US Economic Survey: End-Year 2023

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

December 2023

Key Takeaways

- **The Economy**:
  - 2023 real GDP growth estimate +2.5%, vs. +0.7% 2022 (median forecast, 4Q/4Q)
  - 2023 unemployment rate estimate +3.9%, vs. +3.6% in 2022 (4Q average)
  - 2023 inflation estimates
    - CPI/Core CPI +3.3%/+4.0%
    - PCE/Core PCE +3.1%/+3.5%

- **Monetary Policy**
  - Timing of Fed Funds rate cut: 2Q24, 46.7% of respondents
  - Amount of Fed Funds rate cut to stabilize: >100 bps, 93.3% of respondents
  - Timing of Fed Funds rate returning to neutral: 2026, 53.3% of respondents
  - Fed Funds neutral rate estimate: 2.0-3.0% 66.7% of respondents

Contents

Setting the Scene

A Message from Our Chair

As we look out to the end of the year, so much of the outlook and the momentum of the economy will be predicated on three main factors: the resilience of the consumer, the performance of inflation, and the tough policy decisions made by both our monetary and fiscal officials. Without a solid consumer, the U.S. economy is poised to decline sharply. Alternatively, should inflation fail to improve as expected, a fierce response from the Fed could also undermine growth sooner than later. Further fiscal support meanwhile, is likely to soften any near-term downturn, but leave the U.S. economy increasingly vulnerable to a more sizable decline in the future.

For now, the U.S. consumer continues to exemplify resilience thanks to decent labor gains and wage growth. Even with the more recent volatility, topline hiring remains solid. And coupled with an unemployment rate still near a multi-decade low, this continues to perpetuate the notion of a tight labor market with a sizable imbalance, although some progress is being made.

Of course, it is because of this ongoing imbalance between labor demand and labor supply that wage pressures have remained elevated and sticky, now marking the ninth consecutive month of positive growth on a real basis after two years of trending negative. While offering further support to consumption, ongoing pressure on wages will complicate the Fed’s job going forward to tame price pressure.

The consumer has lost momentum, at least from peak levels, but consumption has remained surprisingly robust given earlier supports continue to dissipate. Amid rising prices and negative real income growth early on, it was not organic growth in the labor market but rather fiscal stimulus providing artificial support for the consumer: trillions in dollars in everything from direct checks to subsidies, resulting in a massive run up in savings to the tune of $2.5 trillion. However, as quickly as those checks arrived, consumers were willing to spend them. Down to $500 billion at the start of the year, savings are expected to run dry early in 2024.

Of course, that does not mean the consumer is poised to collapse at year end or looking out to 2024. Momentum will expectedly continue to wane, but there are other areas of funds and debt supporting the consumer including: 401(k) hardship withdrawals, a generational wealth transfer, and of course credit cards. These temporary supports will continue to finance spending for at least a bit longer, certainly into the key holiday sending season and beyond, into the first half of 2024. That being said, going forward, the strength of the consumer will depend on the balance between organic supports against the indefinite or finite supports from new amounts of debt, particularly as rising rates make accessing debt increasingly burdensome.

Tighter monetary policy and elevated interest rates will not only complicate consumers’ ability to spend but make further capital investment more costly and less attractive as well, as inflation continues to keep the costs of parts and materials and labor elevated. Thus, much of the impeding weakness is predicated on the inability for consumers and businesses to shoulder higher costs and higher inflation. Inflation from not only a global shutdown and closure of economies and trade lines but a massive amount of fiscal stimulus, resulted in the highest levels of inflation here in the U.S. than anywhere else in the developed world.

Now the good news is that is no longer the case. However, inflation remains still too high with the underlying components failing to indicate a clear downward trajectory of costs. Even with the latest cooler than expected reads – for the CPI in particular – the improvement on an annual basis follows three months of upward momentum in costs. Thus, the latest read simply returns the headline to where it was in July, devoid of any improvement over the third quarter. The core is still double the Fed's intended target. And with potential upside risks to inflation and ongoing sticky wage pressures, inflation is likely to remain well above 2% over the next year and potentially into 2025, despite investors' optimism or *overreaction* to the smallest of improvements.

In fact, it was the recent change in market conditions with a backup in longer term rates that convinced at least some in the market – and at the Fed – there may no longer be a need for additional rate hikes, essentially making the argument that an organic shift in credit conditions is doing some of the Fed's last work for it. Yet, the unexpected selloff in longer-term Treasury yields following the latest cooler inflation reports supports the thesis that the momentum higher was in good part a reflection of changed expectations for Fed policy as opposed to structural factors, such as fiscal deficits.

If the Committee does wish to maintain upward pressure on rates to aid the Fed in achieving restrictive policy, the Fed might actually need to follow through on these expectations in order to maintain higher yields. In other words, the recent movement lower in yields does less to ensure a patient Fed and actually could ramp **up** pressure on policy makers to take further action to ensure persistent pressure on longer-term rates. Remember, as Chair Powell noted at the November FOMC press conference, when it comes to financial conditions and the impact on monetary policy, or those factors potentially aiding monetary policy, "*we're looking for* ***persistent*** *changes* [emphasis added]".

While investors see nothing but rate cuts ahead, the Fed may still be considering additional policy action. Fed officials continue to acknowledge the improvement in price pressures but have not gone so far as to say their mission of price stability has yet been accomplished. It all depends on the evolution of the inflation data. The market, meanwhile, has been preemptively calling for an end to rate hikes for the past two years and pricing in rate cuts that have yet to come to fruition. In other words, investors have been wrong before, consistently reminded of the old adage, *"Don't fight the Fed."*

So what does this mean for the US economy and the prospects of a soft landing? Well, the Fed is optimistic the Committee can achieve a soft landing. Although, aside from the early 1990s, historically, the Committee does not have a great track record. Nearer-term, the U.S. economy is poised to remain positive but lose significant momentum from the third quarter's outsized rise, likely slowing to less than 2% in the fourth quarter and slowing further into 2024, with the risk of recession still very real at 55-60%.

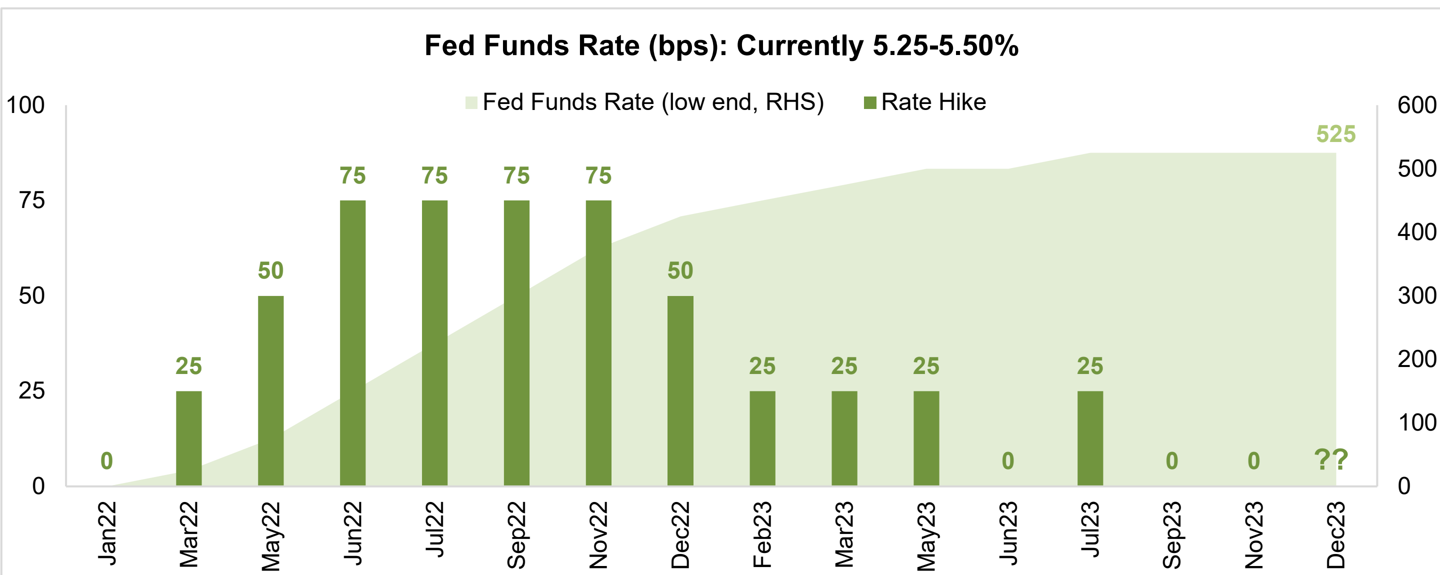
Whether the U.S. economy is able to bypass a technical recession or experience just a downturn – or more simply an unwinding of economic activity with growth slowing to less than 1% – hardship will continue to mount as the Fed potentially raises rates further or, more importantly, continues to keep rates elevated for much longer than expected with rates likely staying well above neutral out beyond 2025.

-- Dr. Lindsey Piegza, Ph.D., Chief Economist and Managing Director at Stifel Financial Corporation and Chair of the SIFMA Economist Roundtable

The Fed's Rate Conundrum

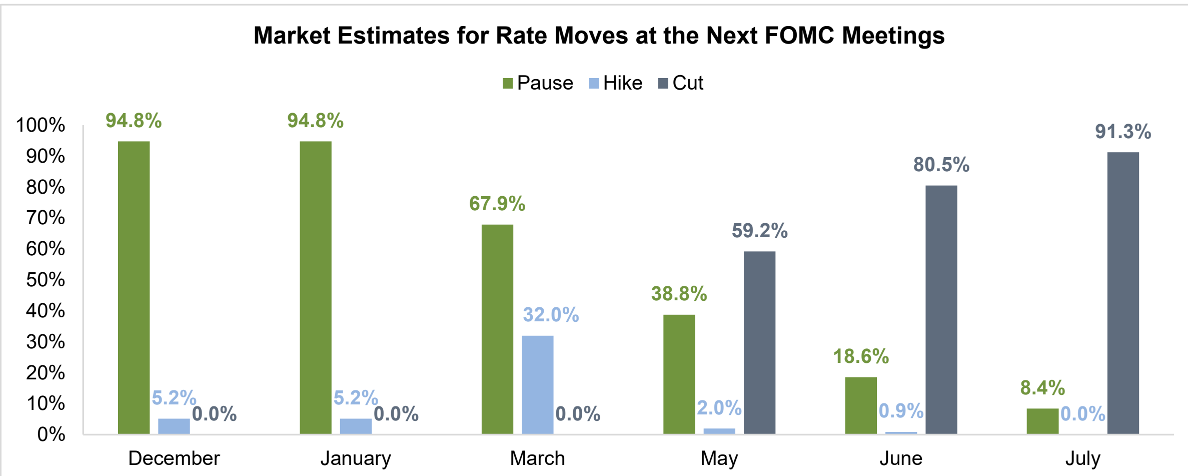
The Fed Funds rate stands at 5.25-5.50%, after increasing 525 bps since March 2022, an unprecedented rate. However, over the last four Federal Open Market Committee (FOMC) meetings, the Fed has only raised rates one time, a 25 bps hike at the July meeting. This leaves markets asking if the Fed is done. We look at the bull/bear debate for the Fed's rate conundrum:

- **Bull case**: As the unprecedented pace of rate hikes is impacting the economy more than what is shown in the data – regional bank turmoil, credit tightening, working through the monetary policy lag time – we are nearing/at the end of the rate hike cycle and rate cuts might be coming sooner than expected.
- **Bear case**: As the labor market remains tight and the economy has not slowed – or at least not enough for the Fed – rates will remain higher for longer.



Source: Federal Reserve

Market consensus is that the Fed is done, with almost a 100% probability of a pause at both the December and January FOMC meetings. As to when the Fed might begin cutting rates, probabilities are growing for a cut at the May FOMC meeting, now almost a 60% probability. That said, the majority still points to cuts by the summer.



Source: CME FedWatch Tool, SIFMA estimates

Note: Analyzes the probabilities of changes to the Fed Funds rate as implied by 30-Day Fed Funds futures pricing data. We aggregated probabilities for all hikes and cut levels (25 bps, 50 bps. Etc.).

Inflation: Current Status

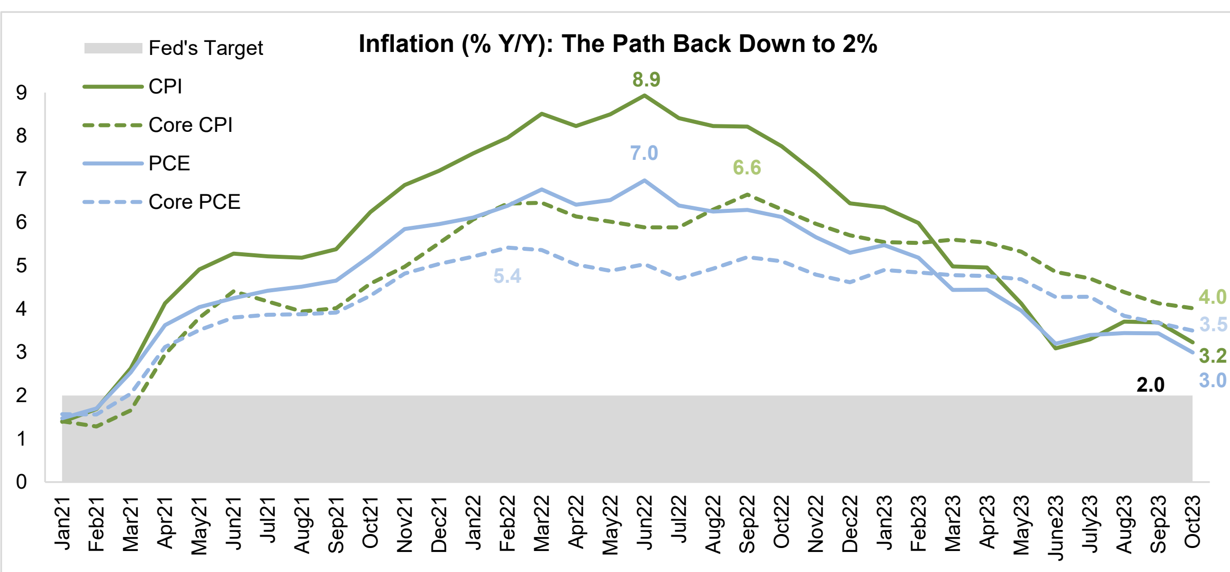
Before we dive into the survey results, we wanted to set the scene on where we are in inflation, the economy, and the Fed's rate conundrum. To begin, we analyze the current status of inflation metrics as monetary policy actions attempt to bring inflation back down to the Fed's 2% target. We highlight the following, paying close attention to the Personal Consumption Expenditures Price Index (PCE), the preferred metric used by the Fed to set monetary policy: (Y/Y change, as of October 2023)

- **Consumer Price Index (CPI) +3.2%**
  - Prior month +3.7%
  - Peak +8.9% in June 2022
  - Path to 2% = -1.2 pps

- **Core CPI +4.0%**
  - Prior month +4.1%
  - Peak +6.6% in September 2022
  - Path to 2% = -2.1 pps

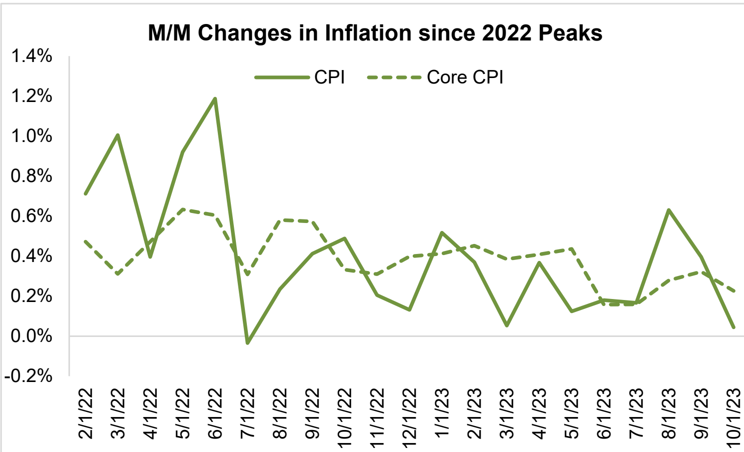
- **PCE +3.0%**
  - Prior month +3.4%
  - Peak +7.0% in June 2022
  - Path to 2% = -1.0 pps

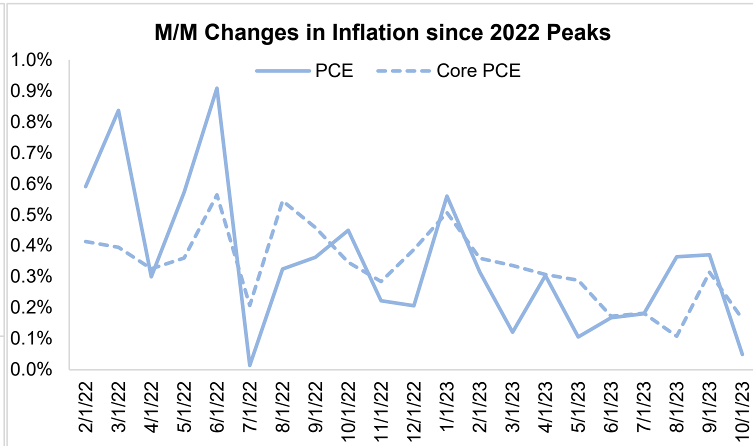
- **Core PCE +3.5%**
  - Prior month +3.7%
  - Peak +5.4% in February and March 2022
  - Path to 2% = -1.5 pps



Source: FRED, SIFMA estimates

On a M/M basis, directional shifts for PCE – posting a monthly percent change that was higher/lower than that for the preceding month – were higher thirteen times and lower eight times. As shown in the charts below, the more erratic patterns have settled.



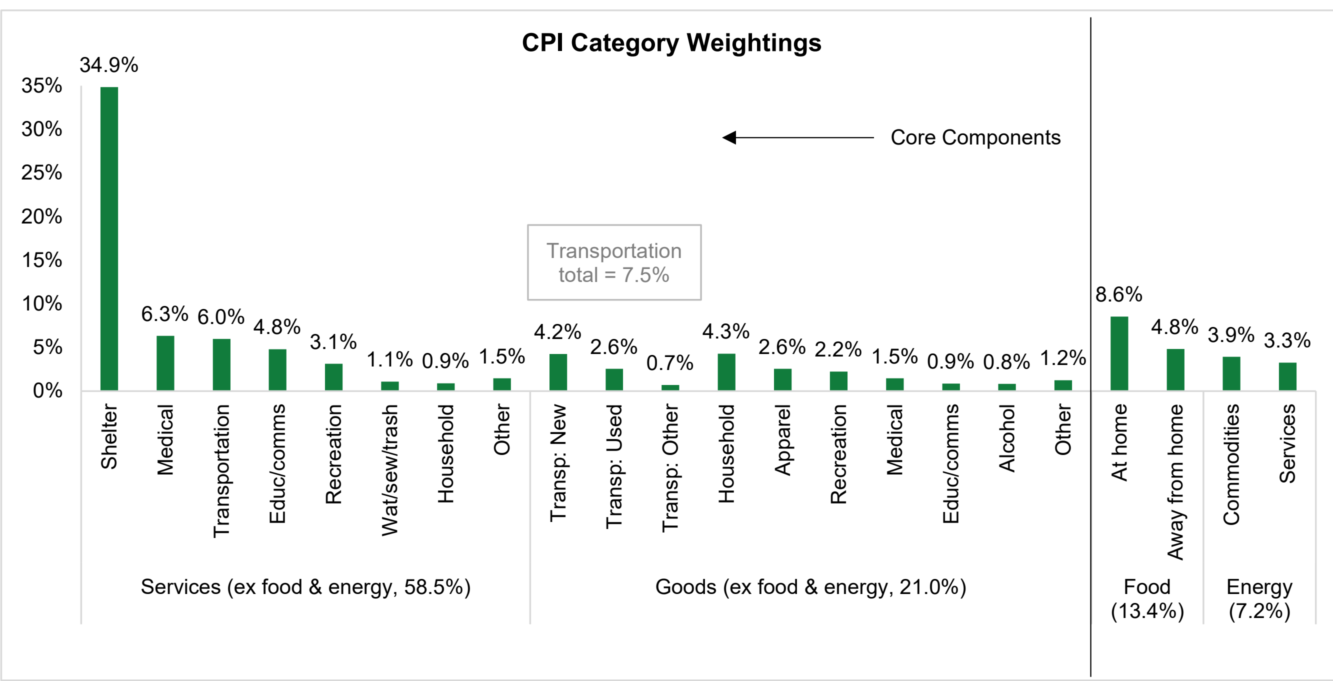


Source: FRED, SIFMA estimates

Inflation: Goods vs. Services

Next, we break out the components of the inflation equation: core (excluding food and energy) versus non-core (food and energy) and then further looking at core across goods and services. The Consumer Price Index (CPI) basket is split into the following (% of total index):

- Non-core components, food and energy, represent 20.6%
- Core components, excluding food and energy, represent 79.4%
    - **Services** 58.5%
        - Shelter 34.9%
        - Medical 6.3%
        - Transportation 6.0%
    - **Goods** 21.0%
        - Total transportation 7.5%; new vehicles 4.2%, used vehicles 2.6%, other 0.7%
        - Household 4.3%
        - Apparel 2.6%



Source: Bureau of Labor Statistics, SIFMA estimates (as of October 2023)

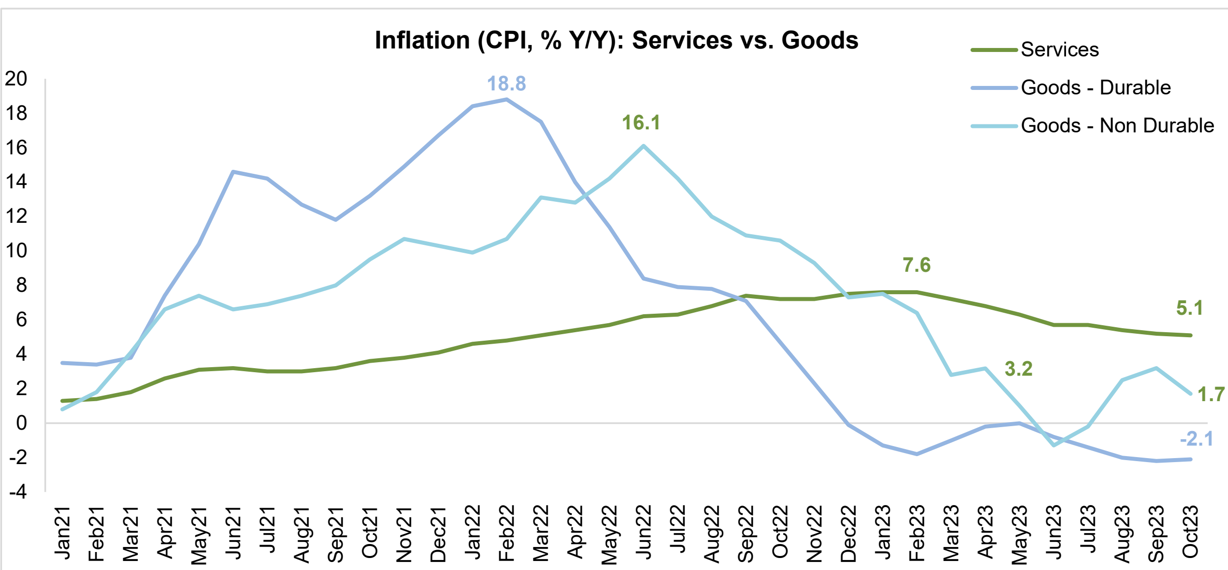
The focus of monetary policy is on the core components. While the Fed cannot control commodity prices, it can impact consumer demand for goods and services. Goods have come down substantially from their peaks: durables -20.9 pps (in a deflationary cycle since December 2022), non durables -14.4 pps). At 58.5% of total CPI, eyes remain on services. Services are 2.5 pps from the peak and have continued on a downward trajectory since the January/February 2023 peak.

We highlight the following trends for the inflation components: (CPI Y/Y change, as of October)

- **Services +5.1%**
  - Prior month +5.2%
  - Peak +7.6% in January and February 2023, -2.5 pps from peak

- **Goods – Durable[1] -2.1%**
  - Prior month -2.2% (essentially negative since December 2022, with one flat month)
  - Peak +18.8% in February 2022, -20.9 pps from peak

- **Goods – Non Durable 1.7%**
  - Prior month +3.2%
  - Peak +16.1% in June 2022, -14.4 pps from peak



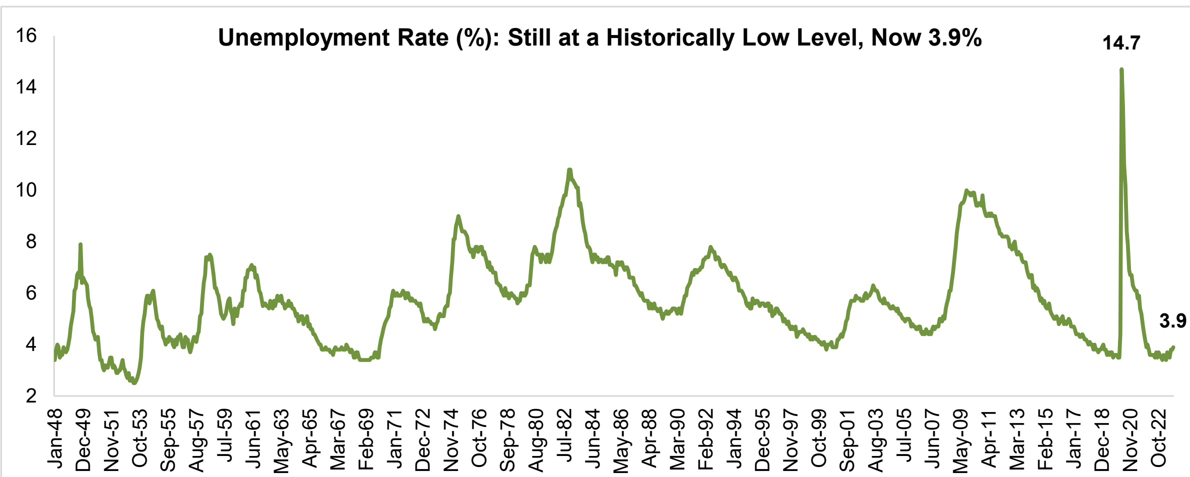
Source: Bureau of Labor Statistics, SIFMA estimates

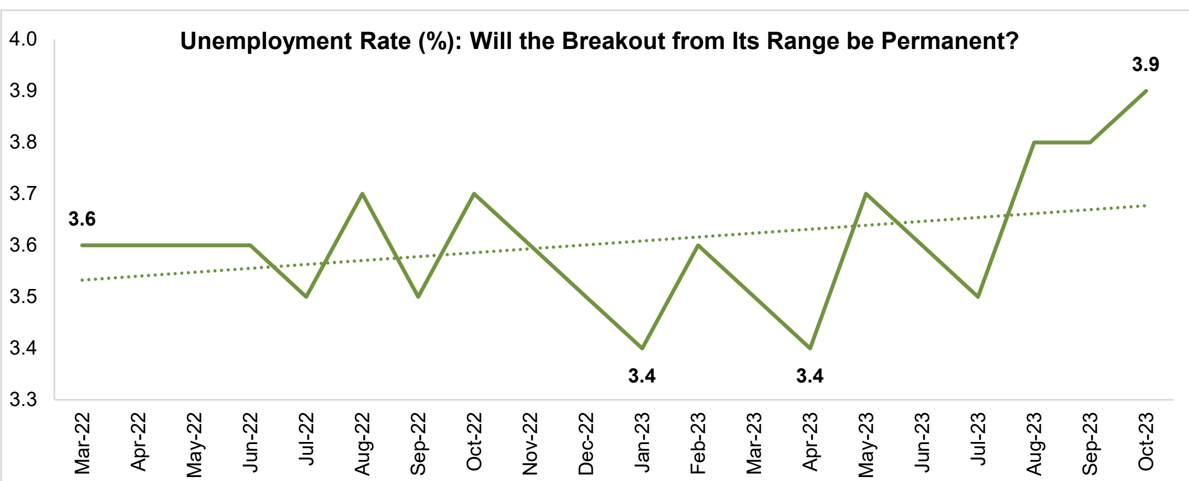
[1] Durable goods – or hard goods (can be purchased or rented) – yield utility over time instead of being consumed in one use and have long periods between successive purchases, i.e. last >3 years; ex: cars, home appliances, consumer electronics, furniture, sports equipment, and toys. Non-durable goods – or soft goods or consumables (generally not rented) – tend to be consumed immediately in one use or have a lifespan of <3 years; ex: cosmetics, cleaning products, food, fuel, beer, cigarettes, paper products, rubber, textiles, clothing, and footwear.

Inflation: Labor Component

The component of inflation which remains stubborn is the labor market. While the unemployment rate has increased, it is still only at 3.9% as of October, translating to 6.5 million unemployed people. This is still considered too low to assist in the Fed's inflation fight.

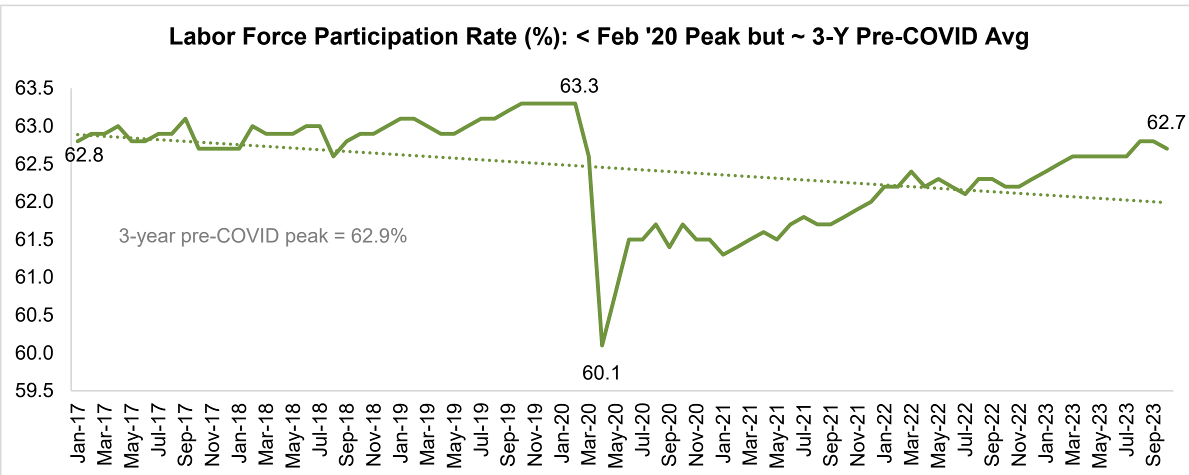
Since the Fed began raising interest rates in March 2022, the unemployment rate has averaged 3.6%, ranging from 3.4% to 3.9%. However, we may have reached an inflection point over the summer. For the last three months (through October), the unemployment rate has averaged 3.8%.





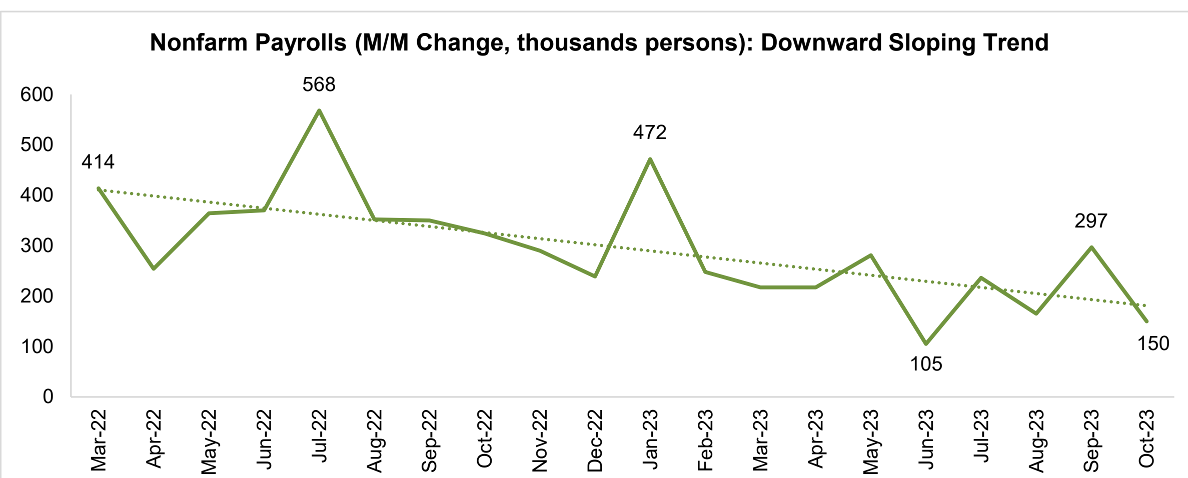
Source: FRED, SIFMA estimates

As to the labor force participation rate, as of October, we are now close to the three-year pre-COVID average of 62.9%. We are still below the February 2020 peak of 63.3% – and the chart is still showing a downward sloping trendline – but we are in line with 2017 levels. The labor force participation rate and historically low unemployment rate have combined to keep labor markets tight. Additionally, we have seen labor hoarding given lessons learned during COVID. At that time, companies were quick to lay off and then struggled to rehire.



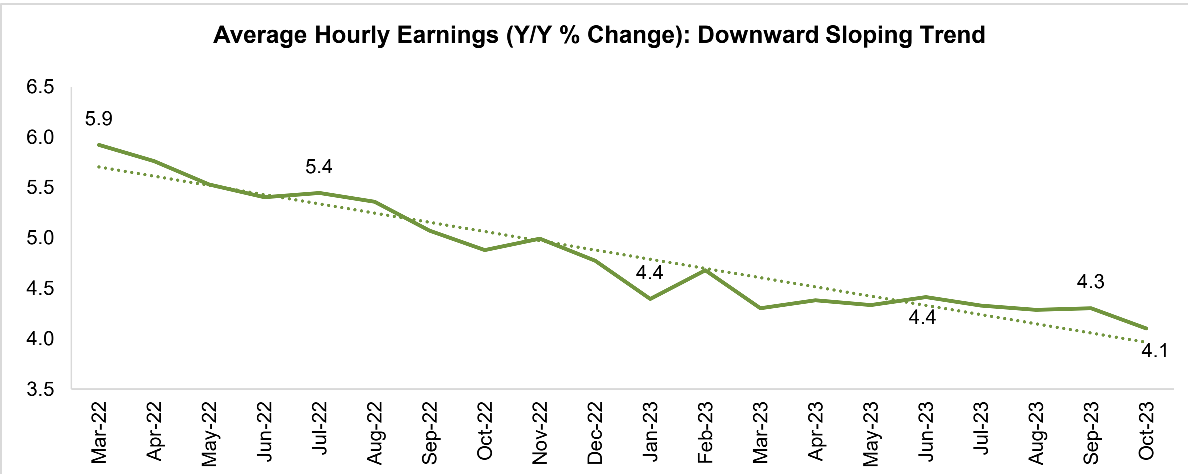
Source: FRED, SIFMA estimates

Despite this, the adjustment to the labor market is progressing. The downward sloping trend continues for the change in nonfarm payrolls, adding 150,000 jobs in October. Since the Fed began raising interest rates in March 2022, nonfarm payrolls added an average of 296,000 jobs per month, ranging from 105,000 to 568,000. For the last three months (through October), nonfarm payrolls added 204,000 jobs per month on average.



Source: FRED, SIFMA estimates

Average hourly earnings growth remains on a downward sloping path, closing out October at +4.1% Y/Y. While still elevated to the +3.0% average for the three years prior to COVID, wage growth pressures have eased somewhat. For the last three months, growth averaged +4.2% Y/Y, as compared to +4.8% on average since the Fed began raising interest rates in March 2022.

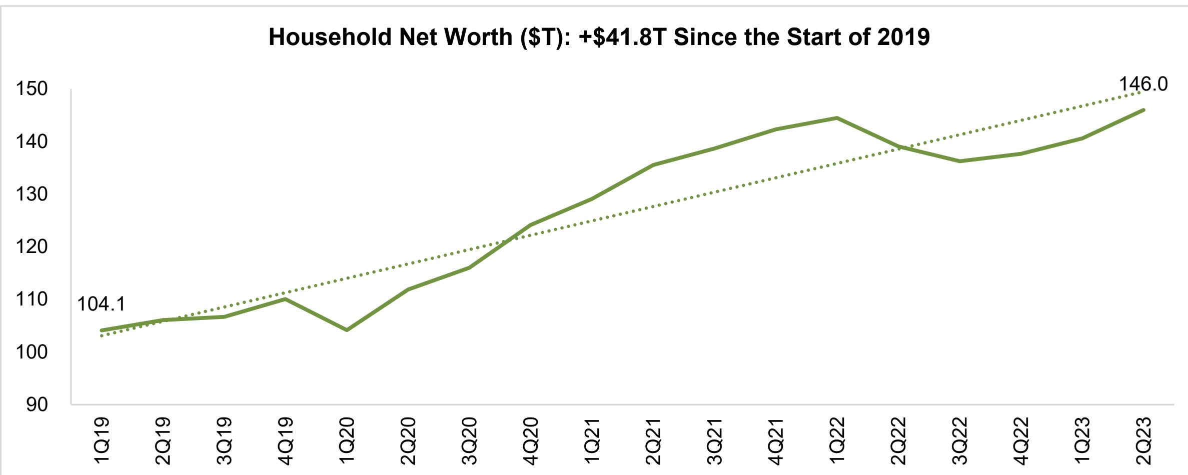


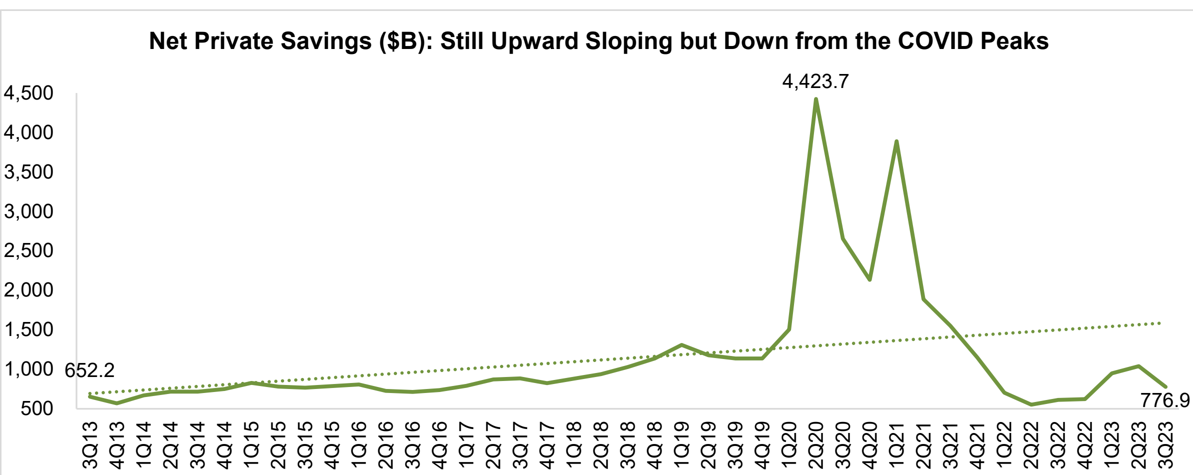
Source: FRED, SIFMA estimates

Economy: Households

Households are in a solid position. Household net worth has increased by $41.8 trillion since the start of 2019 (+40.2%), now at $146.0 trillion. While the wealth is focused on the upper income level – who have seen net worth grow given rising asset prices – the lower income levels have experienced wage growth which keeps them spending, enabling consumption across the board.

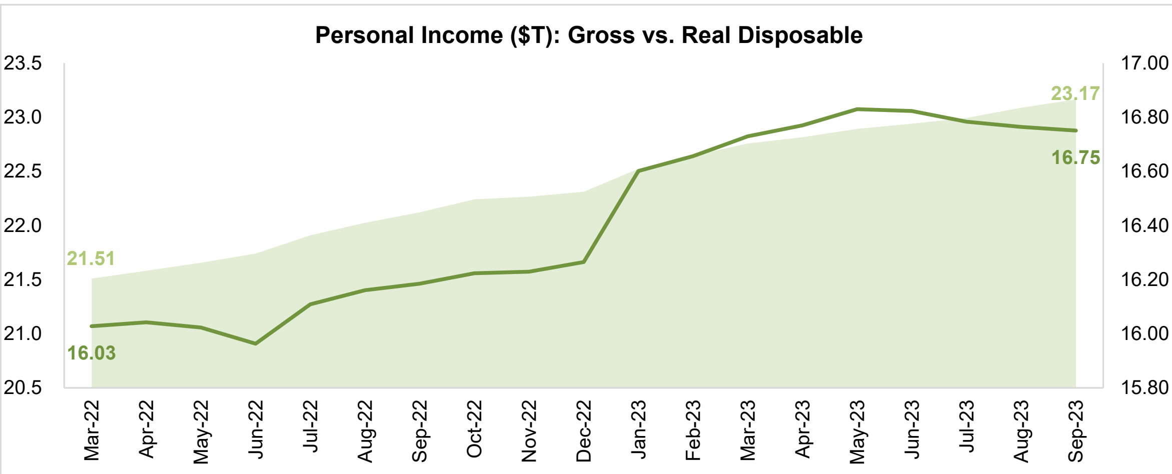
Additionally, households are still sitting on savings, $776.9 billion as of 3Q23, +26.8% Y/Y but -25.3% M/M. This level sits below the 2019 average of $1,190.9, -22.6%, but still allows a buffer for households.

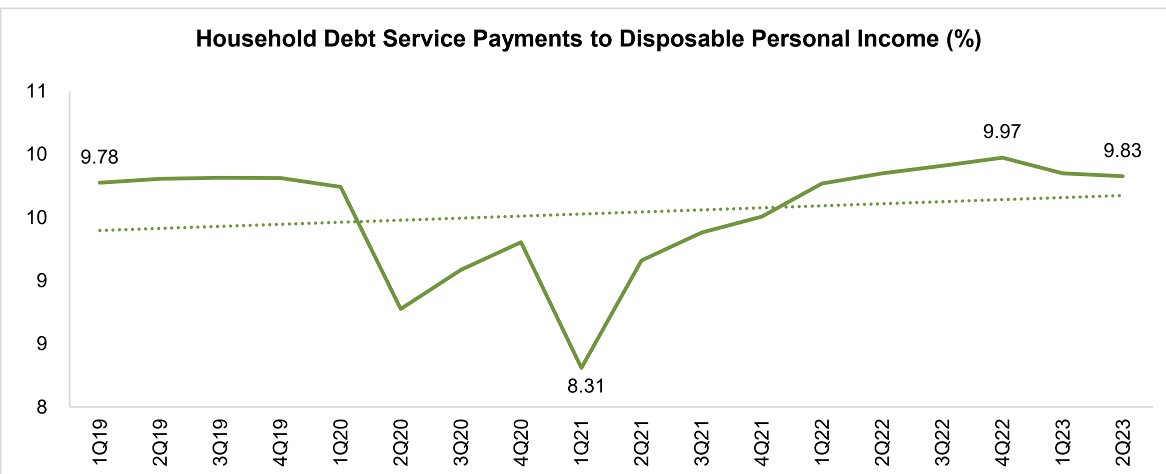




Source: FRED, SIFMA estimates

Personal income has also grown. Gross personal income is up 7.7% since the Fed began raising rates in March 2022. Despite high levels of inflation, real disposable personal income is up 4.5%. Further, household debt service payments as a percent of disposable personal income are essentially in line with 2019 levels.



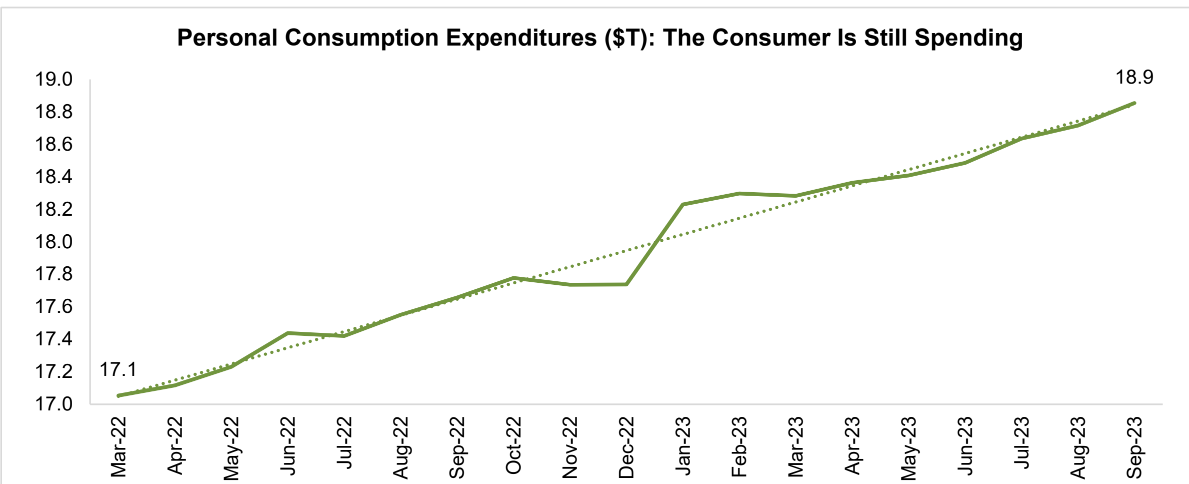


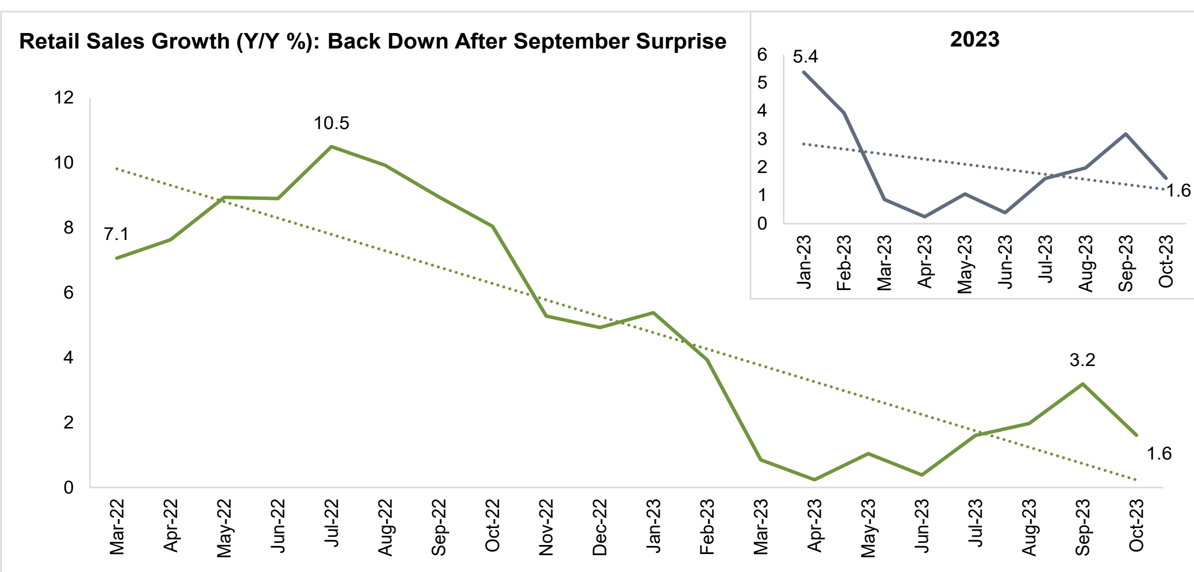
Source: FRED, SIFMA estimates

Economy: The Consumer

As shown above, the consumer remains employed and financially strong, enabling them to spend and therefore underpin the resiliency of the U.S. economy. According to personal consumption data – a measure of how much of household earned income is being spent on goods and services – the consumer continues to spend. Personal consumption expenditures are up 10.5% since the Fed began raising rates in March 2022.

Retail sales growth has been on a downward trajectory since the Fed began raising rates in March 2022. October data showed retail sales grew +1.6% Y/Y, reversing the September surprise (+3.2%) but still above the lows seen earlier this year.

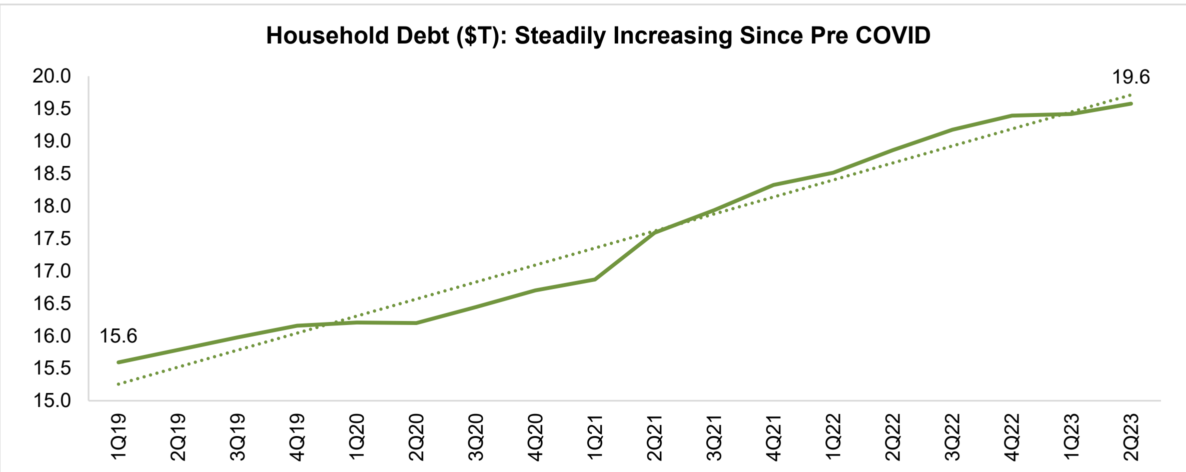


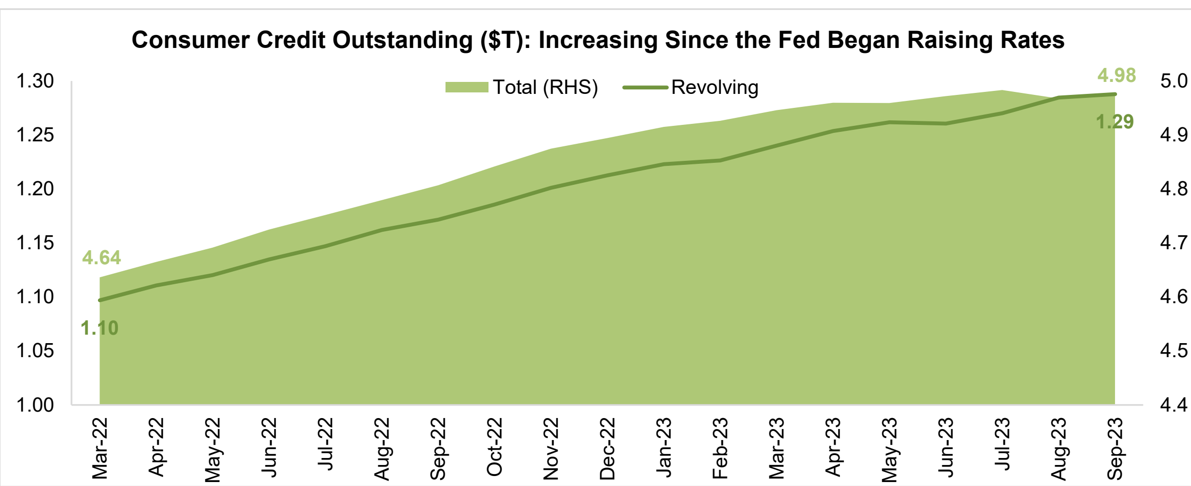


Source: FRED, SIFMA estimates

But can the consumer hold up? The consumer has been spending, but on borrowed – or temporary – money. Originally, consumers had artificial support from fiscal stimulus. Then – as the American consumer always does – they turned to credit cards to keep spending. This year, they have also turned to 401(k) hardship withdrawals to fund their purchases.

Fed Financial Accounts data shows household consumer debt has steadily increased since 2019 (this measures households and nonprofits). It has grown by $4.0 trillion (+25.6%), from $15.6 trillion in 1Q19 to $19.6 trillion in 2Q23. In a separate assessment of consumer credit outstanding by the Fed, from 1Q19 to 2Q23, total consumer debt increased 7.3%, while the revolving portion of this debt (ex: credit cards) rose 17.4%.

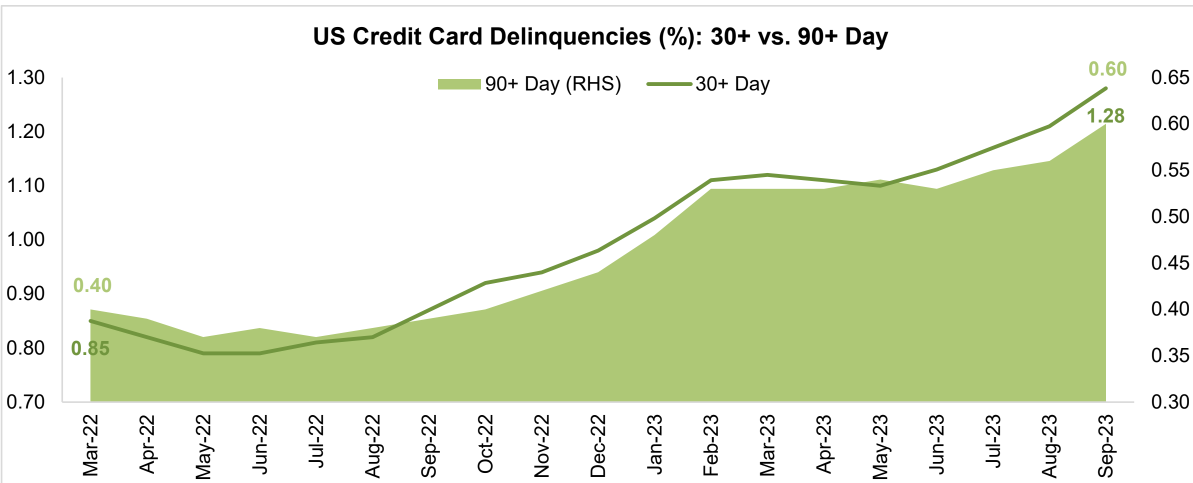




Source: FRED, Federal Reserve, Bloomberg, SIFMA estimates
Note: Household debt includes nonprofits.

The question now is when the party might end. The fiscal stimulus was a one-time (really a few times) action, albeit to the tune of trillions of dollars. A Bank of America's analysis of more than 4 million employee benefits plan participants indicated that the number of people making a hardship withdrawal in 2Q23 was 15,950, +36% Y/Y. You can only dip into your 401(k) one time.

Therefore, credit cards are keeping consumer spending alive. Credit card delinquencies have steadily increased since the Fed began raising rates in March 2022. The 30+ day composite has increased 50.6%, while the 90+ day composite rose 50.0%. Increasing credit delinquencies – coupled with tightened credit standards limiting access to additional credit or increases to credit limits – could curtail consumer spending.



Source: Bloomberg, SIFMA estimates

Executive Summary

Comparing the Current and Prior Surveys

In our semiannual economic surveys (published every June and December), we ask our Economist Roundtable to provide their best assessment of the current economic environment and where we could be headed. We begin by comparing results from the current and prior surveys for questions that were repeated in each survey, to gauge changes in estimates of the economic outlook. For questions where responses were ranked, we show the top answer for each survey. As not all questions are repeated – we adapt the survey to the current economic environment each time – we include additional highlights from the current and prior survey later in this section.

Economic Forecasts	Current Survey	Flash Poll	Last Survey
Economic Indicators:	**(2023E/2024E)**	**(2023E)**	**(2023E/2024E)**
Real GDP (4Q/4Q)	+2.5%/+0.7%	+1.9%	+0.5%/+1.7%
Unemployment Rate (4Q average)	+3.9%/+4.4%	3.7%	+4.1%/+4.4%
Labor Force Participation Rate (4Q average)	+62.8%/+62.9%	n/a	+62.7%/+62.7%
CPI (4Q/4Q)	+3.3%/+2.2%	3.2%	+3.0%/+3.0%
Core CPI (4Q/4Q)	+4.0%/+2.6%	3.8%	+3.8%/+2.6%
PCE (4Q/4Q)	+3.1%/+2.3%	3.1%	+3.1%/+2.2%
Core PCE (4Q/4Q)	+3.5%/+2.4%	3.4%	+3.5%/+2.3%
Rates (monthly averages):	**(Dec ‘23E/Dec ‘24E)**	**(Dec ‘23E)**	**(Dec ‘23E)**
Federal Funds Rate (midpoint)	+5.375%/+4.678%	n/a	+5.125%
2-Year UST Yield	+4.85%/+3.93%	n/a	+3.85%
10-Year UST Yield	+4.50%/+4.00%	n/a	+3.39%
30-Year Fixed Mortgage Rate	+7.39%/+7.00%	n/a	+6.00%

Economic Outlook	Current Survey	Last Survey
What factors will have the greatest impact on U.S. economic growth over next 12-18 months	US monetary policy, US consumer spending, inflation	US monetary policy, US consumer spending, recession threat, tight labor market
What is your estimate of the long-term potential growth rate of the U.S. economy	1.5% to 2% (93.3% of respondents)	1.5% to 2% (92.3% of respondents)
Has your estimate of the long-term growth rate changed in the last 12 months	No (85.7% of respondents)	No (100.0% of respondents)
Top risks to economic forecasts - upside	Consumer spending, labor market, inflation	Inflation, labor market, recession/economy
Top risks to economic forecasts - downside	Monetary policy/interest rates, geopolitical, labor market	Credit tightening, inflation, debt ceiling/rating downgrade
US to enter a recession	Yes, shallow recession in 2024 (60.0% of respondents)	Yes (69.2% of respondents), Mild (100.0% of respondents), 4Q23 (36.4% of respondents)

Note: Current survey November 6-22, 2023, flash poll September 21-29, 2023, past survey May 15-26, 2023.

Employment & The Consumer	Current Survey	Last Survey
Labor force participation rate to return to the ~63% pre-COVID average	No, structural adjustment (71.4% of respondents)	Never (41.7% of respondents)
Factors driving the labor supply gap	The Great Retirement (71.4% of respondents), lack of real wage growth (35.7%), childcare issues (28.6%)	The Great Retirement (76.9% of respondents), childcare issues (38.5%), upward pressure on wages & health concerns around long COVID (15.4% each)
Work-from-office return to pre-pandemic norms	No, structural shift (92.3% of respondents)	Never, hybrid work is here to stay (84.6% of respondents)
Have you personally returned to the office	Hybrid/part-time (60.0% of respondents)	Hybrid/part-time (50.0% of respondents)

Monetary Policy	Current Survey	Flash Poll	Last Survey
Fed Funds Rate:			
Length of monetary policy lag time	Over 9 months (57.1% of respondents)	n/a	9-12 months (38.5% of respondents), over 12 months (23.1%)
Should the ongoing credit tightening be a factor in the Fed's decision making	Yes (84.6% of respondents)	n/a	Yes (91.7% of respondents)
Will the ongoing credit tightening be a factor in the Fed's decision making	Yes (84.6% of respondents)	n/a	Yes (91.7% of respondents)
When will the Fed begin cutting rates?	2Q24 (46.7% of respondents)	2Q24 (63.6% of respondents)	1Q24 (71.4% of respondents)
How many bps the Fed will have to cut before stabilizing	Over 100 bps (93.3% of respondents)	n/a	Over 100 bps (76.9% of respondents)
Fed should consider global monetary policy in its own policy decisions	No (76.9% of respondents)	n/a	No (100.0% of respondents)
Fed Balance Sheet:			
Will the Fed ever get its balance sheet back down to pre-COVID level, ~$4T	No (83.3% of respondents)	n/a	No (84.6% of respondents)
Will the Fed ever get its balance sheet back down to post-GFC level, ~$2T	No (100% of respondents)	n/a	No (92.3% of respondents)
General Monetary Policy:			
Which of the following factors do you think are the most important to the Fed's decision making	Tight labor market/elevated wage growth, persistently higher inflation, credit tightening	n/a	Tight labor market/elevated wage growth, persistently higher inflation, credit tightening
How do you rate the efficiency of the Fed's communication with markets	Excellent, very clear (53.8% of respondents)	n/a	Excellent, very clear & ok, somewhat murky but decipherable (each 50.0% of respondents)

Note: Current survey November 6-22, 2023, flash poll September 21-29, 2023, past survey May 15-26, 2023. Questions and/or ranges may change across surveys

Inflation	Current Survey	Last Survey
Fed poised to make a mistake in tackling inflation	Yes, overshooting & no (38.5% of respondents each)	Yes, overshooting & no (45.5% of respondents each)
PCE by the end of: 2023	3.0-3.5% (53.3% of respondents)	3.0-3.5% & >4.0% (each 40.0% of respondents)
PCE by the end of: 2024	2.0-2.5% (73.3% of respondents)	2.0-2.5% & 3.0-3.5% (each 40.0% of respondents)
Confident the Fed can achieve its 2% goal in a sustainable way	Very confident (53.8% of respondents)	Commitment: Very confident (63.6% of respondents), Effectiveness: Somewhat confident (54.5% of respondents)
Do you believe the Fed will tolerate an above 2% inflation level	No (61.5% of respondents)	Yes & No (each 50.0% of respondents)
Probability of the US experiencing structurally higher inflation over the longer run (>3 years)	0-15% (46.2% of respondents)	15-25% (54.5% of respondents)
Which component has the greatest impact on the level/peak or sticky nature of inflation	Demand side (71.4% of respondents ranked this #1)	Demand side (70.0% of respondents ranked this #1)
Expect acceleration of wage growth to slow to the historical +3.0% level	2H24 (73.3% of respondents)	2024 (70.0% of respondents)
What level of unemployment is needed to meaningfully impact inflation	4.0-4.5% (61.5% of respondents)	4.0-4.5% (58.3% of respondents)
When can reach this unemployment rate	2H24 (42.9% of respondents)	2024 (58.3% of respondents)
Inflation expectations to become unanchored	No (92.3% of respondents)	No (100.0% of respondents)
Fed's strong rhetoric has kept inflation expectations in check	Yes (100% of respondents)	Yes (90.9% of respondents)
Fed can navigate a soft-landing (meet inflation goal without causing a recession)	Doubtful (57.1% of respondents)	Doubtful (66.7% of respondents)
What are the most important factors in your outlook for core inflation	Consumer spending – services, stickiness of wage increases, inflation expectations	Consumer spending – services, stickiness of wage increases, historically hot labor market
What factors do you believe could push long-term inflation higher	Reversal of globalization, stickiness of wage increases, sustained higher deficits	Reversal of globalization, increased costs as we move supply chains back to the U.S., stickiness of wage increases
Concern of disinflation at this time	No (85.7% of respondents)	No (91.7% of respondents)
Greater long-term risk to the economy	Stagflation (100% of respondents)	Stagflation (90.9% of respondents)

Interest Rates	Current Survey	Last Survey
Factors having the greatest impact on long-term Treasury yields	Level of upcoming UST issuance, current rate of US economic activity, US budget deficit trend	Inflation/inflationary expectations; US monetary policy; US economic conditions
Expect the Treasury yield curve to return to a normal upward sloping curve	Beyond 2024 (75.0% of respondents)	Beyond 2024 (45.5% of respondents)

Note: Current survey November 6-22, 2023, past survey May 15-26, 2023. Questions and/or ranges may change across surveys

Additional Survey Results Highlights: 2H23 (Current)

For questions that were not repeated or changed substantially, i.e. not listed in the comparison tables above, we highlight the following from the current survey (populated between November 6-22, 2023).

Economic Outlook

- Respondents expect a meaningful downturn in consumer spending to happen in 1H24 (28.6% of respondents indicated 1Q24 and 2Q24, each)
- 25.0% of respondents each indicated 4Q23 and 2Q24 for a meaningful slowdown in capex spending and hiring

Monetary Policy

- 86.7% of respondents expect the Fed is done with rate hikes
- 64.3% of respondents think in this cycle it will take longer for monetary policy to work its way into the economy
- 53.3% of respondents expect the Fed Funds rate to return to neutral in 2026
- 66.7% of respondents estimate the neutral Fed Funds rate to be 2.0-3.0%
- 41.7% of respondents do not expect the pace of balance sheet reduction to have material impact on the markets

Policy and Macro Factors

- Top three fiscal policy and macro factors to have the greatest impact on U.S. economic growth over the next 12-18 months:
    - Policy related fiscal spending (ex: infrastructure, IRA, student loans, etc.), 75.0% of respondents
    - Fiscal spending to boost the economy, 41.7% of respondents
    - Budget deficit, 41.7% of respondents

Additional Survey Results Highlights: 1H23 (Prior)

For questions that were not repeated or changed substantially, i.e. not listed in the comparison tables above, we highlight the following from the prior survey (populated between May 15-26, 2023): https://www.sifma.org/wp-content/uploads/2023/06/Economic-Survey-Report_1H23_FINAL.pdf

Economic Outlook

- With the Fed raising rates at an unprecedented pace, 72.7% of respondents put low probability of risking a big accident (a more severe or prolonged recession), 27.3% high
- 60.0% of respondents believe labor shortage are impacting consumer behavior towards in-restaurant dining with 30.0% indicating travel – airlines and another 30.0% travel - hotels
- The key factors limiting return to offices to historical levels: choose to continue working at home, not want to commute/time freed up from not commuting, and because WFH option is available (did not ask but it was offered)

Monetary Policy

- Fed actions
    - 92.9% of respondents expect the Fed to pause rate hikes in June, 78.6% of respondents expect the peak rate will be 500-550 bps, 78.6% of respondents expect the peak rate to be achieved by 2Q23
    - As to whether regulatory authorities took appropriate actions in response to the March regional bank turmoil, respondents indicated:
        - The Fed: Yes, 100.0%
        - FDIC: Yes, 91.7%
    - 50.0% of respondents believe all bank deposits should be insured, but up to a certain amount
        - For those responding "yes, but up to a certain amount", 50.0% replied the amount should be $500,000 and 50.0% replied $1,000,000
    - As to whether the regional bank turmoil will cause lasting damage to confidence in banking sector, 58.3% responded yes, but confidence will return over time
    - 66.7% of respondents believe the corresponding credit tightening after the regional bank turmoil in March is equivalent to 50 bps of additional Fed rate hikes
- Inflation
    - As to whether respondents' positions changed about the Fed making a mistake in tackling inflation after the regional bank turmoil, 45% responded yes, somewhat more concerned
    - 50.0% of respondents believe the Fed will tolerate an above 2% inflation level
        - For those that answered yes to the above question, 100.0% responded that a 2.0-2.5% level would be acceptable

Policy and Macro Factors

- Fiscal Stimulus
  - 70.0% of respondents believe sustained higher inflation should deter further fiscal spending
  - 60.0% of respondents believe the (potentially) impending recession should not deter further fiscal spending
  - 60.0% of respondents believe the Russia/Ukraine conflict will cause further international aid and therefore more U.S. fiscal spending
  - 60.0% of respondents believe the government does want to spend more to boost the economy, given the (potentially) impending recession
  - 50.0% of respondents believe the so-called Inflation Reduction Act (IRA) will not be budget deficit reducing but will pressure budget
  - 70.0% of respondents believe the IRA will not help lower inflation at all (in the short term or long run)
  - 62.5% of respondents view the bigger risk to the economy is the government doing too much, therefore further pressuring inflation
  - When considering additional stimulus, 36.4% of respondents each indicated the government should consider the debt level as it could impede long-term growth while another 36% indicate government should not consider the debt level as it needs to invest in the economy for the (Debt/GDP ratio 121.1% for 2022)
  - 80.0% of respondents believe a Debt/GDP level of 150%-175% would be concerning
  - 90.0% of respondents do not believe either party is focused on reinstating a balanced budget
  - 54.5% of respondents believe the government has already done too much, but not to a significant extent
  - 70.0% of respondents believe debt ceiling increases should be procedural only (not tied to alternative measures)
  - 72.7% of respondents believe the debt ceiling debate is not doing material damage to the global perception of the USD
  - With a movement to dethrone the US Dollar (USD), including Yuan denominated purchase of natural gas and regional trade agreements in local currencies, 77.8% of respondents do not believe the USD is losing credibility as the dominant currency
  - With a movement to dethrone the USD, including Yuan denominated purchase of natural gas and regional trade agreements in local currencies, 77.8% of respondents believe the USD is not losing credibility as the dominant currency
  - We asked our Economist Roundtable about the potential impacts of the Inflation Reduction Act (IRA). All of respondents believe the IRA will not have a material impact on economic growth

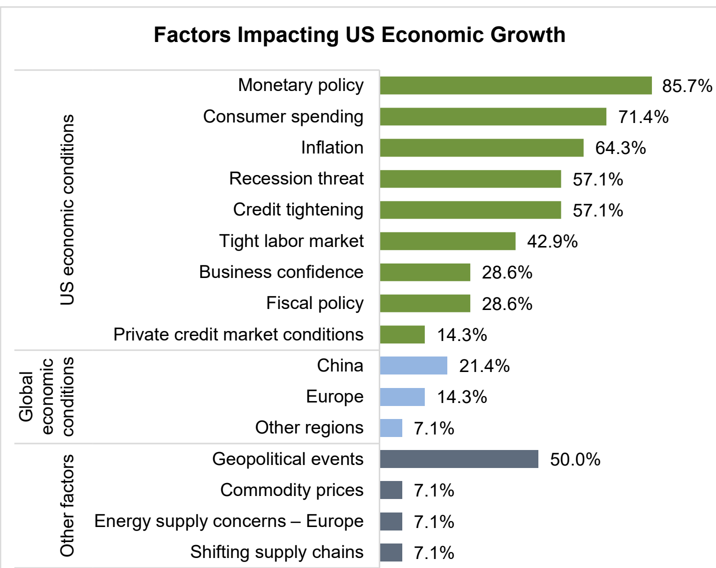
- Tax Policy
  - When asked if geopolitical tensions and memories of China's COVID policies will have a lasting impact on trade relations with China, 100.0% responded yes
  - In light of this, 90.0% of respondents expect a meaningful shift to domestic production, thereby reducing U.S. reliance on overseas production

Economic Outlook

GDP Growth Expectations

Despite the Fed's best efforts, the U.S. economy has remained resilient. To begin analyzing the economic environment, we asked our Economist Roundtable about the key factors driving economic models. We highlight the following results:

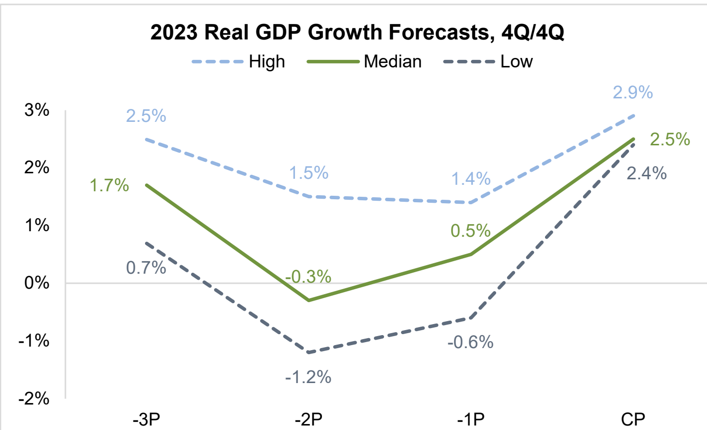
- U.S. monetary policy (85.7% of respondents)
- Consumer spending (71.4% of respondents)
- Inflation (64.3% of respondents)

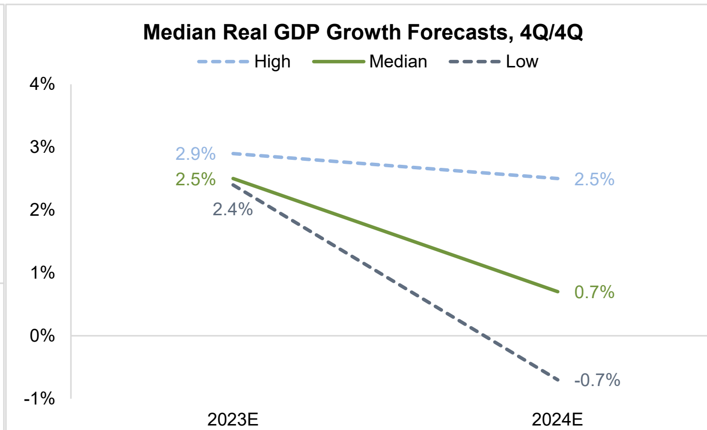


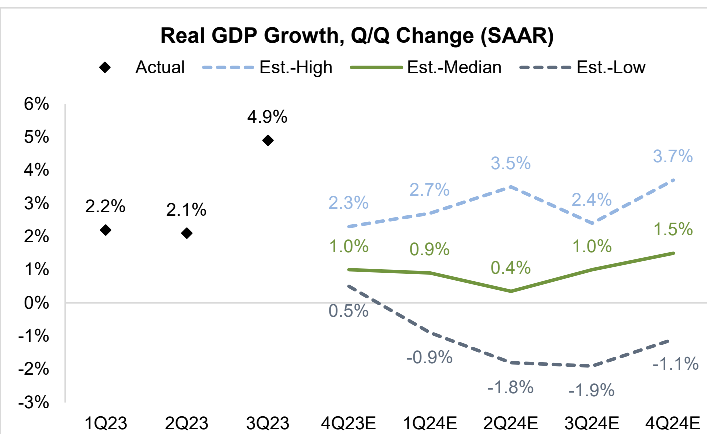
Full Questions: What factors will have the greatest impact on U.S. economic growth over the next 12-18 months? (Ranked by % that listed a factor)

We then asked our Economist Roundtable about their expectations for GDP growth, as well as their expectations for the long-term growth rate potential.

- Annual real GDP growth to finish 2023 at +2.5% (median forecast, 4Q/4Q), shifting to +0.7% in 2024
- On a quarterly basis, respondents forecast +1.0% real GDP growth in 4Q23, +0.9% in 1Q24, +0.4% in 2Q24, +1.0% in 3Q24, and +1.5% in 4Q24 (Q/Q, SAAR)

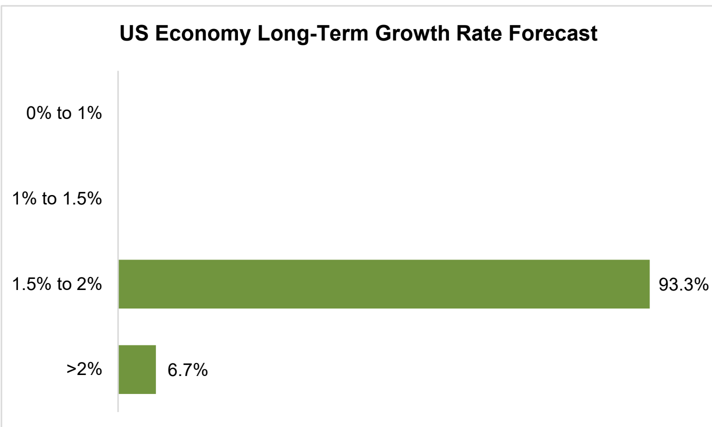


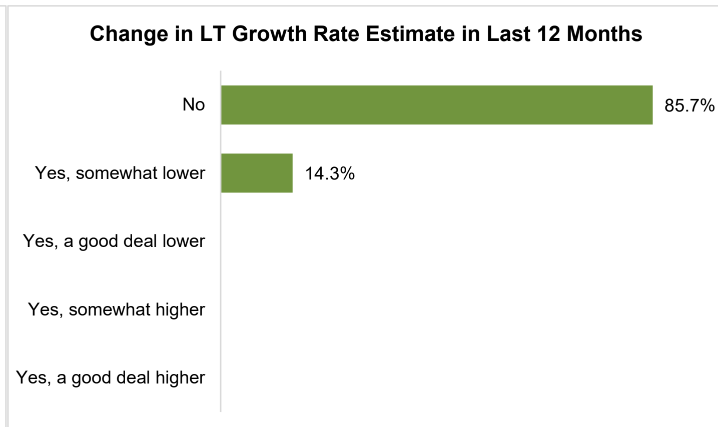




Source: Bureau of Economic Analysis, SIFMA Economist Roundtable
Note: SAAR = seasonally adjusted annual rate

- In terms of the long-term GDP growth rate, 93.3% of respondents replied 1.5-2.0%
- 85.7% of respondents stated that their estimate had not changed in the last twelve months



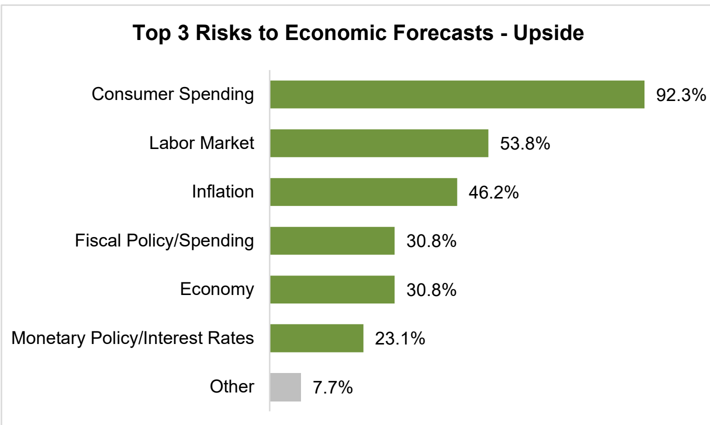


Full Question: What is your estimate of the long-term potential growth rate of the US economy?
Full Question: Has your estimate of the long-term potential growth rate of the US economy changed over the last 12 months?

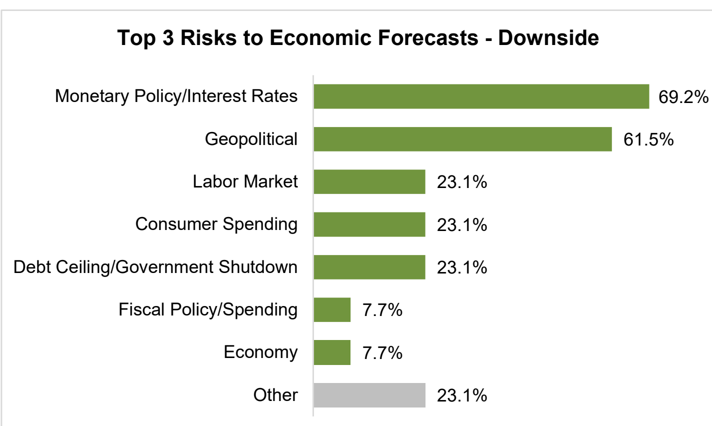
Risks to Economic Forecasts

We asked our Economist Roundtable to list their top risks to their economic forecasts, highlighting the following:

- **Upside:** Consumer spending – robust, labor market – resilient, and inflation – slowing rate of increase/disinflation



- **Downside:** Monetary policy/interest rates, geopolitical, and labor market

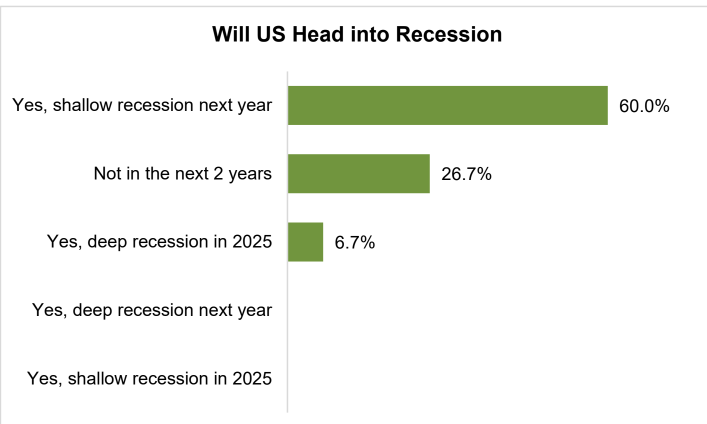


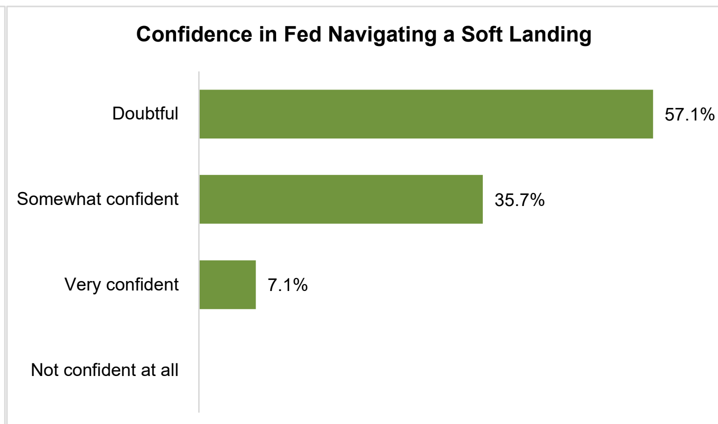
Full Question: Please list your top three upside/downside risks to your economic forecasts.
Upside: Consumer Spending = robust consumer spending, boomers with savings, healthy household balance sheets; Labor Market = resilient labor market, productivity growth, rise in labor participation rate, reshoring; Inflation = disinflation; Fiscal Policy/Spending = fiscal stimulus, expansionary policy, state & local spending; Economy = easing of financial conditions, resilient banking sector, stronger capex; Monetary Policy/Interest Rates = adept monetary policy, quicker easing; Other = lower sustained energy prices.
Downside: Monetary Policy/Interest Rates = tighter monetary policy, high interest rates; Geopolitical = geopolitical shocks, escalation of Ukraine war, Middle East turmoil; Labor Market = layoffs, reduction in hiring; Consumer Spending = weaker consumer spending; Debt Ceiling/Government Shutdown = prolonged US government shutdown, increasing US debt; Fiscal Policy/Spending = lower fiscal policy multiplier; Economy = weak regional bank system; Other = US election uncertainty, rising defaults, crash in commercial real estate.

Recession Expectations

As the Fed continues its inflation fight, economists and market participants continue to assess whether or not the U.S. economy will enter a recession, and, if so, how severe that recession could be. As such, we asked our Economist Roundtable their thoughts around a potential recession and if the Fed can navigate a soft landing (achieve its 2% inflation target without causing a recession).

- 60.0% of respondents believe the U.S. will head into a shallow recession in 2024
- The majority of respondents (57.1%) are doubtful the Fed can navigate a soft-landing, followed by 35.7% somewhat confident



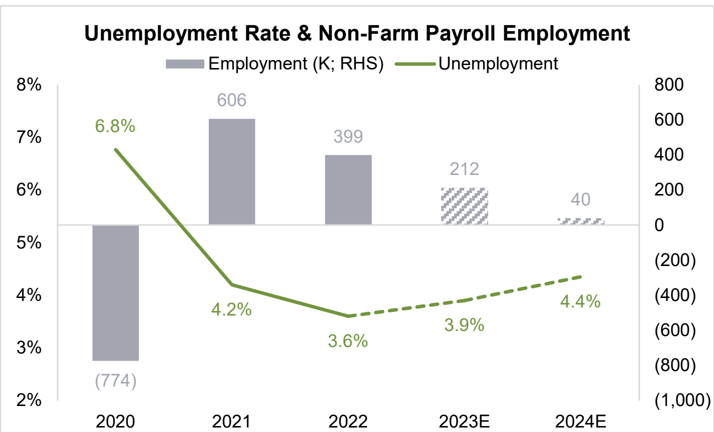


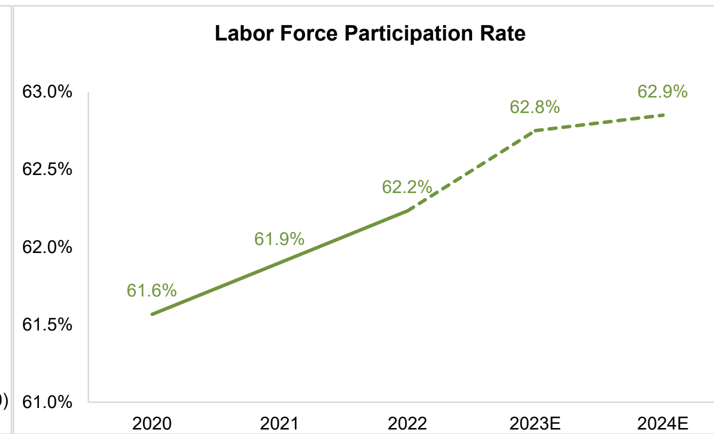
Full Question: Will the US head into recession?
Full Question: How confident are you that the Fed can navigate a soft-landing, meaning achieve its inflation goal without causing a recession?

Employment and the Consumer

One reason for the economic resiliency is that households are in good shape and therefore the consumer continues to spend. In this section, we asked our Economist Roundtable about the employment picture and the shape of the consumer.

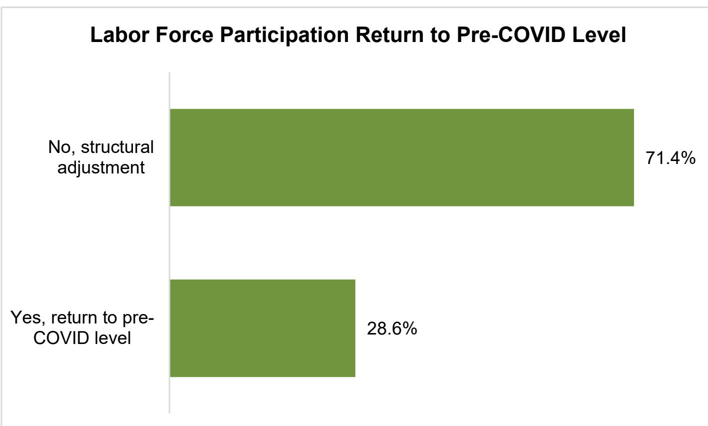
- Economists expect the unemployment rate to end 2023 at 3.9% and increase to 4.4% in 2024 (4Q average)
- Employment growth (average monthly change in non-farm payroll employment) is expected to average 212,000 in 2023 and 40,000 in 2024
- Respondents expect the labor force participation rate to increase to 62.8% in 2023 and 62.9% in 2024

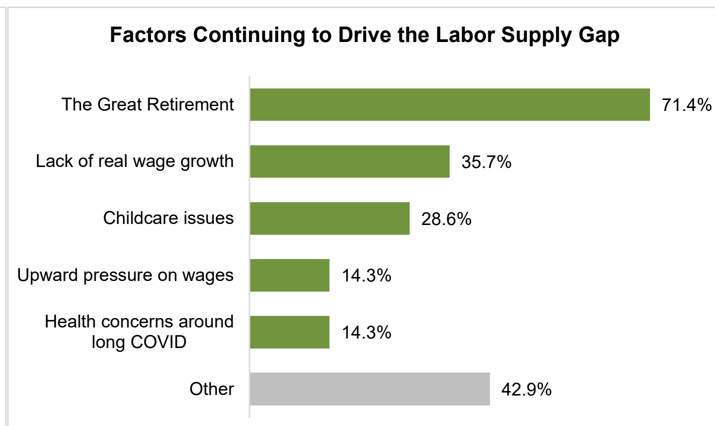


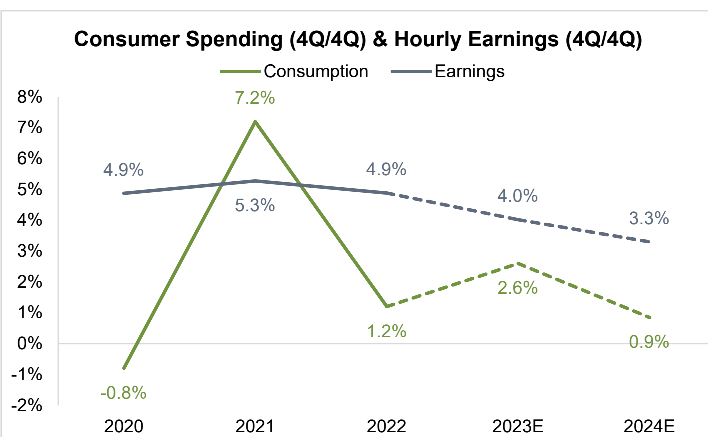


Source: Bureau of Labor Statistics, SIFMA Economist Roundtable
Note: Average monthly change for non-farm payroll employment, 4Q average for unemployment rate

- 71.4% of respondents expect the labor force participation rate to not return to the ~63% pre-COVID average due to a structural adjustment
- The factors respondents believe continue to drive the labor supply gap are: The Great Retirement (71.4%), lack of real wage growth (35.7% of respondents), and childcare issues (28.6%)
    - Other: Immigration restrictions, aging population, skills mismatch, workers becoming more demanding, less willing to work on site
- Respondents expect real personal consumption growth to end 2023 at +2.6% and +0.9% in 2024 (4Q/4Q)
- Average hourly earnings growth is expected to decrease to +4.0% in 2023 and +3.3% in 2024 (4Q/4Q)



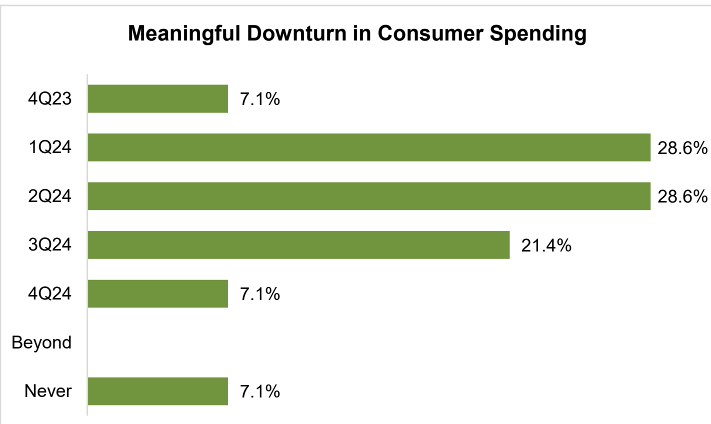


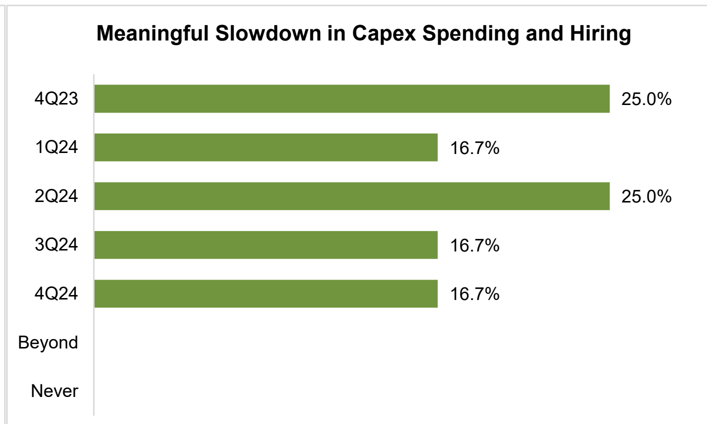


Source: Bureau of Economic Analysis, SIFMA Economist Roundtable
Full Question: Will the labor force participation rate return to the ~63% pre-COVID average or has there been a structural adjustment? (62.7% in October 2023, -0.1 pps M/M; 63.4% in February 2020)
Full Question: With 9.6 million job vacancies (as of September) and 6.5 million Americans reporting a position of unemployment (as of October), what factors do you believe continue to drive the labor supply gap? Other: It always takes time, insufficient skills for the available jobs, immigration restrictions, lower population growth/ageing population, retirement/low participation for 55+, workers have become more demanding/less willing to work on site

We asked our Economist Roundtable their thoughts on consumer spending and capex spending and hiring on the corporate side.

- Respondents expect a meaningful downturn in consumer spending to happen in 1H24 (28.6% of respondents indicated 1Q24 and 2Q24, each)
- 25.0% of respondents each indicated 4Q23 and 2Q24 for a meaningful slowdown in capex spending and hiring

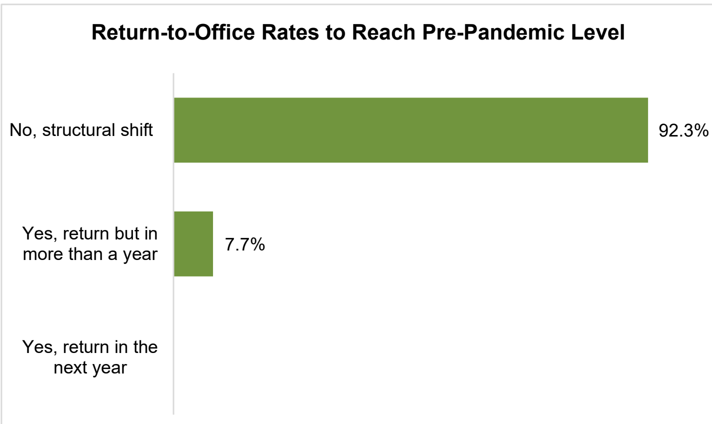


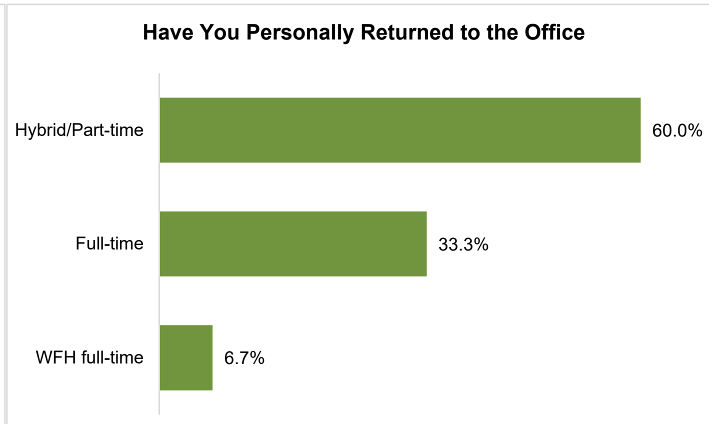


Full Question: Despite current resilience, the consumer is increasingly turning to inorganic support to spending such as credit cards and 401K hardship withdrawals. Given the finite nature of such support, when do you expect a meaningful downturn in consumer spending?
Full Question: Small and mid-size businesses are already seeing higher credit costs. When do you expect to see a meaningful slowdown in capex spending and hiring?

Finally, we asked our Economist Roundtable their thoughts on the return to offices.

- 92.3% of respondents do not expect work-from-office to return to pre-COVID norms, indicating there has been a structural shift
- 60.0% of respondents indicated they have personally returned to the office on a hybrid/part-time schedule





Full Question: Do you expect return to office rates to reach pre-pandemic levels or has there been a structural shift?
Full Question: Have you personally returned to the office?

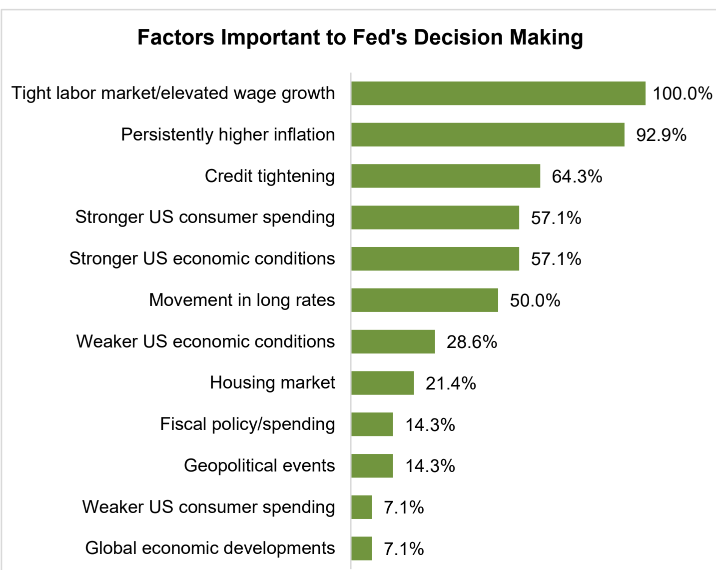
Monetary Policy

Fed Actions

In this section, we drill down into everything monetary policy. The Fed has indicated that they remain data dependent when making policy decisions. Yet, data points from the different moving pieces in the inflation equation present diverging trends, and the same data points are even pointing to different outcomes on different release dates. As we close out 2023, economists and markets continue to read the tea leaves to gauge if the Fed is done and when rate cuts will begin.

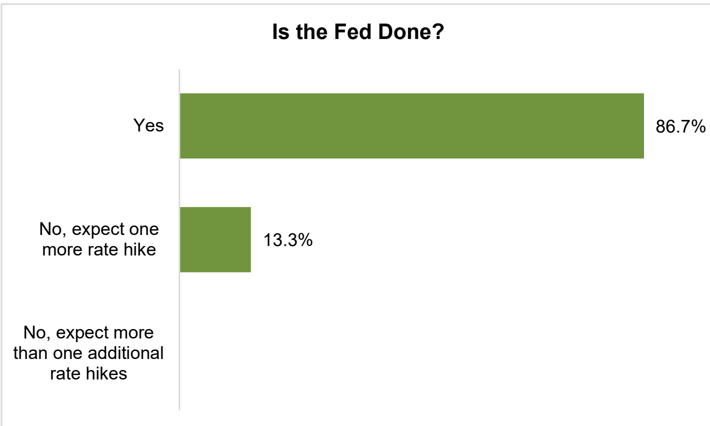
We asked our Economist Roundtable about rate moves, monetary policy lag time, and more, highlighting the following on factors important to the Fed's decision making:

- Tight labor market/elevated wage growth (100.0% of respondents)
- Persistently higher inflation (92.9% of respondents)
- Credit tightening (64.3% of respondents)



Full Question: Which of the following factors do you think are the most important to the Fed's decision making? (Factors listed in order of average rank)

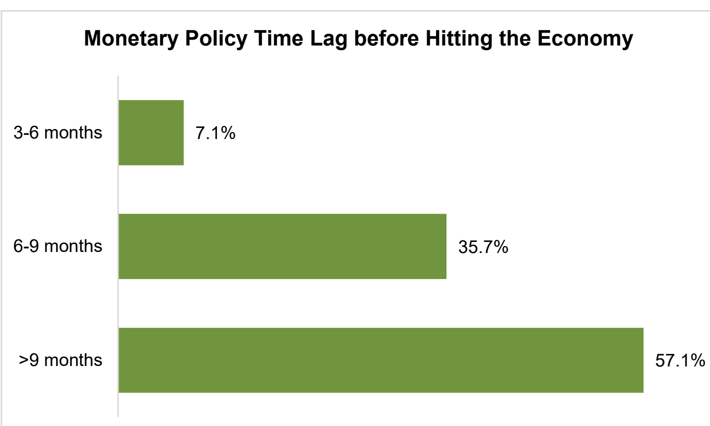
To begin, we asked our Economist Roundtable about their expectations for Fed actions. 86.7% of respondents expect the Fed is done with rate hikes.

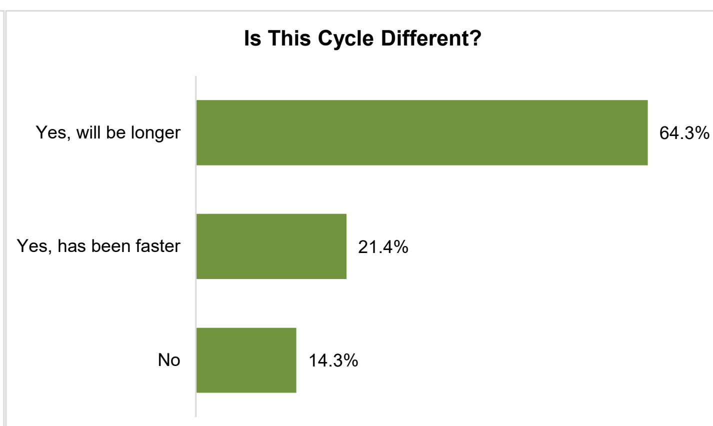


Full Question: With the Fed Funds rate now in the 5.25%-5.50% range, is the Fed done?

Monetary policy comes with a lag time before working its way into the economy. As such, we asked our Economist Roundtable how they view this lag and the current economic cycle.

- 57.1% of respondents believe the lag time is longer than 9 months
- 64.3% of respondents think this cycle will take longer for monetary policy to work its way into the economy

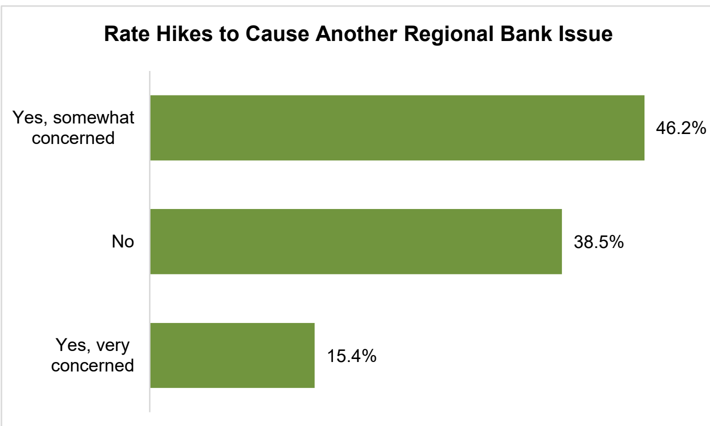


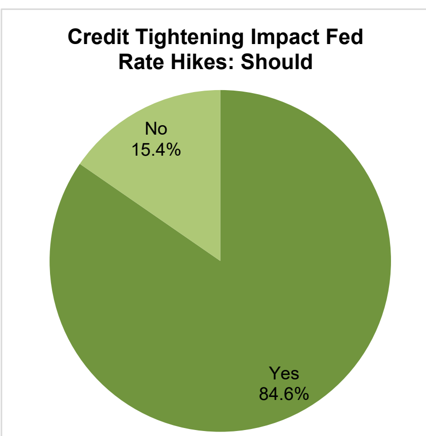


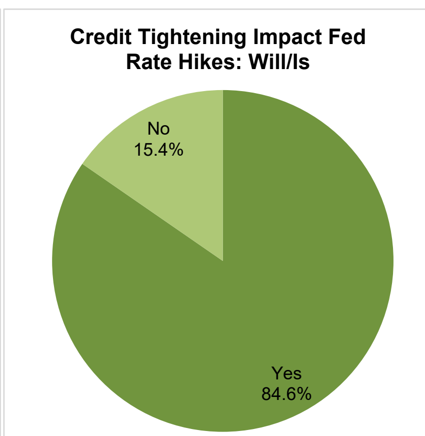
Full Question: Monetary policy comes with a lag time before working its way into the economy. What is that lag time?
Full Question: Is this cycle different for monetary policy to work its way into the economy?

We then asked our Economist Roundtable about the impact on the Fed's rate decisions from the pace of rate hikes and credit tightening.

- 46.2% of respondents are somewhat concerned the rate hikes will cause another regional bank issue as seen earlier in the year
- As to whether the ongoing credit tightening should be a factor in the Fed's decision making for further rate actions:
    - 84.6% of respondents said it should be
    - 84.6% of respondents said it is/will be



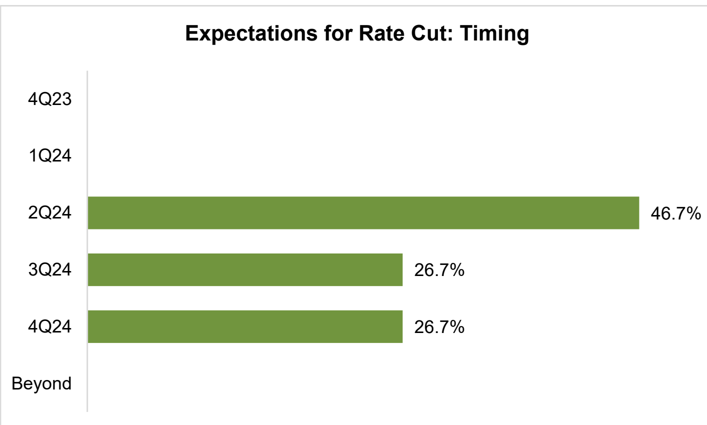


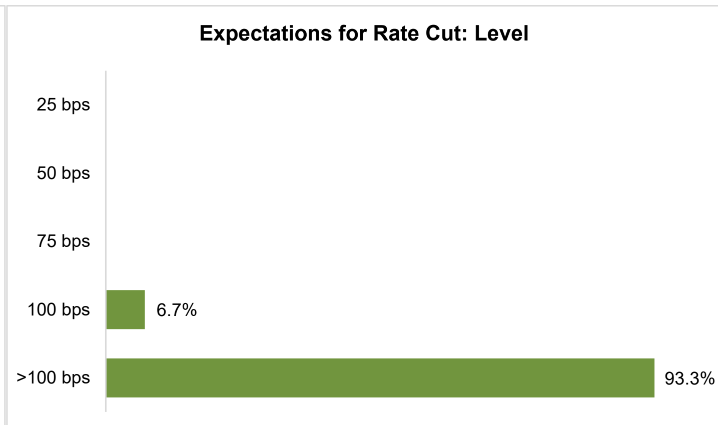


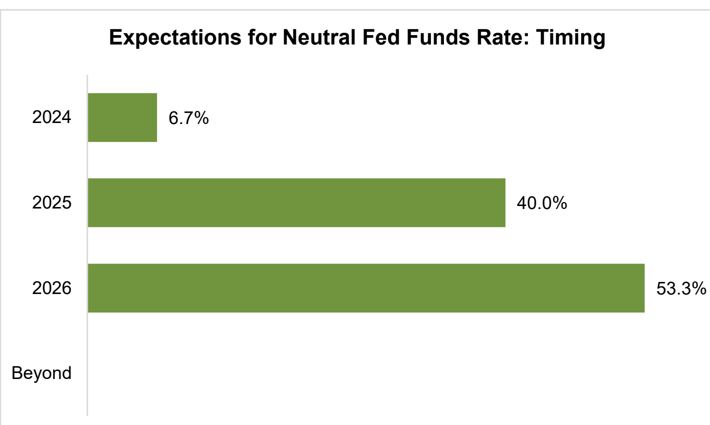
Full Question: As we move through the monetary lag time, are you concerned that the pace of rate hikes will cause another regional bank issue as seen earlier in the year?
Full Question: Should this credit tightening be a factor in the Fed's decision making for further rate hikes: (a) Do you believe it should be? (b) Do you believe it is/will be?

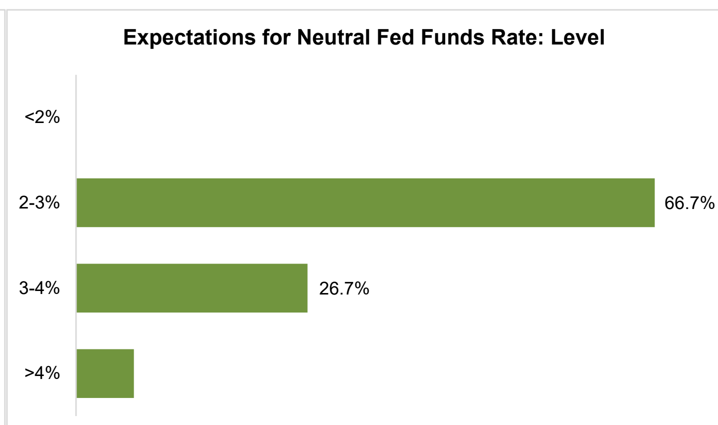
With 86.7% of survey respondents believing the Fed is done with rate hikes, economists – and market participants – are now asking when will the Fed begin cutting rates?

- 46.7% of respondents expect the Fed to cut rates in 2Q24
- Once the Fed begins cutting rates, 93.3% of respondents think it will take over 100 bps of cuts before stabilizing
- 53.3% of respondents expect the Fed Funds rate to return to neutral in 2026
- 66.7% of respondents estimate the neutral Fed Funds rate to be 2-3%



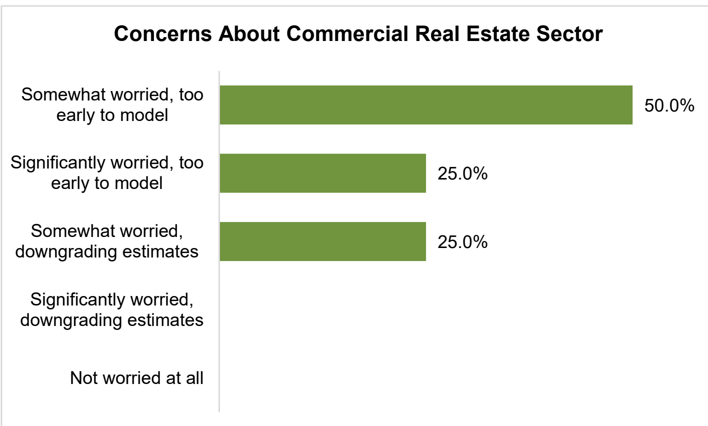


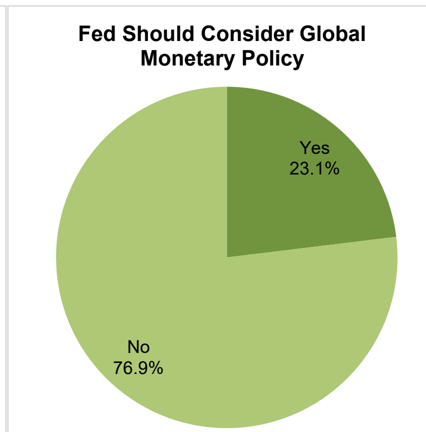




Full Question: Do you expect a rate cut any time soon, and if so when?
Full Question: Once the Fed begins cutting rates, how many bps do you think they will have to cut before stabilizing?
Full Question: When will the Fed Funds rate return to neutral?
Full Question: What is your estimate for the neutral rate?

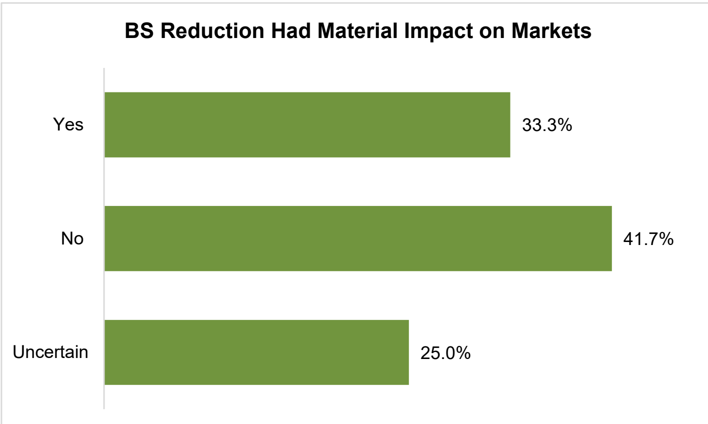
- Given the ongoing credit tightening, 50.0% responded they are “somewhat worried, but too early to model” the impact on the commercial real estate sector
- 76.9% of respondents do not believe the Fed should be considering global monetary policy responses when making its decisions on its own policy moves





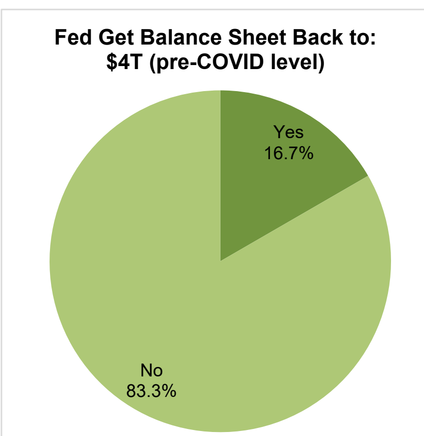
Full Question: Given the aforementioned credit tightening and its impact on the economy, how worried are you, in particular, about the commercial real estate sector?
Full Question: Given the continued inflation battle and corresponding monetary policy actions in the UK and EU, should the Fed be considering global monetary policy responses when making its decisions on its own policy moves?

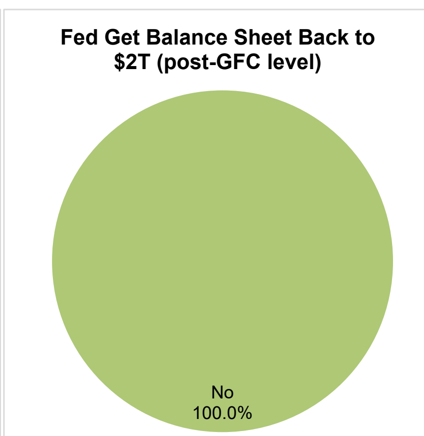
- 41.7% of respondents do not expect the pace of balance sheet (BS) reduction to have a material impact on markets



As to whether the Fed will <u>ever</u> get its balance sheet back down to historical levels, respondents indicated:

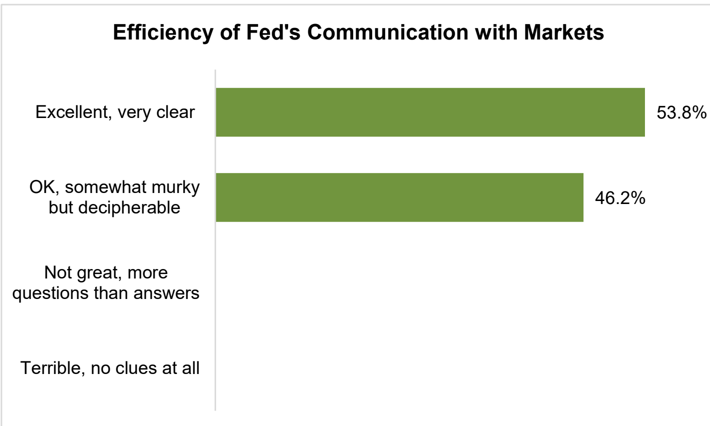
- The pre-COVID level, ~$4 trillion: No (83.3% of respondents)
- The post-GFC level, ~$2 trillion: No (100% of respondents)





Full Question: Will the Fed ever get its balance sheet back down to: (a) The pre-COVID level, ~$4 trillion? (b) The post-GFC level, ~$2 trillion
Full Question: Has the Fed's balance sheet reduction from the $9.0 trillion peak in April 2022 to $7.9 trillion at the end of October had a material impact on market conditions?

Finally, we asked respondents to rate the efficiency of the Fed's communication with markets around its timeline for monetary policy adjustments. Respondents were equally split between the communication being very clear (53.8% of respondents), followed by somewhat murky but decipherable (46.2% of respondents).



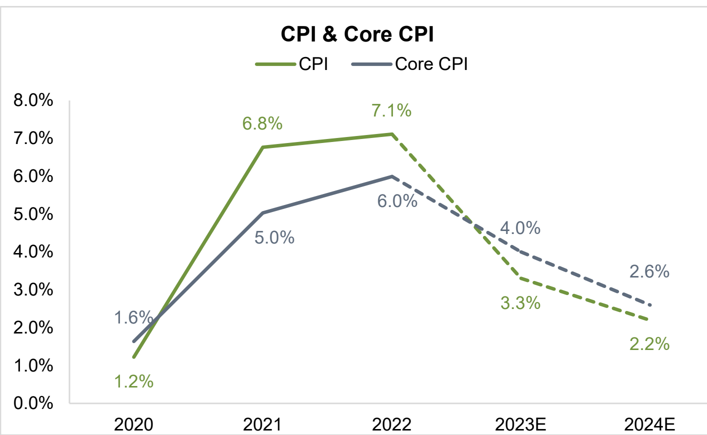
Full Question: In general, how do you rate the efficiency of the Fed's communication with markets around its timeline for monetary policy adjustments (rate moves, balance sheet draw down)?

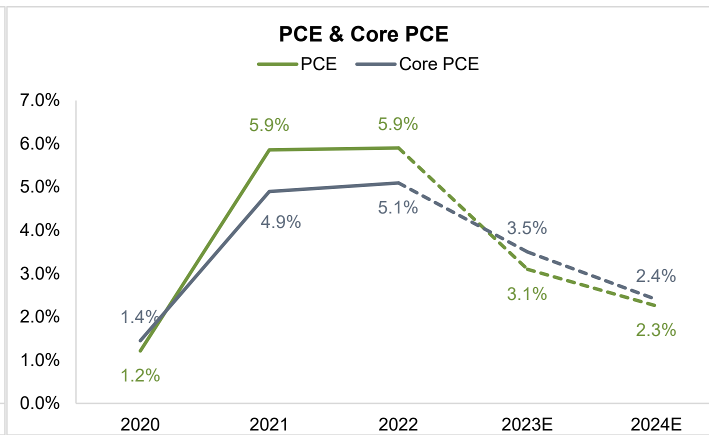
Inflation Expectations

Economists and market participants continue to watch inflation reports[2]. More importantly, inflation is the main metric the Fed is watching to determine policy actions. In this section, we asked our Economist Roundtable their inflation expectations and about the important drivers to bringing down inflation.

Our Economist Roundtable had the following expectations for inflation forecasts:

- CPI: +3.3% to end 2023, +2.2% to end 2024 (2022 actual 7.1%)
- Core CPI: +4.0% to end 2023, +2.6% to end 2024 (2022 actual 6.0%)
- PCE: +3.1% to end 2023, +2.3% to end 2024 (2022 actual 5.9%)
- Core PCE: +3.5% to end 2023, +2.4% to end 2024 (2022 actual 5.1%)



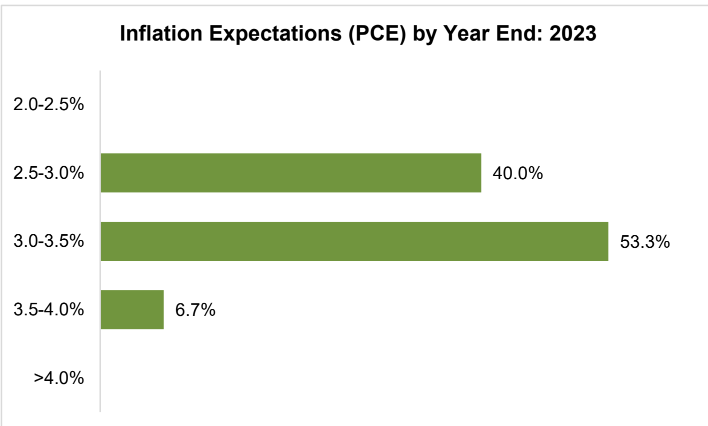


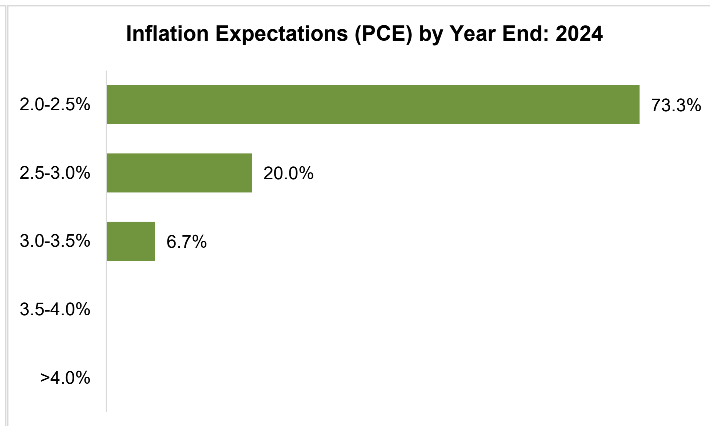
Source: Bureau of Economic Analysis, SIFMA Economist Roundtable

[2] Release dates for November data. CPI/Core CPI December 12; PCE/Core PCE December 21.

We asked our Economist Roundtable about the path back down to the 2% inflation target. We began by asking them where they expect PCE to end:

- 2023: 3.0-3.5% (53.3% of respondents)
- 2024: 2.0-2.5% (73.3% of respondents)

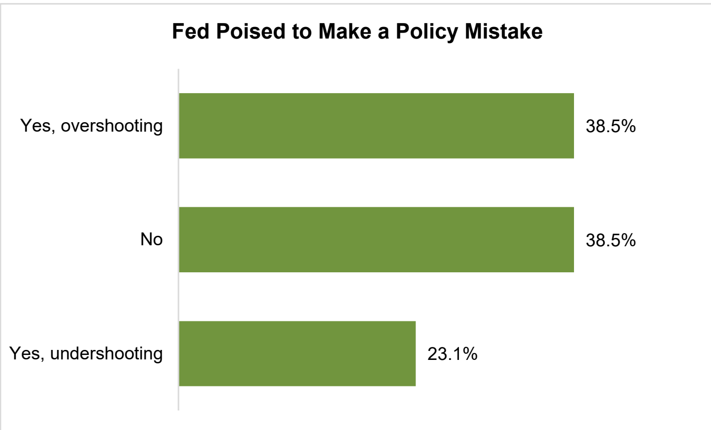


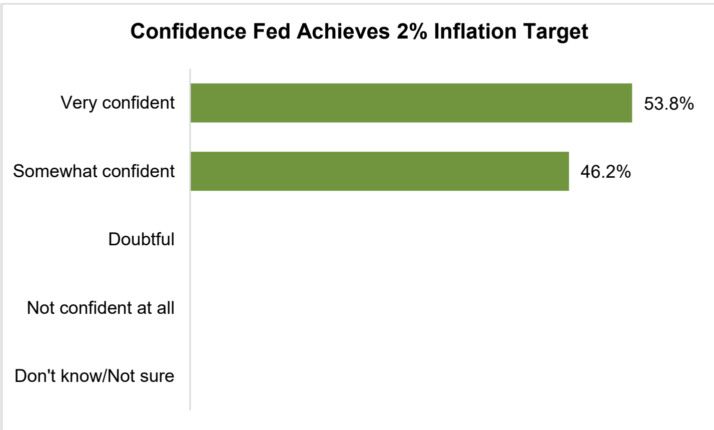


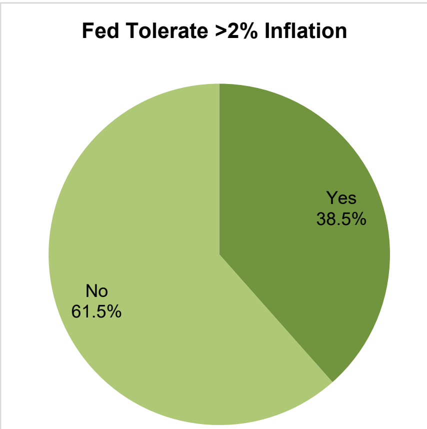
Full Question: With the PCE at 3.5% as of September – down from the June 2022 high of 7.0% but still above the Fed's 2% target – where do you see PCE by the end of:2023/2024?

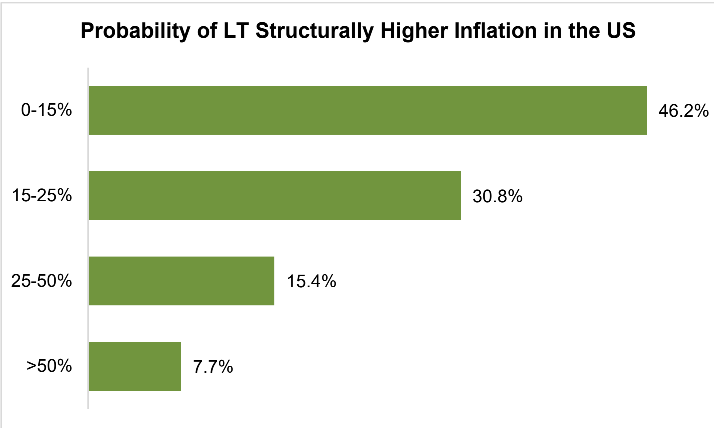
We then dove deeper into the Fed's ability to achieve its 2% objective in a sustainable way:

- 38.5% of respondents indicated the Fed is poised to make a mistake in tackling inflation by overshooting, while another 38.5% do not expect a mistake
- 53.8% of respondents are very confident the Fed can achieve its 2% goal in a sustainable way
- As to whether the Fed will tolerate an above 2% inflation level, 61.5% of respondents do not believe so
- 46.2% of respondents expect a 0% to 15% probability the U.S. will experience structurally higher inflation over the longer run (defined as longer than three years from now)





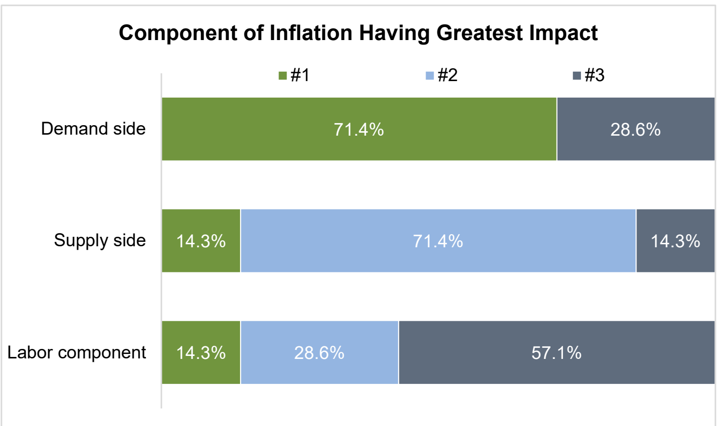




Full Question: The Fed has vowed to do whatever it takes to rein in inflation. How confident are you the Fed can achieve its 2% goal in a sustainable way?
Full Question: Are you concerned the Fed is poised to make a mistake when it comes to tackling inflation?
Full Question: Do you believe the Fed will tolerate an above 2% inflation level?
Full Question: Looking further out, what probability would you place on the U.S. experiencing structurally higher inflation over the longer run (defined as longer than three years from now)?

When analyzing inflation, it can be broken out into three sections: demand side, supply side, and labor component. We asked our Economist Roundtable to rank which factor is having the greatest impact on the sticky nature of inflation. We highlight the following:

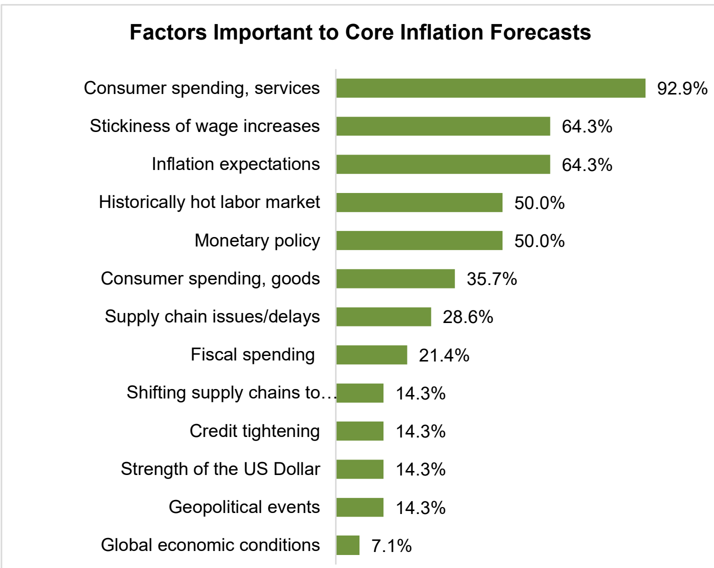
- Demand side: 71.4% responded #1 factor
- Supply side: 71.4% responded #2 factor
- Labor component: 57.1% responded #3 factor



Full Question: Which component do you believe has had the greatest impact on the level/peak or the sticky nature of inflation?

The top factors listed as most important to core inflation forecasts include:

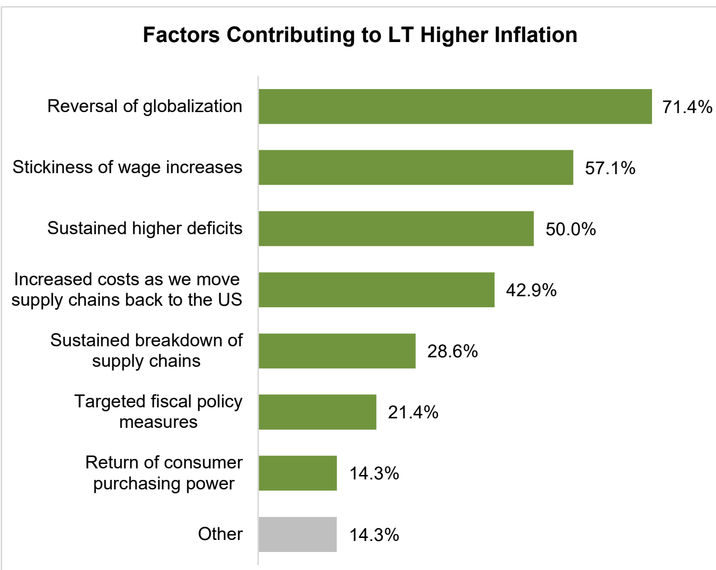
- Consumer spending on services, 92.9% of respondents
- Stickiness of wage increases and inflation, both 64.3% of respondents
- Historically hot labor market and monetary policy, both 50.0% of respondents



Full Question: What are the most important factors in your outlook for core inflation? (Ranked by percentage of economists that listed a factor)

The top factors to push long-term inflation higher include:

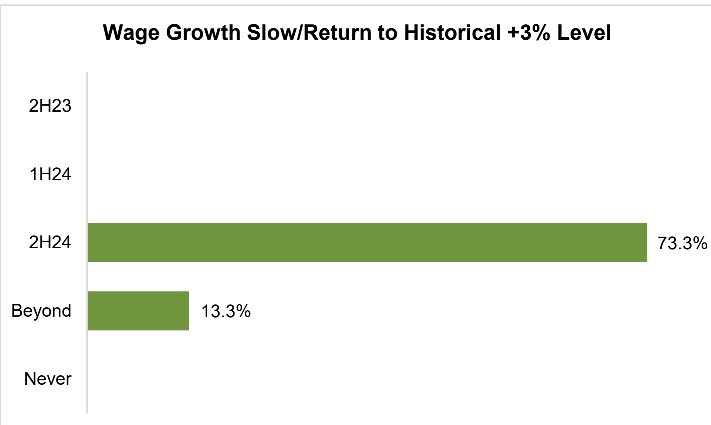
- Reversal of globalization, 71.4% of respondents
- Stickiness of wage increases, 57.1% of respondents
- Sustained higher deficits, 50.0% of respondents
    - Other: Fed's willingness to tolerate higher inflation

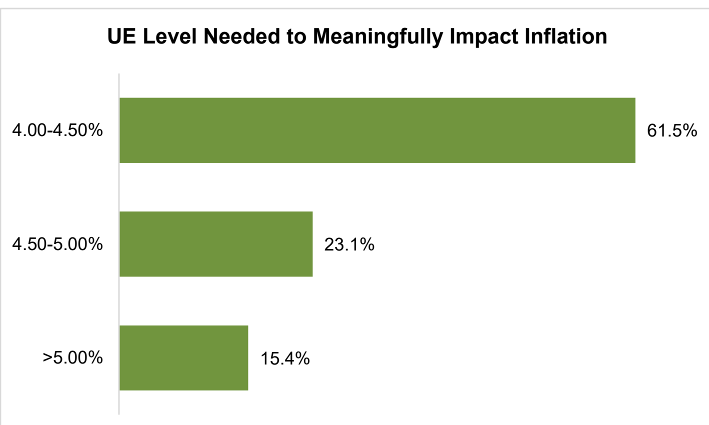


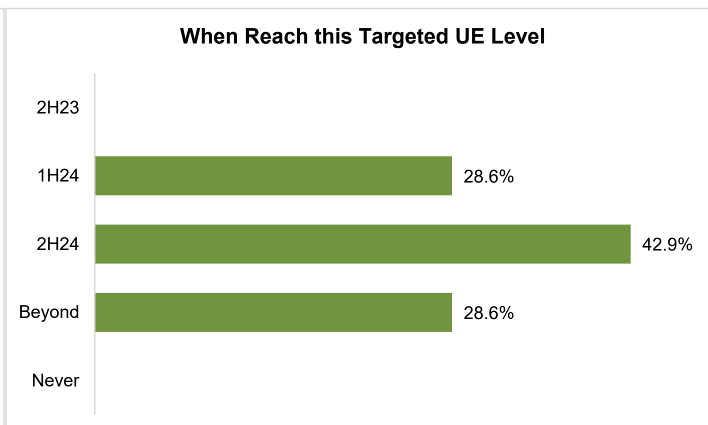
Full Question: What factors do you believe could push long-term inflation higher? (Ranked by percentage of economists that listed a factor)

Attention continues to be paid to the labor side of the inflation equation. As such, we asked our Economist Roundtable their expectations for wages and unemployment.

- 73.3% of respondents expect growth to return to the historical +3.0% level (three-year pre-COVID average) by 2H24
- 61.5% of respondents believe the U3 unemployment rate needs to increase to 4.0-4.5% to meaningfully impact inflation
- 42.9% of respondents expect to reach this U3 target rate by 2H24





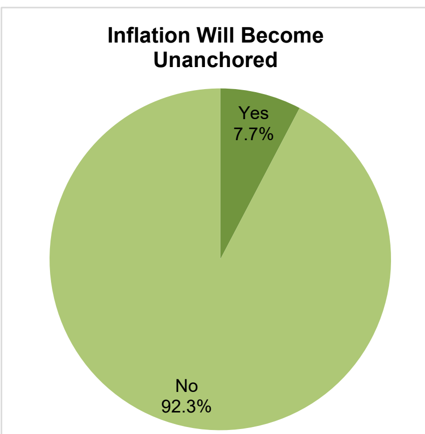


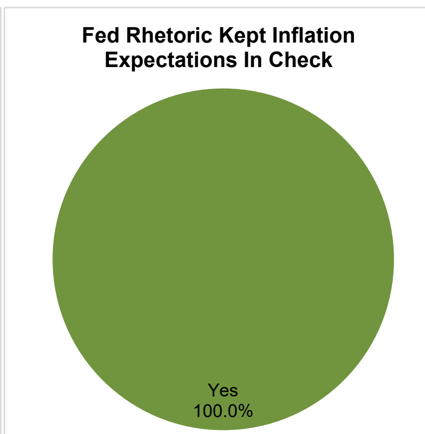
Full Question: While wage growth averaged +5.3% per month in 2022, year-to-date through September the trend is down to +4.4%. When do you expect the acceleration to slow closer to the historical +3.0% level (three-year pre-COVID average)?
Full Question: While unemployment has come down, it remains range bound. At 3.8% in September, what level does the Fed need to see to meaningfully impact inflation?
Full Question: Based on your answer above, when do you believe we can reach this targeted U3 unemployment rate?

Next, we move on to address inflation expectations, an important factor driving the inflation rate. With rising inflation, if consumers believe prices will rise again in the future, this can create a self-fulfilling prophecy. Expected higher prices push employees to demand wage increases and consumers to not delay today's purchases. At the same time, businesses increase prices to accommodate higher wages and consumer demand. This further drives up inflation.

As such, we asked our Economist Roundtable about their thoughts on inflation expectations.

- 92.3% of respondents expect inflation expectations will not become unanchored
- Unlike in the 1970s, 100% of respondents believe the Fed's strong rhetoric has kept inflation expectations in check

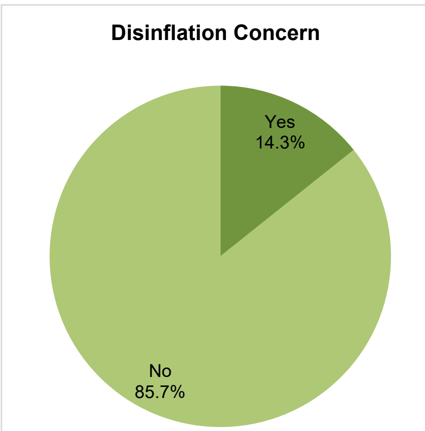


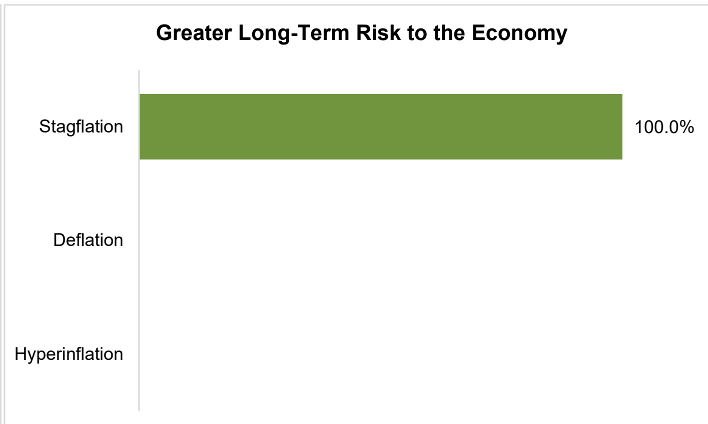


Full Question: Do you believe inflation expectations will become unanchored?
Full Question: Do you believe, unlike in the 1970s, the Fed's strong rhetoric has kept inflation expectations in check?

Finally, we close out the inflation section by looking to the future.

- 85.7% of respondents do not see any concern of disinflation at this point in time
- 100% of respondents believe the greater long-term risk to the economy is stagflation

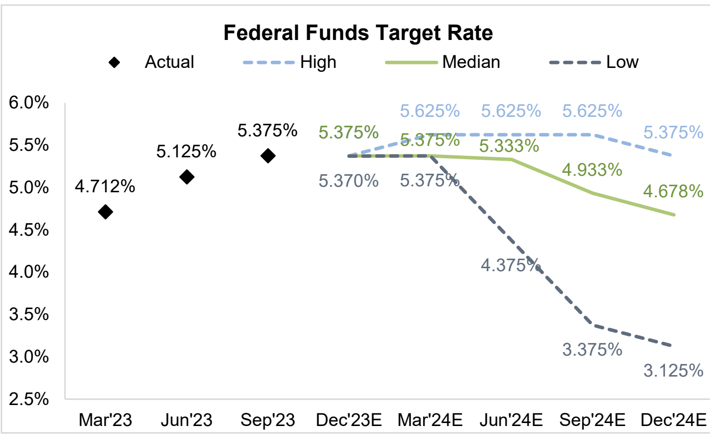


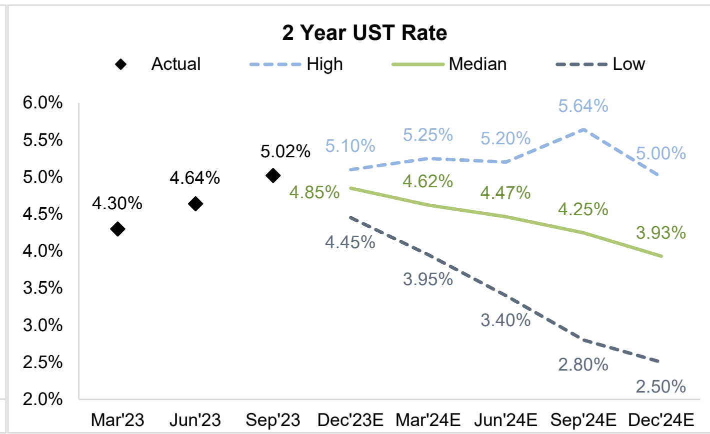


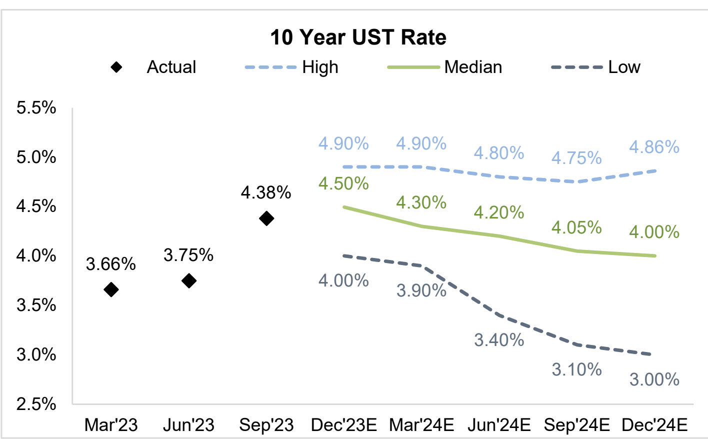
Full Question: Is there any concern of disinflation at this point in time?
Full Question: What is the greater long-term risk to the economy?

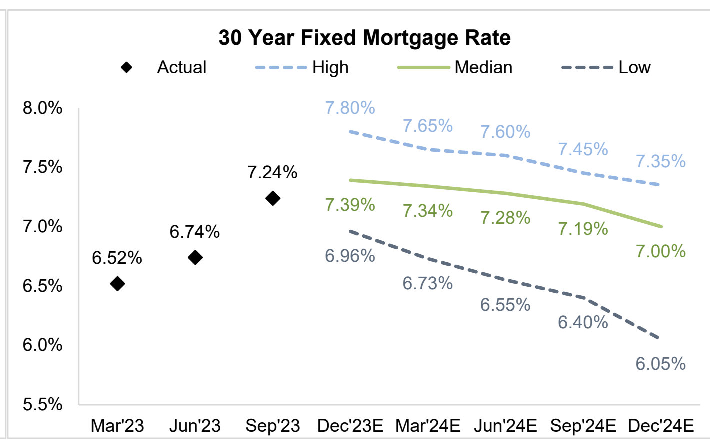
Interest Rates

Putting together all of the above, in this section we asked our Economist Roundtable what factors are impacting short-term interest rates, as well as their expectations on long-term Treasury and mortgage rates. At the time of the survey launch (Nov 6, 2023), the ten-year Treasury was 4.67%. The thirty-year mortgage rate was 7.72%. Based on these figures, we polled our economists on their expectations for rates by the end of this year and next.

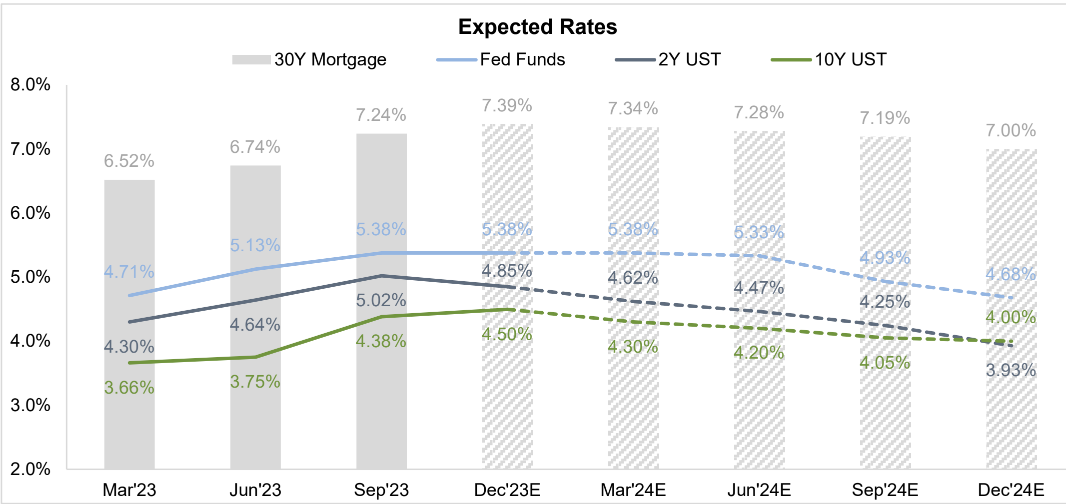








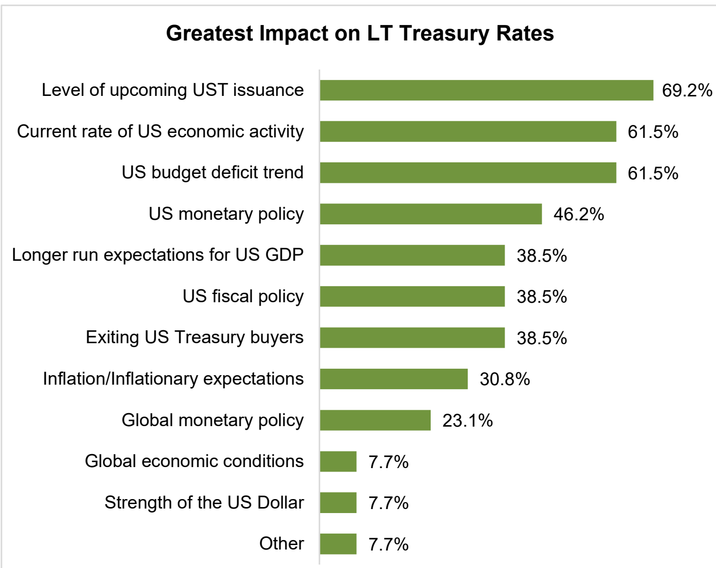
Source: Federal Reserve, Bloomberg, SIFMA Economist Roundtable
Note: Monthly averages. Fed funds = midpoint of target rate range



Source: Federal Reserve, Bloomberg, SIFMA Economist Roundtable
Note: Monthly averages. Fed funds = midpoint of target rate range

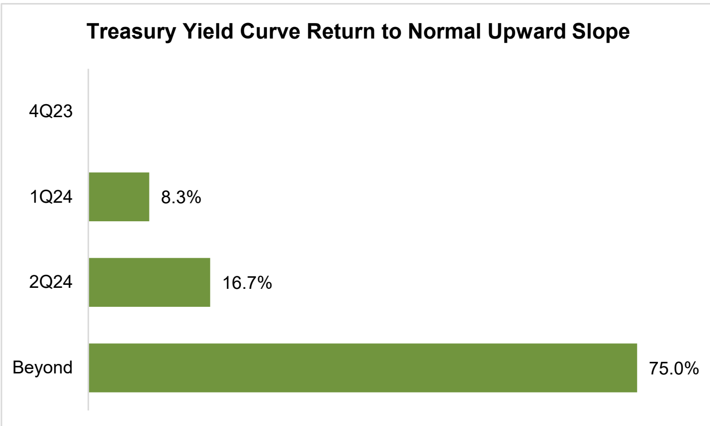
Then, we asked our Economist Roundtable to explain the factors that have the greatest impact on their expectations for long-term Treasury yields.

- Level of upcoming US Treasury issuance, 69.2% of respondents
- Current rate of US economic activity, 61.5% of respondents
- US budget deficit trend, 61.5% of respondents



Full Question: Longer term rates have risen 1.008 bps since the start of the year – with 0.928 of this coming since the end of July – is this a reflection of structural variables such as fiscal deficit, international policy, etc. or an adjustment in expectations for monetary policy? (Ranked by percentage of economists that listed a factor)

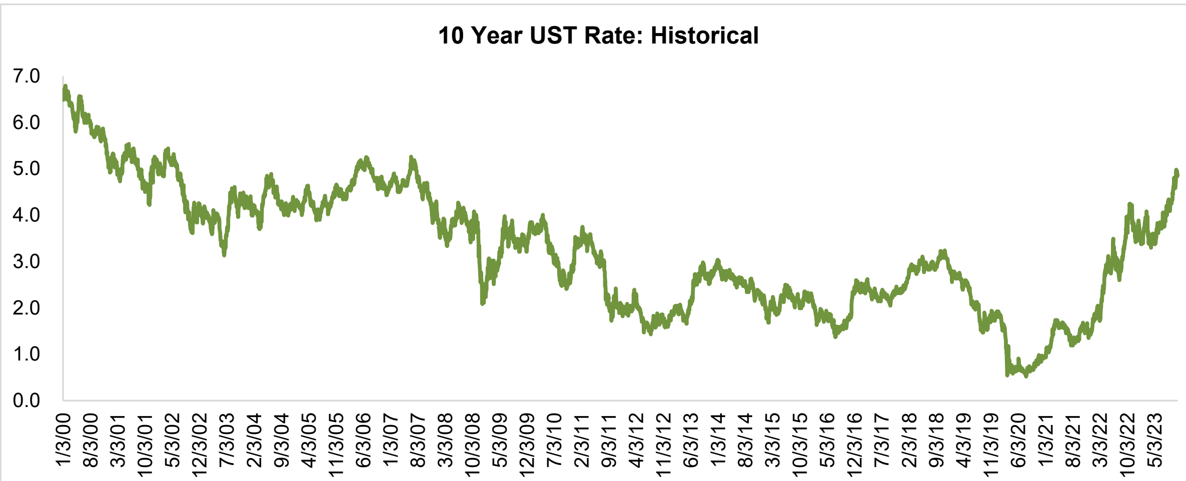
Finally, we asked our economists when they expect the Treasury yield curve to return to a normal upward sloping curve. 75.0% of respondents don’t expect this to occur until beyond 2024.

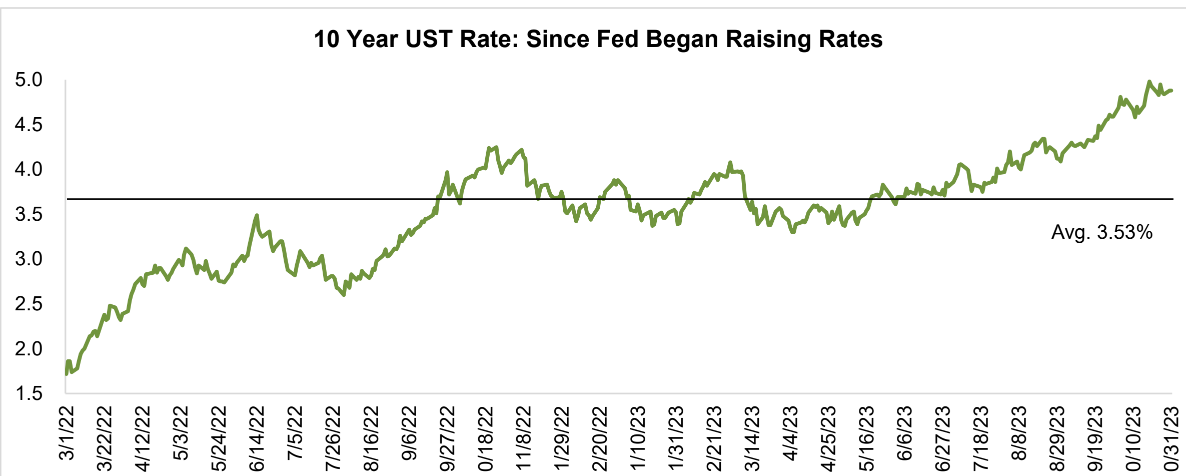


Full Question: In general, when do you expect the Treasury yield curve to return to a normal upward sloping curve?

Historical Rates: 10 Year UST and 30 Year Mortgage

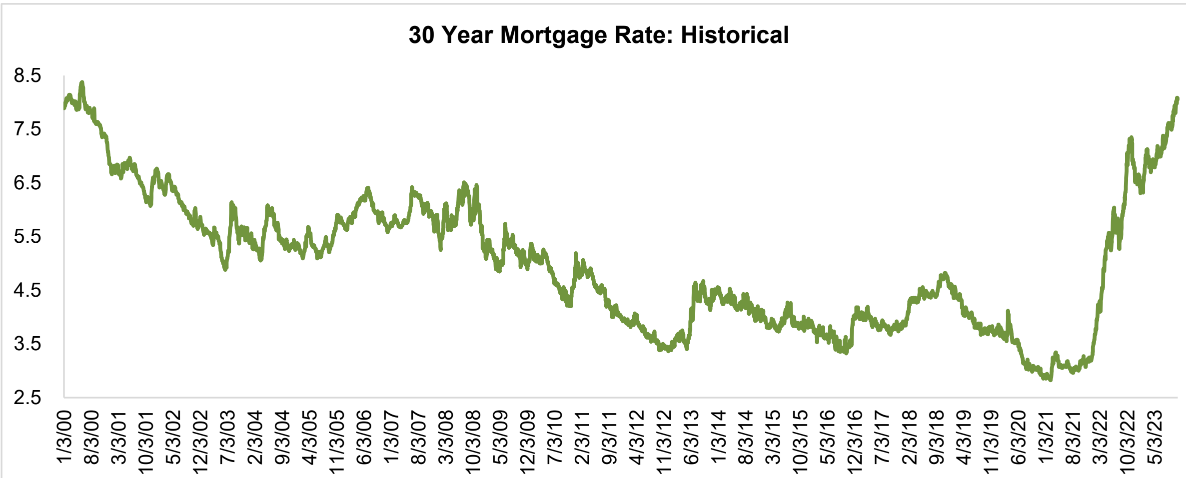
10-Year UST Rate

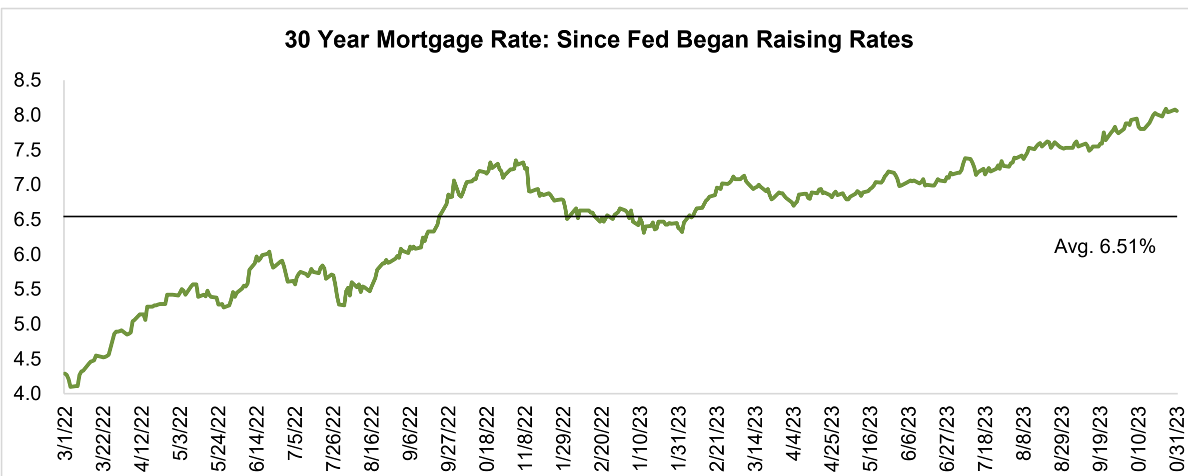




Source: US Treasury, SIFMA Economist Roundtable
Note: Avg = 3/1/2022-10/31/2023

30-Year Mortgage Rate



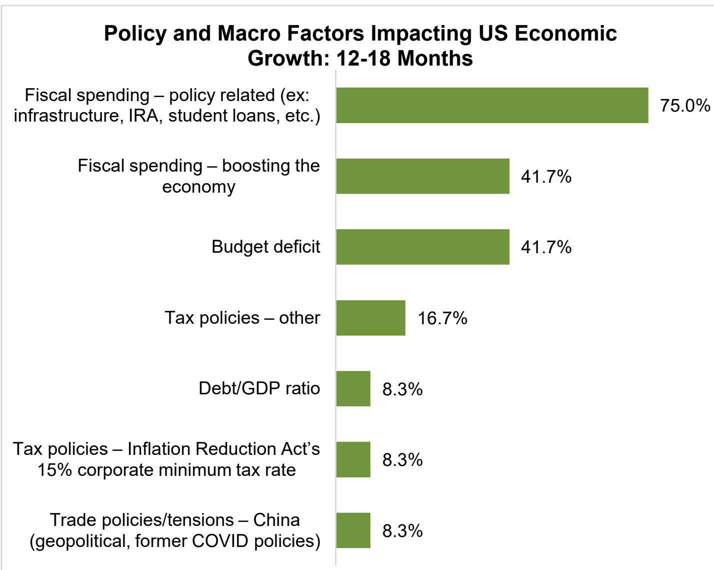


Source: Bloomberg, SIFMA Economist Roundtable
Note: 30Y Mortgage Rate = Bankrate.com US Home Mortgage 30Y Fixed National Average; Avg = 3/1/2022-10/31/2023

Policy and Macro Factors

We asked our Economist Roundtable what policy and macro factors will have the greatest impact on U.S. economic growth over the next 12-18 months. The top three results were:

- Policy related fiscal spending (ex: infrastructure, IRA, student loans, etc.), 75.0% of respondents
- Fiscal spending to boost the economy, 41.7% of respondents
- Budget deficit, 41.7% of respondents



Full Question: What policy and macro factors will have the greatest impact on U.S. economic growth over the next 12-18 months? (Ranked by percentage of economists that listed a factor)

SIFMA Economist Roundtable Forecasts

Economic Indicators – Annual

(%, unless indicated)	2020	2021	2022	2023E	2024E
Real GDP (4Q/4Q)	-1.1	5.4	0.7	2.5	0.7
Real Personal Consumption (4Q/4Q)	-0.8	7.2	1.2	2.6	0.9
Nonresidential Fixed Investment (4Q/4Q)	-3.7	4.9	5.6	3.5	0.4
Residential Fixed Investment (4Q/4Q)	15.9	0.4	-17.4	-1.2	0.3
Real Federal Government Spending (4Q/4Q)	4.5	0.6	-0.1	3.5	1.0
Real State and Local Government Spending (4Q/4Q)	-0.9	-0.6	1.3	3.6	1.0
Non-Farm Payroll Employment (K, avg. monthly change)	-774.1	605.6	399.4	212.0	40.3
Unemployment Rate (4Q average)	6.8	4.2	3.6	3.9	4.4
Labor Force Participation Rate (4Q average)	61.6	61.9	62.2	62.8	62.9
Average Hourly Earnings (4Q/4Q)	4.9	5.3	4.9	4.0	3.3
Real Disposable Income (4Q/4Q)	4.6	0.3	-1.5	3.6	1.6
Personal Savings Rate (annual average)	15.3	11.3	3.3	4.4	4.2
CPI (4Q/4Q)	1.2	6.8	7.1	3.3	2.2
Core CPI (4Q/4Q)	1.6	5.0	6.0	4.0	2.6
PCE (4Q/4Q)	1.2	5.9	5.9	3.1	2.3
Core PCE (4Q/4Q)	1.4	4.9	5.1	3.5	2.4
Industrial Production Index (annual % change)	-7.2	4.4	3.4	0.3	0.1
Housing Starts (K, annual average)	1,396.9	1,605.8	1,551.3	1,386	1,354
S&P Corelogic Case-Shiller Home Prices (Y/Y)	6.1	17.1	14.8	1.4	0.3
New Home Sales (K, annual average)	832.8	769.3	636.9	684.0	705.0
Motor Vehicle Sales (M, annual average)	14.4	14.9	13.7	15.5	15.2
Federal Budget ($B, FY)	-3,131.9	-2,776.0	-1,375.0	-1,695	-1,700

Economic Indicators – Quarterly

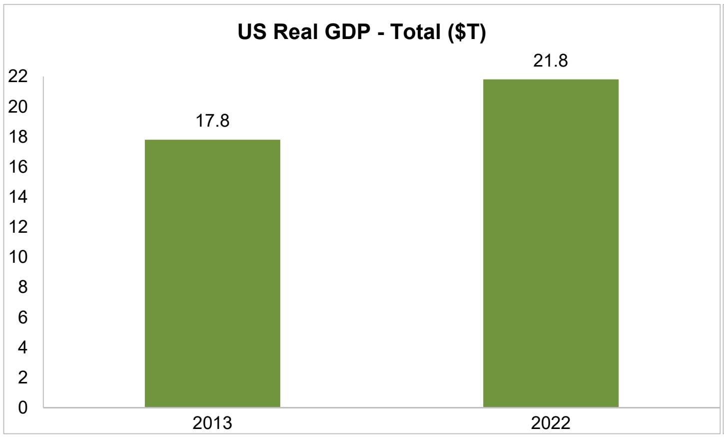
(%)	1Q23	2Q23	3Q23	4Q23E	1Q24E	2Q24E	3Q24E	4Q24E
Real GDP (Q/Q, annualized)	2.2	2.1	5.2	1.0	0.9	0.4	1.0	1.5
Real Personal Consumption (Q/Q, annualized)	3.8	0.8	3.6	1.9	0.9	0.7	1.1	1.5
Nonresidential Fixed Investment (Q/Q, annualized)	5.7	7.4	1.3	1.5	1.0	-0.2	1.4	0.9
Residential Fixed Investment (Q/Q, annualized)	-5.3	-2.2	6.2	-1.1	-1.0	-0.5	1.8	2.5
Unemployment Rate	3.5	3.6	3.7	3.9	4.0	4.3	4.4	4.5
CPI (Y/Y)	5.8	4.1	3.6	3.3	3.0	2.7	2.3	2.3
Core CPI (Y/Y)	5.6	5.2	4.4	4.0	3.5	3.0	2.8	2.6
PCE (Y/Y)	5.0	3.9	3.4	3.1	2.6	2.6	2.4	2.3
Core PCE (Y/Y)	4.8	4.6	3.9	3.5	3.0	2.6	2.6	2.4

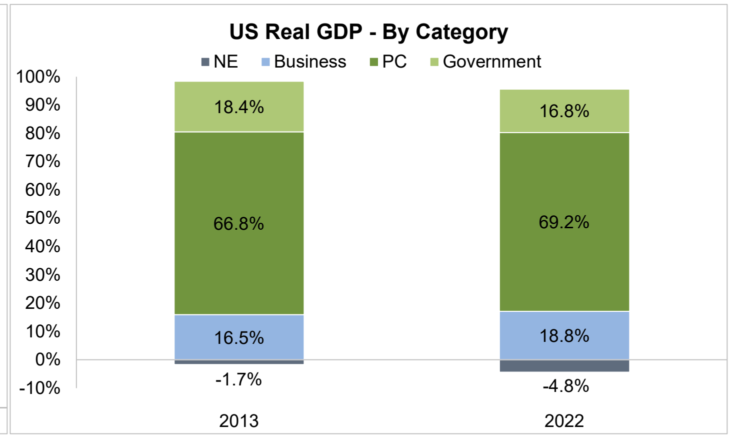
Interest Rates

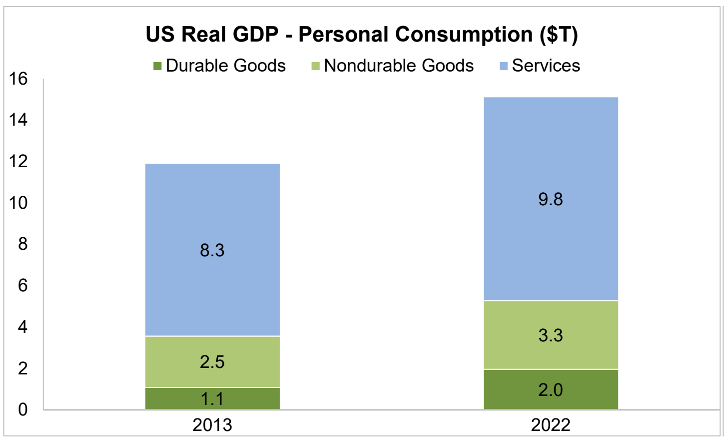
(%, monthly averages)	Mar'23	Jun'23	Sep'23	Dec'23E	Mar'24E	Jun'24E	Sep'24E	Dec'24E
Federal Funds Target Rate (midpoint)	4.712	5.125	5.375	5.375	5.375	5.333	4.933	4.678
2-Year UST Yield	4.30	4.64	5.02	4.85	4.62	4.47	4.25	3.93
10-Year UST Yield	3.66	3.75	4.38	4.50	4.30	4.20	4.05	4.00
30-Year Fixed Mortgage Rate	6.52	6.74	7.24	7.39	7.34	7.28	7.19	7.00

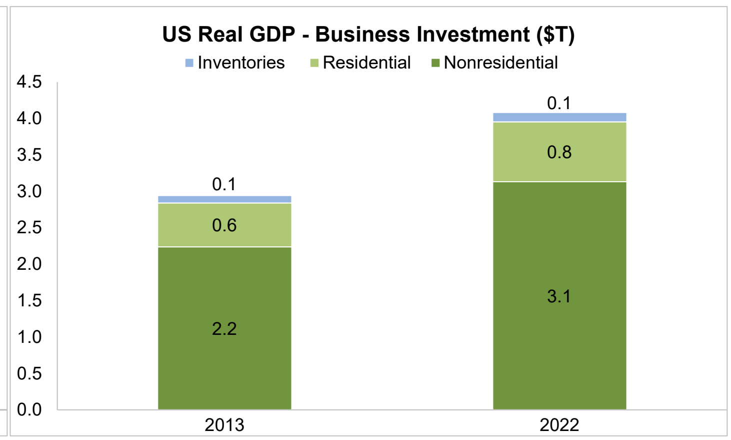
Reference Guide: Economic Landscape

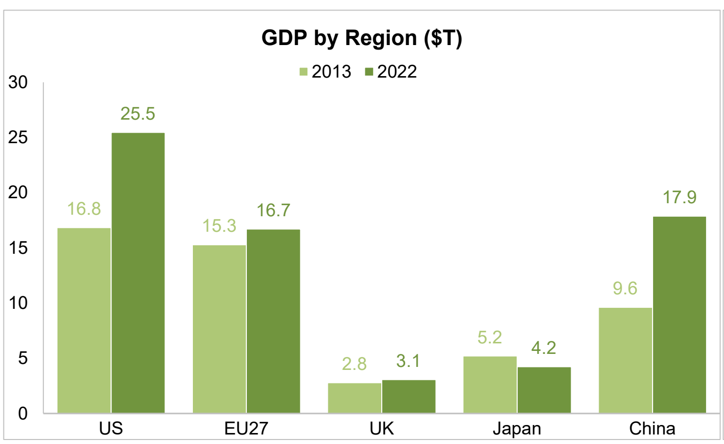
GDP Breakout

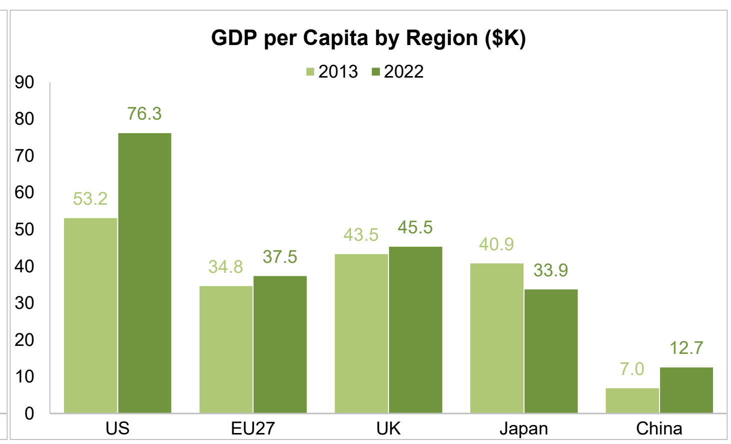




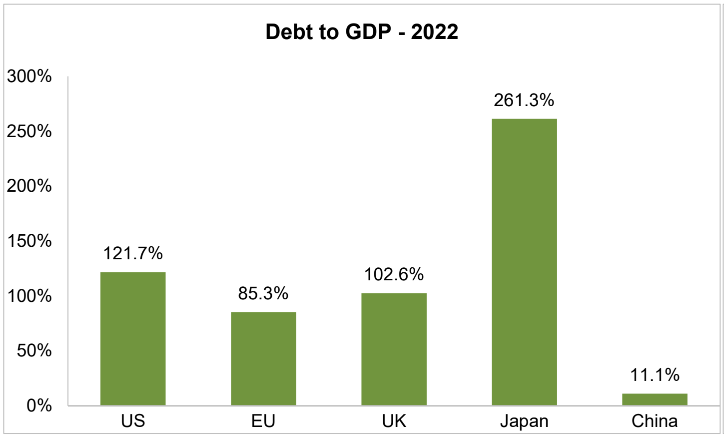


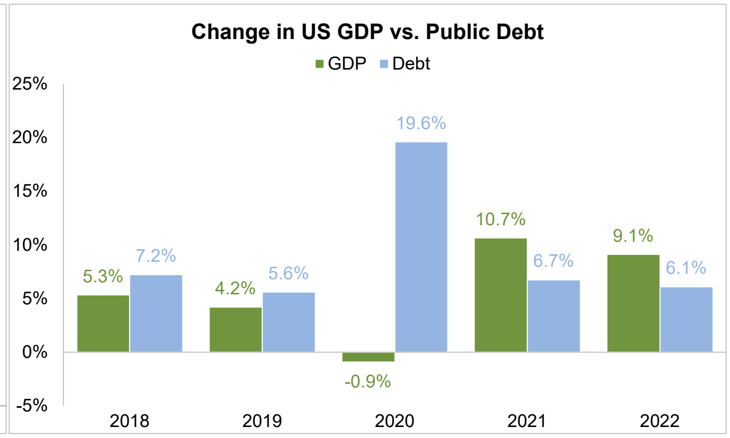


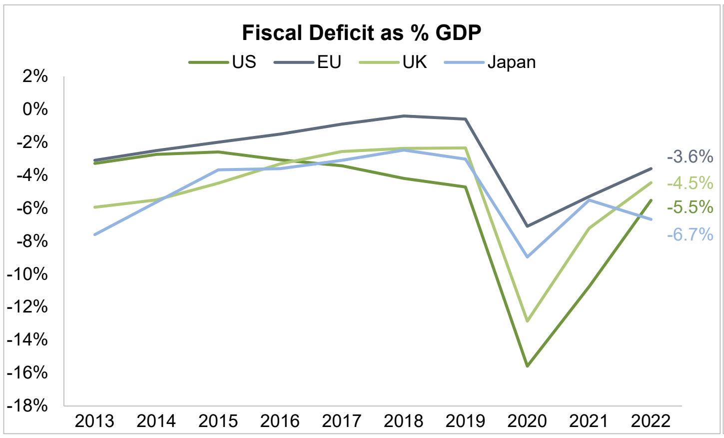


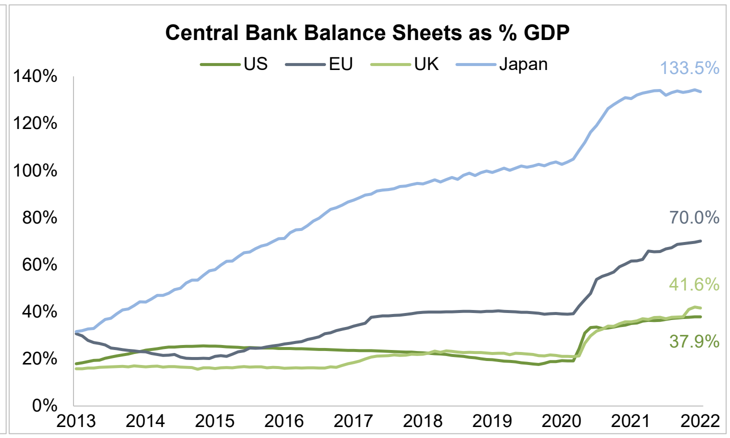


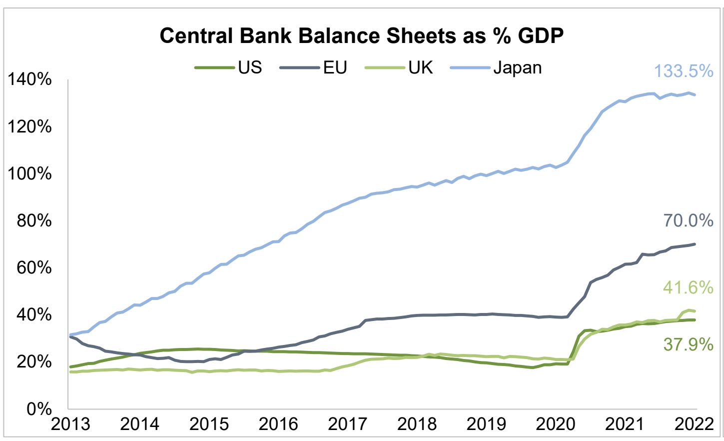
Debt and Fed Balance Sheet

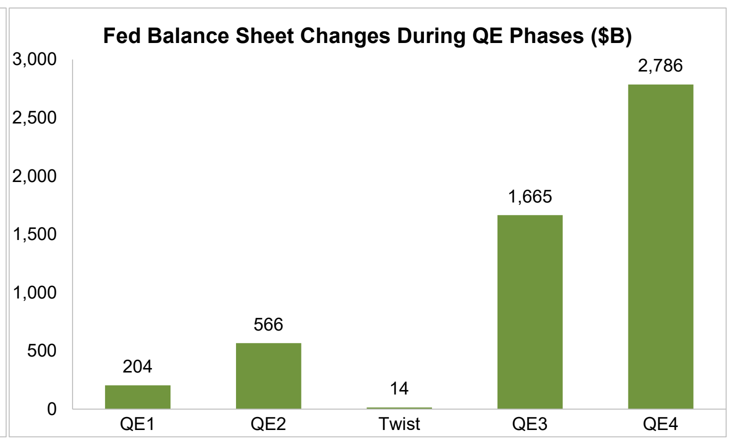




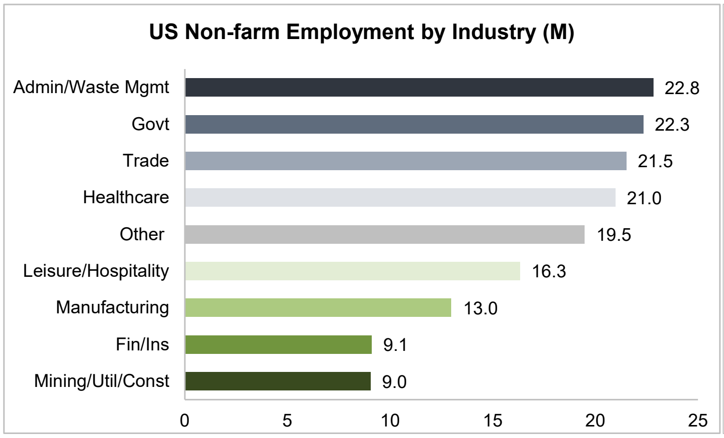


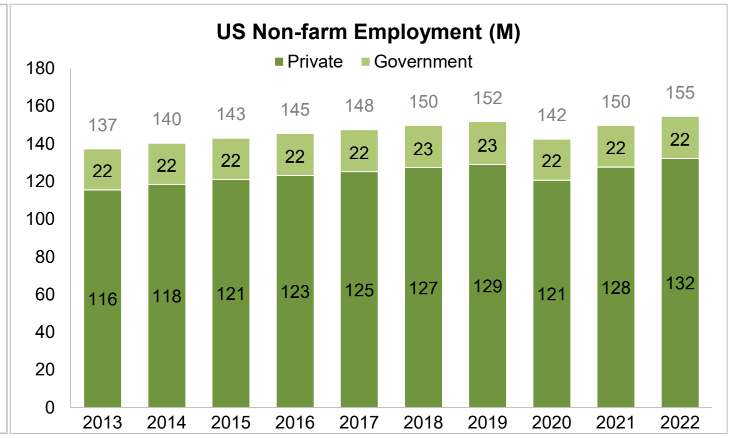


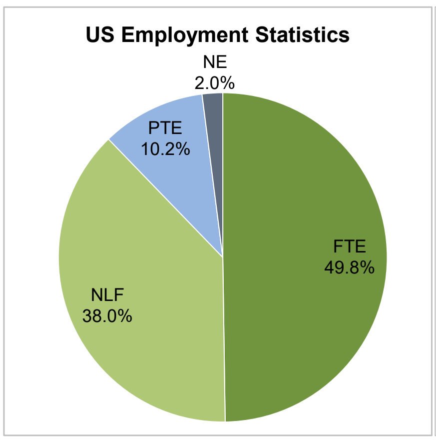


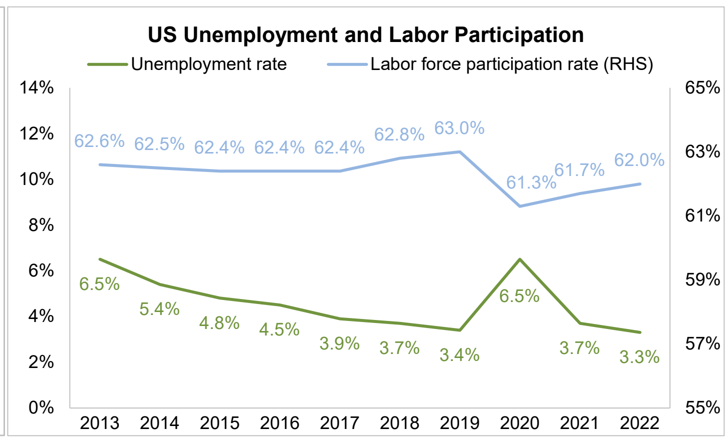


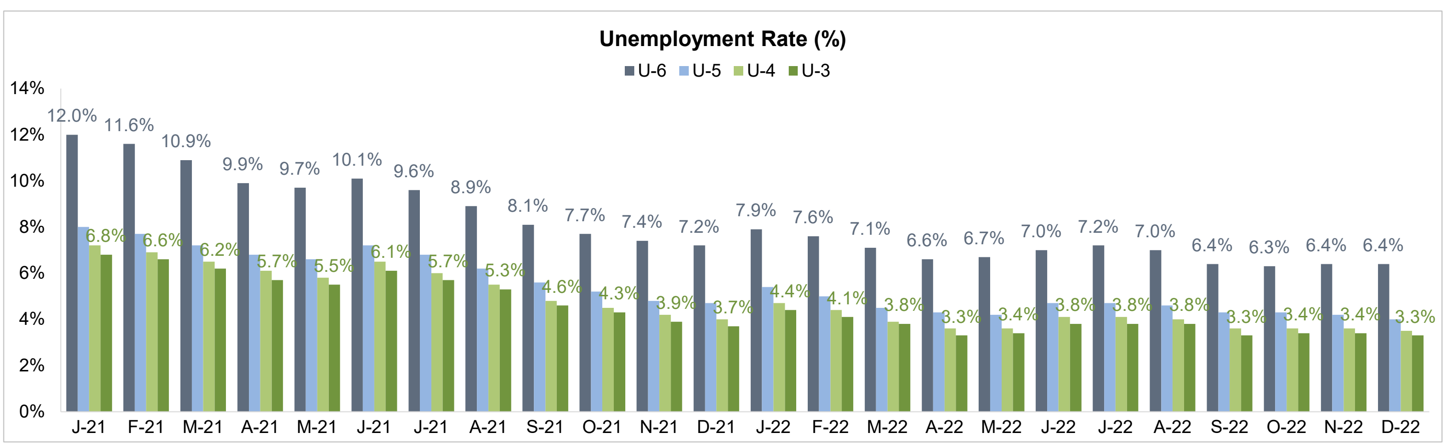
Employment Breakout











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 U.S. 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 U.S. 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: About the SIFMA Economist Roundtable

The SIFMA Economist Roundtable brings together chief U.S. economists from over 20 global and regional financial institutions. SIFMA Research undergoes a semiannual U.S. Economic Survey with this group, analyzing the median economic forecasts of Roundtable members, published prior to the upcoming Federal Open Market Committee (FOMC) meetings in June and December. In those reports, we analyze the Economist Roundtable's expectations for: GDP, unemployment, inflation, interest rates, etc. We also review expectations for policy moves at the upcoming FOMC meeting and discuss key macroeconomic topics and how these factors impact monetary policy.

SIFMA Research also produces Quarterly Flash Polls 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/economist-roundtable-flash-poll/.

This survey was conducted between November 6-22, 2023.

Appendix: SIFMA Economist Roundtable Members

Chair

Lindsey Piegza, Ph.D.
Stifel Financial

Members

Torsten Slok
Apollo Global Management

Michael Gapen
Bank of America

Marc Giannoni
Barclays Capital

Nathaniel Karp
BBVA Compass

Mickey Levy
Berenberg

Douglas Porter
BMO Financial

Andrew Hollenhorst
Citigroup

Nicholas Van Ness
Credit Agricole

Nannette Hechler-Fayd'herbe
Credit Suisse

Peter Hooper
Deutsche Bank Securities

Christopher Low
FHN Financial

Jan Hatzius
Goldman Sachs

Michael Feroli
J.P. Morgan

Thomas Mills
Jefferies

Mark Zandi
Moody's Analytics

Ellen Zentner
Morgan Stanley

Kevin Cummins
NatWest

Lewis Alexander
Nomura

Carl Tannenbaum
Northern Trust

Augustine Faucher
PNC Financial

Eugenio Alemán
Raymond James

Stephen Gallagher
Société Générale

Jonathan Pingle
UBS Securities

Jay Bryson
Wells Fargo Securities

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