U.S. Bancorp

2015 Comprehensive Capital Analysis and Review

Dodd-Frank Act Stress Test Disclosure

March 2015
Quantitative Disclosure

U.S. Bancorp (the “Company”) administers its capital adequacy assessment through its Capital Adequacy Process. The Capital Adequacy Process identifies and quantifies the Company’s material risks under both expected and stressed economic conditions such as those projected by the Federal Reserve for the annual Comprehensive Capital Analysis and Review submission of the Supervisory severely adverse stress test as required by the Dodd-Frank Wall Street Reform and Consumer Protection Act (“Dodd-Frank Act”) Stress Test (“DFAST”). This assessment is made to determine the impact of macroeconomic conditions projected in a severely adverse scenario on the Company’s net income, balance sheet, risk-weighted assets and other components of capital. Described below are the quantitative results for the Company under the Supervisory severely adverse scenario defined by the Federal Reserve in accordance with the expectations and principles set forth in the Federal Reserve’s publication, “Supervisory Guidance on Stress Testing for Banking Organizations with More Than $10 Billion in Total Consolidated Assets.”
Supervisory-defined severely adverse scenario

U.S. Bancorp Disclosure

Dodd-Frank Act Stress Testing Results 2015

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

Actual 2014:Q3 and projected stressed capital ratios through 2016:Q4

<table>
<thead>
<tr>
<th>Actual 2014:Q3 and projected 2016:Q4 risk-weighted assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual 2014:Q3</td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>General approach</td>
</tr>
<tr>
<td>Risk-weighted assets</td>
</tr>
</tbody>
</table>

(1) For each quarter in 2014, risk-weighted assets are calculated using the general risk-based capital approach set forth in 12 CFR 225, appendix A. For each quarter in 2015 and 2016, risk-weighted assets are calculated under the Board's standardized capital risk-based approach in 12 CFR 217, subpart D, except for the risk-weighted assets used to calculate the tier 1 common ratio, which uses the general risk-based capital approach for all quarters.

Projected losses, revenues, net income, and other comprehensive income through 2016:Q4

<table>
<thead>
<tr>
<th>Pre-provision net revenue (2)</th>
<th>15.6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other revenue (3)</td>
<td>0.0</td>
</tr>
<tr>
<td>Provisions</td>
<td>17.8</td>
</tr>
<tr>
<td>Realized losses/gains on securities (AFS/HTM)</td>
<td>0.2</td>
</tr>
<tr>
<td>Trading and counterparty losses (4)</td>
<td>0.0</td>
</tr>
<tr>
<td>Other losses/gains (5)</td>
<td>0.0</td>
</tr>
<tr>
<td>Net income before taxes</td>
<td>(2.4)</td>
</tr>
</tbody>
</table>

Memo items

<p>| Other comprehensive income (6) | 0.9 |</p>
<table>
<thead>
<tr>
<th>Other effects on capital Actual 2014:Q3</th>
<th>2016:Q4</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOCI included in capital (billions of dollars)</td>
<td>(0.1)</td>
</tr>
</tbody>
</table>

Note: Estimates may not sum precisely due to rounding.

Projected loan losses, by type of loan, 2014:Q4 - 2016:Q4

<table>
<thead>
<tr>
<th>Loan losses</th>
<th>Billions of dollars</th>
<th>Portfolio loss rates (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>First-lien mortgages, domestic</td>
<td>1.1</td>
<td>2.0%</td>
</tr>
<tr>
<td>Junior liens and HELOs, domestic</td>
<td>0.6</td>
<td>3.5%</td>
</tr>
<tr>
<td>Commercial and industrial (2)</td>
<td>4.0</td>
<td>7.0%</td>
</tr>
<tr>
<td>Commercial real estate, domestic</td>
<td>3.0</td>
<td>7.5%</td>
</tr>
<tr>
<td>Credit cards</td>
<td>4.0</td>
<td>19.5%</td>
</tr>
<tr>
<td>Other consumer (3)</td>
<td>1.3</td>
<td>4.2%</td>
</tr>
<tr>
<td>Other loans (4)</td>
<td>1.0</td>
<td>4.2%</td>
</tr>
</tbody>
</table>

(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.

Note: Estimates may not sum precisely due to rounding.

Actual 2014:Q3 and projected 2016:Q4 risk-based capital ratios

<table>
<thead>
<tr>
<th>ending</th>
<th>minimum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 1 common ratio (%)</td>
<td>9.5%</td>
</tr>
<tr>
<td>Common equity tier 1 capital ratio (%)</td>
<td>9.7%</td>
</tr>
<tr>
<td>Tier 1 risk-based capital ratio (%)</td>
<td>11.3%</td>
</tr>
<tr>
<td>Total risk-based capital ratio (%)</td>
<td>13.6%</td>
</tr>
<tr>
<td>Tier 1 leverage ratio (%)</td>
<td>9.4%</td>
</tr>
</tbody>
</table>

(1) The capital ratios are calculated using capital action assumptions provided with 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 2014:Q4 to 2016:Q4.

(2) Advanced approaches bank holding companies (BHCs) are subject to the common equity tier 1 ratio for the third and fourth quarter of 2014. All bank holding companies are subject to the common equity tier 1 ratio for each quarter of 2015 and 2016. An advanced approaches BHC includes any BHC that has consolidated total assets greater than or equal to $250 billion or consolidated total on-balance sheet foreign exposure of at least $10 billion.

See 12 CFR 217.100(b)(1). Other BHCs include any BHC that is subject to 12 CFR 225.8 and is not an advanced approaches BHC.

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, and goodwill impairment losses.

(6) Other comprehensive income (OCI) is only calculated for advanced approaches BHCs, and other BHCs that opt into the advanced approaches treatment of AOCI.

(7) Certain AOCI items are subject to transition into projected regulatory capital. Those transitions are 20 percent included in projected regulatory capital for 2014, 40 percent included in projected regulatory capital for 2015, and 60 percent included in projected regulatory capital for 2016.
Macroeconomic Scenario

The Company projects the impact of adverse macroeconomic scenarios (“stressed economic conditions”) on its net income, balance sheet, risk-weighted assets and capital adequacy. The projections disclosed above are based on macroeconomic factors projected by the Federal Reserve and are not interpreted as likely conditions in a recession. Rather, the macroeconomic factor projections describe a hypothetical scenario designed to assess the strength of the Company and its resilience to severely adverse economic conditions. Following is a description of the stressed macroeconomic scenario defined by the Federal Reserve and used to project the results of the 2015 Dodd-Frank Act Stress Test. The nine-quarter stress time horizon for the 2015 Stress Test is from 4Q2014 through 4Q2016.

Supervisory Severely Adverse Scenario Definition

The severely adverse scenario, as defined by the Federal Reserve, is characterized by “a substantial weakening in global economic activity, accompanied by large reductions in asset prices.”\(^1\) Principal economic factors that drive the scenario are defined as follows:

- Unemployment peaks at 10.1 percent in 2Q2016, a 4.0 percentage point increase from the beginning of the stress scenario.
- Real Gross Domestic Product (GDP) declines 6.1 percent by the end of 1Q2015, with declines occurring for 5 consecutive quarters.
- Equity prices decline approximately 58 percent at the trough.
- Housing prices decline roughly 26 percent throughout the scenario time horizon.
- Commercial real estate (CRE) prices decline approximately 34 percent at the trough.
- Short-term interest rates remain low (near zero).
- Long-term 10-year Treasury rates decline to 0.90 percent early in the scenario and gradually increase by approximately 1.00 percent through 2016.
- Mortgage rates begin the stress period in 4Q2014 at 4.20 percent, reach 5.00 percent by 3Q2015 and end the stress period at 4.70 percent.

Please refer to the “2015 Supervisory Scenarios for Annual Stress Tests Required under the Dodd-Frank Act Stress Testing Rules and the Capital Plan Rule” published by the Federal Reserve on October 23, 2014 for more information regarding the supervisory severely adverse scenario.

\(^1\) Defined by the Board of Governors of the Federal Reserve System in the “2015 Supervisory Scenarios for Annual Stress Tests Required under the Dodd-Frank Act Stress Testing Rules and the Capital Plan Rule”, published on October 23, 2014
The Company administers the stressed macroeconomic scenarios through the Company’s Economic Scenario Committee (ESC) which consists of executive officers and subject matter experts. The executive officers who are part of the ESC include the Chief Operating Officer, Chief Financial Officer, Chief Risk Officer, Chief Credit Officer, Treasurer, Executive Vice President responsible for financial forecasting and stress testing and Executive Vice President of Strategy and Corporate Affairs. Subject matter experts include the Company’s Chief Economist and the heads of Capital Planning, Interest Rate Risk Management and Credit Risk Management.

Through the ESC, the Company defines the macroeconomic indicators most relevant to the Company’s business activities, including factors not provided in the Federal Reserve’s macroeconomic scenarios. For relevant drivers that are not provided by the Federal Reserve, the Company interpolates values based on historical correlations to Federal Reserve-defined macroeconomic factors observed in recent recessionary periods. In addition to Unemployment, GDP, Housing Prices and CRE Property Prices, other relevant macroeconomic factors projected by the Company may include, but are not limited to; Weekly Initial Unemployment Claims, Consumer Bankruptcy Filings, Real Personal Consumption Expenditures (PCE), the S&P 500 Index (SPX) and the 1-Month LIBOR rate.

These factors reflect drivers of economic activity (Real GDP Growth, PCE and Unemployment Rate), equity values (SPX), the value of primary collateral pools (Housing Price Index and CRE Price Index), the consumer bankruptcy climate (Consumer Bankruptcy Filings) and interest rates. These variables also are selected for their impact on the performance of the Company’s businesses. The ESC continually reviews the need for additional macroeconomic factors to ensure consistency in modeling and provide more targeted measures of economic conditions. This set of macroeconomic indicators provides a balanced view of the economy and serves as a valuable testing and planning tool for the Company.

**Risks Included in the Stress Test**

Through its Capital Adequacy Process, the Company identifies its material risks under both expected and stressed economic conditions. The Company’s most prominent risk exposures are credit, interest rate, market, liquidity, operational, compliance, strategic, and reputational. The Company projects the impact of these risks to its balance sheet, net income and capital positions and also considers other financial impacts of stressed economic factors on the performance of the Company’s businesses.

Credit risk is the risk of not collecting the interest and/or principal balance of a loan, investment or derivative contract when it is due. The Company’s stress testing methods estimate and quantify the impact of the stressed economic conditions on its credit losses. Principal drivers of higher credit losses are increases in unemployment, declines in GDP, declines in the SPX and declines in home and CRE values.
Losses are separately forecast for each major portfolio segment. The major portfolio segments include corporate exposures managed on an individual basis, small business loans and lines of credit, commercial construction loans, commercial mortgages, residential mortgages, home equity loans and lines of credit, consumer credit cards, auto loans, auto leases and other retail exposures.

Interest rate risk is the potential reduction of net interest income as a result of changes in interest rates, which can affect the re-pricing of assets and liabilities differently. The Company’s net interest income is affected by market rates of interest, which in turn are affected by prevailing economic conditions, by the fiscal and monetary policies of the federal government and by the policies of various regulatory agencies. The stressed macroeconomic scenario includes assumptions about key interest rates. The Company’s stress test results incorporate key interest rate assumptions in its estimate of the yield on assets and funding costs, as well as in the composition of its balance sheet, including the fair value of mortgage servicing rights (MSRs) and their impact on the Company’s net income and capital positions.

Market risk arises from fluctuations in interest rates, foreign exchange rates and security prices that may result in changes in the values of financial instruments, such as trading and available-for-sale securities, mortgage loans held for sale, MSRs and derivatives that are accounted for on a fair value basis. The Company considers the impact of these risks in its projections under the stressed economic conditions.

Liquidity risk is the possible inability to fund obligations or new business at a reasonable cost in a timely manner. The Company’s liquidity is essential for the operation of its business. Market conditions and other events could negatively affect the Company’s access to funds or its borrowing costs. The Company’s results reflect the impact of the stressed economic scenario assumptions on its access to debt markets, its interest expense and its ability to accrete capital.

Operational risk is the risk of loss resulting from inadequate or failed internal processes, people or systems, or from external events, including the risk of loss resulting from breaches in data security. Operational risk can also include failures by third parties with which the Company does business. Compliance risk is the risk of loss arising from violations of, or nonconformance with, laws, rules, regulations, prescribed practices, internal policies, and procedures or ethical standards, potentially exposing the Company to fines, civil money penalties, payment of damages, and the voiding of contracts. Compliance risk also arises in situations where the laws or rules governing certain Company products or activities of the Company’s customers may be ambiguous or untested. The Company’s stress testing process estimates and quantifies the effect of stressed economic conditions on its operational losses, which include losses related to noncompliance, and their effect on the Company’s net income and capital positions.
Strategic risk is the risk to earnings or capital arising from adverse business decisions or improper implementation of those decisions. Reputational risk is the potential that negative publicity or press regarding the Company’s operations, business practices or products, whether true or not, will cause a decline in the customer base, costly litigation or revenue reductions. The Company considers the impact of these risks in its projections under the stressed economic conditions.

Methodologies Used in the Stress Test

Net Income
The outcome projected for net income under the stressed economic conditions includes the impact on the Company’s pre-provision net revenue, provision for credit losses, realized gain or loss on the Company’s available-for-sale (“AFS”) or held-to-maturity investment portfolio and other gains or losses. These include the effects of any goodwill impairment and the benefit to the Company’s income tax expense resulting from the ability to utilize losses and the use of tax credits from the Company’s tax-advantaged community investments.

Capital Position
In assessing its capital position, the Company incorporates the net income resulting from the quantification of the effects of the stressed economic conditions on its business activities into its common equity roll-forward. The Company also incorporates the capital actions prescribed in the stress test regulation. These are limited to preferred dividends and annual common stock dividends equal to the quarterly average dollar amount of common stock dividends that the Company paid in the previous year and no redemption or repurchase of any capital instrument. The Company calculates its adjusted common equity by applying regulatory adjustments to its common equity. The Company assesses resulting changes in those items that are either included on a limited basis or completely deducted from regulatory capital. The Company also adjusts the level of its goodwill and intangibles deducted from capital to reflect amortization and impairment, if any. Additionally, the Company also analyzes the effects of the stressed economic conditions on its net deferred tax asset position, MSRs and significant and non-significant equity investments to determine the appropriate level of deductions from regulatory capital.

Having determined the capital ratio numerator, the Company calculates, according to the capital regulations, its credit risk-weighted assets for on- and off-balance sheet credit exposures. To this amount, the Company adds the risk-weighted assets related to its market risk. The Company’s capital position is determined by the ratio of the capital in the numerator and the risk-weighted assets in the denominator.

The Company considers the potential for impairment of goodwill and other intangible assets under stressed economic conditions using analyses and methodologies similar to those employed in its annual impairment testing, incorporating the impact of the stressed conditions on the interest income,
noninterest income and credit losses of each reporting unit.

**Global Market Shock**
The Company, by Federal Reserve definition, is not subject to the global financial market shock. The Company does, however, consider the impact of the stressed economic conditions on its trading assets and the outcome is included in the Company’s pre-provision net revenue forecast.

**Pre-Provision Net Revenue:** The projections under the stressed economic conditions are produced for:
- the Company’s balance sheet and related net interest income;
- the Company’s fee revenue, including losses related to the repurchase of mortgage loans from investors due to a breach in representations or warranties, the impact on earnings related to the Company’s MSRs and other mortgage production fees, losses related to the Company’s trading portfolio and the stressed outcome of other product fee categories, including the Company’s payment services, retail services, trust and investment services, other commercial product fees, and other fees; and
- the impact on the Company’s expenses, which includes anticipated operational loss events that are expected in stressed economic conditions and increases in litigation and other possible legal expense related to projected loss events.

**Balance Sheet and related Net Interest Income and Fee Income:**
The Company projects the balance sheet, net interest income and fee income under the stressed economic conditions on the basis of regression modeling when significant correlations to macroeconomic factors have been identified. When significant correlations to macroeconomic factors are not identified, the Company uses other forecasting tools and analytics, which include management’s assessment of outcomes in the stressed economic conditions, and considers, as a basis, the historical relationship of fee and balance sheet performance to macroeconomic factors under specific economic conditions. In both of these approaches, the Company analyzes relationships that occurred in past recessionary and non-recessionary periods to determine the strongest correlation to economic drivers. The Company realizes that relying solely on historical relationships may not predict future outcomes and may, based on management’s discretion, apply more conservative overlays to modeled outcomes.

The Company’s models and other approaches rely on several assumptions. A key assumption is that the Company does not predict changes in consumer behavior in stressed economic conditions. Rather, it relies on behavior patterns recognized in previous downturn periods. Another assumption is that balance sheet growth and related revenues observed in the previous economic downturn may not predict growth in future economic downturns, as the flight-to-quality realized in previous recessions may not be repeated. Management assesses the outcome of all financial projections to determine if additional conservative adjustments are required based
on uncertainties in the modeling assumptions or other factors not captured by the models or tools. These adjustments are meant to produce higher levels of financial stress in stressed economic conditions and also address risks that may not be predicted by existing modeling approaches.

**Balance Sheet and Net Interest Income:**

Balance sheet outcomes are projected for loans, loans held for sale, investment securities, other assets, deposits, wholesale borrowings, equity and other liabilities.

Corporate loans, commercial mortgages, construction loans, retail leases, installment loans, residential first liens, home equity loans and lines, residential mortgage and retail and commercial credit card balance projections are based on regression models. These modeled balances represent the majority of the Company’s total loan portfolio.

For the projection of other balance sheet loan categories, the Company relies on tools and analytics that are based on historical analyses. As part of the projection process utilizing tools, management inserts assumptions within the tools to project volumes which consider recent trends, new business activity, portfolio runoff and stressed economic conditions.

Non-interest bearing deposits, interest bearing non-maturity deposits and domestic time deposits balances are also projected based on regression models. These modeled balances represent the majority of the Company’s total deposit balances. Net funding levels are projected based on the outcome of the simulation modeling results of all other balance sheet items.

The Supervisory-defined stressed macroeconomic assumptions result in a general contraction of business activity, which is reflected in the Company’s balance sheet in the form of reduced on- and off-balance sheet exposures. The business activity contraction will impact the Company’s projection of risk-weighted assets associated with balance sheet exposures; however, the macroeconomic assumptions impact the Company’s loan portfolios with differing degrees of severity. This differential will lead to asset mix changes which likely will affect the Company’s weighted average risk-weights from period to period, either emphasizing or offsetting the effect of reduced on- and off-balance sheet exposures. Additionally, the incorporation of the Basel III rules into the stress analysis further impacts risk-weighted assets related to other regulatory deductions under stressed macroeconomic assumptions.

Net interest income is modeled using an interest rate simulation model. The simulation model employs the balance sheet projections that are based on the stressed economic environment and applies the rate forecasts and other key economic indicators as provided in the stressed macroeconomic scenarios.
The model simulates the expected behavior of existing balance sheet volumes based on account characteristics, applies the stressed balance sheet projections and calculates new business volumes. New business volume characteristics are based on the Company’s historical run rate and include adjustments modeled for stressed economic environments.

The Company also models the wholesale funding cost assumptions for long-term funding instruments to ensure these assumptions properly reflect both the availability and cost in a stressed environment. Short-term borrowing rates are forecast based on historical experience in a recessionary time period.

Fee Income:
The majority of the Company’s fee income is projected using regression modeling in the stress scenario including revenues from Mortgage Banking, Payment Services, Investment Management, Treasury Management (a component of Treasury Services), the majority of Retail and Small Business Deposits, Investment Banking, Commercial Lending and Sales and Trading. As an example of the macroeconomic factors that drive fee income, the Mortgage Banking model relies primarily on the macroeconomic paths of Weekly Initial Unemployment Claims, the Housing Price Index, the 10-Year Treasury and the 30-Year Mortgage Rate to statistically determine the impact on mortgage fee income. Payment Services consists of the Credit Card, Corporate Payments and Merchant Processing businesses which rely on regression modeling with strong correlations to Real GDP Growth, the Consumer Price Index, Personal Consumption Expenditures and Weekly Initial Unemployment Claims, which are used for predicting fee income in the stressed scenarios. For all modeled fee income categories, regression models are developed by utilizing the macroeconomic factors that make both good business sense and provide results that reflect strong correlations. Model projections are reviewed to ensure results represent the severity of the scenario and a conservative management overlay may be applied if necessary to further stress results.

The remaining fee income categories use tool-driven analytics relying on management expertise and historical trending from recessionary and non-recessionary periods to project revenues in stressed economic conditions. Tools are used for certain fee categories, such as Commercial Leasing, ATM Processing and Insurance Services, where efforts to model the Company’s historical financial performance have not shown results that are highly correlated to macroeconomic variables. These fee revenue categories rely on the same consistent view of the macroeconomic environment as those businesses using regression modeling. Each business line individually evaluates the macroeconomic scenario factors to determine which factors are significant for their respective fee income categories. Management then projects how these impact their key business drivers of fee income which include, but are not limited to, sales, new business, attrition and overall consumer behavior.
Expenses:
The Company projects the changes to expenses in stressed economic conditions. These are attributable principally to increases in operational losses, increases in foreclosures, litigation, legal and other mortgage-related foreclosure costs.

Increases in expense categories, such as collections, legal and other real estate owned are not statistically modeled but primarily derived using the historical relationship of these expenses to the level of the Company’s credit-related charge-offs as a basis. As the overall economy deteriorates in the stress scenario, charge-offs are projected to increase and these related expenses will increase proportionately by definition. The impact to mortgage-related foreclosure expenses is projected based on the gross delinquency rates developed using the Delinquency and Foreclosure model, which is driven by the Housing Price Index, the Unemployment Rate and Weekly Initial Unemployment Claims. Variable expenses that can be tied directly to fee revenue, such as variable compensation and technology or other outside data services, are adjusted based on their relationship to the respective fee revenue category.

The Company’s operational loss estimates rely on macroeconomic factor models employed to determine statistical relationships with relevant macroeconomic factors, including, among others, real GDP, unemployment and the SPX. Expected loss is obtained by multiplying the modeled expected frequency and the historical average loss severity within each event type. Severity estimates incorporate both internal and external loss estimates. For event types where no significant macroeconomic relationships are found to exist, the Company’s operational loss projections are based on internal, historical loss experience along with scenario analysis leveraging the Company’s operational risk scenario workshops conducted by subject matter experts across the organization.

Finally, the Company uses a conservative approach when considering the reduction in discretionary expenses related to personnel and other business-related costs. The Company considers only a select few expense categories where the ability to make adjustments to spending are clear and supportable. Expense reductions reflected in the stress scenarios are based on the actual cost savings experienced by the Company during the most recent recession and management expectations for discretionary cost containment.

Provision for Credit Losses: The Company projects net credit losses and provision expenses under the stressed economic conditions based on several key inputs. These include beginning period balances and portfolio composition, macroeconomic assumptions of the scenario, forecasts of portfolio balances and forecasts of defaults and losses. The Company’s loss forecasting models are account-level models that forecast quarterly defaults and net charge-offs. Model risk drivers vary by portfolio and include borrower characteristics and macroeconomic factors. The Company
evaluates loss forecasts produced by its primary models by considering results of benchmark models, past portfolio performance, current portfolio composition and expectations of future performance given the scenario’s economic assumptions. The provision is based on the loss forecasts, portfolio growth and asset quality over the forecast horizon.

The Company has a diverse mix of loans and leases. Losses are forecast separately by portfolio and incorporate state or regional effects. The major portfolio segments are corporate exposures managed on an individual basis, small business loans and lines of credit, commercial construction loans, commercial mortgages, residential mortgages, home equity loans and lines of credit, consumer credit cards, auto loans, auto leases and other retail exposures.

The Company’s models rely on several assumptions. A primary model assumption is that past experience is indicative of future performance. This assumption is based on the premise that borrower behaviors observed historically within a risk segment in relation to macroeconomic trends will occur in the future. This assumption is tested as borrower behaviors change over time. In addition, changes in underwriting, law or regulation may alter repayment patterns or the accounting classification of losses. Some of these factors are known at the beginning of the forecast horizon while others are not. When identified, the Company mitigates these risks by making adjustments to the modeled loss forecasts. These adjustments are designed to mitigate risks associated with the assumption that prior experience can be used to model future behavior.

**Realized Gain or Loss on the Company’s Available-for-Sale or Held-to-Maturity Investment Portfolio and Calculation of OTTI:** The Company projects the fair market values of its non-agency mortgage backed securities (MBS), corporate securities and municipal securities under stressed economic conditions. For non-agency MBS securities, changes in fair value are driven primarily by changes in unemployment. For corporate securities, the Company uses regression modeling that is correlated to housing prices and real gross domestic product to derive the modeled fair value during the forecast horizon and on an internal credit assessment of the security issuer’s financial condition. Based on the results of this assessment, the Company may project other than temporary impairment (OTTI) at the lowest fair market value modeled during the forecast horizon (less amortized cost). Municipal securities are reviewed based upon credit quality. The Company uses regression modeling that is correlated to the scenario forecast assumptions for unemployment, real GDP and SPX and a forward ratings transition assessment during the forecast horizon. The Company recognizes OTTI for any municipal security that is projected to transition to a below investment grade internal rating (derived from the application of the rating transition analysis) as the difference between its modeled fair market value and its amortized cost.
**Income Taxes:** The Company’s process for estimating the impact of income taxes on earnings and capital involves estimating the periodic effective tax rate to apply to earnings, estimation of the deferred tax position at each period-end based on estimates for the most significant temporary differences and measuring any deferred tax limitations under the relevant capital framework.

The effective tax rate differs from the marginal tax rate principally as a result of tax credits generated by the Company’s tax-advantaged community investments and, to a lesser extent, income from the Company’s tax-exempt investments. The Company includes estimates of state income taxes in its effective tax rate based on historical income allocation across the states.

The Company evaluates the likelihood of any deferred tax asset being realized considering factors that include whether there is sufficient taxable income in prior periods to support recovery through carryback and the ability of the Company to realize tax benefits in future periods.

**Changes in Capital Positions (Supervisory-defined severely adverse)**

The Company estimates that the effect of the stressed economic conditions, including the Dodd-Frank Act capital actions, on the Company’s Basel III capital levels reduces the Company’s Common Equity Tier 1 Capital (CET1) ratio by approximately 210 basis points over the nine-quarter stress period from September 30, 2014 to December 31, 2016 under the Basel III standardized transition rules.

The decrease in the CET1 ratio is due to a reduction in the Company’s regulatory adjusted common equity (ACE), Basel III deductions and a slight increase in risk-weighted assets. The change in net deductions is primarily driven by an increase in net operating loss carry-forwards and an increase in the amount of deductions required per the transition rules.

The principal cause for the decrease in the Company’s ACE is dividends on common shares. The capital distributions to common shareholders prescribed by DFAST in the final eight quarters of the stress period are limited to quarterly dividends on common stock in an amount consistent with the quarterly average dollar amount of common stock dividends that the Company paid over the prior four quarters from 1Q2014 through 4Q2014. Other material reductions in ACE are driven by common share repurchases estimated to have been completed in the initial quarter (4Q2014) of the stress period with a negative impact on the CET1 ratio. Repurchases of common stock are suspended over the remainder of the nine-quarter stress period. Additional reductions in ACE over this period are the result of dividend payments on preferred stock and net losses.

The Company’s additional Tier 1 Capital is reduced by net operating loss carry-forwards that are included in Tier 1 Capital during the transition period. Tier 2 Capital is reduced by the amortization of the capital value of the Company’s subordinated debt.
Changes in Regulatory Capital Ratios

The capital actions in the scenario are prescribed by the Federal Reserve in their regulations for company-run stress tests for covered companies. The capital actions are limited to dividends equal to the quarterly average dollar amount of common stock dividends that the Company paid in the previous four quarters, 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 an assumption of no redemption or repurchase of any capital instrument that is eligible for inclusion in the Company’s regulatory capital.

The Company’s capital ratios presented below are presented under the Basel III standardized transition rules.

Common Equity Tier 1 Capital Ratio – Declined by 2.1 percent from 9.7 percent at 3Q2014 to 7.6 percent at 4Q2016

The Company’s CET1 ratio declines by 210 basis points over the stress test period. Of this change, 150 basis points are attributed to dividend payments on common and preferred stock, common stock repurchases and other equity issuance. All other changes to CET1, including the impact from changes in accumulated other comprehensive income (AOCI), goodwill, intangibles, income and other regulatory capital deductions, combined to decrease the CET1 ratio by an additional 55 basis points. The Company’s risk-weighted assets increase slightly over the stress horizon due to the transition from a Basel I based approach to a Basel III based approach, partially offset by a modestly decreasing balance sheet. The change in risk-weighted assets resulted in a 5 basis point decrease in the Company’s capital ratios.

Tier 1 Capital Ratio – Declined by 2.3 percent from 11.3 percent at 3Q2014 to 9.0 percent at 4Q2016

The Company’s Tier 1 Capital ratio declined by 230 basis points over the stress horizon, of which 210 basis points is attributed to changes in the level of the Company’s CET1. The additional 20 basis point reduction to Tier 1 Capital is a result of regulatory deductions related to capital security limitations and other regulatory deductions.

Total Risk-based Capital Ratio – Declined 2.4 percent from 13.6 percent at 3Q2014 to 11.2 percent at 4Q2016

The Company’s Tier 2 Capital ratio declined by 240 basis points over the stress test period, of which 230 basis points is due to the change in Tier 1 Capital as described above. The remaining 10 basis point decline was due primarily to the amortization of the regulatory capital value of the Company’s subordinated debt as these capital instruments approach their maturity dates.
Tier 1 Leverage Ratio – Declined 1.8 percent from 9.4 percent at 3Q2014 to 7.6 percent at 4Q2016

The reduction in the Tier 1 Leverage ratio is principally the result of the impact of changes in Tier 1 Capital described above. The reduction in Tier 1 Capital accounts for 188 basis points of the decline. This decline is then partially offset by a modest decrease in average assets.

The Company reports its regulatory capital under the transition rules for the Basel III Standardized Approach; however, for purposes of the CCAR 2015 disclosure the Company presented the Tier 1 Common ratio under the Basel I rules for each quarter of the stress test horizon.

Tier 1 Common Ratio ("T1C") – Declined by 1.6 percent from 9.5 percent at 3Q2014 to 7.9 percent at 4Q2016

The Company’s T1C ratio declined by 160 basis points over the stress test period. Of this change, 150 basis points are attributed to dividend payments on common and preferred stock, common stock repurchases and other equity issuance. All other changes to T1C, including the impact from changes in goodwill, intangibles, income and other regulatory capital deductions, combined to decrease the T1C ratio by 35 basis points. The Company’s balance sheet decreased modestly over the stress horizon, decreasing risk-weighted assets. The change in risk-weighted assets under Basel I resulted in a 25 basis point increase in the Company’s T1C.