ALTAIR INSIGHT

Quarterly Market Review

A Pivotal Year

January 2024

Sun Valley, Idaho
Don Sorota, Managing Director

Fourth Quarter 2023 Key Topics

1. The Fed's signaled rate reversal should be a tailwind for both the economy and markets.

2. The U.S. economy appears headed for a soft landing, defying widespread predictions last year.

3. Markets are evolving as the Magnificent Seven's dominance of 2023 is replaced by more breadth.

4. The presidential election is a wild card, but history shows the outcome rarely has a material impact on markets.

5. Risks still abound in 2024, but so too do opportunities.

The Federal Reserve under Chair Jerome Powell has implied its next play call will be to reverse direction and lower interest rates after raising them 11 times (totaling 5.25 percentage points) in 2022 and 2023.

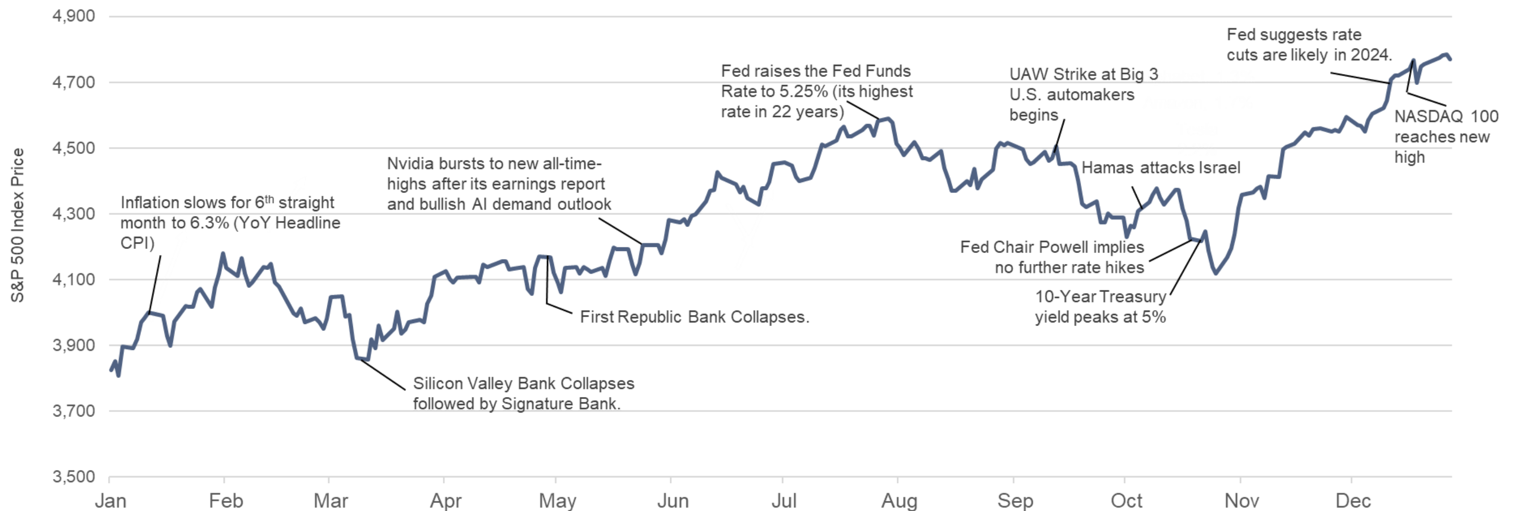
It is difficult to make predictions, especially about the future, according to a proverb that probably originated with an unidentified Dane. (Bet you thought it was Yogi Berra.) But we will go out on a limb and proclaim 2024 as not only the Year of the Dragon, as the Chinese zodiac declares, but the Year of the Pivot for financial markets and the economy.

The Federal Reserve under Jerome Powell has signaled that its playbook will soon call for a reverse of direction. After raising the benchmark interest rate to the highest level in 22 years, it will finally begin lowering it as inflation shrinks. While the Fed has left the world guessing about the specifics, odds are that this pivot will begin at its meeting in March or May. Central banks in Europe and Japan also have indicated they are cutting rates. China's outlook is more in question, since the world's second-largest economy is struggling.

Besides taking pressure off the economy and markets, the shift should mark another big step toward normalcy – positioning this to be the first year of the 2020s without a pandemic or rate hikes. This hardly foretells a year without volatility or risk, particularly with the economy widely expected to slow. But it does spell hope that the massive economic disruptions and abnormal market movements of the past four years are behind us.

U.S. companies have a record amount of cash and are expected to continue the earnings rebound that began last fall. Rate cuts at a time when profits are growing can only add to momentum. Add the growing expectation of a soft landing – a cyclical slowdown in economic growth that steers clear of recession – and you have the makings of another good year for markets.

Plenty could certainly go wrong. An error by the Fed could trigger a recession. Inflation could reignite due to geopolitical shocks, scuttling global central banks' plans to make their policies less restrictive. The interest in the AI-driven technology sector that was responsible for most of the market's gains last year could unexpectedly wane.



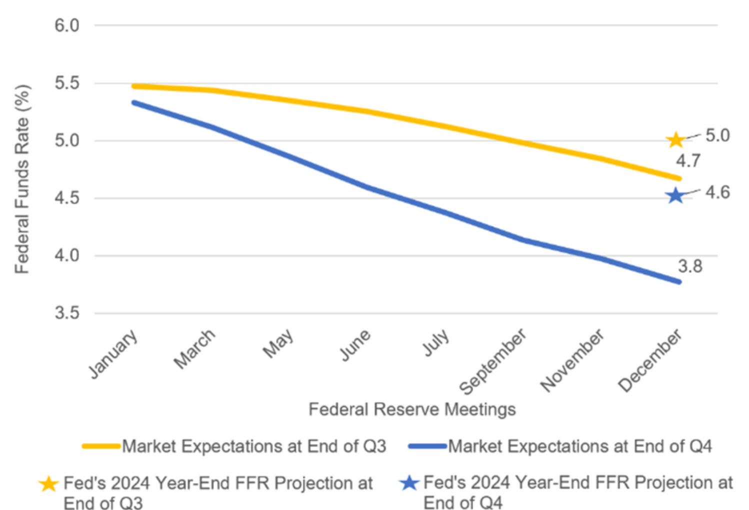
On balance, however, we believe the positives outweigh the negatives. Consumers and the labor market continue to defy expectations with their resilience, upholding economic growth. The stock market's strength broadened by the end of 2023 beyond just the high-performing tech stocks dubbed by Wall Street last year as the Magnificent Seven – Alphabet, Amazon, Apple, Meta, Microsoft, Nvidia and Tesla. The bond market has stabilized as yields come down. Presidential election years may bring periodic volatility but in the past they have rarely caused market pullbacks. And the shifting economic landscape in the wake of the pandemic has created investment opportunities beyond the risks, including within the slumping commercial real estate market.

We retain our tactical overweights to U.S. large- and small-cap stocks and recommend that clients remain fully allocated to target levels in the higher-, medium- and lower-risk categories.

Please read on for more of our thoughts on key issues affecting markets.

1. The Fed's signaled rate reversal should be a tailwind for both the economy and markets.

The Federal Reserve has made a welcome shift in its outlook since late last year, effectively replacing



"Higher for longer" with "A change is gonna come." (Apologies to the late, great Sam Cooke.) Whenever it comes, the pivot will bring long-awaited relief to American businesses and consumers who have been bearing the burden of high rates. It also should add more fuel to markets on top of their late-year surge.

The sooner the better, in our view. We voiced the belief in past commentaries that a federal funds rate of 5% or slightly higher would not be oppressive for companies, and that has been the case so far.

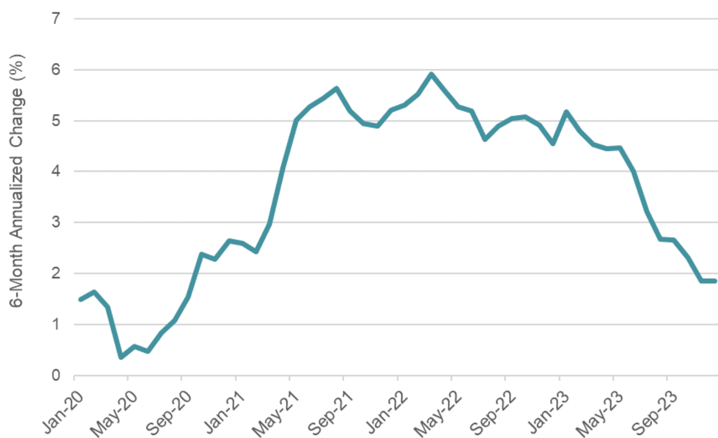
Forward-looking statements may not come true. See disclosures at end of document.
Sources: Morningstar, CME Group, Federal Open Market Committee

Even with the rate at 5.25% since July, corporate earnings strengthened in the second half of 2023 and so did GDP, enabling the economy to expand by a robust 3.1% for the full year. But keeping it there for an extended period is a gamble and would eventually weigh too heavily. It means the clock is ticking on the longer-term toll of high rates on the economy.

The latest inflation data suggests to us that it should be safe to put the change into action beginning with the Fed's next meeting in March. In addition to progress in the personal consumption expenditures (2.6%) and consumer price (3.4%) indexes, the core producer price index, an inflation bellwether that measures wholesale prices, fell in December for a third straight month – the longest streak since 2020 – to just 1.8% year-over-year. Based on their repeated pledges to ensure that inflation is vanquished before they make their policy less restrictive, Jerome Powell and associates may still wish to see more evidence before acting. But it is hard to imagine them waiting beyond their subsequent meeting on May 1st.

6-Month Annualized Change in Core PCE At Fed's Target

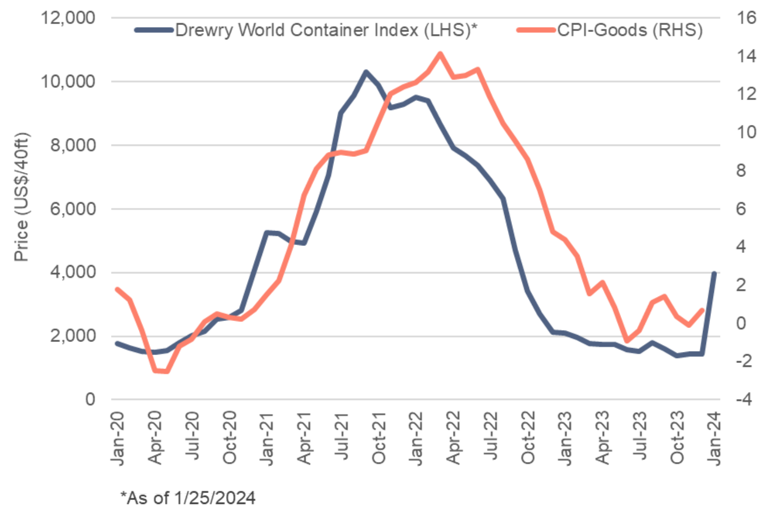
January 2020 – December 2023



Along with rate cuts, another tailwind for financial markets should come at some point from the Fed's planned reduction of quantitative tightening – policies

Shipping Diversions Create New Inflation Risk

January 2020 – January 2024



that contract its huge balance sheet and remove liquidity from markets. Powell said in December that the plan is to "slow and then stop the decline," although he did not specify when.

This is a critical year for not only investors but the Fed chair, too.

Any Wall Street version of the FBI's Ten Most Wanted list a year or two ago surely would have started with Powell. He was maligned for first standing by as inflation soared to 9% and then belatedly launching the most aggressive monetary tightening cycle in decades, taking the rate from 0% to 5.25% in 16 months. Powell still would be an underdog in any popularity contest. However, if price growth continues to cool toward 2% this year without a recession, he may be able to claim a legacy as a successful inflation-fighter in the mold of his role model Paul Volcker.

The central bank is on the right course. But it still must reduce rates at the right pace to avoid both resurgent inflation and an economic contraction in order to "stick the landing" of its exit strategy. That task is complicated by the fact that monetary policy has a delayed impact, making it hard to assess the full consequences of its tightening.

How much credit Powell would deserve if the Fed achieves this Goldilocks scenario is up for debate. The case can be made for inflation having tumbled due to the economy's return to normalcy after the pandemic more than because of the Fed's hawkish policy. Regardless, Powell remains central to how this narrative plays out for the economy and markets.

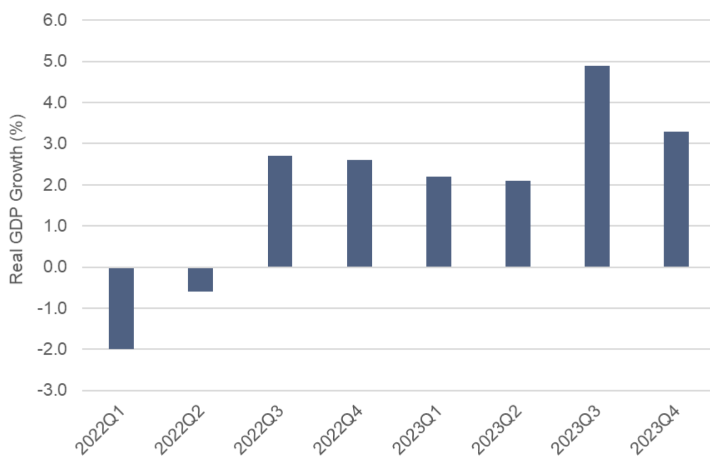
We expect the Fed to move more slowly than markets do. Lowering the rate to 4% or under with at least five 0.25% rate cuts this year, as an overwhelming majority of traders gauged by the CME FedWatch Tool estimate, seems unlikely unless there is a recession, which is not our base case. But we do expect the Fed to begin cutting soon. About three cuts seems likely to us, which would still be a lift for business and consumer sentiment and supportive for markets.

2. The U.S. economy appears headed for a soft landing, defying widespread predictions last year.

The runway is clear. The flight is steady. The descent: barely perceptible so far. An economy that many expected to be mired in a recession by now may avoid one entirely. More data is needed before it is known for sure whether this is a soft landing, a hard landing or no landing at all. But the trend is increasingly positive.

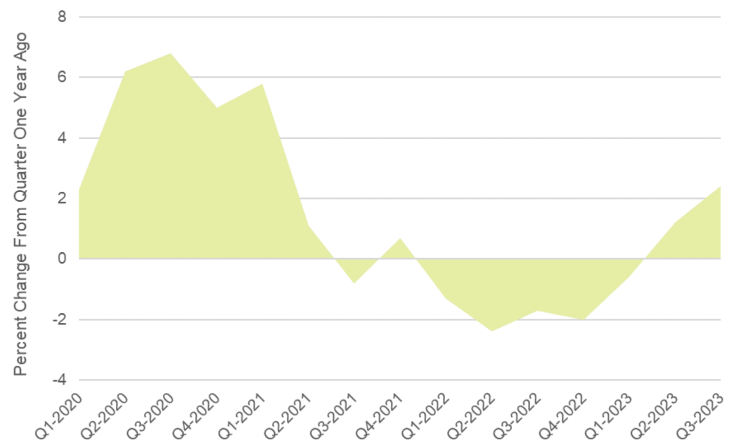
The Economy Continues to Grow

January 2022 – December 2023



Productivity Drives Growth

January 2020 – September 2023

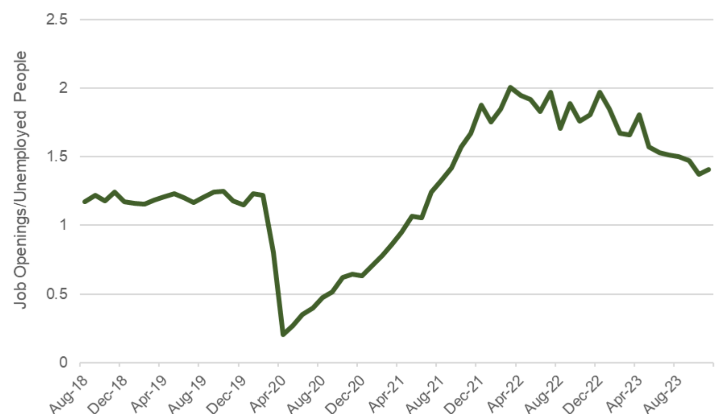


Some flashing caution lights, discussed below, tell us trouble remains possible. However, the economy is clearly on course at the moment toward a soft landing, which will happen if it slows enough to bring inflation down toward the Fed's 2% target without falling into a deep recession.

The same two pillars that have sustained the economy since the Fed's clampdown began, consumers and the labor market, are holding firm. Consumers' resilience through the rise in prices has supported growth without reigniting inflation; inflation-adjusted spending rose 2.7% year-over-year through November last year, similar to the pre-pandemic pace. And labor demand is easing but still healthy. The labor market added 2.7 million jobs in

Labor Market Coming Into Balance

August 2018 – November 2023



Forward-looking statements may not come true. See disclosures at end of document.

Sources: Bureau of Economic Analysis, St. Louis Federal Reserve

2023, unemployment remains low at 3.7%, and wage growth is declining but still stubborn at 3.8%.

The long-slumping housing market, which saw a glimmer of hope with last year's 4.2% rise in new home sales, should get a significant boost this year from a drop in mortgage interest rates. And U.S. companies are in stronger shape than a year ago, with corporate cash flow at a record high. Analysts predict improved corporate profit growth as S&P 500 companies step out of their extended earnings slump, although we are watching fourth-quarter earnings reports closely.

A handful of key indicators give us pause. Their latest readings and our brief takes:

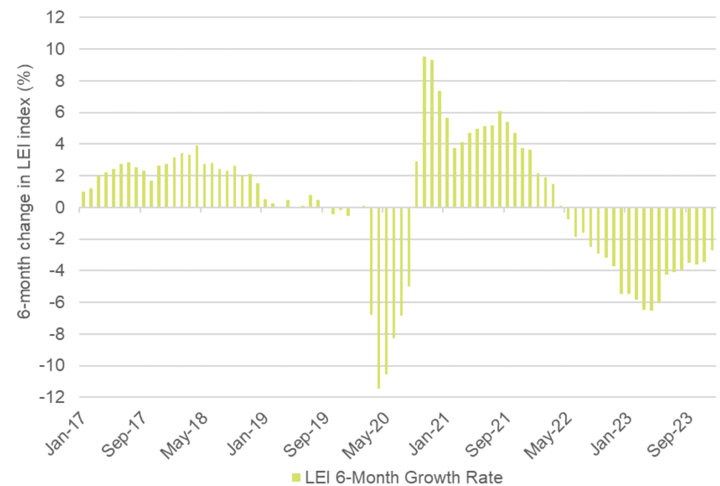
- **The Leading Economic Index** whose 10 components tend to foreshadow changes in the overall economy, fell by 2.9% from June through December. An economic downshift is not necessarily imminent or even assured; the index has been declining for 21 straight months, a period of modestly increasing GDP that strengthened in the second half of last year. The seemingly contrary recent signal could be due to its tilt toward measures of the goods sector, where weakness has been more than offset by strength in services and other areas.

- **Manufacturing** as measured by the purchasing managers' index (PMI) has been below 50 for the past 14 months, signifying negative growth in factory activity. It is the longest such period of contraction since one from August 2000 to January 2002. A recovery may be taking shape, however. December brought a modest rebound in production and improvement in factory employment.

- **A yield curve inversion,** with yields on short-term bonds higher than yields on long-term bonds, has existed since the summer of 2022. Such an inversion has preceded all 10 recessions since 1955, according to the Federal Reserve Bank of San Francisco, with only one false positive in the mid-1960s. It has proven a poor indicator of the timing of a recession, however.

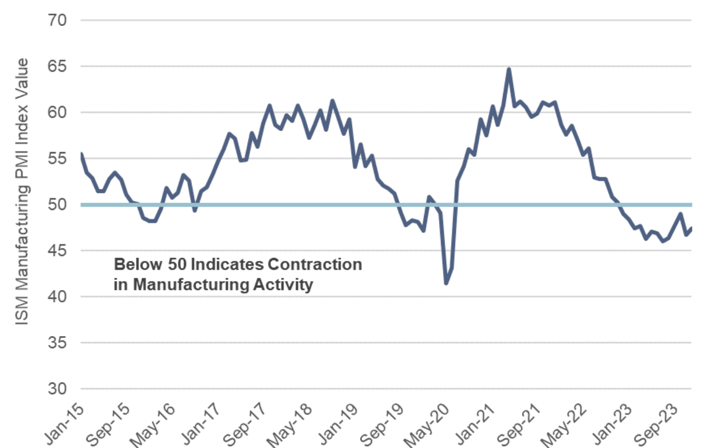
Leading Economic Indicators Still Negative

January 2017 - December 2023



Manufacturing PMIs Steadily in Contraction

January 2015 - December 2023



Internationally, the Houthis' attacks on Red Sea shipping make us wary of a potential resurgence of inflation if they force a long-term diversion of cargo carriers to a much longer, costlier route. Global growth, too, is expected to stay sluggish, with the wars in the Middle East and Ukraine and China's

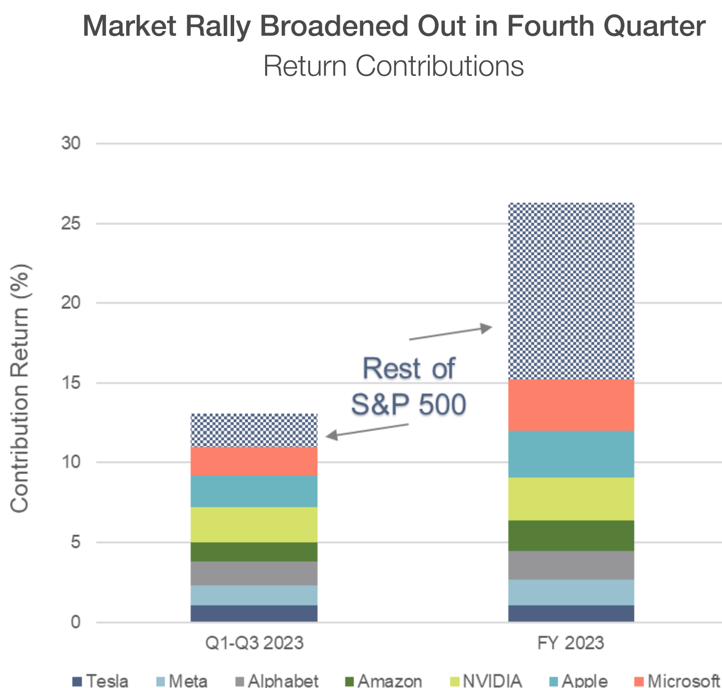
economic struggles weighing on output. But even amid widespread forecasts of weaker growth, central banks' loosening policies should help make a global recession unlikely.

Our seatbelts remain fastened. Given the caution signals, we do not believe this will be a perfect landing for the economy. But even a softish landing is good news for investors.

3. Markets are evolving as the Magnificent Seven's dominance of 2023 is replaced by more breadth.

The seven tech giants that carried the U.S. stock market on their backs for most of last year got some big-time help from the rest of the companies in the Standard & Poor's 500 when they began straining under the burden last fall. We are not counting on a repeat of the "everything rally" that dramatically elevated the S&P and almost all other markets in November and December before flattening in January. However, the broadened strength of a more balanced market bodes well for investors and diminishes the risk of a big pullback.

Market Rally Broadened Out in Fourth Quarter
Return Contributions



The Magnificent Seven accounted for virtually the S&P 500's entire total return through three quarters before that share dropped to "only" 62.2% of the 26.3% return for the full year. The market shift to more balance took shape after the end of October, when small caps, real estate stocks and value stocks were solidly in the red for the year. The same held for the benchmarks for taxable and municipal bonds. Within two months, all had delivered strong full-year gains. Yet the Magnificent Seven retained some momentum too, closing out the year with average total returns of 104.7% each.

We expect the widening of returns across the market to produce further gains, albeit more muted. The improved breadth is not just in capitalization and asset class; it also is visible by sector. Besides technology, only communications services and consumer discretionary stocks were positive through three-quarters of 2023. By year-end, financials, industrials, materials and real estate had not only joined them but finished with double-digit gains, leaving just utilities, health care, consumer staples and energy stocks negative for the year – the last two only fractionally.

The rally has lifted stock valuations to the high end of normal, raising questions about how much room it has left to run after such a strong 2023. As always, returns this year will be guided by the economy, the Fed and corporate earnings as well as by continued advancements in AI and whatever unpredictable events lie ahead. As mentioned, we think both the Fed and an economy that avoids recession will be supportive. But historical precedents for the follow-ups to big market years also are not discouraging. The S&P 500 has delivered a yearly return of 20% or more (including dividends) 27 times since World War II, and the following year's return has been positive in all but seven. The average next-year return was 11.4%, our research found.

International stocks in developed markets, which began 2023 by outperforming their U.S. peers in the

first quarter, showed renewed strength in the last three months with a 10.7% surge to cap a strong year. They should benefit from interest-rate cuts in multiple countries as foreign central banks follow the Fed's lead. But they will be tested by weakening economic conditions in Europe, wars in Ukraine and Gaza and consequences of China's muted growth.

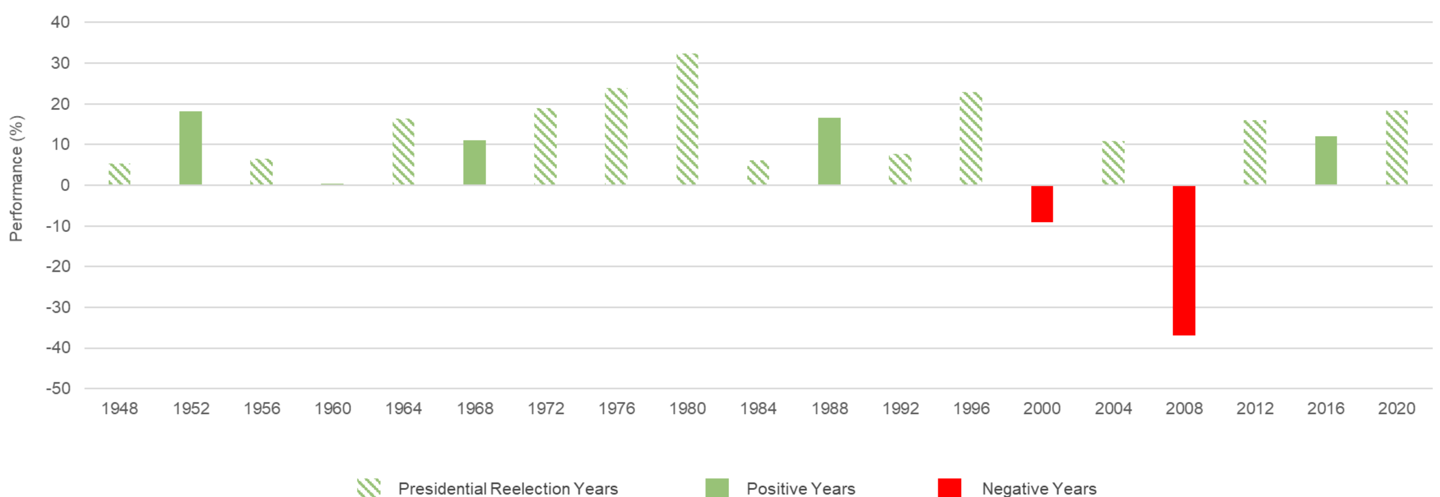
The upside risk is that markets are positioned for a lengthy run higher without rate hikes, a pandemic or – if our base case is correct – a recession looming. The last time the Fed pulled off a successful soft landing, in 1995, markets went on to enjoy banner years from 1996-99 after the economy shrugged off initially weak growth and went on to prosper. We cannot expect a repeat of that historic run; 1995 is remembered as a "perfect landing," and this one is less clear. But the potential for a sustainable run exists if the economy stays strong.

4. The presidential election is a wild card, but history shows the outcome rarely has a material impact on markets.

The economy, interest rates and inflation will almost certainly have more impact on the markets this year than the election, in our view. That does not preclude the chances of temporary volatility that is common in the runups to both Super Tuesday, which is just weeks away, and Election Day itself. But there is little historical precedent to suggest that politics will have a sustained effect on portfolios going into or following a presidential election.

The stock market has had a wide range of outcomes in presidential election years, as just the handful of results from the 21st century so far demonstrate. The benchmark S&P 500 Index fell substantially in 2000 (-9% total return) and 2008 (-37%) and delivered double-digit gains in the two most recent election years (12% in 2016 and 18% in 2020) despite diametrically opposed outcomes for Republicans and Democrats. That is a range of 55 percentage points between best and worst election-year performances in a still-young century.

Yet over the long term the market has performed well in most election years, especially those when the president is up for reelection. While past performance does not guarantee future results, the historical data sheds light on how investors respond to the risks posed by election years.



Forward-looking statements may not come true and past performance does not guarantee future results. See disclosures at end of document. Source: Morningstar

Some findings from Altair's research:

- **Average returns have been favorable, if somewhat lagging.** The S&P 500 and its predecessor index, the S&P 90 before 1957, have averaged annual total returns of 10.4% in the 19 presidential election years since World War II. That compares to the index's 13.1% average return for all other years in the postwar period.

- **Only two negative years in the postwar era.** Seventeen of 19 presidential election years since WWII – all but 2000 and 2008 – have delivered positive total returns.

- **Reelection-year returns are better.** Performance in presidential reelection years (when the incumbent sought another term) has been stronger, averaging 15.5% since WWII.

All told, the market has delivered a positive total return (with dividends) in every presidential reelection year since World War II.

A key reason behind this trend is that policymakers generally deploy more monetary and fiscal measures in years when presidents seek reelection, according to Dan Clifton of Strategas Research. This year the combination of Fed rate cuts, spending from the trillion-dollar infrastructure package of 2021, and pending legislation in Congress providing corporate tax breaks could provide a powerful stimulus.

To be sure, surprises could emerge to disrupt important votes in what is a big election year not just in this country but around the globe. But there is little historical precedent to suggest that politics will affect portfolios going into or following a presidential election.

5. Risks still abound in 2024, but so too do opportunities.

Even with the U.S. on course to avoid a recession and the global economy staying resilient, there are potential hazards to be wary of. There also are investment opportunities to be had, including in stressed sectors.

Some of the opportunities we see are in areas shaken by the pandemic but positioned for recovery:

- **Commercial real estate** still suffers from high interest rates, a difficult lending environment, pricing uncertainty and other consequences of post-pandemic turmoil. Even previously thriving sectors are seeing a huge slowdown in deal activity. But pockets of opportunity are emerging across most sectors, where there is meaningful value in fundamentally sound properties that are now beginning to sell at significant discounts.

  We are allocating capital to a private real estate manager that seeks to take advantage of these discounts. They will target dislocated commercial properties in Class A+ multi-family, mixed-use, hospitality and unique office offerings.

  We also are recommending that clients allocate capital to a private real estate manager that is attempting to disrupt the cold food storage business through technology with industry-leading automated facilities. Post-pandemic, food producers are aggressively rationalizing their supply chain processes and automated facilities allow for larger footprints and less employees, resulting in energy reductions by two-thirds and labor cost cuts up to 80%.

- **Private debt** continues to be a compelling opportunity. Interest rates are expected to stay elevated even with multiple rate cuts projected, and the supply of capital remains constrained as traditional lenders – the banks – no longer are willing to fully service this space. We have previously recommended private debt investments on the corporate side in direct lending (first lien, senior secured loans) and distressed debt, which is the lowest part of the

capital structure. We plan to expand our recommendations in this category and will soon allocate client capital to a private debt manager that can be more opportunistic and flexible throughout the capital structure and also lend in areas that are less correlated to the economy, such as asset-based lending, real assets lending or litigation finance.

- **Private equity** acquisitions remain sluggish, mostly because high interest rates have virtually halted the industry and “exits” through mergers and acquisitions or initial public offerings were meager in 2023. There should be some pickup in 2024, but only for the best deals. Managers that have sufficient capital should be able to cherry-pick the best deals and demand favorable deal terms because many early-stage companies must raise capital to survive no matter the fund-raising environment.

The following risks (in addition to those mentioned earlier) add caution to our outlook:

- **A Fed fumble** would be an economic game-changer. The Federal Reserve has signaled its pivot, but if the follow-through is too slow and rates are kept too high, the risk of recession rises meaningfully. Jerome Powell himself acknowledged the risk in December: “We’re aware of the risk that we would hang on too long (before lowering rates). We’re very focused on not making that mistake.” That awareness does not guarantee a smooth exit from high rates.

- **Geopolitical threats** always weigh on the global outlook. In addition to the protracted war between Russia and Ukraine, expanded fighting in Gaza in 2024 could escalate into a broader Middle East war. Expansion threatens to disrupt oil production and send prices sharply higher. It also could risk directly entangling Iran and the United States.

Our Outlook

- **The Federal Reserve** is poised to make multiple interest-rate cuts this year but we believe there will be fewer than the five or more that the market consensus predicts. The Fed remains data-dependent and any setback in its war on inflation could change its plans.
- **Inflation** should track steadily lower in the months ahead unless the disruption of global shipping routes caused by Houthi attacks becomes protracted or war in the Middle East expands. It is on track to reach the Fed's 2% goal well before the central bank's conservative timeframe estimate of 2026.
- **A recession** appears unlikely in the near future. While the delayed impact of historically high interest rates has yet to be fully felt, the strength of consumers and the labor market suggest the economy can endure a slowdown in growth before ultimately gaining renewed momentum from lower interest rates.
- **Stocks** will be hard-pressed to match last year's strong double-digit gains but should benefit from less restrictive monetary policies both in the United States and abroad. U.S. companies' strengthened fundamentals should power a continued earnings recovery.
- **Bonds** also should benefit from more dovish global central banks, the Fed included, as well as continued positive real returns. The U.S. 10-year Treasury yield may be pushed lower, although we expect it to be more rangebound in 2024 than the wide range in which it moved throughout 2023.

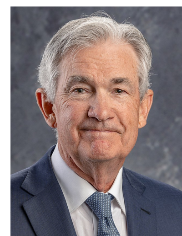
Quotes of the Quarter

"The world economy has proven to be remarkably resilient. … There is some (tail)wind coming from 2023 into 2024."

Kristalina Georgieva
International Monetary Fund managing director

"We are not at the soft landing yet, but we are getting close."

Claudia Sahm
former Federal Reserve principal economist



"It is far too early to declare victory, and there are certainly risks. (But) there's a general expectation that (lowering rates) will be a topic for us, looking ahead."

Jerome Powell
Federal Reserve chair

Market Data

U.S. Stocks

Growing prospects of interest-rate cuts after a long cycle of increases triggered the best quarter for the S&P 500 in three years and the market's best year since 2019. The iShares S&P 500 ETF rose 12.2% over the final three months for a full-year gain of 26.3%, including dividends. The mega-tech companies dubbed the Magnificent Seven for their overwhelming dominance of the market in 2023 – Alphabet, Amazon, Apple, Meta, Microsoft, Nvidia and Tesla – slowed their pace in the second half as the rally broadened. They still ended up accounting for nearly two-thirds of the S&P 500's gains for the year, but the rest of the index also had a solid year with a collective return of 10%.

Small caps revived in a big way at year-end after having been negative for 2023 as late as mid-November. The iShares Russell 2000 ETF benchmark made up for lost time when investors' risk appetite returned, finishing with a 14.5% fourth-quarter gain and a 16.8% full-year return. Growth stocks walloped value for the year at the large-cap level by the second-biggest margin in 25 years: 31 percentage points (42.6%-11.3%). At the smaller-company level, value stocks prevailed in the quarter and trailed growth more narrowly for the year (18.5%-14.5%).

Technology (56.4%) and communications services (54.4%) led the eight S&P 500 sectors with 2023 gains. Utilities, energy and consumer staples were the losers, all with single-digit declines for the year.

International Stocks

Inflation's faster-than-expected decline coupled with expectations that borrowing costs will soon fall also fueled stock markets abroad. International developed markets as benchmarked by the iShares MSCI EAFE ETF logged gains of 10.7% for the quarter and 18.3% for the year, though lagging the U.S. Virtually every developed country ETF had a strong fourth quarter and year, notably Australia (+10.9%) for the quarter and Germany (+22.9%) and Japan (+19.8%) for all of 2023. International investments denominated in dollars got a big boost from the dollar's nearly 5% decline against a basket of other leading currencies. The EAFE benchmark in local currencies (before translation back to the dollar) gained a much more modest 5.0% in the quarter, meaning for a U.S. investor the weak dollar added 5.7 percentage points to investments in overseas developed markets.

Emerging markets were held back by a poor year in China, where the economy unexpectedly sputtered and many American investors pulled their holdings from Hong Kong markets amid U.S.-China tensions. The iShares MSCI Emerging Markets ETF managed to finish 2023 with an 8.9% return despite Hong Kong (-14.0%) and China (-12.9%) being virtually the only country ETFs to fall for the year. Strong returns from Brazil (+31.8%) and India (+17.5%) helped offset those losses, as did the dollar's 2% drop over the full year.

Real Estate

Real estate investment trusts and stocks rocketed back from well into negative territory for 2023 as investors saw relief ahead for high interest and mortgage rates. In the U.S., the Vanguard Real Estate Index Fund jumped 18.1% in the quarter for a full-year gain of 11.8%. Data centers, healthcare and industrial REITs were positive standouts.

International property stocks also delivered impressive gains at year-end, reflecting global relief at the coming pivot to lower rates. The Vanguard Global ex-US Real Estate ETF, proxy for international

real estate stocks in more than 30 countries, surged 13.0% in the quarter to finish 2023 in positive territory with a 6.2% return.

Hedged/Opportunistic

Publicly traded senior bank loans and private debt investments (direct lending) finished out a solid year with further gains. Strong corporate fundamentals and high short-term interest rates continued to buoy investments in bank loans. The Invesco Senior Bank Loan ETF added 3.1% in the fourth quarter for a 12.5% full-year return.

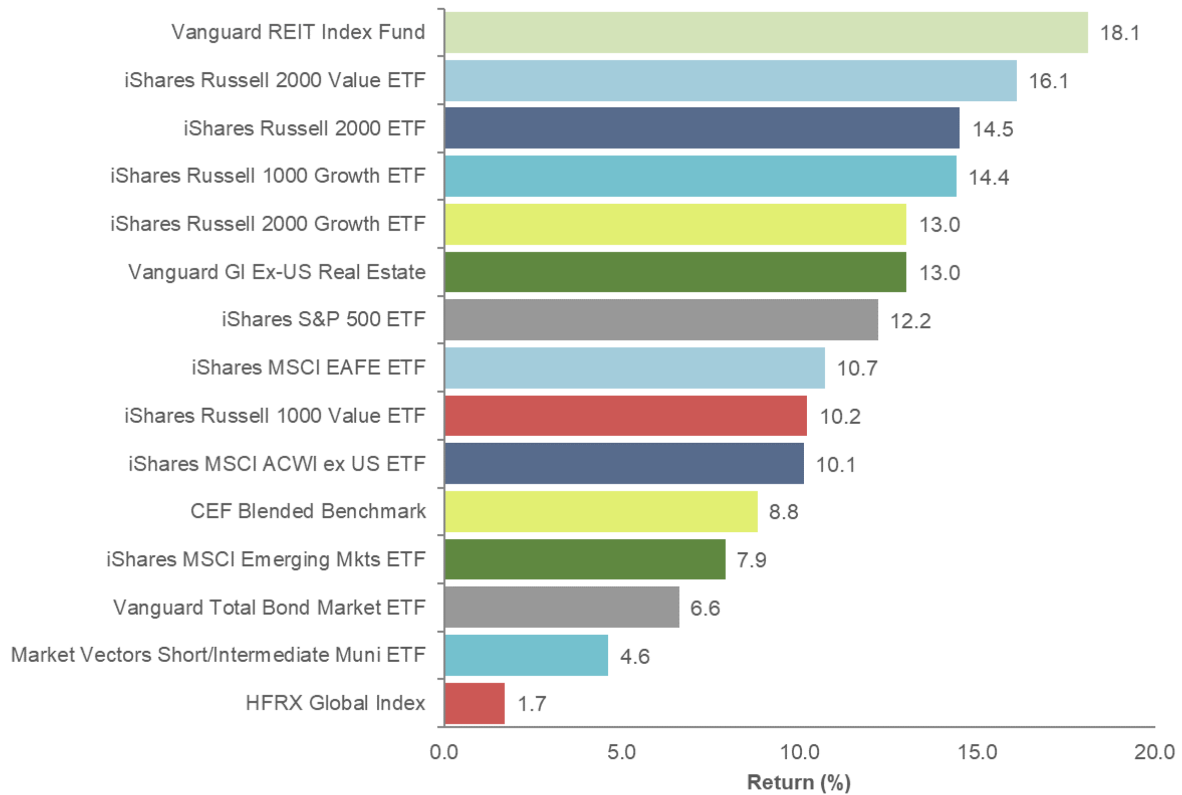
Investments in direct loans from private lenders, which have become a fixture in corporate financing, also had a strong year. Traditional banks largely withdrew as a lending source due to recessionary and contagion fears following the collapse of Silicon Valley Bank and Signature Bank.

Fixed Income

Bond investments underwent a momentous turnaround to avoid an unprecedented third consecutive down year. The presumed end of the Fed’s aggressive rate-hike campaign sent the yield on the benchmark 10-year U.S. Treasury note tumbling below 3.9% after having risen to 5% in October, a reversal that sent prices of existing bonds sharply higher (prices rise when yields fall). While the 10-year yield finished 2023 almost exactly where it began, bond investors came out ahead from the round trip.

The Vanguard Total Bond Market ETF, which holds more than 10,000 investment-grade taxable bonds, gained 5.7% for the year following a 6.6% leap in the fourth quarter. Tax-exempt municipal bonds nearly kept pace with taxable bonds, rallying on the shift in sentiment. Altair’s municipal bonds benchmark, a blend of the Market Vectors short and intermediate ETFs, forged into positive territory with a 4.6% quarterly gain that gave it a 4.0% full-year return.

Fourth Quarter 2023
Market Returns



Investable Benchmark Returns through December 31, 2023

	Quarter (%)	Year-to-Date (%)	Annualized 1 Year (%)	Annualized 3 Year (%)	Annualized 5 Year (%)	Annualized 10 Year (%)
Large Cap Equity						
iShares S&P 500 ETF	12.2	26.3	26.3	10.0	15.7	12.0
iShares Russell 1000 Growth ETF	14.4	42.6	42.6	8.6	19.2	14.6
iShares Russell 1000 Value ETF	10.2	11.3	11.3	8.4	10.6	8.1
Small Cap Equity						
iShares Russell 2000 ETF	14.5	16.8	16.8	2.1	9.9	7.1
iShares Russell 2000 Growth ETF	13.0	18.5	18.5	-3.6	9.2	7.2
iShares Russell 2000 Value ETF	16.1	14.5	14.5	7.7	9.8	6.6
International Equity						
iShares MSCI ACWI ex US ETF	10.1	15.6	15.6	1.5	6.9	3.6
iShares MSCI EAFE ETF	10.7	18.3	18.3	4.2	8.2	4.2
MSCI EAFE Index - in local[1]	5.0	16.8	16.8	9.2	10.0	7.1
Vanguard FTSE Europe ETF	12.1	20.2	20.2	5.7	9.2	4.3
Vanguard FTSE Pacific ETF	9.7	15.6	15.6	-0.3	6.4	4.4
iShares MSCI Emerging Mkts ETF	7.9	8.9	8.9	-5.9	2.9	1.8
Fixed Income						
Market Vectors Sh/Inter Muni ETF	4.6	4.0	4.0	-0.7	1.6	1.8
Barclays 5 Yr Muni Index[1]	5.2	4.3	4.3	-0.3	1.7	1.9
SPDR Nuveen Barclays Muni Bond	8.5	5.6	5.6	-1.7	1.6	2.7
Vanguard Total Bond Market ETF	6.6	5.7	5.7	-3.4	1.1	1.7
Gl FixedInc Investable Benchmark	8.5	6.4	6.4	-5.9	-0.6	0.1
iShares BarclaysInt Govt/Credit	4.4	5.1	5.1	-1.8	1.4	1.5
Alternative						
SPDR Barclays High Yield Bond	7.2	12.4	12.4	0.9	4.3	3.2
Vanguard REIT Index Fund	18.1	11.8	11.8	5.0	7.3	7.4
Vanguard Gl Ex-US Real Estate	13.0	6.2	6.2	-4.5	-0.3	1.5
HFRX Global Index	1.7	3.1	3.1	0.7	3.5	1.4
Invesco Senior Loan ETF	3.1	12.5	12.5	3.9	4.6	3.0
iPath Bloomberg Commodity ETN	-5.4	-9.8	-9.8	11.5	7.4	-1.9
CEF Blended Benchmark[1]	8.8	8.5	8.5	0.7	6.1	4.7
Other Common Benchmarks						
SPDR Dow Jones Industrial Avg	13.1	16.0	16.0	9.2	12.3	10.9
Fidelity Nasdaq Comp. ETF	14.2	45.7	45.7	6.5	19.1	14.9
iShares MSCI ACWI ETF	11.2	22.2	22.2	5.8	11.8	8.1
SPDR Barclays 1-3 Month T-Bill	1.3	4.9	4.9	2.1	1.7	1.1
Inflation - CPI[1]	-0.3	3.4	3.4	5.6	4.1	2.8

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

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Altair's Senior Team

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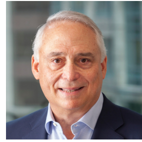
Rebekah L. Kohmescher, CFP®, CPA
Chief Executive Officer



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