## Dodd-Frank Act Stress Test (DFAST) Baseline and Severely Adverse Scenarios

## February 10, 2025

## **Brief Description of the Scenarios**

In the *baseline scenario* for the United States, real gross domestic product (GDP) growth decreases from 2.3 percent at the end of 2024 to 1.9 percent by the second quarter of 2025, remaining there until the end of the scenario. The unemployment rate increases from 4.1 percent at the end of 2024 to 4.3 percent by the second quarter of 2025, falling to 4.2 percent by the end of the scenario. Consumer price index (CPI) inflation rises from 2.7 percent to a peak of 2.8 percent in the first quarter of 2025 after which it falls to 2.1 percent by the fourth quarter of 2027. The 3-month Treasury rate gradually falls from 4.4 percent at the end of 2024 to 3.4 percent by the first quarter of 2027, remaining there until the end of the scenario. Ten-year Treasury yields remain stable, rising slightly from 4.3 percent at the end of 2024 to 4.4 percent by the first quarter of 2025 and declining to 4.1 percent by the fourth quarter of 2025. Equity prices remain at their level for the fourth quarter of 2024 throughout the scenario. Equity market volatility, as measured by the U.S. market Volatility Index (VIX), remains stable at about 28 percent throughout the scenario. Nominal house prices and commercial real estate prices each increase gradually by 2 percent per year over the course of the scenario.

The baseline scenario for international economic activity features gradually slowing growth in developing Asia and Japan. Growth in the United Kingdom and euro area is expected to pick up in 2026, before slowing through the end of the scenario. Inflation rates rise in the euro area and developing Asia, holding at higher levels over the course of the scenario. Inflation in Japan, however, declines until 2026 before rising by the end of the scenario. The United Kingdom experiences a decrease in inflation rates from initial levels over the course of the scenario.

The *severely adverse scenario* is characterized by a hypothetical severe global recession accompanied by a period of heightened stress in commercial and residential real estate markets and in corporate debt markets. The U.S. unemployment rate rises 5.9 percentage points from the scenario's starting point of 4.1 percent in the fourth quarter of 2024 to its peak of 10 percent in the third quarter of 2026. The sharp decline in economic activity is also accompanied by an increase in market volatility, widening corporate bond spreads, and a collapse in asset prices, including a 34 percent decline in house prices and a 30 percent decline in commercial real estate prices. The smaller decline in commercial real estate prices this year relative to last year's severely adverse scenario reflects realized declines in those prices in 2024. The international portion of the scenario features recessions in four countries or country blocs, followed by declines in inflation, with Japan and Developing Asia experiencing deflation. The value of the U.S. dollar appreciates against all countries and country blocs' currencies, except for the Japanese yen.

It is important to recognize that these scenarios are not forecasts. Rather, they are designed to assess the strength and resilience of covered institutions in varying economic environments.

#### Introduction

The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (DFA),<sup>1</sup> as implemented in the stress testing rule issued by the Office of the Comptroller of the Currency (OCC), requires certain national banks and federal savings associations to conduct periodic stress tests using scenarios provided by the OCC.<sup>2</sup> This note provides a narrative on the two scenarios to be used for the 2025 stress test. The OCC developed these scenarios in coordination with the Board of Governors of the Federal Reserve System and the Federal Deposit Insurance Corporation.<sup>3</sup>

#### **Supervisory Scenarios**

**Scenario timing and variables:** The scenarios start in the first quarter of 2025 and extend through the first quarter of 2028. Each scenario includes 28 variables; the set of variables for the 2025 supervisory stress test is the same as the set provided in last year's supervisory scenarios. The variables describing economic developments within the United States include:

- Six measures of economic activity and prices: quarterly percent changes (at an annualized rate) in real and nominal GDP, real and nominal disposable personal income, the CPI, and the level of the unemployment rate of the civilian non-institutional population aged 16 years and over;
- Four aggregate measures of asset prices or financial conditions: indexes of house prices, commercial real estate prices, equity prices, and stock market volatility; and,
- **Six measures of interest rates:** the rate on 3-month Treasury securities; the yield on 5-year Treasury securities; the yield on 10-year Treasury securities; the yield on 10-year BBB-rated corporate securities; the interest rate associated with conforming, conventional, 30-year fixed-rate mortgages; and the prime rate.

The variables describing international economic conditions in each scenario include three variables in four countries or country blocs:

- The three variables for each country or country bloc: quarterly percent changes (at an annual rate) in real GDP and in consumer price indexes or local equivalent, and the level of the U.S. dollar exchange rate.
- Four countries or country blocs: the euro area (the 20 European Union member states that have adopted the euro as their common currency); the United Kingdom; developing Asia (the nominal GDP-weighted aggregate of China, India, South Korea, Hong Kong Special Administrative Region, and Taiwan); and Japan.

<sup>&</sup>lt;sup>1</sup> Public Law 111-203, 124 Stat. 1376 (2010), codified at 12 USC 5365, as amended by the Economic Growth, Regulatory Relief, and Consumer Protection Act, Pub. L. 115-174, 132 Stat. 1296-1368 (2018).

<sup>&</sup>lt;sup>2</sup> 12 CFR 46. See also 77 Fed. Reg. 195 (Oct. 9, 2012); 84 Fed. Reg. 54472 (Oct. 10, 2019).

<sup>&</sup>lt;sup>3</sup> See 78 Fed. Reg. 64153 (October 28, 2013) (Policy Statement on the Principles for Development and Distribution of Annual Stress Test Scenarios).

### **Baseline and Severely Adverse Scenarios**

The following sections describe the baseline and severely adverse scenarios. The specific values for all variables included in the scenarios are provided as an Excel spreadsheet on the OCC's website. Further, this document provides a qualitative summary of the global market shock component that certain banks with significant trading activity are required to apply to their trading and counterparty positions as of October 11, 2024.

#### **Baseline Scenario**

The baseline outlook for U.S. real activity, inflation, and interest rates is similar to the October 2024 and January 2025 consensus projections from *Blue Chip Economic Indicators* and *Blue Chip Financial Forecasts*. <sup>4</sup> This scenario does not represent a forecast of the OCC.

The baseline scenario for the United States features moderate economic growth. The unemployment rate moves up to 4.3 percent in the first quarter of 2025, stays at that level until the end of 2026 before edging down to 4.2 percent at the beginning of 2027 and staying at the level for the rest of the scenario. Real GDP growth decreases from 2.3 percent at the end of 2024 to 1.9 percent by the second quarter of 2025 and hovers around that rate for the rest of the scenario. Inflation, measured as the quarterly change in the CPI and reported as an annualized rate, ticks up from 2.7 percent at the end of 2024 to 2.8 percent in the first quarter of 2025. It then reaches a low of 2.1 percent in the fourth quarter of 2027, before edging up to 2.2 percent at the end of the scenario. The 3-month Treasury rate gradually falls from 4.4 percent at the end of 2024 to 3.4 percent by the first quarter of 2027, where it remains until the end of the scenario. Ten-year Treasury yields tick up from 4.3 percent at the beginning of the scenario to 4.4 percent in the first quarter of 2025 and then decline gradually to 4.1 percent by the fourth quarter of 2026, where they stay at that rate for the rest of the scenario. The prime rate follows a path similar to short-term interest rates. Mortgage rates decline gradually from 6.6 percent at the end of 2024 to 5.6 percent by the second quarter of 2027 and then remain there for the rest of the scenario. Yields on BBB-rated corporate bonds trend up gradually from 5.4 percent at the end of 2024 to 5.9 percent in the second quarter of 2026 and remain around that rate through the end of the scenario.

Equity prices remain at their level for the fourth quarter of 2024 throughout the scenario. Equity market volatility, as measured by the VIX, stays around 28 percent throughout the scenario. Nominal house prices and commercial real estate prices each increase gradually by 2 percent per year over the scenario.

The baseline paths for the international variables are similar to the trajectories reported in the January 2025 *Blue Chip Economic Indicators* and the International Monetary Fund's October 2024 *World Economic Outlook*. In the baseline scenario, real GDP growth in developing Asia declines from 4.5 percent to 3.6 percent in the third quarter of 2027, where it stands until the end

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<sup>&</sup>lt;sup>4</sup> The near-term forecast is similar to the January 2025 release, while the long-range forecast is similar to the October 2024 release. See Wolters Kluwer Legal and Regulatory Solutions, *Blue Chip Economic Indicators* and *Blue Chip Financial Forecasts*.

<sup>&</sup>lt;sup>5</sup> See International Monetary Fund, <u>World Economic Outlook, October 2024: Policy Pivot, Rising Threats (imf.org)</u> The January 2025 update to the World Economic Outlook was released after the finalization of the scenarios.

of the scenario. Real GDP growth in the euro area remains around 1 percent through the third quarter of 2025 and then increases to a high of 1.3 percent in the second quarter of 2026, before declining to 1.1 percent in the first quarter of 2027, where it remains until the end of the scenario. Real GDP growth in the United Kingdom initially decreases and then moves back up to 1.6 percent in the second quarter of 2026. It then declines again, reaching 1.1 percent in the second quarter of 2027 and hovering around that rate for the rest of the scenario. GDP growth in Japan starts at 1.3 percent and declines to 0.3 percent in the second quarter of 2027. It then edges back up to 0.5 percent at the end of the scenario.

Consumer price inflation in the euro area increases from 1.1 percent to 1.9 percent in the first quarter of 2025 and hovers around there for the rest of the scenario. Consumer price inflation in the United Kingdom remains around 2.6 percent through the third quarter of 2025 before edging down to 2.3 by the second quarter of 2026 and staying at that rate for the rest of the scenario. Inflation in Japan decreases from 2.2 percent at the beginning of the scenario to 1.7 percent in the first quarter of 2026, before increasing back to 2.2 percent in the second quarter of 2027. It then remains around that rate for the rest of the scenario. Inflation rates in developing Asia increase gradually from 1.6 percent to 2 percent by the end of the scenario.

## **Severely Adverse Scenario**

This scenario is characterized by a severe global recession, including prolonged declines in both residential and commercial real estate prices, which spill over into the corporate sector and affect investment sentiment, albeit to a lesser degree than in the 2024 severely adverse scenario. This is a hypothetical scenario designed to assess the strength and resilience of banks and does not represent a forecast of the OCC.

Under the severely adverse scenario the U.S. unemployment rate climbs to a peak of 10 percent in the third quarter of 2026, an increase of a 5.9 percentage points from its fourth-quarter 2024 level. Real GDP declines 7.8 percent from the fourth quarter of 2024 to its trough in the first quarter of 2026, before recovering to the level at the beginning of the scenario. The rising unemployment rate and the rapid decline in aggregate demand for goods and services significantly reduce inflationary pressures. Inflation, measured as the quarterly change in the CPI and reported as an annualized rate, falls from 2.7 percent at the end of 2024 to 1.3 percent in the third quarter of 2027, where it stays for the rest of the scenario.

Short-term interest rates, as measured by the 3-month Treasury rate, fall significantly to 0.1 percent by the second quarter of 2025 and remain there for the remainder of the scenario. Long-term interest rates, as measured by the 10-year Treasury yield, fall 3.3 percentage points to 1 percent by the second quarter of 2025, and then gradually start to rise in late 2025 to 1.7 percent by the end of the scenario. These interest rate paths imply that the yield curve is inverted in the first quarter of 2025. Thereafter, the slope of the yield curve becomes positive and steepens over the remainder of the scenario.

Conditions in corporate bond markets deteriorate markedly. The spread between yields on BBB-rated bonds and yields on 10-year Treasury securities increases 3.9 percentage points by the third quarter of 2025, reaching 5 percentage points. Corporate bond spreads then gradually decline to 2 percentage points by the end of the severely adverse scenario. The spread between mortgage rates and 10-year Treasury yields widens to 2.8 percentage points by the third quarter of 2025

before narrowing to about 1.5 percentage points at the end of the severely adverse scenario.

Asset prices drop sharply in the severely adverse scenario. Equity prices fall 50 percent from the fourth quarter of 2024 through the fourth quarter of 2025 and do not return to their initial level until the end of the scenario. The VIX, measured as the highest daily closing value per quarter, reaches a peak of 65 percent in the second quarter of 2025 and then declines to about 31 percent at the end of the scenario. House prices and commercial real estate prices also experience large declines. House prices fall sharply through the third quarter of 2026, reaching a trough that is about 34 percent below their level in the fourth quarter of 2024. Commercial real estate prices experience a slightly smaller decline, reaching a trough in the fourth quarter of 2026 that is 30 percent below their level at the end of 2024. House prices and commercial real estate prices recover slowly and are well below their fourth quarter of 2024 values at the end of the scenario.

The international component of the severely adverse scenario involves sharp declines in real GDP in three of the four countries or country blocs at the start of the scenario. Japan experiences the most severe contraction, followed by the euro area and the United Kingdom, while developing Asia experiences only a modest decline in real GDP. In Japan, the euro area, and the United Kingdom, GDP levels return to around their fourth-quarter 2024 levels toward the end of the scenario. By contrast, in developing Asia, where output falls less, the level of GDP surpasses its fourth quarter of 2024 level in 2026.

Inflation declines significantly in all four countries or country blocs. Both Japan and developing Asia experience a period of deflation at various points in the scenario, although deflation is more severe and protracted in developing Asia than in Japan. The value of the U.S. dollar appreciates against all countries and country blocs' currencies, except for the Japanese yen.

## **Additional Key Features of the Severely Adverse Scenario**

As in last year's severely adverse scenario, stress on corporate borrower balance sheets and resulting credit losses on corporate loans should be assumed to be higher for lower-rated nonfinancial corporate borrowers. Declines in aggregate U.S. house prices should be assumed to be concentrated in regions that have experienced rapid price gains over the past few years. Declines in commercial real estate prices should be assumed to be concentrated in properties most at risk of a sustained drop in income and asset values. Declines in U.S. house prices and U.S. commercial real estate prices also should be assumed to be representative of the declines in house prices and commercial real estate prices in foreign regions and economies.

Weakness in developing Asia in the scenario reflects a significant slowdown in economic growth in China. Conditions across Latin American economies should be assumed to feature a slowdown comparable to the average slowdown in the global economy. Conditions in other emerging economies outside of Latin America should be assumed to feature a slowdown similar to the one in developing Asia.

# Comparison of the Current Severely Adverse Scenario and the 2024 Severely Adverse Scenario

The current severely adverse scenario features a slightly smaller increase in the unemployment rate in the United States as compared to the 2024 severely adverse scenario.

The current severely adverse scenario features a somewhat lower starting level of interest rates as well as a higher trough for the long-term interest rates compared to the previous year's severely adverse scenario. As a result, interest rates decline somewhat less in response to the hypothetical drop in economic activity and inflation. The current severely adverse scenario also features slightly smaller declines in house prices and a decline in commercial real estate prices that is 10 percentage points smaller, as compared to previous year's severely adverse scenario. The 10 percentage points smaller decline in commercial real estate prices recognizes that those prices already declined 10 percent in 2024.

The potential for spillover effects in asset markets and sharp changes in investor sentiment are captured by a decline in equity prices and an increase in corporate bond spreads, although these changes are less severe relative to last year's scenario, reflecting less severe stress in commercial real estate markets. The international component of the current severely adverse scenario shows a recessionary episode that, relative to last year's severely adverse scenario, is the same for the euro area and is less severe in all other countries or country blocs.

### Global Market Shock Component for the Severely Adverse Scenario

The OCC will provide to certain banks a global market shock component for the severely adverse scenario to be used in the current stress test. Under the DFA stress testing rules, large, complex institutions with significant trading activity must apply this component to their trading and counterparty exposures as of a specific date (October 11, 2024, for the current stress testing cycle) to project mark-to-market losses.

The global market shock component for the severely adverse scenario (global market shock) is a set of hypothetical shocks to a large set of risk factors reflecting general market distress and heightened uncertainty. Banks with significant trading activity must consider the global market shock as part of the supervisory severely adverse scenario in their company-run stress test. The losses associated with the global market shock are recognized in the first quarter of the projection horizon. In addition, certain large and highly interconnected firms must apply the same global market shock to project losses under the counterparty default scenario component. The global market shock is applied to positions held by the banks on a given as-of date, which is October 11, 2024. These shocks do not represent a forecast of the OCC.

The design and specifications of the global market shock differ from the macroeconomic scenarios for several reasons. First, profits and losses from trading and counterparty credit are measured in mark-to-market terms, while revenues and losses from traditional banking are generally measured using the accrual method. Another key difference is the timing of loss

<sup>&</sup>lt;sup>6</sup> The global market shock component consists of hypothetical shocks to a large set of risk factors that include a wide range of financial market variables that affect asset prices, such as credit spread or the yield on a bond, and also include, in some cases, shocks to the value of a position itself (for example, the market value of private equity positions). See 12 CFR 46.5(c).

<sup>&</sup>lt;sup>7</sup> A bank may use data as of the date that corresponds to its weekly internal risk reporting cycle as long as it falls during the business week of the as-of date for the global market shock (i.e., October 7-11, 2024). Losses from the global market shock will be assumed to occur in the first quarter of the planning horizon.

<sup>&</sup>lt;sup>8</sup> Currently, four national banks are subject to global market shocks: Bank of America, N.A.; Citibank, N.A.; JPMorgan Chase Bank, N.A.; and Wells Fargo Bank, N.A.

recognition. The global market shock affects the mark-to-market value of trading positions and counterparty credit losses in the first quarter of the severely adverse scenario. This timing is based on the observation that market dislocations can happen rapidly and unpredictably at any time under stressed conditions. Applying the global market shock in the first quarter ensures that potential losses from trading and counterparty exposures are incorporated into banks' capital ratios in each quarter of the severely adverse scenario.

The global market shock is specified by a large set of risk factors that include, but are not limited to:

- Equity prices of key advanced markets and developing and emerging market economies along with selected points along term structures of implied volatilities;
- Foreign exchange rates of most major and some minor currencies, along with selected points along term structures of option-implied volatilities;
- Selected-maturity government yields (e.g., for 10-year U.S. Treasuries), swap rates, and other important interest rates for key developed economies and developing and emerging market economies;
- Selected maturities and expiries of implied volatilities that are key inputs to the pricing of interest rate derivatives;
- Selected expiries of futures prices for energy products including crude oil (differentiated by country of origin), natural gas, and power;
- Selected expiries of futures prices for metals and agricultural commodities; and
- Credit spreads or prices for selected credit-sensitive products, including corporate bonds, credit default swaps, and loans; non-agency residential mortgage-backed securities (RMBS) and commercial mortgage-backed securities (CMBS); sovereign debt; and municipal bonds.

#### Please note:

• The global market shock is a separate and additional component of the scenario applied only to the largest banks with complex trading portfolios.

 Changes to risk factors comprising the global market shock are assumed to occur instantaneously, while the macroeconomic scenario describes the evolution of variables over time.<sup>9</sup>

<sup>&</sup>lt;sup>9</sup> The global market shock is a component of the macroeconomic scenario but is not necessarily directionally consistent with the macroeconomic scenario.

## Global Market Shock – 2025 Severely Adverse Scenario

The 2025 global market shock component (global market shock) is characterized by expectations for a severe slowdown in the economy leading to increased unemployment and lower inflationary pressures.

The expected fall in economic activity leads to equity price declines across global markets, while public equity volatility rises from heightened market uncertainty.

Treasury yields fall, particularly in the shorter tenors as inflation expectations decline. The U.S. dollar appreciates against most major currencies, reflecting flight-to-safety considerations. The Japanese yen strengthens against the U.S. dollar as the yen carry trade unwinds. Consistent with expectations for lower demand from a severe recession, commodity prices fall. An increase in anticipated defaults leads to a significant widening in credit spreads.

# **Counterparty Default Component for the Supervisory Severely Adverse Scenario**

For DFAST 2025, the four banks that are completing the global market shock component must incorporate a counterparty default scenario component in the severely adverse scenario. <sup>10</sup> The counterparty default scenario component involves the unexpected default of the bank's largest counterparty. <sup>11</sup>

In connection with the counterparty default scenario component, these banks will be required to estimate and report the potential losses and related effects on capital associated with the unexpected default of the counterparty that would generate the largest losses across their derivatives and securities financing transactions, including securities lending or borrowing and repurchase or reverse repurchase agreement activities. The counterparty default scenario component is an add-on to the severely adverse scenario.

The largest counterparty of each bank will be determined by net stressed losses. Net stressed losses are estimated by applying the global market shock to revalue securities financing transactions and derivatives, including collateral posted or received. The as-of date for the counterparty default scenario component is October 11, 2024—the same date as the global market shock component.<sup>12</sup>

<sup>&</sup>lt;sup>10</sup> These are the same national banks that are subject to the global market shocks, see footnote 8.

<sup>&</sup>lt;sup>11</sup> In selecting its largest counterparty, a bank will not consider certain sovereign entities (Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States) or designated central clearing counterparties or the bank's own affiliates. <sup>12</sup> As with the global market shock component, a bank subject to the counterparty default scenario component may use data as of the date that corresponds to its weekly internal risk reporting cycle as long as it falls during the business week of the as-of date for the counterparty default scenario component (i.e., October 7-11, 2024). Losses will be assumed to occur in the first quarter of the projection horizon.