US Economic Survey: End-Year 2024

Forecasts from the SIFMA Economist Roundtable
Assessing the Economic Landscape and Monetary Policy

Published: December 2024

Key Takeaways

- **Monetary Policy:** All our economists expect a rate cut at the December FOMC meeting with 90% forecasting a cut of 25 bps. The median forecaster looks for the midpoint of the target range to end 2025 at 3.560% (roughly 100 bps in cuts from current rate) and to end 2026 at 3.375% (a total of 125 bps in cuts from the current rate). Nearly 60% of our economists estimate the neutral nominal fed funds rate to be 3.0%-3.5%.
- **Inflation:** The median forecaster looks for core PCE inflation to end 2024 at 2.8% (year-over-year), which is unchanged from the last full survey in June 2024 and 0.1 pps higher than the September 2024 flash poll. In 2025, core PCE inflation is estimated to decrease to 2.4%, up 0.1 pps from the June survey. The top factors influencing forecasts for core inflation estimates are wage growth, growth in domestic demand, and monetary policy.
- **Economy:** The median economist forecasts real GDP will grow 2.4% in 2024; +0.8 pps from our last full survey in June 2024 and +0.3 pps from the September 2024 flash poll. For 2025, the median real GDP forecast is 1.9%, 0.1 pps lower from the June survey. Almost 50% of our economists put the probability of recession from 0% to 15%. The top factors impacting US economic growth are the US labor market, US trade policy, and US monetary policy. US trade policy also shows up near the top in both upside and downside risks to the economy.
- Also in this report, we include forecast tables and charts for the full survey results, as well as an update on where we are in the economic landscape and a reference guide on historical trends for select economic data.

Contents

Setting the Scene

A Message from Our Chair

The performance of the U.S. economy in 2024 has been extraordinary. Real GDP grew 2.7% on a year-ago basis in the third quarter of 2024 and non-farm payrolls are up 1.7 million year-to-date through October, which equates to an impressive monthly average gain of 170K. Solid employment growth has been supportive of strong growth in real consumer spending, which was up 2.9% in Q3-2024 relative to the same period last year. Although the unemployment rate trended higher over the course of 2024, it currently stands at only 4.1%, which is quite low by historical standards. Despite strong GDP growth and low unemployment, inflation continues to recede, albeit at a slow rate. The year-over-year change in the core PCE deflator, which many economists consider to be the best measure of the underlying rate of consumer price inflation, ended 2023 at 3.0%. It currently stands at 2.8%.

SIFMA recently surveyed the members of the Economist Roundtable regarding their economic forecasts for 2025. (The poll was open between November 8 and November 22, so Roundtable members knew the results of the November 5 election when completing their surveys.) The survey results show that members of the SIFMA Economist Roundtable generally have a constructive outlook for the U.S. economy in 2025. On average, the panel forecasts that real GDP will grow 1.9% next year, down a bit from the 2.4% projection for 2024. Nearly one-half of the panelists place the odds of recession in 2025 at less than 15% or less, with another one-third of the panel estimating the probability of recession as between 15% and 30%. In terms of the labor market, the median forecaster looks for the unemployment rate to tick up to only 4.3%. The panel forecasts that core PCE inflation will average 2.4% in 2025, down from its current rate of 2.8%. On average, panelists foresee a reduction of 100 bps in the fed funds target rate next year from its current level. While none of the panelists believe the stance of monetary policy is “neutral” at present, nearly one-half (46%) believe it will return to neutral in the second half of 2025 with an equal percentage responding that neutral will be reached sometime after the end of next year.

But central tendencies, whether measured as means, medians or modes, can conceal differing views among the panelists. In that regard, there was a meaningful dispersion in the range of forecasts for 2025. For example, the strongest forecast for real GDP growth in 2025 was 2.6% while the weakest forecast was only 1.0%. While most forecasters look for the sequential rate of GDP growth to tick down in the first quarter or two of 2025 from the 2.8% annualized rate that was registered in Q3-2024, the weakest outlook projected an outright contraction of 1.6% in the second quarter of 2025. Regarding consumer prices, the most benign forecast saw core PCE inflation receding to 1.9% by the end of next year. The most pessimistic forecaster saw it rising to 2.9%. There was a similar wide dispersion in the outlook for the stance of monetary policy at the end of next year. The highest forecast saw the FOMC cutting the fed funds rate by only 50 bps from its current level of 4.50%-4.75%. On the other hand, the lowest forecast looks for 225 bps of rate cuts by the end of next year.

This dispersion in the range of economic forecasts for 2025 may reflect, at least in part, different assumptions regarding the outlook for economic policies of the incoming Trump administration. For example, more than 90% of the panelists listed “trade policy/tariffs” as representing a downside risk to their economic forecasts with 55% highlighting “immigration” policy as another downside risk. On the other hand, however, more than 80% of respondents listed the growth-boosting effects of more stimulative fiscal/tax policies and looser regulatory policies as representing an upside risk to their forecasts. Interestingly, about 45% listed “trade policy/tariffs” as an upside risk to their economic forecasts. Perhaps these respondents are anticipating the threat of tariffs will induce foreign governments to lower their trade barriers to American exports.

Panelists also continue to express concern regarding the long-run outlook for federal government debt outstanding, which climbed to $27.6 trillion at the end of fiscal year (FY) 2024. Using a scale of "1" (least) to "10" (most), the panelists were asked to rate their concern "about the current budget deficit and the amount of debt held by the public." One-half of the respondents rated their concern as "5" or lower. However, when asked the same question about the CBO's projection (under current legislation) of the budget deficit and publicly held debt ten years from now, two-thirds of the panelists rated their concern as "7" or higher.

Despite these concerns about the amount of federal government debt in the long run, panelists generally do not have an overly pessimistic view regarding borrowing costs for the U.S. Treasury. Nearly 60% of respondents think the "equilibrium" yield on the 10-year Treasury note will be in a range of 4.00% to 5.00% at the end of 2029. None of the respondents expect the yield on the 10-year note will exceed 5.00% at that time. This relative sanguine view for the outlook for Treasury yields may reflect confidence that the Federal Reserve will be able to keep inflation in check. None of the respondents thought that inflation expectations will become "unanchored" in the foreseeable future. Most panelists believe that a core PCE inflation rate that ranges between 1.5% and 2.5% five-to-ten years from now is by far the most likely outcome (relative to an inflation rate of less than 1.5% or a rate that exceeds 2.5%.)

In sum, the average forecasts of the SIFMA Economist Roundtable look for the strong performance of the U.S. economy in 2024 to continue next year. Real GDP growth should remain solid, inflation should continue to recede, if only slowly, and the Federal Reserve likely will cut rates further. That said, the dispersion of forecasts for next year indicates some difference of views that may reflect policy uncertainty as a new administration comes to the helm in Washington DC. Perhaps some policy uncertainty may dissipate by the time of the next semiannual SIFMA Economic Outlook Survey in June.

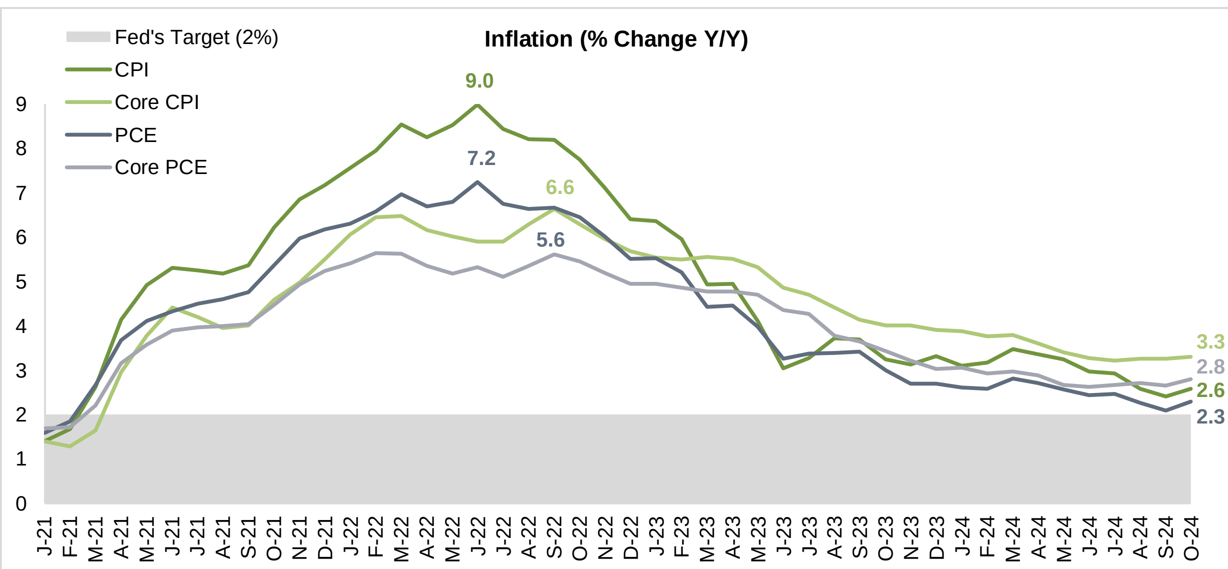
-- Jay Bryson, Ph.D., Managing Director and Chief Economist at Wells Fargo Corporate & Investment Banking and Chair of the SIFMA Economist Roundtable

Current Landscape: Inflation

Several factors attributed to the recent period of high inflation, including both demand surges and supply chain issues related to the global pandemic and a tight labor market, as well as significantly elevated levels of US fiscal spending. As the economy worked through supply side issues and demand normalized on the goods side, the Fed was able to successfully bring down inflation rates from peak levels. However, a lack of constraint on the fiscal spending side continues to weigh on the minds of market participants and we presume the Fed as well.

Recapping the Journey Back Down to 2%

We begin this report by analyzing the inflation environment and the potential path back down to the Fed's 2% target. As a reminder, the Federal Reserve policymakers prefer changes in the Core Personal Consumption Expenditures Price Index (PCE) over changes in the Consumer Price Index (CPI) as the best measure of consumer price inflation. The year-over-year change in core PCE inflation stands at 2.8% as of October, down substantially from the peak of 5.6% in 2022.



Source: FRED, SIFMA estimates

The Last Mile – Stickier than Hoped

While 2.8% is a significant improvement from the 5.6% peak, the last mile to the Fed's 2% target has remained stickier than some hoped. Looking at the six-month view in the table below, it is interesting to see the differentials between headline and core inflation rates. For headline numbers, the CPI is down 0.7 pps since May, with the PCE only 0.3 pps lower over that same period. However, the core numbers have shown a smaller decline in the case of CPI and an increase for PCE: Core CPI -0.1 pps, PCE +0.13 pps. Core PCE inflation, the Fed's preferred metric, has ticked up since May.

	CPI	Core CPI	PCE	Core PCE	M/M Change
Y/Y Change					
May	3.3	3.4	2.6	2.67	
June	3.0	3.3	2.4	2.63	(0.04)
July	2.9	3.2	2.5	2.66	0.03
August	2.6	3.3	2.3	2.72	0.06
September	2.4	3.3	2.1	2.65	(0.07)
October	2.6	3.3	2.3	2.80	0.15
May to October				0.13	
M/M Change					
May	0.0	0.2	0.0	0.08	
June	(0.1)	0.1	0.1	0.22	0.14
July	0.2	0.2	0.2	0.17	(0.05)
August	0.2	0.3	0.1	0.16	(0.01)
September	0.2	0.3	0.2	0.25	0.10
October	0.2	0.3	0.2	0.28	0.03
May to October				0.20	

Source: FRED, SIFMA estimates

Heading into 2025

Moving forward, the Fed's inflation fight could face headwinds from the incoming administration's policies (as we know them). For starters, President-elect Trump campaigned on imposing tariffs of 10% to 20% on all imports and up to 60% on Chinese goods as a key component of his economic strategy[1]. Tariffs are essentially an import tax, potentially leading to higher prices and therefore increased inflation. Further, tariffs have been shown historically to slow economic growth.

Additionally, President-elect Trump's campaign emphasized strict immigration policies, including mass deportations of some eleven million undocumented individuals as well as restrictions on future immigration. Immigration has helped to increase labor supply in recent years, thereby bringing better balance to the labor market. Therefore, future federal policies that could weigh on growth in the labor supply could reignite the supply/demand imbalance in the labor market, potentially leading to higher inflation.

These policies – if enacted in full force as known today – create a conundrum for the Fed heading into 2025, making monetary policy decisions even tougher. The Fed continues to balance eliminating and containing inflation and preventing a recession. We expect economists to update forecasts as we learn more about the incoming administration's policies, while market participants adjust expectations for rate cuts.

(We note that this section focused on the potential impact on inflation. It does not discuss other policies – deregulation, tax policies – which are seen as positives for economic growth.)

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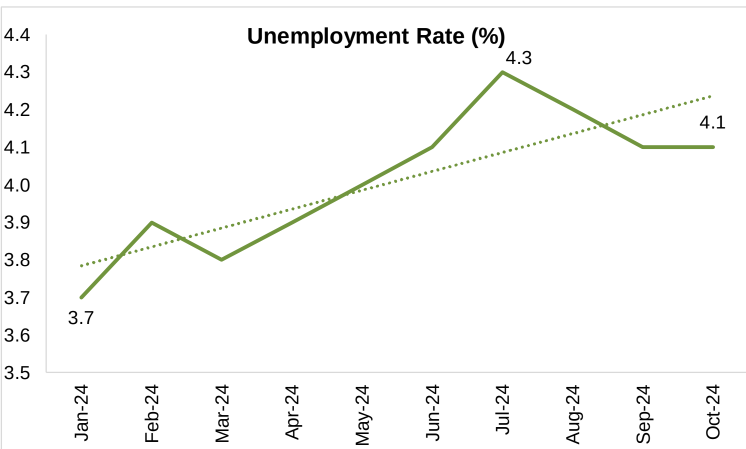
[1] President-elect Trump recently discussed placing a 100% tariff on BRICS countries, if they create a new common currency away from the US Dollar. BRICS originally included Brazil, Russia, India, China, and South Africa, with Iran, the United Arab Emirates, Ethiopia, and Egypt formally joining earlier this year.

Current Landscape: Labor Market

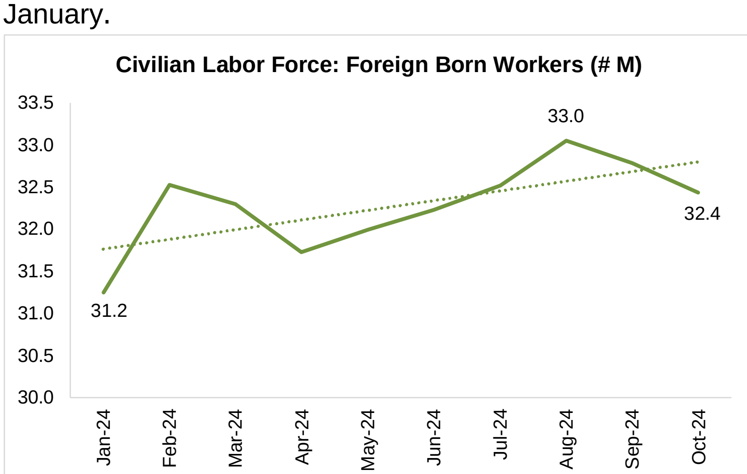
One of the main drivers of inflation had been the tight labor market. A supply/demand imbalance had been created as consumers demanded more goods and services coming out of COVID. This consumer demand in turn increased corporate demand for labor. Yet, the supply of labor was lacking, creating a hot labor market as wages grew significantly to attract employees.

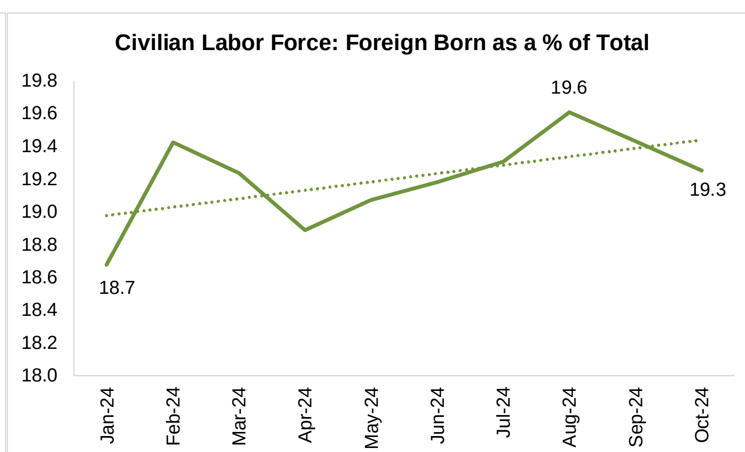
Many economists, especially Fed officials, now consider the labor market to be in better balance. Labor force participation rates have increased from COVID lows, and the unemployment rate has risen from its post-pandemic low of 3.4%. By tightening monetary policy, the Fed was intentionally trying to slow the rate of economic growth, thereby cooling the demand for labor. The jobless rate in October stood at 4.1%.



Source: FRED, SIFMA estimates

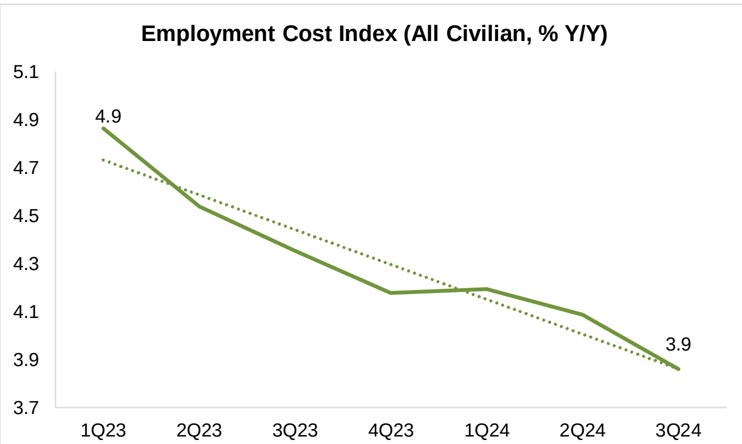
As noted above, immigration has been an important factor that has helped to restore balance to the labor market, replenishing the lack of supply in several sectors. As of October 2024, there were 32.4 million foreign-born workers in the United States, out of 168.5 million total civilian workers, or 19.3% of the workforce. This is a 15.5% increase in foreign-born workers since the end of 2019 versus +2.3% for the total workforce. That said, after a steady increase in foreign workers, we have seen a downtick each month since the 33.0 million peak in August, around -1% each month. Some have inferred that undocumented workers may be choosing to leave the country ahead of the start of the new administration in January.

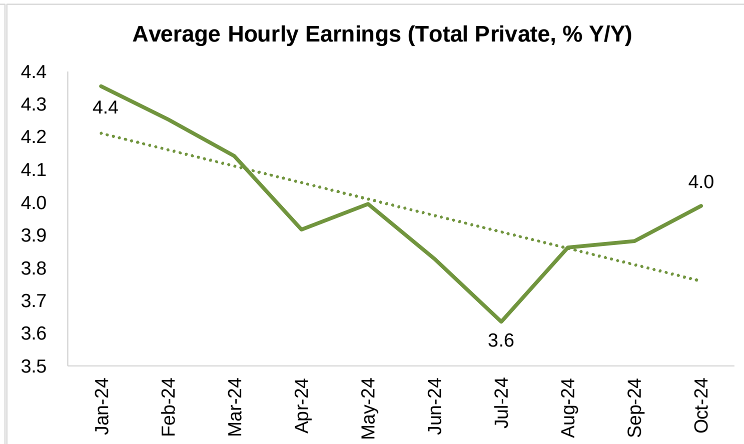




Source: FRED, SIFMA estimates

The increase in immigration balanced the job market, alleviating labor market pressures. In other words, as supply issues were resolved, labor costs decelerated. The Employment Cost Index – the change in the hourly labor cost to employers – was at 3.9% as of 3Q24, down from an average of 4.9% in 2022 (peaked at 5.1%). Wage growth has slowed as well, with the Y/Y average hourly earnings averaging 4.0% in 2024 versus 5.4% in 2022. That said, the year-over-year growth rate in average hourly earnings has ticked up recently from its July low of 3.6% to 4.0% in October.





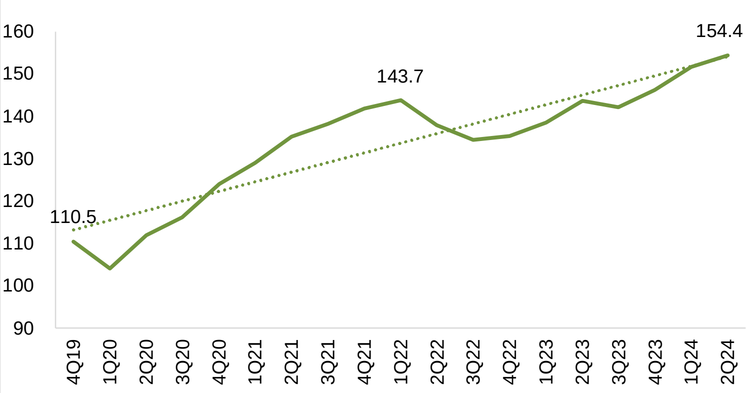
Source: FRED, SIFMA estimates

Note: ECI measures the change in the hourly labor cost to employers over time – including both the cost of wages and salaries and the cost of benefits – using a fixed basket of labor to produce a pure cost change, free from the effects of workers moving between occupations and industries.

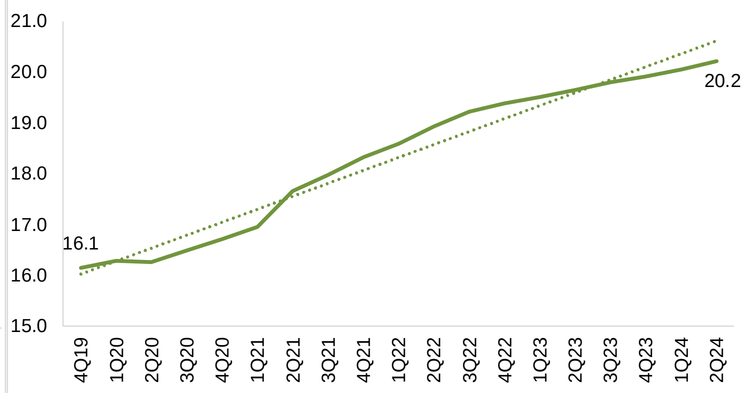
Current Landscape: The Consumer

Positive growth in employment and real wages have contributed to solid growth in real consumer spending. However, the pace of growth in consumer spending may slow next year due to tariff hikes. Another factor contributing to the strength of the consumer is healthy balance sheets. Household net worth, at $154.4 trillion as of 2Q24, has grown 39.8% since the end of 2019. The sharp economic rebound post pandemic drove up net worth 38.0% between 1Q20 and 1Q22. Growth in household net worth has outpaced that of the growth rate for household debt. For the same full time period household debt, at $20.2 trillion, rose 25.2%. From 1Q20 to 1Q22 household debt grew 14.1%. Looking at the slope of the lines for the two metrics, the net worth slope was 8.9x that of debt. This positive trend continued in 2024, with household net worth +5.6% since the end of last year, while debt grew +1.5%.

Health of Households: Net Worth ($T)



Health of Households: Debt ($T)

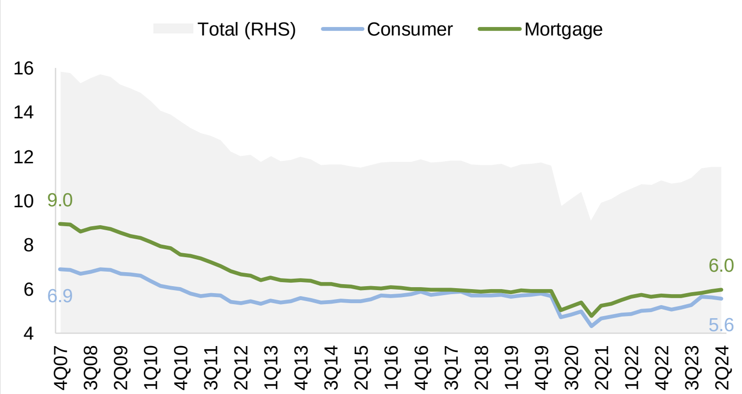


Source: FRED, SIFMA estimates

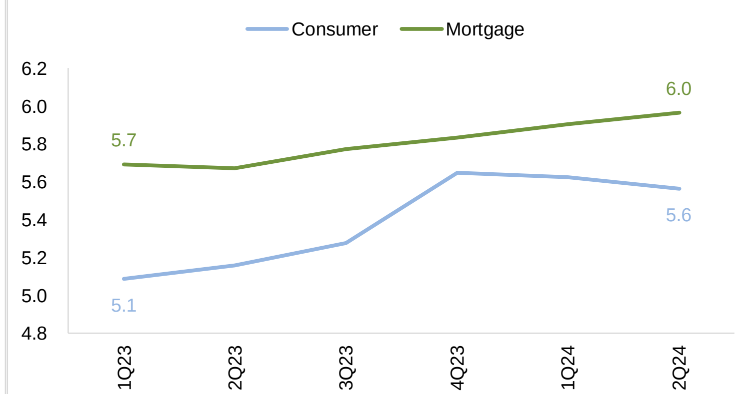
Note: For debt, households includes nonprofit organizations.

Healthy balance sheets allow consumers to comfortably service debt payments. Since the Global Financial Crisis, the total debt service ratio has declined to 11.5% from 15.8% at the end of 2007, as the consumer debt service ratio decreased 1.3 pps and the mortgage debt service ratio declined 3.0 pps. Both total debt service and that for consumer debt are slightly below pre-COVID averages, while the mortgage debt service ratio is up slightly.

HH Debt Service Payments as % Disposable Income



HH Debt Service Payments as % Disposable Income

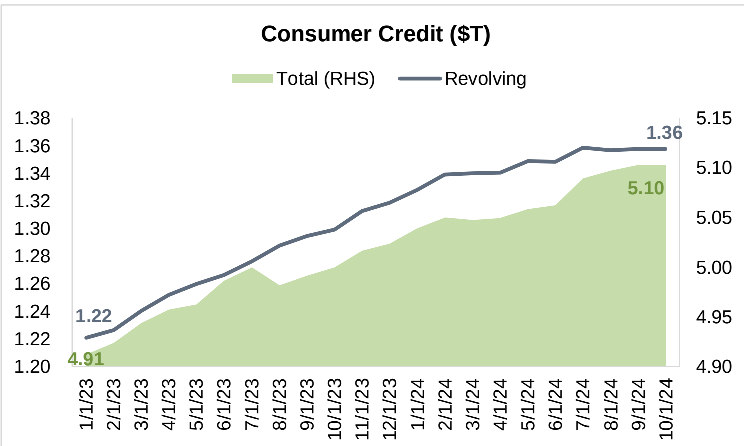


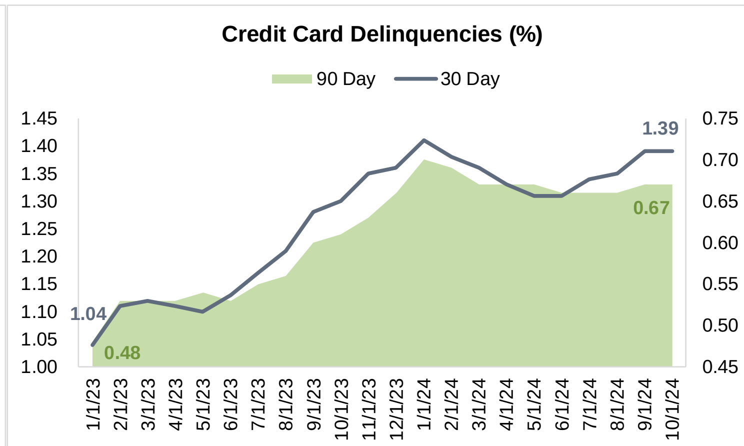
Source: FRED, SIFMA estimates

Note: Household Debt Service Ratio (DSR) is the ratio of total required household debt payments to total disposable income, divided into two parts: required mortgage payments and scheduled consumer debt payments.

Changes in credit market conditions could potentially change the consumer story. Total consumer credit is up 11.2% since the start of 2023, to $5.10 trillion, while revolving credit grew 3.9% to $1.36 trillion. The growth in consumer credit slowed as we moved across 2024, stabilizing since mid-summer.

Credit card delinquencies have also increased since the start of 2023, with 30-day delinquencies +0.35 pps and 90-day delinquencies +0.19 pps. After peaking in January of this year, 30-day delinquencies trended down, until reversing course in mid-summer. The rate has been stable for the last two months. 90-day delinquencies fell at a slower pace since the January peak, reversing course in – yet remaining stable for – the last two months.

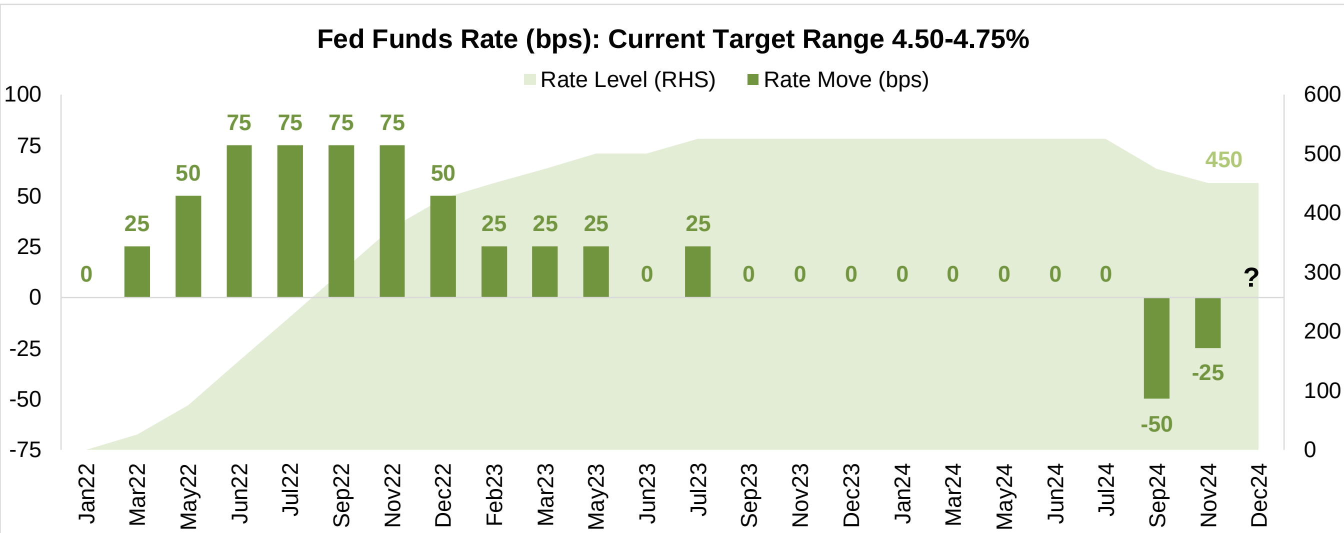




Source: Bloomberg, SIFMA estimates

Current Landscape: Fed Funds Rate

Next, we put all of these factors together to assess the potential timing and level of rate cuts. The current target range for the federal funds rate is 4.50% to 4.75%. After ending rate hikes in July of 2023, the FOMC kept rates on hold for 13 months. The FOMC has now commenced an easing cycle, reducing its target range for the federal funds rate by 75 bps since September.



Source: Federal Reserve, SIFMA estimates

As of this writing, market pricing implies a probability of roughly 65% of a 25 bps cut at the December 18 FOMC meeting, the final meeting of the year. What has been interesting is the shift in probabilities of cuts and pauses. Back in June, some market participants estimated the FOMC could pause this year, albeit at a low probability. As we moved through the summer, the thoughts of a pause faded, and probabilities grew for a potential of 100 bps cuts by the end of the year. The 50 bps cut the Fed enacted in September pulled forward some of the cut probabilities, and we are now closing out the year with a slight majority expecting one more cut.

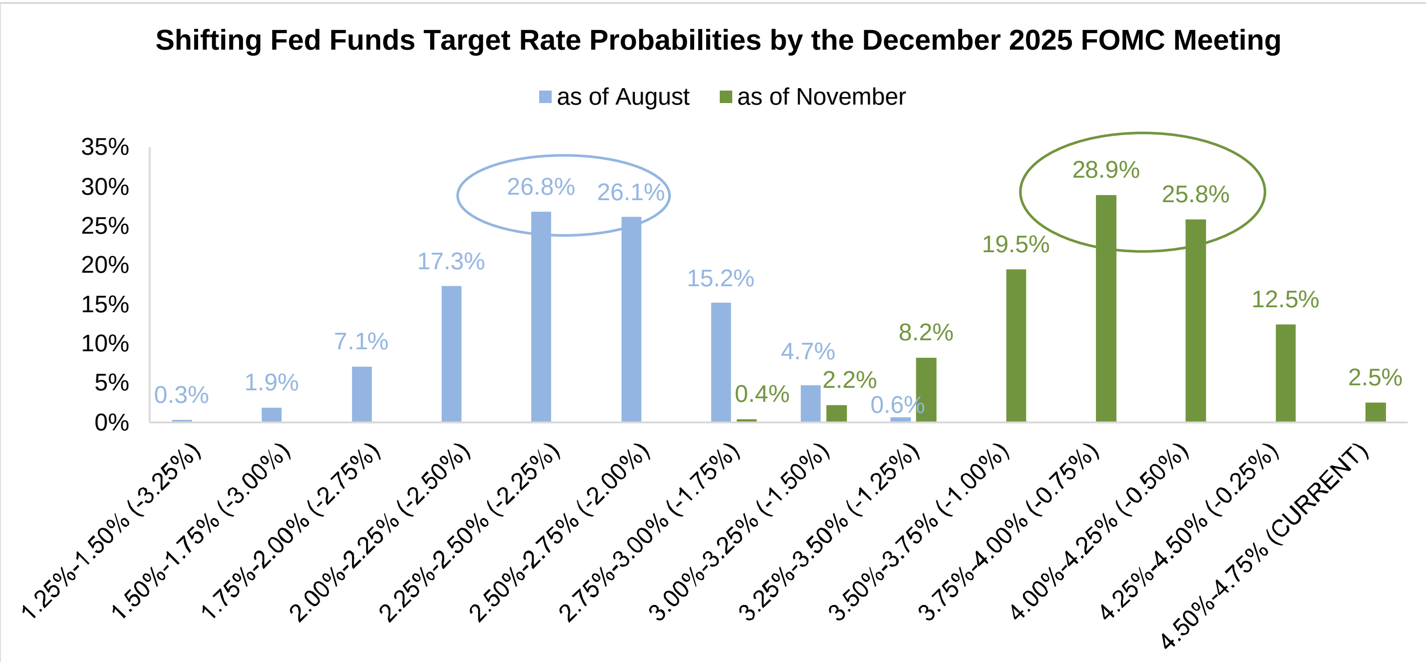
Rate Cuts by the December 2024 FOMC Meeting

Timing	-150	-125	-100	-75	-50	-25	Pause	Remaining FOMCs
2 Weeks Post Nov FOMC						55.7%	44.3%	1 = Dec
1 Week Post Nov FOMC						79.3%	20.7%	1 = Dec
Post Election				0.4%	67.4%	32.2%		
Pre FOMC				0.3%	82.4%	17.3%		
Post Sept FOMC			27.0%	49.9%	23.1%			2 = Nov, Dec
Pre FOMC	4.2%	31.3%	46.2%	18.3%				
End August	3.2%	20.6%	44.5%	31.7%				
Post July FOMC		0.2%	7.3%	57.4%	33.8%	1.3%		3 = Sept, Nov, Dec
Pre FOMC		0.2%	7.2%	56.7%	33.6%	2.2%		
Post June FOMC			1.6%	18.2%	43.7%	30.4%	6.1%	4 = July, Sept, Nov, Dec
Pre FOMC			2.8%	21.2%	42.3%	27.9%	5.8%	

Source: CME FedWatch Tool, SIFMA estimates

Note: CME FedWatch analyzes the probabilities of changes to the Fed Funds rate as implied by 30-Day Fed Funds futures pricing data.

Looking out into 2025 – based on what we know now – market participants for the most part, expect rate cuts to continue. However, the probabilities for the total amount of easing by the end of 2025 have come down significantly. Back in August – the purple columns in the chart below – market participants expected the Fed Funds target range to be down 125 bps from current levels, at a minimum. The range extended to -325 bps, with the majority centering around -200 bps to -255 bps. Now – November probabilities shown in the green columns – the range has come down to a range from 0 bps to -175 bps. The majority is centered around -150 bps to -75 bps by the December FOMC meeting.



Source: CME FedWatch Tool, SIFMA estimates

Note: The X-axis labels show the change in the low end of the range from the current Fed Fund rate to the estimate. CME FedWatch analyzes the probabilities of changes to the Fed Funds rate as implied by 30-Day Fed Funds futures pricing data. FOMC meetings: 2024 – December 17-18. 2025 – January 28-29, March 18-19, May 6-7, June 17-18, July 29-30, September 16-17, October 28-29, December 9-10.

Survey Highlights[2]

We begin by highlighting what we view as the most interesting results from the survey. The full survey results can be found at the end of this report.

Inflation & Monetary Policy

(Forecasts on page 22; survey responses for inflation and monetary policy on pages 30-33, rates markets on pages 34-35)

Fed Funds Rate Cuts

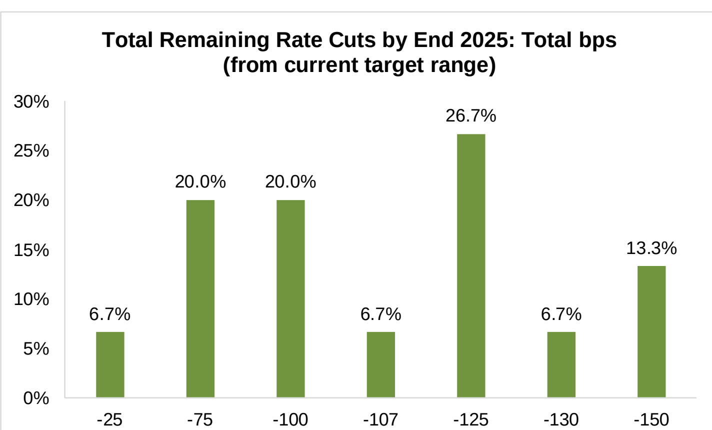
Once again, we put the analysis of our Economist Roundtable forecasts for the Fed Funds rate at the top of the highlights. Our economists expect a midpoint Fed Funds rate of 4.375% by the end of 2024, which equates to a 4.25% to 4.50% range. This was not changed from the September flash poll but was down from the June full survey, -0.558 pps.

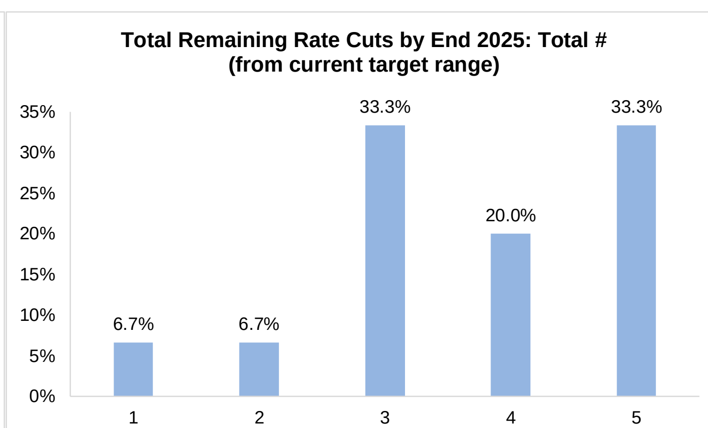
Now we look at the remaining rate cuts following the December 2024 FOMC meeting through the end of 2025. The majority of our economists expect three to five cuts by the end of 2025, at 87% of responses in aggregate. However, there was not a strong consensus around these three options: our economists were split at 33% each for either three or five cuts, with 20% expecting four cuts.

As to the aggregate amount of cuts by the end of 2025, the results showed another wide range. Over one-fourth of our economists expected 125 bps of cuts, the highest individual grouping. However, one-fifth each of our economists expect either 75 bps or 100 bps of cuts.

As 100% of our economists expect a rate cut in December – predominantly in the 25 bps level, though not everyone was in this camp – this would represent a total of three rate cuts in 2024, combined with the cuts at the September and November FOMC meetings. Comparing this to our mid-year survey in June – where only 21% of economists expected three rate cuts and 36% expected two cuts – most economists had some of their 2025 rate cut expectations pulled forward.

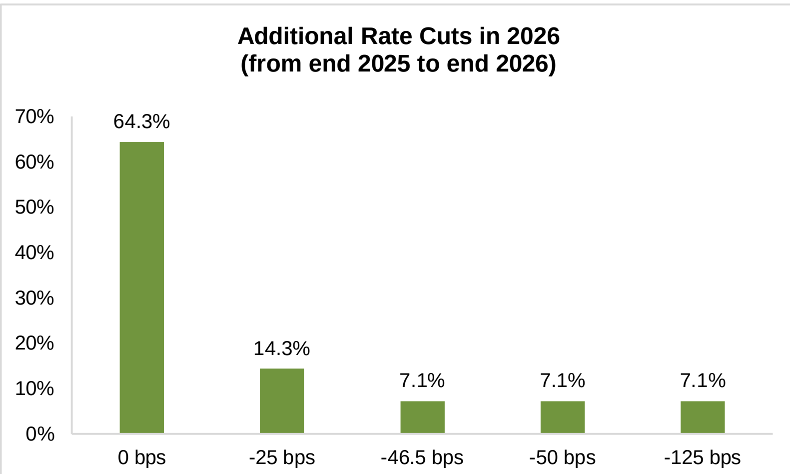
Given the constantly changing economic data, it is not surprising to see such shifts from survey to survey.



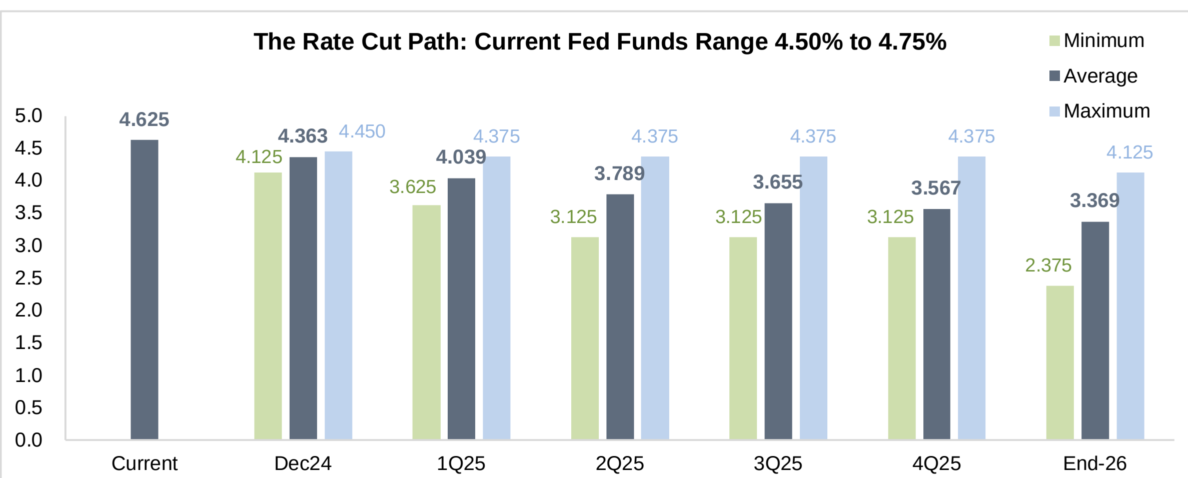


[2] Source: All charts include responses from the SIFMA Economist Roundtable and estimates from SIFMA.

Next – keeping this pull-forward of cuts in mind – we analyzed economist estimates for additional cuts from the end of 2025 to 2026. Almost two-thirds of our economists expect the Fed to be finished cutting in 2025, i.e. zero cuts. That said, over 20% of economists expected additional 2026 rate cuts in the range of 47 bps to 125 bps.



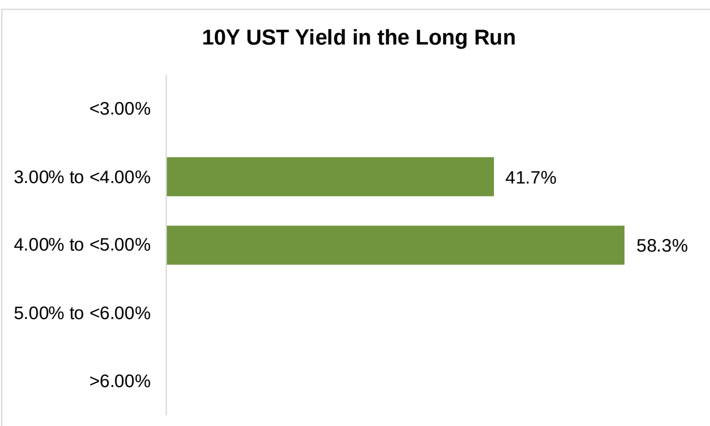
Finally, we assess the rate cut path across FOMC meetings. The chart below shows the average midpoint estimate for the federal funds target range in dark purple, with the minimum and maximum estimates in lighter colors. 100% of our economists expect a rate cut in December, with almost 90% of this falling in a 25 bps cut. Our economists were split whether the Fed would frontload 2025 cuts in the beginning of the year or move equally throughout the four quarters. On average, the projected rate path will be from today's midpoint of 4.625% to 3.567% by the end of 2025 (-106 bps) and 3.369% by the end of 2026 (-126 bps).



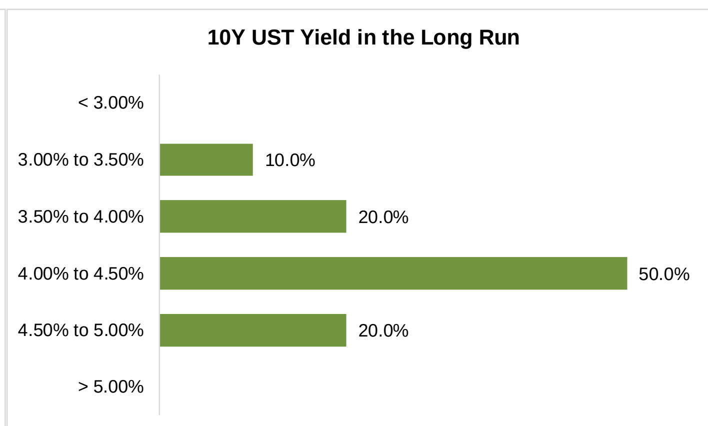
Historically, once the Fed began a rate cut cycle, movements in and expectations for the 10-year Treasury yield moved down as well. We say historically, as there are other fundamental factors impacting the 10-year yield in today's environment. We have written before (under our SIFMA Insights brand) that the high – and unsustainable – level of fiscal spending coupled with a shift in Treasury holders has raised the term premium in this security. This acts in opposition to the lowering of the short end of the yield curve – driven by Fed rate cuts – keeping the 10-year yield elevated.

Based on estimates for the fed funds rate, our economists expect the 10-year Treasury yield to end 2024 at 4.31%, essentially where we are now (at the writing of this report). This was down slightly from the June survey, -0.04 pps. Looking further out in time, a slight majority of our economists expect the long-run level of the 10-year Treasury yield to be in the 4.00% to <5.00% range (currently around 4.3%, at the writing of this report). The remaining economists expect the range to be 3.00% to <4.00%. This has come down from the last survey, where 70% of economists expected the 4.00% to 5.00% range.

Current Survey

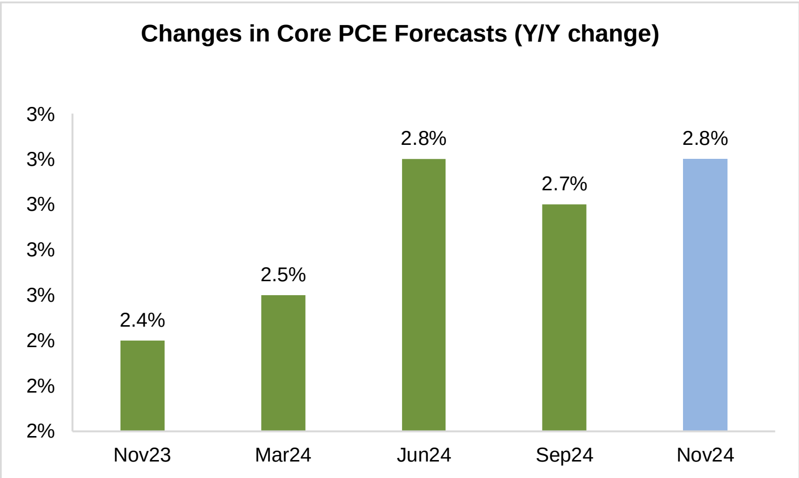


Last Survey



Inflation

Our economists estimate that core PCE inflation will end 2024 at a year-over-year rate of 2.8%. This is a 0.1 pps increase from the flash poll in September but in line with the last full survey in June. The estimate for core PCE inflation recedes to 2.4% for 2025. This was a 0.1 pps increase from the June survey.



Note: December and June are full surveys, March and September flash polls.

Based on survey responses, the top factors to core inflation estimates remained the same from the last survey in June: wage growth, growth in domestic demand, and monetary policy. That said, there were a few changes to note. First, in the November survey, there was a tie for first place between wage growth and growth in domestic demand. In the June survey, wage growth stood alone on top in the last survey, 1.16x the second-place spot held by growth in domestic demand. Next, the conviction for the top three spots has come down. In the current survey, the ranks for the top three factors ranged from 2.5 to 2.6 (on a scale from one to five, with five being the highest). In the last survey in June, this range was from 3.1 to 3.7. Part of this change was the emergence of trade policy into the top five rankings, coming in at a 2.4 rank this year (not in the June survey). Economists are now thinking through the impact and timing of tariffs much discussed – yet not finalized – by President-elect Trump.

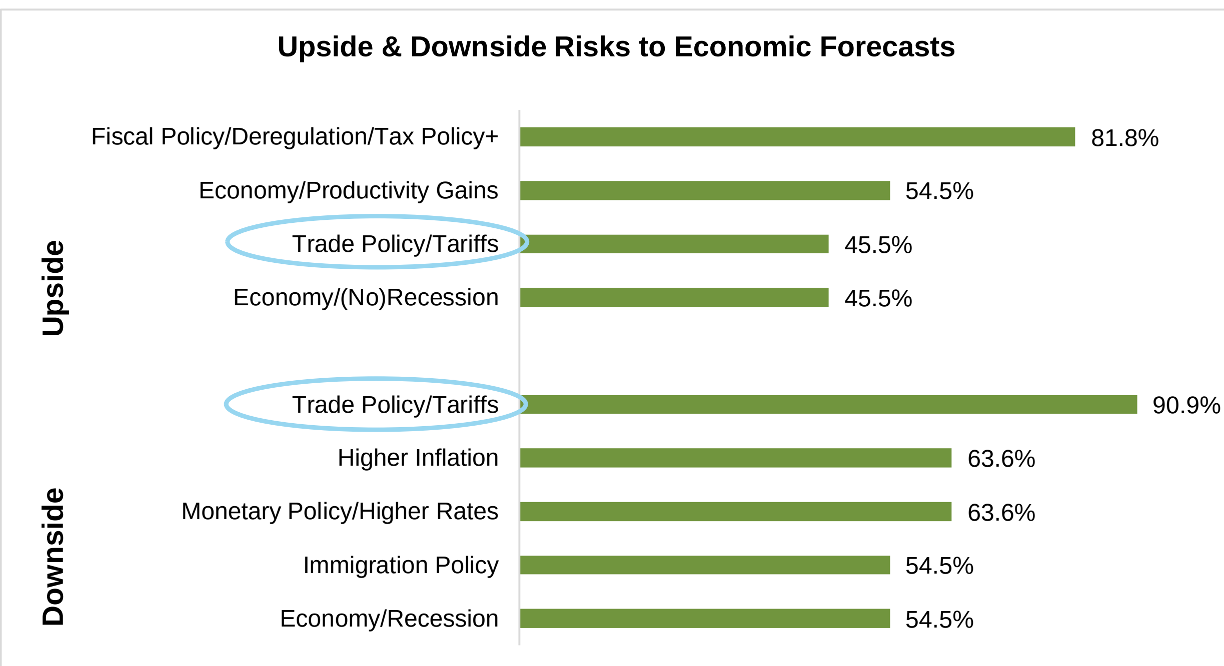
Economic Outlook

(Forecasts on page 22, survey responses for economic outlook on pages 24-27)

Our economists estimate the real GDP growth rate (4Q/4Q) to end 2024 will be 2.4%. This was up 0.3 pps from the September flash poll and 0.8 pps from the June survey. The estimate for real GDP growth decreases to 1.9% for 2025. This was down 0.1 pps from the June survey. Our economists' probability for recession has come down from the June survey. Almost half of economists see a 0% to 15% probability of a recession. Last survey, over 40% of economists each saw a 0% to 15% or 15% to 30% probability.

As to the top factors impacting US economic growth, respondents noted: US labor market developments, US trade policy, and US monetary policy. There were several changes of note since the last survey. The factor of US labor market developments is now on top, whereas US monetary policy held the top spot last survey. Monetary policy fell to the third spot in the current survey. As discussed above, the new entrant was trade policy, taking second place in the November survey. This was not an option in the June survey. Last survey, US household conditions held the second spot. To get a sense of the reasoning behind this change, we point to the question on household financial stress (payment delinquencies on auto loans and credit cards). On a scale of 1-10, with 10 being most concerned, the majority of our economists now rank this either a three or a four. In June, most economists responded a six.

We end this section by indicating the top upside and downside risks to economic forecasts. For this survey, it appears everything is hinging on what policies – and to what degree – the President-elect enacts once in office. We highlighted tariffs in the chart below, which showed up in both upside – i.e. the scale comes in lower than the 10%-20% all/60% China – and downside risks. However, based on percentages, tariff policy could present a bigger threat to economic forecasts than an upside risk. 90.9% listed trade policy/tariffs as a downside risk versus only 45.5% for upside.



Comparing Current and Prior Surveys

Below we compare results from the current and prior surveys for questions that were repeated in each survey – we adapt the survey to the current economic environment each time – to gauge changes in estimates of the economic outlook. For questions where responses were ranked, we show the top three answers from each survey.

	Current Survey	Change	Flash Poll	Change	Last Survey
Economic Indicators (annual)	**(2024E)**		**(2024E)**		**(2024E)**
Real GDP (4Q/4Q)	+2.4%	Increase	+2.1%	Increase	+1.6%
Unemployment Rate (4Q average)	+4.2%	Decrease	+4.3%	Increase	+4.1%
Labor Force Participation Rate (4Q average)	+62.7%	No change	n/a	n/a	+62.7%
CPI (4Q/4Q)	+2.6%	Increase	+2.5%	Decrease	+3.0%
Core CPI (4Q/4Q)	+3.2%	Increase	+3.1%	Decrease	+3.3%
PCE (4Q/4Q)	+2.4%	Increase	+2.3%	Decrease	+2.6%
Core PCE (4Q/4Q)	+2.8%	Increase	+2.7%	Decrease	+2.8%
Rates					
	(Dec FOMC)		**(Dec'24E)**		**(Dec FOMC)**
Federal Funds Rate (midpoint)	4.375%	No change	4.375%	Decrease	4.933%
	(Dec '24E)		**(Dec'24E)**		**(Dec '24E)**
2-Year UST Yield (end-of-period)	4.18%	Decrease	n/a	n/a	4.47%
10-Year UST Yield (end-of-period)	4.31%	Decrease	n/a	n/a	4.35%
30-Year Fixed Mortgage (end-of-period)	6.55%	Decrease	n/a	n/a	6.63%

Note: Current survey November 8-22, 2024; flash poll September 19-30, 2024; last survey June 13-21, 2024. Questions and/or ranges may change across surveys.

	Current Survey	Change	Last Survey
Economic Outlook			
Factors having the greatest impact on US economic growth over the next 12-18 months	US labor market developments, US, trade policy, US monetary policy	US trade policy became a top three factor	US monetary policy, US household financial conditions, US labor market developments
Estimate of the long-term potential growth rate of the US economy	1.5% to 2% and 2% to 2.5% (50.0% of respondents each)	More optimistic	1.5% to 2% (58.3% of respondents)
How concerned are you about household financial stress (1 = least, 10 = most)	3 and 4 (33.3% of respondents each)	Decrease, less concerned	6 (36.4% of respondents)
Has your estimate of the long-term growth rate changed in the last 12 months	Yes, somewhat higher and no, stayed the same (50.0% of respondents each)	More economists revised their estimates	No, stayed the same (54.5% of respondents)
US to enter a recession	0%-15% (45.5% of respondents)	Decreased probability	0%-15% and 15%-30% probability (41.7% of respondents each)
Top risks to economic forecasts - upside	Fiscal policy/deregulation/tax policy+, economy/productivity gains, trade policy/tariffs	Fiscal and trade policies became top three factors	Labor market, monetary policy/interest rates, consumer spending, business investment
Top risks to economic forecasts - downside	Trade policy/tariffs, higher inflation, monetary policy/higher rates	Trade policy became a top factor	Inflation, monetary policy/interest rates, consumer spending, geopolitical
Labor Market			
Where do you see the LFPR over the next two years	Between 62.5%-63.0% (50.0% of respondents)	Essentially no change	62.0%-62.7% and 62.7%-63.3% (50.0% of respondents each)
What range of initial jobless claims is consistent with no growth in non-farm payrolls	Between 275K-300K (50.0% of respondents)	Decrease	Over 300K (45.5% of respondents)
What level of the U-3 rate is consistent with a core PCE inflation rate of 2%	4%-4.5% (80.0% of respondents)	No change in range, but a stronger majority	4%-4.5% (54.5% of respondents)
What rate of increase in the ECI is consistent with a core PCE inflation rate of 2%	3%-3.5% (50.0% of respondents)	Decrease	3%-3.5% and 3.5%-4% (41.7% of respondents each)

Note: Current survey November 8-22, 2024; flash poll September 19-30, 2024; last survey June 13-21, 2024. Questions and/or ranges may change across surveys. Fiscal Policy/Deregulation/Tax Policy+ includes deregulation, tax cuts, or other stimulative policies.

	Current Survey	Change	Last Survey
Inflation			
Factors most important in your outlook for core inflation	Wage growth, growth in domestic demand, monetary policy	No change	Wage growth, growth in domestic demand, monetary policy
Probabilities of annual changes in the rate of core PCE inflation	Below 1.5% (9.8% of respondents) 1.5% - 2.5% (61.7% of respondents) Over 2.5% (28.6% of respondents)	Slightly flatter bell curve	Below 1.5% (6.2% of respondents) 1.5% - 2.5% (67.5% of respondents) Over 2.5% (26.3% of respondents)
Inflation expectations to become unanchored	No (100% of respondents)	Now a unanimous “no”	No (91.7% of respondents)
Factors pushing inflation over 2% on a sustained basis	Reversal of globalization/reshoring, sustained higher fiscal deficits, stickiness of wage increases	Reversal of globalization/reshoring, became a top three factor	Stickiness of wage increases, sustained higher fiscal deficits, unmooring of inflation expectations
Monetary Policy			
Is monetary policy restrictive	Yes (83.3% of respondents)	No change	Yes (83.3% of respondents)
Fed balance sheet size	At end of runoff: $6.5T to $7.0T (72.7% of respondents)	No change	In the next 2 years: $6.5T to $7.0T (81.8% of respondents)
Interest Rates			
Factors having the greatest impact on long-term Treasury yields	The rate of US economic activity, outlook for US monetary policy, inflation/inflationary expectations	The rate of US economic activity moved to #1 from #3	Inflation/inflationary expectations, US monetary policy including quantitative tightening, US economic activity – current rate
Equilibrium yield on the 10-year Treasury note at the end of 2029	4.00% to <5.00% (58.3% of respondents	Essentially no change	4.00% to 4.50% (50% of respondents

Note: Current survey November 8-22, 2024; flash poll September 19-30, 2024; last survey June 13-21, 2024. Questions and/or ranges may change across surveys.

Fiscal Policy			
How concerned are you about the current budget deficit and the amount of debt held by the public (1 = least, 10 = most)	5 (25.0% of respondents)	Less concerned	2, 6, and 8 (18.2% of respondents each)
How concerned are you about the projected budget deficit and the amount of debt held by the public in FY’34 (1 = least, 10 = most)	7 and 9 (25.0% of respondents each)	Less concerned	8 and 9 (30.0% of respondents each)
Best options to reduce budget deficit by spending cuts	Social Security, Medicare and Medicaid, non-defense discretionary spending	Non-defense discretionary spending moved to #3 from #1	Non-defense discretionary spending, Medicare and Medicaid, Social Security
Best options to reduce budget deficit by revenue increases	Individual income taxes (high earners only), individual income taxes (all individuals), payroll taxes	No change	Individual income taxes (high earners only), individual income taxes (all individuals), payroll taxes

Note: Current survey November 8-22, 2024; flash poll September 19-30, 2024; last survey June 13-21, 2024. Questions and/or ranges may change across surveys.

Full Survey Results: Forecast Tables

Economic Indicators: Annual

(%, unless indicated)	2021	2022	2023	2024E	2025E
Real GDP (4Q/4Q)	5.7	1.3	3.2	2.4	1.9
Real Personal Consumption (4Q/4Q)	7.7	1.6	3.0	2.7	1.9
Nonresidential Fixed Investment (4Q/4Q)	4.9	8.5	5.0	3.5	2.8
Residential Fixed Investment (4Q/4Q)	0.6	-16.4	2.5	1.2	3.0
Real Government Spending (4Q/4Q)	-0.3	0.5	4.3	2.9	1.1
Non-Farm Payroll Employment (K, avg. monthly change)	603.8	377.3	251.1	170.5	113.0
Unemployment Rate (4Q average)	4.2	3.6	3.7	4.2	4.3
Labor Force Participation Rate (4Q average)	61.9	62.2	62.7	62.7	62.7
Average Hourly Earnings (4Q/4Q)	5.3	5.0	4.3	3.9	3.3
Real Disposable Income (4Q/4Q)	1.0	-0.8	4.6	2.8	2.0
Personal Savings Rate (annual average)	11.1	3.0	4.7	4.9	4.8
CPI (4Q/4Q)	6.8	7.1	3.2	2.6	2.5
Core CPI (4Q/4Q)	5.0	6.0	4.0	3.2	2.7
PCE (4Q/4Q)	5.8	6.0	2.8	2.4	2.3
Core PCE (4Q/4Q)	4.9	5.2	3.2	2.8	2.4
Industrial Production Index (annual % change)	4.4	3.4	0.2	-0.1	1.3
Housing Starts (K, annual average)	1,604.8	1,552.0	1,421.4	1,350	1,440
S&P Corelogic Case-Shiller Home Prices (Y/Y)	17.1	14.8	2.5	5.0	2.9
Federal Budget Surplus/(Deficit) ($B, FY)	(2,775.4)	(1,375.9)	(1,695.2)	(1,833.0)	(1,871.5)

Economic Indicators: Quarterly

(%)	2Q24	3Q24	4Q24E	1Q25E	2Q25E	3Q25E	4Q25E
Real GDP (Q/Q, annualized)	3.0	2.8	2.1	1.9	2.0	2.0	2.1
Real Personal Consumption (Q/Q, annualized)	2.8	3.5	2.3	1.9	2.1	2.1	2.1
Nonresidential Fixed Investment (Q/Q, annualized)	3.9	3.8	2.4	3.3	2.9	3.3	3.6
Residential Fixed Investment (Q/Q, annualized)	-2.8	-5.0	0.0	1.2	2.5	2.3	2.2
Unemployment Rate	4.0	4.2	4.2	4.2	4.3	4.3	4.3
CPI (Y/Y)	3.2	2.6	2.6	2.3	2.2	2.4	2.5
Core CPI (Y/Y)	3.4	3.2	3.2	2.9	2.7	2.8	2.7
PCE (Y/Y)	2.6	2.3	2.5	2.2	2.1	2.3	2.3
Core PCE (Y/Y)	2.7	2.7	2.8	2.5	2.4	2.4	2.4

Fed Funds Target Rate

(%)	Sep'24	Nov'24	Dec'24E	1Q25E	2Q25E	3Q25E	4Q25E	End-2026
Midpoint	4.875	4.625	4.375	4.125	3.875	3.625	3.560	3.375

Note: 2024 is listed and estimated by FOMC meeting date. 2025 is by quarter, and 2026 is only year end.

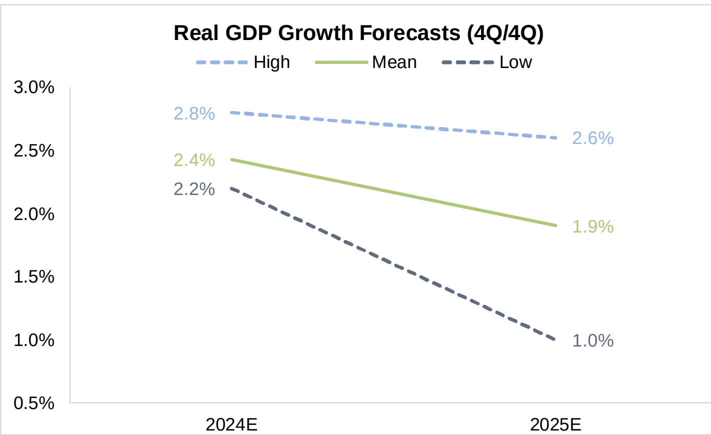
Interest Rates: End-of-Period

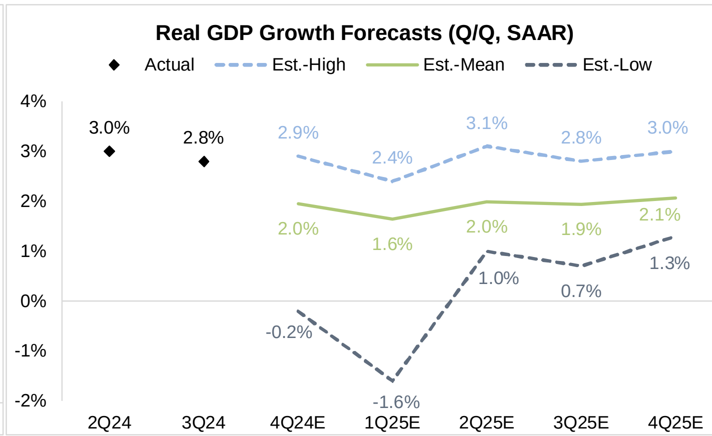
(%, monthly averages)	Jun'24	Sep'24	Dec'24E	Mar'25E	Jun'25E	Sep'25E	Dec'25E
2-Year UST Yield	4.74	3.62	4.18	4.02	3.90	3.78	3.66
10-Year UST Yield	4.31	3.72	4.31	4.22	4.20	4.21	4.23
30-Year Fixed Mortgage Rate	6.92	6.18	6.55	6.20	6.06	5.92	5.83

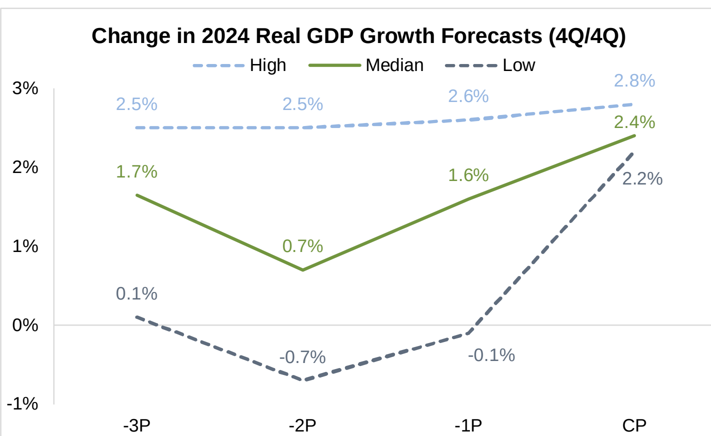
Full Survey Results: Charts[3]

US Economic Outlook

Real GDP Growth Estimates





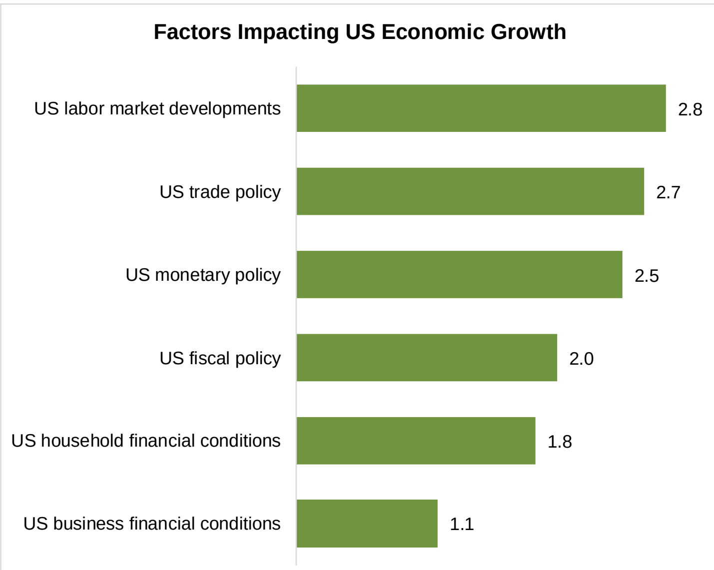


Source: Bureau of Economic Analysis (BEA), SIFMA Economist Roundtable
Note: SAAR = seasonally adjusted annual rate. CP (2H24) = current period's forecast; -1P to -3P = # periods' forecasts prior to CP, periods are semiannual.

[3] Source: All charts include responses from the SIFMA Economist Roundtable and estimates from SIFMA, all other sources noted as is.

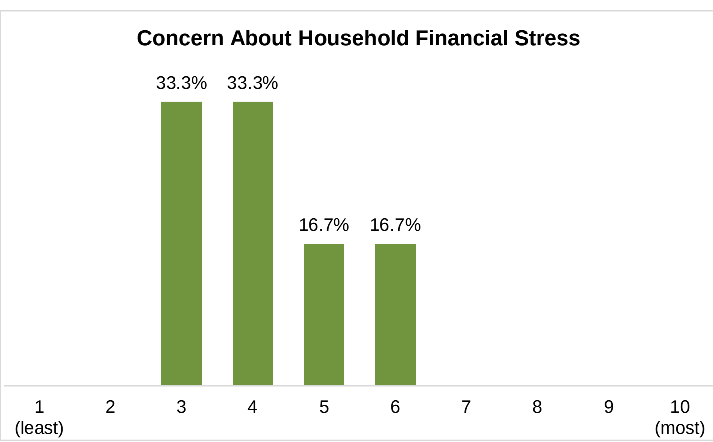
Survey Questions

Q. What five factors will have the greatest impact on US economic growth over the next 12-18 months? Please select and rank order your top 5 factors with “5” having the greatest effect and “1” having the smallest effect (among the five factors you chose).



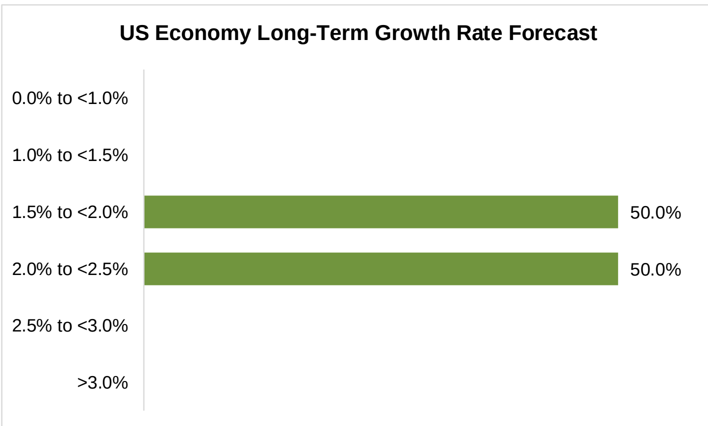
Note: Factors receiving a score of 1 or less were removed from the chart. These included: US realized inflation rates and expectations; lighter regulatory environment; foreign economic and financial developments; US credit market conditions; tighter regulatory environment; commodity prices; supply chain developments; changes in the value of the US dollar; and other (Immigration policy).

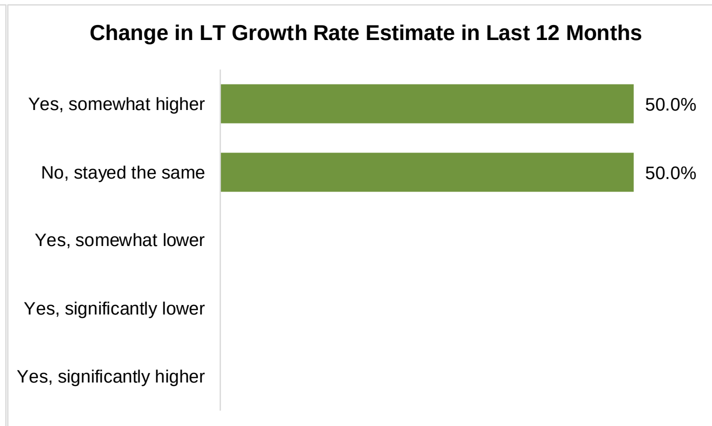
Q. The rise in recent quarters in payment delinquencies on auto loans and credit cards suggests that some households are experiencing financial stress. On a scale of “1” (least) to “10” (most), how concerned are you about these indications of financial stress and their implications for the US economic outlook?



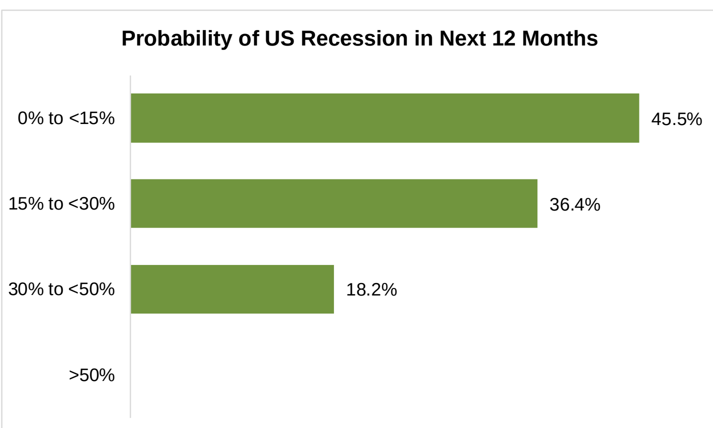
Q. What is your estimate of the potential growth rate of the US economy in the "long run" (5 to 10 years from now)?

Q. Has your estimate of the long-term potential growth rate of the US economy changed over the last twelve months?



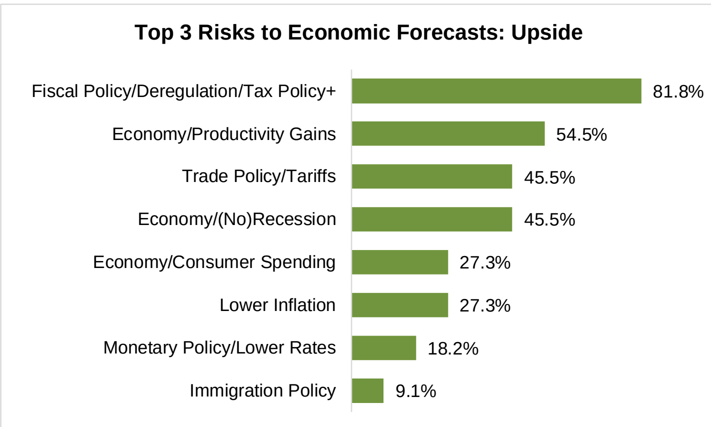


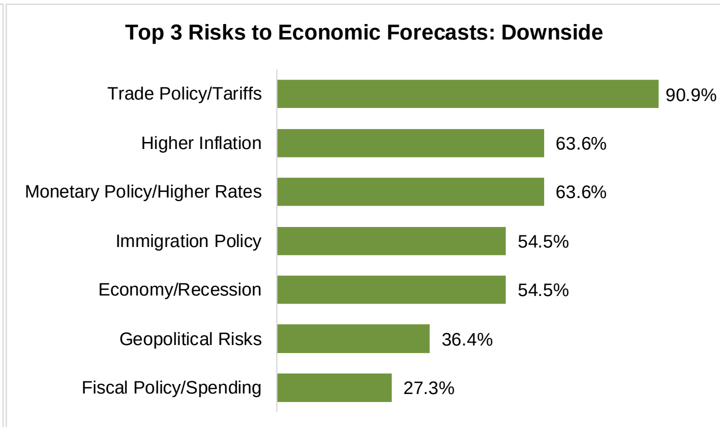
Q. What is the probability of a US recession in the next twelve months?



Q. Please list your top three upside risks to your economic forecasts.

Q. Please list your top three downside risks to your economic forecasts.





Note: Fiscal Policy/Deregulation/Tax Policy+ includes deregulation, tax cuts, or other stimulative policies.

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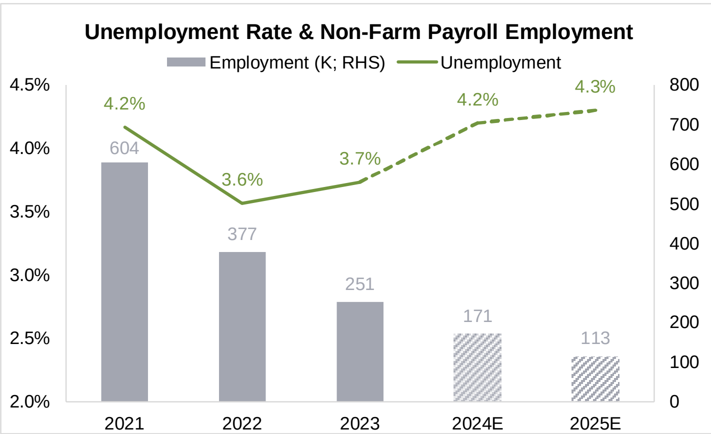
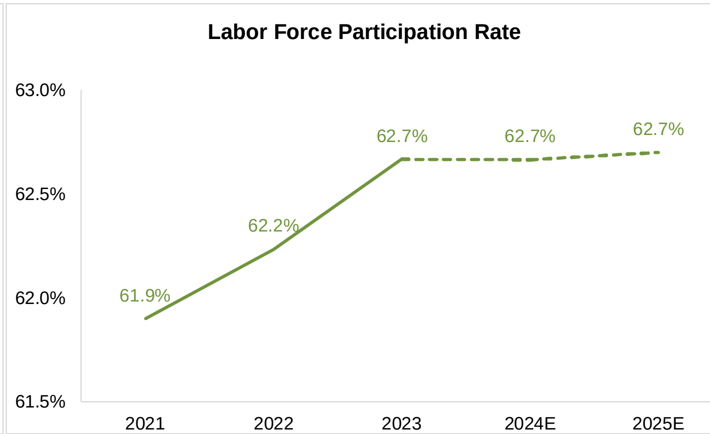
Labor Market

Labor Market Estimates





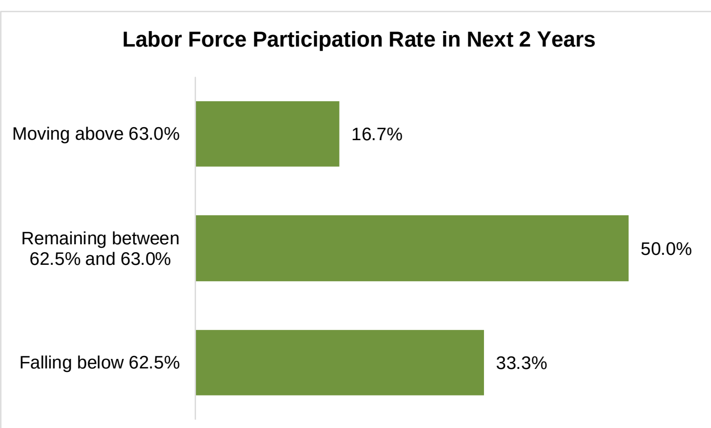
Source: Bureau of Labor Statistics (BLS), SIFMA Economist Roundtable

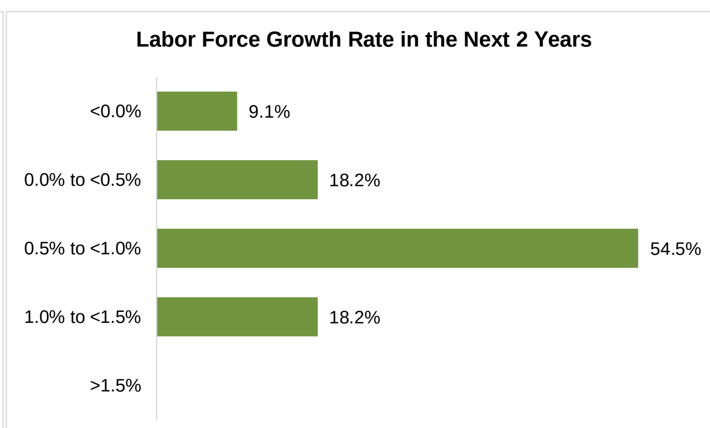
Note: Average monthly change for non-farm payroll employment, 4Q average for unemployment rate

Survey Questions

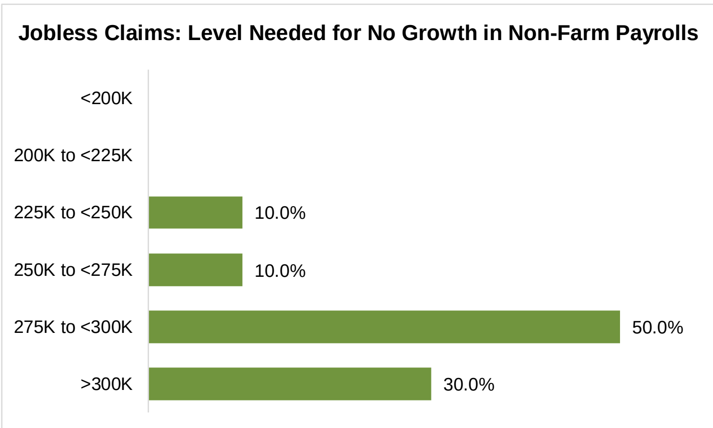
Q. The labor force participation rate (LFPR) stood at 63.3% in February 2020. It has been rangebound between 62.5% and 63.0% since early 2023. Where do you see the LFPR over the next two years?

Q. The US labor force grew roughly 1.5% in both 2022 and 2023, significantly stronger than the 0.7% average per annum growth rate between 2010 and 2019. What average annual rate of labor force growth do you expect in 2025 and 2026?



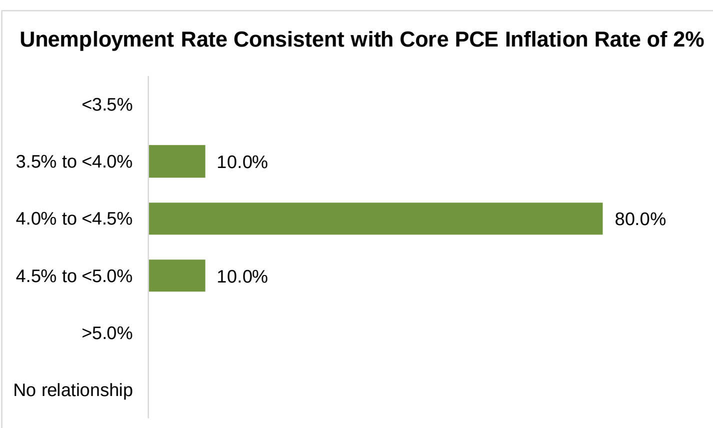


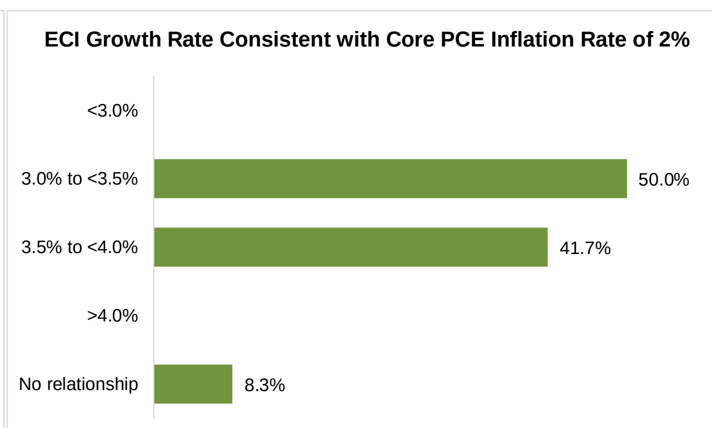
Q. What range in the 4-week moving average of initial jobless claims is consistent with no growth in non-farm payrolls? (217.8K as of November 16)



Q. The U-3 unemployment rate is currently 4.1%. What level of the U-3 rate is consistent with a core PCE inflation rate of 2%?

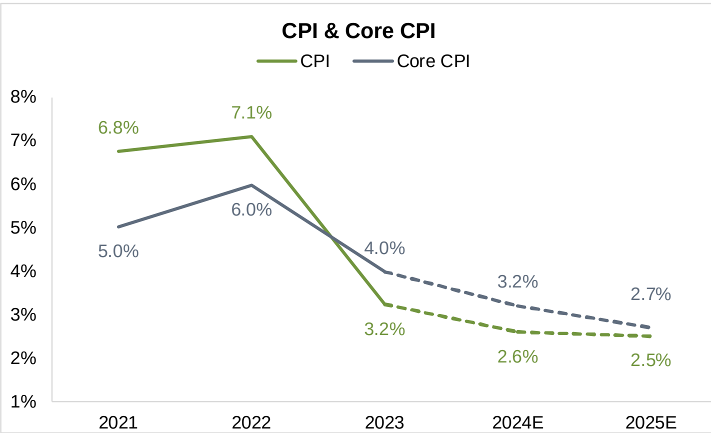
Q. The Employment Cost Index (ECI) for civilian workers was up 3.9% on a year-ago basis in 3Q2024. What rate of increase in the ECI is consistent with a core PCE inflation rate of 2%?

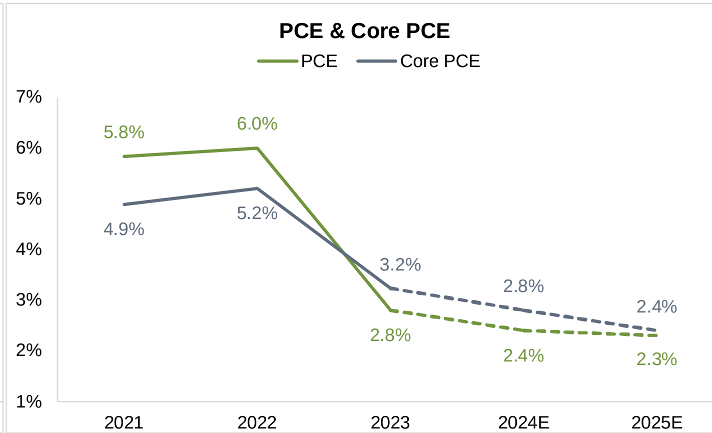




Inflation & Monetary Policy

Inflation Estimates

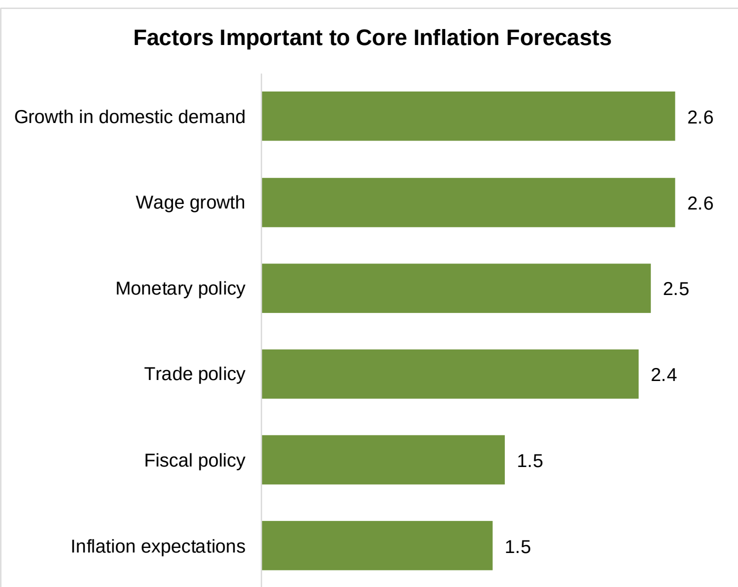




Source: Bureau of Economic Analysis (BEA), SIFMA Economist Roundtable

Survey Questions

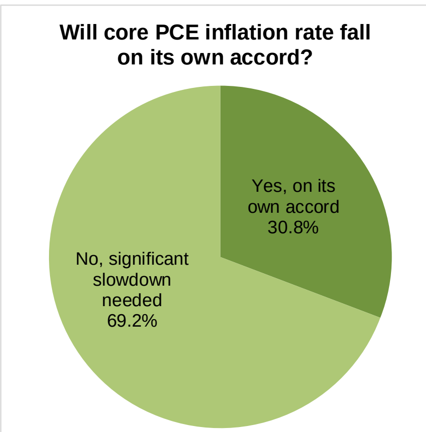
Q. What are the five most important factors in your outlook for core inflation? Please select and rank order your top 5 factors with “5” having the greatest effect and “1” having the smallest effect (among the five factors you chose).

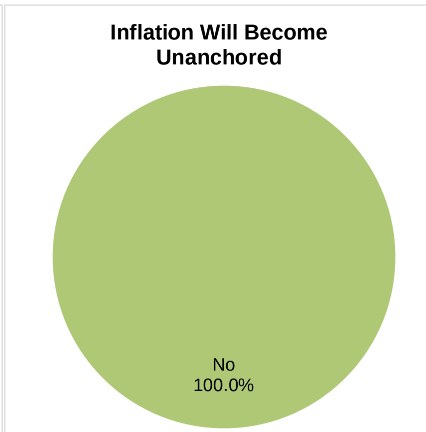


Note: Factors receiving a score of 1 or less were removed from the chart. These included: Supply chain issues; changes in the value of the US dollar; global economic conditions; and other (productivity growth; immigration policy).

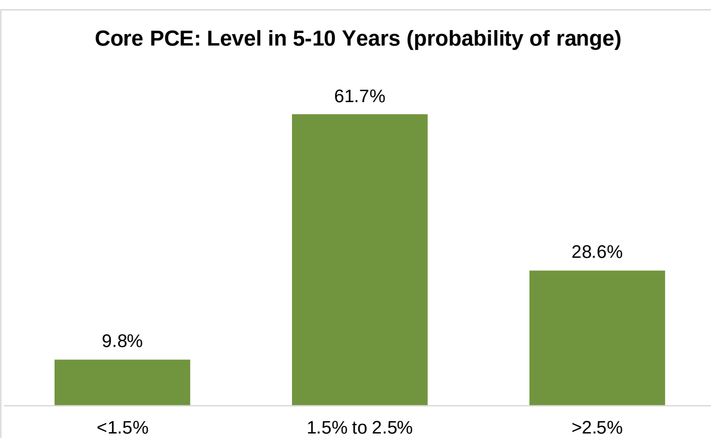
Q. The year-over-year rate of core PCE inflation has yet to return to 2%. The year-over-year rate of real GDP averaged 2.9% in the first three quarters of 2024. If real GDP continues to grow roughly 3% on an annualized basis in coming quarters, will core PCE inflation rate fall to 2% on a sustained basis by the end of 2025 on its own accord, or will a significant economic slowdown be needed to bring inflation down to 2%?

Q. Do you believe inflation expectations will become unanchored in the foreseeable future?

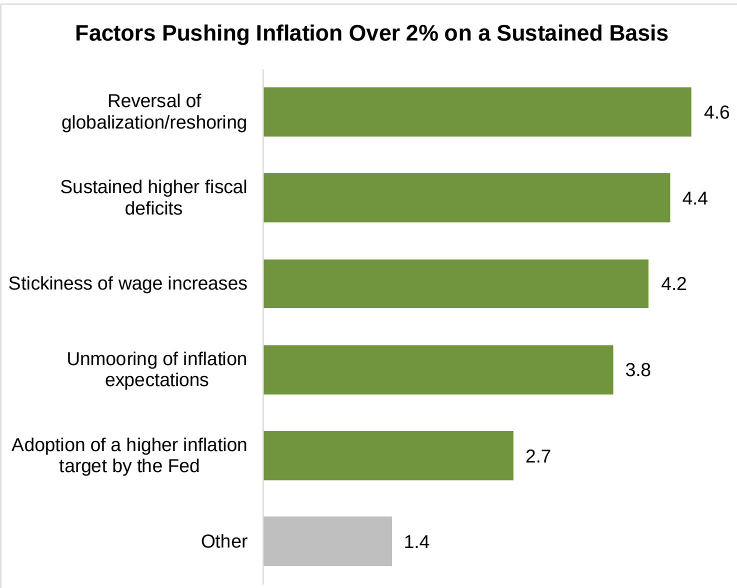




Q. Thinking ahead five to ten years from now, what probabilities would you place on the following average annual changes in the rate of core PCE inflation? (Percentages must sum to 100%.)



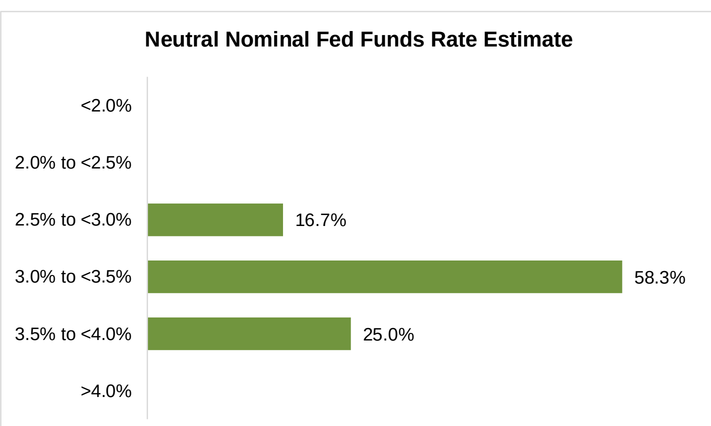
Q. If inflation were to exceed 2% on a sustained basis in coming years, what factors do you believe could cause it to do so? Please rank order your choices from those listed below.

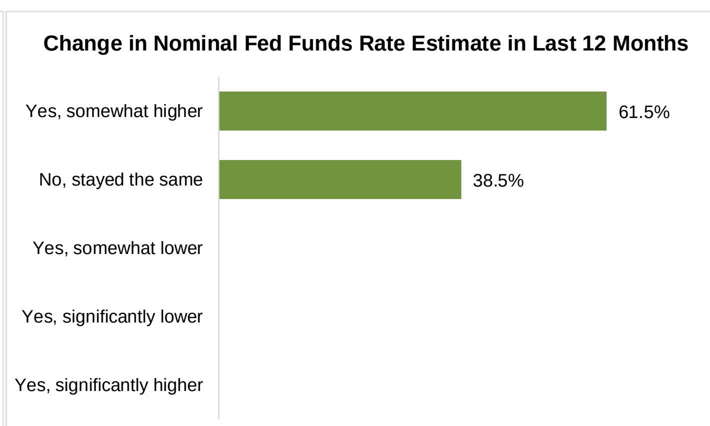


Note: Other = reversal in productivity growth.

Q. Assuming the Fed is successful in the near term in returning inflation to 2% on a sustained basis, what is your estimate of the neutral nominal fed funds rate?

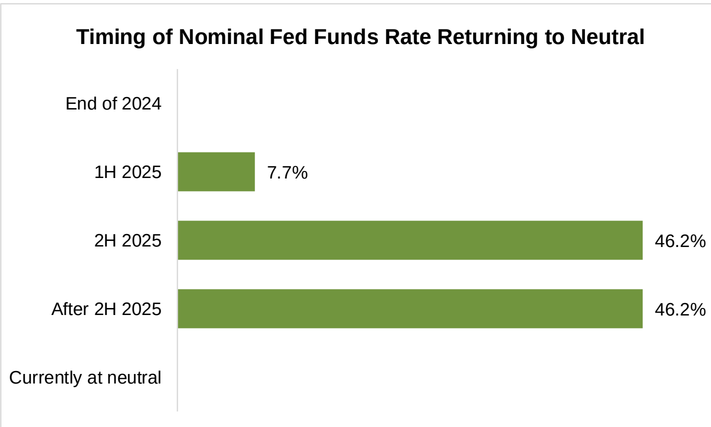
Q. Has your estimate of the neutral nominal fed funds rate changed over the last twelve months?

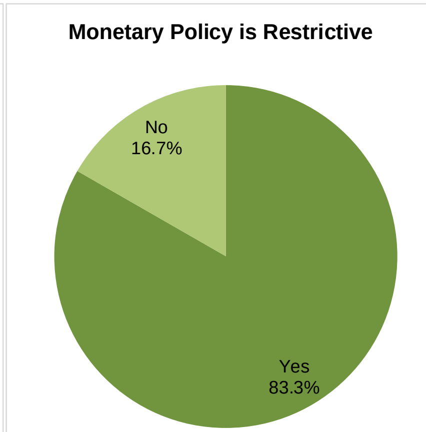




Q. When will the nominal fed funds rate return to neutral?

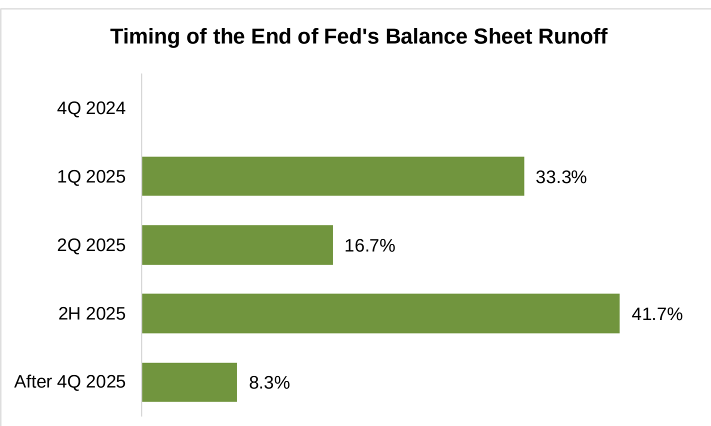
Q. Do you believe the stance of monetary policy today is "restrictive"?

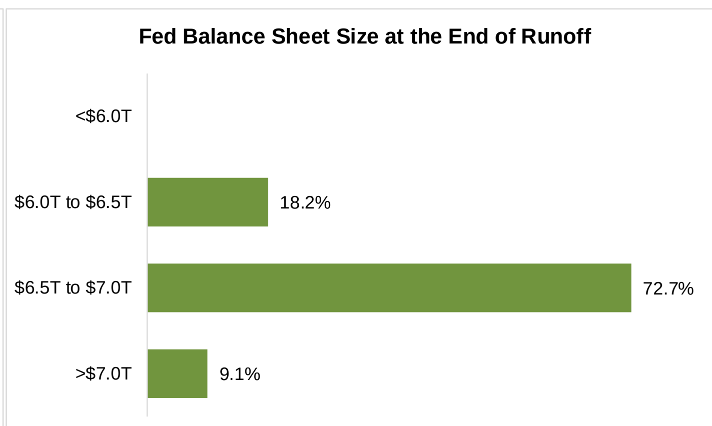




Q. The Fed's balance sheet has shrunk by roughly $2 trillion over the past two years. When do you believe balance sheet runoff will end?

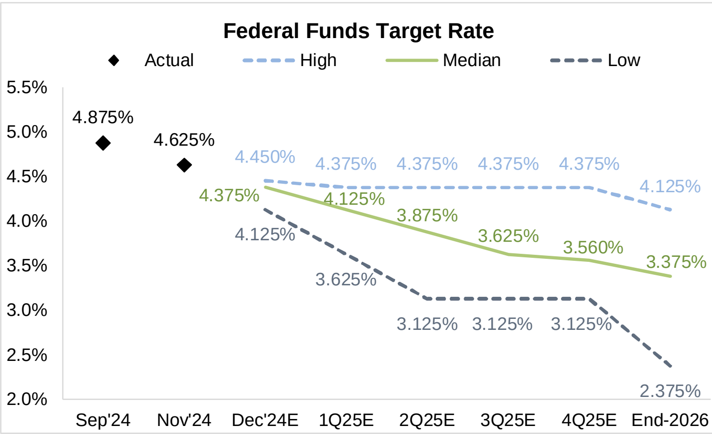
Q. The Fed's balance sheet totals about $7.0 trillion at present. What will its size be when balance sheet runoff comes to an end?

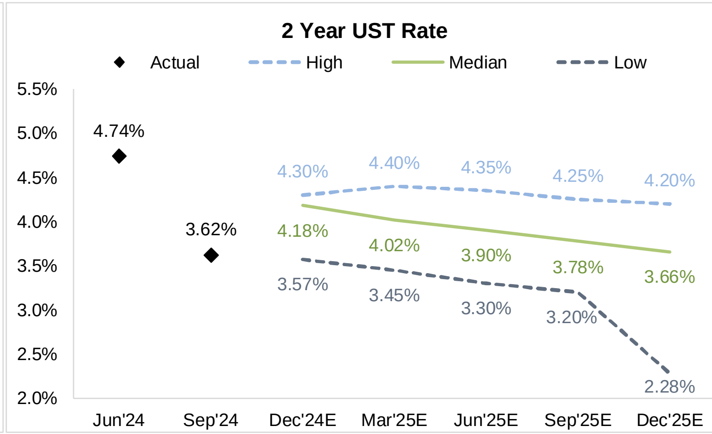


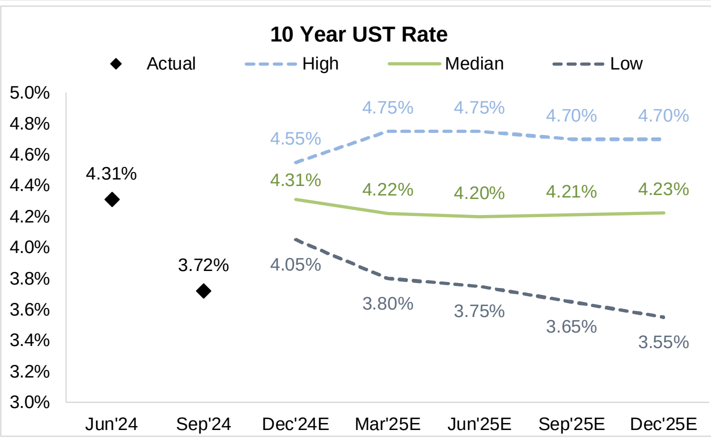


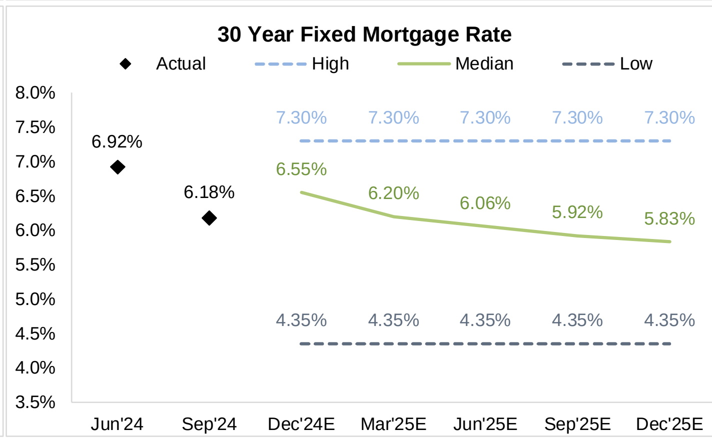
Rates Markets

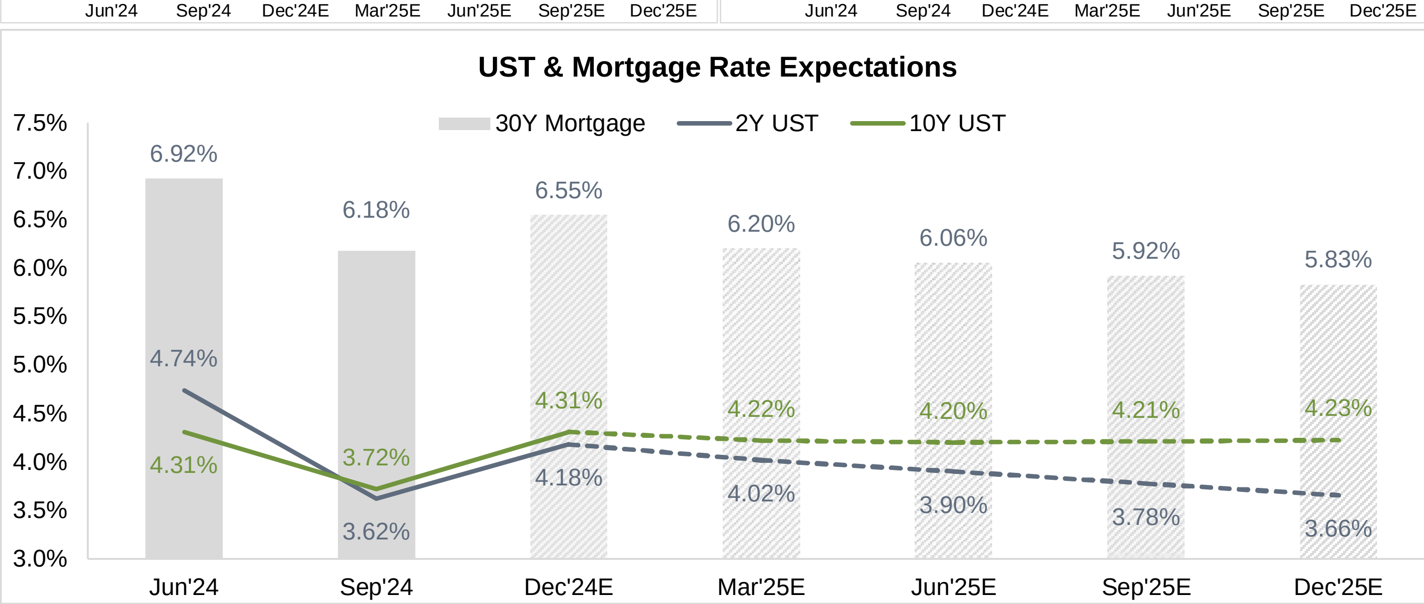
Rate Estimates







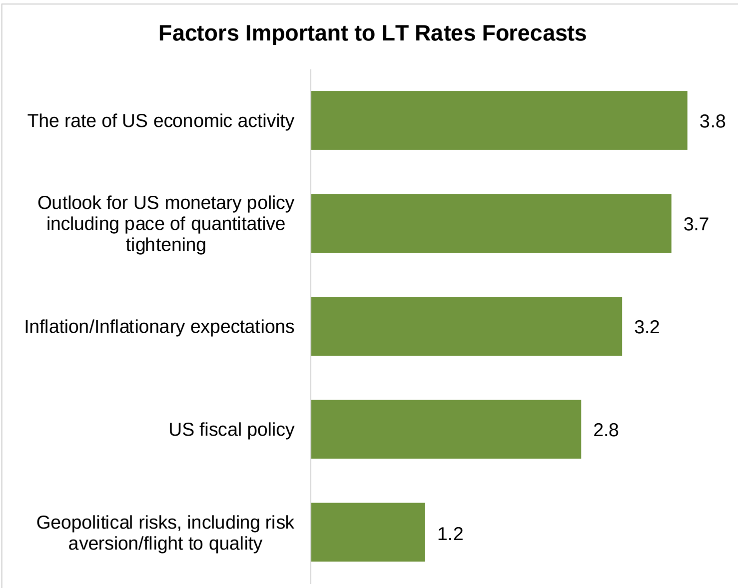




Source: Bloomberg, SIFMA Economist Roundtable

Survey Questions

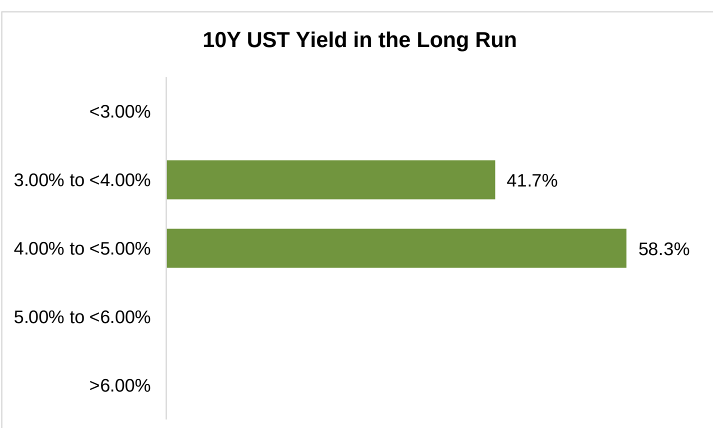
Q. At the writing of the survey, the yield on the 10-year Treasury note was a bit above 4% (now around 4.3%). What are the five most important factors in your outlook for this yield through the end of 2025? Please select and rank order your top 5 factors with “5” having the greatest effect and “1” having the smallest effect (among the 5 factors you chose).

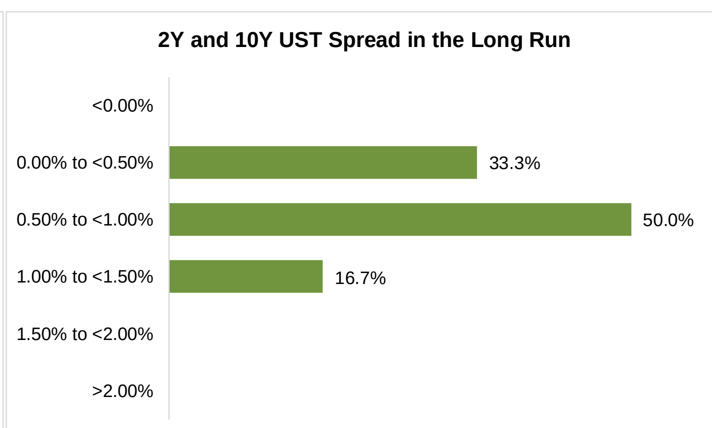


Note: Factors receiving a score of 1 or less were removed from the chart. These included: monetary and economic developments in foreign economies and exchange value of the US dollar.

Q. Thinking well into the future and knowing what you know now, what do you expect the “equilibrium” yield on the 10-year Treasury note to be at the end of 2029?

Q. Thinking well into the future and knowing what you know now, what do you expect the spread between the 2-year note and the 10-year note to be at the end of 2029?

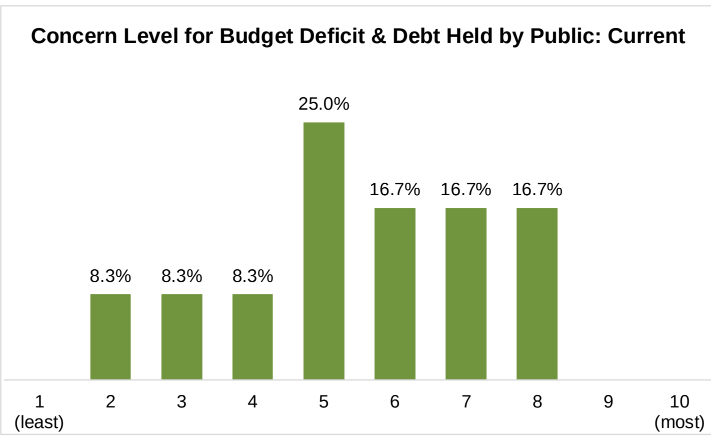


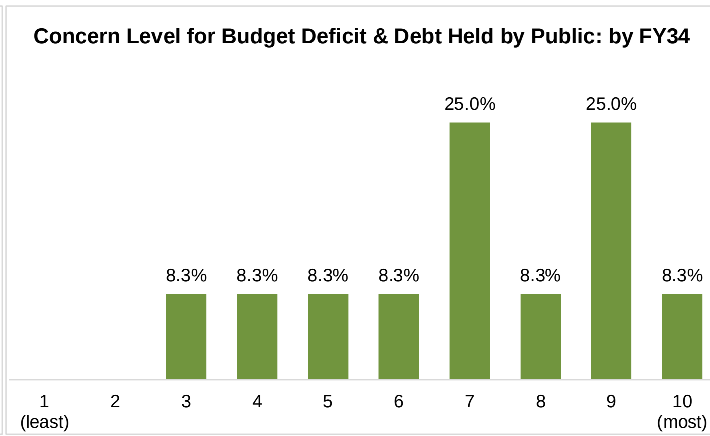


Fiscal Policy

Q. The budget deficit of the federal government totaled $1.8 trillion in the fiscal year that ended on September 30, 2024. The amount of publicly held debt currently stands at $27.6 trillion (99% of GDP). On a scale of "1" (least) to "10" (most), how concerned are you about the current budget deficit and the amount of debt held by the public?

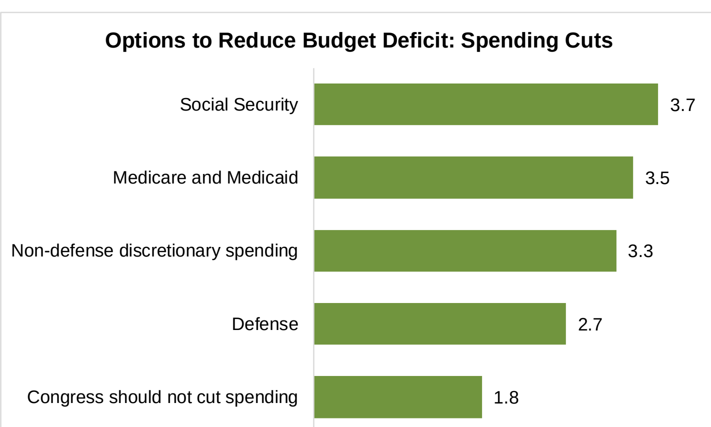
Q. CBO projected in June 2024 that *under current legislation* the budget deficit of federal government in FY 2034 would total about $2.8 trillion with debt held by the public totaling $50.7 trillion (122% of GDP). On a scale of "1" (least) to "10" (most), how concerned are you about the projected budget deficit and the amount of debt held by the public in FY 2034?

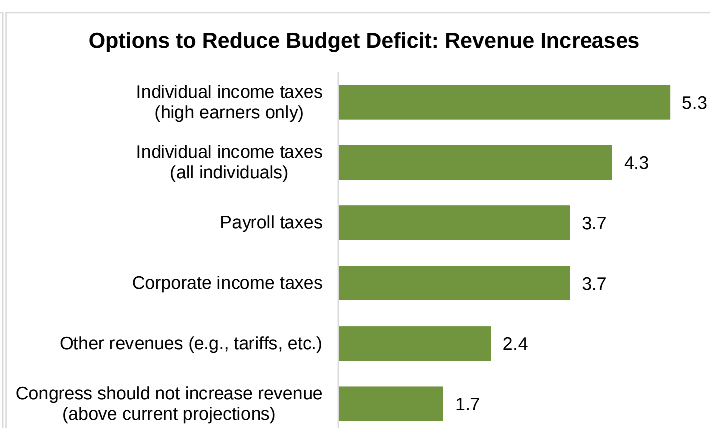




Q. If Congress wants to reduce the size of budget deficits, rank order the spending programs on which lawmakers should focus budget cuts if they want to reduce growth of federal spending with "5" the most important. Please rank order your choices from those listed below.

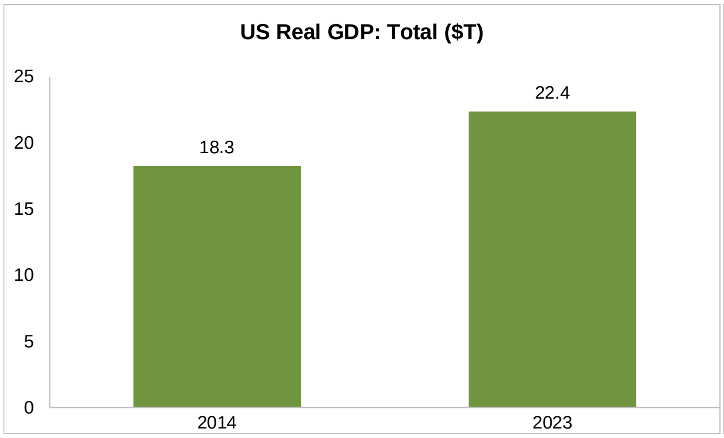
Q. If Congress wants to reduce the size of budget deficits, rank order the revenue programs on which lawmakers should focus revenue increases (above current projections) if they want to reduce the growth of federal spending with "6" the most important. Please rank order your choices from those listed below.

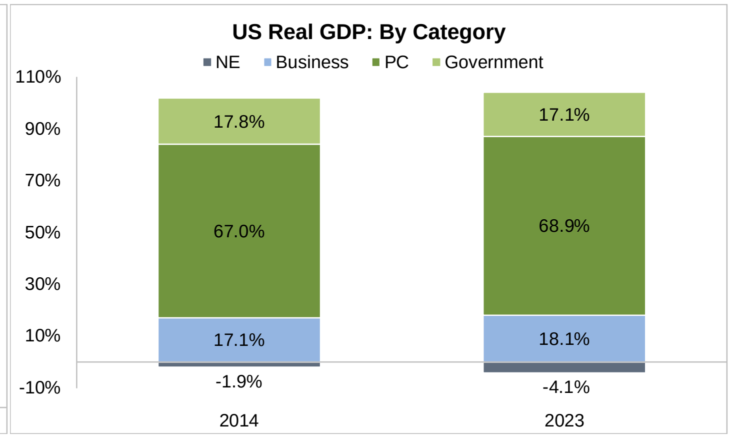


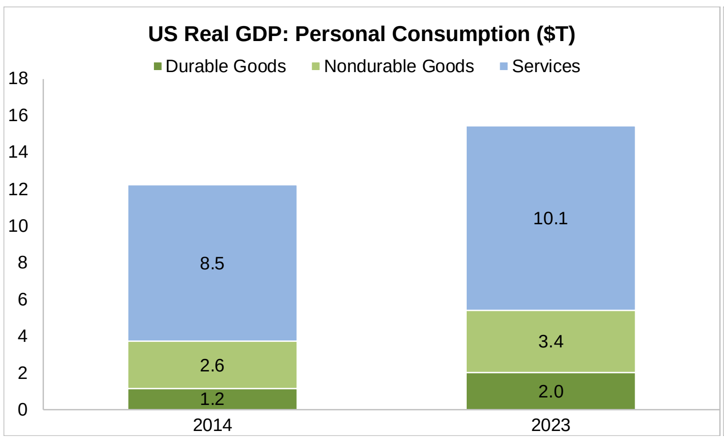


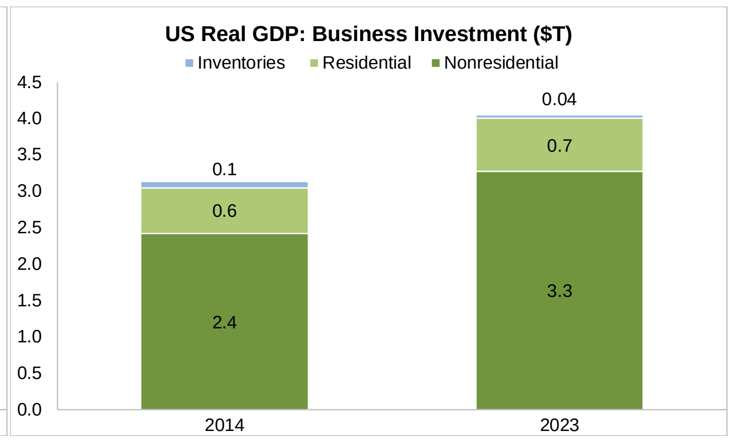
Reference Guide: Economic Landscape

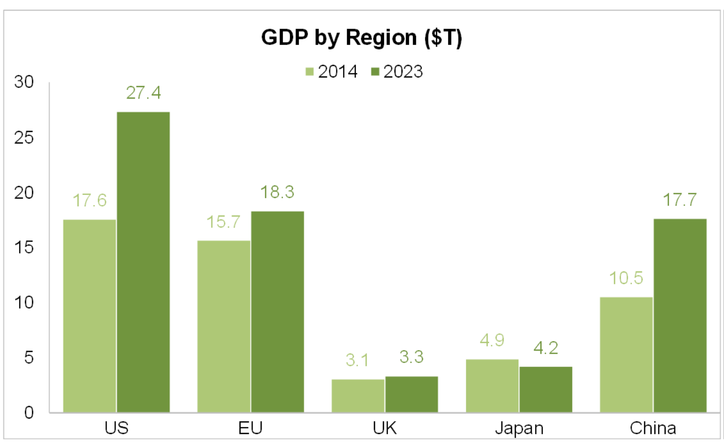
Real GDP Breakout

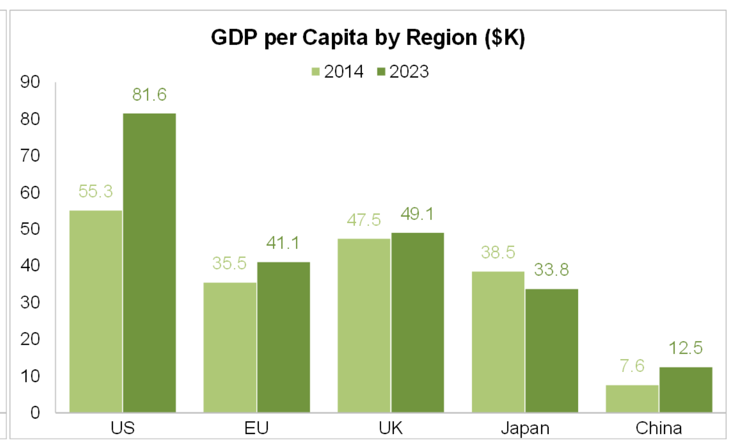






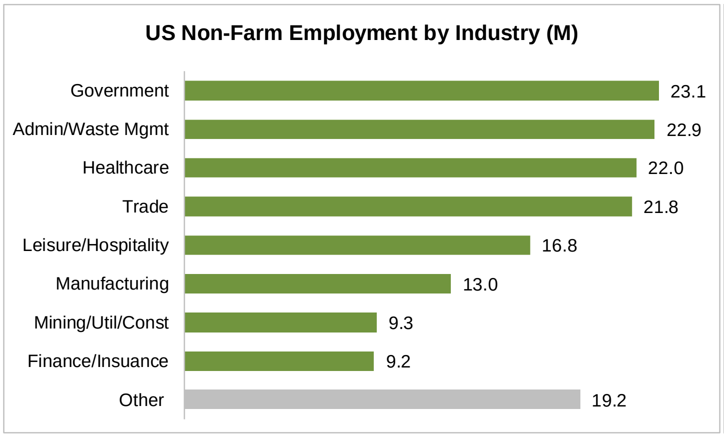


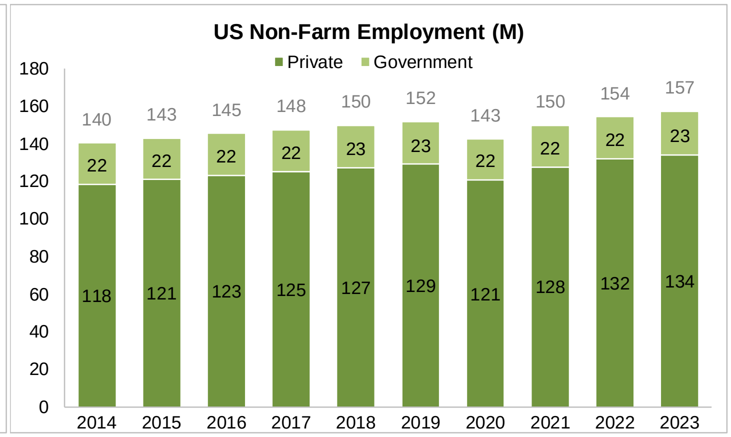


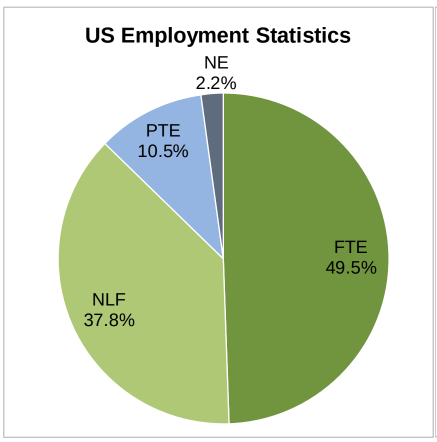


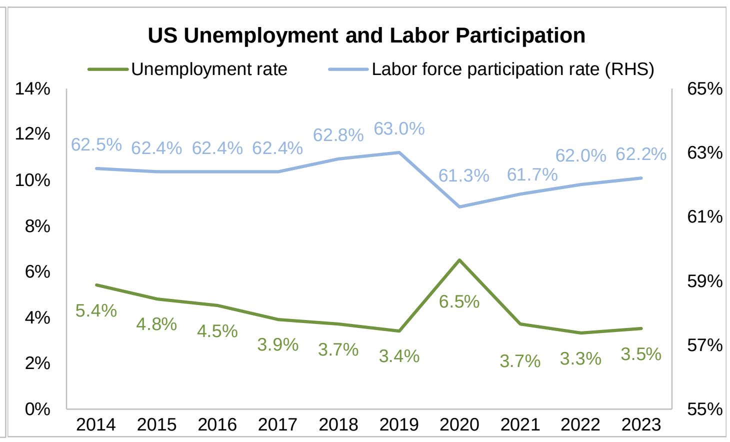
Source: Bureau of Economic Analysis (BEA), International Monetary Fund (IMF), SIFMA estimates

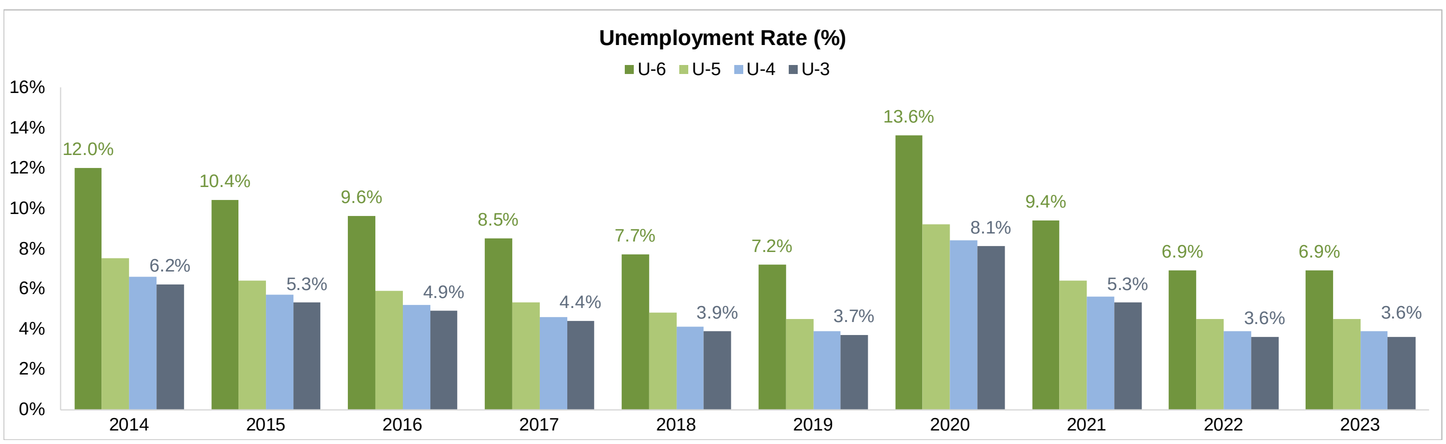
Employment Breakout





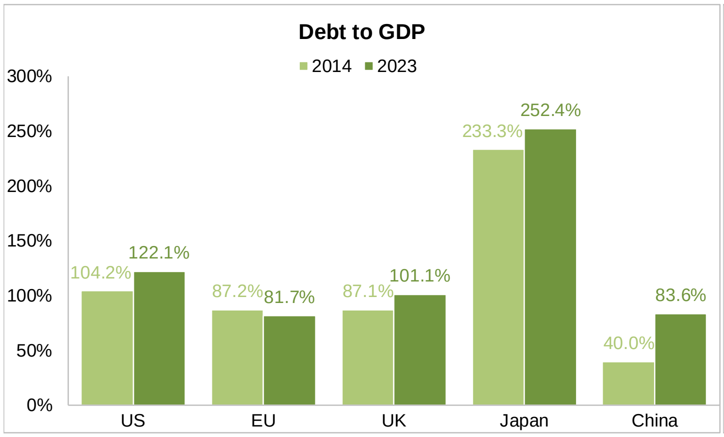


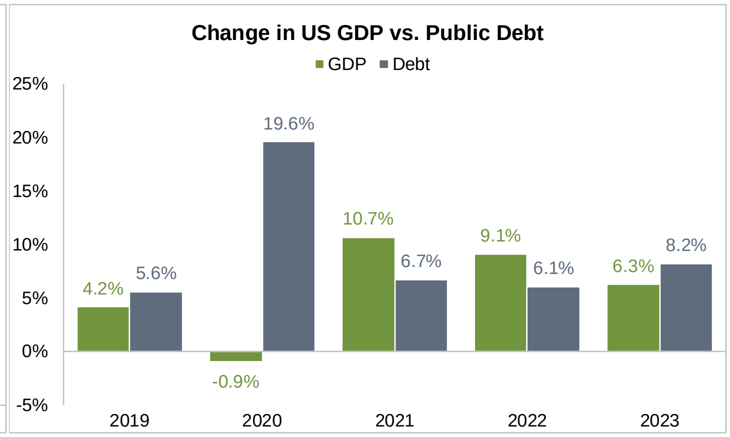


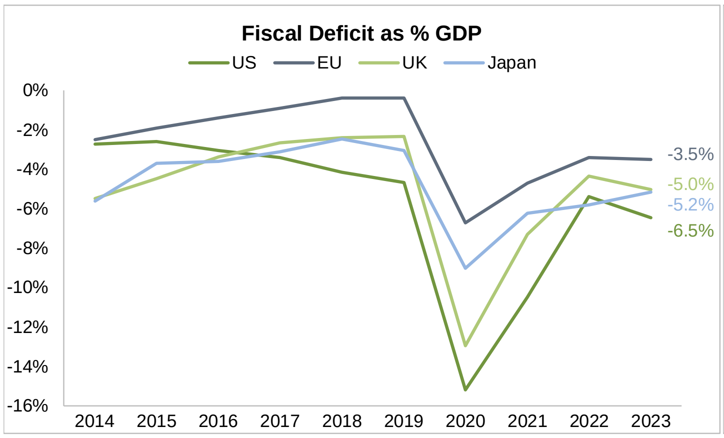


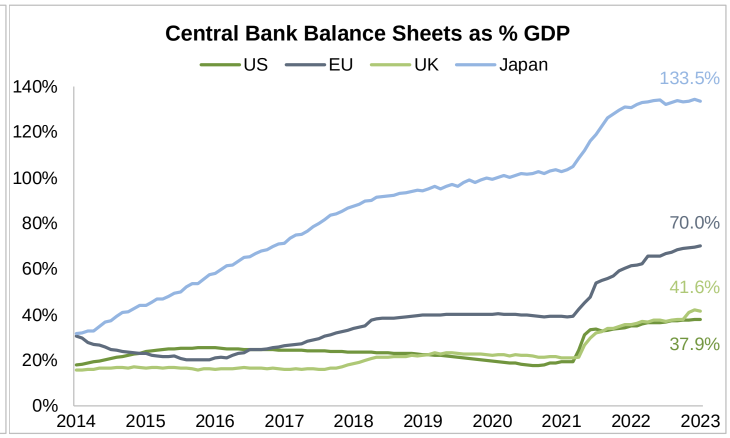
Source: US Bureau of Labor Statistics (BLS), SIFMA estimates
Note: US non-farm employment by industry as of 2023. Other = transportation and warehousing, information, educational services and other services.

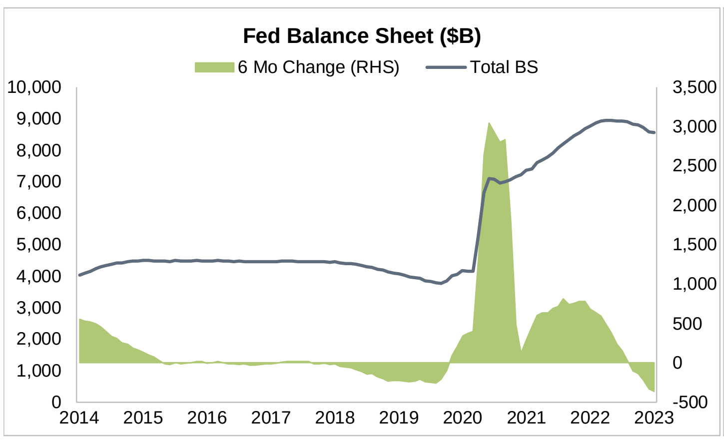
Federal Debt and Central Bank Balance Sheets

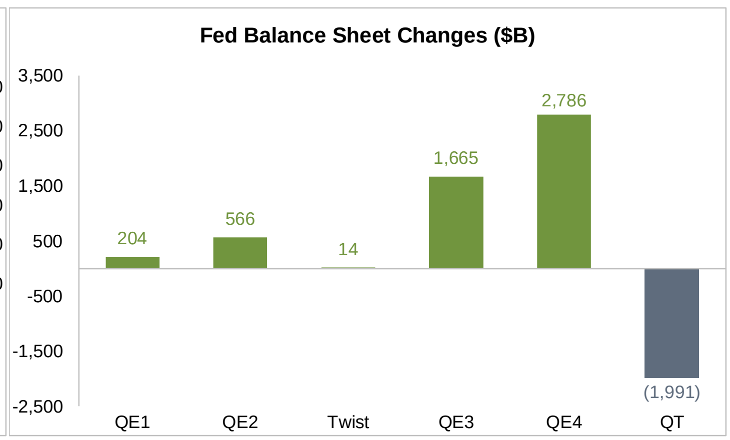












Source: Bloomberg, Bureau of Economic Analysis (BEA), Eurostat, The Federal Reserve, SIFMA estimates
Note: QE1 = 11/26/2008-3/31/2010; QE2 = 11/3/2010-6/29/2011; Twist = 9/21/2011-6/20/2012; QE3 = 9/12/2020-5/27/2020; QE4 = 3/11/2020-5/27/2020; and QT = 6/1/2022-ongoing (as of 11/20/2024).

Appendix: Terms to Know

- **Statistical analysis**
  - M/M – month-over-month change
  - Q/Q – quarter-over-quarter change
  - Y/Y – year-over-year change
  - Bps – basis points
  - Pps – percentage points

- **Gross Domestic Product (GDP)**: A comprehensive measure of US economic activity, indicating the value of the final goods and services produced without double counting the intermediate goods and services used up to produce them. GDP data are seasonally adjusted to remove the effects of yearly patterns – winter weather, holidays, or factory production schedules – to reflect true patterns in economic activity. The Bureau of Economic Analysis (BEA) releases new statistics every month, as it estimates GDP three times:
  - Advance estimate – This comes out around one month after the quarter's end, an early look based on the best information available at that time
  - Second estimate – Incorporates additional source data that were not available the month before, improving accuracy
  - Third estimate – Incorporates even more source data that were not available the month before, considered the most accurate estimate

- **Federal Funds Rate (Fed Funds)**: The interest rate at which banks and other depository institutions lend money to each other, typically on an overnight basis. An important monetary policy tool is the Fed’s open market operations, consisting of buying and selling US Treasury securities on the open market, with the aim of aligning the actual Fed Funds rate with the Federal Open Market Committee’s (FOMC) target rate.

- **Unemployment**: The unemployment rate represents the number of unemployed people as a percentage of the labor force, which is the sum of the employed and unemployed: (Unemployed ÷ Labor Force) x 100. According to the Bureau of Labor Statistics Current Population Survey, people are classified as not in the labor force if: (a) they were not employed during the survey reference week; and (b) they had not actively looked for work (or been on temporary layoff) in the last 4 weeks. People not in the labor force are those who do not meet the criteria to be classified as either employed or unemployed as defined above and can be classified into several subgroups: (a) people who want a job now; (b) people marginally attached to the labor force (not in the labor force but currently want a job); and (c) discouraged workers (not actively searched for work in the last four weeks).

- **Inflation**: It is reflected quantitatively by an increase in the average price level of a basket of selected goods and services in an economy and represents the rate of decline of purchasing power of a given currency over some period of time. There are multiple components that go into the inflation equation. Pressure points can be bucketed as: supply side, demand side, and the labor component.
  - Consumer Price Index (CPI) – headline inflation; measures the change in direct expenditures for all urban households for a defined basket of goods and services (three largest components are housing, transportation, and food/beverages)
  - Personal Consumption Expenditures (PCE) – the metric the Fed monitors for monetary policy – measures the change in the prices of goods and services consumed by all households and nonprofit institutions serving households
  - Core CPI or PCE – makes adjustments to remove the source of the noise in the price data, i.e. food and energy, to get a measure of the underlying component of inflation
  - Differences between CPI and PCE include (among others): Basket composition – CPI based on household purchases (includes imports) versus PCE based on what businesses are selling (includes capital goods); calculation methodologies – expenditure weights assigned to categories of basket items (housing a main difference); accounting for basket changes (PCE allows substitution, CPI is always the same basket); CPI covers only out-of-pocket expenditures, PCE includes expenses paid by employers and federal programs; seasonal adjustment differences; PCE includes rural and urban consumers, CPI only urban; PCE includes expenditures from non-profit institutions serving households, CPI households only

Appendix: The SIFMA Economist Roundtable

About the Group

The SIFMA Economist Roundtable brings together chief US economists from around 20 global and regional financial institutions. SIFMA Research undergoes a semiannual US Economic Survey with this group after the June and November Federal Open Market Committee (FOMC) meetings. In those reports, we review the Economist Roundtable's forecasts for: GDP and factors impacting economic growth, unemployment and other labor market components, inflation, interest rates, and more. We also analyze how these expectations for macroeconomic factors could impact future monetary policy moves.

This survey was conducted between November 8-22, 2024.

SIFMA Research also produces Quarterly Flash Polls after the March and September FOMC meetings to update key Economist Roundtable forecasts and select monetary policy questions on the off quarters from the main survey. The latest flash poll can be found here: https://www.sifma.org/resources/research/economics/economist-roundtable-flash-poll/.

Members

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Jay Bryson, Ph.D.
Wells Fargo Securities

Members

Aditya Bhave
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BBVA Compass

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Citigroup

Nicholas Van Ness
Credit Agricole

Lawrence Werther
Daiwa

Matt Luzzetti
Deutsche Bank Securities

Christopher Low
FHN Financial

Jan Hatzius
Goldman Sachs

Michael Feroli
J.P. Morgan

Thomas Simons
Jefferies

Mark Zandi
Moody's Analytics

Michael Gapen
Morgan Stanley

Kevin Cummins
NatWest

Aichi Amemiya
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Augustine Faucher
PNC Financial

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Raymond James

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