection over the nine quarters of the planning horizon. Because projected loan losses include off-balance-sheet commitments, the BHC's allowance at the beginning of the planning horizon for credit

losses on off-balance-sheet exposures (as reported on the FR Y-9C) is subtracted from the provisions projection in equal amounts each quarter.

Other Losses

Loans Held for Sale or Measured under the Fair-Value Option

Certain loans are not accounted for on an accrual basis. Loans to which the fair-value option (FVO) is applied are valued as mark-to-market assets. Loans under the held-for-sale (HFS) and some loans under the held-for-investment (HFI) accounting classifications are carried at the lower of cost or market value. FVO, HFS, and HFI loan portfolios are identified by the BHCs and reported on the FR Y-14. Losses related to FVO, HFS, and HFI loans are recognized in the income statement at the time of the devaluation.

Losses are estimated by applying the macroeconomic scenario to loans held in portfolio under FVO, HFS, and HFI accounting. Losses on C&I and CRE loans and commitments are estimated by revaluing each loan or commitment each quarter using a stressed discount yield (and spread for floating rate loans). The initial discount yield is based on the loan or commitment's initial fair value, settlement date, maturity date, and interest rate for fixed rate loans and the rating, settlement date, and maturity date for floating rate loans. Quarterly movements in the discount yield over the planning horizon are assumed to equal the stressed change in corporate bond yields of the same credit rating and maturity, adjusted for potential changes in credit ratings. Commitments that are less than fully funded are assumed to be fully drawn down at the beginning of the planning period. Gains on FVO loan hedges were modeled using a similar methodology as one used for comparable assets in the trading portfolio and were netted from estimated losses on the FVO loans.

Losses on retail loans held under FVO, HFS, and HFI accounting are estimated over the nine quarters of the planning horizon using a duration-based approach. This approach uses balances on these loans reported on the FR Y-14, estimates of portfolio-weighted duration, and quarterly changes in stressed spreads from the macroeconomic scenario. Estimates are calculated separately by vintage and loan type. No losses are assumed for residential mort-

⁵² Business and corporate credit card portfolio data, which previously were collected on the FR Y-14Q Retail schedule, are now collected at the loan-level on the FR Y-14M Credit Card schedule and subsequently aggregated to the segment level.

⁵³ The dollar weights used are based on the distribution reported during the last observation period. This method assumes that the distribution of loans across risk segments, other than delinquency status segments, remains constant over the projection period.

⁵⁴ For loan types modeled in a charge-off framework, the appropriate level of ALLL was adjusted to reflect the difference in timing between the recognition of expected losses and that of charge-offs.

gage loans under forward contract with the government-sponsored enterprises (GSEs).

Securities in the Available-for-Sale and Held-to-Maturity Portfolios

If a security becomes OTTI then all or a portion of the difference between the fair value and amortized cost of the security must be recognized in earnings.⁵⁵ Losses on OTTI securities are projected using a suite of OTTI models described below.

The OTTI models are designed to incorporate other-than-temporary differences between amortized cost and fair market value due to credit impairment but not differences reflecting changes in liquidity or market conditions. Some AFS/HTM securities, including U.S. Treasury and U.S. government agency obligations and U.S. government agency mortgage-backed securities (MBS), are assumed not to be at risk for the kind of credit impairment that results in OTTI charges. The remaining securities can be grouped into two basic categories: securitizations, where the value of the security depends on the value of an underlying pool of collateral, and direct obligations such as corporate or sovereign bonds, where the value of the security depends primarily on the credit quality of the issuer.⁵⁶

In all, 10 separate models are used to project OTTI, reflecting differences in the basic structure of the securities (securitized versus direct obligation) and differences in underlying collateral and obligor type. Overall, the OTTI projections involve CUSIP-level analysis of more than 60,000 individual positions at the 30 BHCs.

For securitized obligations, credit and prepayment models estimate delinquency, default, severity, and prepayment vectors on the underlying pool of collateral under the supervisory scenarios. In most cases, these projections incorporate relatively detailed information on the underlying collateral characteristics for each individual security, derived from commercial databases that contain collateral and security structure information. Delinquency, default, severity, and prepayment vectors are projected either using econometric models developed by the Federal Reserve or third-party models designed to project these esti-

mates in stressed economic environments. The models used vary with the type of underlying collateral but generally estimate the relationship between the collateral's performance vectors and economic variables, such as the unemployment rate and house prices. These vectors are then applied to a cash flow engine that captures the specific structure of each security (e.g., tranche, subordination, and payment rules) to calculate the intrinsic value (present value of the cash flows) for that security. If the projected intrinsic value is less than amortized cost, then the security is considered to be other than temporarily impaired, and OTTI is calculated as the difference between amortized cost and intrinsic value.

For direct obligations, the basic approach is to assess the PD or severe credit deterioration for each security issuer or group of security issuers over the planning horizon. PD is either modeled directly or inferred by modeling changes in expected frequency of default or credit default swap (CDS) spreads for the bonds in question. A security is considered other than temporarily impaired if the projected value of the PD or CDS spread crossed a predetermined threshold level—generally the level consistent with a CCC/Caa rating—at any point during the planning horizon. LGD on these securities is based on historical data on bond recovery rates. OTTI is calculated as the difference between the bond's amortized cost and its projected value under the supervisory scenarios.⁵⁷

After a security is written down as OTTI, the difference between its original value and the post-OTTI value is assumed to be invested in securities with the same risk characteristics. Increases projected by the Federal Reserve in a BHCs securities portfolio after September 30, 2013, are assumed to be in short-term, riskless assets, and no OTTI charges are assigned to these securities. This assumption is also consistent with historical data showing that the composition of the AFS and HTM portfolios tends to shift toward U.S. Treasury and agency obligations in times of economic stress.

In addition, under the revised regulatory capital rules, the difference between the amortized cost (accounting for any OTTI charges) and fair value of AFS securities and also on HTM securities that have

⁵⁵ A security is considered impaired when the fair value of the security falls below its amortized cost.

⁵⁶ Equities are also held in the AFS portfolios, although in small amounts. Losses on these positions under each scenario are calculated based on projected equity price changes.

⁵⁷ Trust preferred collateralized debt obligations (TruPS CDOs), not specifically exempted from the Volcker Rule "covered funds" prohibition under the interim final rule issued on January 14, 2014, were written down each quarter to their fair value until they were sold on June 30, 2015. For all other TruPS CDOs, credit-related OTTI write-downs were estimated to occur at a rate similar to that of other credit-sensitive securities.

had a recognition of OTTI will be phased into the calculation of regulatory capital for advanced approaches BHCs.⁵⁸ To address this change in the calculation of regulatory capital, the Federal Reserve has added a new model to estimate changes in the fair value of AFS securities.

The AFS fair value model is designed to project quarterly changes in the prices of available-for-sale (AFS) securities under the supervisory scenarios. In this model, each security is re-priced using one of three methods depending on the asset class of the security—a duration-based approach, generic revaluation, or model-based revaluation. The duration-based approach is taken for all AFS securities except Treasury securities and agency RMBS. This approach approximates the quarterly price path for a security over a nine-quarter planning horizon using projected changes in the security's yield and its initial effective duration. The yields used in the approximation vary over the projection period with changes in Treasury yields and the securities' option-adjusted spread. Separate yield projections were estimated for securities in different asset classes, and with different credit ratings, and maturities. In the generic revaluation method, U.S. Treasury securities are directly re-priced using a simple present-value calculation that incorporates the timing and amount of contractual cash flows and quarterly Treasury yields from the macroeconomic scenario. In the model-based revaluation, agency RMBS are revalued using a security-specific pricing model to capture the effect of embedded options on the cash flows of each security.

Trading and Private Equity

Total potential mark-to-market losses stemming from trading positions under a stressed market environment can be broken into two primary types. The first type of loss arises from a decrease in the market value of trading positions, regardless of the BHC's

counterparties. The second type is the counterparty credit risk associated with changes in counterparty exposures and with deterioration of counterparties' creditworthiness under stressed market conditions, which adversely affects the riskiness of positively valued trading positions. The models used to project losses on trading positions under the global market shock account for both sources of potential losses, generally relying on information provided by firms on estimated sensitivities of their exposures to specific risk factor shocks. Because positions in the trading account are mark-to-market on a daily basis, the approach used to generate loss projections on trading positions is intended to capture the market-value effect of the global market shock.

Losses on trading positions, such as equities, FX, interest rates, commodities, credit products, private equity, and other fair-value assets, arising from the global market shock are calculated using the BHCs' own estimates of the sensitivity of the value of these positions to changes in a wide range of market rates, prices, spreads, and volatilities. Trading losses are calculated by multiplying these sensitivities by the risk factor changes included in the global market shock developed by the Federal Reserve or by interpolating the change in position values from BHC-supplied Profit/(Loss) grids. These shocks are assumed to be instantaneous and no additional hedging, recovery in value, or changes in positions are incorporated into the loss calculation.

Losses in the global market shock include losses from credit valuation adjustments (CVA) and trading incremental default risk (IDR) of the six BHCs with large trading positions. CVAs are adjustments above and beyond the mark-to-market valuation of the BHCs' trading portfolios that capture changes in the risk that a counterparty to derivatives transaction or other trading position will default on its obligations. Using detailed data provided by the six trading BHCs on the FR Y-14A Counterparty schedule, each trading firm's baseline and stressed CVA for each counterparty is calculated as a function of unstressed and stressed values of exposure, PD, and LGD. CVA losses equal the difference between the baseline and the stressed CVAs.

In addition to CVA and other mark-to-market losses on trading positions, default risk in the trading book is captured through IDR. IDR estimates the potential additional loss stemming from the default of obligors in excess of the mark-to-market losses in the trading book. IDR estimates the losses from jump-

⁵⁸ For purposes of DFAST 2014, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance-sheet foreign exposure of at least \$10 billion as of December 31, 2013. The advanced approaches BHCs in DFAST 2014 are American Express Company, Bank of America Corporation, The Bank of New York Mellon Corporation, Capital One Financial Corporation, Citigroup, Inc., The Goldman Sachs Group, Inc., HSBC North America Holdings, Inc., JPMorgan Chase & Co., Morgan Stanley, Northern Trust Corporation, The PNC Financial Services Group, Inc., State Street Corporation, U.S. Bancorp, Wells Fargo & Company. Non-advanced approaches BHCs may elect to opt out of including AOCI in capital. For the purpose of DFAST 2014, the Federal Reserve assumed that all non-advanced approaches BHCs would opt out of including AOCI.

to-default in the tail of the distribution of defaults, where the tail percentile is calibrated to the severity of the macroeconomic scenario.

The IDR models estimate losses from jump-to-default for various exposure types, including single-name, index and index-tranche, and securitizations, at different levels of granularity depending on exposure type. The loss estimates are based on simulation models of obligor-level defaults. The IDR loss models rely on position and exposure data provided by the firms. IDR losses occur over nine quarters.

Losses on trading positions as a result of a global market shock were estimated only for the six BHCs with large trading operations since trading operations determine risk and performance to a larger extent at these firms than at any other BHCs participating in DFAST 2014. In addition, the Federal Reserve's projections of PPNR for all 30 BHCs incorporate the effect of the supervisory scenarios on the revenues generated by day-to-day trading activities, such as market-making for customers and clients.

Largest counterparty default

To estimate losses from the default of counterparties to derivatives and securities financing agreements, the Federal Reserve applied a counterparty default component to the eight BHCs that have substantial trading or custodial operations. The loss is based on the assumed instantaneous and unexpected default of a BHC's largest counterparty, defined as the counterparty that would produce the largest total net stressed loss if it were to default on all of its derivative and securities financing agreements. Net stressed loss was estimated using net stressed current exposure (CE), which is derived by applying the global market shock to the unstressed positions as well as any collateral posted or received. For derivative agreements, applicable CDS hedges and CVA were netted from the net stressed current exposure. A recovery rate of 10 percent was assumed for both net stressed CE and applicable CDS hedges. The recovery value equals the value at the time of default as reflected in market prices.

Similar to the global market shock component, the loss associated with the counterparty default component occurs in the first quarter of the projection and is an add-on to the macroeconomic conditions and financial market environment in the supervisory scenarios. Certain sovereign entities (Canada, France,

Germany, Italy, Japan, the United Kingdom, and the United States) and designated clearing counterparties were excluded when selecting the largest counterparty.

Losses Related to Operational-Risk Events

Losses related to operational-risk events are a component of PPNR and include losses stemming from events such as fraud, employee lawsuits, or computer system or other operating disruptions. Operational-risk loss estimates include historically-based loss estimates, based on the average of three approaches, and estimates of potential costs from unfavorable litigation outcomes, which reflect elevated litigation risk and the associated increase in legal reserves observed in recent years. In all three models, a panel regression model, a loss distribution approach (LDA), and a historical simulation approach, projections of operational-risk-related losses for the 30 BHCs are modeled for each of seven operational-risk categories identified in the Board's advanced approaches rule.⁵⁹ All three models are based on historical operational-loss data submitted by the BHCs on the FR Y-14Q.

In the panel regression model, projections of losses related to operational-risk events are the product of two primary components: loss frequency and loss severity. The expected loss frequency is the estimated number of operational-loss events in the supervisory scenario, while loss severity is the estimated loss per event in each category. Loss frequency is modeled as a function of macroeconomic variables and BHC-specific characteristics. The model is estimated using FR Y-14Q data on operational-loss events as reported by BHCs. Macroeconomic variables, such as the real GDP growth rate, stock market return and volatility, credit spread, and the unemployment rate, are included directly in the panel regression model and/or used to project certain firm-specific characteristics. Loss is projected as a product of projected loss frequency from the panel regression model and loss severity, which equals the historical dollar loss per event in each operational-risk category. Total losses related to operational-risk events equal losses summed across operational-risk categories. Because the relationship between the frequency of

⁵⁹ The seven operational-loss event type categories identified in the Federal Reserve's advanced approaches rule are internal fraud; external fraud; employment practices and workplace safety; clients, products, and business practices; damage to physical assets; business disruption and system failures; and execution, delivery, and process management. See 12 CFR part 217, subpart E.

operational-risk events and macroeconomic conditions varies across the categories, separate models were estimated for each category.⁶⁰

In the LDA model, expected losses related to operational-risk conditional on the macroeconomic scenarios are proxied by the losses at different percentiles of simulated, annualized loss distributions. The loss frequency is assumed to follow a Poisson distribution, in which the estimated intensity parameter of the Poisson distribution is specific to each event type and BHC. A loss severity distribution is also fit to each event type for each BHC.⁶¹ The distribution of aggregate annual losses is simulated, and the macroeconomic scenario is implicitly incorporated in the results through the percentile choice, which was based on analysis of historical loss data for all BHCs taken together. The approach used to choose the percentile for each scenario essentially targets the total loss forecast for all BHCs and allows the LDA approach to split this loss among the individual BHCs and event types. Loss forecasts for an individual BHC are the sum of the BHCs' loss estimates for each event type.

In the third approach—the historical simulation approach—the distribution of aggregate annual losses are simulated by repeatedly drawing the annual event frequency from the same distribution used in the LDA, but the severity of those events was drawn from historical realized loss data rather than an estimated loss severity distribution. Losses from the same percentile of the distribution as in the LDA are used to approximate the supervisory scenarios.

Mortgage Repurchase Losses

Mortgage repurchase expenses are a component of PPNR and are related to litigation, or to demands by mortgage investors to repurchase loans deemed to have breached representations and warranties, or to

loans insured by the U.S. government for which coverage could be denied if loan defects are identified. Mortgage repurchase losses for loans sold with representations and warranties liability are estimated in two parts. The first part is to estimate credit losses for all loans sold by a BHC that have outstanding representations and warranties liability, including loans sold as whole loans, into private-label securities (PLS) or to a GSE (Fannie Mae and Freddie Mac) or loans insured by the government. This part takes into account both losses recognized to date and future losses projected over the remaining lifetime of the loans. The second part is to estimate the share of this credit loss that may be ultimately put back to the selling BHC (whether through contractual repurchase, a settlement agreement, or litigation loss).

Future credit loss rates for mortgages (e.g., grouped by vintage and investor type) are projected using industrywide data and models that incorporate the house price assumptions in the supervisory scenario.⁶² For GSE loans, industrywide credit loss rates are adjusted to reflect the relative credit performance of loans sold by each BHC and are applied to the BHC's outstanding balances. These estimates are based on vintage-level data on original and current unpaid balances, current delinquency status, and losses recognized to date.

The share of past and future credit losses likely to be ultimately put back to the selling BHCs (the “put-back rate”) is estimated separately for each investor type. For whole loans and loans sold into PLS, the estimated put-back rate is based on information from recent settlement activities in the banking industry and incorporates adjustments for supervisory assessments of BHC-specific put-back risk. For government-insured loans, the estimated put-back rate is also based on information from recent settlement activities. Finally, for loans sold to Fannie Mae and Freddie Mac, the estimated put-back rate is based on historical information on the repurchases of loans sold to Fannie Mae or Freddie Mac, with consideration given to the relative seasoning of each vintage and the time interval between default and demand.

⁶⁰ Operational-risk losses due to damage to physical assets, and business disruption and system failure, employment practices, and workplace safety are not expected to be dependent on the macroeconomic environment and therefore were set equal to each BHC's average nine-quarter operational-risk loss in that category. External fraud losses of firms focused on credit card activities were modeled using each BHC's average quarterly losses during the period from the beginning of the financial crisis in the third quarter of 2007 through the second quarter of 2009.

⁶¹ Multiple candidate specifications for the distribution were fit to the data, and the final specification was chosen based on a number of criteria, including a measure of goodness-of-fit.

⁶² The data used to model credit losses for government-insured loans and loans sold to GSEs were loans randomly selected from an industry database. The data used to model credit losses for loans sold into private-label securities and as whole loans were loans in proxy deals chosen based on the dealer, issuer, and originator information contained in the database.

Pre-provision Net Revenue

PPNR is forecast using a series of autoregressive models that relate the components of a BHC's revenues and non-credit-related expenses, expressed as a share of relevant asset or liability balances, to BHC characteristics, and to macroeconomic variables.

These models are estimated using historical, merger-adjusted data from the FR Y-9C. Separate models are estimated for 22 different components of PPNR, including eight components of interest income, five components of interest expense, five components of noninterest non-trading income, three components of noninterest expenses, and trading revenue. When choosing the level of detail at which to model the components of PPNR, consideration is given both to the BHCs' business models and the ability to accurately model small components of revenue. Movements in PPNR stemming from operational-risk events, mortgage repurchases, or OREO are modeled in separate frameworks, described earlier in this document. The PPNR model estimates and projections are adjusted where appropriate to avoid double-counting movements associated with these items. In addition, gains or losses associated with debt valuation adjustments (DVA) are removed from the historical PPNR data series used to estimate the model, and, as a result, PPNR projections do not include DVA gains or losses under the supervisory scenarios.

The model specification varies somewhat by PPNR component. But in general, each component is related to characteristics of the BHCs, including, in some cases, total assets, asset composition, funding sources, and liabilities. In some PPNR components, these measures of BHC portfolio and business activity do not adequately capture the significant variation across BHCs, so BHC-specific controls are included in the models for these components. Macroeconomic variables used to project PPNR include yields on Treasury securities, corporate bond yields, mortgage rates, real GDP, and stock market price movements and volatility. The specific macroeconomic variables differ across equations based on statistical predictive power and economic interpretation.

Because trading revenues are volatile, forecasts of PPNR from trading activities at the six BHCs subject to the global market shock are modeled in the aggregate and then allocated to each BHC based on a measure of the BHC's market share. In addition, because forecasts of trading revenues are intended to include the effect of the relevant macroeconomic

variables and to exclude the effect of the global market shock, net trading revenue is modeled using a median regression approach to lessen the influence of extreme movements in trading revenue associated with the recent financial crisis. Trading revenues for the remaining BHCs are modeled in a framework similar to that of other PPNR components.

Balance Sheet Items and Risk-Weighted Assets (RWAs)

The BHC balance sheet is projected based on a model that relates industrywide loan and non-loan asset growth to each other and to broader economic variables including a proxy for loan supply. The model allows for both long-run relationships between the industry aggregates and macroeconomic variables, as well as short-term dynamics that cause deviations from these relationships. It is estimated using industry aggregate data from the Federal Reserve's Financial Accounts of the United States and from the National Income and Product Accounts.

Industry loan and asset growth rates are projected over the planning horizon using the macroeconomic variables prescribed in the supervisory scenario. Over this horizon, each BHC is assumed to maintain a constant share of the industry's total assets, total loans, and total trading assets. In addition, each BHC is assumed to maintain a constant mix within their loan and trading asset categories. These assumptions are applied as follows. Each category of loans at a BHC is assumed to grow at the projected rate of total loans in the industry. Each category of trading assets at a BHC is assumed to grow as a function of both the projected rate of total assets and the market value of trading assets in the industry. All other BHC's assets are assumed to grow at the projected rate of non-loan assets in the industry. The BHC's security portfolio is the residual category, and its level is set such that the sum of security and non-security assets grows at the projected rate of total assets. Growth in securities is assumed to be in short-term, riskless assets.

Balance sheet projections incorporated expected changes to a BHC's business plan, such as mergers, acquisition, and divestitures, that are likely to have a material impact on the its capital adequacy and funding profile. BHC-submitted data were used to adjust the projected balance sheet in the quarter when the change was expected to occur. Once adjusted, assets

were assumed to grow at the same rate as the pre-adjusted balance sheet. Only divestitures that were either completed or contractually agreed upon before January 6, 2014, were incorporated.

Estimating risk-weighted assets (RWAs) under the two different regulatory capital regimes in place over the planning horizon requires the calculation of three RWA components: market risk-weighted assets (MRWAs) and two types of credit RWAs, generalized RWAs under the capital framework that was in effect as of October 1, 2013, and standardized RWAs under the revised capital framework. For asset categories subject to the market risk rule, the five components of MRWAs are value at risk (VaR), stressed VaR (SVaR), incremental risk charge, specific risk charge, and comprehensive risk charge. The SVaR and the specific and comprehensive risk charges are assumed to evolve according to projections of the BHCs trading assets. VaR and the incremental risk charge are updated using the estimated volatility of the trading portfolio, which is a function of stock market volatility in the supervisory scenarios, and the growth in trading assets.

For all asset categories not subject to the market risk rule, generalized risk weights are imputed from FR Y-9C data. These weights are held fixed throughout the forecast horizon to reflect an assumption that the credit portfolio's underlying risk features remain constant throughout the horizon. In computing standardized RWAs, these generalized risk weights are adjusted to reflect the standardized approach by applying the risk weight differences between the two approaches to the relevant exposures. Estimates of the additional capital requirements for past due exposures under the standardized approach are consistent with the estimated loss forecast for that exposure.

Equity Capital and Regulatory Capital

The final modeling step translates the projections of revenues, expenses, losses, and provisions from the models described above into estimates of tier 1 common and regulatory capital for each BHC under the supervisory scenarios. The projected components of pre-tax net income are summed to estimate taxable income, incorporating each BHC's reported one-time revenue and expense items. A consistent tax rate across all BHCs is applied to taxable income to calcu-

late after-tax net income over the projection period.⁶³ Projected after-tax net income, combined with the capital action assumptions prescribed in the Dodd-Frank Act stress test rules, are used to project quarter-by-quarter changes in equity capital.⁶⁴

The change in equity capital equals projected after-tax net income minus capital distributions (dividends and any other actions that disperse equity), plus any employee compensation-related issuance or other corporate actions that increase equity, plus other comprehensive income and other equity adjustments that are consistent with the Dodd-Frank Act stress test rules.

DVA, goodwill and intangible assets (other than mortgage and non-mortgage servicing assets), and components of AOCI other than unrealized gains (losses) on AFS securities are assumed to remain constant over the planning horizon. The Federal Reserve included the effects of certain planned mergers, acquisitions, or divestitures. BHC-submitted data regarding these changes were incorporated into estimates of goodwill and intangible assets. BHC projections of tier 2 capital, other than includable ALLL, and extraordinary items were incorporated into capital calculations. Similarly, certain non-common elements of tier 1 capital were incorporated for revised capital calculations.

Projected changes in equity capital in turn determine changes in tier 1 common and regulatory capital.

⁶³ For a discussion of the effect of changing this tax rate assumption on the post stress tier 1 common ratio, see box 2 of Board of Governors of the Federal Reserve System (2012), "Dodd-Frank Act Stress Test 2013: Supervisory Stress Test Methodology and Results," available at www.federalreserve.gov/newsevents/press/bcreg/20130307a.htm.

⁶⁴ The Federal Reserve used the following capital action assumptions in projecting post-stress capital levels and ratios: (1) for the fourth quarter of 2013, each company's actual capital actions as of the end of that quarter; (2) for each quarter from the first quarter of 2014 through the end of 2015, each company's projections of capital included: (i) common stock dividends equal to the quarterly average dollar amount of common stock dividends that the company paid in the previous year (that is, from first through the fourth quarter of 2013); (ii) 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; and (iii) an assumption of no redemption, repurchase, or issuance of any capital instrument that is eligible for inclusion in the numerator of a regulatory capital ratio, except for common stock issuances associated with expensed employee compensation. These assumptions are consistent with the capital action assumptions companies are required to use in their Dodd-Frank Act company-run stress tests. See 12 CFR 252.56(b)(2).

Tier 1 common capital is calculated using the definition of capital applicable as of October 1, 2013, in keeping with the interim final rules the Board published in September 2013. However, regulatory capital is calculated consistent with the revised capital framework *that is in effect during the projected quarter of the planning horizon*. The definition of regulatory capital changes throughout the planning horizon, in accordance with the transition arrangements in the revised capital framework approved by the Board in July 2013. For example, at the beginning of the planning horizon, projected tier 1 capital includes limited amounts of trust preferred securities and cumulative perpetual preferred securities, but the revised capital framework excludes those securities from tier 1 capital beginning in 2014 for advanced approaches BHCs and in 2015 for other BHCs. In addition, projected regulatory capital at advanced approaches BHCs includes 20 percent of eligible AOCI in 2014 and 40 percent of AOCI in 2015.

Capital ratios are calculated incorporating the Federal Reserve projections of average total assets and risk-weighted assets. The tier 1 common ratio was calculated based on the generalized approach for calculating risk-weighted assets in all quarters of the planning horizon. All risk-based capital ratios incorporated the generalized approach for calculating risk-weighted assets in projections of the first five quarters of the planning horizon (fourth quarter 2013 through fourth quarter 2014) and the standardized approach for calculating risk-weighted assets in projections of the last four quarters of the planning horizon (first quarter 2015 through fourth quarter 2015). Projected capital levels and ratios were not adjusted to account for any differences between projected and actual performance of the BHCs during the time the supervisory stress test results were being produced in the fourth quarter of 2013 and the first quarter of 2014.

Appendix C: BHC-Specific Results

Tables begin on next page.

Table C.1.A. Ally Financial Inc.

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
Federal Reserve estimates in the severely adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	7.9	6.3	6.3
Common equity tier 1 capital ratio (%) ²	n/a	7.3	7.3
Tier 1 risk-based capital ratio (%)	15.4	9.1	9.1
Total risk-based capital ratio (%)	16.4	10.6	10.6
Tier 1 leverage ratio (%)	13.2	7.9	7.9

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	5.0	5.0
First-lien mortgages, domestic	0.4	6.0
Junior liens and HELOCs, domestic	0.2	9.9
Commercial and industrial ²	1.4	4.1
Commercial real estate, domestic	0.1	4.8
Credit cards	0.0	0.0
Other consumer ³	2.9	5.2
Other loans ⁴	0.0	3.9

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	127.3	129.4	137.3

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	3.6	2.3
Other revenue ³	0.0	
<i>less</i>		
Provisions	5.7	
Realized losses/gains on securities (AFS/HTM)	0.6	
Trading and counterparty losses ⁴	0.0	
Other losses/gains ⁵	0.0	
<i>equals</i>		
Net income before taxes	-2.7	-1.8
Memo items		
Other comprehensive income ⁶	0.0	
<i>Other effects on capital</i>	<i>Q4 2014</i>	<i>Q4 2015</i>
AOCI included in capital (billions of dollars) ⁷	0.0	0.0

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.1.B. Ally Financial Inc.

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
Federal Reserve estimates in the adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	7.9	10.0	7.6
Common equity tier 1 capital ratio (%) ²	n/a	9.4	8.8
Tier 1 risk-based capital ratio (%)	15.4	11.9	10.6
Total risk-based capital ratio (%)	16.4	13.3	11.8
Tier 1 leverage ratio (%)	13.2	10.2	8.9

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	3.8	3.8
First-lien mortgages, domestic	0.3	4.1
Junior liens and HELOCs, domestic	0.2	6.9
Commercial and industrial ²	0.9	2.8
Commercial real estate, domestic	0.1	3.0
Credit cards	0.0	0.0
Other consumer ³	2.3	4.2
Other loans ⁴	0.0	2.3

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	127.3	134.1	140.7

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	5.3	3.4
Other revenue ³	0.0	
<i>less</i>		
Provisions	4.1	
Realized losses/gains on securities (AFS/HTM)	0.4	
Trading and counterparty losses ⁴	0.0	
Other losses/gains ⁵	0.0	
<i>equals</i>		
Net income before taxes	0.8	0.5
Memo items		
Other comprehensive income ⁶	0.0	
<i>Other effects on capital</i>	<i>Q4 2014</i>	<i>Q4 2015</i>
AOCI included in capital (billions of dollars) ⁷	0.0	0.0

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.2.A. American Express Company

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
Federal Reserve estimates in the severely adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	12.8	14.0	12.1
Common equity tier 1 capital ratio (%) ²	n/a	14.0	12.9
Tier 1 risk-based capital ratio (%)	12.8	14.0	12.3
Total risk-based capital ratio (%)	14.7	15.4	14.1
Tier 1 leverage ratio (%)	10.7	11.6	10.1

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	11.4	10.7
First-lien mortgages, domestic	0.0	0.0
Junior liens and HELOCs, domestic	0.0	0.0
Commercial and industrial ²	3.7	11.4
Commercial real estate, domestic	0.0	0.0
Credit cards	7.7	10.6
Other consumer ³	0.0	0.0
Other loans ⁴	0.1	4.5

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	123.2	124.5	130.6

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	20.9	13.6
Other revenue ³	0.0	
<i>less</i>		
Provisions	14.9	
Realized losses/gains on securities (AFS/HTM)	0.0	
Trading and counterparty losses ⁴	0.0	
Other losses/gains ⁵	0.0	
<i>equals</i>		
Net income before taxes	6.0	3.9
Memo items		
Other comprehensive income ⁶	-0.4	
<i>Other effects on capital</i>		
AOCI included in capital (billions of dollars) ⁷	-0.3	-0.7

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.2.B. American Express Company

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses

Federal Reserve estimates in the adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	12.8	16.3	12.5
Common equity tier 1 capital ratio (%) ²	n/a	16.2	13.9
Tier 1 risk-based capital ratio (%)	12.8	16.2	12.5
Total risk-based capital ratio (%)	14.7	17.6	14.4
Tier 1 leverage ratio (%)	10.7	13.2	10.4

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	8.9	8.2
First-lien mortgages, domestic	0.0	0.0
Junior liens and HELOCs, domestic	0.0	0.0
Commercial and industrial ²	2.7	8.3
Commercial real estate, domestic	0.0	0.0
Credit cards	6.1	8.4
Other consumer ³	0.0	0.0
Other loans ⁴	0.1	2.9

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	123.2	128.1	132.9

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	22.6	14.5
Other revenue ³	0.0	
<i>less</i>		
Provisions	11.5	
Realized losses/gains on securities (AFS/HTM)	0.0	
Trading and counterparty losses ⁴	0.0	
Other losses/gains ⁵	0.0	
<i>equals</i>		
Net income before taxes	11.1	7.1
Memo items		
Other comprehensive income ⁶	-0.6	
<i>Other effects on capital</i>		
AOCI included in capital (billions of dollars) ⁷	-0.4	-0.8

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.3.A. Bank of America Corporation

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
Federal Reserve estimates in the severely adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	11.1	6.0	5.9
Common equity tier 1 capital ratio (%) ²	n/a	6.8	6.8
Tier 1 risk-based capital ratio (%)	12.3	6.8	6.8
Total risk-based capital ratio (%)	15.4	9.2	9.2
Tier 1 leverage ratio (%)	7.8	4.4	4.4

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	54.9	5.8
First-lien mortgages, domestic	12.7	4.9
Junior liens and HELOCs, domestic	9.9	10.3
Commercial and industrial ²	8.2	3.8
Commercial real estate, domestic	5.6	8.9
Credit cards	13.7	13.4
Other consumer ³	2.7	3.5
Other loans ⁴	2.1	1.6

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	1,289.4	1,319.5	1,401.6

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	31.4	1.4
Other revenue ³	0.0	
<i>less</i>		
Provisions	57.0	
Realized losses/gains on securities (AFS/HTM)	0.5	
Trading and counterparty losses ⁴	15.8	
Other losses/gains ⁵	7.1	
<i>equals</i>		
Net income before taxes	-49.1	-2.3
Memo items		
Other comprehensive income ⁶	-1.8	
<i>Other effects on capital</i>		
AOCI included in capital (billions of dollars) ⁷	-1.7	-3.5

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.3.B. Bank of America Corporation

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
Federal Reserve estimates in the adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	11.1	11.1	8.7
Common equity tier 1 capital ratio (%) ²	n/a	9.6	8.5
Tier 1 risk-based capital ratio (%)	12.3	10.3	8.8
Total risk-based capital ratio (%)	15.4	12.5	11.4
Tier 1 leverage ratio (%)	7.8	6.6	5.7

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	40.0	4.2
First-lien mortgages, domestic	8.9	3.4
Junior liens and HELOCs, domestic	7.2	7.3
Commercial and industrial ²	5.3	2.4
Commercial real estate, domestic	3.6	5.6
Credit cards	11.2	10.9
Other consumer ³	2.2	2.9
Other loans ⁴	1.5	1.1

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	1,289.4	1,371.7	1,436.2

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	56.2	2.5
Other revenue ³	0.0	
<i>less</i>		
Provisions	36.2	
Realized losses/gains on securities (AFS/HTM)	0.6	
Trading and counterparty losses ⁴	8.0	
Other losses/gains ⁵	6.0	
<i>equals</i>		
Net income before taxes	5.4	0.2
Memo items		
Other comprehensive income ⁶	-20.2	
<i>Other effects on capital</i>		
AOCI included in capital (billions of dollars) ⁷	-6.4	-10.8

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.4.A. The Bank of New York Mellon Corporation

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
Federal Reserve estimates in the severely adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	14.1	16.1	13.1
Common equity tier 1 capital ratio (%) ²	n/a	15.0	13.8
Tier 1 risk-based capital ratio (%)	15.8	16.1	14.7
Total risk-based capital ratio (%)	16.8	16.3	15.3
Tier 1 leverage ratio (%)	5.6	6.6	5.3

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	0.8	1.6
First-lien mortgages, domestic	0.1	2.3
Junior liens and HELOCs, domestic	0.0	11.7
Commercial and industrial ²	0.1	5.1
Commercial real estate, domestic	0.1	8.6
Credit cards	0.0	0.0
Other consumer ³	0.0	0.5
Other loans ⁴	0.4	1.0

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	114.4	118.0	138.5

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	8.3	2.2
Other revenue ³	0.0	
<i>less</i>		
Provisions	0.8	
Realized losses/gains on securities (AFS/HTM)	0.2	
Trading and counterparty losses ⁴	1.3	
Other losses/gains ⁵	0.1	
<i>equals</i>		
Net income before taxes	6.0	1.6
Memo items		
Other comprehensive income ⁶	-0.1	
<i>Other effects on capital</i>		
AOCI included in capital (billions of dollars) ⁷	-0.3	-0.6

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.4.B. The Bank of New York Mellon Corporation

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
Federal Reserve estimates in the adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	14.1	17.6	13.6
Common equity tier 1 capital ratio (%) ²	n/a	15.1	13.3
Tier 1 risk-based capital ratio (%)	15.8	16.1	14.3
Total risk-based capital ratio (%)	16.8	16.3	14.7
Tier 1 leverage ratio (%)	5.6	6.6	5.4

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	0.6	1.1
First-lien mortgages, domestic	0.1	1.0
Junior liens and HELOCs, domestic	0.0	9.0
Commercial and industrial ²	0.1	4.4
Commercial real estate, domestic	0.1	5.5
Credit cards	0.0	0.0
Other consumer ³	0.0	0.6
Other loans ⁴	0.3	0.7

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	114.4	122.8	143.7

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	11.3	2.9
Other revenue ³	0.0	
<i>less</i>		
Provisions	0.4	
Realized losses/gains on securities (AFS/HTM)	0.2	
Trading and counterparty losses ⁴	0.6	
Other losses/gains ⁵	0.1	
<i>equals</i>		
Net income before taxes	10.0	2.6
Memo items		
Other comprehensive income ⁶	-4.4	
<i>Other effects on capital</i>		
	Q4 2014	Q4 2015
AOCI included in capital (billions of dollars) ⁷	-1.4	-2.3

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.5.A. BB&T Corporation

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
Federal Reserve estimates in the severely adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	9.4	8.4	8.4
Common equity tier 1 capital ratio (%) ²	n/a	8.1	8.1
Tier 1 risk-based capital ratio (%)	11.3	9.8	9.8
Total risk-based capital ratio (%)	13.9	11.6	11.6
Tier 1 leverage ratio (%)	9.0	8.0	8.0

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	5.2	4.5
First-lien mortgages, domestic	0.8	2.4
Junior liens and HELOCs, domestic	0.3	4.8
Commercial and industrial ²	0.7	4.4
Commercial real estate, domestic	1.9	6.2
Credit cards	0.3	15.2
Other consumer ³	0.9	6.3
Other loans ⁴	0.2	2.0

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	138.3	139.9	147.4

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	7.0	3.8
Other revenue ³	0.0	
<i>less</i>		
Provisions	5.5	
Realized losses/gains on securities (AFS/HTM)	0.0	
Trading and counterparty losses ⁴	0.0	
Other losses/gains ⁵	0.1	
<i>equals</i>		
Net income before taxes	1.4	0.8
Memo items		
Other comprehensive income ⁶	0.0	
<i>Other effects on capital</i>	<i>Q4 2014</i>	<i>Q4 2015</i>
AOCI included in capital (billions of dollars) ⁷	0.0	0.0

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.5.B. BB&T Corporation

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
Federal Reserve estimates in the adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	9.4	10.2	9.1
Common equity tier 1 capital ratio (%) ²	n/a	9.9	9.3
Tier 1 risk-based capital ratio (%)	11.3	11.6	11.0
Total risk-based capital ratio (%)	13.9	13.2	13.0
Tier 1 leverage ratio (%)	9.0	9.3	8.7

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	3.7	3.1
First-lien mortgages, domestic	0.5	1.6
Junior liens and HELOCs, domestic	0.2	3.6
Commercial and industrial ²	0.5	3.1
Commercial real estate, domestic	1.3	4.2
Credit cards	0.2	12.3
Other consumer ³	0.7	4.9
Other loans ⁴	0.2	1.3

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	138.3	144.3	151.2

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	9.6	5.1
Other revenue ³	0.0	
<i>less</i>		
Provisions	3.4	
Realized losses/gains on securities (AFS/HTM)	0.0	
Trading and counterparty losses ⁴	0.0	
Other losses/gains ⁵	0.2	
<i>equals</i>		
Net income before taxes	6.0	3.2
Memo items		
Other comprehensive income ⁶	0.0	
<i>Other effects on capital</i>	<i>Q4 2014</i>	<i>Q4 2015</i>
AOCI included in capital (billions of dollars) ⁷	0.0	0.0

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.6.A. BBVA Compass Bancshares, Inc.

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
Federal Reserve estimates in the severely adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	11.6	8.5	8.5
Common equity tier 1 capital ratio (%) ²	n/a	8.6	8.6
Tier 1 risk-based capital ratio (%)	11.8	8.6	8.6
Total risk-based capital ratio (%)	14.1	10.6	10.6
Tier 1 leverage ratio (%)	10.2	7.5	7.5

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	2.6	5.2
First-lien mortgages, domestic	0.3	2.2
Junior liens and HELOCs, domestic	0.2	9.1
Commercial and industrial ²	0.6	4.2
Commercial real estate, domestic	1.1	10.3
Credit cards	0.1	18.9
Other consumer ³	0.1	4.9
Other loans ⁴	0.1	2.1

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	55.2	55.6	58.4

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	1.2	1.6
Other revenue ³	0.0	
<i>less</i>		
Provisions	2.8	
Realized losses/gains on securities (AFS/HTM)	0.0	
Trading and counterparty losses ⁴	0.0	
Other losses/gains ⁵	0.1	
<i>equals</i>		
Net income before taxes	-1.8	-2.5
Memo items		
Other comprehensive income ⁶	0.0	
<i>Other effects on capital</i>		
AOCI included in capital (billions of dollars) ⁷	Q4 2014	Q4 2015
	0.0	0.0

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.6.B. BBVA Compass Bancshares, Inc.

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
Federal Reserve estimates in the adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	11.6	11.4	11.1
Common equity tier 1 capital ratio (%) ²	n/a	11.1	10.8
Tier 1 risk-based capital ratio (%)	11.8	11.1	10.9
Total risk-based capital ratio (%)	14.1	12.8	12.8
Tier 1 leverage ratio (%)	10.2	9.5	9.5

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	1.8	3.6
First-lien mortgages, domestic	0.2	1.4
Junior liens and HELOCs, domestic	0.2	7.5
Commercial and industrial ²	0.4	2.8
Commercial real estate, domestic	0.7	6.7
Credit cards	0.1	15.0
Other consumer ³	0.1	4.0
Other loans ⁴	0.1	1.5

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	55.2	57.4	59.7

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	2.0	2.7
Other revenue ³	0.0	
<i>less</i>		
Provisions	1.7	
Realized losses/gains on securities (AFS/HTM)	0.0	
Trading and counterparty losses ⁴	0.0	
Other losses/gains ⁵	0.1	
<i>equals</i>		
Net income before taxes	0.2	0.3
Memo items		
Other comprehensive income ⁶	0.0	
<i>Other effects on capital</i>	<i>Q4 2014</i>	<i>Q4 2015</i>
AOCI included in capital (billions of dollars) ⁷	0.0	0.0

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.7.A. BMO Financial Corp.

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
Federal Reserve estimates in the severely adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	10.8	7.6	7.6
Common equity tier 1 capital ratio (%) ²	n/a	8.9	8.9
Tier 1 risk-based capital ratio (%)	10.8	8.9	8.5
Total risk-based capital ratio (%)	15.2	12.5	12.4
Tier 1 leverage ratio (%)	7.9	6.5	6.0

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	3.3	6.1
First-lien mortgages, domestic	0.6	6.7
Junior liens and HELOCs, domestic	0.4	7.2
Commercial and industrial ²	0.8	5.1
Commercial real estate, domestic	0.8	9.7
Credit cards	0.1	15.2
Other consumer ³	0.2	2.7
Other loans ⁴	0.5	5.1

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	75.1	76.1	81.1

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	1.5	1.3
Other revenue ³	0.0	
<i>less</i>		
Provisions	3.5	
Realized losses/gains on securities (AFS/HTM)	0.0	
Trading and counterparty losses ⁴	0.0	
Other losses/gains ⁵	0.2	
<i>equals</i>		
Net income before taxes	-2.1	-1.8
Memo items		
Other comprehensive income ⁶	0.0	
<i>Other effects on capital</i>		
AOCI included in capital (billions of dollars) ⁷	Q4 2014	Q4 2015
	0.0	0.0

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.7.B. BMO Financial Corp.

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
Federal Reserve estimates in the adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	10.8	10.4	9.9
Common equity tier 1 capital ratio (%) ²	n/a	11.3	11.1
Tier 1 risk-based capital ratio (%)	10.8	11.3	9.9
Total risk-based capital ratio (%)	15.2	14.4	13.8
Tier 1 leverage ratio (%)	7.9	8.2	6.9

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	2.4	4.4
First-lien mortgages, domestic	0.4	4.5
Junior liens and HELOCs, domestic	0.4	6.4
Commercial and industrial ²	0.5	3.5
Commercial real estate, domestic	0.6	6.8
Credit cards	0.1	12.2
Other consumer ³	0.2	2.2
Other loans ⁴	0.3	3.6

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	75.1	78.3	82.8

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	2.4	2.1
Other revenue ³	0.0	
<i>less</i>		
Provisions	2.2	
Realized losses/gains on securities (AFS/HTM)	0.0	
Trading and counterparty losses ⁴	0.0	
Other losses/gains ⁵	0.2	
<i>equals</i>		
Net income before taxes	0.0	0.0
Memo items		
Other comprehensive income ⁶	0.0	
<i>Other effects on capital</i>	<i>Q4 2014</i>	<i>Q4 2015</i>
AOCI included in capital (billions of dollars) ⁷	0.0	0.0

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.8.A. Capital One Financial Corporation

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
Federal Reserve estimates in the severely adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	12.7	7.8	7.8
Common equity tier 1 capital ratio (%) ²	n/a	8.0	8.0
Tier 1 risk-based capital ratio (%)	13.1	8.4	8.4
Total risk-based capital ratio (%)	15.3	10.1	10.1
Tier 1 leverage ratio (%)	10.1	6.7	6.7

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	22.8	11.8
First-lien mortgages, domestic	1.4	3.9
Junior liens and HELOCs, domestic	0.2	10.0
Commercial and industrial ²	1.4	7.6
Commercial real estate, domestic	1.3	6.4
Credit cards	15.0	20.5
Other consumer ³	3.1	9.7
Other loans ⁴	0.4	3.5

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	215.8	213.8	241.0

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	21.2	7.1
Other revenue ³	0.0	
<i>less</i>		
Provisions	26.9	
Realized losses/gains on securities (AFS/HTM)	0.1	
Trading and counterparty losses ⁴	0.0	
Other losses/gains ⁵	0.2	
<i>equals</i>		
Net income before taxes	-6.0	-2.0
Memo items		
Other comprehensive income ⁶	-0.6	
<i>Other effects on capital</i>		
AOCI included in capital (billions of dollars) ⁷	-0.3	-0.6

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.8.B. Capital One Financial Corporation

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
Federal Reserve estimates in the adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	12.7	12.2	11.7
Common equity tier 1 capital ratio (%) ²	n/a	10.7	10.0
Tier 1 risk-based capital ratio (%)	13.1	11.0	10.3
Total risk-based capital ratio (%)	15.3	12.8	12.2
Tier 1 leverage ratio (%)	10.1	8.7	8.4

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	18.0	9.3
First-lien mortgages, domestic	0.5	1.4
Junior liens and HELOCs, domestic	0.2	8.2
Commercial and industrial ²	1.0	5.4
Commercial real estate, domestic	0.9	4.3
Credit cards	12.7	17.1
Other consumer ³	2.5	7.9
Other loans ⁴	0.2	2.1

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	215.8	224.6	247.0

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	25.3	8.3
Other revenue ³	0.0	
<i>less</i>		
Provisions	20.7	
Realized losses/gains on securities (AFS/HTM)	0.0	
Trading and counterparty losses ⁴	0.0	
Other losses/gains ⁵	0.1	
<i>equals</i>		
Net income before taxes	4.5	1.5
Memo items		
Other comprehensive income ⁶	-2.7	
<i>Other effects on capital</i>		
AOCI included in capital (billions of dollars) ⁷	-0.9	-1.4

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.9.A. Citigroup Inc.

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
Federal Reserve estimates in the severely adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	12.7	7.2	7.2
Common equity tier 1 capital ratio (%) ²	n/a	9.3	9.3
Tier 1 risk-based capital ratio (%)	13.6	9.3	9.3
Total risk-based capital ratio (%)	16.7	11.9	11.9
Tier 1 leverage ratio (%)	8.1	5.7	5.7

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	55.5	8.4
First-lien mortgages, domestic	6.8	7.2
Junior liens and HELOCs, domestic	4.6	13.5
Commercial and industrial ²	7.5	4.9
Commercial real estate, domestic	1.1	10.5
Credit cards	24.8	17.0
Other consumer ³	6.1	14.0
Other loans ⁴	4.7	2.6

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	1,069.0	1,100.2	1,180.9

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	32.5	1.7
Other revenue ³	0.0	
<i>less</i>		
Provisions	55.7	
Realized losses/gains on securities (AFS/HTM)	1.3	
Trading and counterparty losses ⁴	16.1	
Other losses/gains ⁵	5.2	
<i>equals</i>		
Net income before taxes	-45.7	-2.4
Memo items		
Other comprehensive income ⁶	-0.6	
<i>Other effects on capital</i>		
AOCI included in capital (billions of dollars) ⁷	-4.2	-7.7

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.9.B. Citigroup Inc.

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
Federal Reserve estimates in the adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	12.7	10.6	9.7
Common equity tier 1 capital ratio (%) ²	n/a	11.7	11.1
Tier 1 risk-based capital ratio (%)	13.6	11.7	11.1
Total risk-based capital ratio (%)	16.7	14.2	13.7
Tier 1 leverage ratio (%)	8.1	7.0	6.6

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	43.4	6.5
First-lien mortgages, domestic	4.8	5.0
Junior liens and HELOCs, domestic	3.4	9.8
Commercial and industrial ²	5.4	3.6
Commercial real estate, domestic	0.7	6.5
Credit cards	20.6	14.0
Other consumer ³	5.4	12.3
Other loans ⁴	3.2	1.7

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	1,069.0	1,134.1	1,204.7

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	46.0	2.3
Other revenue ³	0.0	
<i>less</i>		
Provisions	39.4	
Realized losses/gains on securities (AFS/HTM)	1.5	
Trading and counterparty losses ⁴	9.5	
Other losses/gains ⁵	5.4	
<i>equals</i>		
Net income before taxes	-9.8	-0.5
Memo items		
Other comprehensive income ⁶	-12.9	
<i>Other effects on capital</i>		
AOCI included in capital (billions of dollars) ⁷	-7.2	-12.7

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.10.A. Comerica Incorporated

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
Federal Reserve estimates in the severely adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	10.7	8.6	8.6
Common equity tier 1 capital ratio (%) ²	n/a	8.4	8.4
Tier 1 risk-based capital ratio (%)	10.7	8.4	8.4
Total risk-based capital ratio (%)	13.4	10.2	10.2
Tier 1 leverage ratio (%)	10.9	8.6	8.6

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	2.1	4.7
First-lien mortgages, domestic	0.1	4.3
Junior liens and HELOCs, domestic	0.1	5.8
Commercial and industrial ²	0.8	3.0
Commercial real estate, domestic	0.8	7.5
Credit cards	0.0	0.0
Other consumer ³	0.0	8.4
Other loans ⁴	0.3	7.1

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	64.0	65.2	67.6

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	1.1	1.7
Other revenue ³	0.0	
<i>less</i>		
Provisions	2.3	
Realized losses/gains on securities (AFS/HTM)	0.0	
Trading and counterparty losses ⁴	0.0	
Other losses/gains ⁵	0.0	
<i>equals</i>		
Net income before taxes	-1.2	-1.7
Memo items		
Other comprehensive income ⁶	0.0	
<i>Other effects on capital</i>		
	Q4 2014	Q4 2015
AOCI included in capital (billions of dollars) ⁷	0.0	0.0

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.10.B. Comerica Incorporated

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
Federal Reserve estimates in the adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	10.7	10.5	10.3
Common equity tier 1 capital ratio (%) ²	n/a	10.2	10.0
Tier 1 risk-based capital ratio (%)	10.7	10.2	10.0
Total risk-based capital ratio (%)	13.4	11.5	11.5
Tier 1 leverage ratio (%)	10.9	10.2	10.2

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	1.3	3.0
First-lien mortgages, domestic	0.0	2.5
Junior liens and HELOCs, domestic	0.1	4.4
Commercial and industrial ²	0.5	1.9
Commercial real estate, domestic	0.5	4.8
Credit cards	0.0	0.0
Other consumer ³	0.0	7.2
Other loans ⁴	0.2	4.3

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	64.0	67.1	69.2

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	1.9	2.8
Other revenue ³	0.0	
<i>less</i>		
Provisions	1.2	
Realized losses/gains on securities (AFS/HTM)	0.0	
Trading and counterparty losses ⁴	0.0	
Other losses/gains ⁵	0.0	
<i>equals</i>		
Net income before taxes	0.7	1.0
Memo items		
Other comprehensive income ⁶	0.0	
<i>Other effects on capital</i>		
AOCI included in capital (billions of dollars) ⁷	Q4 2014	Q4 2015
	0.0	0.0

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.11.A. Discover Financial Services

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
Federal Reserve estimates in the severely adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	14.7	13.7	13.2
Common equity tier 1 capital ratio (%) ²	n/a	13.1	12.5
Tier 1 risk-based capital ratio (%)	15.6	13.9	13.3
Total risk-based capital ratio (%)	17.9	15.7	15.2
Tier 1 leverage ratio (%)	13.7	12.1	11.9

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	9.5	15.2
First-lien mortgages, domestic	0.0	0.0
Junior liens and HELOCs, domestic	0.0	14.9
Commercial and industrial ²	0.0	13.2
Commercial real estate, domestic	0.0	35.4
Credit cards	8.3	16.4
Other consumer ³	1.2	10.2
Other loans ⁴	0.0	4.5

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	65.7	64.9	68.8

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	12.0	15.5
Other revenue ³	0.0	
<i>less</i>		
Provisions	11.4	
Realized losses/gains on securities (AFS/HTM)	0.0	
Trading and counterparty losses ⁴	0.0	
Other losses/gains ⁵	0.0	
<i>equals</i>		
Net income before taxes	0.6	0.7
Memo items		
Other comprehensive income ⁶	0.0	
<i>Other effects on capital</i>		
AOCI included in capital (billions of dollars) ⁷	Q4 2014	Q4 2015
	0.0	0.0

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.11.B. Discover Financial Services

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
Federal Reserve estimates in the adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	14.7	16.0	13.9
Common equity tier 1 capital ratio (%) ²	n/a	15.4	14.2
Tier 1 risk-based capital ratio (%)	15.6	16.2	14.7
Total risk-based capital ratio (%)	17.9	17.9	16.9
Tier 1 leverage ratio (%)	13.7	13.8	12.8

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	8.1	12.8
First-lien mortgages, domestic	0.0	0.0
Junior liens and HELOCs, domestic	0.0	9.2
Commercial and industrial ²	0.0	10.2
Commercial real estate, domestic	0.0	34.8
Credit cards	7.0	13.8
Other consumer ³	1.1	9.1
Other loans ⁴	0.0	2.6

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	65.7	66.6	70.0

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	12.9	16.4
Other revenue ³	0.0	
<i>less</i>		
Provisions	9.7	
Realized losses/gains on securities (AFS/HTM)	0.0	
Trading and counterparty losses ⁴	0.0	
Other losses/gains ⁵	0.0	
<i>equals</i>		
Net income before taxes	3.2	4.1
Memo items		
Other comprehensive income ⁶	0.0	
<i>Other effects on capital</i>		
AOCI included in capital (billions of dollars) ⁷	Q4 2014	Q4 2015
	0.0	0.0

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.12.A. Fifth Third Bancorp
 Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
 Federal Reserve estimates in the severely adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	9.9	8.4	8.4
Common equity tier 1 capital ratio (%) ²	n/a	7.9	7.9
Tier 1 risk-based capital ratio (%)	11.1	8.7	8.7
Total risk-based capital ratio (%)	14.3	11.8	11.8
Tier 1 leverage ratio (%)	10.6	8.5	8.5

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	4.8	5.5
First-lien mortgages, domestic	0.7	5.2
Junior liens and HELOCs, domestic	0.7	7.4
Commercial and industrial ²	1.6	4.9
Commercial real estate, domestic	0.9	9.4
Credit cards	0.4	18.9
Other consumer ³	0.3	2.6
Other loans ⁴	0.3	3.1

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	114.5	116.2	122.4

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	4.7	3.7
Other revenue ³	0.0	
<i>less</i>		
Provisions	4.5	
Realized losses/gains on securities (AFS/HTM)	0.1	
Trading and counterparty losses ⁴	0.0	
Other losses/gains ⁵	0.0	
<i>equals</i>		
Net income before taxes	0.1	0.1
Memo items		
Other comprehensive income ⁶	0.0	
<i>Other effects on capital</i>	<i>Q4 2014</i>	<i>Q4 2015</i>
AOCI included in capital (billions of dollars) ⁷	0.0	0.0

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.12.B. Fifth Third Bancorp

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
Federal Reserve estimates in the adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	9.9	10.1	9.2
Common equity tier 1 capital ratio (%) ²	n/a	9.6	9.1
Tier 1 risk-based capital ratio (%)	11.1	10.5	10.0
Total risk-based capital ratio (%)	14.3	12.9	12.7
Tier 1 leverage ratio (%)	10.6	10.0	9.6

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	3.6	4.0
First-lien mortgages, domestic	0.5	4.3
Junior liens and HELOCs, domestic	0.6	6.2
Commercial and industrial ²	1.1	3.2
Commercial real estate, domestic	0.6	6.3
Credit cards	0.3	15.0
Other consumer ³	0.3	2.1
Other loans ⁴	0.2	2.3

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	114.5	119.3	125.3

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	6.4	4.9
Other revenue ³	0.0	
<i>less</i>		
Provisions	2.8	
Realized losses/gains on securities (AFS/HTM)	0.1	
Trading and counterparty losses ⁴	0.0	
Other losses/gains ⁵	0.0	
<i>equals</i>		
Net income before taxes	3.5	2.7
Memo items		
Other comprehensive income ⁶	0.0	
<i>Other effects on capital</i>		
AOCI included in capital (billions of dollars) ⁷	Q4 2014	Q4 2015
	0.0	0.0

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.13.A. The Goldman Sachs Group, Inc.

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
Federal Reserve estimates in the severely adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	14.2	9.2	6.9
Common equity tier 1 capital ratio (%) ²	n/a	7.5	6.6
Tier 1 risk-based capital ratio (%)	16.3	8.4	7.3
Total risk-based capital ratio (%)	19.4	10.8	9.5
Tier 1 leverage ratio (%)	7.9	5.3	4.9

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	1.6	3.1
First-lien mortgages, domestic	0.0	7.5
Junior liens and HELOCs, domestic	0.0	10.9
Commercial and industrial ²	0.5	9.5
Commercial real estate, domestic	0.3	10.0
Credit cards	0.0	0.0
Other consumer ³	0.0	3.3
Other loans ⁴	0.8	1.8

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	436.7	456.1	595.2

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	4.9	0.5
Other revenue ³	0.0	
<i>less</i>		
Provisions	2.1	
Realized losses/gains on securities (AFS/HTM)	0.0	
Trading and counterparty losses ⁴	19.8	
Other losses/gains ⁵	6.0	
<i>equals</i>		
Net income before taxes	-23.0	-2.5
Memo items		
Other comprehensive income ⁶	0.0	
<i>Other effects on capital</i>	<i>Q4 2014</i>	<i>Q4 2015</i>
AOCI included in capital (billions of dollars) ⁷	-0.1	-0.2

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.13.B. The Goldman Sachs Group, Inc.

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
Federal Reserve estimates in the adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	14.2	10.4	9.6
Common equity tier 1 capital ratio (%) ²	n/a	8.3	8.2
Tier 1 risk-based capital ratio (%)	16.3	9.4	9.1
Total risk-based capital ratio (%)	19.4	11.7	11.5
Tier 1 leverage ratio (%)	7.9	5.7	5.6

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	1.1	2.1
First-lien mortgages, domestic	0.0	2.5
Junior liens and HELOCs, domestic	0.0	8.5
Commercial and industrial ²	0.4	6.1
Commercial real estate, domestic	0.2	6.3
Credit cards	0.0	0.0
Other consumer ³	0.0	2.9
Other loans ⁴	0.6	1.3

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	436.7	456.4	597.6

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	4.7	0.5
Other revenue ³	0.0	
<i>less</i>		
Provisions	1.4	
Realized losses/gains on securities (AFS/HTM)	0.0	
Trading and counterparty losses ⁴	13.8	
Other losses/gains ⁵	4.9	
<i>equals</i>		
Net income before taxes	-15.4	-1.6
Memo items		
Other comprehensive income ⁶	0.0	
<i>Other effects on capital</i>		
AOCI included in capital (billions of dollars) ⁷	-0.1	-0.2

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.14.A. HSBC North America Holdings Inc.

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
Federal Reserve estimates in the severely adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	14.7	6.6	6.6
Common equity tier 1 capital ratio (%) ²	n/a	9.4	9.4
Tier 1 risk-based capital ratio (%)	17.1	9.4	9.4
Total risk-based capital ratio (%)	26.5	18.2	18.2
Tier 1 leverage ratio (%)	7.8	4.4	4.4

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	10.0	10.8
First-lien mortgages, domestic	6.8	16.7
Junior liens and HELOCs, domestic	1.0	18.3
Commercial and industrial ²	0.7	2.8
Commercial real estate, domestic	1.1	12.6
Credit cards	0.1	16.4
Other consumer ³	0.1	10.8
Other loans ⁴	0.3	2.2

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	153.4	154.4	164.8

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	-1.1	-0.3
Other revenue ³	0.0	
<i>less</i>		
Provisions	8.5	
Realized losses/gains on securities (AFS/HTM)	0.1	
Trading and counterparty losses ⁴	0.0	
Other losses/gains ⁵	1.1	
<i>equals</i>		
Net income before taxes	-10.7	-3.4
Memo items		
Other comprehensive income ⁶	0.9	
<i>Other effects on capital</i>		
	Q4 2014	Q4 2015
AOCI included in capital (billions of dollars) ⁷	0.1	0.1

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.14.B. HSBC North America Holdings Inc.

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
Federal Reserve estimates in the adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	14.7	11.1	11.1
Common equity tier 1 capital ratio (%) ²	n/a	11.7	11.6
Tier 1 risk-based capital ratio (%)	17.1	12.2	12.2
Total risk-based capital ratio (%)	26.5	20.7	20.7
Tier 1 leverage ratio (%)	7.8	5.6	5.6

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	7.7	8.2
First-lien mortgages, domestic	5.4	13.2
Junior liens and HELOCs, domestic	0.8	15.5
Commercial and industrial ²	0.4	1.8
Commercial real estate, domestic	0.7	8.0
Credit cards	0.1	13.5
Other consumer ³	0.1	9.5
Other loans ⁴	0.2	1.4

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	153.4	160.3	169.7

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	3.0	0.9
Other revenue ³	0.0	
<i>less</i>		
Provisions	5.6	
Realized losses/gains on securities (AFS/HTM)	0.0	
Trading and counterparty losses ⁴	0.0	
Other losses/gains ⁵	0.5	
<i>equals</i>		
Net income before taxes	-3.2	-1.0
Memo items		
Other comprehensive income ⁶	-3.0	
<i>Other effects on capital</i>		
	Q4 2014	Q4 2015
AOCI included in capital (billions of dollars) ⁷	-0.9	-1.5

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.15.A. Huntington Bancshares Incorporated
 Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
 Federal Reserve estimates in the severely adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	10.9	7.4	7.4
Common equity tier 1 capital ratio (%) ²	n/a	7.9	7.9
Tier 1 risk-based capital ratio (%)	12.4	8.5	8.5
Total risk-based capital ratio (%)	14.7	10.8	10.8
Tier 1 leverage ratio (%)	10.9	7.5	7.5

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	2.1	4.9
First-lien mortgages, domestic	0.3	4.0
Junior liens and HELOCs, domestic	0.4	6.0
Commercial and industrial ²	0.6	4.8
Commercial real estate, domestic	0.6	6.9
Credit cards	0.0	8.1
Other consumer ³	0.2	3.3
Other loans ⁴	0.0	2.4

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	48.7	49.8	52.5

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	1.5	2.5
Other revenue ³	0.0	
<i>less</i>		
Provisions	2.3	
Realized losses/gains on securities (AFS/HTM)	0.0	
Trading and counterparty losses ⁴	0.0	
Other losses/gains ⁵	0.2	
<i>equals</i>		
Net income before taxes	-1.0	-1.7
Memo items		
Other comprehensive income ⁶	0.0	
<i>Other effects on capital</i>		
	Q4 2014	Q4 2015
AOCI included in capital (billions of dollars) ⁷	0.0	0.0

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.15.B. Huntington Bancshares Incorporated

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
Federal Reserve estimates in the adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	10.9	9.9	9.5
Common equity tier 1 capital ratio (%) ²	n/a	9.6	9.4
Tier 1 risk-based capital ratio (%)	12.4	10.5	10.3
Total risk-based capital ratio (%)	14.7	12.7	12.7
Tier 1 leverage ratio (%)	10.9	9.2	9.2

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	1.6	3.6
First-lien mortgages, domestic	0.2	2.7
Junior liens and HELOCs, domestic	0.3	5.2
Commercial and industrial ²	0.4	3.5
Commercial real estate, domestic	0.4	4.8
Credit cards	0.0	8.1
Other consumer ³	0.2	2.6
Other loans ⁴	0.0	1.5

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	48.7	51.5	53.7

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	2.3	3.8
Other revenue ³	0.0	
<i>less</i>		
Provisions	1.6	
Realized losses/gains on securities (AFS/HTM)	0.0	
Trading and counterparty losses ⁴	0.0	
Other losses/gains ⁵	0.3	
<i>equals</i>		
Net income before taxes	0.4	0.6
Memo items		
Other comprehensive income ⁶	0.0	
<i>Other effects on capital</i>	<i>Q4 2014</i>	<i>Q4 2015</i>
AOCI included in capital (billions of dollars) ⁷	0.0	0.0

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.16.A. JPMorgan Chase & Co.

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
Federal Reserve estimates in the severely adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	10.5	6.7	6.3
Common equity tier 1 capital ratio (%) ²	n/a	6.5	6.5
Tier 1 risk-based capital ratio (%)	11.7	7.1	7.1
Total risk-based capital ratio (%)	14.3	9.3	9.3
Tier 1 leverage ratio (%)	6.9	4.6	4.6

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	54.2	7.3
First-lien mortgages, domestic	8.9	6.6
Junior liens and HELOCs, domestic	8.9	11.7
Commercial and industrial ²	8.8	7.0
Commercial real estate, domestic	5.0	6.7
Credit cards	14.4	12.7
Other consumer ³	2.4	4.4
Other loans ⁴	5.8	3.6

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	1,374.0	1,457.8	1,574.1

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	48.8	1.9
Other revenue ³	0.0	
<i>less</i>		
Provisions	59.1	
Realized losses/gains on securities (AFS/HTM)	1.3	
Trading and counterparty losses ⁴	24.2	
Other losses/gains ⁵	1.8	
<i>equals</i>		
Net income before taxes	-37.6	-1.5
Memo items		
Other comprehensive income ⁶	-6.6	
<i>Other effects on capital</i>		
	Q4 2014	Q4 2015
AOCI included in capital (billions of dollars) ⁷	-1.6	-2.5

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.16.B. JPMorgan Chase & Co.

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
Federal Reserve estimates in the adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	10.5	9.5	8.7
Common equity tier 1 capital ratio (%) ²	n/a	8.4	7.8
Tier 1 risk-based capital ratio (%)	11.7	9.2	8.5
Total risk-based capital ratio (%)	14.3	11.1	10.8
Tier 1 leverage ratio (%)	6.9	5.8	5.4

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	37.6	5.1
First-lien mortgages, domestic	4.6	3.4
Junior liens and HELOCs, domestic	6.3	8.2
Commercial and industrial ²	6.1	4.8
Commercial real estate, domestic	3.1	4.1
Credit cards	11.8	10.3
Other consumer ³	2.0	3.7
Other loans ⁴	3.7	2.3

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	1,374.0	1,499.4	1,606.9

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	68.1	2.7
Other revenue ³	0.0	
<i>less</i>		
Provisions	36.5	
Realized losses/gains on securities (AFS/HTM)	1.5	
Trading and counterparty losses ⁴	12.7	
Other losses/gains ⁵	1.9	
<i>equals</i>		
Net income before taxes	15.6	0.6
Memo items		
Other comprehensive income ⁶	-19.9	
<i>Other effects on capital</i>		
AOCI included in capital (billions of dollars) ⁷	-5.2	-7.8

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.17.A. KeyCorp

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
Federal Reserve estimates in the severely adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	11.2	9.3	9.2
Common equity tier 1 capital ratio (%) ²	n/a	9.3	9.3
Tier 1 risk-based capital ratio (%)	11.9	9.6	9.6
Total risk-based capital ratio (%)	14.4	11.9	11.9
Tier 1 leverage ratio (%)	11.3	9.2	9.2

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	2.9	5.1
First-lien mortgages, domestic	0.2	4.1
Junior liens and HELOCs, domestic	0.4	5.2
Commercial and industrial ²	0.7	3.8
Commercial real estate, domestic	0.7	8.8
Credit cards	0.1	16.8
Other consumer ³	0.4	8.8
Other loans ⁴	0.2	2.2

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	82.9	84.1	87.2

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	2.5	2.7
Other revenue ³	0.0	
<i>less</i>		
Provisions	3.1	
Realized losses/gains on securities (AFS/HTM)	0.0	
Trading and counterparty losses ⁴	0.0	
Other losses/gains ⁵	0.4	
<i>equals</i>		
Net income before taxes	-1.0	-1.0
Memo items		
Other comprehensive income ⁶	0.0	
<i>Other effects on capital</i>	<i>Q4 2014</i>	<i>Q4 2015</i>
AOCI included in capital (billions of dollars) ⁷	0.0	0.0

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.17.B. KeyCorp

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
Federal Reserve estimates in the adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	11.2	11.2	10.5
Common equity tier 1 capital ratio (%) ²	n/a	10.9	10.5
Tier 1 risk-based capital ratio (%)	11.9	11.4	10.9
Total risk-based capital ratio (%)	14.4	13.3	13.0
Tier 1 leverage ratio (%)	11.3	10.7	10.4

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	2.1	3.7
First-lien mortgages, domestic	0.2	3.5
Junior liens and HELOCs, domestic	0.3	4.1
Commercial and industrial ²	0.5	2.4
Commercial real estate, domestic	0.5	5.9
Credit cards	0.1	13.8
Other consumer ³	0.4	7.5
Other loans ⁴	0.1	1.5

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	82.9	86.8	89.3

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	3.8	4.0
Other revenue ³	0.0	
<i>less</i>		
Provisions	2.1	
Realized losses/gains on securities (AFS/HTM)	0.0	
Trading and counterparty losses ⁴	0.0	
Other losses/gains ⁵	0.3	
<i>equals</i>		
Net income before taxes	1.4	1.5
Memo items		
Other comprehensive income ⁶	0.0	
<i>Other effects on capital</i>		
AOCI included in capital (billions of dollars) ⁷	Q4 2014	Q4 2015
	0.0	0.0

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.18.A. M&T Bank Corporation

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
Federal Reserve estimates in the severely adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	9.1	6.2	6.2
Common equity tier 1 capital ratio (%) ²	n/a	6.7	6.7
Tier 1 risk-based capital ratio (%)	11.9	7.9	7.9
Total risk-based capital ratio (%)	15.1	11.0	11.0
Tier 1 leverage ratio (%)	10.7	7.0	7.0

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	4.0	5.3
First-lien mortgages, domestic	0.8	3.9
Junior liens and HELOCs, domestic	0.4	7.1
Commercial and industrial ²	0.6	4.0
Commercial real estate, domestic	1.8	6.9
Credit cards	0.1	16.5
Other consumer ³	0.2	6.2
Other loans ⁴	0.1	2.4

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	72.6	85.6	98.4

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	3.9	3.9
Other revenue ³	0.0	
<i>less</i>		
Provisions	4.8	
Realized losses/gains on securities (AFS/HTM)	0.0	
Trading and counterparty losses ⁴	0.0	
Other losses/gains ⁵	0.1	
<i>equals</i>		
Net income before taxes	-0.9	-0.9
Memo items		
Other comprehensive income ⁶	0.0	
<i>Other effects on capital</i>	<i>Q4 2014</i>	<i>Q4 2015</i>
AOCI included in capital (billions of dollars) ⁷	0.0	0.0

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.18.B. M&T Bank Corporation

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
Federal Reserve estimates in the adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	9.1	10.2	8.7
Common equity tier 1 capital ratio (%) ²	n/a	9.3	9.0
Tier 1 risk-based capital ratio (%)	11.9	10.5	10.1
Total risk-based capital ratio (%)	15.1	13.5	13.4
Tier 1 leverage ratio (%)	10.7	9.2	9.1

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	2.9	3.9
First-lien mortgages, domestic	0.6	3.0
Junior liens and HELOCs, domestic	0.4	5.9
Commercial and industrial ²	0.4	2.9
Commercial real estate, domestic	1.2	4.6
Credit cards	0.0	13.5
Other consumer ³	0.2	4.7
Other loans ⁴	0.1	1.6

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	72.6	89.6	100.9

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	5.3	5.2
Other revenue ³	0.0	
<i>less</i>		
Provisions	3.3	
Realized losses/gains on securities (AFS/HTM)	0.0	
Trading and counterparty losses ⁴	0.0	
Other losses/gains ⁵	0.1	
<i>equals</i>		
Net income before taxes	1.9	1.9
Memo items		
Other comprehensive income ⁶	0.0	
<i>Other effects on capital</i>		
AOCI included in capital (billions of dollars) ⁷	Q4 2014	Q4 2015
	0.0	0.0

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.19.A. Morgan Stanley

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
Federal Reserve estimates in the severely adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	12.6	7.6	6.1
Common equity tier 1 capital ratio (%) ²	n/a	7.8	7.1
Tier 1 risk-based capital ratio (%)	15.3	7.9	7.1
Total risk-based capital ratio (%)	16.1	9.9	8.9
Tier 1 leverage ratio (%)	7.3	4.6	4.5

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	1.7	3.0
First-lien mortgages, domestic	0.1	1.0
Junior liens and HELOCs, domestic	0.0	11.1
Commercial and industrial ²	0.8	8.9
Commercial real estate, domestic	0.2	9.4
Credit cards	0.0	0.0
Other consumer ³	0.1	0.6
Other loans ⁴	0.5	2.0

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	385.7	409.8	495.1

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	0.4	0.0
Other revenue ³	0.0	
<i>less</i>		
Provisions	2.2	
Realized losses/gains on securities (AFS/HTM)	0.0	
Trading and counterparty losses ⁴	13.3	
Other losses/gains ⁵	2.1	
<i>equals</i>		
Net income before taxes	-17.3	-2.0
Memo items		
Other comprehensive income ⁶	-0.2	
<i>Other effects on capital</i>		
AOCI included in capital (billions of dollars) ⁷	-0.3	-0.5

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.19.B. Morgan Stanley

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
Federal Reserve estimates in the adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	12.6	9.4	8.9
Common equity tier 1 capital ratio (%) ²	n/a	8.6	8.4
Tier 1 risk-based capital ratio (%)	15.3	9.0	8.7
Total risk-based capital ratio (%)	16.1	10.9	10.6
Tier 1 leverage ratio (%)	7.3	5.0	4.9

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	1.2	2.1
First-lien mortgages, domestic	0.0	0.5
Junior liens and HELOCs, domestic	0.0	8.3
Commercial and industrial ²	0.6	6.4
Commercial real estate, domestic	0.1	6.1
Credit cards	0.0	0.0
Other consumer ³	0.1	0.6
Other loans ⁴	0.4	1.4

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	385.7	410.3	496.3

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	1.5	0.2
Other revenue ³	0.0	
<i>less</i>		
Provisions	1.5	
Realized losses/gains on securities (AFS/HTM)	0.0	
Trading and counterparty losses ⁴	8.6	
Other losses/gains ⁵	2.2	
<i>equals</i>		
Net income before taxes	-10.7	-1.2
Memo items		
Other comprehensive income ⁶	-2.0	
<i>Other effects on capital</i>		
	Q4 2014	Q4 2015
AOCI included in capital (billions of dollars) ⁷	-0.7	-1.2

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.20.A. Northern Trust Corporation

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
Federal Reserve estimates in the severely adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	13.1	11.7	11.7
Common equity tier 1 capital ratio (%) ²	n/a	10.6	10.6
Tier 1 risk-based capital ratio (%)	13.6	10.7	10.7
Total risk-based capital ratio (%)	14.9	13.7	13.7
Tier 1 leverage ratio (%)	8.3	7.1	7.1

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	2.4	8.2
First-lien mortgages, domestic	0.4	4.7
Junior liens and HELOCs, domestic	0.4	17.5
Commercial and industrial ²	0.5	8.1
Commercial real estate, domestic	0.4	11.3
Credit cards	0.0	0.0
Other consumer ³	0.0	17.9
Other loans ⁴	0.7	7.8

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	57.8	59.0	65.0

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	2.7	2.7
Other revenue ³	0.0	
<i>less</i>		
Provisions	3.0	
Realized losses/gains on securities (AFS/HTM)	0.0	
Trading and counterparty losses ⁴	0.0	
Other losses/gains ⁵	0.0	
<i>equals</i>		
Net income before taxes	-0.4	-0.4
Memo items		
Other comprehensive income ⁶	0.3	
<i>Other effects on capital</i>		
AOCI included in capital (billions of dollars) ⁷	-0.0	-0.0

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.20.B. Northern Trust Corporation

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
Federal Reserve estimates in the adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	13.1	13.1	12.6
Common equity tier 1 capital ratio (%) ²	n/a	11.5	11.1
Tier 1 risk-based capital ratio (%)	13.6	11.6	11.2
Total risk-based capital ratio (%)	14.9	14.2	14.0
Tier 1 leverage ratio (%)	8.3	7.6	7.4

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	1.7	5.7
First-lien mortgages, domestic	0.2	3.0
Junior liens and HELOCs, domestic	0.3	13.8
Commercial and industrial ²	0.3	5.5
Commercial real estate, domestic	0.3	7.5
Credit cards	0.0	0.0
Other consumer ³	0.0	15.9
Other loans ⁴	0.5	5.3

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	57.8	61.0	66.8

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	3.3	3.3
Other revenue ³	0.0	
<i>less</i>		
Provisions	2.0	
Realized losses/gains on securities (AFS/HTM)	0.0	
Trading and counterparty losses ⁴	0.0	
Other losses/gains ⁵	0.0	
<i>equals</i>		
Net income before taxes	1.3	1.3
Memo items		
Other comprehensive income ⁶	-0.5	
<i>Other effects on capital</i>		
AOCI included in capital (billions of dollars) ⁷	-0.2	-0.3

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.21.A. The PNC Financial Services Group, Inc.

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
Federal Reserve estimates in the severely adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	10.3	9.0	9.0
Common equity tier 1 capital ratio (%) ²	n/a	7.5	7.5
Tier 1 risk-based capital ratio (%)	12.2	9.1	9.1
Total risk-based capital ratio (%)	15.6	11.8	11.8
Tier 1 leverage ratio (%)	11.1	8.8	8.8

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	10.1	5.2
First-lien mortgages, domestic	0.6	2.3
Junior liens and HELOCs, domestic	1.3	4.9
Commercial and industrial ²	3.4	5.7
Commercial real estate, domestic	3.1	10.1
Credit cards	0.5	14.3
Other consumer ³	0.8	3.6
Other loans ⁴	0.4	1.7

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	266.7	270.1	296.4

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	10.8	3.4
Other revenue ³	0.0	
<i>less</i>		
Provisions	11.3	
Realized losses/gains on securities (AFS/HTM)	0.3	
Trading and counterparty losses ⁴	0.0	
Other losses/gains ⁵	0.4	
<i>equals</i>		
Net income before taxes	-1.1	-0.3
Memo items		
Other comprehensive income ⁶	-1.5	
<i>Other effects on capital</i>		
AOCI included in capital (billions of dollars) ⁷	-0.3	-0.6

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.21.B. The PNC Financial Services Group, Inc.

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
Federal Reserve estimates in the adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	10.3	10.9	10.2
Common equity tier 1 capital ratio (%) ²	n/a	9.4	8.7
Tier 1 risk-based capital ratio (%)	12.2	10.9	10.2
Total risk-based capital ratio (%)	15.6	13.4	13.1
Tier 1 leverage ratio (%)	11.1	10.4	9.9

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	6.9	3.6
First-lien mortgages, domestic	0.4	1.5
Junior liens and HELOCs, domestic	0.9	3.3
Commercial and industrial ²	2.2	3.8
Commercial real estate, domestic	2.0	6.6
Credit cards	0.4	11.6
Other consumer ³	0.7	3.0
Other loans ⁴	0.3	1.1

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	266.7	278.6	304.3

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	15.3	4.7
Other revenue ³	0.0	
<i>less</i>		
Provisions	6.6	
Realized losses/gains on securities (AFS/HTM)	0.2	
Trading and counterparty losses ⁴	0.0	
Other losses/gains ⁵	0.3	
<i>equals</i>		
Net income before taxes	8.2	2.5
Memo items		
Other comprehensive income ⁶	-3.5	
<i>Other effects on capital</i>		
AOCI included in capital (billions of dollars) ⁷	-0.8	-1.4

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.22.A. RBS Citizens Financial Group, Inc.

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
Federal Reserve estimates in the severely adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	13.9	10.7	10.7
Common equity tier 1 capital ratio (%) ²	n/a	10.7	10.7
Tier 1 risk-based capital ratio (%)	14.0	10.9	10.9
Total risk-based capital ratio (%)	16.3	13.5	13.5
Tier 1 leverage ratio (%)	12.1	9.5	9.5

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	4.9	5.8
First-lien mortgages, domestic	0.4	3.3
Junior liens and HELOCs, domestic	2.0	9.9
Commercial and industrial ²	0.9	3.9
Commercial real estate, domestic	0.9	8.4
Credit cards	0.2	16.0
Other consumer ³	0.4	3.1
Other loans ⁴	0.1	2.4

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	96.7	96.0	101.4

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	3.2	2.6
Other revenue ³	0.0	
<i>less</i>		
Provisions	5.7	
Realized losses/gains on securities (AFS/HTM)	0.1	
Trading and counterparty losses ⁴	0.0	
Other losses/gains ⁵	0.2	
<i>equals</i>		
Net income before taxes	-2.6	-2.1
Memo items		
Other comprehensive income ⁶	0.0	
<i>Other effects on capital</i>		
	Q4 2014	Q4 2015
AOCI included in capital (billions of dollars) ⁷	0.0	0.0

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.22.B. RBS Citizens Financial Group, Inc.

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
Federal Reserve estimates in the adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	13.9	13.4	13.0
Common equity tier 1 capital ratio (%) ²	n/a	12.8	12.5
Tier 1 risk-based capital ratio (%)	14.0	12.9	12.6
Total risk-based capital ratio (%)	16.3	15.4	15.2
Tier 1 leverage ratio (%)	12.1	11.2	11.0

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	3.7	4.3
First-lien mortgages, domestic	0.3	2.4
Junior liens and HELOCs, domestic	1.6	8.1
Commercial and industrial ²	0.6	2.6
Commercial real estate, domestic	0.6	5.6
Credit cards	0.2	13.4
Other consumer ³	0.3	2.6
Other loans ⁴	0.1	1.5

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	96.7	99.4	104.2

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	5.0	4.0
Other revenue ³	0.0	
<i>less</i>		
Provisions	4.0	
Realized losses/gains on securities (AFS/HTM)	0.0	
Trading and counterparty losses ⁴	0.0	
Other losses/gains ⁵	0.1	
<i>equals</i>		
Net income before taxes	0.8	0.7
Memo items		
Other comprehensive income ⁶	0.0	
<i>Other effects on capital</i>		
AOCI included in capital (billions of dollars) ⁷	Q4 2014	Q4 2015
	0.0	0.0

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.23.A. Regions Financial Corporation
 Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
 Federal Reserve estimates in the severely adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	11.0	9.0	8.9
Common equity tier 1 capital ratio (%) ²	n/a	9.3	9.3
Tier 1 risk-based capital ratio (%)	11.5	9.5	9.5
Total risk-based capital ratio (%)	14.5	12.0	12.0
Tier 1 leverage ratio (%)	9.9	8.2	8.1

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	5.2	6.9
First-lien mortgages, domestic	0.9	6.4
Junior liens and HELOCs, domestic	0.8	8.0
Commercial and industrial ²	1.0	4.9
Commercial real estate, domestic	1.9	11.2
Credit cards	0.2	16.9
Other consumer ³	0.2	6.2
Other loans ⁴	0.3	2.6

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	96.5	97.3	101.6

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	4.3	3.6
Other revenue ³	0.0	
<i>less</i>		
Provisions	5.6	
Realized losses/gains on securities (AFS/HTM)	0.0	
Trading and counterparty losses ⁴	0.0	
Other losses/gains ⁵	0.1	
<i>equals</i>		
Net income before taxes	-1.4	-1.2
Memo items		
Other comprehensive income ⁶	0.0	
<i>Other effects on capital</i>		
	Q4 2014	Q4 2015
AOCI included in capital (billions of dollars) ⁷	0.0	0.0

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.23.B. Regions Financial Corporation
 Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
 Federal Reserve estimates in the adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	11.0	11.7	10.7
Common equity tier 1 capital ratio (%) ²	n/a	11.5	10.8
Tier 1 risk-based capital ratio (%)	11.5	11.8	11.2
Total risk-based capital ratio (%)	14.5	14.3	13.8
Tier 1 leverage ratio (%)	9.9	10.1	9.5

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	3.8	4.9
First-lien mortgages, domestic	0.7	4.5
Junior liens and HELOCs, domestic	0.6	6.4
Commercial and industrial ²	0.7	3.3
Commercial real estate, domestic	1.3	7.6
Credit cards	0.1	13.5
Other consumer ³	0.2	5.1
Other loans ⁴	0.2	1.8

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	96.5	101.1	104.4

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	6.0	4.9
Other revenue ³	0.0	
<i>less</i>		
Provisions	3.6	
Realized losses/gains on securities (AFS/HTM)	0.0	
Trading and counterparty losses ⁴	0.0	
Other losses/gains ⁵	0.1	
<i>equals</i>		
Net income before taxes	2.4	1.9
Memo items		
Other comprehensive income ⁶	0.0	
<i>Other effects on capital</i>	<i>Q4 2014</i>	<i>Q4 2015</i>
AOCI included in capital (billions of dollars) ⁷	0.0	0.0

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.24.A. Santander Holdings USA, Inc.

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
Federal Reserve estimates in the severely adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	13.7	7.3	7.3
Common equity tier 1 capital ratio (%) ²	n/a	6.7	6.7
Tier 1 risk-based capital ratio (%)	14.4	10.0	8.9
Total risk-based capital ratio (%)	16.5	12.8	11.2
Tier 1 leverage ratio (%)	12.4	8.9	7.8

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	6.4	8.7
First-lien mortgages, domestic	0.4	4.3
Junior liens and HELOCs, domestic	0.3	4.8
Commercial and industrial ²	0.5	3.9
Commercial real estate, domestic	1.7	9.5
Credit cards	0.0	16.4
Other consumer ³	3.4	13.3
Other loans ⁴	0.1	4.3

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	63.2	88.5	91.8

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	5.6	5.4
Other revenue ³	0.0	
<i>less</i>		
Provisions	8.0	
Realized losses/gains on securities (AFS/HTM)	0.0	
Trading and counterparty losses ⁴	0.0	
Other losses/gains ⁵	0.0	
<i>equals</i>		
Net income before taxes	-2.4	-2.4
Memo items		
Other comprehensive income ⁶	0.0	
<i>Other effects on capital</i>		
	Q4 2014	Q4 2015
AOCI included in capital (billions of dollars) ⁷	0.0	0.0

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.24.B. Santander Holdings USA, Inc.

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
Federal Reserve estimates in the adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	13.7	9.5	8.5
Common equity tier 1 capital ratio (%) ²	n/a	8.6	8.1
Tier 1 risk-based capital ratio (%)	14.4	11.9	9.9
Total risk-based capital ratio (%)	16.5	14.7	11.8
Tier 1 leverage ratio (%)	12.4	10.5	8.9

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	4.9	6.5
First-lien mortgages, domestic	0.3	3.1
Junior liens and HELOCs, domestic	0.2	3.6
Commercial and industrial ²	0.3	2.7
Commercial real estate, domestic	1.1	6.3
Credit cards	0.0	13.4
Other consumer ³	2.8	10.9
Other loans ⁴	0.0	2.9

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	63.2	91.6	94.7

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	6.7	6.4
Other revenue ³	0.0	
<i>less</i>		
Provisions	5.9	
Realized losses/gains on securities (AFS/HTM)	0.0	
Trading and counterparty losses ⁴	0.0	
Other losses/gains ⁵	0.0	
<i>equals</i>		
Net income before taxes	0.8	0.8
Memo items		
Other comprehensive income ⁶	0.0	
<i>Other effects on capital</i>		
AOCI included in capital (billions of dollars) ⁷	Q4 2014	Q4 2015
	0.0	0.0

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.25.A. State Street Corporation

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
Federal Reserve estimates in the severely adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	15.5	14.7	13.3
Common equity tier 1 capital ratio (%) ²	n/a	11.9	11.4
Tier 1 risk-based capital ratio (%)	17.3	12.8	12.2
Total risk-based capital ratio (%)	19.8	14.8	14.3
Tier 1 leverage ratio (%)	7.2	7.0	6.3

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	0.5	3.1
First-lien mortgages, domestic	0.0	0.0
Junior liens and HELOCs, domestic	0.0	0.0
Commercial and industrial ²	0.0	6.9
Commercial real estate, domestic	0.0	26.2
Credit cards	0.0	0.0
Other consumer ³	0.0	0.0
Other loans ⁴	0.4	2.7

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	80.4	83.0	111.2

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	4.8	2.2
Other revenue ³	0.0	
<i>less</i>		
Provisions	0.6	
Realized losses/gains on securities (AFS/HTM)	0.4	
Trading and counterparty losses ⁴	1.7	
Other losses/gains ⁵	0.0	
<i>equals</i>		
Net income before taxes	2.1	0.9
Memo items		
Other comprehensive income ⁶	-2.0	
<i>Other effects on capital</i>		
	Q4 2014	Q4 2015
AOCI included in capital (billions of dollars) ⁷	-0.5	-0.8

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.25.B. State Street Corporation

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
Federal Reserve estimates in the adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	15.5	17.1	13.9
Common equity tier 1 capital ratio (%) ²	n/a	12.8	11.2
Tier 1 risk-based capital ratio (%)	17.3	13.5	11.8
Total risk-based capital ratio (%)	19.8	15.4	13.7
Tier 1 leverage ratio (%)	7.2	7.3	6.5

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	0.3	2.1
First-lien mortgages, domestic	0.0	0.0
Junior liens and HELOCs, domestic	0.0	0.0
Commercial and industrial ²	0.0	4.2
Commercial real estate, domestic	0.0	16.1
Credit cards	0.0	0.0
Other consumer ³	0.0	0.0
Other loans ⁴	0.3	1.9

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	80.4	86.0	114.8

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	7.5	3.3
Other revenue ³	0.0	
<i>less</i>		
Provisions	0.4	
Realized losses/gains on securities (AFS/HTM)	0.3	
Trading and counterparty losses ⁴	0.9	
Other losses/gains ⁵	0.0	
<i>equals</i>		
Net income before taxes	5.9	2.6
Memo items		
Other comprehensive income ⁶	-4.9	
<i>Other effects on capital</i>		
	Q4 2014	Q4 2015
AOCI included in capital (billions of dollars) ⁷	-1.3	-2.0

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.26.A. SunTrust Banks, Inc.

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
Federal Reserve estimates in the severely adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	9.9	9.0	8.8
Common equity tier 1 capital ratio (%) ²	n/a	8.5	8.4
Tier 1 risk-based capital ratio (%)	11.0	9.0	8.9
Total risk-based capital ratio (%)	13.0	10.9	10.9
Tier 1 leverage ratio (%)	9.5	7.8	7.8

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	5.7	4.6
First-lien mortgages, domestic	1.3	4.8
Junior liens and HELOCs, domestic	1.2	7.7
Commercial and industrial ²	1.6	4.7
Commercial real estate, domestic	0.8	5.6
Credit cards	0.1	13.6
Other consumer ³	0.5	2.7
Other loans ⁴	0.2	1.5

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	143.5	144.9	149.9

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	5.8	3.3
Other revenue ³	0.0	
<i>less</i>		
Provisions	6.1	
Realized losses/gains on securities (AFS/HTM)	0.0	
Trading and counterparty losses ⁴	0.0	
Other losses/gains ⁵	0.9	
<i>equals</i>		
Net income before taxes	-1.2	-0.7
Memo items		
Other comprehensive income ⁶	0.0	
<i>Other effects on capital</i>		
	Q4 2014	Q4 2015
AOCI included in capital (billions of dollars) ⁷	0.0	0.0

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.26.B. SunTrust Banks, Inc.

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
Federal Reserve estimates in the adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	9.9	11.1	9.7
Common equity tier 1 capital ratio (%) ²	n/a	10.7	10.0
Tier 1 risk-based capital ratio (%)	11.0	11.4	10.6
Total risk-based capital ratio (%)	13.0	13.2	12.6
Tier 1 leverage ratio (%)	9.5	9.8	9.2

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	4.1	3.3
First-lien mortgages, domestic	0.9	3.2
Junior liens and HELOCs, domestic	1.0	6.5
Commercial and industrial ²	1.1	3.0
Commercial real estate, domestic	0.5	3.6
Credit cards	0.1	10.7
Other consumer ³	0.4	2.2
Other loans ⁴	0.1	0.9

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	143.5	149.1	154.0

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	8.5	4.8
Other revenue ³	0.0	
<i>less</i>		
Provisions	3.8	
Realized losses/gains on securities (AFS/HTM)	0.0	
Trading and counterparty losses ⁴	0.0	
Other losses/gains ⁵	0.5	
<i>equals</i>		
Net income before taxes	4.2	2.4
Memo items		
Other comprehensive income ⁶	0.0	
<i>Other effects on capital</i>		
AOCI included in capital (billions of dollars) ⁷	Q4 2014	Q4 2015
	0.0	0.0

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.27.A. U.S. Bancorp

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
Federal Reserve estimates in the severely adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	9.3	8.3	8.2
Common equity tier 1 capital ratio (%) ²	n/a	7.6	7.5
Tier 1 risk-based capital ratio (%)	11.2	9.2	9.1
Total risk-based capital ratio (%)	13.3	11.1	11.0
Tier 1 leverage ratio (%)	9.6	8.1	8.1

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	15.6	7.0
First-lien mortgages, domestic	1.3	2.5
Junior liens and HELOCs, domestic	1.0	6.3
Commercial and industrial ²	4.2	8.2
Commercial real estate, domestic	4.3	11.2
Credit cards	2.8	16.2
Other consumer ³	1.1	4.2
Other loans ⁴	0.9	4.3

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	293.2	297.1	316.1

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	20.6	5.6
Other revenue ³	0.0	
<i>less</i>		
Provisions	17.1	
Realized losses/gains on securities (AFS/HTM)	0.0	
Trading and counterparty losses ⁴	0.0	
Other losses/gains ⁵	0.4	
<i>equals</i>		
Net income before taxes	3.1	0.8
Memo items		
Other comprehensive income ⁶	-0.7	
<i>Other effects on capital</i>		
AOCI included in capital (billions of dollars) ⁷	-0.4	-0.8

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.27.B. U.S. Bancorp

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
Federal Reserve estimates in the adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	9.3	10.5	9.1
Common equity tier 1 capital ratio (%) ²	n/a	9.6	8.6
Tier 1 risk-based capital ratio (%)	11.2	11.2	10.2
Total risk-based capital ratio (%)	13.3	13.0	12.1
Tier 1 leverage ratio (%)	9.6	9.7	9.0

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	11.3	5.0
First-lien mortgages, domestic	0.9	1.7
Junior liens and HELOCs, domestic	0.8	4.7
Commercial and industrial ²	2.9	5.8
Commercial real estate, domestic	2.8	7.3
Credit cards	2.3	13.3
Other consumer ³	0.9	3.3
Other loans ⁴	0.7	3.2

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	293.2	306.8	324.0

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	26.6	7.0
Other revenue ³	0.0	
<i>less</i>		
Provisions	11.2	
Realized losses/gains on securities (AFS/HTM)	0.0	
Trading and counterparty losses ⁴	0.0	
Other losses/gains ⁵	0.4	
<i>equals</i>		
Net income before taxes	15.0	4.0
Memo items		
Other comprehensive income ⁶	-3.1	
<i>Other effects on capital</i>		
	Q4 2014	Q4 2015
AOCI included in capital (billions of dollars) ⁷	-1.1	-1.8

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.28.A. UnionBanCal Corporation

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
Federal Reserve estimates in the severely adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	11.1	8.1	8.1
Common equity tier 1 capital ratio (%) ²	n/a	8.2	8.2
Tier 1 risk-based capital ratio (%)	11.2	8.2	8.2
Total risk-based capital ratio (%)	13.1	10.4	10.4
Tier 1 leverage ratio (%)	10.2	7.6	7.6

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	3.4	5.0
First-lien mortgages, domestic	0.8	3.2
Junior liens and HELOCs, domestic	0.1	3.2
Commercial and industrial ²	0.7	3.9
Commercial real estate, domestic	1.5	10.1
Credit cards	0.0	0.0
Other consumer ³	0.0	13.2
Other loans ⁴	0.3	3.9

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	90.9	92.8	97.4

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	0.8	0.7
Other revenue ³	0.0	
<i>less</i>		
Provisions	4.1	
Realized losses/gains on securities (AFS/HTM)	0.4	
Trading and counterparty losses ⁴	0.0	
Other losses/gains ⁵	0.0	
<i>equals</i>		
Net income before taxes	-3.7	-3.5
Memo items		
Other comprehensive income ⁶	0.0	
<i>Other effects on capital</i>	<i>Q4 2014</i>	<i>Q4 2015</i>
AOCI included in capital (billions of dollars) ⁷	0.0	0.0

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.28.B. UnionBanCal Corporation

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
Federal Reserve estimates in the adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	11.1	11.6	11.4
Common equity tier 1 capital ratio (%) ²	n/a	11.3	11.1
Tier 1 risk-based capital ratio (%)	11.2	11.3	11.1
Total risk-based capital ratio (%)	13.1	13.1	13.0
Tier 1 leverage ratio (%)	10.2	10.4	10.3

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	2.0	2.9
First-lien mortgages, domestic	0.4	1.4
Junior liens and HELOCs, domestic	0.1	1.7
Commercial and industrial ²	0.5	2.5
Commercial real estate, domestic	1.0	6.5
Credit cards	0.0	0.0
Other consumer ³	0.0	11.3
Other loans ⁴	0.2	2.4

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	90.9	95.6	99.3

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	2.3	2.0
Other revenue ³	0.0	
<i>less</i>		
Provisions	2.2	
Realized losses/gains on securities (AFS/HTM)	0.4	
Trading and counterparty losses ⁴	0.0	
Other losses/gains ⁵	0.0	
<i>equals</i>		
Net income before taxes	-0.3	-0.3
Memo items		
Other comprehensive income ⁶	0.0	
<i>Other effects on capital</i>		
	Q4 2014	Q4 2015
AOCI included in capital (billions of dollars) ⁷	0.0	0.0

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.29.A. Wells Fargo & Company

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
Federal Reserve estimates in the severely adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	10.6	8.2	8.2
Common equity tier 1 capital ratio (%) ²	n/a	7.4	7.4
Tier 1 risk-based capital ratio (%)	12.1	8.5	8.5
Total risk-based capital ratio (%)	15.1	12.0	12.0
Tier 1 leverage ratio (%)	9.8	7.0	7.0

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	55.1	6.8
First-lien mortgages, domestic	15.7	6.7
Junior liens and HELOCs, domestic	8.5	9.8
Commercial and industrial ²	9.4	6.0
Commercial real estate, domestic	9.4	7.9
Credit cards	4.2	16.4
Other consumer ³	5.0	5.7
Other loans ⁴	2.9	2.9

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	1,135.1	1,161.6	1,211.3

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	50.7	3.3
Other revenue ³	0.0	
<i>less</i>		
Provisions	61.6	
Realized losses/gains on securities (AFS/HTM)	1.2	
Trading and counterparty losses ⁴	5.9	
Other losses/gains ⁵	2.5	
<i>equals</i>		
Net income before taxes	-20.5	-1.3
Memo items		
Other comprehensive income ⁶	-10.6	
<i>Other effects on capital</i>		
AOCI included in capital (billions of dollars) ⁷	-1.6	-3.3

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.29.B. Wells Fargo & Company

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
Federal Reserve estimates in the adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	10.6	10.7	10.0
Common equity tier 1 capital ratio (%) ²	n/a	9.4	8.8
Tier 1 risk-based capital ratio (%)	12.1	10.6	9.9
Total risk-based capital ratio (%)	15.1	14.3	13.6
Tier 1 leverage ratio (%)	9.8	8.6	8.2

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	36.3	4.5
First-lien mortgages, domestic	7.6	3.2
Junior liens and HELOCs, domestic	6.1	7.0
Commercial and industrial ²	6.8	4.3
Commercial real estate, domestic	6.2	5.2
Credit cards	3.5	13.5
Other consumer ³	4.2	4.7
Other loans ⁴	1.9	1.9

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	1,135.1	1,199.3	1,246.1

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	71.7	4.6
Other revenue ³	0.0	
<i>less</i>		
Provisions	36.9	
Realized losses/gains on securities (AFS/HTM)	0.9	
Trading and counterparty losses ⁴	3.3	
Other losses/gains ⁵	0.9	
<i>equals</i>		
Net income before taxes	29.7	1.9
Memo items		
Other comprehensive income ⁶	-25.5	
<i>Other effects on capital</i>		
AOCI included in capital (billions of dollars) ⁷	-5.8	-9.3

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.30.A. Zions Bancorporation

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses
Federal Reserve estimates in the severely adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	10.5	3.6	3.6
Common equity tier 1 capital ratio (%) ²	n/a	4.6	4.6
Tier 1 risk-based capital ratio (%)	13.1	5.4	5.4
Total risk-based capital ratio (%)	14.8	7.2	7.2
Tier 1 leverage ratio (%)	10.6	4.5	4.5

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	2.5	6.6
First-lien mortgages, domestic	0.0	0.8
Junior liens and HELOCs, domestic	0.1	5.0
Commercial and industrial ²	0.7	6.7
Commercial real estate, domestic	1.5	8.3
Credit cards	0.0	16.2
Other consumer ³	0.0	10.7
Other loans ⁴	0.1	4.8

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	44.5	44.8	47.6

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	0.2	0.4
Other revenue ³	0.0	
<i>less</i>		
Provisions	2.8	
Realized losses/gains on securities (AFS/HTM)	0.3	
Trading and counterparty losses ⁴	0.0	
Other losses/gains ⁵	0.0	
<i>equals</i>		
Net income before taxes	-2.9	-5.1
Memo items		
Other comprehensive income ⁶	0.0	
<i>Other effects on capital</i>		
	Q4 2014	Q4 2015
AOCI included in capital (billions of dollars) ⁷	0.0	0.0

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

Table C.30.B. Zions Bancorporation

Projected stressed capital ratios, risk-weighted assets, losses, revenues, net income before taxes, and loan losses

Federal Reserve estimates in the adverse scenario

Projected stressed capital ratios through Q4 2015			
	Actual Q3 2013	Stressed capital ratios ¹	
		Ending	Minimum
Tier 1 common ratio (%)	10.5	7.3	7.3
Common equity tier 1 capital ratio (%) ²	n/a	7.5	7.5
Tier 1 risk-based capital ratio (%)	13.1	8.9	8.9
Total risk-based capital ratio (%)	14.8	10.7	10.7
Tier 1 leverage ratio (%)	10.6	7.2	7.2

¹ The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

² Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

n/a Not applicable.

Projected loan losses, by type of loan, Q4 2013–Q4 2015		
	Billions of dollars	Portfolio loss rates (%) ¹
Loan losses	1.7	4.3
First-lien mortgages, domestic	0.0	0.3
Junior liens and HELOCs, domestic	0.1	3.5
Commercial and industrial ²	0.5	4.5
Commercial real estate, domestic	1.0	5.4
Credit cards	0.0	13.3
Other consumer ³	0.0	9.1
Other loans ⁴	0.1	3.2

¹ Average loan balances used to calculate portfolio loss rates exclude loans held for sale and loans held for investment under the fair-value option, and are calculated over nine quarters.

² Commercial and industrial loans include small- and medium- enterprise loans and corporate cards.

³ Other consumer loans include student loans and automobile loans.

⁴ Other loans include international real estate loans.

Actual Q3 2013 and projected Q4 2015 risk-weighted assets			
	Actual Q3 2013	Projected Q4 2015	
		Current general approach	Basel III standardized approach
Risk-weighted assets (billions of dollars) ¹	44.5	46.2	48.5

¹ For each quarter in 2014, risk-weighted assets are calculated using the current general risk-based capital approach. For each quarter in 2015, risk-weighted assets are calculated under the Basel III standardized capital risk-based approach, except for the tier 1 common ratio which uses the general risk-based capital approach for all quarters.

Projected losses, revenue, and net income before taxes through Q4 2015		
	Billions of dollars	Percent of average assets ¹
Pre-provision net revenue ²	0.7	1.3
Other revenue ³	0.0	
<i>less</i>		
Provisions	1.6	
Realized losses/gains on securities (AFS/HTM)	0.3	
Trading and counterparty losses ⁴	0.0	
Other losses/gains ⁵	0.0	
<i>equals</i>		
Net income before taxes	-1.1	-1.9
Memo items		
Other comprehensive income ⁶	0.0	
<i>Other effects on capital</i>	<i>Q4 2014</i>	<i>Q4 2015</i>
AOCI included in capital (billions of dollars) ⁷	0.0	0.0

¹ Average assets is the nine-quarter average of total assets.

² Pre-provision net revenue includes losses from operational-risk events, mortgage repurchase expenses, and other real estate owned (OREO) costs.

³ Other revenue includes one-time income and (expense) items not included in pre-provision net revenue.

⁴ Trading and counterparty losses include mark-to-market and credit valuation adjustments (CVA) losses and losses arising from the counterparty default scenario component applied to derivatives, securities lending, and repurchase agreement activities.

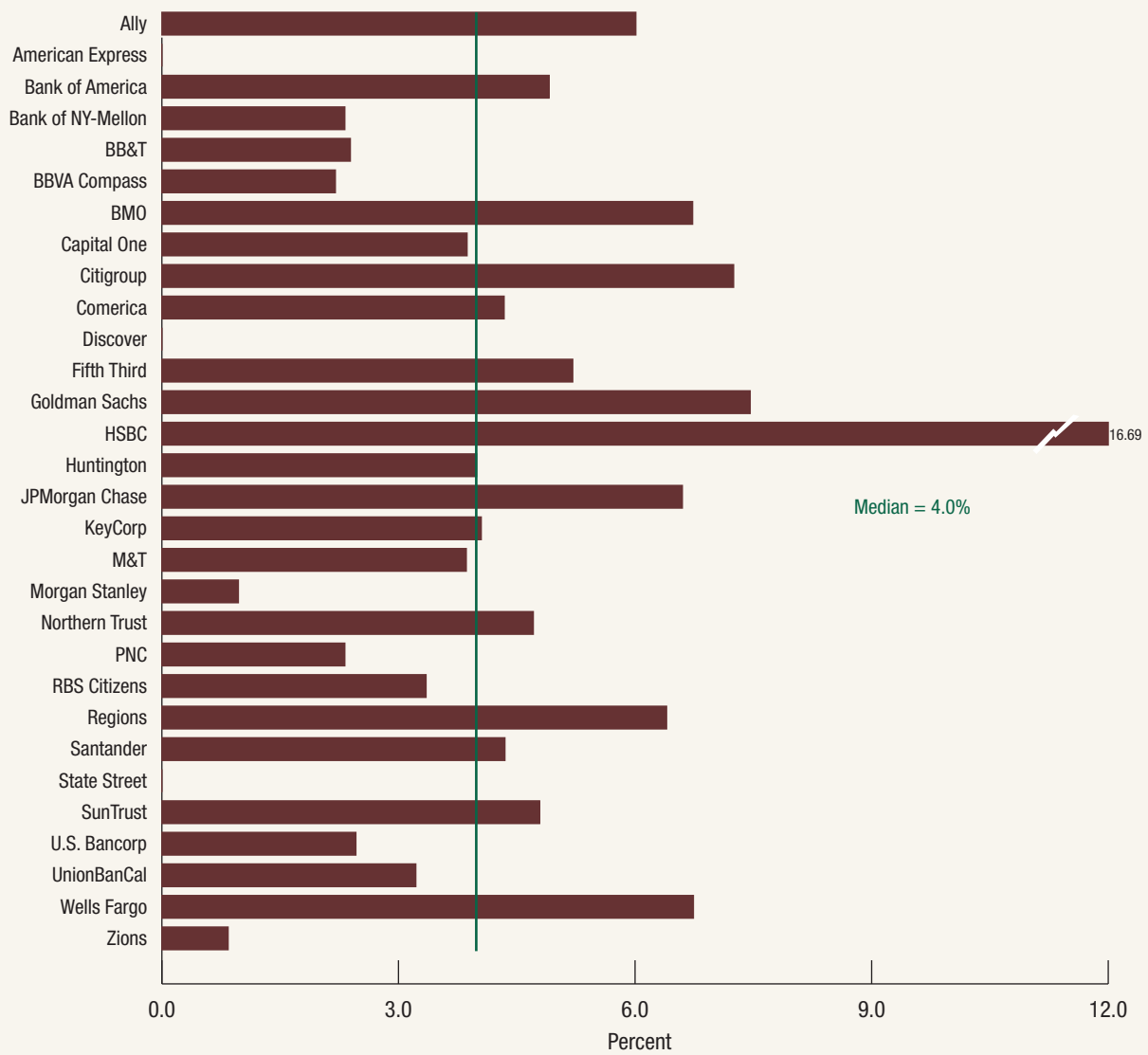
⁵ Other losses/gains includes projected change in fair value of loans held for sale and loans held for investment measured under the fair-value option.

⁶ Other comprehensive income is only calculated for advanced approaches BHCs, as only those BHCs include accumulated other comprehensive income (AOCI) in calculations of regulatory capital. Other comprehensive income includes incremental unrealized losses/gains on AFS securities and on any HTM securities that have experienced other than temporary impairment.

⁷ For advanced approaches BHCs, 20 percent of AOCI is included in capital calculations for 2014 and 40 percent of AOCI is included in capital calculations for 2015. For the purposes of this stress test cycle, non-advanced approaches BHCs are assumed to opt-out of including AOCI in their capital calculations.

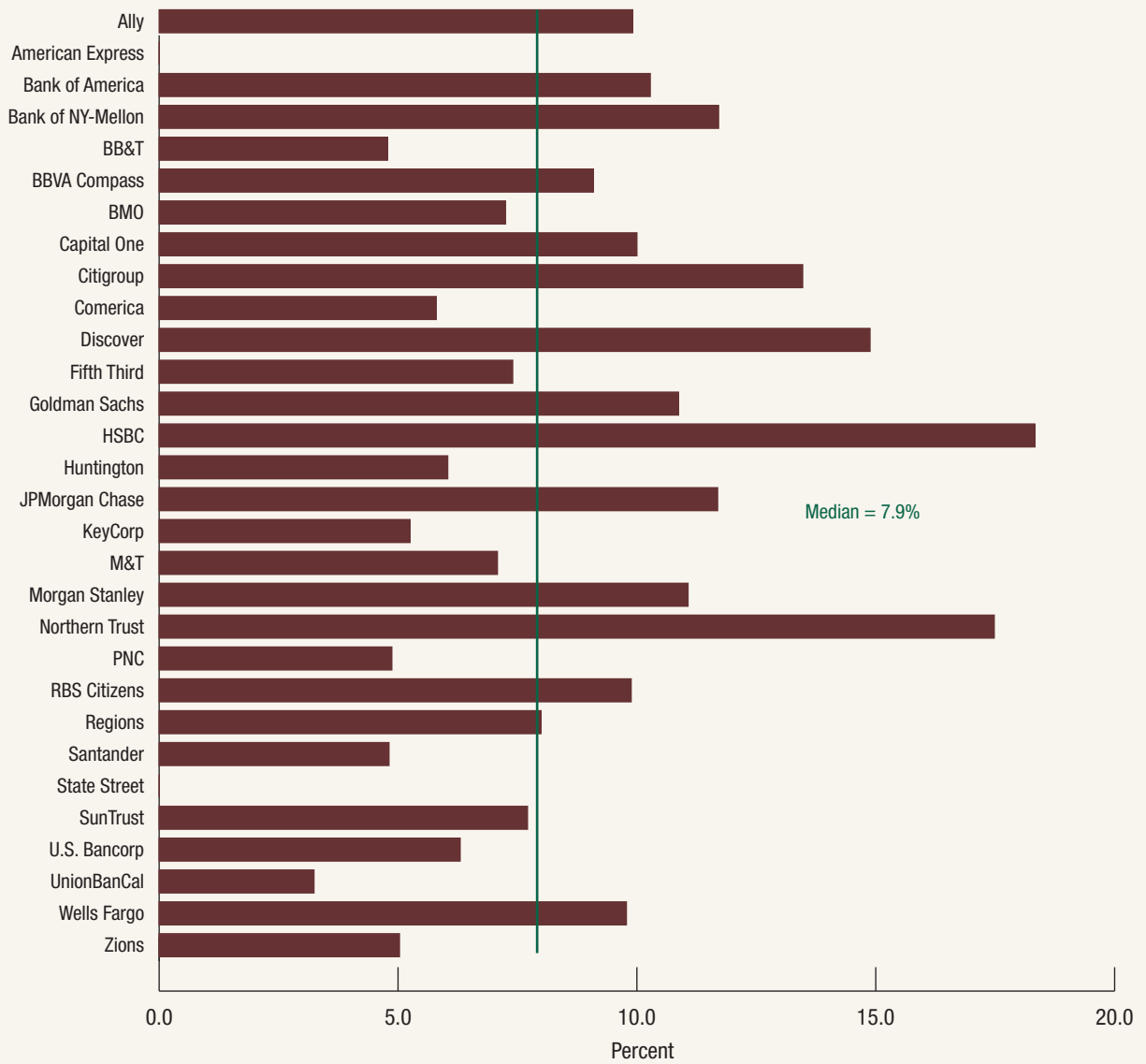
Appendix D: Selected Loss Rates

Figure D.1. First-lien mortgages, domestic loss rates in the severely adverse scenario



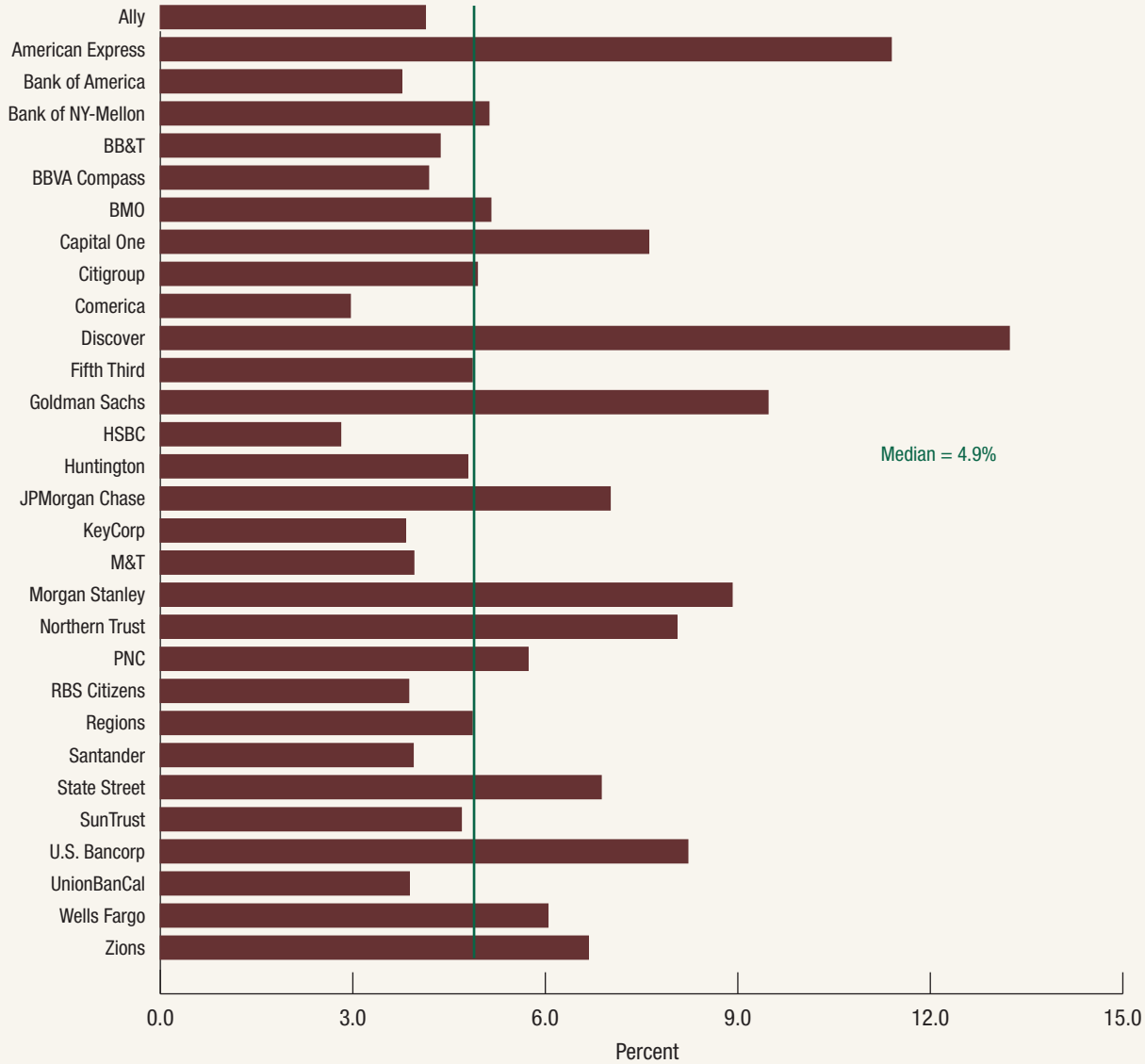
Estimates are for nine-quarter period from Q4 2013 to Q4 2015 as a percent of average balances.

Figure D.2. Junior liens and HELOCs, domestic loss rates in the severely adverse scenario



Estimates are for nine-quarter period from Q4 2013 to Q4 2015 as a percent of average balances.

Figure D.3. Commercial and industrial loss rates in the severely adverse scenario



Note: Estimates are for the nine-quarter period from Q4 2013 to Q4 2015 as a percent of average balances. Losses are calculated based on the exposure at default, which includes both outstanding balances and any additional drawdown of the credit line that occurs prior to default, while loss rates are calculated as a percent of outstanding balances.

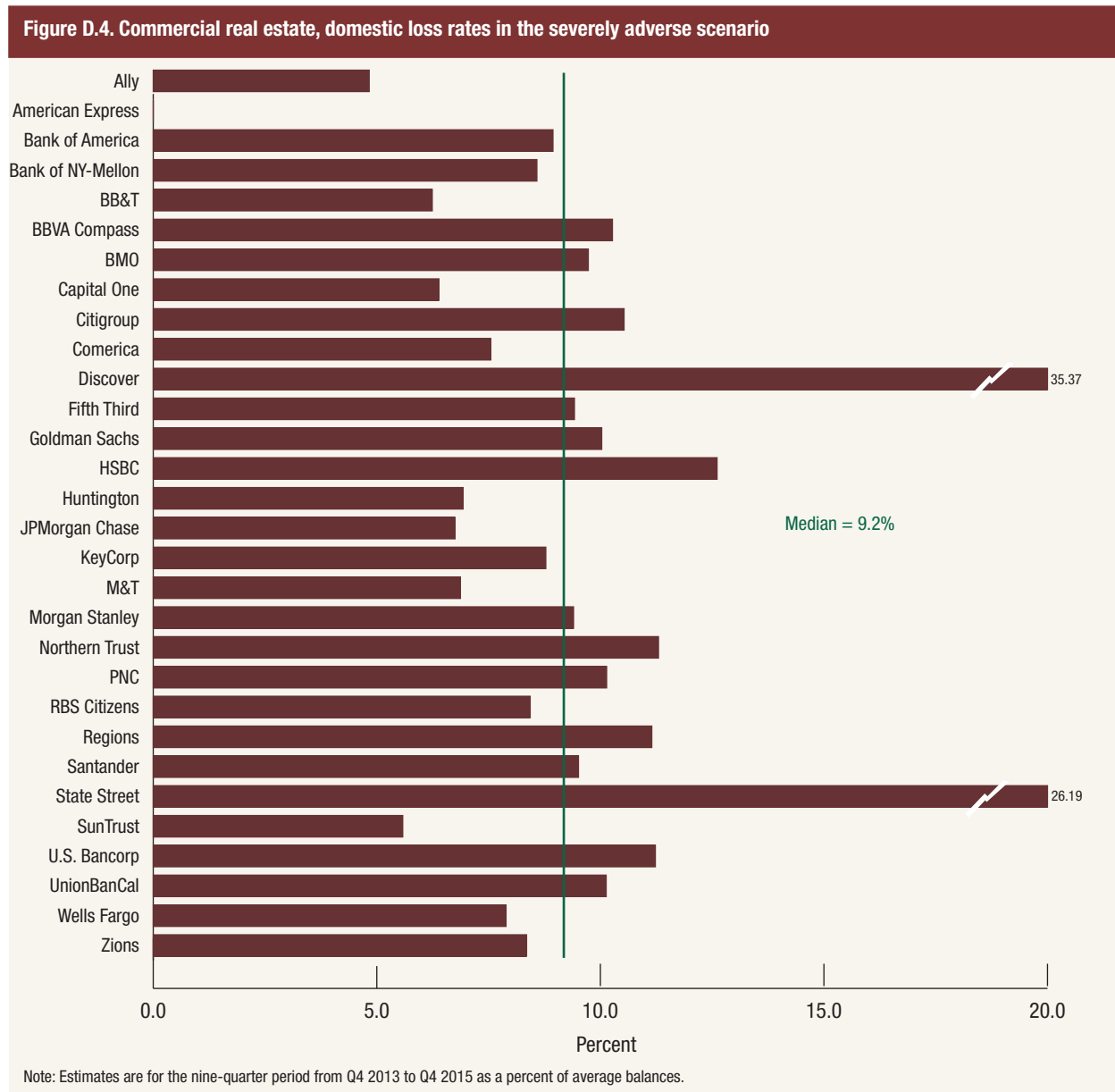
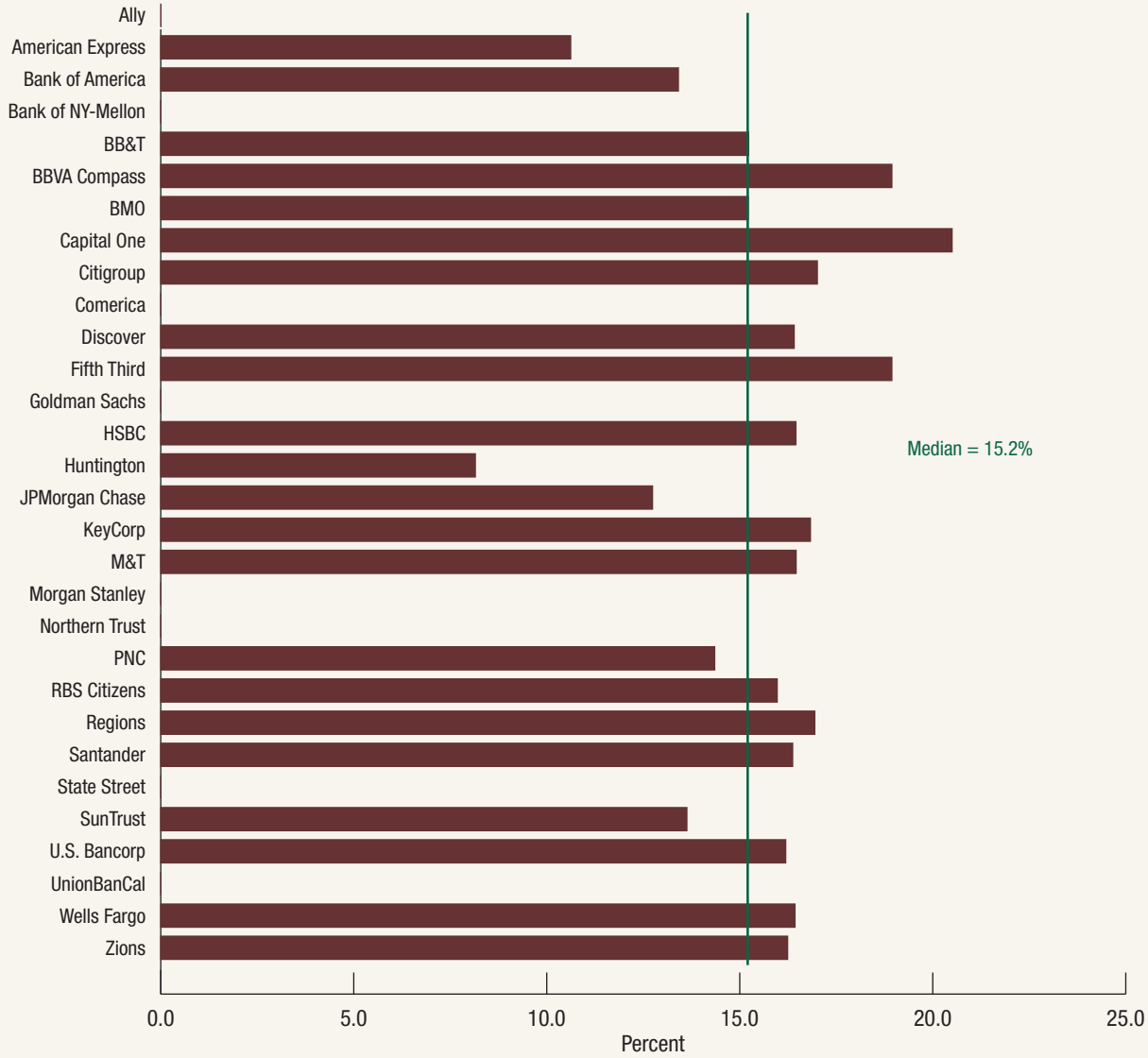
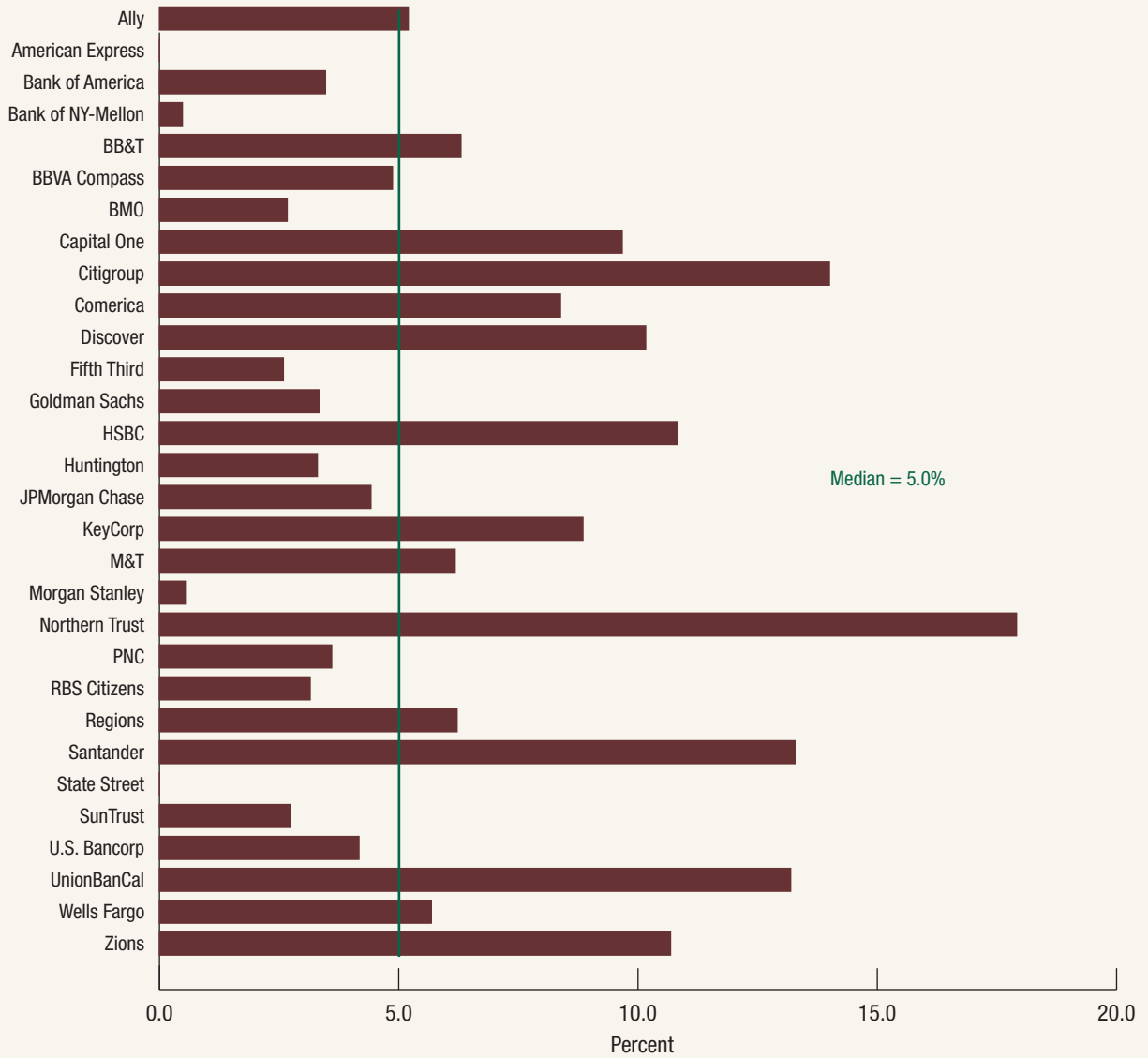


Figure D.5. Credit card loss rates in the severely adverse scenario



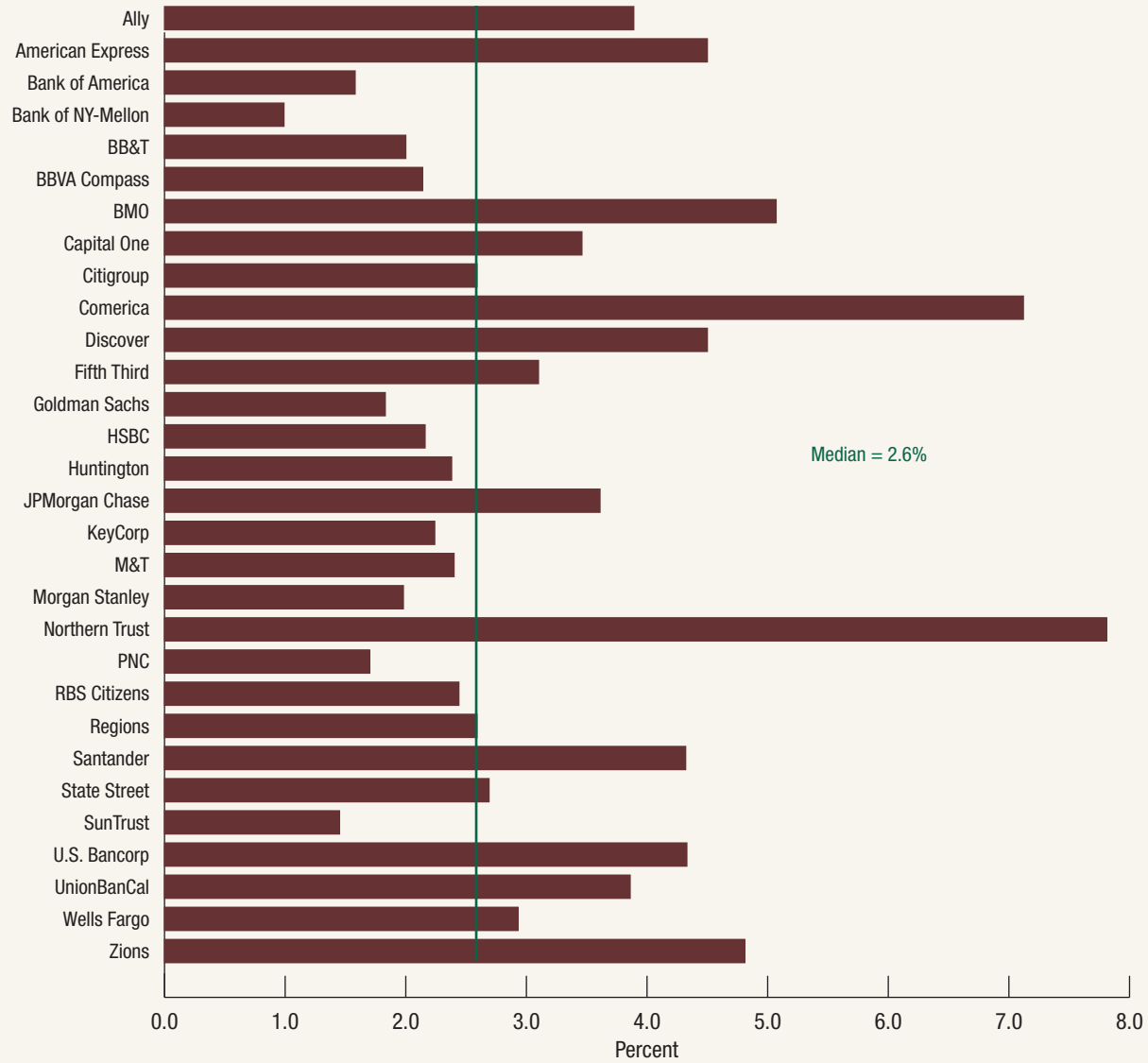
Note: Estimates are for the nine-quarter period from Q4 2013 to Q4 2015 as a percent of average balances.

Figure D.6. Other consumer loss rates in the severely adverse scenario



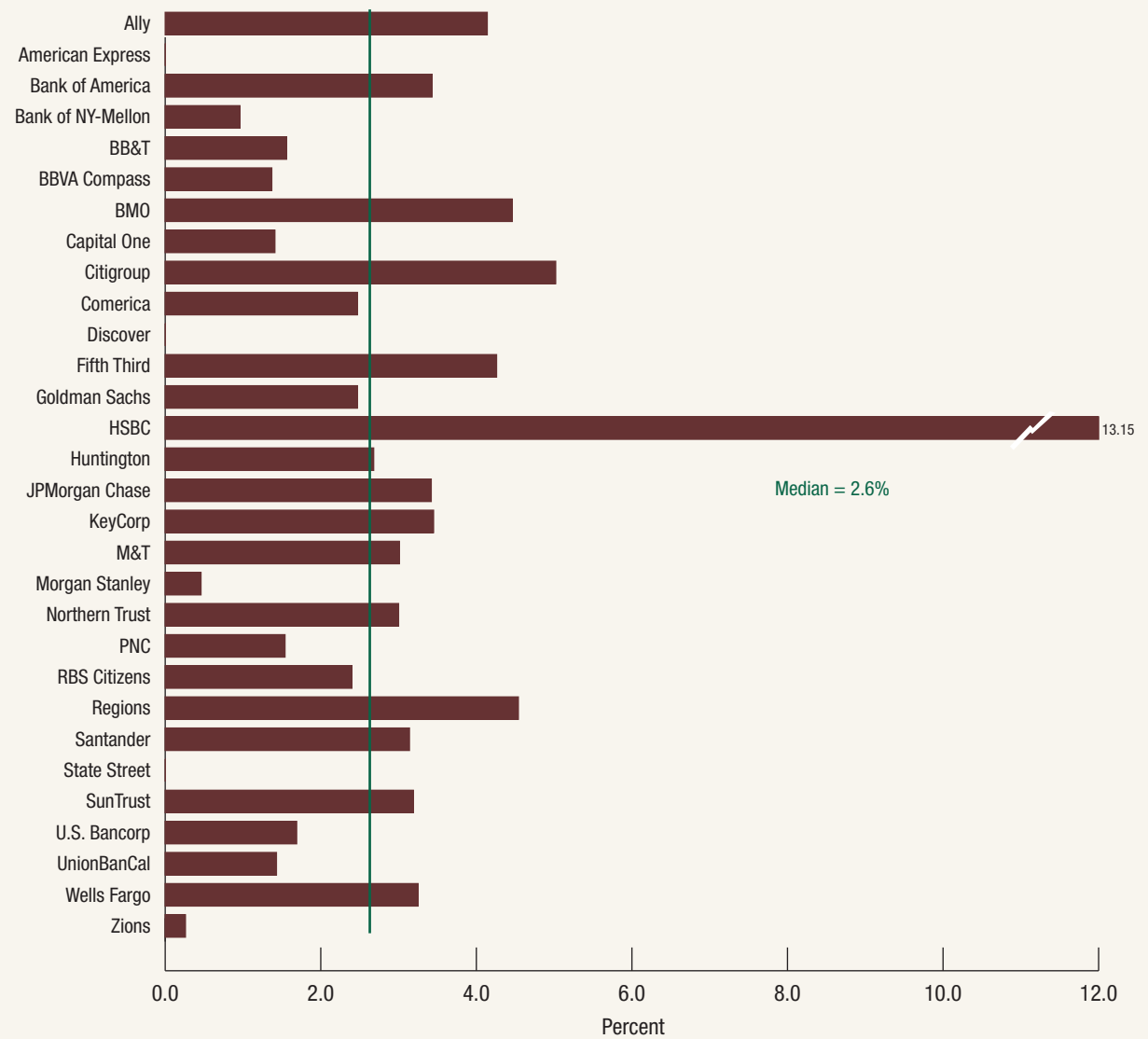
Note: Estimates are for the nine-quarter period from Q4 2013 to Q4 2015 as a percent of average balances.

Figure D.7. Other loans loss rates in the severely adverse scenario



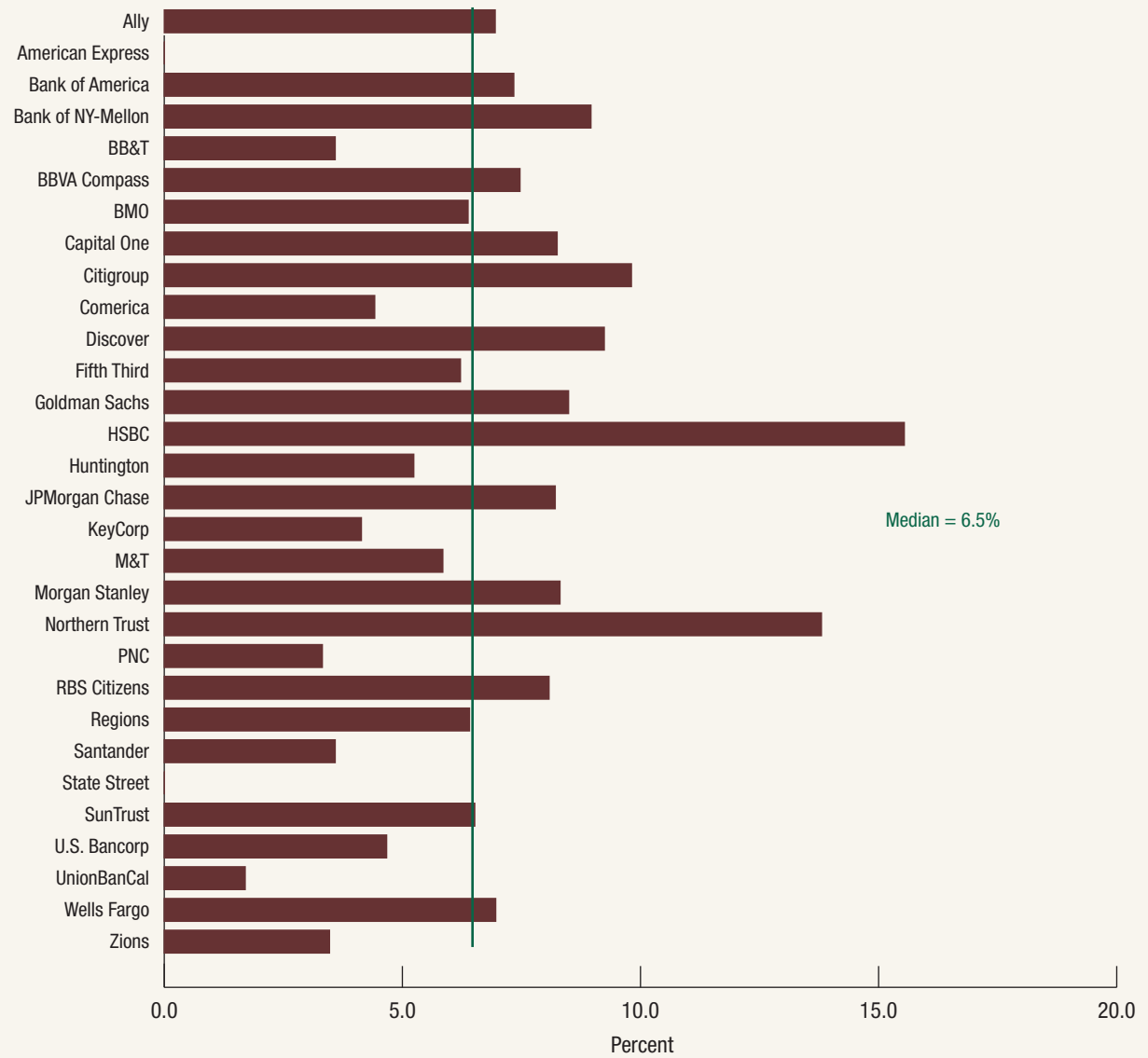
Note: Estimates are for the nine-quarter period from Q4 2013 to Q4 2015 as a percent of average balances.

Figure D.8. First-lien mortgages, domestic loss rates in the adverse scenario



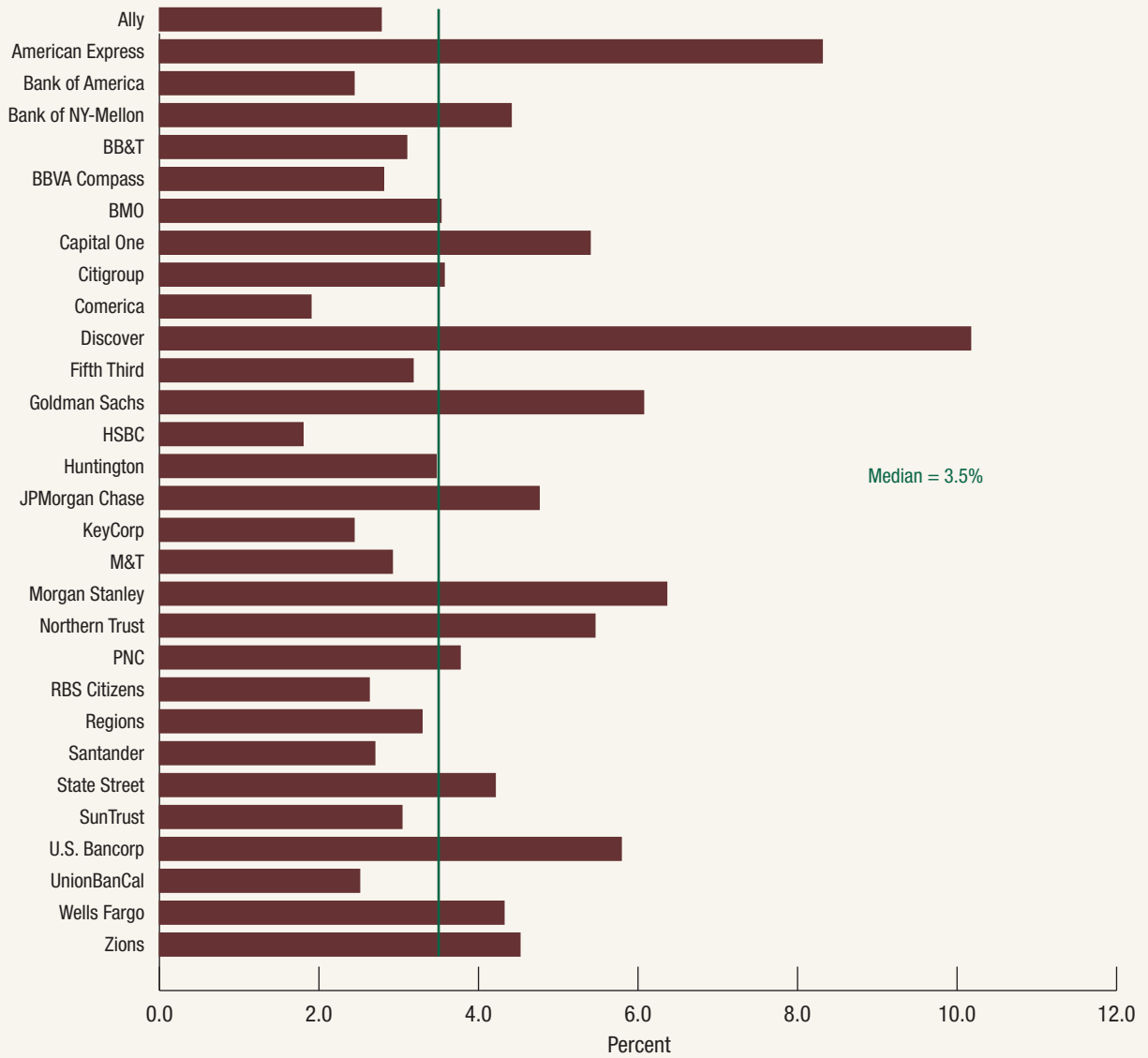
Estimates are for nine-quarter period from Q4 2013 to Q4 2015 as a percent of average balances.

Figure D.9. Junior liens and HELOCs, domestic loss rates in the adverse scenario



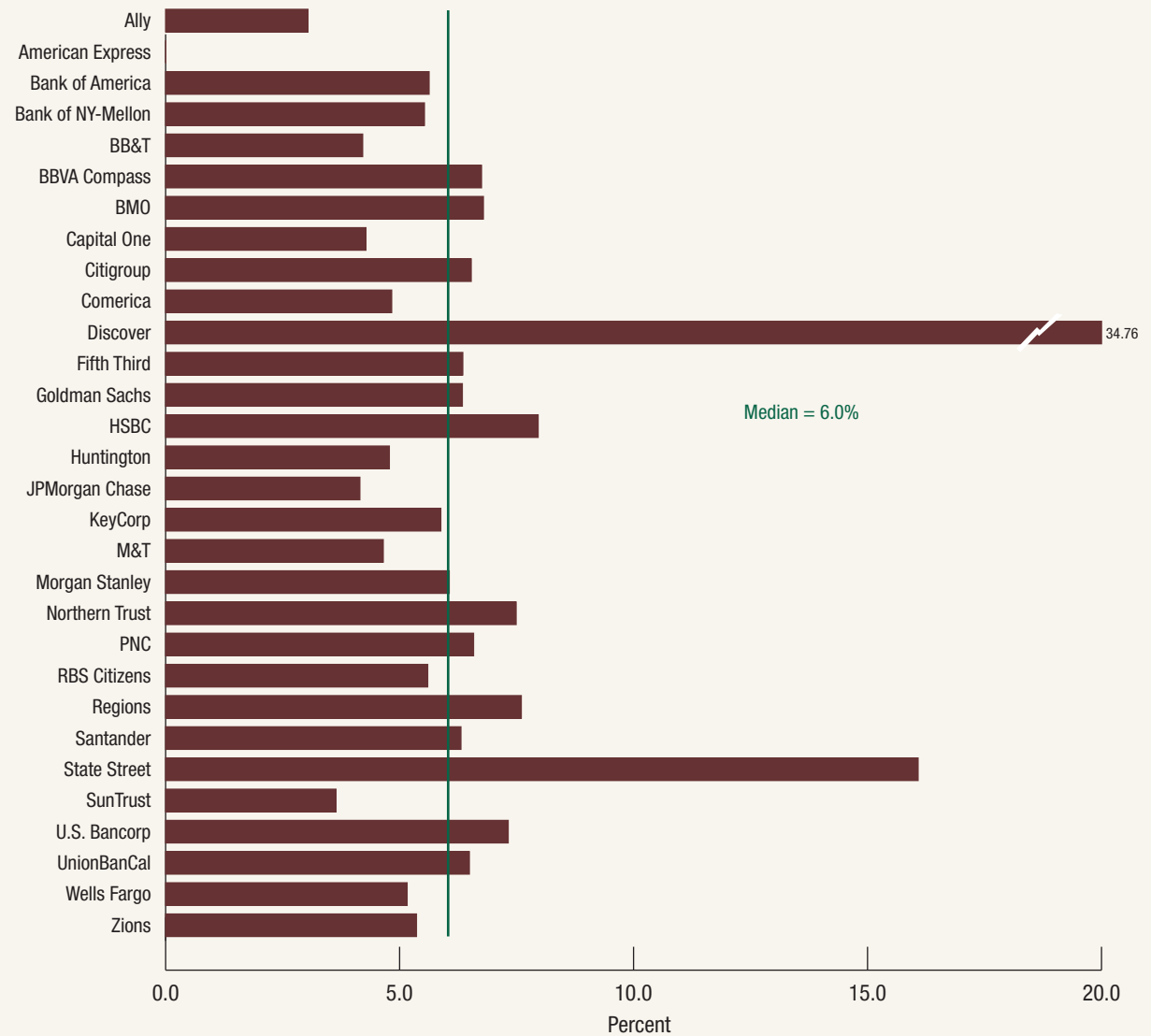
Estimates are for nine-quarter period from Q4 2013 to Q4 2015 as a percent of average balances.

Figure D.10. Commercial and industrial loss rates in the adverse scenario



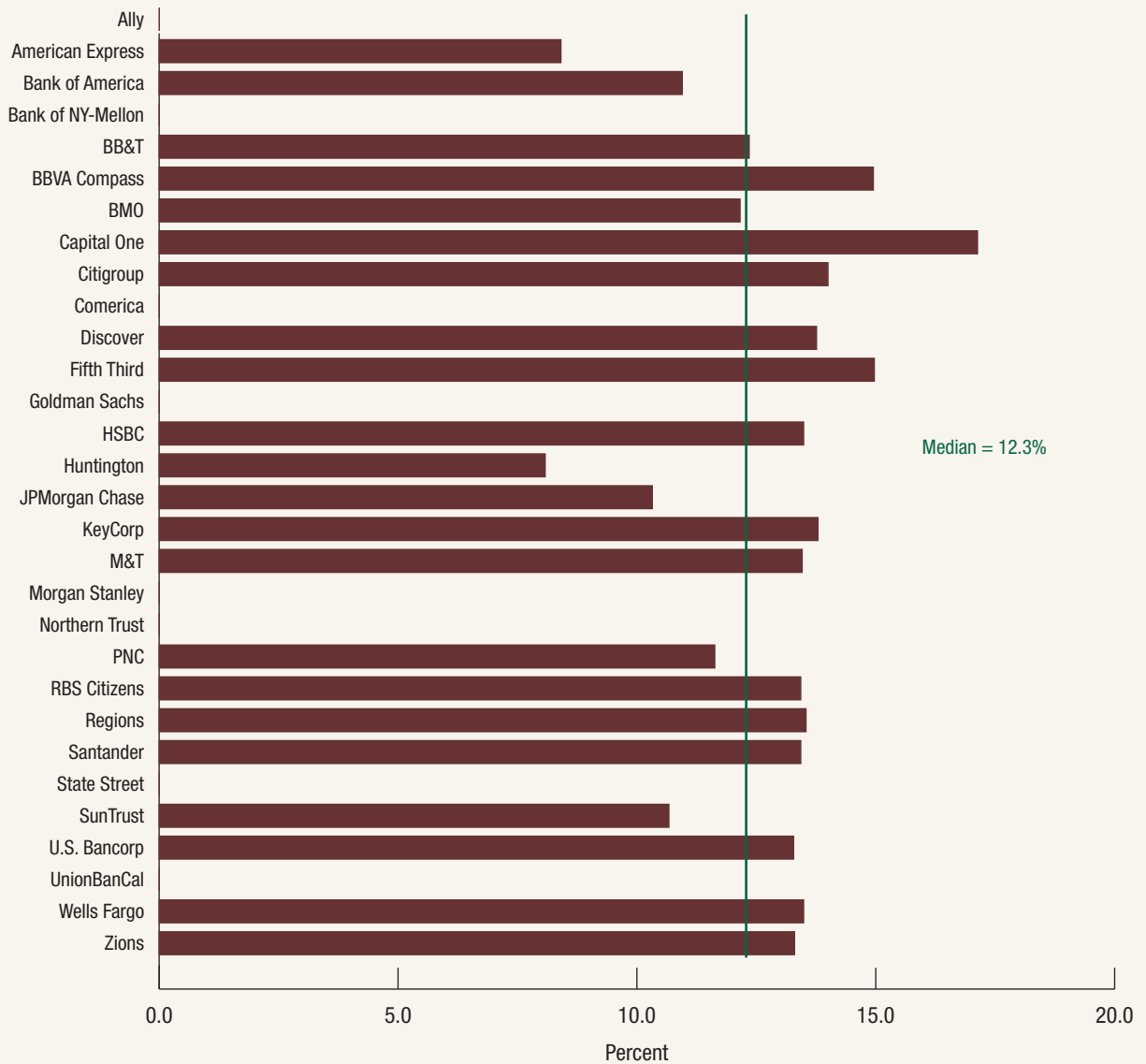
Note: Estimates are for the nine-quarter period from Q4 2013 to Q4 2015 as a percent of average balances. Losses are calculated based on the exposure at default, which includes both outstanding balances and any additional drawdown of the credit line that occurs prior to default, while loss rates are calculated as a percent of outstanding balances.

Figure D.11. Commercial real estate, domestic loss rates in the adverse scenario



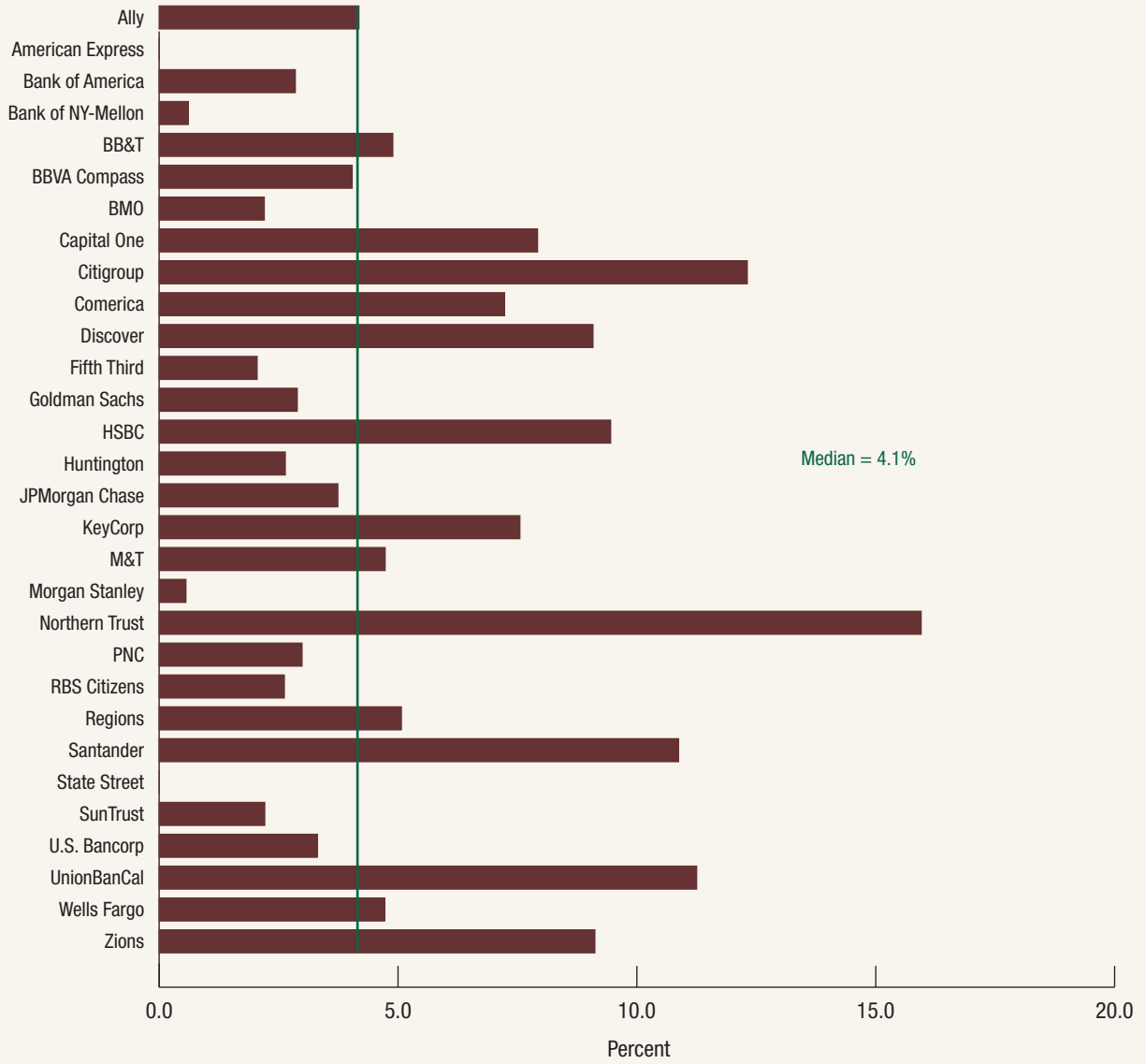
Note: Estimates are for the nine-quarter period from Q4 2013 to Q4 2015 as a percent of average balances.

Figure D.12. Credit card loss rates in the adverse scenario



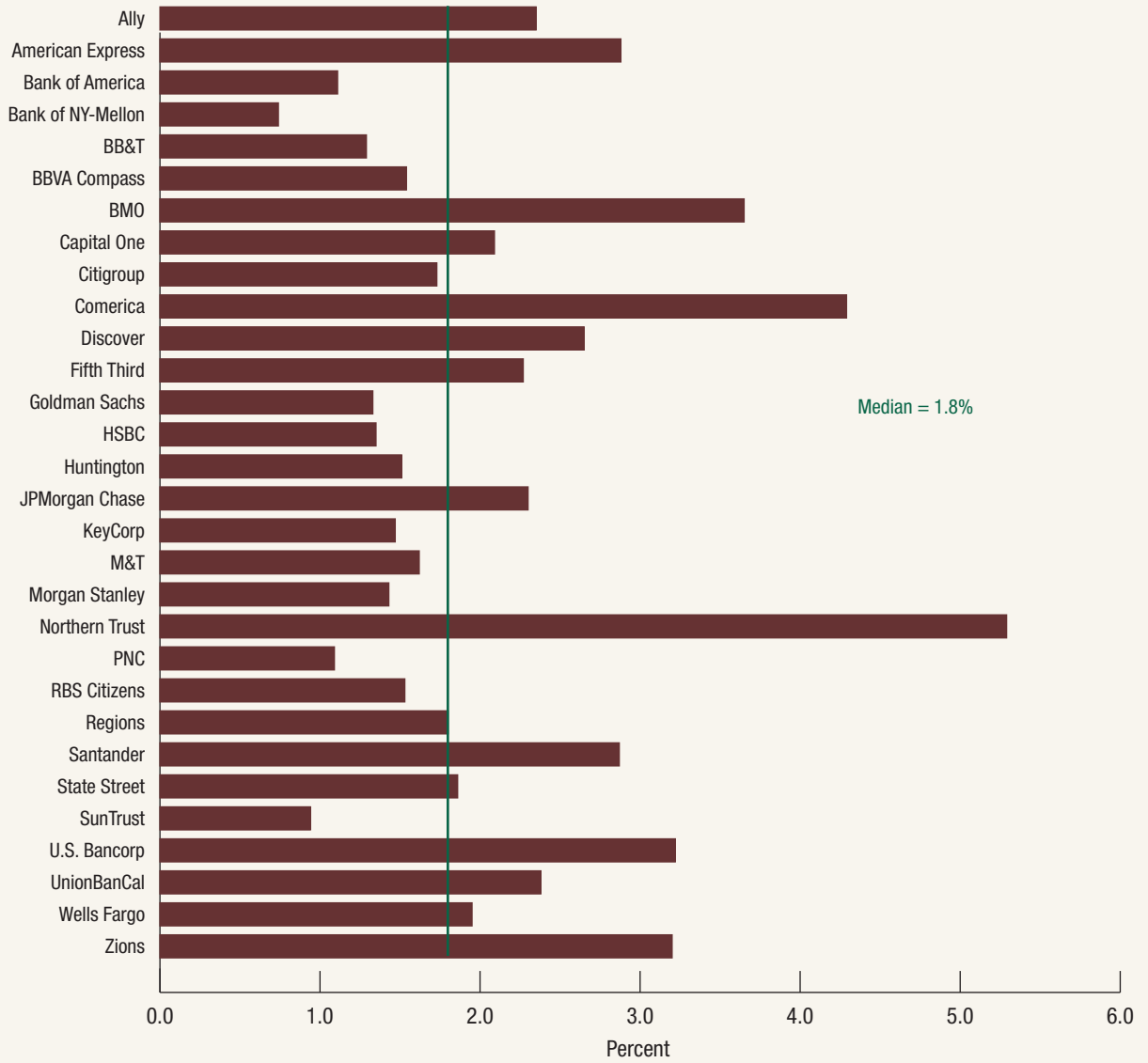
Note: Estimates are for the nine-quarter period from Q4 2013 to Q4 2015 as a percent of average balances.

Figure D.13. Other consumer loss rates in the adverse scenario



Note: Estimates are for the nine-quarter period from Q4 2013 to Q4 2015 as a percent of average balances.

Figure D.14. Other loans loss rates in the adverse scenario



Note: Estimates are for the nine-quarter period from Q4 2013 to Q4 2015 as a percent of average balances.

Appendix E: Errata

This appendix includes five tables. Table E.1 shows the revisions in data between [Table 3](#) in this report and Table 3 published on March 20 (reproduced as Table E.2 here); Table E.3 shows the revisions in data between [Table 9](#) in this report and Table 9 published on March 20 (reproduced as Table E.4 here).

Table E. 5 shows the revisions in risk-weighted assets, Basel III standardized approach data presented in [Table 2](#), [Table 8](#), and [Appendix C](#) in this report versus Table 2, Table 8, and Appendix C in the report published on March 20.

Table E.1. Revisions in projected stressed capital ratios in the severely adverse scenario, Q4 2013 to Q4 2015: All bank holding companies *

Federal Reserve estimates in the severely adverse scenario

Bank holding company	Tier 1 common ratio (%)			Common equity tier 1 ratio (%) ¹		Tier 1 risk-based capital ratio (%)			Total-risk based capital ratio (%)			Tier 1 leverage ratio (%)		
	Actual Q3 2013	Ending	Minimum	Ending	Minimum	Actual Q3 2013	Ending	Minimum	Actual Q3 2013	Ending	Minimum	Actual Q3 2013	Ending	Minimum
Ally Financial Inc.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.2	0.0	0.0	0.4
American Express Company	0.0	-0.2	-0.5	-0.2	-0.4	0.0	-1.4	-0.5	0.0	-1.9	-0.5	0.0	-1.2	-0.4
Bank of America Corporation	0.0	-0.1	-0.1	-0.3	-0.3	0.0	-0.3	-0.3	0.0	-0.3	-0.3	0.0	-0.2	-0.2
The Bank of New York Mellon Corporation	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0
BB&T Corporation	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0	-0.6	-0.2	0.0	0.1	0.1
BBVA Compass Bancshares, Inc.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BMO Financial Corp.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.0
Capital One Financial Corporation	0.0	0.1	0.1	0.1	0.1	0.0	-0.9	-0.6	0.0	-0.9	-0.8	0.0	-0.7	-0.7
Citigroup Inc.	0.0	0.1	0.1	-0.3	-0.3	0.0	-0.3	-0.3	0.0	-0.2	-0.2	0.0	-0.2	-0.2
Comerica Incorporated	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0	-0.5	-0.5	0.0	0.1	0.1
Discover Financial Services	0.0	0.2	0.1	0.2	0.1	0.0	0.2	0.1	0.0	-0.0	-0.0	0.0	0.2	0.1
Fifth Third Bancorp	0.0	0.1	0.1	0.1	0.1	0.0	-0.1	-0.1	0.0	-0.1	-0.1	0.0	-0.1	-0.1
The Goldman Sachs Group, Inc.	0.0	0.4	0.1	0.3	0.2	0.0	0.1	-0.0	0.0	0.3	0.3	0.0	0.0	-0.0
HSBC North America Holdings Inc.	0.0	-0.2	-0.2	-0.2	-0.2	0.0	-0.2	-0.2	0.0	-0.2	-0.2	0.0	-0.1	-0.1
Huntington Bancshares Incorporated	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPMorgan Chase & Co.	0.0	0.0	0.0	0.0	0.0	0.0	-0.6	-0.6	0.0	-0.5	-0.5	0.0	-0.4	-0.4
KeyCorp	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
M&T Bank Corporation	0.0	0.3	0.3	0.3	0.3	0.0	-0.1	-0.1	0.0	0.3	0.3	0.0	-0.1	-0.1
Morgan Stanley	0.0	0.0	0.0	-0.0	-0.0	0.0	-0.6	-0.3	0.0	-0.9	-0.7	0.0	-0.3	-0.2
Northern Trust Corporation	0.0	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.0	0.3	0.3	0.0	0.2	0.2
The PNC Financial Services Group, Inc.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.5	-0.5	0.0	0.0	0.0
RBS Citizens Financial Group, Inc.	0.0	0.0	0.0	0.0	0.0	0.0	-1.1	-0.7	0.0	-2.1	-0.7	0.0	-1.0	-0.3
Regions Financial Corporation	0.0	0.1	0.1	0.1	0.1	0.0	-0.3	-0.1	0.0	-0.1	-0.1	0.0	-0.3	0.0
Santander Holdings USA, Inc.	0.0	0.0	0.0	0.0	0.0	0.0	-1.1	0.0	0.0	-1.1	0.1	0.0	-1.0	0.0
State Street Corporation	0.0	0.0	0.0	0.0	0.0	0.0	-1.3	-0.9	0.0	-1.3	-0.9	0.0	-0.7	0.0
SunTrust Banks, Inc.	0.0	0.1	0.1	0.1	0.1	0.0	-0.2	0.1	0.0	-0.2	0.1	0.0	-0.2	0.1
U.S. Bancorp	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0	0.0	-0.5	-0.3	0.0	-0.1	-0.0
UnionBanCal Corporation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Wells Fargo & Company	0.0	0.0	0.0	0.0	0.0	0.0	-0.5	-0.4	0.0	-1.0	-0.8	0.0	-0.4	-0.4
Zions Bancorporation	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.1
30 participating bank holding companies	0.0	0.0	0.0	-0.1	-0.1	0.0	-0.4	-0.3	0.0	-0.5	-0.4	0.0	-0.3	-0.3

Note: The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

¹ Advanced approaches bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

* Numbers may not add due to rounding.

**Table E.2. Projected stressed capital ratios in the severely adverse scenario, Q4 2013 to Q4 2015:
All bank holding companies (As published on 3/20/14)**

Federal Reserve estimates in the severely adverse scenario

Bank holding company	Tier 1 common ratio (%)			Common equity tier 1 ratio (%) ¹		Tier 1 risk-based capital ratio (%)			Total-risk based capital ratio (%)			Tier 1 leverage ratio (%)		
	Actual Q3 2013	Ending	Minimum	Ending	Minimum	Actual Q3 2013	Ending	Minimum	Actual Q3 2013	Ending	Minimum	Actual Q3 2013	Ending	Minimum
Ally Financial Inc.	7.9	6.3	6.3	7.3	7.3	15.4	9.1	9.0	16.4	10.6	10.5	13.2	7.9	7.5
American Express Company	12.8	14.2	12.6	14.2	13.3	12.8	15.4	12.8	14.7	17.3	14.7	10.7	12.7	10.5
Bank of America Corporation	11.1	6.1	6.0	7.1	7.1	12.3	7.1	7.1	15.4	9.5	9.5	7.8	4.6	4.6
The Bank of New York Mellon Corporation	14.1	16.1	13.1	15.0	13.8	15.8	16.0	14.7	16.8	16.3	15.3	5.6	6.6	5.3
BB&T Corporation	9.4	8.2	8.2	7.9	7.9	11.3	9.7	9.7	13.9	12.2	11.8	9.0	7.9	7.9
BBVA Compass Bancshares, Inc.	11.6	8.5	8.5	8.6	8.6	11.8	8.6	8.6	14.1	10.6	10.6	10.2	7.5	7.5
BMO Financial Corp.	10.8	7.6	7.6	8.9	8.9	10.8	8.9	8.5	15.2	12.4	12.3	7.9	6.5	6.0
Capital One Financial Corporation	12.7	7.6	7.6	7.9	7.9	13.1	9.3	9.0	15.3	11.0	10.9	10.1	7.5	7.4
Citigroup Inc.	12.7	7.0	7.0	9.7	9.7	13.6	9.7	9.7	16.7	12.1	12.1	8.1	5.9	5.9
Comerica Incorporated	10.7	8.4	8.4	8.3	8.3	10.7	8.3	8.3	13.4	10.7	10.7	10.9	8.5	8.5
Discover Financial Services	14.7	13.6	13.1	13.0	12.4	15.6	13.8	13.2	17.9	15.8	15.3	13.7	11.9	11.8
Fifth Third Bancorp	9.9	8.3	8.3	7.7	7.7	11.1	8.8	8.8	14.3	11.9	11.9	10.6	8.6	8.6
The Goldman Sachs Group, Inc.	14.2	8.9	6.8	7.2	6.4	16.3	8.4	7.3	19.4	10.4	9.3	7.9	5.2	4.9
HSBC North America Holdings Inc.	14.7	6.8	6.8	9.6	9.6	17.1	9.6	9.6	26.5	18.4	18.4	7.8	4.4	4.4
Huntington Bancshares Incorporated	10.9	7.4	7.4	7.9	7.9	12.4	8.5	8.5	14.7	10.8	10.8	10.9	7.5	7.5
JPMorgan Chase & Co.	10.5	6.7	6.3	6.5	6.5	11.7	7.8	7.7	14.3	9.8	9.8	6.9	5.0	5.0
KeyCorp	11.2	9.3	9.2	9.3	9.3	11.9	9.6	9.6	14.4	11.9	11.9	11.3	9.2	9.2
M&T Bank Corporation	9.1	5.9	5.9	6.5	6.5	11.9	8.0	8.0	15.1	10.8	10.8	10.7	7.1	7.1
Morgan Stanley	12.6	7.6	6.1	7.8	7.1	15.3	8.5	7.5	16.1	10.8	9.6	7.3	4.9	4.7
Northern Trust Corporation	13.1	11.4	11.4	10.3	10.3	13.6	10.5	10.5	14.9	13.4	13.4	8.3	6.9	6.9
The PNC Financial Services Group, Inc.	10.3	9.0	9.0	7.5	7.5	12.2	9.1	9.1	15.6	12.3	12.3	11.1	8.8	8.8
RBS Citizens Financial Group, Inc.	13.9	10.7	10.7	10.7	10.7	14.0	12.0	11.6	16.3	15.6	14.2	12.1	10.5	9.8
Regions Financial Corporation	11.0	8.9	8.8	9.2	9.2	11.5	9.8	9.5	14.5	12.1	12.1	9.9	8.4	8.0
Santander Holdings USA, Inc.	13.7	7.3	7.3	6.7	6.7	14.4	11.1	8.9	16.5	13.9	11.2	12.4	9.9	7.8
State Street Corporation	15.5	14.7	13.3	11.9	11.4	17.3	14.1	13.1	19.8	16.1	15.2	7.2	7.7	6.3
SunTrust Banks, Inc.	9.9	8.9	8.7	8.4	8.3	11.0	9.2	8.8	13.0	11.1	10.8	9.5	8.0	7.8
U.S. Bancorp	9.3	8.3	8.2	7.6	7.5	11.2	9.4	9.1	13.3	11.6	11.4	9.6	8.3	8.1
UnionBanCal Corporation	11.1	8.1	8.1	8.2	8.2	11.2	8.2	8.2	13.1	10.4	10.4	10.2	7.6	7.6
Wells Fargo & Company	10.6	8.2	8.2	7.4	7.4	12.1	9.0	8.9	15.1	13.0	12.8	9.8	7.4	7.4
Zions Bancorporation	10.5	3.5	3.5	4.5	4.5	13.1	5.3	5.3	14.8	7.1	7.1	10.6	4.4	4.4
30 participating bank holding companies	11.5	7.8	7.6	8.0	8.0	12.9	8.9	8.8	15.6	11.5	11.4	8.4	6.1	6.1

Note: The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

¹ Advanced approaches bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

**Table E.3. Revisions in projected stressed capital ratios in the adverse scenario, Q4 2013 to Q4 2015:
All bank holding companies ***

Federal Reserve estimates in the adverse scenario

Bank holding company	Tier 1 common ratio (%)			Common equity tier 1 ratio (%) ¹		Tier 1 risk-based capital ratio (%)			Total-risk based capital ratio (%)			Tier 1 leverage ratio (%)		
	Actual Q3 2013	Ending	Minimum	Ending	Minimum	Actual Q3 2013	Ending	Minimum	Actual Q3 2013	Ending	Minimum	Actual Q3 2013	Ending	Minimum
Ally Financial Inc.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.2	0.0	0.0	0.3
American Express Company	0.0	-0.1	-0.5	-0.1	-0.4	0.0	-1.3	-0.5	0.0	-1.7	-0.5	0.0	-1.1	-0.4
Bank of America Corporation	0.0	-0.1	-0.1	-0.1	-0.1	0.0	-0.3	-0.3	0.0	-0.3	-0.3	0.0	-0.2	-0.2
The Bank of New York Mellon Corporation	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0
BB&T Corporation	0.0	0.1	0.0	0.1	0.1	0.0	0.1	0.0	0.0	-0.6	0.1	0.0	0.1	0.0
BBVA Compass Bancshares, Inc.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BMO Financial Corp.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Capital One Financial Corporation	0.0	0.1	0.1	0.1	0.1	0.0	-0.9	-0.3	0.0	-0.9	-0.3	0.0	-0.7	-0.3
Citigroup Inc.	0.0	0.1	0.1	-0.3	-0.2	0.0	-0.3	-0.2	0.0	-0.2	-0.0	0.0	-0.2	0.0
Comerica Incorporated	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0	-0.4	-0.3	0.0	0.1	0.1
Discover Financial Services	0.0	0.2	0.0	0.2	0.1	0.0	0.2	0.0	0.0	0.0	-0.0	0.0	0.2	0.1
Fifth Third Bancorp	0.0	0.2	0.0	0.2	0.1	0.0	-0.1	-0.1	0.0	-0.1	-0.1	0.0	-0.1	0.0
The Goldman Sachs Group, Inc.	0.0	0.4	0.1	0.3	0.2	0.0	0.1	-0.0	0.0	0.3	0.3	0.0	0.0	-0.0
HSBC North America Holdings Inc.	0.0	-0.2	-0.1	-0.2	-0.1	0.0	-0.2	-0.1	0.0	-0.1	-0.1	0.0	-0.1	-0.1
Huntington Bancshares Incorporated	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JPMorgan Chase & Co.	0.0	0.0	0.0	0.0	0.0	0.0	-0.6	-0.6	0.0	-0.5	-0.5	0.0	-0.4	-0.4
KeyCorp	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
M&T Bank Corporation	0.0	0.3	0.1	0.2	0.2	0.0	-0.1	-0.2	0.0	0.3	0.2	0.0	-0.1	0.0
Morgan Stanley	0.0	0.0	0.0	-0.0	-0.0	0.0	-0.5	-0.4	0.0	-0.9	-0.8	0.0	-0.3	-0.2
Northern Trust Corporation	0.0	0.3	0.1	0.3	0.2	0.0	0.3	0.2	0.0	0.3	0.2	0.0	0.2	0.1
The PNC Financial Services Group, Inc.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.5	-0.2	0.0	0.0	0.0
RBS Citizens Financial Group, Inc.	0.0	0.0	0.0	0.0	0.0	0.0	-1.1	-0.4	0.0	-2.1	-0.5	0.0	-1.0	0.0
Regions Financial Corporation	0.0	0.1	0.0	0.1	0.1	0.0	-0.3	0.0	0.0	-0.1	-0.1	0.0	-0.3	0.0
Santander Holdings USA, Inc.	0.0	0.0	0.0	0.0	0.0	0.0	-1.1	0.0	0.0	-1.1	0.0	0.0	-0.9	0.0
State Street Corporation	0.0	0.0	0.0	0.0	0.0	0.0	-1.3	-0.9	0.0	-1.3	-0.9	0.0	-0.7	-0.1
SunTrust Banks, Inc.	0.0	0.1	0.0	0.1	0.1	0.0	-0.2	0.1	0.0	-0.2	0.1	0.0	-0.2	0.0
U.S. Bancorp	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0	0.0	-0.5	-0.3	0.0	-0.1	0.0
UnionBanCal Corporation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Wells Fargo & Company	0.0	0.0	0.0	0.0	0.0	0.0	-0.5	-0.3	0.0	-1.0	-0.6	0.0	-0.4	-0.2
Zions Bancorporation	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.1
30 participating bank holding companies	0.0	0.0	-0.0	-0.0	-0.0	0.0	-0.4	-0.3	0.0	-0.4	-0.3	0.0	-0.2	-0.2

Note: The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

¹ Advanced approaches bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

* Numbers may not add due to rounding.

**Table E.4. Projected stressed capital ratios in the adverse scenario, Q4 2013 to Q4 2015:
All bank holding companies (As published on 3/20/14)**

Federal Reserve estimates in the adverse scenario

Bank holding company	Tier 1 common ratio (%)			Common equity tier 1 ratio (%) ¹		Tier 1 risk-based capital ratio (%)			Total-risk based capital ratio (%)			Tier 1 leverage ratio (%)		
	Actual Q3 2013	Ending	Minimum	Ending	Minimum	Actual Q3 2013	Ending	Minimum	Actual Q3 2013	Ending	Minimum	Actual Q3 2013	Ending	Minimum
Ally Financial Inc.	7.9	10.0	7.6	9.4	8.8	15.4	11.9	10.3	16.4	13.3	11.6	13.2	10.2	8.6
American Express Company	12.8	16.4	13.0	16.3	14.3	12.8	17.5	13.0	14.7	19.4	14.9	10.7	14.3	10.8
Bank of America Corporation	11.1	11.2	8.8	9.7	8.6	12.3	10.6	9.1	15.4	12.8	11.7	7.8	6.8	5.9
The Bank of New York Mellon Corporation	14.1	17.6	13.6	15.1	13.3	15.8	16.1	14.3	16.8	16.2	14.6	5.6	6.6	5.4
BB&T Corporation	9.4	10.0	9.1	9.8	9.2	11.3	11.5	10.9	13.9	13.7	12.9	9.0	9.2	8.6
BBVA Compass Bancshares, Inc.	11.6	11.4	11.1	11.1	10.8	11.8	11.1	10.9	14.1	12.8	12.8	10.2	9.5	9.5
BMO Financial Corp.	10.8	10.4	9.9	11.3	11.1	10.8	11.3	9.9	15.2	14.4	13.7	7.9	8.2	6.9
Capital One Financial Corporation	12.7	12.1	11.6	10.6	9.9	13.1	11.9	10.7	15.3	13.7	12.5	10.1	9.4	8.6
Citigroup Inc.	12.7	10.5	9.7	12.0	11.2	13.6	12.0	11.2	16.7	14.4	13.7	8.1	7.2	6.6
Comerica Incorporated	10.7	10.3	10.2	10.0	9.9	10.7	10.0	9.9	13.4	11.9	11.8	10.9	10.1	10.1
Discover Financial Services	14.7	15.8	13.9	15.2	14.1	15.6	16.0	14.7	17.9	17.9	16.9	13.7	13.6	12.7
Fifth Third Bancorp	9.9	9.9	9.2	9.4	9.0	11.1	10.5	10.1	14.3	12.9	12.8	10.6	10.1	9.5
The Goldman Sachs Group, Inc.	14.2	10.0	9.5	8.0	7.9	16.3	9.3	9.1	19.4	11.4	11.2	7.9	5.7	5.6
HSBC North America Holdings Inc.	14.7	11.2	11.2	11.9	11.7	17.1	12.3	12.3	26.5	20.8	20.8	7.8	5.7	5.7
Huntington Bancshares Incorporated	10.9	9.9	9.5	9.6	9.4	12.4	10.5	10.3	14.7	12.7	12.7	10.9	9.2	9.2
JPMorgan Chase & Co.	10.5	9.5	8.7	8.4	7.8	11.7	9.8	9.1	14.3	11.6	11.3	6.9	6.2	5.8
KeyCorp	11.2	11.2	10.5	10.9	10.5	11.9	11.4	10.9	14.4	13.3	13.0	11.3	10.7	10.4
M&T Bank Corporation	9.1	9.9	8.6	9.1	8.8	11.9	10.6	10.3	15.1	13.2	13.2	10.7	9.3	9.0
Morgan Stanley	12.6	9.4	8.9	8.6	8.4	15.3	9.6	9.1	16.1	11.9	11.4	7.3	5.3	5.1
Northern Trust Corporation	13.1	12.8	12.5	11.3	11.0	13.6	11.4	11.1	14.9	14.0	13.8	8.3	7.4	7.3
The PNC Financial Services Group, Inc.	10.3	10.9	10.2	9.4	8.7	12.2	10.9	10.2	15.6	13.9	13.4	11.1	10.4	9.9
RBS Citizens Financial Group, Inc.	13.9	13.4	13.0	12.8	12.5	14.0	14.0	13.0	16.3	17.5	15.7	12.1	12.1	11.0
Regions Financial Corporation	11.0	11.6	10.7	11.4	10.7	11.5	12.1	11.2	14.5	14.4	13.9	9.9	10.3	9.4
Santander Holdings USA, Inc.	13.7	9.5	8.5	8.6	8.1	14.4	13.0	9.9	16.5	15.8	11.8	12.4	11.5	8.9
State Street Corporation	15.5	17.1	13.9	12.8	11.2	17.3	14.8	12.7	19.8	16.7	14.6	7.2	8.0	6.5
SunTrust Banks, Inc.	9.9	11.0	9.7	10.6	9.9	11.0	11.6	10.5	13.0	13.4	12.5	9.5	9.9	9.2
U.S. Bancorp	9.3	10.5	9.1	9.6	8.6	11.2	11.3	10.2	13.3	13.5	12.4	9.6	9.8	9.0
UnionBanCal Corporation	11.1	11.6	11.4	11.3	11.1	11.2	11.3	11.1	13.1	13.1	13.0	10.2	10.4	10.3
Wells Fargo & Company	10.6	10.7	10.0	9.4	8.8	12.1	11.0	10.2	15.1	15.3	14.2	9.8	8.9	8.4
Zions Bancorporation	10.5	7.2	7.2	7.4	7.4	13.1	8.8	8.8	14.8	10.6	10.6	10.6	7.2	7.2
30 participating bank holding companies	11.5	10.8	9.7	10.0	9.3	12.9	11.1	10.2	15.6	13.6	12.9	8.4	7.5	7.0

Note: The capital ratios are calculated using capital action assumptions provided within the Dodd-Frank Act stress testing rule. These projections represent hypothetical estimates that involve an economic outcome that is more adverse than expected. These estimates are not forecasts of expected losses, revenues, net income before taxes, or capital ratios. The minimum capital ratio presented is for the period Q4 2013 to Q4 2015.

¹ Advanced approaches bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015. For purposes of this stress test cycle, an advanced approaches BHC includes any BHC that has consolidated assets greater than or equal to \$250 billion or total consolidated on-balance sheet foreign exposure of at least \$10 billion as of December 31, 2013. See 12 CFR 217.100(b)(1); 12 CFR part 225, appendix G, section 1(b). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

Table E.5. Projected Q4 2015 risk-weighted assets, Basel III standardized approach: All bank holding companies

Federal Reserve estimates in the severely adverse scenario and adverse scenario

Billions of dollars

Bank holding company	Severely adverse scenario			Adverse scenario		
	Updated on 3/24	As published on 3/20	Difference*	Updated on 3/24	As published on 3/20	Difference*
Ally Financial Inc.	137.3	137.3	0.0	140.7	140.7	0.0
American Express Company	130.6	130.6	0.0	132.9	132.9	0.0
Bank of America Corporation	1,401.6	1,401.7	-0.1	1,436.2	1,436.3	-0.1
The Bank of New York Mellon Corporation	138.5	138.5	0.0	143.7	143.7	0.0
BB&T Corporation	147.4	147.4	0.0	151.2	151.2	0.0
BBVA Compass Bancshares, Inc.	58.4	58.4	0.0	59.7	59.7	0.0
BMO Financial Corp.	81.1	81.1	0.0	82.8	82.8	0.0
Capital One Financial Corporation	241.0	240.9	0.0	247.0	247.0	0.0
Citigroup Inc.	1,180.9	1,180.8	0.1	1,204.7	1,204.6	0.1
Comerica Incorporated	67.6	67.6	0.0	69.2	69.2	0.0
Discover Financial Services	68.8	68.8	0.0	70.0	70.0	0.0
Fifth Third Bancorp	122.4	122.4	0.0	125.3	125.3	0.0
The Goldman Sachs Group, Inc.	595.2	595.1	0.1	597.6	597.5	0.1
HSBC North America Holdings Inc.	164.8	164.8	-0.0	169.7	169.7	-0.0
Huntington Bancshares Incorporated	52.5	52.5	0.0	53.7	53.7	0.0
JPMorgan Chase & Co.	1,574.1	1,574.1	0.0	1,606.9	1,606.9	0.0
KeyCorp	87.2	87.2	0.0	89.3	89.3	0.0
M&T Bank Corporation	98.4	98.4	0.0	100.9	100.9	0.0
Morgan Stanley	495.1	495.1	-0.0	496.3	496.3	-0.0
Northern Trust Corporation	65.0	65.0	0.0	66.8	66.8	0.0
The PNC Financial Services Group, Inc.	296.4	296.4	0.0	304.3	304.3	0.0
RBS Citizens Financial Group, Inc.	101.4	101.4	0.0	104.2	104.2	0.0
Regions Financial Corporation	101.6	101.6	0.0	104.4	104.4	0.0
Santander Holdings USA, Inc.	91.8	91.8	0.0	94.7	94.7	0.0
State Street Corporation	111.2	111.2	0.0	114.8	114.8	0.0
SunTrust Banks, Inc.	149.9	149.9	0.0	154.0	154.0	0.0
U.S. Bancorp	316.1	316.1	0.0	324.0	324.0	0.0
UnionBanCal Corporation	97.4	97.4	0.0	99.3	99.3	0.0
Wells Fargo & Company	1,211.3	1,211.3	0.0	1,246.1	1,246.1	0.0
Zions Bancorporation	47.6	47.6	0.0	48.5	48.5	0.0
30 participating bank holding companies	9,432.4	9,432.3	0.1	9,638.8	9,638.7	0.1

* Numbers may not add due to rounding.

