ALTAIR INSIGHT

20 YEARS

Quarterly Market Review

A Painful Ramp-Up

October 2022

Rhonda, Spain
Lauren Denton, Senior Research Analyst

Third Quarter 2022 Key Topics

1.The Fed's steep tightening remains the driving force behind markets' abysmal performance and has likely delayed their recovery until there are signs the central bank is nearing a pause.

2. Inflation remains stubbornly high even as multiple signs point to an inevitable slowing. We expect it to decelerate through the months ahead, especially with rate hikes having intensified.

3. A year of global economic shocks has raised recession risks. If a recession occurs here, the U.S. economy's persistent durability suggests it is unlikely to be severe.

4. Stocks, bonds and real estate all remain under pressure in a year without safe havens. Yet a turnaround is inevitably coming and can be quick whenever it happens.

5. The post-midterms bounce that typically boosts markets after elections faces bigger hurdles in a challenging year, but there are reasons for its spotless record.

Noah Kroese Illustration for Altair Advisers

This fall has marked some noteworthy farewells and changes of the guard. The world bade a sentimental goodbye to Queen Elizabeth II, whose reign began before nine out of every ten living human beings were born. A hello-goodbye was said to British Prime Minister Liz Truss, whose time in office drew comparisons to the shelf-life of lettuce. Tennis fans were sorry to see the departures of all-time greats Serena Williams and Roger Federer, now retired at 41. And investors experienced anguish at the realization that market-friendly monetary policy is gone for the foreseeable future.

While it had been months since the Federal Reserve shelved its accommodative approach last March and began ramping up the federal funds rate, markets rallied for much of the summer in the widespread expectation that the long-dovish central bank could soon let up. Chair Jerome Powell quashed that notion in a late August policy speech at the Fed's annual Jackson Hole, Wyoming, conference, emphasizing that the Fed would bear down in its inflation fight after seeing only limited progress.

We generally agree with the Fed's toughened approach post-Jackson Hole; a more haphazard strategy in the 1970s failed to forestall years of extremely high inflation. As we noted in our last quarterly commentary, a sound economy has allowed the Fed to front-load interest-rate hikes and raise the benchmark rate quickly from zero to 3% and counting, toward a projected level of 5% without causing a significant increase in the unemployment rate or plunging us into a recession – so far. However, we believe it should consider pausing further rate hikes once it reaches its current terminal rate projection to assess how much additional pressure the rate increases have put on the economy, since the impact of monetary moves on the economy takes time to show up in the data.

Unless the Fed raises its interest-rate target above current expectations, we think most of the damage to markets has been done with the S&P 500 already having fallen at one point by around 25% and the 10-year Treasury yield above 4%, and we anticipate improved conditions in 2023. One favorable historical trend that bodes well for the U.S. market if it continues: Following the eight other times since 1950 that the S&P 500 fell 25% or more, it was up a year later all but once, with an average return of approximately 21%.

A recovery is coming, though it may not be imminent. Four-decade-high inflation and Moscow's senseless invasion of Ukraine, both tied closely to this year's painfully large pullback in almost all global risk assets, remain unresolved. The intentions of two unpredictable leaders with dangerous ambitions, Russia's Vladimir Putin and China's newly strengthened Xi Jinping, also remain threats to the global outlook, already clouded by likely recessions in Europe and elsewhere. However, the U.S. economy remains stable and we believe any recession that might occur here would be relatively brief and moderate and is likely mostly reflected in today's battered stock prices.

We are making some tactical moves to take advantage of the sharp rise in Treasury yields over the last several months. We believe that it is prudent to unwind our overweight to medium-risk assets and use the proceeds to purchase short-term Treasurys, thereby moving both the medium- and lower-risk categories back to their long-term target allocations.

The reduced possibility of a Fed pivot to a less stringent policy over the next few months removes the likeliest catalyst for an immediate bounceback in higher-risk assets. It is important to remember, however, that markets almost always turn higher in advance of an economic rebound. While delayed, we believe a recovery is not distant. Therefore we are maintaining our current allocation level in the higher-risk category. If the market should decline significantly in the meantime, we would not hesitate to recommend an overweight to higher-risk assets.

Please read on for a more detailed discussion of these issues:

1. The Fed's steep tightening remains the driving force behind markets' abysmal performance and has likely delayed their recovery until there are signs the central bank is nearing a pause.

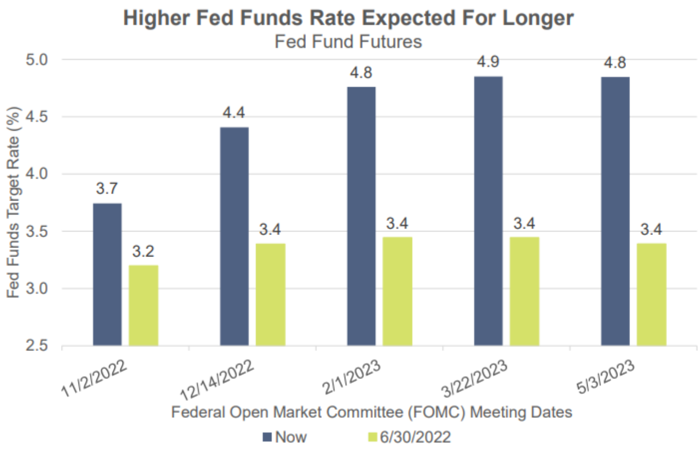
For all the Fed's missteps in the past couple of years – from deeming high inflation "transitory" to buying billions of dollars in bonds to stimulate an already strong economy as recently as last March to waiting until inflation was at a 40-year high before raising rates – indecisiveness and a lack of transparency are not currently among them. That may not be comforting for investors, but it should ultimately pay off in stable prices and a sounder economic outlook – as long as the Fed stops before going too far.

Fed leaders went to great pains in past decades to keep the decision-making process behind the curtain like the Great and Powerful Oz, leaving investors guessing. Alan Greenspan in particular embraced obfuscation, saying in a 1988 speech: "If I turn out to be particularly clear, you've probably misunderstood what I said."

Powell turned that strategy upside down on August 26th in a terse nine-minute speech at the Jackson Hole Economic Symposium that could not have been clearer. His message was the financial equivalent of the famous George H.W. Bush line (written by Peggy Noonan) pledging no new taxes – in effect, "Read my lips: More rate hikes." It set the stage for a renewed market sell-off in the late summer and fall, bringing home the likelihood of interest rates rising into 2023 and underscoring the painful price of the inflation crackdown.

Powell's comments, since echoed consistently by other Federal Open Market Committee members, show a central bank turning the full force of its policy on inflation despite the short-term consequences for the economy and markets. His unapologetic warning, "We must keep at it until the job is done," was a signal to us that a pivot back to a more supportive monetary policy is unlikely in the near term. A pause is possible by year-end, but only if inflation were to drop unexpectedly sharply between now and then.

The federal funds rate has jumped to 3% this fall from zero last March and may be headed to 5%,



market-based indicators suggest. Such estimates cannot be guaranteed, of course – as recently as last year, for example, the Fed anticipated not raising rates before 2023. While the rate could go higher if the core Personal Consumption Expenditures price index remains stubbornly elevated into early next year, it also could go lower if inflation drops sharply by the end of 2022, giving the Fed a chance to back off with its target within reach. Neither of these scenarios is our base case.

A soft landing for the economy – no recession – remains possible despite the Fed's steep rate hikes, but the available runway is getting shorter. Chances have diminished significantly following three outsized rate increases of 0.75 percentage point since June, with the likelihood of a fourth on November 2nd adding to the economy's mounting challenges.

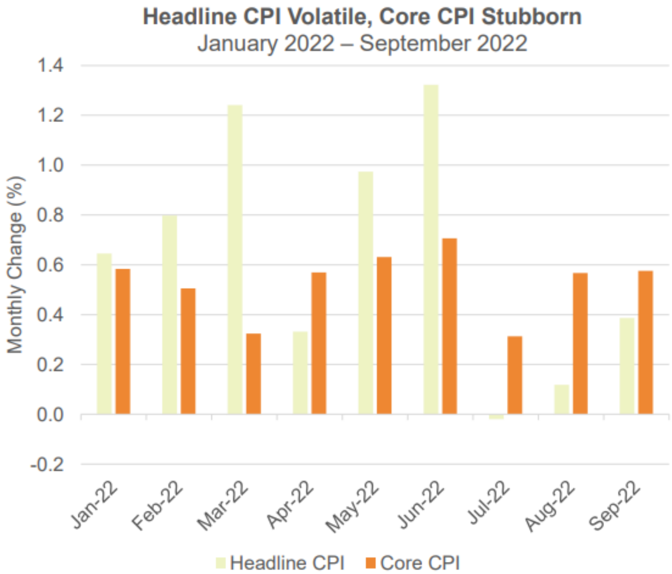
We believe the Fed's take-no-prisoners approach to inflation is necessary and overdue after its protracted hesitancy. As Powell noted at Jackson Hole, high inflation becomes more entrenched in wage- and price-setting the longer it persists, leading to much deeper problems for the economy. A hesitant and constantly changing monetary policy, like the one that led to double-digit inflation in the 1970s, must be avoided.

However, at some point in the coming months, Powell and his colleagues need to find an appropriate opportunity to pause in order to fully assess the impact of their rate hikes and minimize the risk of a serious recession. Interest-rate policy acts with a lag, which heightens the risk of overtightening because it is possible that by the time it is evident it is too late. Former Fed Vice Chair Alan Blinder views the FOMC as more moderate than some of its predecessors and expects it to stop hiking after raising rates to around 4.5% to give its tightening more time to bring inflation down. We hope Mr. Blinder is right.

We do believe the Fed's harsh ramp-up is likely in the late innings, particularly if the so-called terminal rate – the expected end point for rate hikes – proves to be no higher than 5%. The rate hikes should ease in the first half of 2023, reducing pressure on the economy and markets.

2. Inflation remains stubbornly high even as multiple signs point to an inevitable slowing. We expect it to decelerate through the months ahead, especially with rate hikes having intensified.

On the surface, the war on inflation appeared to give ground this fall. Core inflation as gauged by the Consumer Price Index rose monthly by 0.6% in both August and September, reaching the highest year-over-year level (6.6%) since 1982. Overall (headline) inflation climbed to an even-worse 8.2% above a year earlier. The data dashed hopes of the Fed



hitting the brakes next month and showed the service sector as the main driver of inflation now with some goods prices having fallen.

Yet looking beyond the CPI, which is a lagging indicator, we see encouraging signs of prices heading in the right direction. Other indexes are trending to lower inflation, which will ultimately show up in the CPI as the Fed's rate cuts work their way through the system and lower demand is reflected in prices.

The noteworthy signals go beyond the stagnation in consumer spending this fall:

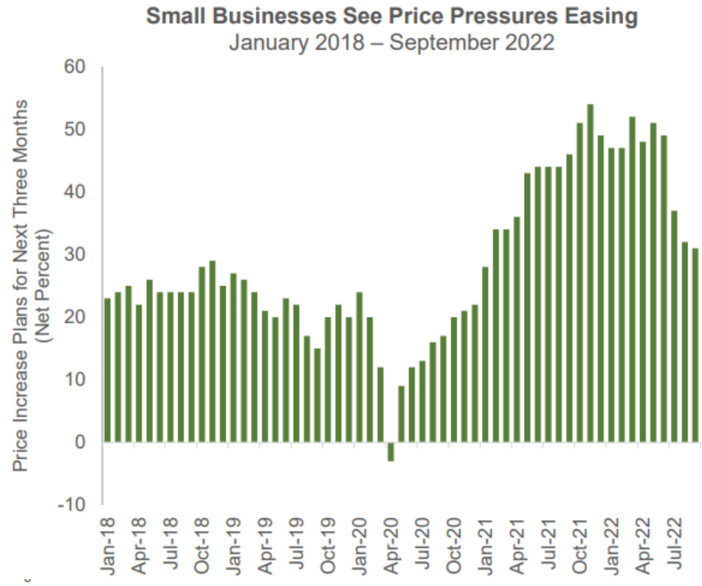
- Businesses surveyed believe the worst of the price growth is over. Small businesses have lowered their expectations for future inflation and fewer than a third of business owners polled nationwide plan price increases in the next three months, according to the latest monthly survey by the National Federation of Independent Businesses – the smallest amount since January 2021.

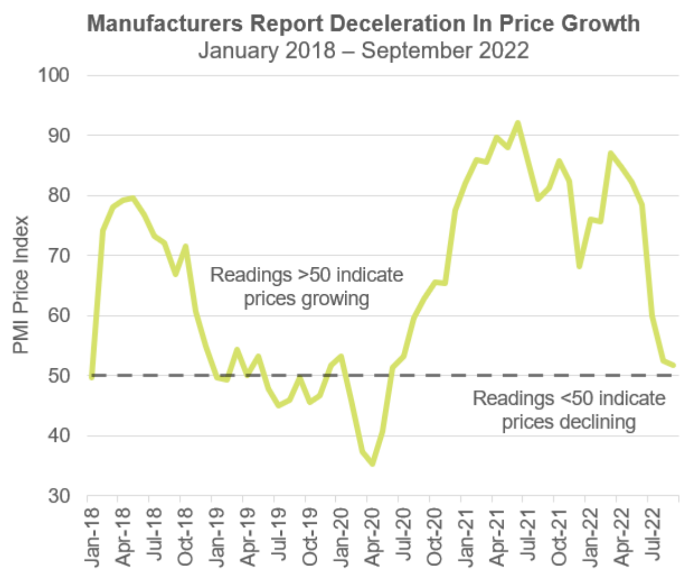
- Manufacturers are reporting a deceleration in price growth. U.S. manufacturing activity grew at its slowest pace in 2½ years in September as new orders contracted, according to the Institute of Supply Management's monthly survey of manufacturing supply executives.

- The market's inflation expectations have been trending gradually lower since March when the Fed began its hiking cycle. The 5-year breakeven inflation rate, which measures expected price growth from the prices of certain Treasury bonds, fell recently to its lowest point since early 2021 and is anchored to the Fed's 2% inflation target.

- Commodity prices, which helped drive inflation skyward earlier this year, already have dropped precipitously.

Supply-chain problems tied to pandemic-era





shutdowns still linger as a source of higher-than-desired inflation. But they are showing signs of improvement, according to the newest Fed governor, including shipping and freight times declining. "We have already seen some indications from survey data, information from transportation hubs, and producer prices that supply bottlenecks have, at long last, begun to resolve," Philip Jefferson said in an October speech.

Has peak inflation been reached? Inflation has persistently defied all predictions, and we will not make such a declaration. It also may take until well beyond 2023 to return to the 2% level. However, we believe the Fed's rate hikes have already done enough to send inflation lower and should make its retreat increasingly evident in upcoming monthly readings.

3. A year of global economic shocks has raised recession risks. If a recession occurs here, the U.S. economy's persistent durability suggests it is unlikely to be severe.

Given the triple whammy dealt by 2022 – high inflation, rapid monetary tightening and the Ukraine war – the global economy has held up relatively well amid the resulting turmoil. The International Monetary Fund, while warning in October that "the worst is yet to come," still projects 2.7% global GDP growth in 2023 despite the likelihood of recessions in the eurozone, Latin America and elsewhere.

China's slowdown is a major wild card for the world economy going forward, with its zero-tolerance approach to COVID-19 and a real-estate crunch both posing continuing threats. Europe will be tested by an energy crunch this winter as a result of Russia's gas cutoff, and Britain is fighting through economic chaos tied to its botched leadership transition. The United States, too, faces challenges but has avoided a deep slump. Based on current indicators, we believe that will be the case again next year as it moves toward recovery.

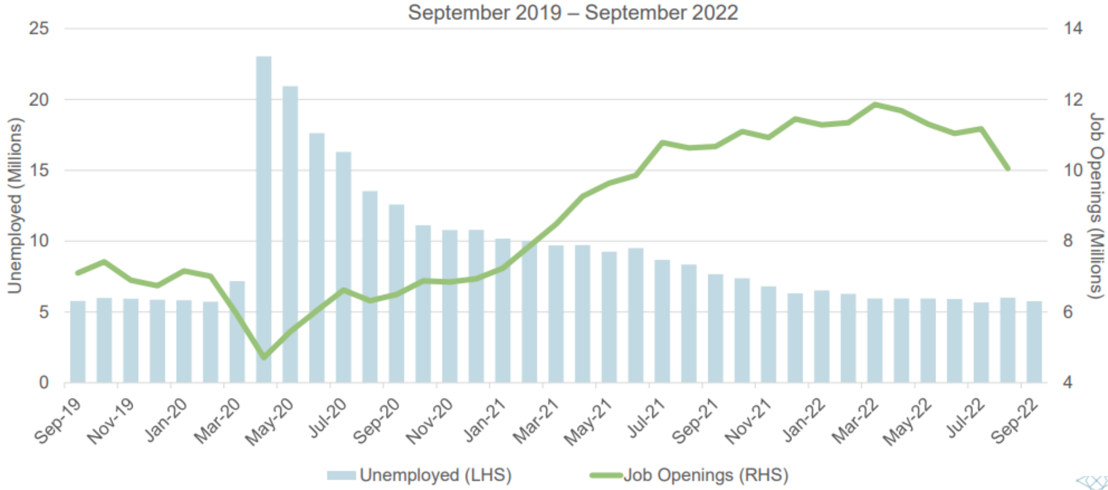
America's economy continues to show resilience, expanding at a healthy 2.6% clip in the third quarter. The downside is that because it is taking longer than anticipated to cool down, the Fed projects it will raise the federal funds rate even higher than previously planned, which will tighten the economy's belt another notch or two.

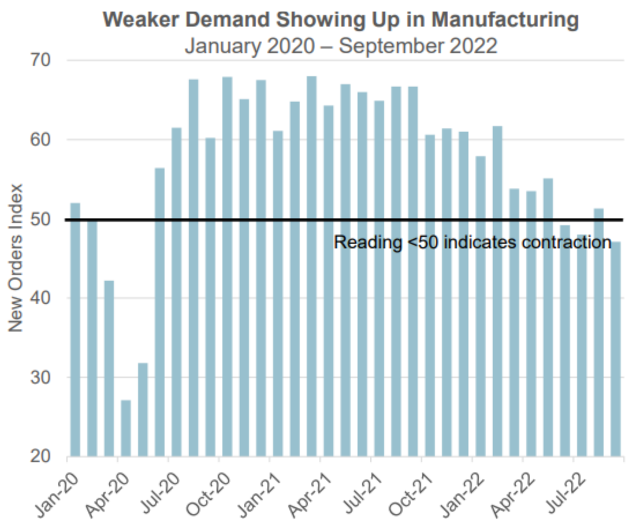
The upside is that the outlook for recession appears to have softened. Despite tepid growth – 1.6% this year and 1.0% in 2023, according to IMF estimates – economic indicators as a whole suggest that any recession that takes place will be modest and relatively brief. While CEOs surveyed recently by The Conference Board are preparing for a possible U.S. recession in the next 12 to 18 months, 85% said they expect it to be brief and shallow, with limited global spillover.

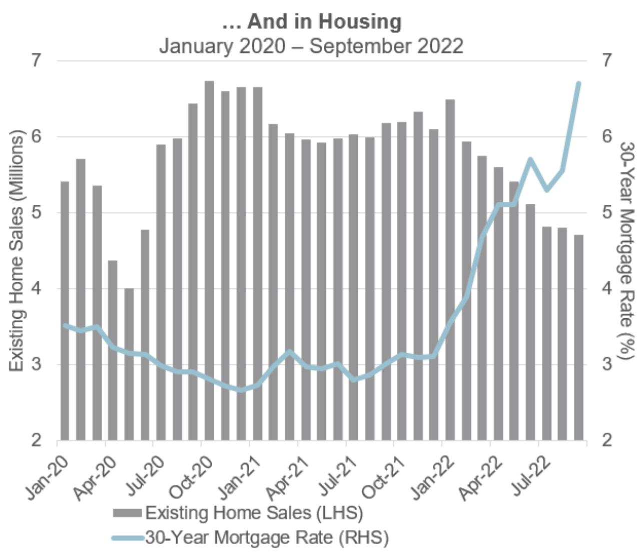
The labor market is still the linchpin, surprisingly strong even as jobs growth cools from the blazing-hot level of earlier this year. Unemployment dropped back to 3.5% in September, matching the pre-pandemic low. Current conditions would have to deteriorate significantly to produce a deep economic slump, as recessions typically are accompanied by a substantial loss of jobs.

Consumer confidence has risen for the past two months, buoyed by the job market and lower gasoline prices. Banks' balance sheets are healthy. Industrial production also remains robust.

Job Openings Drop While Unemployed Number Stays Level
September 2019 – September 2022





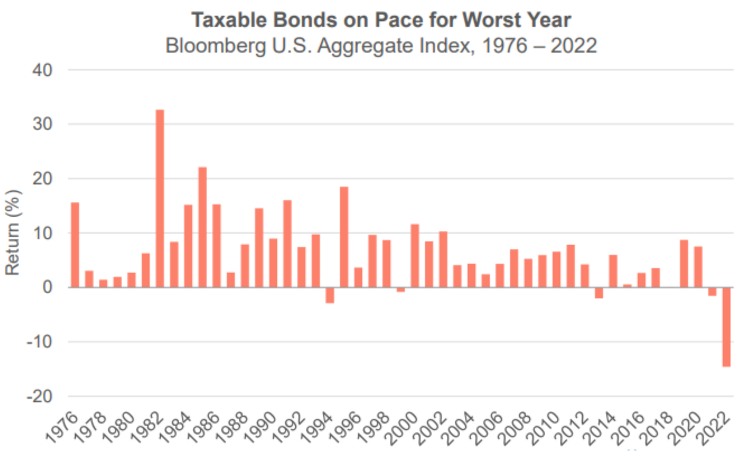


More weak spots have appeared in recent months. Retail sales have stalled this fall, although that is less of a concern than a sign the Fed's rate hikes are having a desired impact. The housing market is more of an issue with home sales and construction both down and likely to sink further with mortgage rates soaring; the average for a 30-year fixed loan jumped to a 20-year high above 7%. And the stock market's sell-off has reduced households' wealth.

All told, the data show an economy being buffeted by this year's storm but riding it out in stable condition. We believe it is unlikely to fall into a profound or lasting recession.

4. Stocks, bonds and real estate all remain under pressure in a year without safe havens. Yet a turnaround is inevitably coming and can be quick whenever it happens.

The historical rarity of this year's miserable market performance is small comfort to investors at the moment. Through nine-plus months, 2022 continues to be one of the worst years on record for stocks, bonds and real estate. Three consecutive quarters of declines for the S&P 500 along with both taxable and municipal bonds had never happened as far back as those collective indexes go. International stocks have fared even worse than their American counterparts again after slightly outperforming them in the first half. And real estate investment trusts are on a pace for their worst year since 2008 when they dropped by nearly 40%.



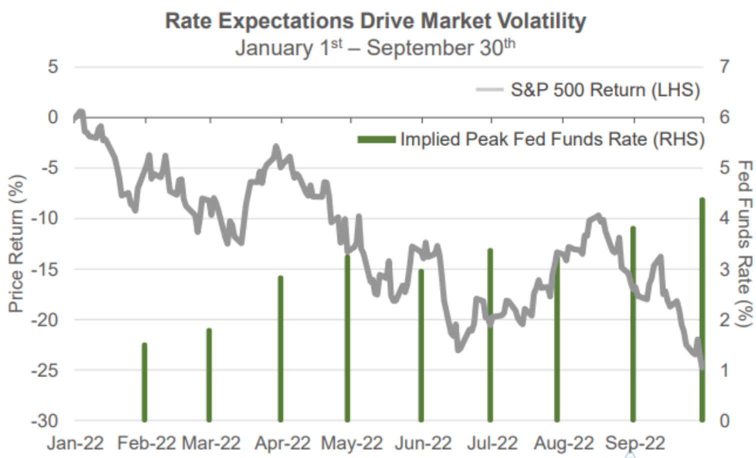
*2022 returns through 9/30/22

More trouble may well lie ahead before a turning point is reached, a consequence of continuing pressure from rate hikes and inflation. Yet we believe the bulk of this deep pullback has already occurred, particularly given our view that any potential recession will not be severe and is now at least partially reflected in today's heavily sold-off market prices.

We do not anticipate a V-shaped comeback like the one that followed the pandemic lockdowns in 2020. But a nervous market is ready to seize on even the hint of an emerging recovery to shoot higher. On October 13th, for example, the S&P 500 first fell

2.4% before reversing course to close up 2.6% for the day – a more than 5% intraday swing that underscored the unpredictability of markets.

While that short-lived rally was based on sentiment more than developments, we see fundamental as well as historical reasons for a sustainable market recovery in the not-distant future. The Fed is almost certainly closer to the end of its tightening cycle than the beginning. The dollar's 15% rise year-to-date is unsustainable in our view. And we believe bond yields should soon settle after this year's unprecedented surge.



The market's big losses this year, too, ironically mean expectations for future returns have actually risen in anticipation of the inevitable comeback. The S&P 500, which was down 23.9% for the year through September, has finished with annual losses of more than 20% just three times since World War II, in 1974, 2002 and 2008. Total returns the following year were 37.2%, 28.7% and 26.5%, respectively.

Another indicator with a strong track record as a contrarian signal is investor sentiment. Bearish sentiment, or expectations that stock prices will fall over the next six months, rose recently to the highest since March 2009 in a survey by the American Association of Individual Investors. Above-average market returns over the subsequent year have typically followed such an unusually high level of pessimism.

While inflation may remain stubborn, we expect it to head increasingly lower going into 2023. That should bode well for both a letup in Fed tightening and for markets, and we will be watching closely for an appropriate opportunity to overweight higher-risk assets in anticipation of a recovery.

There will be no advance warning for a market upturn. But it will almost certainly occur before the economy gives investors any kind of all-clear signal and long before inflation drops back down near the Fed's 2% target. If we are wrong and markets sell off materially from here, we will be ready to pounce on the resulting buying opportunity and add to higher-risk assets. For now, we believe patience is the best approach as this difficult year nears an end.

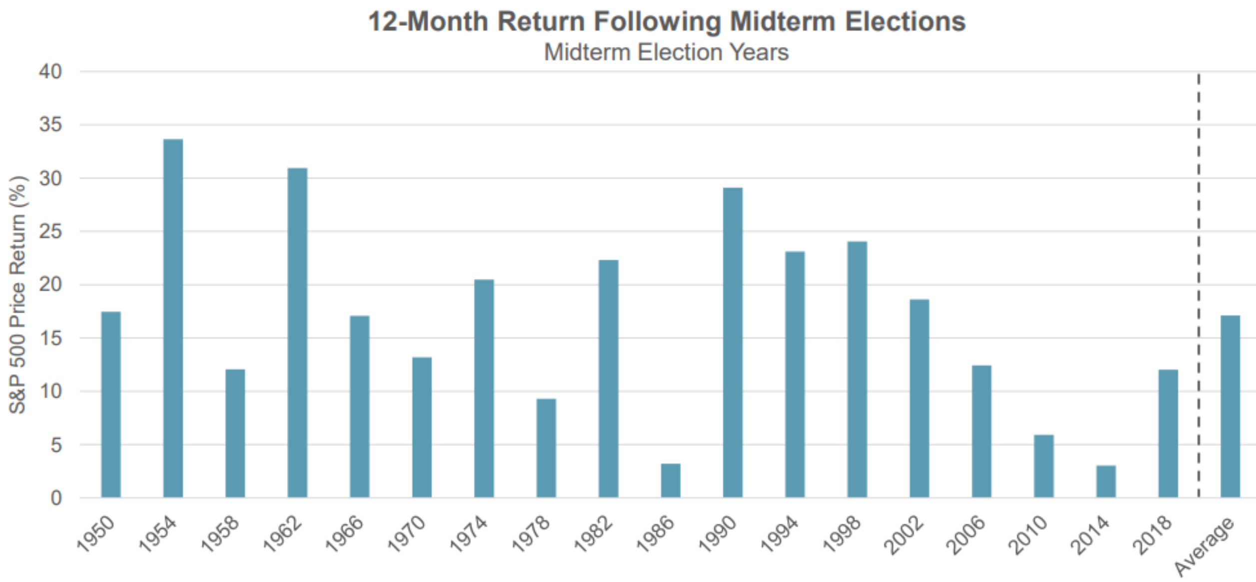
5. The post-midterms bounce that typically boosts markets after elections faces bigger hurdles in a challenging year, but there are reasons for its spotless record.

Markets' persistent record of gains in the year following midterm elections, while not guaranteed to repeat, holds out at least the potential for a tailwind for stocks following this year's painful pullback.

Just as a Santa Claus rally cannot be relied upon to make its usual appearance at year-end, the same holds for market performance tied to midterms. Any past statistical tendency must be viewed first and foremost through the lens of today's market and economic outlook. The Fed's clampdown on economic conditions could dilute or preclude any post-election bounce.

Still, the track record of this trend merits attention. The benchmark S&P 500 has risen in the 12 months after every midterm election since 1950. Returns have outperformed those of other periods, averaging about 17%.

Notably for today's investors, this trend has persisted through periods of high inflation, rising interest rates and recession.



Stocks have tended to rally after midterms regardless which political party gains or loses control in Washington, with the outcome removing much of the political uncertainty that clouds markets. That uncertainty is abundant this year. Not only are all 435 House seats and 35 of 50 Senate seats up for grabs, along with 36 governorships, but Republicans have a good chance to overturn Democrats' majority in both houses. That means a dramatic shift in the congressional agenda is possible, albeit still with divided government under a Democratic president for at least two more years.

Expectations of higher government spending tend to drive the post-midterms rise in stocks as much as the clarity gained on the political outlook. Big fiscal outlays are less likely in 2023 with the pandemic spending spree over and the government focused on reducing inflation. Substantial new spending is not off the table, however, especially if the Democrats retain control of both houses. The Biden administration could use higher taxes to help pay for additional big-ticket priorities such as a child tax credit extension, Medicaid expansion, clean energy and infrastructure.

We are not forecasting a sustainable surge in the market on the heels of the November 8th election. Too many issues must gain more clarity – most notably inflation and the extent and duration of rate hikes – before companies' outlooks brighten and investors fully regain their risk appetites. But based on the economy's continuing strength and with the Fed's rate-hike cycle moving along rapidly, we do expect the S&P 500 to rise from its current level in the year ahead.

Our Outlook

- **The Federal Reserve** is unlikely to halt its rate-hike cycle until the first half of 2023 with inflation still far above its 2% target. Its tightening will add pressure on the economy and markets for at least the near term. However, we expect the Fed to reduce the pace by year-end after one or possibly two more 75-basis-point increases.

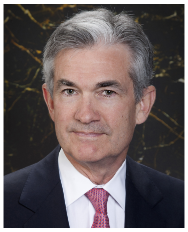
- **Inflationary pressures** are easing in key areas such as goods prices, construction materials, commodities and used cars. While the Consumer Price Index remains stuck near a 40-year high, we expect the cooling economy and latest rate increases to start producing steadily lower inflation readings in the months ahead.

- **A market recovery** is coming, though turbulence is likely to continue. The extent of further volatility hinges on the pace of both inflation and the Fed's tightening. If inflation soon shows signs of trending steadily lower as we expect, the Fed will have an opportunity to pause and the market should show increased strength.

- **Corporate profits'** weakening outlook has the potential to tip the U.S. into a modest recession, but a deep or protracted slump is unlikely. The labor market, personal income, industrial production and consumer confidence all remain robust.

- **Bonds** have had a historically poor year due to the Fed's unusually steep rate-hike cycle. We believe they still merit a place in portfolios going forward because of attractive yields, portfolio diversification and their historically low correlations to equities in a stable interest-rate environment. We expect the forward returns to be compelling.

Quotes of the Quarter



"No one knows whether this process will lead to a recession."
Jerome Powell, Federal Reserve chair

"My colleagues and I are resolute that we will bring inflation back down to 2%."
Philip Jefferson, newly installed Federal Reserve governor

"A global recession can be avoided if governments' fiscal policies are consistent with monetary policy tightening."
Kristalina Georgieva, International Monetary Fund chair and managing director

Market Data

U.S. Stocks

The stock market posted a third straight quarter of losses amid growing investor concerns that the Fed could cause a recession with its multiple interest-rate hikes. A summer rally trimmed the year-to-date loss of the iShares S&P 500 ETF to single digits by mid-August. But following tough talk from Fed officials and another too-high inflation reading, the market tumbled quickly; September was the worst month (-9.2%) for the index since March 2020 and the worst September since 2002. Overall the benchmark was down 4.9% in the third quarter and 23.9% through nine months, dipping to its lowest level since November 2020 on the final day of the quarter.

The only positive stock sectors in the quarter were consumer discretionary (3.9%) and energy (1.6%), which also was alone in positive territory (33.8%) year-to-date thanks to the runup in oil and gas prices. Growth stocks outperformed value stocks for the first time this year but both ended the quarter deep in the red for 2022.

The iShares Russell 2000 ETF finished ahead of its large-cap sibling with a 2.1% quarterly decline after an even wilder round trip: up 18.5% as of August 15th but all the way back down to negative territory again by quarter's end. For the year, the small-cap benchmark was down 25.1% -- the second-worst showing through nine months since its 1978 inception.

International Stocks

Accelerated policy tightening by global central banks and the surging U.S. dollar took a big toll on non-U.S. stocks in the quarter. The strongest dollar in two decades was a difference-maker, pushing developed and developing markets below U.S. stocks for the year after topping them in the first half.

The iShares MSCI EAFE ETF, which tracks stocks in 21 developed markets outside the United States and Canada, dropped by 10.4% and was down 27.0% through nine months. Stock indexes for markets in Japan and Europe posted quarterly declines in the low single digits and the overall EAFE index declined a modest 3.5% in local currencies. But investors were hit with significantly bigger losses after conversion to the dollar, which strengthened by another 7% against a basket of other major currencies from July through September and was up 17% year-to-date through September.

Emerging markets, more dependent on dollar-denominated commodities and on China's market, took a bigger nosedive. The iShares MSCI Emerging Markets ETF fell 13% in the quarter for a 27.9% year-to-date loss. The mainland stock index in China, which accounts for a third of the index, fell more than 15%. Brazil (8.1%) and India (3.8%) were rare winners in the quarter and Brazil also stood virtually alone with a year-to-date gain (10.6%).

Real Estate

Publicly traded real estate investment trusts underperformed the broad stock market in the quarter as interest rates steepened and most REITs shrank significantly in value. The Vanguard REIT Index Fund, consisting of U.S. stocks issued by commercial REITs, plummeted 12.8% in September alone as the Fed's toughened stance torpedoed a strong summer comeback. REITs tend to slump during rate hikes before recovering. The index was down 29.3% through three quarters in a complete turnaround from last year's 40.4% gain.

The Vanguard Global ex-US Real Estate ETF fared even worse as international central banks joined in ramping up interest rates. The fund plunged 13.7% in the quarter after a historically poor -12.1% showing in September and was down 29.3% year-to-date, the same as the U.S. REITs benchmark.

Hedged/Opportunistic

Publicly traded senior bank loans, as well as private debt (direct lending), avoided the turmoil that hit other asset classes during the quarter. The Invesco Senior Bank Loan ETF managed a 0.7% gain and was down 6.0% for the year. These loans generally have floating interest rates that fluctuate with short-term rates such as LIBOR or SOFR.

Our benchmark for securitized credit, a blend of 65% mortgage-backed bonds and 35% high-yield bonds, fell 3.8% and had a return of negative 13.7% through nine months of 2022 as rising rates and wider spreads created headwinds.

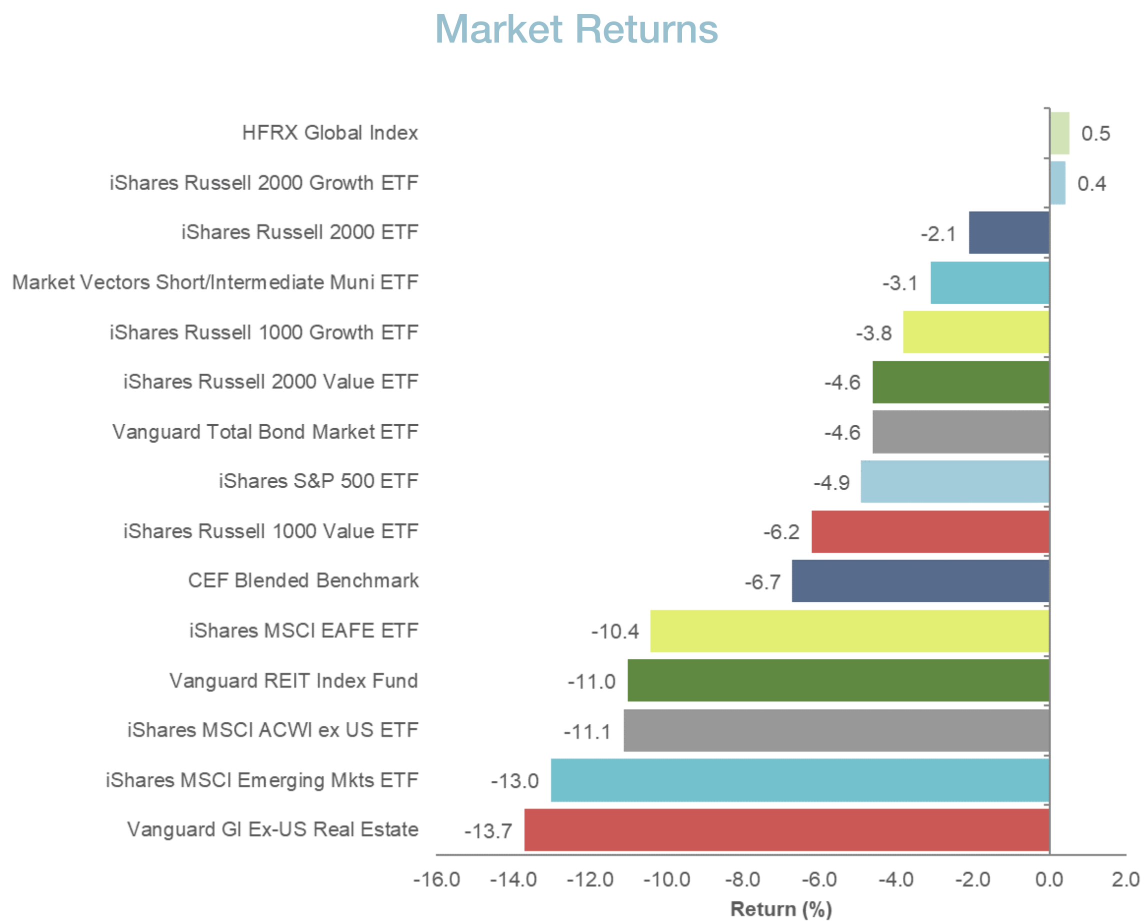
Hedge funds outperformed both stocks and bonds for a third consecutive quarter, this time managing a collective gain. The HFRX Global Index, a measure of the average hedge-fund performance, edged up by 0.5% to narrow its year-to-date loss to 4.6%.

Fixed Income

The rout in bond prices continued after a respite in July as the Fed extended its aggressive rate-hike cycle with steep increases for the second and third consecutive meetings. The Vanguard Total Bond Market ETF fell 4.6% in the quarter for an unprecedented 14.5% decline to date in 2022. The drop reflected the sharp rise in yields, which climbed to match the Fed's rate actions. The 10-year U.S. Treasury yield moved above 4% for the first time in a decade.

The municipal bond market experienced a similar but slightly smaller contraction. Strong fundamentals and reduced supply in the municipal market have contributed to their outperformance versus the taxable market. Altair's benchmark for tax-exempt munis, a blend of the Market Vectors short and intermediate ETFs, was down 3.1% in the quarter and 9.1% for the year.

Third Quarter 2022 Market Returns



Investable Benchmark Returns through September 30, 2022

	Quarter (%)	Year-to-Date (%)	Annualized 1 Year (%)	Annualized 3 Year (%)	Annualized 5 Year (%)	Annualized 10 Year (%)
Large Cap Equity						
iShares S&P 500 ETF	-4.9	-23.9	-15.5	8.1	9.2	11.7
iShares Russell 1000 Growth ETF	-3.8	-30.9	-22.9	10.4	11.9	13.5
iShares Russell 1000 Value ETF	-6.2	-18.3	-12.0	4.0	5.0	8.9
Small Cap Equity						
iShares Russell 2000 ETF	-2.1	-25.1	-23.6	4.2	3.5	8.5
iShares Russell 2000 Growth ETF	0.4	-29.1	-29.2	2.9	3.5	8.9
iShares Russell 2000 Value ETF	-4.6	-21.2	-17.9	4.5	2.7	7.8
International Equity						
iShares MSCI ACWI ex US ETF	-11.1	-26.6	-25.2	-1.9	-1.1	2.9
iShares MSCI EAFE ETF	-10.4	-27.0	-25.0	-2.0	-0.9	3.6
MSCI EAFE Index - in local[1]	-3.5	-14.1	-10.7	3.0	3.3	7.9
Vanguard FTSE Europe ETF	-12.2	-30.6	-27.1	-2.1	-1.5	3.5
Vanguard FTSE Pacific ETF	-9.3	-25.5	-26.9	-2.1	-0.8	4.1
iShares MSCI Emerging Mkts ETF	-13.0	-27.9	-29.1	-3.1	-2.8	0.4
Fixed Income						
Market Vectors Sh/Inter Muni ETF	-3.1	-9.1	-9.0	-1.4	0.3	0.9
Barclays 5 Yr Muni Index[1]	-2.7	-8.1	-8.0	-0.9	0.5	1.2
SPDR Nuveen Barclays Muni Bond	-3.6	-14.0	-13.2	-2.8	-0.1	1.3
Vanguard Total Bond Market ETF	-4.6	-14.5	-14.5	-3.3	-0.3	0.8
Gl FixedInc Investable Benchmark	-7.3	-21.0	-21.7	-6.7	-2.9	-1.4
iShares BarclaysInt Govt/Credit	-3.2	-9.6	-10.3	-1.9	0.1	0.8
Alternative						
SPDR Barclays High Yield Bond	-1.7	-16.2	-15.6	-2.1	0.3	2.4
Vanguard REIT Index Fund	-11.0	-29.3	-18.7	-1.6	3.1	6.2
Vanguard Gl Ex-US Real Estate	-13.7	-29.3	-28.4	-9.4	-4.2	1.3
HFRX Global Index	0.5	-4.6	-4.5	2.7	1.7	1.8
HFRX Equity Hedge Index	-0.1	-4.8	-2.3	4.7	2.8	3.2
DRA Strategic Benchmark	-5.8	-8.2	-4.4	4.6	3.9	2.4
CEF Blended Benchmark[1]	-6.7	-24.3	-21.2	-1.4	1.2	3.6
Other Common Benchmarks						
SPDR Dow Jones Industrial Avg	-6.2	-19.8	-13.4	4.2	7.3	10.3
Fidelity Nasdaq Comp. ETF	-3.7	-31.6	-25.7	10.9	11.4	14.2
iShares MSCI ACWI ETF	-7.2	-25.6	-20.5	3.7	4.5	7.5
SPDR Barclays 1-3 Month T-Bill	0.4	0.5	0.5	0.4	0.9	0.5
Inflation - CPI[1]	0.2	6.5	8.2	5.0	3.8	2.5

[1]There is no investable equivalent for this index

Source: Financial Times Interactive Data (IDC) and Charles Schwab.

This table was prepared using investment performance and other information obtained from third-party sources, which we believe to be reliable; however, we have not audited the data from these sources and are not responsible for its accuracy. Past performance is no guarantee of future results.

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The Closed-End Fund Blended Benchmark consists of 60% First Trust Equity Closed-End Fund TR USD Index, 20% Invesco CEF Income Composite ETF, and 20% VanEck Vectors CEF Municipal Income ETF.

The Securitized Credit Benchmark consists of 65% iShares MBS ETF and 35% iShares iBoxx $ High Yield Corporate Bond ETF.

The U.S. Municipal Bonds Benchmark consists of 65% VanEck Short Muni ETF and 35% VanEck Intermediate Muni ETF.

Altair's Senior Team

Managing Directors

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Chief Executive Officer

Steven B. Weinstein, CFA, CFP®
Chairman

Jason M. Laurie, CFA, CFP®
Managing Director & Chief Investment Officer

Timothy G. French, CFP®, CPA
Managing Director & Chief Client Officer

Richard K. Black, JD, CFP®
Managing Director

David J. Lin, CFA
Managing Director & Head of Investment Research

Bryan R. Malis, CFA, CFP®
Managing Director

Rachael Halstuk Mangoubi, CFP®, CPWA®
Managing Director

Michael J. Murray, CFA, CFP®, CAIA
Managing Director

Donald J. Sorota, CFP®, CPA
Managing Director

Client Service

Lisa Micka, CFP®, CPWA®, AEP®
Director

Peter A. Paolilli, CPWA®, CEPA
Director

Jenn R. Shepard, CFA, CFP®
Director of Client Services

Business Development

William C. Shannon, CIMA®, CPWA®
Director of Strategic Growth

Marketing

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