

Investment Management & Research Quarterly Update

Highlights

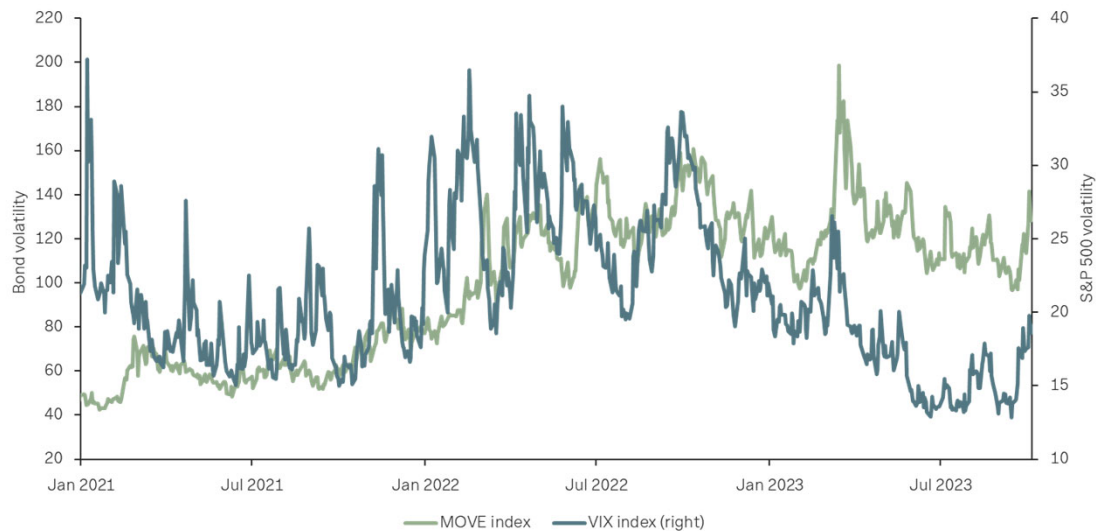
- Equities ended lower in the third quarter (Q3), as persistent inflation and high interest rates took a toll on near-term growth and earnings.
- Economic growth likely accelerated in Q3, according to the Federal Reserve Bank of Atlanta's GDPNow estimate, despite the Federal Reserve (the Fed) keeping rates high. Consumer demand weakened but remained stable, supported by a tight labor market and excess savings.
- Headline U.S. inflation rose from 3% in June to 3.7% in August, year over year (YoY), remaining well above the Fed's 2% target. The Fed raised interest rates by 25 basis points (bps) in July and kept rates unchanged in September but will likely keep rates higher for longer while remaining laser-focused on bringing inflation down to its 2% target.

Overview

U.S. equities fell in Q3 after a staging a strong start to 2023. The S&P 500 Total Return Index declined by 3.3% this quarter, snapping three consecutive quarterly gains. Bond markets fell by 3.2%, as measured by the Bloomberg U.S. Aggregate Bond Index. The U.S. Treasury yield curve became more inverted, indicating that economic growth will likely slow in the upcoming months. The dollar index increased by 3.2% this quarter.

Market volatility was slightly elevated in Q3, as investor sentiment weakened later in the quarter given the Fed's likelihood of keeping interest rates higher for longer to restore price stability at the expense of economic growth (see Figure 1). Inflation rose to 3.7% in August, remaining above the Fed's 2% target. Fed rate hikes continued to take their toll on the economy, leaving consumers with less purchasing power, and have led to tighter credit conditions and less credit availability for both consumers and businesses. Tighter lending activity and greater use of credit signal caution for consumption. Markets are becoming more confident of a softer economic landing while the Fed will likely keep rates high until inflation is meaningfully closer to 2%.

Figure 1 | Bond volatility vs. S&P 500 Index volatility
As of 9/30/2023



Sources: Bloomberg, First Republic Investment Management, as of September 30, 2023.

While the economic backdrop continued to be challenged, there were bright spots in the economy. The consumer remained more resilient throughout the quarter, supported by a tight labor market and leftover pandemic savings, a trend we don't expect to last for much longer. The shift from goods to services spending continued, helping ease demand-side inflationary pressure on goods. Growth and inflation remain much more resilient than expected, suggesting that higher rates are taking longer to work through the U.S. economy. We believe that inflation will continue to fall but caution that it will remain volatile as energy prices have recently risen — it will take more time to get closer to the Fed's 2% goal.

Going forward, the focus remains on the transmission of tighter Fed policy on the real economy, as it keeps rates high to restore price stability. While policymakers tried to engineer a "soft landing," the resilience of consumers and the labor market have supported growth. Consumers have drawn down their pandemic savings, and credit is scarce. Supply chain disruptions have eased but continue to cause delays, and financial conditions have become less accommodative for growth. We expect that equities will keep experiencing volatility as corporate profit expectations adjust lower to reflect a slowdown. In fixed income markets, we expect continued interest rate volatility and credit spread widening.

Economic Summary

The U.S. economy remained resilient while fighting multiple headwinds. Strong consumption, driven by savings and a tight labor market, supported domestic growth and delayed fears of an imminent recession. Real gross domestic product (GDP) growth is expected to have grown by 5.1% in Q3 (estimated by the Atlanta Fed's GDPNow model on October 10). Economic

growth is supported by consumption until consumer spending weakens materially. We expect growth to slow in the rest of 2023. In our view, the odds and severity of a U.S. economic downturn have decreased.

The main challenges facing U.S. growth have remained broad-based:

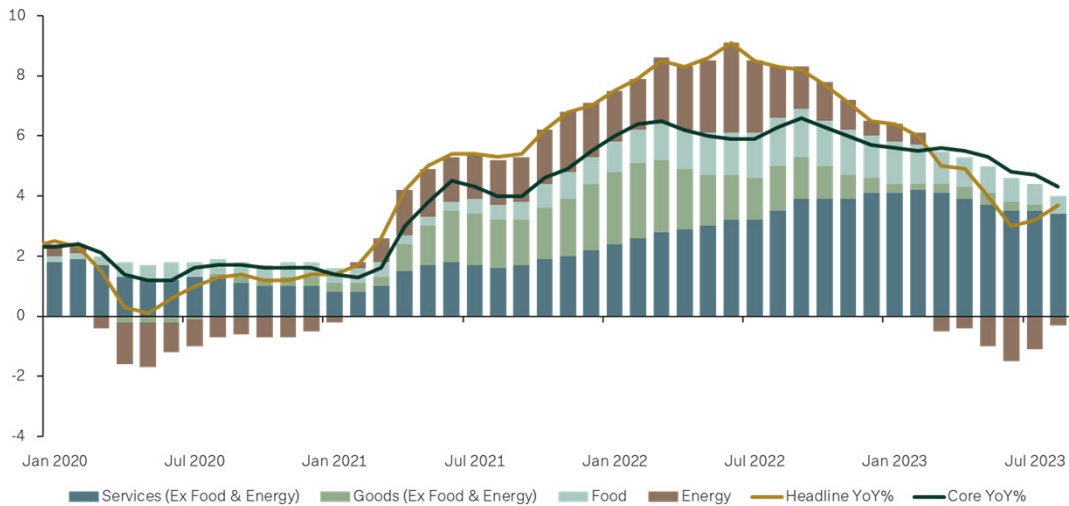
- Inflation moderated but remains higher than the Fed desires, weighing on consumer spending.
- Fed rate hikes continued to take their toll on demand, leaving consumers with less purchasing power.
- The ongoing Russia-Ukraine conflict coupled with supply cuts from major oil producers heightened volatility for commodities, keeping gas and food price volatility elevated.

August's Consumer Price Index (CPI) release highlighted that inflation is moderating but continues to run above what the Fed is comfortable with. August's CPI rose by 0.6% month over month (MoM) and 3.7% YoY at the headline level, after rising by 3.2% YoY in July and 3% YoY in June. The MoM rebound in August was driven by a 5.6% rise in the energy component due to a large rise in gasoline prices. We expect that inflation will further slow throughout the year but will take time to get closer to the Fed's 2% goal, as energy and housing prices remain elevated in the near term.

Core goods prices continue to fall while core services prices remain sticky. Core goods prices fell again by 0.1% MoM in August, driven lower particularly by a decline in used vehicle prices. We expect the price of goods to continue to moderate throughout 2023 as consumer demand further weakens due to high interest rates and tighter lending standards. Core services inflation rose by 0.4% MoM in August and remains the stickier side of the inflation picture, which the Fed is laser focused on slowing (see Figure 2). The driver of core services inflation continues to be the shelter component, which accounts for one-third of the overall CPI. Although, changes in housing prices have a lagged effect on the housing component of the CPI, and newly signed contracts inflation fell significantly in August, pointing to a likely decline in rent this year, in our view.

The Fed has been laser focused on its new measure of inflation, core services inflation (excluding housing), and this continues to trend downward. Core services inflation (excluding housing) increased by 0.5% MoM, the largest monthly gain since January, but fell to 3.1% YoY, the smallest annual gain since March 2021. We expect that this indicator will be volatile month to month but trend downward on an annualized basis. August's CPI release adds weight to our view that headline inflation pressures are moderating but taking longer to reach the Fed's 2% target and will lead the Fed to keep rates higher for longer.

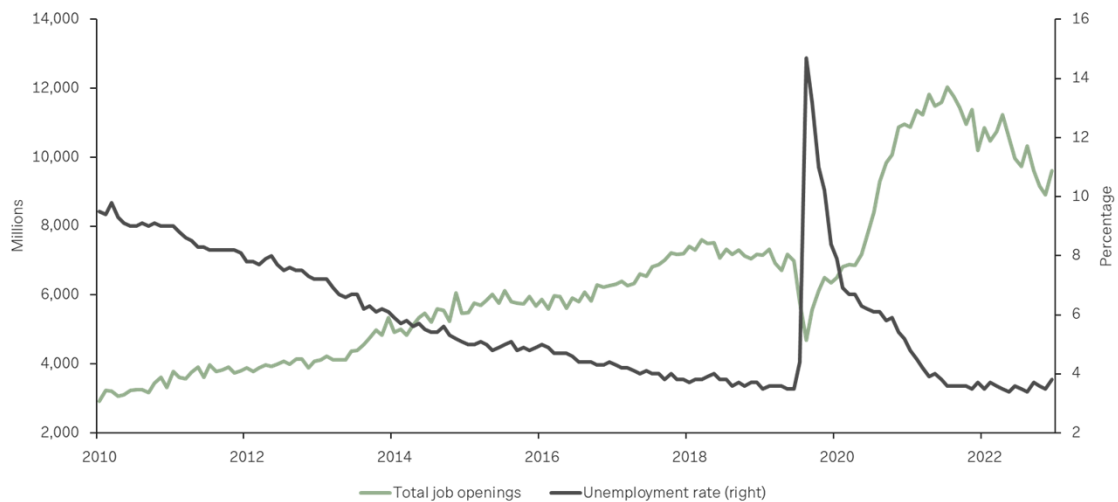
Figure 2 | U.S. CPI components
 Percentage, as of 9/30/2023



Sources: Bloomberg, First Republic Investment Management, as of September 30, 2023.

The labor market showed some signs of weakness but remains too tight for the Fed. September’s employment report will put the Fed on high alert for potential upcoming rate increases to help bring inflation back to its 2% target. Nonfarm payrolls showed that there were 336,000 job gains in September, much stronger than expected. We believe that seasonal factors boosted headline job growth, and job growth at this speed is unlikely to continue. Average hourly earnings rose by 0.2% MoM for the second straight month and 4.2% YoY in September, the smallest YoY gain since June 2021. Annual wage growth is still stronger than the roughly 3.5% that would be consistent with the Fed’s 2% inflation target, but the Fed is likely encouraged by the progress. The unemployment rate remained unchanged at 3.8% in September (see Figure 3). As the labor market softens by year-end, we expect consumer confidence to weaken as well.

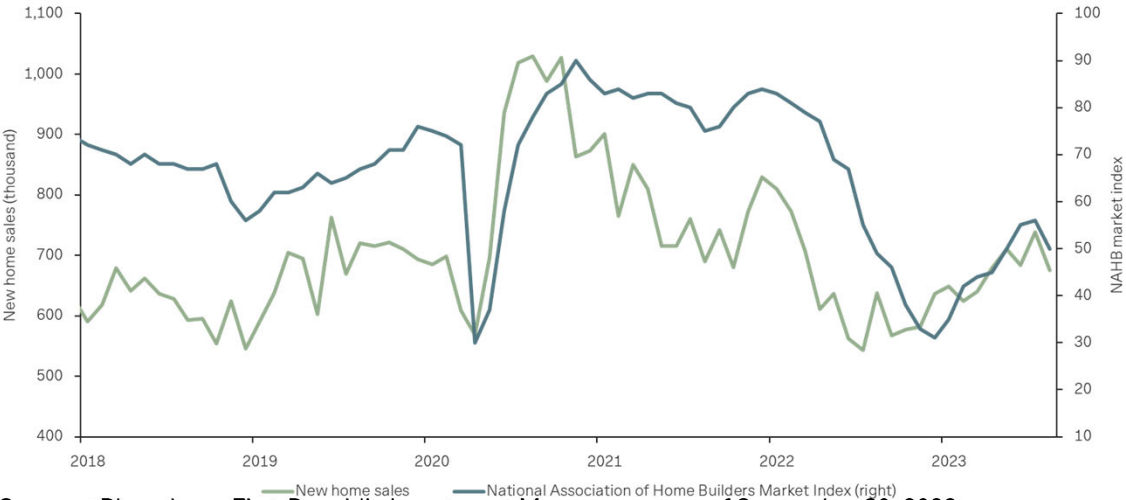
Figure 3 | Job openings vs. unemployment rate
 Millions, percentage, as of 9/30/2023



Sources: Bloomberg, First Republic Investment Management, as of September 30, 2023.

Housing activity continues to slow as high mortgage rates and slower economic growth weigh on housing demand. Affordability remains low, as mortgage rates reached a peak of 7.3% in September and the labor market is slowly starting to moderate. There were only 675,000 new home sales in August, following 739,000 home sales in July (see Figure 4). We expect that housing market sales and sentiment will continue to weaken in 2023 as slowing economic growth, high interest rates and a moderating labor market reduce housing demand. This will play a key role in moving inflation closer to the Fed’s target.

Figure 4 | New home sales vs. NAHB market index
Millions, percentage, as of 9/30/2023



Sources: Bloomberg, First Republic Investment Management, as of September 30, 2023.

Emerging markets (EMs) continued to be challenged by supply chain issues and high inflation. Most central banks kept interest rates high to lower inflation, which dampened economic growth. The Russia-Ukraine conflict continued to exacerbate supply shortages as tensions remained elevated, keeping energy prices high in International Developed markets, which kept inflation elevated. Economic growth slowed considerably in Europe and the United Kingdom, as high inflation and high interest rates low economic growth. China’s evolving COVID policies continued to weigh on manufacturing, growth and international trade activity. Meanwhile, economic growth in Japan was strong in Q3 and throughout 2023 so far.

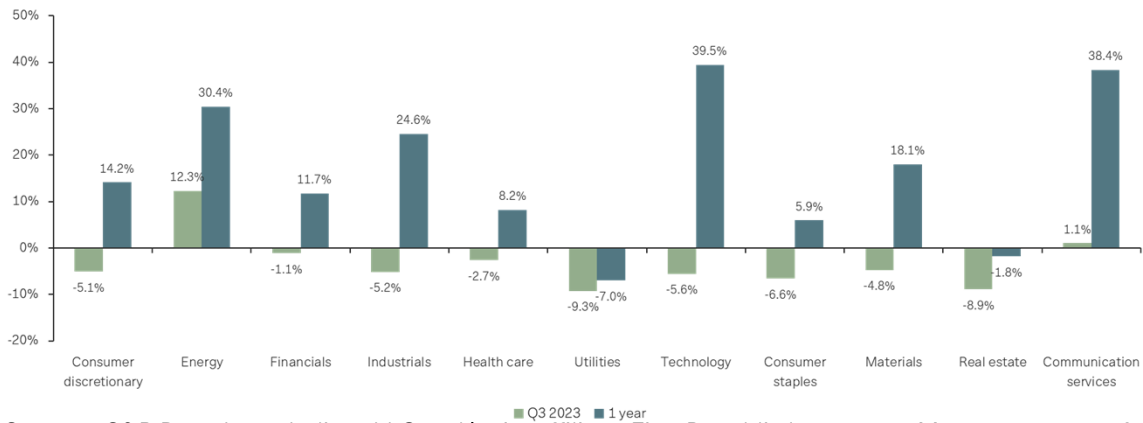
Global Equities

U.S. equities ended lower in Q3 after a strong start to 2023. The S&P 500 Total Return Index returned -3.3% this quarter, snapping three consecutive quarters of gains. The Nasdaq Composite Total Return Index returned -3.9% in Q3 2023. The Dow Jones Industrial Average Total Return Index returned -2.1% in Q3.

During Q3, value stocks outperformed, with energy as the top performing sector due to a surge in oil prices. The best-performing S&P 500 sectors were energy, returning 12.3%; communication services, returning 1.1%; financials, returning -1.1%; and healthcare, returning -2.7%. The underperforming sectors were utilities, returning -9.3%; real estate, returning -8.9%; consumer staples, returning -6.6%; technology, returning -5.6%;

industrials, returning -5.2%; materials, returning -4.8%; and consumer discretionaries, returning -5.1% (see Figure 5).

Figure 5 | S&P 500 sectors return
Percentage, as of 9/30/2023



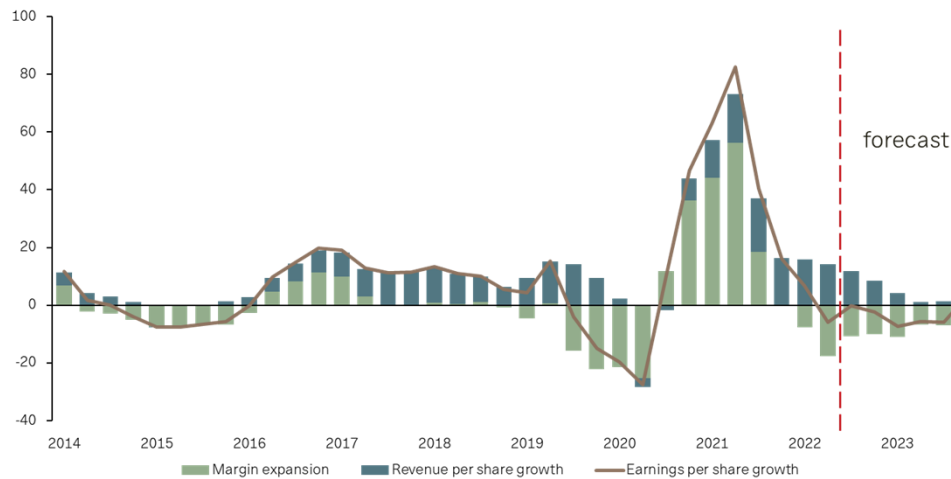
Sources: S&P Dow Jones Indices LLC and/or its affiliate, First Republic Investment Management, as of September 30, 2023.

The macroeconomic backdrop remains more benign for equity fundamentals, for now. Equities were supported by moderating inflation and resilient consumer spending despite high interest rates. These factors, in addition to the Fed’s pausing of rate hikes in September, increased optimism for the economic outlook for 2023, slightly improving sentiment early in the quarter. However, sentiment was weakened later in the quarter by a pickup in headline inflation, soft economic data and lagged policy effects, which signal caution going forward.

The Fed’s commitment to restore price stability through higher interest rates and quantitative tightening weighed on corporate profits in Q3. Investors feared the economic and market cost of the rate hikes would take too much of a toll, reducing returns and increasing the odds of a recession in 2024. Stress in the banking system continued to exacerbate investor concerns, further sparking market volatility. Bank lending standards continued to tighten, which continue to weaken economic growth and slow corporate earnings. Seasonality also partially played a role in lowering returns, as August and September have, on average, been the two worst-performing months in a year since 1970.

Market leadership isn’t signaling a “risk-on” backdrop, as market breadth has begun to fade with less participation in upward momentum. Most measures of the equity risk premium show low potential upside as tightening continues. Higher treasury yields tend to correspond with lower equity multiples during tightening regimes. Earnings expectations are beginning to accelerate however valuations are near the upper band of fair value. Corporate management remains laser focused on margins, which are benefiting from productivity but vulnerable to interest costs. In our view, the trajectory of margins will be the key determinant of equity fundamentals moving forward (see Figure 6).

Figure 6 | U.S. 12-month trailing EPS growth*
YoY percentage change, as of 9/30/2023



*Datastream total market index.

Sources: Bloomberg, Oxford Economics, First Republic Investment Management, as of September 30, 2023.

Overseas, developed markets, EMs and Asia underperformed in Q3. This quarter, China's stock prices declined by 3.1%, as measured by the MSCI China Index; Japan's stock prices declined by 4%, as measured by the Japan Nikkei 225; and the U.K.'s stock prices increased by 1%, as measured by the FTSE 100 Index. Geopolitical tensions remained elevated and heightened global market volatility. The Russia-Ukraine conflict exacerbated energy prices, keeping them high in International Developed markets. European equities have rarely led the United States, and momentum is stalling once again. Market internals signal strength in Japanese and Indian equities, two of our favored international segments. Macroeconomic momentum is accelerating in India and showing green shoots in Japan. China's evolving COVID policies continued to weigh on manufacturing and international trade activity.

We expect that international equities may remain under pressure as the effects of the global monetary tightening cycle slow manufacturing and trade. In our view, International Developed equities are hampered by the deleterious effects of tighter policy without the same upside for growth and the compositional dynamism offered within by the United States. We note that the historical degree of chasm between growth momentum in the United States relative to the Eurozone. Recently, we've become more constructive on Japanese equities, relative to Europe, as the mix of policy and growth appears more favorable.

We expect equities to continue to experience volatility in the rest of 2023 as the Fed focuses on slowing inflation by keeping rates high. We project equity returns to be more muted as high rates continue to slow growth, as risks are tilted to the downside in the near term. Within equities, we continue to favor U.S. large cap exposure, which provide an attractive blend of quality, yield and growth at a reasonable value, albeit at higher valuations.

Fixed Income

Treasuries were notably weaker this quarter, with the yield curve steepening as the Fed reiterated the expectation to keep rates higher for longer. Bond markets fell by 3.2%, as measured by the Bloomberg U.S. Aggregate Bond Index, dropping as the Fed kept interest rates high. In Q3, the 2-year yield rose by less than 20 bps but reached its highest level since 2006 at one point. The 10-year yield rose by 74 bps in Q3, reaching its highest level in 16 years (see Figure 7). The U.S. Treasury 2-year to 10-year spread inverted by over 100 bps on June 30 but ended the quarter inverted by less than 50 bps, reflecting that economic growth is slowing. The U.S. dollar index increased by 3.2% this quarter, ending the quarter with 11 consecutive weekly gains.

Figure 7 | U.S. Treasury yields
As of 9/30/2023

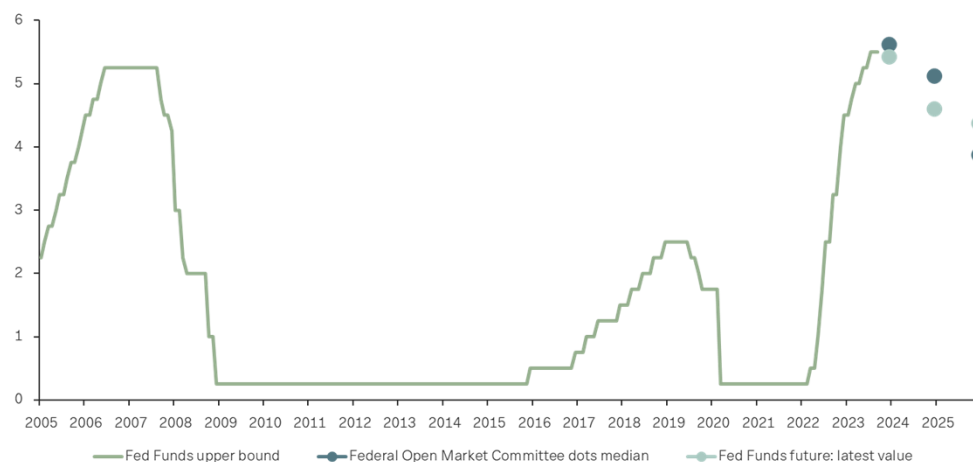


Sources: Bloomberg, First Republic Investment Management, as of September 30, 2023.

The Fed continues to transition from a fast-paced hiking cycle to a period of higher-for-longer interest rates. The recent volatility in yields is a result of a market response to a slowing macroeconomic outlook coupled with the perception that monetary policy may remain restrictive longer than previously thought. The change in the rates market over the quarter continued to elevate bond market volatility. Rate volatility continues to weigh on rates markets, even with terminal rates approaching. The yield curve continued to become more inverted, a trend we expect to continue, reflecting slower growth.

The Federal Open Market Committee (FOMC) unanimously voted to maintain the current policy rate at the September FOMC meeting, leaving the Fed Funds Target Rate unchanged at 5.25% to 5.50% (see Figure 8). We believe that the theme of a still-hawkish Fed that's laser focused on bringing inflation down to its 2% target remains intact, as Chairman Jerome Powell reiterated that messaging many times in his press conference. In our view, the Fed now has rates high enough to fight inflation as policy rates are at a sufficiently restrictive level, and the Fed has indicated that it's likely to hold them there for longer until inflation starts rapidly moving closer to its 2% target.

Figure 8 | Market expectation vs. Fed forecasts
As of 9/30/2023



Sources: Bloomberg, First Republic Investment Management, as of September 30, 2023.

The official Fed statement only contained a few but notable changes. Job growth was characterized as “slowed,” while the previous statement labeled it as “robust.” The adjective to describe economic expansion was changed from “moderate” to “solid,” yet another level after the June statement characterized it as “modest.” Meanwhile, the Fed’s Summary of Economic Projections (SEP) continued to show a year-end median Fed Funds Rate of 5.6%, unchanged from the last release of the SEP in June and implying one more 25-bp hike this year.

The biggest takeaway is that the Fed wants to see further sustained declines in inflation. Going forward, we flag the risk that Fed policy will remain higher for longer while a restrictive monetary stance continues to weigh on economic growth. However, we believe that the Fed will remain fully data dependent, and Powell reiterated that many times in his press conference. Between now and the November meeting, the Fed will have additional economic data to help it make a decision on whether to continue hiking rates or pause. If the data consistently continues to move closer to the Fed’s 2% inflation target, that will give the Fed leeway to potentially pause rate hikes.

Credit spreads leaked wider in Q3 amid slow economic growth, high inflation and sustained tighter monetary policy. Fed rate hikes left consumers with less purchasing power, leading to tighter credit conditions and less availability of credit for both consumers and businesses. Households are relying more on credit cards to meet regular expenses. Lower investment-grade credit spreads (not high-yield) are a useful indicator of trouble in the economy, of the sort that spills over into the stock market, signaling caution for optimism. The banking stress spiked spreads, but contagion seems muted and contained, and spreads are slowly receding. We expect spreads to further widen in Q4 and municipals to likely benefit from favorable demand from a strong technical backdrop between supply and demand. Spreads aren’t at the “something’s breaking” level and remain supportive of stock prices.

Congress was able to pass a bill at the end of September to avoid a government shutdown and continue funding through November 17, which is a credit positive. A shutdown would've had the largest impact on municipal issuers in the Washington, D.C., area and those that rely on federal funding for revenue or debt service payments. As paychecks for federal employees would've been interrupted, that would've affected spending from those consumers. Most federal funding for the hospital sector and states is nondiscretionary and formula-based and would've continued to flow during a shutdown. Overall, it's a credit negative for the United States that, timing wise, it came so close to a potential shutdown.

Globally, major central banks' monetary policy is beginning to diverge. Central banks, except for the Bank of Japan (BoJ), increased interest rates aggressively in the first half of 2023 to slow persistently high inflation. But in Q3, some central banks paused rate hikes given the welcomed signs of moderating inflation and to prevent economic growth from slowing too significantly. On July 28, the BoJ loosened its yield curve control policy and remains the only central bank with low interest rates. Given our expectations for global inflation to remain persistently higher than expected in Q4, we expect that most global central banks will continue to keep rates higher for longer to quash inflation.

Investor Takeaways

The fundamental floor for risk assets including equities has risen in recent weeks as data continues to suggest that downside prospects for economic growth aren't as severe. We expect pockets of volatility to persist as policymakers and investors alike are increasingly data dependent. Fixed income markets will need to adjust for the reality of higher-for-longer rates. We've become more neutral in our top-line positioning but maintain a defensive growth tilt underneath. We'd advocate using periods of market weakness as opportunities to upgrade portfolios.

Within equities, we continue to favor U.S. large-cap exposure, since China's evolving COVID policies continue to weigh on manufacturing and international trade activity. We've recently become more constructive on Japanese equities, relative to Europe, as the mix of policy and growth appears more favorable.

- U.S. large-cap equities provide an attractive blend of quality, yield and growth at a reasonable value, albeit at higher valuations. We advocate for more "equal weight" as opposed to "cap-weighted" exposure and believe that a "catch-up, melt-up" phase could lead underperforming segments to enjoy gains moving forward.
- For fixed income, we favor duration at close to, or slightly above, neutral.
- We remain defensive in our credit positioning and higher in credit quality. Even as the economic backdrop appears more benign, we remain on guard for the potential that credit spreads will leak wider.

Financial Market Returns

Total Return Index Performance as of 9/30/23					
U.S. Equity	Q3 2023	1 Year	3 Year	5 Year	10 Year
DJ Industrial Average	-2.1%	19.2%	8.6%	7.1%	10.8%
NASDAQ Composite	-3.9%	26.1%	6.6%	11.4%	14.5%
S&P 500 TR Index	-3.3%	21.6%	10.2%	9.9%	11.9%
Russell 1000 Index	-3.1%	21.2%	9.5%	9.6%	11.6%
Russell 1000 Growth Index	-3.1%	27.7%	8.0%	12.4%	14.5%
Russell 1000 Value Index	-3.2%	14.4%	11.1%	6.2%	8.4%
Russell Mid Cap Index	-4.7%	13.4%	8.1%	6.4%	9.0%
Russell Mid Cap Growth Index	-5.2%	17.5%	2.6%	7.0%	9.9%
Russell Mid Cap Value Index	-4.5%	11.0%	11.0%	5.2%	7.9%
Russell 2000 Index	-5.1%	8.9%	7.2%	2.4%	6.6%
Russell 2000 Growth Index	-7.3%	9.6%	1.1%	1.6%	6.7%
Russell 2000 Value Index	-3.0%	7.8%	13.3%	2.6%	6.2%
Total Return Index Performance as of 9/30/23					
International Equity	Q3 2023	1 Year	3 Year	5 Year	10 Year
MSCI EAFE Index (\$USD, net)	-4.1%	25.6%	5.8%	3.2%	3.8%
MSCI AC World Index (\$USD, net)	-3.4%	20.8%	6.9%	6.5%	7.6%
MSCI AC World Ex US Index (\$USD, net)	-3.8%	20.4%	3.7%	2.6%	3.3%
MSCI Emerging Markets Index (\$USD, net)	-2.9%	11.7%	-1.7%	0.6%	2.1%
MSCI BRIC Index (\$USD, net)	-0.8%	7.7%	-7.3%	-1.1%	1.6%
Total Return Index Performance as of 9/30/23					
Fixed Income	Q3 2023	1 Year	3 Year	5 Year	10 Year
Bloomberg US Treasury 1-3 Year Index	0.7%	2.4%	-0.9%	1.0%	0.8%
Bloomberg US Treasury 5-10 Year Index	-3.1%	-0.6%	-6.2%	0.2%	0.9%
Bloomberg US Long Treasury Index	-11.8%	-9.1%	-15.7%	-2.8%	0.8%
Bloomberg US Treasury US TIPS Index	-2.6%	1.2%	-2.0%	2.1%	1.7%
Bloomberg US Govt/Credit Intermediate Index	-0.8%	2.2%	-2.9%	1.0%	1.3%
ICE BofA Municipals 1-10 Year A-AAA Index	-1.9%	2.1%	-1.5%	1.0%	1.4%
Bloomberg US Corporate High Yield Index	0.5%	10.3%	1.8%	3.0%	4.2%
ICE BofA Preferred Stock Fixed Rate Index	-1.2%	3.5%	-1.9%	1.6%	4.3%
Bloomberg US Aggregate Bond	-3.2%	0.6%	-5.2%	0.1%	1.1%

Index Definitions

U.S. Equity

Dow Jones Industrial Average is a price-weighted average of 30 actively traded blue-chip U.S. stocks.

NASDAQ Composite Index is a market capitalization index of approximately 3,000 common equities listed on the NASDAQ exchange.

S&P 500 TR Index is a type of equity index that tracks both the capital gains of the equities in the S&P 500 and assumes any cash distributions (dividends) are reinvested back into the index.

Russell 1000 Index® measures the performance of the 1,000 largest companies in the Russell 3000.

Russell 1000 Growth Index® measures the performance of those Russell 1000 companies with higher price-to-book ratios and higher forecasted growth values.

Russell 1000 Value Index® measures the performance of those Russell 1000 companies with lower price-to-book ratios and lower forecasted growth values.

Russell Mid Cap Index® measures the performance of the 800 smallest companies in the Russell 1000 Index.

Russell Mid Cap Growth Index® measures the performance of those Russell Midcap® companies with higher price-to-book ratios and higher forecasted growth values. The stocks are also members of the Russell 1000 Growth Index.

Russell Mid Cap Value Index® measures the performance of those Russell Midcap® companies with lower price-to-book and lower forecasted growth values. The stocks are also members of the Russell 1000 Value Index.

Russell 2000 Index® measures the performance of the 2,000 smallest companies in the Russell 3000 Index.

Russell 2000 Growth Index® measures the performance of those Russell 2000 companies with higher price-to-book ratios and higher forecasted growth values.

Russell 2000 Value Index® measures the performance of those Russell 2000 companies with lower price-to-book ratios and lower forecasted growth values.

International Equity

MSCI EAFE Index is a free float-adjusted market capitalization index that is designed to measure the equity market performance of developed markets, excluding the United States and Canada.

MSCI AC World Index is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed and emerging markets.

MSCI AC World Ex U.S. Index captures large and midcap representation across 22 of 23 developed market countries (excluding the United States) and 23 emerging markets countries.

MSCI Emerging Markets Index is a free float-adjusted market capitalization index that is designed to measure equity market performance in the global emerging markets.

MSCI BRIC Index is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance across the following four emerging market country indexes: Brazil, Russia, India and China.

Fixed Income

Bloomberg Barclays U.S. Treasury 1-3 Year Index measures the performance of U.S. Treasury securities that have a remaining maturity of at least one year and less than three years.

Bloomberg Barclays U.S. Treasury 5-10 Year Index measures the performance of U.S. Treasury securities that have a remaining maturing of at least five years and less than 10 years.

Bloomberg Barclays U.S. Long Treasury Index includes all publicly issued, U.S. Treasury securities that have a remaining maturity of 10 or more years, are rated investment grade and have \$250 million or more of outstanding face value.

Bloomberg Barclays U.S. Treasury U.S. TIPS Index includes all publicly issued U.S. Treasury inflation-protected securities that have at least one year remaining to maturity, are rated investment grade and have \$250 million or more of outstanding face value.

Bloomberg Barclays U.S. Govt/Credit Intermediate Index measures the performance of the USD-denominated U.S. Treasuries, government-related and investment-grade U.S. corporate securities that have a remaining maturity of greater than one year and less than 10 years.

Bloomberg Barclays U.S. Corporate High Yield Index measures the USD-denominated, high-yield, fixed-rate corporate bond market. Securities are classified as high yield if the middle rating of Moody's, Fitch and S&P is Ba1/ BB+/BB+ or below. Bonds from issues with an emerging markets country of risk, based on Barclay's emerging markets country definition, are excluded.

ICE BofAML Municipals 1-10 Year A-AAA Index is a subset of the BofAML U.S. Municipal Securities Index and includes all securities with a remaining term to final maturity of less than 10 years and rated AAA through A3, inclusive.

ICE BofAML Preferred Stock Fixed Rate Index is designed to replicate the total return of a diversified group of investment-grade preferred securities.

JPMorgan GBI EM Global Diversified Index is an investable benchmark that includes only those countries that are directly accessible by most of the international investor base. This index excludes countries with explicit capital controls, but it does not factor in regulatory/tax hurdles in assessing eligibility.

Chart sources:

1. Bloomberg, First Republic Investment Management, as of September 30, 2023.
2. Bloomberg, First Republic Investment Management, as of September 30, 2023.
3. Bloomberg, First Republic Investment Management, as of September 30, 2023.
4. Bloomberg, First Republic Investment Management, as of September 30, 2023.
5. S&P Dow Jones Indices LLC and/or its affiliate, First Republic Investment Management, as of September 30, 2023.
6. Bloomberg, Oxford Economics, First Republic Investment Management, as of September 30, 2023.
7. Bloomberg, First Republic Investment Management, as of September 30, 2023.
8. Bloomberg, First Republic Investment Management, as of September 30, 2023.

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Investors cannot invest directly in an index. The indexes referred to do not reflect management fees and transaction costs that are associated with some investments.

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