June 28, 2021

State Street Corporation 2021 Dodd-Frank Act Stress Test Disclosure

Supervisory Severely Adverse Scenario

STATE STREET

Overview of the 2021 Stress Test

As part of the Comprehensive Capital Analysis and Review (CCAR), the Federal Reserve conducts annual supervisory stress tests on the largest banking organizations (i.e., banking organizations with $100 billion or greater in average total consolidated assets). These forward-looking exercises assess whether such firms have sufficient capital to absorb losses and continue operating during stressful economic and financial conditions over a nine-quarter planning horizon.

The annual CCAR 2021 stress test applies to 23 bank holding companies (BHCs) and U.S. intermediate holding companies (IHCs), 12 of which, including State Street Corporation ("State Street"), are subject to a Counterparty Default Scenario requirement and therefore must include losses and related effects on capital associated with the default of their largest stressed counterparty, determined by applying the Global Market Shock (GMS) specified by the Federal Reserve.

The Federal Reserve has published a summary of its stress test results, including a post-stress capital analysis under the supervisory severely adverse scenario. For CCAR 2021, the Federal Reserve has used the capital action assumptions set forth in its Capital Planning and Stress Capital Buffer Requirement (SCB) rule[1]. For this CCAR exercise, the Federal Reserve used the incurred loss approach for measuring provisions for credit loss while State Street has adopted the current expected credit losses (CECL) accounting standard to estimate credit losses. The Federal Reserve also assumes an unchanged balance sheet in their projections while State Street uses the methodology described under the "Pre-Provision Net Revenue" capital component on page 11 of this disclosure. The results of these company-run and supervisory stress tests are less comparable than in past years as a result of these differences. These disclosures are being published pursuant to the disclosure requirements of the capital planning rule and include a summary of stress test results, and a post-stress capital analysis under the supervisory severely adverse scenario.

(1) 12 C.F.R. § 225.8

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 financial condition as of December 31, 2020, risks, exposures, strategies and activities.

For the CCAR 2021 stress test, State Street was required to execute company-run tests, incorporating hypothetical stress impacts to estimates of its revenues, expenses, trading and counterparty losses, and provisions for credit losses, and the resultant changes in regulatory capital and related capital ratios, over the nine-quarter planning horizon starting on January 1, 2021. To execute the stress tests, State Street applied multiple economic scenarios and parameters, including those prescribed by the Federal Reserve, to its internal stress testing methodologies, models, and tools. Although State Street ran stress tests using multiple scenarios, the sections below describe the methodologies used in the stress test as required under the supervisory severely adverse scenario.

The CCAR 2021 **supervisory severely adverse scenario**, as prescribed by the Federal Reserve, is characterized by a severe global recession accompanied by a period of heightened stress in commercial real estate and corporate debt markets. Over the nine-quarter stress horizon, this supervisory severely adverse scenario includes the following features:

- A peak US **unemployment rate** of 10.8%;
- A US **GDP** contraction of 4.0%;
- A decline in **10-year Treasury yields** to about 0.3% followed by a gradual recovery to around 1.0%;
- An **equity market** decline of 55%;
- From an **international** standpoint, the scenario features severe recessions in the Eurozone, United Kingdom, and Japan, and a significant deceleration in activity in Developing Asia; and
- The **Global Market Shock** factors used for the **Counterparty Default** Scenario reflect wide-spread corporate debt defaults, ratings downgrades, severe declines in equity values, and an increase in equity-implied volatility. It also features US dollar appreciation against the currencies of most advanced economies, with Japanese yen as a notable exception.

This scenario, along with the supervisory baseline scenario, is set forth and described in the document titled "2021 Stress Test Scenarios" published on the Federal Reserve's website on February 12, 2021: https://www.federalreserve.gov/newsevents/pressreleases/files/bcreg20210212a1.pdf

Assumptions Regarding Capital Actions

All assumptions and results presented in this disclosure document reflect the capital actions prescribed by Section 165 of the Dodd-Frank Act (Dodd-Frank Act prescribed capital actions) as amended by the Federal Reserve's Capital Planning and SCB rule, including:

- For each of the quarters of the planning horizon:
    - no common stock dividends are reflected in the pro forma estimates;
    - scheduled payments on any other instrument that is eligible for inclusion in the numerator of a regulatory capital ratio are included;
    - no common stock repurchases and redemptions of any capital instrument are included; and
    - no issuances of common stock or preferred stock are reflected in the pro forma estimates.

Pro Forma Projections (1/3)

The tables below summarize pro forma estimated results under the supervisory severely adverse scenario with Dodd-Frank Act prescribed capital actions. All risk-weighted assets (RWA)-based calculations use the Basel III standardized approach.

Actual 4Q20 and projected stressed capital ratios (1Q21 – 1Q23)				
	Regulatory Minimums[1]	Actual	Stressed Capital Ratios	
		4Q20	Ending	Minimum[2]
Common Equity Tier 1 (CET 1) Capital Ratio	4.5%	12.3%	14.4%	10.4%
Tier 1 Capital Ratio	6.0%	14.4%	16.6%	12.3%
Total Capital Ratio	8.0%	15.3%	18.6%	13.8%
Tier 1 Leverage Ratio	4.0%	6.4%	7.8%	5.4%
Supplementary Leverage Ratio	3.0%	8.1%	9.5%	7.2%

[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 supervisory severely adverse scenario

Pro Forma Projections (2/3)

	Actual 4Q20	Projected 1Q23
Risk-Weighted Assets (billions of dollars)	117.1	111.9

Projected 9-quarter cumulative losses, revenue, and net income before taxes (1Q21 – 1Q23)		
	Billions of dollars[1]	Percent of avg. assets[2]
Pre-provision Net Revenue	4.5	1.8%
Other Revenue	0.0	
Less		
Provision for Credit Losses	0.6	
Realized Gains/Losses on Securities	0.0	
Trading and Counterparty Losses[3]	0.8	
Other Losses/Gains	0.4	
Equals		
Net Income Before Taxes	2.7	1.1%

[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] A 10% recovery rate was applied, consistent with the Federal Reserve's disclosed methodology

Pro Forma Projections (3/3)

The table below summarizes pro forma estimated results under the supervisory severely adverse scenario

Projected 9-quarter cumulative loan losses, by loan type (1Q21 – 1Q23)		
	Billions of dollars[1]	Percent of avg. assets[2]
Loan losses	0.4	1.4%
First Lien Mortgages, Domestic	-	-
Junior Liens and HELOCs, Domestic	-	-
Commercial and Industrial	0.2	0.9%
Commercial Real Estate	0.0	0.1%
Credit Cards	-	-
Other Consumer	-	-
Other Loans	0.1	0.5%

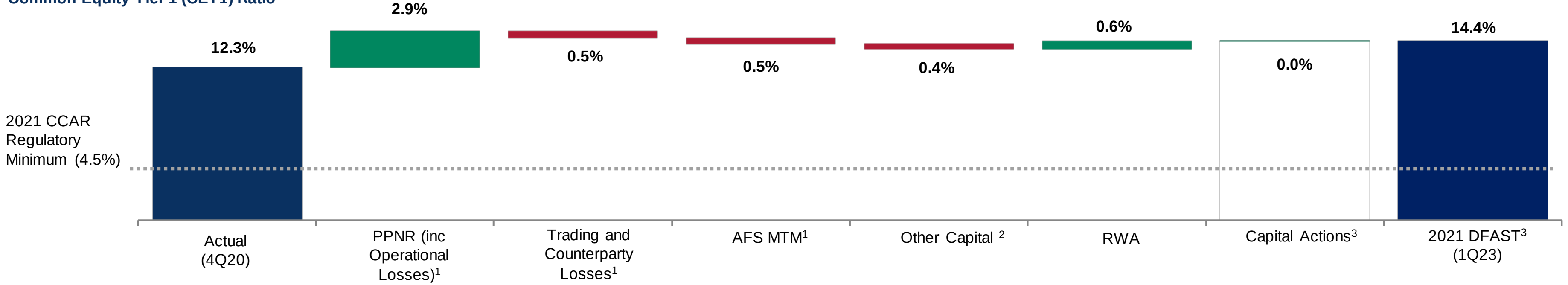
[1] Due to rounding, the sum of the projected loan losses by asset type may not equal the total presented
[2] Percentage of average balance of the identified type of loans represented by projected aggregate loan losses. Loan balances are averaged over the nine-quarter planning horizon

Under the supervisory severely adverse scenario, the stress projections resulted in a decline in most regulatory capital ratios, which utilized Basel III standardized RWA or Leverage Assets; 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, and legal and operational losses.

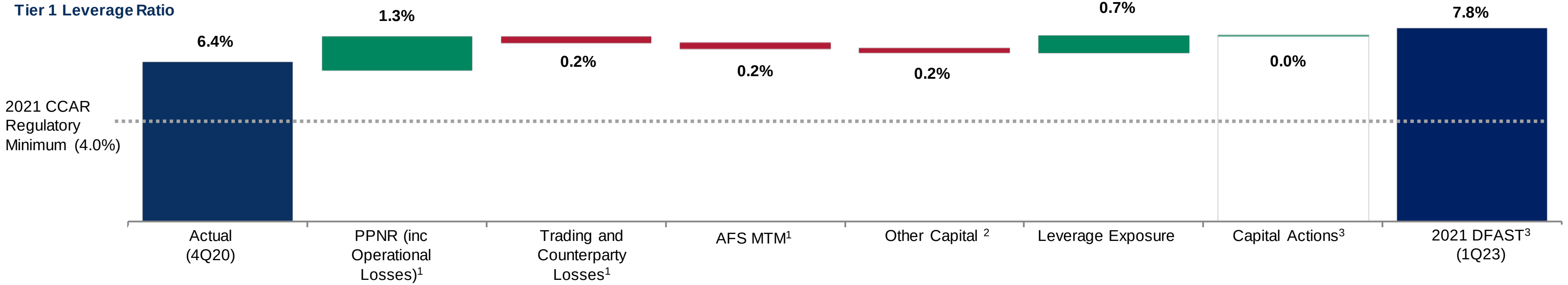
Key Drivers of State Street's Common Equity Tier 1 and Tier 1 Leverage Ratios

Supervisory Severely Adverse Scenario with Dodd-Frank Capital Actions (1Q21 - 1Q23)

Common Equity Tier 1 (CET1) Ratio



Tier 1 Leverage Ratio



Note: Numbers may not sum due to rounding

(1) Items presented above reflected net of tax, as applicable

(2) Other capital includes other losses in the Consolidated Statement of Income, FX translation in AOCI, Disallowed DTA, and Goodwill & Intangibles deductions

(3) For net capital distribution assumptions, please refer to "Assumptions Regarding Capital Actions" on page 4 for details

Stress Testing Framework – Risks and Methodologies (1/2)

- State Street has a robust company-wide stress testing program that executes supervisory stress tests, with the program overseen by management and its Board of Directors
- The stress testing program is structured around what State Street deems to be its key risks. These risks serve as an organizing principle for much of State Street's risk management and reporting framework
- In connection with the focus on these key risks, State Street's internally-developed stress tests 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 may differ from those of a traditional commercial bank
- In the normal course of its global business activities, State Street is exposed to a variety of risks; some intrinsic to the financial services industry, and others which are more specific to its 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 Trading Activities;
  - Market Risk associated with 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

Stress Testing Framework – Risks and Methodologies (2/2)

- Many of these risks, as well as some 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 of the “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, 2020 on file with the SEC (2020 Form 10-K), as those disclosures may from time-to-time be updated in subsequent filings with the SEC.

Stress Testing Framework – General Description of Methodologies (1/4)

The table below and on the subsequent pages provides a general description of the methodologies used in the supervisory severely adverse scenario, including those employed to estimate losses, revenues, provision for credit losses, and other components of our capital projections.

Capital Component	General Description of Methodologies
Pre-Provision Net Revenue	PPNR is calculated as net interest income (NII) plus non-interest revenue minus non-interest expense. The following is a description of the methodologies used to calculate the components of PPNR under the supervisory severely adverse scenario. • State Street's NII is primarily 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 supervisory severely adverse scenario in the 2021 annual stress test, the interest rate paths across the nine-quarter planning horizon had a limited impact on stressed NII compared to the baseline as a significant amount of risk was already embedded in the baseline outlook. 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 software and processing fees. 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 PPNR projections of non-interest expense incorporated a reduction to compensation and employee benefits, transaction processing, and professional services expense due to the impact of lower activity levels and/or lower performance. Offsetting these reductions, State Street projected incremental costs related to severance and operational risk events such as increased litigation expenses.

Stress Testing Framework – General Description of Methodologies (2/4)

Capital Component	General Description of Methodologies
Trading and Counterparty Losses	For the annual stress test, the Federal Reserve required 12 firms, including State Street, to incorporate a Counterparty Default scenario component into their prescribed supervisory scenarios. • 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 State Street's core credit-related activities with the given counterparty, including derivatives and securities financing activities. • As required, the largest counterparty was determined by net stressed losses, estimated by revaluing exposures and collateral using the Global Market Shock provided by the Federal Reserve. • Additionally, as in prior years, the potential for increased defaults, or the probability of default, under the prescribed scenarios was assessed for all counterparties and across a spectrum of types of risks, yielding additional losses and related effects on capital.
Provision for Credit Losses	Credit loss estimates are equal to the sum of the CECL provisions associated with State Street's financial assets held at amortized cost under each scenario, including corporate and insurance lending, leveraged loans, and other asset types. • State Street stressed its estimated credit losses using an expected credit loss (ECL) framework. ECL can be expressed as the product of portfolio cumulative probability of default (PD), loss given default (LGD), and exposure at default (EAD). • The component PD, LGD, and EAD inputs were stressed through each component's specific sensitivity to the scenario macroeconomic factors. Component model sensitivities were defined using business analysis, historical performance, and statistical tools, such as regression analysis. • State Street applied a credit review and, where necessary, an overlay to modeled results to account for identified limitations in the model or process. There was one overlay in CCAR 2021 for Sovereign PD. • Forecast credit losses are charged off in the quarter that default is estimated to occur, reflected by a reduction to the allowance for credit losses (ACL).

Stress Testing Framework – General Description of Methodologies (3/4)

Capital Component	General Description of Methodologies
Realized Gains/Losses on Securities (Available-for-Sale/Held-to-Maturity)	Pursuant to GAAP, impairment projections under CECL (effective as of 1/1/2020) incorporate projected ECL in credit expectations. • For the supervisory severely adverse scenario, ECL was projected for structured securities using forecasts from internal econometric models. These models utilized relevant stressed macroeconomic factors (*e.g.*, 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 “Provision for Credit Losses” section.
Available-for-Sale Mark-to-Market on the Investment Portfolio	Available-for-Sale Mark-to-Market (AFS MTM) is the unrealized gain or loss composed of the difference between the fair value and amortized cost of AFS securities. • Under Basel III, the AFS MTM, which is a component of accumulated other comprehensive income/loss (AOCI) within shareholders’ equity, is reflected in regulatory capital. • For the annual stress test, State Street derived the stressed AOCI using forecasts from internal econometric models consistent with those utilized in the ECL 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.

Stress Testing Framework – General Description of Methodologies (4/4)

Capital Component	General Description of Methodologies
Risk-Weighted Assets	For the annual 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 and 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 largely internally sourced econometric models consistent with those used in the approaches for ECL 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 the determination of its 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 its 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 any 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 2020 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 (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.

Definitions

- **ACL**: Allowance for credit losses
- **AFS**: Available-for-sale securities
- **AOCI**: Accumulated other comprehensive income
- **BHC**: Bank holding company
- **CCAR**: Comprehensive Capital Analysis and Review
- **CECL**: Current Expected Credit Losses
- **DFAST**: Dodd-Frank Act Stress Test
- **Dodd-Frank Act**: Dodd-Frank Wall Street Reform and Consumer Protection Act
- **DTA**: Deferred tax assets
- **EAD**: Exposure at default
- **ECL**: Expected credit loss
- **Federal Reserve**: Board of Governors of the Federal Reserve System
- **FX**: Foreign exchange
- **GAAP**: Generally accepted accounting principles
- **GDP**: Gross Domestic Product
- **GMS**: Global Market Shock, as prescribed by Supervisory requirements for covered companies
- **IHC**: Intermediate holding company, the U.S. subsidiary of a foreign domiciled bank holding company
- **LGD**: Loss given default
- **MTM**: Mark-to-market
- **NII**: Net interest income
- **PD**: Probability of default
- **PPNR**: Pre-provision net revenue
- **P&L**: Consolidated Statement of Income
- **RWA**: Risk-weighted assets
- **SCB**: Stress Capital Buffer
- **SEC**: Securities and Exchange Commission
- **SSFA**: Simplified Supervisory Formula Approach