



**State Street Corporation
2018 Mid-Cycle Stress Test Disclosure**

**Dodd-Frank Act Mid-Cycle Stress Test Results
Bank Holding Company Internally Developed Severely Adverse Scenario**

November 1, 2018

Overview of the 2018 Stress Test

State Street Corporation (State Street or the Company), like other “covered companies” governed by the provisions of Section 165 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (the Dodd-Frank Act), is required to conduct company-run stress tests semi-annually (an “annual stress test” and a “mid-cycle stress test”) and disclose the results under the severely adverse scenario. The annual stress test is conducted in coordination with the Comprehensive Capital Analysis and Review (CCAR) conducted by the Board of Governors of the Federal Reserve System (Federal Reserve). The mid-cycle stress test is conducted between each annual CCAR exercise utilizing a different as-of-date. In addition, the annual stress test disclosures by the Federal Reserve and each covered company represent the results of the supervisory severely adverse scenario, while the mid-cycle stress test reflects the results of an internally developed severely adverse scenario.

The Dodd-Frank Act requires bank holding companies (BHCs), including State Street, participating in CCAR to publish a summary of stress test results, including a post-stress capital analysis (1) under the supervisory severely adverse scenario for the annual stress test and (2) under a BHC internally developed severely adverse scenario for the mid-cycle stress test. This disclosure presents the results of the 2018 mid-cycle stress test conducted by State Street.

Required Scenarios

As required under the “Supervisory and Company-Run Stress Test Requirements for Covered Companies” Final Rule, and as applied by State Street, a stress test represents a process to assess the potential impact of scenarios (representing hypothetical economic conditions) on State Street’s consolidated financial position and consolidated results of operations and regulatory capital over a defined period (known as a “planning horizon”), taking into account State Street’s current financial condition, risks, exposures, strategies and activities.

Consistent with Section 165 of the Dodd-Frank Act, the following results are based on the company-run internally-developed severely adverse scenario for the period beginning on July 1, 2018 and ending on September 30, 2020.

Upon review of its material risk inventory, State Street developed the severely adverse scenario which reflects macroeconomic, market-wide, and firm-specific events tailored specifically to State Street’s business activities, operations, financial profile and condition, and regulatory characteristics. The hypothetical stress environment presented by this scenario was designed to explore the trend of rising risks predicated on two, concurrent factors:

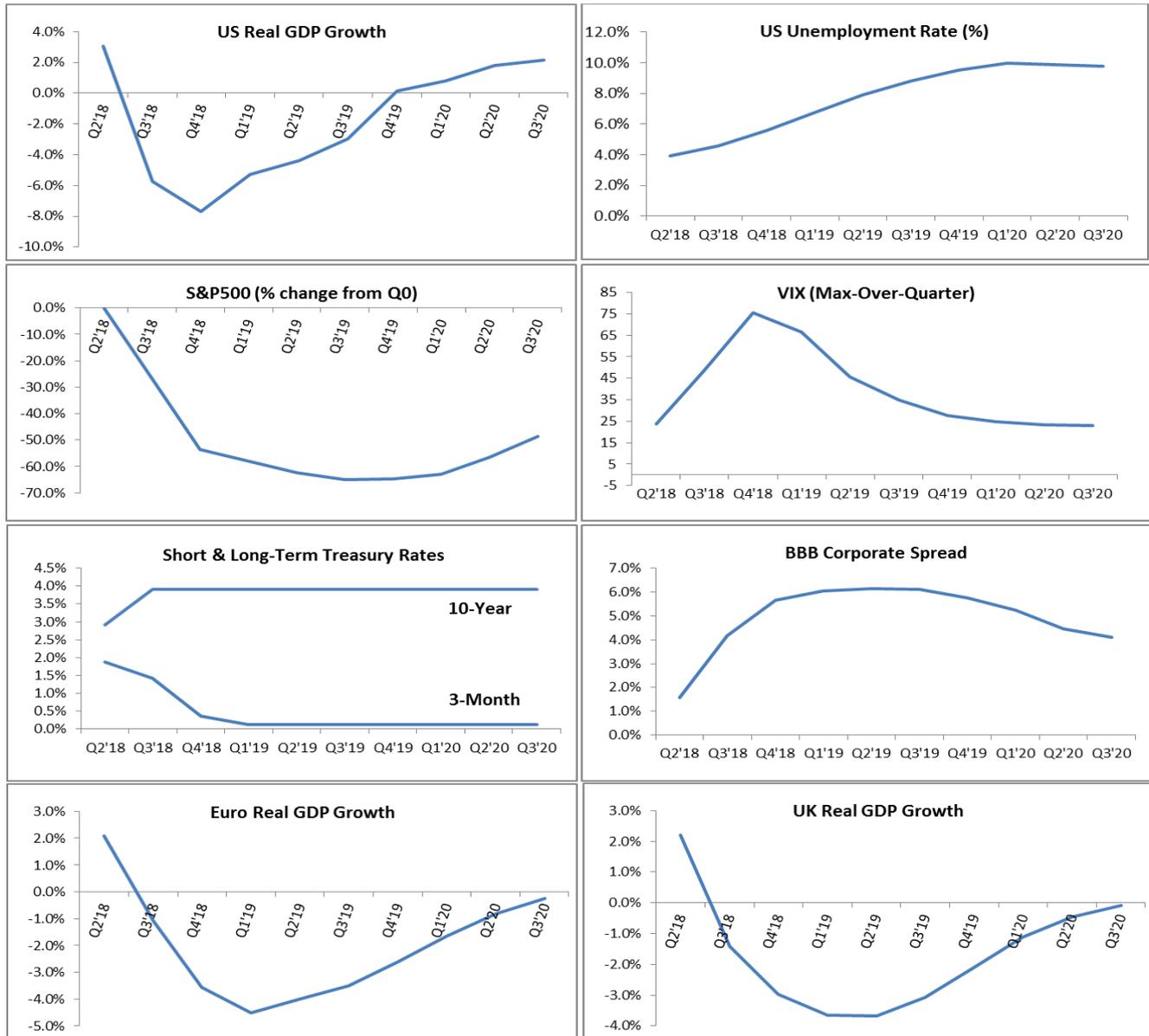
- 1) Unsustainable debt and deficit spending levels, and the risks they pose to the U.S. economy and financial markets; and
- 2) The potential that foreign investors may be driven by a weaker U.S. dollar toward other sovereign debt issuers in a “reserve safe haven” effect.

The scenario reflects a panic in the U.S. debt market following a record-low 10-year Treasury note auction bid-to-cover ratio. The subsequent 60% drop in equity prices and 5-10% U.S. dollar depreciation causes the Federal Reserve to reduce the Fed Funds rate back to the 0% lower bound. Constricted by unsustainable debt levels, the U.S. government is unable to use fiscal policy as a means of stabilization; the ensuing economic downturn results in domestic unemployment reaching 10% and a sharp contraction of U.S. real gross domestic product (GDP). As the recession spreads around the globe, equity prices experience a drop in excess of 50% across the EU, Asia-Pacific and emerging markets.

In addition to this significant macroeconomic downturn, several idiosyncratic elements were included in this scenario. These elements are comprised of the default of State Street’s largest counterparty, an operational risk add-on focused on technology and resiliency themes, and losses associated with potential litigation from operational and reputational risks.

The charts below reflect material macroeconomic parameters used in the mid-cycle stress test that particularly impact State Street. All macroeconomic factors shown below are representative of the internally developed severely adverse scenario.

Figure: Summary of Material Macroeconomic Parameters under the Company-Defined internally developed severely adverse scenario



Assumptions Regarding Dodd-Frank Act Prescribed Capital Actions

All assumptions and results presented below reflect the capital actions prescribed by Section 165 of the Dodd-Frank Act (*Dodd-Frank Act prescribed capital actions*), including:

- For the third quarter of 2018, actual capital actions (e.g., stock issuances and repurchases) occurring during that period are assumed, and;
- For each of the second through ninth quarters of the planning horizon:
 - common stock dividends continue equal to the quarterly average dollar amount of common stock dividends paid in the prior four quarters (including the first quarter in the planning horizon);
 - common stock dividends continue that are attributable to issuances related to expensed employee compensation or in connection with a planned merger or acquisition to the extent that the merger or acquisition is reflected in the *pro forma* balance sheet estimates;

- o scheduled payments continue on any other instrument that is eligible for inclusion in the numerator of a regulatory capital ratio;
- o no common stock repurchases and redemptions of any capital instrument take place; and
- o no issuances of common stock or preferred stock take place, except for issuances related to expensed employee compensation or in connection with a planned merger or acquisition to the extent that the merger or acquisition is reflected in the *pro forma* balance sheet estimates.

Pro Forma Projections

The tables below summarize pro forma estimated results under the internally developed severely adverse scenario with Dodd-Frank Act prescribed capital actions. Revenue and loss categories are aligned to those reported in CCAR, though results generated under company-run stress tests are not comparable to those measured by the Federal Reserve's supervisory stress tests due primarily to differences in scenarios and modeling methodologies. Counterparty Losses have been segmented into two categories: (1) Trading Exposures, such as derivatives and securities financing activities that are also measured under the Counterparty Default Scenario Component in CCAR, and (2) Other Exposures, such as sub-custodian exposures that are not included in supervisory-run CCAR results.

Summary of Stressed Capital Ratio Results in the 2018 Mid-Cycle Stress Test under the internally developed severely adverse scenario with Dodd-Frank Act Prescribed Capital Actions

Actual Q2 2018 and projected stressed capital ratios (Q3 2018 – Q3 2020)				
	Regulatory Minimums ¹	Actual	Stressed Capital Ratios	
		Q2 2018	Ending	Minimum ²
Common Equity Tier 1 (CET 1) Capital Ratio	4.5%	11.3%	9.4%	6.9%
Tier 1 Capital Ratio	6.0%	14.3%	13.2%	10.3%
Total Capital Ratio	8.0%	15.1%	13.6%	11.0%
Tier 1 Leverage Ratio	4.0%	7.1%	6.4%	4.9%
Supplementary Leverage Ratio	3.0%	6.2%	5.5%	4.3%

¹ Regulatory minimum ratio requirements as prescribed by the Federal Reserve.

² Represents the projected minimum quarter-end ratio at any point during the nine quarter planning horizon of the severely adverse scenario.

Projected 9-quarter cumulative losses, revenue, and net income before taxes (Q3 2018 – Q3 2020)		
	Billions of dollars ¹	Percent of avg. assets ²
Pre-provision Net Revenue	3.4	1.4%
Other Revenue	0.0	
Less		
Provisions	0.4	
Realized Gains/Losses on Securities	0.1	
Trading and Counterparty Losses:		
Counterparty - Trading Exposures ³	1.6	
Counterparty - Other Exposures	0.8	
Other Losses/Gains	0.3	
Equals		
Net Income Before Taxes	0.2	0.1%

¹ Due to rounding, the calculation for the net income before taxes utilizing the results above may not equal the total presented.

² Assets are averaged over the nine quarter planning horizon.

³ Conservative recovery rate relative to Dodd-Frank Act annual stress test results announced in June 2018. Recovery rates for stress tests may vary, based on the specific applicable methodologies and scenarios.

Projected 9-quarter cumulative loan losses, by type of loan (Q3 2018 – Q3 2020)		
	Billions of dollars ¹	Percent of avg. assets ²
Loan losses	0.3	1.3%
First Lien Mortgages, Domestic	-	-
Junior Liens and HELOCs, Domestic	-	-
Commercial and Industrial	0.2	6.1%
Commercial Real Estate	0.0	0.5%
Credit Cards	-	-
Other Consumer	0.0	1.2%
Other Loans	0.1	0.5%

¹ Due to rounding, the sum of the projected loan losses by asset type may not equal the total presented.

² Percentage of average balance of the identified type of loans represented by projected aggregate loan losses. Loan balances are averaged over the nine-quarter planning horizon.

Under the internally developed severely adverse scenario, the stress projections resulted in a decline in the regulatory capital ratios, which utilized Basel III standardized RWA. However, State Street exceeded all Basel III minimum regulatory capital ratio requirements throughout the nine-quarter horizon. Changes in regulatory capital were primarily driven by the stressed declines in revenue relative to baseline expectations, counterparty losses, legal and operational losses in Pre-provision net revenue (PPNR) and Available-for-Sale (AFS) securities Mark-to-Market (MTM).

Stress Testing Framework – Risks and Methodologies

State Street has a robust company-wide stress testing program that executes multiple stress tests each year and is overseen by its management and Board of Directors (*the Board*). The stress testing program is structured around what State Street determines to be its key risks. These key risks serve as an organizing principle for much of State Street's risk management framework, as well as reporting. In connection with the focus on these key risks, State Street's stress tests that are internally developed incorporate idiosyncratic loss events tailored to its unique risk profile. Due to the nature of State Street's business model and consolidated statement of condition, these key risks differ from those of a traditional commercial bank.

In the normal course of our global business activities, State Street is exposed to a variety of risks, some inherent in the financial services industry, others more specific to our business activities. State Street's risk management framework focuses on material risks, which include the following:

- credit and counterparty risk;
- liquidity risk, funding and management;
- operational risk;
- information technology risk;
- market risk associated with our trading activities;
- market risk associated with our non-trading activities, which State Street refers to as asset-and-liability management, and which consists primarily of interest rate risk;
- strategic risk;
- model risk; and
- reputational, fiduciary and business conduct risk.

Many of these risks, as well as certain of the factors underlying each of these risks that could affect our businesses and our consolidated financial statements, are discussed in detail under Item 1A, "Risk Factors" and "Risk Management" under Item 7, "Management Discussion and Analysis of Financial Condition and Results of Operations," included in our Annual Report on Form 10-K for the year ended December 31, 2017 on file with the SEC (2017 Form 10-K).

The below table provides a general description of the methodologies used in the internally developed severely adverse scenario, including those employed to estimate losses, revenues, provision for loan and lease losses, and changes in capital positions over the planning horizon.

General Description of Methodologies

<p><i>Pre-Provision Net Revenue</i></p>	<p><i>PPNR</i> is calculated as net interest income (<i>NII</i>) plus non-interest revenue minus non-interest expense. The following is a description of the methodologies used to calculate the components of <i>PPNR</i> under the internally developed severely adverse scenario.</p> <ul style="list-style-type: none">• State Street's <i>NII</i> is sensitive to changes in the balance sheet due to economic conditions or business actions, movements in interest rates and foreign exchange rates, and changes in spreads earned on interest earning assets or paid on interest bearing liabilities, among other factors. Under the internally developed severely adverse scenario in the 2018 mid-cycle stress test, the interest rate paths across the nine-quarter planning horizon were the primary macroeconomic drivers used to estimate <i>NII</i>. In addition, State Street used projections of short-term interest rates and market volatility to forecast deposit volumes across the planning horizon. Scenario-specific decisions on investment portfolio reinvestment and loan growth assumptions were also applied to the stressed scenarios.• State Street also stressed non-interest revenue, which includes servicing fees, management fees, securities finance, trading services, and processing fees and other revenue. In most cases, macroeconomic factors (e.g., equities, fixed income, GDP, currencies, volatility) identified in the scenario were linked to asset and activity levels through regression based analysis. In cases where fee revenue lacked sensitivity to the macroeconomic factors, State Street used empirical analysis in conjunction with qualitative assessments to determine the impact of stress. Non-Interest revenue also reflected reduced revenue due to client attrition associated with operational and other idiosyncratic events.• State Street's <i>PPNR</i> projections of non-interest expense incorporated a reduction to incentive compensation, salaries & benefits, transaction processing, and professional services expense due to the impacts of lower activity levels and/or lower performance. Offsetting these reductions to expenses, State Street projected incremental costs related to severance and operational risk events such as increased litigation expenses.
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General Description of Methodologies

<p><i>Loan Loss Provisions</i></p>	<p>Loan loss provisions under the internally developed severely adverse scenario represent the sum of the provisions associated with State Street's lending portfolio, including corporate and insurance lending, leveraged loans, and other loan types.</p> <ul style="list-style-type: none">• For the 2018 mid-cycle stress test, State Street stressed its loan losses using a stressed expected loss framework. Expected loss can be expressed as the product of the probability of default (<i>PD</i>), the loss given default (<i>LGD</i>), and the dollar exposure at the time of default (<i>EAD</i>) for a given lending exposure. To capture the stress impacts to each of the components of expected loss, State Street stressed the <i>PD</i>, <i>LGD</i>, and <i>EAD</i> parameters through macroeconomic factor regression or other models which allowed State Street to capture the projected impacts of the scenario on each parameter.• In addition, to account for limitations inherent in such models, State Street applied a credit expert review and overlay to modeled outcomes in the limited instances where such limitations were more acute, in particular for portfolios with limited internal or external loss history.• For the purpose of determining the evolution of the allowance for loan and lease losses, State Street assumed that the defaulted loan losses experienced during the planning horizon would be charged off from the balance sheet.
<p><i>Realized Gains/Losses on Securities (Available-for-Sale/Held-to-Maturity)</i></p>	<p>Pursuant to GAAP, other-than-temporary impairment (<i>OTTI</i>) projections incorporate projected other-than temporary changes in credit expectations.</p> <ul style="list-style-type: none">• For the internally developed severely adverse scenario, <i>OTTI</i> was projected for structured securities using forecasts from externally sourced econometric models. These models utilized relevant stressed macroeconomic factors (<i>e.g.</i>, GDP growth, unemployment, housing price index) together with loan- and pool-level collateral characteristics to generate prepayment rates, recovery rates, and default rates, which were used as inputs in generating bond-specific cash flows.• For non-structured securities, State Street utilized loss rates that were derived from the stressed expected credit loss approach described in the preceding section.• Additionally, State Street applied quantitative overlays at the bond level for structured securities where the models did not forecast underlying collateral performance, as well as for non-structured securities deemed to exhibit increased risk of loss based on expert assessment.

General Description of Methodologies

<p><i>Trading and Counterparty Losses</i></p>	<p>For the 2018 mid-cycle stress test, State Street incorporated a counterparty default scenario component into the internally developed scenarios.</p> <ul style="list-style-type: none">• In connection with the counterparty default scenario component, State Street estimated and reported the potential losses and related effects on capital associated with the instantaneous and unexpected default of the counterparty that would generate the largest direct and indirect credit losses across all of the Bank's core credit-related activities with the given counterparty, including derivatives, securities financing activities, and sub-custodian exposures.• Additionally, as in prior years, the potential for increased defaults, or the probability of default, under the internally developed counterparty default scenario was assessed for all counterparties and across a spectrum of types of risks, yielding additional credit losses and related effects on capital.
<p><i>Available-for-Sale Mark-to-Market on the Investment Portfolio</i></p>	<p>AFS MTM is the unrealized gain or loss composed of the difference between the fair value and amortized cost of AFS securities.</p> <ul style="list-style-type: none">• Under the Basel III final rule, the AFS MTM, which is a component of accumulated other comprehensive income/loss (AOCI) within shareholders' equity, is reflected in regulatory capital according to a phase-in schedule which began on January 1, 2014. Starting in 2018, 100% of AFS MTM is reflected in capital calculations.• For the 2018 mid-cycle stress test, State Street derived the stressed AFS MTM using forecasts from externally sourced econometric models consistent with those utilized in the OTTI projections.• The models were linked to the same set of macroeconomic factors, including GDP growth, housing price index, and unemployment, in addition to other financial indicators, like interest rates and credit spreads. The most impactful macro factors were the long-term interest rate and credit spread.

General Description of Methodologies

Risk-Weighted Assets

For the 2018 mid-cycle stress test, BHCs were required to calculate risk-weighted assets (*RWA*) under the Basel III standardized approach throughout the entire nine quarter planning horizon.

- Under this approach, stressed RWA were primarily impacted by RWA from investment portfolio securities, on- and off-balance sheet growth relative to baseline expectations for other exposures such as loans, securities finance, and derivatives exposures.
- Investment portfolio securities are made up of securitizations, which use the Simplified Supervisory Formula Approach (*SSFA*), and non-structured securities. In applying the *SSFA*, State Street utilized the macroeconomic factors and externally sourced econometric models consistent with those used in the approaches for OTTI and AOCI.
- The impacts to State Street's RWA associated with other items such as loans, securities finance and derivatives were applied consistent with changes in PPNR and balance sheet positions underlying the various exposures.
- State Street also estimated the stress impact on market risk RWA in accordance with the market risk capital rule issued by the Federal Reserve in 2012, which requires banking organizations with significant trading activities, including State Street, to explicitly incorporate the market risks of those activities into determination of the capital requirements. This approach incorporated market risk factors, including interest rates, foreign exchange (*FX*) rates, and the Chicago Board Options Exchange Volatility Index (*VIX*).

Important Disclosure Information

The results of a stress test represent estimates of potential outcomes based on hypothetical economic and business conditions. State Street's stress testing efforts seek to incorporate loss events tailored to its unique risk profile, which differs from that of a traditional commercial bank due to the nature of the business model and consolidated statement of condition. The hypothetical economic conditions applied during any stress test do not represent State Street's projections of expected economic conditions, and the estimates representing the results of the stress test are not forecasts of expected revenues, expenses, losses or other results, or of State Street's financial condition or regulatory capital ratios or levels for any future period. Furthermore, because the methodologies, models and tools used by State Street to project estimates of revenues, expenses, losses, regulatory capital ratios and other results under stress tests are proprietary to State Street, the results of company-run stress tests may differ in material respects from the results of stress tests performed on State Street by other parties, including the Federal Reserve in its annual supervisory stress test conducted in coordination with CCAR.

Additional financial and other information about State Street and its principal business activities can be found in its 2017 Form 10-K and subsequent Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and other filings (collectively, SEC filings) with the Securities and Exchange Commission (the SEC), which are made available on the Investor Relations section of State Street's corporate website at <http://investors.statestreet.com/>. All stakeholders are encouraged to review these SEC filings. The information presented above may differ, in presentation, form, content or otherwise, from similar information, or disclosures on similar topics, presented in SEC filings. Differences could occur, for example, because SEC filings are based on applicable SEC rules and U.S. generally accepted accounting principles (GAAP), which may differ from the regulatory standards or requirements for company-run stress tests under Section 165 of the Dodd-Frank Act. In addition, the information presented in this disclosure may also differ, and would not be comparable to, similar disclosures made by other companies.