Quarterly Economic Update

December 13, 2023

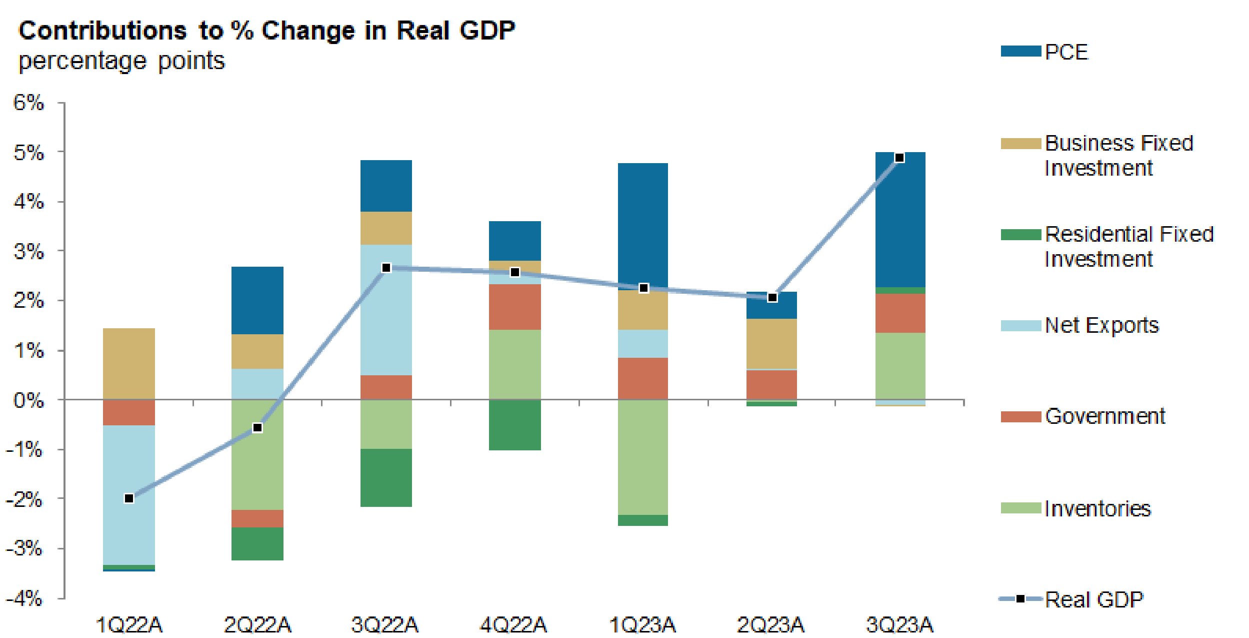
MACROECONOMIC COMMENTARY

Economic Outlook

By Bobby Long

Economic activity is now showing some clear signs that it is slowing from the strong pace of growth over the past several quarters. Despite expectations of a weakening economy, conditions have largely surprised to the positive over the past year. This resilience has led the chorus of economists calling for a recession over the past year to shift towards the "soft landing" view, with their odds now embracing the latter. Growth over the third quarter was especially strong, however there are weakening trends that signal slower activity ahead. These trends are not alarming but need to be watched. Any acceleration in the weakness would raise additional concerns. The Federal Reserve's most recent Beige Book publication reported that economic activity had broadly slowed across the twelve Federal Reserve Districts. Four districts reported modest growth, two indicated conditions were flat to slightly down, and six reported slight declines in activity. Collectively, the economic outlook for the next six to twelve months had diminished since the previous publication was released.

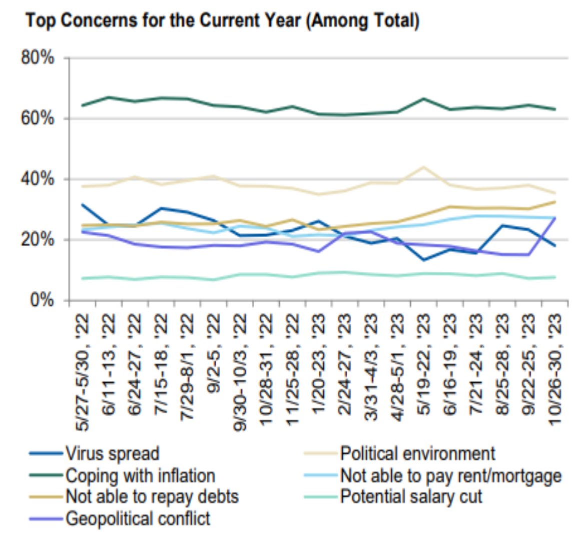
Real Gross Domestic Product (GDP) grew at an annual rate of 5.2% in the third quarter. This was significantly stronger than the second-quarter growth rate of 2.1%. Growth was again driven largely by strong consumer spending. Personal consumption expenditures increased 3.6% over the prior quarter, supported by spending across services and both durable and nondurable goods. The quarter's growth also benefited from a large increase in private inventory investment. Nonresidential fixed investment modestly increased, weighed down by a contraction in equipment investment. Residential investment did turn positive after nine quarters of negative growth.



Source: Bureau of Economic Analysis, Morgan Stanley Research

With the consumer carrying such a large weight over the past several quarters, softening consumer spending patterns would be a negative signal for broader activity. October retail sales declined -0.1% over the prior month, breaking a six-month trend of positive sales growth. While the decline was modest, it was fairly broad, with eight of the thirteen categories reporting slower sales. One month does not make a trend, and the holiday sales season can be noisy, but future reports should be monitored for any indication that consumers are pulling back harder on the reigns. Some consumers are clearly feeling the effects of higher interest rates and tighter credit, which, combined with lingering inflationary pressures on household necessities, are leaving less capacity for discretionary spending. Excess savings continue to decline, with lower- and middle-income groups having drawn down most of these savings. These households have also benefited from drawing on equity lines as mortgages were refinanced and student loan payments were delayed. With these alternative excess cash flow sources drying up, consumers have less discretionary income to spend. Household net interest payments is also rising as interest-earning liquid assets are declining and interest paid on revolving debt is increasing.

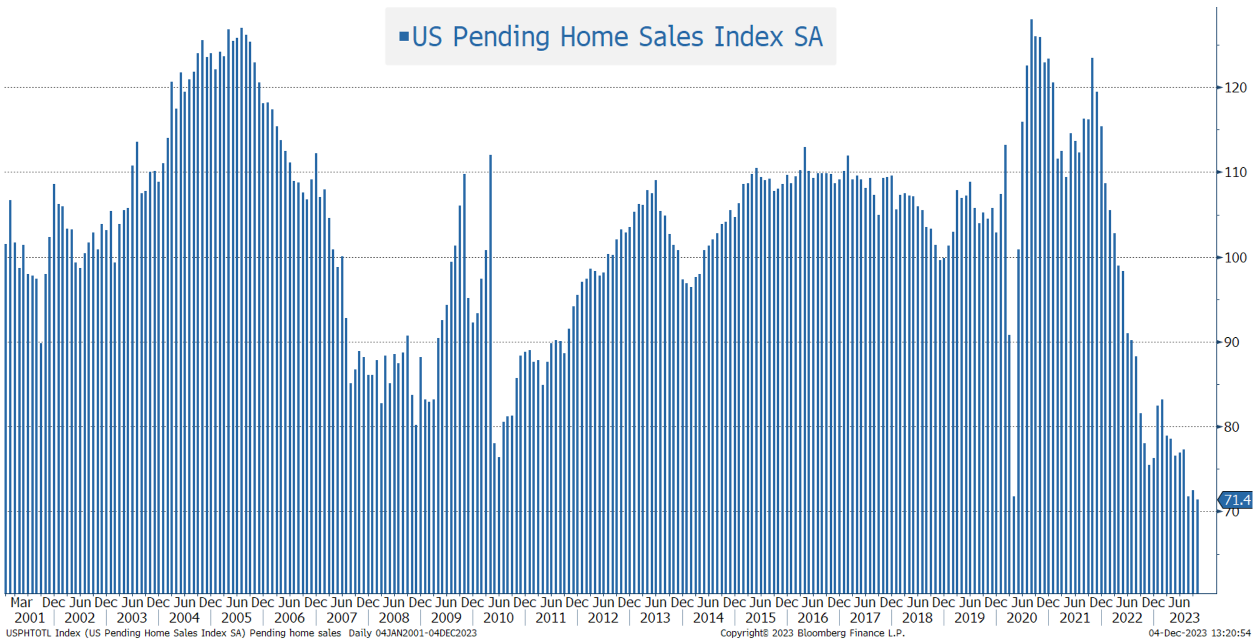
A recent survey conducted by Morgan Stanley Research reported 32% of consumers surveyed listed their ability to repay debts as their top concern. This was an increase from 23% at the beginning of the year. Being unable to pay rent or mortgage was also an increasing top concern. The survey also reports consumers continue to worry about inflation even as headline inflation measures have declined. Together, these concerns paint the picture of a consumer who is increasingly worried about cash flow and feels they have less capacity to spend.



Source: AlphaWise Consumer Pulse Survey, Morgan Stanley Research.

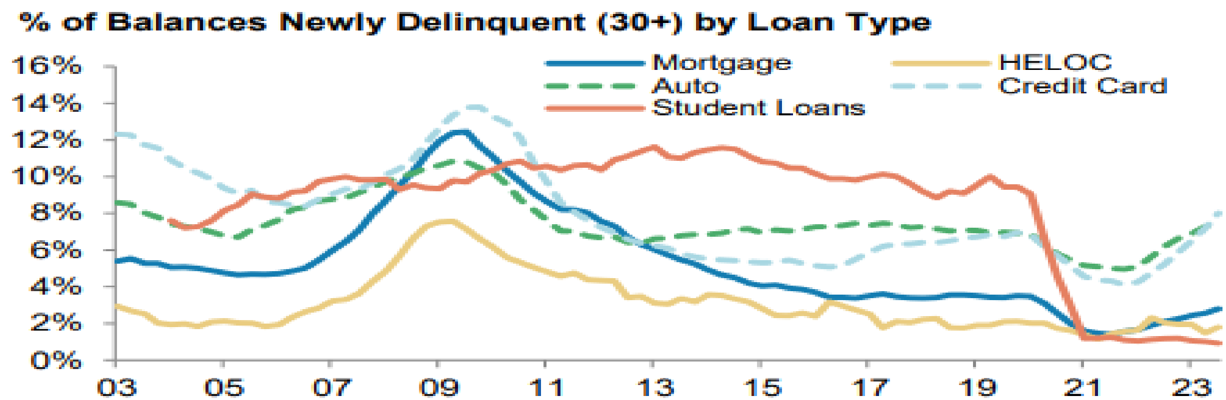
Consumers also indicated they planned to spend more on groceries and household items over the next six months and less on discretionary and big-ticket items. Spending intentions were to spend more than 15% less across the categories of small home appliances, consumer electronics, food away from home, leisure and entertainment activities, and major home appliances.

Housing-related activity remains weaker and is unlikely to be a driver of consumer spending as it has been over the past several years. Supply remains fairly tight; however, affordability continues to limit activity as home prices remain elevated and higher mortgage rates are leaving purchases out of the reach of many homebuyers. Homeowners who previously locked in a low mortgage rate are also more reluctant to move. All this serves to depress home sales and the spending that typically accompanies it. Studies have shown that the average household spends $8,000 more on home-related goods and improvement in the two years after a home purchase. The chart below shows the post-Covid bump in home sales, followed by the sharp decline as mortgage rates have risen. Pending home sales continue to run at historically low levels and indicate weaker housing-related spending over the next several quarters. Many home goods manufacturers and retailers have already experienced declining revenues and challenging business conditions, with expectations for further deterioration.



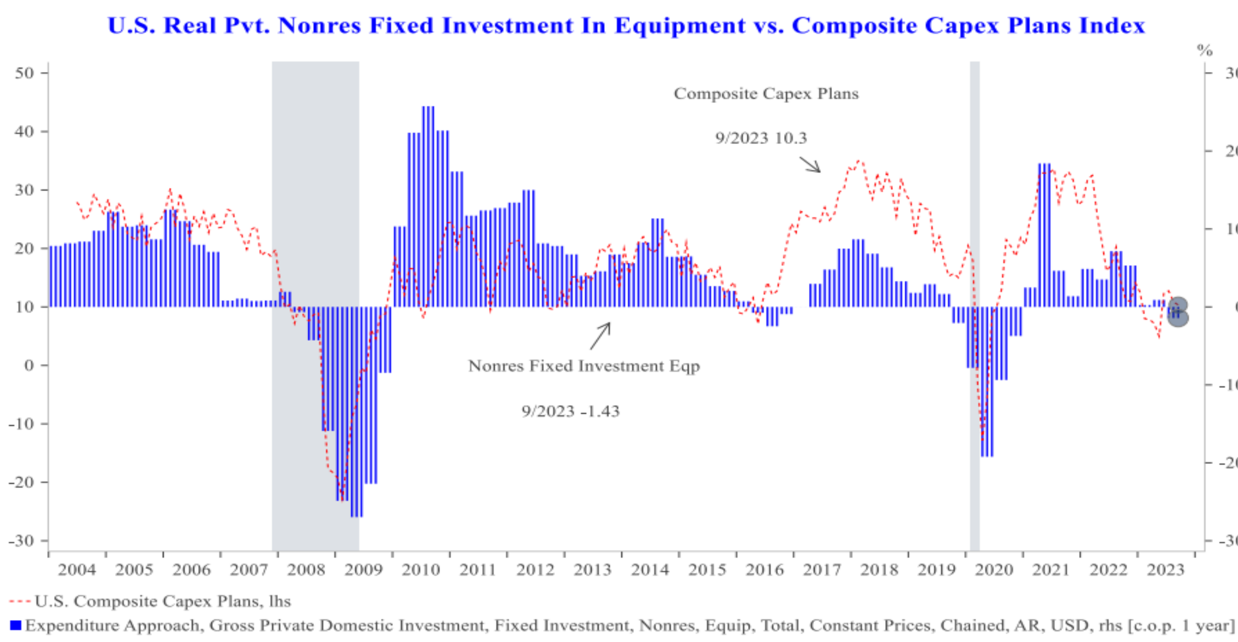
While there are clear signals that a large percentage of consumers are experiencing a diminishing capacity to spend, high-income households have been spending at historically unprecedented levels and have not shown any significant signs of slowing down. The top income quintile has historically accounted for the highest share of personal consumption expenditures, averaging 39% over the past 20 years. These top earners have represented 45% of all consumption since 2020. This group has also benefited disproportionately from the rise in housing and stock prices. National home prices are roughly 40% higher than pre-pandemic levels, and stocks have risen over 30%. With asset prices still strong and the significant expansion in net worth for these households, this group can continue to support consumer spending. Historically, these households do not feel compelled to pull back on spending until they experience job losses and see a contraction in housing and financial wealth. An uptick in white-collar layoffs would likely foretell a contraction in spending from these households and represent a more meaningful hit to economic activity.

Delinquency rates continue to move higher as debt service costs rise. Newly delinquent balances have been rising sharply for credit card and auto loans and are now above pre-pandemic levels. Mortgage delinquencies have also been increasing but remain at relatively low levels. Student loan delinquencies are expected to follow now that payment plans are resuming following the long pause. These delinquencies are ticking up even as labor conditions remain strong and confirm consumers' excess cash flow is tightening. An increasing number of credit card and auto loan delinquencies are moving into the serious delinquency category as defined as greater than 90+ days. These delinquencies also represent an increasing risk to lenders and securitization markets.

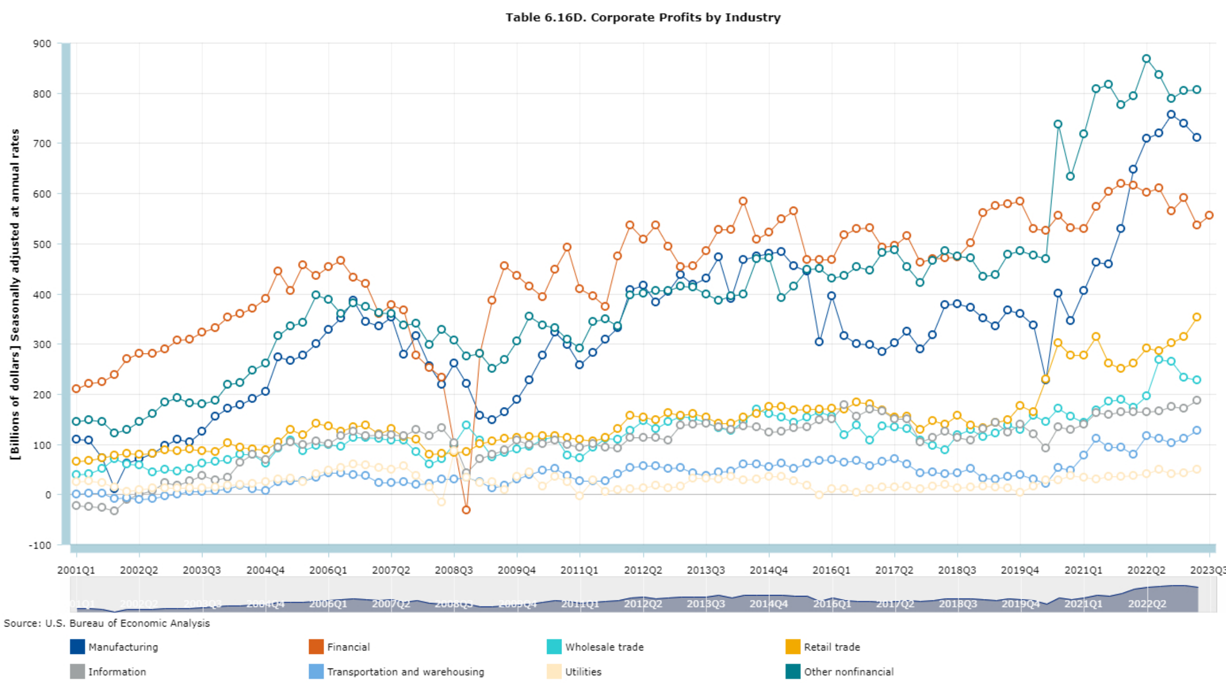


Source: Morgan Stanley Research

Private fixed investment has been weak, and businesses are pulling back on capital expenditure plans with concerns of slower economic activity. Rising interest rates are affecting borrowing decisions, and banks have tightened lending standards. The Federal Reserve's Senior Loan Officer Opinion Survey (SLOOS) has reported falling demand for both commercial business and real estate loans for several quarters now. Businesses have indicated slowing consumer demand, higher capital costs, and weakening pricing power expectations are discouraging investment. Equipment investment has been especially weak over the past year. An uptick in capex plans usually leads to an increase in equipment investment, however, according to the chart below, this has been moving lower and is a negative signal for investment.



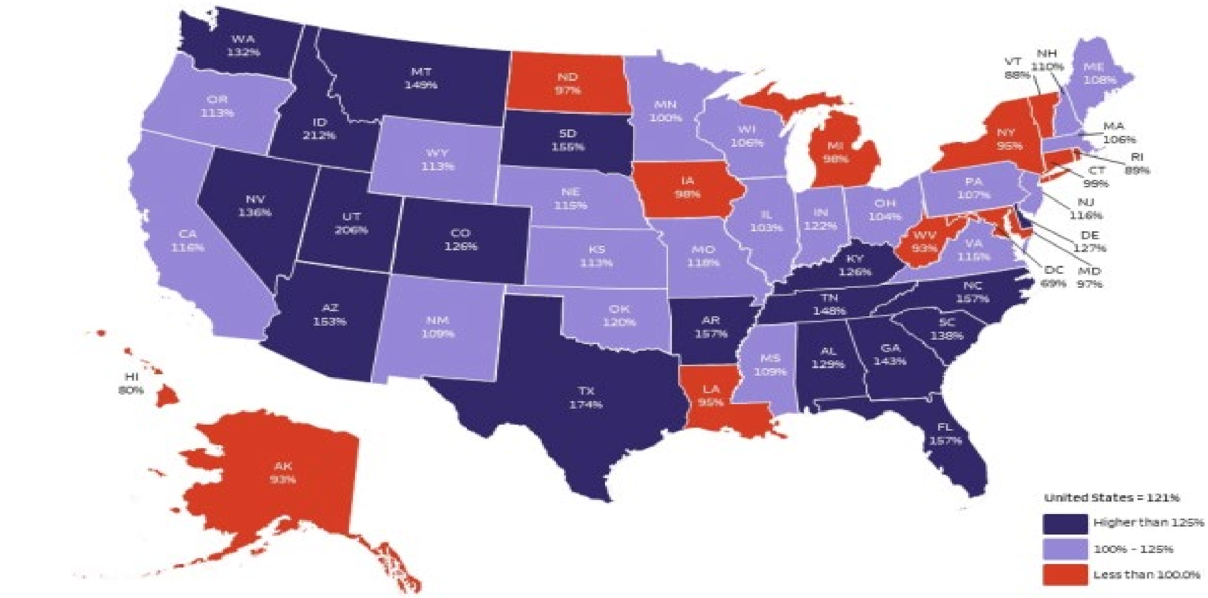
Third-quarter corporate profits rose 3.3% over the prior quarter and have largely held up so far. Industry data for the third quarter has not been released, but the chart below shows how profits have trended historically and through the second quarter of the current year. Manufacturing and wholesale trade profits have been declining for several quarters now. Financial profits have also been losing momentum. The large other non-financial catch-all category seems to have stalled. If profits begin to significantly deteriorate, job losses are likely to follow.



The Institute of Supply Management's Services PMI index increased to 52.7% for the month of November, indicating the services sector expanded for the eleventh consecutive month and activity slightly strengthened over the prior month. Fifteen of the eighteen industries reported growth for the month. The Manufacturing PMI index was unchanged from the prior month at 46.7%, remaining firmly in contraction territory for the thirteenth consecutive month. Manufacturing activity continues to be broadly weak; only three manufacturing industries reported growth for the month.

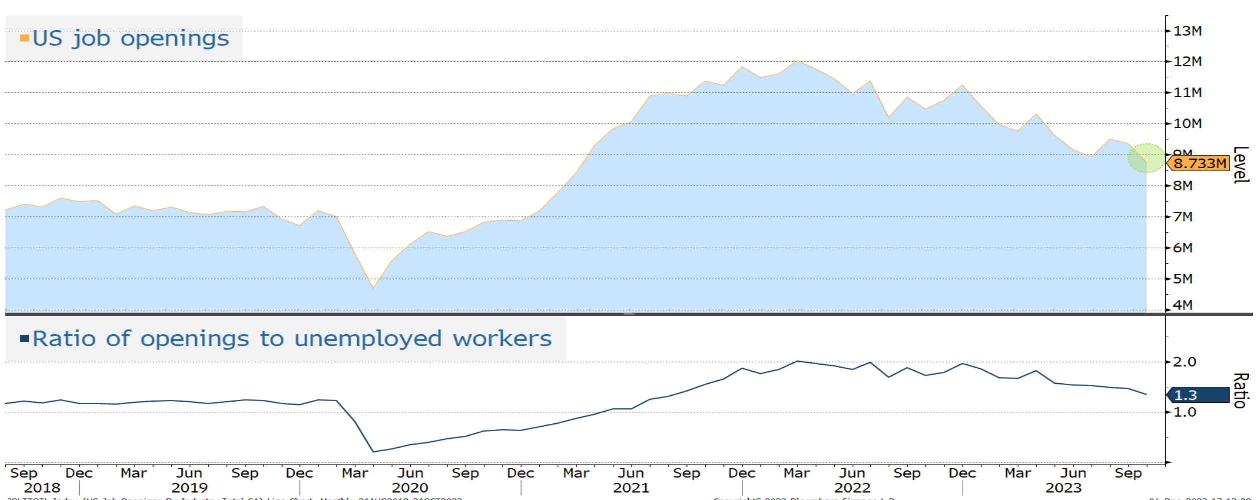
Employment has been strong, and the jobs lost during the pandemic slowdown in 2020 have been fully recovered with additional jobs added. This has been broadly realized across the country, with only a small subset of states with employment remaining below pre-pandemic levels. The graphic on the following page provides an illustration of how this job recovery has occurred at the state level. States with the biggest gains were big beneficiaries from population shifts and migration patterns initiated by the pandemic.

Percent of March and April 2020 Job Losses Recovered – September 2023



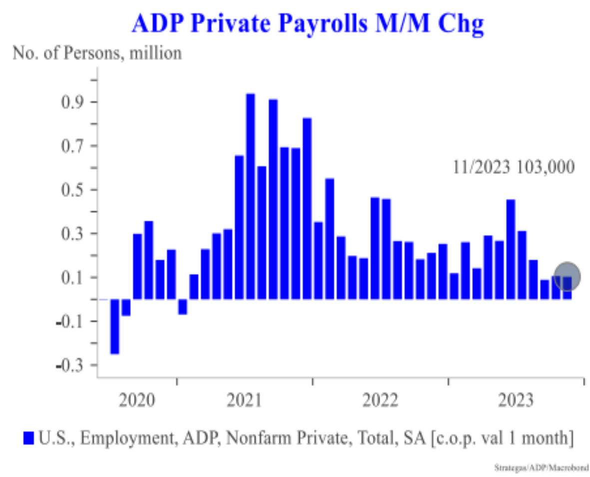
Source: U.S. Department of Labor and Wells Fargo Economics

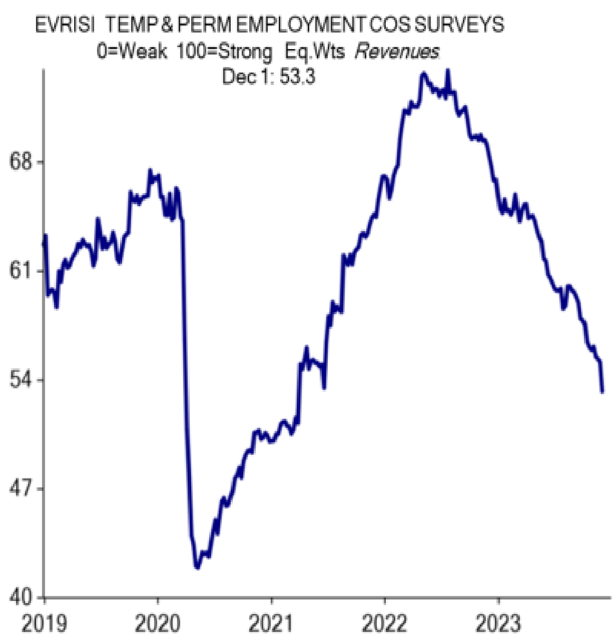
With labor demand having been extremely strong, tight labor markets have driven wage inflation that was feeding the broader inflationary pressures. The elevated number of job openings has been a measure that reflects these tight conditions. The Federal Reserve's goal in their efforts to tame inflation is to tighten conditions enough to bring job openings down without triggering actual job losses. According to the JOLTS survey, job openings have fallen to 8.7 million, a drop from 9.3 million the prior month. There are roughly 161 million employed workers in the US and 9 million job openings, which remain in excess of the 168 million workers. With job openings coming down, this imbalance is easing and providing some further relief to wage pressures. The chart below shows there is still some ways to go, but these measures are trending in a direction that brings labor supply and demand into a more sustainable balance.



Recent labor data has been mixed, but labor conditions remain healthy overall even as demand for labor slows. On one hand, it looks like an orderly slowdown from an extraordinarily tight labor market. On the other hand, several measures look like there could be weaker conditions forming. The October employment report was weaker; however, the November report came in better than expectations, and conditions strengthened over the prior month. The unemployment rate had been ticking up a little over the past few months, rising to 3.9% in October but falling back to 3.7% in November. Nonfarm payroll gains have been choppy but are still positive. October payrolls added a more modest 150,000 jobs for the month, with November job gains improving to 199,000.

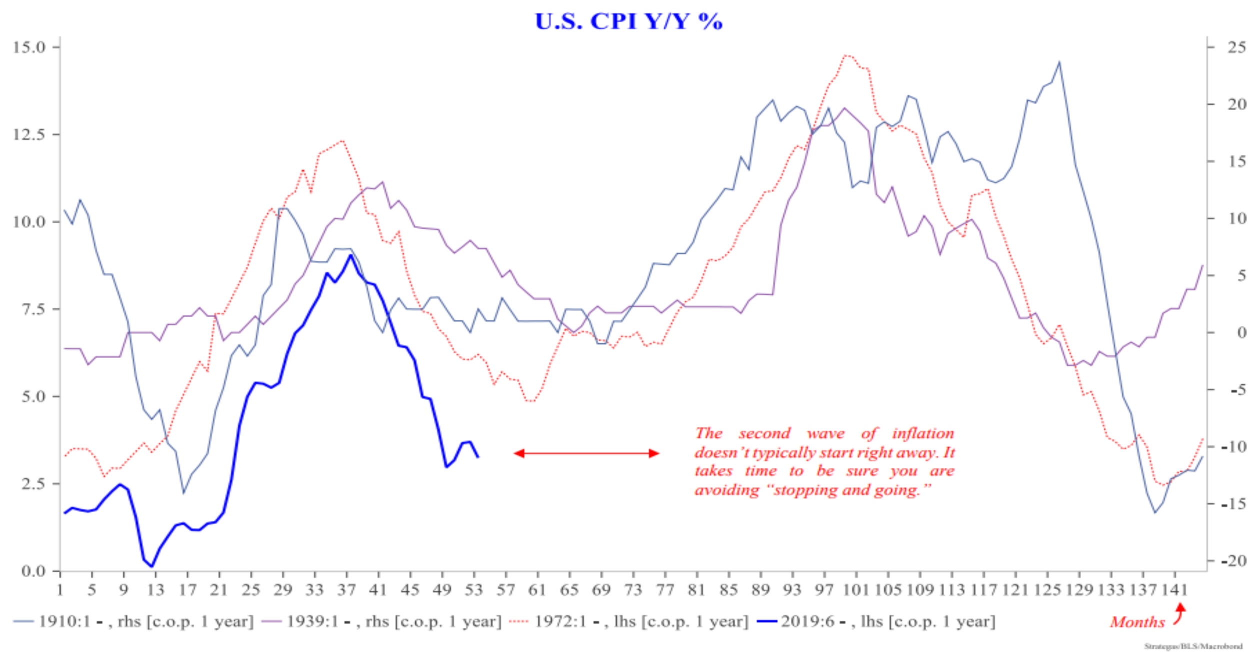
Private sector employment growth as measured by the ADP National Employment Report showed an increase of only 103,000 jobs for the month of November, with gains clearly decelerating over the past three months. Job growth came primarily from service-providing sectors such as trade, transportation, education, and healthcare. Manufacturing jobs shrunk by 15,000, the leisure and hospitality sector shed 7,000 jobs, and construction declined by 4,000 jobs. Small business, which represents 45% of total private employment, only increased by 6,000.





Initial jobless claims have not moved significantly higher and are trending below averages earlier in the year. Continuing jobless claims have been moving sharply higher since mid-September, but the most recent release ticked back down a little. The Conference Board's "jobs plentiful minus jobs hard to get" survey is in a downtrend that seems to be gaining momentum. This survey, combined with the continuing claims trends, indicates that those workers who are losing their jobs are finding it more difficult to find new employment. Evercore ISI's employment agency surveys have reported weakening revenues and is another real-time indicator that suggests labor demand weakness is accelerating.

Inflation has continued to fall over the past several months. While there are still some sticky areas of inflation, this is clearly moving in the right direction with the most recent October headline CPI release at 3.2% and core CPI at 4.0%. Month-over-month inflation numbers have been decelerating and indicate this can continue to move lower. Inflation is still above the Federal Reserve's 2% threshold, but it is moving towards it, and one-year inflation swaps have slipped back below 2%. A concern has been that inflationary pressures will not be fully contained, and if restrictive policy is lifted too early, it will rear its head again. Inflationary pressures from wages, rents, and commodities are all diminishing, and there are no signs of this threatening to reverse; however, as the chart below shows, inflation has a history of moving in waves that occur over longer cycles.



The Federal Reserve's restrictive policy has helped bring inflation down and is cooling economic activity. The question remains whether they have successfully pulled this off without destroying jobs and pushing the economy into a recession. So far, the number of job openings coming down without a corresponding increase in the unemployment rate is positive for the soft-landing scenario. Policy actions work with long lags, making the appropriate amount and duration of restrictive policy difficult to get just right without triggering unwanted consequences. Many have been calling for the Federal Reserve to begin lowering interest rates early next year. This seems premature with inflationary pressures not fully contained, but as inflation does come down, real rates are becoming more restrictive. Consumer spending is slowing under stable labor conditions. If job losses start mounting, this could become more pronounced. Employment is key to the soft-landing vs recession scenario. For now, it looks okay, but it is hard to tell the difference between cooling and cracks forming. Weaker business profits can quickly lead to an uptick in layoffs, which can trigger consumers to abruptly reduce spending and kick off a negative cycle. Despite the continued economic strength over the past few months, expectations should be for slower growth with an elevated risk that weaker economic conditions could develop.

RSA PORTFOLIO STRATEGY

Fixed Income Strategy

By Nick Prillaman

At our previous meeting in early September, the Federal Reserve appeared to be in a holding pattern. The tight job market was beginning to normalize while consumer spending was remaining resilient. After a period of calm in the first half of the month, markets took a negative turn in response to the Federal Reserve which met on September 20. While the Fed did refrain from hiking the federal funds rate, they signaled one more hike in 2023 and projected fewer rate cuts in 2024. The “hawkish skip” pushed the S&P 500 down by almost 1%, and interest rates moved higher. Markets continued sliding the following day as initial jobless claims fell to 201,00 versus the estimate of 225,000 which reinforced the Fed’s higher-for-longer view. The 30-year Treasury was particularly weak with a 13 bp rise in yields. The bearish trend in interest rates continued for the rest of the month with longer-dated bonds bearing the brunt of the selloff while the front-end barely moved. For example, the 30-year Treasury bond yield rose approximately 49 bps while the 12-month Treasury only rose by 6 bps. In terms of the 2s/10s curve, it started the month at -75 bps and finished at -47 bps.

Fixed-income investors suffered in this environment as the Treasury portion of the Bloomberg Aggregate returned -2.209%. Among government-related spread products, agencies fared the best with a -.62 bp return as the sector’s short-duration profile proved to be very valuable. Mortgages underperformed other fixed income sectors with a -3.186% return as the Bloomberg US MBS Agency Fixed Rate Average OAS widened by 13 bps to end the month at 66 bps. Also, the duration of the index extended, which negatively impacted returns. Corporates lagged Treasury securities with a -2.669% return. Duration was the primary driver behind the underperformance rather than spreads as the Bloomberg Corporate OAS only widened by 3 bps. Among corporate sectors, utilities fared the worst with a -3.14% total return, while financials lost the least at -2.027%. According to BofA, new issue supply for investment grade corporates was vigorous at $128.4 billion issued in September, which handily topped the $81.4 billion in September of 2022. Relative to other fixed-income sectors outside of agencies, high-yield bonds fared better with a -1.183% total return, which can be attributed to their short-duration positioning.

October was a difficult month for investors as U.S. economic data pushed yields higher across various maturities which helped drive equities lower. One of these data points was the September Consumer Price Index, which showed prices rising 3.7% on a year-over-year basis and .4% on a monthly basis. The core CPI, which excludes food and energy, rose .3% in September per the Bureau of Labor Statistics. Reade Pickert from Bloomberg said the numbers reinforce “the Federal Reserve’s intent to keep interest rates high and bring down inflation.” The second piece of economic information was the retail sales number, which rose .7% for the month per the Commerce Department. Jeff Cox at

CNBC.com said, “Consumers showed surprising strength in September, boosting retail sales well above expectations despite high-interest rates and worries over a weakening economy.” Also affecting markets were the UAW strike, the vacancy of the Speaker of the House, and the Israel-Hamas conflict, which started on October 7.

In this environment, Treasuries posted a -1.208% and the S&P 500 returned -2.10%. The front end of the yield curve was essentially flat, while bonds with longer maturities saw material yield increases. For example, the 10-year yield rose by almost 36 bps and at one point crested the 5% threshold. The 2s/10s curve started the month at -47 bps and ended at -15.6 bps, which shows how dramatic the bear steepener was. Like the previous month, agencies outperformed Treasuries with a -.169% return, while mortgages were again the laggard in fixed income with a -2.066% return. Mortgage spreads started the month at 66 bps before reaching their apex of 82 bps on October 23, which was the highest level in a year. Spreads eventually ended the month at 75 bps. Investment grade corporate bonds returned -1.873% as spreads widened by 8 bps and duration weighed on prices. According to CreditSights, the I.G. primary market was healthy as $81 billion in gross new issuance was priced in October which was only slightly less than the $85 billion priced last year. For the high-yield market, spreads moved materially wider by 43 bps, though the asset class outperformed Treasuries and high-grade corporates with a -1.165% return.

November’s market action was diametrically opposed to the previous two months. Equity indices rallied hard off the late October bottom while Treasury yields fell quickly. On November 1, two positive catalysts occurred. One was the better-than-expected U.S. Treasury quarterly refunding announcement, which showed slightly lower borrowing needs as well as concentrating the bulk of the auctions on the front end of curve. This was viewed as easing “the upward pressure on long-end rates” per icapital.com. The second was from the Federal Reserve which kept rates unchanged at their meeting and comments from Fed Chair Powell in his press conference “fueled investor optimism rate hikes were done even though the central bank left the door open for more,” according to Reuters.

As the month progressed, the recent bullish trends were reinforced as the soft inflation data released on November 14 “bolstered bets the Federal Reserve’s aggressive hiking cycle is now over – and the next move will be a rate cut next year,” per Rita Nazareth at Bloomberg. The U.S. Bureau of Labor Statistics said the Consumer Price Index was unchanged for October while core CPI only increased by .2%. Both were lower than expected. Treasury yields continued their move lower on November 28 in response to dovish comments by Fed Governor Waller, who said, “I am increasingly confident that policy is currently well positioned to slow the economy and get inflation back to 2%.” He also said that if “we feel confident that inflation is really down and on its way, you could then start lowering the policy rate just because inflation is lower.”

In total, Treasuries returned 3.473% and the S&P 500 gained 8.9%. The 20+ year Treasury portion of the Bloomberg Aggregate returned an incredible 9.995% as the 30-year Treasury yield fell 60 bps. The 2s/10s curve became more inverted during this time as the 10-year yield fell more than the 2-year. Given the rally in bonds, it is not surprising that agencies with their shorter duration lagged Treasuries with a 1.925% return. Mortgages posted a stellar 5.213% return as the OAS compressed by 19 bps. Investment grade corporates were the standout among fixed income asset classes with a 5.978% return as longer duration combined with OAS tightening of 25 bps drove performance. High yield relatively lagged with a 4.530% return due to less duration even though spreads came in 67 bps.

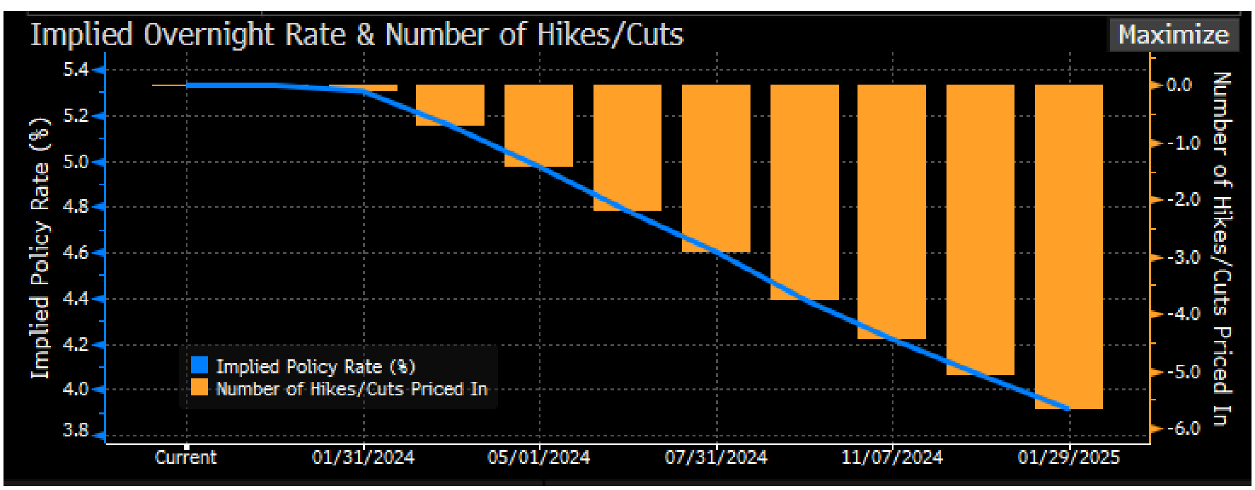
So far in December, long-dated yields have continued their descent lower. On the first day of the month, the bond market interpreted comments from Fed Chair Powell dovishly and rallied significantly. Also, the falling interest rates thesis was supported by weaker-than-expected JOLTS, the Job Openings and Labor Turnover Survey number, and a subpar ADP private payroll number. In total, the 30-year Treasury has fallen 26 bps in this environment.

With regards to activity in RSA's fixed income portfolio, we made multiple adjustments to the Treasury sector. For example, we sold a portion of our February 2024 Treasury security and purchased two Treasuries, a May 2026 and a September 2030, to lengthen duration at the margin and take advantage of the increase in interest rates. Another example was selling the remaining position in the February 2024 Treasury issue and funding the purchase of mortgages to increase our allocation to higher-yielding agency MBS while also marginally increasing duration.

The outlook for the Treasury market is that interest rates look to have peaked and appear to be heading lower. Multiple observations support this view. First, the 12-month Treasury, as seen in the chart, looks to be rolling over in anticipation of rate cuts. The yield has recently fallen by roughly 45 bps. Second, inflation is materially slowing down. As mentioned earlier, the Consumer Price Index for October was flat on a monthly basis while the core CPI was only up .2%. On a yearly basis, the October CPI was 3.2% which is a far cry from the 9.1% registered in June of 2022. With reduced inflation, there is less of a need of restrictive interest rates.

Source: Bloomberg

Third, fed funds futures are signaling a falling interest rate environment. The chart below shows the implied policy rate dropping to 3.91% by January of 2025. A high 3% fed funds rate is consistent with a soft-landing scenario as inflation comes down amid a growing economy. If a hard landing situation occurs where economic growth falls precipitously along with inflation, the fed funds rate will probably drop well below 3.91%. In the terms of positioning the portfolio going forward, we will be looking to add duration to get closer to the index as opportunities present themselves.



Source: Bloomberg

For the MBS portfolio, we purchased multiple pools since our last board meeting. Besides the typical reinvestment of monthly prepayments, we deployed additional capital into the space as the combination of healthy spreads relative to other high quality fixed income securities combined with elevated interest rates made mortgages attractive from an investment perspective. The trades also helped us reduce our underweight in mortgages relative to the index which seemed prudent given that the yields available to mortgage investors in October were the best in years. Over the last 3 months, we added a myriad of coupons ranging from 2.5s to 6.0s. One was a 6.0% coupon Freddie Mac with an estimated static yield of 6.472% and a spread of 166 bps over the 5-year Treasury. It had an option-adjusted spread of 64.6 bps and an option-adjusted duration of 4.82 years. Getting over 6% in yield for a government-related credit with a purchase price under par made mortgages hard to pass up.

Our outlook in mortgages is that the asset class is a fine place to invest money in fixed income though the yields are not as good as they were in October when spreads and interest rates were both at their apex. As seen in the chart below, the Bloomberg US MBS Index Yield to Worst hit 6.05% on October 19th and now resides at 5.09% at the time of writing. Compared to the last decade of low yields, we are of the opinion that these yield levels with GSE credit risk still makes sense for an investment perspective. Besides the healthy yields in the sector, the prepayment risk is lower than usual as most coupons from 5.5% and below are currently out-of-the money. This will allow mortgages to perform better than they traditionally have in a falling interest rate environment.

Source: Bloomberg

In the corporate bond sector, we added numerous bonds over the last few months. One example was a 6nc5 note issued by Bank of America which allowed us to lock in a yield of 6.26% after the recent spread and interest rate backup. A second was a 2033 Public Service Enterprise note at a yield of 6.297%. We were able to add a stable utility that should relatively outperform in a spread widening scenario while also taking advantage of higher yields. A third example was a 8nc7 American Express note with a 6.489% yield as we were comfortable locking in this type of yield in a name that has a proven track record of success across various cycles. Our approach going forward with respect to corporate bonds is that we will continue to purchase investment grade bonds as the yield to worst is the highest it has been since 2009 which can be seen in the chart below.

Source: Bloomberg

While yields look very attractive, investment grade corporate spreads are not compelling as they were in 2020 or 2008 as seen below. There is spread risk going forward from these valuation levels as a recession could cause an abrupt widening which would detract from performance. To limit this risk, we will focus on high quality issuers as they will be less impacted by a downturn in the economy.

Source: Bloomberg

Domestic Equity Strategy

By Hunter Bronson

<u>Review of Calendar Year 4th Quarter</u>

Since the turn of RSA's fiscal year in September, the market has ridden a wave of investor optimism. After yet another weak August and September to close our fiscal year, which saw the S&P 500 pull back some 6.5%, the market has rallied strongly and is up a little over 6.7% fiscal-year-to-date. While the gains have recently been more broad-based, there is no doubt that the "Magnificent Seven" (Meta, Nvidia, Amazon, Apple, Alphabet, Microsoft, and Tesla) led the way in 2023 – the MAG7 are up nearly 102% on a cap-weighted basis in 2023 vs. 8.7% for the rest of the S&P 500.

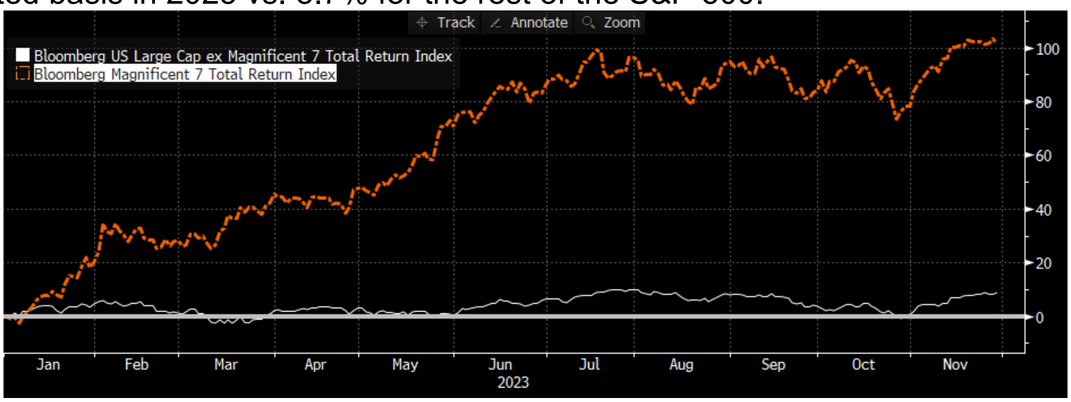


Figure 1: The Magnificent Seven (META, NVDA, AMZN, AAPL, GOOGL, MSFT, and TSLA) have trounced the broader market in 2023. Source: Bloomberg

"The Magnificent Seven" (film), starring Steve McQueen and Charles Bronson, is the story of a group of down-and-out gunslingers who rally together to save a small town hounded by bandits. Just so, today's MAG7 awoke from their 2022 hangover to come to the rescue of a 2023 market plagued by widespread fear of imminent recession. Interestingly, the 1960 hit American Western was a remake of a Japanese film released six years earlier – we should all be reminded of the original FAANG trade of 2016 and 2017.

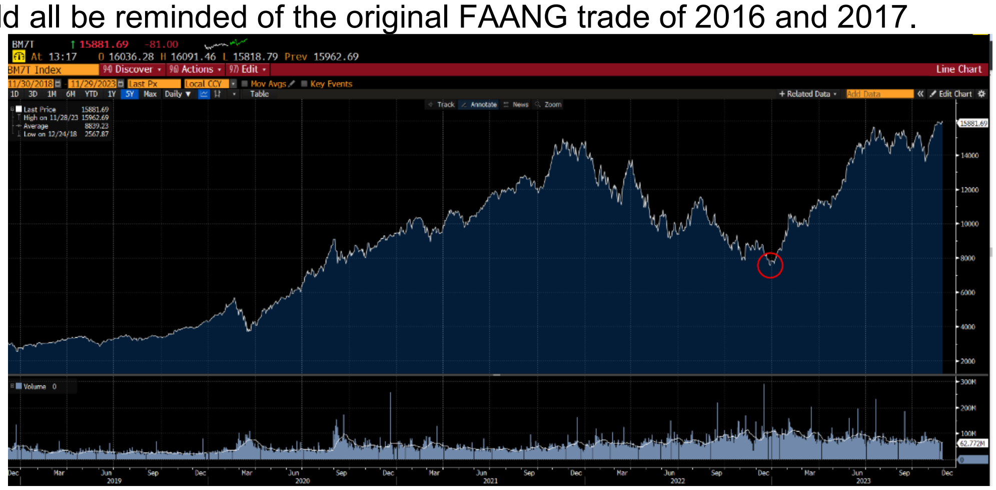


Figure 2: The Magnificent Seven rally began at the turn of 2023, nearly to the day. Source: Bloomberg Magnificent Seven Total Return Index

More recently, market gains have broadened out on the back of softer inflation data, a still-resilient job market, and hopes that the Fed may begin to cut rates in 2024. The renewed optimism in a "soft landing" has driven yields down and allowed for the participation of some beaten-down corners of the market – like Small-caps, Financials, Real Estate, Transports, and more speculative issues. We believe this is important because healthy, sustainable market rallies tend to be broad-based. While there is no doubt today's tech giants are wonderful, defensible businesses with tremendous prospects for growth, at some point valuation becomes an obstacle.

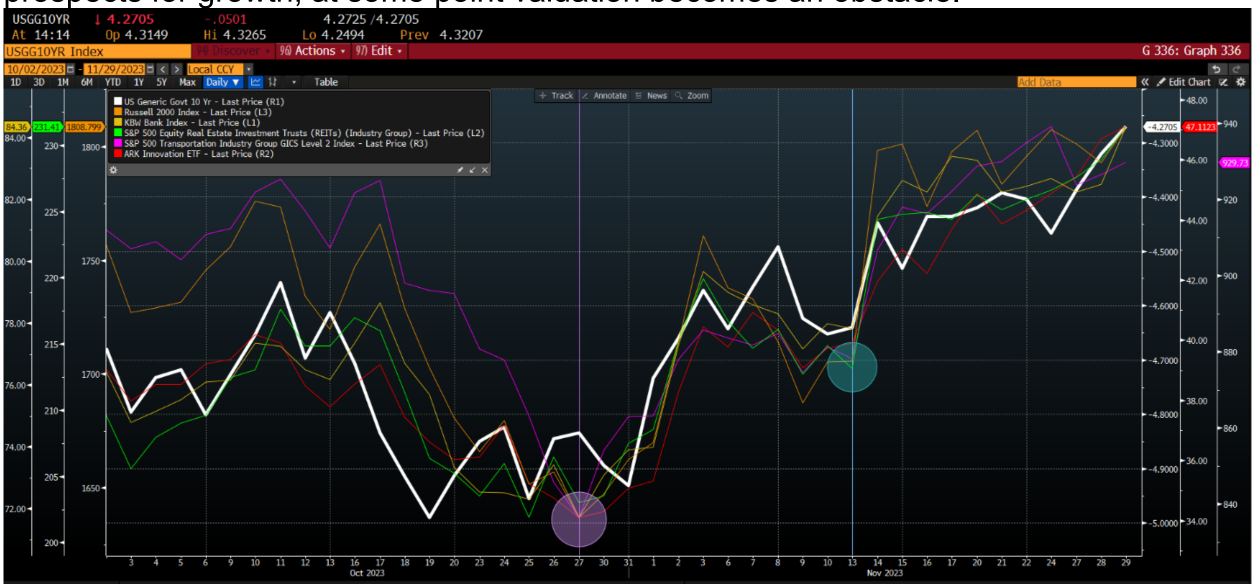


Figure 3: The Russell 2000, KBW Bank, S&P 500 Real Estate, S&P 500 Transportation, and Ark Innovation Fund Indexes bottomed together on October 27 and Nov. 13. Source: Bloomberg

With the benefit of hindsight, we can do a bit of armchair quarterbacking to tease out what the market believes is important for a broad-based equity rally to continue. Figure 3 above shows that all the market's laggard sectors bottomed together at the end of October and middle of November. In fact, by October 27, it had become clear that 2024 growth guidance – particularly for the tech leaders – was going to be lower than expectations. At first blush, this seems like a negative development. But with a bit more time for digestion, it had become clear that the Fed's window for a soft landing had widened. More sustainable growth levels signal that inflation is more likely to be under control. The Fed signaled on November 11 that it was done raising rates for the year, and the lower-than-expected Consumer Price Index release on November 13 confirmed the signal. The broader market was off to the races.

A more thorough analysis recently done by Empirical Research Partners, depicted in the figure below, confirms our intuition. Changes in the 10-year yield have four times more explanatory power today for equity return dispersions than the average since 1954.

The Bond Market Has Been in Charge…

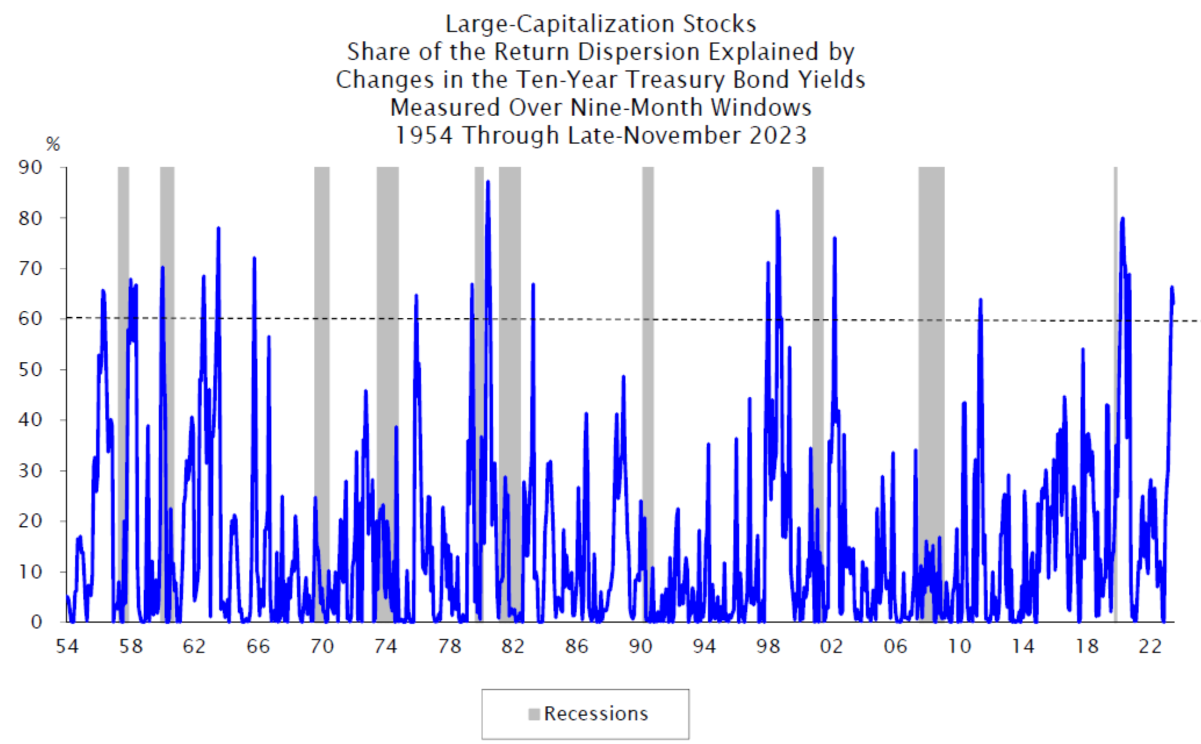


Figure 4: Moves in 10-Year Treasuries seem to be having an outsized effect on equity market returns today. Source: Empirical Research Partners

With very few catalysts on the horizon until the end of the year and positive December seasonality on the side of equity markets, we think momentum probably carries the day through the close of 2023. Beyond that, it's time to consider what major factors will impact equities' performance in 2024. From the analysis above, it's clear that the broader market cares most about rates falling for the right reasons. In other words, the path of equity markets going forward continues to be highly dependent on policymakers' ability to execute a soft landing. While it remains a tight gap to shoot with pitfalls on either side, the prospects for success look more promising today than in the last several quarters. Consistent with our belief that equity markets sit atop a bit of a precipice, we go through what we believe to be the most important macroeconomic and market-level factors going forward, giving both reasons for optimism and hesitation for each.

The Setup: Macro Conditions

Inflation & Growth

In our estimation, inflation (and super-normal nominal growth) poses the greatest downside risk to 2024 equity returns, although it appears to be under control for now. As is historically the case, CPI Inflation has come down in an orderly, symmetrical fashion since its peak of 9.1% in June of 2022 to a level very near 3% today.

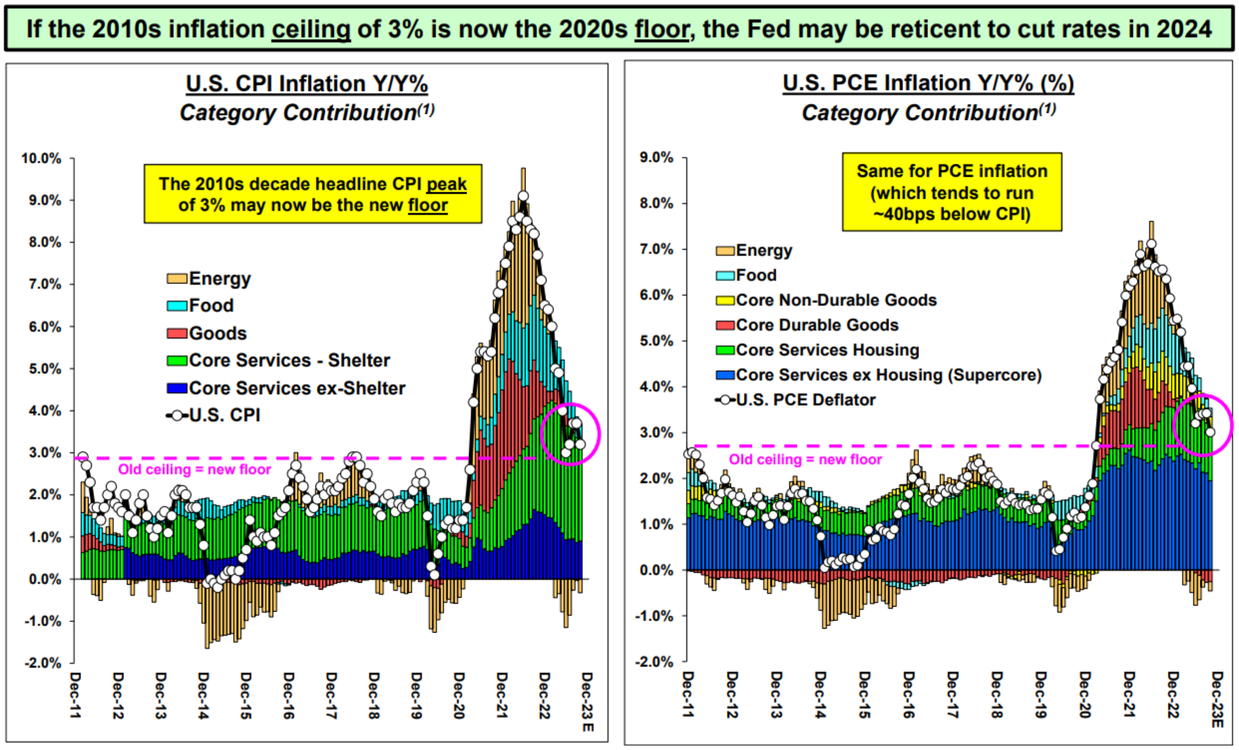


Figure 5: Headline inflation has come down symmetrically and is near target. Source: Stifel

By easing monetary conditions to a more neutral level, the Fed has signaled it is much more comfortable with inflation today, but it is far from declaring "mission accomplished." The Fed's greatest challenge in pushing headline inflation closer to its 2% target is the stubbornly sticky Core Services, ex Housing, aka "Supercore" Inflation. It remains stuck closer to 4%, accounting for nearly 50% of measured inflation.

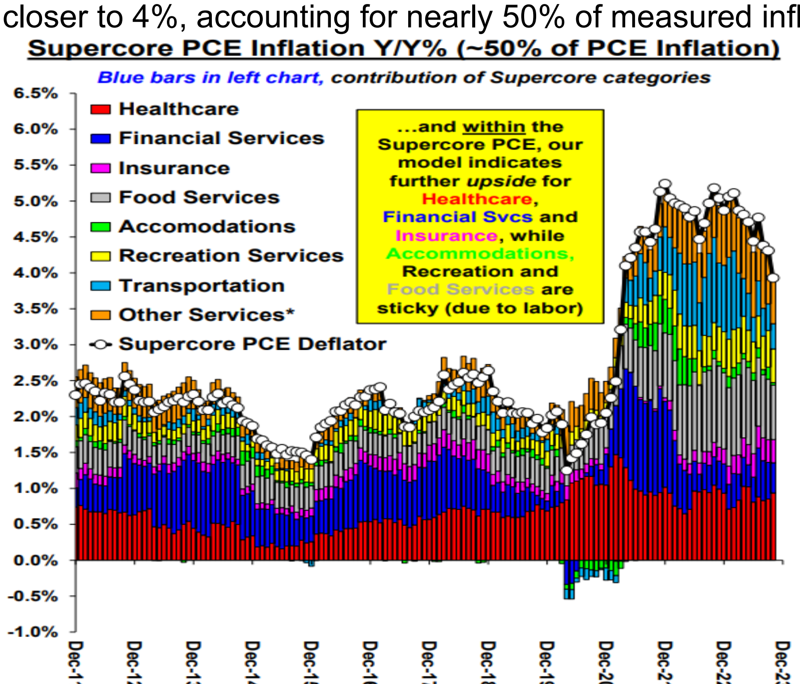


Figure 6: However, "Supercore" inflation has been slower to come down. Source: Stifel

As we will continue to emphasize, we think this stickiness will give the Fed pause in aggressively easing financial conditions to support growth in 2024. As our friends at Strategas have reminded us, second bouts of national inflation have historically occurred some 80+% of the time across the globe. Our base case is that we will remain in the minority, but sticky inflation introduces an existential risk that the Fed cannot risk tolerating. This puts a floor under the levels of financial conditions that it will be willing to explore.

To sum it up, inflation remains in controlled decline, but it is not quashed. Especially in an election year, we think the Fed will be loath to introduce an overly easy policy that would risk reigniting price instability and force it to re-tighten into a possible recession.

Current levels of economic growth reinforce this moderate view. Although the most recent GDP release (November 29) looked a bit hot at the headline level (5.9%), inventories were a major contributing factor, and real underlying growth looked closer to 3%. We (and most likely the Fed) view this as a historically normal level of growth that balances upside and downside risk. We see very little reason to "goose" it and risk reigniting inflation. Our expectation is for 4-5% nominal GDP growth in 2024.

Hence, we believe the base case should be to anticipate mostly neutral monetary policy and more normal levels of nominal economic growth. While the market has put the specter of Fed tightening behind it, we should not assume policy will be a significant tailwind any time soon.

Unemployment

On the flip side, we believe unemployment to be the key measure to monitor for any developing weakness in economic growth that could weigh on equity returns. At a very simple level, weakening growth or an inability of corporates to price goods and services beyond inflation results in impaired profitability. Faced with this condition, most businesses choose to reduce their most flexible, variable costs – i.e. their labor forces. Hence, rising unemployment is a good coincident indicator of weaker growth or looming recession. Again, we find ourselves at a bit of a crossroads.

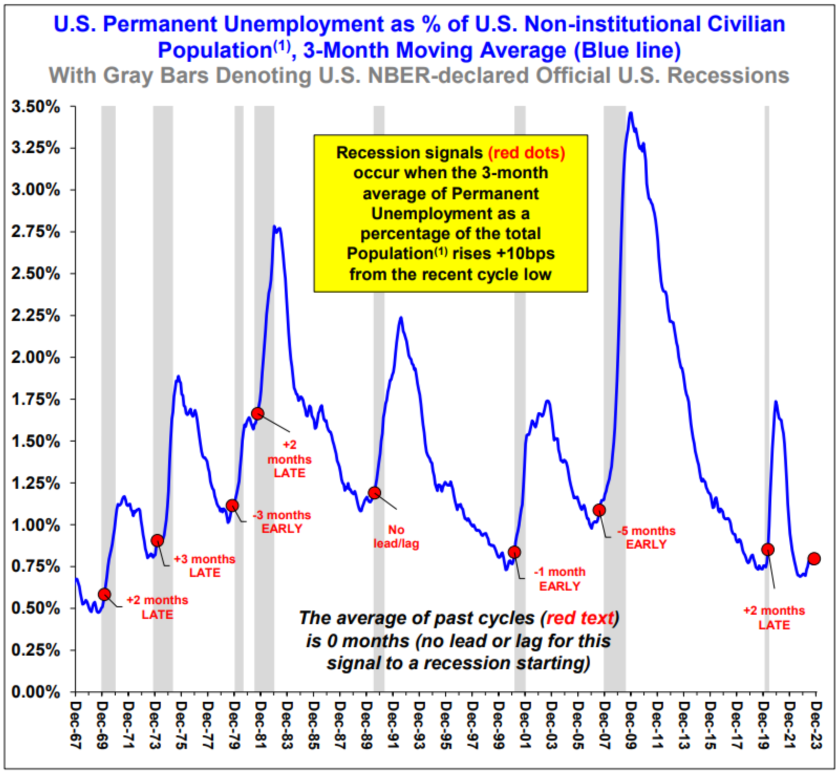


Figure 7: After a long (historically) period of moving sideways, unemployment is ticking up. Source: Stifel

Despite a seemingly very small uptick in unemployment, depending on how you measure it, the labor market is already or is very close to signaling recessionary levels. Looking back at Figure 7, the reason is quite simple: 1) unemployment almost never moves sideways for very long, and 2) the series is autocorrelated, i.e. it tends to move in the same direction as the most recent ticks.

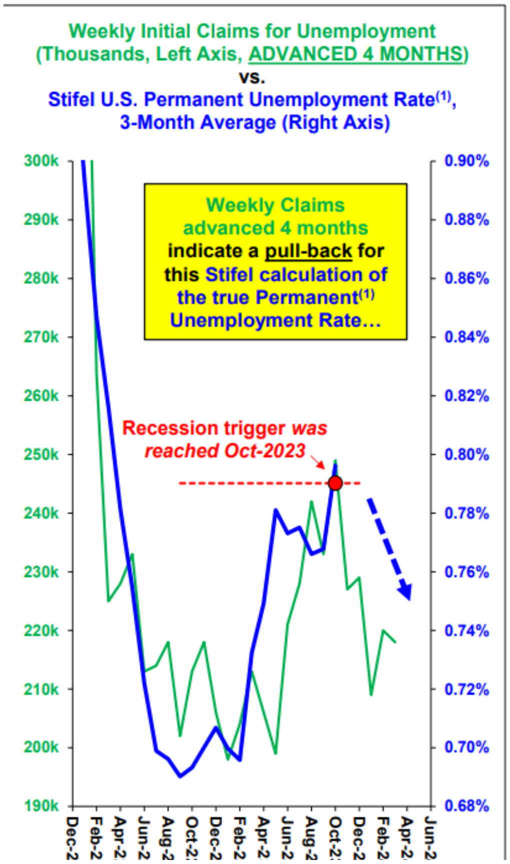


Figure 8: Recently, weekly unemployment claims have headed lower, sparking hope the broader series will follow suit. Source: Stifel

Corporate profits are still digesting the lagged (long and variable lags, as Ed Hyman reminds us) effects of policy tightening. In the next several quarters, unemployment should either 1) resume the downtrend and head for a new cycle low or 2) rise at an accelerating rate. If the unemployment rate is up, profits are likely under pressure. Not only would this impair growth, but it would probably also mean credit spreads widen along with equity risk premiums, dragging earnings multiples lower.

If, on the other hand, the unemployment rate resumes the downtrend to new cycle lows, the Fed's runway for extending the soft landing is lengthened, the policy can continue to support reasonable levels of growth, and earnings multiples should remain steady, all things equal.

On a positive note, weekly unemployment claims, in Figure 8, have most recently fallen, indicating a labor market that could be pulling back from the brink. It remains to be seen whether the broader unemployment series will follow this positive trend. It would be unusual for unemployment to reverse course, given the job market already looks very tight, but rising productivity could be the economy's saving grace. Throughout 2022 and 2023, productivity has been rising at levels rarely seen outside of recession. Could this be the positive effects of hybrid work, or are we seeing the early benefits of generative AI being introduced into the workplace, or is it an aberration? It's hard to say, but we do find it interesting.

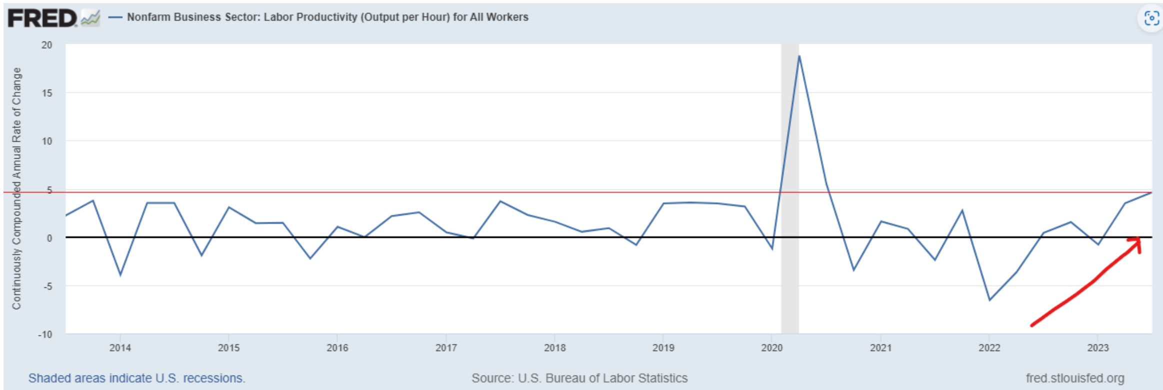
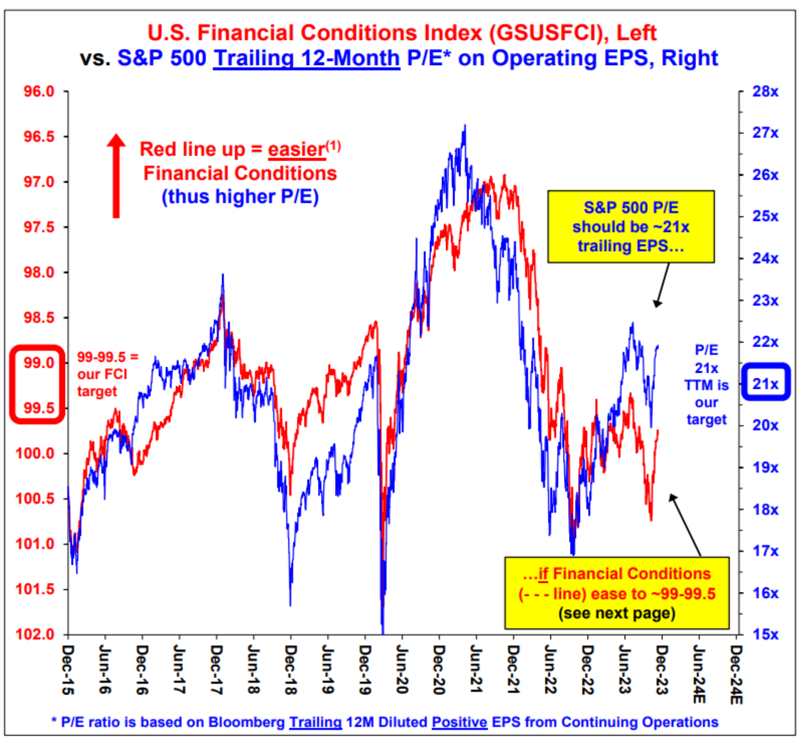


Figure 9: Productivity is sustainably increasing for the first time in at least a decade. Source: FRED & BLS

The Payoff: Earnings, Multiples, and Breadth

Earnings

As we have repeatedly mentioned since 2021, S&P 500 Operating earnings per share remain above trend due to the outsized effects of Covid-19 fiscal and monetary relief. Barring any sudden change in the geopolitical picture or rapid domestic economic deterioration, we expect earnings to continue slowly growing into the trend line in the right half of Figure 10. At the index level, earnings are mean-reverting, so barring exogenous shocks, there isn't reason to expect meaningful acceleration or deterioration.



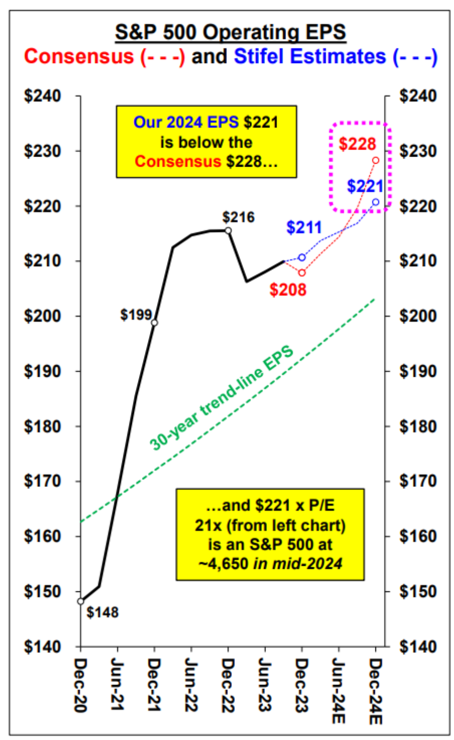


Figure 10: Operating earnings remain above-trend, as do earnings multiples. Source: Stifel

Somewhere between $220-230 seems roughly right to us, especially considering that early Street estimates for 2024 (up to nearly $250) have already come off the boil quite a bit. This level would also be consistent with our previously mentioned expectation for 4-5% nominal GDP growth – i.e., $221 is 5% higher than the 2023 Operating EPS of $211 with some room for margin improvement.

Multiples

In our view, the real test for domestic equity markets in 2024 is captured in the left half of Figure 10 above. Financial conditions have *already* settled at roughly neutral levels through the end of this year. As mentioned, index-level operating earnings are *already* above trend and have been since 2021. And as you can see in the left of the figure, earnings multiples are *already* slightly elevated both relative to history and relative to current financial conditions. As we laid out above, it's hard to imagine the Fed will aggressively ease policy into a still-tight labor market and sticky (although lower) underlying inflation – especially if earnings continue to rise. This likely caps the ability of earnings multiples to expand meaningfully from here and probably ties equity growth potential to earnings.

Breadth

This brings us back to the breadth of the market, or more accurately, the lack thereof throughout 2023. For the market to match the 20% total returns of this year again in 2024, we think market returns would need to broaden out. It's not impossible that the Magnificent Seven would continue to lead the way, but especially following the stellar returns in 2023, it wouldn't be our base case.

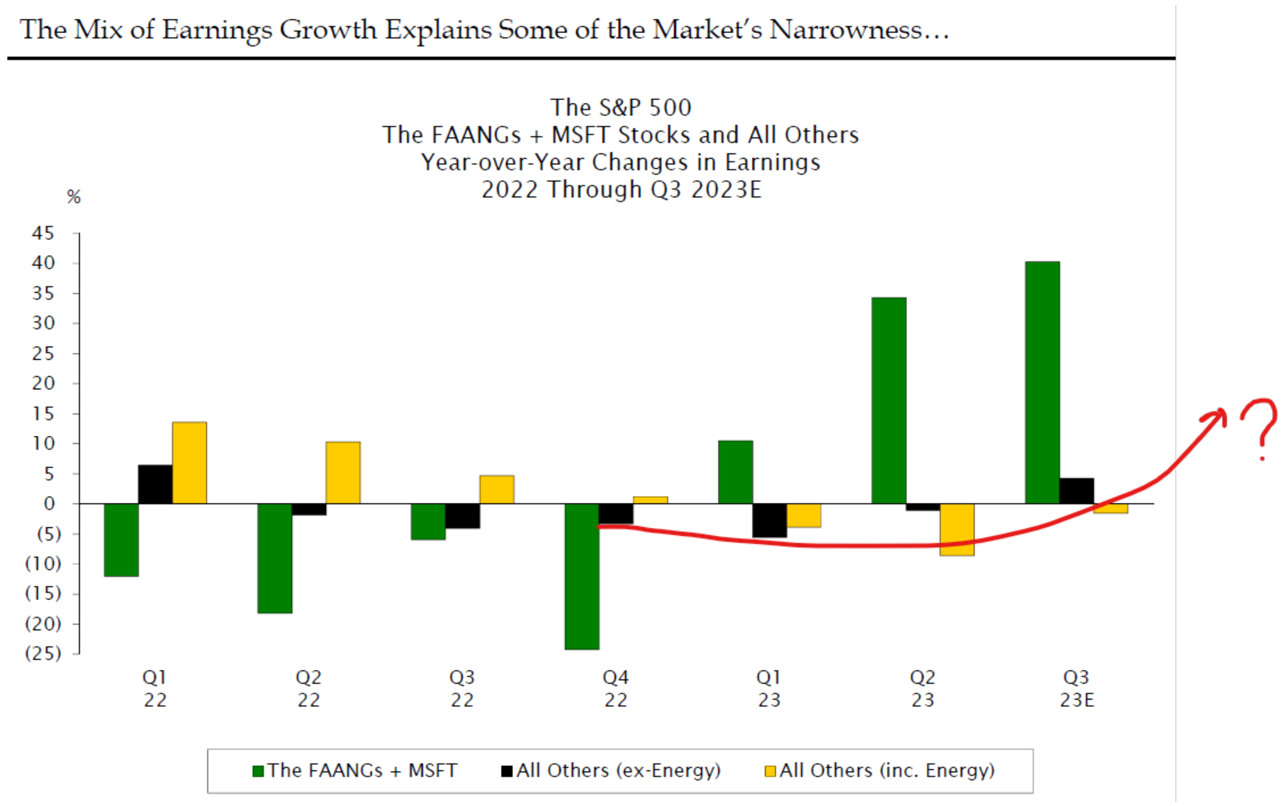


Figure 11: The MAG7 have grown earnings at 30-35% so far this year, and the rest of the market is inflecting positively. Source: Empirical Research

Focusing on the green bars, we see just how dominant an earnings performance the MAG7 have put in this year, and it really should be no surprise that they led in a year in which they grew earnings at a 30-40% clip. But we prefer to focus on the inflection in the black bars. It appears the rest of the market is again ready to participate with positively inflecting earnings, especially ex-energy.

To sum up our outlook for equity markets in 2024, we believe GDP and earnings growth will return to a more normal setting as inflation slowly fizzles out, and the Fed cautiously eases its foot off the brakes. Given the current level of financial conditions, we think it is unlikely multiples can expand meaningfully from here, but there is still room for modest equity returns, especially if it is driven by broader market earnings growth. We need to be vigilant about several potential macroeconomic pitfalls, especially inflation and unemployment, but we do still see a path to a soft landing. As always, an escalation in geopolitical tensions could throw a wrench in the machine, but we find that is nearly impossible to forecast.

International Equity Strategy

By Steve Lambdin

The global equity markets reversed course in the third quarter as stubbornly high interest rates, falling global economic growth projections, elevated geo-political tensions, and China's ongoing real estate crisis proved too much to overcome and pushed markets down in the period. Global central banks surprised investors as most began to message that interest rates need to stay higher for longer, rather than the significant downward trajectory that many had expected in the quarter. The German 10-year Bund rate rose nearly +45 basis points in the quarter as Christine Lagarde, the President of the European Central Bank (ECB) consistently repeated her remarks that interest rates will stay elevated until inflation retreats near the target of 2%.

On the growth front, the International Monetary Fund (IMF) and the Organization for Economic Cooperation and Development (OECD) both cut their expectation for global economic growth in 2024. While the U.S. and Japan may experience more of a "soft landing" growth scenario in 2024, many are worried that China and Europe could disappoint beyond this outlook. Investors will remain watchful as economic data points are released over the next few months. On the geopolitical front, recent terrorist attacks in Israel near Gaza threaten to destabilize the entire Middle East. Israel's subsequent invasion of Gaza, seeking to eliminate Hamas militant groups, comes with a lot of risks to the region. We are even seeing U.S. Navy ships being fired upon by rebel groups in Yemen. No one knows how this conflict ultimately plays out, but this is certainly a risk for investors over the next several months. Ukraine's counter-offensive that started in the summer has yielded little progress overall, and most expect no further progress as winter sets in the region. Also, weekly encounters between the U.S. and Chinese navies in the South China Sea continue to garner a lot of attention and could turn much worse in an instant. The geopolitical environment is as much a mess as we have seen in many years and remains a key risk for investors going forward.

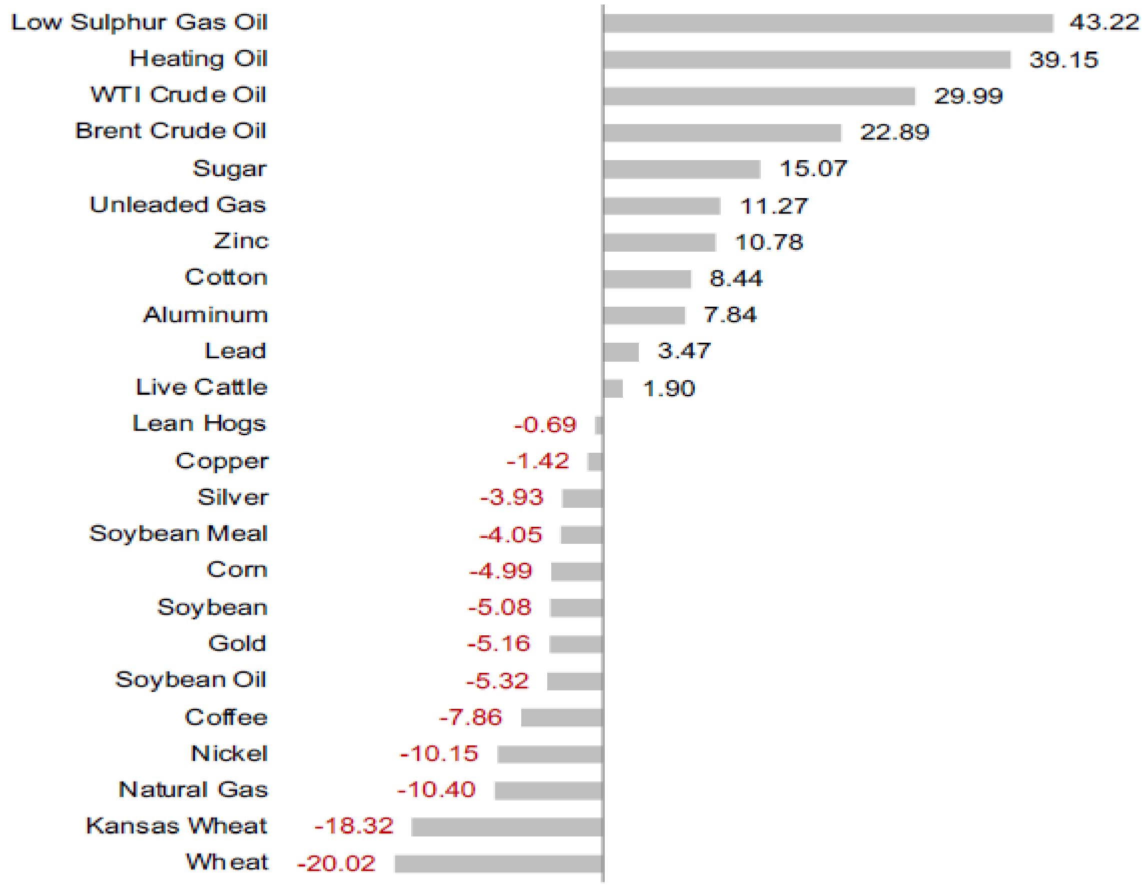
On the bright side, global inflation continued to trend lower over the last few months, which should usher in a period of flat interest rates from several of the key central banks around the globe over the next several months. Eurozone inflation fell to +4.2% in October from a year earlier, the lowest level in two years. In addition, global employment levels look very strong as many regions remain near historic lows in unemployment. In a reversal from the previous quarter, value stocks significantly outperformed growth stocks as investors repositioned portfolios for a potentially softer economic growth outlook in 2024.

Equity index returns (%)	September 2023 U.S. dollar	September 2023 Local currency	3Q 2023 U.S. dollar	3Q 2023 Local currency	YTD 2023 U.S. dollar	YTD 2023 Local currency
S&P 500	–4.8	–4.8	–3.3	–3.3	13.1	13.1
MSCI ACWI	–4.1	–3.5	–3.4	–2.5	10.1	11.2
MSCI ACWI ex USA	–3.2	–1.4	–3.8	–1.4	5.3	8.2
MSCI World	–4.3	–3.7	–3.5	–2.6	11.1	12.1
MSCI Emerging Markets	–2.6	–1.8	–2.9	–1.4	1.8	4.0
MSCI EAFE	–3.4	–1.1	–4.1	–1.3	7.1	10.7
MSCI Europe	–4.0	–1.3	–5.0	–2.1	8.0	8.2
MSCI Pacific	–2.4	–0.7	–2.7	0.2	5.5	15.8

Source: RIMES; Capital Group

The MSCI EAFE Index (net dividend) and the MSCI Emerging Markets Index returned -4.1% and -2.90%, respectively, during the third quarter of 2023 vs. -3.30% for the S&P 500 Index. U.S. stocks outperformed in the period on a relative basis, which is usually the case in most periods of market stress. The U.S. dollar proved to be a headwind for returns outside of the U.S., rising 3.0% in the period, which hurt returns for unhedged U.S. investors in the MSCI EAFE Index and, to a lesser extent, investors in the emerging markets. Even though the last quarter of our fiscal year was weak, the MSCI EAFE Index and the MSCI Emerging Markets Index finished up +25.65% and +11.70% for our fiscal year, which was a good return in a tough investing climate. For the third quarter, the Asian region was stronger than the European region as the Japanese equity market held in much better than many of the large European equity markets. Nine of the eleven sectors of the MSCI EAFE Index posted negative returns, with technology, consumer discretionary, and utilities being the worst. The energy and financial sectors managed to post positive returns in the quarter. The Bloomberg Commodity Index rose +4.7% in the quarter, led by crude oil and heating oil, while soft commodities were generally weak.

Ranked Returns (%)



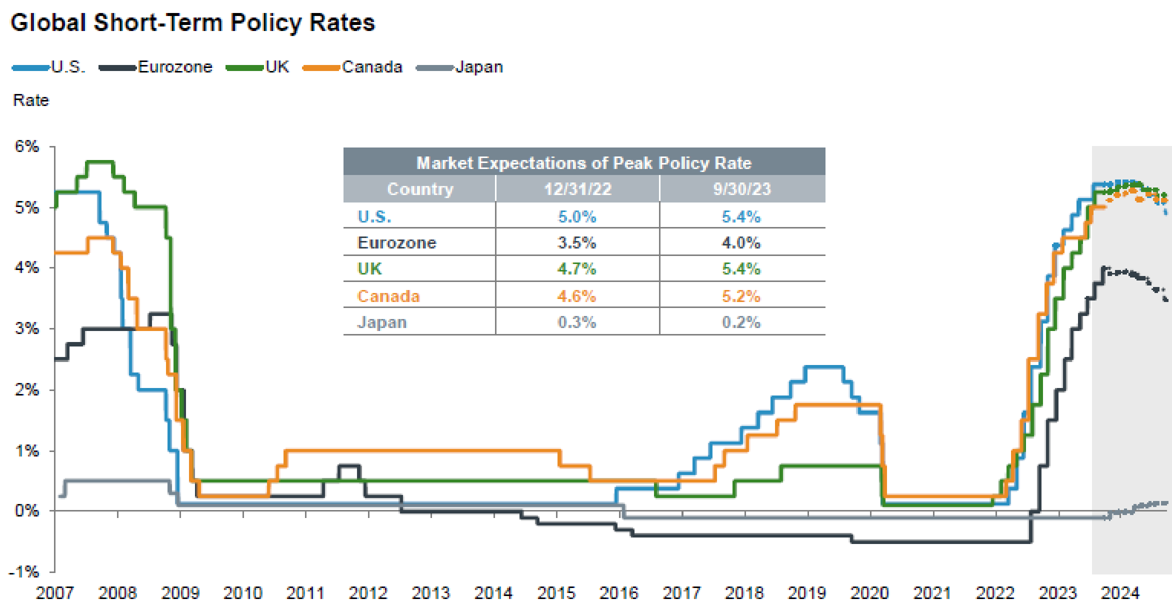
Sources: Arcadia Wealth Management

The global equity markets are off to a strong start in our new fiscal year as long-term interest rates have fallen over the last few months as inflation continues to cool. In addition, recessionary concerns in the U.S. and a few other regions seem to have been pushed a bit further to the right, perhaps indicating more of an economic "soft landing" case developing in 2024. This seems to have motivated investors into taking on more risk. We will see how this plays out over the next couple of months. The MSCI EAFE Index and the MSCI Emerging Markets Index are up +4.8% and +3.8%, while the S&P 500 Index is up +6.8% through the end of November. This is a good start to our new fiscal year.

The following pages provide an update to what we see as the current issues in the marketplace, which could set the direction of equity markets over the next few months.

Issues/Points:

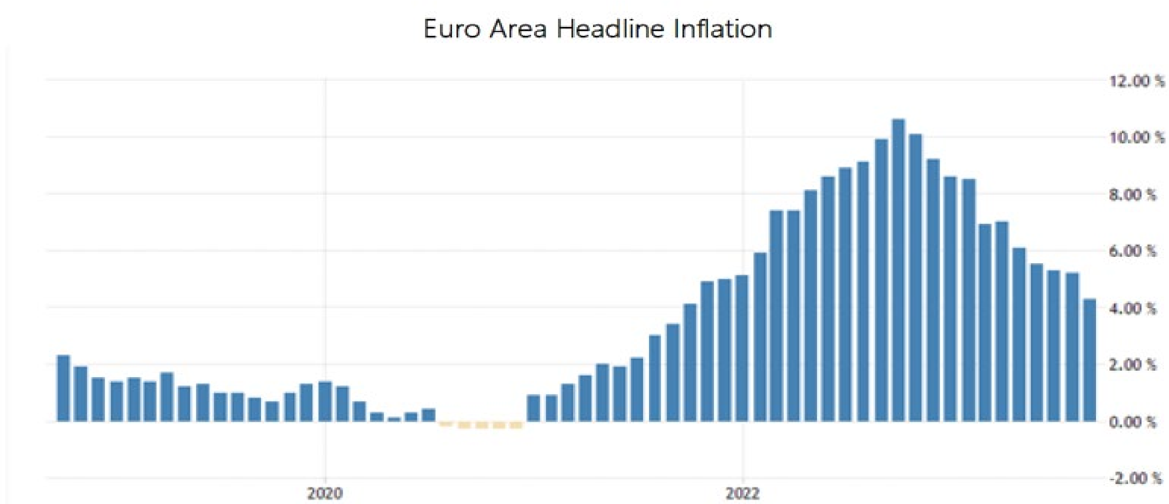
Central Bank Actions – At this point, it would seem we have moved past peak central bank interest rates. With this in mind, we now turn our attention to a transition from the past tightening cycle to an easing cycle. However, an easing cycle may not be right around the corner, and policy rates could stay at higher levels for longer than many expect. Recent messaging from the ECB and the U.S. Federal Reserve (FED) seems to indicate that central banks are in no rush to cut interest rates. We believe this could startle investors who were expecting a quicker move to easing and could pressure global equity markets going forward. As we mentioned in our last quarterly piece, we are watchful for quick changes in central bank expectations, as this can move markets very quickly in any direction.



Country	12/31/22	9/30/23
U.S.	5.0%	5.4%
Eurozone	3.5%	4.0%
UK	4.7%	5.4%
Canada	4.6%	5.2%
Japan	0.3%	0.2%

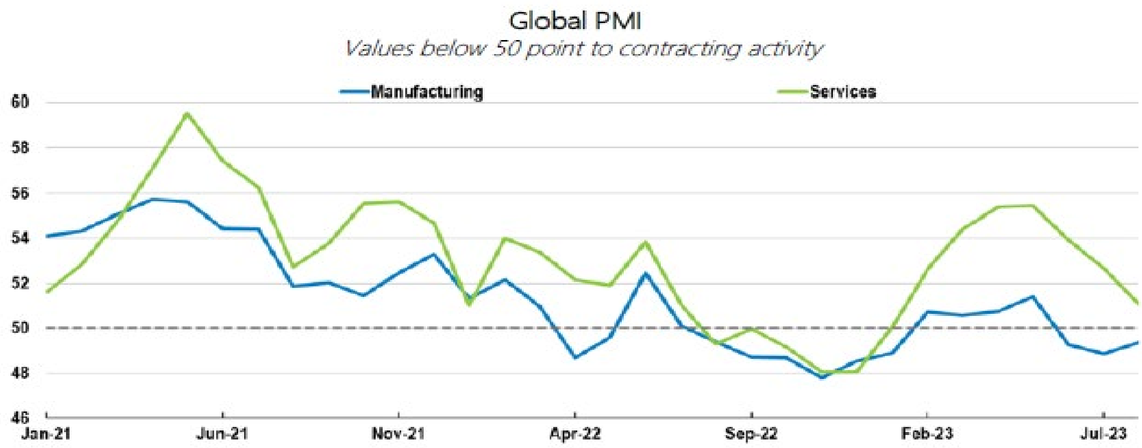
Source: FED, ECB, BOJ, BOE, Haver Analytics, Bloomberg, Fidelity Investments

Inflation – Global inflation continues to head in the right direction. The IMF sees inflation finishing 2023 at 5.9% and falling further to 4.8% in 2024. This is almost half the rate we experienced in 2022. Nearly every major region around the globe is experiencing lower inflation readings. However, CPI readings are still well above targeted levels by most central banks. This could push interest rate cuts into mid to late 2024.

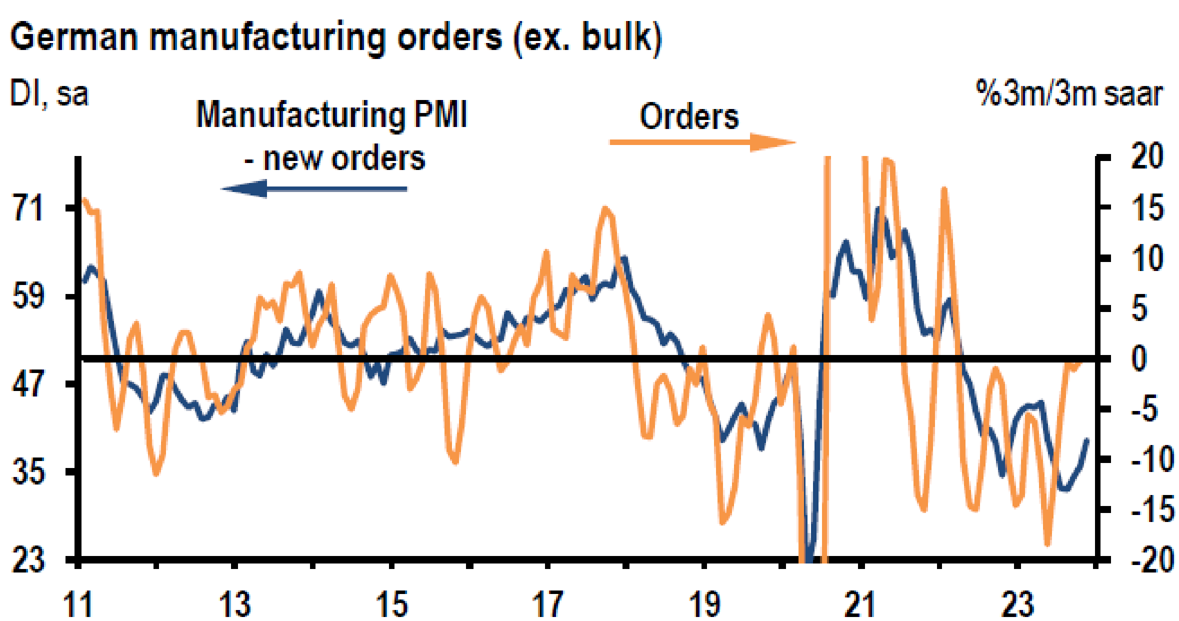


Source: Tradingeconomics.com; Eagle Global Advisors

Economic Growth – The IMF and the OECD have both recently cut their projections for economic growth in 2024. They forecast growth to be in the +2.7% to +2.9% range. This is well below historical averages and the critical +3% level, as anything below this level feels recessionary. Central to this forecast has been the recent weakness in global PMIs. While the manufacturing PMI has been below the 50 level for most of last year, the recent weakness in the services PMI is very alarming. If the trend in the services PMI continues, it may be very difficult to avoid a recession in many of the world's largest economies in 2024. Investors will be watching this data point very closely over the next several months.



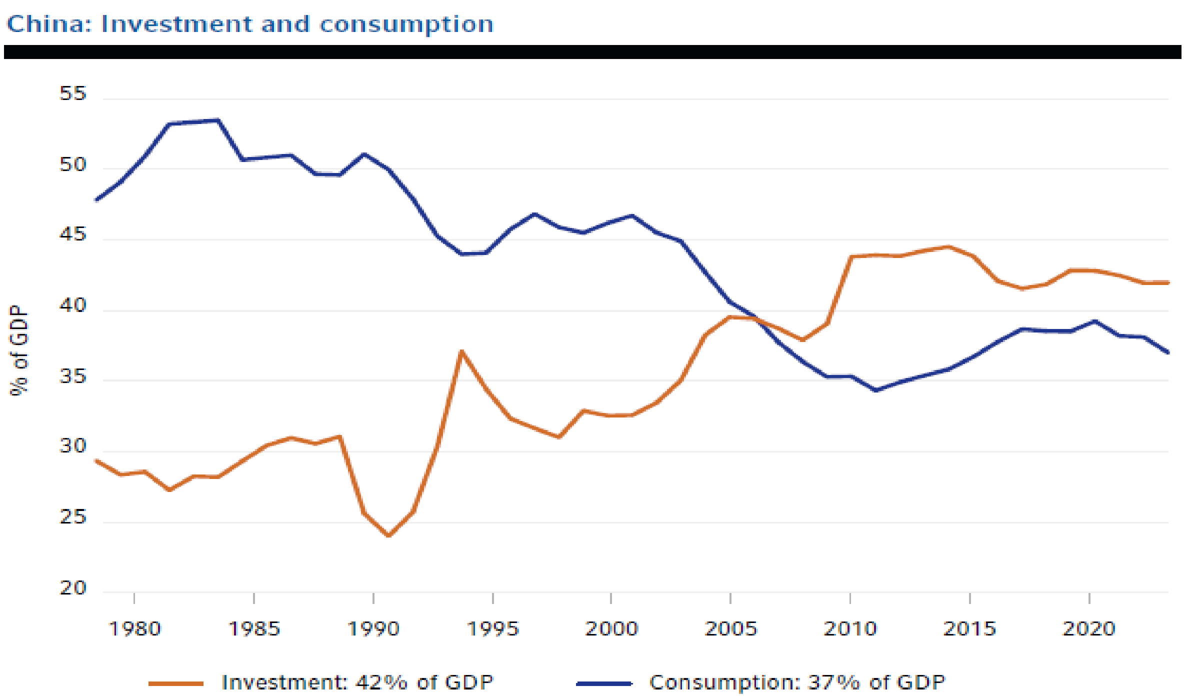
Source: OECD; Eagle Global Advisors



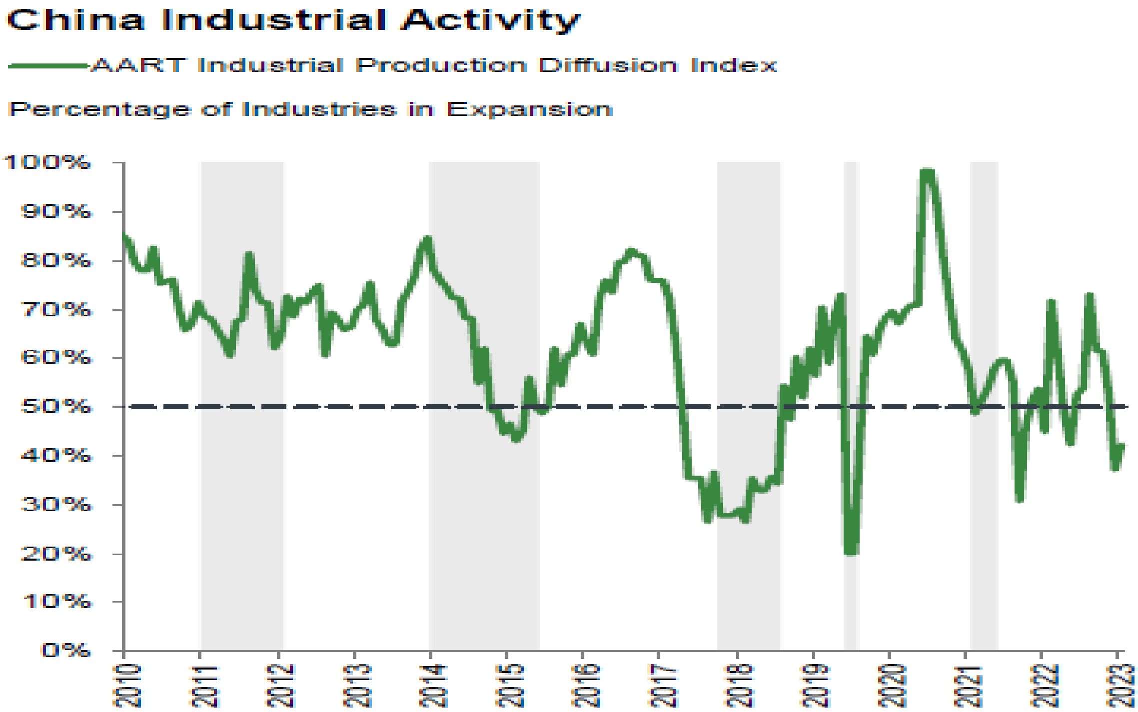
Source: Destatis, Markit, JP Morgan

China's Economy – Economic growth in this economy looks set to move lower over the next year as investment in infrastructure and property looks to head south. Evergrande, a large property developer, has filed for bankruptcy, and a large homebuilder, Country

Garden, may follow soon. Consumer and business confidence readings are falling, and deflation is something to watch now. As consumption becomes a smaller part of GDP, this will put pressure on the manufacturing sector. As we digest this, we now see China's economic growth in the +4.0 to +4.5 range for 2024. This is well below the growth rates of the past as years of over investment have led to an unbalanced economy. Also, geo-political tensions with the U.S. are forcing many companies to re-shore to other regions which will pressure fixed asset investment in the years to come. However, government officials will respond with monetary easing and fiscal policy support to counter these headwinds. Perhaps these actions can stabilize the region going forward.



Source: LSEG DataStream; Russell Investments

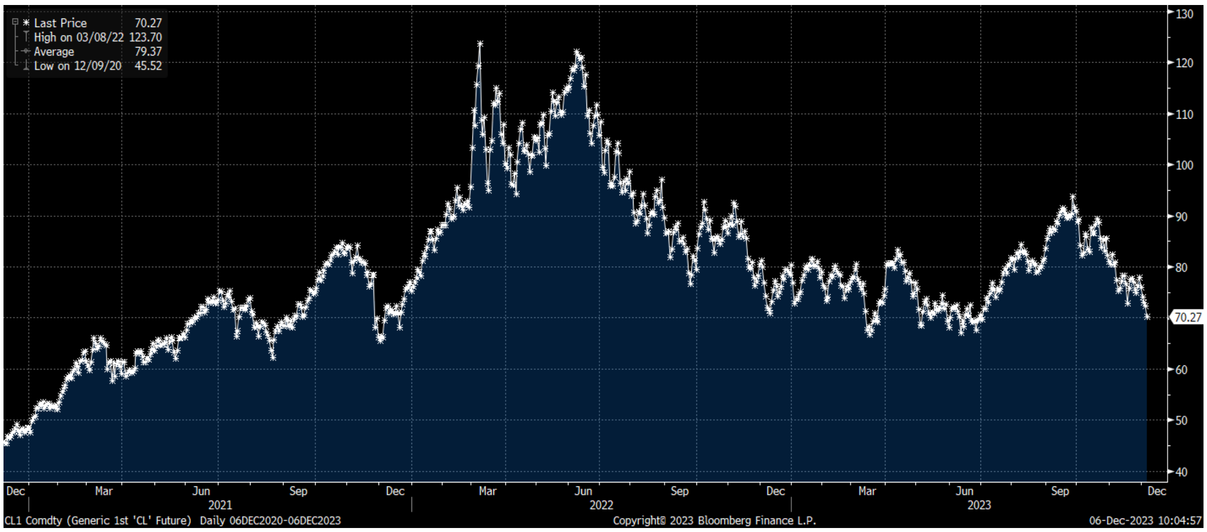


Source: National Bureau of Statistics; PBOC; Fidelity Investments

Source: CLSA; China National Bureau of Statistics; Oxford Economics; Eagle Asset Mgmt.

Energy Prices? – It's hard to enter the winter months without considering energy prices. Since Russia's invasion of Ukraine 20 months ago, energy markets have garnered plenty of attention from investors. Quick moves in crude oil or natural gas can disrupt a region's economy in a short period of time. Nearly everyone remembers the real possibility of constrained natural gas supplies across the Eurozone economy over the last two winters. Thankfully, supplies were not quite as bad as forecasted due to better-than-expected weather conditions. As we enter 2024, things seem better on the margin. Crude oil and natural gas supplies are in better shape than in the last two years as economies have adjusted to the “new normal”. However, the geopolitical climate remains in turmoil in the Middle East and Ukraine, which could spark another spike in energy prices with little notice. While the situation seems okay to us currently, investors should remain on guard for any new developments on this front.

Crude Oil



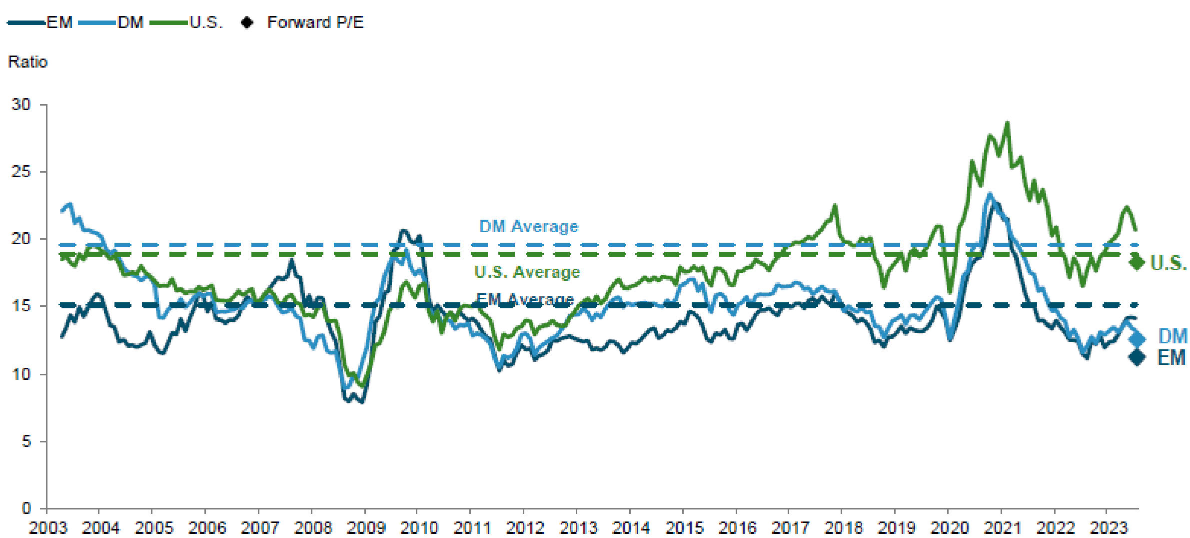
Natural Gas

Geopolitical? – Most investors would probably agree the geopolitical landscape remains an area of risk with a potential wide range of outcomes and possibilities for the global economy. Below are the main "hotspots" and issues we see at the present time.

Russia/Ukraine
Israel/Hames
China/U.S./Taiwan
Iran/U.S.
North Korea/U.S.
Former President Trump or President Biden (second presidency??)
Tariffs (more?)

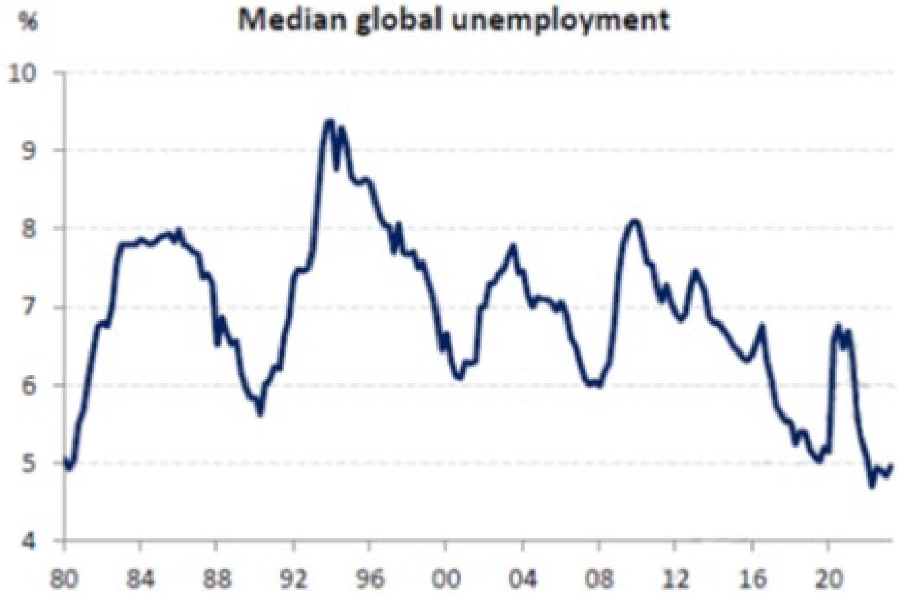
Valuations? – From a pure valuation standpoint, the global equity markets have a wide range of valuation levels. The U.S. market looks to be a bit above 20-year levels, while many valuation metrics seem about in line from a 10-year period. On the developed markets outside of the U.S., valuation levels seem to be below 10-year and 20-year averages, especially in the European markets. The Emerging Markets look relatively cheap compared to most other regions around the world. This is especially so in China, as this market is trading about 10x earnings. But as we have said many times, valuation differences come from different levels of future expected economic growth, various levels of corporate performance (returns on invested capital, operating margins, balance sheet metrics, free cash flows, etc.), as well as geopolitical risk in certain regions of the world.

Global Stock Market P/E Ratios



Source: Factset, MSCI, Bloomberg, Fidelity Investments

Global Employment – If there is one strong point in the global economy, it is the global employment picture. Unemployment levels remain very low in Japan, the United Kingdom, Eurozone, and the U.S. Most of these markets are seeing record employment levels. This has led to healthy wage gains over the last year in these regions. Perhaps this can stabilize the economic growth outlook in these regions and prevent a moderate to deep recession over the next couple of years.



Source: UBS; Haver

Final Thoughts/Summary

Looking out over the next few months, we expect global recession chatter to heat up quite a bit from the investment community. While equity markets have benefitted recently from a lot of "soft landing" scenarios floating around in some of the global economies, we still believe growth in 2024 will feel mildly recessionary. However, this should not be deep or unusually long at this time. Global central banks do not seem to be in any hurry to cut interest rates anytime soon. Upside risks to most investors' outlooks would be the U.S. avoiding more recessionary talk, better-than-expected global corporate earnings growth, inflation falling faster toward central bank targets, and a cooling of the global geopolitical risk. Any of these issues could push equity markets higher from current levels and surprise us. On the other hand, downside risks would come from further unanticipated problems in the Chinese economy, stickier inflation, interest rate cuts that get pushed back into 2025, and new threats from the global debt picture. These points would probably be very negative for equity markets. In the meantime, we will continue to ride the "wall of worry trade" perhaps higher, as we are off to a decent start in global equities for the fiscal year.

We continue to sell a few out-of-the-money calls on the Emerging Markets Index to bring in some small income and sell just a bit of exposure in a decent short-term rally if this happens. Premiums remain attractive in the current equity market. Emerging market equities remain an asset class that looks attractive to us going forward over the long term. Our current allocation to Emerging Market equities is approximately 3.0% of total assets and approximately 11.7% for MSCI EAFE equities across our TRS, ERS, and JRF portfolios for a total international equity exposure of approximately 14.7%. This is nearly at our target allocation within our investment policy statement.

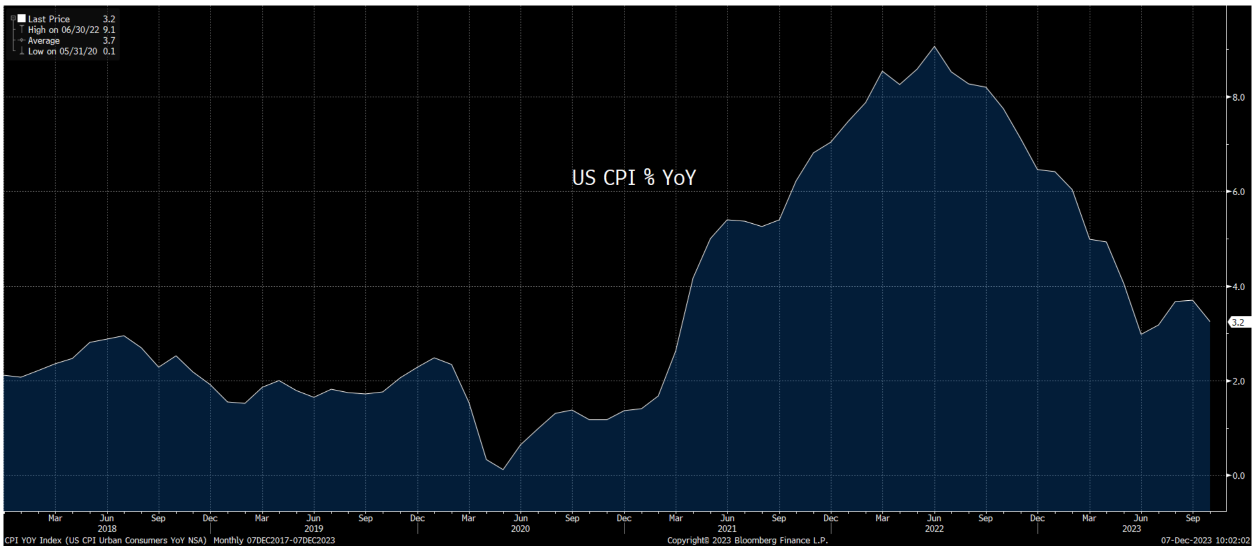
(Credit is given to the following entities for charts provided: UBS, Haver Analytics, Factset, MSCI, Bloomberg, Fidelity Investments, National Bureau of Statistics, PBOC, LSEG, DataStream, Russell Investments, CLSA, China National Bureau of Statistic, Oxford Economics, Eagle Asset Mgmt. and Advisors, OECD, Destatis, Markit, JP Morgan, Tradingeconomimcs.com, FED, ECB, BOJ, BOE, Arcadia Wealth Management, RIMES, Capital Group)

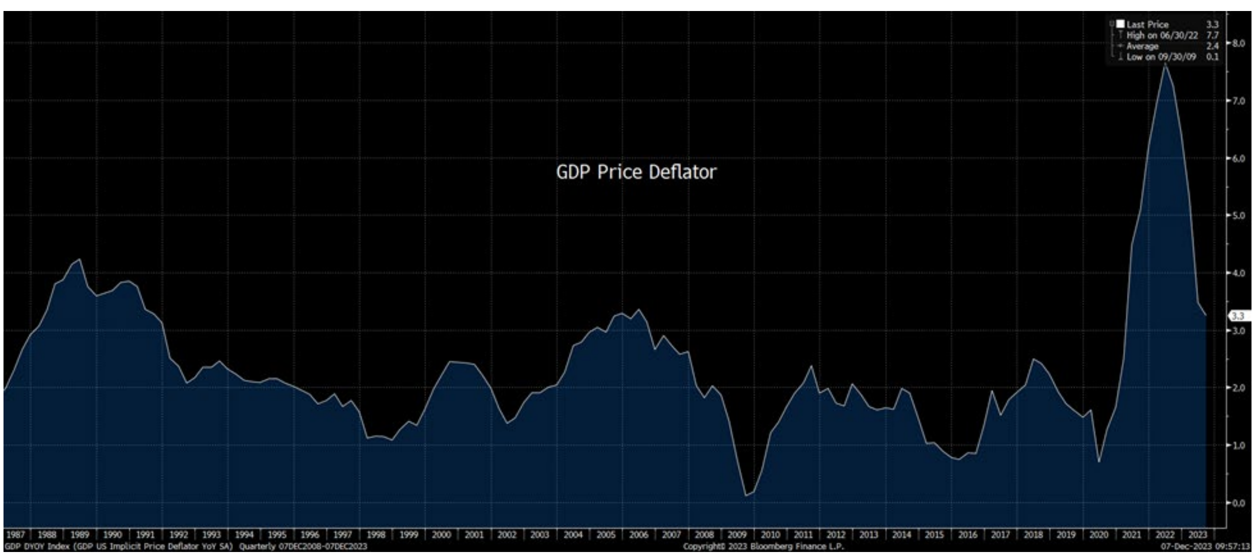
Fiscal and Monetary Policy

By Michael McNair

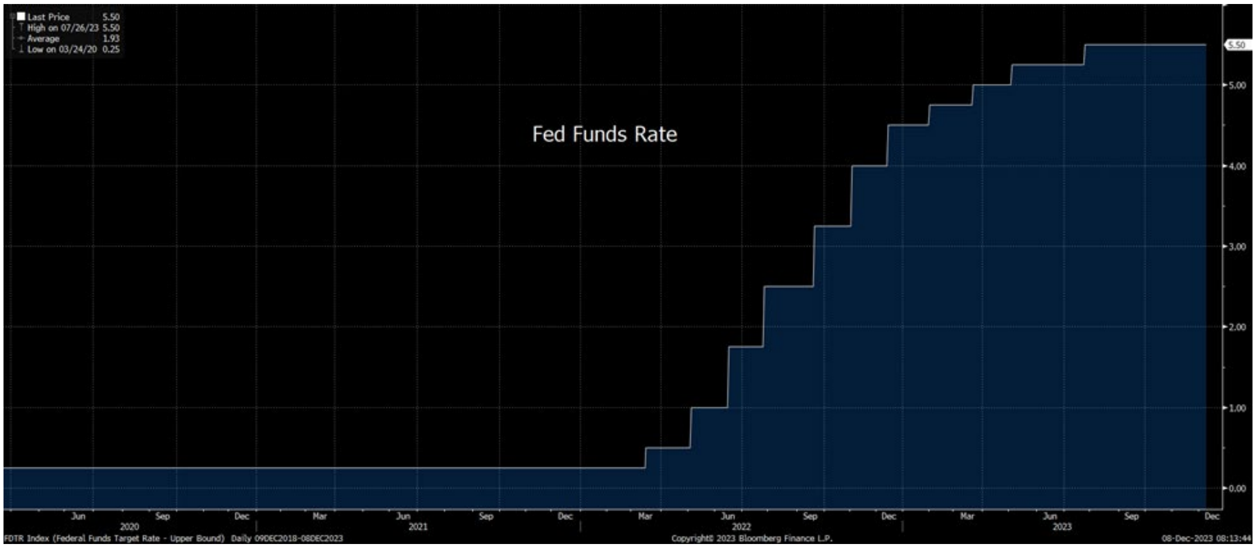
Untangling the Drivers Behind Falling Inflation

In the past 18 months, inflation, as measured by the Consumer Price Index (CPI), has undergone a significant decline, dropping from over 8% in mid-2022 to around 3%. This trend is mirrored across various inflation measures, including the GDP Price Deflator. This leads to a critical question: who or what deserves credit for this significant reduction in inflation?





The Federal Reserve has undertaken a rapid tightening cycle, raising the Fed Funds Rate by 5.25% in less than two years. However, the effectiveness of these rate hikes in curbing inflation warrants examination.



According to the textbook view, interest rates affect prices via labor costs.

In a press conference in early 2022, Fed Chairman Powell was asked:

"What is the mechanism by which a higher federal funds rate is supposed to bring down inflation, if not by raising unemployment?"

Chairman Powell's responded candidly:

"There is a very, very tight labor market, tight to an unhealthy level. Our tools work as you describe … if you were moving down the number of job openings, you would have less upward pressure on wages, less of a labor shortage."

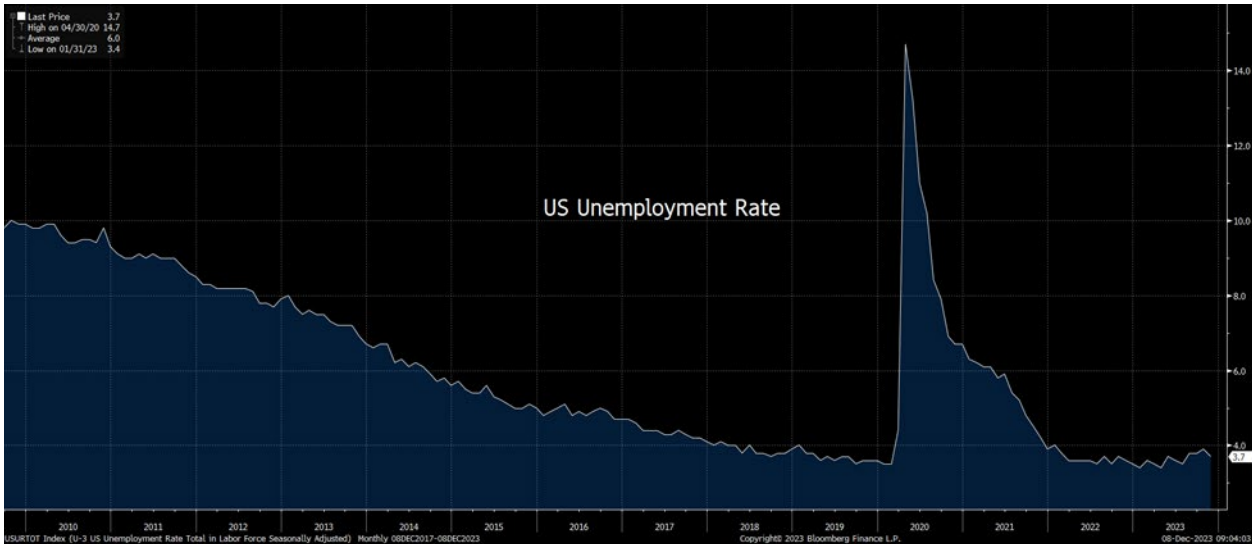
The theory was that increasing the cost and availability of credit would cause businesses to invest less, leading to a reduction in demand for labor, weakening labor's bargaining power, and forcing labor to accept lower wages.

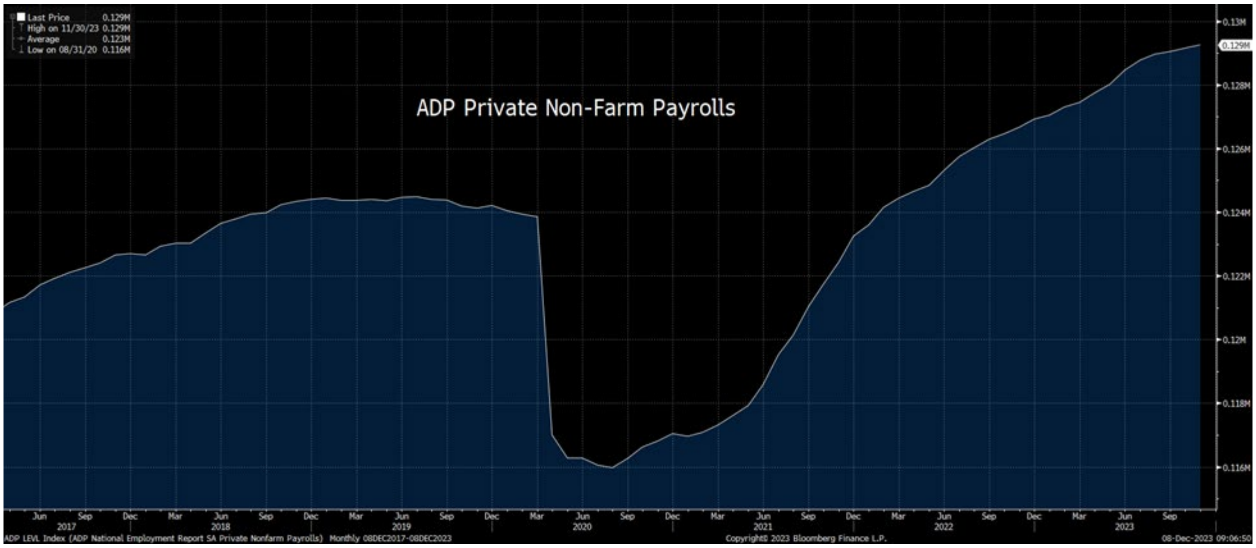
Employment decisions are made by the private sector. The Federal Reserve can only attempt to indirectly influence the labor market. The Fed's tool to "cool" the labor market is to increase the overnight lending rate between banks and sell off some of its holdings of longer-maturity Treasuries and mortgage-backed securities that sit on its balance sheet.

The higher short-term lending rate did manifest in higher interest rates down the curve, which seemingly tightened lending standards. It was believed that rising rates and security sales would lower the value of financial assets and diminish the willingness of businesses to invest.

In summary, rising rates were expected to lead to tighter credit conditions and falling financial asset values, which would reduce borrowing and, in turn, reduce aggregate demand. Since inflation is a result of aggregate demand exceeding the production capacity of the economy, the Fed’s goal was to indirectly reduce demand.

The Fed's rate hikes have likely had some impact. Without these hikes, employment and output might be higher. There are signs of a gently slowing economy, which some attribute to the Fed's actions. However, the labor market has not significantly weakened, as evidenced by the steady unemployment rate of 3.7%, well below the level when inflation began rising in late 2020. Alternative labor market indicators, such as quits and job vacancy rates, remain high by historical standards.





Moreover, the U.S. economy has continued to add jobs during the rate hike period. The November employment report, for instance, showed robust job gains of 199,000 for the month.

Further, real gross domestic product growth accelerated during the period of declining inflation. The output gap data also shows that spending rose relative to potential output over the past year, contradicting the demand reduction narrative. These trends contradict the expectation that higher rates should slow rising prices by curtailing spending, reducing production, and employment.

There are signs that higher interest rates have slowed housing construction to some degree. However, it is noteworthy that the current rate of housing starts surpasses any level witnessed from 2007 until the onset of the pandemic.

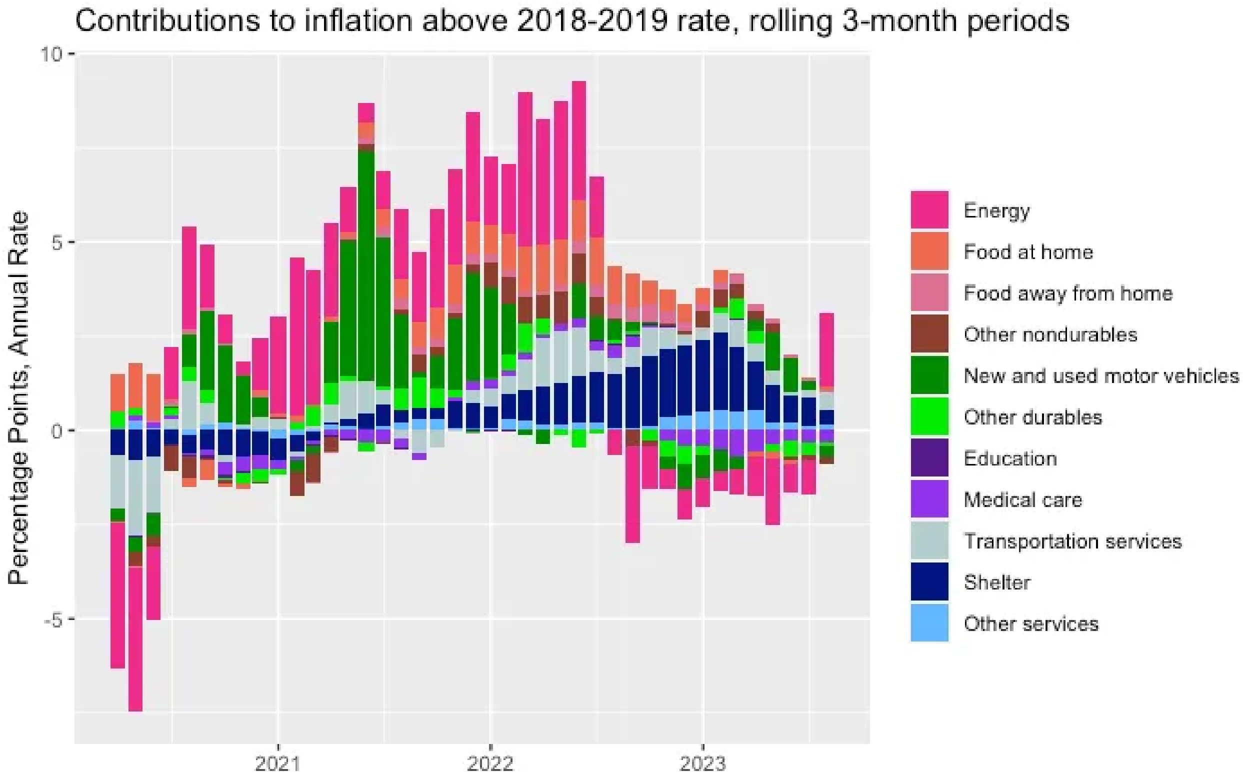
Meanwhile, business investment continues to surge ahead, accelerating over the past year even amid rising rates. In fact, the manufacturing sector is undergoing a historic boom, with spending on new factories and equipment nearly doubling over the past year. Major expansions are underway in areas like electric vehicles, solar panels, and semiconductors.

This surge in industrial investment, occurring amidst a backdrop of sharply rising interest rates, casts doubt on the conventional wisdom regarding the primacy of interest rates in influencing business investment decisions. Consequently, any analysis attributing the recent decline in inflation solely to interest rate effects on investment appears to be an oversimplification.

Disinflation was in goods, not services

Further evidence against interest rates driving disinflation comes from examining price trends across sectors. The prices contributing most to declining inflation have been energy and goods - mostly global, tradeable categories less tied to domestic spending or labor market conditions.

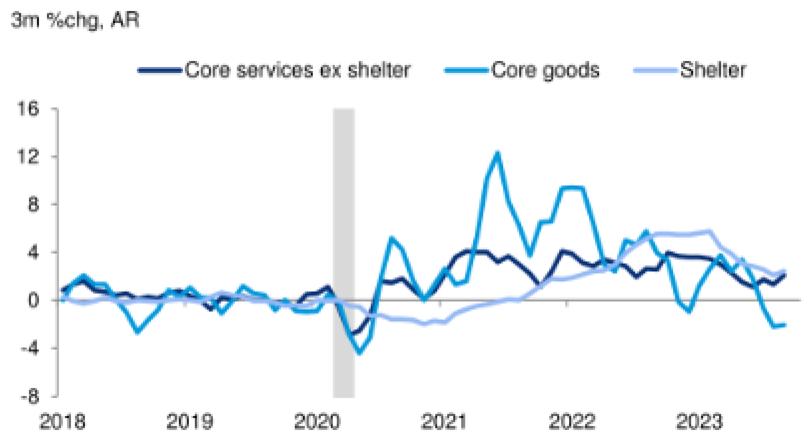
A detailed examination of the inflationary trends over the past three months, as compared to the high-inflation period of 2021-2022, reveals a broad-based deceleration in price increases across most sectors of the economy. However, the deceleration is markedly more pronounced in certain areas.



Notably, nearly half of the seven-point reduction in inflation can be attributed to energy, which constitutes a relatively small proportion of the overall consumption basket. The remaining decrease is largely due to manufactured goods. In contrast, non-energy services have only experienced a slight moderation in price increases. Given that services, which make up around 60% of the consumption basket, have contributed minimally to the overall reduction in inflation, it becomes evident that services have yet to significantly contribute to disinflation.

The resilience of service prices, which ought to be more susceptible to a softening labor market, further undermines the hypothesis of a Fed-induced disinflationary trend. Most services are not internationally traded and are labor-intensive, characteristics that render them sensitive to domestic product and labor market conditions. In contrast, manufactured goods and energy, which are extensively traded on international markets and have been subject to supply disruptions, are the categories where price declines would be expected irrespective of Federal Reserve policies. Consequently, the pattern of price changes implies that the slowing of inflation is less a consequence of Federal Reserve actions.

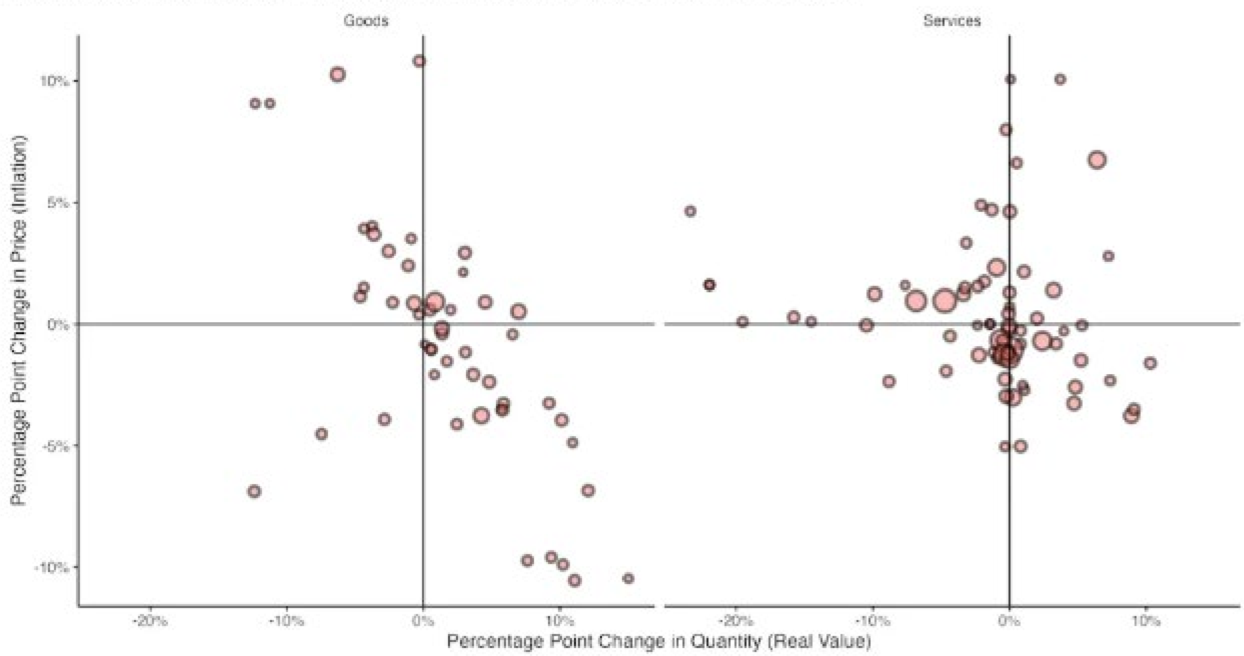
Decomposition of core PCE inflation into goods, shelter, and services ex shelter



Note: All lines are differences from 2019 averages. Source: BEA, Haver Analytics, Deutsche Bank

This argument is echoed by Mike Konczal in his recent issue brief, “Inflation is Down. It’s a Supply-Side Story." Konczal's analysis, featuring a correlation between quantities and prices across various spending categories, highlights a negative relationship for goods, where the disinflationary trend is most apparent.

Figure 3: Inflation Deceleration Is Driven by Expanded Supply, 123 Core PCE Categories
6-month Change July 2023 Minus 6-month Change December 2022, for ~123 Core PCE Categories



We learn in Econ 101 that when prices and quantities move together, that implies a shift in demand; when they move in opposite directions, that implies a shift in supply. To put it more simply, if auto prices are falling even while people are buying more automobiles, as they have been, then reduced demand cannot be the reason for the price fall.

The demand reduction explanation for the fall in inflation requires that rising prices be accompanied by rising spending. As Konczal shows, the opposite is the case.

In summary, the only way for higher rates to slow down rising prices is if it curtails spending, thereby reducing production and employment. But, the evidence shows that neither demand nor employment have declined during the period of falling inflation.

While the Fed's rate hikes may have had some influence, the evidence does not support the view that they are the primary driver of the recent significant drop in inflation. The next section will explore the factors that led to the sharp rise in inflation from 2020 to 2022, providing context for understanding its recent decline.

What Caused the Sharp Rise in Inflation from 2020-2022?

The dramatic rise in inflation from 2020 to 2022, characterized by a peak CPI of over 8%, can be attributed to a confluence of unique and interrelated factors. Understanding these factors is crucial for comprehending the recent decline in inflation.

COVID-19 Pandemic and Capacity Closures

The onset of the COVID-19 pandemic triggered global production shutdowns from shelter in place orders but also due to pessimistic business outlooks, leading to significant capacity closures and canceling inventory purchases. Notably, auto manufacturers, anticipating a crash in sales, canceled semiconductor orders. This action exemplifies the far-reaching impact of the pandemic on supply chains and production capabilities.

<u>Shift in Consumption Patterns</u>

The pandemic also caused a rapid shift in the consumption basket from services to goods. Goods jumped from 36.1% of consumption in late 2019 to 40.5% in the first half of 2021, while the services share dropped from 63.9% to 59.5%. Shifting consumption patterns caused supply and demand to tighten in areas that were pandemic "beneficiaries", while demand for travel-related services collapsed. The best example is the surge in demand for housing-related goods and services that pushed lumber prices up 550%. Production capacity was built based on the pre-pandemic demand preferences, and it takes time for resources to be redeployed to meet the changing demand. Prices adjust more quickly than productive activity; thus, rapid shifts in activity, or consumption patterns, can generate large price spikes that are not informative about long-run production possibilities.

<u>Government Stimulus Programs</u>

In response to the pandemic, the U.S. government implemented unprecedented stimulus measures, peaking at 18.2% of GDP in 2020. While these measures bolstered the economy, they also contributed to inflation by increasing demand at a pace that outstripped the economy's production capacity.

It is often stated that government deficit spending will cause inflation. The truth is that all spending (public or private) can cause inflation if it causes demand to rise faster than the real production capacity of the economy.

The real reason that the U.S. fiscal spending caused an outbreak of inflation is a result of the unbalanced nature of growth that resulted from the stimulus. The German economist Albert Hirschman explained that all rapid growth is unbalanced growth.

The spectacular growth rates achieved by the U.S. economy in 2020 and 2021 were aided by government stimulus which was focused on transfer payments, which initially increased consumption. Since inflation is the result of demand exceeding supply, the result of a rapid rise in consumption relative to the production capacity of the economy created an inflationary impulse.

The U.S. stimulus created spending power that was not – initially - matched by a rise in productive capacity. As a result, it created inflation.

There are several reasons why production has not kept pace with consumption. First, businesses were slow to increase investment due to uncertainty around the pandemic. Second, the transfer payments increased spending power almost immediately, but adding production capacity takes time. However, as we will later discuss, businesses eventually responded to the tight supply and demand conditions by increasing manufacturing capacity at the highest rate in U.S. history, outside of wartime, which has better aligned supply and demand and reduced inflation. Yet, the most important reason supply has not kept pace with demand is due to a series of supply shocks.

<u>Supply Shocks and Economic Reverse Salient</u>

The most important reason for the rise in inflation was a series of supply shocks that hit the global economy from 2020-2022, which acted as a reverse salient, bottlenecking global supply chains.

Southeast Asian Power Crisis

In our 'Shortages and the Reverse Salient' note from 2021, we argued that the origins of the global supply chain bottlenecks could be traced back to market distortions in the semi-liberalized power markets of East Asia, which caused severe destocking of coal inventories that eventually resulted in a short squeeze that sent the price of thermal coal soaring. Higher coal prices created unprecedented demand in Southeast Asia for Liquified Natural Gas (LNG), which caused a rise in global natural gas prices. Higher coal and natural gas prices increased power prices, which led to inflation via an increase in the cost of production. Economists are used to modeling the impact of rising energy prices on inflation. What was unique about 2021 is that the energy crisis led to widespread power rationing in the manufacturing center of the world in East Asia, as well as parts of Europe, and many other places around the world. Power rationing removed significant supply of materials critical in the production of downstream goods, leading to widespread shortages and contributing to inflation.

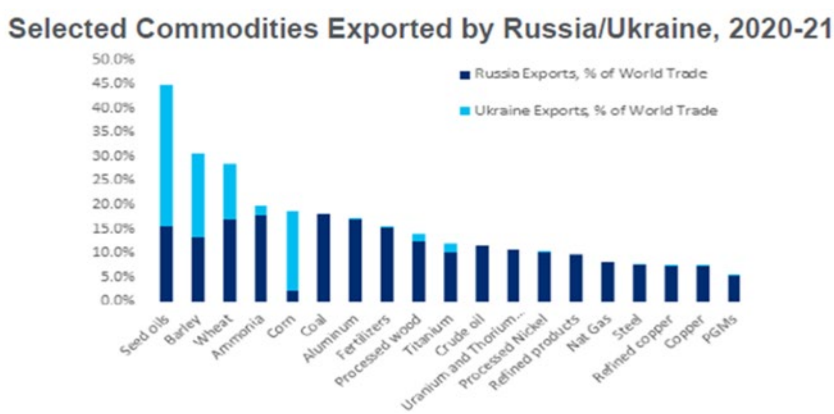
The term reverse salient has military origins but is now more commonly used to describe any system in which a part holds back the progress of the entire system. An example is General Patton's 7th Army outrunning its fuel supply lines during the Allied advance through Western Europe. Patton had all of his necessary supplies in place for a rapid advance but could not proceed until his reverse salient, fuel supply, was relieved.

Hungarian Economist Janos Kornai explained that measuring the change in prices for particular goods and services will not show you the true source of inflation. If the reverse salient is a critical component which feeds into a wide range of other critical processes in the economy, then a supply/demand imbalance in that single component can create supply constraints which a cascade through the economic network. The critical lesson is that the pervasiveness of inflation is insufficient to determine its persistence.

As the effects of the government-directed power rationing began to diminish, the economy was hit by another economic reverse salient in the form of a commodity supply shock triggered by the Russian invasion of Ukraine.

Russo-Ukrainian War

This event caused a substantial supply shock, particularly in energy and agricultural markets. Russia and Ukraine are significant global suppliers of oil, natural gas, and agricultural commodities. In fact, Russia was the biggest commodity exporter in the world. The combined effect of sanctions on Russia and Belarus and war-related logistical constraints placed on Ukraine disrupted the supply of commodities, leading to soaring prices and adding to the inflationary pressures already present from the aforementioned factors.



In summary, the sharp rise in inflation from 2020 to 2022 was not a result of a singular cause but a complex interplay of multiple factors. These factors ranged from pandemic-induced disruptions and changes in consumer behavior to government stimulus and global supply shocks. Recognizing these diverse drivers is essential for a nuanced understanding of the economic landscape during this period.

Falling Inflation

The recent period has witnessed a significant decline in inflation, a reversal of the trends observed between 2020 and 2022. This section examines the key factors that contributed to this decline.

COVID-19 Related Disruptions Easing

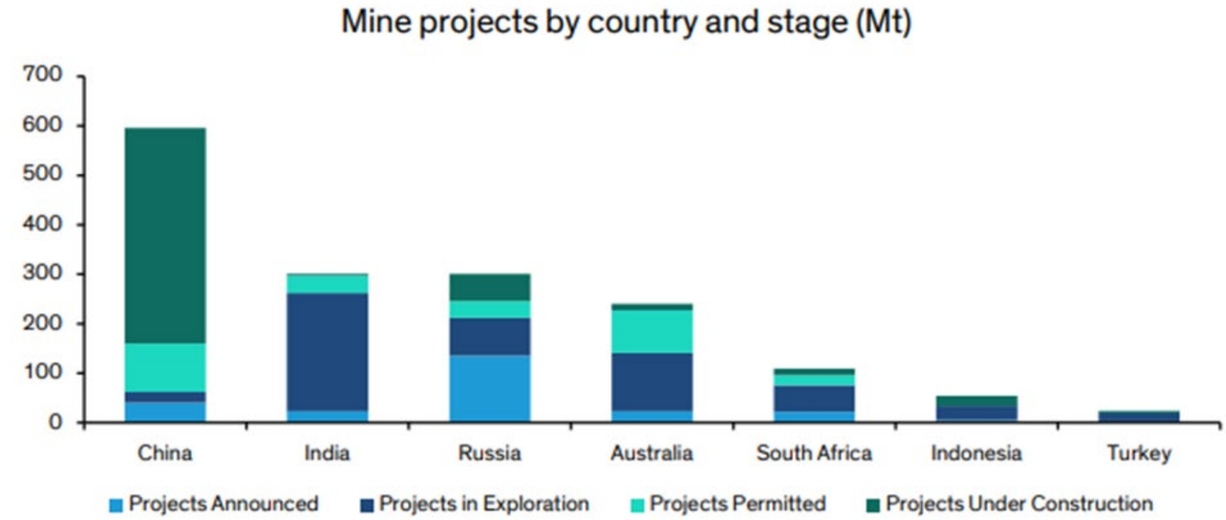
As the world adapted to the COVID-19 pandemic, the initial disruptions in supply chains and production started to ease. The normalization of the consumption basket, with a gradual shift back from goods to services, played a vital role. This shift helped alleviate some of the pressure on goods' prices that had surged during the pandemic.

Chinese Power Market Reforms

The Southeast Asian power crisis, which had a significant impact on global supply chains, began to ease following reforms in the Chinese power market. Chinese officials explicitly acknowledged that government price controls created market distortions that caused nationwide shortages. The NDRC's secretary-general stated that "such unreasonable interference must now be firmly stopped."

In addition to the liberalization of electricity prices, the Chinese government ordered coal production to be ramped up, including speeding up the opening of new mines and reopening suspended ones. China is now opening a new coal mine every three weeks and has significant capacity under construction. This added supply has reduced coal prices and eased China's power crisis.

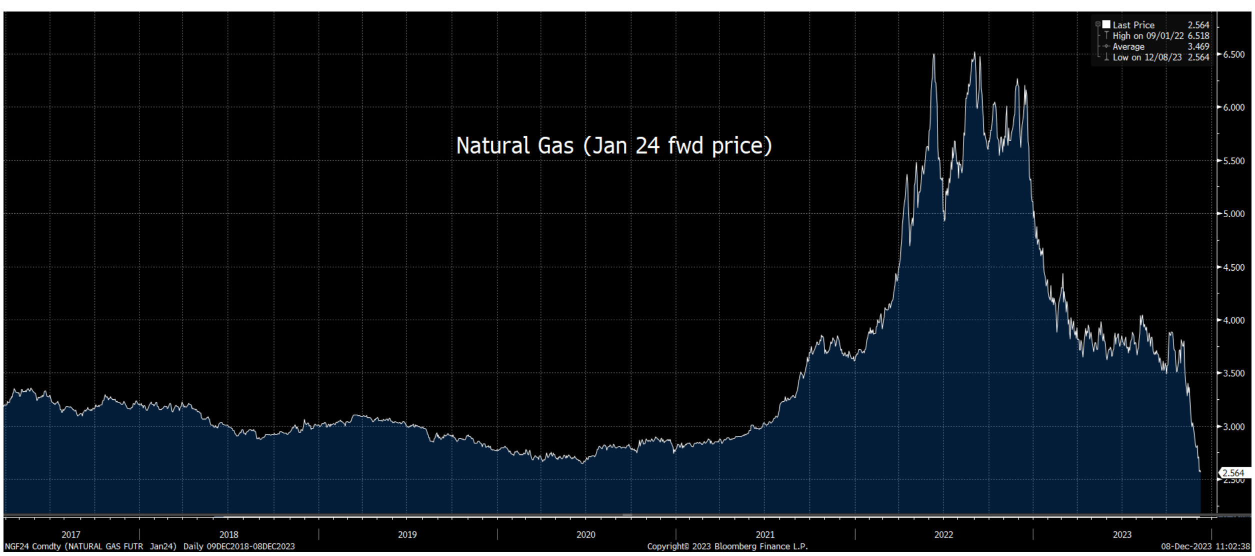
EXHIBIT 55 : **China has a huge amount of mine projects under construction**



Source: Global Energy Monitor, Bernstein analysis

Commodity Market Adjustments Post-Russian Invasion

Despite the ongoing Russo-Ukrainian War, the initial commodity market disruptions caused by the conflict began to ease. It is a credit to the ingenuity and adaptability of the global economy that the markets were able to adjust to severe supply disruptions, such that prices of most commodities have collapsed, and many are even below pre-covid, let alone pre-invasion price levels. For example, natural gas prices increased over 500% from 2020-2022 but now forward natural gas prices have collapsed are trading below pre-covid levels.



The table below shows a list of commodities and their respective price declines from the 2022 peak price:

	Current Price vs 2022 Peak
Oil	-43%
Corn	-42%
Wheat	-56%
Nitrogen	-67%
Phosphate	-44%
Steel (HRC)	-47%
Aluminum	-45%

Easing of Economic Reverse Salient

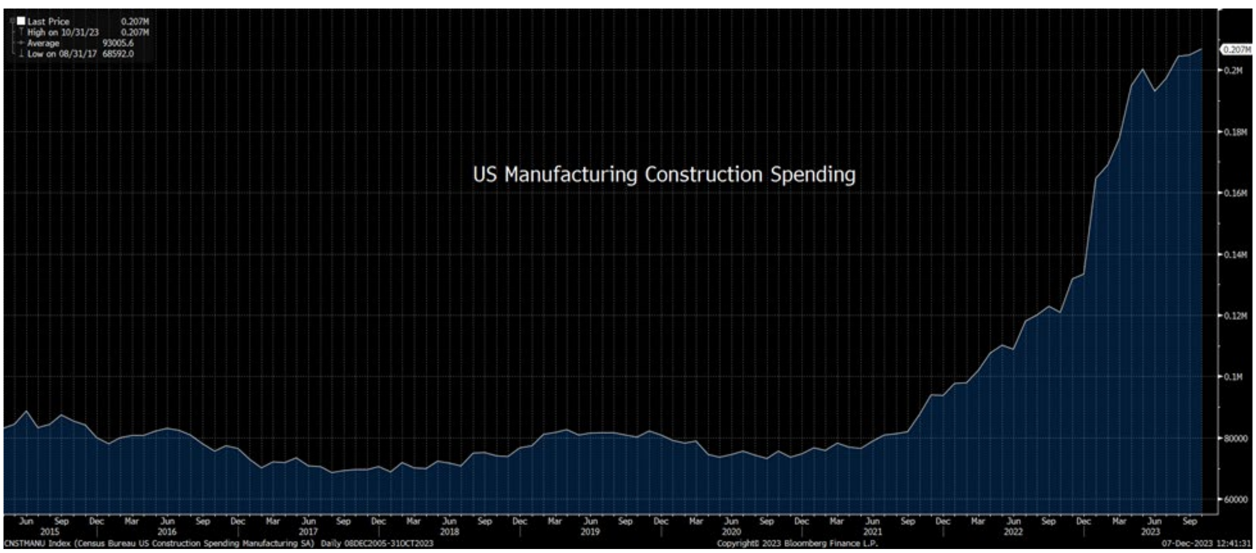
The concept of "economic reverse salient," where bottlenecks in one area impede progress in others, became less prominent as the global economy adjusted to new realities. In our Shortages and the Reverse Salient note, we wrote, "If we are right about the role that commodity shortages have played in creating a global bottleneck, then the easing of these conditions should catch investors and economists by surprise as inflation and shortages ease over the coming months. When a reverse salient is rectified people are always surprised by the rapid progress that follows."

These words proved prescient, as the easing of such bottlenecks led to an unexpected acceleration in economic growth and a corresponding decline in inflation.

Profiteering

Even though government stimulus was initially directed towards consumption, it has fed through into higher investment as well. As demand exceeded production limits, companies raised prices. Profiteering can be described as price increases beyond the change in the cost of production, and critics have argued that company profiteering exacerbated inflation.

If demand for a company's product exceeds the capacity of the market to supply that product, then the company will have leverage to raise prices above the increase in its costs – expanding margins and profitability. But in a capitalistic economy, increased profits lead to increased investments, leading to expanded production capacity.



Profiteering initially raised prices and expanded profitability, but in doing so, it led to a historic surge of investment in the U.S. manufacturing sector. This increase in production capacity has allowed supply to catch up with demand, thereby easing inflationary pressures and contributing to the overall decline in inflation.

In summary, the fall in inflation is a result of a combination of factors, including the easing of pandemic-related disruptions, rebalancing consumption patterns, market adjustments in response to global events, and an increase in production capacities. These elements collectively contributed to the decline in inflation, showcasing the complexity and interconnectivity of global economic dynamics.

The Fed's Dual Mandate

This final section delves into the Federal Reserve's dual mandate and its implications on inflation and economic policy.

The Federal Reserve, often perceived as the steward of the U.S. economy, has a dual mandate: to foster maximum employment and stable prices. This mandate, however, is often misunderstood. It's not solely about combating inflation or reducing unemployment but about managing the economy in a way that avoids extremes.

1. **Misconceptions about the Federal Reserve’s Role**: Contrary to popular belief, the Federal Reserve’s legal responsibility does not directly extend to controlling inflation or unemployment. These are outcomes, not mandates in themselves. The Federal Reserve Act emphasizes maintaining long-term credit growth aligned with the economy’s potential to increase production. This approach is intended to indirectly support the goals of stable prices, maximum employment, and moderate long-term interest rates.

2. **The Limits of Monetary Policy**: The effectiveness of monetary policy in directly addressing economic issues like inflation and unemployment is limited. Traditional monetary policy tools, such as adjusting the federal funds rate, can influence credit conditions but have indirect and often unpredictable impacts on broader economic outcomes. For example, supply shortages can cause price rises independent of monetary policy, and the Federal Reserve's role is not to directly intervene in these market dynamics.
3. **The Fed and Financial Stability**: The Federal Reserve's primary role, as per its statutory mandate, is to ensure that developments in the financial system do not hinder economic goals like stable prices and full employment. This role involves managing money and credit creation by banks to prevent imbalances that could disrupt the economy.
4. **Rethinking Monetary Policy Framework**: The recent economic history suggests a need to rethink the conventional monetary policy framework. Instead of viewing the Federal Reserve as the primary driver of macroeconomic outcomes, its role should be seen as stabilizing the financial system. This perspective acknowledges the complex interplay of various factors, including fiscal policy and global economic conditions, in shaping inflation and employment.

In summary, understanding the Federal Reserve's dual mandate requires recognizing its limitations and the broader economic context in which it operates. The Fed's influence on the economy is significant but not all-encompassing, and its actions are part of a larger economic ecosystem that includes fiscal policy, global market dynamics, and private sector decisions.

Conclusion: Navigating the Ebb and Flow of Inflation: Perspectives and Prognostics

As we step back to assess the intricate tapestry of factors influencing the recent decline in inflation, it becomes evident that this phenomenon is not just a result of singular policy actions or isolated economic events. Instead, it's a confluence of interconnected dynamics spanning from pandemic-induced disruptions to global supply chain adjustments and shifting consumption patterns. The Federal Reserve's monetary policy, while influential, are but a single thread in this complex weave.

The Federal Reserve's aggressive rate hikes, initially perceived as a direct counter to soaring inflation, appear to have played a more nuanced role. While these measures may have tempered certain economic activities, their impact seems overshadowed by broader, more potent forces at play. The persistence of a robust job market, alongside continued business investments, underscores the limited influence that rising interest rates have thus far had on the decline in inflation.

Meanwhile, the global economy's remarkable adaptability to supply shocks, exemplified by the easing of commodity market disruptions post-Russian invasion and China's power market reforms, has significantly contributed to the taming of inflation. These developments highlight the resilience and dynamism of the global economic system, capable of rapid adjustments in the face of unprecedented challenges.

Moreover, the role of profiteering and its subsequent impact on investment and production capacities cannot be overlooked. As companies capitalized on heightened demand amidst limited supply, this led to increased investments, further fueling an expansion in production capacities. This cycle, in turn, has played a crucial role in realigning supply with demand easing inflationary pressures.

In essence, the decline in inflation reflects the complex interplay of monetary policies, global economic shifts, and private sector responses. Moving forward, policymakers and investors alike need a nuanced understanding of these diverse forces shaping the terrain.

The Federal Reserve’s dual mandate, often misconstrued as a direct control over inflation and unemployment, must be understood within this broader context. The Fed’s influence, though significant, is part of a larger, intricate economic ecosystem. This perspective is vital for shaping realistic expectations and informed decision-making, particularly in an era marked by rapid changes and unprecedented global interconnectivity.