DODD-FRANK ACT STRESS TESTS RESULTS
SEVERELY ADVERSE SCENARIO

August 10, 2023

Federal Housing Finance Agency

Table of Contents

I.   Overview

Fannie Mae and Freddie Mac (the "Enterprises") are required to conduct annual stress tests pursuant to Federal Housing Finance Agency (FHFA) rule 12 CFR 1238, which implements section 165(i)(2) of the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act"). Section 165(i)(2) of the Dodd-Frank Act, as amended by section 401 of the Economic Growth, Regulatory Relief, and Consumer Protection Act ("EGRRCPA") requires certain financial companies with total consolidated assets of more than $250 billion, that are regulated by a primary federal financial regulatory agency, to conduct periodic stress tests to determine whether the companies have the capital necessary to absorb losses as a result of severely adverse economic conditions. These changes became effective on March 24, 2020. This is the ninth implementation of the Dodd-Frank Act Stress Tests (DFAST) for the Enterprises.

In September 2008, FHFA suspended capital requirements after placing Fannie Mae and Freddie Mac into conservatorships. The Senior Preferred Stock Purchase Agreements that were established between the Department of the Treasury ("Treasury") and each Enterprise limited the amount of capital that each Enterprise could hold to a Capital Reserve Amount of $3.0 billion. However, on September 27, 2019, FHFA, acting in its capacity as the conservator of the Enterprises, and Treasury entered into a letter agreement modifying the dividend and liquidation preference provisions of the senior preferred stock held by Treasury. Effective with the third quarter 2019 dividend period, the Enterprises were not required to pay further dividends to Treasury until they accumulated over $25 billion in net worth at Fannie Mae and $20 billion in net worth at Freddie Mae. Subsequently, on January 14, 2021, FHFA and Treasury announced amendments to the Senior Preferred Stock Purchase Agreements. The amendments allow the Enterprises to continue to retain earnings until they satisfy the requirements of the 2020 Enterprise Regulatory Capital Framework.

Notwithstanding the capital limits stipulated in the Senior Preferred Stock Purchase Agreements, FHFA requires the Enterprises to conduct DFAST annually in order to provide insight into risk exposure and potential sources of losses in the prescribed conditions. This report provides updated information on possible ranges of future financial results of the Enterprises under severely adverse conditions. The severely adverse conditions assumed are identical for both Enterprises.

The projections reported here are not expected outcomes. They are modeled projections in response to "what if" exercises based on assumptions about Enterprise operations, loan performance, macroeconomic and financial market conditions, and house prices. The projections do not define the full range of possible outcomes. Actual outcomes may be different.

The 2023 DFAST Severely Adverse scenario is described below. The Enterprises used their respective internal models to project their financial results based on the assumptions provided by FHFA. While this results in a degree of comparability between the Enterprises, it does not eliminate differences in the Enterprises' respective internal models, accounting differences, or management actions.

II.   Description of Severely Adverse Scenario

The 2023 DFAST Severely Adverse scenario is characterized by a severe global recession accompanied by stressed residential and commercial real estate as well as corporate debt markets. The scenario is not a forecast, but instead is a hypothetical future economic environment designed to assess the strength of the Enterprises and other financial institutions and their resilience to unfavorable market conditions. The planning horizon for the implementation of the 2023 DFAST is over a nine-quarter period from December 31, 2022 through March 31, 2025.

In the 2023 DFAST Severely Adverse scenario, U.S. real GDP declines by nearly 8.75 percent from the fourth quarter of 2022, reaching a trough in the first quarter of 2024 before recovering. The rate of unemployment increases by about 6.5 percentage points compared to the beginning of the planning horizon, reaching a peak of 10 percent in the third quarter of 2024. The annualized consumer price index (CPI) inflation rate falls from below 3.25 percent at the beginning of the planning horizon to about 1.25 percent in the third quarter of 2023 and then gradually rises to above 1.5 percent by the end of the planning horizon.

The 3-month Treasury rate falls to near zero by the third quarter of 2023 and remains there throughout the planning horizon. The 10-year Treasury yield falls by nearly 3.25 percentage points by the second quarter of 2023 and then gradually increases beginning in late 2023 to about 1.5 percent by the end of the planning horizon. The interest rate paths specified in the scenario imply that the yield curve remains inverted through the second quarter of 2023. Beginning in mid-2023, the slope of the yield curve becomes positive and steepens over the remainder of the planning horizon.

Due to these macroeconomic developments, asset prices decline sharply as financial conditions in corporate and real estate lending markets become severely stressed. Spreads between domestic BBB-rated corporate bonds versus 10-year Treasury securities widen to 5.75 percentage points by the third quarter of 2023, an increase of more than 3.5 percentage points relative to year-end 2022. Corporate bond spreads then decline to 2.25 percentage points by the end of the planning horizon. Over the same time period, the spread between mortgage rates and the 10-year Treasury yield widens to 3 percentage points and then declines to about 1.5

percentage points. In addition, equity prices fall by 45 percent through the fourth quarter of 2023, and equity market volatility increases substantially. Home prices decline sharply through the third quarter of 2024, reaching a trough that is about 38 percent below their year-end 2022 levels, and commercial real estate prices fall by 40 percent through the fourth quarter of 2024. Residential and commercial real estate prices recover slowly and are well below their year-end 2022 levels at the end of the planning horizon. The residential real estate price decline is more severe relative to the 2022 DFAST reporting cycle.

Compared to last year's DFAST, the 2023 severely adverse scenario includes a larger increase in the unemployment rate due to the lower unemployment rate at the beginning of the planning horizon, and the magnitude of the decline in the 10-year Treasury yield is greater due to the higher starting level of interest rates. The decline in equity prices is less severe than in the 2022 DFAST.

The 2023 DFAST Severely Adverse scenario also includes a global market shock component that primarily impacts the Enterprises' retained portfolios. This year's global market shock is characterized by market expectations of severe recessions in the United States and abroad. Financial conditions tighten and inflation expectations diminish. Treasury rates – particularly short-term rates – decline sharply. Longer-term rates also decline but to a lesser extent, reflecting a flight-to-quality sentiment. The U.S. dollar depreciates against the Euro and other advanced country currencies but appreciates against most emerging market currencies, reflecting expectations for more severe recessions in those countries. The expected decline in economic activity drives large price declines in public equities across global markets, and financial market uncertainty drives an increase in public equity volatility. Compared to the 2022 DFAST cycle, this year's global market shock includes less severe spread shocks impacting the Enterprises' agency mortgage-backed securities (MBS) and whole loans, and generally similar market value shocks impacting the Enterprises' private label securities (PLS) holdings.

The global market shock also includes a counterparty default component that assumes the failure of each Enterprise's largest counterparty. The global market shock is treated as an instantaneous loss and reduction of capital in the first quarter of the planning horizon, and the scenario assumes no recovery of these losses by the Enterprises in future quarters. For those positions subject to the global market shock, FHFA directed the Enterprises to report the greater of the global market shock losses or the losses attributable to the macroeconomic scenario for the identical positions.

III.   FHFA Guidance

FHFA instructed the Enterprises to extrapolate any scenario variables beyond the projection date as required. FHFA provided one year of scenario assumptions beyond the nine-quarter planning horizon to be used by the Enterprises as needed. Additionally, FHFA provided historical data on scenario variables in the event that models required that information.

FHFA instructed the Enterprises to comply with the terms of the Senior Preferred Stock Purchase Agreements, as amended, to determine the level of dividends to be paid during each quarter of the planning horizon.

FHFA communicated specific instructions to address particular issues relevant to the Enterprises' unique lines of business. FHFA required the Enterprises to use aligned regional house price paths to improve the comparability of stress test results. Additionally, FHFA broadened the definition of counterparties to be considered in the largest counterparty default component of the global market shock to include mortgage insurers, unsecured overnight deposits, providers of multifamily credit enhancements, nonbank servicers, and credit risk transfer reinsurance counterparties.

IV.   Severely Adverse Scenario Results Detail

- Without establishing a valuation allowance on Deferred Tax Assets (DTA), both Enterprises reported comprehensive income in the severely adverse scenario. Key drivers were portfolio growth and house price appreciation in 2022, partially offset by a more severe house price decline in the 2023 planning horizon.

- However, with establishing a valuation allowance on DTA, both Enterprises recognize comprehensive losses.

- The provision for credit losses was the largest expense at both Enterprises.

- The second largest expense at Fannie Mae was mark-to-market losses. The second largest expense at Freddie Mac was the global market shock impact, including the counterparty default scenario component.

The following tables reflect the Enterprises' results on the Dodd-Frank Act Stress Tests.

Table 1: DFAST Severely Adverse Scenario Results − Combined

	Cumulative Projected Financial Metrics (Q1 2023 - Q1 2025)				
	Results without establishing valuation allowance on deferred tax assets		Impact of establishing valuation allowance on deferred tax assets	Results with establishing valuation allowance on deferred tax assets	
	Billions of dollars	Percent of average assets[7]		Billions of dollars	Percent of average assets[7]
Pre-provision net revenue[1]	$62.0	0.82%		$62.0	0.82%
(Provision) benefit for credit losses	($38.0)	0.50%		($38.0)	0.50%
Mark-to-market gains (losses)[2]	($5.4)	0.07%		($5.4)	0.07%
Global market shock impact on trading securities and counterparty	(5.5)	0.07%		(5.5)	0.07%
Net income before taxes	13.0	0.17%		13.0	0.17%
(Provision) benefit for taxes	(2.5)	0.03%	(18.4)	(20.9)	0.28%
Other comprehensive income (loss)[3]	(0.6)	0.01%		(0.6)	0.01%
Total comprehensive income (loss)	9.9	0.13%	(18.4)	(8.4)	0.11%
Net Worth	$107.2			$88.9	
CET1 Capital[4]	($140.5)			($137.9)	
Credit losses[5]	($34.9)			($34.9)	
Credit losses (% of average portfolio balance)[6]	0.46%			0.46%	

[1] Includes net interest income, operational risk losses, foreclosed property income (expense), and other non-interest income/expenses.
[2] Includes fair value gains (losses) on derivative and trading securities, and other gains (losses) on investment securities.
[3] Includes global market shock impact on available-for-sale securities.
[4] Represents the Enterprises' hypothetical common equity tier 1 capital deficit as of March 31, 2025.
[5] Credit losses are defined as charge-offs, net plus foreclosed property expenses.
[6] Average portfolio balance over the nine-quarter planning horizon.
[7] Average total assets over the nine-quarter planning horizon.

Additional Notes
· Numbers may not foot due to rounding.

Table 2: DFAST Severely Adverse Scenario Results – Fannie Mae

	Cumulative Projected Financial Metrics (Q1 2023 - Q1 2025)				
	Results without establishing valuation allowance on deferred tax assets		Impact of establishing valuation allowance on deferred tax assets	Results with establishing valuation allowance on deferred tax assets	
	Billions of dollars	Percent of average assets[7]		Billions of dollars	Percent of average assets[7]
Pre-provision net revenue[1]	$32.4	0.74%		$32.4	0.74%
(Provision) benefit for credit losses	($16.6)			($16.6)	
Mark-to-market gains (losses)[2]	($6.2)			($6.2)	
Global market shock impact on trading securities and counterparty[3]	(2.3)			(2.3)	
Net income before taxes	7.3	0.17%		7.3	0.17%
(Provision) benefit for taxes	(1.3)		(13.8)	(15.1)	
Other comprehensive income (loss)[3]	0.0			0.0	
Total comprehensive income (loss)	6.0	0.14%	(13.8)	(7.8)	0.18%
Net Worth	$66.2			$52.5	
CET1 Capital[4]	($87.5)			($87.5)	
Credit losses[5]	($21.3)			($21.3)	
Credit losses (% of average portfolio balance)[6]	0.51%			0.51%	

[1] Includes net interest income, operational risk losses, foreclosed property income (expense), and other non-interest income/expenses.

[2] Includes fair value gains (losses) on derivative and trading securities, and other gains (losses) on investment securities.

[3] Includes global market shock impact on available-for-sale securities.

[4] Represents the Enterprise's hypothetical common equity tier 1 capital deficit as of March 31, 2025.

[5] Credit losses are defined as charge-offs, net plus foreclosed property expenses.

[6] Average portfolio balance over the nine-quarter planning horizon.

[7] Average total assets over the nine-quarter planning horizon.

Additional Notes

· Numbers may not foot due to rounding.

Table 3: DFAST Severely Adverse Scenario Results – Freddie Mac

	Cumulative Projected Financial Metrics (Q1 2023 - Q1 2025)					
	Results without establishing valuation allowance on deferred tax assets		Impact of establishing valuation allowance on deferred tax assets	Results with establishing valuation allowance on deferred tax assets		
	Billions of dollars	Percent of average assets[7]		Billions of dollars	Percent of average assets[7]	
Pre-provision net revenue[1]	$29.6	0.93%		$29.6	0.93%	
(Provision) benefit for credit losses	(21.4)			(21.4)		
Mark-to-market gains (losses)[2]	0.8			0.8		
Global market shock impact on trading securities and counterparty	(3.2)			(3.2)		
Net income before taxes	5.8	0.18%		5.8	0.18%	
(Provision) benefit for taxes	(1.2)		(4.6)	(5.8)		
Other comprehensive income (loss)[3]	(0.6)			(0.6)		
Total comprehensive income (loss)	4.0	0.12%	(4.6)	(0.6)	0.02%	
Net Worth	$41.0			$36.4		
CET1 Capital[4]	($53.0)			($50.4)		
Credit losses[5]	($13.7)			($13.7)		
Credit losses (% of average portfolio balance)[6]	0.40%			0.40%		

[1] Includes net interest income, operational risk losses, foreclosed property income (expense), and other non-interest income/expenses.

[2] Includes fair value gains (losses) on derivative and trading securities, and other gains (losses) on investment securities.

[3] Includes global market shock impact on available-for-sale securities.

[4] Represents the Enterprise's hypothetical common equity tier 1 capital deficit as of March 31, 2025.

[5] Credit losses are defined as charge-offs, net plus foreclosed property expenses.

[6] Average portfolio balance over the nine-quarter planning horizon.

[7] Average total assets over the nine-quarter planning horizon.

Additional Notes

· Numbers may not foot due to rounding.