

ANALYSIS

May 2025

AUTHOR

Edward Friedman

Edward.Friedman@moodys.com

Director

ABOUT

Please attribute information in this document to Moody's Analytics, which is a division within Moody's that is separate from Moody's Ratings. Accordingly, the viewpoints expressed herein do not reflect those of Moody's Ratings.

CONTACT US

Email

helpeconomy@moodys.com

U.S./Canada

+1.866.275.3266

EMEA

+44.20.7772.5454 (London)

+420.234.747.505 (Prague)

Asia/Pacific

+852.3551.3077

All Others

+1.610.235.5299

Web

www.economy.com

U.S.—Baseline Outlook and Alternative Scenarios

UPDATED MONTHLY

Table of Contents

Forecast Assumptions 3

Baseline Forecast 5

Risks..... 11

Scenario Comparison.....12

S0: Alternative Scenario 0 – Upside – 4th Percentile15

S1: Alternative Scenario 1 – Upside – 10th Percentile18

S2: Alternative Scenario 2 – Downside – 75th Percentile21

S3: Alternative Scenario 3 – Downside – 90th Percentile 24

S4: Alternative Scenario 4 – Downside – 96th Percentile.....27

S5: Slower-Trend Growth Scenario30

S6: Stagflation Scenario 33

S7: Next-Cycle Recession Scenario..... 36

S8: Low Oil Price Scenario 39

CF: Consensus Scenario..... 42

CS: Alternative Scenario Constant Severity – Downside – 99th Percentile 44

CH: High Interest Rate Scenario..... 47

Forecast Assumptions

Monetary Policy

Monetary policy is on hold until the Federal Reserve has more clarity regarding the economic policies pursued by the Trump administration. Most important are large, broad-based tariff increases, which threaten to add to inflation but also weigh on the economy's growth. Higher inflation argues for higher interest rates, but a weaker economy argues for lower rates.

Unsure of how to respond, the Fed is expected to hold the funds rate at its current 4% to 4.5% range until the July 2025 Federal Open Market Committee meeting. At that point, the weakening economy will trump inflation concerns and convince policymakers to cut rates.

We then expect a quarter-percentage point rate cut each quarter until the funds rate returns to its so-called equilibrium rate—the rate consistent with monetary policy neither restraining nor supporting growth. The estimated equilibrium rate, or r^* , currently stands at almost 4%, which is unusually high. We expect it to drift lower and settle near 3% by mid-decade.

The Fed continues to engage in quantitative tightening by allowing its Treasury holdings to mature. But we expect it to end QT in the next few months with just less than \$7 trillion of assets on its balance sheet. That will ensure ample reserves to conduct monetary policy efficiently.

Despite the intensifying global trade war and its economic fallout, the 10-year Treasury yield remains in a range of 4% to 4.5%. This is in line with our estimate of its long-run equilibrium—the rate consistent with our estimate of nominal potential GDP growth (the sum of 2%+ real potential GDP growth and 2% in target inflation).

Economic policy

Economic policy under the Trump administration and Republican Congress is rapidly shifting. The president has used executive orders to significantly increase tariff rates on most trading partners. The effective tariff rate is expected to rise from nearly 3% at the start of the year to a peak of close to 20% this summer before falling back to 8% by late 2026.

Deportations of foreign immigrants are also expected to increase significantly, pushing net foreign immigration down to 500,000 per annum in the next four years. This compares with more than 2 million per annum over the past four years and just over 1 million yearly in the decade before. The expected changes to tariffs and immigration policy will be taken using executive orders.

President Trump and Congress are also expected to pass legislation under reconciliation later this year to extend the individual tax cuts passed under the 2017 Tax Cuts and Jobs Act. The tax legislation is expected to include another cut in the corporate tax rate and a number of smaller cuts to business taxes.

The reconciliation bill will also include cuts to government spending, including cuts to nondefense discretionary spending. We do not expect meaningful cuts to the defense budget and entitlement programs, although the Medicaid program will likely see some changes in work requirements.

These changes are not expected to improve the nation's disconcerting fiscal outlook. The federal government's budget deficit, close to 6% of GDP, is uncomfortably large, particularly with the economy operating at full employment. The nation's publicly traded debt-to-GDP ratio is just less than 100%, up from 80% before the pandemic, and is expected to steadily increase.

U.S. dollar

The broad trade-weighted value of the U.S. dollar is high by historical standards but has come under pressure due to President Trump's large tariff increases. Foreign exchange investors appear to be anticipating that the trade war will result in a weaker U.S. economy, which will pressure the Fed to begin cutting interest rates soon. The dollar will remain under pressure until the trade war abates, but any weakening in value will be limited by its reserve currency status.

Energy prices

Global oil prices have slumped as the mounting global trade war is expected to weigh on oil demand. Moreover, oil supply continues to increase due to more production in the U.S., Brazil, Norway and Guyana. OPEC+ is also increasing production and has significant excess production capacity, which puts a lid on prices. We anticipate that prices will remain below \$70 per barrel. The break-even oil price, which equals the cost of producing and transporting the marginal barrel of oil to the global marketplace, is an estimated \$65 per barrel.

Geopolitical risks

No geopolitical threats appear likely to significantly hurt the U.S. economy. Most worrisome is the vexed relationship between the U.S. and China, which has become even more complicated with the higher U.S. tariffs on Chinese imports. But while the relationship is tense and the risks are meaningful, we do not expect the tensions to boil over.

A cessation of the Russian war in Ukraine looks increasingly likely, but the impact on energy, agriculture, and other commodity markets will be modest. Global markets have adjusted reasonably gracefully to the sanctions on Russian oil production and other disruptions caused by the war.

The Israel-Hamas conflict is not expected to spread to other parts of the Middle East, including Iran. This should mitigate any disruption to energy markets and global shipping through the Suez Canal.

The fallout from the pandemic has largely faded, and we expect any remaining adverse global economic impacts to largely wind down soon.

Baseline Forecast

This scenario is the baseline forecast of Moody's Analytics. Since it is a baseline, by definition the probability that the economy will perform better than this projection is equal to 50%, the same as the probability that it will perform worse.

Key assumptions

- Despite the gyrations in tariff announcements, the near-term economic outlook changed little in May. On an annual average basis, real GDP growth for 2025 and 2026 is essentially the same as in April, below trend and well below the 2024 pace. The rebound in growth in 2027 and 2028 is lower than in April.
- Monetary policy assumptions are unchanged. We expect three 25-basis point cuts in July, September and December from the current federal funds target range of 4.25%-4.5%. Subsequently, we expect the Federal Reserve to gradually reduce the rate by 25 basis points each quarter to its neutral level of 3% by 2026.
- The 10-year Treasury yield will average 4.2% in the second quarter, unchanged from the April outlook. The rate will remain near this level throughout the decade due to elevated inflation and fiscal uncertainty.
- Moody's Analytics has lowered its oil price forecasts in the May forecast vintage. Our oil price forecasts for the second quarter of 2025 are fully \$4 per barrel lower than they were a month ago, and \$2 lower for the entire year of 2025. The change was influenced by a weaker outlook for demand and announced increases in OPEC+ production.
- Changes to Moody's Analytics tariff assumptions were minor in May. As in the April outlook, we assume that high tariffs, including those on China, prove brief, but that tariffs remain materially higher than last year through the end of President Trump's term.
- The outlook for the job market in the coming year was little changed in May, as we still expect that the global trade war will do real damage to the U.S. economy. The unemployment rate will rise to a peak of 4.9% by the end of 2026, unchanged from the April forecast.
- A full-employment economy is one with an unemployment rate of around 4%, a 62.5% labor force participation rate, and a prime-age employment-to-population ratio in the range of 80%. The economy is close to that level now.
- The failures of several U.S. banks in the first half of 2023 are not symptomatic of a serious broader problem in the financial system. Policymakers' aggressive response will ensure the failures do not weaken the system or undermine economic growth.
- The baseline forecast includes climate change assumptions that are consistent with a weighted average of the assumptions underpinning a range of scenarios, including those from the Network for Greening the Financial System. See [Moody's Analytics Baseline Climate](#) for a detailed description.

Key risks

- Higher than expected tariffs could directly reduce consumer spending and business investment, weakening growth.
- Higher tariffs than expected could also contribute to higher inflation. If inflation remains elevated and job growth rebounds, the Fed could signal a slower-than-expected pace of cuts. This could cause confidence and credit-sensitive spending to fall sharply and the economy could fall into recession.
- A wage-price spiral could set in, especially as tariffs push up prices, ushering in a new inflation regime where inflation is persistently higher than that seen pre-pandemic or desired by the Federal Reserve, causing the Fed to raise interest rates substantially.
- An expansion of Russia's invasion of Ukraine and resulting sanctions, changes to announced OPEC+ supply increases, a collapse of the Israel-Hamas ceasefire, other shocks to supply, and/or China's economic recovery could cause global oil prices to increase, pushing gasoline prices above the forecast. This could weaken business and consumer confidence and result in weaker-than-anticipated consumer and business spending.

- Unanticipated financial system weaknesses could appear. Problems might not be handled as well as the bank failures in March 2023. This could reduce access to credit for businesses and consumers more than the Fed desired and push the economy into recession.
- With hiring now weakening, a return to pre-pandemic levels of layoffs would likely result in job losses, undermining consumer spending and growth.
- On the upside, faster-than-expected growth in the labor force or productivity could allow inflation to fall even if job gains exceed expectations. The Federal Reserve could still cut rates under those circumstances since inflation is approaching its target, and the economy would outperform.
- Another upside risk is that the trade war ends faster than expected, boosting growth.

The U.S. economy performed well through the end of 2024, but this ended abruptly in 2025 when Moody's Analytics reduced its outlook early in the year because of the trade war. However, the baseline changed little in May compared with April. Real GDP growth will remain weak in the near term, though a recession is avoided. Compared with the April forecast, growth in the second half of 2025 is slightly stronger than previously expected because the decline in imports was more front-loaded than anticipated. The below-trend growth continues in 2026, as in the April baseline. Although the economy rebounds in 2027 and 2028, the pace is below the April baseline. The federal government will provide little support, trade will be a drag, and employment growth will slow significantly. The jobless rate will edge up as slowing labor force growth partially offsets slowing employment growth.

Key assumptions were little changed in May. Tariff assumptions were tweaked given events and announcements made prior to the release of the forecast. Monetary policy assumptions were unchanged. We continue to assume the economy will come close to recession but avoid it. Moody's Analytics lowered its forecast for oil prices in 2025 by several dollars a barrel. The outlook for house prices and commercial real estate changed only a little.

Fiscal policy

The May baseline tariff assumptions incorporate the following changes. First, in China, the tariff increase of 145% proves brief. The tariffs are scaled back to 70% by the end of May and 40% (a 30-percentage point increase over the starting level of 10%) by the end of the summer. There are exemptions for certain products such as copper, pharmaceuticals, semiconductors, electronics and energy products. These tariffs remain in place for all of Trump's presidency, through 2028. Subsequently, they are removed. Second, for Canada and Mexico, the current tariff policy remains in effect until early 2026, when the renegotiation of the United States-Mexico-Canada Agreement leads to its removal. Third, for the rest of the world, the base tariff rate of 10% becomes the new normal for the remainder of Trump's presidency. Product-specific rates and exemptions remain in place through 2028 as well. From mid-2026 to the end of 2028, the effective tariff rate stabilizes around 8.5% compared with a rate of about 2% in 2024.

We made modest adjustments to our federal tax and spending assumptions in the May baseline. In addition to the full extension of the Tax Cuts and Jobs Act and lower tax rates for domestic producers, we assume that Congress implements additional personal income tax cuts in line with some of President Trump's campaign proposals. Specifically, we assume that Congress will reduce taxes on tip income and expand the standard deduction for taxpayers who are 65 and older. This shaves more than 10 basis points off the effective personal income tax rate. We also lifted our forecast slightly for nondefense discretionary spending to reflect higher anticipated immigration-related outlays. The impact of the changes on the projected budget deficit was marginal.

Changes to GDP

The strong expansion in economic activity during 2024 abruptly ended in the first quarter of 2025 as surging imports resulted in a slight decline in real GDP. Much of the increase in imports was an effort to avoid anticipated tariffs. Real GDP fell 0.3%, following a 2.4% gain in the fourth quarter, according to the preliminary report from the Bureau of Economic Analysis. However, this is not necessarily an indicator of recession, as job growth and industrial production grew at healthy rates. Still, with uncertainty high and confidence falling, a recession could be in the offing.

Imports took 5 percentage points from top-line growth. Federal government spending also declined, reducing growth by 0.3 percentage point, with most of the decline coming from defense expenditures. Consumer spending remained an important source of support in the first quarter, adding 1.2 percentage points to growth. Inventories were an even larger contributor, as some of the rise in imports went into inventories, adding 2.3 percentage points to growth. Fixed

investment reversed its fourth-quarter decline and added 1.3 percentage points to growth. Residential investment, exports, and state and local spending grew modestly.

As a result of the weak first quarter and new policy assumptions, Moody's Analytics has shifted the timing of growth during 2025, with more growth later in the year. However, on an annual average basis, the May forecast of 1.3% is unchanged from April. Growth in subsequent years was similarly little changed, with real GDP growth, on an annual average basis, projected to rise 1.5% in 2026 and 2.1% in 2027. By comparison, the March forecast had growth of 1.4% in 2026 and 2.3% in 2027. Revisions to growth were largest for trade and inventories, although all components of GDP experienced some shifts in the timing of growth.

Monetary policy

Monetary policy assumptions are unchanged in the May forecast. We expect three 25-basis point cuts in July, September and December from the current federal funds target range of 4.25%-4.5%. Subsequently, we expect the Fed to gradually reduce the rate by 25 basis points each quarter to its neutral level of 3% in 2026.

As expected, the Federal Open Market Committee left the fed funds target range unchanged at its May meeting. Policymakers face an economy that is still expanding, with slightly elevated inflation. However, the Trump administration's tariff policies are expected to cause more inflation, slower growth, and higher unemployment. This has kept the FOMC in a holding pattern. Accelerating inflation and rising unemployment put the central bank's dual mandates into conflict, as the first demands higher interest rates, and the second, lower ones. Once the economy shows clearer signs of slowing by summer, we expect the Fed will begin to cut.

As in February, the March inflation reports showed progress. The headline consumer price index fell by 0.2% month over month, and inflation fell from 2.8% to 2.4% year over year. Core CPI, which excludes food and energy prices and is a more reliable predictor of future inflation, rose 0.2%, less than expected. On a year-ago basis, core inflation fell from 3.1% to 2.8%. However, the report does not yet reflect the effects of tariffs announced in April. Meanwhile, job markets also remain resilient. April's payroll growth was 177,000, about matching March's 185,000. The jobless rate held steady at 4.2%.

Amid high volatility, markets recovered their initial losses following the tariff announcements, when the Standard & Poor's 500 had briefly entered correction territory. Gradual tariff pauses and rollbacks helped stocks regain value. After the U.S. and China announced a preliminary trade deal in early May, the S&P 500 rose by 2.5%, trading 2% above its level at the beginning of April. However, compared with its all-time high in February, the index is down by 5%, as substantial levies remain in effect, and some economic damage has already been done. Similarly, the bond market stabilized in April, albeit at lower prices. In mid-May, the 10-year Treasury yield traded at 4.4%, up 20 basis points from early April, reflecting investor concerns about inflation, growth, and the Treasury's safe-haven status.

The May baseline predicts consumer price inflation of 3% year over year in the second quarter of 2025, slightly lower than April's 3.1%. Consumer price inflation will peak near 3.5% in the fourth quarter before gradually returning to target in late 2026. Meanwhile, we expect the 10-year Treasury yield to average 4.2% in the second quarter, unchanged from the April forecast. The rate will remain near this level throughout the decade due to elevated inflation and fiscal uncertainty.

The trade tensions also continued to put downward pressure on the U.S. dollar in recent months. On a real broad trade-weighted basis, the currency fell by 3.6% from January through April. Tariffs will weigh on dollar demand, but we expect the currency to gradually recover as tariffs fade out by 2027.

Business investment and real estate

The BEA's advance release for the first quarter of 2025 showed that inflation-adjusted nonresidential investment rose a surprising 9.8% annualized, well above Moody's Analytics final projection of 4%. Real equipment led the way, up more than 20%, and intellectual property was up about 4%. Within equipment, the main source of strength was IT. Spending jumped nearly 70% annualized, well above expectations, as businesses rushed to buy imported laptops and smartphones ahead of announced tariffs by the Trump administration. Transportation rose more than 10% annualized because of a 75% jump in aircraft investment. Boeing delivered 130 planes in the first quarter compared with only 57 in the fourth quarter of 2024 due to the strike. Real structures spending was essentially flat, about as expected. The large commercial segment was unchanged because weakness in multi-merchandise retail and healthcare facilities

construction offset a rebound in office. Manufacturing facilities construction declined moderately following the end of subsidies for the construction of semiconductor plants.

High-frequency data have been negative. Although inflation-adjusted new orders for nondefense, nonaircraft capital goods have risen since October, inflation-adjusted shipments have continued to decline. The Moody's Analytics survey of business confidence has moved erratically on changing announcements by the Trump administration about tariffs, but on balance, it has dropped sharply since the beginning of March. The stock market has shown the same sort of volatility and is down about 5% since mid-February. Surveys of planned capital expenditure six months from now have weakened substantially. For all five reporting Federal Reserve banks, the April reading was sharply lower than in January. Moreover, two of the April surveys showed expectations that spending would decline.

Growth in real business investment will be slower than the 3.6% recorded in 2024 for several reasons. First, a deceleration in GDP growth will reduce investment opportunities. Second, the tariffs will raise the prices of imported capital goods. On an annual average basis, investment growth will be 1.3% and -0.8%, respectively, in 2025 and 2026, compared with 0.8% and -0.2% in the April baseline. The higher figure for 2025 compared with April reflects the jump in spending on IT equipment in the first quarter of 2025 to avoid expected tariffs.

The short-term outlook for single-family housing permits and starts was revised lower this month. Homebuilders are contending with increasing challenges on the supply side as tariffs soar, raising materials costs. Further, deportations will shrink the construction labor force. Additionally, a buildup of completed inventory will weigh on new-home construction in the coming year.

The outlook for existing-home sales is stable and is expected to remain near a recessionary low. While the underlying demand for housing remains robust, given the large number of "pent-up" household formations, the higher interest rate environment will drag on affordability. Further, increasing uncertainty about the strength of the labor market will result in more potential buyers postponing their search. Existing-home sales will recover over time as homeowners outgrow their homes, but the recovery to a long-run equilibrium will be protracted.

The forecast for single-family house prices was stable this month. Reduced demand due to higher interest rates and a weaker labor market outlook will be balanced by the limited supply of existing homes. Nationally, house prices are projected to grow at a low single-digit rate, as sellers make price concessions to address buyers' affordability challenges.

Commercial real estate price forecasts were upgraded this month, but Moody's Analytics anticipates a continued decline in total CRE prices. The change stems from an improvement in the office outlook. While office property prices will continue to fall due to high vacancy rates, the decline will be less severe given the recent return to office mandates in some key distressed markets. Elevated interest rates will impede refinancing, though lenders will continue to accommodate borrowers via extend and pretend agreements. Multifamily property prices are expected to inch lower in the near term as property owners navigate limited rent growth and complete ongoing construction projects.

Labor market

The April employment report confirmed that the labor market is holding up, though it provided little information about the impact of the historically high tariffs announced in early April. The April payroll reference week ended on the 12th of the month, leaving little time for any reaction to the tariffs to show up in this employment report. Job growth came in at 177,000 in April and is averaging 155,000 over the last three months.

The outlook for the job market in the coming year was little changed in May, as we still expect that the global trade war will do real damage to the U.S. economy. The May forecast now expects that about 900,000 jobs will be added in 2025. More notably, the labor market will flatline in 2026, compared with the March forecast of a gain of half a million jobs. The unemployment rate will rise to a peak of 4.9% by the end of 2026, unchanged from the April forecast.

Energy

Moody's Analytics has lowered its oil price forecasts in the May forecast vintage. Our oil price forecasts for the second quarter of 2025 are more than \$4 per barrel lower than a month ago, and \$2 lower for 2025 as a whole. This is a big change in the forecast, and it is underpinned by two important factors.

First, the demand outlook continues to weaken. We have lowered our demand forecast by 300,000 barrels per day, consistent with the International Energy Agency. Although the Trump administration's reciprocal tariffs were delayed by

90 days, they could be reinstated after that. In the meantime, each country faces an across-the-board tariff of 10%, the U.S. initially raised China's tariff rate to 145%, and multiple sectors such as steel, aluminum and autos face their own higher tariffs. These tariffs threaten the longevity of the global economic expansion, upon which oil demand thrives. Port traffic is already faltering on the West Coast on account of these tariffs. Reduced demand for transportation threatens petroleum demand even if a recession is avoided.

Second, OPEC+ met on May 3 to discuss production levels. They decided to raise production by 411,000 bpd starting in June, building on their planned increases in April and May. Saudi Arabia is displeased by the poor compliance, with production cuts by countries such as Iraq and Kazakhstan, and is signaling that it will stomach lower prices in the near term. The combined production hike by June has now reached 960,000 bpd, representing 44% of OPEC+'s 2.2 million bpd of production cuts instituted in 2022. OPEC+ is trying to reclaim market share by ending the cuts, but the extra supply is pressuring prices significantly at a time when global oil demand is at risk of faltering.

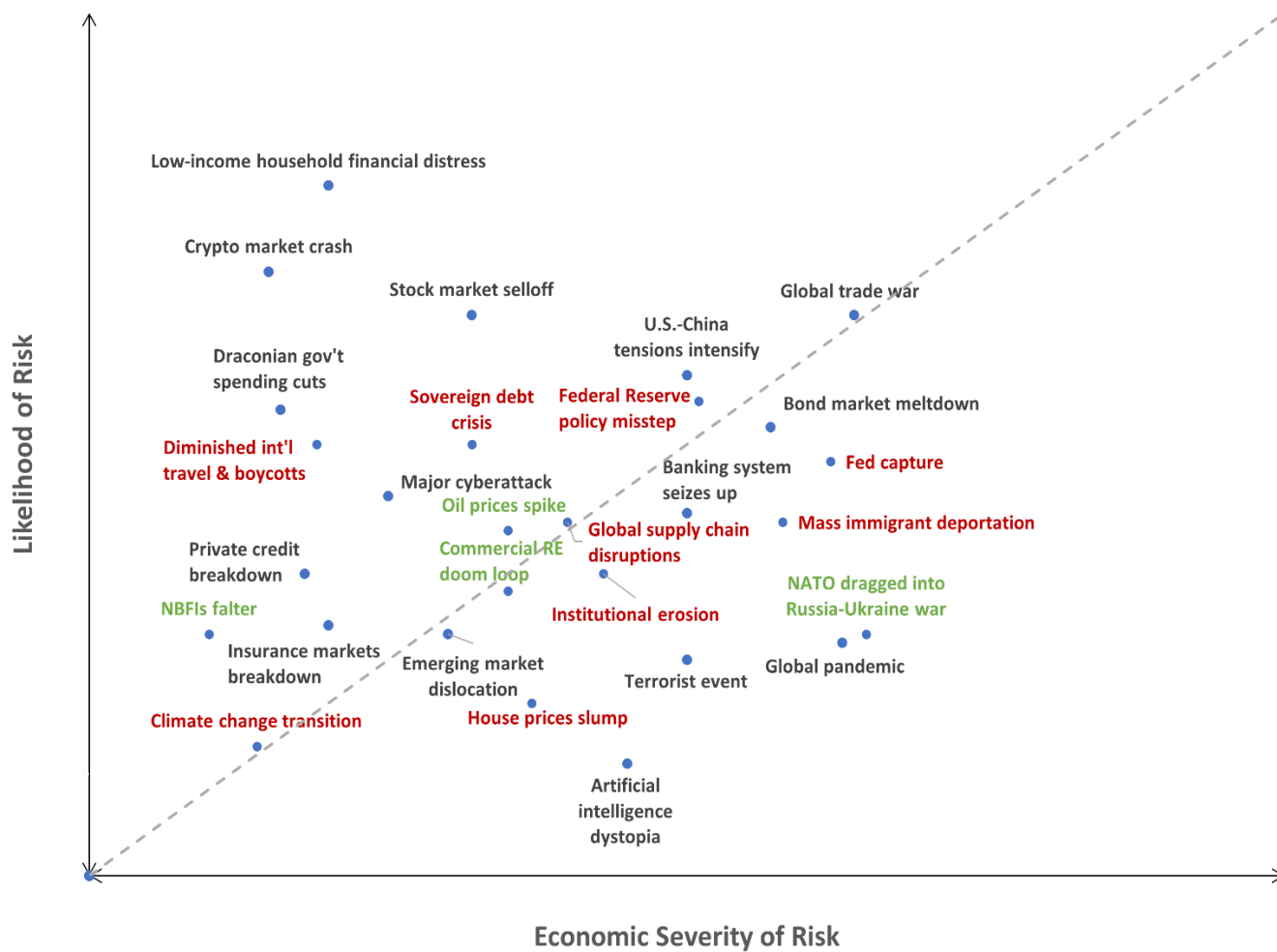
MOODY'S ANALYTICS DID NOT CHANGE ITS NATURAL GAS PRICE FORECAST FOR THE MONTH OF MAY.

U.S. MACRO BASELINE SCENARIO—FORECAST SUMMARY—May 2025

	Units	25Q1	25Q2	25Q3	25Q4	26Q1	26Q2	26Q3	26Q4	27Q1
Gross Domestic Product	bcw \$	23,526.1	23,549.0	23,622.8	23,715.5	23,796.1	23,895.4	24,010.7	24,122.0	24,244.8
Change	%AR	-0.3	0.4	1.3	1.6	1.4	1.7	1.9	1.9	2.1
Federal Budget	\$ bil	-596.2	-55.2	-473.3	-653.7	-561.5	-263.5	-604.3	-772.3	-643.7
Total Employment	mil	159.2	159.5	159.5	159.5	159.5	159.5	159.5	159.5	159.5
Change	%AR	1.4	0.8	0.1	0.0	-0.1	-0.1	0.0	0.0	0.1
Unemployment Rate	%	4.1	4.2	4.2	4.4	4.6	4.8	4.9	4.9	4.9
Light Vehicle Sales	mil, SAAR	16.4	16.3	15.6	15.9	16.0	16.1	16.1	16.2	16.2
Residential Housing Starts	mil, SAAR	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.5
Median Existing-Home Price	\$ ths	417.8	417.5	418.2	418.6	418.8	419.1	419.4	420.0	420.9
Change	%YA	3.4	2.2	2.0	0.1	0.3	0.4	0.3	0.3	0.5
Consumer Price Index	%AR	3.8	3.8	3.3	3.2	3.5	2.9	2.1	1.8	1.9
Federal Funds Rate	%	4.3	4.3	4.1	3.8	3.5	3.3	3.0	3.0	3.0
Treasury Yield: 10-Yr Bond	%	4.5	4.2	4.1	4.1	4.1	4.2	4.3	4.3	4.3
Baa Corp. - 10-Yr Treasury	DIFF	1.5	2.0	2.3	2.4	2.4	2.5	2.5	2.5	2.6
Corporate Profits With IVA & CCA	\$ bil	4,066.5	3,510.5	3,620.3	3,674.5	3,708.6	3,796.9	3,871.6	3,894.4	3,929.3
Change	%YA	10.4	-8.0	-4.8	-8.3	-8.8	8.2	6.9	6.0	6.0
S&P 500	1941=10	5,900.7	5,319.7	5,380.1	5,511.3	5,593.5	5,686.6	5,705.6	5,699.5	5,725.8
Change	%YA	18.1	1.2	-3.0	-6.8	-5.2	6.9	6.1	3.4	2.4
CRE Price Index	index	305.4	305.8	305.7	305.7	305.4	305.2	309.0	316.3	322.2
NCREIF Property Index: Rate of Return	%, NSA	1.3	1.3	1.4	1.4	1.4	1.5	1.5	1.5	1.6
C&I Loans Outstanding	\$ bil	2,782.7	2,838.6	2,864.0	2,887.4	2,903.1	2,917.1	2,924.7	2,920.8	2,927.8
BAA spread	%	1.5	2.0	2.3	2.4	2.4	2.5	2.5	2.5	2.6

	Units	2021	2022	2023	2024	2025	2026	2027	2028	2029
Gross Domestic Product	bcw \$	21,494.8	22,034.8	22,671.1	23,305.0	23,603.4	23,956.0	24,448.5	25,009.5	25,635.0
Change	%AR	6.1	2.5	2.9	2.8	1.3	1.5	2.1	2.3	2.5
Federal Budget	\$ bil	-2,580.4	-1,419.2	-1,783.8	-2,033.4	-1,778.4	-2,201.6	-2,394.8	-2,415.6	-2,464.0
Total Employment	mil	146.3	152.5	155.9	158.0	159.4	159.5	159.8	160.6	161.7
Change	%AR	2.9	4.3	2.2	1.3	0.9	0.0	0.2	0.5	0.7
Unemployment Rate	%	5.4	3.6	3.6	4.0	4.2	4.8	4.9	4.6	4.3
Light Vehicle Sales	mil, SAAR	14.9	13.8	15.5	15.8	16.1	16.1	16.4	16.9	17.3
Residential Housing Starts	mil, SAAR	1.6	1.6	1.4	1.4	1.4	1.4	1.5	1.5	1.4
Median Existing-Home Price	\$ ths	353.9	390.2	392.5	410.1	418.0	419.3	424.0	437.4	452.6
Change	%YA	18.4	10.2	0.6	4.5	1.9	0.3	1.1	3.2	3.5
Consumer Price Index	%AR	4.7	8.0	4.1	3.0	3.2	3.0	2.0	2.0	1.8
Federal Funds Rate	%	0.1	1.7	5.0	5.1	4.1	3.2	3.0	3.0	2.9
Treasury Yield: 10-Yr Bond	%	1.4	3.0	4.0	4.2	4.2	4.2	4.3	4.3	4.2
Baa Corp. - 10-Yr Treasury	DIFF	1.9	2.1	1.9	1.5	2.1	2.5	2.5	2.4	2.4
Corporate Profits With IVA & CCA	\$ bil	3,077.6	3,316.7	3,546.5	3,827.8	3,717.9	3,817.9	4,048.4	4,357.7	4,597.1
Change	%YA	27.6	7.8	6.9	7.9	-2.9	2.7	6.0	7.6	5.5
S&P 500	1941=10	4,266.8	4,100.7	4,284.2	5,426.7	5,527.9	5,671.3	5,802.4	6,229.9	6,681.2
Change	%YA	32.6	-3.9	4.5	26.7	1.9	2.6	2.3	7.4	7.2
CRE Price Index	index	346.3	341.0	317.3	305.0	305.7	316.3	336.3	353.7	372.9
NCREIF Property Index: Rate of Return	%, NSA	4.2	1.4	-2.0	0.1	1.3	1.5	1.6	1.8	1.8
C&I Loans Outstanding	\$ bil	2,479.5	2,642.1	2,771.3	2,766.9	2,843.2	2,916.4	2,953.3	3,070.9	3,250.9
BAA spread	%	1.9	2.1	1.9	1.5	2.1	2.5	2.5	2.4	2.4

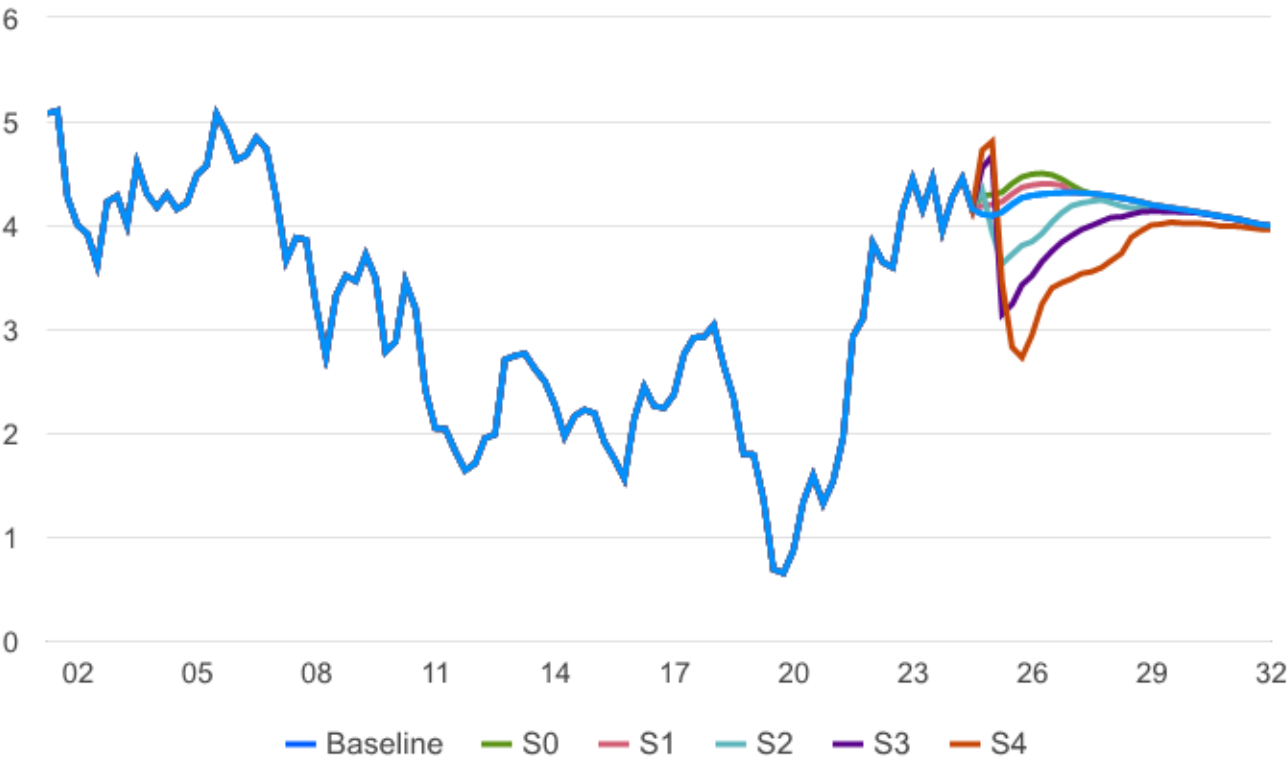
Risks



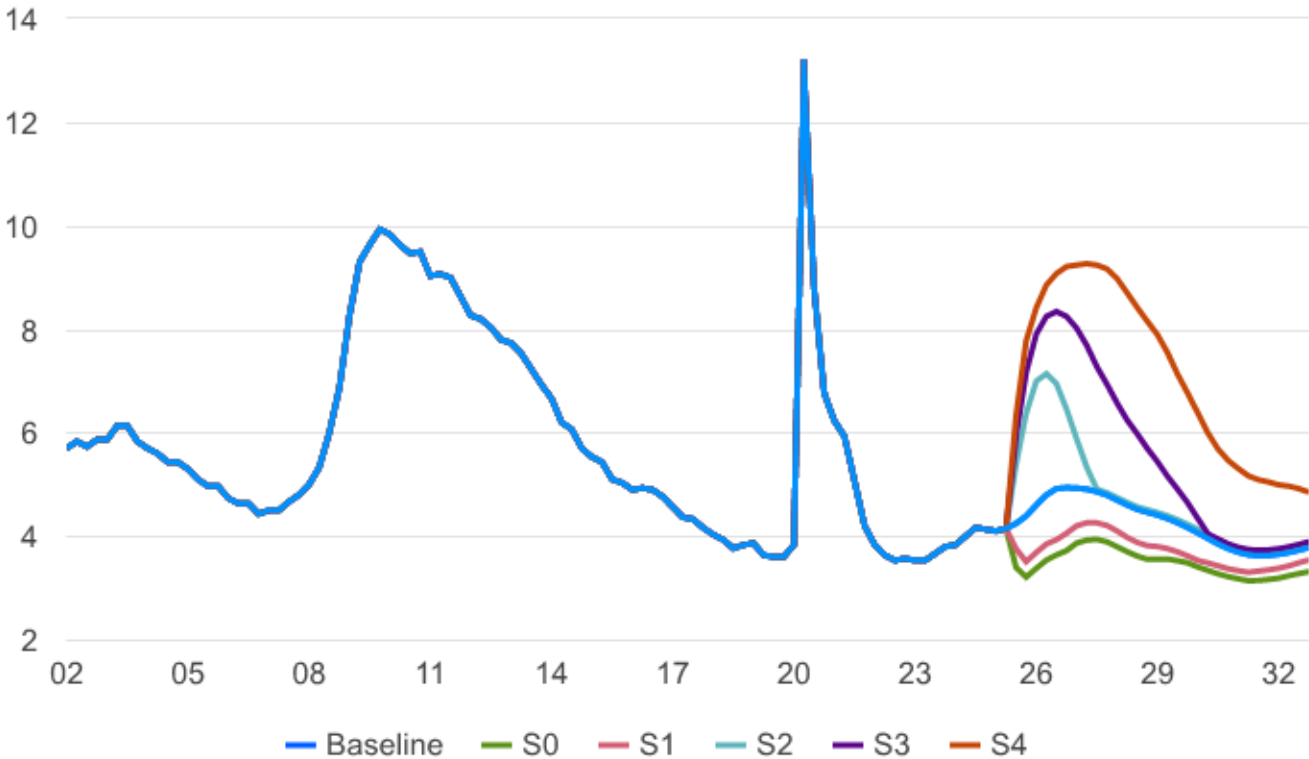
Note: Changes in **red** are either an increase in the odds of the event occurring or a new downside risk. Changes in **green** reflect a decline in the probability of the event occurring.

Scenario Comparison

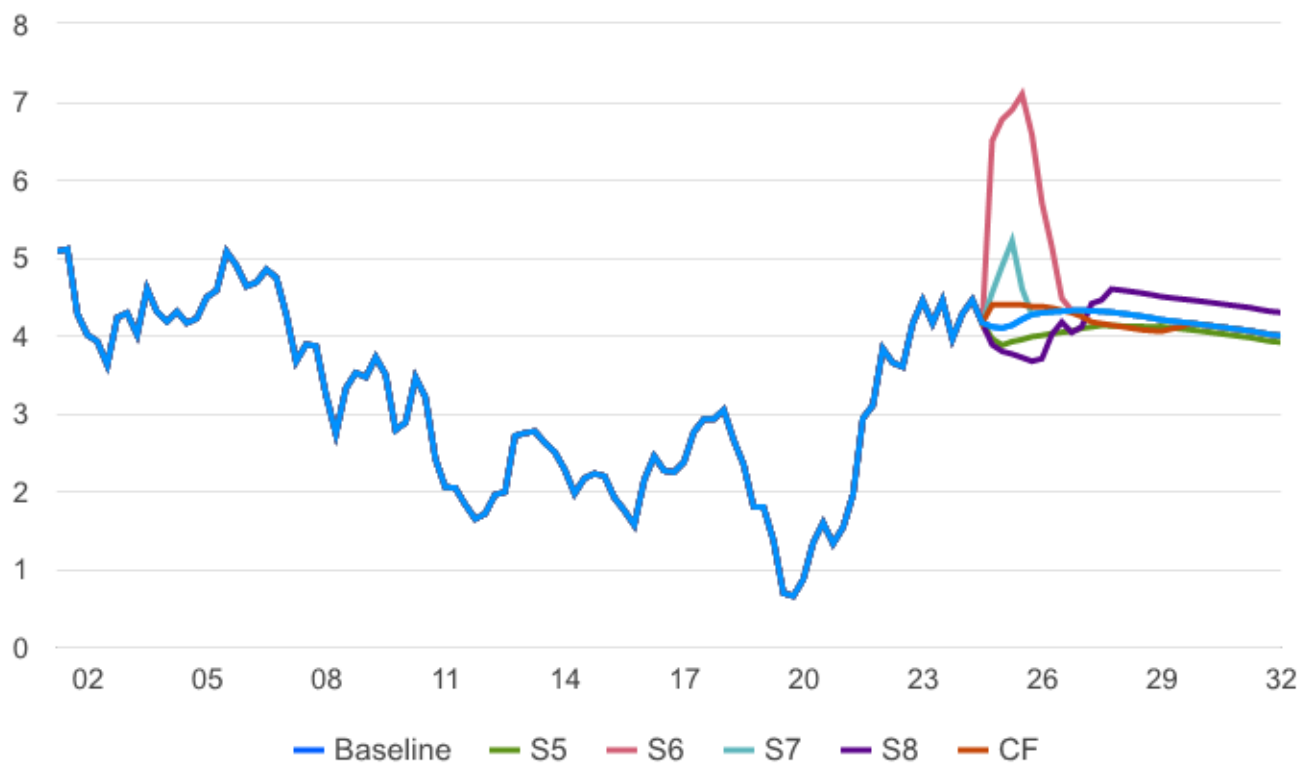
United States 10-Yr Government Bond Yield, % p.a., NSA



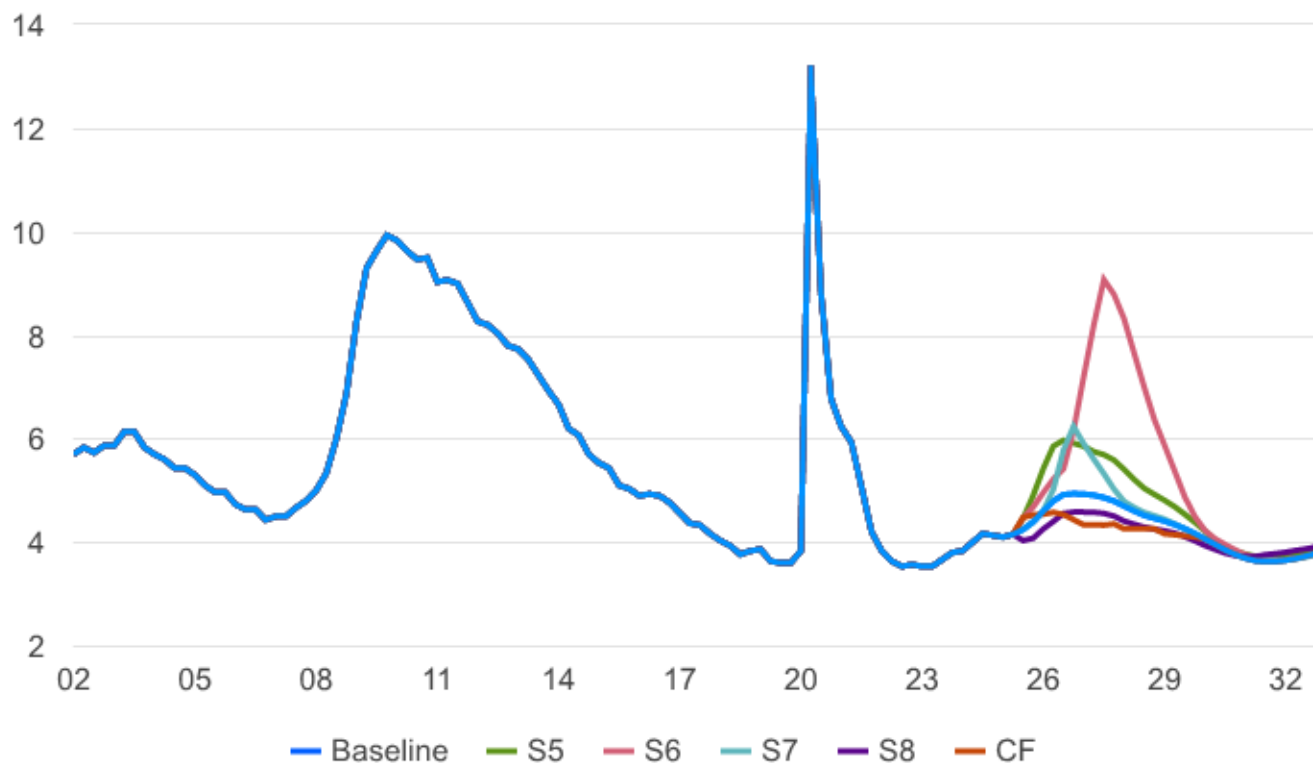
United States Unemployment Rate, %, SA



United States 10-Yr Government Bond Yield, % p.a., NSA



United States Unemployment Rate, %, SA



U.S. REAL GDP, % CHANGE YR AGO —SCENARIO COMPARISON—May 2025									
	25Q1	25Q2	25Q3	25Q4	26Q1	26Q2	26Q3	26Q4	27Q1
Baseline	2.05	1.40	0.95	0.74	1.15	1.47	1.64	1.71	1.89
S0: Upside 4th Percentile	2.05	1.40	2.32	3.10	4.44	5.58	4.38	3.64	3.23
S1: Upside 10th Percentile	2.05	1.40	1.60	1.68	2.37	3.00	2.67	2.53	2.42
S2: Down side 75th Percentile	2.05	1.40	0.50	-0.54	-0.91	-0.79	-0.16	0.97	2.13
S3: Down side 90th Percentile	2.05	1.40	-0.07	-1.45	-2.46	-2.47	-1.52	-0.38	1.22
S4: Down side 96th Percentile	2.05	1.40	-0.19	-1.82	-3.09	-4.14	-3.56	-2.37	-0.70

	2024	2025	2026	2027	2028	2029	2030	2031	2032
Baseline	2.80	1.28	1.49	2.06	2.29	2.50	2.79	2.76	2.36
S0: Upside 4th Percentile	2.80	2.22	4.50	2.81	2.67	2.55	2.51	2.07	1.97
S1: Upside 10th Percentile	2.80	1.68	2.64	2.26	2.48	2.65	2.80	2.30	2.10
S2: Down side 75th Percentile	2.80	0.84	-0.22	2.68	2.95	2.79	2.81	2.48	2.15
S3: Down side 90th Percentile	2.80	0.47	-1.71	1.85	3.48	3.53	2.94	2.57	2.22
S4: Down side 96th Percentile	2.80	0.35	-3.30	0.85	3.55	3.50	3.13	2.74	2.42

U.S. CPI, % CHANGE YR AGO —SCENARIO COMPARISON—May 2025									
	25Q1	25Q2	25Q3	25Q4	26Q1	26Q2	26Q3	26Q4	27Q1
Baseline	2.74	3.01	3.49	3.53	3.45	3.21	2.89	2.55	2.17
S0: Upside 4th Percentile	2.74	3.01	3.59	3.77	3.74	3.55	3.21	2.84	2.50
S1: Upside 10th Percentile	2.74	3.01	3.55	3.67	3.63	3.41	3.04	2.64	2.22
S2: Down side 75th Percentile	2.74	3.01	3.57	3.50	3.11	2.57	1.85	1.50	1.56
S3: Down side 90th Percentile	2.74	3.01	3.94	4.13	3.35	2.62	1.39	0.71	0.91
S4: Down side 96th Percentile	2.74	3.01	4.24	4.53	3.60	2.79	1.02	0.02	0.14

	2024	2025	2026	2027	2028	2029	2030	2031	2032
Baseline	2.95	3.19	3.02	2.02	2.01	1.85	1.90	2.09	2.23
S0: Upside 4th Percentile	2.95	3.28	3.33	2.27	2.07	1.85	1.90	2.09	2.23
S1: Upside 10th Percentile	2.95	3.25	3.17	2.05	2.01	1.85	1.90	2.09	2.23
S2: Down side 75th Percentile	2.95	3.21	2.25	1.86	2.07	2.00	2.02	2.16	2.30
S3: Down side 90th Percentile	2.95	3.46	2.00	1.20	1.68	1.82	1.94	2.17	2.34
S4: Down side 96th Percentile	2.95	3.63	1.84	0.47	0.99	1.43	1.64	1.87	2.10

U.S. FEDERAL FUNDS RATE, % —SCENARIO COMPARISON—May 2025									
	25Q1	25Q2	25Q3	25Q4	26Q1	26Q2	26Q3	26Q4	27Q1
Baseline	4.33	4.32	4.12	3.77	3.54	3.29	3.01	3.00	2.96
S0: Upside 4th Percentile	4.33	4.32	4.12	3.95	3.67	3.46	3.17	3.14	3.11
S1: Upside 10th Percentile	4.33	4.32	4.12	3.87	3.59	3.40	3.09	3.05	3.02
S2: Down side 75th Percentile	4.33	4.32	4.48	3.35	2.81	2.26	2.15	2.08	2.02
S3: Down side 90th Percentile	4.33	4.32	4.53	4.75	3.45	2.94	2.46	1.95	1.43
S4: Down side 96th Percentile	4.33	4.32	4.58	4.81	3.85	2.74	1.66	1.01	0.77

	2024	2025	2026	2027	2028	2029	2030	2031	2032
Baseline	5.15	4.14	3.21	2.96	2.96	2.93	2.73	2.70	2.70
S0: Upside 4th Percentile	5.15	4.18	3.36	3.08	2.99	2.93	2.73	2.70	2.70
S1: Upside 10th Percentile	5.15	4.16	3.28	3.00	2.97	2.93	2.73	2.70	2.70
S2: Down side 75th Percentile	5.15	4.12	2.33	2.04	2.71	2.93	2.73	2.70	2.70
S3: Down side 90th Percentile	5.15	4.48	2.70	1.04	1.43	1.98	2.46	2.70	2.70
S4: Down side 96th Percentile	5.15	4.51	2.32	0.54	0.55	0.64	0.91	1.79	2.51

U.S. S&P 500, % CHANGE YR AGO —SCENARIO COMPARISON—May 2025									
	25Q1	25Q2	25Q3	25Q4	26Q1	26Q2	26Q3	26Q4	27Q1
Baseline	18.12	1.25	-2.99	-6.76	-5.21	6.90	6.05	3.42	2.36
S0: Upside 4th Percentile	18.12	1.25	3.33	3.07	6.13	18.51	9.58	2.87	0.87
S1: Upside 10th Percentile	18.12	1.25	1.39	0.69	3.01	14.76	8.15	1.98	0.52
S2: Down side 75th Percentile	18.12	1.25	-15.83	-25.65	-30.74	-22.10	-9.29	-1.82	8.10
S3: Down side 90th Percentile	18.12	1.25	-16.44	-30.04	-41.25	-34.02	-23.05	-13.25	5.53
S4: Down side 96th Percentile	18.12	1.25	-17.60	-31.69	-43.09	-43.99	-35.40	-26.72	-10.31

	2024	2025	2026	2027	2028	2029	2030	2031	2032
Baseline	26.67	1.87	2.59	2.31	7.37	7.24	7.54	5.66	3.20
S0: Upside 4th Percentile	26.67	6.16	8.99	2.46	6.44	5.84	7.59	5.66	3.20
S1: Upside 10th Percentile	26.67	5.01	6.75	2.01	5.69	5.56	7.54	5.66	3.20
S2: Down side 75th Percentile	26.67	-6.56	-17.27	9.39	16.48	12.84	7.54	5.66	3.20
S3: Down side 90th Percentile	26.67	-7.91	-29.31	9.53	21.36	16.14	8.79	5.77	3.20
S4: Down side 96th Percentile	26.67	-8.66	-38.22	0.73	18.98	19.07	13.02	10.90	6.79

S0: Alternative Scenario 0 – Upside – 4th Percentile

This above-baseline scenario is designed so that there is a 4% probability that the economy will perform better, broadly speaking, and a 96% probability that it will perform worse.

Key assumptions/risks

- The impacts of the Trump administration's tariffs and deportations on the economy are much less than expected.
- The peak tariff rate is 22.8%, the same as in the baseline, but tariffs are rolled back to below 10% by the end of 2025.
- The Russian invasion of Ukraine resolves much faster than anticipated, and the Hamas-Israel ceasefire holds.
- The economy has more than full employment in the third quarter of 2025, with the unemployment rate dropping below the baseline at that time.
- Because of the unexpectedly strong growth in the economy, inflation and interest rates are a bit higher than in the baseline. Financial markets stabilize, and the stronger growth allows equity prices to rebound strongly.
- Political and economic tensions between the U.S. and China diminish substantially.

Monetary policy assumptions

- The fed funds rate is slightly higher than in the baseline starting in the fourth quarter of 2025.
- The 10-year Treasury is a bit higher than in the baseline because of the stronger growth and slightly higher inflation.

Fiscal policy assumptions

- Just as in the baseline, the S0 assumes a full extension of the Tax Cuts and Jobs Act personal income provisions, increased state and local tax deductions, certain business tax provisions, reduced taxes on tips, and a reduction of the statutory corporate tax rate from 21% to 15% for domestic producers.
- One offset will be revenue from the new tariffs, with the effective tariff rate rising from about 2% to 22.8%, as in the baseline. However, the administration will roll the tariffs back to below 10% by the end of 2025.
- To offset the net reduction in tax revenue, the administration will limit growth in nondefense spending and eliminate spending on Ukraine and emergency spending on foreign aid.
- However, defense spending will continue to rise. Further, there will not be material changes to existing legislation, including the Infrastructure Investment and Jobs Act, the IRA (except for EV tax credits), or the CHIPS Act. There remains a significant amount of funds that have yet to be allocated, with the peak impact occurring within the next two to three years.
- The tax policy assumptions in S0 are fundamentally the same as in the baseline. However, since the economy is stronger, tax revenues are higher than in the baseline and the deficit is lower. On balance, the budget deficit will be approximately -5.7% in fiscal 2025, compared with -6.1% in the baseline.

The upside scenario “S0: Alternative Scenario 0 – Upside – 4th Percentile” assumes that the impacts on the economy of the Trump administration’s tariffs will be much less than expected. The effective tariff rate rises from about 2% to 22.8%, as in the baseline. However, the administration will roll the tariffs back to below 10% by the end of 2025.

Additionally, the economic impacts of the Russian invasion of Ukraine and the Hamas-Israel conflict resolve much faster than expected.

The stronger economy results in unemployment declining below the baseline. Likewise, inflation is slightly above the baseline, and as a result, so are long-term interest rates. The Fed will cut rates as inflation decelerates, but rates will be slightly higher than in the baseline. The 10-year Treasury yield is slightly higher than in the baseline because of the stronger growth and slightly higher inflation. Financial markets stabilize, and the stronger growth allows equity prices to rise more than in the baseline.

Business sentiment and consumer confidence rise significantly, causing consumer spending and business investment growth to accelerate. The gains in U.S. employment lift household incomes and spending more than expected. House prices rise by 7.8% between mid-2025 and mid-2026 versus 0.7% in the baseline.

The euro zone's economy also grows much more than in the baseline, boosting U.S. exports and business investment. In the energy market, the price of Brent crude is slightly above the baseline.

Real GDP is higher than in the baseline over the next several years. On an annual average basis, real GDP rises 2.2% in 2025 and 4.5% in 2026, compared with 1.3% and 1.5%, respectively, in each of those years in the baseline. Over time, the increase in capital per worker resulting from higher investment in this scenario generates significant, persistent additional growth in labor productivity, leading to above-baseline levels of output in the long term.

U.S. MACRO S0 SCENARIO—FORECAST SUMMARY—May 2025

	Units	25Q1	25Q2	25Q3	25Q4	26Q1	26Q2	26Q3	26Q4	27Q1
Gross Domestic Product	bcw \$	23,526.1	23,549.0	23,942.2	24,273.3	24,569.6	24,862.0	24,991.0	25,156.0	25,362.6
Change	%AR	-0.3	0.4	6.8	5.6	5.0	4.8	2.1	2.7	3.3
Federal Budget	\$ bil	-596.2	-55.2	-449.6	-614.3	-485.5	-133.7	-430.9	-584.4	-451.8
Total Employment	mil	159.2	159.5	160.9	161.4	161.9	162.4	162.9	163.2	163.3
Change	%AR	1.4	0.8	3.7	1.0	1.2	1.4	1.3	0.6	0.4
Unemployment Rate	%	4.1	4.2	3.4	3.2	3.4	3.5	3.6	3.7	3.9
Light Vehicle Sales	mil, SAAR	16.4	16.3	16.2	16.6	16.8	16.8	17.2	17.0	16.8
Residential Housing Starts	mil, SAAR	1.4	1.4	1.4	1.5	1.5	1.6	1.6	1.7	1.7
Median Existing-Home Price	\$ ths	417.8	417.5	431.7	440.0	447.8	453.9	466.5	474.5	479.4
Change	%YA	3.4	2.2	5.3	5.2	7.2	8.7	8.1	7.9	7.0
Consumer Price Index	%AR	3.8	3.8	3.7	3.8	3.7	3.1	2.3	2.3	2.3
Federal Funds Rate	%	4.3	4.3	4.1	4.0	3.7	3.5	3.2	3.1	3.1
Treasury Yield: 10-Yr Bond	%	4.5	4.2	4.3	4.3	4.3	4.4	4.5	4.5	4.5
Baa Corp. - 10-Yr Treasury	DIFF	1.5	2.0	2.1	2.0	2.1	2.2	2.4	2.4	2.5
Corporate Profits With IVA & CCA	\$ bil	4,066.5	3,510.5	3,696.0	3,841.6	3,963.8	4,122.2	4,262.6	4,343.5	4,432.8
Change	%YA	10.4	-8.0	-2.8	-4.1	-2.5	17.4	15.3	13.1	11.8
S&P 500	1941=10	5,900.7	5,319.7	5,730.6	6,092.6	6,262.3	6,304.5	6,279.9	6,267.6	6,316.7
Change	%YA	18.1	1.2	3.3	3.1	6.1	18.5	9.6	2.9	0.9
CRE Price Index	index	305.4	305.8	309.6	315.6	318.0	322.7	331.2	342.3	350.6
NCREIF Property Index: Rate of Return	%, NSA	1.3	1.3	2.2	2.2	2.0	2.2	2.2	2.1	2.0
C&I Loans Outstanding	\$ bil	2,782.7	2,838.6	2,895.0	3,048.1	3,162.1	3,256.2	3,368.7	3,457.0	3,516.7
BAA spread	%	1.5	2.0	2.1	2.0	2.1	2.2	2.4	2.4	2.5

	Units	2021	2022	2023	2024	2025	2026	2027	2028	2029
Gross Domestic Product	bcw \$	21,494.8	22,034.8	22,671.1	23,305.0	23,822.6	24,894.6	25,595.3	26,278.4	26,949.5
Change	%AR	6.1	2.5	2.9	2.8	2.2	4.5	2.8	2.7	2.6
Federal Budget	\$ bil	-2,580.4	-1,419.2	-1,783.8	-2,033.4	-1,715.3	-1,634.5	-1,638.2	-1,769.2	-1,970.7
Total Employment	mil	146.3	152.5	155.9	158.0	160.2	162.6	163.9	164.8	165.5
Change	%AR	2.9	4.3	2.2	1.3	1.4	1.5	0.8	0.5	0.4
Unemployment Rate	%	5.4	3.6	3.6	4.0	3.7	3.6	3.9	3.7	3.5
Light Vehicle Sales	mil, SAAR	14.9	13.8	15.5	15.8	16.4	16.9	16.9	17.3	17.8
Residential Housing Starts	mil, SAAR	1.6	1.6	1.4	1.4	1.4	1.6	1.7	1.8	1.8
Median Existing-Home Price	\$ ths	353.9	390.2	392.5	410.1	426.8	460.7	482.8	501.3	520.4
Change	%YA	18.4	10.2	0.6	4.5	4.0	8.0	4.8	3.8	3.8
Consumer Price Index	%AR	4.7	8.0	4.1	3.0	3.3	3.3	2.3	2.1	1.8
Federal Funds Rate	%	0.1	1.7	5.0	5.1	4.2	3.4	3.1	3.0	2.9
Treasury Yield: 10-Yr Bond	%	1.4	3.0	4.0	4.2	4.3	4.4	4.5	4.3	4.2
Baa Corp. - 10-Yr Treasury	DIFF	1.9	2.1	1.9	1.5	1.9	2.3	2.5	2.4	2.5
Corporate Profits With IVA & CCA	\$ bil	3,077.6	3,316.7	3,546.5	3,827.8	3,778.7	4,173.0	4,595.0	4,981.6	5,283.2
Change	%YA	27.6	7.8	6.9	7.9	-1.3	10.4	10.1	8.4	6.1
S&P 500	1941=10	4,266.8	4,100.7	4,284.2	5,426.7	5,760.9	6,278.6	6,433.3	6,847.9	7,247.6
Change	%YA	32.6	-3.9	4.5	26.7	6.2	9.0	2.5	6.4	5.8
CRE Price Index	index	346.3	341.0	317.3	305.0	315.6	342.3	367.5	381.8	396.0
NCREIF Property Index: Rate of Return	%, NSA	4.2	1.4	-2.0	0.1	1.8	2.1	1.9	1.9	1.7
C&I Loans Outstanding	\$ bil	2,479.5	2,642.1	2,771.3	2,766.9	2,891.1	3,311.0	3,569.6	3,714.9	3,895.6
BAA spread	%	1.9	2.1	1.9	1.5	1.9	2.3	2.5	2.4	2.5

S1: Alternative Scenario 1 – Upside – 10th Percentile

This above-baseline scenario is designed so that there is a 10% probability that the economy will perform better, broadly speaking, and a 90% probability that it will perform worse.

Key assumptions/risks

- The impacts of the Trump administration's tariffs and deportations on the economy are less than expected.
- The effective tariff rate rises from about 2% to 22.8%, as in the baseline. However, the administration rolls the tariffs back to below 10% by early 2026.
- The Russian invasion of Ukraine resolves faster than anticipated, and the Hamas-Israel ceasefire holds.
- The unemployment rate declines below the baseline starting in the third quarter of 2025.
- Because of the stronger growth, inflation and interest rates are a bit higher than in the baseline. Financial markets are stable and the stronger growth allows equity prices to rise strongly.
- Political and economic tensions between the U.S. and China diminish.

Monetary policy assumptions

- The fed funds rate remains a bit higher than in the baseline starting in the fourth quarter of 2025.
- The 10-year Treasury is a bit higher than in the baseline because of the stronger growth and slightly higher inflation.

Fiscal policy assumptions

- Just as in the baseline, the S1 assumes a full extension of the Tax Cuts and Jobs Act personal income provisions, increased state and local tax deductions, certain business tax provisions, reduced taxes on tips, and a reduction of the statutory corporate tax rate from 21% to 15% for domestic producers.
- One offset will be revenue from the new tariffs, with the effective tariff rate rising from about 2% to 22.8%, as in the baseline. However, the administration will roll the tariffs back to below 10% by early 2026.
- To offset the net reduction in tax revenue, the administration will limit growth in nondefense spending and eliminate spending on Ukraine and emergency spending on foreign aid.
- However, defense spending will continue to rise. Further, there will not be material changes to existing legislation, including the Infrastructure Investment and Jobs Act, the IRA (except for EV tax credits), or the CHIPS Act. There remains a significant amount of funds that have yet to be allocated, with the peak impact occurring within the next two to three years.
- The tax policy assumptions in S1 are fundamentally the same as in the baseline. However, since the economy is stronger, tax revenues are higher than in the baseline and the deficit is lower. On balance, the budget deficit will be approximately -5.9% in fiscal 2025, compared with -6.1% in the baseline.

The upside scenario “S1: Alternative Scenario 1 – Upside – 10th Percentile” assumes that the impacts on the economy of the Trump administration’s tariffs will be much less than expected. The effective tariff rate will rise from about 2% to 22.8%, as in the baseline. However, the administration will roll the tariffs back to below 10% by early 2026. Further, acceleration of China’s economy boosts demand for U.S. exports and manufacturing. Additionally, the economic impacts of the Russian invasion of Ukraine and the Hamas-Israel conflict resolve much faster than anticipated.

The stronger economy results in unemployment declining below the baseline and inflation slightly above the baseline. As a result, long-term interest rates are a bit higher than in the baseline. The Fed will cut rates as inflation decelerates, but rates remain a bit higher than in the baseline because of stronger growth and slightly higher inflation. The 10-year Treasury yield is also a bit higher than in the baseline because of the stronger growth and slightly higher inflation. Financial markets stabilize and the stronger growth allows equity prices to rebound quickly.

Business sentiment and consumer confidence rise significantly, accelerating consumer spending and business investment growth. The return to strong gains in U.S. employment lifts household incomes and spending more than expected. House prices rise by 4.9% between mid-2025 and mid-2026 versus 0.7% in the baseline.

The euro zone's economy also grows more quickly than in the baseline, boosting U.S. exports and business investment. In the energy market, the price of Brent crude oil is slightly above the baseline.

Real GDP is higher than in the baseline over the next several years. On an annual average basis, real GDP rises 1.7% in 2025 and 2.6% in 2026, compared with 1.3% and 1.5%, respectively, in each of those years in the baseline. The increase in capital per worker resulting from higher investment in this scenario generates additional growth in labor productivity, leading to above-baseline levels of output in the long term.

U.S. MACRO S1 SCENARIO—FORECAST SUMMARY—May 2025

	Units	25Q1	25Q2	25Q3	25Q4	26Q1	26Q2	26Q3	26Q4	27Q1
Gross Domestic Product	bcw \$	23,526.1	23,549.0	23,774.8	23,937.3	24,084.5	24,256.6	24,408.7	24,543.2	24,667.4
Change	%AR	-0.3	0.4	3.9	2.8	2.5	2.9	2.5	2.2	2.0
Federal Budget	\$ bil	-596.2	-55.2	-467.0	-632.8	-534.9	-193.0	-496.0	-653.3	-523.0
Total Employment	mil	159.2	159.5	159.9	160.2	160.3	160.6	160.8	161.1	161.3
Change	%AR	1.4	0.8	1.0	0.8	0.2	0.7	0.6	0.7	0.4
Unemployment Rate	%	4.1	4.2	3.8	3.5	3.7	3.8	3.9	4.1	4.2
Light Vehicle Sales	mil, SAAR	16.4	16.3	16.1	16.5	16.7	16.6	16.9	16.8	16.6
Residential Housing Starts	mil, SAAR	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.6	1.6
Median Existing-Home Price	\$ ths	417.8	417.5	425.5	430.3	435.1	439.7	446.4	451.0	452.6
Change	%YA	3.4	2.2	3.8	2.9	4.1	5.3	4.9	4.8	4.0
Consumer Price Index	%AR	3.8	3.8	3.6	3.5	3.6	2.9	2.1	1.9	1.9
Federal Funds Rate	%	4.3	4.3	4.1	3.9	3.6	3.4	3.1	3.1	3.0
Treasury Yield: 10-Yr Bond	%	4.5	4.2	4.2	4.2	4.2	4.3	4.4	4.4	4.4
Baa Corp. - 10-Yr Treasury	DIFF	1.5	2.0	2.1	2.2	2.2	2.3	2.5	2.5	2.5
Corporate Profits With IVA & CCA	\$ bil	4,066.5	3,510.5	3,658.3	3,757.3	3,869.2	3,992.1	4,099.3	4,147.7	4,210.3
Change	%YA	10.4	-8.0	-3.8	-6.2	-4.9	13.7	12.1	10.4	8.8
S&P 500	1941=10	5,900.7	5,319.7	5,623.0	5,951.6	6,078.1	6,105.1	6,081.3	6,069.3	6,109.7
Change	%YA	18.1	1.2	1.4	0.7	3.0	14.8	8.1	2.0	0.5
CRE Price Index	index	305.4	305.8	307.1	310.8	311.2	314.6	321.1	330.0	336.8
NCREIF Property Index: Rate of Return	%, NSA	1.3	1.3	2.0	2.0	1.8	1.9	1.9	1.8	1.8
C&I Loans Outstanding	\$ bil	2,782.7	2,838.6	2,882.0	3,013.5	3,101.3	3,172.7	3,241.8	3,281.8	3,308.9
BAA spread	%	1.5	2.0	2.1	2.2	2.2	2.3	2.5	2.5	2.5

	Units	2021	2022	2023	2024	2025	2026	2027	2028	2029
Gross Domestic Product	bcw \$	21,494.8	22,034.8	22,671.1	23,305.0	23,696.8	24,323.2	24,872.8	25,489.3	26,163.6
Change	%AR	6.1	2.5	2.9	2.8	1.7	2.6	2.3	2.5	2.6
Federal Budget	\$ bil	-2,580.4	-1,419.2	-1,783.8	-2,033.4	-1,751.2	-1,877.2	-1,934.5	-2,058.9	-2,235.3
Total Employment	mil	146.3	152.5	155.9	158.0	159.7	160.7	161.8	162.8	163.7
Change	%AR	2.9	4.3	2.2	1.3	1.1	0.6	0.7	0.6	0.5
Unemployment Rate	%	5.4	3.6	3.6	4.0	3.9	3.9	4.2	3.9	3.7
Light Vehicle Sales	mil, SAAR	14.9	13.8	15.5	15.8	16.3	16.8	16.7	17.1	17.6
Residential Housing Starts	mil, SAAR	1.6	1.6	1.4	1.4	1.4	1.5	1.6	1.7	1.7
Median Existing-Home Price	\$ ths	353.9	390.2	392.5	410.1	422.8	443.1	456.2	474.7	493.7
Change	%YA	18.4	10.2	0.6	4.5	3.1	4.8	3.0	4.0	4.0
Consumer Price Index	%AR	4.7	8.0	4.1	3.0	3.2	3.2	2.1	2.0	1.8
Federal Funds Rate	%	0.1	1.7	5.0	5.1	4.2	3.3	3.0	3.0	2.9
Treasury Yield: 10-Yr Bond	%	1.4	3.0	4.0	4.2	4.3	4.3	4.4	4.3	4.2
Baa Corp. - 10-Yr Treasury	DIFF	1.9	2.1	1.9	1.5	1.9	2.4	2.5	2.4	2.5
Corporate Profits With IVA & CCA	\$ bil	3,077.6	3,316.7	3,546.5	3,827.8	3,748.2	4,027.1	4,334.3	4,651.9	4,920.2
Change	%YA	27.6	7.8	6.9	7.9	-2.1	7.4	7.6	7.3	5.8
S&P 500	1941=10	4,266.8	4,100.7	4,284.2	5,426.7	5,698.8	6,083.4	6,205.5	6,558.9	6,923.5
Change	%YA	32.6	-3.9	4.5	26.7	5.0	6.7	2.0	5.7	5.6
CRE Price Index	index	346.3	341.0	317.3	305.0	310.8	330.0	352.0	368.6	385.5
NCREIF Property Index: Rate of Return	%, NSA	4.2	1.4	-2.0	0.1	1.6	1.8	1.8	1.8	1.8
C&I Loans Outstanding	\$ bil	2,479.5	2,642.1	2,771.3	2,766.9	2,879.2	3,199.4	3,345.0	3,481.8	3,661.9
BAA spread	%	1.9	2.1	1.9	1.5	1.9	2.4	2.5	2.4	2.5

S2: Alternative Scenario 2 – Downside – 75th Percentile

In this scenario, there is a 75% probability that the economy will perform better, broadly speaking, and a 25% probability that it will perform worse.

Key assumptions/risks

- The impacts of Trump administration's tariffs and deportations on the economy are worse than expected, causing inflation to rise in the second quarter of 2025.
- The effective tariff rate rises from about 2% to 22.8%, as in the baseline, and the administration does not roll it back significantly until the second half of 2026.
- Elevated interest rates weaken credit-sensitive spending more than anticipated.
- Worries grow that the Hamas-Israel conflict will widen and that Russia's invasion of Ukraine will persist longer than expected. The risk also increases that China might block the Taiwan Strait, limiting the supply of semiconductor chips from Taiwan and raising fears of a broader conflict. Business and consumer confidence declines.
- The combination of tariffs, rising inflation, deportations, political tensions, still-elevated interest rates, and reduced credit availability causes the economy to fall into a mild recession starting in the third quarter of 2025. The decline lasts for three quarters, and the peak-to-trough decline is 1%. The unemployment rate rises to a peak of 7.1% in the second quarter of 2026.
- The stock market falls another 23% from the second quarter of 2024 through the first quarter of 2026.
- Declines in European economies hurt U.S. exports and also corporate earnings from European subsidiaries.
- The economy returns to full employment by mid-2029.

Monetary policy assumptions

- The Fed began to ease in the third quarter of 2024. However, despite the onset of recession in the third quarter of 2025, rising inflation causes the Fed to raise the fed funds rate. It resumes easing in the fourth quarter of 2025 as the recession persists and the fed funds rate goes below the baseline at that point.
- The 10-year Treasury rises above the baseline starting in the third quarter of 2025 because of increased inflation. It then falls some as the recession persists because of the flight to quality.

Fiscal policy assumptions

- Just as in the baseline, the S2 assumes a full extension of the Tax Cuts and Jobs Act personal income provisions, increased state and local tax deductions, certain business tax provisions, reduced taxes on tips, and a reduction of the statutory corporate tax rate from 21% to 15% for domestic producers.
- One offset will be new tariffs. The effective tariff rate will rise from about 2% to 22.8%, as in the baseline, and the administration does not roll it back significantly until the second half of 2026.
- To offset the net reduction in tax revenue, the administration will limit growth in nondefense spending and eliminate spending on Ukraine and emergency spending on foreign aid.
- However, defense spending will continue to rise. Further, there will not be material changes to existing legislation, including the Infrastructure Investment and Jobs Act, the IRA (except for EV tax credits), or the CHIPS Act. There remains a significant amount of funds that have yet to be allocated, with the peak impact occurring within the next two to three years.
- The tax policy assumptions in S2 are fundamentally the same as in the baseline. However, since the economy is weaker, tax revenues are lower than in the baseline and the deficit is higher. On balance, the budget deficit will be about -6.6% in fiscal 2025, compared with -6.1% in the baseline. The higher deficit adds to worries about growth in the national debt, raising uncertainty over the course of tax policy. Though no crisis ultimately materializes, business and consumer sentiment is damaged.

→ No additional measures to stem the recession are enacted.

In the downside 25% scenario, “S2: Alternative Scenario 2 – Downside – 75th Percentile,” the combination of increased tariffs, rising inflation, deportations, persistent political tensions, still-elevated interest rates, and reduced credit availability causes the economy to fall into a mild recession starting in the third quarter of 2025. The decline lasts for three quarters, and the peak-to-trough decline in real GDP is 1%. Despite the recession, rising inflation causes the Fed to raise the fed funds rate in the third quarter. It resumes easing in the fourth quarter of 2025 as the recession persists, and the fed funds rate falls below the baseline at that point. The stock market falls from the second quarter of 2025 through the first quarter of 2026, by another 23% cumulatively. Further, declines in European economies and retaliatory tariffs hurt U.S. exports and also corporate earnings from European subsidiaries. The weakening global economy causes oil prices to start to fall immediately.

The weakening in the economy causes the unemployment rate to rise in the third quarter of 2025 and reach a peak of 7.1% in the second quarter of 2026. House prices decline 5.8% between mid-2025 and mid-2026 versus an increase of 0.7% in the baseline. The economy begins to recover in the second quarter of 2026 amid Fed easing. The economy returns to full employment by mid-2029.

The change in real GDP on an annual average basis is 0.8% in 2025 and -0.2% in 2026, compared with 1.3% and 1.5%, respectively, in each of those years in the baseline. Reduced business investment lowers productivity so that the level of real GDP remains below the baseline indefinitely.

U.S. MACRO S2 SCENARIO —FORECAST SUMMARY—May 2025										
	Units	25Q1	25Q2	25Q3	25Q4	26Q1	26Q2	26Q3	26Q4	27Q1
Gross Domestic Product	bcw \$	23,526.1	23,549.0	23,517.3	23,414.3	23,313.0	23,363.5	23,478.9	23,640.4	23,808.5
Change	%AR	-0.3	0.4	-0.5	-1.7	-1.7	0.9	2.0	2.8	2.9
Federal Budget	\$ bil	-596.2	-55.2	-437.5	-626.2	-568.4	-264.4	-598.1	-769.5	-617.0
Total Employment	mil	159.2	159.5	157.3	155.8	154.7	154.3	154.8	155.8	156.9
Change	%AR	1.4	0.8	-5.3	-3.8	-2.9	-0.9	1.2	2.6	2.9
Unemployment Rate	%	4.1	4.2	5.4	6.4	7.0	7.1	6.9	6.5	5.9
Light Vehicle Sales	mil, SAAR	16.4	16.3	15.4	15.1	14.8	15.0	15.5	15.7	15.8
Residential Housing Starts	mil, SAAR	1.4	1.4	1.3	1.1	1.0	1.1	1.2	1.2	1.2
Median Existing-Home Price	\$ ths	417.8	417.5	413.9	391.1	384.1	387.6	390.6	392.6	393.8
Change	%YA	3.4	2.2	1.0	-6.4	-8.1	-7.2	-5.6	0.4	2.5
Consumer Price Index	%AR	3.8	3.8	3.6	2.8	2.2	1.7	0.7	1.4	2.5
Federal Funds Rate	%	4.3	4.3	4.5	3.4	2.8	2.3	2.2	2.1	2.0
Treasury Yield: 10-Yr Bond	%	4.5	4.2	4.3	3.9	3.6	3.7	3.8	3.8	3.9
Baa Corp. - 10-Yr Treasury	DIFF	1.5	2.0	2.4	3.2	3.3	3.1	2.9	2.8	2.7
Corporate Profits With IVA & CCA	\$ bil	4,066.5	3,510.5	3,556.3	3,462.8	3,381.1	3,549.9	3,669.0	3,748.5	3,812.2
Change	%YA	10.4	-8.0	-6.5	-13.6	-16.9	1.1	3.2	8.3	12.7
S&P 500	1941=10	5,900.7	5,319.7	4,668.0	4,394.9	4,086.9	4,144.2	4,234.3	4,314.9	4,418.1
Change	%YA	18.1	1.2	-15.8	-25.6	-30.7	-22.1	-9.3	-1.8	8.1
CRE Price Index	index	305.4	305.8	301.4	290.1	278.2	273.6	274.8	285.9	295.8
NCREIF Property Index: Rate of Return	%, NSA	1.3	1.3	0.6	0.0	-0.3	0.9	1.1	1.7	1.8
C&I Loans Outstanding	\$ bil	2,782.7	2,838.6	2,781.4	2,780.8	2,772.4	2,792.7	2,828.0	2,854.2	2,879.0
BAA spread	%	1.5	2.0	2.4	3.2	3.3	3.1	2.9	2.8	2.7

	Units	2021	2022	2023	2024	2025	2026	2027	2028	2029
Gross Domestic Product	bcw \$	21,494.8	22,034.8	22,671.1	23,305.0	23,501.6	23,448.9	24,077.6	24,787.4	25,479.2
Change	%AR	6.1	2.5	2.9	2.8	0.8	-0.2	2.7	2.9	2.8
Federal Budget	\$ bil	-2,580.4	-1,419.2	-1,783.8	-2,033.4	-1,715.1	-2,200.3	-2,167.5	-2,035.8	-2,087.9
Total Employment	mil	146.3	152.5	155.9	158.0	158.0	154.9	158.3	159.7	160.8
Change	%AR	2.9	4.3	2.2	1.3	0.0	-1.9	2.2	0.9	0.7
Unemployment Rate	%	5.4	3.6	3.6	4.0	5.0	6.9	5.2	4.6	4.4
Light Vehicle Sales	mil, SAAR	14.9	13.8	15.5	15.8	15.8	15.2	16.2	16.8	17.2
Residential Housing Starts	mil, SAAR	1.6	1.6	1.4	1.4	1.3	1.1	1.3	1.4	1.4
Median Existing-Home Price	\$ ths	353.9	390.2	392.5	410.1	410.1	388.7	398.4	414.3	428.4
Change	%YA	18.4	10.2	0.6	4.5	0.0	-5.2	2.5	4.0	3.4
Consumer Price Index	%AR	4.7	8.0	4.1	3.0	3.2	2.3	1.9	2.1	2.0
Federal Funds Rate	%	0.1	1.7	5.0	5.1	4.1	2.3	2.0	2.7	2.9
Treasury Yield: 10-Yr Bond	%	1.4	3.0	4.0	4.2	4.2	3.8	4.1	4.2	4.2
Baa Corp. - 10-Yr Treasury	DIFF	1.9	2.1	1.9	1.5	2.3	3.0	2.6	2.3	2.3
Corporate Profits With IVA & CCA	\$ bil	3,077.6	3,316.7	3,546.5	3,827.8	3,649.0	3,587.2	3,951.3	4,285.5	4,515.8
Change	%YA	27.6	7.8	6.9	7.9	-4.7	-1.7	10.2	8.5	5.4
S&P 500	1941=10	4,266.8	4,100.7	4,284.2	5,426.7	5,070.8	4,195.0	4,588.8	5,345.1	6,031.5
Change	%YA	32.6	-3.9	4.5	26.7	-6.6	-17.3	9.4	16.5	12.8
CRE Price Index	index	346.3	341.0	317.3	305.0	290.1	285.9	316.7	337.3	363.4
NCREIF Property Index: Rate of Return	%, NSA	4.2	1.4	-2.0	0.1	0.8	0.9	1.8	2.0	2.1
C&I Loans Outstanding	\$ bil	2,479.5	2,642.1	2,771.3	2,766.9	2,795.9	2,811.8	2,908.1	3,025.4	3,202.7
BAA spread	%	1.9	2.1	1.9	1.5	2.3	3.0	2.6	2.3	2.3

S3: Alternative Scenario 3 – Downside – 90th Percentile

In this scenario, there is a 90% probability that the economy will perform better, broadly speaking, and a 10% probability that it will perform worse.

Key assumptions/risks

- The impacts of the Trump administration's tariffs and deportations on the economy are significantly worse than expected, causing inflation to rise above the baseline.
- The effective tariff rate rises from about 2% to 27.6%, more than the 22.8% in the baseline, and the administration does not roll it back significantly until the second half of 2027.
- Rising inflation causes the Fed to raise the fed funds rate in the third and fourth quarters of 2025, and the elevated interest rates weaken credit-sensitive spending more than anticipated. Business and consumer confidence declines.
- Worries grow that Russia's invasion of Ukraine will persist longer than expected and that the Hamas-Israel conflict will widen. The risk increases that China might block the Taiwan Strait, limiting the supply of semiconductor chips from Taiwan and raising fears of a broader conflict.
- The combination of tariffs, rising inflation, deportations, political tensions, still-elevated interest rates, and reduced credit availability causes the economy to fall into recession in the third quarter of 2025.
- Declines in European economies and retaliatory tariffs hurt U.S. exports and also corporate earnings from European subsidiaries.
- Unemployment begins to increase significantly in the third quarter of 2025. From the second quarter of 2025 through the first quarter of 2026, real GDP declines cumulatively by 2.5%. The unemployment rate peaks at 8.3% in the third quarter of 2026.
- Recovery begins in the second quarter of 2026 amid Fed easing. However, the economy does not return to full employment until the first quarter of 2030.

Monetary policy assumptions

- The Fed began to ease in the third quarter of 2024. However, despite the recession starting in the third quarter of 2025, rising inflation causes the Fed to reverse course and to raise the fed funds rate in the third and fourth quarters of 2025. It resumes easing in the first quarter of 2026 as the recession persists and the fed funds rate falls below the baseline at that time.
- The 10-year Treasury rises above the baseline in the third and fourth quarters of 2025 because of increased inflation. Subsequently, it falls as the recession persists because of the flight to quality.

Fiscal policy assumptions

- Just as in the baseline, the S3 assumes a full extension of the Tax Cuts and Jobs Act personal income provisions, increased state and local tax deductions, certain business tax provisions, reduced taxes on tips, and a reduction of the statutory corporate tax rate from 21% to 15% for domestic producers.
- One offset will be new tariffs. The effective tariff rate will rise from about 2% to 27.6%, more than the 22.8% in the baseline, and the administration does not roll it back significantly until the second half of 2027.
- To offset the net reduction in tax revenue, the administration will limit growth in nondefense spending and eliminate spending on Ukraine and emergency spending on foreign aid.
- However, defense spending will continue to rise. Further, there will not be material changes to existing legislation, including the Infrastructure Investment and Jobs Act, the IRA (except for EV tax credits), or the CHIPS Act. There remains a significant amount of funds that have yet to be allocated, with the peak impact occurring within the next two to three years.

- The tax policy assumptions in S3 are fundamentally the same as in the baseline. However, since the economy is weaker, tax revenues are lower than in the baseline and the deficit is higher. On balance, the budget deficit will be about -7.1% in fiscal 2025, compared with -6.1% in the baseline. The higher deficit adds to worries about growth in the national debt, raising uncertainty over the course of tax policy. Though no crisis ultimately materializes, business and consumer sentiment is damaged.
- No additional measures to stem the recession are enacted.

In the downside scenario “S3: Alternative Scenario 3 – Downside – 90th Percentile,” the combination of tariffs, retaliatory tariffs, rising inflation, deportations, political tensions, and the Fed response of a rising fed funds rate causes the economy to fall into recession in the third quarter of 2025. Retaliatory tariffs reduce U.S. exports and lead to a global downturn. The global contraction causes oil prices to fall below the baseline. The recession lasts through the first quarter of 2026, during which time the stock market falls another 35%.

Rising unemployment and higher tariffs cause unit auto sales to drop back to less than 13 million in 2026, compared with well over 16 million in the baseline at that time. The economies of Europe also go into recession, as the increased tariffs lower their exports. Populism in Europe rises, once again raising uncertainties about the longevity of the euro zone. This contributes to the economic and financial stress faced by heavily indebted nations in the region, especially Italy. These developments further lower U.S. exports and also corporate earnings of foreign subsidiaries of U.S. companies.

The Fed began to ease in the third quarter of 2024. However, despite the recession beginning in the third quarter of 2025, rising inflation causes the Fed to reverse course and to raise the fed funds rate during the third and fourth quarters of 2025. It resumes easing in the first quarter of 2026 as the recession persists, and at that point, the fed funds rate is below the baseline. The 10-year Treasury also rises in the third and fourth quarters of 2025 because of inflation but then declines because of the flight to quality amid the decline in the stock market and the contracting economy. Because of disagreements in Congress, no further measures are enacted to stem the recession.

Real GDP declines from the second quarter of 2025 through the first quarter of 2026. The cumulative decline is 2.5%. The unemployment rate peaks at 8.3% in the third quarter of 2026. The rising unemployment rate causes house prices to drop more than 12% between mid-2025 and mid-2026. By comparison, in the baseline, house prices rise 0.7% during that time.

The Fed’s easing allows the economy to begin to recover in the second quarter of 2026. However, the economy does not return to full employment until the first quarter of 2030.

The change in real GDP on an annual average basis is 0.5% in 2025 and -1.7% in 2026, compared with 1.3% and 1.5%, respectively, in each of those years in the baseline. Reduced business investment lowers productivity so that the level of real GDP remains below the baseline indefinitely.

U.S. MACRO S3 SCENARIO—FORECAST SUMMARY—May 2025

	Units	25Q1	25Q2	25Q3	25Q4	26Q1	26Q2	26Q3	26Q4	27Q1
Gross Domestic Product	bcw \$	23,526.1	23,549.0	23,383.0	23,200.9	22,948.0	22,968.5	23,027.0	23,113.7	23,227.0
Change	%AR	-0.3	0.4	-2.8	-3.1	-4.3	0.4	1.0	1.5	2.0
Federal Budget	\$ bil	-596.2	-55.2	-426.4	-641.2	-573.0	-254.7	-570.8	-724.6	-609.5
Total Employment	mil	159.2	159.5	155.5	153.4	152.1	151.2	151.0	151.2	151.8
Change	%AR	1.4	0.8	-9.6	-5.3	-3.5	-2.3	-0.4	0.5	1.7
Unemployment Rate	%	4.1	4.2	5.9	7.2	7.9	8.2	8.3	8.2	8.0
Light Vehicle Sales	mil, SAAR	16.4	16.3	14.0	13.7	13.4	12.9	12.5	12.4	12.5
Residential Housing Starts	mil, SAAR	1.4	1.4	1.1	0.9	0.8	0.7	0.6	0.6	0.7
Median Existing-Home Price	\$ ths	417.8	417.5	392.9	365.7	357.5	356.8	358.6	362.1	366.2
Change	%YA	3.4	2.2	-4.2	-12.5	-14.4	-14.5	-8.7	-1.0	2.4
Consumer Price Index	%AR	3.8	3.8	5.1	3.8	0.7	1.0	0.2	1.0	1.5
Federal Funds Rate	%	4.3	4.3	4.5	4.8	3.4	2.9	2.5	2.0	1.4
Treasury Yield: 10-Yr Bond	%	4.5	4.2	4.6	4.7	3.1	3.2	3.4	3.5	3.6
Baa Corp. - 10-Yr Treasury	DIFF	1.5	2.0	2.5	3.5	4.1	3.6	3.1	2.9	2.9
Corporate Profits With IVA & CCA	\$ bil	4,066.5	3,510.5	3,145.4	2,947.7	2,799.2	2,930.5	3,029.8	3,101.1	3,224.5
Change	%YA	10.4	-8.0	-17.3	-26.4	-31.2	-16.5	-3.7	5.2	15.2
S&P 500	1941=10	5,900.7	5,319.7	4,634.3	4,135.6	3,466.6	3,510.0	3,566.1	3,587.8	3,658.2
Change	%YA	18.1	1.2	-16.4	-30.0	-41.3	-34.0	-23.1	-13.2	5.5
CRE Price Index	index	305.4	305.8	300.6	287.5	269.9	257.5	248.2	248.1	251.4
NCREIF Property Index: Rate of Return	%, NSA	1.3	1.3	0.0	-0.9	-2.1	0.0	0.5	0.8	1.2
C&I Loans Outstanding	\$ bil	2,782.7	2,838.6	2,676.1	2,674.3	2,632.5	2,644.9	2,687.2	2,728.0	2,755.2
BAA spread	%	1.5	2.0	2.5	3.5	4.1	3.6	3.1	2.9	2.9

	Units	2021	2022	2023	2024	2025	2026	2027	2028	2029
Gross Domestic Product	bcw \$	21,494.8	22,034.8	22,671.1	23,305.0	23,414.8	23,014.3	23,439.1	24,254.4	25,111.1
Change	%AR	6.1	2.5	2.9	2.8	0.5	-1.7	1.8	3.5	3.5
Federal Budget	\$ bil	-2,580.4	-1,419.2	-1,783.8	-2,033.4	-1,719.0	-2,123.1	-2,357.0	-2,384.8	-2,241.2
Total Employment	mil	146.3	152.5	155.9	158.0	156.9	151.4	153.3	156.5	158.7
Change	%AR	2.9	4.3	2.2	1.3	-0.7	-3.5	1.3	2.1	1.4
Unemployment Rate	%	5.4	3.6	3.6	4.0	5.3	8.2	7.5	6.1	5.0
Light Vehicle Sales	mil, SAAR	14.9	13.8	15.5	15.8	15.1	12.8	13.6	16.0	17.1
Residential Housing Starts	mil, SAAR	1.6	1.6	1.4	1.4	1.2	0.7	0.8	1.0	1.3
Median Existing-Home Price	\$ ths	353.9	390.2	392.5	410.1	398.5	358.8	373.7	392.2	407.6
Change	%YA	18.4	10.2	0.6	4.5	-2.8	-10.0	4.2	5.0	3.9
Consumer Price Index	%AR	4.7	8.0	4.1	3.0	3.5	2.0	1.2	1.7	1.8
Federal Funds Rate	%	0.1	1.7	5.0	5.1	4.5	2.7	1.0	1.4	2.0
Treasury Yield: 10-Yr Bond	%	1.4	3.0	4.0	4.2	4.5	3.3	3.8	4.0	4.1
Baa Corp. - 10-Yr Treasury	DIFF	1.9	2.1	1.9	1.5	2.4	3.4	2.7	2.3	2.2
Corporate Profits With IVA & CCA	\$ bil	3,077.6	3,316.7	3,546.5	3,827.8	3,417.5	2,965.1	3,445.0	3,872.0	4,184.6
Change	%YA	27.6	7.8	6.9	7.9	-10.7	-13.2	16.2	12.4	8.1
S&P 500	1941=10	4,266.8	4,100.7	4,284.2	5,426.7	4,997.6	3,532.6	3,869.3	4,695.6	5,453.5
Change	%YA	32.6	-3.9	4.5	26.7	-7.9	-29.3	9.5	21.4	16.1
CRE Price Index	index	346.3	341.0	317.3	305.0	287.5	248.1	274.9	310.4	343.3
NCREIF Property Index: Rate of Return	%, NSA	4.2	1.4	-2.0	0.1	0.4	-0.2	1.5	2.3	2.4
C&I Loans Outstanding	\$ bil	2,479.5	2,642.1	2,771.3	2,766.9	2,742.9	2,673.2	2,792.0	2,909.4	3,059.8
BAA spread	%	1.9	2.1	1.9	1.5	2.4	3.4	2.7	2.3	2.2

S4: Alternative Scenario 4 – Downside – 96th Percentile

In this scenario, there is a 96% probability that the economy will perform better, broadly speaking, and a 4% probability that it will perform worse.

Key assumptions/risks

- The impacts of the Trump administration's tariffs and deportations on the economy are far worse than expected.
- The effective tariff rate rises from about 2% to 31.6%, more than the 22.8% in the baseline, and the administration does not roll it back significantly until the second half of 2028.
- Elevated interest rates weaken credit-sensitive spending more than anticipated. However, despite the weakening economy, rising inflation due to the tariffs causes the Fed to raise the fed funds rate in the third and fourth quarters of 2025.
- Worries grow that the crisis caused by Russia's invasion of Ukraine persists longer than expected and that the Hamas-Israel conflict will widen. The risk grows that China might block the Taiwan Strait, limiting the supply of semiconductor chips from Taiwan and raising fears of a broader conflict.
- The combination of tariffs, foreign retaliatory tariffs, rising inflation, deportations, political tensions, still-elevated interest rates, and reduced credit availability causes the economy to fall into a deep recession in the third quarter of 2025.
- Declines in European economies and retaliatory tariffs hurt U.S. exports and also corporate earnings from European subsidiaries.
- Unemployment begins to increase significantly in the third quarter of 2025 and reaches a peak of 9.3% in the second quarter of 2027.
- The downturn lasts for more than a year and begins to subside amid Fed easing. From the second quarter of 2025 through the third quarter of 2026, real GDP declines cumulatively by 4.3%.
- The economy does not return to full employment until 2034.

Monetary policy assumptions

- The Fed began to ease in the third quarter of 2024. However, despite the recession beginning in the third quarter of 2025, rising inflation causes the Fed to reverse course and to raise the fed funds rate in the third and fourth quarters of 2025. It resumes easing in the first quarter of 2026 as the recession deepens, when the fed funds rate falls below the baseline.
- The 10-year Treasury rises above the baseline in the third and fourth quarters of 2025 because of increased inflation. It then falls as the recession persists because of the flight to quality.

Fiscal policy assumptions

- Just as in the baseline, the S4 assumes a full extension of the Tax Cuts and Jobs Act personal income provisions, increased state and local tax deductions, certain business tax provisions, reduced taxes on tips, and a reduction of the statutory corporate tax rate from 21% to 15% for domestic producers.
- One offset will be new tariffs. The effective tariff rate will rise from about 2% to 31.6%, more than the 22.8% in the baseline, and the administration does not roll it back significantly until 2028.
- To offset the net reduction in tax revenue, the administration will limit growth in nondefense spending and eliminate spending on Ukraine and emergency spending on foreign aid.
- However, defense spending will continue to rise. Further, there will not be material changes to existing legislation, including the Infrastructure Investment and Jobs Act, the IRA (except for EV tax credits), or the CHIPS Act. There remains a significant amount of funds that have yet to be allocated, with the peak impact occurring within the next two to three years.

- The tax policy assumptions in S4 are fundamentally the same as in the baseline. However, since the economy is weaker, tax revenues are lower than in the baseline and the deficit is higher despite increased tariff revenues. On balance, the budget deficit will be about -7.6% in fiscal 2025, compared with -6.1% in the baseline. The higher deficit adds to worries about growth in the national debt, raising uncertainty over the course of tax policy. Though no crisis ultimately materializes, business and consumer sentiment is damaged.
- No additional measures to stem the recession are enacted.

In the downside 4% scenario, “S4: Alternative Scenario 4 – Downside – 96th Percentile,” the impacts of Trump administration tariffs and deportations on the economy are significantly worse than expected, causing inflation to accelerate. Elevated interest rates weaken credit-sensitive spending more than anticipated, and rising inflation causes the Fed to raise the fed funds rate during the third and fourth quarters of 2025. Worries grow that Russia’s invasion of Ukraine will persist longer than expected, and the Hamas-Israel conflict will widen. The risk increases that China might block the Taiwan Strait, limiting the supply of semiconductor chips from Taiwan and raising fears of a broader conflict. Business and consumer confidence declines. The combination of rising tariffs, rising inflation, deportations, political tensions, still-high and rising interest rates, and reduced credit availability causes the economy to fall into recession in the third quarter of 2025.

The contraction causes oil prices to fall below the baseline. The recession lasts through the third quarter of 2026. During that time, the stock market falls another 45%. Rising unemployment causes unit auto sales to drop back to less than 11 million units by 2026, compared with well over 16 million in the baseline at that time.

The economies across Europe contract as tariffs lower their exports. Populism in Europe accelerates, once again putting the euro zone’s existence at risk. This contributes to the economic and financial stress faced by heavily indebted nations, especially Italy. The declines in Europe lower corporate earnings of foreign subsidiaries of U.S. companies, contributing to the decline in the stock market, and also reduce U.S. exports to Europe, deepening the U.S. recession. So do retaliatory tariffs. Because of disagreements in Congress, no further measures are enacted to stem the recession.

The Fed had begun to ease in the third quarter of 2024. However, despite the recession starting in the third quarter of 2025, rising inflation causes the Fed to reverse course and to raise the fed funds rate during the third and fourth quarters of 2025. It resumes easing in the first quarter of 2026 as the recession deepens, and the fed funds rate falls below the baseline. The 10-year Treasury rises above the baseline in the third and fourth quarters of 2025 because of increased inflation. It then falls as the recession persists because of the flight to quality.

Real GDP declines from the second quarter of 2025 through the third quarter of 2026. The cumulative decline is 4.3%. The unemployment rate peaks at 9.3% in the second quarter of 2027. The rising unemployment rate causes house prices to drop 17% between mid-2025 and mid-2026. By comparison, in the baseline, house prices rise 0.8% during that time. Disagreements in Congress prevent stimulus measures to stem the downturn. The economy does not return to full employment until 2034.

The change in real GDP on an annual average basis is 0.4% in 2025 and -3.3% in 2026, compared with growth of 1.3% and 1.5%, respectively, in those years in the baseline. Reduced business investment lowers productivity so that the level of real GDP remains below the baseline indefinitely.

U.S. MACRO S4 SCENARIO —FORECAST SUMMARY—May 2025

	Units	25Q1	25Q2	25Q3	25Q4	26Q1	26Q2	26Q3	26Q4	27Q1
Gross Domestic Product	bcw \$	23,526.1	23,549.0	23,355.7	23,114.0	22,798.9	22,573.1	22,524.0	22,565.3	22,639.5
Change	%AR	-0.3	0.4	-3.2	-4.1	-5.3	-3.9	-0.9	0.7	1.3
Federal Budget	\$ bil	-596.2	-55.2	-420.1	-655.9	-598.2	-303.2	-638.7	-797.1	-655.1
Total Employment	mil	159.2	159.5	154.9	152.6	151.0	149.8	149.1	148.7	148.6
Change	%AR	1.4	0.8	-11.1	-5.7	-4.2	-3.2	-1.8	-1.0	-0.4
Unemployment Rate	%	4.1	4.2	6.3	7.8	8.4	8.9	9.1	9.2	9.2
Light Vehicle Sales	mil, SAAR	16.4	16.3	13.9	13.4	12.8	12.1	10.7	10.7	10.6
Residential Housing Starts	mil, SAAR	1.4	1.4	1.1	0.8	0.8	0.7	0.5	0.4	0.4
Median Existing-Home Price	\$ ths	417.8	417.5	381.5	359.3	340.1	334.1	333.1	334.6	335.8
Change	%YA	3.4	2.2	-6.9	-14.1	-18.6	-20.0	-12.7	-6.9	-1.3
Consumer Price Index	%AR	3.8	3.8	6.3	4.2	0.1	0.7	-0.8	0.1	0.6
Federal Funds Rate	%	4.3	4.3	4.6	4.8	3.8	2.7	1.7	1.0	0.8
Treasury Yield: 10-Yr Bond	%	4.5	4.2	4.7	4.8	3.4	2.8	2.7	2.9	3.2
Baa Corp. - 10-Yr Treasury	DIFF	1.5	2.0	2.7	4.0	4.8	4.4	3.8	3.3	3.1
Corporate Profits With IVA & CCA	\$ bil	4,066.5	3,510.5	3,097.7	2,849.7	2,641.2	2,545.2	2,484.6	2,540.1	2,609.9
Change	%YA	10.4	-8.0	-18.5	-28.9	-35.1	-27.5	-19.8	-10.9	-1.2
S&P 500	1941=10	5,900.7	5,319.7	4,569.5	4,038.1	3,358.4	2,979.6	2,951.9	2,959.2	3,012.2
Change	%YA	18.1	1.2	-17.6	-31.7	-43.1	-44.0	-35.4	-26.7	-10.3
CRE Price Index	index	305.4	305.8	299.9	283.6	262.3	244.0	227.2	222.0	220.8
NCREIF Property Index: Rate of Return	%, NSA	1.3	1.3	-0.8	-2.3	-4.3	-2.8	-1.3	-0.5	0.4
C&I Loans Outstanding	\$ bil	2,782.7	2,838.6	2,590.3	2,493.7	2,404.6	2,374.3	2,358.7	2,336.2	2,319.3
BAA spread	%	1.5	2.0	2.7	4.0	4.8	4.4	3.8	3.3	3.1

	Units	2021	2022	2023	2024	2025	2026	2027	2028	2029
Gross Domestic Product	bcw \$	21,494.8	22,034.8	22,671.1	23,305.0	23,386.2	22,615.3	22,807.2	23,617.2	24,444.3
Change	%AR	6.1	2.5	2.9	2.8	0.3	-3.3	0.8	3.6	3.5
Federal Budget	\$ bil	-2,580.4	-1,419.2	-1,783.8	-2,033.4	-1,727.5	-2,337.3	-2,361.6	-2,606.9	-2,714.5
Total Employment	mil	146.3	152.5	155.9	158.0	156.5	149.7	148.9	151.2	154.2
Change	%AR	2.9	4.3	2.2	1.3	-0.9	-4.4	-0.5	1.6	1.9
Unemployment Rate	%	5.4	3.6	3.6	4.0	5.6	8.9	9.2	8.6	7.3
Light Vehicle Sales	mil, SAAR	14.9	13.8	15.5	15.8	15.0	11.6	11.9	14.4	15.4
Residential Housing Starts	mil, SAAR	1.6	1.6	1.4	1.4	1.2	0.6	0.5	0.8	0.9
Median Existing-Home Price	\$ ths	353.9	390.2	392.5	410.1	394.0	335.5	340.5	358.4	373.5
Change	%YA	18.4	10.2	0.6	4.5	-3.9	-14.9	1.5	5.3	4.2
Consumer Price Index	%AR	4.7	8.0	4.1	3.0	3.6	1.8	0.5	1.0	1.4
Federal Funds Rate	%	0.1	1.7	5.0	5.1	4.5	2.3	0.5	0.5	0.6
Treasury Yield: 10-Yr Bond	%	1.4	3.0	4.0	4.2	4.5	3.0	3.4	3.6	3.9
Baa Corp. - 10-Yr Treasury	DIFF	1.9	2.1	1.9	1.5	2.6	4.1	2.9	2.4	2.2
Corporate Profits With IVA & CCA	\$ bil	3,077.6	3,316.7	3,546.5	3,827.8	3,381.1	2,552.8	2,753.2	3,165.6	3,530.9
Change	%YA	27.6	7.8	6.9	7.9	-11.7	-24.5	7.9	15.0	11.5
S&P 500	1941=10	4,266.8	4,100.7	4,284.2	5,426.7	4,957.0	3,062.3	3,084.5	3,670.1	4,370.1
Change	%YA	32.6	-3.9	4.5	26.7	-8.7	-38.2	0.7	19.0	19.1
CRE Price Index	index	346.3	341.0	317.3	305.0	283.6	222.0	227.4	261.4	301.8
NCREIF Property Index: Rate of Return	%, NSA	4.2	1.4	-2.0	0.1	-0.1	-2.2	1.1	2.2	2.6
C&I Loans Outstanding	\$ bil	2,479.5	2,642.1	2,771.3	2,766.9	2,676.3	2,368.5	2,326.8	2,431.8	2,584.9
BAA spread	%	1.9	2.1	1.9	1.5	2.6	4.1	2.9	2.4	2.2

S5: Slower-Trend Growth Scenario

In this low-performance, long-term scenario, the economy underperforms its potential indefinitely.

Key assumptions/risks

- Higher tariffs and deportations of immigrants weaken the economy more than expected.
- Elevated interest rates slow credit-sensitive spending more and longer than expected.
- Worries grow that the Hamas-Israel conflict will widen.
- The Russian invasion of Ukraine and tensions between China and Taiwan persist longer than expected.

Monetary policy assumptions

- The Fed lowers the fed funds rate somewhat more than in the baseline starting in the third quarter of 2025 because of weaker growth.
- The 10-year Treasury yield is lower than in the baseline, because of the weaker growth and slightly lower inflation.

Fiscal policy assumptions

- Just as in the baseline, the S5 assumes a full extension of the Tax Cuts and Jobs Act personal income provisions, increased state and local tax deductions, certain business tax provisions, reduced taxes on tips, and a reduction of the statutory corporate tax rate from 21% to 15% for domestic producers.
- One offset will be new tariffs, raising the effective tariff rate from about 2% to 22.8%, the same as in the baseline. However, the negative effects of the tariffs will subsequently cause the administration to begin to roll them back later in 2025.
- To offset the net reduction in tax revenue, the administration will limit growth in nondefense spending and eliminate spending on Ukraine and emergency spending on foreign aid.
- However, defense spending will continue to rise. Further, there will not be material changes to existing legislation, including the Infrastructure Investment and Jobs Act, the IRA (except for EV tax credits), or the CHIPS Act. There remains a significant amount of funds that have yet to be allocated, with the peak impact occurring within the next two to three years.
- The tax policy assumptions in S5 are fundamentally the same as in the baseline. However, since the economy is weaker, tax revenues are lower than in the baseline and the deficit is higher. On balance, the budget deficit will be about -6.6% in fiscal 2025, compared with -6.1% in the baseline, despite the additional tariff revenue. The higher deficit adds to worries about growth in the national debt, raising investors' concerns over the course of tax policy. Though no crisis ultimately materializes, business and consumer sentiment is damaged.

In the low-performance “S5: Slower-Trend Growth Scenario,” economic growth is slower than in the baseline starting in the third quarter of 2025, and stronger growth never materializes. There are several drivers. First, tariffs and deportations weaken growth more than expected. Second, elevated interest rates slow credit-sensitive spending more and longer than expected. Third, worries grow that the Hamas-Israel conflict will widen. Also, Russia’s invasion of Ukraine and tensions between China and Taiwan persist longer than expected.

The weakness in the economy keeps capacity utilization lower than in the baseline, reducing the need for business investment. The lower capital accumulation results in productivity gains that are lower than in the baseline indefinitely. Real GDP growth is persistently lower than in the baseline over the next decade, and the level of real GDP is permanently lower. On an annual average basis, real GDP growth is 1.2% in 2025 and 1% in 2026, compared with 1.3% and 1.5%, respectively, in those years in the baseline.

The unemployment rate drifts back up to a percentage point above the baseline and remains elevated for several years. The dislocation in the labor market hampers the typical pattern of advances in worker productivity, as

employees find fewer opportunities to develop their skills while on the job. The result is productivity growth that is weaker than in the baseline.

U.S. MACRO S5 SCENARIO —FORECAST SUMMARY—May 2025

	Units	25Q1	25Q2	25Q3	25Q4	26Q1	26Q2	26Q3	26Q4	27Q1
Gross Domestic Product	bcw \$	23,526.1	23,549.0	23,589.8	23,659.8	23,707.4	23,786.6	23,871.5	23,940.2	24,018.6
Change	%AR	-0.3	0.4	0.7	1.2	0.8	1.3	1.4	1.2	1.3
Federal Budget	\$ bil	-596.2	-55.2	-486.1	-679.5	-600.4	-315.2	-661.8	-831.7	-706.9
Total Employment	mil	159.2	159.5	159.0	158.3	157.7	157.1	156.9	156.9	157.0
Change	%AR	1.4	0.8	-1.2	-1.7	-1.7	-1.4	-0.6	0.1	0.1
Unemployment Rate	%	4.1	4.2	4.5	4.9	5.4	5.9	6.0	5.9	5.9
Light Vehicle Sales	mil, SAAR	16.4	16.3	15.3	15.3	15.5	15.6	15.7	15.7	15.7
Residential Housing Starts	mil, SAAR	1.4	1.4	1.3	1.3	1.3	1.3	1.3	1.3	1.2
Median Existing-Home Price	\$ ths	417.8	417.5	417.5	416.2	416.2	416.1	415.4	415.8	416.7
Change	%YA	3.4	2.2	1.9	-0.5	-0.4	-0.4	-0.5	-0.1	0.1
Consumer Price Index	%AR	3.8	3.8	3.0	2.8	3.1	2.6	1.7	1.5	1.7
Federal Funds Rate	%	4.3	4.3	4.0	3.6	3.2	3.0	2.8	2.9	2.9
Treasury Yield: 10-Yr Bond	%	4.5	4.2	4.0	3.9	3.9	3.9	4.0	4.0	4.0
Baa Corp. - 10-Yr Treasury	DIFF	1.5	2.0	2.4	2.5	2.5	2.6	2.6	2.6	2.6
Corporate Profits With IVA & CCA	\$ bil	4,066.5	3,510.5	3,653.1	3,752.3	3,806.1	3,908.6	3,970.3	3,948.0	3,938.6
Change	%YA	10.4	-8.0	-3.9	-6.4	-6.4	11.3	8.7	5.2	3.5
S&P 500	1941=10	5,900.7	5,319.7	5,337.5	5,435.0	5,486.7	5,563.4	5,563.3	5,545.8	5,568.6
Change	%YA	18.1	1.2	-3.8	-8.1	-7.0	4.6	4.2	2.0	1.5
CRE Price Index	index	305.4	305.8	305.9	305.9	305.6	305.3	309.0	316.3	322.4
NCREIF Property Index: Rate of Return	%, NSA	1.3	1.3	1.3	1.3	1.4	1.4	1.5	1.5	1.6
C&I Loans Outstanding	\$ bil	2,782.7	2,838.6	2,848.0	2,868.2	2,880.6	2,895.1	2,896.6	2,890.6	2,894.8
BAA spread	%	1.5	2.0	2.4	2.5	2.5	2.6	2.6	2.6	2.6

	Units	2021	2022	2023	2024	2025	2026	2027	2028	2029
Gross Domestic Product	bcw \$	21,494.8	22,034.8	22,671.1	23,305.0	23,581.2	23,826.4	24,147.6	24,569.7	25,114.3
Change	%AR	6.1	2.5	2.9	2.8	1.2	1.0	1.3	1.7	2.2
Federal Budget	\$ bil	-2,580.4	-1,419.2	-1,783.8	-2,033.4	-1,817.0	-2,409.1	-2,651.9	-2,648.3	-2,654.4
Total Employment	mil	146.3	152.5	155.9	158.0	159.0	157.1	157.2	158.3	159.8
Change	%AR	2.9	4.3	2.2	1.3	0.7	-1.2	0.0	0.7	0.9
Unemployment Rate	%	5.4	3.6	3.6	4.0	4.4	5.8	5.7	5.1	4.6
Light Vehicle Sales	mil, SAAR	14.9	13.8	15.5	15.8	15.8	15.6	16.0	16.8	17.2
Residential Housing Starts	mil, SAAR	1.6	1.6	1.4	1.4	1.4	1.3	1.2	1.3	1.3
Median Existing-Home Price	\$ ths	353.9	390.2	392.5	410.1	417.3	415.9	419.7	433.2	448.8
Change	%YA	18.4	10.2	0.6	4.5	1.7	-0.3	0.9	3.2	3.6
Consumer Price Index	%AR	4.7	8.0	4.1	3.0	3.1	2.7	1.8	1.6	1.6
Federal Funds Rate	%	0.1	1.7	5.0	5.1	4.0	3.0	2.9	2.9	2.9
Treasury Yield: 10-Yr Bond	%	1.4	3.0	4.0	4.2	4.1	4.0	4.1	4.1	4.1
Baa Corp. - 10-Yr Treasury	DIFF	1.9	2.1	1.9	1.5	2.1	2.6	2.6	2.5	2.5
Corporate Profits With IVA & CCA	\$ bil	3,077.6	3,316.7	3,546.5	3,827.8	3,745.6	3,908.3	4,006.4	4,190.4	4,356.8
Change	%YA	27.6	7.8	6.9	7.9	-2.1	4.3	2.5	4.6	4.0
S&P 500	1941=10	4,266.8	4,100.7	4,284.2	5,426.7	5,498.2	5,539.8	5,628.0	5,950.3	6,284.6
Change	%YA	32.6	-3.9	4.5	26.7	1.3	0.8	1.6	5.7	5.6
CRE Price Index	index	346.3	341.0	317.3	305.0	305.9	316.3	338.2	358.4	379.1
NCREIF Property Index: Rate of Return	%, NSA	4.2	1.4	-2.0	0.1	1.3	1.4	1.7	1.8	1.8
C&I Loans Outstanding	\$ bil	2,479.5	2,642.1	2,771.3	2,766.9	2,834.4	2,890.7	2,911.9	3,007.9	3,171.7
BAA spread	%	1.9	2.1	1.9	1.5	2.1	2.6	2.6	2.5	2.5

S6: Stagflation Scenario

In this stagflation scenario, inflation reaccelerates as the economy weakens. The Fed is initially more concerned about the weakening economy and does not respond to inflation throughout 2025. In 2026, it responds by sharply tightening credit, causing the economy to fall into a deep recession after mid-2026.

Key assumptions/risks

- Inflation accelerates above the baseline in the third quarter of 2025 and remains elevated throughout the year. Real growth decelerates below the baseline, but there is no recession during that time.
- Several factors drive the acceleration of inflation. First, President Trump keeps tariffs higher than in the baseline, increasing the cost of both consumer goods and also inputs into production. Second, more deportations of immigrants than in the baseline result in labor shortages and, therefore, higher wage costs. Third, sanctions against Iranian oil exports are imposed, causing an overall loss in volumes on the international market. As a result, oil prices begin to rise, ultimately to \$87 per barrel by mid-2026, and the higher prices contribute to the acceleration in inflation.
- The peak tariff rate is 27.6% compared with 22.8% in the baseline, and tariffs remain elevated through most of 2027.
- Tensions between the U.S. and China persist. As a result, supply-chain problems, with increased shortages of many goods, also boost inflation and weaken manufacturing. A wage-price spiral develops.
- President Trump insists that the Fed reduce the fed funds rate despite the elevated inflation, and the Fed obliges throughout 2025. The interest rate reductions in 2025 match those in the baseline.
- The yield on the 10-year Treasury jumps because of the higher expected inflation. Foreign investors fear that the Fed will address inflation and therefore sell off Treasury securities, causing the dollar to fall.
- The persistence of inflation causes the Fed to stop cutting rates at the end of 2025.
- Subsequently, despite weakening in the economy, and in response to the wage-price spiral and other inflation pressures, the Fed ultimately raises the fed funds rate by 200 basis points above the baseline in the second quarter of 2026. The extra tightening of credit causes the economy to fall into a deep recession starting in the fourth quarter of 2026, with unemployment rising to 9.1% in the third quarter of 2027. Real GDP declines 3.2% cumulatively. The recession causes inflation to subside.

Monetary policy assumptions

- Despite the acceleration of inflation, President Trump insists that the Fed not raise rates, and the Fed obliges throughout 2025. The interest rate reductions in 2025 match those in the baseline. The Fed stops cutting the fed funds rate at the end of 2025. However, in the second quarter of 2026, it raises the fed funds rate by 200 basis points to stem the persistent inflation. The terminal range of the fed funds rate is 5.75% to 6%.
- The higher-than-expected inflation drives the yield on the 10-year Treasury sharply higher than in the baseline in 2025 despite the deceleration in growth. Subsequently, as the economy goes into recession, it falls amid a flight to quality.

Fiscal policy assumptions

- Just as in the baseline, the S6 assumes a full extension of the Tax Cuts and Jobs Act personal income provisions, increased state and local tax deductions, certain business tax provisions, reduced taxes on tips, and a reduction of the statutory corporate tax rate from 21% to 15% for domestic producers.
- One offset will be revenue from the new tariffs, with the effective tariff rising rate from about 2% to 27.6%, more than the 22.8% in the baseline. The administration keeps tariffs elevated through most of 2027.
- To offset the net reduction in tax revenue, the administration will limit growth in nondefense spending and eliminate spending on Ukraine and emergency spending on foreign aid.
- However, defense spending will continue to rise. Further, there will not be material changes to existing legislation, including the Infrastructure Investment and Jobs Act, the IRA (except for EV tax credits), or the CHIPS Act. There

remains a significant amount of funds that have yet to be allocated, with the peak impact occurring within the next two to three years.

- The tax policy assumptions in S6 are fundamentally the same as in the baseline. However, since the economy is weaker, tax revenues are lower than in the baseline and the deficit is higher. On balance, the budget deficit will be about -6.6% in fiscal 2025, compared with -6.1% in the baseline, despite the additional tariff revenue. The higher deficit adds to worries about growth in the national debt, raising investors' concerns over the course of tax policy. Though no crisis ultimately materializes, business and consumer sentiment is damaged.
- Because of disagreements in Congress, no further measures are enacted to stem the recession.

In the "S6: Stagflation Scenario," several factors drive the acceleration of inflation. First, President Trump raises tariffs more than expected, increasing the cost of both consumer goods and also inputs into production. The peak tariff rate is 27.6% compared with 22.8% in the baseline, and tariffs remain elevated through most of 2027. Second, deportations of immigrants result in labor shortages and, therefore, higher wage costs. Third, oil markets come under increased pressure as sanctions against Iranian oil exports are imposed, causing an overall loss in volumes on the international market. As a result, oil prices rise substantially. Further, the Russian invasion of Ukraine worsens, leading to fears that the G-7 will apply more stringent sanctions on Russian oil. The higher oil prices contribute to an acceleration in inflation. OPEC does not soothe market concerns by increasing supply, and the Brent oil price rises to \$87 per barrel by mid-2026. A wage-price spiral begins to develop. Further, supply-chain issues reemerge as the Russian invasion of Ukraine and U.S.-China tensions worsen. As a result, the economy decelerates below the baseline throughout 2025 and early 2026, though it continues to grow during that time.

Despite the acceleration of inflation, President Trump insists that the Fed cut the fed funds rate, and the Fed obliges throughout 2025. Foreign investors fear that the Fed will not address inflation and therefore sell off Treasury securities, causing the dollar to fall. The yield on the 10-year Treasury jumps because of the higher expected inflation. The interest rate reductions in 2025 match those in the baseline. However, the persistence of high inflation causes the Fed to stop cutting rates at the end of 2025 and to raise the fed funds rate by 200 basis points in the second quarter of 2026. The terminal range of the fed funds rate is 5.75% to 6% at that point.

The tightening of credit causes the economy to fall into a deep recession in the fourth quarter of 2026, and unemployment rises sharply. Real GDP drops 3.2% cumulatively from the third quarter of 2026 to the third quarter of 2027, and the unemployment rate reaches a peak of 9.1% by the third quarter of 2027. Because of disagreements in Congress, no further measures are enacted to stem the recession.

The recession ultimately brings down inflation, allowing the Fed to lower the fed funds rate, enabling the economy to recover.

The change in real GDP on an annual average basis is 1.3% in 2025, 0.4% in 2026, and -2.3% in 2027, compared with 1.3%, 1.5% and 2.1%, respectively, in each of those years in the baseline. Reduced business investment lowers productivity so that the level of real GDP remains below the baseline indefinitely.

U.S. MACRO S6 SCENARIO —FORECAST SUMMARY—May 2025

	Units	25Q1	25Q2	25Q3	25Q4	26Q1	26Q2	26Q3	26Q4	27Q1
Gross Domestic Product	bcw \$	23,526.1	23,549.0	23,570.9	23,613.5	23,647.7	23,678.7	23,695.8	23,495.6	23,248.1
Change	%AR	-0.3	0.4	0.4	0.7	0.6	0.5	0.3	-3.3	-4.1
Federal Budget	\$ bil	-596.2	-55.2	-379.4	-544.7	-460.8	-158.7	-492.9	-723.1	-703.6
Total Employment	mil	159.2	159.5	158.7	158.4	158.2	158.0	157.8	156.3	154.3
Change	%AR	1.4	0.8	-2.0	-0.6	-0.6	-0.5	-0.4	-3.8	-4.9
Unemployment Rate	%	4.1	4.2	4.5	4.7	5.0	5.2	5.4	6.2	7.2
Light Vehicle Sales	mil, SAAR	16.4	16.3	15.5	15.7	15.8	15.8	15.9	15.3	14.2
Residential Housing Starts	mil, SAAR	1.4	1.4	1.3	1.3	1.3	1.2	1.2	1.2	1.1
Median Existing-Home Price	\$ ths	417.8	417.5	416.7	416.2	416.2	413.1	416.2	408.4	401.0
Change	%YA	3.4	2.2	1.7	-0.5	-0.4	-1.1	-0.1	-1.9	-3.6
Consumer Price Index	%AR	3.8	3.8	5.2	5.3	5.5	5.3	4.4	3.6	2.3
Federal Funds Rate	%	4.3	4.3	4.1	3.8	3.8	5.8	5.8	5.8	5.4
Treasury Yield: 10-Yr Bond	%	4.5	4.2	6.5	6.8	6.9	7.1	6.6	5.7	5.1
Baa Corp. - 10-Yr Treasury	DIFF	1.5	2.0	2.3	2.5	2.5	2.8	3.1	3.4	3.8
Corporate Profits With IVA & CCA	\$ bil	4,066.5	3,510.5	3,529.7	3,568.7	3,616.1	3,646.8	3,646.6	3,672.0	3,724.4
Change	%YA	10.4	-8.0	-7.2	-10.9	-11.1	3.9	3.3	2.9	3.0
S&P 500	1941=10	5,900.7	5,319.7	5,328.2	5,380.7	5,433.8	5,474.1	5,501.7	4,745.8	4,268.2
Change	%YA	18.1	1.2	-3.9	-9.0	-7.9	2.9	3.3	-11.8	-21.4
CRE Price Index	index	305.4	305.8	302.5	297.7	291.1	283.3	278.0	274.6	268.1
NCREIF Property Index: Rate of Return	%, NSA	1.3	1.3	0.7	0.4	0.1	-0.8	-1.4	-2.0	-1.8
C&I Loans Outstanding	\$ bil	2,782.7	2,838.6	2,850.8	2,866.9	2,865.6	2,805.5	2,787.3	2,754.8	2,720.3
BAA spread	%	1.5	2.0	2.3	2.5	2.5	2.8	3.1	3.4	3.8

	Units	2021	2022	2023	2024	2025	2026	2027	2028	2029
Gross Domestic Product	bcw \$	21,494.8	22,034.8	22,671.1	23,305.0	23,564.9	23,629.4	23,073.1	23,575.4	24,538.5
Change	%AR	6.1	2.5	2.9	2.8	1.1	0.3	-2.4	2.2	4.1
Federal Budget	\$ bil	-2,580.4	-1,419.2	-1,783.8	-2,033.4	-1,575.5	-1,835.5	-3,239.5	-3,569.4	-3,300.6
Total Employment	mil	146.3	152.5	155.9	158.0	159.0	157.6	152.1	153.1	156.8
Change	%AR	2.9	4.3	2.2	1.3	0.6	-0.9	-3.5	0.7	2.5
Unemployment Rate	%	5.4	3.6	3.6	4.0	4.4	5.4	8.3	7.3	5.2
Light Vehicle Sales	mil, SAAR	14.9	13.8	15.5	15.8	16.0	15.7	13.8	15.7	17.1
Residential Housing Starts	mil, SAAR	1.6	1.6	1.4	1.4	1.4	1.2	1.0	1.1	1.3
Median Existing-Home Price	\$ ths	353.9	390.2	392.5	410.1	417.1	413.5	390.8	393.1	419.3
Change	%YA	18.4	10.2	0.6	4.5	1.7	-0.9	-5.5	0.6	6.7
Consumer Price Index	%AR	4.7	8.0	4.1	3.0	3.6	5.0	2.5	0.5	1.1
Federal Funds Rate	%	0.1	1.7	5.0	5.1	4.1	5.3	4.7	3.0	2.9
Treasury Yield: 10-Yr Bond	%	1.4	3.0	4.0	4.2	5.5	6.6	4.6	4.3	4.2
Baa Corp. - 10-Yr Treasury	DIFF	1.9	2.1	1.9	1.5	2.1	3.0	3.6	2.7	2.2
Corporate Profits With IVA & CCA	\$ bil	3,077.6	3,316.7	3,546.5	3,827.8	3,668.9	3,645.4	3,875.0	4,049.4	4,315.2
Change	%YA	27.6	7.8	6.9	7.9	-4.2	-0.6	6.3	4.5	6.6
S&P 500	1941=10	4,266.8	4,100.7	4,284.2	5,426.7	5,482.4	5,288.8	3,861.7	4,072.6	4,974.2
Change	%YA	32.6	-3.9	4.5	26.7	1.0	-3.5	-27.0	5.5	22.1
CRE Price Index	index	346.3	341.0	317.3	305.0	297.7	274.6	247.1	245.8	274.5
NCREIF Property Index: Rate of Return	%, NSA	4.2	1.4	-2.0	0.1	0.9	-1.0	-1.1	0.9	2.6
C&I Loans Outstanding	\$ bil	2,479.5	2,642.1	2,771.3	2,766.9	2,834.8	2,803.3	2,641.7	2,495.4	2,767.9
BAA spread	%	1.9	2.1	1.9	1.5	2.1	3.0	3.6	2.7	2.2

S7: Next-Cycle Recession Scenario

This downside scenario reflects the risk that the Federal Reserve's overly tight policy response to inflation would cause the next recession.

Key assumptions/risks

- Inflation accelerates back to more than 4% in 2025. There are several drivers. First, President Trump raises tariffs more than expected, increasing the cost of imported goods and inputs into production. Second, deportations of immigrants cause labor shortages. Third, oil prices rise as tensions in Ukraine and the Middle East persist and sanctions are imposed on Iranian oil.
- The peak tariff rate is 25.4% compared with 22.8% in the baseline, and tariffs remain elevated through most of 2026.
- To address the rising inflation, the Fed raises the fed funds rate 25 basis points per quarter starting in the third quarter of 2025 through the second quarter of 2026. The terminal range is 5.25% to 5.5%. Business and household confidence declines.
- The elevated cost of borrowing reduces credit-sensitive spending more than expected.
- The combination of the reacceleration of inflation, higher tariffs than expected, additional Fed rate increases, and declining confidence causes economic growth to decelerate during the remainder of 2025 and to fall into recession in the second quarter of 2026. The rising unemployment rate causes the stock market to fall sharply.
- The recession lasts three quarters.
- The unemployment rate peaks at 6.2% in the fourth quarter of 2026.
- The economy returns to full employment in the first quarter of 2030.

Monetary policy assumptions

- To fight inflation, the Fed raises the fed funds rate by 25 basis points per quarter starting in the third quarter of 2025 through the second quarter of 2026. The terminal range is 5.25% to 5.5%. After the economy has begun to decline, the Fed lowers the fed funds rate starting in the third quarter of 2026.
- The yield on the 10-year Treasury rises above the baseline in 2025 because of the extra inflation and the increase in the fed funds rate. It begins to fall in the second quarter of 2026 as the economy goes into recession.

Fiscal policy assumptions

- Just as in the baseline, the S7 assumes a full extension of the Tax Cuts and Jobs Act personal income provisions, increased state and local tax deductions, certain business tax provisions, reduced taxes on tips, and a reduction of the statutory corporate tax rate from 21% to 15% for domestic producers.
- One offset will be new tariffs. The effective tariff rate will rise from about 2% to 25.4%, more than the 22.8% in the baseline, and the administration does not roll it back significantly until the second half of 2026.
- To offset the net reduction in tax revenue, the administration will limit growth in nondefense spending and eliminate spending on Ukraine and emergency spending on foreign aid. However, defense spending will continue to rise. Further, there will not be material changes to existing legislation, including the Infrastructure Investment and Jobs Act, the IRA (except for EV tax credits), or the CHIPS Act. There remains a significant amount of funds that have yet to be allocated, with the peak impact occurring within the next two to three years.
- The tax policy assumptions in S7 are fundamentally the same as in the baseline. However, since the economy is weaker, tax revenues are lower than in the baseline and the deficit is higher.
- On balance, the budget deficit will be about -6.5% in fiscal 2025, compared with -6.1% in the baseline, despite the additional tariff revenue. The higher deficit adds to worries about growth in the national debt, raising investors' concerns over the course of tax policy. Though no crisis ultimately materializes, business and consumer sentiment is damaged.

→ Because of disagreements in Congress, no further measures are enacted to stem the recession.

In the “S7: Next-Cycle Recession Scenario,” inflation accelerates back to 4% in 2025. There are several drivers. First, President Trump raises tariffs more than expected. The peak tariff rate is 25.4% compared with 22.8% in the baseline, and tariffs remain elevated through most of 2026. Second, deportations of immigrants cause labor shortages. Third, oil prices rise as tensions in Ukraine and the Middle East persist and sanctions are imposed on Iranian oil.

As a result, the Fed raises the fed funds rate 25 basis points per quarter starting in the third quarter of 2025 through the second quarter of 2026. The terminal range is 5.25% to 5.5%. Business and household confidence declines. The combination of the reacceleration of inflation, higher tariffs, additional Fed rate increases, and declining confidence causes economic growth to decelerate during the remainder of 2025 and to fall into recession in the second quarter of 2026. The rising unemployment rate causes the stock market to fall sharply. The recession lasts three quarters.

Real GDP drops 1.5% peak to trough and begins to recover in the first quarter of 2027. The unemployment rate reaches a peak of 6.2% in the fourth quarter of 2026. Inflation begins to decelerate, allowing the economy to begin to recover. Because of disagreements in Congress, no further measures are enacted to stem the recession.

The changes in real GDP on an annual average basis are 1.1% in 2025 and -0.5% in 2026, compared with 1.3% and 1.5%, respectively, in those years in the baseline.

U.S. MACRO S7 SCENARIO —FORECAST SUMMARY—May 2025

	Units	25Q1	25Q2	25Q3	25Q4	26Q1	26Q2	26Q3	26Q4	27Q1
Gross Domestic Product	bcw \$	23,526.1	23,549.0	23,581.4	23,612.2	23,634.4	23,519.9	23,382.2	23,285.0	23,362.9
Change	%AR	-0.3	0.4	0.6	0.5	0.4	-1.9	-2.3	-1.7	1.3
Federal Budget	\$ bil	-596.2	-55.2	-393.2	-566.9	-509.4	-258.9	-649.7	-875.5	-746.6
Total Employment	mil	159.2	159.5	159.2	159.0	158.7	157.5	156.0	154.8	155.1
Change	%AR	1.4	0.8	-0.7	-0.7	-0.6	-3.0	-3.9	-3.0	0.8
Unemployment Rate	%	4.1	4.2	4.2	4.4	4.6	5.0	5.8	6.2	5.9
Light Vehicle Sales	mil, SAAR	16.4	16.3	15.4	15.6	15.7	14.6	13.6	13.1	13.7
Residential Housing Starts	mil, SAAR	1.4	1.4	1.4	1.3	1.3	1.3	1.2	1.2	1.2
Median Existing-Home Price	\$ ths	417.8	417.5	417.4	417.2	416.8	409.0	403.2	398.2	394.2
Change	%YA	3.4	2.2	1.8	-0.2	-0.2	-2.0	-3.4	-4.5	-5.4
Consumer Price Index	%AR	3.8	3.8	4.3	4.0	4.5	3.2	1.4	0.4	0.8
Federal Funds Rate	%	4.3	4.3	4.6	4.8	5.1	5.3	4.5	4.1	3.5
Treasury Yield: 10-Yr Bond	%	4.5	4.2	4.6	4.9	5.2	4.6	4.3	4.3	4.3
Baa Corp. - 10-Yr Treasury	DIFF	1.5	2.0	2.7	2.9	3.1	3.2	3.2	3.3	3.2
Corporate Profits With IVA & CCA	\$ bil	4,066.5	3,510.5	3,474.9	3,510.7	3,562.6	3,604.9	3,617.1	3,638.1	3,599.5
Change	%YA	10.4	-8.0	-8.6	-12.4	-12.4	2.7	4.1	3.6	1.0
S&P 500	1941=10	5,900.7	5,319.7	5,359.2	5,385.8	5,412.5	4,925.0	4,494.8	4,172.1	4,299.4
Change	%YA	18.1	1.2	-3.4	-8.9	-8.3	-7.4	-16.1	-22.5	-20.6
CRE Price Index	index	305.4	305.8	304.6	301.2	294.9	287.4	282.3	280.6	278.6
NCREIF Property Index: Rate of Return	%, NSA	1.3	1.3	0.3	-0.2	-0.7	-0.9	-0.1	0.0	0.2
C&I Loans Outstanding	\$ bil	2,782.7	2,838.6	2,844.4	2,842.8	2,835.4	2,820.2	2,812.1	2,771.5	2,735.0
BAA spread	%	1.5	2.0	2.7	2.9	3.1	3.2	3.2	3.3	3.2

	Units	2021	2022	2023	2024	2025	2026	2027	2028	2029
Gross Domestic Product	bcw \$	21,494.8	22,034.8	22,671.1	23,305.0	23,567.2	23,455.4	23,685.6	24,604.6	25,502.6
Change	%AR	6.1	2.5	2.9	2.8	1.1	-0.5	1.0	3.9	3.6
Federal Budget	\$ bil	-2,580.4	-1,419.2	-1,783.8	-2,033.4	-1,611.5	-2,293.6	-2,703.3	-2,380.5	-2,259.6
Total Employment	mil	146.3	152.5	155.9	158.0	159.2	156.8	155.9	157.8	159.3
Change	%AR	2.9	4.3	2.2	1.3	0.8	-1.5	-0.6	1.2	0.9
Unemployment Rate	%	5.4	3.6	3.6	4.0	4.2	5.4	5.5	4.6	4.3
Light Vehicle Sales	mil, SAAR	14.9	13.8	15.5	15.8	15.9	14.2	14.6	16.6	17.2
Residential Housing Starts	mil, SAAR	1.6	1.6	1.4	1.4	1.4	1.2	1.2	1.4	1.4
Median Existing-Home Price	\$ ths	353.9	390.2	392.5	410.1	417.5	406.8	397.3	417.3	441.6
Change	%YA	18.4	10.2	0.6	4.5	1.8	-2.5	-2.3	5.0	5.8
Consumer Price Index	%AR	4.7	8.0	4.1	3.0	3.4	3.4	1.2	1.9	1.7
Federal Funds Rate	%	0.1	1.7	5.0	5.1	4.5	4.7	3.2	3.0	2.9
Treasury Yield: 10-Yr Bond	%	1.4	3.0	4.0	4.2	4.5	4.6	4.3	4.3	4.2
Baa Corp. - 10-Yr Treasury	DIFF	1.9	2.1	1.9	1.5	2.3	3.2	2.8	2.2	2.2
Corporate Profits With IVA & CCA	\$ bil	3,077.6	3,316.7	3,546.5	3,827.8	3,640.7	3,605.7	3,763.0	4,298.1	4,770.4
Change	%YA	27.6	7.8	6.9	7.9	-4.9	-1.0	4.4	14.2	11.0
S&P 500	1941=10	4,266.8	4,100.7	4,284.2	5,426.7	5,491.3	4,751.1	4,541.1	5,643.3	6,478.1
Change	%YA	32.6	-3.9	4.5	26.7	1.2	-13.5	-4.4	24.3	14.8
CRE Price Index	index	346.3	341.0	317.3	305.0	301.2	280.6	280.8	299.2	327.3
NCREIF Property Index: Rate of Return	%, NSA	4.2	1.4	-2.0	0.1	0.7	-0.4	0.8	1.8	2.3
C&I Loans Outstanding	\$ bil	2,479.5	2,642.1	2,771.3	2,766.9	2,827.1	2,809.8	2,708.5	2,854.3	3,125.4
BAA spread	%	1.9	2.1	1.9	1.5	2.3	3.2	2.8	2.2	2.2

S8: Low Oil Price Scenario

This scenario is designed as a benchmark to reflect the impact on the economy under the assumption of lower oil prices.

Key assumptions/risks

- Weak global economic activity and reduced global energy demand contribute to lower oil prices. Weak global demand is caused by the impacts of elevated U.S. tariff rates on non-U.S. exports and a weaker-than-expected recovery in China.
- OPEC increases production substantially despite excess supply in order to regain market share.
- The Hamas-Isreal ceasefire holds, relieving regional tensions about oil supply.
- Russia manages to increase total energy exports to pre-2022 levels despite EU sanctions. The economic impact of the Russian invasion of Ukraine resolves sooner than expected.
- The Brent oil price falls and remains below the baseline projection through 2027, averaging only half the baseline level during that time.

Monetary policy assumptions

- The fed funds rate is slightly lower than in the baseline because of the lower inflation.
- The long-term Treasury yield is slightly lower than in the baseline in 2025 because of the lower inflation caused by low oil prices.

Fiscal policy assumptions

- Just as in the baseline, the S8 assumes a full extension of the Tax Cuts and Jobs Act personal income provisions, increased state and local tax deductions, certain business tax provisions, reduced taxes on tips, and a reduction of the statutory corporate tax rate from 21% to 15% for domestic producers.
- One offset will be new tariffs, raising the effective tariff rate from about 2% to 22.8%, the same as in the baseline. However, the negative effects of the tariffs will subsequently cause the administration to begin to roll them back later in 2025.
- To offset the net reduction in tax revenue, the administration will limit growth in nondefense spending and eliminate spending on Ukraine and emergency spending on foreign aid.
- However, defense spending will continue to rise. Further, there will not be material changes to existing legislation, including the Infrastructure Investment and Jobs Act, the IRA (except for EV tax credits), or the CHIPS Act. There remains a significant amount of funds that have yet to be allocated, with the peak impact occurring within the next two to three years.
- The tax policy assumptions in S8 are fundamentally the same as in the baseline. However, since the economy is slightly stronger, tax revenues are slightly higher than in the baseline and the deficit is lower. On balance, the budget deficit will be about -5.9% in fiscal 2025, compared with -6.1% in the baseline.

The “S8: Low Oil Price Scenario” assumes that weak global demand caused by U.S. tariffs results in an excess supply of oil. Further, the Hamas-Isreal ceasefire relieves regional tensions about oil supply. OPEC increases production substantially despite excess supply. Further, Russia manages to export as much oil as before the invasion of Ukraine. Additionally, the economic consequences of the Russian invasion of Ukraine resolve sooner than expected.

As a result, oil supply outpaces demand over the next several years amid weak economic growth. As a result, this scenario assumes that the time path for the price of oil is half that of the baseline over the next several years.

In terms of real economic activity in the U.S., lower oil prices have two major offsetting effects. The first is that the energy industry contracts, with oil exploration and related employment slowing below the baseline pace starting in

the third quarter of 2025. Oil production also falls during that time. This effect has become increasingly important for the U.S. economy, as its energy industry has grown quickly during the past decade. The second effect is comparable to a tax cut because lower gasoline costs increase disposable income available for other consumer spending. Moreover, the reduced energy costs overall increase the profitability of industrial production.

The result of these two offsetting effects is that real GDP overall performs slightly worse than in the baseline initially and then slightly better through 2028, and at the peak, the level of real GDP is 0.3% higher than in the baseline.

Oil prices begin to rise steadily starting in 2029, faster than in the baseline, and as a result, overall real GDP growth decelerates to the baseline pace over the next several years. The assumption is that oil prices rise relative to the CPI and ultimately return to the baseline level by 2035. The basis for this assumption is the historical observation that, although oil prices are highly volatile, over long periods the inflation-adjusted price of oil has trended neither up nor down.

U.S. MACRO S8 SCENARIO —FORECAST SUMMARY—May 2025

	Units	25Q1	25Q2	25Q3	25Q4	26Q1	26Q2	26Q3	26Q4	27Q1
Gross Domestic Product	bcw \$	23,526.1	23,549.0	23,604.0	23,717.7	23,834.5	23,962.2	24,091.4	24,201.9	24,321.1
Change	%AR	-0.3	0.4	0.9	1.9	2.0	2.2	2.2	1.8	2.0
Federal Budget	\$ bil	-596.2	-55.2	-474.4	-651.3	-557.0	-250.6	-586.7	-752.3	-621.2
Total Employment	mil	159.2	159.5	159.5	159.5	159.5	159.4	159.4	159.4	159.4
Change	%AR	1.4	0.8	-0.1	0.0	0.1	-0.1	-0.2	0.0	0.1
Unemployment Rate	%	4.1	4.2	4.0	4.1	4.3	4.4	4.6	4.6	4.6
Light Vehicle Sales	mil, SAAR	16.4	16.3	15.9	16.6	16.9	17.0	16.9	16.9	16.9
Residential Housing Starts	mil, SAAR	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.6	1.6
Median Existing-Home Price	\$ ths	417.8	417.5	418.0	418.0	417.7	417.9	418.3	418.8	419.3
Change	%YA	3.4	2.2	2.0	0.0	0.0	0.1	0.1	0.2	0.4
Consumer Price Index	%AR	3.8	3.8	0.9	1.4	2.3	1.7	1.0	0.9	1.2
Federal Funds Rate	%	4.3	4.3	4.1	3.6	3.3	3.1	2.8	2.8	3.0
Treasury Yield: 10-Yr Bond	%	4.5	4.2	3.9	3.8	3.8	3.7	3.7	3.7	4.0
Baa Corp. - 10-Yr Treasury	DIFF	1.5	2.0	2.3	2.3	2.3	2.3	2.4	2.4	2.5
Corporate Profits With IVA & CCA	\$ bil	4,066.5	3,510.5	3,653.7	3,722.6	3,740.6	3,793.9	3,838.5	3,834.9	3,844.2
Change	%YA	10.4	-8.0	-3.9	-7.1	-8.0	8.1	5.1	3.0	2.8
S&P 500	1941=10	5,900.7	5,319.7	5,497.8	5,696.6	5,873.6	6,058.3	6,138.4	6,139.1	6,182.6
Change	%YA	18.1	1.2	-0.9	-3.6	-0.5	13.9	11.7	7.8	5.3
CRE Price Index	index	305.4	305.8	306.1	306.8	307.7	309.2	315.2	325.0	333.1
NCREIF Property Index: Rate of Return	%, NSA	1.3	1.3	1.5	1.6	1.7	1.9	2.0	2.0	2.0
C&I Loans Outstanding	\$ bil	2,782.7	2,838.6	2,836.9	2,858.2	2,883.2	2,908.2	2,927.4	2,934.7	2,944.2
BAA spread	%	1.5	2.0	2.3	2.3	2.3	2.3	2.4	2.4	2.5

	Units	2021	2022	2023	2024	2025	2026	2027	2028	2029
Gross Domestic Product	bcw \$	21,494.8	22,034.8	22,671.1	23,305.0	23,599.2	24,022.5	24,481.9	25,001.5	25,605.4
Change	%AR	6.1	2.5	2.9	2.8	1.3	1.8	1.9	2.1	2.4
Federal Budget	\$ bil	-2,580.4	-1,419.2	-1,783.8	-2,033.4	-1,777.1	-2,146.7	-2,306.9	-2,353.0	-2,445.0
Total Employment	mil	146.3	152.5	155.9	158.0	159.4	159.4	159.6	160.3	161.2
Change	%AR	2.9	4.3	2.2	1.3	0.9	0.0	0.1	0.5	0.6
Unemployment Rate	%	5.4	3.6	3.6	4.0	4.1	4.4	4.6	4.3	4.1
Light Vehicle Sales	mil, SAAR	14.9	13.8	15.5	15.8	16.3	16.9	17.0	17.3	17.4
Residential Housing Starts	mil, SAAR	1.6	1.6	1.4	1.4	1.4	1.5	1.6	1.5	1.4
Median Existing-Home Price	\$ ths	353.9	390.2	392.5	410.1	417.8	418.2	421.7	432.3	444.7
Change	%YA	18.4	10.2	0.6	4.5	1.9	0.1	0.8	2.5	2.9
Consumer Price Index	%AR	4.7	8.0	4.1	3.0	2.8	1.7	1.3	1.6	2.1
Federal Funds Rate	%	0.1	1.7	5.0	5.1	4.1	3.0	3.0	3.0	3.0
Treasury Yield: 10-Yr Bond	%	1.4	3.0	4.0	4.2	4.1	3.7	4.1	4.5	4.5
Baa Corp. - 10-Yr Treasury	DIFF	1.9	2.1	1.9	1.5	2.0	2.4	2.5	2.4	2.5
Corporate Profits With IVA & CCA	\$ bil	3,077.6	3,316.7	3,546.5	3,827.8	3,738.3	3,801.9	3,904.9	4,123.7	4,345.6
Change	%YA	27.6	7.8	6.9	7.9	-2.3	1.7	2.7	5.6	5.4
S&P 500	1941=10	4,266.8	4,100.7	4,284.2	5,426.7	5,603.7	6,052.4	6,300.9	6,693.0	7,000.5
Change	%YA	32.6	-3.9	4.5	26.7	3.3	8.0	4.1	6.2	4.6
CRE Price Index	index	346.3	341.0	317.3	305.0	306.8	325.0	352.3	368.4	377.8
NCREIF Property Index: Rate of Return	%, NSA	4.2	1.4	-2.0	0.1	1.4	1.9	1.9	1.6	1.4
C&I Loans Outstanding	\$ bil	2,479.5	2,642.1	2,771.3	2,766.9	2,829.1	2,913.4	2,972.3	3,081.0	3,244.0
BAA spread	%	1.9	2.1	1.9	1.5	2.0	2.4	2.5	2.4	2.5

CF: Consensus Scenario

This scenario is designed to incorporate the central tendency of a range of baseline forecasts produced by various institutions. Since the result is itself a baseline, by definition the probability that the economy will perform better than this consensus is equal to the probability that it will perform worse.

The “CF: Consensus Scenario” is based on the review of a variety of surveys of baseline forecasts of the U.S. economy. These surveys vary in date of latest vintage, number of updates per year, list of variables forecast, duration of forecast, frequency of data (quarterly or annual), and the number of respondents to a survey. In the preparation of the Moody’s Analytics consensus forecast, the focus is on the next three to five years since that is the most typical duration in the surveyed results. The approach is to give greater consideration to whatever forecasts were produced most recently since they will include the most up-to-date historical information, and to those variables for which the number of surveyed responses is largest.

Some publicly available surveys are published quarterly, including the Philadelphia Federal Reserve Survey of Professional Forecasters (<https://www.philadelphiafed.org/surveys-and-data/real-time-data-research/spf-q1-2025>, February 2025) and the Federal Open Market Committee members’ range of forecasts (<https://www.federalreserve.gov/monetarypolicy/fomcproptabl20250319.htm>, March 2025). Moody’s Analytics also includes in its review a survey published by a private provider of consensus forecasts. This source provides the medians of projections by upwards of 40 major institutions, including banks and consulting firms, and is published monthly.

The publication of new historical data since the time a survey was published can result in some forecast figures changing, simply as a matter of arithmetic. This has been taken into account.

The approach of Moody’s Analytics is to input consensus information for unit car sales, housing starts, the unemployment rate, CPI inflation, real GDP growth, house price increases, oil prices, natural gas prices, the fed funds rate, and the 10-year Treasury yield.

Beginning with the March 2020 consensus scenario, the consensus scenario has used futures-implied yields for the fed funds rate and the 10-year Treasury bond for the first year of the projection instead of consensus surveys. Research on the accuracy of federal funds futures in the near term is the basis for this change in methodology (“Clarity or Confusion: Fed vs. Fed Funds Futures,” Regional Financial Review, Damien Moore and Ryan Sweet, July 2019). Over the next two years of the scenario, the futures projections are blended with surveyed expectations, with the weights on the surveyed expectations gradually increasing.

Although consensus survey information generally goes out no more than five years, the consensus scenario extends out for the full 30-year duration in the Moody’s Analytics baseline. To accomplish this, the assumption is made that the consensus scenario would revert to the long-term trends embodied in the baseline. For most variables, for which the consensus and the baseline are close to each other at the end of the consensus projection, the reversion is within two years. When the gap is larger, the convergence may require up to two additional years.

The macro model is then simulated to expand the consensus information to the rest of the variables in the forecast.

Users of the Moody’s Analytics regional scenarios should note that the regional scenario associated with the consensus scenario is the result of running it through the regional model. In other words, the “consensus” for any state or metro area is not based on the review of publicly available state- or metro area-specific forecasts.

U.S. MACRO CF SCENARIO —FORECAST SUMMARY—May 2025

	Units	25Q1	25Q2	25Q3	25Q4	26Q1	26Q2	26Q3	26Q4	27Q1
Gross Domestic Product	bcw \$	23,526.1	23,549.0	23,590.5	23,662.5	23,759.8	23,872.5	23,996.8	24,119.5	24,251.1
<i>Change</i>	%AR	-0.3	0.4	0.7	1.2	1.7	1.9	2.1	2.1	2.2
Federal Budget	\$ bil	-596.2	-55.2	-479.1	-657.6	-559.1	-260.2	-596.4	-757.3	-621.6
Total Employment	mil	159.2	159.5	158.7	158.5	158.4	158.5	158.6	158.8	159.1
<i>Change</i>	%AR	1.4	0.8	-2.0	-0.6	0.0	0.1	0.4	0.4	0.7
Unemployment Rate	%	4.1	4.2	4.5	4.5	4.5	4.6	4.5	4.4	4.3
Light Vehicle Sales	mil, SAAR	16.4	16.3	15.2	15.2	15.4	15.6	15.6	15.8	16.0
Residential Housing Starts	mil, SAAR	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.5
Median Existing-Home Price	\$ ths	417.8	417.5	421.5	427.0	430.5	433.9	436.0	439.0	438.3
<i>Change</i>	%YA	3.4	2.2	2.8	2.1	3.0	3.9	3.5	2.8	1.8
Consumer Price Index	%AR	3.8	3.8	3.4	3.5	3.1	2.9	2.6	2.4	2.3
Federal Funds Rate	%	4.3	4.3	4.1	3.7	3.5	3.3	3.3	3.3	3.3
Treasury Yield: 10-Yr Bond	%	4.5	4.2	4.4	4.4	4.4	4.4	4.4	4.4	4.4
Baa Corp. - 10-Yr Treasury	DIFF	1.5	2.0	2.3	2.4	2.4	2.5	2.5	2.5	2.5
Corporate Profits With IVA & CCA	\$ bil	4,066.5	3,510.5	3,641.5	3,707.6	3,737.7	3,826.4	3,905.7	3,926.2	3,950.3
<i>Change</i>	%YA	10.4	-8.0	-4.2	-7.5	-8.1	9.0	7.3	5.9	5.7
S&P 500	1941=10	5,900.7	5,319.7	5,404.7	5,514.7	5,601.7	5,688.7	5,707.7	5,701.6	5,727.9
<i>Change</i>	%YA	18.1	1.2	-2.5	-6.7	-5.1	6.9	5.6	3.4	2.3
CRE Price Index	index	305.4	305.8	305.3	304.7	303.6	302.8	306.0	312.7	318.2
NCREIF Property Index: Rate of Return	%, NSA	1.3	1.3	1.3	1.3	1.3	1.3	1.4	1.5	1.5
C&I Loans Outstanding	\$ bil	2,782.7	2,838.6	2,857.9	2,875.6	2,884.8	2,893.8	2,898.2	2,902.4	2,925.7
BAA spread	%	1.5	2.0	2.3	2.4	2.4	2.5	2.5	2.5	2.5

	Units	2021	2022	2023	2024	2025	2026	2027	2028	2029
Gross Domestic Product	bcw \$	21,494.8	22,034.8	22,671.1	23,305.0	23,582.0	23,937.1	24,424.7	24,905.8	25,414.6
<i>Change</i>	%AR	6.1	2.5	2.9	2.8	1.2	1.5	2.0	2.0	2.0
Federal Budget	\$ bil	-2,580.4	-1,419.2	-1,783.8	-2,033.4	-1,788.1	-2,173.0	-2,295.3	-2,334.6	-2,428.5
Total Employment	mil	146.3	152.5	155.9	158.0	159.0	158.6	159.3	160.0	160.8
<i>Change</i>	%AR	2.9	4.3	2.2	1.3	0.6	-0.2	0.5	0.5	0.5
Unemployment Rate	%	5.4	3.6	3.6	4.0	4.3	4.5	4.3	4.3	4.1
Light Vehicle Sales	mil, SAAR	14.9	13.8	15.5	15.8	15.8	15.6	16.4	16.9	17.3
Residential Housing Starts	mil, SAAR	1.6	1.6	1.4	1.4	1.4	1.4	1.5	1.5	1.5
Median Existing-Home Price	\$ ths	353.9	390.2	392.5	410.1	421.0	434.9	438.2	440.0	451.6
<i>Change</i>	%YA	18.4	10.2	0.6	4.5	2.6	3.3	0.8	0.4	2.6
Consumer Price Index	%AR	4.7	8.0	4.1	3.0	3.2	3.1	2.4	2.3	2.2
Federal Funds Rate	%	0.1	1.7	5.0	5.1	4.1	3.3	3.4	3.4	3.4
Treasury Yield: 10-Yr Bond	%	1.4	3.0	4.0	4.2	4.3	4.4	4.3	4.1	4.1
Baa Corp. - 10-Yr Treasury	DIFF	1.9	2.1	1.9	1.5	2.1	2.5	2.5	2.4	2.4
Corporate Profits With IVA & CCA	\$ bil	3,077.6	3,316.7	3,546.5	3,827.8	3,731.5	3,849.0	4,041.6	4,287.5	4,503.9
<i>Change</i>	%YA	27.6	7.8	6.9	7.9	-2.5	3.1	5.0	6.1	5.0
S&P 500	1941=10	4,266.8	4,100.7	4,284.2	5,426.7	5,535.0	5,674.9	5,803.4	6,229.9	6,681.2
<i>Change</i>	%YA	32.6	-3.9	4.5	26.7	2.0	2.5	2.3	7.3	7.2
CRE Price Index	index	346.3	341.0	317.3	305.0	304.7	312.7	332.3	352.2	375.5
NCREIF Property Index: Rate of Return	%, NSA	4.2	1.4	-2.0	0.1	1.3	1.4	1.6	1.9	2.0
C&I Loans Outstanding	\$ bil	2,479.5	2,642.1	2,771.3	2,766.9	2,838.7	2,894.8	2,974.2	3,110.5	3,261.5
BAA spread	%	1.9	2.1	1.9	1.5	2.1	2.5	2.5	2.4	2.4

CS: Alternative Scenario Constant Severity – Downside – 99th Percentile

In this scenario, there is a 99% probability that the economy will perform better, broadly speaking, and a 1% probability that it will perform worse.

Key risks

- The impacts of Trump administration tariffs and deportations on the economy are far worse than expected, causing inflation to accelerate.
- The peak tariff rate is 35.5% compared with 22.8% in the baseline, and tariffs remain elevated through most of 2029.
- Elevated interest rates weaken credit-sensitive spending more than anticipated, and rising inflation causes the Fed to raise the fed funds rate in the third quarter of 2025.
- Russia's invasion of Ukraine persists longer than expected, and the Israel-Hamas ceasefire collapses.
- The risk grows that China might block the Taiwan Strait, limiting the supply of semiconductor chips from Taiwan and raising fears of a broader conflict. Business and consumer confidence declines.
- The combination of tariffs, foreign retaliatory tariffs, rising inflation, deportations, political tensions, still-elevated interest rates, and reduced credit availability causes the economy to fall into recession in the third quarter of 2025.
- Declines in European economies and retaliatory tariffs hurt U.S. exports and also corporate earnings from European subsidiaries.
- The stock market collapses. The economy falls into a deep recession in the second quarter of 2025. Recession in Europe hurts U.S. exports and also corporate earnings from European subsidiaries.
- Bank failures greatly weaken consumer confidence and banks tighten credit availability.
- The unemployment rate ultimately rises to 20%.
- The downturn lasts for more than a year and starts to subside only when the economic impacts of the conflicts begin to resolve.
- The economy does not return to full employment until 2034.

Monetary policy assumptions

- The Fed began to ease in the third quarter. However, despite the recession in the second quarter of 2025, rising inflation causes the Fed to reverse course and to raise the fed funds rate in the third and fourth quarters of 2025. It resumes easing in the first quarter of 2026 as the recession deepens, and the fed funds rate falls below the baseline.
- The 10-year Treasury rises above the baseline in the third and fourth quarters of 2025 because of increased inflation. It then falls starting in the first quarter of 2026 as the recession persists because of the flight to quality.

Fiscal policy assumptions

- Just as in the baseline, the CS assumes a full extension of the Tax Cuts and Jobs Act personal income provisions, increased state and local tax deductions, certain business tax provisions, reduced taxes on tips, and a reduction of the statutory corporate tax rate from 21% to 15% for domestic producers.
- One offset will be new tariffs. The effective tariff rate will rise from about 2% to 35.5%, more than the 22.8% in the baseline, and the administration does not roll it back significantly until 2028. The administration keeps tariffs elevated through much of 2029.
- To offset the net reduction in tax revenue, the administration will limit growth in nondefense spending and eliminate spending on Ukraine and emergency spending on foreign aid.

- However, defense spending will continue to rise. Further, there will not be material changes to existing legislation, including the Infrastructure Investment and Jobs Act, the IRA (except for EV tax credits), or the CHIPS Act. There remains a significant amount of funds that have yet to be allocated, with the peak impact occurring within the next two to three years. The tax policy assumptions in CS are fundamentally the same as in the baseline. However, since the economy is weaker, tax revenues are lower than in the baseline and the deficit is higher. On balance, the budget deficit will be about -10% in fiscal 2025, compared with -6.1% in the baseline. The higher deficit adds to worries about growth in the national debt, raising uncertainty over the course of tax policy. Though no crisis ultimately materializes, business and consumer sentiment is damaged.
- No additional measures to stem the recession are enacted.

In the downside 1% scenario “CS: Alternative Scenario Constant Severity – Downside – 99th Percentile,” the impacts of higher-than-expected Trump administration tariffs and deportations on the economy are significantly worse than expected, causing inflation to accelerate. The peak tariff rate is 35.5% compared with 22.8% in the baseline, and tariffs remain elevated through most of 2029.

Rising inflation causes the Fed to raise the fed funds rate during the third and fourth quarters of 2025. Russia’s invasion of Ukraine persists longer than expected, and the Hamas-Israel ceasefire collapses. The risk grows that China might block the Taiwan Strait, limiting the supply of semiconductor chips from Taiwan and raising fears of a broader conflict. Business and consumer confidence declines. The combination of tariffs, rising inflation, deportations, political tensions, still-high and rising interest rates, and reduced credit availability causes the economy to fall into a deep recession in the third quarter of 2025.

The contraction causes oil prices to fall below the baseline. The recession lasts through the third quarter of 2026. The stock market collapses. The U.S. economy falls into a deep recession, and unemployment begins to increase significantly in the third quarter of 2025. Disagreements in Congress prevent any stimulus measures to stem the recession.

The Fed had begun to ease in the third quarter. However, despite the recession in the second quarter of 2025, rising inflation causes the Fed to reverse course and to raise the fed funds rate during the third and fourth quarters of 2025. It resumes easing in the first quarter of 2026 as the recession deepens, and the fed funds rate falls below the baseline. The 10-year Treasury rises above the baseline in the third and fourth quarters of 2025 because of increased inflation. It then falls as the recession persists because of the flight to quality.

The depth of the downturn ultimately causes the unemployment rate to rise to 20% by 2026.

The economies across Europe contract as tariffs and the weakening U.S. economy reduce their exports. Populism in Europe accelerates, once again putting the euro zone’s existence at risk. This contributes to the economic and financial stress faced by heavily indebted nations, especially Italy. The declines in Europe’s corporate earnings of foreign subsidiaries of U.S. companies contribute to the decline in the stock market and also lower U.S. exports to Europe, deepening the U.S. recession. Retaliatory tariffs also reduce U.S. exports.

The downturn lasts for more than a year. Unit auto sales drop to less than 9 million at an annual rate by 2026, compared with well over 16 million in the baseline. Rising joblessness causes house prices to drop cumulatively by more than 25% from the fourth quarter of 2024 through 2026. Disagreements in Congress prevent stimulus measures to stem the downturn. The economy does not return to full employment until 2034.

The change in real GDP is -2.1% in 2025 and -10% in 2026 on an annual average basis, compared with growth of 1.3% and 1.5%, respectively, in the baseline. Reduced business investment lowers productivity so that the level of real GDP remains below the baseline indefinitely.

U.S. MACRO CS SCENARIO—FORECAST SUMMARY—May 2025

	Units	25Q1	25Q2	25Q3	25Q4	26Q1	26Q2	26Q3	26Q4	27Q1
Gross Domestic Product	bcw \$	23,526.1	23,549.0	22,703.0	21,526.6	20,912.5	20,508.5	20,334.5	20,395.4	20,596.6
Change	%AR	-0.3	0.4	-13.6	-19.2	-10.9	-7.5	-3.4	1.2	4.0
Federal Budget	\$ bil	-596.2	-55.2	-638.1	-1,060.1	-1,141.5	-932.3	-1,317.1	-1,524.2	-1,403.7
Total Employment	mil	159.2	159.5	148.8	141.2	137.1	134.5	132.4	131.0	130.2
Change	%AR	1.4	0.8	-24.2	-18.9	-11.1	-7.5	-6.1	-4.1	-2.5
Unemployment Rate	%	4.1	4.2	10.0	14.1	16.4	17.8	18.9	19.8	20.2
Light Vehicle Sales	mil, SAAR	16.4	16.3	12.7	11.2	10.5	9.7	8.7	8.1	8.1
Residential Housing Starts	mil, SAAR	1.4	1.4	1.0	0.7	0.6	0.5	0.4	0.3	0.3
Median Existing-Home Price	\$ ths	417.8	417.5	376.1	345.6	319.1	301.2	290.9	289.0	287.6
Change	%YA	3.4	2.2	-8.3	-17.3	-23.6	-27.9	-22.7	-16.4	-9.9
Consumer Price Index	%AR	3.8	3.8	7.0	4.3	-0.6	-0.2	-2.0	-1.8	-1.1
Federal Funds Rate	%	4.3	4.3	4.6	5.2	3.5	1.9	1.3	0.8	0.6
Treasury Yield: 10-Yr Bond	%	4.5	4.2	4.8	4.9	3.2	2.5	2.2	2.3	2.6
Baa Corp. - 10-Yr Treasury	DIFF	1.5	2.0	4.2	5.1	4.8	4.1	3.8	3.4	3.2
Corporate Profits With IVA & CCA	\$ bil	4,066.5	3,510.5	3,010.0	2,757.0	2,516.4	2,420.1	2,331.7	2,363.4	2,399.6
Change	%YA	10.4	-8.0	-20.8	-31.2	-38.1	-31.1	-22.5	-14.3	-4.6
S&P 500	1941=10	5,900.7	5,319.7	3,785.8	2,935.4	2,680.4	2,494.2	2,461.1	2,492.0	2,543.4
Change	%YA	18.1	1.2	-31.7	-50.3	-54.6	-53.1	-35.0	-15.1	-5.1
CRE Price Index	index	305.4	305.8	298.4	269.4	224.0	189.0	160.8	148.0	142.1
NCREIF Property Index: Rate of Return	%, NSA	1.3	1.3	-4.1	-4.7	-5.6	-4.7	-4.5	-2.5	-1.0
C&I Loans Outstanding	\$ bil	2,782.7	2,838.6	2,543.5	2,366.5	2,243.8	2,156.6	2,077.7	2,010.3	1,974.0
BAA spread	%	1.5	2.0	4.2	5.1	4.8	4.1	3.8	3.4	3.2

	Units	2021	2022	2023	2024	2025	2026	2027	2028	2029
Gross Domestic Product	bcw \$	21,494.8	22,034.8	22,671.1	23,305.0	22,826.2	20,537.8	20,882.0	21,683.3	22,588.7
Change	%AR	6.1	2.5	2.9	2.8	-2.1	-10.0	1.7	3.8	4.2
Federal Budget	\$ bil	-2,580.4	-1,419.2	-1,783.8	-2,033.4	-2,349.6	-4,915.2	-5,229.9	-4,223.4	-4,069.8
Total Employment	mil	146.3	152.5	155.9	158.0	152.2	133.8	130.7	137.8	145.2
Change	%AR	2.9	4.3	2.2	1.3	-3.7	-12.1	-2.3	5.4	5.4
Unemployment Rate	%	5.4	3.6	3.6	4.0	8.1	18.2	20.0	15.4	10.8
Light Vehicle Sales	mil, SAAR	14.9	13.8	15.5	15.8	14.1	9.2	8.9	10.6	11.5
Residential Housing Starts	mil, SAAR	1.6	1.6	1.4	1.4	1.1	0.5	0.3	0.2	0.3
Median Existing-Home Price	\$ ths	353.9	390.2	392.5	410.1	389.2	300.0	290.1	304.6	324.2
Change	%YA	18.4	10.2	0.6	4.5	-5.1	-22.9	-3.3	5.0	6.4
Consumer Price Index	%AR	4.7	8.0	4.1	3.0	3.7	1.3	-1.1	-0.1	1.0
Federal Funds Rate	%	0.1	1.7	5.0	5.1	4.6	1.9	0.4	0.1	0.1
Treasury Yield: 10-Yr Bond	%	1.4	3.0	4.0	4.2	4.6	2.5	2.8	3.0	3.6
Baa Corp. - 10-Yr Treasury	DIFF	1.9	2.1	1.9	1.5	3.2	4.1	3.0	2.6	2.5
Corporate Profits With IVA & CCA	\$ bil	3,077.6	3,316.7	3,546.5	3,827.8	3,336.0	2,407.9	2,491.8	2,754.0	3,056.2
Change	%YA	27.6	7.8	6.9	7.9	-12.8	-27.8	3.5	10.5	11.0
S&P 500	1941=10	4,266.8	4,100.7	4,284.2	5,426.7	4,485.4	2,531.9	2,584.3	2,774.4	2,965.9
Change	%YA	32.6	-3.9	4.5	26.7	-17.3	-43.6	2.1	7.4	6.9
CRE Price Index	index	346.3	341.0	317.3	305.0	269.4	148.0	139.7	183.2	248.6
NCREIF Property Index: Rate of Return	%, NSA	4.2	1.4	-2.0	0.1	-1.6	-4.3	0.1	3.0	3.6
C&I Loans Outstanding	\$ bil	2,479.5	2,642.1	2,771.3	2,766.9	2,632.8	2,122.1	1,961.8	2,029.4	2,170.0
BAA spread	%	1.9	2.1	1.9	1.5	3.2	4.1	3.0	2.6	2.5

CH: High Interest Rate Scenario

In this scenario, acceleration of inflation causes an immediate Federal Reserve response that results in a recession.

Key risks

- Several factors drive the acceleration of inflation. First, President Trump raises tariffs by more than in the baseline, raising the cost of both consumer goods and inputs into production. Second, deportations of immigrants result in labor shortages and, therefore, higher wage costs. Third, worries grow that the Hamas-Israel conflict will widen and sanctions will be imposed on Iranian oil. Further, Russia's invasion of Ukraine widens and persists longer than expected. These developments cause the price of oil to rise.
- The peak tariff rate is 27.6% compared with 22.8% in the baseline, and tariffs remain elevated through most of 2027.
- Additionally, worries grow that China would blockade the Taiwan Strait, reducing the supply of chips and causing other supply shortages. These developments cause inflation to accelerate to the 4% range.
- The Federal Reserve responds by raising the fed funds rate by 100 basis points in the third quarter of 2025.
- As a result, the economy immediately falls into recession.
- Inflation does not decelerate, causing the Fed to raise interest rates by another 100 basis points in the fourth quarter of 2025 and the first and second quarters of 2026 despite the downturn in the economy.
- The downturn lasts for a year and starts to subside when inflation decelerates.
- The unemployment rate rises to 6.6% by the second quarter of 2026.
- The economy does not return to full employment until the first quarter of 2030.

Monetary policy assumptions

- The Fed raises the fed funds rate by 100 basis points in the third quarter of 2025 in response to rising inflation and an additional 100 basis points in the fourth quarter of 2025 and the first and second quarters of 2026. The Fed begins to ease once inflation decelerates.
- The 10-year Treasury initially rises because of the acceleration of inflation despite the downturn in the economy.

Fiscal policy assumptions

- Just as in the baseline, the CH assumes a full extension of the Tax Cuts and Jobs Act personal income provisions, increased state and local tax deductions, certain business tax provisions, reduced taxes on tips, and a reduction of the statutory corporate tax rate from 21% to 15% for domestic producers.
- One offset will be new tariffs, especially on China, but also on other countries, raising the effective tariff rate from about 2% to 27.6%, more than the 22.8% in the baseline. The administration keeps tariffs elevated through most of 2026.
- To offset the net reduction in tax revenue, the administration will limit growth in nondefense spending and eliminate spending on Ukraine and emergency spending on foreign aid.
- However, defense spending will continue to rise. Further, there will not be material changes to existing legislation, including the Infrastructure Investment and Jobs Act, the IRA (except for EV tax credits), or the CHIPS Act. There remains a significant amount of funds that have yet to be allocated, with the peak impact occurring within the next two to three years.
- The tax policy assumptions in CH are fundamentally the same as in the baseline. However, since the economy is weaker, tax revenues are lower than in the baseline, and the deficit is higher. On balance, the budget deficit will be about -6.6% in fiscal 2025, compared with -6.1% in the baseline. The higher deficit adds to worries about growth in the national debt, raising uncertainty over the course of tax policy. Though no crisis ultimately materializes, business and consumer sentiment is damaged.

→ No additional measures to stem the recession are enacted.

In the downside “CH: High Interest Rate Scenario,” several factors drive the acceleration of inflation. First, President Trump raises tariffs by more than in the baseline, raising the cost of both consumer goods and also inputs into production. Second, deportations of immigrants result in labor shortages and, therefore, higher wage costs. Third, worries grow that the Hamas-Israel cease-fire will collapse, sanctions are imposed on Iranian oil, and the invasion of Ukraine persists longer than expected. These developments cause the price of oil to rise. Further worries grow that China will blockade the Taiwan Strait, limiting the supply of chips since Taiwan is a major producer and causing other shortages. The rise in oil prices plus the other shortages cause inflation to accelerate.

The Fed responds by raising the fed funds rate by 100 basis points in the third quarter of 2025, causing the U.S. economy to fall into recession. However, the persistence of inflation causes the Fed to raise the fed funds rate another 100 basis points in the fourth quarter of 2025 and the first and second quarters of 2026 despite the recession. The 10-year Treasury rises because of the rising inflation and increased fed funds rate, and then subsequently falls as the Fed reduces the fed funds rate.

Unemployment increases and ultimately rises to 6.6%. Disagreements in Congress prevent any stimulus measures to stem the recession. The downturn lasts for a year and starts to subside when inflation decelerates, allowing the Fed to begin to lower the fed funds rate.

The change in real GDP is 0.8% in 2025 and -1.8% in 2026 on an annual average basis, compared with growth of 1.3% and 1.5%, respectively, in the baseline. Reduced business investment lowers productivity so that the level of real GDP remains below the baseline indefinitely.

U.S. MACRO HIGH INTEREST RATE SCENARIO —FORECAST SUMMARY—May 2025

	Units	25Q1	25Q2	25Q3	25Q4	26Q1	26Q2	26Q3	26Q4	27Q1
Gross Domestic Product	bcw \$	23,526.1	23,549.0	23,513.3	23,347.1	23,150.1	23,020.2	23,019.8	23,079.7	23,209.6
Change	%AR	-0.3	0.4	-0.6	-2.8	-3.3	-2.2	0.0	1.0	2.3
Federal Budget	\$ bil	-596.2	-55.2	-401.3	-601.6	-553.4	-282.3	-632.5	-795.5	-684.5
Total Employment	mil	159.2	159.5	158.4	156.9	155.5	154.5	154.3	154.4	154.6
Change	%AR	1.4	0.8	-2.8	-3.6	-3.5	-2.6	-0.6	0.3	0.6
Unemployment Rate	%	4.1	4.2	4.8	5.5	6.2	6.6	6.5	6.1	5.8
Light Vehicle Sales	mil, SAAR	16.4	16.3	15.2	14.7	14.2	14.0	14.2	14.9	15.3
Residential Housing Starts	mil, SAAR	1.4	1.4	1.3	1.2	1.2	1.1	1.1	1.1	1.2
Median Existing-Home Price	\$ ths	417.8	417.5	413.9	406.8	399.5	392.1	384.8	381.4	382.8
Change	%YA	3.4	2.2	1.0	-2.7	-4.4	-6.1	-7.0	-6.3	-4.2
Consumer Price Index	%AR	3.8	3.8	5.0	5.7	5.8	5.3	3.2	2.9	2.3
Federal Funds Rate	%	4.3	4.3	5.3	6.3	7.3	8.3	7.3	6.3	5.3
Treasury Yield: 10-Yr Bond	%	4.5	4.2	5.3	5.9	6.3	6.6	6.0	5.0	4.5
Baa Corp. - 10-Yr Treasury	DIFF	1.5	2.0	2.9	3.3	3.5	3.6	3.5	2.9	2.6
Corporate Profits With IVA & CCA	\$ bil	4,066.5	3,510.5	3,520.4	3,512.7	3,503.8	3,521.1	3,486.9	3,489.4	3,577.3
Change	%YA	10.4	-8.0	-7.4	-12.3	-13.8	0.3	-1.0	-0.7	2.1
S&P 500	1941=10	5,900.7	5,319.7	5,118.7	4,820.5	4,475.6	4,255.5	4,264.0	4,393.4	4,483.4
Change	%YA	18.1	1.2	-7.7	-18.4	-24.2	-20.0	-16.7	-8.9	0.2
CRE Price Index	index	305.4	305.8	303.4	297.2	287.1	273.9	263.0	256.9	252.6
NCREIF Property Index: Rate of Return	%, NSA	1.3	1.3	-0.3	-1.1	-1.8	-2.1	-2.0	-0.7	0.0
C&I Loans Outstanding	\$ bil	2,782.7	2,838.6	2,816.6	2,778.7	2,714.8	2,636.0	2,598.4	2,570.1	2,571.0
BAA spread	%	1.5	2.0	2.9	3.3	3.5	3.6	3.5	2.9	2.6

	Units	2021	2022	2023	2024	2025	2026	2027	2028	2029
Gross Domestic Product	bcw \$	21,494.8	22,034.8	22,671.1	23,305.0	23,483.9	23,067.4	23,525.1	24,487.0	25,410.3
Change	%AR	6.1	2.5	2.9	2.8	0.8	-1.8	2.0	4.1	3.8
Federal Budget	\$ bil	-2,580.4	-1,419.2	-1,783.8	-2,033.4	-1,654.3	-2,263.7	-2,600.0	-2,325.4	-1,980.3
Total Employment	mil	146.3	152.5	155.9	158.0	158.5	154.7	155.3	156.5	157.6
Change	%AR	2.9	4.3	2.2	1.3	0.3	-2.4	0.4	0.8	0.7
Unemployment Rate	%	5.4	3.6	3.6	4.0	4.6	6.3	5.4	4.6	4.4
Light Vehicle Sales	mil, SAAR	14.9	13.8	15.5	15.8	15.7	14.3	16.1	16.9	17.3
Residential Housing Starts	mil, SAAR	1.6	1.6	1.4	1.4	1.3	1.1	1.3	1.4	1.4
Median Existing-Home Price	\$ ths	353.9	390.2	392.5	410.1	414.0	389.5	390.7	412.1	427.1
Change	%YA	18.4	10.2	0.6	4.5	0.9	-5.9	0.3	5.5	3.6
Consumer Price Index	%AR	4.7	8.0	4.1	3.0	3.6	4.9	2.5	1.8	1.8
Federal Funds Rate	%	0.1	1.7	5.0	5.1	5.1	7.3	4.0	3.0	2.9
Treasury Yield: 10-Yr Bond	%	1.4	3.0	4.0	4.2	5.0	6.0	4.4	4.3	4.2
Baa Corp. - 10-Yr Treasury	DIFF	1.9	2.1	1.9	1.5	2.4	3.4	2.5	2.1	2.2
Corporate Profits With IVA & CCA	\$ bil	3,077.6	3,316.7	3,546.5	3,827.8	3,652.5	3,500.3	3,843.0	4,455.1	4,859.9
Change	%YA	27.6	7.8	6.9	7.9	-4.6	-4.2	9.8	15.9	9.1
S&P 500	1941=10	4,266.8	4,100.7	4,284.2	5,426.7	5,289.9	4,347.1	4,842.1	5,992.7	6,556.7
Change	%YA	32.6	-3.9	4.5	26.7	-2.5	-17.8	11.4	23.8	9.4
CRE Price Index	index	346.3	341.0	317.3	305.0	297.2	256.9	253.8	276.9	315.4
NCREIF Property Index: Rate of Return	%, NSA	4.2	1.4	-2.0	0.1	0.3	-1.6	0.8	2.3	3.0
C&I Loans Outstanding	\$ bil	2,479.5	2,642.1	2,771.3	2,766.9	2,804.1	2,629.9	2,648.4	2,940.1	3,229.2
BAA spread	%	1.9	2.1	1.9	1.5	2.4	3.4	2.5	2.1	2.2

About Moody's Analytics

In an increasingly interconnected and complex operating environment, organizations face challenges decoding the intricacies of the global economy. Moody's Analytics Economics team delivers timely and in-depth data, forecasts and analysis of the global economy's latest developments and trends—empowering organizations and policymakers to identify and manage risks, seize new growth opportunities, respond to geopolitical threats, and thrive in an ever-evolving landscape.

The Economics team has more than 35 years of dedicated experience in economic forecasting and research. Leveraging our team's global coverage and local expertise, our economists provide unrivalled insight on pivotal economic topics, including labor markets, housing, commercial real estate, and consumer spending, among others, across the Americas, Europe, the Middle East, and APAC. We also provide real-time monitoring of economic indicators, scenario analysis, and thought leadership on critical themes such as monetary and fiscal policy and sovereign risk—all of which support decision makers and policymakers in strategic planning, product and sales forecasting, stress testing, credit risk management, and investment decisions.

By combining economic modeling, expansive data resources, and innovative technology solutions, we equip business leaders with critical insights to navigate the complexities of an ever-changing economic landscape. Recognized for our industry-leading solutions and commitment to quality, client service, and integrity, more than 1,000 organizations worldwide—including multinational corporations, governments, financial institutions, real estate firms, and professional investors—trust us to help them turn today's risks into tomorrow's opportunities.

Learn how Moody's Analytics can help drive your success at www.economy.com

DISCLAIMER:

Please attribute information in this document to Moody's Analytics, which is a division within Moody's that is separate from Moody's Ratings. Accordingly, the viewpoints expressed herein do not reflect those of Moody's Ratings.

CREDIT RATINGS ISSUED BY MOODY'S CREDIT RATINGS AFFILIATES ARE THEIR CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MATERIALS, PRODUCTS, SERVICES AND INFORMATION PUBLISHED OR OTHERWISE MADE AVAILABLE BY MOODY'S (COLLECTIVELY, "MATERIALS") MAY INCLUDE SUCH CURRENT OPINIONS. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT OR IMPAIRMENT. SEE APPLICABLE MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S CREDIT RATINGS. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS, NON-CREDIT ASSESSMENTS ("ASSESSMENTS"), AND OTHER OPINIONS INCLUDED IN MOODY'S MATERIALS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S MATERIALS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. AND/OR ITS AFFILIATES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND MATERIALS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND MATERIALS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND MATERIALS DO NOT COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS, ASSESSMENTS AND OTHER OPINIONS AND PUBLISHES OR OTHERWISE MAKES AVAILABLE ITS MATERIALS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS, AND MATERIALS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS OR MATERIALS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER.

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT. FOR CLARITY, NO INFORMATION CONTAINED HEREIN MAY BE USED TO DEVELOP, IMPROVE, TRAIN OR RETRAIN ANY SOFTWARE PROGRAM OR DATABASE, INCLUDING, BUT NOT LIMITED TO, FOR ANY ARTIFICIAL INTELLIGENCE, MACHINE LEARNING OR NATURAL LANGUAGE PROCESSING SOFTWARE, ALGORITHM, METHODOLOGY AND/OR MODEL.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND MATERIALS ARE NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the credit rating process or in preparing its Materials.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY CREDIT RATING, ASSESSMENT, OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any credit rating, agreed to pay Moody's Investors Service, Inc. for credit ratings opinions and services rendered by it. MCO and all MCO entities that issue ratings under the "Moody's Ratings" brand name ("Moody's Ratings"), also maintain policies and procedures to address the independence of Moody's Ratings' credit ratings and credit rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold credit ratings from Moody's Investors Service, Inc. and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at ir.moody's.com under the heading "Investor Relations — Corporate Governance — Charter and Governance Documents - Director and Shareholder Affiliation Policy."

Moody's SF Japan K.K., Moody's Local AR Agente de Calificación de Riesgo S.A., Moody's Local BR Agência de Classificação de Risco LTDA, Moody's Local MX S.A. de C.V., I.C.V., Moody's Local PE Clasificadora de Riesgo S.A., and Moody's Local PA Calificadora de Riesgo S.A. (collectively, the "Moody's Non-NRSRO CRAs") are all indirectly wholly-owned credit rating agency subsidiaries of MCO. None of the Moody's Non-NRSRO CRAs is a Nationally Recognized Statistical Rating Organization.

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657 AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors.

Additional terms for India only: Moody's credit ratings, Assessments, other opinions and Materials are not intended to be and shall not be relied upon or used by any users located in India in relation to securities listed or proposed to be listed on Indian stock exchanges.

Additional terms with respect to Second Party Opinions and Net Zero Assessments (as defined in Moody's Ratings Rating Symbols and Definitions): Please note that neither a Second Party Opinion ("SPO") nor a Net Zero Assessment ("NZA") is a "credit rating." The issuance of SPOs and NZAs is not a regulated activity in many jurisdictions, including Singapore. JAPAN: In Japan, development and provision of SPOs and NZAs fall under the category of "Ancillary Businesses," not "Credit Rating Business," and are not subject to the regulations applicable to "Credit Rating Business" under the Financial Instruments and Exchange Act of Japan and its relevant regulation. PRC: Any SPO: (1) does not constitute a PRC Green Bond Assessment as defined under any relevant PRC laws or regulations; (2) cannot be included in any registration statement, offering circular, prospectus or any other documents submitted to the PRC regulatory authorities or otherwise used to satisfy any PRC regulatory disclosure requirement; and (3) cannot be used within the PRC for any regulatory purpose or for any other purpose which is not permitted under relevant PRC laws or regulations. For the purposes of this disclaimer, "PRC" refers to the mainland of the People's Republic of China, excluding Hong Kong, Macau and Taiwan.