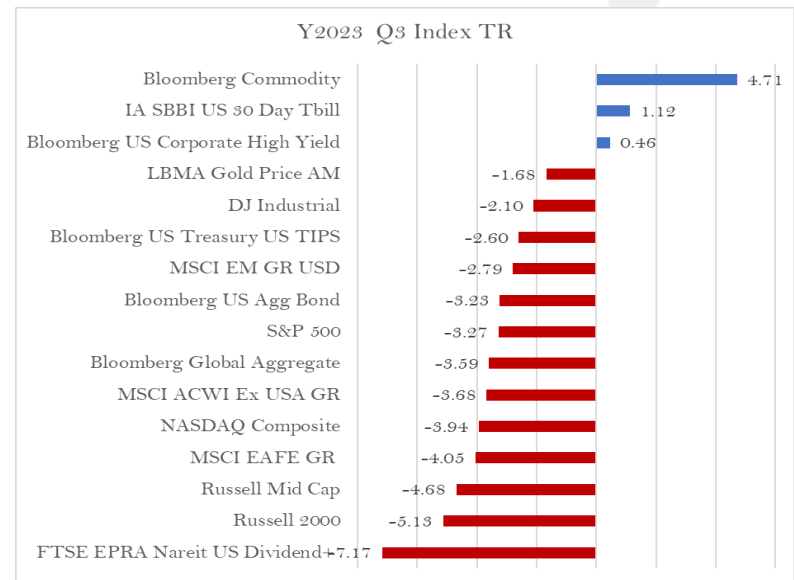


2023 Q3 Commentary: No Shelter from Uncertainty

- The first half of the year was full of hope that inflation will continue to decelerate and thus the Fed will take its foot off the rate hiking gas. The scenario of a soft landing fast became the (desired) base case. This is the immaculate disinflation scenario where the Fed would engineer an environment of continuous disinflation towards 2% while the economy continues to expand slowly (no recession) without a serious hike in unemployment. Although U.S. equities, on an index level, seem to be buoyant, the underlying support has been concentrated in a handful of large-cap technology/AI/communication stocks. There were periodic appearances of market participation being broadened to small and mid-cap stocks.
- The third quarter witnessed a less confident scenario where we saw signs of a slowing economy, although employment remained tight and the Fed continued to push its consistent narrative of more work is needed to bring core inflation to the 2% target. Further, the Fed reiterated the need to hold rates higher for longer (not defined). We saw energy prices jump and market participants expecting the oil price to reach \$100 per barrel and beyond. Consumers are still spending and traveling even though Covid-era savings continue to dwindle and now with credit card debt rising along with default rate. At the same time, the savings rate is rising, suggesting some consumers are bracing for more economic uncertainties.
- After the 2022 losses in equities and bonds, many had hoped or expected the traditional stock/bond correlation would return to be less correlated. On the surface, that has been true with stocks advancing and bonds continuing to be challenged. However, the positive performance of stocks has been narrowly concentrated in a small handful of technology/AI related issues and the broader market has mostly not participated. If this handful of issues are removed from the various indexes, the stock market and the bond market have again been significantly correlated with no diversification benefits. The one bright spot has been cash (short term fixed income).



Geopolitics: Left Tail is Fatter – Time is not our Friend

- Last winter was a milder one and Europe skated through what could have been a much harsher energy crisis because of sanctions on Russian energy supply. On February 24, 2022, Russia launched its special operation in Ukraine, and the conflict continues today with no end in sight. For as long as U.S. led allies continue to support Ukraine with contributions and weapons, the conflict/war will continue. If the 2023-2024 winter in Europe turns out to be much harsher than expected, the European economy would be seriously impacted, and recession would become more of a certainty. There are increasing voices within the alliance of lowering the financial and military support to Ukraine, but even if the war stops, it is not likely that the sanctions against Russia will cease.
- The terrorist attack on October 7th by the Palestinian militant group, Hamas, took everyone by surprise and led to an immediate declaration of war from Israel. It is not clear yet if Iran, the long-time benefactor of Hamas, had a direct role in planning and aiding the attack. If so, this somewhat contained conflict will spread out quickly and affect not only the Middle East (Iran, Lebanon, Syria, Saudi Arabia, Egypt, Jordan, etc.) but the price of oil (potentially stricter sanctions on Iranian oil export of which China is currently a large buyer) could spike with a military confrontation to ensue. An expanding conflict will lead to unintended and not easily containable consequences.
- There is always the tension between the U.S. led West and China. The elections in the U.S and Taiwan in 2024 may add additional stress to an already tense relationship. Crossing the Red Line is no longer make believe. Even though no country (at least publicly) wants a hot war in the South China Sea, accidents can and do happen and cooler heads may not prevail.
- Since the Taliban seized power in Afghanistan in August 2021, it has given shelter to some and pushed out other terrorists and extremists near the border with Pakistan. Since then, we have witnessed increasing terrorist violence in Pakistan including a recent serious attack on Pakistan's largest city, Karachi. This is destabilizing an area with the highest number of terrorist groups. The different extremist-fundamentalist groups are also fighting each other. This is like a pot of soup getting warmer which could come to a boil one day (egged on by Hamas-Israel) and not be locally containable.
- For the U.S., our treasury and government securities, the U.S. Dollar, and gold are deemed “safe haven” assets, and these events tend to attract overseas buyers into U.S. treasuries which would push down U.S. interest rates in the near term.

Don't Fight the Fed

- Pacific Investment Management Co. coined the term “New Normal” to define the post Global Financial Crisis (GFC) environment of below-average economic growth with disinflation and uber low interest rates. Years later, the New Normal moved to the New Neutral phase where the Federal Reserve’s neutral interest rate or r^* (r star)¹ was below the average past.
- The Zero Interest Rate Policy (ZIRP) is not only confined to the U.S. ECB and Japan among other central banks were all at or below the zero interest rate policy. In fact, the ECB and Japan both maintained a Negative Interest Rate Policy (NIRP) for years.
- Responding to the New Normal and New Neutral was to seek return by taking on more risk through the abundance of cheap credit. For years, investors borrowed from the reliable lowest interest countries and invested in higher interest paying markets to make a safe spread (often known as the “carry trade”). With the abundance of “cheap” money, real and financial assets appreciated along with debt. Borrowers were rewarded at the cost of savers – financial repression. As the GFC’s impact faded, central banks began to look to “normalize” by shrinking the bloated balance sheets from Large Scale Asset Purchases (Quantitative Easing - QE) and raising interest rates.
- Then came COVID-19. The initial response was to increase QE again and maintain ZIRP to provide plenty of system liquidity and a safety net for the financial and banking sectors along with massive fiscal stimulus and transfers. Ultimately these actions created a distortion to supply and demand for goods, especially during a period of supply chain dislocation and politicizing globalization. With high demand and inconsistent supply, inflation came roaring back, and as the global supply chain recovered, consumer demand shifted from goods to services. With a mismatch of skills and jobs, an imbalance of labor supply and demand became the next bottleneck and we saw wage increases. The Fed and the ECB both began to hike rates and again shrink their balance sheets to combat spiking inflation even though many contributors to inflation are not interest rate sensitive.
- Investors and the market have gotten complacent with the New Normal and the New Neutral (at least they were “New” at the time) and must again adjust. This new phase is more like an Old Normal with the Old Neutral where inflation is higher and r^* is higher. The easy formula of using leverage and borrowing to “juice” investment returns is behind us. The Fed will keep interest rates higher to keep a lid on inflation and to maintain a well anchored inflation expectation, except the foreseeable future will have a lower growth trajectory than the “Old Normal” – Will this be Stagflation where slow growth meets higher sustained inflation until productivity returns?

¹ The neutral rate of interest is the point at which rates reach an equilibrium where it is neither stimulating nor restricting economic growth. This r^* perfectly supports the two Fed mandates of full employment and price control (i.e., inflation at or around its 2% long-term target).

Chair Powell Press Conference - 09/20/2023 Remarks¹

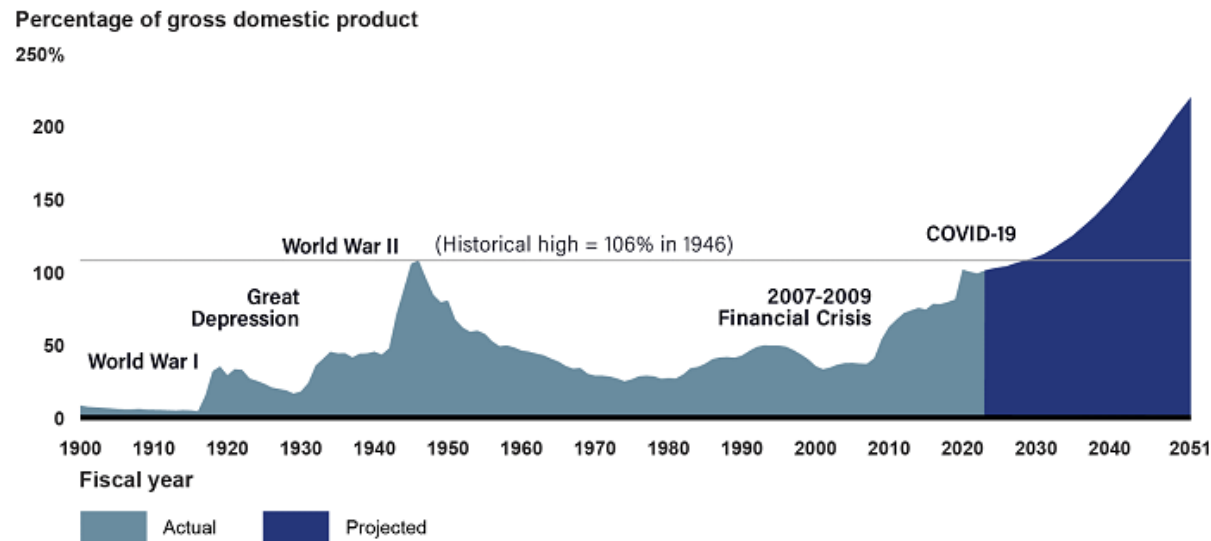
- Highly attentive to the risks that high inflation poses to both sides of the dual mandate, and thus strongly committed to returning inflation to the 2 percent objective. (*preserve integrity*)
- The full effects of our tightened stance on monetary policy have yet to be felt. (*long and variable lag*)
- According to the Summary of Economic Projections (SEP), it is more likely than not that it will be appropriate to raise rates one more time in the two remaining meetings this year due to the broadly stronger economic activity. (*more hikes needed*)
- Policy rate has risen 5-1/4 percentage points and considers the current stance of monetary policy as restrictive, putting downward pressure on economic activity, hiring, and inflation. The economy is facing headwinds from tighter credit conditions for households and businesses. (*currently policy is restrictive*)
- Want to see convincing evidence that the appropriate level of policy rate has been reached and progress made in order to determine if the policy is sufficiently restrictive. (*not sufficiently restrictive however*)
- Policy to remain restrictive so that inflation gets down to target. This is needed to remain the case for some time. (*higher for longer*)
- Carefully determining the extent of additional policy firming that may be appropriate based on ongoing assessments of the incoming data and the evolving outlook and risks is also needed. (*data dependent*)
- Inflation remains well above the longer-run goal of 2 percent (as of August, PCE at 3.4% and core PCE at 3.9%), but longer-term inflation expectations appear to remain well anchored. (*inflation still too high*)
- The process of getting inflation sustainably down to 2 percent has a long way to go. The median projection in the SEP for total PCE inflation is 3.3 percent this year, falls to 2.5 percent next year, and reaches 2 percent in 2026. (*likely holding higher rates throughout 2024*)

¹<https://www.federalreserve.gov/mediacenter/files/FOMCpresconf20230920.pdf>

U.S.'s Unsustainable Long-Term Fiscal Future

- According to the Government Accountability Office (GAO), the federal government faces an unsustainable long-term fiscal future. At the end of fiscal year 2022, debt held by the public was about 97 percent of gross domestic product (GDP). Projections from the Office of Management and Budget, the Department of the Treasury, the Congressional Budget Office, and GAO all show that current fiscal policy is unsustainable over the long term. Debt held by the public is projected to grow at a faster pace than the size of the economy and is projected to reach its historical high of 106 percent of GDP within 10 years and continue to grow at an increasing pace. GAO projects that this ratio could reach more than twice the size of the economy by 2051, absent any changes in revenue and spending policies.

Debt Held by the Public Projected to Grow Faster Than GDP

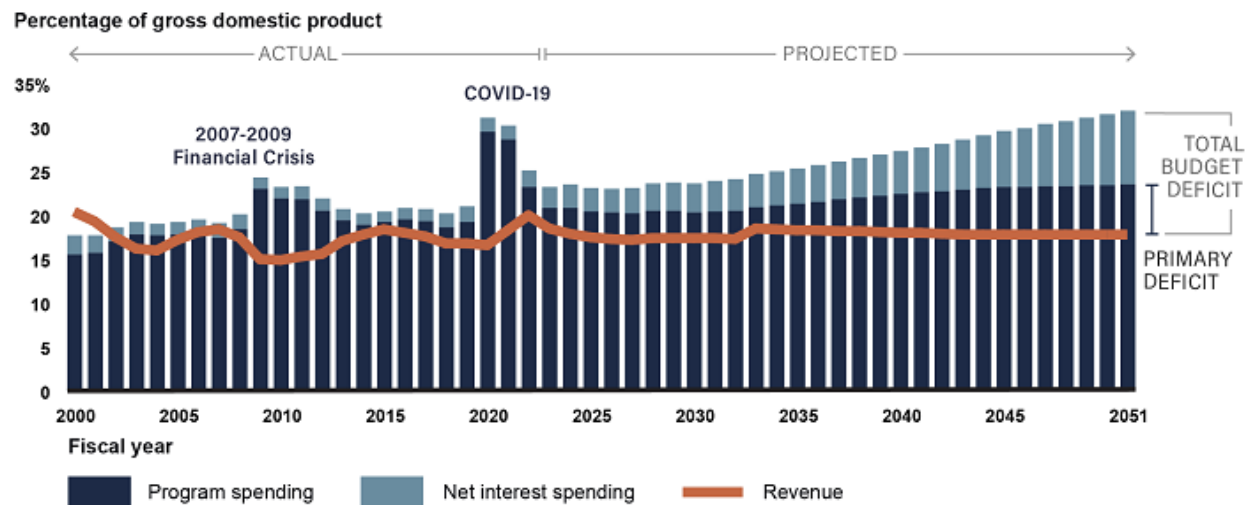


Source: Congressional Budget Office data and GAO simulation. | GAO-23-106201

The 2022 Budget Deficit was Among the Largest in History

- When spending is more than revenue collected, the Treasury borrows money to finance the deficit. The federal budget deficit in fiscal year 2022 was \$1.4 trillion, a 50% decline from fiscal year 2021, but still the fourth largest in U.S. history. This decline is attributable to higher tax revenue and lower pandemic-related federal spending. In fiscal year 2022, the publicly held federal debt grew by about \$2 trillion, reaching \$24.2 trillion.
- The growing debt is a consequence of borrowing to finance increasingly large annual budget deficits. GAO projects that (1) spending for Social Security, federal health care programs, and all other federal program spending will increase more than revenue, resulting in the primary deficit; and (2) net interest spending, which primarily represents the federal government's cost to service its debt, will steadily increase over the next 30 years, further widening the total budget deficits.

Primary Deficit and Total Budget Deficit, Actual, and Projected



Source: Congressional Budget Office data and GAO simulation. | GAO-23-106201

Consequences of an Ever-Rising Deficit

- Net interest spending will continue to increase because of both higher levels of overall debt and projected increases in interest rates over the long-term. Higher than projected interest rates would further increase interest costs and debt. In addition to increased borrowing costs, rising debt could lead to slower economic growth.
- Other potential fiscal risks stem from delays in raising or suspending the debt limit—the legal limit on the total amount of money that the federal government is authorized to borrow to meet its existing legal obligations. These delays could create disruptions to financial markets, and investors may require higher interest rates to hedge against increased risks, which in turn, could increase borrowing costs. Failure to raise the debt limit in time to prevent a default would have much more dire economic and reputational consequences.
- At the end, we believe it is a matter of eroding trust. The U.S., being the reserve currency, has been relying on others to help fund our spending. As illustrated by the GAO, the deficit is growing at such a pace and scale at a time of a divided Congress and U.S politics. Although we don't see the end of the U.S.'s reserve currency status, investors are and likely will continue to ask to be compensated more for taking on U.S. public debt. This is also occurring at a time when many countries are seeking to diversify somewhat away from their historical concentration in U.S. dollar denominated bonds. This was more evident after the U.S. government took steps to immobilize Russian central bank assets that are held in the U.S., impose sanctions on the Russian Direct Investment Fund (a sovereign wealth fund), and block select Russian banks from SWIFT, the global financial messaging system. These actions against Russia are a lesson to other countries to understand the concentration risk of their assets in U.S. government bonds.

Uncertain Interest Rates – the Great Un-anchoring

- We have already experienced a speedy rise in the Fed Fund (short term) rate since last year. Today it is set at 5.25% to 5.50%. At the end of Q3, the 10-year U.S. Treasury rate, set by the market (supply and demand), is 4.61% and the 30 years was at 4.73%. Since the end of the quarter and the Israel-Hamas conflict, both the 10-year and 30-year treasuries yields were close to 5%.
- There are three unknowns for which the market is trying to identify some certainty: (1) the Fed's reaction function to incoming data on the economy to determine short-term monetary policy, (2) the new r^* (the Fed neutral rate) during this cycle, and (3) the risk premium (the additional compensation needed) for longer duration. We believe the following:
 - The Fed has an even chance of raising rates once more this year. Even though some of the indicators are showing signs of the impact from the rate hikes as well slowing economic activities, there are also signals showing that the easy gains have been had and the remaining march towards the targeted 2% inflation rate would need to take on more economic pain. What the Fed does not want is to repeat Fed Chair Arthur Burns's experience of relaxing the monetary policy too soon. We could see 6% Fed Fund rate before this ends.
 - Chair Powell has suggested that the long run r^* is at or around 2.5%. We are far away from there. He also stated that finding the r^* now is equivalent to star gazing under a cloudy sky. We believe the intermediate r^* is more likely to be 3.5% than 2.5%. This also means that inflation will remain higher for longer as well. Getting to the 2% target will take much longer.
 - The recent spike in long-term treasuries was quite unexpected, and the move upward approaching 5% for both the 10- and 30- years was only truncated by the conflict in the Middle East (flight to safety perhaps). We believe the longer-term trend is for the longer end of the U.S. treasuries to yield higher. S&P downgraded U.S. debt to AA+ in 2011, and 12 years later in August, Fitch downgraded U.S. debt from AAA to AA+, citing "steady deterioration in standards of governance" related to government shutdown. However, the bigger story is focusing on the runaway deficit in a rising interest rate environment with a dysfunctional legislature. This means investors are seeking a higher risk premium for buying U.S. treasuries. Furthermore, some of the foreign governments (notably China and Japan) are diversifying away from a U.S. centric foreign reserve. This means demand for U.S. treasury, on the margin, is being challenged.

Patience is not a Market Virtue

- In 2022, unprecedented interest rate hikes announced by Chair Powell at the end of each FOMC meeting shocked financial markets. The response was an 18.11% loss for the S&P 500, a 16.24% loss in the MSCI All Country World Index ex USA, a 13.01% loss in the U.S. Aggregate Bond Index (investment grade), and a 16.25% loss in the Global Aggregate Bond Index. The Fed Funds rate shot up from 0%-0.25% to 4%-4.25% in 9 months. U.S. treasuries, being deemed the “safe” investment, set the floor for all other assets to be priced, from a risk and return standpoint. This naturally meant an immediate adjustment to all asset prices and to the projections of where each asset return would be going forward.
- Almost every market economist projected a U.S. recession in the following 12-months, then came the earnings recession for a few quarters into 2023. However, with a very tight labor market, a strong consumer appetite that moved from goods to services (which fueled a steady GDP), and the long and variable lag of the economic impacts from the Fed’s actions, a recession became less certain. No-landing and soft-landing became the new narrative.
- With the changing sentiment towards economic contraction and the rapid deceleration of inflation (primarily due to healing of the supply chain), market participants are betting on a sooner Fed pause and sooner Fed pivot in 2024 regardless of Chair Powell’s consistent rhetoric about tighter financial conditions and more restrictive monetary stance which project higher rates for longer.
- Market participants’ short-term focus and the hope and wish for the end of this hiking cycle coupled with the flip flopping of an economic soft and hard landing finally gave rise to a more volatile stock market. More recently we witnessed a surge in longer term bond yield which took many by surprise.
- For several reasons, the post-pandemic recovery disturbed a normal economic cycle. There are signs of continuing economic slowdown, and we continue to anticipate a recession or hard landing (i.e., economic contraction with a higher unemployment rate). The reality is that the full, restrictive impact of the significant rate hikes is yet to filter through the economy. The short view and reaction of the market will continue to add more volatility and exaggerate uncertainty. Patience is not a market virtue; everyone is trying to predict the future, no matter how self-serving or inaccurate.

A Word on Forecasting

- In today's post-GFC, post-pandemic environment with high debt, higher inflation, higher interest rates, and a geopolitically troubled world, we should be reminded of Niels Bohr's (Nobel laureate in Physics) famous saying: "Prediction is very difficult, especially if it's about the future!"
- John Kenneth Galbraith, a well-respected economist once said, "There are two kinds of forecasters: those who don't know and those who don't know they don't know."
- This evokes Donald Rumsfeld's most famous statement while serving as George W. Bush's secretary of defense: "As we know, there are known knowns; there are things we know we know. We also know there are known unknowns; that is to say we know there are some things we do not know. But there are also unknown unknowns—the ones we don't know we don't know."
- During times of great uncertainty, many professional market observers espouse their market forecasts. Currently it is the never-ending prediction about no landing, soft landing, or hard landing. I guess the no landing folks so far are right. However, give it enough time, and the soft landing folks will look like they have predicted accurately, and ultimately, the hard landing camp will be right. No economy flies forever; it will land. We just simply don't know when that is.
- The market has persistently tried to anticipate the Fed's policy, and unless the market knows the incoming data before the Fed and knows their reaction function, its expectation would be nothing more than a guess.
- What we do know is that, presently, interest rate is high and inflation remains much higher than 2%. If we take Chair Powell at his word, he is committed to meeting the 2% target, and we are far from it. As such, he needs to keep rates higher for longer to slow down economic activities (possibly a recession) and bring more balance to the labor economy (more unemployment). Two things seems reasonable: (1) with a much higher risk-free interest rate (currently at 5%+), risk assets (such as stocks) will need to deliver a much higher return than the past to compensate for the risk associated, and (2) more pain for the economy is likely coming before we will see the Fed pivot (lower rates).

2023Q3 Stocks & Bonds Performance in USD & 60/40

Index TR in US\$ (as of 09-30-2023)	TR 2023Q3	TR 2023 YTD	TR 2022	TR Trail 3 Yr Annlzd
DJ Industrial Average NR	-2.25	2.24	-7.44	7.96
S&P 500	-3.27	13.07	-18.11	10.15
S&P 500 Growth	-2.59	18.11	-29.41	6.80
S&P 500 Value	-4.09	7.56	-5.22	13.39
Russell Mid Cap	-4.68	3.91	-17.32	8.09
Russell Mid Cap Growth	-5.22	9.88	-26.72	2.61
Russell Mid Cap Value	-4.46	0.54	-12.03	10.98
Russell 2000	-5.13	2.54	-20.44	7.16
Russell 2000 Growth	-7.32	5.24	-26.36	1.09
Russell 2000 Value	-2.96	-0.53	-14.48	13.32
NASDAQ 100	-2.86	35.37	-32.38	9.69

Index TR in US\$ (as of 09-30-2023)	TR 2023Q3	TR 2023 YTD	TR 2022	TR Trail 3 Yr Annlzd
Bloomberg US Agg Bond	-3.23	-1.21	-13.01	-5.21
Bloomberg US Corp IG + HY	-2.51	0.96	-14.91	-3.74
Bloomberg Municipal	-3.95	-1.38	-8.53	-2.30
Bloomberg High Yield Corporate	0.46	5.86	-11.19	1.76
Bloomberg Global Aggregate	-3.59	-2.21	-16.25	-6.93
Bloomberg EM Local Currency Broad	-4.15	1.65	-12.72	-5.35
Bloomberg EM Hard Currency Agg	-2.40	1.06	-16.60	-4.82

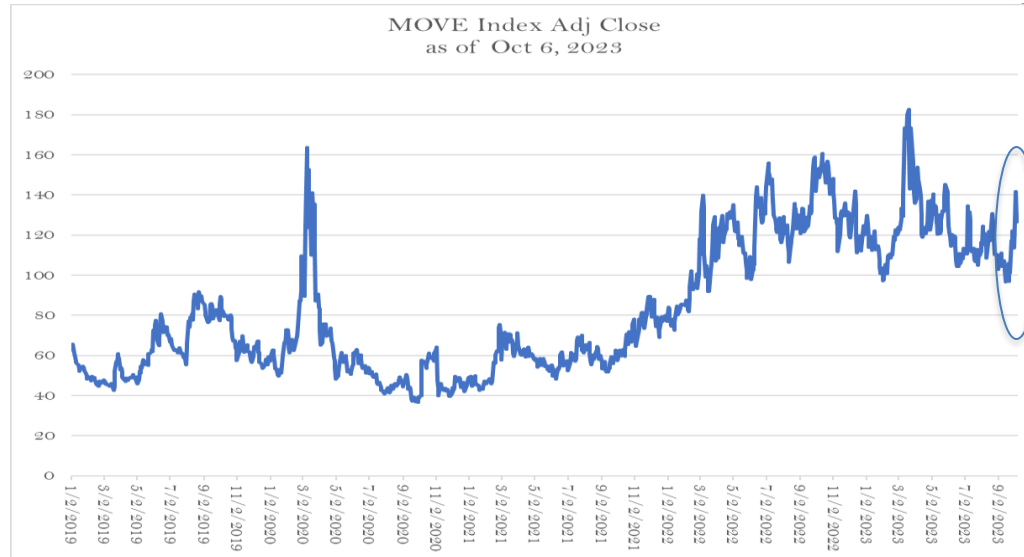
Index TR in US\$ (as of 09-30-2023)	TR 2023Q3	TR 2023 YTD	TR 2022	TR Trail 3 Yr Annlzd
US 60/40 Portfolio US\$ (as of 09-30-2023)				
S&P 500	-3.27	13.07	-18.11	10.15
Bloomberg US Agg Bond	-3.23	-1.21	-13.01	-5.21
Total Blended Index Return (no fee)	-3.26	7.36	-16.07	4.01
Index TR in US\$ (as of 09-30-2023)	TR 2023Q3	TR 2023 YTD	TR 2022	TR Trail 3 Yr Annlzd
Global 60/40 Portfolio US\$ (as of 09-30-2023)				
MSCI ACWI All Cap GR	-3.31	9.72	-18.04	7.34
Bloomberg Global Aggregate	-3.59	-2.21	-16.25	-6.93
Total Blended Index Return (no fee)	-3.42	4.95	-17.32	1.63

Index TR in US\$ (as of 09-30-2023)	TR 2023Q3	TR 2023 YTD	TR 2022	TR Trail 3 Yr Annlzd
S&P 1500 Cons Discretionary	-4.93	24.26	-35.70	3.15
S&P 1500 Cons Staples	-5.72	-4.15	-0.74	6.34
S&P 1500 Energy	12.64	6.64	63.77	51.55
S&P 1500 Financials	-0.90	-2.31	-10.15	13.65
S&P 1500 Health Care	-3.19	-4.33	-3.31	7.94
S&P 1500 Industrials	-4.94	6.41	-6.43	12.44
S&P 1500 Information Technology	-5.72	33.88	-27.91	13.37
S&P 1500 Materials	-4.79	2.52	-10.78	10.75
S&P 1500 Media	3.00	17.24	-30.54	-2.00
S&P 1500 Commun Services	2.72	39.07	-39.66	5.09
S&P 1500 Utilities	-9.41	-14.78	1.37	2.97
S&P 1500	-3.36	12.24	-17.78	10.31

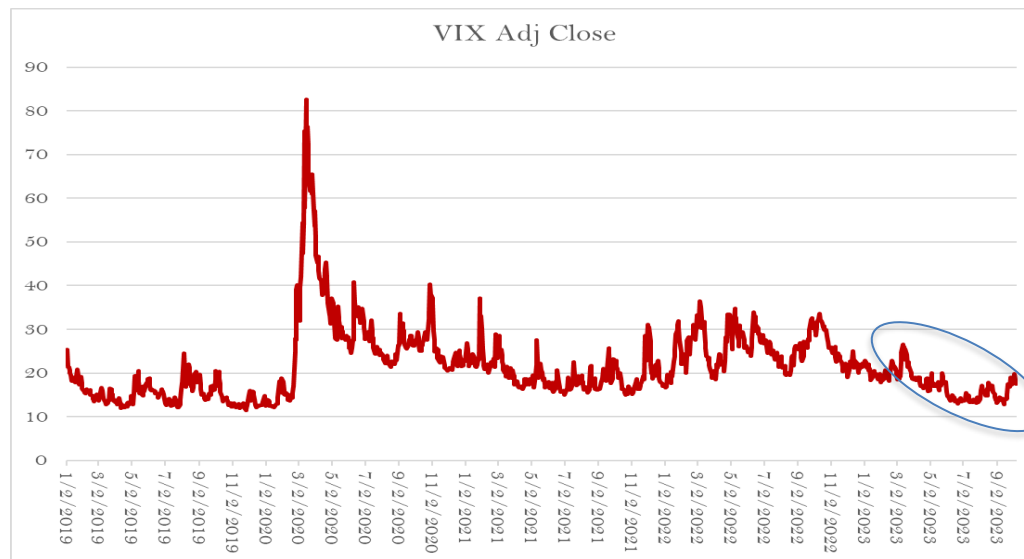
Index TR in US\$ (as of 09-30-2023)	TR 2023Q3	TR 2023 YTD	TR 2022	TR Trail 3 Yr Annlzd
MSCI ACWI ex USA All Cap GR	-3.39	5.65	-16.24	4.23
MSCI EAFE GR	-4.05	7.59	-14.01	6.28
MSCI Europe GR	-4.91	8.60	-14.53	7.89
MSCI AC ASEAN GR	-1.35	-3.03	-4.09	4.04
MSCI EM GR	-2.79	2.16	-19.74	-1.34
MSCI Frontier Emerging Market GR	-0.17	4.58	-17.84	1.83
MSCI Australia GR	-3.33	-0.30	-5.13	8.41
MSCI Brazil GR	-3.49	12.98	14.61	13.70
MSCI Canada GR	-3.83	4.47	-12.17	9.94
MSCI China GR	-1.83	-7.13	-21.80	-14.14
MSCI France GR	-6.94	10.79	-12.67	12.00
MSCI Germany GR	-7.71	9.67	-21.62	0.50
MSCI Hong Kong GR	-11.08	-17.59	-4.71	-4.49
MSCI India GR	2.87	8.32	-7.49	15.43
MSCI Italy GR	-1.84	22.80	-13.42	14.76
MSCI Japan GR	-1.45	11.60	-16.31	3.19
MSCI Korea GR	-6.57	7.08	-28.94	-0.98
MSCI Mexico GR	-6.43	19.13	-1.64	23.61
MSCI UK All Cap GR	-1.80	6.03	-10.16	10.07
MSCI ACWI All Cap GR	-3.31	9.72	-18.04	7.34

Source: Morningstar Direct, Experiential Wealth 09-30-2023

The Market: Bond and Stock Volatility



<https://finance.yahoo.com/quote/%5EMOVE/history?period1=1546473600&period2=1688428800&interval=1d&filter=history&frequency=1d&includeAdjustedClose=true>, Experiential Wealth

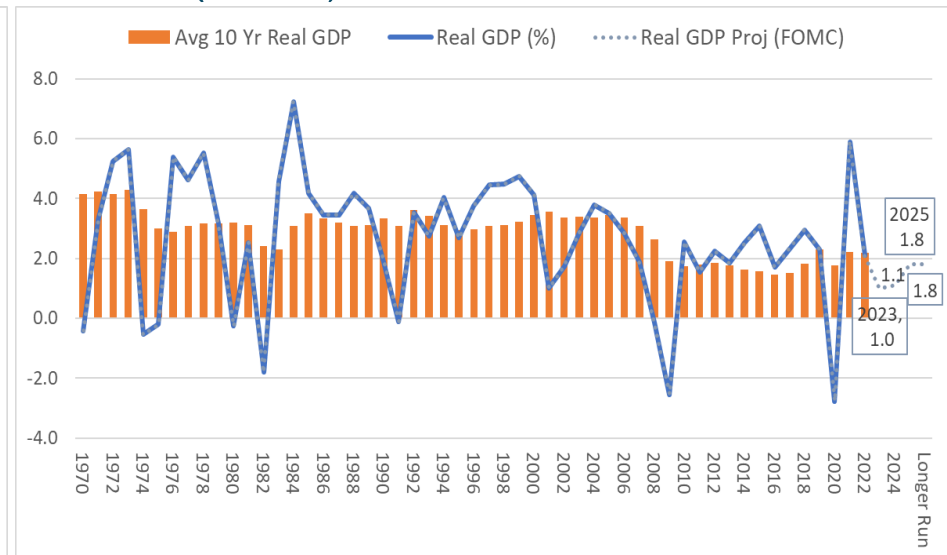
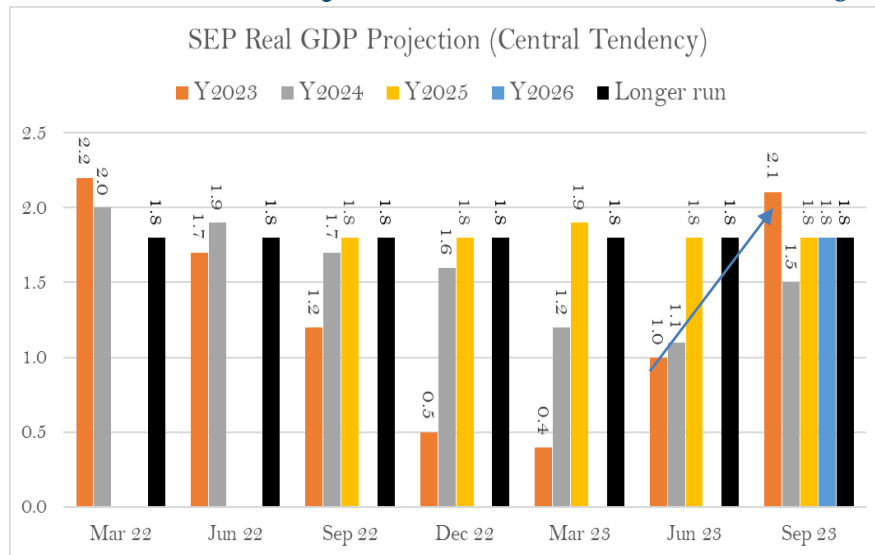


<https://finance.yahoo.com/quote/%5EVIX/history>, Experiential Wealth

ICE MOVE - Merrill Lynch Option Volatility Estimate - is one measure of U.S. interest rate volatility and can provide a signal for changing risk sentiment in fixed income markets. The recent spike in interest rates (especially in the long end of the yield curve) has taken many by surprise. Some of the reasons can be an increasing supply, accepting the Fed's position of higher rates for longer, fewer foreign government buyers, and a reluctance of retail buyers thinking the rates could go even higher if the Fed raise rates again.

The VIX, which is a measure of the S&P500 index volatility by comparison, has been calmer than expected under increasing uncertainties. One explanation is that the market is discounting the possibility of a recession and that the overall above expectations in labor and the general economy provide support for the stock market on the surface.

Summary of Economic Projections (SEP) – GDP 09-2023



Source: FRED, FOMC SEP, Experiential Wealth

At its September meeting, the Federal Open Market Committee (FOMC) released its quarterly Summary of Economic Projections (SEP). FOMC participants submit their projections of the most likely outcomes for real gross domestic product (GDP) growth. Participant projections are based on information available at the time of the meeting together with their assessment of appropriate monetary policy and assumptions about other factors likely to affect economic outcomes. Historically, SEP projections are more instructive in terms of directionality rather than the actual projections.

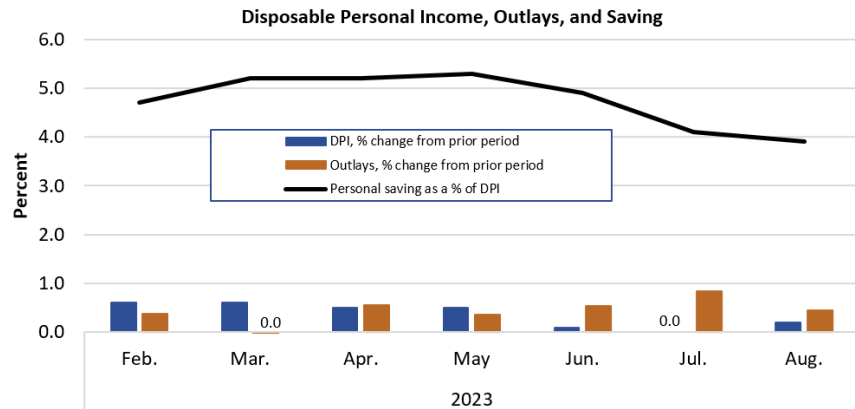
The SEP has significantly revised upward its 2023 economic growth projection. This is a recognition of an economy with continuing moderate expansion.

The SEP should NOT be deemed as the official position of the FOMC. It is a collection of individual indications about the future.

According to the September 2023 SEP, the central tendency average estimate for real GDP has revised up from 1% in May's meeting to 2.1% for 2023 and stays the course for both 2024 and 2025. This suggests that the FOMC's central tendency is for continuing economic expansion (at a faster speed) in 2023 but holding steady for both 2024 and 2025.

The U.S. Economy – GDP – Consumers are Still Spending

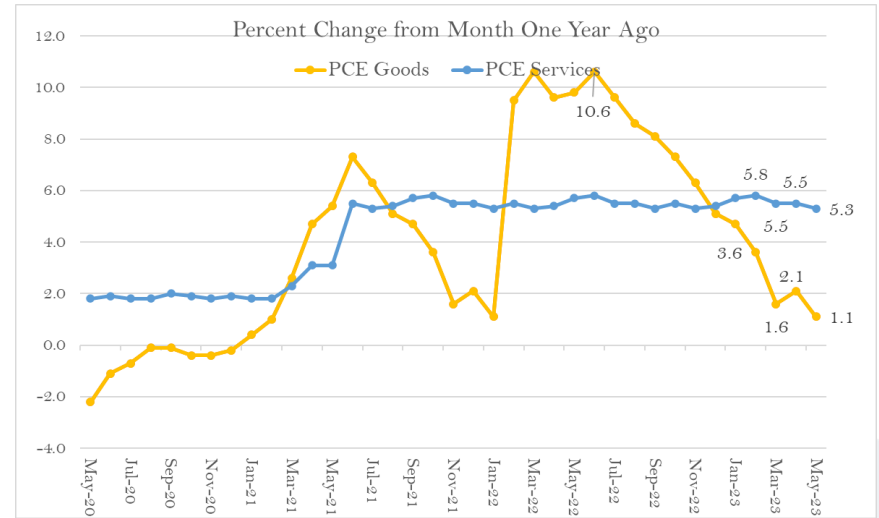
According to the BEA, personal consumption expenditure (PCE) for durable goods has shown some rebound, while PCE for services has trended down slightly in February. In the meantime, personal savings has continued to move higher as personal income notched down from January along with personal outlay.



U.S. Bureau of Economic Analysis

Seasonally adjusted

Personal income increased \$87.6 billion (0.4% at a monthly rate) in August. Disposable personal income (DPI)—personal income less personal current taxes—increased \$46.6 billion (0.2%). Personal outlays—the sum of PCE, personal interest payments, and personal current transfer payments—increased \$86.0 billion (0.4%), and consumer spending increased \$83.6 billion (0.4%). Personal saving was \$794.1 billion, and the personal saving rate—personal saving as a percentage of disposable personal income—was 3.9% in August.

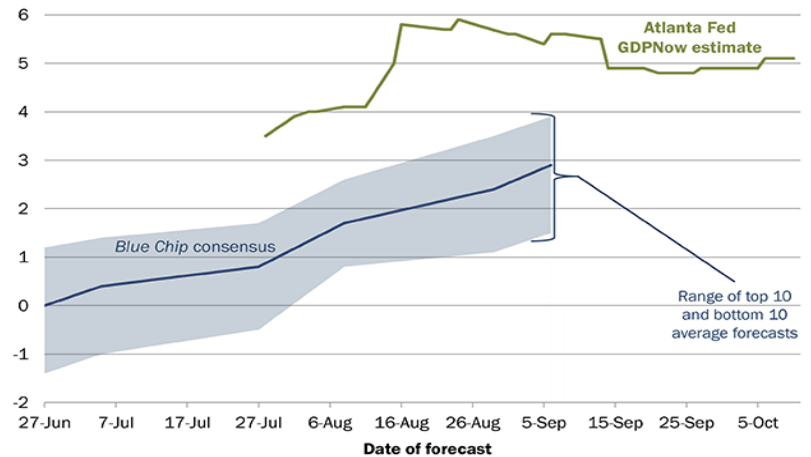


Source: BEA, Experiential Wealth

<https://www.bea.gov/data/income-saving/personal-income>

Evolution of Atlanta Fed GDPNow real GDP estimate for 2023: Q3

Quarterly percent change (SAAR)



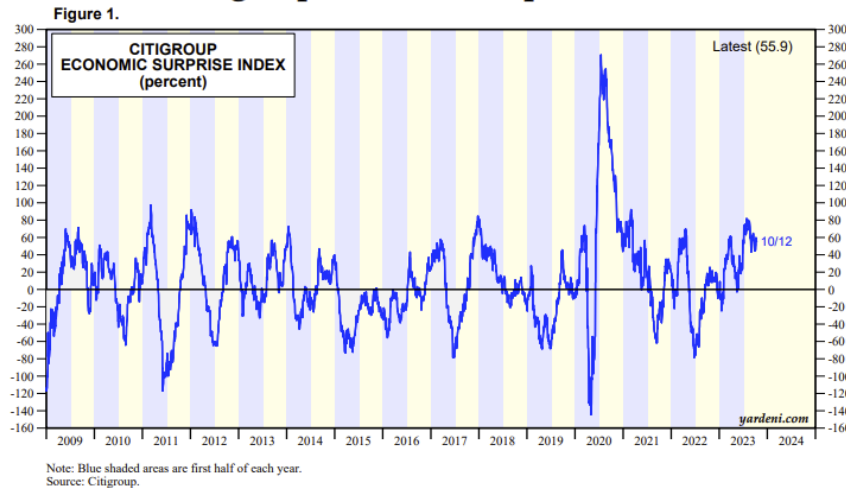
Sources: Blue Chip Economic Indicators and Blue Chip Financial Forecasts

Note: The top (bottom) 10 average forecast is an average of the highest (lowest) 10 forecasts in the Blue Chip survey.

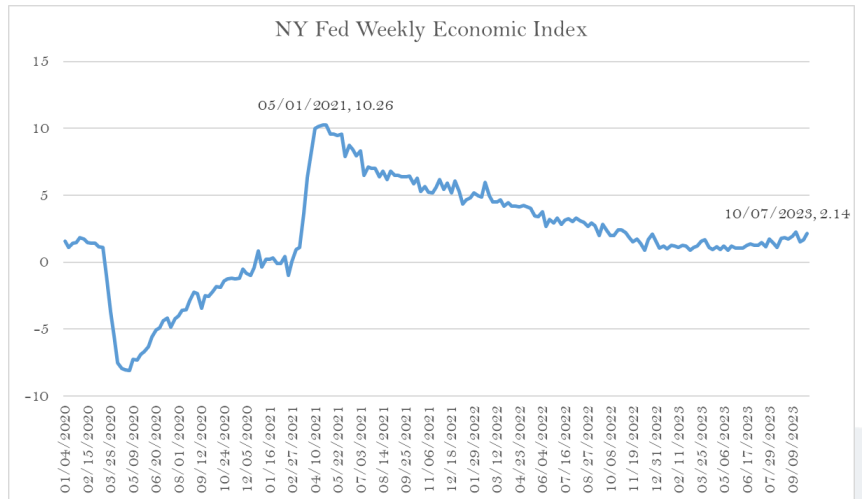
<https://www.atlantafed.org/cqer/research/gdpnow> (10-05-2023)

High Frequency Economic Data

Citigroup Economic Surprise Index



<https://www.yardeni.com/pub/citigroup.pdf>



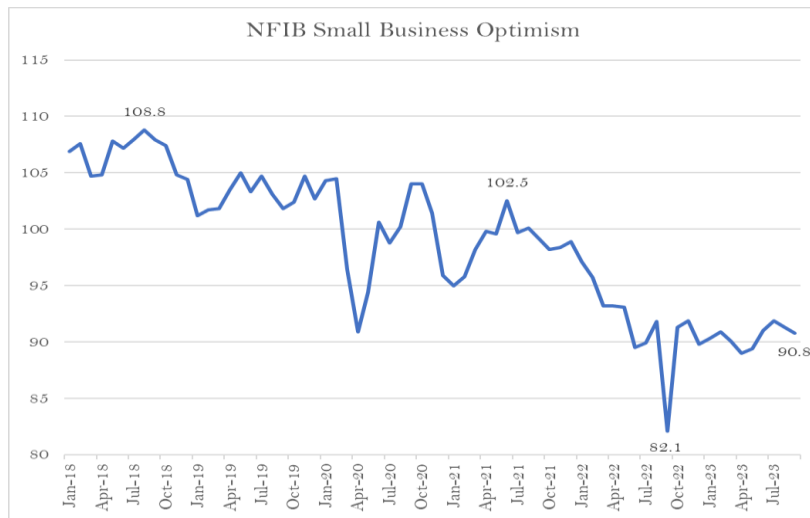
Source: Authors' calculations based on data from Haver Analytics, Redbook Research, Rasmussen Reports, the Association of American Railroads, and Booth Financial Consulting.

<https://www.newyorkfed.org/research/policy/weekly-economic-index#/interactive>

Citi's Economic Surprise Index, which measures the degree to which economic data is either beating or missing expectations, continued to positively improve in the third quarter.

New York Fed's Weekly Economic Index shows ten daily and weekly indicators of real economic activity. The increase in the WEI for the week of October 7th (relative to the final estimate for the week of September 30) is due to rises in retail sales and railroad traffic and a decline in initial unemployment insurance claims, which more than offset falls in steel production, tax withholding, and consumer confidence. Electricity output and fuel sales were not released due to the Columbus Day holiday.

National Federation of Independent Business (NFIB) 09-23



SMALL BUSINESS OPTIMISM INDEX COMPONENTS

Index Component	Seasonally Adjusted Level	Change from Last Month	Contribution to Index Change
Plans to Increase Employment	13%	1	*
Plans to Make Capital Outlays	24%	0	*
Plans to Increase Inventories	1%	1	*
Expect Economy to Improve	-6%	-2	*
Expect Real Sales Higher	7%	1	*
Current Inventory	-6%	0	*
Current Job Openings	29%	4	*
Expected Credit Conditions	-7%	-2	*
Now a Good Time to Expand	10%	-2	*
Earnings Trends	-15%	4	*
Total Change		5	*

(Column 1 is the current reading; column 2 is the change from the prior month; column 3 the percent of the total change accounted for by each component; * is under 1 percent and not a meaningful calculation)

The NFIB Small Business Optimism Index decreased half a point in September to 90.8. September's reading marks the 21st consecutive month below the 49-year average of 98. Twenty-three percent of owners reported that inflation was their single most important problem in operating their businesses, unchanged from last month and tied with labor quality as the top concern.

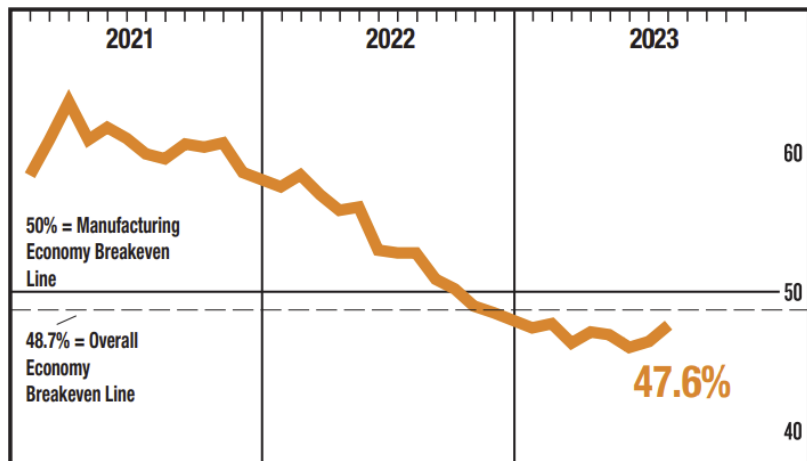
Key findings include:

- Number of small business owners expecting better business conditions over the next six months deteriorated six points from August to a net negative 43%, seasonally adjusted. However, this was 18 percentage points better than last June's reading of net negative 61%.

- Forty-three percent (seasonally adjusted) of owners reported job openings that were hard to fill, up three points from August, and these were remaining historically high as owners can't hire enough workers due to few qualified applicants.
- Seasonally adjusted, a net 23% of owners plan to raise compensation in the next three months, down three points from August.
- The net percentage of owners raising average selling prices increased two points to a net 29% seasonally adjusted, still a very inflationary level.
- The net percent of owners who expect real sales to be higher increased one point from August to a net negative 13% (seasonally adjusted), still a very dismal posture.

Continuing Manufacturing Sector Recovering

ISM Manufacturing PMI Index
> 50 is expansionary



The U.S. manufacturing sector contracted in August as the Manufacturing PMI registered 47.6 percent, 1.2 percentage points higher than the reading of 46.4 percent recorded in July.

This is the 10th month of contraction and continuation of a downward trend that began in June 2022. That trend is reflected in the Manufacturing PMI's 12-month average falling to 47.8 percent.

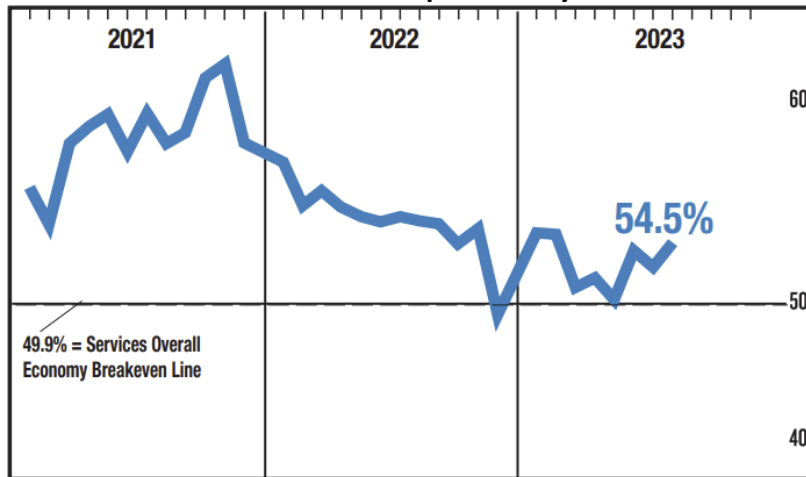
INDEX	Aug Index	Jul Index	% Point Change	Direction	Rate of Change	Trend* (months)
Manufacturing PMI®	47.6	46.4	+1.2	Contracting	Slower	10
New Orders	46.8	47.3	-0.5	Contracting	Faster	12
Production	50.0	48.3	+1.7	Unchanged	From Contracting	1
Employment	48.5	44.4	+4.1	Contracting	Slower	3
Supplier Deliveries	48.6	46.1	+2.5	Faster	Slower	11
Inventories	44.0	46.1	-2.1	Contracting	Faster	6
Customers' Inventories	48.7	48.7	0.0	Too Low	Same	3
Prices	48.4	42.6	+5.8	Decreasing	Slower	4
Backlog of Orders	44.1	42.8	+1.3	Contracting	Slower	11
New Export Orders	46.5	46.2	+0.3	Contracting	Slower	3
Imports	48.0	49.6	-1.6	Contracting	Faster	10
Overall Economy				Contracting	Slower	9
Manufacturing Sector				Contracting	Slower	10

*Number of months moving in current direction. Manufacturing ISM® Report On Business® data has been seasonally adjusted for the New Orders, Production, Employment and Inventories indexes.

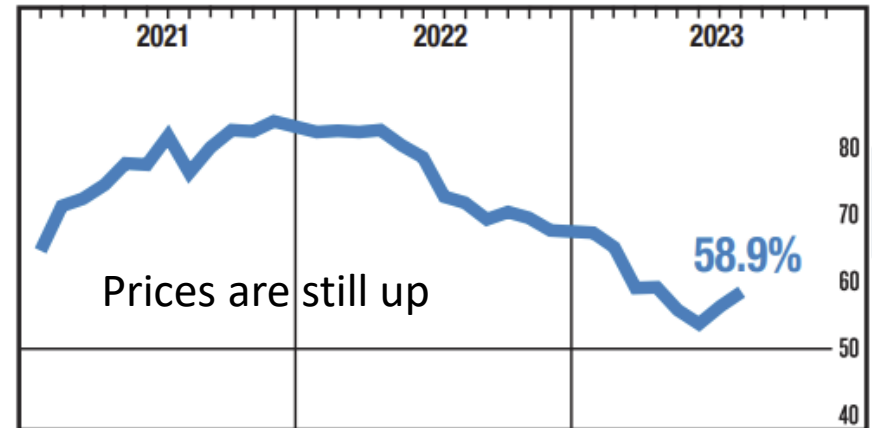
The August Manufacturing PMI registered 47.6%. Regarding the overall economy, this figure indicates a ninth month contraction after a 30-month period of expansion. The New Orders Index remained in contraction territory at 46.8%, 0.5% lower than the figure of 47.3% recorded in July. The Production Index reading of 50% is a 1.7% increase compared to July's figure of 48.3%. The Prices Index registered 48.4%, up 5.8% compared to the July figure of 42.6%. The Backlog of Orders Index registered 44.1%, 1.3% higher than the July reading of 42.8%. The Employment Index registered 48.5%, up 4.1% from July's reading of 44.4%.

Service Sector Still Expanding with Prices Up

ISM Services PMI Index
> 50 is expansionary



In August, the Services PMI® registered 54.5%, a 1.8% increase compared to the July reading of 52.7%. A Services PMI above 49.9% over time generally indicates an expansion of the overall economy. Therefore, the August Services PMI indicates the overall economy is growing for the eighth consecutive month after one month of contraction in December 2022.



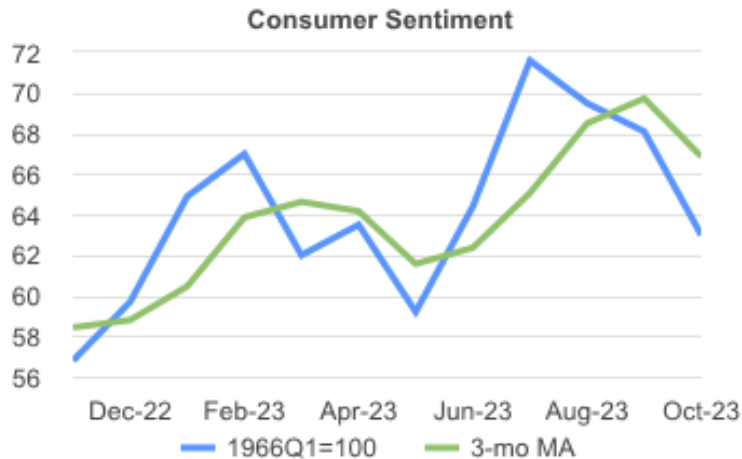
The Prices Index registered 58.9 percent. Twelve service industries reported an increase in prices paid during the month of August, in the following order: Public Administration; Other Services; Educational Services; Health Care & Social Assistance; Professional, Scientific & Technical Services; Accommodation & Food Services; Construction; Utilities; Management of Companies & Support Services; Information; Finance & Insurance; and Wholesale Trade.

INDEX	Aug Index	Jul Index	% Point Change	Direction	Rate of Change	Trend* (months)
Services PMI®	54.5	52.7	+1.8	Growing	Faster	8
Business Activity	57.3	57.1	+0.2	Growing	Faster	39
New Orders	57.5	55.0	+2.5	Growing	Faster	8
Employment	54.7	50.7	+4.0	Growing	Faster	3
Supplier Deliveries	48.5	48.1	+0.4	Faster	Slower	7
Inventories	57.7	50.4	+7.3	Growing	Faster	4
Prices	58.9	56.8	+2.1	Increasing	Faster	75
Backlog of Orders	41.8	52.1	-10.3	Contracting	From Growing	1
New Export Orders	62.1	61.1	+1.0	Growing	Faster	5
Imports	52.3	52.3	0.0	Growing	Same	3
Inventory Sentiment	61.5	56.6	+4.9	Too High	Faster	4
Overall Economy				Growing	Faster	8
Services Sector				Growing	Faster	8

*Number of months moving in current direction. Services ISM® Report On Business® data has been seasonally adjusted for the Business Activity, New Orders, Employment and Prices indexes.

Consumer Sentiments & Confidence - Dropping

UMich Consumer Sentiment
10-2023



Conference Board Consumer Confidence Survey



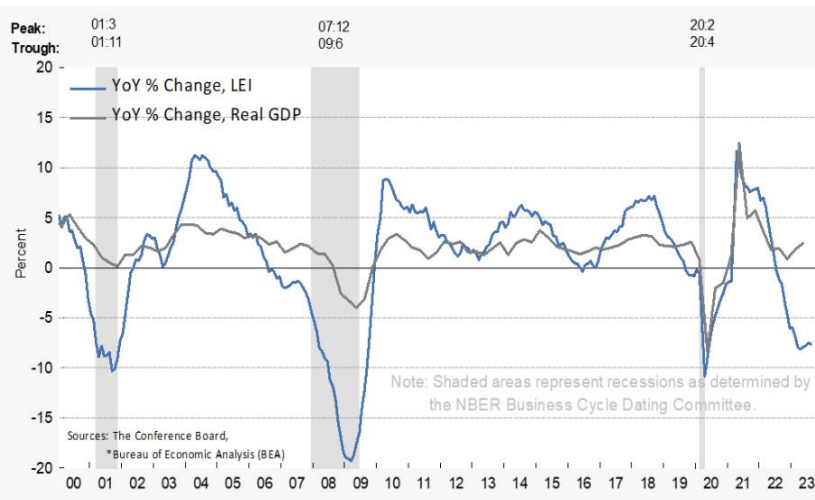
<https://www.conference-board.org/topics/consumer-confidence>

The University of Michigan consumer sentiment index fell in October as inflation expectations jumped despite a dip in oil and gas prices. The index fell to 63 from 68.1 in September, according to the preliminary report. The change from September was led by the expectations component, which fell 5.3 points. The present conditions component fell 4.7 points. Inflation expectations moved sharply higher. Median 12-month inflation expectations jumped from 3.2% to 3.8%, its highest level since May. Five-year expectations reversed last month's drop, rising from 2.8% to 3%.

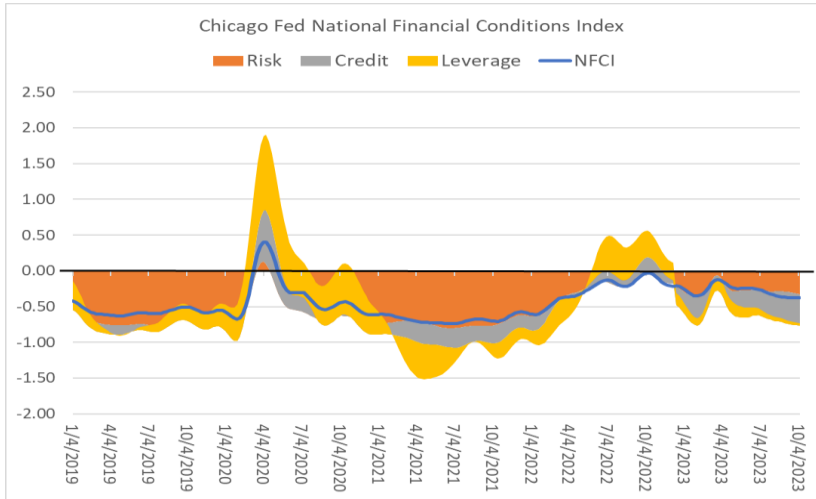
The Conference Board Consumer Confidence Index® declined again in September to 103.0 (Y1985=100), down from an upwardly revised 108.7 in August. The Present Situation Index—based on consumers' assessment of current business and labor market conditions—rose slightly to 147.1 (Y1985=100) from 146.7. The Expectations Index—based on consumers' short-term outlook for income, business, and labor market conditions—declined to 73.7 (Y1985=100) in September after falling to 83.3 in August. Expectations fell back below 80—the level that historically signals a recession within the next year. Consumer fears of an impending recession also ticked back up, consistent with the short and shallow economic contraction we anticipate for the first half of 2024. The decline in consumer confidence was evident across all age groups and notably among consumers with household incomes of \$50,000 or more.

Leading Indicators and Financial Stress – a Mixed Bag

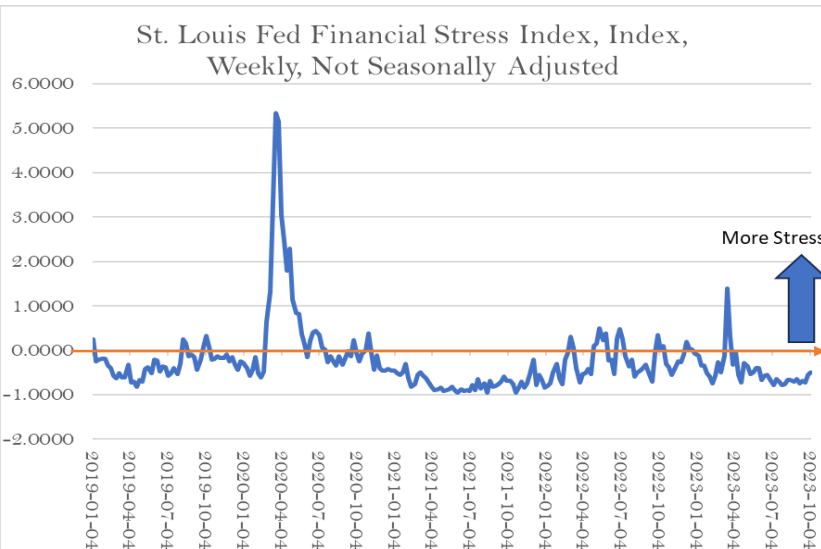
Conference Board Leading Indicator



Source: <https://www.conference-board.org/topics/us-leading-indicators>



Source: <https://www.chicagofed.org/publications/nfci/index>, Experiential Wealth



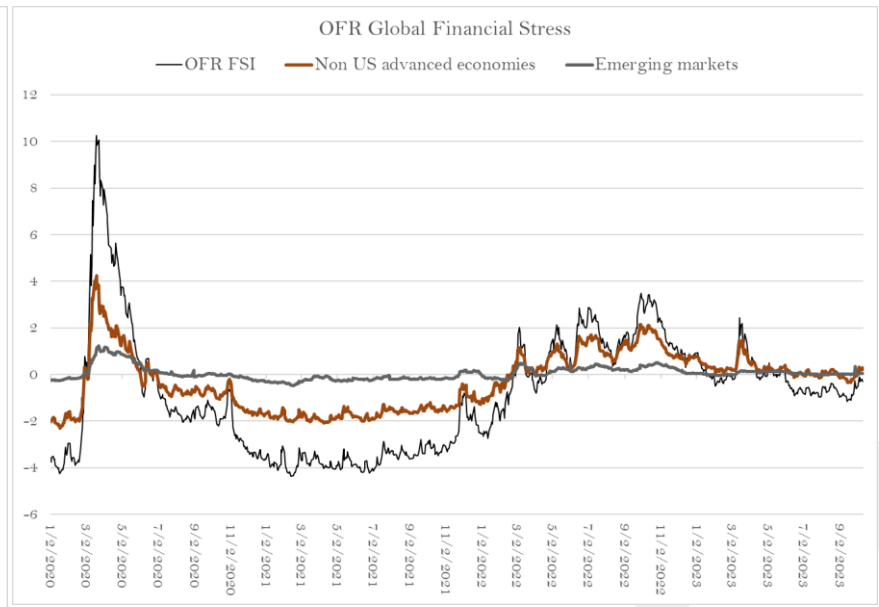
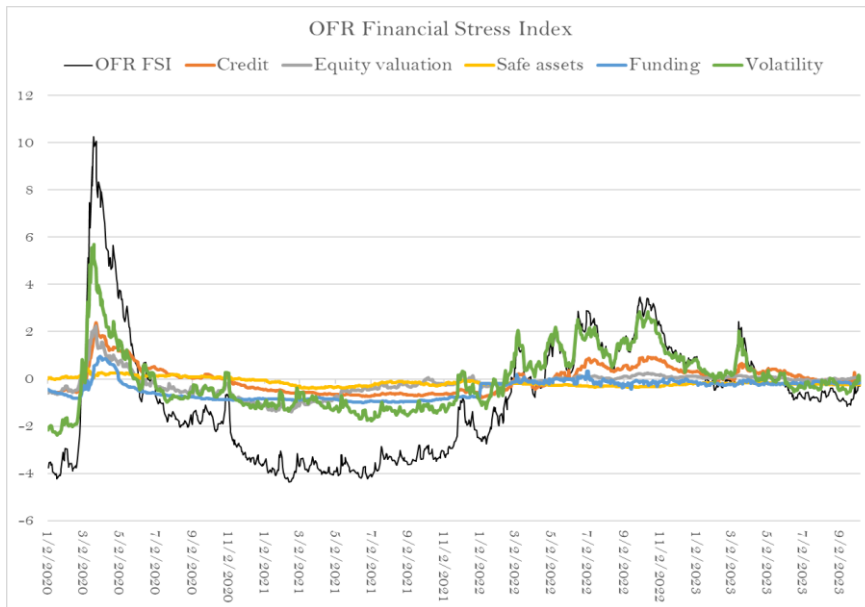
Source: <https://fred.stlouisfed.org/series/STLFSL4>, Experiential Wealth

The Conference Board Leading Economic Index (LEI) provides an early indication of significant turning points in the business cycle and where the economy is heading in the near term. The LEI for the U.S. declined by 0.4 percent in August 2023 to 105.4 (Y2016=100), following a decline of 0.3 percent in July. The LEI is down 3.8 percent over the six-month period between February and August 2023—little changed from its 3.9 percent contraction over the previous six months (August 2022 to February 2023). “With August’s decline, the U.S. Leading Economic Index has now fallen for nearly a year and a half straight, indicating the economy is heading into a challenging growth period and possible recession over the next year.”

The St. Louis Federal Reserve Bank’s Financial Stress Index measures the degree of financial stress in the markets and is constructed from 18 weekly data series: 7 interest rate series, 6 yield spreads, and 5 other indicators. Each of these variables captures some aspect of financial stress. Accordingly, as the level of financial stress in the economy changes, the data series are likely to move together. The Index continue to show below-average financial market stress.

The Chicago Fed’s National Financial Conditions Index (NFCI) provides a comprehensive weekly update on U.S. financial conditions in money markets, debt and equity markets, and the traditional and “shadow” banking systems. The index pointed to steady financial conditions as the NFCI was unchanged at -0.38 for the week ending October 6. Risk indicators contributed -0.16 , credit indicators contributed -0.11 , and leverage indicators contributed -0.10 to the index in the latest week.

Financial Stress – Still no Signs of Stress ... yet



FSI, Experiential Wealth

<https://www.financialresearch.gov/financial-stress-index/#ae>

The OFR Financial Stress Index (OFR FSI) is a daily market-based snapshot of stress in global financial markets. It is constructed from 33 financial market variables, such as yield spreads, valuation measures, and interest rates. The OFR FSI is positive when stress levels are above average, and negative when stress levels are below average. The OFR FSI incorporates five categories of indicators: **credit**, **equity valuation**, **funding**, **safe assets**, and **volatility**.

Although the overall financial stress in the U.S. has remained below 0, the stress index has been trending upward towards neutral at 0.

FSI, Experiential Wealth

The FSI also shows stress contributions by three regions: United States, other advanced economies, and emerging markets.

Other advanced economies: Variables measuring stress from advanced economies other than the United States, including primarily the eurozone and Japan

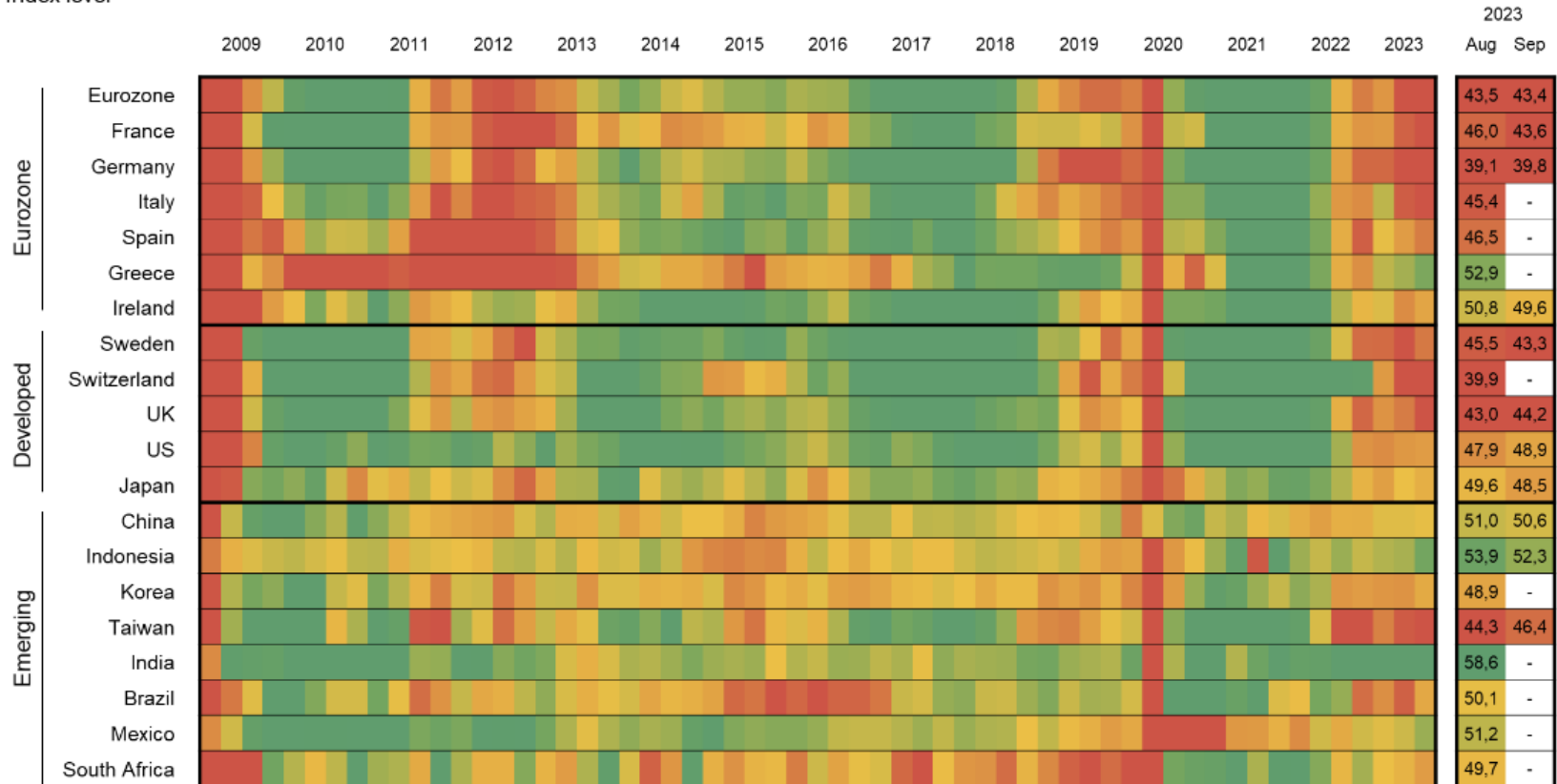
Emerging markets: Variables measuring stress from emerging markets

Overall global financial stress remains below the neutral 0 value, but the index is trending upwards towards the neutral point.

JPM Global Purchasing Managers' Index (PMI)

Global manufacturing PMI

Index level



The Eurozone and the U.S. are both below the 50th percentile threshold. This means manufacturing activities remain in the contraction territory. For two plus consecutive months, the manufacturing sectors in the U.S. and Eurozone were in recession, and China continues to show weakness and is trending towards a contraction. These would be even more likely if the world enters a mild recession in 2024.

<https://am.jpmorgan.com/lu/en/asset-management/per/insights/market-insights/guide-to-the-markets/guide-to-the-markets-slides-europe/global-economy/gtm-ce-pmimanufacturing/>

OECD – September 2023 Economic Interim Projection

Table 1. Global growth is projected to remain moderate

	Real GDP growth, year-on-year, per cent				
	2022	2023		2024	
		Interim EO projections	Difference from June EO	Interim EO projections	Difference from June EO
World	3.3	3.0	0.3	2.7	-0.2
G20¹	3.1	3.1	0.3	2.7	-0.2
Australia	3.7	1.8	0.0	1.3	-0.1
Canada	3.4	1.2	-0.2	1.4	0.0
Euro area	3.4	0.6	-0.3	1.1	-0.4
Germany	1.9	-0.2	-0.2	0.9	-0.4
France	2.5	1.0	0.2	1.2	-0.1
Italy	3.8	0.8	-0.4	0.8	-0.2
Spain ²	5.5	2.3	0.2	1.9	0.0
Japan	1.0	1.8	0.5	1.0	-0.1
Korea	2.6	1.5	0.0	2.1	0.0
Mexico	3.9	3.3	0.7	2.5	0.4
Türkiye	5.5	4.3	0.7	2.6	-1.1
United Kingdom	4.1	0.3	0.0	0.8	-0.2
United States	2.1	2.2	0.6	1.3	0.3
Argentina	5.0	-2.0	-0.4	-1.2	-2.3
Brazil	3.0	3.2	1.5	1.7	0.5
China	3.0	5.1	-0.3	4.6	-0.5
India³	7.2	6.3	0.3	6.0	-1.0
Indonesia	5.3	4.9	0.2	5.2	0.1
Russia	-2.0	0.8	2.3	0.9	1.3
Saudi Arabia	8.8	1.9	-1.0	3.1	-0.5
South Africa	1.9	0.6	0.3	1.1	0.1

1. The European Union is a full member of the G20, but the G20 aggregate only includes countries that are also members in their own right.

2. Spain is a permanent invitee to the G20.

3. Fiscal years, starting in April

Source: Interim Economic Outlook 114 database; and Economic Outlook 113 database.

The Organization for Economic Co-operation and Development (OECD) is an international organization that aims to build better policies for better lives. It works towards shaping policies that foster prosperity, equality, opportunity, and well-being for all. The OECD works with over 100 countries to promote policies that improve the economic and social well-being of people around the world. It provides country-specific reviews at the request of governments and helps inform debates in parliaments, the media, and research work.

OECD – September 2023 Economic Outlook Summary

- After a stronger-than-expected start to 2023 that was helped by lower energy prices and the reopening of China, global growth is expected to moderate. The impact of tighter monetary policy is becoming increasingly visible; business and consumer confidence have turned down, and the rebound in China has faded.
- Global GDP growth is projected to remain sub-par in 2023 and 2024, at 3% and 2.7% respectively, held back by the macroeconomic policy tightening needed to rein in inflation.
- Annual GDP growth in the United States is expected to slow from 2.2% this year to 1.3% in 2024, as tighter financial conditions moderate demand pressures. In the euro area, where demand is already subdued, GDP growth is projected to ease to 0.6% in 2023 and edge up to 1.1% in 2024 as the adverse impact of high inflation on real income fades. Growth in China is expected to be held back by subdued domestic demand and structural stresses in property markets, easing to 5.1% in 2023 and 4.6% in 2024.
- Headline inflation is declining, but core inflation remains persistent in many economies, held up by cost pressures and high margins in some sectors.
- Inflation is projected to moderate gradually over 2023 and 2024 but to remain above central bank objectives in most economies. Headline inflation in the G20 economies is projected to ease to 6% in 2023 and 4.8% in 2024, with core inflation in the G20 advanced economies declining from 4.3% this year to 2.8% in 2024.
- Risks remain tilted to the downside. Uncertainty about the strength and speed of monetary policy transmission and the persistence of inflation are key concerns. The adverse effects of higher interest rates could prove stronger than expected, and greater inflation persistence would require additional policy tightening that might expose financial vulnerabilities.

OECD – September 2023 Economic Outlook Summary

- A sharper-than-expected slowdown in China is an additional key risk that would hit output growth around the world.
- Monetary policy needs to remain restrictive until there are clear signs that underlying inflation pressures have durably abated. Policy interest rates appear to be at or close to a peak in most economies, including the U.S. and the euro area, with policy judgements more finely balanced as the effects of higher interest rates become visible.
- Governments are faced with mounting fiscal pressures from rising debt burdens and additional spending on aging populations, the climate transition, and defense. Enhanced near-term efforts to rebuild fiscal space and credible medium-term fiscal plans are needed to better align near-term macroeconomic policies and help ensure debt sustainability.
- Structural policy efforts need to be reinvigorated to strengthen growth prospects. Reducing barriers in labor and product markets and enhancing skills development would help to boost investment, productivity, and labor force participation and make growth more inclusive.
- A key priority is to revive global trade, which is an important source of long-term prosperity for both advanced and emerging-market economies. Concerns about economic security should not prevent advantage being taken of opportunities to lower trade barriers, especially in service sectors.

IMF October 2023 World Economic Outlook Projections

	Projections			From July Projections	
	Y2022	Y2023	Y2024	Y2023	Y2024
World Output	3.5%	3.0%	2.9%	0.0%	0.1%
Advanced Economies	2.6%	1.5%	1.4%	0.0%	0.0%
USA	2.1%	2.1%	1.5%	0.3%	0.5%
Euro Area	3.3%	0.7%	1.2%	-0.2%	-0.3%
Japan	1.0%	2.0%	1.0%	0.6%	0.0%
Emerging & Developing Economies	4.1%	4.0%	4.0%	0.0%	-0.1%
China	3.0%	5.0%	4.2%	-0.2%	-0.3%
India	7.2%	6.3%	6.3%	0.2%	0.0%
Brazil	2.9%	3.1%	1.5%	1.0%	0.3%
Mexico	3.9%	3.2%	2.1%	0.6%	0.6%
ASEAN	5.5%	4.2%	4.5%	-0.4%	0.0%

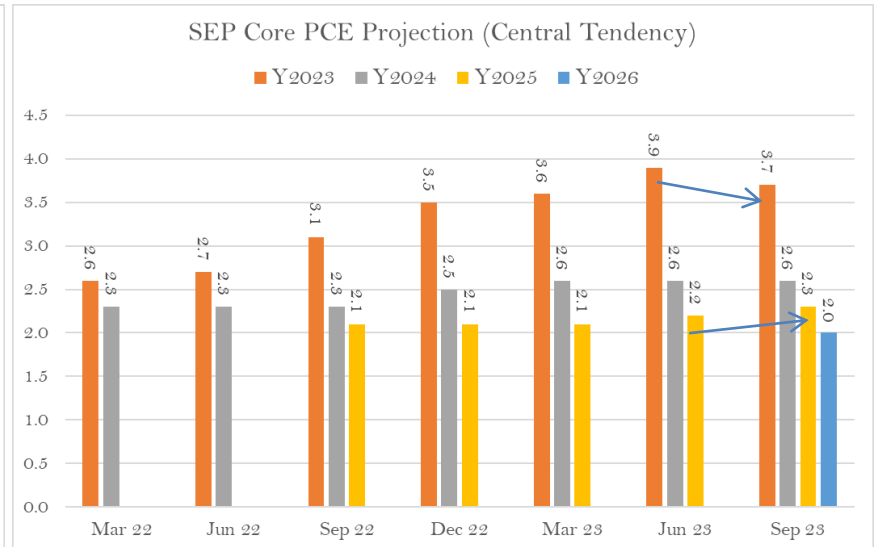
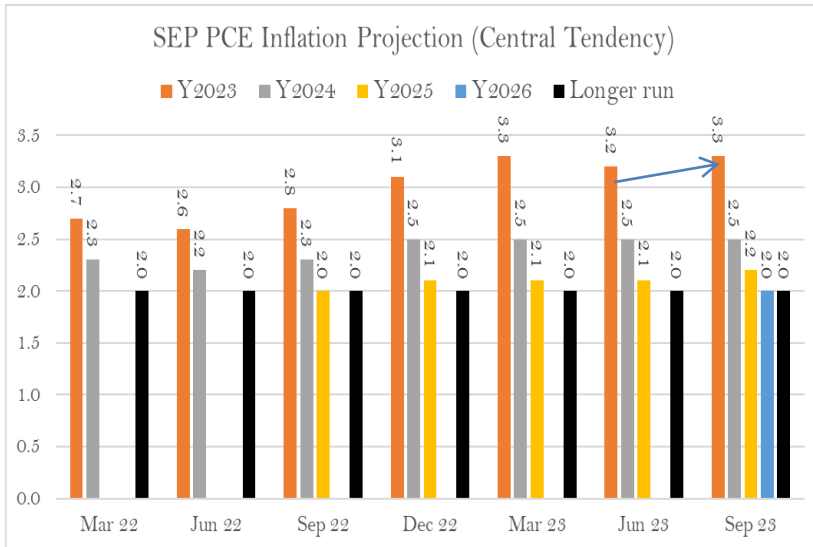
IMF World Economic Outlook – October 2023

- The global recovery from the COVID-19 pandemic and Russia's invasion of Ukraine remains slow and uneven.
- Despite economic resilience earlier this year, with a reopening rebound and progress in reducing inflation from last year's peaks, it is too soon to take comfort. Economic activity still falls short of its pre-pandemic path, especially in emerging markets and developing economies, and there are widening divergences among regions.
- Several forces are holding back the recovery. Some reflect the long-term consequences of the pandemic, the war in Ukraine, and increasing geoeconomic fragmentation. Others are more cyclical in nature, including the effects of monetary policy tightening necessary to reduce inflation, withdrawal of fiscal support amid high debt, and extreme weather events.
- Global growth is forecast to slow from 3.5% in 2022 to 3.0% in 2023 and 2.9% in 2024. The projections remain below the historical (2000–2019) average of 3.8%, and the forecast for 2024 is down by 0.1% from the July 2023 Update to the World Economic Outlook.
- Forecasts for global growth over the medium term, at 3.1%, are at their lowest in decades, and prospects for countries to catch up to higher living standards are weak. Global inflation is forecast to decline steadily from 8.7% in 2022 to 6.9% in 2023 and 5.8% in 2024. Inflation is not expected to return to target until 2025 in most cases.
- Risks to the outlook are more balanced than they were six months ago, on account of the resolution of U.S. debt ceiling tensions and Swiss and U.S. authorities having acted decisively to contain financial turbulence. The likelihood of a hard landing has receded, but the balance of risks to global growth remains tilted to the downside. China's property sector crisis could deepen, with global spillovers, particularly for commodity exporters.

IMF World Economic Outlook – Top Risks

- While some of the extreme risks—such as severe banking instability—have moderated since April, the balance remains tilted to the downside.
- First, the real estate crisis could deepen further in China, an important risk for the global economy. The policy challenge is complex. Restoring confidence requires promptly restructuring struggling property developers, preserving financial stability, and addressing the strains in local public finance. China's economy needs to pivot away from a credit driven real estate model of growth.
- Second, commodity prices could become more volatile under renewed geopolitical tensions and disruptions linked to climate change. Since June, oil prices have increased by about 25 percent, on the back of extended supply cuts from OPEC+ (the Organization of the Petroleum Exporting Countries plus selected nonmembers) countries. Food prices remain elevated and could be disrupted further by an escalation of the war in Ukraine, causing significant hardship for many low-income countries.
- Geoeconomic fragmentation has also led to a sharp increase in the dispersion in commodity prices across regions, including critical minerals.
- Third, while both underlying and headline inflation have decreased, they remain uncomfortably high. Near-term inflation expectations have risen markedly above target, although they now appear to be turning a corner.
- Fourth, fiscal buffers have eroded in many countries, with elevated debt levels, rising funding costs, slowing growth, and an increasing mismatch between the growing demands on the state and available fiscal resources. This leaves many countries more vulnerable to crises and demands a renewed focus on managing fiscal risks.
- Fifth, despite the tightening of monetary policy, financial conditions have eased in many countries. The danger is of a sharp repricing of risk, especially for emerging markets, that would further appreciate the U.S. dollar, trigger capital outflows, and increase borrowing costs and debt distress.

Summary of Economic Projections – Inflation (Core PCE)



FOMC, Experiential Wealth

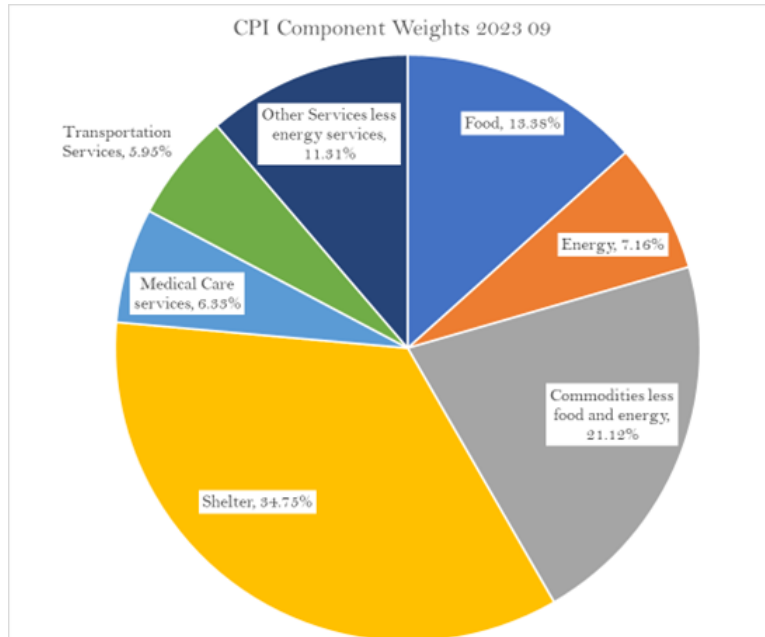
FOMC, Experiential Wealth

In the latest SEP, the central tendency average member continues to expect PCE inflation to move higher for 2023. Since March 2022 until September 2023, the FOMC projection has moved higher. In June, the projection has come down by 0.1%. For Y2023, the projected annual PCE moved back to 3.3%. At the same time, the projection for 2024 remains at 2.5% and, for 2025, has moved up to 2.2%

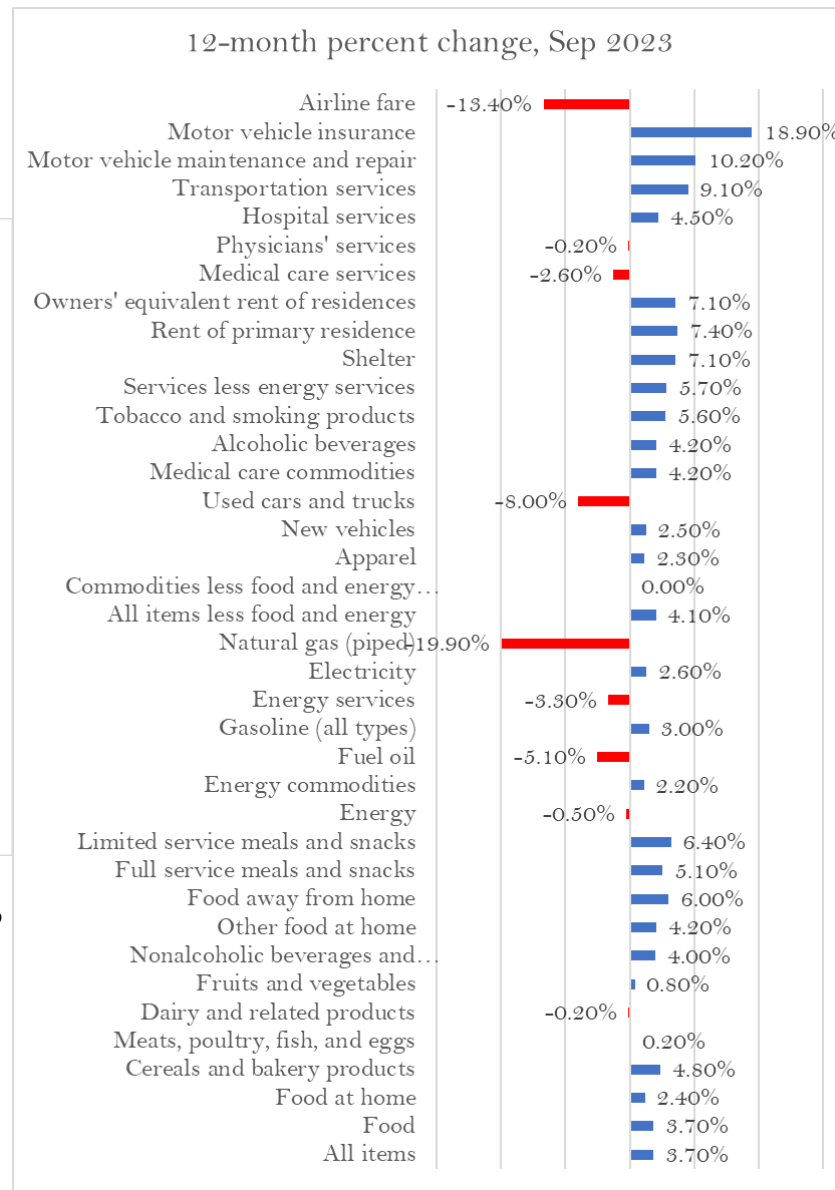
At the same time, projections for Core PCE (ex-food and energy) inflation move lower. In June, the projection for 2023 was at 3.9%, and now, in September, the projection is 3.7%. Although this projection is lower, it remains higher than the March meeting projection of 3.6%. At the same time, the projection for Y2024 remains at 2.6%, but for Y2025, the inflation projection has moved up from 2.2% to 2.3%. This suggests that the FOMC members are expecting core inflation will likely remain higher for longer.

The Fed does not project reaching its 2% inflation target until the end of 2025.

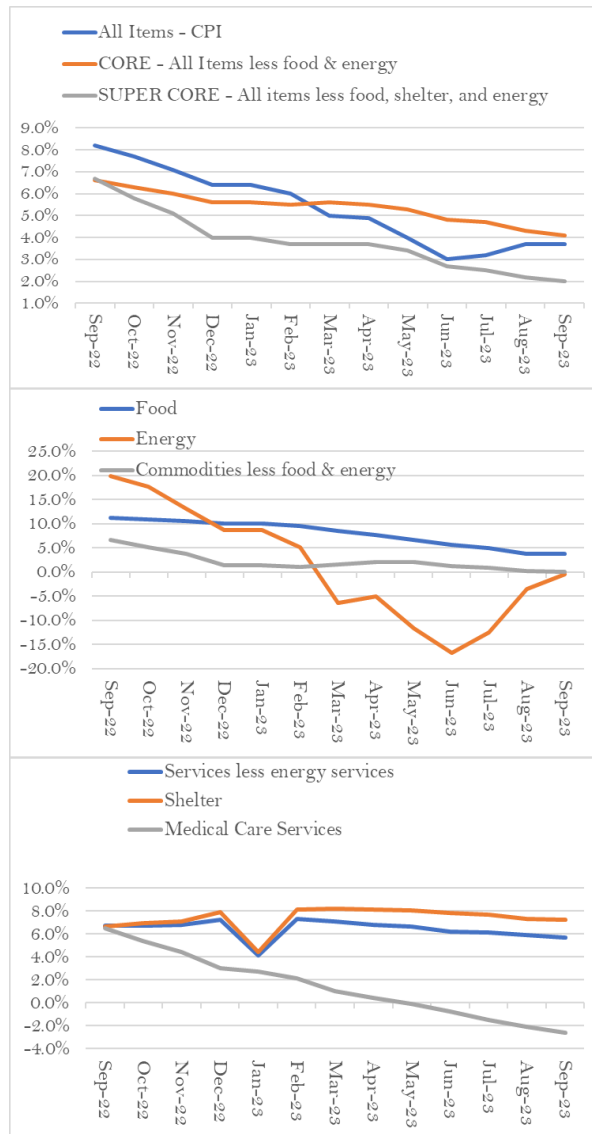
Weights of CPI Components & their Contributions



Source: BLS, Experiential Wealth 2023 09



Components of CPI

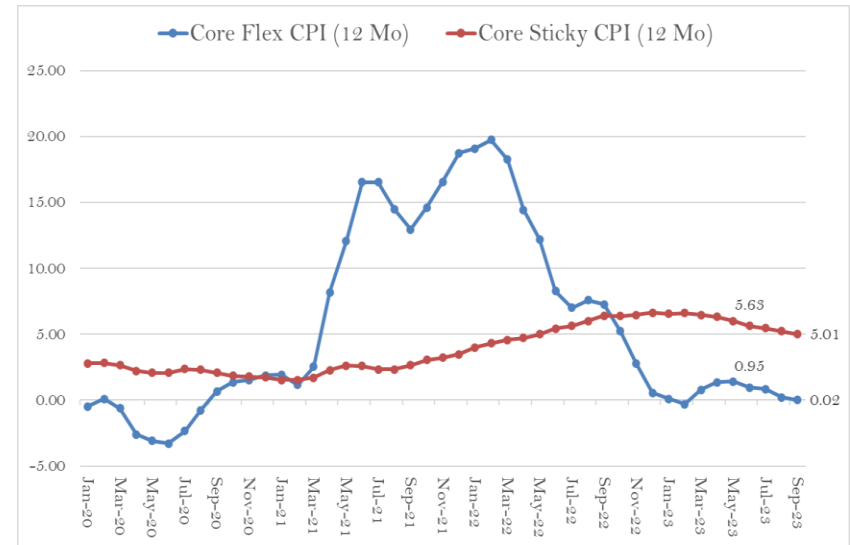
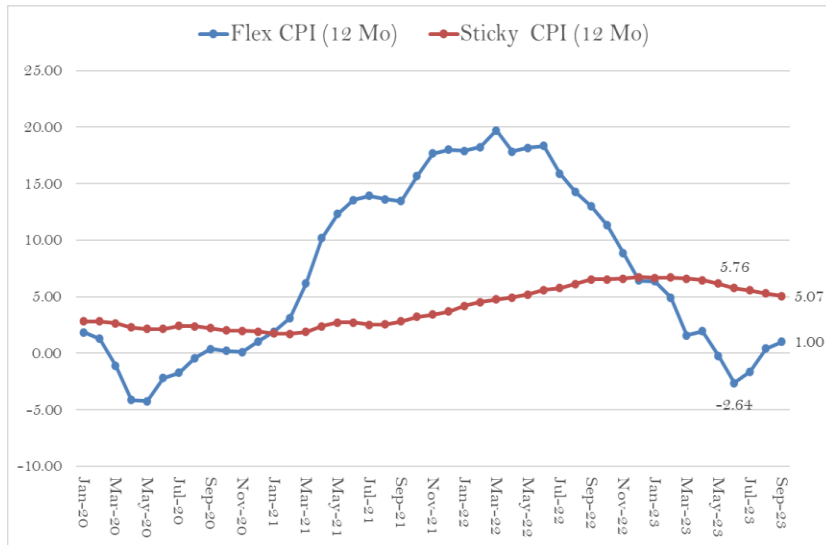


On a trailing 12-month basis, the headline CPI of 3.7% for **September 2023** has improved significantly from 8.2% for September 2022; a 55% reduction. The major contributing factors have been the significant reductions in energy and food prices. The core CPI value has also dropped for the same period but at a much slower pace. After removing the volatile food and energy components, core CPI dropped from 6.6% to 4.1%, a drop of 38%. The service component has been much stickier, of which its major component, shelter, moved up from 6.6% to 7.2% over the same period. Finally, the Fed is also focused on the super core (i.e., CPI stripping out food, energy, and shelter components) which has finally reached 2% in September.

In sum, headline inflation is coming down much faster than most thought, but the core CPI remains too far away from the Fed target of 2%.

Source: BLS CPI Table7, Experiential Wealth <https://www.bls.gov/cpi/tables/supplemental-files/>

CPI – Flex and Sticky (09-2023) – Disinflation is Happening

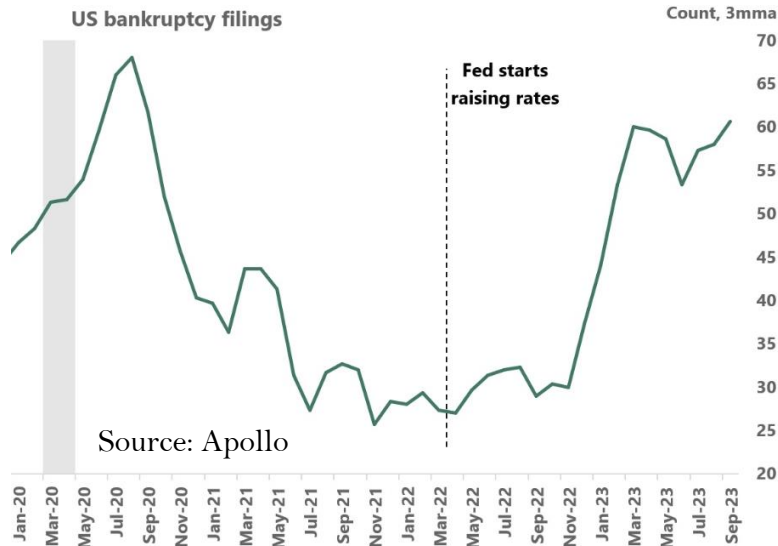


Source: <https://www.atlantafed.org/research/inflationproject/stickyprice>, Experiential Wealth

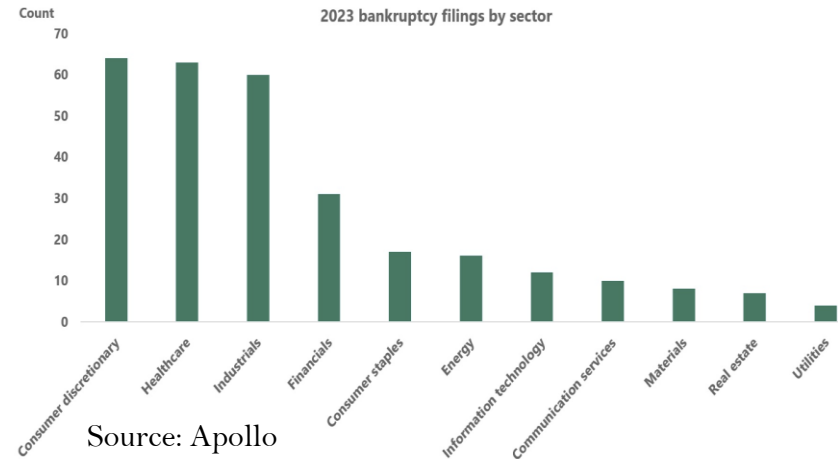
The Atlanta Federal Reserve uses the published components of the CPI to compute two subindexes, a **sticky-price composite** of the CPI and a **flexible-price** CPI. The evidence indicates that the flexible-price measure is, in fact, much more responsive to changes in the economic environment—slack—while the sticky-price variant appears to be more forward looking. Price setters understand that it will be costly to change prices; they will want their price decisions to account for inflation over the periods between their infrequent price changes. The Atlanta Fed divides the published components of the monthly CPI (45 categories derived from the raw price data) into their “sticky-price” and “flexible-price” aggregates.

Flex and sticky are further divided into core and non-core. Core excludes energy and food prices. Historically, flexible price and flexible core price CPI have shown much more volatility than the alternative sticky-price and sticky core price measures. Although imperfect, separating CPI categories into these two measures and further separating core categories from non-core (i.e., removing the more volatile priced categories from the CPI) provide a view of future inflation. As of September, the sticky-price CPI increased 5.07% (on an annualized basis), and the flex CPI was up only 1%. The more refined division of Core Flex CPI moved up 0.02%, while the Core Sticky moved up 5.02%. These are all signs of the stubbornness of the sticky CPI which remains too high against the Fed’s inflation target.

Economic Trouble Brewing – Early Indicators



Bankruptcies concentrated in Consumer discretionary, Healthcare, and Industrials



Household Debt and Credit Developments as of Q2 2023

CATEGORY	QUARTERLY CHANGE * (BILLIONS \$)	ANNUAL CHANGE** (BILLIONS \$)	TOTAL AS OF Q2 2023 (TRILLIONS \$)
Mortgage Debt	(-) \$30	(+) \$627	\$12.01
Home Equity Line Of Credit	(+) \$1	(+) \$21	\$0.34
Student Debt	(-) \$35	(-) \$20	\$1.57
Auto Debt	(+) \$20	(+) \$80	\$1.58
Credit Card Debt	(+) \$45	(+) \$144	\$1.03
Other	(+) \$15	(+) \$57	\$0.53
Total Debt	(+) \$16	(+) \$909	\$17.06

*Change from Q1 2023 to Q2 2023

** Change from Q2 2022 to Q2 2023

Source: NY Fed

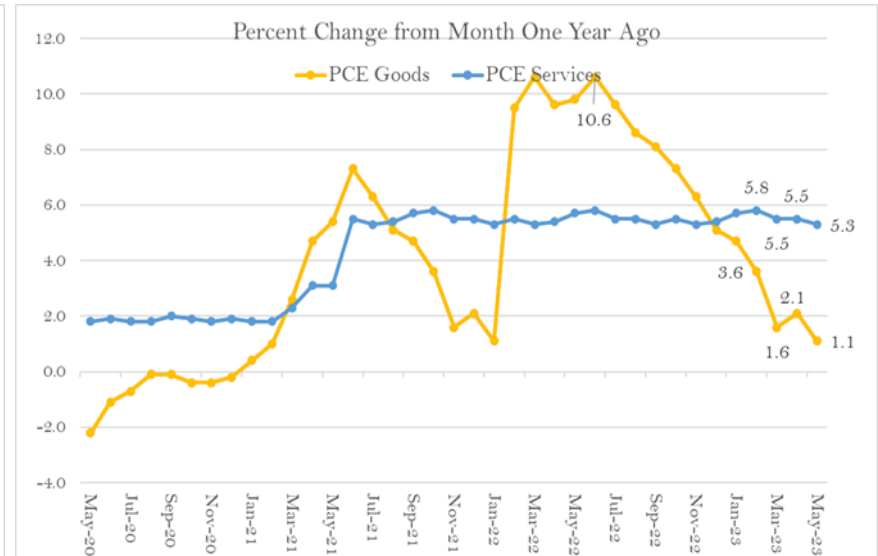
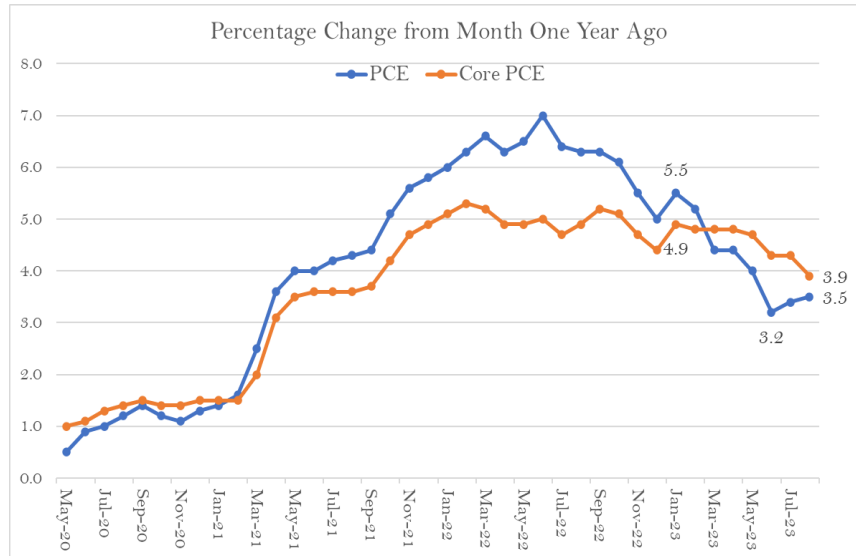
Flow into Serious Delinquency (90 days or more delinquent)

CATEGORY 1	Q2 2022	Q2 2023
Mortgage Debt	0.44%	0.63%
Home Equity Line Of Credit	0.32%	0.44%
Student Loan Debt	0.98%	0.85%
Auto Loan Debt	1.81%	2.41%
Credit Card Debt	3.35%	5.08%
Other	3.21%	4.65%
ALL	0.84%	1.16%

Source: NY Fed

<https://www.newyorkfed.org/newsevents/news/research/2023/20230808>

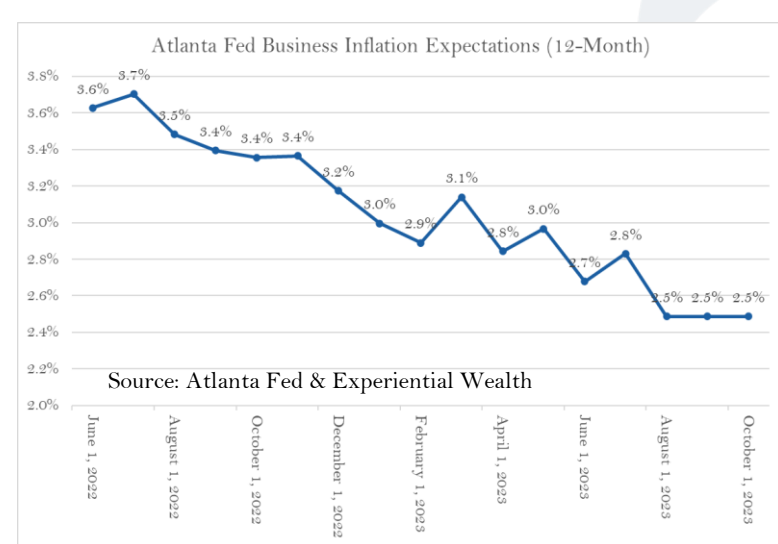
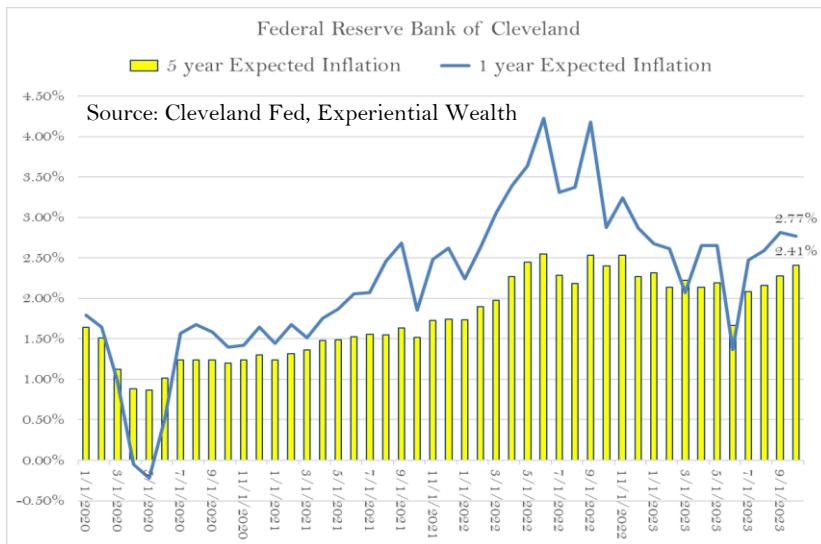
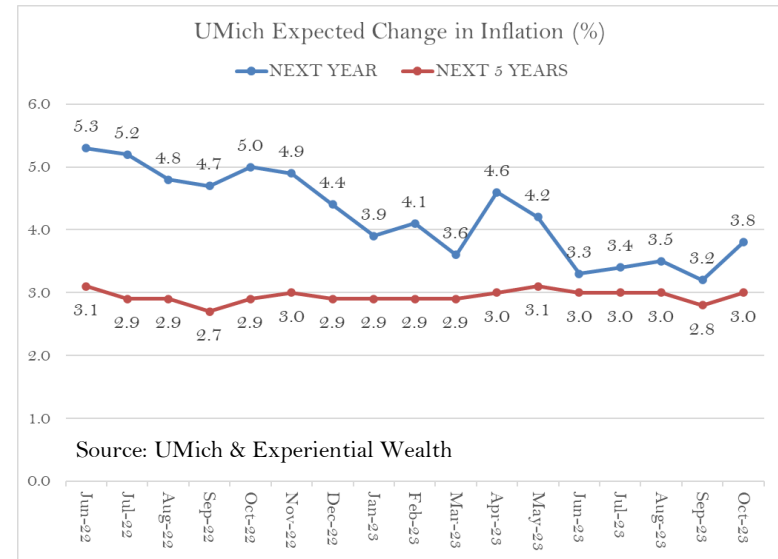
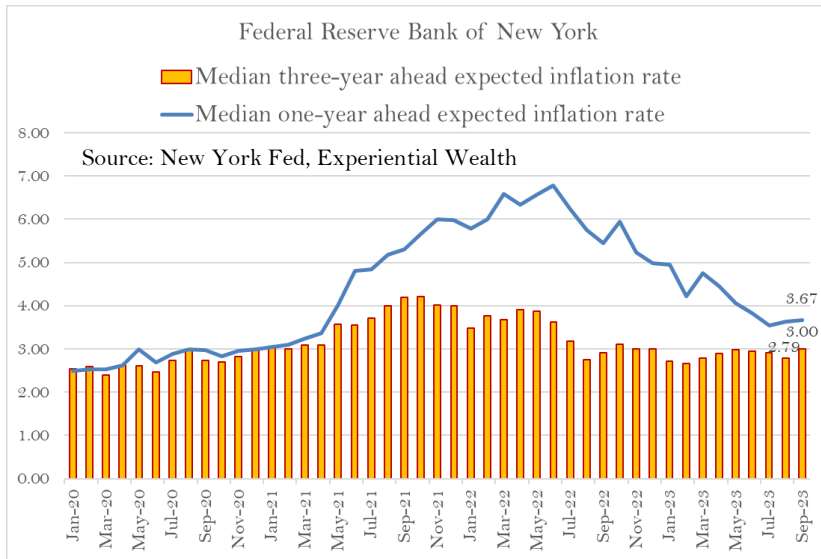
Inflation (PCE) Remains Elevated



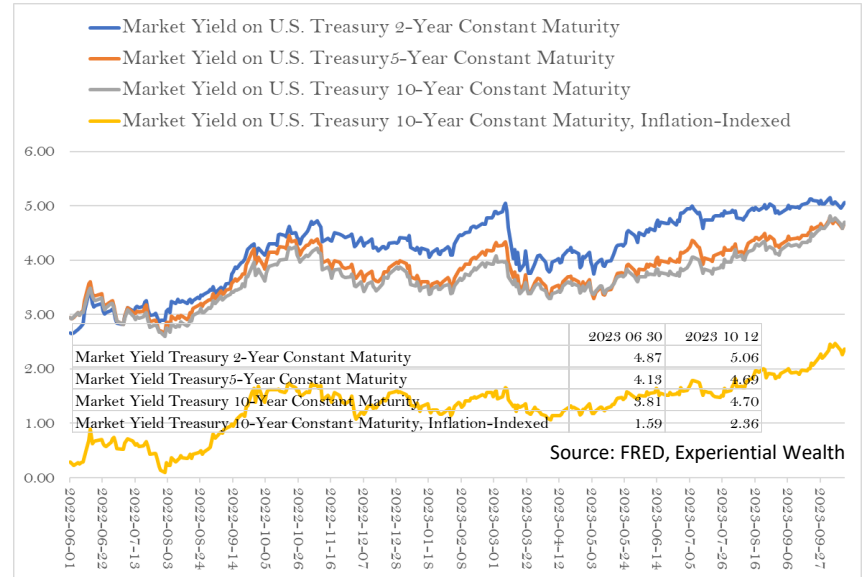
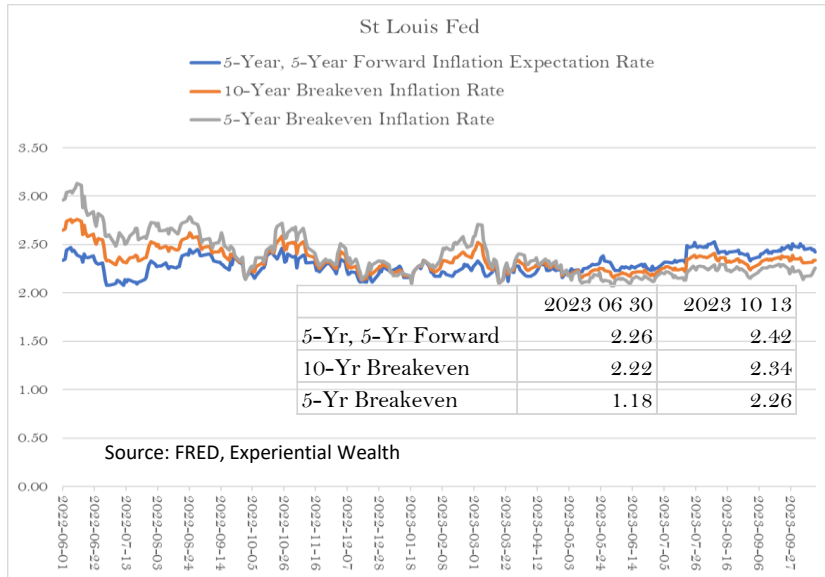
The preferred inflation gauge for the Fed is the Personal Consumption Expenditure (PCE). As of **August 2023** (latest) data, PCE is now at 3.5%, rising 0.2% since June (3.2%) and 2.0% since January (5.5%) The rise in PCE is a bit troublesome, even though the core CPE (the Fed’s main focus) is now at 3.9%, falling from the January 4.9% rate. The Fed target is 2% core PCE, so this is still twice as high as the target.

Breaking down the PCE further into its services and goods components tells us goods’ prices have rebounded from their low in June even though the services component continues to come down and is now at 4.9%. We should continue to pay attention to goods’ prices to see if this is the beginning of a higher inflation trend.

Inflation Expectation – Survey-Based – flat to up



Inflation Expectation – Market-Based – Rates Moved up since June



5-Year, 5-Year Forward Inflation Expectation Rate is a measure of expected inflation (on average) over the five-year period that begins five years from today @ **2.42%**.

10-Year Breakeven Inflation Rate is a measure of expected inflation derived from 10-Year Treasury Constant Maturity Securities and 10-Year Treasury Inflation-Indexed Constant Maturity Securities. The latest value implies what market participants expect inflation to be in the next 10 years, on average @ **2.34%**.

5-Year Breakeven Inflation Rate is the measure of expected inflation derived from 5-Year Treasury Constant Maturity Securities and 5-Year Treasury Inflation-Indexed Constant Maturity Securities. The latest value implies what market participants expect inflation to be in the next 5 years, on average @ **2.26%**.

2-Year Constant Maturity Rate is the nominal rate of the 2-Year U.S. Treasury. The latest value is the current yield on the 2-Year Treasury @ **5.06%**.

5-Year Constant Maturity Rate is the nominal rate of the 5-Year U.S. Treasury. The latest value is the current yield on the 5-Year Treasury @ **4.69%**.

10-Year Constant Maturity Rate is the nominal rate of the 10-Year U.S. Treasury. The latest value is the current yield on the 10-Year Treasury @ **4.70%**.

10-Year Constant Inflation Indexed Maturity Rate is the real rate of the 10-Year U.S. Treasury. The latest value is the current yield on the 10-Year Treasury @ **2.36%**.

Market based expectations remain somewhere around 2% in the long run and appear to be well anchored.

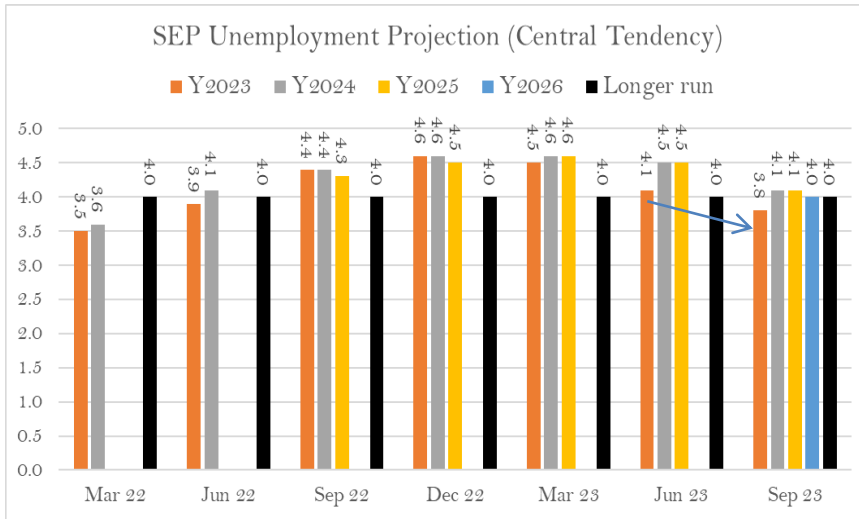
Global Inflation is Falling or Holding Steady

Country	Last	Previous	Reference
China	0.00	0.10	23-Sep
Netherlands	0.20	3.00	23-Sep
Saudi Arabia	1.70	2.00	23-Sep
Switzerland	1.70	1.60	23-Sep
Indonesia	2.28	3.27	23-Sep
Japan	3.20	3.30	23-Aug
Spain	3.50	2.60	23-Sep
South Korea	3.70	3.40	23-Sep
United States	3.70	3.70	23-Sep
Canada	4.00	3.30	23-Aug
Singapore	4.00	4.10	23-Aug
Euro Area	4.30	5.20	23-Sep
Mexico	4.45	4.64	23-Sep
Germany	4.50	6.10	23-Sep
South Africa	4.80	4.70	23-Aug
France	4.90	4.90	23-Sep
India	5.02	6.83	23-Sep
Brazil	5.19	4.61	23-Sep
Italy	5.34	5.44	23-Sep
Australia	6.00	7.00	23-Jun
Russia	6.00	5.20	23-Sep
United Kingdom	6.70	6.80	23-Aug
Turkey	61.53	58.94	23-Sep
Argentina	138.00	124.00	23-Sep

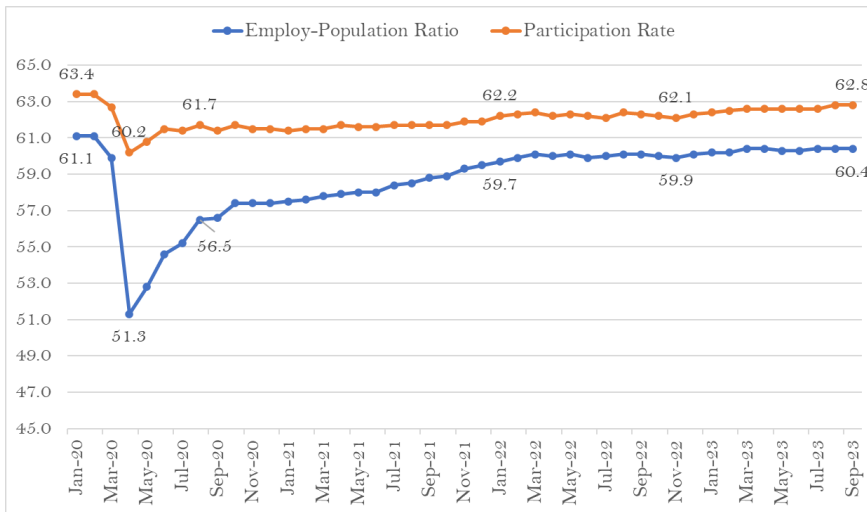
Most countries have seen a reduction in inflation in August-September 2023.

Source: Trading Economics, Experiential Wealth
<https://tradingeconomics.com/country-list/inflation-rate>

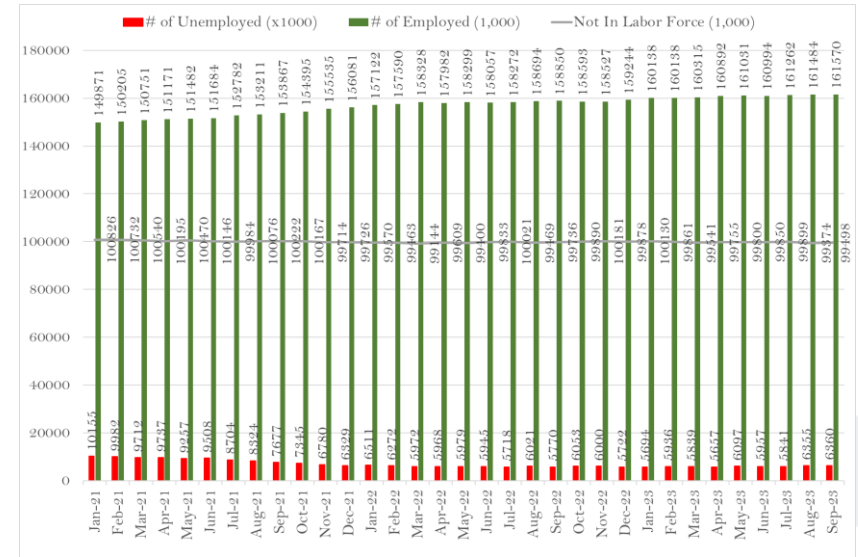
Summary of Economic Projections – Unemployment (U3)



Source: FOMC, Experiential Wealth



BLS, Experiential Wealth

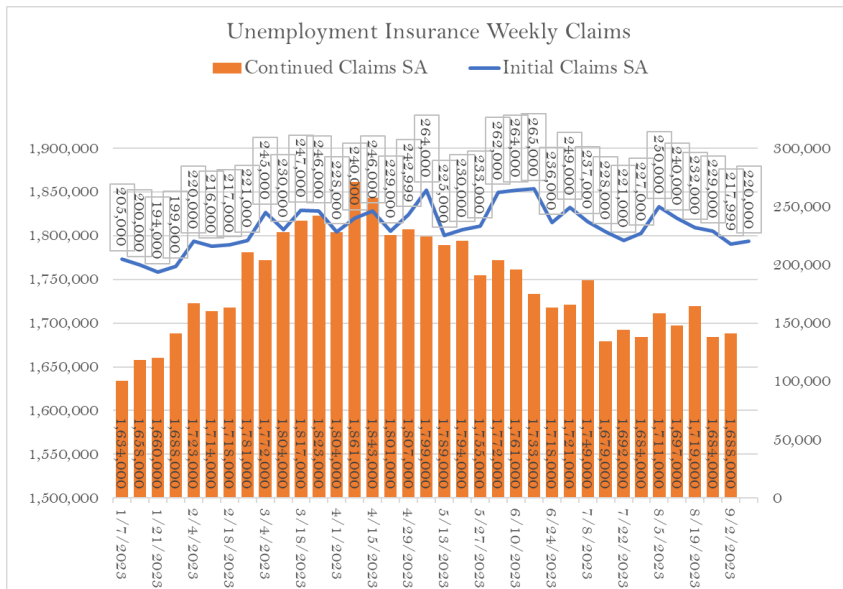
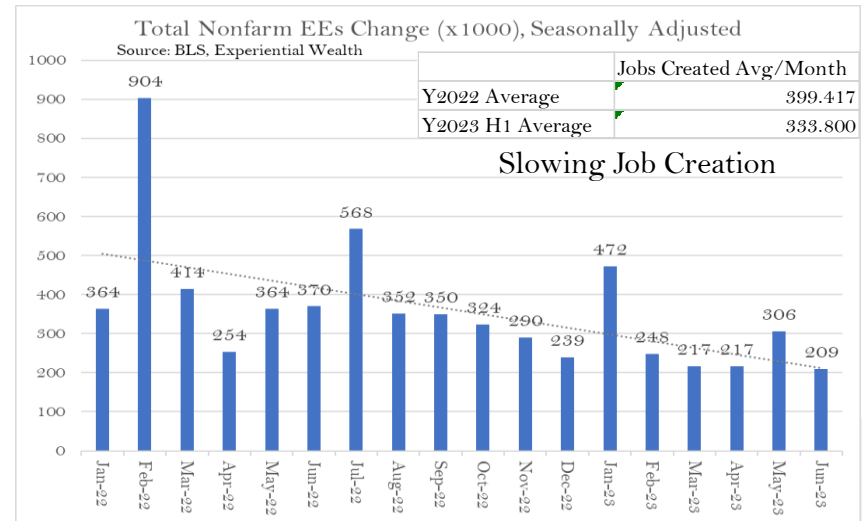
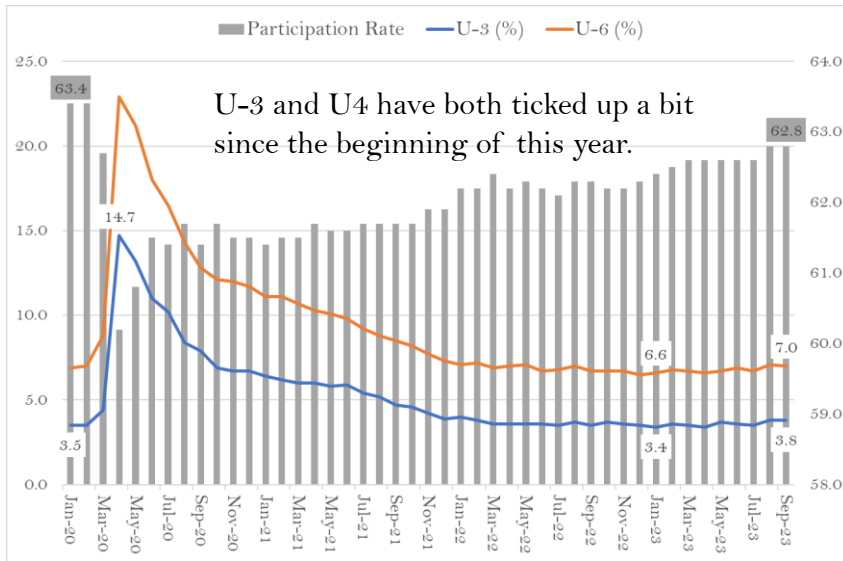


The Federal Reserve expects unemployment to move down from its June projection of 4.1% to 3.8% by end of year. This is a sign that the Fed does not expect a recession in 2023 and acknowledges the tight labor market. New jobs continue to be added while the labor pool is not expanding, as evidenced by the Employment-Population Ratio and the Participation Rate.

The rate of increase in employment is slowing as the economy also slows, but the labor market remains tight. Both the Employment-Population Ratio and the Participation Rate are below their respective pre-pandemic levels. This continues to support the factors such as long-Covid effects, baby boomers retiring, and the tail end of high savings during Covid from fiscal transfers. Of course, there is also the job-skill mismatch challenge.



Labor Market Data



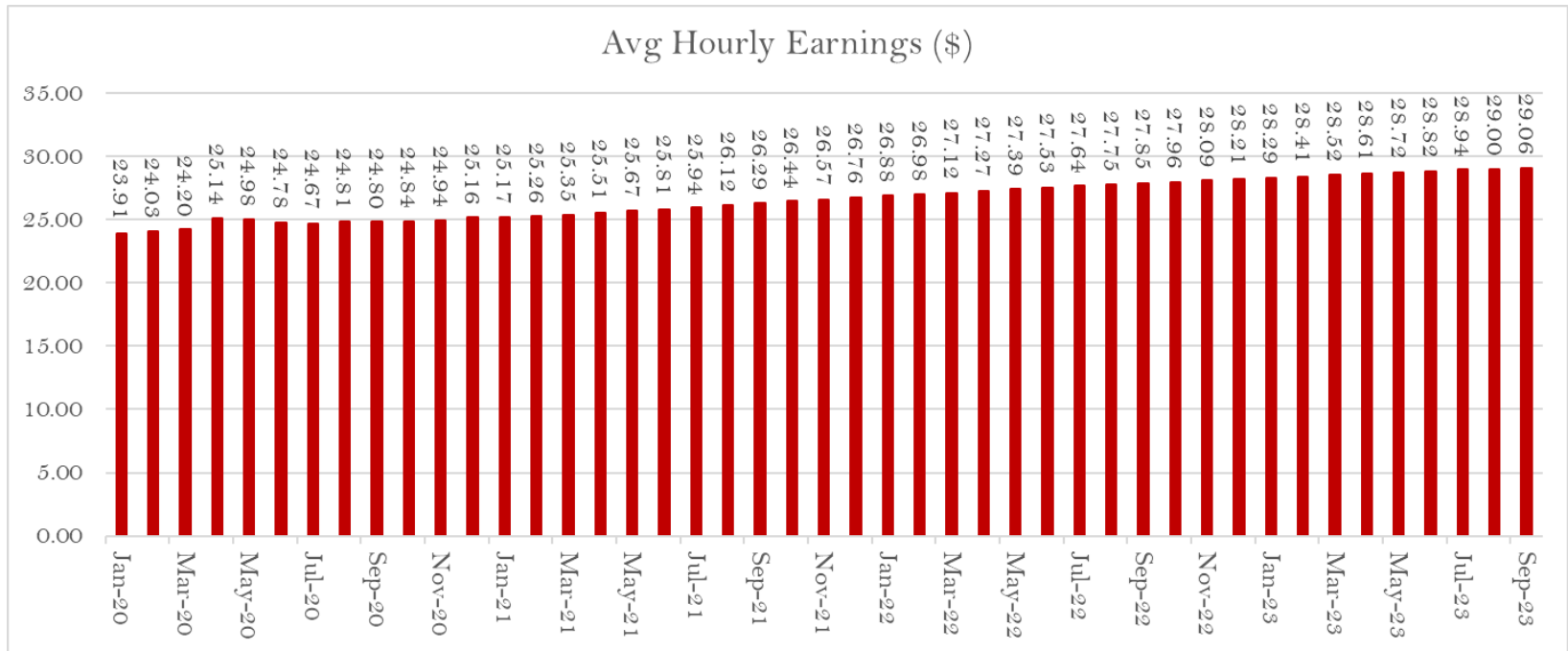
The unemployment rate remains at historically low levels. There are still “more” jobs opening than people looking for jobs. The number of people not in the labor force has been quite steady, and there does not yet seem to be a big rush to come back into the labor force (participation rate). There is likely a mismatch of job and skills which (1) maintains a higher job opening rate and (2) causes employers to hold on to workers longer. Job creation is slowing and is a sign of a continually slowing economy.

Where New Jobs are...One Year and One Month Hence

	Industry Sector (x1000)	Aug-22	Jul-23	Aug-23
More Hiring	Mining and logging	20	29	29
	Construction	388	431	361
	Durable goods	298	233	220
	Nondurable goods	226	218	226
	Wholesale trade	179	160	153
	Retail trade	885	731	763
	Transportation, warehousing, and utilities	375	260	301
	Information	125	96	84
	Finance and insurance	165	137	161
Less Hiring	Real estate and rental and leasing	91	98	70
	Professional and business services	1,240	1,199	1,127
	Educational services	173	119	167
	Health care and social assistance	860	879	850
	Leisure and hospitality	1,266	1,079	1,218
	Arts, entertainment, and recreation	133	152	140
	Accommodation and food services	1,133	927	1,078
	Other services	249	229	195
	Government	760	409	631

Source: BLS, Experiential Wealth 2023 08

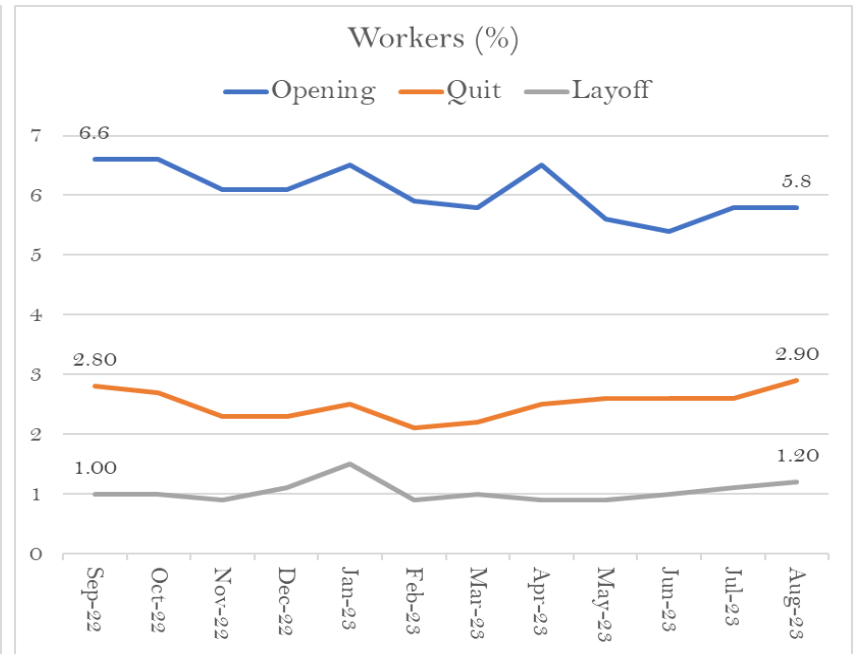
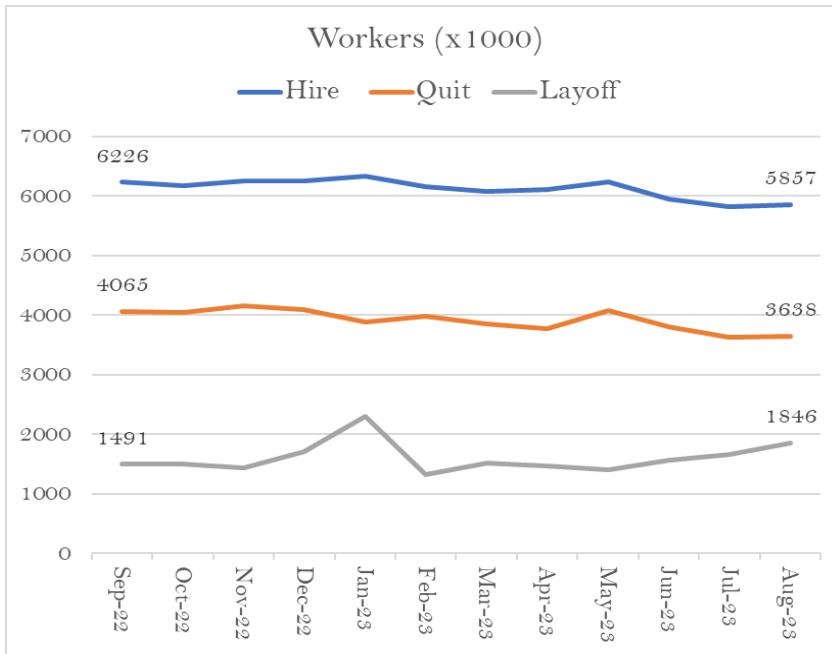
Payroll



In September, average hourly earnings for all employees on private nonfarm payrolls rose by 7 cents, or 0.2%, to \$29.06. Over the past 12 months, average hourly earnings have increased by 4.2%. In September, average hourly earnings of private-sector production and nonsupervisory employees rose by 6 cents, or 0.2%, to \$29.06.

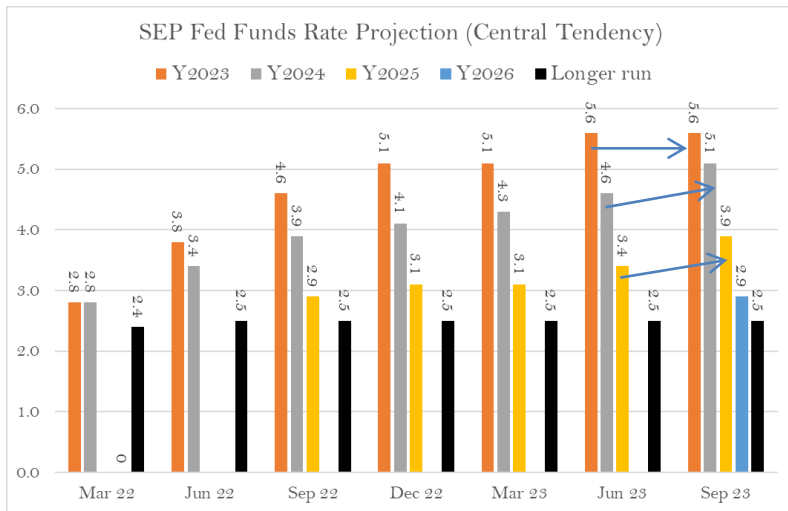
The average workweek for all employees on private nonfarm payrolls was unchanged at 34.4 hours in September. In manufacturing, the average workweek was little changed at 40.1 hours, and overtime was unchanged at 3.1 hours. The average workweek for production and nonsupervisory employees on private nonfarm payrolls remained at 33.8 hours.

JOLTS Data – 2023 August, still a strong labor market



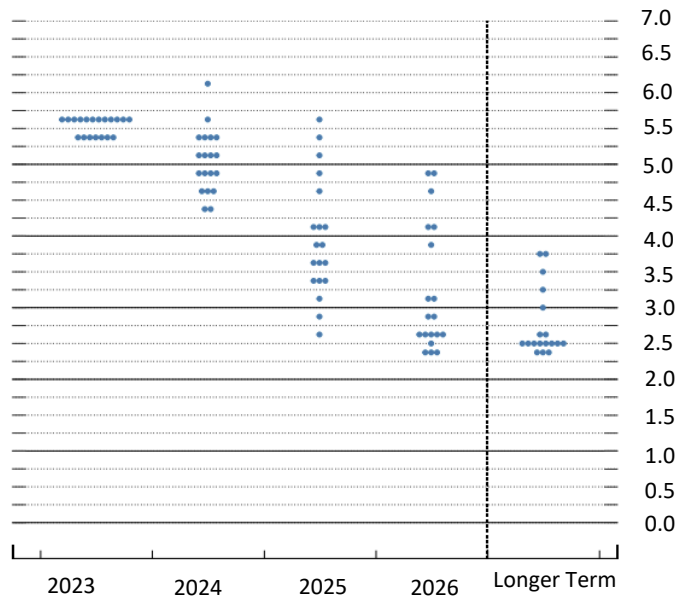
HIRES (x1000)	May-23	Jun-23	Jul-23	Aug-23	QUITS (x1000)	May-23	Jun-23	Jul-23	Aug-23
Total private	4.4	4.2	4.1	4.1	Total private	3,869	3,618	3,409	3,422
1 to 9 employees	4.4	4	3.9	4	1 to 9 employees	626	514	416	437
10 to 49 employees	4.2	4.1	3.9	4	10 to 49 employees	1,420	1,256	1,213	1,171
50 to 249 employees	4.5	4.6	4.5	4.5	50 to 249 employees	1,165	1,191	1,146	1,155
250 to 999 employees	4.9	4.2	4.4	4.4	250 to 999 employees	450	445	429	456
1,000 to 4,999 employees	4.1	3.5	3.8	4	1,000 to 4,999 employees	169	165	163	160
5,000 or more employees	2.5	2.1	2.1	1.9	5,000 or more employees	39	47	42	43

Summary of Economic Projections (SEP) – Fed Fund Rate



Source: FOMC, Experiential Wealth

The central tendency (among all FOMC members) rate stays at 5.6% since the June meeting for Y2023. Currently, the Fed Fund rate is at 5.25% to 5.50%. This continues to signal that the members are expecting one more hike in 2024. The dot plots suggest 7 members expect to hold rates constant and the rest of the members are expecting another 25bp hike in the November or December meeting. Members raised their rate projections for 2024 from 4.6% to 5.1%. This suggests that, in June, the members expected a cut of 100bp in 2024, which has been revised to a cut of 50bp in 2024. For 2024, the June projection of 3.4% has been revised up by 50bp to 3.9%.

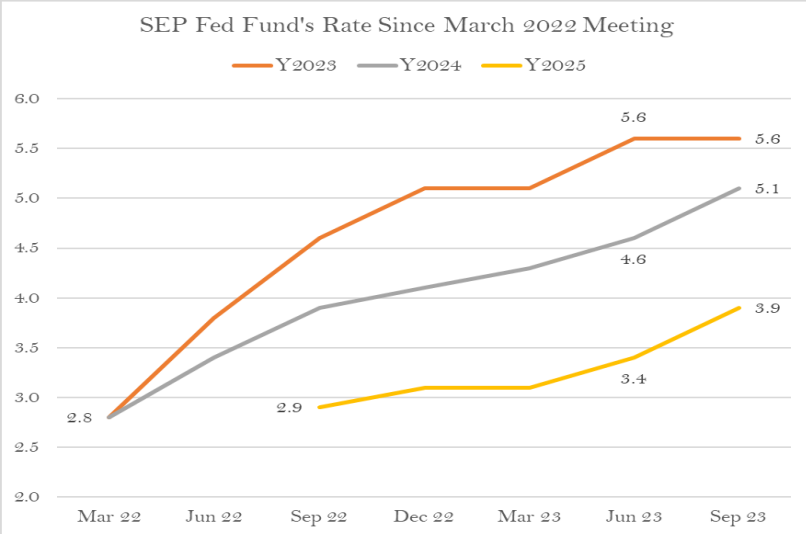
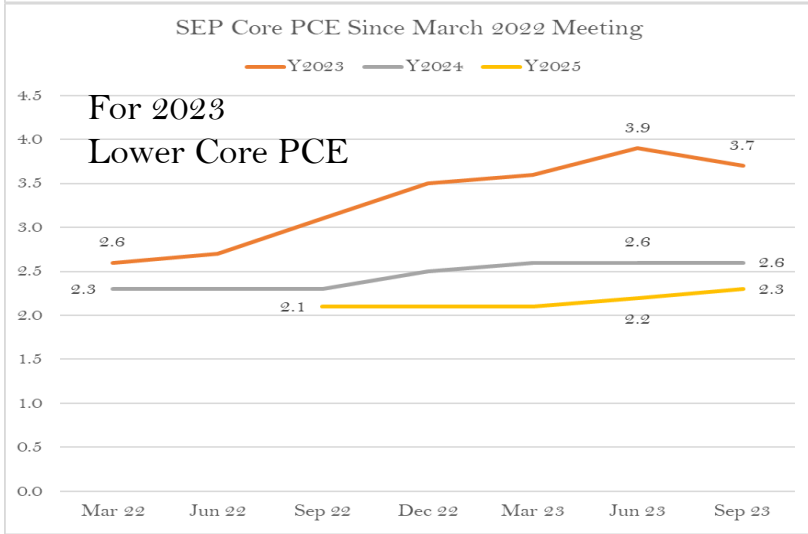
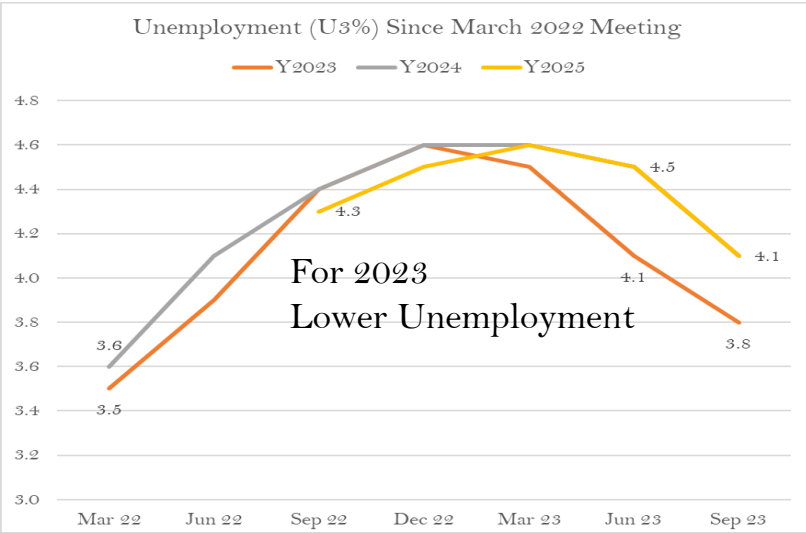
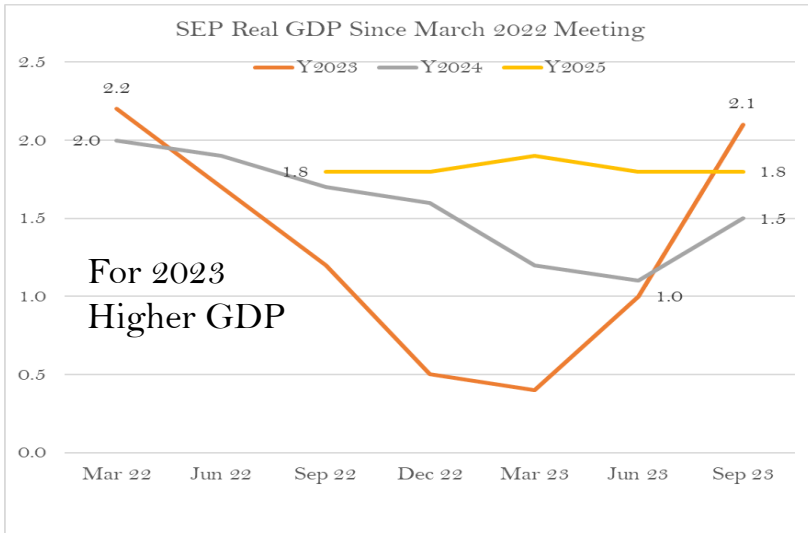


Source: FOMC, Experiential Wealth 09 2023

These new dots suggest (1) rate cuts will be less generous, (2) rate cuts are likely due to a more stubbornly high core inflation rate, and (3) higher rates will be with us for longer periods.

Please note that these dots are constantly changing based on incoming data and each regional bank survey. Investors should not solely rely on these dots as the definitive direction of the FOMC; rather, the dots are to provide a current view of what the members are anticipating.

SEP Dots Project...



Higher economic growth (GDP) + Lower unemployment (U3) + Lower but still high core inflation (PCE)
= High and Higher rates and for longer

CME Fed Watch Tool – 6-30 vs 10-1 – too optimistic still.

6-30-2023 MEETING PROBABILITIES												
MEETING DATE	300-325	325-350	350-375	375-400	400-425	425-450	450-475	475-500	500-525	525-550	550-575	575-600
7/26/2023				0.0%	0.0%	0.0%	0.0%	0.0%	13.2%	86.8%	0.0%	0.0%
9/20/2023	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10.0%	69.1%	20.8%	0.0%
11/1/2023	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.5%	54.0%	33.2%	5.3%
12/13/2023	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	13.2%	51.4%	29.7%	4.7%
1/31/2024	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	5.5%	27.4%	43.4%	20.4%	2.9%
3/20/2024	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	2.9%	16.5%	35.4%	31.9%	11.7%	1.5%
5/1/2024	0.0%	0.0%	0.0%	0.0%	0.1%	2.5%	14.3%	32.3%	32.5%	15.0%	3.1%	0.2%
6/19/2024	0.0%	0.0%	0.0%	0.1%	1.2%	7.9%	22.5%	32.4%	24.5%	9.6%	1.8%	0.1%
7/31/2024	0.0%	0.0%	0.1%	1.0%	6.4%	19.4%	30.3%	26.2%	12.8%	3.5%	0.5%	0.0%
9/25/2024	0.0%	0.0%	0.8%	5.6%	17.3%	28.5%	26.8%	14.9%	5.0%	1.0%	0.1%	0.0%
11/6/2024	0.0%	0.7%	4.9%	15.5%	26.8%	27.1%	16.7%	6.5%	1.6%	0.2%	0.0%	0.0%
12/18/2024	0.4%	2.8%	10.3%	21.3%	27.0%	21.8%	11.5%	4.0%	0.9%	0.1%	0.0%	0.0%

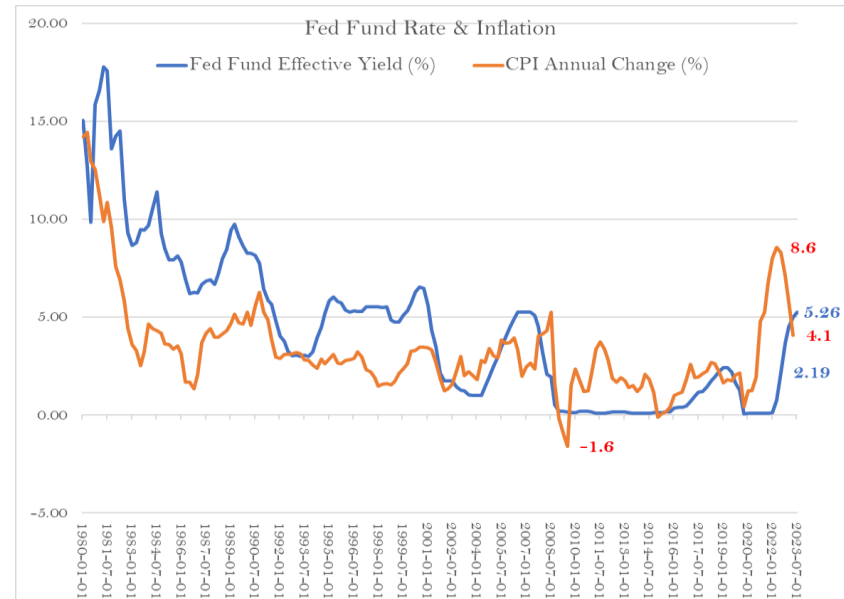
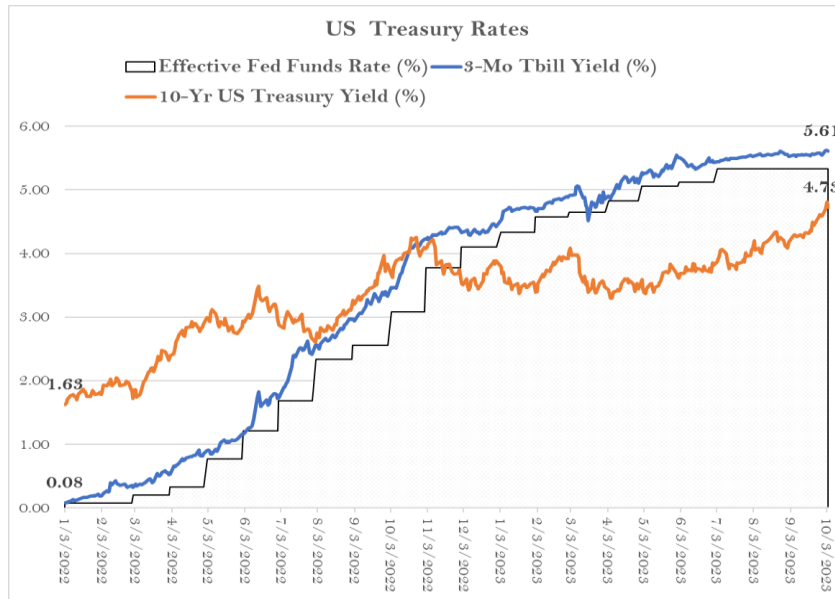
The CME Fed Watch Tool uses Fed Funds futures contracts to estimate the probability of a rate hike or cut. At the end of the second quarter, the market expected the Fed to hold rates at 525-550 (current rate) through January 2024 and begin to cut rates during its March 20th meeting by 25bp. The tool projects **5 cuts** in total in 2024, or 125bp in all. The market has been fighting or hoping that the Fed will cut rates sooner than later based on a rapid disinflation and a soft economic landing scenario.

10-1-2023 MEETING PROBABILITIES										
MEETING DATE	375-400	400-425	425-450	450-475	475-500	500-525	525-550	550-575	575-600	600-625
11/1/2023		0.0%	0.0%	0.0%	0.0%	0.0%	66.9%	33.1%	0.0%	0.0%
12/13/2023	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	55.0%	39.1%	5.9%	0.0%
1/31/2024	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	53.3%	39.6%	6.9%	0.2%
3/20/2024	0.0%	0.0%	0.0%	0.0%	0.0%	8.5%	51.1%	34.4%	5.8%	0.2%
5/1/2024	0.0%	0.0%	0.0%	0.0%	3.0%	23.6%	45.2%	24.3%	3.8%	0.1%
6/12/2024	0.0%	0.0%	0.0%	0.9%	9.4%	30.3%	38.7%	17.9%	2.7%	0.1%
7/31/2024	0.0%	0.0%	0.5%	5.1%	19.8%	34.5%	28.4%	10.4%	1.4%	0.0%
9/18/2024	0.0%	0.2%	2.9%	12.7%	27.4%	31.3%	19.0%	5.7%	0.7%	0.0%
11/7/2024	0.1%	1.3%	6.8%	18.6%	29.0%	26.4%	13.7%	3.7%	0.4%	0.0%
12/18/2024	1.1%	6.0%	16.7%	27.3%	26.8%	15.7%	5.3%	0.9%	0.1%	0.0%

The CME Fed Watch Tool is now projecting a holding the current rate and for longer scenario. As of 10-1-23, the current 525-550 rate shall remain until July 31, 2024, when the Fed is expected to cut 25bp. For the year of 2024, the market expects **3 cuts** in total or 75bp. Although this is extending the higher for longer by 3 meetings, we believe the market will be disappointed. This is especially true if there is no significant economic slowdown or a recession.

The CME Group calculates the probabilities of possible Fed Funds target rates. These are based on Fed Funds futures contract prices, assuming that rate hikes/cuts are uniformly sized in increments of 25bps (0.25%) and that the Effective Fed Funds Rate (EFFR) will react proportionally to the size of the hike/cut.

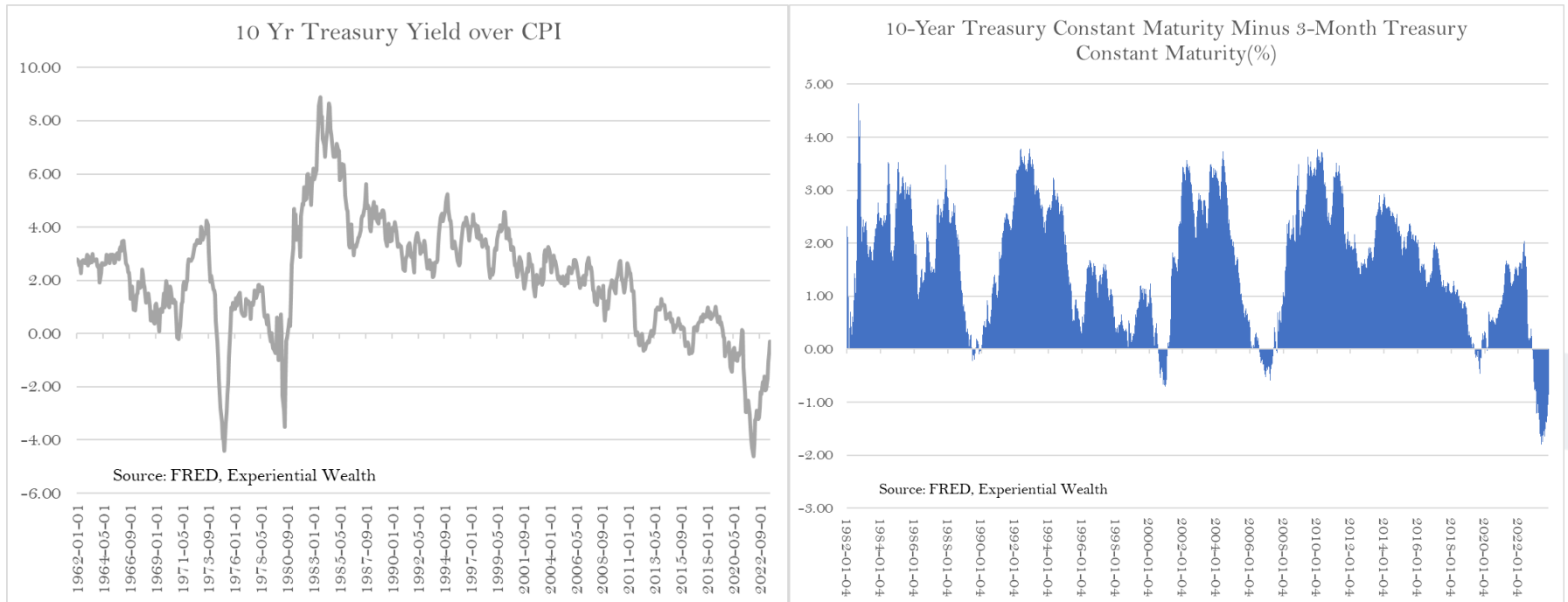
Monetary Policy Entering Restrictive Territory?



The FOMC has increased its Fed Funds rate 11 times since 2022 and went from the 0%-0.25% to the 5.25%-5.50% range. The 3-month T-bill is now yielding more than 5.6%, and the 10-treasury yielding is at more than 4.7%. Even at this high rate, the yield curve remains inverted. The real (inflation adjusted) 10-year interest rate is now at 1.58%.

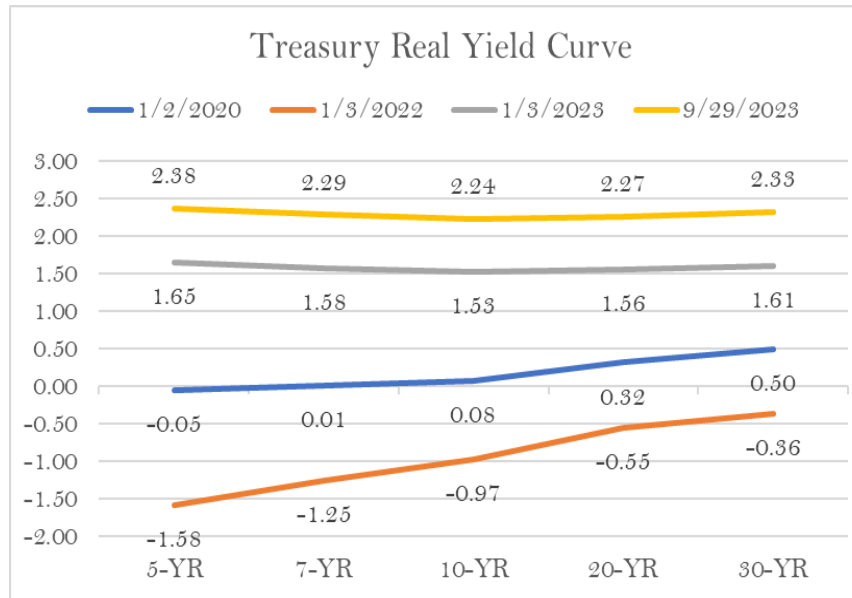
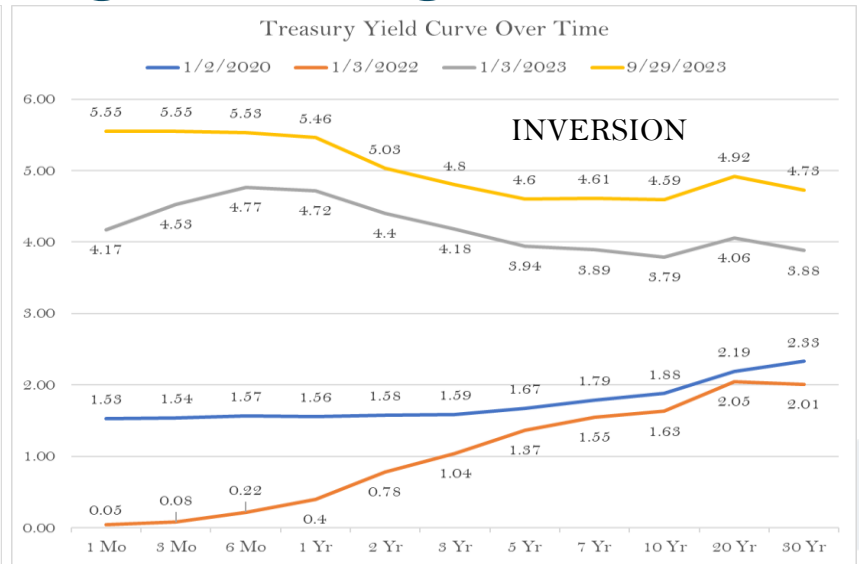
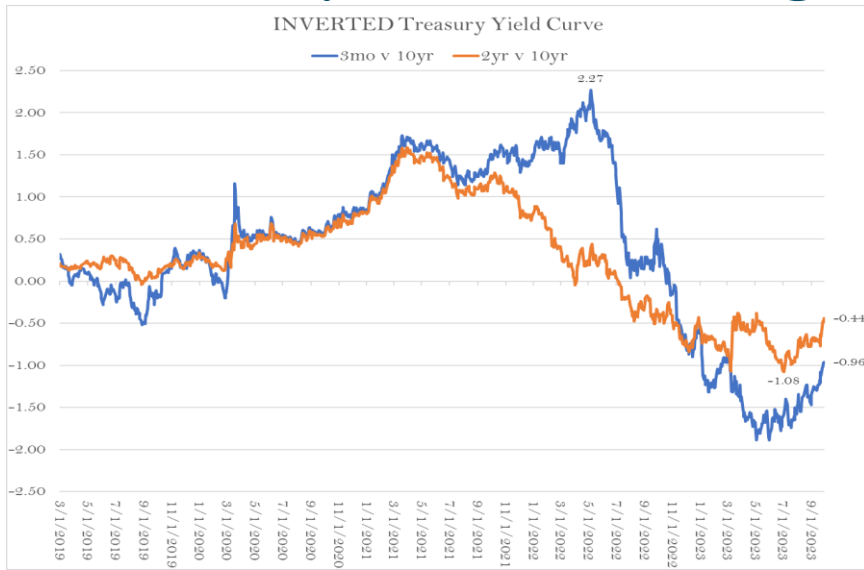
At the same time, headline inflation (CPI) is retreating as both the short- and long-term interest rates continue to escalate. If inflation continues to fall and the Fed either hikes rate some more (which we expect at least one more time in 2023) or keeps the rate “higher for longer” (as Chair Powell has consistently broadcasted), the financial environment will become increasingly restrictive. The long and variable lag to feel the negative economic impact of the 11 or more rate hikes will be increasingly evident.

Where 10-Year U.S. Treasury Rate Likely Settles ...5%+



There are 552 months from January 1962 through the December 2008-09 GFC, the Y2020 COVID-19 global pandemic and before the 2022 March Fed rate hike. The average 10-year U.S. treasury yield is 2.757% over the 1-year trailing CPI (inflation). Using this as a guide, the CPI for All Urban Consumers is 3.7% over the last 12 months as of August 2023. As of October 2, the 10-year treasury was yielding 4.69%. This means the 10-year U.S. Treasury could settle around $(3.7\% + 2.76\%)$ 6.46%, *ceteris paribus*. Separately, the term premium comparing 10-year U.S. treasury from 3-month T-bills (i.e., the amount of yield that an investor seeks to be compensated for the time risk) is 1.74% since January 1982 through February 2022 (the month before the FOMC started the current hiking cycle) representing 1,048 months. Assuming the FOMC is successful in bringing inflation down to 2.5% and after adding 1% for the neutral rate plus 1.74% in term premium, the estimated 10-year treasury would be yielding around 5.24% today. The question is how fast and how low would inflation go.

U.S. Treasury Yield Curve: Signaling Continuing Recession



Source: U.S. Treasury, Experiential Wealth

<https://home.treasury.gov/policy-issues/financing-the-government/interest-rate-statistics>

Our Base Case Forward

- The U.S. economy continues to demonstrate its resilience. This is particularly the case for employment as the labor economy remains tight, but wage increases and over-time work have slowed. There are other signs of a late-stage economic expansion. Although it is likely that we will have a good and above average GDP for the third quarter, there are signs of deterioration in the economy. We do not expect a recession or hard landing this year, but the long and variable lag of the interest rate increases the odds for 2024. A mild recession in 2024 is our base case.
- Long-term U.S. interest rates spiked at the end of September and beginning of October. There are many contributing factors to this elevation in long bond rates which could signal the market demand for higher return for increasing risk from an escalating U.S. budget deficit. It could also be a response to higher supply and lower demand for long-term treasuries. With the latest escalation in geopolitical risks, more foreign capital will likely be parking in long-term U.S. treasuries as a flight to safety move and bring the yields down as a result (+rates have come down since the Israel-Hamas conflict started). Another possibility is that the market is recognizing the strength of the U.S. economy with a reflation of goods and services. There are many contributing factors, and some may cancel out the others. This is a period of enhanced uncertainty for rates, and we should expect more volatility to come. Nonetheless, as the 10-year approaches and exceeds 5%, these assets are attractive as we believe that, in the next 10-years, rates are more likely to be lower than higher than 5%.
- Geopolitical risks are real, and the possible chain reaction could widen any conflict. This is especially true for the Middle East. In combination with the Russia-Ukraine conflict, it is even more challenging to try to anticipate the impact on the financial markets. Once thing is clear, there is more upside risk to energy prices from here, and it would drive up headline inflation in the U.S. If this is deemed transitory, maybe the Fed will not react too quickly and severely.
- The market has been trying to shape Fed policy since the beginning of this year. The economic system is very complex, and there are coincidences, abnormalities, and blind spots. The Fed will do what it needs to do to meet its dual mandates of price stability and full employment. At present, the full employment is met but not price stability (i.e., 2% inflation target). For as long as the economy and the labor market continue to be resilient, it gives the Fed room to raise interest rates some more. After all, the effect of inflation is to diminish consumption. Moreover, the Fed moves slowly and prudently. This means the Fed is late to raise rates and late to end the hiking cycle. The Fed wants to have a high degree of certainty that its job is done right the first time. As such, we believe there is one more hike this year, and with evidence that there are some reflation, the Fed will likely hold rates higher for even longer than it expects (as so stated in the September SEP).
- After the March bankruptcies of three banks, interest rates have only moved up. This means bank assets (typically in bonds) have lost value. If rates continue to move upwards, it is likely we will see banking challenges in the next few quarters.

Our Investment Thinking (not advice)

- Risk for the stock market – with U.S. treasuries yielding higher than the average dividend rate for stock, this means stocks have to work much harder to keep their current or escalating prices. As the Fed is likely to move to 5.5%-5.7% rate, it gets increasingly challenging for stocks to continue upward. In the short term, we expect a pull back. For long term investors, this is the volatility we all love to hate in order to get us the long-term superior returns.
- Risk for the bond market – if interest rates (short-end controlled by the Fed and long-end controlled by the market) continue to rise, this is bad for every kind of bonds and especially the high yield (junk) bonds as they are currently priced for a soft landing. However, for long-term investors looking to lock in (through dollar cost averaging) escalating long-term yields can make sense. At worst, they can hold the individual bonds until maturity.
- Great for cash – investors can easily earn 5% plus in T-Bills, CDs, and money market investments at very little to no risk to principal. Of course, the push back for leaving too much in cash is reinvestment risk (meaning the high rates will not last forever) and opportunity cost (meaning if one is not in the stock market it could turn on a dime and run away from us all). But under the current situation of high uncertainty about policies, politics, and foreign conflicts, for many investors, protecting on the down-side while earning 5% or more is an attractive and prudent approach.
- This is a time to review one's investment policy (allocation to stock, bonds, cash, real estate, private vs public securities, commodities, infrastructure, gold/precious metals, etc. exposures) along with one's cash/liquidity needs, and capacity to take on risk. Each person or institution (which is made up of persons) is different, and there is no one right allocation or approach for all. An alignment of investment objectives and expectations with the portfolio is always the right way forward.

Disclosures and Limitations

- Experiential Wealth is an investment advisory¹ firm.
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