GALLIARD Capital Management, LLC

ARCHITECTS OF INVESTMENT SOLUTIONS

ECONOMIC UPDATE

THIRD QUARTER 2022

October 5, 2022

Quarterly Key Points

- The Fed's current thinking suggests it may well raise the policy rate by an additional 125 bps before the end of the year, and that the terminal fed funds rate could end up between 4.5% and 5.0%.
- The market reacted violently to the re-pricing of inflation fundamentals and the increasingly hawkish Fed tone. Notably, the 2s vs 10s curve is now deeply inverted by 45 bps. Meanwhile, real interest rates continue to adjust higher reflecting tighter financial conditions and inflation expectations have fallen meaningfully after reaching all-time highs earlier this spring.
- The war in Ukraine continues to influence commodity prices globally. There is a particular sense of urgency with regard to energy prices across Europe as we head into the winter months. At present, natural gas, the primary source of heating, is 7x more expensive in Europe than in the United States.
- GDP growth was once again weaker than anticipated in 2Q, coming in at -0.6% q/q annualized. Despite the most aggressive monetary policy tightening in decades, third quarter GDP is expected to be approximately 0.5%-1.5% q/q annualized, with full year growth in the 1.6%-1.8% range.
- With mortgage rates approaching 7% and equities ending the quarter at a 2-year low, consumers don't necessarily feel all that great. Further, while the labor market remains tight, the taxing effect of inflation continues to drive real hourly earnings negative. Consequently, consumers have resorted to savings and revolving credit to maintain spending, albeit at a slower pace than previously. Businesses are not expanding at the same rate that they were over the previous 18 months either.

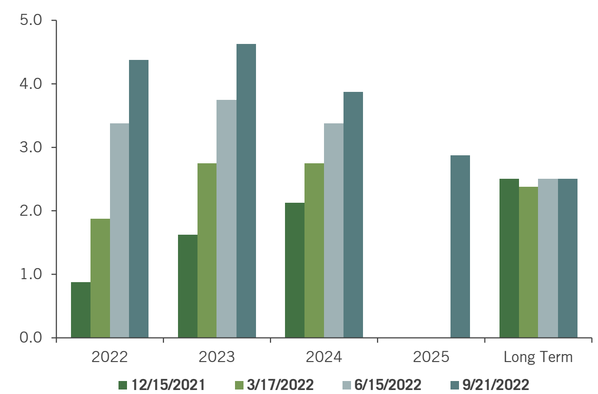
Our View

- For central bankers to prevail over persistently high inflation, interest rates may need to rise higher and stay elevated for longer than previously expected, leading many to believe that the narrative of a soft economic landing is becoming untenable. Tighter financial conditions, manifesting in higher real yields, suggest that asset values may continue to be under pressure.
- Weaker markets have provided attractive opportunities to add high quality spread across sectors in a measured way. As always, we continue to be mindful of downside risks, and remain cognizant of the potential unintended consequences of large monetary policy and geopolitical shifts which may impact our investment decisions.

3Q2022 – FED AND INFLATION REMAIN FRONT-AND-CENTER FOR MARKETS

The Fed continued its battle against inflation throughout the summer with a 75 basis point (bps) rate increase in June, the largest single hike since 1994. This was followed by 75 bps hikes in both July and September as inflation showed little sign of abating. While these outsized increases were widely expected, the September Summary of Economic Projections (SEP) median dot plot was more of a surprise (Figure 1). The Fed's current thinking suggests it may well raise the policy rate by an additional 125 bps before the end of the year, and that the terminal fed funds rate could end up between 4.5% and 5.0%. Market pricing indicates another 75 bps hike in November followed by 50 bps in December, and 25 bps in both February and March.

FIGURE 1: FOMC MEDIAN FED FUNDS RATE PROJECTIONS (%)[1]



Messaging from Fed officials became increasingly hawkish throughout the quarter as well. For example, in his speech at the Jackson Hole Economic Symposium in August, Fed Chair Powell stated that "reducing inflation is likely to require a sustained period of below-trend growth" and "restoring price stability will likely require maintaining a restrictive policy stance for some time." The market's interpretation? For central bankers to prevail over persistently high inflation, interest rates may need to rise higher and stay elevated for longer than previously expected. Furthermore, wealth destruction may be implicit in the Fed's policy direction, and if so, the narrative of a soft landing is becoming untenable.

Additionally, September marked the first month of fully stepped-up quantitative tightening caps. Going forward, the Fed will reduce its balance sheet by a maximum of $60 billion of Treasury securities and $35 billion of Agency MBS per month. Importantly, balance sheet reduction will come from reduced reinvestment and not active selling…for now. With mortgage rates above 6%, the Fed will struggle to get a sufficient amount of paydowns per month, fueling some debate about whether or not it may start to actively sell Agency MBS at some point. Opinions vary, but considering the impact this may have on an already weak market, consensus is that the Fed would only sell securities if it absolutely needed to in order to realize its monetary policy goals.

Month-over-month measures of inflation, particularly core CPI and core PCE, turned higher in August after a brief slowdown in the prior month. Although year-over-year inflation numbers grab more attention, we prefer to highlight month-over-month changes at this point as they are a stronger signal of direction. Headline CPI increased by 0.1% m/m in August after coming in flat in July, while core CPI accelerated to 0.6% m/m in August after slowing to 0.3% m/m in July. Similarly, headline PCE jumped up to 0.3% m/m in August after falling by -0.1% m/m in July, whereas core PCE increased by 0.6% m/m in August after a flat reading for the prior month. On a rolling 3-month basis (smooths out monthly volatility), all four of these measures of inflation are lower than earlier in the year. Notably, though, headline measures have fallen further and the decline has been steeper, whereas core measures stopped falling and accelerated faster after mid-summer. Furthermore, alternative Fed

[1]Source: Federal Reserve

measures of core inflation like the Federal Reserve Bank of Cleveland Median CPI, the Federal Reserve Bank of Cleveland 16% Trimmed-Mean CPI, and the Atlanta Fed Sticky CPI 12-Month have shown no signs of slowing. In fact, on a rolling 3-month basis, several of these measures have consistently increased throughout the year. These trends go a long way in explaining the Fed's fervor in August and September.

The market reacted violently to the re-pricing of inflation fundamentals and the increasingly hawkish Fed tone. As of the end of the quarter, the S&P 500 Index has fallen 25% year-to-date. Between August 15th and September 30th, the index was down almost 17%. During the quarter, the 2-year Treasury sold off by 133 bps to wind up at 4.28% while the 10-year Treasury sold off by 82 bps to 3.83%. Notably, the 2s vs 10s curve is now deeply inverted by 45 bps, perhaps signaling a recession on the horizon. Meanwhile, real interest rates continue to adjust higher reflecting tighter financial conditions: the 10-year real rate sold off by another 101 bps to end the quarter at 1.68%, a staggering 278 bps higher than at the beginning of the year. On the bright side, inflation expectations have fallen meaningfully after reaching all-time highs earlier this spring. 5-year and 10-year breakeven rates were both at ~2.15% as of the end of the quarter. Meanwhile, the 5Y5Y forward breakeven decreased to 2.12%. Although some of this is due to the illiquidity of the TIPS market (putting upward pressure on real yields), clearly the market believes the Fed will ultimately win the inflation fight.

GLOBAL ECONOMIC UNCERTAINTY REMAINS ELEVATED

The war in Ukraine, now in its eighth month, has no end in sight. In September, Russia annexed multiple regions of the country via elections that have widely been viewed as illegitimate. Even more frightening, the option of nuclear conflict continues to surface, although many geopolitical pundits believe this is little more than sabre rattling. At a minimum, the war continues to influence commodity prices globally. The Bloomberg Commodity Index has come down since peaking in late spring; however, it remains 12% higher year-to-date. There is a particular sense of urgency with regard to energy prices across Europe as we head into the winter months. At present, natural gas, the primary source of heating, is 7x more expensive in Europe than in the United States.

Currency prices, reflecting relative economic strength and varying central bank policies, are making commodities and goods even more expensive for those outside the U.S. The Bloomberg Dollar Spot Index is up 14% year-to-date through the third quarter, a move that will have implications for the global economy. For example, foreign liabilities issued in U.S. dollars - which are considerable - will be expensive to roll over. We continue to believe that the consequences of this war, both intended and unintended, will be felt for years to come.

U.S. ECONOMIC RECOVERY SLOWING

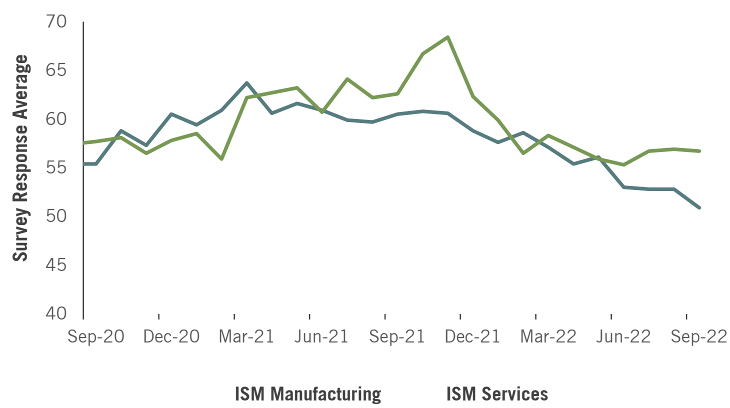
GDP growth was once again weaker than anticipated in 2Q, coming in at -0.6% q/q annualized. This was driven primarily by a drag in inventories and slowing demand given higher interest rates and elevated inflation, and marks the second consecutive quarter of negative economic growth. Although this meets the definition of a technical recession, the National Bureau of Economic Research (NBER), the official governing body of economic measurement in the United States, has not called this an official recession given broad measures of economic health like labor market strength and corporate earnings. Despite the most aggressive monetary policy tightening in decades, third quarter GDP is expected to be approximately 0.5%-1.5% q/q annualized, with full year growth in the 1.6%-1.8% range. However, as we've noted in the past, GDP growth has consistently been revised downward since the beginning of the year. Our previous quarterly write-ups included 2022 full-year GDP consensus estimates of 3.0%-3.5% in 1Q and 2.3%-2.6% in 2Q. Additionally, the Conference Board U.S. Leading Index has been on a downward trend since the end of the first quarter and the Bloomberg median recession probability forecast has increased to 50% from only 20% at the beginning of the year. Therefore, it would not be a surprise if 3Q GDP came in light versus expectations.

The labor market remains tight, with another 526k and 315k jobs added in July and August respectively. Meanwhile, the unemployment rate ground down to only 3.5% in July before rising modestly to 3.7% in August on a surprise boost in the labor force participation rate. Initial unemployment claims fell to ~200k by the end of the quarter from a year-to-date high of 260k in July. Notably, this is a very normal range, historically speaking. Further, continuing claims have been steady in the 1.3 million to 1.4 million range. Job openings fell by over 1 million in August, from 11.2 million to 10.1 million, surprising market forecasts to the downside. This has been interpreted as another early sign that labor markets are beginning to soften. Still, the quits rate continues to hover in the 2.7% to 2.8% range, suggesting that structural labor frictions persist. Nominal hourly earnings growth has held steady at 5.2% y/y since June while the month-over-month number increased 0.4%, 0.5%, and 0.3% in June, July, and August respectively. In normal times, these earnings advancements would be great. Unfortunately, these are not normal times. The taxing effect of inflation continues to drive real hourly earnings negative, measuring –3.5% y/y, -3.0% y/y, and -2.8% y/y in June, July, and August respectively.

With gasoline prices below $4 per gallon, consumers are feeling less pain at the pump, which should be a good thing. Unfortunately, with mortgage rates approaching 7% and equities ending the quarter at a 2-year low, consumers don't necessarily feel all that great. Indeed, the University of Michigan Consumer Sentiment Index rebounded to only 58.6 in September after hitting the lowest measurement on record in June (50.0). Consequently, consumers have resorted to savings and revolving credit to maintain spending. Personal savings measured as a percentage of disposable income plummeted to only 3.5% in August, marking the lowest savings rate since early 2008, and consumer revolving credit has consistently grown at a double digit annualized rate over the past year. Not surprisingly, retail sales growth has slipped from the year-to-date highs reached in the early part of the year. After spiking 1.0% m/m in June, retail sales growth fell -0.4% m/m in July before rebounding by 0.3% m/m in August. Retail sales ex-autos came in at 1.1% m/m in June, 0.0% m/m in July, and -0.3% m/m in August. Personal consumption expenditures followed a similar pattern. Interestingly, the weakness in July seems to correlate with the pull-back in inflation measures month-over-month during this time. In summary, it appears that consumers are managing to spend, albeit at a slower pace than previously.

Businesses are not expanding at the same rate that they were over the previous 18 months either. The ISM Manufacturing PMI fell to 50.9 in September from a reading of 52.8 in both July and August (Figure 2). Notably, the latest reading is barely expansionary and is also the lowest since May 2020. Further, the ISM Manufacturing Report on Business New Orders Index slumped to only 47.1 in September. This is considerably lower than readings of >60 for most of 2021 and early 2022. The ISM Services PMI has been more consistent, coming in at 56.7, 56.9, and 56.7 in July, August, and September respectively. After increasing a whopping 2.3% m/m in June, durable goods orders came in at -0.1% m/m in July and -0.2% m/m in August. Construction spending shrunk by -0.6% m/m in July and -0.7% in August. Finally, industrial production and capacity utilization have plateaued after rising to well past pre-pandemic levels. Industrial production remains at nearly 105, which is a series high, whereas capacity utilization has leveled off at ~80%. It stands to reason that with bigger ticket items, like durable goods, businesses are reluctant to spend while facing an uncertain outcome with the Fed and broader economy.

FIGURE 2: ISM MANUFACTURING & SERVICES[2]



The combination of higher mortgage rates and home prices that have gone up considerably have made the cost of housing substantially more expensive. As a result, housing related activity is falling precipitously. After briefly dipping in late summer, mortgage rates have catapulted higher once again, commensurate with the broader selloff in interest rates in August and September. Freddie Mac's weekly survey rate ended September at ~6.7%, more than double where it was at the beginning of the year. This marks the highest mortgage rate since summer of 2007 and also the first time 30-year mortgage rates have been >6% since 2008. Not surprisingly, mortgage applications and mortgage refinancing activity is at the lowest level in over 20 years. The S&P CoreLogic Case-Shiller 20-City Composite City Home Price Index turned negative month-over-month for the first time in over 10 years in July, and the rate of change has been striking with prices falling from a high of 2.4% m/m in March to -0.44% in July. Notably, these numbers are published on a two-month lag and we would not be surprise to see lower readings over the coming months.

Existing home sales have plummeted from a 6.5 million unit annualized pace in January to only 4.8 million in August, matching the lowest

[2]Source: Bloomberg

measurement in the last decade, excluding the early months of the pandemic. In contrast, new home sales have fared relatively well, bouncing up to a 685k unit annualized pace in August after dipping to a six-year low in July. Some have posited that the sharp reversal in new home sales reflects a rush to buy before mortgage rates head even higher and builder willingness to offer discounts in order to offload inventory before the situation worsens. The supply of new homes has jumped from ~3 months of supply two years ago to over 8 months of supply in August of this year, reflecting that new homes are sitting on the market much longer than previously. Existing home supply has also increased, but not nearly as much. Currently, existing home supply is ~3 months, up from an historic low of less than 2 months earlier this year.

GOVERNMENT UPDATE - STUDENT LOAN DEBT RELIEF

In August, the Biden administration announced a new student loan debt relief plan that includes an extension of the previously existing payment holiday, an updated income driven repayment plan (IDR), and debt cancellation. First, the plan extends the student loan payment holiday until 12/31/2022. Previously scheduled to expire at the end of August, this is said to be the final extension. Second, the plan proposes a new IDR plan that caps annual payments at a smaller percentage of discretionary income, measures discretionary income at a greater percentage of the federal poverty level, and forgives outstanding balances in 10 years versus 20 years compared to the current IDR. Third, the plan involves targeted student debt cancellation up to $20,000 depending on household income and Pell Grant status. A recent CBO report estimates the plan, if it goes through, will cost ~$400 billion over the next 30 years. The report also highlights that 90% of the 37 million Federal Direct Loan borrowers are likely eligible for debt forgiveness of some form according the proposed plan. The administration is using an executive order to implement this plan, avoiding the need for Congressional approval. History suggests this could be brought into question and a number of legal battles are already pending.

LOOKING AHEAD

Rampant inflation and the resulting central bank response remain front-and-center for markets. Sustained inflationary pressure has resulted in a compressed timeline for monetary policy action and the expectation is for fairly aggressive rate hikes over the remainder of the year alongside a continuation of quantitative tightening. For central bankers to prevail over persistently high inflation, interest rates may need to rise higher and stay elevated for longer than previously expected, leading many to believe that the narrative of a soft economic landing is becoming untenable. Indeed, the yield curve is deeply inverted signaling that a recession may await. Tighter financial conditions, manifesting in higher real yields, suggest that asset values may continue to be under pressure. The continuing war in Eastern Europe and the impact on energy prices add to the uncertainty of what lies ahead. This is particularly true for Europe as winter approaches. Currency prices have adjusted rapidly, reflecting relative economic strength and varying central bank policies, having the effect of making commodities and goods even more expensive for those outside the U.S.

Volatility in risk assets has persisted, reflecting fatter tails in the distribution of outcomes. Discussions about recession will continue and an eventual "pivot" in monetary policy is somewhere on the horizon, but not before the Fed feels confident that inflation is on a normalized path. An economic slowdown that includes softer labor markets will be a strong signal. In the meantime, weaker markets have provided attractive opportunities to add high quality spread across sectors in a measured way. As always, we continue to be mindful of downside risks, and remain cognizant of the potential unintended consequences of large monetary policy and geopolitical shifts which may impact our investment decisions.

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