2019 Annual Stress Test Disclosure

Results of the Severely Adverse Scenario Prescribed by the Federal Housing Finance Agency

November 15, 2019

**As Required by the Dodd-Frank
Wall Street Reform and Consumer Protection Act**

FHLBANK DALLAS

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Forward-Looking Information

This presentation contains forward-looking statements and projections that involve risks or uncertainties. Forward-looking statements in this presentation include projections of the Federal Home Loan Bank of Dallas' ("Bank") financial condition and results of operations under a hypothetical stress scenario, which incorporates a set of assumed economic conditions prescribed by the Bank's regulator, the Federal Housing Finance Agency. These projections are not intended to be, nor should they be construed as, the Bank's forecast of expected future economic conditions or a forecast of the Bank's expected future financial condition or results of operations. Rather, these projections reflect possible results under the prescribed hypothetical scenario. The Bank's future financial condition and results of operations will be influenced by actual economic and financial conditions as well as various other factors including, but not limited to, those described in the reports that the Bank files with the U.S. Securities and Exchange Commission. Any duty to update these forward-looking statements is disclaimed.

Executive Summary

Background

- The Dodd-Frank Wall Street Reform and Consumer Protection Act ("Dodd-Frank Act") requires certain financial companies with total consolidated assets of more than $10 billion, and which are regulated by a primary federal financial regulatory agency, to conduct annual stress tests to determine whether the companies have the capital necessary to absorb losses under adverse economic conditions.
- In September 2013, the Federal Housing Finance Agency ("FHFA"), regulator of the Federal Home Loan Banks ("FHLBanks"), implemented a stress testing rule for the FHLBanks as required by the Dodd-Frank Act. In accordance with that rule, as amended, and an FHFA Order dated March 5, 2019 which was accompanied by Summary Instructions and Guidance (collectively, the "Order"), the Federal Home Loan Bank of Dallas ("Bank") was required to submit to the FHFA by August 31, 2019 the results of stress tests based on three scenarios: baseline, adverse and severely adverse.
- As required by the Order, the Bank has disclosed in this document the 2019 stress test results for the severely adverse scenario.

Requirements

- The FHFA provided inputs and key assumptions for the severely adverse scenario.
- The stress test was based on the Bank's portfolio as of December 31, 2018 and incorporates its projections for future business under severely adverse economic conditions during the period from the first quarter of 2019 through the first quarter of 2021, the nine-quarter plan horizon prescribed by the FHFA. Results were projected over that nine-quarter period, starting with balances as of December 31, 2018. In accordance with the FHFA's instructions, the projections do not take into consideration new accounting standards that have become (or will become) effective for the Bank during the plan horizon including, but not limited to, ASU 2017-12, *"Targeted Improvements to Accounting for Hedging Activities"* and ASU 2016-13, *"Measurement of Credit Losses on Financial Instruments."* In accordance with the Order, the results for the nine-quarter period are presented herein on a cumulative basis.
- The stress test results under the FHFA's severely adverse scenario should not be viewed as forecasts of expected or likely outcomes of future results. Rather, the results from this hypothetical stress scenario provide a measure of the potential impact that the FHFA's severely adverse scenario could have on the Bank's future results and capital position.

Results

- The Bank's stress test results demonstrated capital adequacy under severely adverse economic conditions throughout the nine-quarter planning horizon. The projected capital balances and ratios as of March 31, 2021 (the end of the planning horizon) are set forth below.
  - Total projected regulatory capital of $3.395 billion.
  - Projected permanent capital ratio of 5.78% as compared to the regulatory requirement of 4.00%.
  - Projected leverage capital ratio of 8.68% as compared to the regulatory requirement of 5.00%.
  - Total projected GAAP[1] capital of $2.751 billion.

Use/Governance

- Stress testing has evolved as an important analytical tool for evaluating capital adequacy under adverse economic conditions. The Bank regularly uses stress tests in its capital planning to measure its exposure to material risks and to evaluate the adequacy of capital resources available to absorb potential losses arising from those risks.
- Among other things, the Bank takes the results of its stress tests into account in making changes, as appropriate, to the Bank's capital structure (including the level and composition of capital); its exposures, concentrations and risk positions; any plans for recovery and resolution; and to improve its overall risk management. No changes to the Bank's current capital management activities or dividend practices were assumed in the stress test simulations.
- The Bank's stress test policies and procedures were reviewed and approved by the Bank's Board of Directors. The Bank's stress test results were reviewed with the Bank's Board of Directors.

[1] Generally Accepted Accounting Principles in the United States.

Stress Test Components

Net Interest Income + Other Non-Interest Income, Net	• Includes net interest income, other income (loss) and other expenses.
Provision for Credit Losses on Mortgage Loans	• Provision for credit losses on mortgage loans held for portfolio.
OTTI Credit Losses	• Credit component of other-than-temporary impairment ("OTTI") losses on non-agency (private-label) residential mortgage-backed securities ("MBS") classified as held-to-maturity ("HTM").
Mark-to-Market Gains (Losses)	• Fair value gains (losses) on derivatives and trading securities.
Global Market Shock	• Losses recognized in other comprehensive income ("OCI") resulting from an instantaneous widening of option adjusted spreads ("OAS") that were applied to the Bank's holdings of agency debentures, Private Export Funding Corporation ("PEFCO") debentures and agency commercial MBS ("CMBS") classified as available-for-sale ("AFS"). This component also includes the non-credit component of OTTI losses which were based upon prescribed instantaneous price declines applied to two other than temporarily impaired non-agency residential MBS ("RMBS") classified as HTM, which are recognized in OCI.
Counterparty Default Losses	• Losses resulting from an instantaneous and unexpected default of the Bank's largest counterparty (as measured by the amount of the loss) emanating from its secured and unsecured lending, reverse repurchase agreements, derivative positions and single-family mortgage insurance providers.

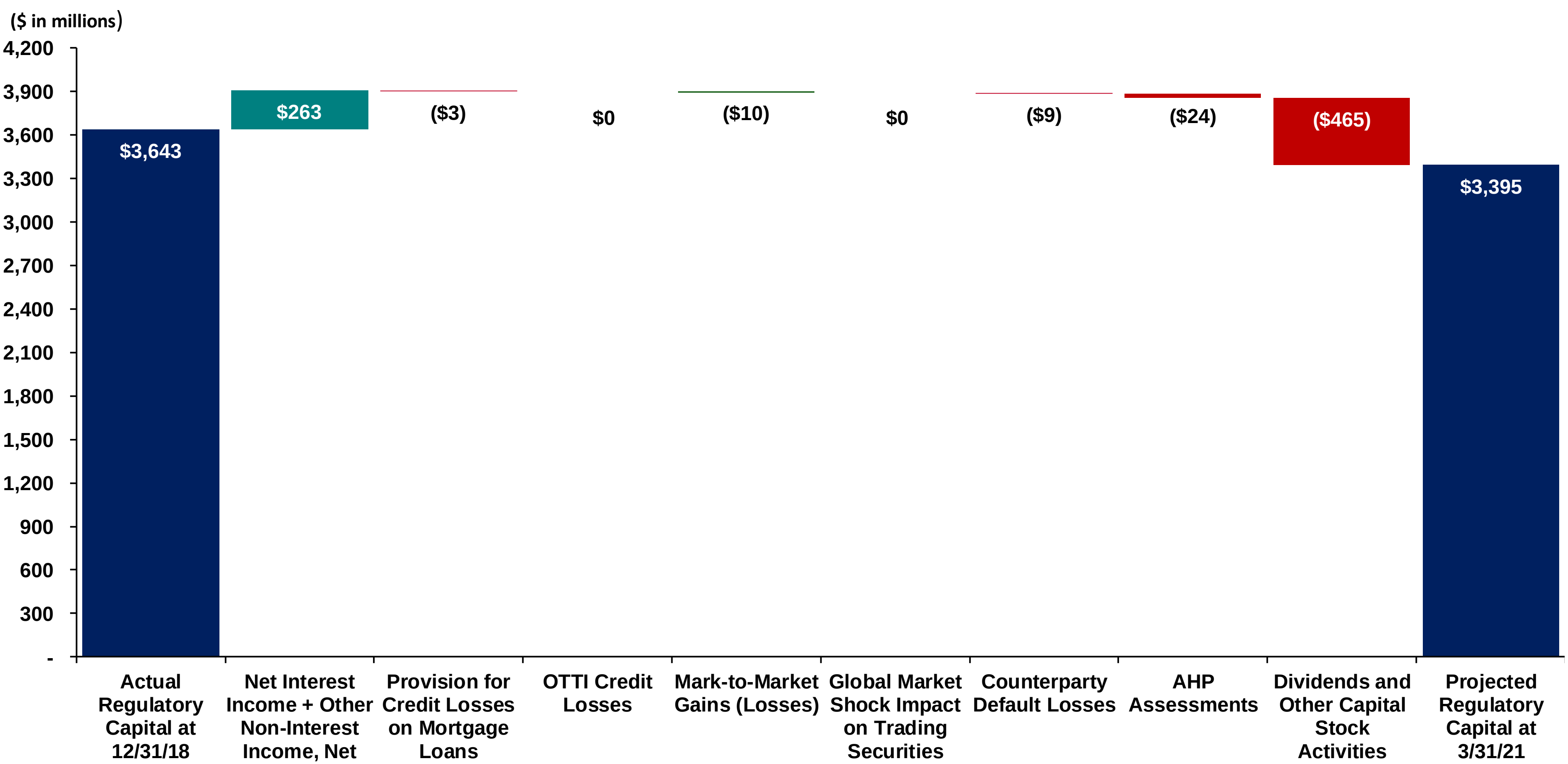
Severely Adverse Scenario Results

FHFA Dodd-Frank Stress Test Template - SEVERELY ADVERSE SCENARIO
(In thousands, except percentages)

		Cumulative Projected Financial Metrics (Q1 2019 - Q1 2021)
1	Net interest income + other non-interest income, net	263,490
2	(Provision) benefit for credit losses on mortgage loans	(3,290)
3	OTTI credit losses	(80)
4	Mark-to-market gains (losses)	(9,950)
5	Global market shock impact on trading securities	-
6	Counterparty default losses	(8,960)
7	AHP assessments	(24,120)
8	Net income (loss)	217,090
9	Other comprehensive income (loss)	(764,830)
10	Total comprehensive income (loss)	(547,740)
11	Total capital (GAAP) - starting	3,764,260
12	Total capital (GAAP) - ending	2,751,490
13	Regulatory capital ratio - starting	5.01%
14	Regulatory capital ratio - ending	5.78%

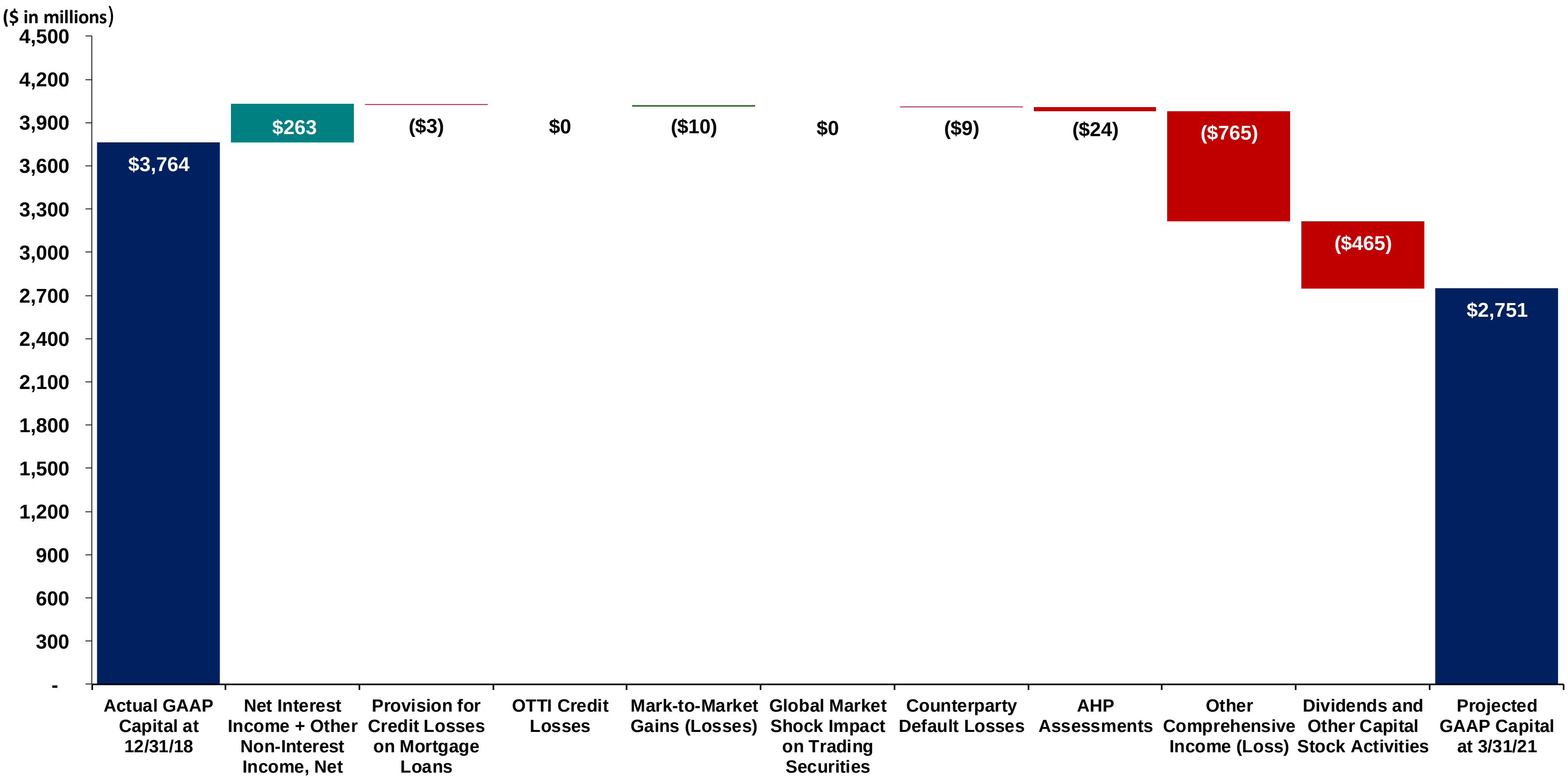
Regulatory Capital Analysis Under Severely Adverse Scenario

- Regulatory capital, which is comprised of capital stock - putable, retained earnings and mandatorily redeemable capital stock, decreases from $3.643 billion at 12/31/18 to $3.395 billion at 3/31/21.
- Results shown below are based upon a modeled simulation, except for actual regulatory capital at 12/31/18.



GAAP Capital Analysis
Under Severely Adverse Scenario

- GAAP capital, which is comprised of capital stock - putable, retained earnings and accumulated other comprehensive income (loss), decreases from $3.764 billion at 12/31/18 to $2.751 billion at 3/31/21.
- Results shown below are based upon a modeled simulation, except for actual GAAP capital at 12/31/18.



Severely Adverse Scenario
Key Assumptions Provided by FHFA

Macroeconomic Variables	
Residential House Prices *(Decline over the plan horizon)*	-26%
Commercial Real Estate Prices *(Decline over the plan horizon)*	-35%
Real Gross Domestic Product *(Annual/Annualized GDP growth rate)*	-6.7% (2019)/-0.7% (2020) +3.6% (Q1 2021)
Unemployment Rate *(Peak in Q3 2020/Average over the plan horizon)*	10.0%/8.4%
Interest Rate Variables	
30-Year Mortgage Rate *(Lowest/Average over the plan horizon)*	3.9%/4.2%
10-Year Treasury Rate *(Lowest/Average over the plan horizon)*	0.8%/1.1%
3-Month Treasury Rate *(Lowest/Average over the plan horizon)*	0.1%/0.1%
Global Market Shock	
Instantaneous price shock on two non-agency OTTI HTM securities	-54.8%
Instantaneous OAS shocks on:	
Agency and PEFCO debentures classified as AFS	OAS widening of 53.5 basis points
Agency CMBS classified as AFS	OAS widening of 96.6 basis points

Component Methodologies

Net Interest Income + Other Non-Interest Income, Net

Description

- Reflects projections of net interest income, other income (expense) and other expenses over the nine-quarter plan horizon.
- Material risks covered include interest rate risk, operational risk and business risk.

Methodologies

- Net interest income was estimated by projecting portfolio balances, funding mix, and spreads using the macroeconomic variables provided by the FHFA and management assumptions. Notable management assumptions include those for advances and the Bank's mortgage loan, MBS and short-term liquidity holdings. Advances balances were projected to decline from $40.8 billion at December 31, 2018 to $30.6 billion at December 31, 2019 and were then held constant at $30.6 billion through the remainder of the plan horizon. Mortgage loans held for portfolio were projected to increase from $2.2 billion at December 31, 2018 to $4.2 billion at March 31, 2021. At December 31, 2019 and December 31, 2020, mortgage loans held for portfolio were projected to approximate $3.0 billion and $4.0 billion, respectively. MBS holdings were maintained throughout the plan horizon at an amount approximating 300% of the Bank's total regulatory capital. No agency debentures were assumed to be acquired during the plan horizon. The total carrying value of long-term investment securities (comprising both debentures and MBS) declined from $17.4 billion at December 31, 2018 to $14.7 billion at March 31, 2021. At December 31, 2019 and December 31, 2020, the carrying value of long-term investment securities was projected to approximate $15.9 billion and $15.3 billion, respectively. The Bank's short-term liquidity holdings were projected to decline from $12.2 billion at December 31, 2018 to $9.0 billion at December 31, 2019 and were then held constant at $9.0 billion through the remainder of the plan horizon.

- Other income (loss) and other expenses were estimated based upon management's assumptions. Operating expenses, the most significant item comprising other income (loss) and other expenses, was based on the Bank's operating budget for 2019 and, for 2020 and the first quarter of 2021, the Bank's Strategic Plan projections. Operational risk losses, totaling $18.8 million, were estimated at the 99-percent confidence level using the Bank's operational risk model, which utilizes internal loss data, external loss data and operational risk scenario analysis to calculate the Value at Risk of an estimated loss distribution.

Provision for Credit Losses on Mortgage Loans

Description

- Reflects projected credit loss provisions for mortgage loans held for portfolio.
- Captures mortgage credit risk.

Methodologies

- Loan loss reserves related to mortgage loans were forecasted using a third-party model that generates loan level defaults, loss severities and net credit losses based upon specified loan attributes, state-level HPI assumptions and projected interest rates.

Component Methodologies

OTTI Credit Losses

Description	▪ Reflects projected credit-related losses on non-agency RMBS classified as HTM. ▪ Material risks covered include credit risk associated with the Bank's long-term investment portfolio, substantially all of which is comprised of securities classified as AFS and HTM.
Methodologies	▪ OTTI credit losses on non-agency RMBS were estimated by projecting cash flow shortfalls based on FHFA-provided assumptions as well as management's assumptions for housing prices, interest rates and mortgage rates. No OTTI credit losses were assumed to occur on any of the Bank's holdings of agency RMBS or CMBS, agency debentures, PEFCO debentures, state housing agency obligations or U.S. government-guaranteed obligations. Two non-agency RMBS were deemed to be other-than-temporarily impaired in the simulation.

Mark-to-Market Gains (Losses)

Description	▪ Reflects projected fair value gains (losses) on derivatives and securities classified as trading. ▪ Material risk covered includes market risk.
Methodologies	▪ Based upon FHFA-provided assumptions, no losses were assumed to occur on the U.S. Treasury Notes that were held by the Bank and classified as trading as of December 31, 2018. ▪ For derivative positions that had a substantially offsetting position for which the gains and losses are recognized in earnings, no fair value changes were projected for either position. For its other derivative positions for which the gains and losses are recognized in earnings, the Bank applied a combination of FHFA-specified interest rates and management's interest rate assumptions to derive the projected fair value changes throughout the plan horizon.

Component Methodologies

Global Market Shock

Description	▪ Reflects projected OCI losses resulting from an instantaneous OAS widening applied to agency CMBS, agency debentures and PEFCO debentures classified as AFS as well as an instantaneous price decline applied to two OTTI non-agency RMBS classified as HTM. The losses recognized in OCI are not recovered during the plan horizon. ▪ Material risk covered includes market risk.
Methodologies	▪ The Bank applied FHFA-specified shocks, in the first quarter of the nine-quarter plan horizon, to its holdings of agency debentures, PEFCO debentures, agency CMBS and OTTI non-agency RMBS: ▪ OTTI non-agency RMBS: prescribed price decline of 54.8% applied to each of two securities, which produced non-credit losses of $4 million ▪ Agency CMBS: OAS widening of 96.6 basis points, which produced unrealized fair value losses of $613 million ▪ Agency and PEFCO debentures: OAS widening of 53.5 basis points, which produced unrealized fair value losses of $148 million

Counterparty Default Losses

Description	▪ Reflects instantaneous and unexpected default of the Bank's largest counterparty (as measured by the amount of the loss). ▪ Material risks covered include secured and unsecured lending, repurchase/reverse repurchase agreements, derivative exposures and single-family mortgage insurance providers, excluding advances, overnight federal funds sold, repurchase/reverse repurchase agreements with Federal Reserve Banks and derivatives cleared through third-party central clearinghouses.
Methodologies	▪ The largest counterparty net stressed exposure was identified by applying the FHFA-specified interest rate shock to all bilateral derivative positions, by applying the FHFA-specified market shock to the securities that were associated with a $2.0 billion overnight reverse repurchase agreement that was transacted with a counterparty that was not a Federal Reserve Bank, and by estimating (based upon management assumptions) the probability of potential losses from single-family mortgage insurance providers (which were insignificant given the small amount of the Bank's mortgage loans held for portfolio that were insured by mortgage insurance companies as of December 31, 2018). As of December 31, 2018, all of the Bank's federal funds sold were transacted on an overnight basis and $4.2 billion of the $6.2 billion in overnight reverse repurchase agreements was transacted with counterparties which were not Federal Reserve Banks but because the counterparties had pledged as collateral U.S. Treasury securities, no losses were assumed to occur. The Bank was not a party to any repurchase agreements at December 31, 2018. For each of the Bank's bilateral derivative counterparties, the cash collateral held or pledged was combined with the resulting net fair value of the derivatives to determine the net gain or loss position (no securities or other collateral was pledged to or from the Bank's bilateral derivative counterparties as of December 31, 2018). Based upon these calculations, the bilateral derivative counterparty representing the largest net loss to the Bank was assumed to default. Recoveries from that bilateral derivative counterparty were capped at 10% of the projected net loss amount. With a net stressed loss of $9.0 million, one of the Bank's bilateral derivative counterparties represented the largest net stressed loss in the simulation.

Key Risks Considered

Market Risk	• The risk to earnings or capital arising from changes in the estimated fair value of investment securities, mortgage loans and other financial instruments due to changes in the level, volatility, or correlations among financial market rates or prices, including interest rates. Specifically, market risk to the Bank includes the risk that the estimated fair value of the Bank's financial instrument portfolio (and, in particular, its long-term investment securities portfolio) will decline as a result of changes in interest rates and/or changes in spreads.
Credit Risk	• The risk to earnings or capital arising from the default, inability, or unwillingness of a borrower, obligor or counterparty to meet the terms of any financial obligation with the Bank or otherwise perform as agreed. Specifically, credit risk to the Bank as it pertained to the stress test included the risk of loss due to defaults on principal and interest payments on advances, mortgage loans, MBS and other investments, interest-rate exchange agreements and unsecured extensions of credit. No losses on advances were assumed to occur over the plan horizon.
Operational Risk	• The risk of loss resulting from inadequate or failed processes, systems, human factors or external events. Operational risk is inherent in the Bank's business activities and can manifest itself in various ways, including accounting or operational errors, business interruptions, fraud and technology failures. This definition includes legal risk, which is the risk of loss arising from defective transactions, litigation or claims made, or the failure to adequately protect company-owned assets.
Business Risk	• The risk of an adverse effect on the Bank's profitability resulting from external factors that may occur in both the short and long term. Business risk includes the impact of regulatory risk. Declines in business may affect the Bank's capital levels by reducing its activity-based capital stock balance and slowing the pace at which the Bank can build its retained earnings. In addition, a reduction in capital levels would limit the Bank's ability to purchase additional investments, thereby further limiting potential income and growth.