Bank of America
2022 Dodd-Frank Act Annual Stress Test Results
Supervisory Severely Adverse Scenario

June 27, 2022

BANK OF AMERICA

Important Presentation Information

The 2022 Dodd-Frank Act Annual Stress Test Results Disclosure (the "Stress Test Results") included herein has not been prepared under accounting principles generally accepted in the United States of America ("GAAP"). The Stress Test Results present certain forward-looking projected financial measures for Bank of America Corporation ("Bank of America", "BAC", or "the Company") and Bank of America, National Association ("BANA") under the hypothetical severely adverse economic and market scenario, and required assumptions described herein. The Stress Test Results are not forecasts of actual financial results for BAC and BANA. Investors in securities issued by Bank of America or BANA should not rely on the Stress Test Results as being indicative of expected future results or as a measure of the solvency or actual financial performance or condition of BAC or BANA.

Bank of America's financial information, prepared under GAAP, and a discussion of important factors that could affect Bank of America's future business, results and financial condition are available in reports filed with the Securities and Exchange Commission, including its Annual Report on Form 10-K for the year ended December 31, 2021.

Amounts presented are rounded to the nearest significant digit, as indicated or stated. Immaterial differences arising from the effect of rounding are not adjusted.

The stress testing of financial institutions conducted by the Board of Governors of the Federal Reserve System ("FRB") is based on models and methodologies developed or employed by the FRB. The FRB does not disclose all details of its models and methodologies. Therefore, Bank of America may not be able to explain certain variances between the FRB's projections and Bank of America's Stress Test Results included herein.

Bank of America's Capital Planning Process

The Company's capital planning process is a robust, proactive, forward-looking capital management exercise that identifies and measures risks and translates them into estimates of potential losses to assess capital adequacy over a planning horizon considering different economic and market environments. Centrally, a committee comprised of senior management from a range of finance and risk backgrounds is responsible for oversight as well as review and challenge of certain aspects of the process. The process is fully integrated with the Company's financial and risk management routines and is subject to well-established internal controls and governance. The Company establishes the following requirements for the capital planning process:

- Identify, measure, and assess all material risks;

- Translate risk measures into estimates of potential losses over a range of scenarios and environments, including stress scenarios, and assess capital needs for risks not fully captured in stress testing results through a standalone impact analysis;

- Define available capital resources and estimate sources and uses of capital over the same scenarios and environments;

- Aggregate the sources and uses of capital and assess capital adequacy relative to applicable Capital Management Triggers;

- Establish and maintain a comprehensive capital policy and robust capital planning practices, including capital contingency planning;

- Develop and maintain internal controls and monitoring; and

- Establish and maintain effective oversight and governance to ensure the integrity of the capital planning process.

Assumptions

- This document provides internal projections for BAC and BANA under the stressed macroeconomic and market conditions in the Supervisory Severely Adverse scenario as prescribed by the FRB and the Office of the Comptroller of the Currency ("OCC") at https://www.federalreserve.gov/publications/2022-Stress-Test-Scenarios.htm

- The Supervisory Severely Adverse scenario is characterized by a severe global recession accompanied by a period of heightened stress in commercial real estate and corporate debt markets, and assumes the following key macroeconomic variables over a nine-quarter horizon:
  - Maximum quarterly (annualized) rate of real gross domestic product ("RGDP") decline of 6.2%
  - Peak unemployment rate of 10.0%
  - Maximum home price index ("HPI") decline of 28.6%
  - Maximum commercial real estate price index decline ("CREPI") of 39.6%
  - Maximum equity market decline of 55.0%
  - Trough U.S. 10-year Treasury yield of 0.7%
  - Trough U.S. 3-Month Treasury rate of 0.1%

- Severe instantaneous global market shocks are also applied to the trading book, private equity positions, and counterparty exposures.

- Results presented herein include capital actions as specified under the Dodd-Frank Wall Street Reform and Consumer Protection Act ("DFA") stress testing rules as of the April 5, 2022 submission date of BAC's capital plan. Specified capital action assumptions for BAC are itemized on page 21.

- Results comply with methodologies and instructions provided by the FRB and effective for the 2022 Comprehensive Capital Analysis and Review and Dodd-Frank Act Stress Test.

- Results presented are estimates and may not reflect the actual impacts to Bank of America if such a hypothetical scenario were to occur. Importantly, in certain instances, methodologies required by the FRB and OCC differ from Bank of America's internal practices; therefore, results may not reflect actions Bank of America would likely employ under such stressed conditions.

- The stress test is applied to on- and off-balance sheet exposures as of December 31, 2021. Instantaneous global market shocks are applied as of October 8, 2021 as prescribed by the FRB.

- Capital, risk-weighted assets ("RWA") and capital ratios are calculated under the Basel 3 Standardized ("B3S") approach.

- Income statement categories in this document conform to the FRB's definition of Pre-Provision Net Revenue ("PPNR"), and classifications of revenue and expense items may differ from reporting under Bank of America's public financial disclosures and preparation of financial statements under GAAP.

Bank of America Corporation

Supervisory Severely Adverse – BAC Results

- A $44.5B cumulative pre-tax loss is projected over the specified nine-quarter horizon under the Supervisory Severely Adverse scenario.

- Significant items include loan and lease losses ($34.9B), incremental build in allowance through provision expense ($10.5B), trading and counterparty losses ($14.2B), goodwill impairment ($11.0B, which is capital neutral) and other losses ($6.9B), partially offset by $33.1B of PPNR.

- The hypothetical pre-tax losses in the scenario generate deferred tax assets (representing future deductions) that are generally disallowed for regulatory capital.

- RWA increases primarily driven by commercial loan draws and trading book RWA in line with stressed market conditions, partially offset by lower consumer loans and unfunded commitments.

- Under B3S, the estimated lowest stress ratios over the nine-quarter horizon for Common Equity Tier 1 Capital, Tier 1 Capital, Total Capital, Tier 1 Leverage and Supplementary Leverage Ratio are 7.7%, 9.2%, 11.6%, 5.1% and 4.4%, respectively.

- BAC maintains capital above required regulatory minimum ratios in the Supervisory Severely Adverse scenario. The required regulatory minimum ratios for Common Equity Tier 1 Capital, Tier 1 Capital, Total Capital, Tier 1 Leverage and Supplementary Leverage Ratio are 4.5%, 6.0%, 8.0%, 4.0% and 3.0%, respectively.

Supervisory Severely Adverse – BAC Capital and Risk-Weighted Assets

Capital Ratios[1]	Actual Ratios at 12/31/21	Hypothetical Stressed Ratios at 3/31/24	Hypothetical Stressed Minimum Ratios
Common Equity Tier 1 Capital Ratio	10.6%	8.2%	7.7%
Tier 1 Capital Ratio	12.1%	9.7%	9.2%
Total Capital Ratio	14.1%	12.2%	11.6%
Tier 1 Leverage Ratio	6.4%	5.4%	5.1%
Supplementary Leverage Ratio	5.5%	4.6%	4.4%

Capital/Risk-Weighted Assets $ in billions	Actual Balances at 12/31/21	Balances at 3/31/24	Balances at Common Equity Tier 1 Capital Ratio Minimum
Common Equity Tier 1 Capital	$172	$134	$130
Basel 3 Risk-Weighted Assets	$1,618	$1,635	$1,674

Note: Hypothetical stressed results presented are BAC's internal projections for the scenario using the rules and conditions set forth by the FRB with capital actions for BAC as required under DFA stress testing rules. See "Capital Action Assumptions for Bank Holding Companies" on page 21.

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[1] Capital, risk-weighted assets and capital ratios are calculated under the Basel 3 Standardized approach.

Supervisory Severely Adverse – BAC Income Statement and Loan and Lease Losses

Net Income Before Taxes $ in billions	Cumulative Hypothetical Results Over 9 Quarters	% of Average Assets[4]
Pre-Provision Net Revenue[1]	$33.1	1.1%
Provision for Loan and Lease Losses	45.4	
Credit Losses on Investment Securities (AFS / HTM)	0.1	
Trading and Counterparty Losses[2]	14.2	
Goodwill Impairment	11.0	
Other Losses[3]	6.9	
Net Income Before Taxes	($44.5)	-1.4%

Memo Items

Other Comprehensive Income[5]	($2.0)	
Other Effects on Capital	*Actual Balance at 12/31/21*	*Hypothetical Stressed Balance at 3/31/24*
Accumulated Other Comprehensive Income ("AOCI") Included in Capital	($3.2)	($8.7)

Loan and Lease Losses $ in billions	Cumulative Hypothetical Results Over 9 Quarters	Portfolio Loss Rates Over 9 Quarters[7]
Estimated Loan Losses[6]	$34.9	3.4%
First Lien Mortgages, Domestic	1.7	0.8%
Junior Liens and HELOCs, Domestic	0.4	1.8%
Commercial and Industrial	13.7	4.6%
Commercial Real Estate	3.7	4.9%
Credit Cards	10.4	14.7%
Other Consumer	0.7	0.7%
Other Loans	4.3	1.8%

Note: Hypothetical stressed results presented are BAC's internal projections for the scenario using the rules and conditions set forth by the FRB.

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[1] PPNR includes losses from operational risk events, mortgage repurchase expenses, legal expenses, and OREO costs. PPNR in this disclosure does not include projected changes in the fair value of loans held for sale and loans held for investment measured under the fair value option.

[2] Trading and counterparty includes mark-to-market losses, credit valuation adjustments, trading incremental default losses, and counterparty default.

[3] Other losses include the projected change in the fair value of loans held for sale and loans held for investment measured under the fair value option.

[4] Calculated by dividing nine-quarter cumulative revenue or earnings by the average of the quarter ending balances over the specified nine-quarter horizon.

[5] Other comprehensive income includes net unrealized losses/gains on (i) available-for-sale securities, (ii) foreign currency translation adjustments, (iii) cash flow hedges, (iv) debit valuation adjustments, and (v) net actuarial losses and prior service costs related to defined benefit pension and other postretirement employee benefit plans.

[6] Commercial and industrial loans include small and medium enterprise loans and corporate cards. Other loans include international real estate loans.

[7] Calculated by dividing the nine-quarter cumulative loan and lease losses by the average of the accrual loan and lease balances for each portfolio over the same time period.
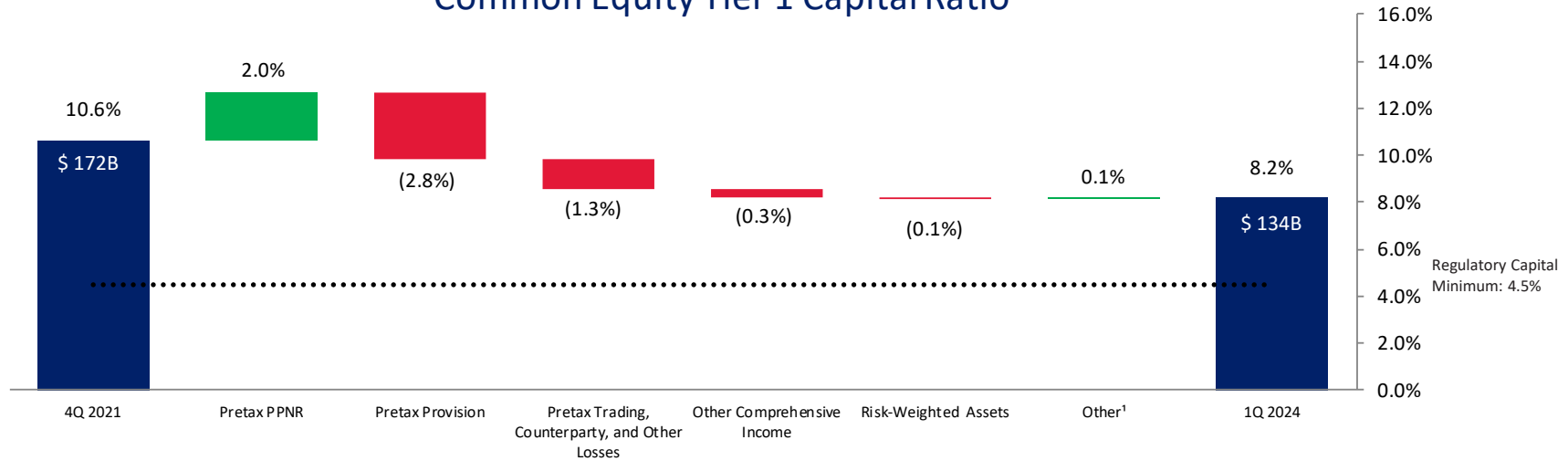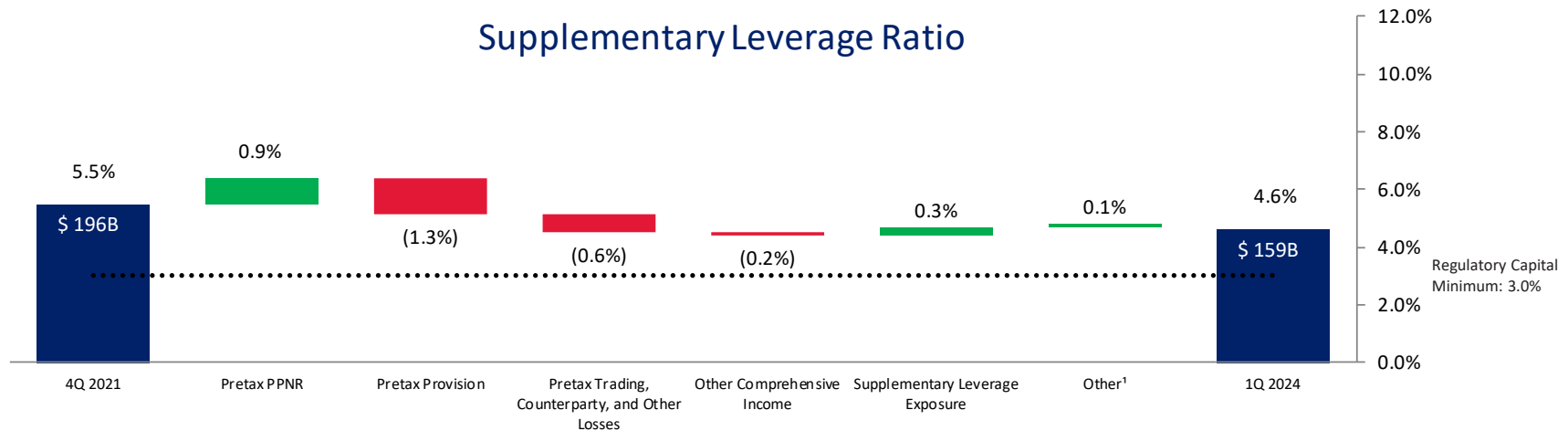
Supervisory Severely Adverse – BAC Regulatory Capital Ratio Drivers

The key drivers of Bank of America's DFAST pro forma Common Equity Tier 1 and Supplementary Leverage ratios are shown in the tables below.

Common Equity Tier 1 Capital Ratio

10.6%	**2.0%**	**(2.8%)**	**(1.3%)**	**(0.3%)**	**(0.1%)**	**0.1%**	**8.2%**
$ 172B							$ 134B
4Q 2021	Pretax PPNR	Pretax Provision	Pretax Trading, Counterparty, and Other Losses	Other Comprehensive Income	Risk-Weighted Assets	Other¹	1Q 2024

Regulatory Capital Minimum: 4.5%

Supplementary Leverage Ratio

5.5%	**0.9%**	**(1.3%)**	**(0.6%)**	**(0.2%)**	**0.3%**	**0.1%**	**4.6%**
$ 196B							$ 159B
4Q 2021	Pretax PPNR	Pretax Provision	Pretax Trading, Counterparty, and Other Losses	Other Comprehensive Income	Supplementary Leverage Exposure	Other¹	1Q 2024

Regulatory Capital Minimum: 3.0%

¹ Other adjustments to capital are included for items such as: intangibles, fair value option and capital actions reflective of DFA rules. See "Capital Action Assumptions for Bank Holding Companies" on page 21.

Bank of America, National Association

Supervisory Severely Adverse – BANA Results

- A $13.2B cumulative pre-tax loss is projected over the specified nine-quarter horizon under the Supervisory Severely Adverse scenario.

- Significant items include loan and lease losses ($34.8B), incremental build in allowance for loan and lease losses through provision expense ($10.4B), trading and counterparty losses ($4.4B), and other losses ($6.8B), partially offset by PPNR of $43.4B.

- RWA increases primarily driven by commercial loan draws and trading book RWA in line with stressed market conditions, partially offset by lower consumer loans and unfunded commitments.

- Under B3S, the estimated lowest stress ratios over the nine-quarter horizon for Common Equity Tier 1 Capital, Tier 1 Capital, Total Capital, Tier 1 Leverage and Supplementary Leverage Ratio are 11.7%, 11.7%, 13.0%, 6.5% and 5.6%, respectively.

Supervisory Severely Adverse – BANA Capital and Risk-Weighted Assets

Capital Ratios[1]	Actual Ratios at 12/31/21	Hypothetical Stressed Ratios at 3/31/24	Hypothetical Stressed Minimum Ratios
Common Equity Tier 1 Capital Ratio	13.5%	12.7%	11.7%
Tier 1 Capital Ratio	13.5%	12.7%	11.7%
Total Capital Ratio	14.4%	14.1%	13.0%
Tier 1 Leverage Ratio	7.6%	7.2%	6.5%
Supplementary Leverage Ratio	6.5%	6.1%	5.6%

Capital/Risk-Weighted Assets $ in billions	Actual Balances at 12/31/21	Balances at 3/31/24	Balances at Common Equity Tier 1 Capital Ratio Minimum
Common Equity Tier 1 Capital	$183	$169	$169
Basel 3 Risk-Weighted Assets	$1,352	$1,331	$1,448

Note: Hypothetical stressed results presented are BANA's internal projections for the scenario using the rules and conditions set forth by the FRB and OCC.

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[1] Capital, risk-weighted assets and capital ratios are calculated under the Basel 3 Standardized approach.

Supervisory Severely Adverse – BANA Income Statement and Loan and Lease Losses

Net Income Before Taxes $ in billions	Cumulative Hypothetical Results Over 9 Quarters	% of Average Assets[4]
Pre-Provision Net Revenue[1]	$43.4	1.7%
Provision for Loan and Lease Losses	45.2	
Credit Losses on Investment Securities (AFS / HTM)	0.1	
Trading and Counterparty Losses[2]	4.4	
Goodwill Impairment	-	
Other Losses[3]	6.8	
Net Income Before Taxes	($13.2)	-0.5%

Memo Items

Other Comprehensive Income[5]	($2.3)	
Other Effects on Capital	*Actual Balance at 12/31/21*	*Hypothetical Stressed Balance at 3/31/24*
Accumulated Other Comprehensive Income ("AOCI") Included in Capital	($0.3)	($5.8)

Loan and Lease Losses $ in billions	Cumulative Hypothetical Results Over 9 Quarters	Portfolio Loss Rates Over 9 Quarters[7]
Estimated Loan Losses[6]	$34.8	3.6%
First Lien Mortgages, Domestic	1.6	0.8%
Junior Liens and HELOCs, Domestic	0.4	1.8%
Commercial and Industrial	13.7	4.6%
Commercial Real Estate	3.7	4.9%
Credit Cards	10.4	14.7%
Other Consumer	0.7	0.7%
Other Loans	4.3	2.1%

Note: Hypothetical stressed results presented are BANA's internal projections for the scenario using the rules and conditions set forth by the FRB and OCC.

[1] PPNR includes losses from operational risk events, mortgage repurchase expenses, legal expenses and OREO costs. PPNR in this disclosure does not include projected changes in the fair value of loans held for sale and loans held for investment measured under the fair value option.

[2] Trading and counterparty includes mark-to-market losses, credit valuation adjustments, trading incremental default losses, and counterparty default.

[3] Other losses include the projected change in the fair value of loans held for sale and loans held for investment measured under the fair value option.

[4] Calculated by dividing nine-quarter cumulative revenue or earnings by the average of the quarter ending balances over the specified nine-quarter horizon.

[5] Other comprehensive income includes net unrealized losses/gains on (i) available-for-sale securities, (ii) foreign currency translation adjustments, (iii) cash flow hedges, (iv) debit valuation adjustments, and (v) net actuarial losses and prior service costs related to defined benefit pension and other postretirement employee benefit plans.

[6] Commercial and industrial loans include small and medium enterprise loans and corporate cards. Other loans include international real estate loans.

[7] Calculated by dividing the nine-quarter cumulative loan and lease losses by the average of the accrual loan and lease balances for each portfolio over the same time period.

Stress Test Methodologies

Credit Risk Methodologies

Credit Risk

The risk of loss arising from a borrower's or counterparty's future inability or failure to repay its contractual obligations is analyzed by product in the stress testing process. Each product is assessed for charge-offs and allowance using the relevant loss forecasting methodologies over a specified horizon. Quantitative and qualitative driven results are analyzed and adjustments may be made related to historical experience, portfolio characteristics, and subject matter expertise. Credit risk and losses related to borrower default are projected in the income statement through provision for loan and lease losses.

Commercial Asset Quality

• The commercial portfolio includes commercial credit exposure across products including Commercial and Industrial ("C&I") and Commercial Real Estate ("CRE").

• Stress testing uses the same general approach and inputs as the baseline forecast. The C&I approach captures losses through stressed obligor ratings, increased defaults, and elevated loss given default; the CRE approach captures losses through changes in value, income, and repayment streams of the underlying CRE collateral.

• The level of stress is determined by incorporating a variety of macroeconomic variables, including, but not limited to, RGDP, equity market prices, corporate bond spreads, unemployment rates, HPI, and CREPI.

Consumer Asset Quality

• The main consumer portfolios include Home Loans (First Mortgage and Home Equity), Card Services (U.S. Card and Business Card), and Consumer Vehicle Lending.

• Consumer products use loan level probability of default and loss given default models, which include relevant loan level characteristics such as FICO and loan-to-value ratio, plus macroeconomic assumptions relevant to each product such as HPI, unemployment rates, and interest rates.

Market and Counterparty Risk Methodologies

Market and Counterparty Risk

Hypothetical stress losses for the Supervisory Severely Adverse scenario are calculated by applying FRB-provided global market shocks to the relevant counterparty exposures, private equity positions, and on- and off-balance sheet positions in the trading portfolios.

Instantaneous Shocks / Trading and Counterparty Losses

- Market risk stress testing estimates and reports the impact to earnings under the prescribed instantaneous market disruption shocks.

- Shocks across the portfolio risk factors (including interest rates, currencies, equities, commodities, and credit) are applied to company-wide trading, private equity, and counterparty exposures as of October 8, 2021.

- Stress testing of the counterparty risk exposure is designed to assess the losses from the counterparty portfolio of changes in both market and credit risk conditions. The impact is measured by the change in mark-to-market value of the credit valuation adjustments after applying the stress scenario shocks. Also included is the resulting direct impact of a large counterparty default post the application of these shocks.

- The trading and counterparty scenario P&L impact is included in the first quarter of the forecast period without recovery assumed in the remaining quarters.

Interest Rate Risk Methodologies

Interest Rate Risk

Interest rate risk represents the most significant market risk exposure to the banking book balance sheet and is measured as the exposure of the Company's earnings and capital to movements in interest rates. Client-facing activities, primarily lending and deposit-taking, create interest rate sensitive positions on the balance sheet.

Net Interest Income

- The Company's consolidated net interest income trajectory is reflected in the scenario as it relates to the interest income from loans, debt securities, and other interest-earning assets in addition to the interest expense related to deposits, borrowings, and other interest-bearing liabilities. This incorporates balance sheet assumptions such as loan and deposit balance movements and pricing, changes in funding mix, product re-pricing, and maturity characteristics.

- The scenario captures the potential interest rate stresses to the consolidated balance sheet, net interest income, and other activities that are sensitive to changes in interest rate levels and yield curves. For example, the scenario incorporates changes to interest rates that are applied across exposures and business activities, resulting in impacts to prepayments on mortgage-related assets and net interest income, among other items.

Capital

- In addition to net interest income, the other comprehensive income impact to the available for sale ("AFS") securities portfolio and the valuation impact to the mortgage servicing rights portfolio are considered when evaluating interest rate risk. These items and the impact to the Company's DTA can affect the Company's capital ratios under Basel 3.

Operational Risk Methodologies

Operational Risk

The risk of loss resulting from inadequate or failed internal processes, people, systems or external events is considered in each stress test. These risks are independently assessed for our businesses and operational loss event categories both for legal (e.g., litigation) and non-legal operational risks.

- Operational losses are included in the projections for each business and result in a reduction in PPNR. Four approaches are used to arrive at stress losses under various economic scenario assumptions: scenario analysis, structural models based on the underlying economics of the business, statistical regression models, and simple historical fallbacks.

- Non-legal and legal losses are expected to increase across most of the businesses in stress scenarios given the Bank's idiosyncratic risks and pressures on execution, a heightened litigation and regulatory environment, and potential business disruptions.

- Operational losses are disaggregated into material risks groups, and largest losses include forecasts from internal/external fraud, data management issues, and improper business practices, among others.

- Related litigation expenses are analyzed across the company in aggregate and on a case-by-case basis for significant matters, and are included as an increase to projected operational risk losses in the stress scenario.

Risk-Weighted Assets Methodologies

Credit Risk RWA

- Traditional Banking Book RWA projections are based on projected exposure balances and the applicable risk weights as prescribed in the regulatory framework. The distribution of projected exposures across prescribed regulatory risk weight categories is based on product characteristics and risk profile, including credit migration of non-performing assets and changes in Organization for Economic Co-operation and Development ("OECD") Country Risk Classification.

- Securitization RWA projections are based on projected securitization exposures and applicable risk weights as calculated under the Basel 3 Final Rule. The projections of the risk weights consider the impact of the scenario on delinquencies of underlying exposures and attachment / detachment point.

Counterparty Risk RWA

- Counterparty RWA projections are based on the projected exposures given stressed market projections, credit risk migration, projected balances, and the applicable risk weights.

Market Risk RWA

- Market Risk RWA projections are based on models and approaches that link the RWA components (VaR / Stressed-VaR, Incremental Risk Charge, Comprehensive Risk Measure, Trading Book Securitization, and Standard Charges) directly or indirectly to the market variables in the scenario. The RWA projections also incorporate the projected size of the trading assets and changes in OECD Country Risk Classifications where appropriate.

Other Methodologies

Pre-Provision Net Revenue

- Net interest income is derived using macroeconomic variables to forecast asset and liability balances and related interest income and expense over the specified nine-quarter horizon.

- Noninterest income and noninterest expense are determined on a business-by-business basis over the specified nine-quarter horizon using the macroeconomic variables that are relevant to each business. Stress losses related to operational risk events, including mortgage representation and warranties and legal costs, are included within PPNR.

- Personnel expense calculations, which utilize FRB-prescribed methodologies for the scenario, do not incorporate personnel expense reductions in conjunction with the market and counterparty disruptions.

Provision Expense

- Charge-off projections are derived from the loss forecasting processes described under Credit Risk Methodologies.

- The allowance for loan and lease losses, and related reserve build or release, is projected over the specified nine-quarter horizon under the Current Expected Credit Loss ("CECL") accounting standard, where the allowance is measured based on an estimate of lifetime expected credit losses under the macroeconomic conditions in the scenario.

- In accordance with CECL adoption in 2020, results include credit losses on AFS & HTM Debt securities as well as other financial assets, as applicable under the macroeconomic conditions in the scenario.

Other Losses

- Other losses excluding goodwill are primarily related to loans held under the fair value option and loans held for sale where projections are based on the macroeconomic assumptions in the scenario without reference to the global market shock.

Required Capital Action Assumptions for Bank Holding Companies

For stressed projections under the Dodd-Frank Act stress test rule, a bank holding company ("BHC") must use the following assumptions regarding its capital actions over the planning horizon for the supervisory baseline scenario and the supervisory severely adverse scenario:

(1) The covered company will not pay any dividends on any instruments that qualify as common equity tier 1 capital;

(2) The covered company will make payments on instruments that qualify as additional tier 1 capital or tier 2 capital equal to the stated dividend, interest, or principal due on such instrument;

(3) The covered company will not make a redemption or repurchase of any capital instrument that is eligible for inclusion in the numerator of a regulatory capital ratio; and

(4) The covered company will not make any issuances of common stock or preferred stock.