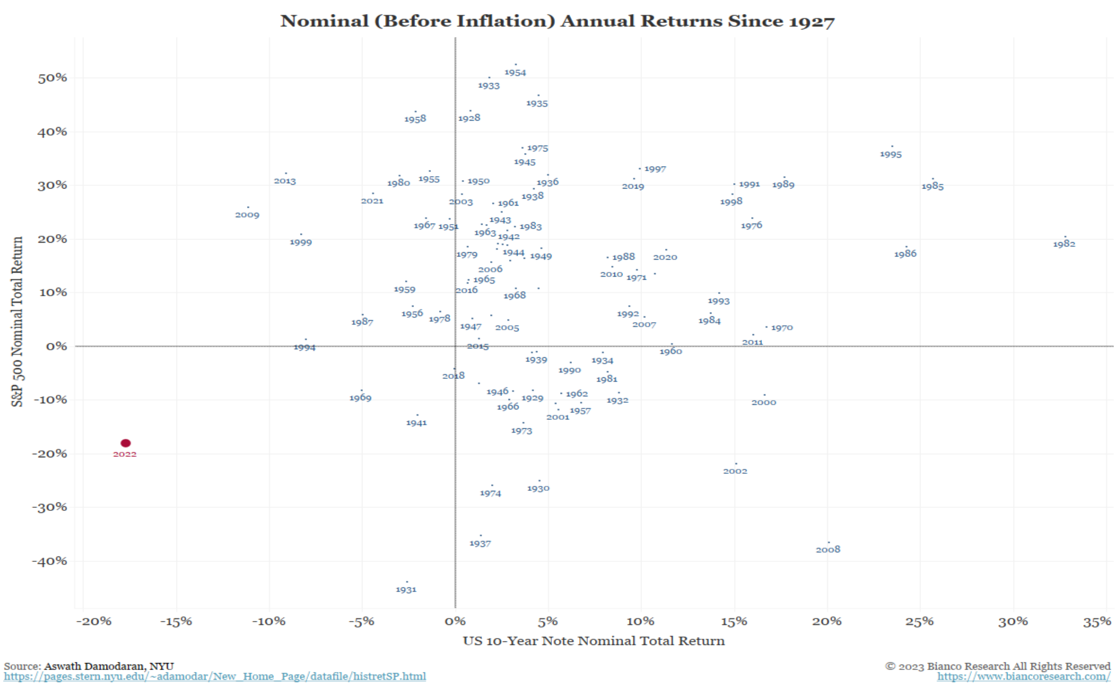
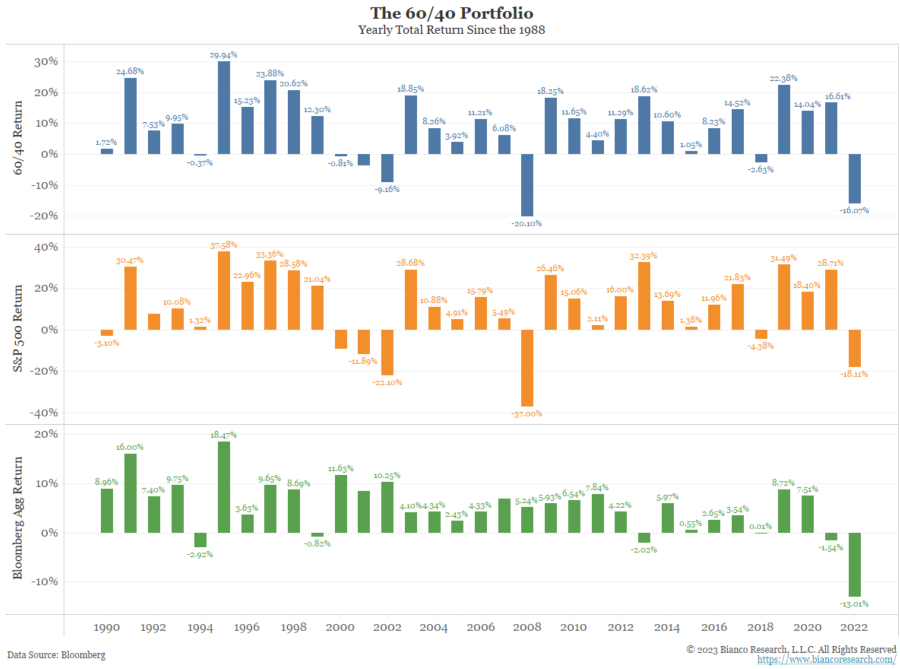
2022: Unprecedented in Modern Market History

For only the third time since 1926, both US stocks and bonds lost money this year (the other two occurrences were ... 1931 and 1969. The 60/40 portfolio simply didn't work. While this might not be new news, we believe it is important when piecing together a plan of attack into the new year. We've become accustomed to risk free yields moving DOWN when risk premiums move however this year, they've both moved UP in tandem. While inflation might have peaked, the level it settles down to will be important in considering how asset classes correlate (stock/ bond relationship) into the future. Past performance might not be indicative of future performance.



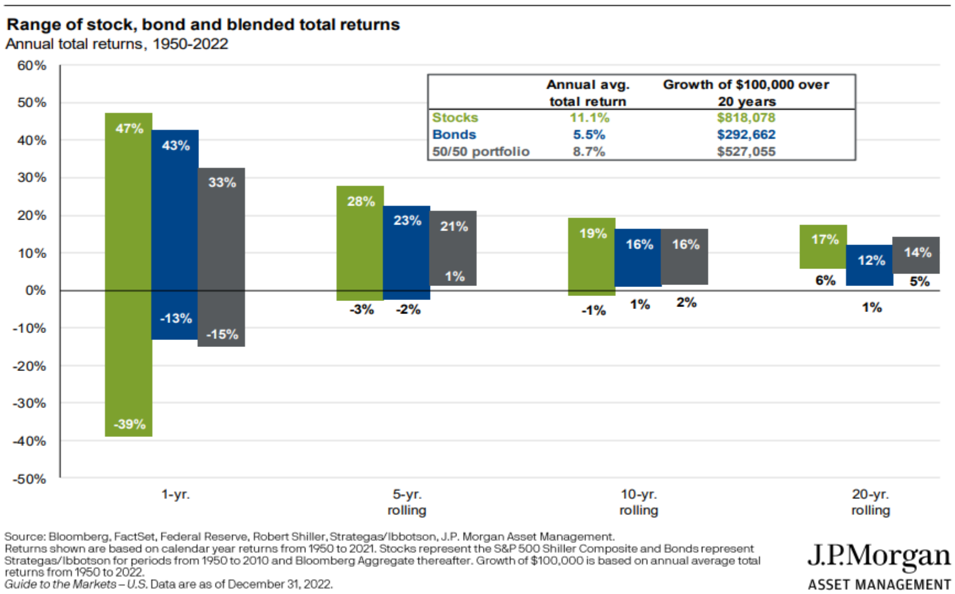
Source: Bianco. As of 12/31/22.



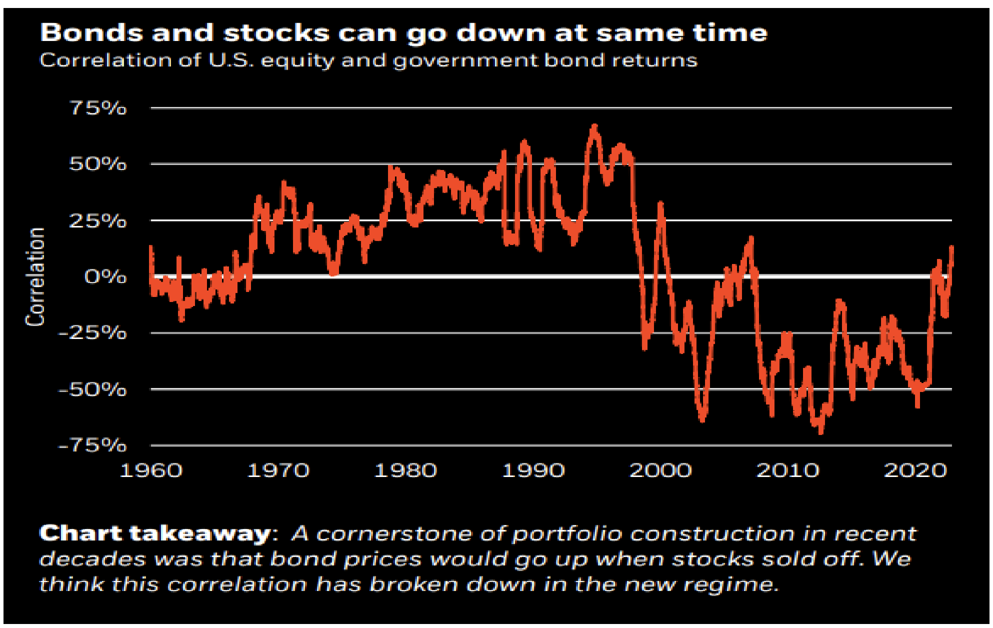
Source: Bianco. As of 12/31/22.

Market Relationships Changing

Stock/Bond Correlations haven't worked out as planned given persistent inflation. Again this goes back to the point of where will inflation settle out? Will it fall quickly back to 2% like everyone expects or will it be persistently sticky.

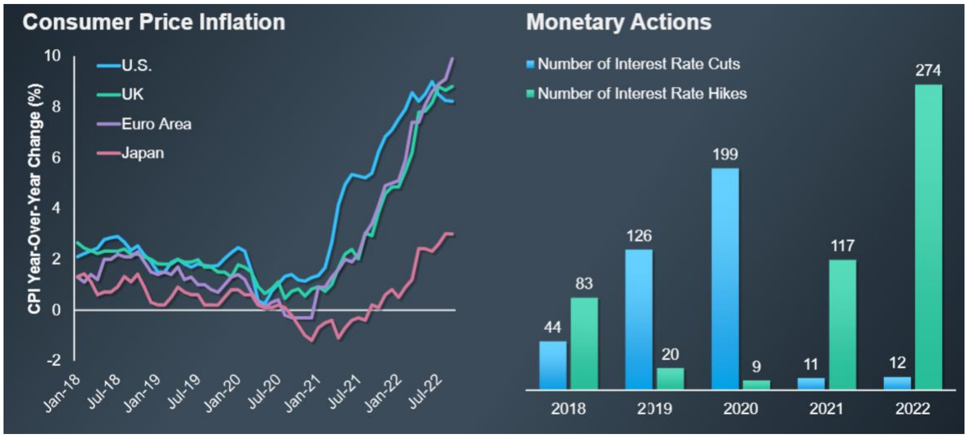


Source: JPM. As of 12/31/22.



Source: Blackrock. As of 11/30/22.

The World Against Inflation



Source: TRowe Price. As of 12/31/2022

Inflation globally prompted central banks to hike rates aggressively. This was quite the change in tune we've experienced the last 10+ years as Central Banks have typically been quick to cut rates in a weak equity market. Both stocks and bonds felt the mercy of a tightening liquidity environment.

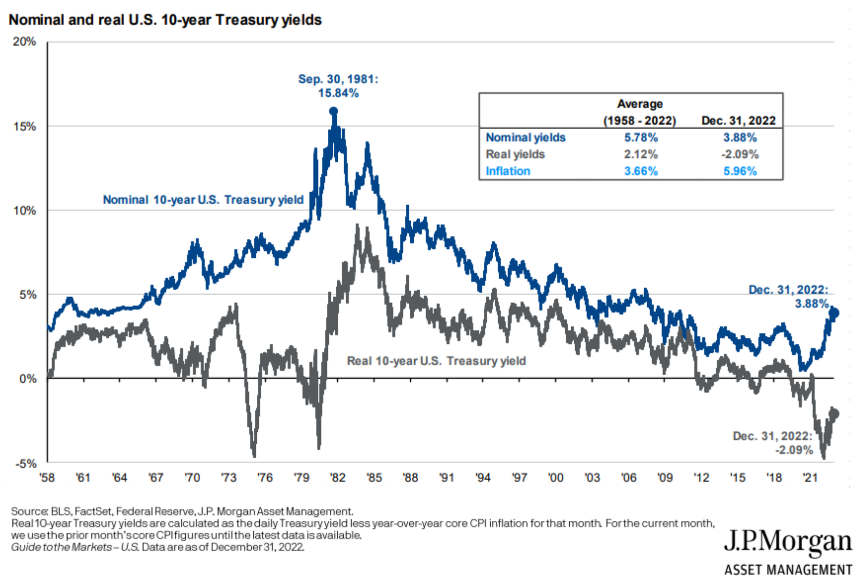
Now, a Slowdown?

The global yield curve has inverted. Given how low interest rates have fallen the last 20 years, it was only a matter of time. The Fed needs to raise borrowing rates in order to have room to cut rates once economic weakness hits. CBs globally are all on the same mission now: tighten financial conditions.

Source: Bloomberg. As of 11/30/22.

With Real Rates Still Negative

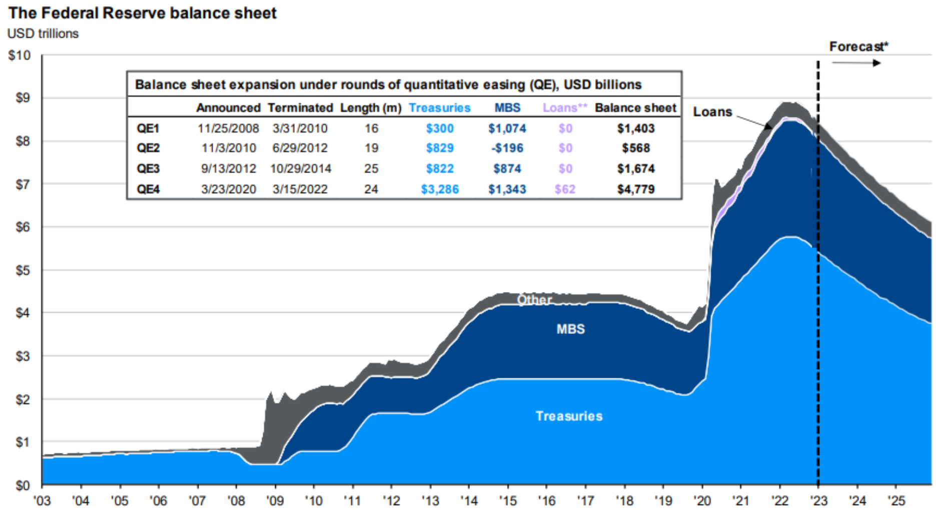
Real yields are still negative, even after the aggressive rate hikes. Recall that Dot Plot projections last year predicted quite limited (almost no) hikes for 2022 and we've already had 17 hikes of 25 basis points and more pending… The Fed wants positive real yields across the curve.



Source: JPMorgan. As of 12/31/22.

Quantatitative Tightening (QT) the Story of 2023?

Probably the second biggest story of 2022 and what could likely be the largest of 2023 is the Quantitative Tightening (QT) that is slowly working its way through the global liquidity system. I found this data on the Fed's Balance from Goldman Sachs quite interesting: In the second quarter of 2008, for every one dollar of GDP, there was 6 cents on the Fed's balance sheet ... right before COVID hit, that number was 22 cents ... today -- it stands at 37 cents. As balance sheets shrink, the private sector will be forced to absorb supply of government bonds... presumably at higher yields.



Balance sheet expansion under rounds of quantitative easing (QE), USD billions

	Announced	Terminated	Length (m)	Treasuries	MBS	Loans**	Balance sheet
QE1	11/25/2008	3/31/2010	16	$300	$1,074	$0	$1,403
QE2	11/3/2010	6/29/2012	19	$829	-$196	$0	$568
QE3	9/13/2012	10/29/2014	25	$822	$874	$0	$1,674
QE4	3/23/2020	3/15/2022	24	$3,286	$1,343	$62	$4,779

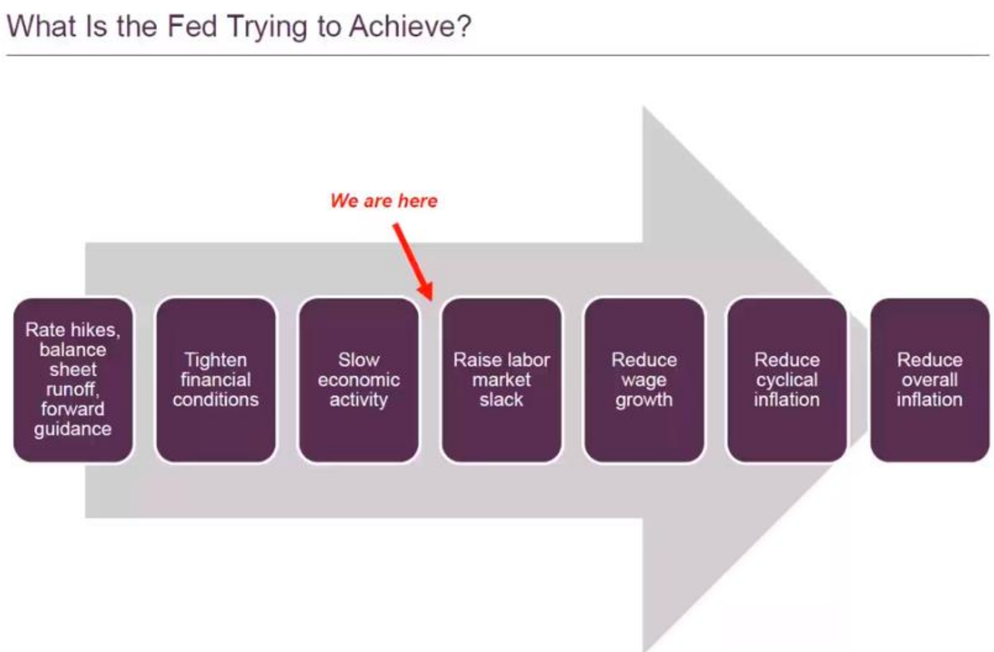
Source: FactSet, Federal Reserve, J.P. Morgan Investment Bank, J.P. Morgan Asset Management.
At its peak, the balance sheet contained $5.8tn in Treasuries and $2.7tn in MBS. *Per the most recent Federal Reserve policy meeting, the forecast assumes the Federal Reserve began balance sheet runoff in June 2022. From June to August, the committee allowed up to $30bn in U.S. Treasury securities and $17.5bn in agency mortgage-backed securities to mature per month, with that pace doubling to $60bn and $35bn, respectively, in September. Any maturing amount in excess of these caps are reinvested. The forecast does not include the active selling of securities from the committee. **Loans include liquidity and credit extended through corporate credit facilities established in March 2020. Other includes primary, secondary and seasonal loans, repurchase agreements, foreign currency reserves and maiden lane securities. Forecasts are not a reliable indicator of future performance. Forecasts, projections and other forward-looking statements are based upon current beliefs and expectations. They are for illustrative purposes only and serve as an indication of what may occur. Given the inherent uncertainties and risks associated with forecasts, projections or other forward-looking statements, actual events, results or performance may differ materially from those reflected or contemplated.
Guide to the Markets – U.S. Data are as of December 31, 2022.

J.P.Morgan ASSET MANAGEMENT

Source: JPMorgan. As of 12/31/22.

How Much Longer is This Going to Take?

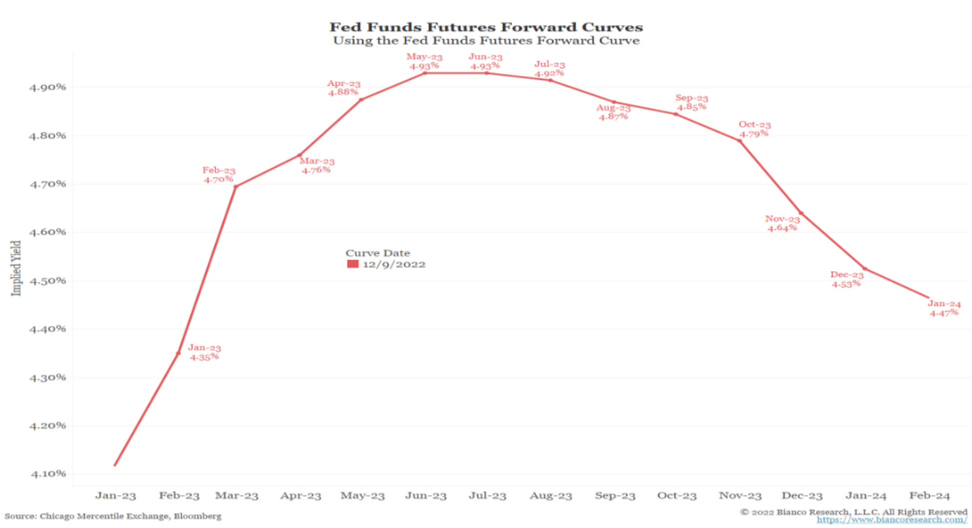
The Fed is on a mission to kill inflation. They have hiked aggressively and tightened financial conditions. The lagging impacts from the hikes is just starting to work it's way through the economy as consumers burn through stimulus and savings. The labor market continues to be resilent and wage pressures, specifically on the services side remains well above the Fed's comfort zone. The Fed needs some slack in the labor market. So bottomline is inflation is peaking but the ultimate question is how fast it will drop and IF it will drop down to the Fed's 2% target.



Source: Guggenheim. As of 11/30/22

The Market Still Thinks the Fed Pivots in '23... Even Though the Fed Dots Say No!

The Fed still isn't done hiking rates. The market is pricing in a terminal rate of just below 5% in May of '23. But contrary to the Fed, the market is expecting (hoping) for rather quick rate cuts!



Source: Bianco. As of 12/9/22.

Source: Bloomberg. As of 12/15/2022.

So When is the Recession?

An inverted curve is the market's opinion that the Fed is too tight. Short rates are held up by perceptions the Fed will continue with tight policy, while long rates fall on the belief that the economy will slow and/or inflation is coming down. The table above highlights this curve's predictive ability. The 10-year less 3-month yield curve inverted before each of the last eight recessions.

With the terminal rate approaching, QT will soon take center stage as the primary policy tool, and markets are already busy considering what "abundant reserves" means.

Over the last 30 years, the average recession led the Fed to cut rates by 300 bps in the first 12 months and by a cumulative 400 bps in the 24 months following the start of the recession.

How Long Until the Recession?

When the 3-month to 10-year yield curve inverts for **10 consecutive trading days**

Date of Inversion	Consecutive Trading Days Inverted	Date of Next Recession	Calendar Days to Next Recession
1/10/1969	24	Dec-69	325
6/14/1973	177	Nov-73	140
12/8/1978	91	Jan-80	389
11/7/1980	102	Jul-81	236
6/6/1989	30	Jul-90	390
7/31/2000	135	Mar-01	213
8/1/2006	217	Dec-07	487
6/6/2019	41	Feb-20	268
Average	**111**		**311**

1/10/1969 = inverted for 24 calendar days, went positive for 33 days, then inverted again for 53 days

6/6/1989 = inverted for 30 calendar days, went postive for 9 days, inverted again for 26 days

6/6/2019 = As of July 31 the inversion has been 41 consecutive trading days.
Positive for 1 day, then inverted again for 67 days (through October 10)

Source: Bianco. As of 12/12/22.

And When Might They Cut?

Over the last five interest rate cycles, the average hold at a peak rate was 11 months, and those were periods when inflation was more stable. The market is currently expecting 50bps of hikes in the back half of '23.

'For Some Time'

Average rate between peak rate and first cut is 11 months

Peak	Cut	Months	Peak rate	Cut Until
Feb-95	Jul-95	5	6.00%	5.25%
Mar-97	Sep-98	18	5.50%	4.75%
May-00	Jan-01	8	6.50%	1.00%
Jun-06	Sep-07	15	5.25%	0.25%
Dec-18	Jul-19	7	2.50%	0.25%

Source: Bloomberg

Source: Bloomberg. As of 12/12/22.

Does Inflation Come Down With A Recession?

Recessions ALWAYS have led to a slowdown in inflation. The average recession took 16 months to bring inflation down from its peak to 2%, but it always did. The question here isn't whether inflation will go down but whether it will stay down (i.e., will the Fed remain restrictive long enough to anchor inflation).

With the Fed in Tightening Mode, It Wouldn't be a Macro Chart without Some Bond Vigilante Talk

Does inflation come down with a recession?
History says: yes, big times.

Year*	# Months for CPI to slow to 2%	Peak CPI ahead of recession	Low in CPI after recession	Change in CPI (peak to trough)
1923	6	3.6	-0.6	-4.2
1926	7	4.7	-3.4	-8.1
1929	-	-	-	-
1937	9	5.1	-4.1	-9.2
1945	-	-	-	-
1948	11	10.2	-2.9	-13.1
1953	-	-	-	-
1957	16	3.7	0.3	-3.4
1960	-	-	-	-
1969	30	6.2	2.7	-3.5
1974	24	12.3	4.9	-7.4
1981	41	14.8	2.5	-12.3
1990	16	6.3	2.6	-3.7
2001	13	3.7	1.1	-2.6
2008	5	5.6	-2.1	-7.7
2020	-	-	-	-
2022-2023?	?	?	?	?

Average (1922-2022)

# Months for CPI to slow to 2%	Peak CPI ahead of recession	Low in CPI after recession	Change in CPI (peak to trough)
16.2	6.9	0.1	-6.8

**Period colored in grey (and ignored for analysis) when CPI <3% entering the recession*

TheMacroCompass.substack.com

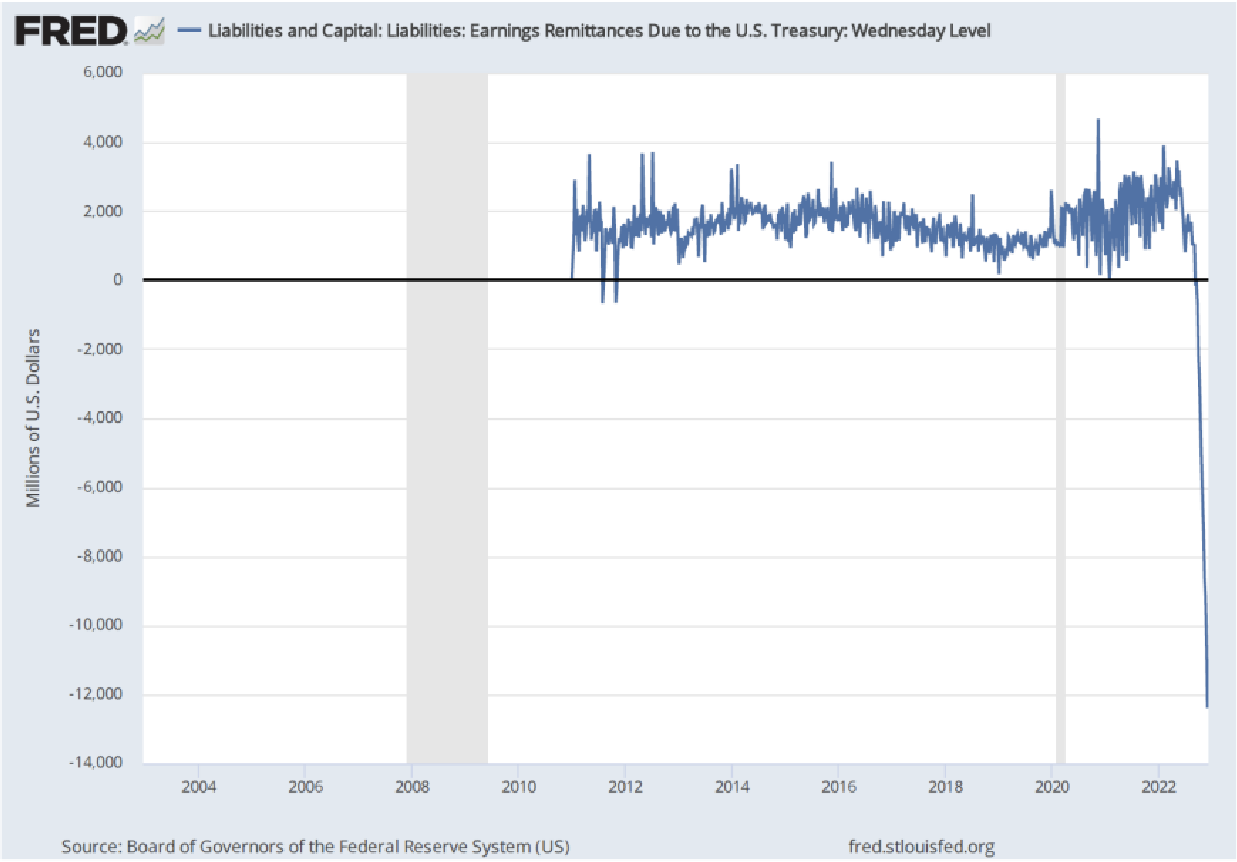
Source: MacroCompass. As of 11/30/22.

Operating At A Loss… Is That A Problem?

The Fed running a massive operating loss given the rise in short term rates vs. income generated off their bond portfolio. This is Asset/ Liability 101, any banker will have the importance of A/L management instilled in their brain at the start of their career. Stated simply, the income the Fed is receiving off their bond portfolio (their assets) ARE NOT keeping up with the interest expense they are paying out to banks to prevent them from lending. While this would not be sustainable for a private organization, the Fed just labels this a “deferred asset”. If interest rates stay elevated as the Fed incentives banks to not lend, the gap between the Fed’s income vs expense will continue to point to insolvency…

But wait there is more…

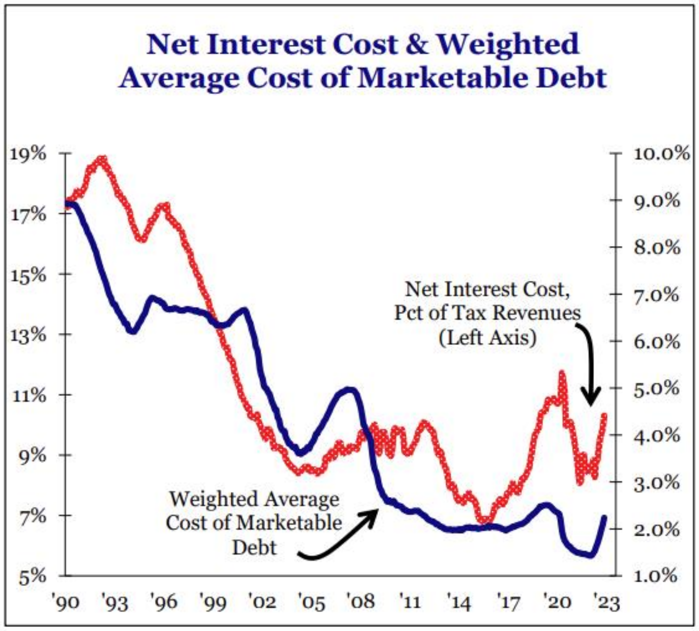
As tax receipts fall, the Treasury will need to issue more bonds into the private sector (considering the largest buyer, the Fed, doesn’t swoop in to rescue). Positive Term Premium Anyone??



Source: Fred. As of 11/30/22.

How Does Net Interest Cost Effect Us Long Term?

In a low rate or low debt environment, fiscal policy is accommodative. But we are moving to a high rate and high debt scenario, which will restrict fiscal policy moving forward. Austerity has been forced on Congress when net interest costs rise to about 15% of tax revenues. Not a 2023 story but coming soon and much more difficult to solve in such a polarized political environment.

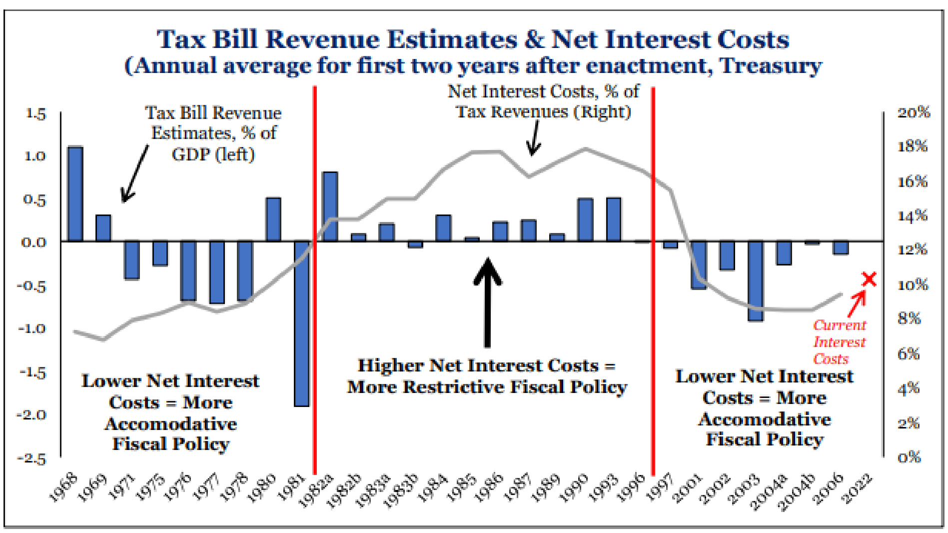


US Debt Interest Spending Surges

The federal government's debt interest costs surged in the first two months of the fiscal year, a shift that's likely to get increasing political attention in Washington. The Treasury Department reported that interest paid on public debt amounted to $103 billion over the past two months. **That marks an 87% jump over October and November of last year**. It's a taste of what lies ahead after the Federal Reserve hiked its benchmark rate by nearly 4 percentage points this year and is expected to lift it close to 5% in 2023, a Bloomberg survey found.

Bloomberg, **12/12/2022**

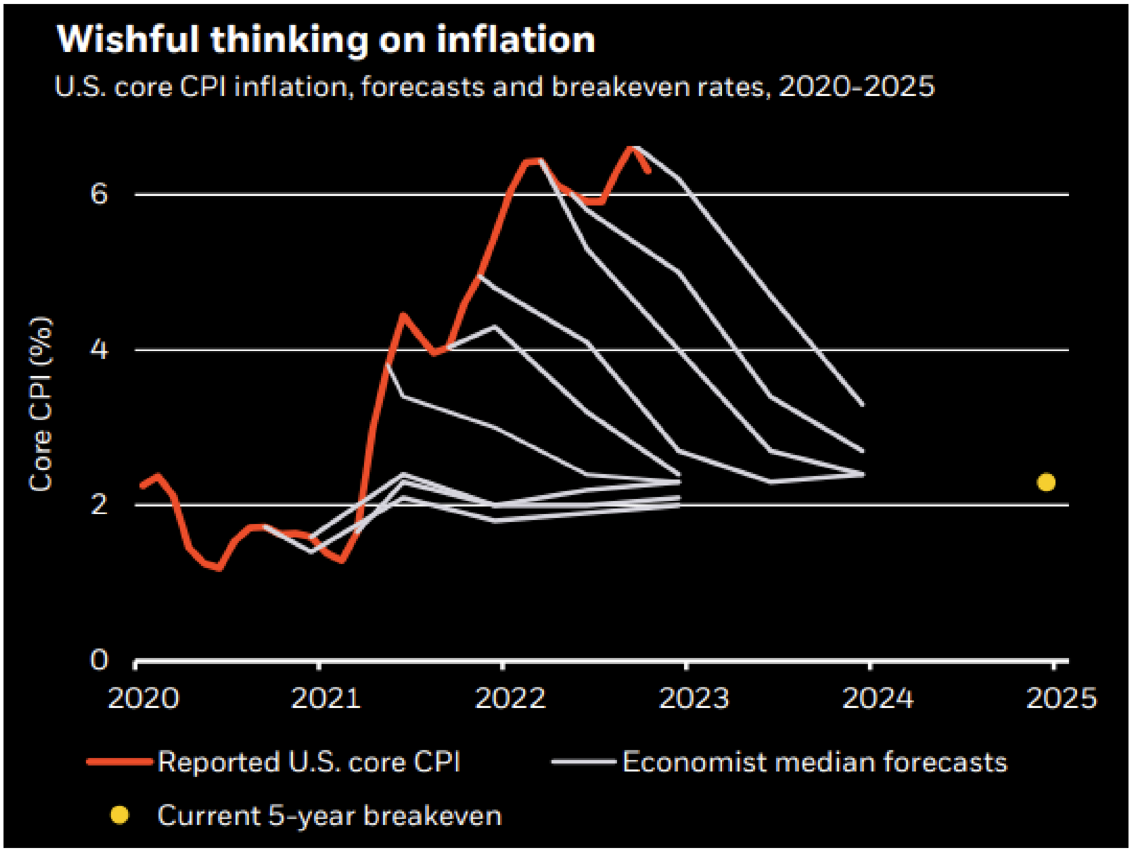
Source: Strategas. As of 12/12/22



Source: Strategas. As of 12/31/22.

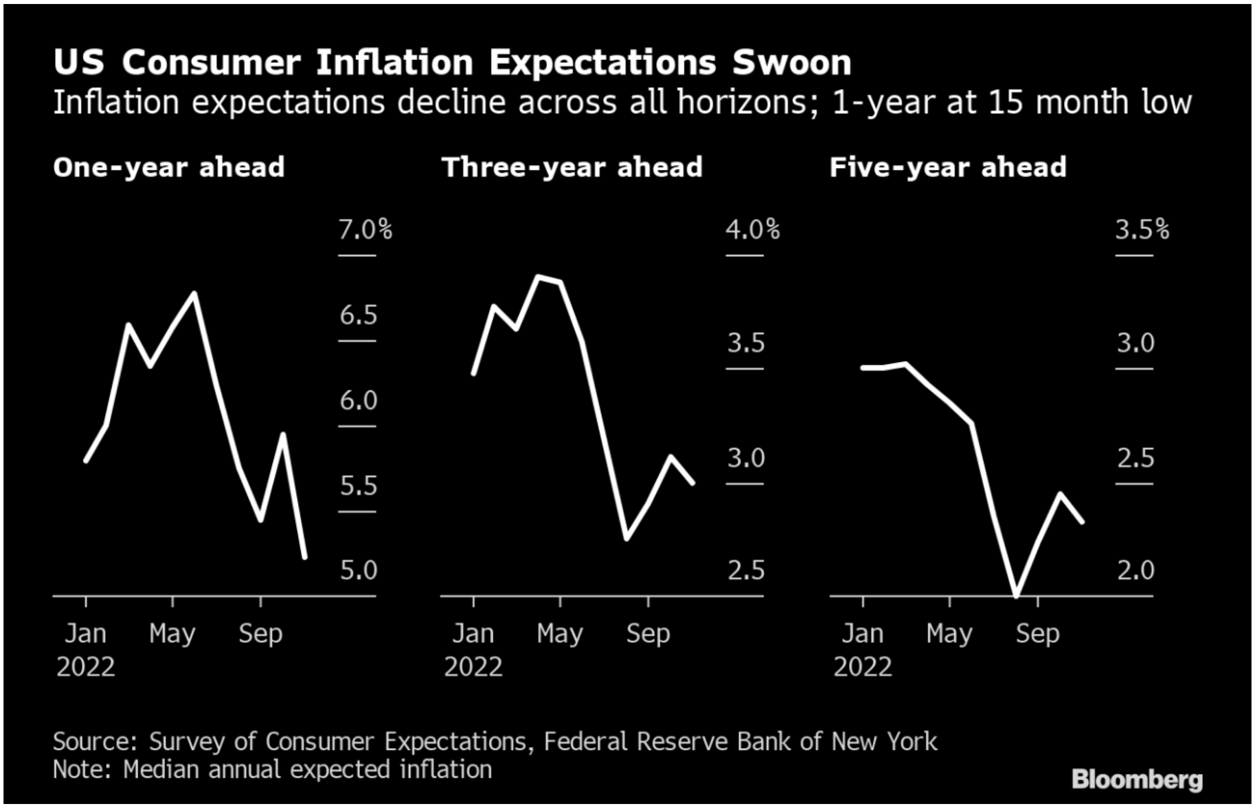
So Where Is Inflation Headed?

Economist Think Back to 2% and Promptly!



Source: Bloomberg. As of 11/30/22.

Economist expect inflation to fall FAST. The market is is still pricing the Fed threading the needle on a soft landing.



Source: Bloomberg. As of 12/12/22.

Long term inflation expectations remain well anchored. The Fed has regained their credibility following a massive hiking campaign. The Fed should continue to keep rates restrictive until inflation is handled or they risk reigniting longer term inflation expectations. A bailout here could give back all the progress from 2022.

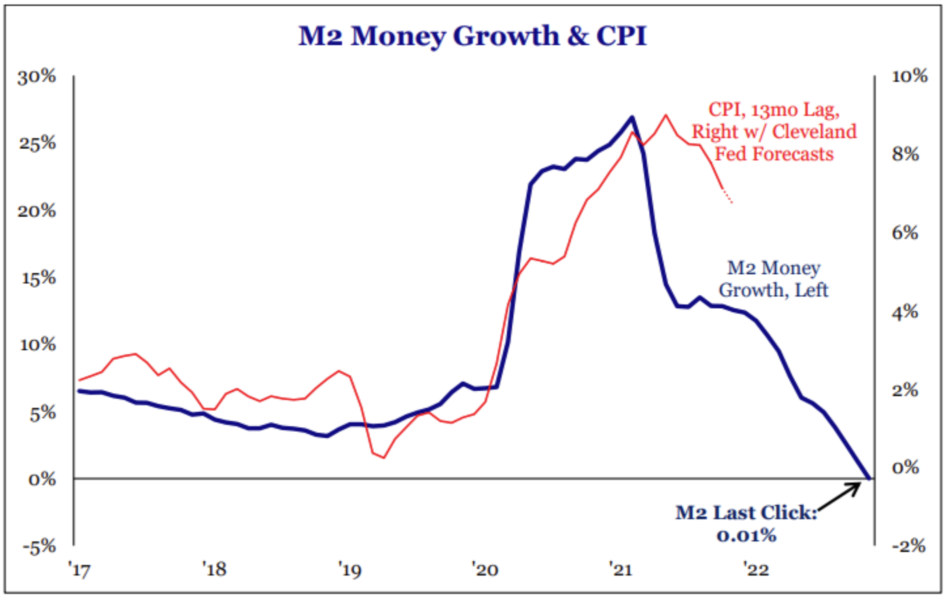
Where Does The Money Supply Fit In?

Money supply has tanked from the free money spigot of 2020 and 2021. Demand based Inflation should continue follow.

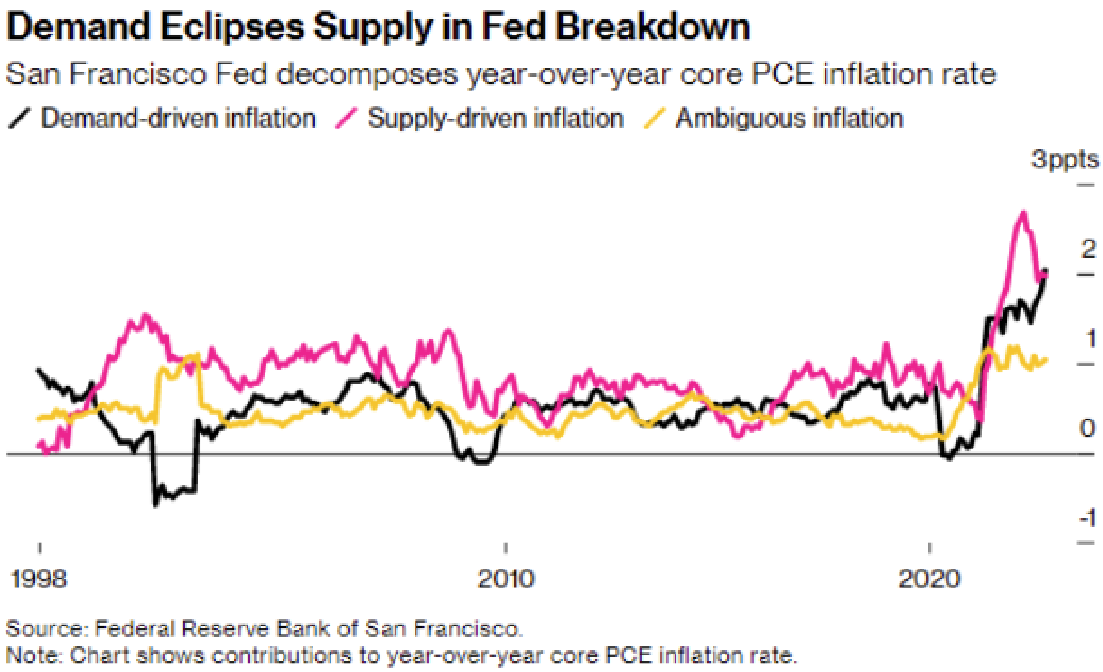
Ludwig von Mises states it very clearly:

"There is nowadays a very reprehensible, even dangerous, semantic confusion that makes it extremely difficult for the non-expert to grasp the true state of affairs. Inflation, as this term was always used everywhere and especially in this country, means increasing the quantity of money and bank notes in circulation and the quantity of bank deposits subject to check. But people today use the term "inflation" to refer to the phenomenon that is an inevitable consequence of inflation, that is the tendency of all prices and wage rates to rise. The result of this deplorable confusion is that there is no term left to signify the cause of this rise in prices and wages." Economic Freedom and Interventionism, 1990.

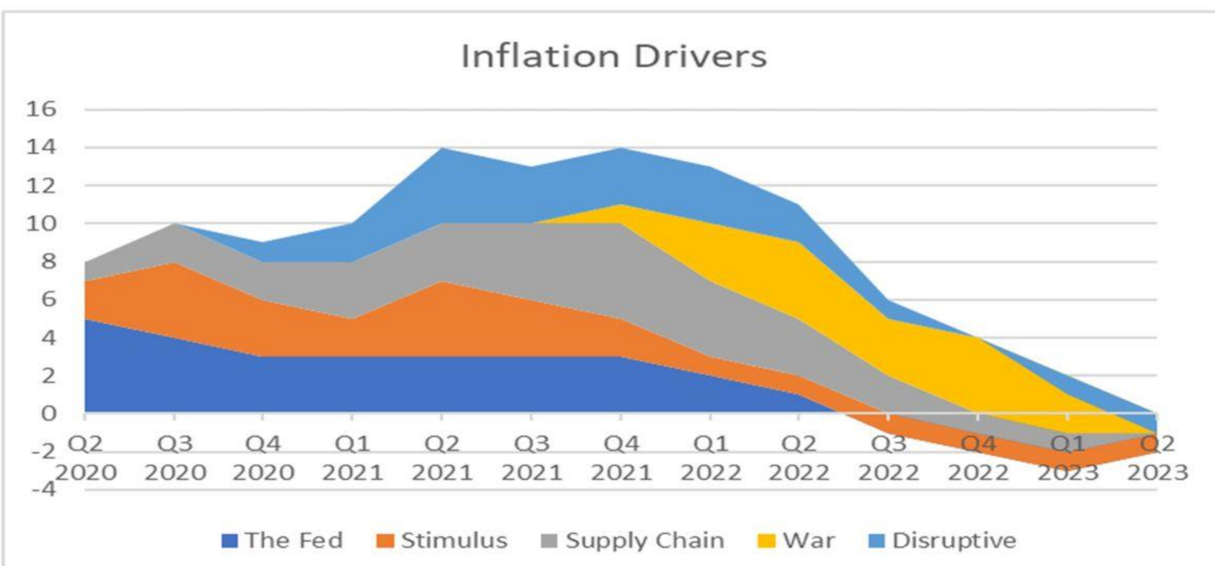
But, Demand Based Inflation hasn't been the Only Story



Source: Strategas. As of 12/31/22.



Source: Bloomberg. As of 11/30/22.

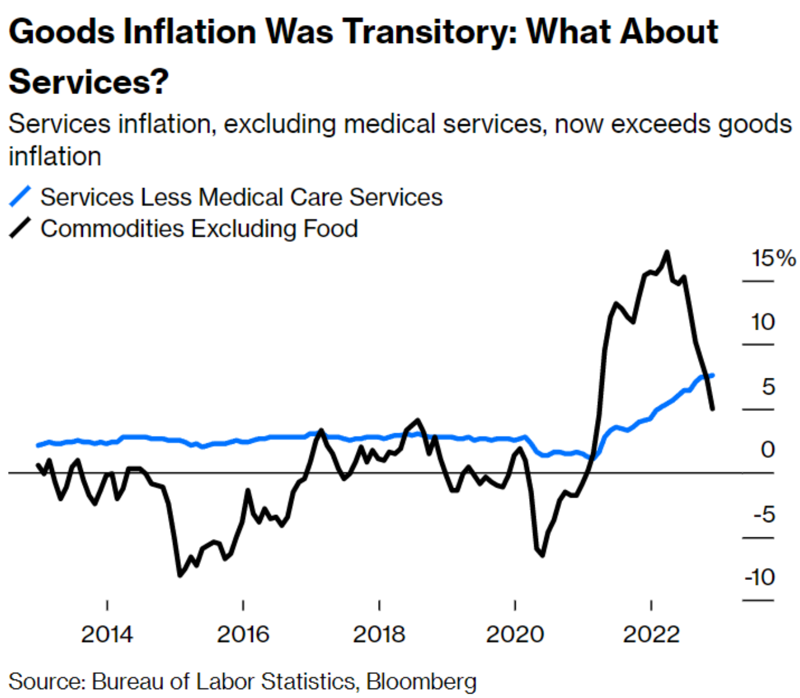


Source: Bloomberg, John Authers. As of 12/12/22

What Is Driving Inflation?

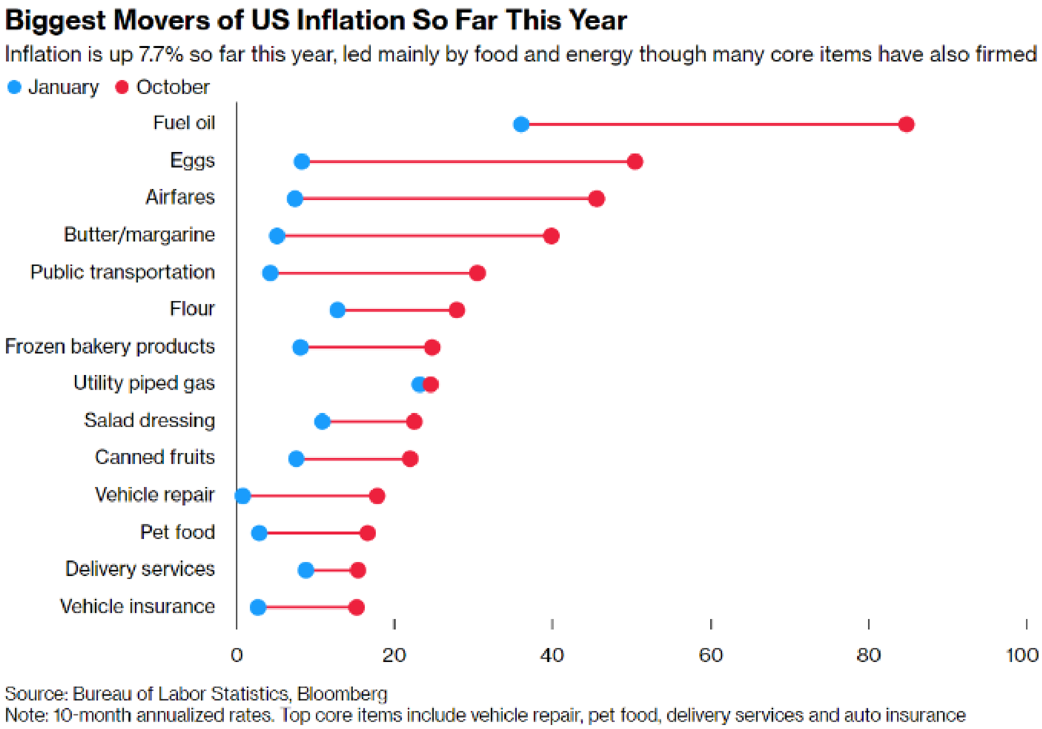
Central bankers were positive that inflation was going to be ‘transitory,’ exclaiming that only base effects and supply-side pressures were driving inflation higher. Now, over a full year later with headline CPI sitting just above 7% year-over-year, the Fed is still trying to nail down exactly what is driving inflation.

The challenging part in understanding whether inflation is supply or demand driven is the Fed can only influence one of these factors. If inflation is driven by demand, the Fed’s policy tools allow them to reduce demand in the economy. However, supply-side disruptions are much more difficult to manage.



Source: Bloomberg. As of 12/31/22.

The San Fran Fed ran initial analysis on inflation (and why the Fed was so wrong in calling inflation transitory) to see the root cause. While supply driven inflation was partially to blame, government policy pushing cash to consumers created a demand frenzy. Too many dollars chasing too few goods proved to push inflation higher and make inflation more problematic than expected. Both cyclical and structral inflation have been the problem... The Fed can tame cyclical... not structural.



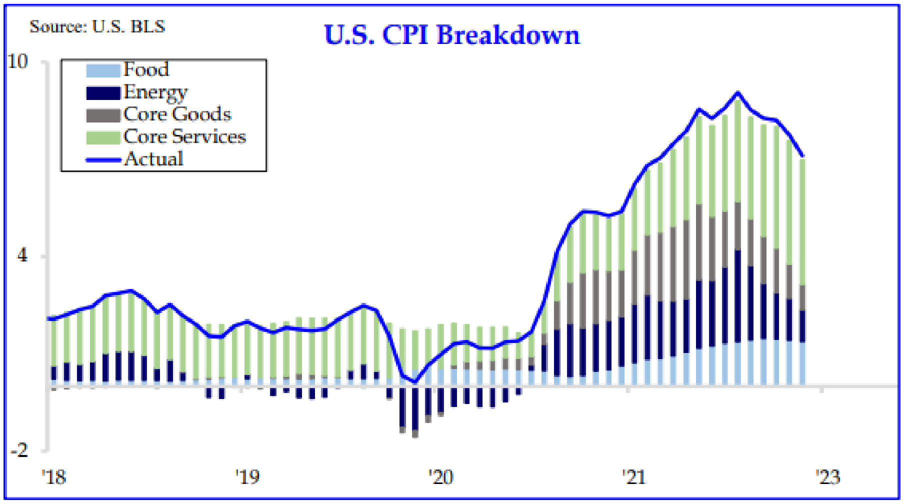
Source: Bloomberg. As of 11/30/22.

Again, structural drivers of inflation like underdevelopment of commodities continues to threaten the Fed's agenda. The real cost of living (grocerries, gas and rent) were drastically higher than the Fed's stated 8-9% inflation.

If the Fed focuses too much on the tactical inflation measurement and not on the structural inflation baseline in the first half of 23 they could slow/pause tightening as product specific supply side disinflation flows through to measured numbers. By doing that the Fed could risk not doing enough to address the more structural inflation dynamics. And once the disinflationary revert the Fed will be faced with more persistent inflation than they expected 2H next year. And that is the real risk of higher for longer.

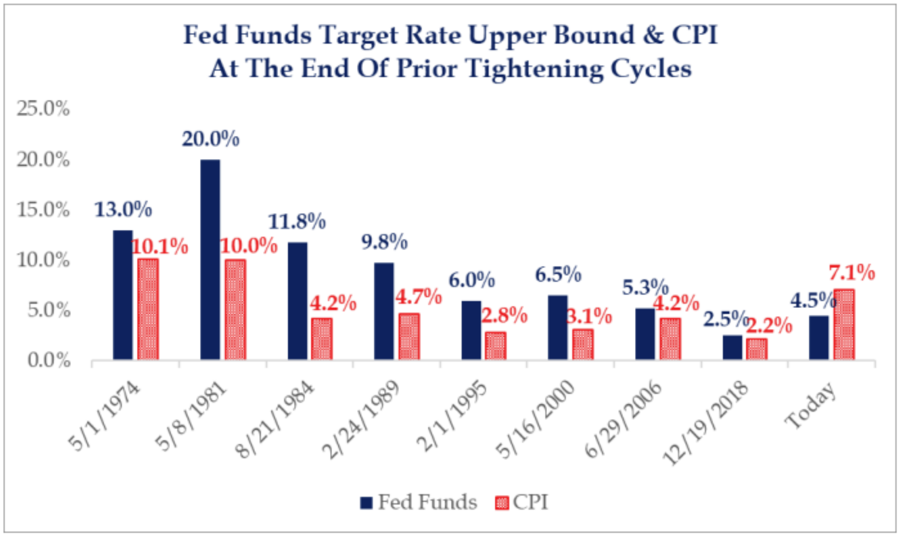
When Will We Know When the Fed Can Stop Hiking?

We're Looking to the Labor Market! The Fed typically tightens until the Fed Funds rate exceeds headline inflation. If inflation continues to decelrate as expected (remember YoY data is working off massive comps and is naturally headed lower) and the Fed continues to hike rates 50bps at the next couple meetings, we should get there by sometime in Q2. We don't expect the Fed to stop until this objective is met.



Source: Strategas. As of 12/31/22.

So, How Much Higher Must Rates Go?



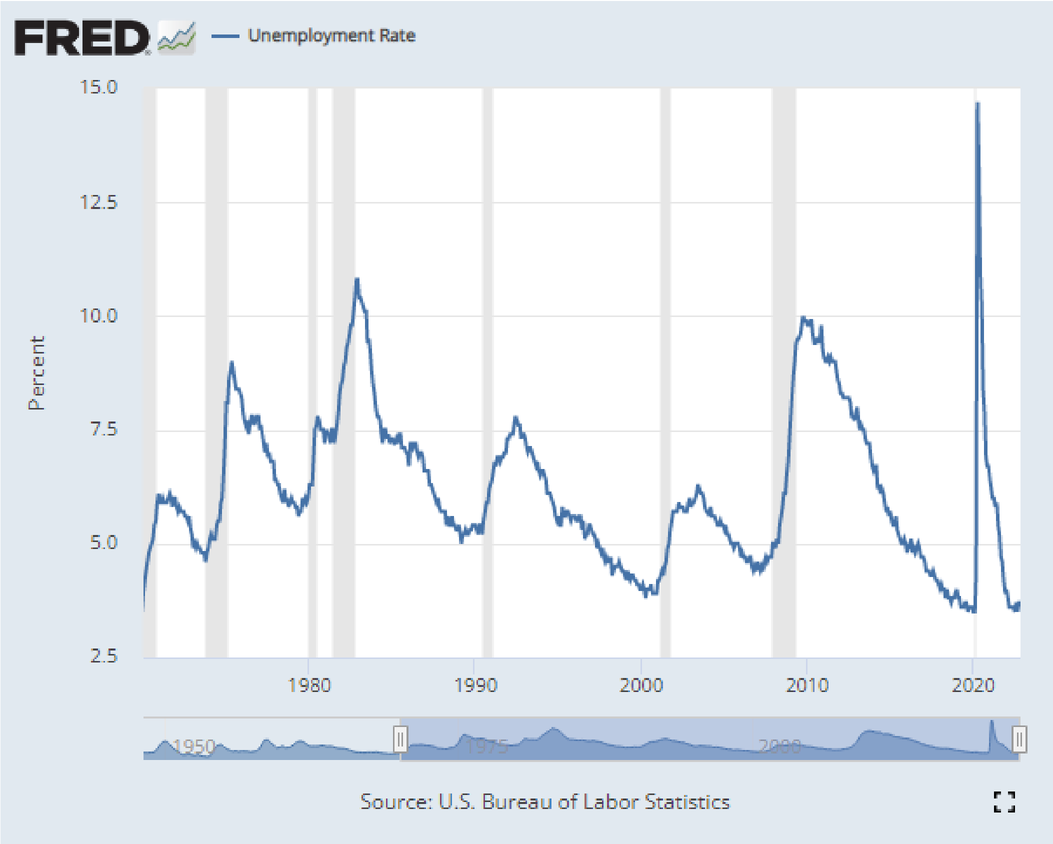
Source: Strategas. As of 12/31/22.

We think it will be unlikely that the Fed will pivot to easier monetary policy until it is convinced that the Fed Funds rate is positive in real terms (point we just made) and also that the labor market is cooling. Incomes drive spending. Incomes are growing around 5-6%. The ECI report, which is lagging (3Q) but is the most comprehensive so its a good baseline. 5% nominal income growth which hasn't come down. 2010s we had nominal income growth run in the 1-3% range. The result was observed inflation around 2%.

Source: Jefferies. As of 11/30/22.

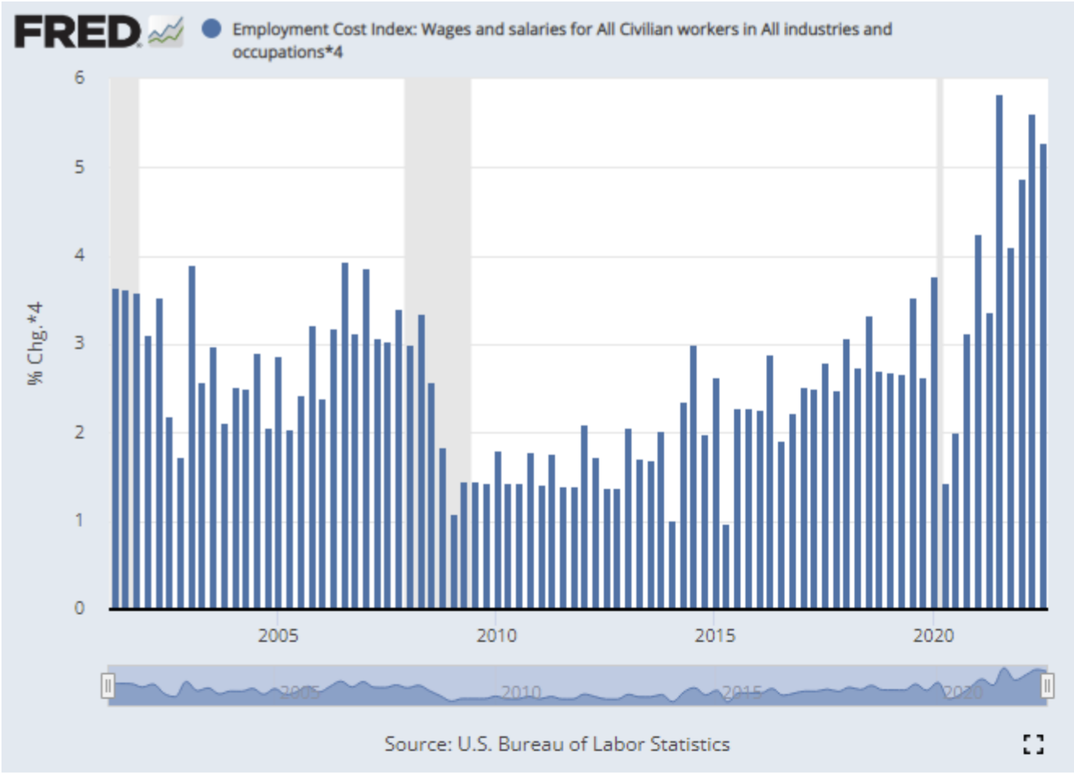
What's Next With Unemployment?

Unemployment remains cyclically low at sub 4%. While the Fed thinks the UE rate will rise >4% over 2023, companies thus far have been hesitant to layoff employees... and for the companies that have laid off, there are ~1.7 jobs open for everyone searching for work. Bottomline, we have never entered a recession with unemployment this low.

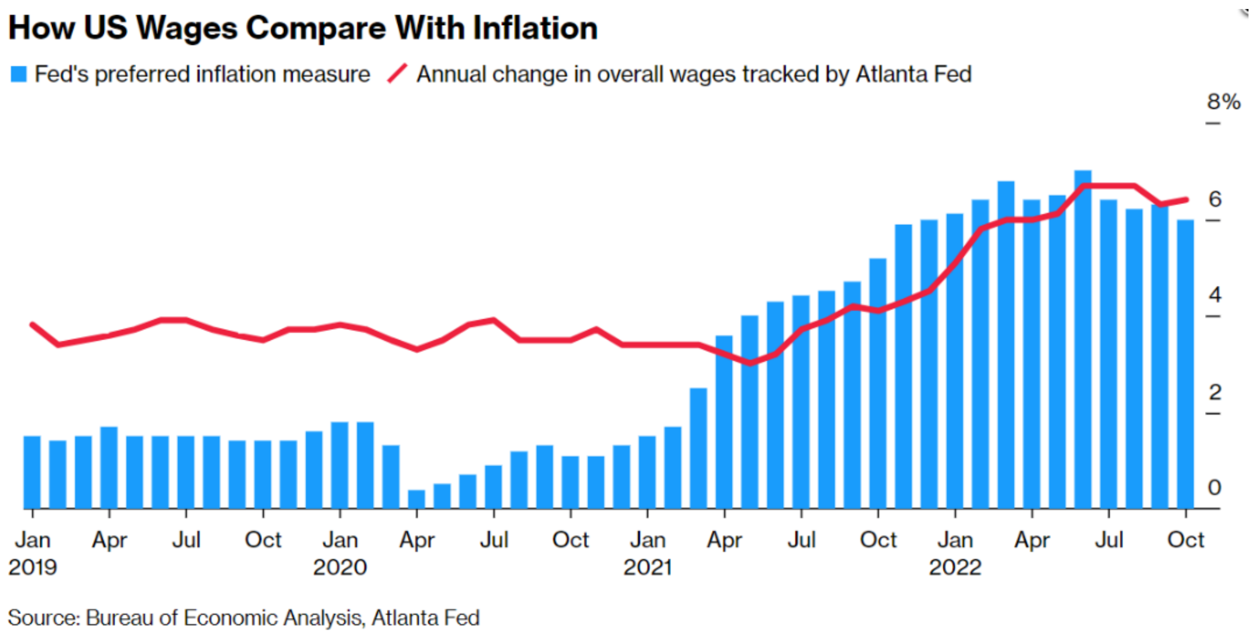


Source: Fred. As of 11/30/22.

The structural shortage of qualified employees continues to pressure wages higher.

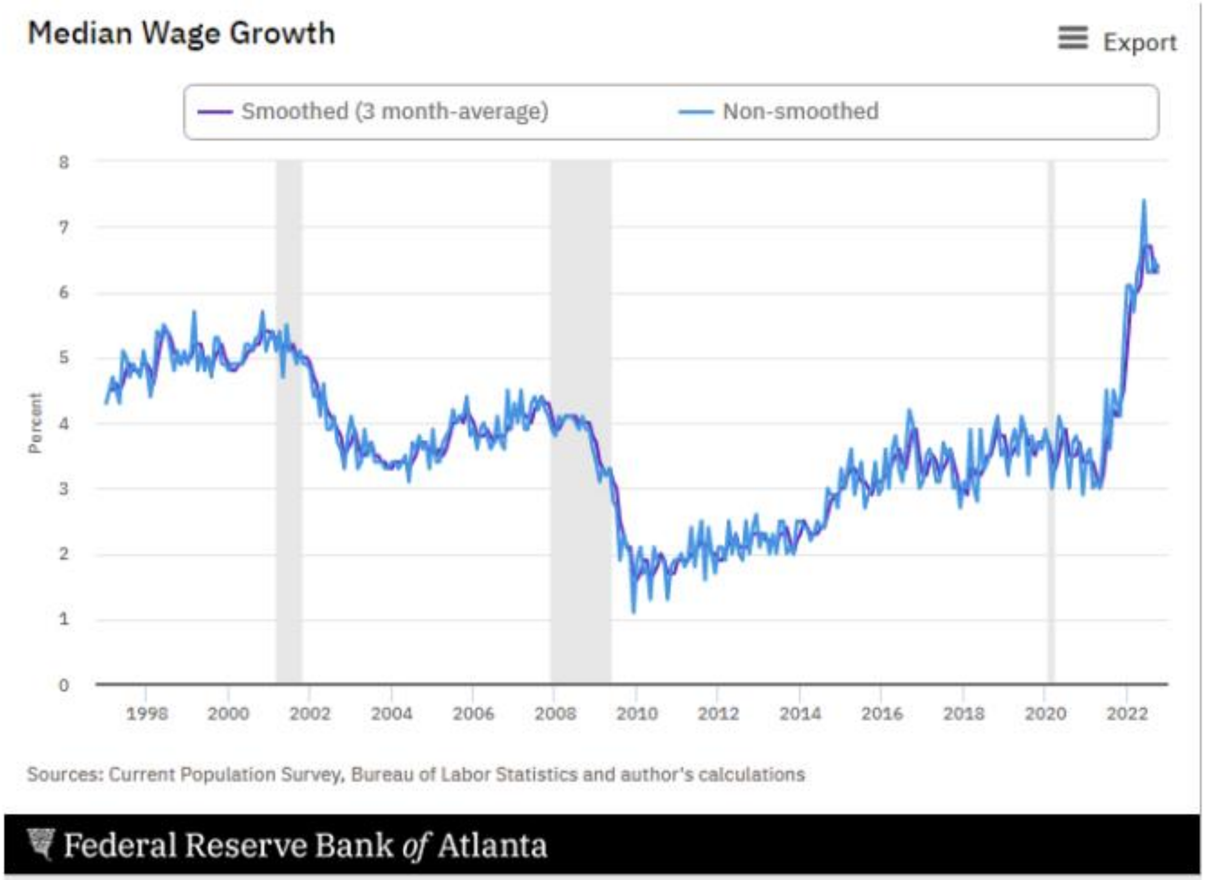


Source: Fred. As of 11/30/22.



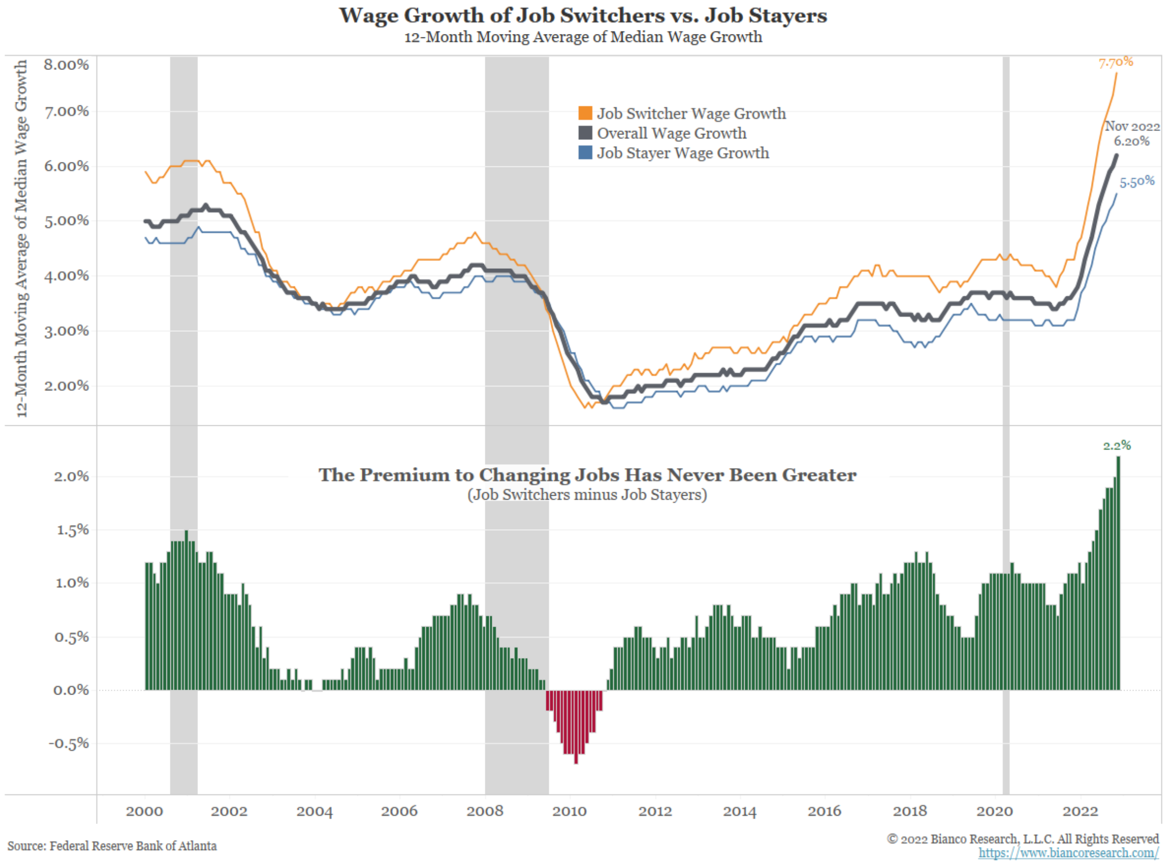
Is The Wage Growth Here To Stay?

Today income growth is running 5-6%. Production growth of the economy is the same or weaker (retirements plus some indications of weaker productivity). Put it all together and it is reasonable that with wage growth the way it is today, the baseline inflation rate is 3-4% higher than it was pre-covid. And that is not close to the Fed's mandate. It really is about the wage growth of those with the highest propensity to consume. That wage growth is actually going *faster* than the headline numbers



Source: Atlanta Fed. As of 11/30/22.

The pivotal question for Fed officials is whether the climb in US pay over the past 18 months or so is a one-time bump — as companies adjust to scarce labor supply, and a realization that their workforce was under-compensated — or a pernicious feedback loop in which prices and wages drive each other up.



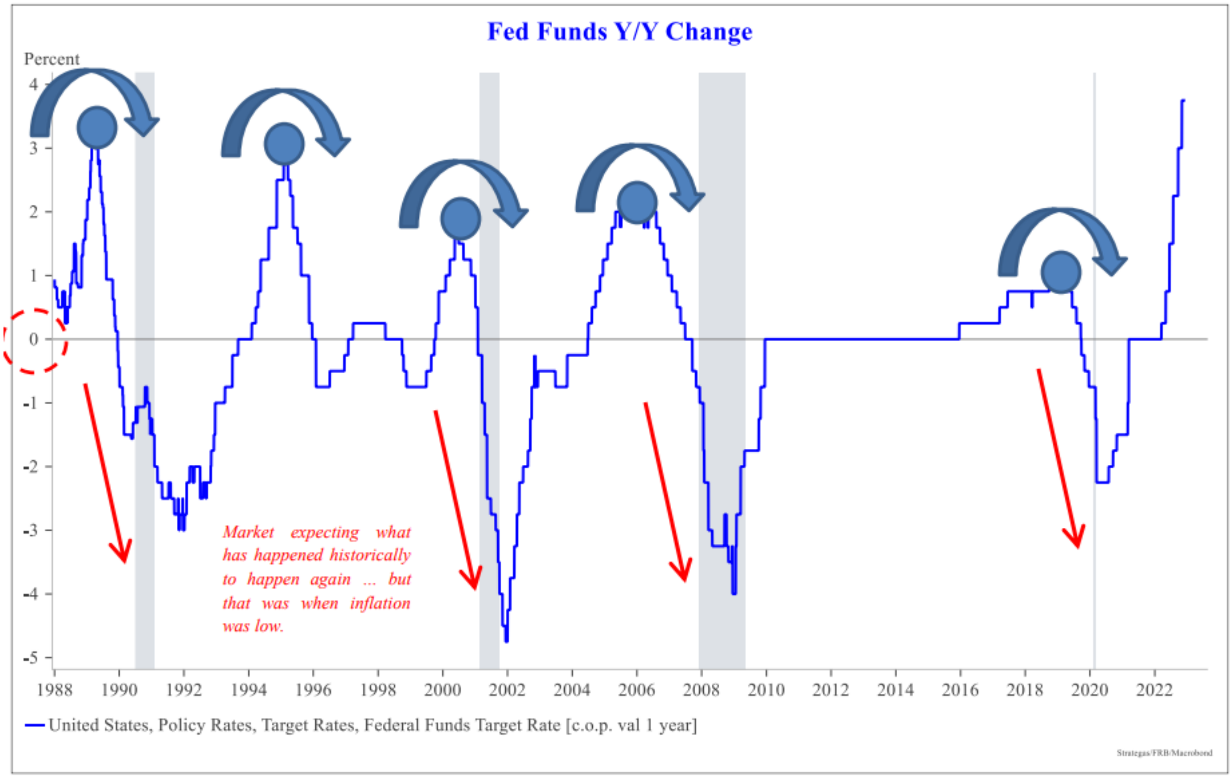
Source: Bianco. As of 12/31/22.

We're keeping a close eye on the job stayer vs job switcher wage growth differential. According to the Wall Street Journal, employees who changed companies, job duties or occupations saw even greater wage gains of 7.7% in November from a year earlier. The prospect that employees might leave for bigger paychecks is a main reason companies are raising wages for existing employees.

This is likely to continue the spiral of higher wages as companies can't afford to lose talent and pay up for them. All in all, even after higher wages, employees are still losing in real terms as inflation is eating away at their "raise".

Will The Fed Pivot?

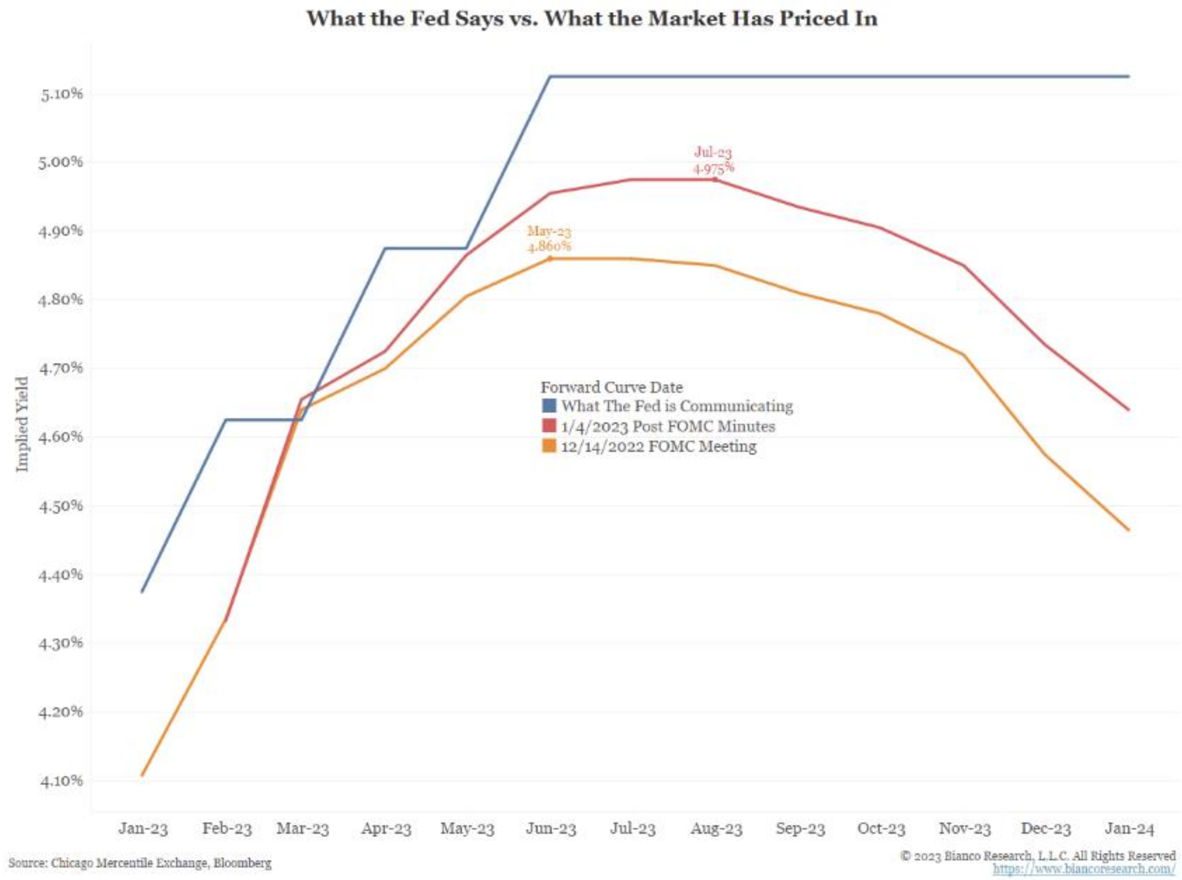
The market continues to lean on the “Fed Pivot”. The Fed will pivot BUT it might not be as quick as normal given the inflationary backdrop.



Source: Strategas. As of 11/30/22.

Q1 2023: Reconciling Market Expectations with Fedspeak

A split has developed between what the market thinks the Fed will do, and what the Fed keeps saying they'll do. We think it makes sense to take them at their word, without making explicit bets that rely on any one outcome.



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The Consumer Price Index (CPI) measures the change in prices paid by consumers for goods and services. The CPI reflects spending patterns for each of two population groups: all urban consumers and urban wage earners and clerical workers.

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