ZIONS BANCORPORATION
A COLLECTION OF GREAT BANKS

Zions Bancorporation

Dodd-Frank Act Mid-Cycle Stress Test Disclosure

November 4, 2016

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Introduction

Zions Bancorporation ("the Company" or "Zions") is one of the nation's premier financial services companies with total assets of approximately $61 billion. Zions operates under local management teams and unique brands in 11 western states: Arizona, California, Colorado, Idaho, Nevada, New Mexico, Oregon, Texas, Utah, Washington and Wyoming. The Company is a national leader in Small Business Administration lending and public finance advisory services, and is a consistent top recipient of Greenwich Excellence awards in banking. In addition, Zions is included in the S&P 500 and NASDAQ Financial 100 indices. Investor information and links to local banking brands can be accessed at www.zionsbancorp.com.

Incorporated in this disclosure are the mid-cycle stress test results of Zions Bancorporation. Zions' Dodd-Frank Act Mid-Cycle Stress Test (DFAST) results, based on the hypothetical *Severely Adverse* scenario developed by the Company, indicate Zions Bancorporation would maintain capital ratios at sufficient levels throughout the nine-quarter forecasting horizon.

In accordance with section 165(i)(2) of the Dodd-Frank Wall Street Reform and Consumer Protection Act ("Dodd-Frank Act"), bank holding companies ("BHCs") with total consolidated assets of $50 billion or more ("Covered Companies") are required to create a set of forward-looking mid-cycle stress tests based upon hypothetical economic scenarios developed by the BHC. The estimated financial results of the stress test identify the hypothetical projected capital position of a corporation under severely adverse economic conditions to determine if there is sufficient capital to absorb losses and support operations.

For the DFAST forecasts, all BHCs are required to make uniform capital assumptions over the nine-quarter planning period, which include (i) no issuances or redemptions of regulatory capital instruments, (ii) quarterly common stock dividend distributions equal to the average of the prior four quarters, and (iii) capital instrument payments that must be equal to the previously stated expectations of dividends, interest, or principal payments.

Pursuant to CFR §252.148, the following summary is a disclosure of the results of the mid-cycle stress test of Zions Bancorporation. Included is a discussion of the macroeconomic scenarios, a summary of results, risks accounted for, and methodologies used in development of the stress testing. The quantitative output included herein should not be viewed as forecasts of expected outcomes or capital ratios or as a measure of the company's solvency or actual financial performance or condition. Results of the BHC Severely Adverse scenario are in the table below:

Projected Capital Ratios as of September 30, 2018 in the BHC Severely Adverse Scenario					
	Actual	Stressed Capital Ratios			
	As of June 30, 2016	As of September 30, 2018	Minimum ratio during projection period	***Regulatory Minimum***	Exceeds regulatory minimum
Common Equity Tier 1 Ratio	12.0%	7.8%	7.8%	***4.5%***	✔
Tier 1 Leverage Ratio	11.2%	7.4%	7.4%	***4.0%***	✔
Tier 1 Capital Ratio	13.4%	9.3%	9.3%	***6.0%***	✔
Total Risk-Based Capital Ratio	15.5%	11.5%	11.5%	***8.0%***	✔

Process

Zions administers its company-run stress tests through its Capital Adequacy Process (CAP). The CAP identifies and quantifies the company's material risks under different hypothetical risk events prescribed by the Severely Adverse Scenario. Zions considers all risks in stress testing that have been determined to be material based upon sensitivity analysis; in addition it considers whether certain risks deemed individually to be immaterial could collectively be material. These risks range from idiosyncratic risks (geographical footprint and industry concentrations in credit portfolios) to broad economic, political, and regulatory and compliance risks that Zions believes could impact the Company. Zions' stress testing models and other estimation techniques attempt to capture substantially all of these risks and their potential effects on the performance of the company's portfolios and revenue generating activities.

Risks

Zions' stress testing process is designed to be comprehensive in addressing the risks faced by the company. Risks considered as part of this analysis include credit, market, funding/liquidity, general economic conditions, operational, legal and compliance, as well as the potential for reputational and strategic risks. These risks are described below:

Credit risk includes obligor default risk, counterparty credit risk, guarantor non-performance, credit risk of securities held, and collateral management risk. Zions believes credit risk is its primary risk.

Zions' business is subject to periodic fluctuations based on national, regional, and local economic conditions. These fluctuations are not predictable, cannot be controlled, and may have a material adverse impact on Zions' operations and financial condition even if other favorable events occur. Zions' banking operations are locally oriented and predominantly community-based. Accordingly, Zions is dependent on local business conditions as well as conditions in the local residential and commercial real estate markets it serves. For example, an increase in unemployment, a decrease in real estate values, increases in interest rates, and a variety of other factors could weaken the economies of the communities Zions serves. Weakness in Zions' market area could depress its earnings and its financial condition.

Any of the above scenarios could require Zions to charge off a higher percentage of loans and/or increase provisions for credit losses, which would reduce Zions' net income. For example, while the credit conditions that Zions experienced from 2007 through 2010 has improved considerably, the challenges in the economy still present credit deterioration risks for Zions in light of the slow pace of general economic recovery. Any further credit deterioration would result in increased loan charge-offs and higher provisions for credit losses, which would negatively impact Zions' net income.

Market risk includes risk arising from changes in interest rate levels, equity prices, property prices, commodity prices, and credit spreads. Zions' earnings and financial condition are largely dependent on net interest income, which is the difference between interest earned from loans and investments and interest paid on deposits and borrowings. The narrowing of interest rate spreads could adversely affect Zions' earnings and financial condition. Zions cannot control or predict changes in interest rates. Regional and local economic conditions, competitive pressures, and the policies of regulatory authorities, including monetary policies of the Board of Governors of the Federal Reserve System, affect interest income and interest expense. Changes in interest rates may have an adverse effect on Zions' profitability. For example, high interest rates could adversely affect Zions' mortgage banking business as clients would apply for fewer mortgages; higher interest rates may also increase credit risk. The *Severely Adverse* scenario includes interest rate assumptions projected to cause a significant decrease in net interest income.

Funding/liquidity risk may arise from the Company's inability to access funding sources (e.g., deposits), funding maturity mismatches, off-balance sheet commitments, deteriorating earnings performance, public or market perception, and obstacles to cash movement among subsidiaries.

Liquidity is essential to Zions' businesses. Market disruption and volatility could materially impair Zions' ability to access capital and funding. Economic losses sustained as a result of market disruption or poor general economic conditions would likely lead to higher loan and securities losses and reduced fee income.

General economic condition risk results from changes in national, regional, and local economic conditions. Changes in the general economic condition of markets to which Zions is exposed could lead to higher loan charge-offs, deposit run-off, reduced fee income, and higher operating costs, which would reduce Zions' net income and possibly threaten its financial health.

Operational risk includes the risk of losses as a result of internal fraud, external fraud, inadequate employment practices and workplace safety, inability to meet contractual and/or fiduciary obligations, damage to physical assets, business disruption and/or systems failures, and failures in execution, delivery, and process management.

Legal and compliance risk includes failure to comply with laws, rules, regulations, or accounting and financial reporting laws; prescribed practices; internal policies and procedures; exposure to litigation; failure to identify and properly communicate regulatory and legal requirements; and situations where the laws or rules may be ambiguous or untested.

Reputational risk includes losses related to unethical or deceptive business practices; high-profile litigation; poor financial performance; violations of laws, regulations, or controls (e.g., conflicts of interest); customer dissatisfaction and complaints (e.g., privacy breach); and poor public communication.

Strategic risk includes adverse outcomes from poor business decisions; inadequate implementation of business decisions; and/or a lack of responsiveness to changes in the industry and operating environment.

Model (including data) risk includes losses stemming from fundamental errors leading to inaccurate model output and incorrect or inappropriate model usage.

Methodologies

The Company projects the impact of its key exposures and material risks in several scenarios including the severely adverse scenario using a variety of modeling techniques. The following forecasting methodologies were used in the stress test:

1. The Company models credit losses using separate loan-level loss models for Commercial & Industrial (C&I), Small Business, Residential Real Estate (RRE), Energy, and Commercial Real Estate (CRE) loans. Portfolio level loss models are used for other loan categories including auto and credit card, municipal securities, and Small Business Administration securities. The counterparty credit risk model is used to model possible losses from existing counterparty exposures.
2. Market risk is captured through interest rates used in Pre-Provision Net Revenue (PPNR) models; equity prices through PPNR models, credit models, and the private equity model; energy commodity prices are directly stressed through the scenario design process that is a direct input into the energy loss model; credit spreads impact the loan growth and pricing models; and real estate prices are used in PPNR, CRE, RRE, and C&I models.

3. Liquidity risk is measured through liquidity stress test scenarios and the parent liquidity model; asset/liability model; unfunded commitments included in credit loss models; and earnings impacts through PPNR projections.
4. Operational risk is captured in scenario analysis as well as through an operational loss model.
5. Legal risk is captured through scenario analysis, the operational loss model, and specific litigation expense buffers.
6. Reputational and strategic risks are difficult to quantify; however, their potential impacts on capital are quantified using scenario analysis and other techniques.
7. Model risk is captured through conservative model choices and overlays addressing model weaknesses and limitations.

Macroeconomic Scenario Description

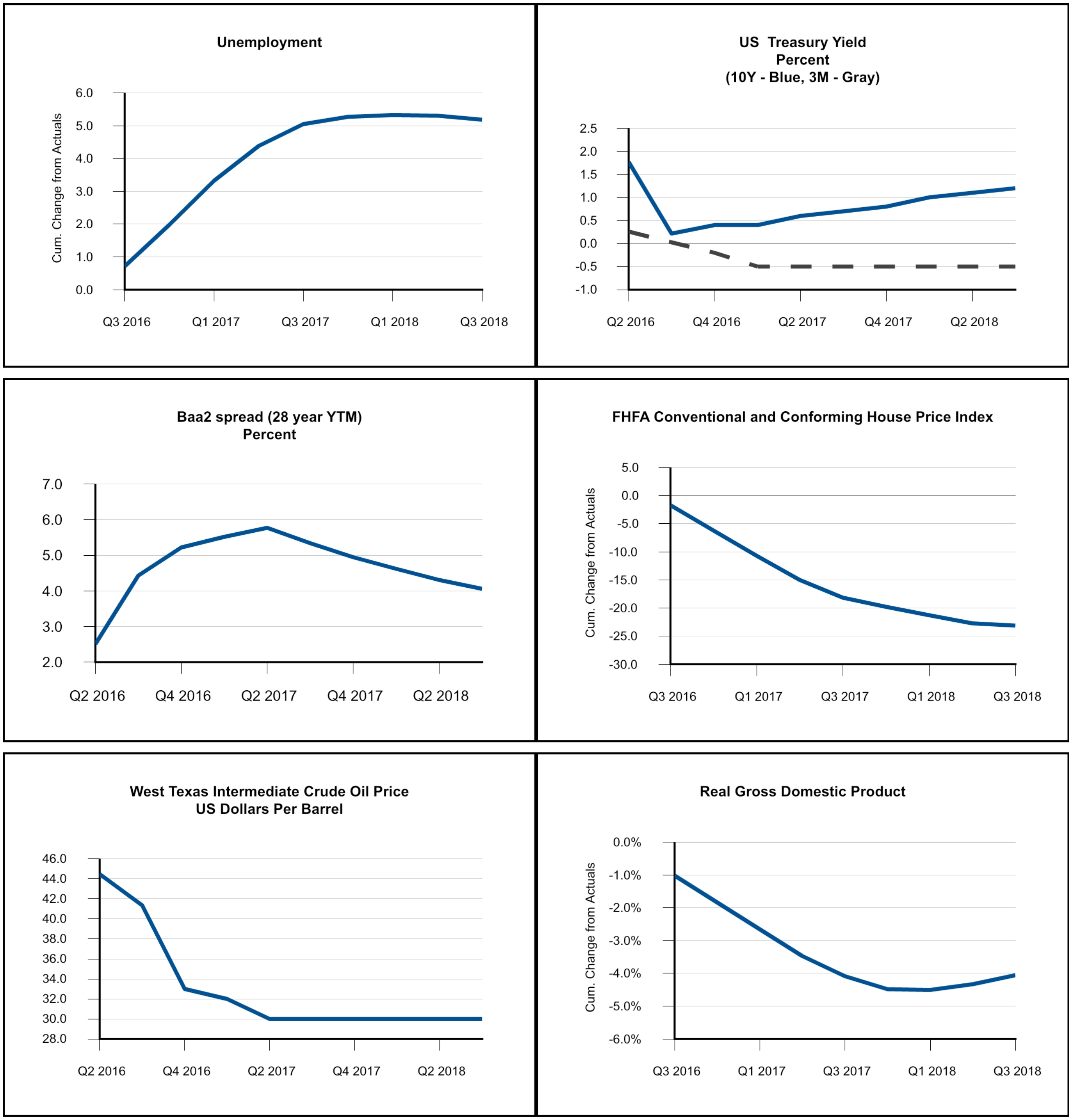
The severely adverse scenario developed by Zions for use in the company-run stress test is a hypothetical scenario and as such does not reflect expected conditions. It was designed by Zions to stress Zions' risk exposures, especially Zions' loan portfolio concentrations in residential and commercial real estate, energy sector, and sensitivity to the yield curve. It is comparable to the severely adverse scenario provided by the Federal Reserve during the Dodd-Frank Act stress test conducted in early 2016. The company's board of directors approved the stress test selected to demonstrate the company's ability to withstand a deep and severe economic scenario and maintain a significant level of excess capital.

In this hypothetical scenario there is a substantial weakening of the world economy, with the U.S. economy experiencing increases in financial distress that are significantly greater than under more common economic downturns and recessions. The U.S. banking industry is strained, credit availability shrinks and the U.S. enters a recession. Interest rates on short-term benchmark indices turn negative, resulting in net interest margin compression, while corporate spreads increase. Many consumers, facing increasing unemployment rates and reduced household wealth, experience foreclosure on their homes, resulting in a decline in housing prices. Commercial real estate prices decline in tandem. West Texas Intermediate crude oil declines and with it employment in the mining and manufacturing sectors shrinks considerably. Ordered most to least sensitive below, the variables in this scenario include:

- A sharp increase in unemployment to 10.09% from the recent 4.77%
- A decline in various interest rate indices; for example, the US 10-year Treasury rate declines to 0.22% from 1.77%
- A significant widening of credit spreads, using an index of bonds rated Baa2 by Moody's, to 5.77% from 2.51%
- A 40.0% decline in commercial property values
- A 23.1% decline in residential property values
- A 32.5% decline in oil price
- A significant decline in gross domestic product (down cumulatively by nearly 4.6%)
- A 50.0% decline in the stock prices, as measured by the Dow Jones Total Stock Market Index

The charts below show some of the economic indicators used in the *BHC Severely Adverse* scenario approved by Zions Bancorporation's Board of Directors.

Macroeconomic Indicators - BHC Severely Adverse Scenario



Summary of Results

The following data are the results submitted by Zions in its 2016 DFAST submission for the *Severely Adverse* scenario. These results represent estimates of Zions' capital position as of Q3 2018 under this scenario, as well as the minimum ratios during the nine-quarter period. **This scenario is considered unlikely to occur; therefore, these estimates do not represent forecasts of expected results.** The economic assumptions used to arrive at these results involve an economic outcome that is significantly more adverse than current market expectations for the economy generally or for Zions specifically. The company frequently uses highly conservative assumptions.

Projected Capital Ratios as of September 30, 2018 in the BHC Severely Adverse Scenario					
	Actual	Stressed Capital Ratios			
	As of June 30, 2016	As of September 30, 2018	Minimum ratio during projection period	***Regulatory Minimum***	Exceeds regulatory minimum
Common Equity Tier 1 Ratio	12.0%	7.8%	7.8%	***4.5%***	✔
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Total Risk-Based Capital Ratio	15.5%	11.5%	11.5%	***8.0%***	✔

Projected losses, revenue, and net income before taxes through September 30, 2018 in the BHC Severely Adverse Scenario			
	Cumulative Amount ($Bil)	Loss Rates, not annualized	Loss Rates, historical worst 9Q
Loan Losses	$2.25	5.4%	6.0%
Domestic closed-end first-lien mortgages	0.14	2.2%	3.6%
Domestic junior lien mortgages and home equity lines of credit	0.07	2.5%	2.5%
Commercial and industrial	0.94	7.6%	5.9%
Commercial real estate	0.98	5.8%	6.9%
Credit card exposures	0.01	5.6%	10.0%
Other consumer	0.02	5.2%	9.2%
Other loans	0.09	3.2%	1.2%

The table above utilizes regulatory classifications which vary from GAAP classifications

The total net loss rate of 5.4% compares to a 6.0% actual realized worst nine-quarter loss period, experienced as a result of the 2008-2009 recession. The credit loss results of the mid-cycle 2016 stress test are similar to the actual recent recession, and Zions has reduced risk materially by reducing construction and land development loans by approximately $6 billion since December 2007. Therefore, Zions believes the mid-cycle 2016 modeled results are conservative.

Zions applied assumptions that are designed to capture risks that are unique or idiosyncratic to Zions' business; among others, the most notable is the price of oil, as of June 2016 Zions had $2.6 billion of loan balances outstanding that are classified as direct exposure to the oil and natural gas industries. Zions used an average price of oil per barrel during the nine-quarter period of $32, which resulted in elevated losses, primarily captured in the Commercial and Industrial loan category, and thus explaining the elevated net loss rate for that category of 7.6%, as compared to the actual worst nine-quarter loss rate of only 5.9%.

Projected losses, revenue, and net income before taxes through September 30, 2018 in the BHC Severely Adverse Scenario			
	Cumulative Amount ($Bil)	Percent of Average Assets	% Avg Assets Q1 2008-Q3 2010
Pre-provision net revenue	$0.68	1.2%	4.4%
Other Revenue	—	0.0%	0.0%
Less			
Provisions for loan losses	3.24	5.5%	6.0%
Realized Gains/Losses on Securities (AFS/HTM)	—	0.0%	0.0%
Trading and Counterparty Losses	—	0.0%	0.0%
Other Losses/Gains	—	0.0%	0.0%
Equals			
Net Income/(Loss) Before Taxes	(3.09)	(5.2)%	(3.8)%

In the *BHC Severely Adverse* scenario, the Company's capital position declines due to the impact of the following:

Loan Loss Provision

During 2015, the Company recorded a provision for loan losses of $40 million. In the *BHC Severely Adverse* scenario, the Company modeled an annualized provision of $1.4 billion, or a cumulative $3.2 billion for the nine-quarter period. Such modeled provisions were primarily attributable to modeled net loan losses of an annualized amount of $1.1 billion, or a cumulative $2.7 billion. This compares to actual 2015 net charge-offs of only $39 million.

Securities Losses

Zions' securities portfolio contains U.S. government, U.S. government agency, and municipal securities. In the *BHC Severely Adverse* scenario, the Company modeled a cumulative $29 million loss for the nine-quarter period.

Pre-Provision Net Revenue (PPNR)

Zions' PPNR for 2015 was $619 million (adjusts income before taxes by excluding the effect of the provision for loan losses and net losses on securities). Under the *BHC Severely Adverse* scenario, Zions' PPNR equaled an annualized $302 million, or $681 million for the nine-quarter period, which reflected:

- **Lower net interest income attributable to negative short-term rates.** Zions’ earning assets are skewed to shorter-duration instruments, the income from which is more adversely affected under a falling rate scenario than assets that have longer duration. As of Q2 2016 Zions had an annualized net interest income run rate of $1.95 billion. Under the *BHC Severely Adverse* scenario, Zions' projected annualized net interest income is $1.77 billion. Zions projected that loan balances would decline under a severely adverse stress scenario and that interest income on loans would be negatively impacted due to both lower balances and the falling rate environment, offset by lower interest costs on deposits and other interest-bearing liabilities.
- **Lower noninterest income.** Excluding losses on the sale of fixed income securities in 2015, Zions realized $496 million of noninterest income. In the *BHC Severely Adverse* scenario, Zions projected annualized noninterest income excluding securities losses and impairment would be $439 million. The largest contributor to this decline is in the account Dividends and Other Investment Income.

- **Higher noninterest expenses.** In 2015, excluding other real estate owned expenses, credit-related expenses, and goodwill impairment, Zions recognized $1.55 billion of noninterest expenses. Under the *BHC Severely Adverse* scenario, Zions projected annualized noninterest expense, excluding those same items, would be $1.74 billion.
- **Higher other real estate owned and credit-related expenses.** In 2015, Zions' other real estate owned and credit-related expenses totaled $28 million. Under the *BHC Severely Adverse* scenario, Zions estimated an annualized $173 million during the nine-quarter period.

Deferred Tax Asset (DTA)

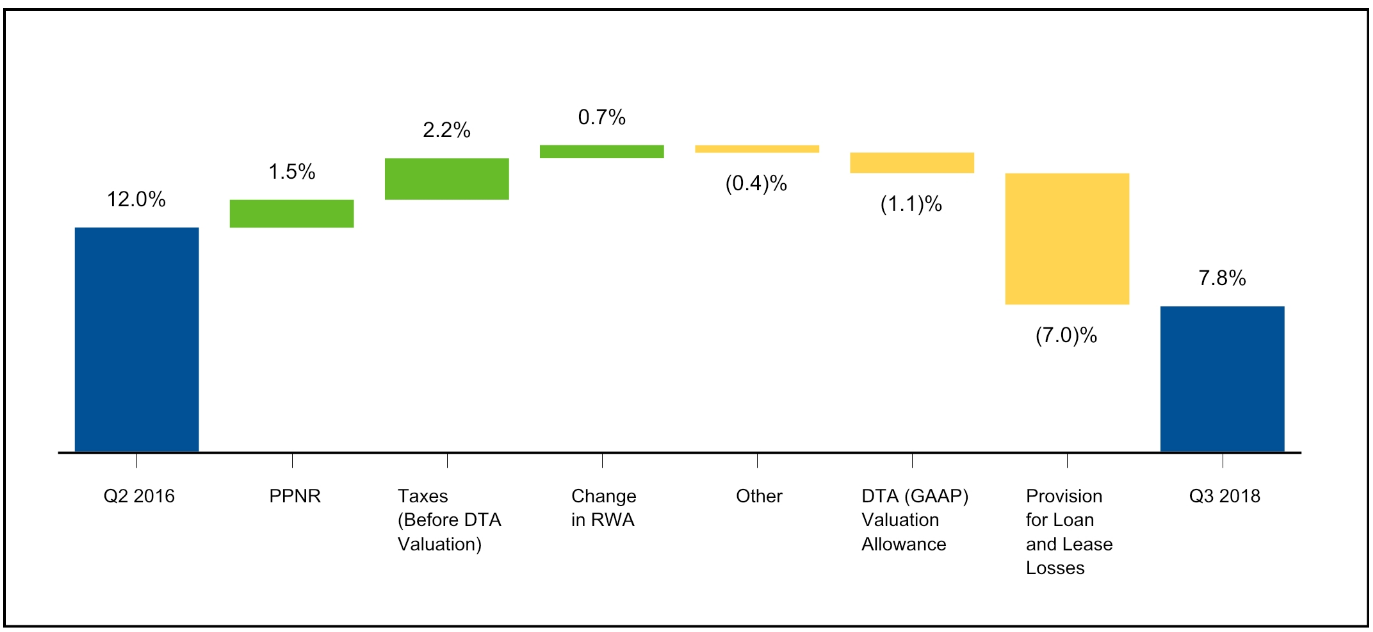
A valuation allowance of a portion of DTA is triggered by hypothetical earnings losses under severely adverse scenarios, which is driven primarily by high provisions for loan losses and related net operating losses. The DTA (GAAP) valuation allowance in the *BHC Severely Adverse* scenario was projected to be $507 million, which adversely affected the CET1 ratio (as indicated in the waterfall chart later in this section). Under a less severe economic scenario, DTA would not grow as rapidly and therefore would not likely be subject to disallowance or impairment.

Risk-Weighted Assets (RWA)

Net risk-weighted assets decreased in the *BHC Severely Adverse* scenario from $50 billion at Q3 2016 to $46 billion at Q3 2018. Loan balances decreased by $2.7 billion, mostly due to loan charge-offs, which decreased RWA.

Significant Drivers of Changes to the Projected Common Equity Tier 1 Ratio under the *BHC Severely Adverse* Scenario

The chart below shows material impacts to the Common Equity Tier 1 Ratio over the course of the nine-quarter stress period. Per the DFAST rules, the forecast capital impacts shown below incorporate the following assumptions: (i) no issuances or redemptions of regulatory capital instruments, (ii) quarterly common stock dividend distributions equal to the average of the prior four quarters, and (iii) capital instrument payments that must be equal to the previously stated expectations of dividends, interest, or principal payments.



For Zions Bancorporation, credit losses are the main driver of capital deterioration in the *BHC Severely Adverse scenario* forecast.

Forward-Looking Statement

This disclosure contains statements relating to a stress test and analysis undertaken by Zions Bancorporation pursuant to regulatory requirements. The stress test results are based upon the hypothetical impact of assumed future economic conditions on our capital, financial condition, and earnings under certain financial models. The stress test results are not intended to reflect our expectations about actual future conditions. As this stress test contains hypothetical results, the statements contained in this disclosure are based on facts and circumstances as understood by management of the Company on the date of this disclosure, which may change in the future. Except as required by law, Zions disclaims any obligation to update any statements or to publicly announce the results of any revisions to any of the forward-looking statements included herein to reflect future events, developments, determinations, or understandings.