MOODY'S

ANALYSIS
October 2024

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

Monetary Policy

The Federal Reserve began normalizing interest rates at the September Federal Open Market Committee meeting. The Fed cut the federal funds rate by an outsize half a percentage point to just under 5%. Moody's Analytics expects quarter-percentage-point rate cuts at the November and December meetings and then a quarter-point cut once each calendar quarter until the federal funds rate returns to its so-called equilibrium rate.

The recent softening in the job market and low inflation readings have raised expectations among investors that the Fed may cut rates even more aggressively. This is not in our baseline outlook but is an increasing possibility.

The equilibrium rate or r-star—the rate consistent with monetary policy neither restraining nor supporting growth—stands at an unusually high 4%. This reflects the extraordinary interest-rate insensitivity of the economy, as many households and businesses were able to refinance their debt when rates were at record lows during the worst of the pandemic. However, we do expect r-star to drift lower and settle near 3% by mid-decade.

The Fed has scaled back its quantitative tightening by allowing fewer of its Treasury holdings to mature and will end its QT altogether at the start of 2025 with just less than $7 trillion of assets on its balance sheet.

Ten-year Treasury yields are trading just under their long-run equilibrium of 4%-4.5%. The equilibrium rate is consistent with our estimate of nominal potential GDP growth, which equals the sum of 2%+ real potential GDP growth and 2% in target inflation. We expect long-term Treasury yields to remain near 4% for the foreseeable future.

Fiscal policy

The federal government's budget deficit is stable but remains uncomfortably large, at close to 6% of GDP. The nation's publicly traded debt-to-GDP ratio, which is just less than 100%, up from 80% before the pandemic, is steadily rising.

Early next year, soon after this November's election, is shaping up to be a period of significant change to fiscal policy. Not only will the debt limit need to be increased again, but the expiration of the individual tax cuts passed under former President Trump and the expiration of Affordable Care Act health insurance subsidies expanded under President Biden will need to be addressed. How these issues are ultimately resolved depends on the outcome of the presidential and congressional elections.

Regardless of the election results, we do not expect lawmakers to materially address the nation's unsustainable long-term fiscal outlook until they are under extraordinary economic and political pressure, which may require meaningfully higher interest rates and some form of fiscal crisis.

The election results will have significant implications for fiscal policy, trade, immigration, climate and regulatory policies in the next four years. Our baseline is for Kamala Harris to be elected president and Congress to be divided with the Senate under Republican control and the House under the Democrats. If so, changes will be more modest, although the tax cuts implemented as part of the Tax Cuts and Jobs Act for taxpayers making over $400,000 per year will expire. The tax subsidies provided in the CHIPS Act and Inflation Reduction Act will be reaffirmed.

U.S. dollar

The broad trade-weighted value of the U.S. dollar is down from its pandemic peak but remains high. It receives a substantial boost from the Fed's tight monetary policy and recent rate cuts by the European Central Bank and Bank of Canada. Also supporting the dollar is the ongoing flight to quality into U.S. assets prompted by heightened global uncertainties.

The dollar's value will remain elevated until the Fed begins to consistently ease monetary policy and geopolitical uncertainties, including the Russian war in Ukraine and ongoing tensions between the U.S. and China, moderate.

Despite substantial handwringing, the dollar's reserve currency status will remain unchallenged. There continue to be no viable alternatives.

Energy prices

Global oil prices are trading in the $75 per barrel range. Prices are up a few dollars given the intensifying conflict in the Middle East, which could disrupt Iranian oil supplies. But OPEC+'s decision to pump more oil is capping prices. Given increases in production in the U.S., Brazil, Norway and Guyana, the global oil market appears well supplied.

We do expect prices to drift higher and settle in the range of $80-$90 per barrel by early next year as an improving global economy led by better manufacturing activity should lift oil demand. Gasoline prices are expected to average near $3.50 for a gallon of regular unleaded during the remainder of this year, and a bit higher in 2025.

Geopolitical risks

Fallout from the pandemic on global supply chains, tourism, business travel, immigration and labor markets has largely faded. We expect any remaining global economic impacts from the pandemic to largely wind down in the coming months.

The Russian war in Ukraine will continue for the foreseeable future, but its impact on energy, agriculture, and other commodity markets and the global economy continues to fade. Global oil 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 relationship between the U.S. and China is vexed but more-or-less stable, and this is expected to remain the case in our baseline. Both economies will continue to steadily decouple, weighing on global growth, but tensions are not expected to boil over into a disruptive conflict.

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

→ Monetary policy assumptions have changed from the last update to reflect the Federal Reserve's September pivot to slash the fed funds target range by an unexpected 50 basis points to 4.75%-5%. We expect the Federal Open Market Committee will cut the policy rate by 25 basis points at each of its November and December meetings, followed by gradual reductions to 3% by mid-2026 and 2.7% by 2030.

→ Recent reports continued a trend of several months of good inflation data. The October baseline predicts consumer price inflation of 2.6% year over year in the third quarter of 2024, the same as the previous outlook. We anticipate that inflation will approach its target by early 2025. Similarly, the 10-year Treasury yield will average 4% in the third quarter, the same as in the last vintage. The rate will rise to 4.1% by mid-2025, slightly slower than in the last outlook, and remain near this level until the end of the decade.

→ Moody's Analytics has slightly lowered its oil price forecast over the past month as Saudi Arabia has signaled that it will go through with production increases that were planned for late 2024 and into 2025. Our natural gas price forecast has not changed from September. Prices have bounced up in recent weeks toward our forecast.

→ In the most recent NIPA data, the Bureau of Economic Analysis revised up early-2024 federal outlays by nearly 3%, yielding a noticeably larger budget shortfall. Hence, the fiscal outlook has darkened. The federal government's budget deficit is projected to exceed 6% of GDP through calendar year 2025, about 50 basis points worse than prior projections.

→ 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 and recent issues around other banks were unsettling, but they 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 further 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

→ If inflation remains elevated and job growth rebounds, the Fed could signal a slower-than-expected pace of upcoming cuts or even raise the fed funds rate. This could cause confidence and credit-sensitive spending to fall sharply, especially amid the concerns regarding the financial system, and the economy could fall into recession.

→ The conflict in the Middle East, an expansion of Russia's invasion of Ukraine and resulting sanctions, changes to announced OPEC+ supply increases, transportation issues, other shocks to supply, and/or China's economic recovery could cause global oil prices to increase more than anticipated, 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 desired by the Fed and push the economy into recession.

→ Political gridlock, especially as the election approaches, or dysfunction in its aftermath if the results are contested, could result in government inaction and undermine confidence or result in a debt limit breach in early 2025, pushing the economy into recession.

- → A wage-price spiral could set in, 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 once again.
- → 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, continued faster-than-expected growth in the labor force and productivity could allow inflation to fall despite faster-than-expected job and economic gains. The Federal Reserve would still cut rates since inflation is approaching its target, and the economy would outperform.

The U.S. economy is performing well despite slower growth in the first half of this year than in the second half of last year. We made modest adjustments to the October U.S. baseline forecast, based on revised national accounts data and the larger-than-expected move by the Federal Reserve. Real GDP will be slightly stronger in the near term because of lower rates. However, the forecast remains that growth will be below trend in the near term in response to fiscal tightening and high interest rates, followed by a return to trend by 2026. The jobless rate will remain relatively steady through the second half of 2025 as job growth slows, consistent with the weakening trend in labor market data.

The only major change to key assumptions in October was for monetary policy. With inflation slowing as desired, the Federal Reserve implemented a larger-than-expected rate cut in September and signaled two additional smaller cuts are likely before year's end. The resulting lower rate path lifts housing and economic growth modestly. Fiscal policy assumptions were unchanged, although new data suggest larger budget deficits currently and in the near term than previously expected. The outlook for long-term rates was reduced slightly in response to Fed actions. A slowdown in growth remains the expectation for the remainder of the year. The outlooks for house prices and commercial real estate were little changed, but we lowered oil prices slightly in the near term, as Saudi Arabia appears poised to follow through on announced production increases.

Monetary policy

Monetary policy assumptions have changed from the last update to reflect the Federal Reserve's September move to cut the fed funds target range by an unexpected 50 basis points to 4.75%-5%. As inflation and labor market risks are now more balanced than over the past two years, we expect the Federal Open Market Committee will cut the policy rate by 25 basis points at each of its November and December meetings, followed by gradual reductions to 3% by mid-2026 and 2.7% by 2030.

Recent inflation reports essentially continued the slowing trend seen in recent months. Monthly consumer prices rose by 2.3% on an annualized basis versus 1.9% in July. Annualized monthly core CPI inflation rose to 3.4% in August compared with 2% in July. The uptick in core came from a 0.5% monthly increase in shelter and 0.9% in transportation services, but leading indicators like new rents suggest that both should normalize in coming months. Headline consumer price inflation came in at 2.6% year over year in August, the lowest since February 2021, while the Fed's preferred personal consumption expenditure measure rose by 2.2% year over year, close to target. Core PCE, however, a better measure for future inflation, remains somewhat elevated at 2.7% year-ago, the same as in July.

Meanwhile, the September employment delivered an upside surprise. Payroll hiring rose to 254,000, the strongest gain since March. The jobless rate fell to 4.1% from 4.2% in August, and average hourly earnings growth accelerated from 3.8% to 4% year over year. While the labor market has slowed over the course of the year, the hot report almost certainly suggests that the Fed will move slower than financial markets had hoped in early September.

Financial markets were less optimistic. The Standard and Poor's 500 moved sideways in intra-day trading and lost about 1% following the jobs report. Interest rates, meanwhile, moved up reflecting a higher expected policy rate path. The 10-year Treasury yield now trades at 4%, up 10 basis points from early September. Futures markets expect the Fed to cut rates by 25 basis points in November and December each, in line with the FOMC's median September projections. Should the next inflation or jobs reports also come in high, however, the Fed may move even slower than that.

The October baseline predicts consumer price inflation of 2.6% year over year in the third quarter of 2024, the same as the previous outlook. We anticipate that inflation will approach its target by early 2025. Similarly, the 10-year

Treasury yield will average 4% in the third quarter, same as in the last vintage. The rate will rise to 4.1% by mid-2025, slightly slower than in the last outlook, and remain near this level until the end of the decade.

While the Fed's rate cuts have caused softening, the dollar remains strong against the U.S.'s major trading partners' currencies. On a real broad trade-weighted basis, the currency traded 7% above its pre-pandemic level in September. It has further appreciated by 1.4% since last December.

Changes to GDP

According to the BEA's third estimate of second-quarter real GDP, growth was 3% annualized, the same as previously reported. This was about double the 1.6% growth for the first quarter. This latest data included annual revisions impacting reported data beginning in 2019. These revisions increased growth over the entire four-year period.

Consumer spending was the largest contributor in the second quarter, adding nearly 2 percentage points to growth, more than in the prior quarter. Other supports included inventories, nonresidential fixed investment, which was led by transportation equipment investment, both federal and state and local spending, and a small uptick in exports. However, rising imports were a large offset, reducing growth by 1 percentage point, the largest negative contribution in more than two years. Residential investment fell slightly.

The outlook for 2024 real GDP growth on an annual average basis was mostly unchanged from last month. Real GDP is projected to rise 2.7% on an annual average basis, up from 2.6% last month. Growth will be 2.3% in 2025 and 2.1% in 2026, approximately the long-term trend, compared with 2.1% and 2%, respectively, in the September outlook. Higher consumer spending and business investment drove the upward revisions to the outlook in those years.

Labor market

The unexpectedly large increase in the September employment report did not change the forecast in October, which still calls for stability in the unemployment rate and a gradual slowdown in job growth over the next year. The payroll gain of 254,000 in September was around 100,000 above consensus expectations and marks the strongest monthly gain since March. The unemployment rate ticked down 0.1 percentage point for second consecutive month as household employment rose by 430,000 even as the labor force expanded by 150,000. The 4.1% reading in September puts the unemployment rate back to where it was in June.

Job growth was broad-based across industries in September. Healthcare and leisure/hospitality led the way, accounting for 150,000 of the gains. Offsetting were losses in manufacturing and transportation/warehousing. The JOLTS data and the unemployment insurance data show that mass layoffs are non-existent. However the pace of both hiring and quitting have slowed below pre-pandemic rates.

Monthly job growth will slow to below 100,000 per month by the middle of 2025 and will be around 50,000 by the middle of 2026. The unemployment rate will remain at or near 4% for the next few years.

Business investment and real estate

The BEA's third estimate of second-quarter real fixed business investment was 3.7% annualized, a downward revision from the 4.6% reported last month, though still a solid performance. Contributing to the lower growth were downward estimates for equipment and intellectual property. Despite the lower reading for equipment, it was still up about 10% annualized, mostly due to the sharp rebound in aircraft spending following the drop in the first quarter of 2024 resulting from concerns following the January Alaska Airlines door plug incident.

However, without the aircraft data, which are typically volatile, equipment is up only about 2% year over year. Spending on light trucks has moved up modestly but remains well below pre-pandemic levels. On the positive side, IT equipment growth was revised downward to about 11% annualized, reinforcing the picture of a robust rebound in recent quarters as companies replace laptops and peripherals to support remote work in order to update equipment originally purchased during the pandemic. Real structures were revised upward slightly because of upward revisions in booming manufacturing and a more modest decline in commercial. These offset a significant downward revision in power and communication. However, commercial has trended down since 2020 amid high interest rates.

Monthly data continue to send signals of weakness. Inflation-adjusted nondefense, nonaircraft capital goods shipments declined by 0.3% in August and have cumulatively fallen by 5% since the beginning of 2022. Shipments would have fallen more except for the fulfillment of unfilled orders, which themselves have been declining significantly. Further, although the inflation-adjusted value of construction put in place is up by more than 10% since early 2023, all the gains are in manufacturing facilities, with office, retail and warehouse all declining during that time in real terms.

Despite the slightly weaker second-quarter data, the outlook for real business investment has been raised to 4.1% in 2024 and 3.2% in 2025 on an annual average basis, compared with 3.9% and 2.9%, respectively, in the September outlook. The reason is that the Fed's unanticipated 50-basis point rate cut will boost business capital spending more than expected.

The Moody's Analytics baseline forecast projecting a gradual moderation in house price growth was largely unchanged this month as the inventory of homes for sale continues to increase. Recent declines in mortgage rates will favor home listings and lead to increased home sales but are unlikely to result in a housing boom as the majority of outstanding mortgages carry interest rates that are well below 6%. Life events such as job changes, retirements, birth of children, deaths, and divorces will continue to drive home sales for the foreseeable future.

The short-term forecast for single-family home construction was revised upward this month due to the lower projected trajectory for the 30-year fixed-rate mortgage. With rates now expected to fall to 5.75% by the end of 2025, construction and home sales are expected to pick up. In addition, the revised population forecast has increased the outlook for household formations in coming years, which will support sales and construction.

The outlook for commercial real estate prices as measured by the Federal Reserve's price index (FZFL075035503Q.IUSA) fell slightly from last month. The trough was pushed to mid-2025 as CRE markets continue to adjust to structural shifts, particularly in the office property market. The projected year-over-year change in the value-weighted version of Moody's CRE price indexes was largely unchanged this month, with the exception of the hotel sector, which reported a sharper peak-to-trough decline in the most recent historical update. Forecasts for the equal-weighted version of the Moody's CRE price indexes were similar to last month's baseline with the exception of hotels and apartments, which both registered larger declines in the second quarter of 2024.

Energy

Moody's Analytics has lowered its oil price forecast over the past month. We now forecast Brent prices to average $80.41 in the fourth quarter, down from $81.39 per barrel, and we are expecting Brent to average $79.41 in 2025 compared with our prior forecast of $79.91. The primary impetus for the change is that Saudi Arabia has signaled that it will go through with production increases that were planned for late 2024 and into 2025.

The OPEC+ schedule implies an increase in production of 2.4 million barrels per day from November 2024 until December 2025, but because of existing overproduction, that translates to a 1.4 mbpd increase when compared with August 2024. We assume an increase of 0.95 mbpd, or 70% of the announced effective increase. This assumes that, except for Saudi Arabia and Russia, others will increase their quotas. Saudi Arabia will increase by 0.64 mbpd from the scheduled 1 mbpd.

Risks to the outlook are tilted to the downside. In previous instances, Saudi Arabia has decided to boost output and regain market share by washing out non-OPEC production, especially in the 1980s and 2014-2015, and there is a chance they might do that again. This is not our base case outlook, but oil prices would sink should Saudi Arabia take that course of action. Excess capacity has been above average for over a year now and OPEC has been surrendering market share in the meantime, so an OPEC production increase has been overdue.

Our natural gas price forecast has not changed. Prices have bounced up in recent weeks towards our forecast.

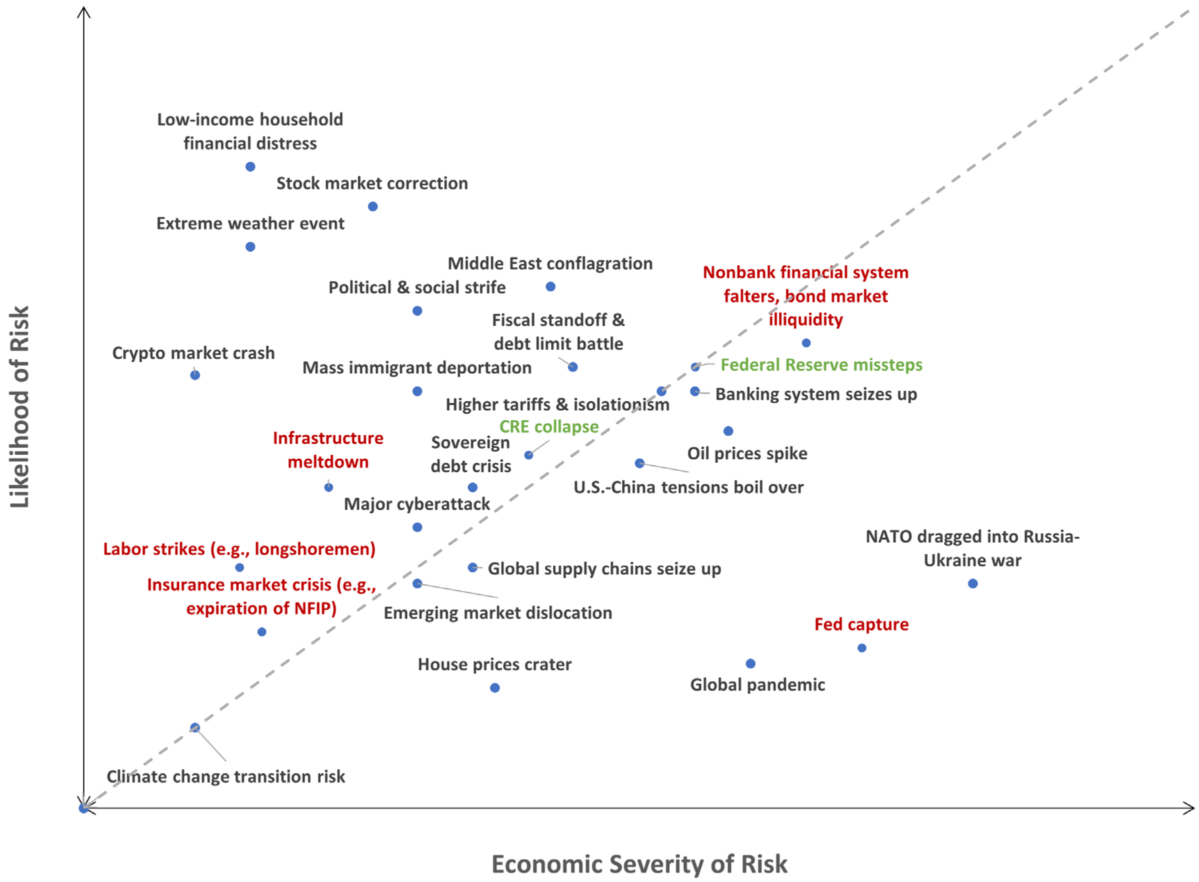
Fiscal policy

Federal spending has come in higher than initially anticipated in fiscal 2024, primarily due to a combination of student-loan forgiveness, higher interest payments on the public debt, and larger Social Security and Medicare payments. In the most recent NIPA data, the Bureau of Labor Statistics revised up early-2024 federal outlays by nearly 3%, yielding a noticeably larger budget shortfall. The deficit should shrink over the next year in the absence of further loan forgiveness, though the improvement is modest as the size of social benefits transfers continues to balloon. With the downward revisions to total personal income, the forecast for retirement transfer income (that is, Social Security) has also shifted higher. The Fiscal Responsibility Act's budget caps will keep discretionary spending in check, but that represents an increasingly small share of total outlays. While the nominal spending outlook for the government's consumption and investment spending remains unchanged, upward revisions to the unit price of these programs reduce the near-term outlook for real government spending compared with the previous month's forecast. All told, the fiscal outlook has darkened. The federal government's budget deficit is projected to exceed 6% of GDP through calendar year 2025, about 50 basis points worse than prior projections.

U.S. MACRO BASELINE SCENARIO —FORECAST SUMMARY—October 2024										
	Units	**24Q2**	**24Q3**	**24Q4**	**25Q1**	**25Q2**	**25Q3**	**25Q4**	**26Q1**	**26Q2**
Gross Domestic Product	bcw $	23,223.9	23,351.5	23,482.5	23,599.2	23,736.9	23,880.5	24,000.0	24,116.4	24,232.4
Change	%AR	*3.0*	*2.2*	*2.3*	*2.0*	*2.4*	*2.4*	*2.0*	*2.0*	*1.9*
Federal Budget	$ bil	-208.6	-704.8	-715.5	-721.9	-186.0	-415.6	-605.3	-651.6	-224.1
Total Employment	mil	158.4	158.9	159.3	159.7	160.0	160.2	160.5	160.7	160.8
Change	*%AR*	*1.5*	*1.2*	*1.0*	*0.9*	*0.8*	*0.7*	*0.6*	*0.5*	*0.4*
Unemployment Rate	%	4.0	4.2	4.2	4.2	4.1	4.1	4.1	4.0	4.0
Light Vehicle Sales	mil, SAAR	15.7	15.6	16.2	16.4	16.6	16.8	16.9	17.0	17.1
Residential Housing Starts	mil, SAAR	1.3	1.3	1.3	1.4	1.5	1.5	1.5	1.6	1.6
Median Existing-Home Price	$ ths	407.0	411.9	414.2	415.8	416.3	417.9	419.3	420.7	422.1
Change	*%YA*	*4.9*	*3.6*	*3.6*	*2.9*	*2.3*	*1.4*	*1.2*	*1.2*	*1.4*
Consumer Price Index	%AR	2.8	1.2	2.4	2.6	2.7	2.5	2.4	2.5	2.5
Federal Funds Rate	%	5.3	5.3	4.6	4.3	4.0	3.8	3.5	3.3	3.0
Treasury Yield: 10-Yr Bond	%	4.4	4.0	4.0	4.1	4.1	4.1	4.1	4.1	4.1
Baa Corp. - 10-Yr Treasury	DIFF	1.5	1.7	1.7	2.0	2.3	2.4	2.5	2.5	2.5
Corporate Profits With IVA & CCA	$ bil	3,817.2	3,781.7	3,783.8	3,770.4	3,767.9	3,780.4	3,782.8	3,766.5	3,772.7
Change	%YA	*10.8*	*5.4*	*0.9*	*2.3*	*-1.3*	*0.0*	*0.0*	*-0.1*	*0.1*
S&P 500	1941=10	5,254.3	5,545.8	5,673.2	5,593.0	5,555.2	5,556.3	5,567.8	5,585.8	5,589.2
Change	%YA	*25.0*	*24.4*	*26.9*	*12.0*	*5.7*	*0.2*	*-1.9*	*-0.1*	*0.6*
CRE Price Index	index	308.1	306.6	305.7	305.3	305.1	309.2	316.2	321.5	326.9
NCREIF Property Index: Rate of Return	%, NSA	-0.2	0.7	1.5	1.7	1.9	1.7	1.7	1.7	1.7
C&I Loans Outstanding	$ bil	2,758.0	2,771.5	2,813.0	2,864.6	2,914.0	2,963.0	3,009.9	3,056.2	3,105.1
BAA spread	%	1.5	1.7	1.7	2.0	2.3	2.4	2.5	2.5	2.5

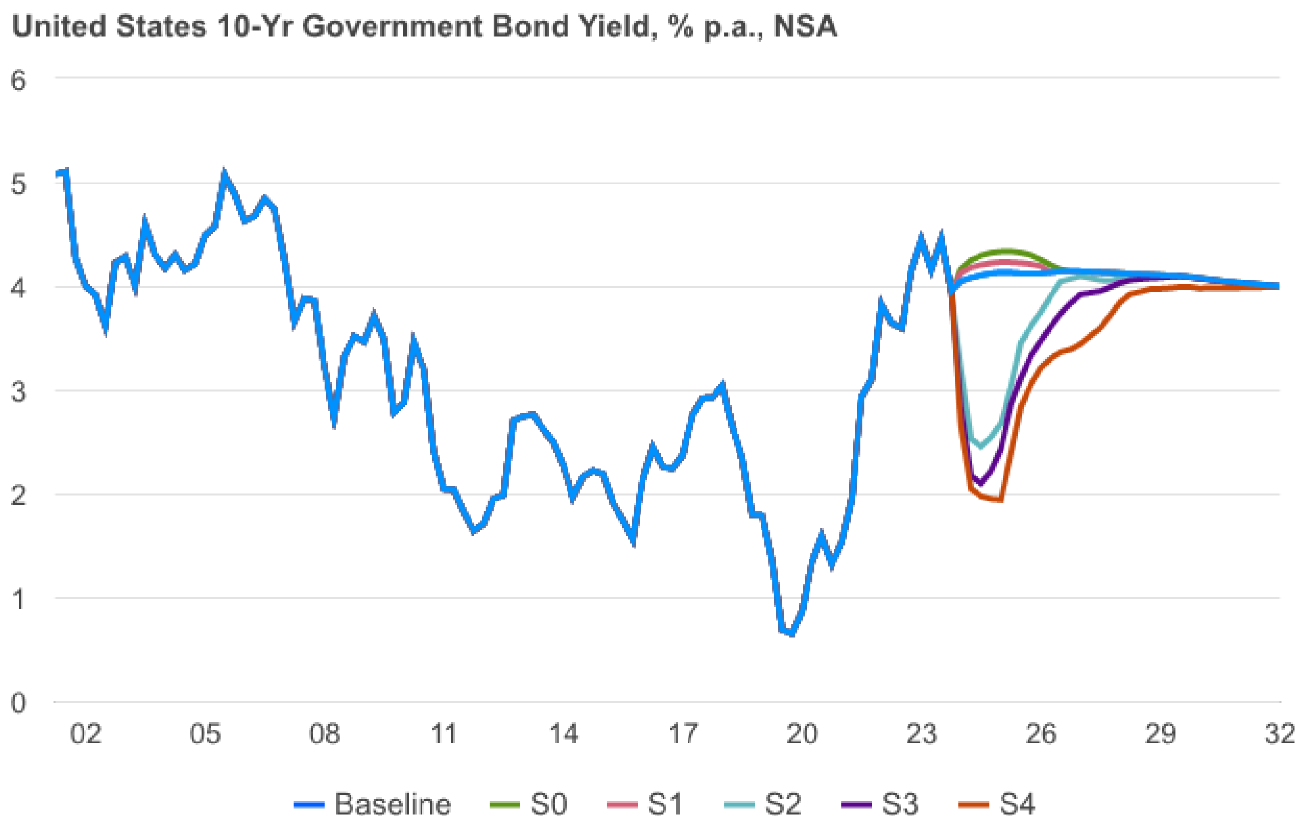
	Units	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**
Gross Domestic Product	bcw $	20,267.6	21,494.8	22,034.8	22,671.1	23,277.9	23,804.1	24,295.5	24,817.5	25,383.8
Change	%AR	*-2.2*	*6.1*	*2.5*	*2.9*	*2.7*	*2.3*	*2.1*	*2.1*	*2.3*
Federal Budget	$ bil	-3,348.2	-2,580.4	-1,419.2	-1,783.7	-2,183.6	-1,928.8	-1,870.4	-1,965.0	-2,111.1
Total Employment	mil	142.2	146.3	152.5	156.1	158.6	160.1	160.9	161.5	162.1
Change	*%AR*	*-5.8*	*2.9*	*4.3*	*2.3*	*1.6*	*0.9*	*0.5*	*0.4*	*0.4*
Unemployment Rate	%	8.1	5.4	3.6	3.6	4.0	4.1	4.0	4.0	4.0
Light Vehicle Sales	mil, SAAR	14.5	14.9	13.8	15.5	15.7	16.7	17.2	17.4	17.4
Residential Housing Starts	mil, SAAR	1.4	1.6	1.6	1.4	1.3	1.5	1.6	1.6	1.6
Median Existing-Home Price	$ ths	298.9	353.9	390.2	392.8	409.3	417.3	422.9	430.6	443.2
Change	*%YA*	*9.7*	*18.4*	*10.2*	*0.7*	*4.2*	*2.0*	*1.3*	*1.8*	*2.9*
Consumer Price Index	%AR	1.2	4.7	8.0	4.1	2.9	2.4	2.4	2.3	2.3
Federal Funds Rate	%	0.4	0.1	1.7	5.0	5.1	3.9	3.1	3.0	3.0
Treasury Yield: 10-Yr Bond	%	0.9	1.4	3.0	4.0	4.2	4.1	4.1	4.1	4.1
Baa Corp. - 10-Yr Treasury	DIFF	2.7	1.9	2.1	1.9	1.6	2.3	2.5	2.5	2.5
Corporate Profits With IVA & CCA	$ bil	2,411.3	3,077.6	3,316.7	3,546.5	3,766.9	3,775.4	3,785.5	3,902.5	4,073.1
Change	%YA	*-2.4*	*27.6*	*7.8*	*6.9*	*6.2*	*0.2*	*0.3*	*3.1*	*4.4*
S&P 500	1941=10	3,218.5	4,266.8	4,100.7	4,284.2	5,367.2	5,568.1	5,645.5	5,978.6	6,326.6
Change	%YA	*10.5*	*32.6*	*-3.9*	*4.5*	*25.3*	*3.7*	*1.4*	*5.9*	*5.8*
CRE Price Index	index	302.3	349.7	347.2	317.5	305.7	316.2	337.8	359.1	379.4
NCREIF Property Index: Rate of Return	%, NSA	0.4	4.2	1.4	-2.0	0.3	1.8	1.8	2.0	2.1
C&I Loans Outstanding	$ bil	2,693.3	2,479.4	2,642.6	2,771.3	2,774.5	2,937.9	3,125.7	3,308.6	3,495.7
BAA spread	%	2.7	1.9	2.1	1.9	1.6	2.3	2.5	2.5	2.5

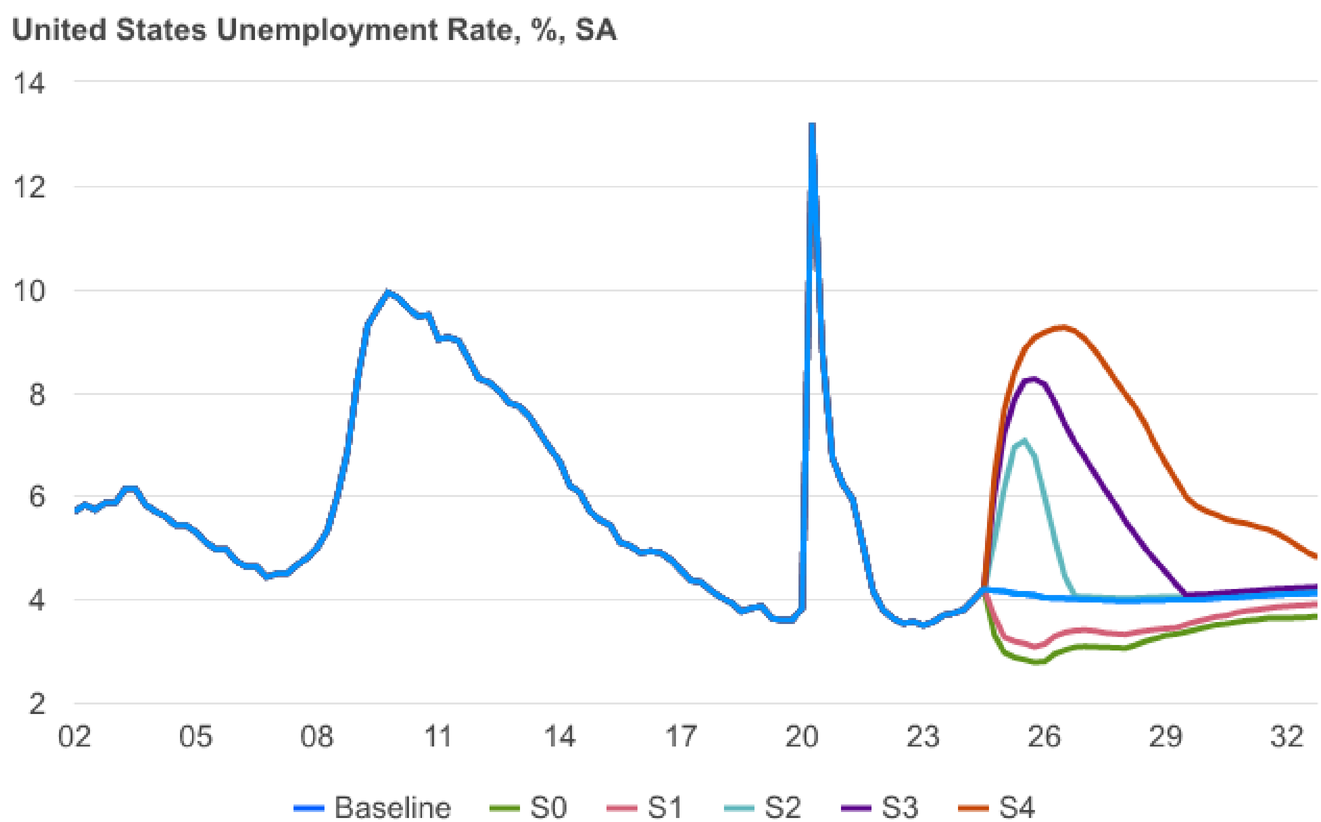
Risks

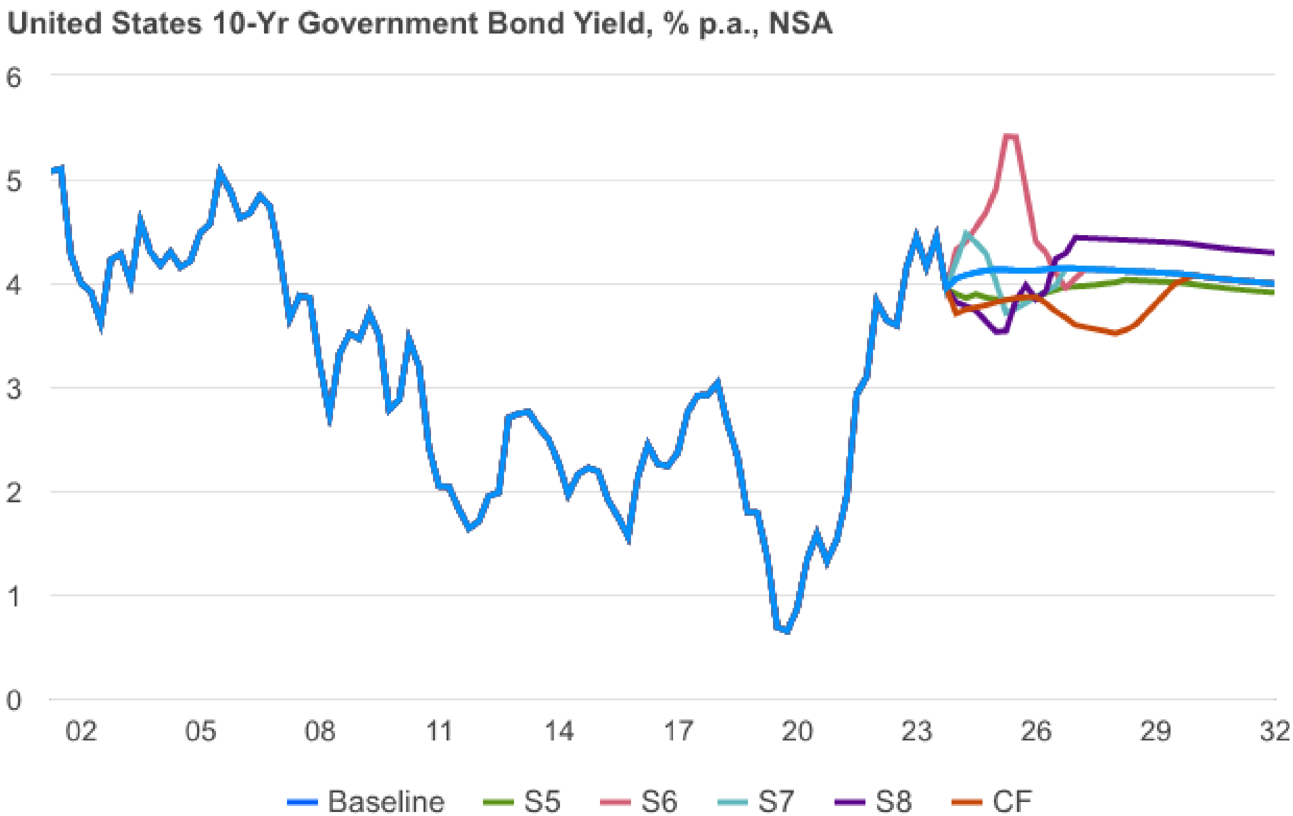


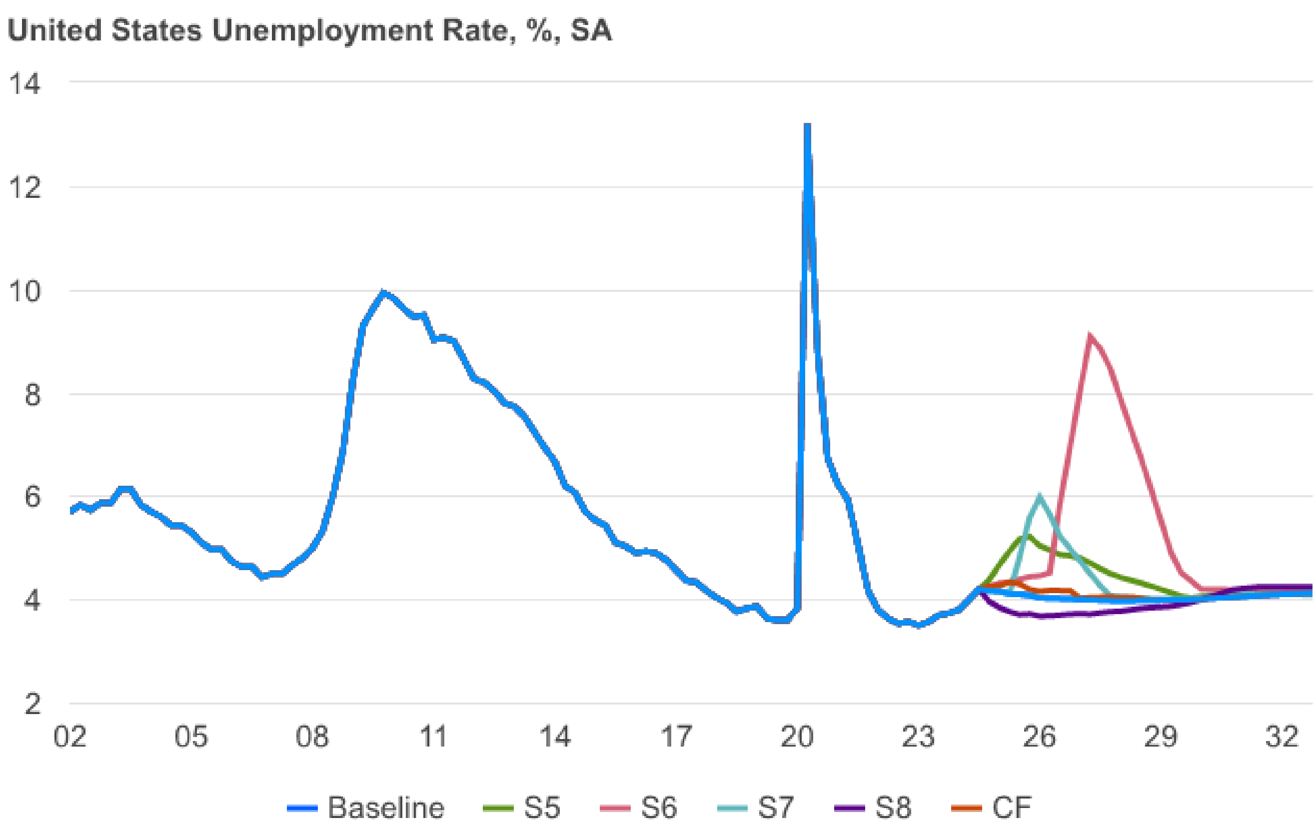
Note: Changes in red are either an increase in the odds of the event occurring or a new downside risk. Changes in green reflect a decline in the probability of the event occurring.

Scenario Comparison






United States 10-Yr Government Bond Yield, % p.a., NSA
6
5
4
3
2
1
0
02
05
08
11
14
17
20
23
26
29
32
Baseline
S5
S6
S7
S8
CF


United States Unemployment Rate, %, SA
14
12
10
8
6
4
2
02
05
08
11
14
17
20
23
26
29
32
Baseline
S5
S6
S7
S8
CF

U.S. REAL GDP, % CHANGE YR AGO —SCENARIO COMPARISON—October 2024									
	24Q3	24Q4	25Q1	25Q2	25Q3	25Q4	26Q1	26Q2	26Q3
Baseline	2.50	2.27	2.37	2.21	2.27	2.20	2.19	2.09	1.98
S0: Upside 4th Percentile	2.50	3.47	4.72	5.47	6.30	5.10	4.11	3.41	2.55
S1: Upside 10th Percentile	2.50	2.74	3.27	3.37	3.69	3.35	2.96	2.58	2.21
S2: Dow nside 75th Percentile	2.50	1.58	0.69	-0.41	-0.56	0.20	1.36	2.43	2.81
S3: Dow nside 90th Percentile	2.50	0.82	-0.46	-2.04	-2.29	-1.12	0.14	1.48	1.63
S4: Dow nside 96th Percentile	2.50	0.67	-0.91	-2.67	-4.07	-3.39	-2.15	-0.88	0.35
	2023	2024	2025	2026	2027	2028	2029	2030	2031
Baseline	2.89	2.68	2.26	2.06	2.15	2.28	2.26	2.18	2.10
S0: Upside 4th Percentile	2.89	2.98	5.40	3.16	2.43	2.26	2.05	1.72	1.76
S1: Upside 10th Percentile	2.89	2.79	3.42	2.44	2.15	2.34	2.36	2.00	1.93
S2: Dow nside 75th Percentile	2.89	2.50	-0.02	2.34	2.65	2.58	2.39	2.22	2.05
S3: Dow nside 90th Percentile	2.89	2.31	-1.48	1.32	2.79	3.43	2.66	2.35	2.22
S4: Dow nside 96th Percentile	2.89	2.27	-2.76	-0.41	2.75	3.34	2.66	2.39	2.24

U.S. CPI, % CHANGE YR AGO —SCENARIO COMPARISON—October 2024									
	24Q3	24Q4	25Q1	25Q2	25Q3	25Q4	26Q1	26Q2	26Q3
Baseline	2.63	2.55	2.25	2.22	2.54	2.53	2.50	2.44	2.43
S0: Upside 4th Percentile	2.63	2.62	2.48	2.53	2.91	2.90	2.82	2.77	2.72
S1: Upside 10th Percentile	2.63	2.58	2.38	2.42	2.76	2.73	2.61	2.50	2.47
S2: Dow nside 75th Percentile	2.63	2.46	2.13	1.92	1.71	1.71	1.72	1.96	2.44
S3: Dow nside 90th Percentile	2.63	2.46	2.12	1.41	1.22	1.12	0.97	1.54	1.97
S4: Dow nside 96th Percentile	2.63	2.46	2.04	1.27	0.84	0.17	0.14	0.72	1.32
	2023	2024	2025	2026	2027	2028	2029	2030	2031
Baseline	4.13	2.90	2.39	2.45	2.32	2.26	2.25	2.23	2.19
S0: Upside 4th Percentile	4.13	2.92	2.71	2.74	2.40	2.26	2.25	2.23	2.19
S1: Upside 10th Percentile	4.13	2.91	2.57	2.51	2.32	2.26	2.25	2.23	2.19
S2: Dow nside 75th Percentile	4.13	2.88	1.87	2.17	2.35	2.27	2.25	2.22	2.19
S3: Dow nside 90th Percentile	4.13	2.88	1.47	1.63	2.14	2.54	2.41	2.29	2.22
S4: Dow nside 96th Percentile	4.13	2.88	1.08	1.02	1.89	2.09	2.44	2.59	2.52

U.S. FEDERAL FUNDS RATE, % —SCENARIO COMPARISON—October 2024									
	24Q3	24Q4	25Q1	25Q2	25Q3	25Q4	26Q1	26Q2	26Q3
Baseline	5.27	4.60	4.29	4.04	3.79	3.52	3.29	3.00	2.96
S0: Upside 4th Percentile	5.27	4.60	4.40	4.17	3.95	3.69	3.45	3.26	3.12
S1: Upside 10th Percentile	5.27	4.60	4.35	4.14	3.89	3.63	3.37	3.18	3.05
S2: Dow nside 75th Percentile	5.27	4.30	3.70	3.05	2.55	2.15	2.08	2.02	1.95
S3: Dow nside 90th Percentile	5.27	4.20	3.57	2.93	2.43	1.87	1.44	1.03	0.83
S4: Dow nside 96th Percentile	5.27	4.10	3.45	2.73	2.13	1.67	1.23	0.85	0.64
	2023	2024	2025	2026	2027	2028	2029	2030	2031
Baseline	5.03	5.13	3.91	3.05	2.96	2.96	2.96	2.70	2.70
S0: Upside 4th Percentile	5.03	5.13	4.05	3.23	3.02	2.97	2.97	2.71	2.71
S1: Upside 10th Percentile	5.03	5.13	4.01	3.15	2.98	2.98	2.98	2.71	2.71
S2: Dow nside 75th Percentile	5.03	5.06	2.86	2.03	2.51	2.96	2.96	2.70	2.70
S3: Dow nside 90th Percentile	5.03	5.03	2.70	1.05	1.25	1.88	2.38	2.70	2.70
S4: Dow nside 96th Percentile	5.03	5.01	2.50	0.79	0.47	0.65	0.81	1.57	2.38

U.S. S&P 500, % CHANGE YR AGO —SCENARIO COMPARISON—October 2024									
	24Q3	24Q4	25Q1	25Q2	25Q3	25Q4	26Q1	26Q2	26Q3
Baseline	24.40	26.87	11.96	5.73	0.19	-1.86	-0.13	0.61	1.91
S0: Upside 4th Percentile	24.40	35.14	23.77	18.37	11.08	1.41	-0.66	-0.86	1.68
S1: Upside 10th Percentile	24.40	32.60	20.90	14.89	6.15	-1.23	-2.81	-2.50	1.45
S2: Dow nside 75th Percentile	24.40	26.17	-3.01	-17.13	-21.36	-21.60	-6.32	7.01	10.28
S3: Dow nside 90th Percentile	24.40	12.80	-17.71	-31.23	-34.79	-27.26	-9.57	5.08	9.48
S4: Dow nside 96th Percentile	24.40	7.30	-22.82	-34.76	-43.57	-35.83	-19.46	-8.10	3.25
	2023	2024	2025	2026	2027	2028	2029	2030	2031
Baseline	4.48	25.28	3.74	1.39	5.90	5.82	5.02	4.91	4.64
S0: Upside 4th Percentile	4.48	27.44	13.06	1.06	5.94	3.95	4.96	4.91	4.64
S1: Upside 10th Percentile	4.48	26.77	9.64	-0.10	5.13	3.61	4.86	4.91	4.64
S2: Dow nside 75th Percentile	4.48	25.10	-16.11	5.38	14.11	10.93	5.37	4.91	4.64
S3: Dow nside 90th Percentile	4.48	21.61	-27.97	3.99	19.77	16.68	9.01	5.29	4.64
S4: Dow nside 96th Percentile	4.48	20.17	-34.49	-5.18	15.71	19.36	11.05	10.14	8.97

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

→ Strengthening of China's economy boosts demand for U.S. exports and manufacturing.

→ Upcoming fiscal disputes in Congress resolve much more easily than expected.

→ The Russian invasion of Ukraine and the Hamas-Israel conflict resolve much faster than anticipated.

→ The Fed's efforts to resolve bank failures successfully stabilize consumer confidence.

→ The economy has more than full employment in the fourth quarter of 2024, with the unemployment rate dropping below the baseline at that time.

→ Because of 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 rise strongly.

→ Political and economic tensions between the U.S. and China diminish substantially.

Monetary policy assumptions

→ The terminal range for the fed funds rate was 5.25% to 5.5%, and it remained there throughout the second quarter of 2024. Subsequently, the Fed has begun to cut rates as inflation decelerates, though rates are slightly higher than in the baseline.

→ The 10-year Treasury is a bit higher than in the baseline because of the stronger growth and slightly higher inflation.

→ The Fed's efforts to resolve recent bank failures successfully stabilize consumer confidence.

Fiscal policy assumptions

→ The Infrastructure Investment and Jobs Act provides $572 billion in new infrastructure spending over the next decade, half of which will go to transportation infrastructure and the rest to other needs such as the power grid and broadband. Congress passed the legislation in November 2021, and its implementation is well underway, with the peak impact on the labor market set to occur in the middle of the decade.

→ Democrats enacted the Inflation Reduction Act on their own via budget reconciliation in 2022. The centerpiece of the bill is the more than $500 billion in tax credits for the production of electricity from renewable sources, residential and commercial energy efficiency, advanced energy manufacturing, and electric vehicles. The IRA also utilizes grants, rebates, loans and federal procurement to promote the adoption of clean energy technologies and climate resilience, among other objectives. Finally, the law extends the expansion of the Affordable Care Act premium subsidies under the American Rescue Plan into 2025. Higher corporate taxes, as well as prescription drug savings, defray the cost of these expenditures on clean energy and healthcare affordability.

→ Congress passed the Fiscal Responsibility Act in 2023, which suspends the debt limit until 2025 and places two-year caps on discretionary federal spending that, combined with other smaller fiscal changes, will produce $1.5 trillion in budgetary savings over the next decade. Under the spending limits, the defense budget is allowed to grow by 3.3% and 1% in fiscal 2024 and 2025, respectively. The baseline assumes $1.85 trillion in discretionary spending for fiscal 2024, when certain accounting gimmicks and emergency spending are factored in. The budget deficit is expected to remain large at around 6.9% of GDP for fiscal 2024, as the deficit by the federal government recorded through August has been deeper than anticipated.

→ As expected, Congress passed a continuing resolution to push the budget negotiations to the other side of the election; it will expire at midnight on December 20. We expect the fiscal 2025 discretionary budget to mostly hold to the $1.606 trillion cap as mandated by the FRA. However, side deals between President Biden and former House Speaker Kevin McCarthy, which amount to about $85 billion over two years, will push the spending total higher as certain nondefense items are reclassified as emergency spending to avoid the limit. We also expect additional emergency spending to respond to various geopolitical and extreme weather events, pushing the discretionary spending total even higher for the fiscal year to $1.87 trillion. The deficit-to-GDP ratio will hold at 6.8%.

→ For fiscal 2025 and beyond, the baseline assumes Kamala Harris wins the presidency and Congress is divided, with Republicans in control of the Senate and Democrats boasting a majority in the House. Fiscal policy will more or less stick to the status quo as both parties struggle to push their priorities through. However, the debt limit gets extended after the suspension ends on January 1. Also, the personal income provisions in the Tax Cuts and Jobs Act, which are set to expire at the end of 2025, are extended for individuals earning less than $400,000 per annum while those earning more will see a tax increase. The discretionary budget in fiscal 2025 sticks to the $1.606 trillion cap imposed by the FRA, though accounting gimmicks and emergency spending push the true spending total higher.

→ The fiscal policy assumptions in S0 are 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.

The upside scenario “S0: Alternative Scenario 0 – Upside – 4th Percentile” assumes that acceleration of China’s economy boosts demand for U.S. exports and manufacturing. Further, the Fed’s efforts to resolve bank failures successfully stabilize consumer confidence. With a divided Congress, the fiscal policy status quo largely endures, but the drama proves to be much less than expected. 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. Likewise, inflation is slightly above the baseline, and as a result, so are long-term interest rates. The terminal range for the fed funds rate was 5.25% to 5.5%, and it remained there throughout the second quarter of 2024. Subsequently, the Fed has begun to cut rates as inflation decelerates, but rates stay 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 8.8% from the third quarter of 2024 to the third quarter of 2025, compared with 1.6% 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 by 5.4% in 2025 and 3.2% in 2026, compared with 2.3% and 2.1%, 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—October 2024										
	Units	24Q2	24Q3	24Q4	25Q1	25Q2	25Q3	25Q4	26Q1	26Q2
Gross Domestic Product	bcw $	23,223.9	23,351.5	23,757.2	24,140.9	24,494.6	24,823.3	24,969.2	25,132.6	25,330.4
Change	%AR	*3.0*	*2.2*	*7.1*	*6.6*	*6.0*	*5.5*	*2.4*	*2.6*	*3.2*
Federal Budget	$ bil	-208.6	-704.8	-691.7	-672.0	-106.7	-313.1	-485.6	-522.9	-90.9
Total Employment	mil	158.4	158.9	160.7	161.5	162.3	163.2	163.9	164.3	164.6
Change	*%AR*	*1.5*	*1.2*	*4.6*	*2.0*	*2.1*	*2.1*	*1.9*	*1.0*	*0.7*
Unemployment Rate	%	4.0	4.2	3.3	3.0	2.9	2.8	2.8	2.8	2.9
Light Vehicle Sales	mil, SAAR	15.7	15.6	16.8	17.1	17.5	17.6	18.0	17.9	17.7
Residential Housing Starts	mil, SAAR	1.3	1.3	1.4	1.5	1.6	1.7	1.7	1.8	1.9
Median Existing-Home Price	$ ths	407.0	411.9	427.6	437.1	445.1	452.6	466.3	475.3	480.7
Change	*%YA*	*4.9*	*3.6*	*6.9*	*8.1*	*9.4*	*9.9*	*9.1*	*8.7*	*8.0*
Consumer Price Index	%AR	2.8	1.2	2.7	3.3	3.0	2.7	2.7	2.9	2.8
Federal Funds Rate	%	5.3	5.3	4.6	4.4	4.2	4.0	3.7	3.5	3.3
Treasury Yield: 10-Yr Bond	%	4.4	4.0	4.2	4.3	4.3	4.3	4.3	4.3	4.3
Baa Corp. - 10-Yr Treasury	DIFF	1.5	1.7	1.5	1.7	2.0	2.2	2.3	2.4	2.4
Corporate Profits With IVA & CCA	$ bil	3,817.2	3,781.7	3,824.7	3,873.8	3,940.6	4,017.0	4,085.2	4,114.1	4,161.2
Change	%YA	*10.8*	*5.4*	*2.0*	*5.1*	*3.2*	*6.2*	*6.8*	*6.2*	*5.6*
S&P 500	1941=10	5,254.3	5,545.8	6,042.8	6,183.0	6,219.4	6,160.0	6,128.2	6,142.5	6,166.0
Change	%YA	*25.0*	*24.4*	*35.1*	*23.8*	*18.4*	*11.1*	*1.4*	*-0.7*	*-0.9*
CRE Price Index	index	308.1	306.6	309.6	315.2	317.8	326.9	338.9	347.9	355.6
NCREIF Property Index: Rate of Return	%, NSA	-0.2	0.7	2.3	2.5	2.5	2.5	2.4	2.3	2.2
C&I Loans Outstanding	$ bil	2,758.0	2,771.5	2,843.5	3,024.0	3,173.9	3,307.4	3,466.7	3,617.2	3,729.6
BAA spread	%	1.5	1.7	1.5	1.7	2.0	2.2	2.3	2.4	2.4

	Units	2020	2021	2022	2023	2024	2025	2026	2027	2028
Gross Domestic Product	bcw $	20,267.6	21,494.8	22,034.8	22,671.1	23,346.5	24,607.0	25,385.3	26,002.4	26,590.2
Change	%AR	*-2.2*	*6.1*	*2.5*	*2.9*	*3.0*	*5.4*	*3.2*	*2.4*	*2.3*
Federal Budget	$ bil	-3,348.2	-2,580.4	-1,419.2	-1,783.7	-2,159.8	-1,577.4	-1,333.9	-1,392.6	-1,526.0
Total Employment	mil	142.2	146.3	152.5	156.1	158.9	162.7	164.9	165.7	166.0
Change	*%AR*	*-5.8*	*2.9*	*4.3*	*2.3*	*1.8*	*2.4*	*1.3*	*0.5*	*0.2*
Unemployment Rate	%	8.1	5.4	3.6	3.6	3.8	2.9	3.0	3.1	3.2
Light Vehicle Sales	mil, SAAR	14.5	14.9	13.8	15.5	15.9	17.5	17.7	17.7	17.8
Residential Housing Starts	mil, SAAR	1.4	1.6	1.6	1.4	1.4	1.6	1.9	1.9	1.9
Median Existing-Home Price	$ ths	298.9	353.9	390.2	392.8	412.7	450.3	480.6	492.3	509.2
Change	*%YA*	*9.7*	*18.4*	*10.2*	*0.7*	*5.1*	*9.1*	*6.7*	*2.4*	*3.4*
Consumer Price Index	%AR	1.2	4.7	8.0	4.1	2.9	2.7	2.7	2.4	2.3
Federal Funds Rate	%	0.4	0.1	1.7	5.0	5.1	4.1	3.2	3.0	3.0
Treasury Yield: 10-Yr Bond	%	0.9	1.4	3.0	4.0	4.2	4.3	4.3	4.2	4.1
Baa Corp. - 10-Yr Treasury	DIFF	2.7	1.9	2.1	1.9	1.5	2.0	2.4	2.4	2.5
Corporate Profits With IVA & CCA	$ bil	2,411.3	3,077.6	3,316.7	3,546.5	3,777.1	3,979.1	4,175.3	4,330.4	4,540.8
Change	%YA	*-2.4*	*27.6*	*7.8*	*6.9*	*6.5*	*5.3*	*4.9*	*3.7*	*4.9*
S&P 500	1941=10	3,218.5	4,266.8	4,100.7	4,284.2	5,459.7	6,172.7	6,238.3	6,608.8	6,869.8
Change	%YA	*10.5*	*32.6*	*-3.9*	*4.5*	*27.4*	*13.1*	*1.1*	*5.9*	*3.9*
CRE Price Index	index	302.3	349.7	347.2	317.5	309.6	338.9	369.1	389.0	404.7
NCREIF Property Index: Rate of Return	%, NSA	0.4	4.2	1.4	-2.0	0.5	2.5	2.2	2.1	2.0
C&I Loans Outstanding	$ bil	2,693.3	2,479.4	2,642.6	2,771.3	2,782.1	3,243.0	3,754.9	4,009.1	4,196.5
BAA spread	%	2.7	1.9	2.1	1.9	1.5	2.0	2.4	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

→ Acceleration of China's economy boosts demand for U.S. exports and manufacturing.

→ Upcoming fiscal disputes in Congress resolve more easily than expected.

→ The Russian invasion of Ukraine and the Hamas-Israel conflict resolve faster than anticipated.

→ The Fed's efforts to resolve bank failures successfully stabilize consumer confidence.

→ The economy has more than full employment starting in the first quarter of 2025, with unemployment declining below the baseline.

→ 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 terminal range for the fed funds rate was 5.25% to 5.5%, and it remained there through the second quarter of 2024. Subsequently, the Fed has begun to cut rates, but rates remain a bit higher than in the baseline.

→ The 10-year Treasury is a bit higher than in the baseline because of the stronger growth and slightly higher inflation.

→ The Fed's efforts to address recent bank failures successfully stabilize consumer confidence.

Fiscal policy assumptions

→ The Infrastructure Investment and Jobs Act provides $572 billion in new infrastructure spending over the next decade, half of which will go to transportation infrastructure and the rest to other needs such as the power grid and broadband. Congress passed the legislation in November 2021, and its implementation is well underway, with the peak impact on the labor market set to occur in the middle of the decade.

→ Democrats enacted the Inflation Reduction Act on their own via budget reconciliation in 2022. The centerpiece of the bill is the more than $500 billion in tax credits for the production of electricity from renewable sources, residential and commercial energy efficiency, advanced energy manufacturing, and electric vehicles. The IRA also utilizes grants, rebates, loans and federal procurement to promote the adoption of clean energy technologies and climate resilience, among other objectives. Finally, the law extends the expansion of the Affordable Care Act premium subsidies under the American Rescue Plan into 2025. Higher corporate taxes, as well as prescription drug savings, defray the cost of these expenditures on clean energy and healthcare affordability.

→ Congress passed the Fiscal Responsibility Act in 2023, which suspends the debt limit until 2025 and places two-year caps on discretionary federal spending that, combined with other smaller fiscal changes, will produce $1.5 trillion in budgetary savings over the next decade. Under the spending limits, the defense budget is allowed to grow by 3.3% and 1% in fiscal 2024 and 2025, respectively. The baseline assumes $1.85 trillion in discretionary spending for fiscal 2024, when certain accounting gimmicks and emergency spending are factored in. The budget deficit is expected to remain large at around 6.9% of GDP for fiscal 2024, as the deficit by the federal government recorded through August has been deeper than anticipated.

→ As expected, Congress passed a continuing resolution to push the budget negotiations to the other side of the election; it will expire at midnight on December 20. We expect the fiscal 2025 discretionary budget to mostly hold to the $1.606 trillion cap as mandated by the FRA. However, side deals between President Biden and former House Speaker Kevin McCarthy, which amount to about $85 billion over two years, will push the spending total higher as certain nondefense items are reclassified as emergency spending to avoid the limit. We also expect additional emergency spending to respond to various geopolitical and extreme weather events, pushing the discretionary spending total even higher for the fiscal year to $1.87 trillion. The deficit-to-GDP ratio will hold at 6.8%.

→ For fiscal 2025 and beyond, the baseline assumes Kamala Harris wins the presidency and Congress is divided, with Republicans in control of the Senate and Democrats boasting a majority in the House. Fiscal policy will more or less stick to the status quo as both parties struggle to push their priorities through. However, the debt limit gets extended after the suspension ends on January 1. Also, the personal income provisions in the Tax Cuts and Jobs Act, which are set to expire at the end of 2025, are extended for individuals earning less than $400,000 per annum while those earning more will see a tax increase. The discretionary budget in fiscal 2025 sticks to the $1.606 trillion cap imposed by the FRA, though accounting gimmicks and emergency spending push the true spending total higher.

→ The fiscal policy assumptions in S1 are 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.

The upside scenario "S1: Alternative Scenario 1 – Upside – 10th Percentile" assumes that the acceleration of China's economy boosts demand for U.S. exports and manufacturing. Further, the Fed's efforts to resolve bank failures successfully stabilize consumer confidence. With a divided Congress, the policy status quo largely endures, but the drama will be less than expected. Additionally, the economic impact of the Russian invasion of Ukraine and the Hamas-Israel conflict resolve 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 rise a bit more than in the baseline. The terminal range for the fed funds rate was 5.25% to 5.5% and it remained there throughout the second quarter of 2024. Subsequently, the Fed begins to cut rates, but rates remain a bit higher than in the baseline because of slightly 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, causing consumer spending and business investment growth to accelerate. The return to strong gains in U.S. employment lifts household incomes and spending more than expected. House prices rise 5.9% from the third quarter of 2024 to the third quarter of 2025 compared with 1.6% 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 by 3.4% in 2025 and 2.4% in 2026, compared with 2.3% and 2.1%, 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—October 2024										
	Units	**24Q2**	**24Q3**	**24Q4**	**25Q1**	**25Q2**	**25Q3**	**25Q4**	**26Q1**	**26Q2**
Gross Domestic Product	bcw $	23,223.9	23,351.5	23,590.0	23,807.9	24,007.7	24,214.1	24,379.2	24,512.2	24,626.2
Change	%AR	*3.0*	*2.2*	*4.1*	*3.7*	*3.4*	*3.5*	*2.8*	*2.2*	*1.9*
Federal Budget	$ bil	-208.6	-704.8	-707.6	-695.5	-140.5	-356.0	-534.0	-575.2	-146.0
Total Employment	mil	158.4	158.9	159.6	160.3	160.8	161.3	161.8	162.3	162.6
Change	*%AR*	*1.5*	*1.2*	*1.9*	*1.8*	*1.0*	*1.5*	*1.1*	*1.2*	*0.7*
Unemployment Rate	%	4.0	4.2	3.7	3.3	3.2	3.1	3.1	3.1	3.3
Light Vehicle Sales	mil, SAAR	15.7	15.6	16.7	17.0	17.3	17.4	17.8	17.7	17.5
Residential Housing Starts	mil, SAAR	1.3	1.3	1.3	1.4	1.5	1.6	1.6	1.7	1.8
Median Existing-Home Price	$ ths	407.0	411.9	421.5	427.5	432.5	438.5	446.3	451.7	453.9
Change	*%YA*	*4.9*	*3.6*	*5.4*	*5.8*	*6.3*	*6.5*	*5.9*	*5.7*	*5.0*
Consumer Price Index	%AR	2.8	1.2	2.5	3.0	3.0	2.5	2.4	2.6	2.5
Federal Funds Rate	%	5.3	5.3	4.6	4.4	4.1	3.9	3.6	3.4	3.2
Treasury Yield: 10-Yr Bond	%	4.4	4.0	4.1	4.2	4.2	4.2	4.2	4.2	4.2
Baa Corp. - 10-Yr Treasury	DIFF	1.5	1.7	1.5	1.8	2.1	2.3	2.4	2.5	2.5
Corporate Profits With IVA & CCA	$ bil	3,817.2	3,781.7	3,814.5	3,845.9	3,907.5	3,967.4	4,014.5	4,022.0	4,053.9
Change	%YA	*10.8*	*5.4*	*1.7*	*4.4*	*2.4*	*4.9*	*5.2*	*4.6*	*3.7*
S&P 500	1941=10	5,254.3	5,545.8	5,929.4	6,039.9	6,036.4	5,886.8	5,856.4	5,870.0	5,885.7
Change	%YA	*25.0*	*24.4*	*32.6*	*20.9*	*14.9*	*6.1*	*-1.2*	*-2.8*	*-2.5*
CRE Price Index	index	308.1	306.6	307.0	310.4	310.9	318.7	328.6	335.5	341.6
NCREIF Property Index: Rate of Return	%, NSA	-0.2	0.7	2.1	2.3	2.2	2.2	2.1	2.0	1.9
C&I Loans Outstanding	$ bil	2,758.0	2,771.5	2,830.7	2,989.7	3,112.9	3,222.6	3,336.2	3,433.9	3,509.3
BAA spread	%	1.5	1.7	1.5	1.8	2.1	2.3	2.4	2.5	2.5

	Units	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**
Gross Domestic Product	bcw $	20,267.6	21,494.8	22,034.8	22,671.1	23,304.7	24,102.2	24,691.3	25,223.4	25,814.4
Change	%AR	*-2.2*	*6.1*	*2.5*	*2.9*	*2.8*	*3.4*	*2.4*	*2.2*	*2.3*
Federal Budget	$ bil	-3,348.2	-2,580.4	-1,419.2	-1,783.7	-2,175.7	-1,726.0	-1,556.7	-1,625.8	-1,753.2
Total Employment	mil	142.2	146.3	152.5	156.1	158.7	161.1	162.8	163.7	164.1
Change	*%AR*	*-5.8*	*2.9*	*4.3*	*2.3*	*1.7*	*1.5*	*1.1*	*0.6*	*0.2*
Unemployment Rate	%	8.1	5.4	3.6	3.6	3.9	3.2	3.3	3.4	3.4
Light Vehicle Sales	mil, SAAR	14.5	14.9	13.8	15.5	15.9	17.4	17.6	17.5	17.6
Residential Housing Starts	mil, SAAR	1.4	1.6	1.6	1.4	1.3	1.5	1.8	1.8	1.8
Median Existing-Home Price	$ ths	298.9	353.9	390.2	392.8	411.1	436.2	454.8	466.0	482.9
Change	*%YA*	*9.7*	*18.4*	*10.2*	*0.7*	*4.7*	*6.1*	*4.3*	*2.5*	*3.6*
Consumer Price Index	%AR	1.2	4.7	8.0	4.1	2.9	2.6	2.5	2.3	2.3
Federal Funds Rate	%	0.4	0.1	1.7	5.0	5.1	4.0	3.2	3.0	3.0
Treasury Yield: 10-Yr Bond	%	0.9	1.4	3.0	4.0	4.2	4.2	4.2	4.1	4.1
Baa Corp. - 10-Yr Treasury	DIFF	2.7	1.9	2.1	1.9	1.6	2.1	2.5	2.5	2.5
Corporate Profits With IVA & CCA	$ bil	2,411.3	3,077.6	3,316.7	3,546.5	3,774.6	3,933.8	4,062.1	4,176.2	4,366.0
Change	%YA	*-2.4*	*27.6*	*7.8*	*6.9*	*6.4*	*4.2*	*3.3*	*2.8*	*4.5*
S&P 500	1941=10	3,218.5	4,266.8	4,100.7	4,284.2	5,431.3	5,954.9	5,949.2	6,254.2	6,479.7
Change	%YA	*10.5*	*32.6*	*-3.9*	*4.5*	*26.8*	*9.6*	*-0.1*	*5.1*	*3.6*
CRE Price Index	index	302.3	349.7	347.2	317.5	307.0	328.6	353.7	374.5	393.1
NCREIF Property Index: Rate of Return	%, NSA	0.4	4.2	1.4	-2.0	0.4	2.2	2.0	2.0	2.0
C&I Loans Outstanding	$ bil	2,693.3	2,479.4	2,642.6	2,771.3	2,779.0	3,165.4	3,531.7	3,753.9	3,942.6
BAA spread	%	2.7	1.9	2.1	1.9	1.6	2.1	2.5	2.5	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

→ Elevated interest rates weaken credit-sensitive spending more than anticipated.

→ Upcoming fiscal disputes in Congress are more contentious than expected, leading to a decline in business and consumer sentiment.

→ Worries grow that the Hamas-Israel conflict will lead to a wider conflict and the crisis caused by Russia's invasion of Ukraine persists longer than expected.

→ 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.

→ Concerns about additional bank failures reduce consumer confidence and cause banks to tighten lending standards more than expected.

→ The combination of rising political tensions, still-elevated inflation, still-elevated interest rates, and reduced credit availability causes the economy to fall into a mild recession starting in the fourth quarter of 2024. 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 third quarter of 2025.

→ The stock market falls by 23% from the fourth quarter of 2024 through the second quarter of 2025.

→ Declines in European economies hurt U.S. exports and also corporate earnings from European subsidiaries.

→ The economy returns to full employment by the fourth quarter of 2026.

Monetary policy assumptions

→ Because of concerns about inflation, the Fed initially kept the fed funds rate at the terminal range of 5.25% to 5.5% through the second quarter of 2024. However, the Fed has begun to ease in the third quarter of 2024, and as the economy weakens, the fed funds rate declines below the baseline starting in the fourth quarter of 2024.

→ The 10-year Treasury falls below the baseline starting in the fourth quarter of 2024 because of the flight to quality.

→ The Fed's efforts to address recent bank failures do not succeed in stabilizing consumer confidence and banks tighten lending standards.

Fiscal policy assumptions

→ The Infrastructure Investment and Jobs Act provides $572 billion in new infrastructure spending over the next decade, half of which will go to transportation infrastructure and the rest to other needs such as the power grid and broadband. Congress passed the legislation in November 2021, and its implementation is well underway, with the peak impact on the labor market set to occur in the middle of the decade.

→ Democrats enacted the Inflation Reduction Act on their own via budget reconciliation in 2022. The centerpiece of the bill is the more than $500 billion in tax credits for the production of electricity from renewable sources, residential and commercial energy efficiency, advanced energy manufacturing, and electric vehicles. The IRA also utilizes grants, rebates, loans and federal procurement to promote the adoption of clean energy technologies and climate resilience, among other objectives. Finally, the law extends the expansion of the Affordable Care Act premium subsidies under the American Rescue Plan into 2025. Higher corporate taxes, as well as prescription drug savings, defray the cost of these expenditures on clean energy and healthcare affordability.

→ Congress passed the Fiscal Responsibility Act in 2023, which suspends the debt limit until 2025 and places two-year caps on discretionary federal spending that, combined with other smaller fiscal changes, will produce $1.5 trillion in budgetary savings over the next decade. Under the spending limits, the defense budget is allowed to grow by 3.3% and 1% in fiscal 2024 and 2025, respectively. The baseline assumes $1.85 trillion in discretionary spending for fiscal 2024, when certain accounting gimmicks and emergency spending are factored in. The budget deficit is expected to remain large at around 6.9% of GDP for fiscal 2024, as the deficit by the federal government recorded through August has been deeper than anticipated.

→ As expected, Congress passed a continuing resolution to push the budget negotiations to the other side of the election; it will expire at midnight on December 20. We expect the fiscal 2025 discretionary budget to mostly hold to the $1.606 trillion cap as mandated by the FRA. However, side deals between President Biden and former House Speaker Kevin McCarthy, which amount to about $85 billion over two years, will push the spending total higher as certain nondefense items are reclassified as emergency spending to avoid the limit. We also expect additional emergency spending to respond to various geopolitical and extreme weather events, pushing the discretionary spending total even higher for the fiscal year to $1.87 trillion. The deficit-to-GDP ratio will hold at 6.8%.

→ For fiscal 2025 and beyond, the baseline assumes Kamala Harris wins the presidency and Congress is divided, with Republicans in control of the Senate and Democrats boasting a majority in the House. Fiscal policy will more or less stick to the status quo as both parties struggle to push their priorities through. However, the debt limit gets extended after the suspension ends on January 1. Also, the personal income provisions in the Tax Cuts and Jobs Act, which are set to expire at the end of 2025, are extended for individuals earning less than $400,000 per annum while those earning more will see a tax increase. The discretionary budget in fiscal 2025 sticks to the $1.606 trillion cap imposed by the FRA, though accounting gimmicks and emergency spending push the true spending total higher.

→ The fiscal policy assumptions in S2 are the same as in the baseline. However, since the economy is weaker than in the baseline, tax revenues are lower than in the baseline and the deficit is higher. The higher deficit adds to worries about growth in the national debt, intensifying investors' anxieties over Congress' ability to raise the debt ceiling in a timely manner and raising uncertainty over the course of tax policy. Though no crisis ultimately materializes, business and consumer sentiment is damaged.

In the downside 25% scenario, "S2: Alternative Scenario 2 – Downside – 75th Percentile," still-elevated interest rates reduce consumer confidence and credit-sensitive spending more than expected. Additionally, the Russian invasion of Ukraine persists longer than expected, worries grow that the Hamas-Israel conflict will lead to a wider conflict and that China might block the Taiwan Strait, limiting the supply of chips from Taiwan. Additionally, the Fed's efforts to address bank failures do not succeed in stabilizing consumer confidence and banks tighten lending standards. Further, with a divided Congress, the fiscal policy status quo largely endures, but the drama will be somewhat more intense than expected, causing business and consumer sentiment to decline. These factors cause the economy to fall into recession in the fourth quarter of 2024. The Fed lowers the fed funds rate below the baseline starting in the fourth quarter of 2024. The stock market falls from the fourth quarter of 2024 through the second quarter of 2025, by 23% cumulatively. The decline lasts for three quarters, and the peak-to-trough decline in real GDP is 1%. Further, declines in European economies 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 fourth quarter of 2024, and it reaches a peak of 7.1% in the third quarter of 2025. House prices decline by 5.7% from the third quarter of 2024 to the third quarter of 2025, compared with an increase of 1.6% in the baseline. The economy begins to recover in the third quarter of 2025 amid Fed easing. The economy returns to full employment by fourth quarter of 2026.

The change in real GDP on an annual average basis is -0.1% in 2025 and 2.3% in 2026, compared with 2.3% 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 S2 SCENARIO —FORECAST SUMMARY—October 2024										
	Units	**24Q2**	**24Q3**	**24Q4**	**25Q1**	**25Q2**	**25Q3**	**25Q4**	**26Q1**	**26Q2**
Gross Domestic Product	bcw $	23,223.9	23,351.5	23,324.2	23,211.5	23,127.7	23,221.6	23,371.8	23,527.5	23,690.0
Change	%AR	*3.0*	*2.2*	*-0.5*	*-1.9*	*-1.4*	*1.6*	*2.6*	*2.7*	*2.8*
Federal Budget	$ bil	-208.6	-704.8	-727.7	-740.6	-219.4	-449.1	-634.0	-668.8	-225.0
Total Employment	mil	158.4	158.9	157.1	155.9	155.1	155.0	155.7	156.9	158.1
Change	*%AR*	*1.5*	*1.2*	*-4.5*	*-2.8*	*-2.2*	*-0.1*	*1.8*	*3.0*	*3.1*
Unemployment Rate	%	4.0	4.2	5.1	6.1	6.9	7.1	6.8	6.0	5.2
Light Vehicle Sales	mil, SAAR	15.7	15.6	15.9	15.6	15.3	15.7	16.3	16.5	16.7
Residential Housing Starts	mil, SAAR	1.3	1.3	1.2	1.1	1.1	1.2	1.3	1.3	1.4
Median Existing-Home Price	$ ths	407.0	411.9	407.7	385.7	378.3	383.0	387.0	389.8	391.5
Change	*%YA*	*4.9*	*3.6*	*1.9*	*-4.6*	*-7.1*	*-7.0*	*-5.1*	*1.1*	*3.5*
Consumer Price Index	%AR	2.8	1.2	2.1	2.5	2.0	0.3	2.1	2.5	3.0
Federal Funds Rate	%	5.3	5.3	4.3	3.7	3.0	2.6	2.2	2.1	2.0
Treasury Yield: 10-Yr Bond	%	4.4	4.0	3.2	2.5	2.5	2.5	2.7	3.0	3.5
Baa Corp. - 10-Yr Treasury	DIFF	1.5	1.7	1.9	2.5	3.0	3.0	2.8	2.7	2.6
Corporate Profits With IVA & CCA	$ bil	3,817.2	3,781.7	3,753.2	3,593.5	3,458.8	3,513.4	3,562.8	3,586.1	3,620.0
Change	%YA	*10.8*	*5.4*	*0.1*	*-2.5*	*-9.4*	*-7.1*	*-5.1*	*-0.2*	*4.7*
S&P 500	1941=10	5,254.3	5,545.8	5,641.8	4,845.4	4,354.5	4,361.3	4,423.0	4,539.2	4,659.9
Change	%YA	*25.0*	*24.4*	*26.2*	*-3.0*	*-17.1*	*-21.4*	*-21.6*	*-6.3*	*7.0*
CRE Price Index	index	308.1	306.6	301.4	289.7	278.0	277.1	281.2	290.7	300.0
NCREIF Property Index: Rate of Return	%, NSA	-0.2	0.7	0.6	0.1	0.6	1.3	1.5	2.1	2.1
C&I Loans Outstanding	$ bil	2,758.0	2,771.5	2,746.1	2,862.6	2,923.8	3,001.0	3,096.3	3,188.1	3,259.4
BAA spread	%	1.5	1.7	1.9	2.5	3.0	3.0	2.8	2.7	2.6

	Units	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**
Gross Domestic Product	bcw $	20,267.6	21,494.8	22,034.8	22,671.1	23,238.3	23,233.1	23,777.2	24,407.6	25,037.8
Change	%AR	*-2.2*	*6.1*	*2.5*	*2.9*	*2.5*	*0.0*	*2.3*	*2.7*	*2.6*
Federal Budget	$ bil	-3,348.2	-2,580.4	-1,419.2	-1,783.7	-2,195.7	-2,043.0	-1,829.1	-1,694.6	-1,734.8
Total Employment	mil	142.2	146.3	152.5	156.1	158.0	155.4	158.6	160.5	161.1
Change	*%AR*	*-5.8*	*2.9*	*4.3*	*2.3*	*1.3*	*-1.6*	*2.0*	*1.2*	*0.3*
Unemployment Rate	%	8.1	5.4	3.6	3.6	4.3	6.7	4.9	4.0	4.0
Light Vehicle Sales	mil, SAAR	14.5	14.9	13.8	15.5	15.7	15.7	16.8	17.2	17.3
Residential Housing Starts	mil, SAAR	1.4	1.6	1.6	1.4	1.3	1.2	1.4	1.5	1.6
Median Existing-Home Price	$ ths	298.9	353.9	390.2	392.8	407.7	383.5	393.0	403.9	416.5
Change	*%YA*	*9.7*	*18.4*	*10.2*	*0.7*	*3.8*	*-5.9*	*2.5*	*2.8*	*3.1*
Consumer Price Index	%AR	1.2	4.7	8.0	4.1	2.9	1.9	2.2	2.4	2.3
Federal Funds Rate	%	0.4	0.1	1.7	5.0	5.1	2.9	2.0	2.5	3.0
Treasury Yield: 10-Yr Bond	%	0.9	1.4	3.0	4.0	3.9	2.6	3.5	4.0	4.1
Baa Corp. - 10-Yr Treasury	DIFF	2.7	1.9	2.1	1.9	1.7	2.8	2.6	2.4	2.3
Corporate Profits With IVA & CCA	$ bil	2,411.3	3,077.6	3,316.7	3,546.5	3,759.2	3,532.1	3,635.8	3,793.0	3,977.6
Change	%YA	*-2.4*	*27.6*	*7.8*	*6.9*	*6.0*	*-6.0*	*2.9*	*4.3*	*4.9*
S&P 500	1941=10	3,218.5	4,266.8	4,100.7	4,284.2	5,359.4	4,496.0	4,737.9	5,406.7	5,997.7
Change	%YA	*10.5*	*32.6*	*-3.9*	*4.5*	*25.1*	*-16.1*	*5.4*	*14.1*	*10.9*
CRE Price Index	index	302.3	349.7	347.2	317.5	301.4	281.2	317.0	340.5	368.7
NCREIF Property Index: Rate of Return	%, NSA	0.4	4.2	1.4	-2.0	0.0	0.9	2.1	2.2	2.4
C&I Loans Outstanding	$ bil	2,693.3	2,479.4	2,642.6	2,771.3	2,757.8	2,970.9	3,282.2	3,514.6	3,706.9
BAA spread	%	2.7	1.9	2.1	1.9	1.7	2.8	2.6	2.4	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

→ Elevated interest rates weaken credit-sensitive consumer spending and confidence much more than expected.

→ The Fed kept the fed funds rate at the target range of 5.25% to 5.5% throughout the second quarter of 2024 because of inflation concerns. However, it starts to ease in the third quarter of 2024 and as the economy weakens, the fed funds rate is below the baseline starting in the first quarter of 2025.

→ Upcoming fiscal disputes in Congress are much worse than expected, causing business and consumer confidence to fall sharply.

→ The Russian invasion of Ukraine persists longer than expected, and worries grow that the Hamas-Israel conflict will lead to a wider conflict.

→ Tensions between China and Taiwan increase and China briefly interrupts trade through the Taiwan Strait, worsening the chip shortage since Taiwan is a major producer. The threat of a wider conflict causes consumer and business confidence to fall.

→ Concerns about bank failures raise fears of further collapse in the banking industry, reducing consumer confidence and causing banks to tighten lending standards.

→ The combination of still-elevated interest rates, political tensions, and concerns about bank failures causes the stock market to fall. The economy falls into recession in the fourth quarter of 2024.

→ Declines in European economies hurt U.S. exports and also corporate earnings from European subsidiaries.

→ Unemployment begins to increase significantly in the fourth quarter of 2024. From the third quarter of 2024 through the second quarter of 2025, real GDP declines cumulatively by 2.6%. The unemployment rate peaks at 8.3% in the fourth quarter of 2025.

→ The economic consequences of the disagreements in Congress, China-Taiwan tensions, the Russian invasion of Ukraine, and the Hamas-Israel conflict begin to resolve later in 2025, allowing the economy to begin to recover. However, the economy does not return to full employment until the third quarter of 2029.

Monetary policy assumptions

→ The Fed kept the fed funds rate at the target range of 5.25% to 5.5% throughout the second quarter of 2024 because of inflation concerns. However, it began to lower the fed funds rate in the third quarter of 2024, and it is below the baseline starting in the following quarter as the economy weakens.

→ The 10-year Treasury declines because of the flight to quality amid the decline in the stock market and the contracting economy. However, persistent inflation prevents a deeper decline. The yield curve inverts throughout 2024 and much of 2025.

→ The Fed's efforts to resolve bank failures are not successful at restoring consumer and investor confidence, causing banks to tighten lending standards.

Fiscal policy assumptions

→ The Infrastructure Investment and Jobs Act provides $572 billion in new infrastructure spending over the next decade, half of which will go to transportation infrastructure and the rest to other needs such as the power grid and broadband. Congress passed the legislation in November 2021, and its implementation is well underway, with the peak impact on the labor market set to occur in the middle of the decade.

→ Democrats enacted the Inflation Reduction Act on their own via budget reconciliation in 2022. The centerpiece of the bill is the more than $500 billion in tax credits for the production of electricity from renewable sources, residential and commercial energy efficiency, advanced energy manufacturing, and electric vehicles. The IRA also utilizes grants, rebates, loans and federal procurement to promote the adoption of clean energy technologies and climate resilience, among other objectives. Finally, the law extends the expansion of the Affordable Care Act premium subsidies under the American Rescue Plan into 2025. Higher corporate taxes, as well as prescription drug savings, defray the cost of these expenditures on clean energy and healthcare affordability.

- Congress passed the Fiscal Responsibility Act in 2023, which suspends the debt limit until 2025 and places two-year caps on discretionary federal spending that, combined with other smaller fiscal changes, will produce $1.5 trillion in budgetary savings over the next decade. Under the spending limits, the defense budget is allowed to grow by 3.3% and 1% in fiscal 2024 and 2025, respectively. The baseline assumes $1.85 trillion in discretionary spending for fiscal 2024, when certain accounting gimmicks and emergency spending are factored in. The budget deficit is expected to remain large at around 6.9% of GDP for fiscal 2024, as the deficit by the federal government recorded through August has been deeper than anticipated.
- As expected, Congress passed a continuing resolution to push the budget negotiations to the other side of the election; it will expire at midnight on December 20. We expect the fiscal 2025 discretionary budget to mostly hold to the $1.606 trillion cap as mandated by the FRA. However, side deals between President Biden and former House Speaker Kevin McCarthy, which amount to about $85 billion over two years, will push the spending total higher as certain nondefense items are reclassified as emergency spending to avoid the limit. We also expect additional emergency spending to respond to various geopolitical and extreme weather events, pushing the discretionary spending total even higher for the fiscal year to $1.87 trillion. The deficit-to-GDP ratio will hold at 6.8%.
- For fiscal 2025 and beyond, the baseline assumes Kamala Harris wins the presidency and Congress is divided, with Republicans in control of the Senate and Democrats boasting a majority in the House. Fiscal policy will more or less stick to the status quo as both parties struggle to push their priorities through. However, the debt limit gets extended after the suspension ends on January 1. Also, the personal income provisions in the Tax Cuts and Jobs Act, which are set to expire at the end of 2025, are extended for individuals earning less than $400,000 per annum while those earning more will see a tax increase. The discretionary budget in fiscal 2025 sticks to the $1.606 trillion cap imposed by the FRA, though accounting gimmicks and emergency spending push the true spending total higher.
- However, no additional measures are enacted to stem the recession.
- The fiscal policy assumptions in S3 are the same as in the baseline. However, since the economy is weaker than in the baseline, tax revenues are lower than in the baseline and the deficit is higher. The higher deficit adds to worries about growth in the national debt, intensifying investors' anxieties over Congress' ability to raise the debt ceiling in a timely manner and raising uncertainty over the course of tax policy. Though no crisis ultimately materializes, business and consumer sentiment is damaged.

In the downside scenario "S3: Alternative Scenario 3 – Downside – 90th Percentile," still-elevated interest rates cause credit-sensitive spending to fall sharply. Further, the Fed's efforts to resolve bank failures are not successful at restoring consumer and investor confidence, causing banks to tighten lending standards. Additionally, with a divided Congress, the fiscal policy status quo largely endures, but the drama will be more intense than in the baseline, causing business and consumer sentiment to decline even more. The Fed initially kept the fed funds rate at the target range throughout the second quarter of 2024 because of inflation concerns. However, the Fed lowered the fed funds rate in the third quarter of 2024, and it is below the baseline starting in the fourth quarter of 2024 as the economy weakens.

Further, worries grow that the Hamas-Israel conflict will lead to a broader conflict. Additionally, as tensions between China and Taiwan rise, China briefly blockades the Taiwan Strait, limiting the supply of semiconductor chips because Taiwan is a major supplier. Consumer and business confidence falls on worries about a wider conflict. Moreover, the Russian invasion of Ukraine persists longer than expected.

The economy drops into recession in the fourth quarter of 2024. The global contraction causes oil prices to fall below the baseline. The recession lasts through the second quarter of 2025. During that time, the stock market falls 35%.

Rising unemployment causes unit auto sales to drop back into the 13-million-unit range by mid-2025, compared with the 16 million range in the baseline at that time. The economies of Europe also go into recession. 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 lower U.S. exports and also corporate earnings of foreign subsidiaries of U.S. companies.

The 10-year Treasury declines because of the flight to quality amid the decline in the stock market and the contracting economy. The yield curve remains inverted throughout 2024 and much of 2025. Because of disagreements in Congress, no further measures are enacted to stem the recession.

Real GDP declines from the third quarter of 2024 through the second quarter of 2025. The cumulative decline is 2.6%. The unemployment rate peaks at 8.3% in the fourth quarter of 2025. The rising unemployment rate causes house prices to drop 12.2% from the third quarter of 2024 to the third quarter of 2025. By comparison, in the baseline, house prices rise 1.6% during that time.

The Fed's easing allows the economy to begin to recover in the second half of 2025. However, the economy does not return to full employment until the third quarter of 2029.

The change in real GDP on an annual average basis is -1.5% in 2025 and 1.3% in 2026, compared with 2.3% 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 S3 SCENARIO —FORECAST SUMMARY—October 2024										
	Units	**24Q2**	**24Q3**	**24Q4**	**25Q1**	**25Q2**	**25Q3**	**25Q4**	**26Q1**	**26Q2**
Gross Domestic Product	bcw $	23,223.9	23,351.5	23,149.4	22,946.4	22,750.2	22,815.6	22,889.7	22,977.4	23,087.3
Change	%AR	*3.0*	*2.2*	*-3.4*	*-3.5*	*-3.4*	*1.2*	*1.3*	*1.5*	*1.9*
Federal Budget	$ bil	-208.6	-704.8	-759.5	-788.5	-277.2	-514.6	-705.9	-751.2	-313.9
Total Employment	mil	158.4	158.9	155.2	153.5	152.5	151.9	152.0	152.3	153.1
Change	*%AR*	*1.5*	*1.2*	*-8.9*	*-4.3*	*-2.8*	*-1.4*	*0.1*	*0.9*	*2.0*
Unemployment Rate	%	4.0	4.2	6.0	7.2	7.9	8.2	8.3	8.2	7.8
Light Vehicle Sales	mil, SAAR	15.7	15.6	14.5	14.1	13.8	13.5	13.1	13.1	13.3
Residential Housing Starts	mil, SAAR	1.3	1.3	1.1	0.9	0.9	0.8	0.7	0.8	0.8
Median Existing-Home Price	$ ths	407.0	411.9	386.7	360.2	351.9	352.0	354.8	359.0	363.5
Change	*%YA*	*4.9*	*3.6*	*-3.3*	*-10.9*	*-13.5*	*-14.6*	*-8.3*	*-0.3*	*3.3*
Consumer Price Index	%AR	2.8	1.2	2.1	2.4	0.0	0.4	1.6	1.8	2.3
Federal Funds Rate	%	5.3	5.3	4.2	3.6	2.9	2.4	1.9	1.4	1.0
Treasury Yield: 10-Yr Bond	%	4.4	4.0	2.8	2.2	2.1	2.2	2.4	2.9	3.1
Baa Corp. - 10-Yr Treasury	DIFF	1.5	1.7	2.1	3.5	3.4	3.3	3.0	2.8	2.7
Corporate Profits With IVA & CCA	$ bil	3,817.2	3,781.7	3,337.5	3,069.6	2,879.9	2,928.2	2,982.8	3,022.9	3,101.8
Change	%YA	*10.8*	*5.4*	*-11.0*	*-16.7*	*-24.6*	*-22.6*	*-10.6*	*-1.5*	*7.7*
S&P 500	1941=10	5,254.3	5,545.8	5,044.0	4,111.0	3,613.4	3,616.5	3,669.1	3,717.6	3,796.9
Change	%YA	*25.0*	*24.4*	*12.8*	*-17.7*	*-31.2*	*-34.8*	*-27.3*	*-9.6*	*5.1*
CRE Price Index	index	308.1	306.6	300.6	287.1	269.7	260.9	254.0	252.2	255.0
NCREIF Property Index: Rate of Return	%, NSA	-0.2	0.7	-0.3	-1.5	-0.1	0.5	0.9	1.1	1.4
C&I Loans Outstanding	$ bil	2,758.0	2,771.5	2,628.5	2,653.2	2,642.3	2,699.1	2,802.9	2,918.3	3,001.0
BAA spread	%	1.5	1.7	2.1	3.5	3.4	3.3	3.0	2.8	2.7

	Units	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**
Gross Domestic Product	bcw $	20,267.6	21,494.8	22,034.8	22,671.1	23,194.6	22,850.5	23,152.9	23,798.0	24,614.3
Change	%AR	*-2.2*	*6.1*	*2.5*	*2.9*	*2.3*	*-1.5*	*1.3*	*2.8*	*3.4*
Federal Budget	$ bil	-3,348.2	-2,580.4	-1,419.2	-1,783.7	-2,227.5	-2,286.2	-2,195.1	-2,056.6	-1,949.3
Total Employment	mil	142.2	146.3	152.5	156.1	157.6	152.5	153.6	156.8	158.8
Change	*%AR*	*-5.8*	*2.9*	*4.3*	*2.3*	*1.0*	*-3.2*	*0.7*	*2.1*	*1.2*
Unemployment Rate	%	8.1	5.4	3.6	3.6	4.5	7.9	7.6	6.3	5.1
Light Vehicle Sales	mil, SAAR	14.5	14.9	13.8	15.5	15.3	13.6	13.8	16.1	17.1
Residential Housing Starts	mil, SAAR	1.4	1.6	1.6	1.4	1.3	0.9	0.9	1.1	1.3
Median Existing-Home Price	$ ths	298.9	353.9	390.2	392.8	402.5	354.7	366.0	380.9	395.3
Change	*%YA*	*9.7*	*18.4*	*10.2*	*0.7*	*2.5*	*-11.9*	*3.2*	*4.1*	*3.8*
Consumer Price Index	%AR	1.2	4.7	8.0	4.1	2.9	1.5	1.6	2.1	2.5
Federal Funds Rate	%	0.4	0.1	1.7	5.0	5.0	2.7	1.1	1.3	1.9
Treasury Yield: 10-Yr Bond	%	0.9	1.4	3.0	4.0	3.8	2.2	3.2	3.8	4.0
Baa Corp. - 10-Yr Treasury	DIFF	2.7	1.9	2.1	1.9	1.7	3.3	2.7	2.3	2.2
Corporate Profits With IVA & CCA	$ bil	2,411.3	3,077.6	3,316.7	3,546.5	3,655.3	2,965.1	3,138.9	3,386.2	3,614.8
Change	%YA	*-2.4*	*27.6*	*7.8*	*6.9*	*3.1*	*-18.9*	*5.9*	*7.9*	*6.8*
S&P 500	1941=10	3,218.5	4,266.8	4,100.7	4,284.2	5,210.0	3,752.5	3,902.3	4,673.7	5,453.4
Change	%YA	*10.5*	*32.6*	*-3.9*	*4.5*	*21.6*	*-28.0*	*4.0*	*19.8*	*16.7*
CRE Price Index	index	302.3	349.7	347.2	317.5	300.6	254.0	270.4	310.3	346.0
NCREIF Property Index: Rate of Return	%, NSA	0.4	4.2	1.4	-2.0	-0.2	0.0	1.6	2.5	2.6
C&I Loans Outstanding	$ bil	2,693.3	2,479.4	2,642.6	2,771.3	2,728.4	2,699.4	3,020.3	3,221.4	3,383.3
BAA spread	%	2.7	1.9	2.1	1.9	1.7	3.3	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

→ Still-elevated interest rates cause credit-sensitive spending and consumer confidence to fall sharply.

→ The Fed kept the fed funds rate at the target range throughout the second quarter of 2024 because of inflation concerns. However, it lowered the funds rate beginning in the third quarter of 2024, and it is lower than the baseline starting in the fourth quarter of 2024.

→ Upcoming fiscal disputes in Congress are substantially worse than expected, causing business and consumer sentiment to plummet.

→ Worries grow that the Hamas-Israel conflict will lead to a wider conflict and the Russia-Ukraine conflict worsens.

→ Tensions between China and Taiwan increase as China interrupts trade through the Taiwan Strait for several months, worsening the chip shortage since Taiwan is a major producer. The fear of a wider conflict further lowers confidence.

→ Concerns grow that bank failures will increase fears of further collapse in the banking industry, further reducing consumer confidence and causing banks to tighten lending standards more than expected.

→ The combination of all these factors causes the stock market to fall sharply. The economy falls into recession in the fourth quarter of 2024.

→ Declines in European economies hurt U.S. exports and also corporate earnings from European subsidiaries.

→ Unemployment begins to increase significantly in the fourth quarter of 2024 and reaches a peak of 9.3% in the second quarter of 2026.

→ The downturn lasts for more than a year and begins to subside when the economic impacts of the political conflicts around the world begin to resolve, and interest rates have fallen significantly. From the third quarter of 2024 through the fourth quarter of 2025, real GDP declines cumulatively by 4.4%.

→ The economy does not return to full employment until early 2034.

Monetary policy assumptions

→ The Fed kept the fed funds rate at the target range throughout the second quarter of 2024 because of inflation concerns. However, it lowered the funds rate beginning in the third quarter of 2024, and as the economy weakens, the fed funds rate is below the baseline starting in the fourth quarter of 2024.

→ The 10-year Treasury declines because of the flight to quality amid the decline in the stock market and the contracting economy. The yield curve remains inverted throughout 2024 and much of 2025.

→ The Fed's efforts to resolve bank failures are not successful at restoring consumer and investor confidence, causing banks to tighten lending standards much more than expected.

Fiscal policy assumptions

→ The Infrastructure Investment and Jobs Act provides $572 billion in new infrastructure spending over the next decade, half of which will go to transportation infrastructure and the rest to other needs such as the power grid and broadband. Congress passed the legislation in November 2021, and its implementation is well underway, with the peak impact on the labor market set to occur in the middle of the decade.

→ Democrats enacted the Inflation Reduction Act on their own via budget reconciliation in 2022. The centerpiece of the bill is the more than $500 billion in tax credits for the production of electricity from renewable sources, residential and commercial energy efficiency, advanced energy manufacturing, and electric vehicles. The IRA also utilizes grants, rebates, loans and federal procurement to promote the adoption of clean energy technologies and climate resilience, among other objectives. Finally, the law extends the expansion of the Affordable Care Act premium subsidies under the American Rescue Plan into 2025. Higher corporate taxes, as well as prescription drug savings, defray the cost of these expenditures on clean energy and healthcare affordability.

→ Congress passed the Fiscal Responsibility Act in 2023, which suspends the debt limit until 2025 and places two-year caps on discretionary federal spending that, combined with other smaller fiscal changes, will produce $1.5 trillion in budgetary savings over the next decade. Under the spending limits, the defense budget is allowed to grow by 3.3% and 1% in fiscal 2024 and 2025, respectively. The baseline assumes $1.85 trillion in discretionary spending for fiscal 2024, when certain accounting gimmicks and emergency spending are factored in. The budget deficit is expected to remain large at around 6.9% of GDP for fiscal 2024, as the deficit by the federal government recorded through August has been deeper than anticipated.

→ As expected, Congress passed a continuing resolution to push the budget negotiations to the other side of the election; it will expire at midnight on December 20. We expect the fiscal 2025 discretionary budget to mostly hold to the $1.606 trillion cap as mandated by the FRA. However, side deals between President Biden and former House Speaker Kevin McCarthy, which amount to about $85 billion over two years, will push the spending total higher as certain nondefense items are reclassified as emergency spending to avoid the limit. We also expect additional emergency spending to respond to various geopolitical and extreme weather events, pushing the discretionary spending total even higher for the fiscal year to $1.87 trillion. The deficit-to-GDP ratio will hold at 6.8%.

→ For fiscal 2025 and beyond, the baseline assumes Kamala Harris wins the presidency and Congress is divided, with Republicans in control of the Senate and Democrats boasting a majority in the House. Fiscal policy will more or less stick to the status quo as both parties struggle to push their priorities through. However, the debt limit gets extended after the suspension ends on January 1. Also, the personal income provisions in the Tax Cuts and Jobs Act, which are set to expire at the end of 2025, are extended for individuals earning less than $400,000 per annum while those earning more will see a tax increase. The discretionary budget in fiscal 2025 sticks to the $1.606 trillion cap imposed by the FRA, though accounting gimmicks and emergency spending push the true spending total higher.

→ The fiscal policy assumptions in S4 are the same as in the baseline. However, since the economy is weaker than in the baseline, tax revenues are lower than in the baseline and the deficit is higher. The higher deficit adds to worries about growth in the national debt, intensifying investors' anxieties over Congress' ability to raise the debt ceiling in a timely manner and raising uncertainty 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 downside 4% scenario, "S4: Alternative Scenario 4 – Downside – 96th Percentile," still-elevated interest rates cause credit-sensitive spending and consumer confidence to fall sharply. Further, previous bank failures raise fears of further collapse in the banking industry, further reducing consumer confidence and causing banks to tighten lending standards. Additionally, with a divided Congress, although the fiscal policy status quo largely endures, the drama is much more intense than in the baseline, causing business and consumer sentiment to decline further. Worries grow that the Hamas-Israel conflict will lead to a broader conflict and the Russian invasion of Ukraine worsens. Additionally, tensions between China and Taiwan rise, and China interrupts trade through the Taiwan Strait, limiting the supply of semiconductor chips because Taiwan is a major supplier. Consumer and business confidence falls on worries about a wider conflict.

These factors cause the economy to fall into recession in the fourth quarter of 2024. The global contraction causes oil prices to fall below the baseline. The recession lasts through the fourth quarter of 2025. During that time, the stock market falls 44%. Rising unemployment causes unit auto sales to drop back to less than 12 million units by late 2025, compared with nearly 17 million in the baseline at that time.

The economies across Europe contract for similar reasons. 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. Because of disagreements in Congress, no further measures are enacted to stem the recession.

The Fed kept the fed funds rate at the target range throughout the second quarter of 2024 because of inflation concerns despite the weakening economy. However, it began to ease in the third quarter. The fed funds rate is lower than in the baseline starting in the fourth quarter of 2024 because of the weakening economy. The 10-year Treasury declines because of the flight to quality amid the decline in the stock market and the contracting economy. However, still-elevated inflation prevents a deeper decline. The yield curve remains inverted throughout 2024 and much of 2025.

Real GDP declines from the third quarter of 2024 through the fourth quarter of 2025. The cumulative decline is 4.4%. The unemployment rate peaks at 9.3% in the second quarter of 2026. The rising unemployment rate causes house prices to drop by 17.1% from the third quarter of 2024 to the third quarter of 2025. By comparison, in the baseline, house prices rise by 1.6% during that time. Disagreements in Congress prevent stimulus measures to stem the downturn. The economy does not return to full employment until 2033.

The change in real GDP on an annual average basis is -2.8% in 2025 and -0.4% in 2026, compared with growth of 2.3% 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 S4 SCENARIO —FORECAST SUMMARY—October 2024										
	Units	**24Q2**	**24Q3**	**24Q4**	**25Q1**	**25Q2**	**25Q3**	**25Q4**	**26Q1**	**26Q2**
Gross Domestic Product	bcw $	23,223.9	23,351.5	23,113.8	22,844.1	22,604.6	22,400.7	22,329.5	22,351.9	22,405.8
Change	%AR	*3.0*	*2.2*	*-4.0*	*-4.6*	*-4.1*	*-3.6*	*-1.3*	*0.4*	*1.0*
Federal Budget	$ bil	-208.6	-704.8	-774.2	-812.8	-308.1	-561.1	-766.1	-813.5	-382.7
Total Employment	mil	158.4	158.9	154.6	152.8	151.4	150.5	150.0	149.8	149.7
Change	*%AR*	*1.5*	*1.2*	*-10.3*	*-4.8*	*-3.5*	*-2.3*	*-1.3*	*-0.6*	*-0.2*
Unemployment Rate	%	4.0	4.2	6.3	7.7	8.4	8.8	9.1	9.2	9.2
Light Vehicle Sales	mil, SAAR	15.7	15.6	14.4	13.8	13.2	12.6	11.3	11.2	11.2
Residential Housing Starts	mil, SAAR	1.3	1.3	1.0	0.9	0.8	0.7	0.6	0.5	0.6
Median Existing-Home Price	$ ths	407.0	411.9	375.6	353.4	334.2	328.9	328.6	330.9	332.5
Change	*%YA*	*4.9*	*3.6*	*-6.1*	*-12.6*	*-17.9*	*-20.1*	*-12.5*	*-6.4*	*-0.5*
Consumer Price Index	%AR	2.8	1.2	2.0	2.1	-0.2	-0.5	-0.6	2.0	2.1
Federal Funds Rate	%	5.3	5.3	4.1	3.5	2.7	2.1	1.7	1.2	0.9
Treasury Yield: 10-Yr Bond	%	4.4	4.0	2.6	2.0	2.0	2.0	1.9	2.4	2.8
Baa Corp. - 10-Yr Treasury	DIFF	1.5	1.7	2.8	4.4	3.9	3.6	3.5	3.1	2.9
Corporate Profits With IVA & CCA	$ bil	3,817.2	3,781.7	3,298.1	2,976.8	2,723.6	2,580.6	2,535.0	2,566.7	2,619.2
Change	%YA	*10.8*	*5.4*	*-12.0*	*-19.2*	*-28.7*	*-31.8*	*-23.1*	*-13.8*	*-3.8*
S&P 500	1941=10	5,254.3	5,545.8	4,797.8	3,855.4	3,428.1	3,129.4	3,078.8	3,105.1	3,150.5
Change	%YA	*25.0*	*24.4*	*7.3*	*-22.8*	*-34.8*	*-43.6*	*-35.8*	*-19.5*	*-8.1*
CRE Price Index	index	308.1	306.6	299.9	283.2	262.1	247.1	232.4	225.7	224.0
NCREIF Property Index: Rate of Return	%, NSA	-0.2	0.7	-1.8	-3.4	-1.7	-1.4	-0.9	-0.2	0.7
C&I Loans Outstanding	$ bil	2,758.0	2,771.5	2,544.2	2,474.0	2,413.6	2,411.7	2,427.3	2,444.5	2,459.7
BAA spread	%	1.5	1.7	2.8	4.4	3.9	3.6	3.5	3.1	2.9

	Units	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**
Gross Domestic Product	bcw $	20,267.6	21,494.8	22,034.8	22,671.1	23,185.7	22,544.7	22,451.9	23,069.8	23,841.0
Change	%AR	*-2.2*	*6.1*	*2.5*	*2.9*	*2.3*	*-2.8*	*-0.4*	*2.8*	*3.3*
Federal Budget	$ bil	-3,348.2	-2,580.4	-1,419.2	-1,783.7	-2,242.2	-2,448.1	-2,484.8	-2,425.4	-2,339.2
Total Employment	mil	142.2	146.3	152.5	156.1	157.4	151.2	149.9	151.5	154.0
Change	*%AR*	*-5.8*	*2.9*	*4.3*	*2.3*	*0.9*	*-4.0*	*-0.9*	*1.1*	*1.6*
Unemployment Rate	%	8.1	5.4	3.6	3.6	4.6	8.5	9.2	8.7	7.5
Light Vehicle Sales	mil, SAAR	14.5	14.9	13.8	15.5	15.3	12.7	11.8	14.4	15.4
Residential Housing Starts	mil, SAAR	1.4	1.6	1.6	1.4	1.3	0.8	0.6	0.8	1.0
Median Existing-Home Price	$ ths	298.9	353.9	390.2	392.8	399.7	336.3	333.8	346.7	361.1
Change	*%YA*	*9.7*	*18.4*	*10.2*	*0.7*	*1.8*	*-15.9*	*-0.7*	*3.9*	*4.1*
Consumer Price Index	%AR	1.2	4.7	8.0	4.1	2.9	1.1	1.0	1.9	2.1
Federal Funds Rate	%	0.4	0.1	1.7	5.0	5.0	2.5	0.8	0.5	0.7
Treasury Yield: 10-Yr Bond	%	0.9	1.4	3.0	4.0	3.8	2.0	2.9	3.4	3.7
Baa Corp. - 10-Yr Treasury	DIFF	2.7	1.9	2.1	1.9	1.9	3.8	2.9	2.5	2.3
Corporate Profits With IVA & CCA	$ bil	2,411.3	3,077.6	3,316.7	3,546.5	3,645.4	2,704.0	2,651.3	2,873.5	3,122.3
Change	%YA	*-2.4*	*27.6*	*7.8*	*6.9*	*2.8*	*-25.8*	*-1.9*	*8.4*	*8.7*
S&P 500	1941=10	3,218.5	4,266.8	4,100.7	4,284.2	5,148.4	3,372.9	3,198.4	3,700.8	4,417.1
Change	%YA	*10.5*	*32.6*	*-3.9*	*4.5*	*20.2*	*-34.5*	*-5.2*	*15.7*	*19.4*
CRE Price Index	index	302.3	349.7	347.2	317.5	299.9	232.4	227.3	258.1	300.9
NCREIF Property Index: Rate of Return	%, NSA	0.4	4.2	1.4	-2.0	-0.6	-1.8	0.9	2.2	2.8
C&I Loans Outstanding	$ bil	2,693.3	2,479.4	2,642.6	2,771.3	2,707.3	2,431.6	2,473.7	2,612.5	2,777.5
BAA spread	%	2.7	1.9	2.1	1.9	1.9	3.8	2.9	2.5	2.3

S5: Slower-Trend Growth Scenario

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

Key assumptions/risks

→ Elevated interest rates slow credit-sensitive spending more and longer than expected.

→ Concerns about bank failures weaken consumer confidence and cause banks to tighten lending standards.

→ Upcoming fiscal disputes in Congress are worse than expected, weakening business and consumer sentiment.

→ Worries grow that the Hamas-Israel conflict will lead to a wider conflict .

→ The Russian invasion of Ukraine and tensions between China and Taiwan persist longer than expected.

Monetary policy assumptions

→ Because of concerns about inflation, the Fed kept the fed funds rate at the terminal range of 5.25% to 5.5% through the second quarter of 2024. However, it subsequently eases somewhat more than in the baseline starting in the fourth quarter of 2024 because of weaker growth than in the baseline.

→ The 10-year Treasury yield is lower than in the baseline, because of the weaker growth and slightly lower inflation.

→ The Fed's efforts to resolve the bank failures are not fully successful at restoring consumer confidence and banks tighten lending standards.

Fiscal policy assumptions

→ The Infrastructure Investment and Jobs Act provides $572 billion in new infrastructure spending over the next decade, half of which will go to transportation infrastructure and the rest to other needs such as the power grid and broadband. Congress passed the legislation in November 2021, and its implementation is well underway, with the peak impact on the labor market set to occur in the middle of the decade.

→ Democrats enacted the Inflation Reduction Act on their own via budget reconciliation in 2022. The centerpiece of the bill is the more than $500 billion in tax credits for the production of electricity from renewable sources, residential and commercial energy efficiency, advanced energy manufacturing, and electric vehicles. The IRA also utilizes grants, rebates, loans and federal procurement to promote the adoption of clean energy technologies and climate resilience, among other objectives. Finally, the law extends the expansion of the Affordable Care Act premium subsidies under the American Rescue Plan into 2025. Higher corporate taxes, as well as prescription drug savings, defray the cost of these expenditures on clean energy and healthcare affordability.

→ Congress passed the Fiscal Responsibility Act in 2023, which suspends the debt limit until 2025 and places two-year caps on discretionary federal spending that, combined with other smaller fiscal changes, will produce $1.5 trillion in budgetary savings over the next decade. Under the spending limits, the defense budget is allowed to grow by 3.3% and 1% in fiscal 2024 and 2025, respectively. The baseline assumes $1.85 trillion in discretionary spending for fiscal 2024, when certain accounting gimmicks and emergency spending are factored in. The budget deficit is expected to remain large at around 6.9% of GDP for fiscal 2024, as the deficit by the federal government recorded through August has been deeper than anticipated.

→ As expected, Congress passed a continuing resolution to push the budget negotiations to the other side of the election; it will expire at midnight on December 20. We expect the fiscal 2025 discretionary budget to mostly hold to the $1.606 trillion cap as mandated by the FRA. However, side deals between President Biden and former House Speaker Kevin McCarthy, which amount to about $85 billion over two years, will push the spending total higher as certain nondefense items are reclassified as emergency spending to avoid the limit. We also expect additional emergency spending to respond to various geopolitical and extreme weather events, pushing the discretionary spending total even higher for the fiscal year to $1.87 trillion. The deficit-to-GDP ratio will hold at 6.8%.

→ For fiscal 2025 and beyond, the baseline assumes Kamala Harris wins the presidency and Congress is divided, with Republicans in control of the Senate and Democrats boasting a majority in the House. Fiscal policy will more or less stick to the status quo as both parties struggle to push their priorities through. However, the debt limit gets extended after the suspension ends on January 1. Also, the personal income provisions in the Tax Cuts and Jobs Act, which are set to expire at the end of 2025, are extended for individuals earning less than $400,000 per annum while those earning more will see a tax increase. The discretionary budget in fiscal 2025 sticks to the $1.606 trillion cap imposed by the FRA, though accounting gimmicks and emergency spending push the true spending total higher.

→ The fiscal policy assumptions in S5 are the same as in the baseline. However, since the economy is weaker than in the baseline, tax revenues are lower than in the baseline and the deficit is higher. The higher deficit adds to worries about growth in the national debt, intensifying investors' anxieties over Congress' ability to raise the debt ceiling in a timely manner and raising uncertainty 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 fourth quarter of 2024, and stronger growth never materializes. There are several drivers. First, elevated interest rates slow credit-sensitive spending more and longer than expected. Second, the Fed's efforts to resolve bank failures are not fully successful at restoring consumer confidence and banks tighten lending standards. Third, upcoming fiscal disputes in Congress weaken business and consumer sentiment. Fourth, worries grow that the Hamas-Israel conflict will lead to a wider conflict. 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 1.4% in 2025 and 2026, compared with 2.7% and 2.3%, 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—October 2024										
	Units	**24Q2**	**24Q3**	**24Q4**	**25Q1**	**25Q2**	**25Q3**	**25Q4**	**26Q1**	**26Q2**
Gross Domestic Product	bcw $	23,223.9	23,351.5	23,416.4	23,489.5	23,552.7	23,632.2	23,710.7	23,794.9	23,881.9
Change	%AR	*3.0*	*2.2*	*1.1*	*1.3*	*1.1*	*1.4*	*1.3*	*1.4*	*1.5*
Federal Budget	$ bil	-208.6	-704.8	-726.0	-743.0	-217.9	-460.6	-661.1	-712.0	-289.1
Total Employment	mil	158.4	158.9	158.8	158.4	158.0	157.7	157.7	157.9	158.1
Change	*%AR*	*1.5*	*1.2*	*-0.3*	*-0.8*	*-1.0*	*-0.8*	*-0.1*	*0.6*	*0.5*
Unemployment Rate	%	4.0	4.2	4.4	4.7	4.9	5.2	5.2	5.0	5.0
Light Vehicle Sales	mil, SAAR	15.7	15.6	15.5	15.3	15.6	15.8	16.0	16.1	16.1
Residential Housing Starts	mil, SAAR	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Median Existing-Home Price	$ ths	407.0	411.9	413.5	413.5	413.7	414.9	415.3	416.6	418.0
Change	*%YA*	*4.9*	*3.6*	*3.4*	*2.3*	*1.6*	*0.7*	*0.4*	*0.8*	*1.0*
Consumer Price Index	%AR	2.8	1.2	2.0	2.3	2.5	2.3	2.0	2.1	2.3
Federal Funds Rate	%	5.3	5.3	4.4	4.1	3.7	3.5	3.3	3.2	2.9
Treasury Yield: 10-Yr Bond	%	4.4	4.0	3.9	3.9	3.9	3.9	3.8	3.8	3.8
Baa Corp. - 10-Yr Treasury	DIFF	1.5	1.7	1.8	2.1	2.4	2.5	2.5	2.5	2.5
Corporate Profits With IVA & CCA	$ bil	3,817.2	3,781.7	3,795.4	3,814.6	3,804.7	3,798.5	3,783.9	3,741.6	3,727.5
Change	%YA	*10.8*	*5.4*	*1.2*	*3.5*	*-0.3*	*0.4*	*-0.3*	*-1.9*	*-2.0*
S&P 500	1941=10	5,254.3	5,545.8	5,619.8	5,507.4	5,440.9	5,427.8	5,420.8	5,426.9	5,427.6
Change	%YA	*25.0*	*24.4*	*25.7*	*10.2*	*3.6*	*-2.1*	*-3.5*	*-1.5*	*-0.2*
CRE Price Index	index	308.1	306.6	305.9	305.5	305.3	309.3	316.2	321.4	326.9
NCREIF Property Index: Rate of Return	%, NSA	-0.2	0.7	1.5	1.6	1.8	1.7	1.7	1.7	1.8
C&I Loans Outstanding	$ bil	2,758.0	2,771.5	2,797.3	2,845.5	2,891.4	2,940.7	2,980.9	3,024.6	3,070.1
BAA spread	%	1.5	1.7	1.8	2.1	2.4	2.5	2.5	2.5	2.5

	Units	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**
Gross Domestic Product	bcw $	20,267.6	21,494.8	22,034.8	22,671.1	23,261.3	23,596.3	23,925.0	24,320.9	24,788.2
Change	%AR	*-2.2*	*6.1*	*2.5*	*2.9*	*2.6*	*1.4*	*1.4*	*1.7*	*1.9*
Federal Budget	$ bil	-3,348.2	-2,580.4	-1,419.2	-1,783.7	-2,194.0	-2,082.6	-2,133.4	-2,232.9	-2,347.3
Total Employment	mil	142.2	146.3	152.5	156.1	158.5	158.0	158.2	159.0	160.0
Change	*%AR*	*-5.8*	*2.9*	*4.3*	*2.3*	*1.5*	*-0.3*	*0.1*	*0.5*	*0.6*
Unemployment Rate	%	8.1	5.4	3.6	3.6	4.1	5.0	4.9	4.7	4.3
Light Vehicle Sales	mil, SAAR	14.5	14.9	13.8	15.5	15.6	15.7	16.2	16.9	17.0
Residential Housing Starts	mil, SAAR	1.4	1.6	1.6	1.4	1.3	1.3	1.3	1.4	1.4
Median Existing-Home Price	$ ths	298.9	353.9	390.2	392.8	409.2	414.3	418.7	426.5	439.4
Change	*%YA*	*9.7*	*18.4*	*10.2*	*0.7*	*4.2*	*1.3*	*1.1*	*1.9*	*3.0*
Consumer Price Index	%AR	1.2	4.7	8.0	4.1	2.9	2.1	2.2	1.9	2.0
Federal Funds Rate	%	0.4	0.1	1.7	5.0	5.1	3.6	2.9	2.8	2.9
Treasury Yield: 10-Yr Bond	%	0.9	1.4	3.0	4.0	4.1	3.9	3.9	3.9	4.0
Baa Corp. - 10-Yr Treasury	DIFF	2.7	1.9	2.1	1.9	1.6	2.4	2.5	2.5	2.5
Corporate Profits With IVA & CCA	$ bil	2,411.3	3,077.6	3,316.7	3,546.5	3,769.8	3,800.4	3,733.2	3,762.0	3,850.2
Change	%YA	*-2.4*	*27.6*	*7.8*	*6.9*	*6.3*	*0.8*	*-1.8*	*0.8*	*2.3*
S&P 500	1941=10	3,218.5	4,266.8	4,100.7	4,284.2	5,353.9	5,449.2	5,475.2	5,728.0	5,966.8
Change	%YA	*10.5*	*32.6*	*-3.9*	*4.5*	*25.0*	*1.8*	*0.5*	*4.6*	*4.2*
CRE Price Index	index	302.3	349.7	347.2	317.5	305.9	316.2	338.8	363.1	385.5
NCREIF Property Index: Rate of Return	%, NSA	0.4	4.2	1.4	-2.0	0.3	1.7	1.8	2.1	2.1
C&I Loans Outstanding	$ bil	2,693.3	2,479.4	2,642.6	2,771.3	2,770.6	2,914.6	3,086.6	3,245.7	3,412.9
BAA spread	%	2.7	1.9	2.1	1.9	1.6	2.4	2.5	2.5	2.5

S6: Stagflation Scenario

In this stagflation scenario, inflation reaccelerates as the economy falls below full employment. The Fed is initially more concerned about the weakening economy and does not respond to inflation throughout 2025. In early 2026, it responds by sharply tightening credit, causing the economy to fall into a deep recession in mid-2026. Note: This narrative changed significantly in September.

Key assumptions/risks

→ Inflation begins to reaccelerate in the fourth quarter of 2024 and remains elevated over the following year, ultimately causing a wage-price spiral to develop. Throughout 2025, real growth decelerates below the baseline, but there is no recession during that time.

→ The driver of the acceleration of inflation is that the conflict between Israel and Hamas results in sanctions against Iranian oil exports and an overall loss in volumes on the international market. Additionally, Saudi Arabia bows to domestic and regional political pressure and does not increase supply. As a result, oil prices begin to rise. International fears that this will be a long and drawn-out conflict keep prices high for a considerable time. Oil prices rise to $105 per barrel by the fourth quarter of 2025, and the higher prices contribute to the acceleration in inflation.

→ Higher gasoline prices cut into disposable income that would otherwise be available for other spending.

→ Donald Trump is reelected and insists that the Fed lower interest rates despite the elevated inflation. The Fed keeps lowering through mid-2025 but pauses in the second half of that year.

→ Tensions between the U.S. and China also persist. As a result, supply-chain problems, with increased shortages of many goods, also boost inflation. The supply-chain shortages weaken manufacturing.

→ Trump raises tariffs by 10% across the board, adding to inflation.

→ 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 first quarter of 2026. The extra tightening of credit causes the economy to fall into a deep recession starting in the third quarter of 2026, with unemployment rising to 9.1% in the second quarter of 2027. Real GDP declines by 3.1% cumulatively. The recession causes inflation to subside.

Monetary policy assumptions

→ Despite the acceleration of inflation, the Fed continues to lower interest rates as in the baseline at Trump's insistence through mid-2025, but then pauses for the rest of the year. Finally, in the first quarter of 2026, it raises the fed funds rate by 200 basis points to stem inflation. The terminal range of the fed funds rate is 6% to 6.25%.

→ The higher-than-expected inflation drives the yield on the 10-year Treasury higher than in the baseline in 2025 despite the weakening economy. Further, the increase in the fed funds rate in the first half of 2026 contributes to this increase. Subsequently, it begins to fall amid a flight to quality.

Fiscal policy assumptions

→ The Infrastructure Investment and Jobs Act provides $572 billion in new infrastructure spending over the next decade, half of which will go to transportation infrastructure and the rest to other needs such as the power grid and broadband. Congress passed the legislation in November 2021, and its implementation is well underway, with the peak impact on the labor market set to occur in the middle of the decade.

→ Democrats enacted the Inflation Reduction Act on their own via budget reconciliation in 2022. The centerpiece of the bill is the more than $500 billion in tax credits for the production of electricity from renewable sources, residential and commercial energy efficiency, advanced energy manufacturing, and electric vehicles. The IRA also utilizes grants, rebates, loans and federal procurement to promote the adoption of clean energy technologies and climate resilience, among other objectives. Finally, the law extends the expansion of the Affordable Care Act premium subsidies under the American Rescue Plan into 2025. Higher corporate taxes, as well as prescription drug savings, defray the cost of these expenditures on clean energy and healthcare affordability.

→ Congress passed the Fiscal Responsibility Act in 2023, which suspends the debt limit until 2025 and places two-year caps on discretionary federal spending that, combined with other smaller fiscal changes, will produce $1.5 trillion in budgetary savings over the next decade. Under the spending limits, the defense budget is allowed to grow by 3.3% and 1% in fiscal 2024 and 2025, respectively. The baseline assumes $1.85 trillion in discretionary spending for fiscal 2024, when certain accounting gimmicks and emergency spending are factored in. The budget deficit is expected to remain large at around 6.9% of GDP for fiscal 2024, as the deficit by the federal government recorded through August has been deeper than anticipated.

→ As expected, Congress passed a continuing resolution to push the budget negotiations to the other side of the election; it will expire at midnight on December 20. We expect the fiscal 2025 discretionary budget to mostly hold to the $1.606 trillion cap as mandated by the FRA. However, side deals between President Biden and former House Speaker Kevin McCarthy, which amounted to about $85 billion over two years, will push the spending total higher as certain nondefense items are reclassified as emergency spending to avoid the limit. We also expect additional emergency spending to respond to various geopolitical and extreme weather events, pushing the discretionary spending total even higher for the fiscal year to $1.87 trillion. The deficit-to-GDP ratio will hold at 6.8%.

→ The fiscal policy assumptions in S6 are the same as in the baseline. However, since the economy is weaker than in the baseline, tax revenues are lower than in the baseline and the deficit is higher. The higher deficit adds to worries about growth in the national debt. 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," inflation reaccelerates as oil markets come under increased pressure. The conflict between Israel and Hamas results in sanctions against Iranian oil exports and an overall loss in volumes on the international market. Additionally, Saudi Arabia bows to domestic and regional political pressure and does not increase supply. As a result, oil prices rise substantially. International fears that this will be a long and drawn-out conflict keep prices high for a considerable time. The higher oil prices contribute to an acceleration in inflation. Further, the Russian invasion of Ukraine worsens, leading to fears that the G-7 will apply more stringent sanctions on Russian oil. OPEC does not soothe market concerns by increasing supply and the Brent oil price rises to $105 per barrel by late 2025. 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, though it continues to grow during that time.

Donald Trump is reelected president and insists that the Fed continue to lower interest rates despite the elevated inflation. The Fed's response is to keep lowering rates as in the baseline through mid-2025. Trump also raises tariffs by 10% across the board, also contributing to inflation. The Fed pauses its rate cuts in mid-2025 for the rest of the year. However, by early 2026, it ultimately responds by raising the fed funds rate by 200 basis points in early 2026. The terminal range of the fed funds rate is 6% to 6.25% at that point.

The tightening of credit causes the economy to fall into a deep recession in mid-2026, and unemployment rises sharply. Real GDP drops by 3.1% cumulatively from the second quarter of 2026 to the second quarter of 2027, and the unemployment rate reaches a peak of 9.1% by the second 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 1.5% in 2025, 0.1% in 2026, and -1.9% in 2027, compared with 2.3%, 2.1% and 2.2%, 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—October 2024										
	Units	24Q2	24Q3	24Q4	25Q1	25Q2	25Q3	25Q4	26Q1	26Q2
Gross Domestic Product	bcw $	23,223.9	23,351.5	23,449.3	23,531.6	23,605.7	23,689.2	23,759.9	23,798.2	23,812.2
Change	%AR	*3.0*	*2.2*	*1.7*	*1.4*	*1.3*	*1.4*	*1.2*	*0.6*	*0.2*
Federal Budget	$ bil	-208.6	-704.8	-717.8	-725.6	-191.5	-422.9	-614.7	-667.3	-241.0
Total Employment	mil	158.4	158.9	159.0	159.1	159.1	159.1	159.1	159.1	159.1
Change	*%AR*	*1.5*	*1.2*	*0.4*	*0.1*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Unemployment Rate	%	4.0	4.2	4.2	4.3	4.3	4.4	4.4	4.5	4.5
Light Vehicle Sales	mil, SAAR	15.7	15.6	15.8	15.9	15.9	16.0	16.1	16.2	16.2
Residential Housing Starts	mil, SAAR	1.3	1.3	1.3	1.4	1.4	1.4	1.4	1.4	1.4
Median Existing-Home Price	$ ths	407.0	411.9	413.2	414.9	415.7	416.3	417.4	418.3	420.3
Change	*%YA*	*4.9*	*3.6*	*3.3*	*2.7*	*2.1*	*1.1*	*1.0*	*0.8*	*1.1*
Consumer Price Index	%AR	2.8	1.2	3.6	3.9	4.3	4.0	4.0	3.4	3.3
Federal Funds Rate	%	5.3	5.3	4.6	4.3	4.0	4.1	4.1	6.1	6.0
Treasury Yield: 10-Yr Bond	%	4.4	4.0	4.3	4.4	4.5	4.7	4.9	5.4	5.4
Baa Corp. - 10-Yr Treasury	DIFF	1.5	1.7	1.8	2.1	2.3	2.4	2.5	2.8	3.0
Corporate Profits With IVA & CCA	$ bil	3,817.2	3,781.7	3,782.0	3,759.5	3,745.1	3,763.7	3,774.6	3,747.9	3,720.3
Change	%YA	*10.8*	*5.4*	*0.9*	*2.0*	*-1.9*	*-0.5*	*-0.2*	*-0.3*	*-0.7*
S&P 500	1941=10	5,254.3	5,545.8	5,654.5	5,561.2	5,501.7	5,488.4	5,496.5	5,510.0	5,522.8
Change	%YA	*25.0*	*24.4*	*26.5*	*11.3*	*4.7*	*-1.0*	*-2.8*	*-0.9*	*0.4*
CRE Price Index	index	308.1	306.6	305.3	304.3	303.1	305.8	310.9	312.8	312.8
NCREIF Property Index: Rate of Return	%, NSA	-0.2	0.7	1.4	1.6	1.7	1.5	1.4	0.5	-0.2
C&I Loans Outstanding	$ bil	2,758.0	2,771.5	2,810.6	2,859.3	2,904.3	2,939.5	2,973.0	2,948.3	2,966.8
BAA spread	%	1.5	1.7	1.8	2.1	2.3	2.4	2.5	2.8	3.0

	Units	2020	2021	2022	2023	2024	2025	2026	2027	2028
Gross Domestic Product	bcw $	20,267.6	21,494.8	22,034.8	22,671.1	23,269.5	23,646.6	23,653.9	23,173.5	23,839.1
Change	%AR	*-2.2*	*6.1*	*2.5*	*2.9*	*2.6*	*1.6*	*0.0*	*-2.0*	*2.9*
Federal Budget	$ bil	-3,348.2	-2,580.4	-1,419.2	-1,783.7	-2,185.9	-1,954.6	-2,099.3	-3,035.3	-3,165.3
Total Employment	mil	142.2	146.3	152.5	156.1	158.5	159.1	157.5	151.7	153.7
Change	*%AR*	*-5.8*	*2.9*	*4.3*	*2.3*	*1.6*	*0.3*	*-1.0*	*-3.7*	*1.3*
Unemployment Rate	%	8.1	5.4	3.6	3.6	4.1	4.4	5.4	8.6	7.0
Light Vehicle Sales	mil, SAAR	14.5	14.9	13.8	15.5	15.6	16.0	15.6	14.0	16.1
Residential Housing Starts	mil, SAAR	1.4	1.6	1.6	1.4	1.3	1.4	1.3	1.1	1.3
Median Existing-Home Price	$ ths	298.9	353.9	390.2	392.8	409.1	416.1	414.7	392.0	401.6
Change	*%YA*	*9.7*	*18.4*	*10.2*	*0.7*	*4.2*	*1.7*	*-0.3*	*-5.5*	*2.4*
Consumer Price Index	%AR	1.2	4.7	8.0	4.1	3.0	3.5	3.5	2.1	1.9
Federal Funds Rate	%	0.4	0.1	1.7	5.0	5.1	4.1	5.8	4.1	2.9
Treasury Yield: 10-Yr Bond	%	0.9	1.4	3.0	4.0	4.2	4.6	5.0	4.1	4.1
Baa Corp. - 10-Yr Treasury	DIFF	2.7	1.9	2.1	1.9	1.6	2.3	3.2	3.4	2.5
Corporate Profits With IVA & CCA	$ bil	2,411.3	3,077.6	3,316.7	3,546.5	3,766.4	3,760.7	3,727.0	3,726.3	3,796.6
Change	%YA	*-2.4*	*27.6*	*7.8*	*6.9*	*6.2*	*-0.2*	*-0.9*	*0.0*	*1.9*
S&P 500	1941=10	3,218.5	4,266.8	4,100.7	4,284.2	5,362.6	5,512.0	5,063.1	3,904.0	4,354.8
Change	%YA	*10.5*	*32.6*	*-3.9*	*4.5*	*25.2*	*2.8*	*-8.1*	*-22.9*	*11.5*
CRE Price Index	index	302.3	349.7	347.2	317.5	305.3	310.9	306.6	285.3	292.5
NCREIF Property Index: Rate of Return	%, NSA	0.4	4.2	1.4	-2.0	0.2	1.5	-0.4	-0.1	1.5
C&I Loans Outstanding	$ bil	2,693.3	2,479.4	2,642.6	2,771.3	2,773.9	2,919.0	2,968.2	2,851.8	2,771.6
BAA spread	%	2.7	1.9	2.1	1.9	1.6	2.3	3.2	3.4	2.5

S7: Next-Cycle Recession Scenario

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

Key assumptions/risks

→ The elevated cost of borrowing reduces credit-sensitive spending more than expected.

→ Inflation accelerates back to more than 3% annualized, causing the Fed to stop lowering the fed funds rate in the fourth quarter of 2024 and to raise it by 50 basis points in the first quarter of 2025 and again in the second quarter of 2025. The terminal range is 5.75% to 6%. As a result, there are declines in business and household confidence.

→ The Fed's efforts to resolve bank failures are not successful at restoring consumer confidence and banks tighten lending standards more than expected.

→ Upcoming fiscal disputes in Congress are worse than expected, weakening business and consumer sentiment.

→ The combination of the reacceleration of inflation, additional Fed rate increases, and declining confidence causes economic growth to decelerate during the fourth quarter of 2024 and the first half of 2025 and to fall into recession in the third quarter of 2025. The rising unemployment rate causes the stock market to fall sharply.

→ The unemployment rate peaks at 6% in the first quarter of 2026.

→ The economy returns to full employment in the fourth quarter of 2027.

Monetary policy assumptions

→ To fight inflation the Fed stops lowering the fed funds rate in the fourth quarter of 2024 and raises it by 50 basis points in the first quarter of 2025 and again in the second quarter of 2025. The terminal range for the fed funds rate is 5.75% to 6%. Once the economy starts to decline in the third quarter of 2025, the Fed lowers the fed funds rate to provide support to the economy.

→ The yield on the 10-year Treasury rises slightly above the baseline in the fourth quarter of 2024 and the first half of 2025 because of the extra inflation and the rise in the fed funds rate. It begins to fall in the third quarter of 2025 as the economy goes into recession.

→ The Fed's efforts to resolve bank failures are not successful at restoring consumer confidence and banks tighten lending standards.

Fiscal policy assumptions

→ The Infrastructure Investment and Jobs Act provides $572 billion in new infrastructure spending over the next decade, half of which will go to transportation infrastructure and the rest to other needs such as the power grid and broadband. Congress passed the legislation in November 2021, and its implementation is well underway, with the peak impact on the labor market set to occur in the middle of the decade.

→ Democrats enacted the Inflation Reduction Act on their own via budget reconciliation in 2022. The centerpiece of the bill is the more than $500 billion in tax credits for the production of electricity from renewable sources, residential and commercial energy efficiency, advanced energy manufacturing, and electric vehicles. The IRA also utilizes grants, rebates, loans and federal procurement to promote the adoption of clean energy technologies and climate resilience, among other objectives. Finally, the law extends the expansion of the Affordable Care Act premium subsidies under the American Rescue Plan into 2025. Higher corporate taxes, as well as prescription drug savings, defray the cost of these expenditures on clean energy and healthcare affordability.

→ Congress passed the Fiscal Responsibility Act in 2023, which suspends the debt limit until 2025 and places two-year caps on discretionary federal spending that, combined with other smaller fiscal changes, will produce $1.5 trillion in budgetary savings over the next decade. Under the spending limits, the defense budget is allowed to grow by 3.3% and 1% in fiscal 2024 and 2025, respectively. The baseline assumes $1.85 trillion in discretionary spending for fiscal 2024, when certain accounting gimmicks and emergency spending are factored in. The budget deficit is expected to remain large at around 6.9% of GDP for fiscal 2024, as the deficit by the federal government recorded through August has been deeper than anticipated.

→ As expected, Congress passed a continuing resolution to push the budget negotiations to the other side of the election; it will expire at midnight on December 20. We expect the fiscal 2025 discretionary budget to mostly hold to the $1.606 trillion cap as mandated by the FRA. However, side deals between President Biden and former House Speaker Kevin McCarthy, which amount to about $85 billion over two years, will push the spending total higher as certain nondefense items are reclassified as emergency spending to avoid the limit. We also expect additional emergency spending to respond to various geopolitical and extreme weather events, pushing the discretionary spending total even higher for the fiscal year to $1.87 trillion. The deficit-to-GDP ratio will hold at 6.8%.

→ For fiscal 2025 and beyond, the baseline assumes Kamala Harris wins the presidency and Congress is divided, with Republicans in control of the Senate and Democrats boasting a majority in the House. Fiscal policy will more or less stick to the status quo as both parties struggle to push their priorities through. However, the debt limit gets extended after the suspension ends on January 1. Also, the personal income provisions in the Tax Cuts and Jobs Act, which are set to expire at the end of 2025, are extended for individuals earning less than $400,000 per annum while those earning more will see a tax increase. The discretionary budget in fiscal 2025 sticks to the $1.606 trillion cap imposed by the FRA, though accounting gimmicks and emergency spending push the true spending total higher.

→ The fiscal policy assumptions in S7 are the same as in the baseline. However, since the economy is weaker than in the baseline, tax revenues are lower than in the baseline and the deficit is higher. The higher deficit adds to worries about growth in the national debt, intensifying investors' anxieties over Congress' ability to raise the debt ceiling in a timely manner and raising uncertainty 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," the elevated cost of borrowing reduces credit-sensitive spending more than expected. Further, inflation accelerates back to the 3% range, causing the Fed to stop lowering the fed funds rate in the fourth quarter of 2024 and to raise it by 50 basis points in the first quarter of 2025 and again in the second quarter of 2025. Additionally, the Fed's efforts to resolve recent bank failures are not successful at restoring consumer confidence and banks tighten lending standards. The terminal range for the fed funds rate is 5.75% to 6%.

Additionally, upcoming fiscal disputes in Congress are worse than expected, weakening business and consumer sentiment.

The combination of the increase in inflation, the Fed rate increases, and reduced consumer confidence causes the U.S. economy to decelerate below the baseline in the remainder of 2024 and the first half of 2025 and to fall into recession in the third quarter of 2025. The recession lasts three quarters.

Unemployment begins to increase, causing the stock market to fall significantly. Real GDP drops 1.5% peak to trough and begins to recover in the second quarter of 2026. The unemployment rate reaches a peak of 6% in the first 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 0.8% in 2025 and -0.1% in 2026, compared with 2.3% and 2.1%, respectively, in those years in the baseline.

U.S. MACRO S7 SCENARIO —FORECAST SUMMARY—October 2024										
	Units	**24Q2**	**24Q3**	**24Q4**	**25Q1**	**25Q2**	**25Q3**	**25Q4**	**26Q1**	**26Q2**
Gross Domestic Product	bcw $	23,223.9	23,351.5	23,433.2	23,481.1	23,551.9	23,453.8	23,296.0	23,206.0	23,287.4
Change	%AR	*3.0*	*2.2*	*1.4*	*0.8*	*1.2*	*-1.7*	*-2.7*	*-1.5*	*1.4*
Federal Budget	$ bil	-208.6	-704.8	-719.3	-731.0	-200.8	-462.8	-685.1	-760.8	-337.9
Total Employment	mil	158.4	158.9	159.3	159.6	159.9	158.4	156.9	156.0	156.5
Change	*%AR*	*1.5*	*1.2*	*1.0*	*0.8*	*0.7*	*-3.6*	*-3.7*	*-2.2*	*1.1*
Unemployment Rate	%	4.0	4.2	4.2	4.2	4.1	4.8	5.6	6.0	5.6
Light Vehicle Sales	mil, SAAR	15.7	15.6	15.9	15.9	16.0	15.0	14.0	13.6	14.2
Residential Housing Starts	mil, SAAR	1.3	1.3	1.3	1.4	1.4	1.4	1.3	1.3	1.3
Median Existing-Home Price	$ ths	407.0	411.9	413.4	414.9	415.0	408.6	403.8	399.5	399.1
Change	*%YA*	*4.9*	*3.6*	*3.4*	*2.7*	*2.0*	*-0.8*	*-2.3*	*-3.7*	*-3.8*
Consumer Price Index	%AR	2.8	1.2	3.1	3.1	3.0	2.3	1.3	1.3	1.7
Federal Funds Rate	%	5.3	5.3	4.8	5.3	5.6	4.7	4.0	3.5	3.1
Treasury Yield: 10-Yr Bond	%	4.4	4.0	4.2	4.5	4.4	4.3	4.0	3.7	3.8
Baa Corp. - 10-Yr Treasury	DIFF	1.5	1.7	1.7	2.3	2.7	3.1	3.3	3.2	3.2
Corporate Profits With IVA & CCA	$ bil	3,817.2	3,781.7	3,768.3	3,710.9	3,648.8	3,623.0	3,555.0	3,490.7	3,459.9
Change	%YA	*10.8*	*5.4*	*0.5*	*0.7*	*-4.4*	*-4.2*	*-5.7*	*-5.9*	*-5.2*
S&P 500	1941=10	5,254.3	5,545.8	5,619.8	5,537.5	5,498.0	4,921.9	4,486.2	4,182.1	4,292.5
Change	%YA	*25.0*	*24.4*	*25.7*	*10.8*	*4.6*	*-11.3*	*-20.2*	*-24.5*	*-21.9*
CRE Price Index	index	308.1	306.6	305.5	304.1	302.1	302.6	303.8	302.4	301.0
NCREIF Property Index: Rate of Return	%, NSA	-0.2	0.7	1.4	1.1	0.7	-0.1	0.2	0.5	0.6
C&I Loans Outstanding	$ bil	2,758.0	2,771.5	2,805.8	2,830.6	2,854.0	2,890.4	2,906.5	2,899.4	2,884.1
BAA spread	%	1.5	1.7	1.7	2.3	2.7	3.1	3.3	3.2	3.2

	Units	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**
Gross Domestic Product	bcw $	20,267.6	21,494.8	22,034.8	22,671.1	23,265.5	23,445.7	23,424.4	24,342.6	25,205.6
Change	%AR	*-2.2*	*6.1*	*2.5*	*2.9*	*2.6*	*0.8*	*-0.1*	*3.9*	*3.5*
Federal Budget	$ bil	-3,348.2	-2,580.4	-1,419.2	-1,783.7	-2,187.4	-2,079.6	-2,287.0	-2,140.6	-2,013.9
Total Employment	mil	142.2	146.3	152.5	156.1	158.6	158.7	156.8	159.0	160.3
Change	*%AR*	*-5.8*	*2.9*	*4.3*	*2.3*	*1.6*	*0.1*	*-1.2*	*1.4*	*0.8*
Unemployment Rate	%	8.1	5.4	3.6	3.6	4.0	4.7	5.5	4.4	4.0
Light Vehicle Sales	mil, SAAR	14.5	14.9	13.8	15.5	15.7	15.2	14.6	16.7	17.3
Residential Housing Starts	mil, SAAR	1.4	1.6	1.6	1.4	1.3	1.4	1.4	1.5	1.5
Median Existing-Home Price	$ ths	298.9	353.9	390.2	392.8	409.1	410.6	402.8	417.2	441.0
Change	*%YA*	*9.7*	*18.4*	*10.2*	*0.7*	*4.2*	*0.4*	*-1.9*	*3.6*	*5.7*
Consumer Price Index	%AR	1.2	4.7	8.0	4.1	2.9	2.6	1.8	2.2	2.2
Federal Funds Rate	%	0.4	0.1	1.7	5.0	5.2	4.9	3.1	3.0	3.0
Treasury Yield: 10-Yr Bond	%	0.9	1.4	3.0	4.0	4.2	4.3	3.8	4.0	4.1
Baa Corp. - 10-Yr Treasury	DIFF	2.7	1.9	2.1	1.9	1.6	2.8	2.9	2.3	2.2
Corporate Profits With IVA & CCA	$ bil	2,411.3	3,077.6	3,316.7	3,546.5	3,763.0	3,634.4	3,521.2	3,907.8	4,241.1
Change	%YA	*-2.4*	*27.6*	*7.8*	*6.9*	*6.1*	*-3.4*	*-3.1*	*11.0*	*8.5*
S&P 500	1941=10	3,218.5	4,266.8	4,100.7	4,284.2	5,353.9	5,110.9	4,390.7	5,341.5	6,242.6
Change	%YA	*10.5*	*32.6*	*-3.9*	*4.5*	*25.0*	*-4.5*	*-14.1*	*21.7*	*16.9*
CRE Price Index	index	302.3	349.7	347.2	317.5	305.5	303.8	303.3	324.3	351.4
NCREIF Property Index: Rate of Return	%, NSA	0.4	4.2	1.4	-2.0	0.3	0.5	0.9	1.9	2.3
C&I Loans Outstanding	$ bil	2,693.3	2,479.4	2,642.6	2,771.3	2,772.7	2,870.4	2,876.4	2,999.3	3,322.9
BAA spread	%	2.7	1.9	2.1	1.9	1.6	2.8	2.9	2.3	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

→ OPEC does not reduce supply amid the Hamas-Israel conflict. Instead, it reverses course from its decision to lower supply and increases production substantially. Further, the conflict resolves sooner than expected.

→ 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, causing oil prices to fall. Weak global economic activity and therefore reduced global energy demand also contribute to lower oil prices. A weaker-than-expected recovery in China would be consistent with this.

→ 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 lower than in the baseline in 2025 because of the lower inflation caused by low oil prices.

Fiscal policy assumptions

→ The Infrastructure Investment and Jobs Act provides $572 billion in new infrastructure spending over the next decade, half of which will go to transportation infrastructure and the rest to other needs such as the power grid and broadband. Congress passed the legislation in November 2021, and its implementation is well underway, with the peak impact on the labor market set to occur in the middle of the decade.

→ Democrats enacted the Inflation Reduction Act on their own via budget reconciliation in 2022. The centerpiece of the bill is the more than $500 billion in tax credits for the production of electricity from renewable sources, residential and commercial energy efficiency, advanced energy manufacturing, and electric vehicles. The IRA also utilizes grants, rebates, loans and federal procurement to promote the adoption of clean energy technologies and climate resilience, among other objectives. Finally, the law extends the expansion of the Affordable Care Act premium subsidies under the American Rescue Plan into 2025. Higher corporate taxes, as well as prescription drug savings, defray the cost of these expenditures on clean energy and healthcare affordability.

→ Congress passed the Fiscal Responsibility Act in 2023, which suspends the debt limit until 2025 and places two-year caps on discretionary federal spending that, combined with other smaller fiscal changes, will produce $1.5 trillion in budgetary savings over the next decade. Under the spending limits, the defense budget is allowed to grow by 3.3% and 1% in fiscal 2024 and 2025, respectively. The baseline assumes $1.85 trillion in discretionary spending for fiscal 2024, when certain accounting gimmicks and emergency spending are factored in. The budget deficit is expected to remain large at around 6.9% of GDP for fiscal 2024, as the deficit by the federal government recorded through August has been deeper than anticipated.

→ As expected, Congress passed a continuing resolution to push the budget negotiations to the other side of the election; it will expire at midnight on December 20. We expect the fiscal 2025 discretionary budget to mostly hold to the $1.606 trillion cap as mandated by the FRA. However, side deals between President Biden and former House Speaker Kevin McCarthy, which amount to about $85 billion over two years, will push the spending total higher as certain nondefense items are reclassified as emergency spending to avoid the limit. We also expect additional emergency spending to respond to various geopolitical and extreme weather events, pushing the discretionary spending total even higher for the fiscal year to $1.87 trillion. The deficit-to-GDP ratio will hold at 6.8%.

→ For fiscal 2025 and beyond, the baseline assumes Kamala Harris wins the presidency and Congress is divided, with Republicans in control of the Senate and Democrats boasting a majority in the House. Fiscal policy will more or less stick to the status quo as both parties struggle to push their priorities through. However, the debt limit gets extended after the suspension ends on January 1. Also, the personal income provisions in the Tax Cuts and Jobs Act, which are set to expire at the end of 2025, are extended for individuals earning less than $400,000 per annum while those earning more will see a tax increase. The discretionary budget in fiscal 2025 sticks to the $1.606 trillion cap imposed by the FRA, though accounting gimmicks and emergency spending push the true spending total higher.

→ The fiscal policy assumptions in S8 are 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.

The “S8: Low Oil Price Scenario” assumes that OPEC does not reduce supply amid the Hamas-Israel conflict. Instead, it reverses course from its decision to limit production and increases output substantially. 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. Also, the Hamas-Israel conflict resolves 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 second quarter of 2024. Oil production also falls somewhat 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 2026, 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 2028, 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 2034. 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—October 2024										
	Units	**24Q2**	**24Q3**	**24Q4**	**25Q1**	**25Q2**	**25Q3**	**25Q4**	**26Q1**	**26Q2**
Gross Domestic Product	bcw $	23,223.9	23,351.5	23,454.9	23,600.5	23,777.7	23,947.6	24,068.8	24,181.5	24,284.2
Change	%AR	*3.0*	*2.2*	*1.8*	*2.5*	*3.0*	*2.9*	*2.0*	*1.9*	*1.7*
Federal Budget	$ bil	-208.6	-704.8	-711.2	-713.7	-176.4	-400.8	-587.2	-630.9	-200.5
Total Employment	mil	158.4	158.9	159.2	159.6	159.9	160.2	160.5	160.9	161.2
Change	*%AR*	*1.5*	*1.2*	*0.7*	*1.0*	*0.9*	*0.6*	*0.9*	*1.0*	*0.8*
Unemployment Rate	%	4.0	4.2	4.0	3.8	3.8	3.7	3.7	3.7	3.7
Light Vehicle Sales	mil, SAAR	15.7	15.6	16.5	17.2	17.5	17.8	17.8	17.8	17.8
Residential Housing Starts	mil, SAAR	1.3	1.3	1.3	1.5	1.5	1.6	1.7	1.7	1.7
Median Existing-Home Price	$ ths	407.0	411.9	414.0	415.3	415.1	416.7	418.1	419.5	420.5
Change	*%YA*	*4.9*	*3.6*	*3.5*	*2.7*	*2.0*	*1.2*	*1.0*	*1.0*	*1.3*
Consumer Price Index	%AR	2.8	1.2	-0.5	0.6	1.0	1.3	1.3	1.6	1.8
Federal Funds Rate	%	5.3	5.3	4.6	4.2	3.8	3.6	3.3	3.1	2.9
Treasury Yield: 10-Yr Bond	%	4.4	4.0	3.8	3.8	3.7	3.6	3.5	3.5	3.8
Baa Corp. - 10-Yr Treasury	DIFF	1.5	1.7	1.7	1.9	2.2	2.3	2.3	2.4	2.4
Corporate Profits With IVA & CCA	$ bil	3,817.2	3,781.7	3,829.6	3,817.8	3,782.3	3,759.7	3,720.0	3,666.0	3,635.0
Change	%YA	*10.8*	*5.4*	*2.1*	*3.6*	*-0.9*	*-0.6*	*-2.9*	*-4.0*	*-3.9*
S&P 500	1941=10	5,254.3	5,545.8	5,797.3	5,781.1	5,833.4	5,919.5	5,990.2	6,016.6	6,035.1
Change	%YA	*25.0*	*24.4*	*29.6*	*15.7*	*11.0*	*6.7*	*3.3*	*4.1*	*3.5*
CRE Price Index	index	308.1	306.6	306.1	306.4	307.3	313.0	322.3	330.1	337.6
NCREIF Property Index: Rate of Return	%, NSA	-0.2	0.7	1.6	1.9	2.2	2.1	2.2	2.2	2.1
C&I Loans Outstanding	$ bil	2,758.0	2,771.5	2,782.0	2,831.6	2,888.3	2,944.4	3,000.8	3,056.9	3,110.7
BAA spread	%	1.5	1.7	1.7	1.9	2.2	2.3	2.3	2.4	2.4

	Units	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**
Gross Domestic Product	bcw $	20,267.6	21,494.8	22,034.8	22,671.1	23,270.9	23,848.7	24,328.9	24,798.8	25,341.9
Change	%AR	*-2.2*	*6.1*	*2.5*	*2.9*	*2.6*	*2.5*	*2.0*	*1.9*	*2.2*
Federal Budget	$ bil	-3,348.2	-2,580.4	-1,419.2	-1,783.7	-2,179.2	-1,878.1	-1,779.2	-1,884.3	-2,075.5
Total Employment	mil	142.2	146.3	152.5	156.1	158.6	160.0	161.3	162.3	162.9
Change	*%AR*	*-5.8*	*2.9*	*4.3*	*2.3*	*1.6*	*0.9*	*0.8*	*0.6*	*0.4*
Unemployment Rate	%	8.1	5.4	3.6	3.6	4.0	3.8	3.7	3.7	3.8
Light Vehicle Sales	mil, SAAR	14.5	14.9	13.8	15.5	15.8	17.6	17.8	17.7	17.5
Residential Housing Starts	mil, SAAR	1.4	1.6	1.6	1.4	1.3	1.6	1.7	1.7	1.6
Median Existing-Home Price	$ ths	298.9	353.9	390.2	392.8	409.3	416.3	421.1	426.4	436.0
Change	*%YA*	*9.7*	*18.4*	*10.2*	*0.7*	*4.2*	*1.7*	*1.1*	*1.3*	*2.2*
Consumer Price Index	%AR	1.2	4.7	8.0	4.1	2.7	0.8	1.5	1.9	2.1
Federal Funds Rate	%	0.4	0.1	1.7	5.0	5.1	3.7	3.0	3.1	3.1
Treasury Yield: 10-Yr Bond	%	0.9	1.4	3.0	4.0	4.1	3.7	3.8	4.2	4.4
Baa Corp. - 10-Yr Treasury	DIFF	2.7	1.9	2.1	1.9	1.6	2.2	2.4	2.5	2.5
Corporate Profits With IVA & CCA	$ bil	2,411.3	3,077.6	3,316.7	3,546.5	3,778.3	3,770.0	3,630.4	3,649.6	3,779.6
Change	%YA	*-2.4*	*27.6*	*7.8*	*6.9*	*6.5*	*-0.2*	*-3.7*	*0.5*	*3.6*
S&P 500	1941=10	3,218.5	4,266.8	4,100.7	4,284.2	5,398.3	5,881.0	6,118.4	6,454.5	6,671.0
Change	%YA	*10.5*	*32.6*	*-3.9*	*4.5*	*26.0*	*8.9*	*4.0*	*5.5*	*3.4*
CRE Price Index	index	302.3	349.7	347.2	317.5	306.1	322.3	352.3	375.2	387.0
NCREIF Property Index: Rate of Return	%, NSA	0.4	4.2	1.4	-2.0	0.3	2.1	2.2	2.0	1.6
C&I Loans Outstanding	$ bil	2,693.3	2,479.4	2,642.6	2,771.3	2,766.8	2,916.3	3,128.1	3,291.2	3,451.2
BAA spread	%	2.7	1.9	2.1	1.9	1.6	2.2	2.4	2.5	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-q3-2024, August 2024) and the Federal Open Market Committee members’ range of forecasts (https://www.federalreserve.gov/monetarypolicy/fomcprojtabl20240918.htm, September 2024). 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—October 2024	Units	24Q2	24Q3	24Q4	25Q1	25Q2	25Q3	25Q4	26Q1	26Q2
Gross Domestic Product	bcw $	23,223.9	23,351.5	23,422.2	23,510.8	23,615.1	23,724.3	23,845.7	23,952.4	24,068.0
Change	%AR	*3.0*	*2.2*	*1.2*	*1.5*	*1.8*	*1.9*	*2.1*	*1.8*	*1.9*
Federal Budget	$ bil	-208.6	-704.8	-719.6	-727.5	-194.8	-426.5	-614.9	-663.9	-238.1
Total Employment	mil	158.4	158.9	158.8	158.9	158.8	159.0	159.2	159.3	159.4
Change	*%AR*	*1.5*	*1.2*	*-0.2*	*0.2*	*-0.1*	*0.4*	*0.6*	*0.2*	*0.3*
Unemployment Rate	%	4.0	4.2	4.3	4.3	4.3	4.3	4.2	4.2	4.2
Light Vehicle Sales	mil, SAAR	15.7	15.6	15.6	15.9	15.9	15.9	15.9	16.1	16.3
Residential Housing Starts	mil, SAAR	1.3	1.3	1.4	1.4	1.5	1.5	1.5	1.5	1.5
Median Existing-Home Price	$ ths	407.0	411.9	417.4	421.3	424.3	428.1	431.6	435.2	438.8
Change	*%YA*	*4.9*	*3.6*	*4.4*	*4.2*	*4.2*	*3.9*	*3.4*	*3.3*	*3.4*
Consumer Price Index	%AR	2.8	1.2	2.4	2.5	2.6	2.5	2.3	2.4	2.4
Federal Funds Rate	%	5.3	5.3	4.6	3.9	3.4	3.2	3.1	3.1	3.1
Treasury Yield: 10-Yr Bond	%	4.4	4.0	3.7	3.8	3.8	3.8	3.8	3.8	3.9
Baa Corp. - 10-Yr Treasury	DIFF	1.5	1.7	1.8	2.0	2.3	2.4	2.4	2.5	2.5
Corporate Profits With IVA & CCA	$ bil	3,817.2	3,781.7	3,763.4	3,760.5	3,774.3	3,784.9	3,789.4	3,776.3	3,792.7
Change	%YA	*10.8*	*5.4*	*0.4*	*2.1*	*-1.1*	*0.1*	*0.7*	*0.4*	*0.5*
S&P 500	1941=10	5,254.3	5,545.8	5,679.6	5,607.2	5,578.9	5,583.1	5,594.6	5,604.4	5,607.8
Change	%YA	*25.0*	*24.4*	*27.0*	*12.2*	*6.2*	*0.7*	*-1.5*	*0.0*	*0.5*
CRE Price Index	index	308.1	306.6	306.2	306.3	306.8	311.7	319.8	326.1	332.5
NCREIF Property Index: Rate of Return	%, NSA	-0.2	0.7	1.6	1.8	2.0	1.9	1.9	1.9	1.9
C&I Loans Outstanding	$ bil	2,758.0	2,771.5	2,809.3	2,866.8	2,916.1	2,958.0	2,991.6	3,026.4	3,064.0
BAA spread	%	1.5	1.7	1.8	2.0	2.3	2.4	2.4	2.5	2.5

	Units	2020	2021	2022	2023	2024	2025	2026	2027	2028
Gross Domestic Product	bcw $	20,267.6	21,494.8	22,034.8	22,671.1	23,262.8	23,674.0	24,130.5	24,598.3	25,084.5
Change	%AR	*-2.2*	*6.1*	*2.5*	*2.9*	*2.6*	*1.8*	*1.9*	*1.9*	*2.0*
Federal Budget	$ bil	-3,348.2	-2,580.4	-1,419.2	-1,783.7	-2,187.6	-1,963.6	-1,924.8	-2,013.4	-2,152.5
Total Employment	mil	142.2	146.3	152.5	156.1	158.5	159.0	159.5	160.2	160.7
Change	*%AR*	*-5.8*	*2.9*	*4.3*	*2.3*	*1.5*	*0.3*	*0.3*	*0.4*	*0.3*
Unemployment Rate	%	8.1	5.4	3.6	3.6	4.1	4.3	4.2	4.0	4.0
Light Vehicle Sales	mil, SAAR	14.5	14.9	13.8	15.5	15.6	15.9	16.4	17.2	17.4
Residential Housing Starts	mil, SAAR	1.4	1.6	1.6	1.4	1.4	1.5	1.5	1.5	1.5
Median Existing-Home Price	$ ths	298.9	353.9	390.2	392.8	410.1	426.3	440.6	444.9	445.8
Change	*%YA*	*9.7*	*18.4*	*10.2*	*0.7*	*4.4*	*3.9*	*3.3*	*1.0*	*0.2*
Consumer Price Index	%AR	1.2	4.7	8.0	4.1	2.9	2.3	2.4	2.4	2.4
Federal Funds Rate	%	0.4	0.1	1.7	5.0	5.1	3.4	3.2	3.2	3.1
Treasury Yield: 10-Yr Bond	%	0.9	1.4	3.0	4.0	4.1	3.8	3.9	3.7	3.6
Baa Corp. - 10-Yr Treasury	DIFF	2.7	1.9	2.1	1.9	1.6	2.3	2.5	2.5	2.5
Corporate Profits With IVA & CCA	$ bil	2,411.3	3,077.6	3,316.7	3,546.5	3,761.8	3,777.3	3,809.3	3,904.2	4,063.6
Change	%YA	*-2.4*	*27.6*	*7.8*	*6.9*	*6.1*	*0.4*	*0.8*	*2.5*	*4.1*
S&P 500	1941=10	3,218.5	4,266.8	4,100.7	4,284.2	5,368.8	5,591.0	5,655.1	5,979.1	6,327.1
Change	%YA	*10.5*	*32.6*	*-3.9*	*4.5*	*25.3*	*4.1*	*1.1*	*5.7*	*5.8*
CRE Price Index	index	302.3	349.7	347.2	317.5	306.2	319.8	345.6	373.0	402.3
NCREIF Property Index: Rate of Return	%, NSA	0.4	4.2	1.4	-2.0	0.3	1.9	2.0	2.2	2.4
C&I Loans Outstanding	$ bil	2,693.3	2,479.4	2,642.6	2,771.3	2,773.6	2,933.1	3,085.5	3,268.7	3,464.4
BAA spread	%	2.7	1.9	2.1	1.9	1.6	2.3	2.5	2.5	2.5

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 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