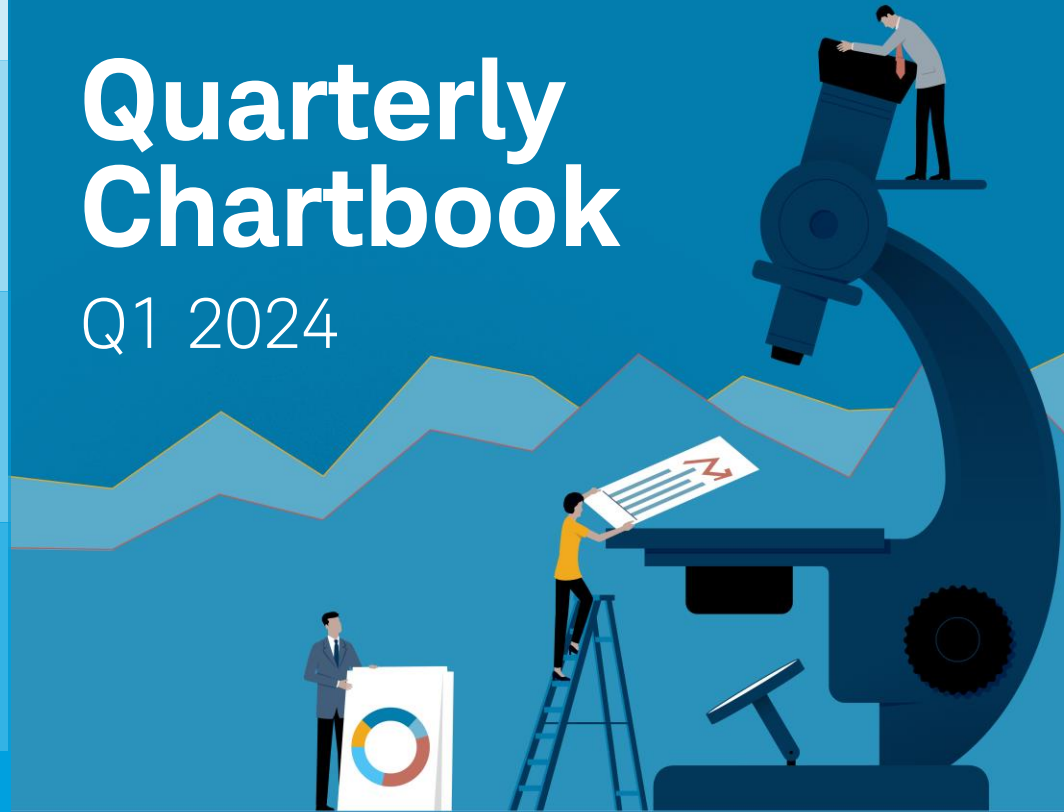


charles
SCHWAB

Quarterly Chartbook

Q1 2024



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About the Quarterly Chartbook



The Quarterly Chartbook is constructed to help provide you with information around the global economy, equities, sources of income, commodities, and asset allocation opportunities. These charts can provide a visual framework to help support conversations with your clients.

We have created this chartbook in collaboration with the investment professionals from Schwab Asset Management™ and the market strategists at the Schwab Center for Financial Research.

We hope it will help illuminate what is happening in the economy and provide insights to support market discussions with your clients.

Q4 Market summary | Total returns

Market commentary

- Equities rebounded sharply in the fourth quarter on the heels of what the market anticipates is a Fed pivot and interest rate cuts coming in 2024. Easing inflation measures and strong labor market data helped lead these expectations. The strong performance was felt at both ends of the market-cap spectrum, unlike previous rallies throughout the year.
- U.S. bond yields, represented by the Bloomberg U.S. Aggregate Bond Index, fell in the fourth quarter as the Fed signaled that rate cuts were likely in 2024. After rising as high as 5% in mid-October, the 10-year Treasury yield ended the year near 4%.
- Most major global central banks held their policy rates steady in the fourth quarter, with rate cuts likely on the horizon. Global bond returns were positive, boosted by falling yields and a weaker dollar.
- Energy led the commodity indexes lower courtesy of the downside reversal in crude oil prices amid growing non-OPEC oil production and global growth concerns. REIT indexes broke out to five-month highs as interest rates tumbled and industrial and health care REITs continued to outperform.

	BENCHMARK	Q4 2023	1-Year	3-Year	5-Year	10-Year
U.S. Large-Cap Stocks	S&P 500® Index	11.7%	26.3%	10.0%	15.7%	12.0%
U.S. Small-Cap Stocks	Russell 2000® Index	14.0%	16.9%	2.2%	9.9%	7.1%
International Developed Stocks	MSCI EAFE Index	10.4%	18.8%	4.5%	8.7%	4.7%
Emerging Market Stocks	MSCI Emerging Markets Index	7.8%	10.0%	-4.8%	4.0%	3.0%
U.S. Bonds	Bloomberg US Aggregate Bond Index	6.8%	5.5%	-3.3%	1.1%	1.8%
Treasury Inflation Protected Securities	Bloomberg US Treasury Inflation Protected Securities (TIPS) Index	4.7%	3.9%	-1.0%	3.2%	2.4%
High Yield Bonds	Bloomberg US Corporate High Yield Bond Index	7.2%	13.4%	2.0%	5.4%	4.6%
International Developed Bonds	Bloomberg Global Treasury ex-US Index	9.9%	6.2%	-7.9%	-1.8%	-0.8%
Commodities	S&P GSCI Index	-10.7%	-4.3%	19.2%	8.7%	-3.6%
REITS	Dow Jones U.S. Select REIT Index	16.3%	14.0%	7.2%	6.1%	7.0%

Note: Returns are annualized for periods over one year. Total return includes the reinvestment of dividends, interest, and other cash flows. Source: Bloomberg as of 12/31/2023. Indexes are unmanaged, do not incur management fees, costs and expenses, and cannot be invested in directly. For more information on indexes, please see [Schwab.com/IndexDefinitions](https://www.schwab.com/IndexDefinitions). Investing involves risk, including loss of principal. **Past performance is no guarantee of future results. For illustrative purposes only.**

Overview

Economy

Economic data continued to paint a mixed picture, evidenced by relatively anemic recoveries in the manufacturing and housing sectors—two key, leading segments of the economy. Conversely, the labor market remained resilient as measured by nearly every metric; the unemployment rate stayed near its lowest in history, initial jobless claims haven't yet spiked into recessionary territory, and wage growth is still strong relative to recent history. Various inflation metrics continued to ease—most notably core measures (which exclude food and energy prices) that are most closely watched by the Federal Reserve. Positive developments have helped solidify the expectation that officials are finished raising interest rates for this cycle.

Equities

U.S. stocks rebounded at an aggressive pace throughout the quarter after reaching oversold territory in late October. Favorable inflation data, a perceived Fed pivot, and a revival in areas that had been hit the hardest this year (e.g., small caps) helped catalyze a strong rally into the end of the year. Participation down the cap spectrum was the most notable development, not least because that is typically the hallmark of a new, strong bull market. Bond yields were likely the main driver of equities' price action, given that the negative correlation between changes in bond yields and stock prices has grown to an extreme relative to historical levels.

Income

U.S. Treasury yields fell sharply at the end of the fourth quarter as the Federal Reserve pivoted towards an easing bias in 2024. After raising rates by more than 5 percentage points since early 2022, the Fed held rates steady at both of its fourth quarter meetings, and the median projection from Fed officials suggests that they could lower rates by 75 basis points this year. However, market expectations, as measured by the fed funds futures market, are pricing in a much more aggressive pace of cuts. The gap between Fed projections and market expectations may be a source of volatility in the Treasury market. Although yields are down from their recent peaks, we believe that positive total returns are likely for high-quality fixed income investments in 2024.

Commodities

Crude oil remained the story with prices reversing Q3's rally. Global growth uncertainty lingered regarding the ultimate impact of tight global monetary policies, while increased non-OPEC oil production offset OPEC's output cuts. Industrial metals were mixed although economically sensitive copper and iron ore prices advanced, with the latter continuing to rally. Precious metals posted nice gains in Q4, with gold a standout, and if global recessionary concerns persist, this trend could continue in 2024. Oil prices are likely to remain subdued in Q1 as rising non-OPEC oil production—led by record output in the U.S.—could be met with a reversal in OPEC cuts and if global growth uncertainty festers. However, we could see commodities strengthen as 2024 unfolds if China's economy can revive, the U.S. continues to defy a hard landing, and monetary policies loosen.

Asset allocation

Diversified portfolios can help reduce volatility. Historically, fixed income, especially high-quality bonds, and international investments have provided diversification when compared to an all-equity portfolio. Diversification is important both across and within asset classes. Investors can help increase their chances of achieving their goals by focusing on time in the market and not timing the market, investing in a tax-efficient manner, ignoring outside noise such as politics, and paying attention to the purchasing power of their portfolio.

Source: Schwab Center for Financial Research. Commentary as of 12/31/2023. Investing involves risk, including loss of principal. Diversification strategies do not ensure a profit and do not protect against losses in declining markets.

Past performance is no guarantee of future results.

A view of the U.S. economy

Segments of the economy—like manufacturing—that fell into recessionary territory last year have started to show hints of bottoming out, although it's too soon to say an uptrend has been achieved. The positive offset has been strength in areas like the services sector, which is still broadly expanding.

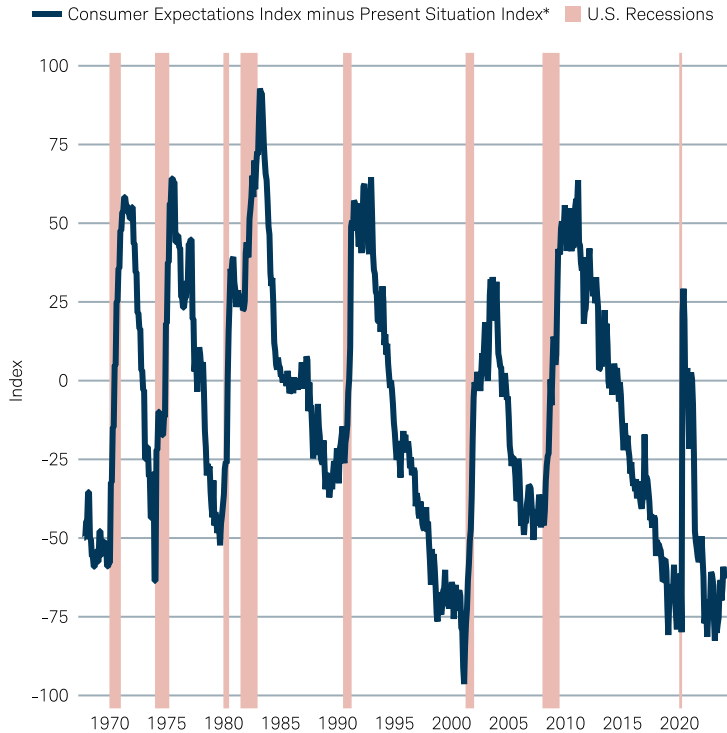


Bars represent National Bureau of Economic Research defined recession periods.

Source: Macrobond as of 12/31/2023. LEI is a composite average of leading indicators designed to signal peaks and troughs in the business cycle. ISM Manufacturing index monitors employment production inventories, new orders, and supplier deliveries and is based on surveys of more than 300 manufacturing firms. ISM Non-manufacturing index monitors employment, prices, and new orders in non-manufacturing industries and is based on surveys of more than 400 non-manufacturing firms.

A view of U.S. economic expectations

Economic data are still coming in better than expected, however the pace of outperformance has been waning into year-end.

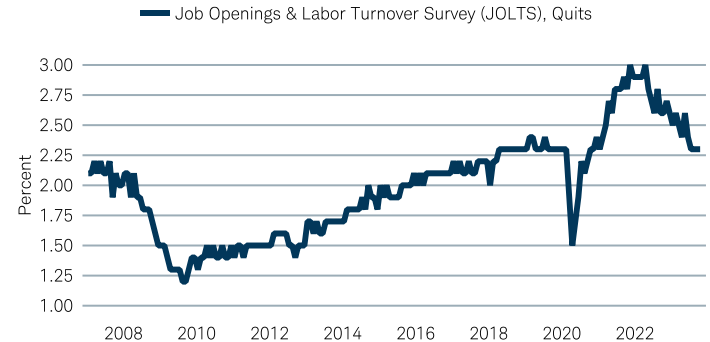
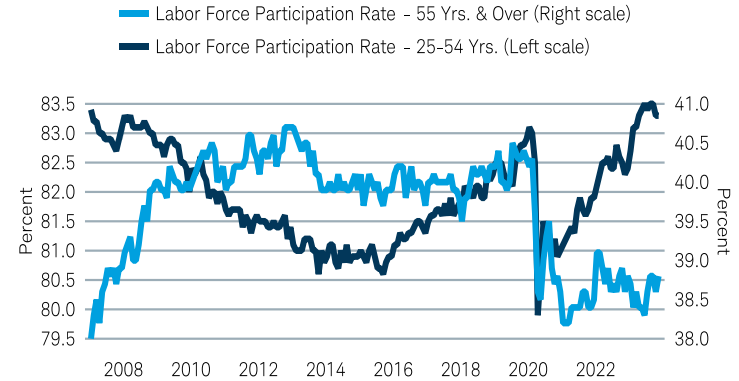
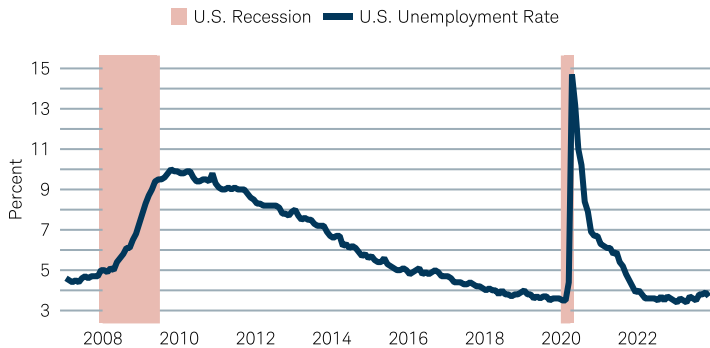
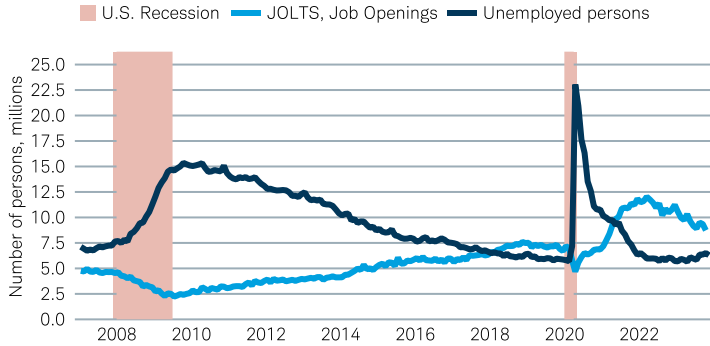


Bars represent National Bureau of Economic Research defined recession periods.

Source: Macrobond as of 12/31/2023. *Conference Board Consumer Confidence Index consists of five questions: two related to present conditions and three related to future expectations. Citi Economic Surprise Index measures data surprises relative to market expectations. A positive reading means data surprises have been stronger than expected, and a negative reading means data releases have been worse than expected.

The labor market remains relatively tight

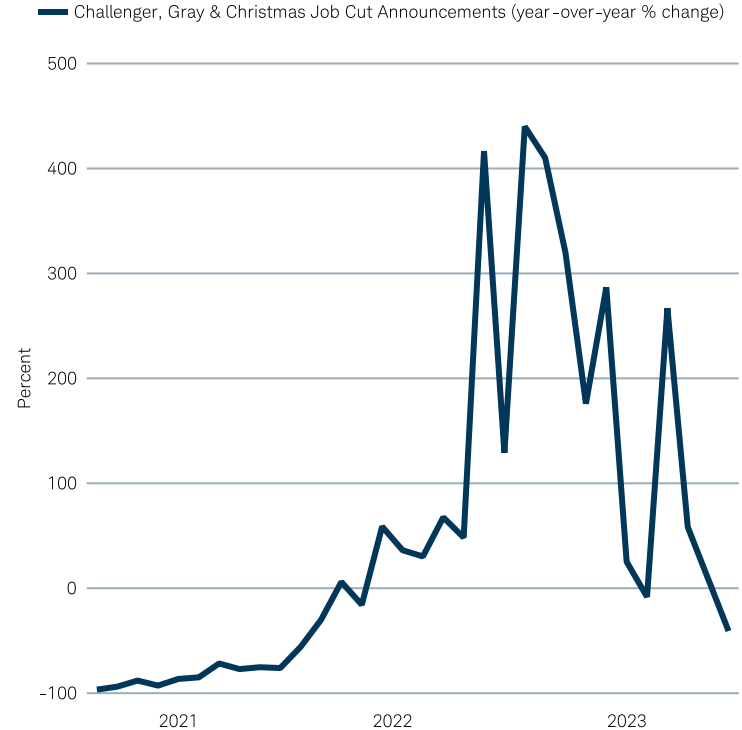
Reducing the gap between job openings and unemployed persons is a key part of the Fed's objective. Fewer individuals leaving their jobs (quits) and a continued increase in labor force participation have helped alleviate supply-side constraints and put downward pressure on wage inflation.



Bars represent National Bureau of Economic Research defined recession periods.
Source: Charles Schwab, Macrobond as of 12/31/2023.

Job cuts have slowed while jobless claims remain flat

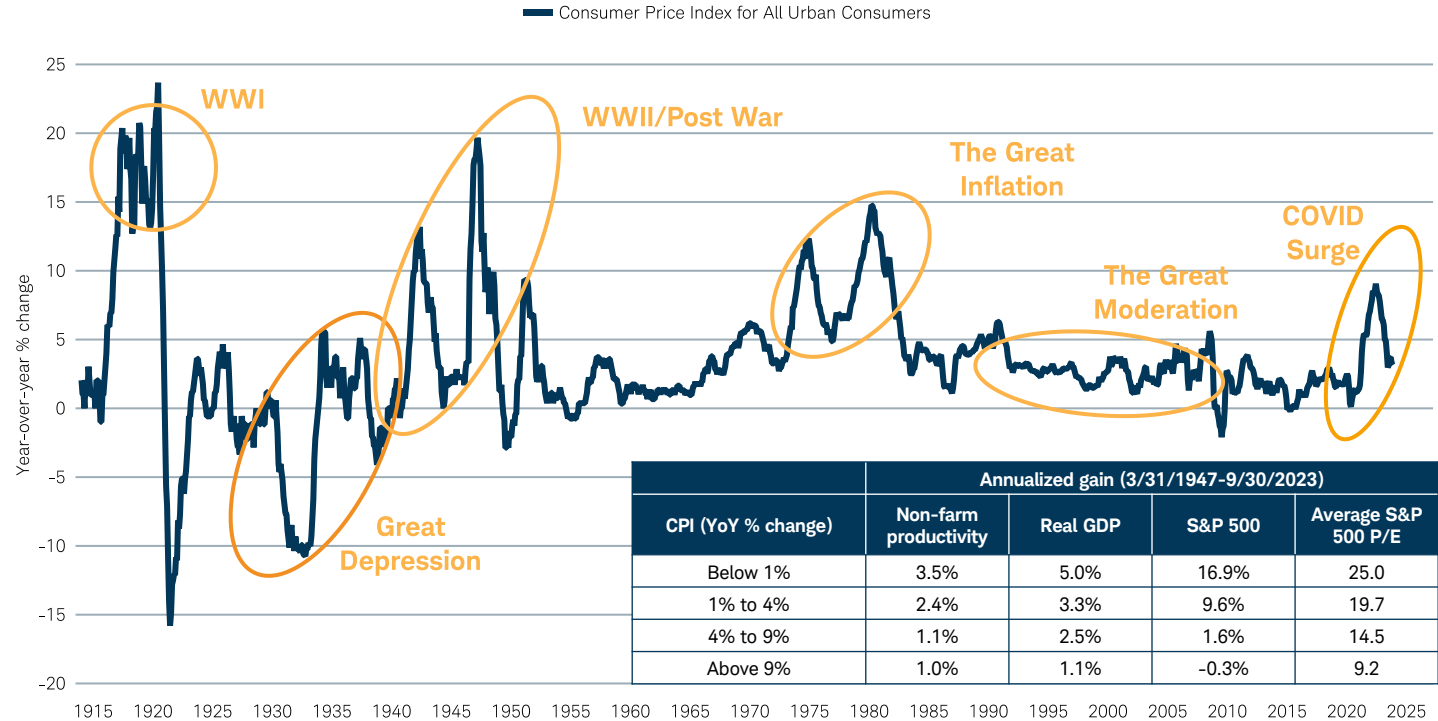
A significant spike in job cuts over the past year hasn't yet led to a meaningful increase in initial jobless claims. This continues to bode well for the labor market and broader economy, given that inflation has eased.



Source: Macrobond as of 12/31/2023. The April 2023 seasonal adjustment of jobless claims resulted in a larger than usual revision of some weeks over the past five years.

A long-term view of U.S. inflation

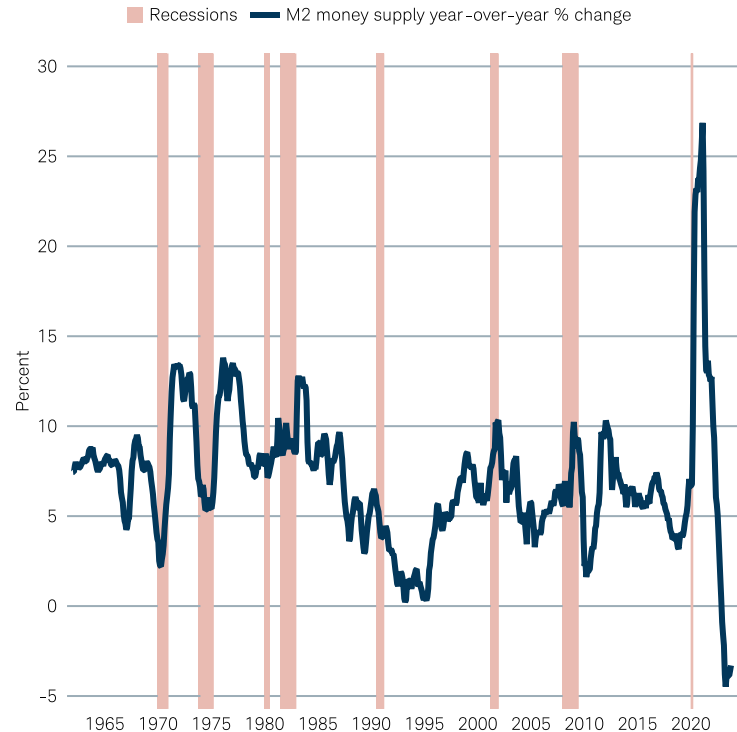
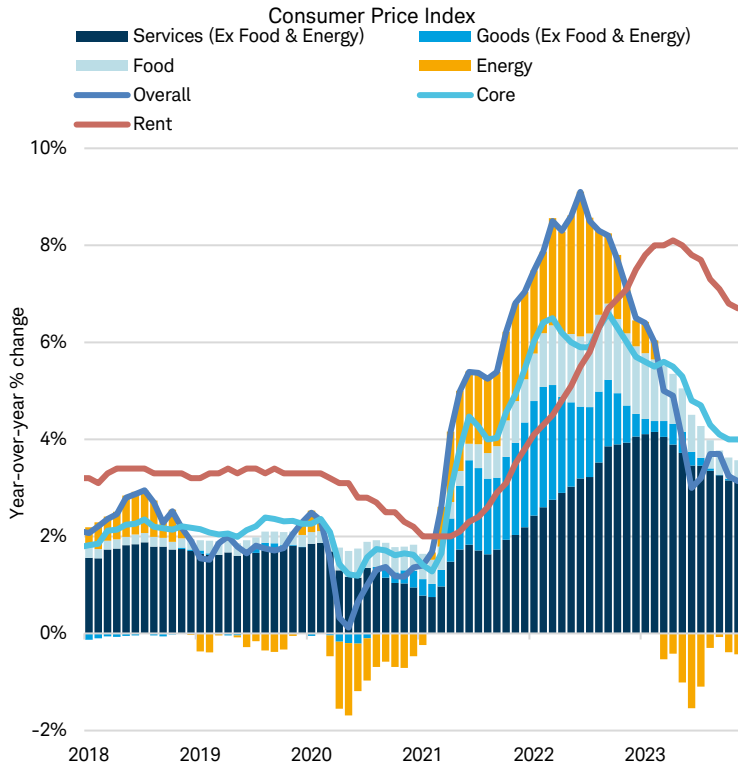
Previous surges in inflation were associated with unique events, some of which lasted for years. More active monetary policies have been in place since the early 1980s, although it's uncertain whether the ultra-aggressive Fed actions can contain core inflation in the near term. Historically, higher inflation correlated with weaker stock market and economic gains.



Source: Charles Schwab, Macrobond, Ned Davis Research using monthly data available as of 12/31/2023. U.S. CPI Urban Consumers YoY Not Seasonally Adjusted (CPI YoY Index). Investing involves risk, including loss of principal. **Past performance is no guarantee of future results.**

Services sector driving bulk of inflation

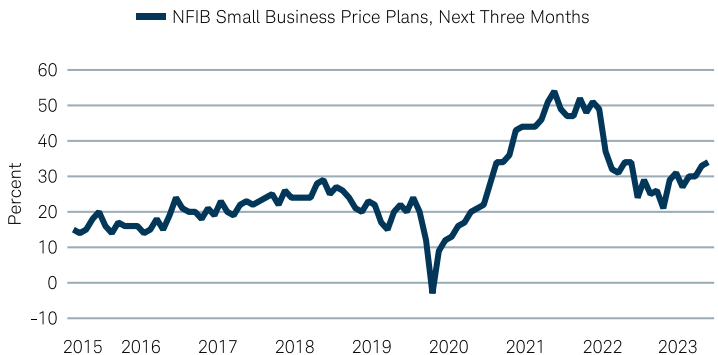
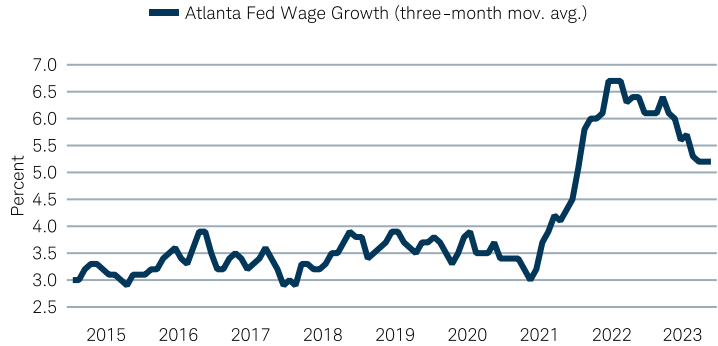
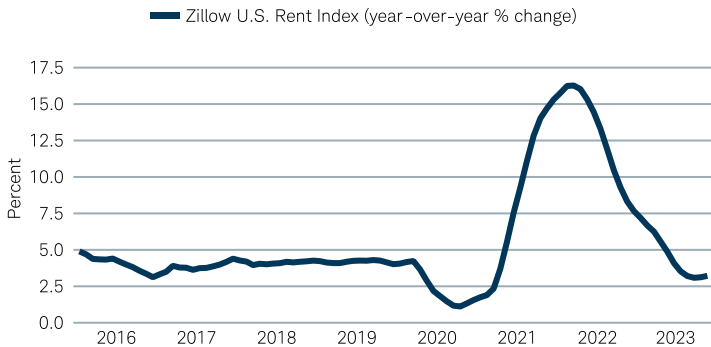
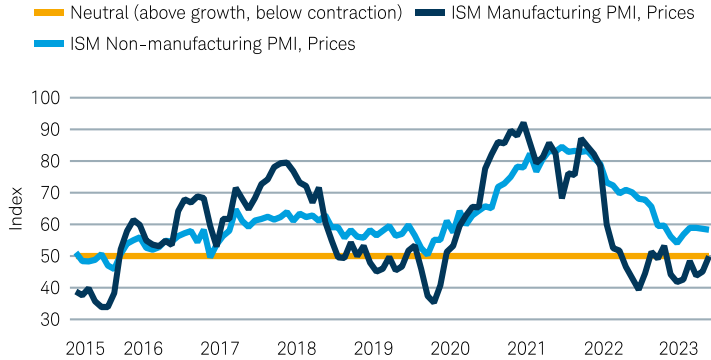
Goods-oriented inflation is decisively off its peak, while services prices have been relatively stickier. Trends and leading indicators (like money supply growth) continue to suggest an easing in price growth; however, the decline will likely continue to be uneven.



Source: Charles Schwab, U.S. Bureau of Labor Statistics. Table 7. Consumer Price Index for All Urban Consumers (CPI-U) and selected categories: U.S. city average, by expenditure category, November 2023, 12-month analysis table. Selected categories are as follows: "Overall" does not exclude any services or goods, "Core" excludes energy and food from the overall number, and remaining categories look at each component of the CPI individually. Bloomberg, Federal Reserve Bank of St. Louis, as of 12/31/2023. M2 Money Supply is a calculation of money supply that includes cash, checking deposits, savings deposits, money market deposits, and other time deposits less than \$100,000. It is a broader measure of money supply than M1. **Past performance is no guarantee of future results.**

Inflation watch

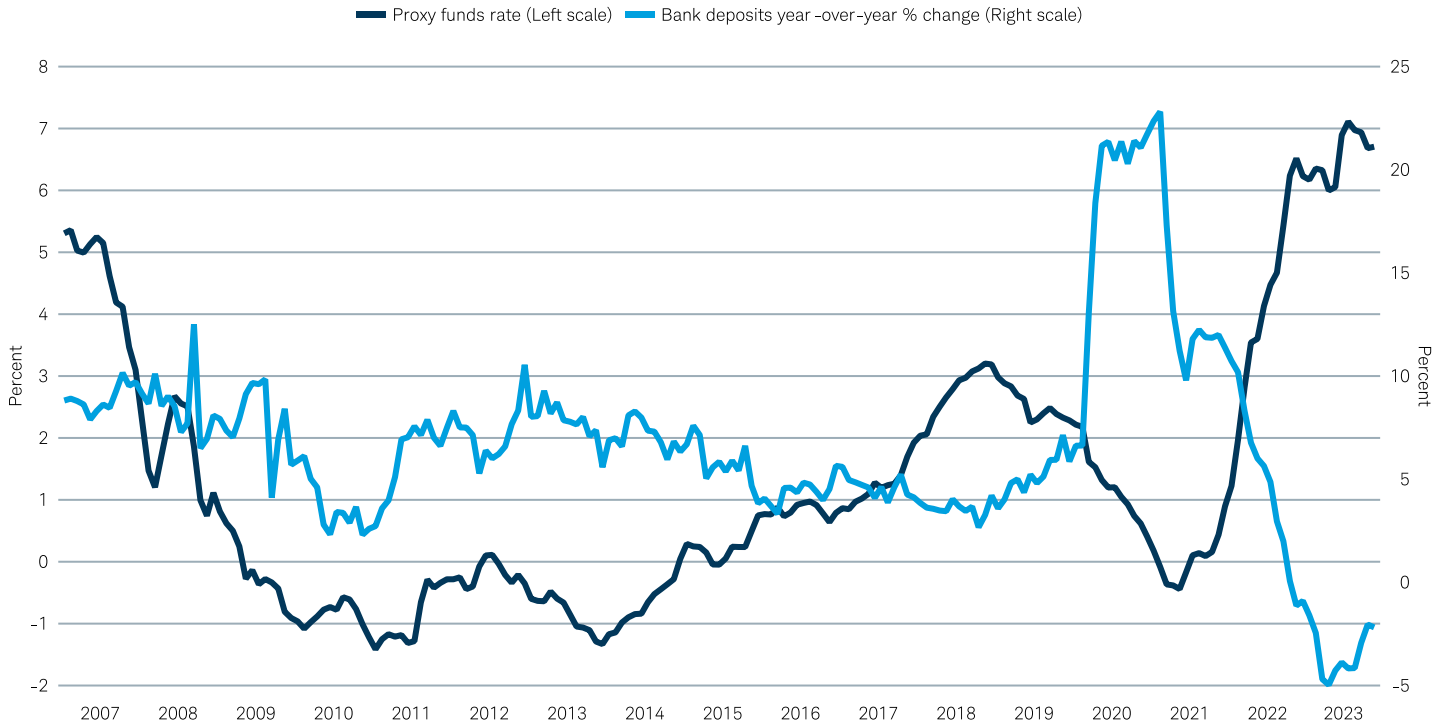
Across several metrics, we've likely seen peak inflation. Perception differs, however, depending on which segment of the economy is analyzed. For workers, wage growth is still quite strong relative to history; and for businesses, pricing plans are already starting to pick up.



Source: Charles Schwab, Macrobond, using monthly data available as of 12/31/2023.

Banking industry

As monetary policy tightened significantly in 2022 and 2023, bank deposits plunged. This was a double-edged sword for some banks that were left with large unrealized losses at the same time depositors were pulling money out.

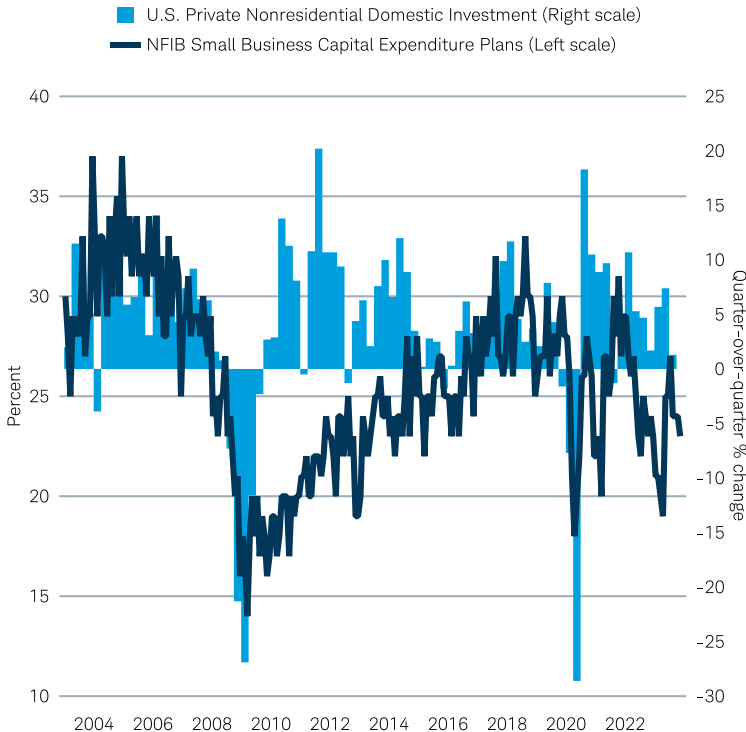


Source: Charles Schwab, Bloomberg, Federal Reserve Bank of San Francisco. The proxy rate (as of 11/30/2023) can be interpreted as indicating what federal funds rate would typically be associated with prevailing financial market conditions if these conditions were driven solely by the funds rate. Bank deposits as of 11/30/2023. Unrealized losses are a result of holding an asset that has decreased in price but not yet selling it to realize the loss. For illustrative purposes only.

Business and consumer confidence

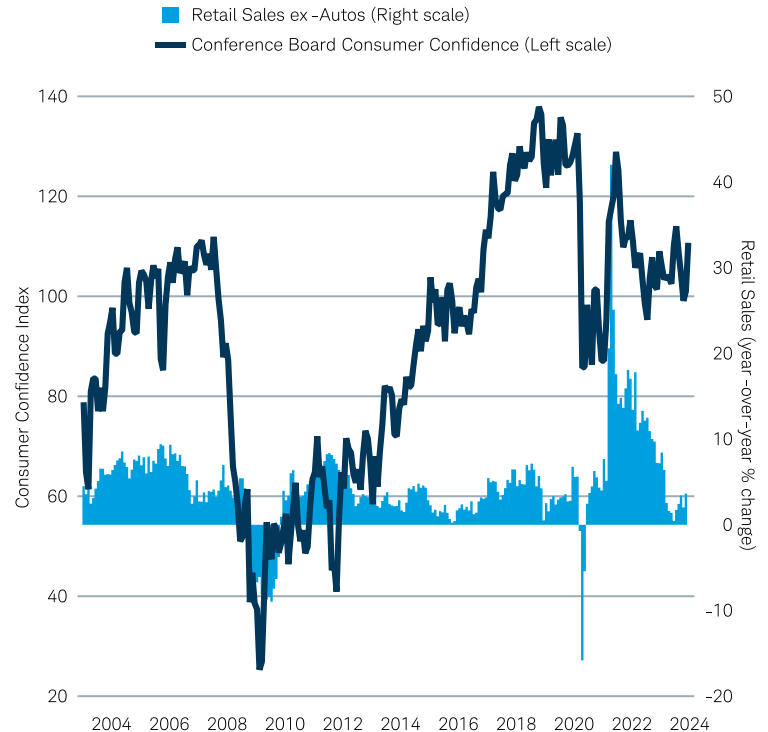
Small business capital spending plans haven't yet signaled a firm expansion in business investment. Retail sales have been volatile, with gas station sales driving some volatility of late (mostly due to the recent moves in oil prices).

Small business spending plans and business investment



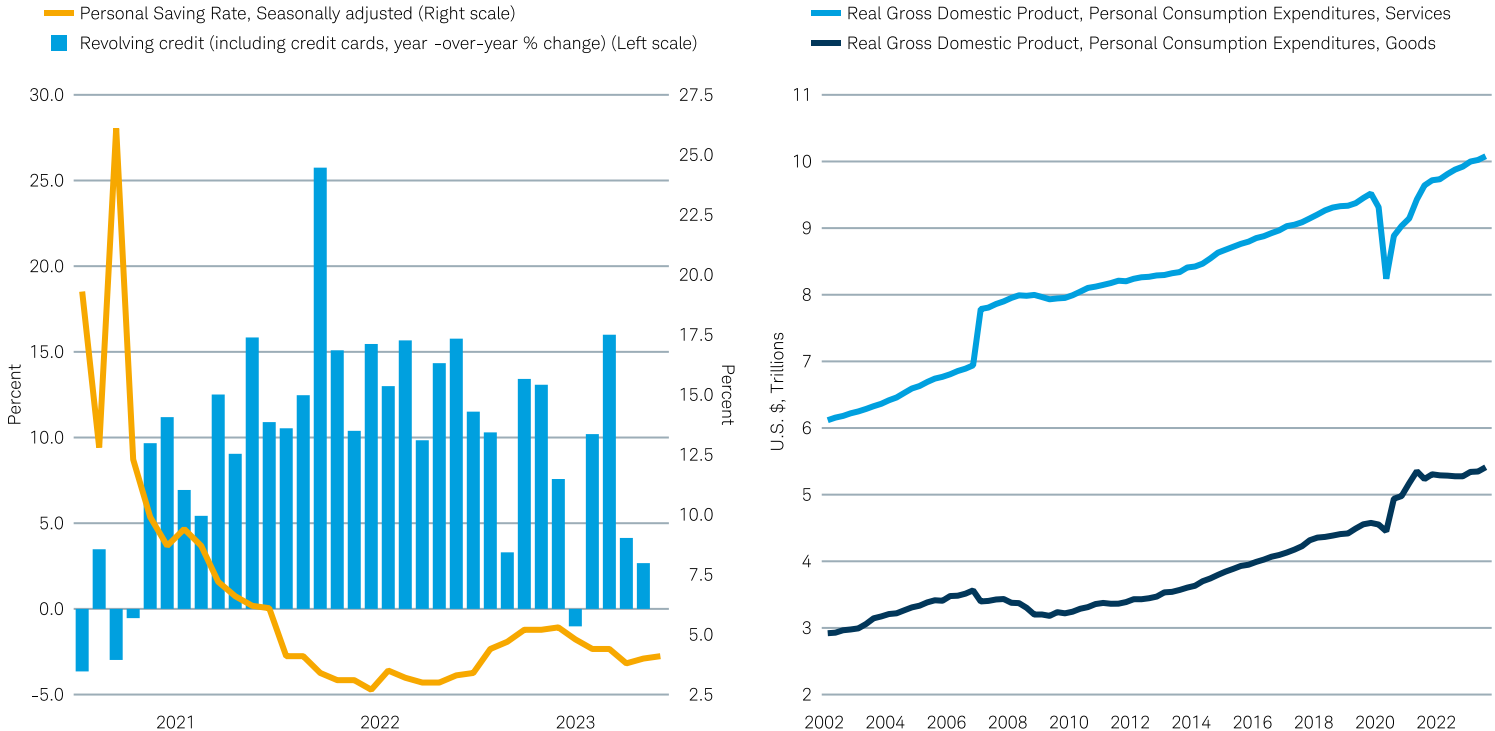
Source: Charles Schwab, Macrobond as of 12/31/2023.

Consumer optimism and retail sales



Consumer spending

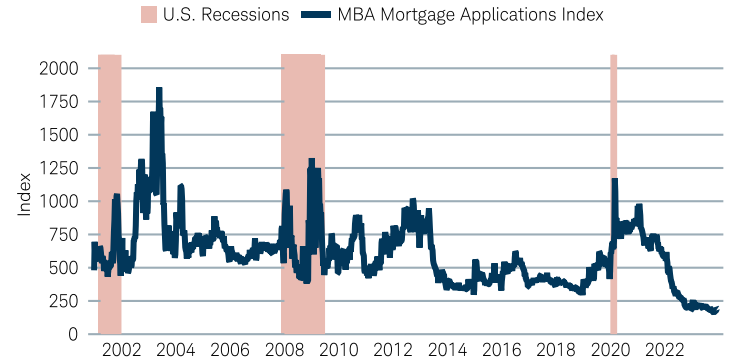
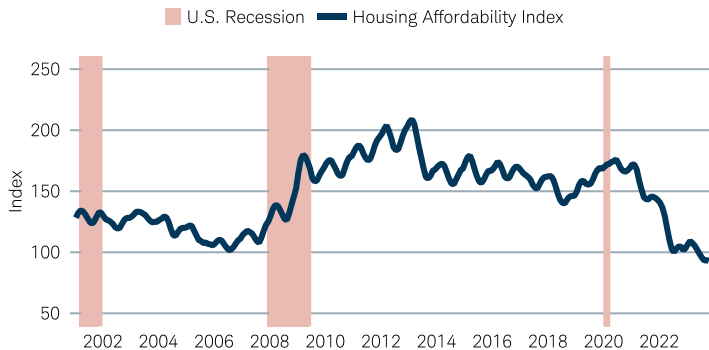
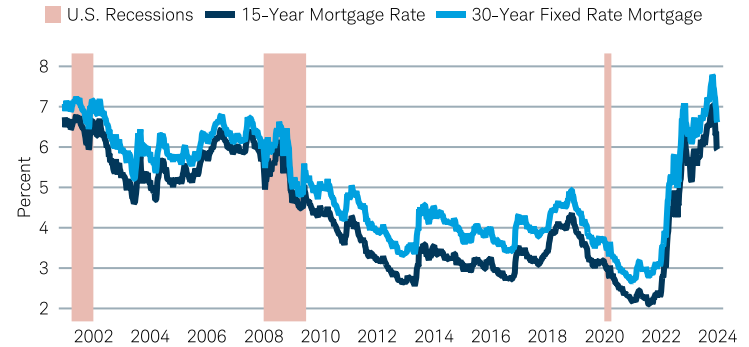
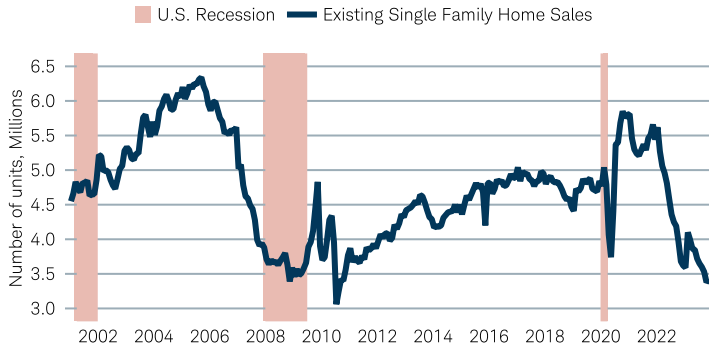
Consumer spending has been supported by a dramatic decline in the savings rate and a subsequent increase in credit card debt. Spending on services has offset relatively softer goods spending, although it's worth noting that the latter category is starting to improve.



Source: Charles Schwab, Macrobond as of 12/31/2023. Savings rate and revolving credit are on a monthly basis and subject to revisions.

Housing update

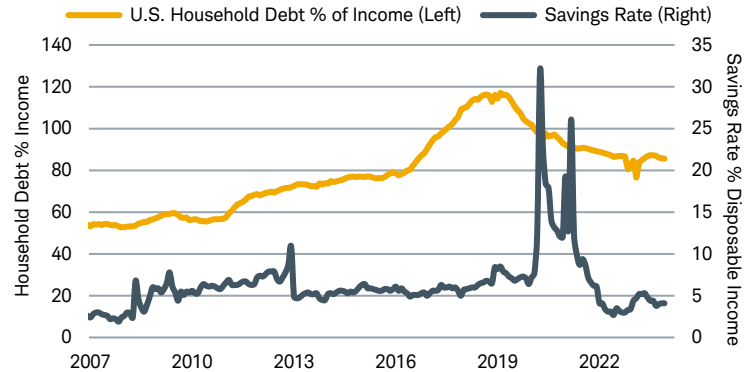
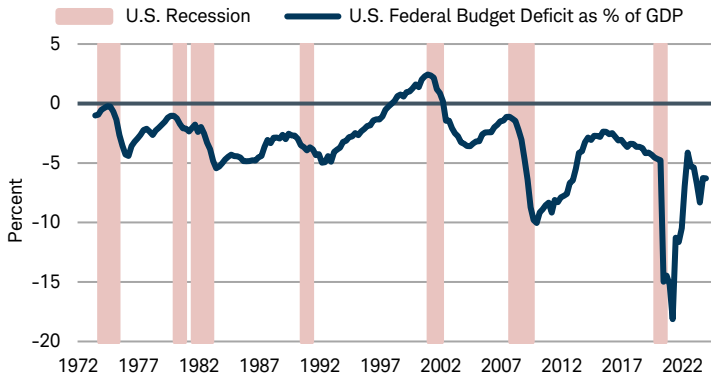
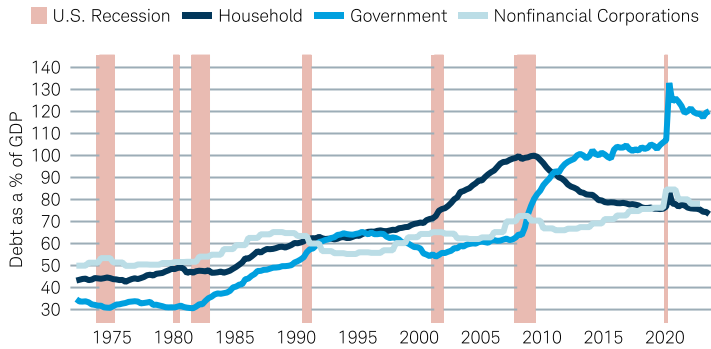
Housing affordability has tumbled due to stubbornly high home prices and the spike in mortgage rates. Worth watching is the recent decline in some leading housing indicators; if a decline is sustained, it would lend less support to a broad-based economic soft landing.



Bars represent National Bureau of Economic Research defined recession periods.
Source: Charles Schwab, Bloomberg, Macrobond as of 12/31/2023.

U.S. debt and taxes

The fiscal impulse remains strong as investment has picked up—especially in the green energy and semiconductor sectors—but direct aid to households has waned.



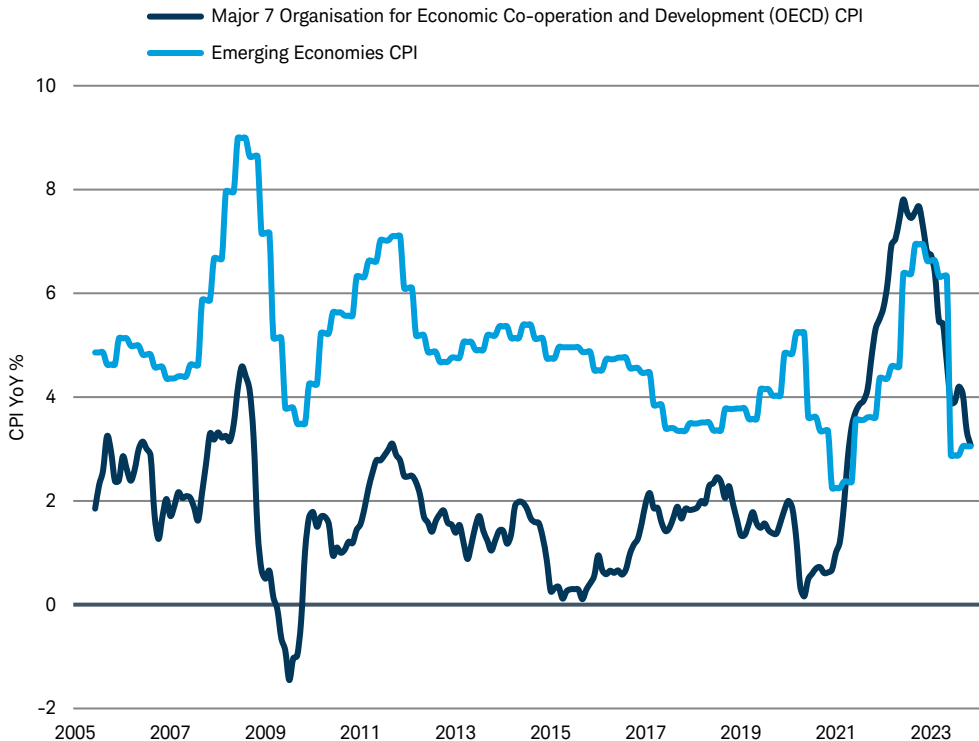
Married Filing Jointly Qualifying Widow(er) 2024 IRS Brackets			
Tax rate	Taxable income bracket	Capital gains bracket	Long-term capital gains and qualified dividends
10%	\$0 to \$23,200	\$0 to \$94,050	0%
12%	\$23,201 to \$94,300	\$94,051 to \$583,750	15%
22%	\$94,301 to \$201,050	\$583,751 or more	20%
24%	\$201,051 to \$383,900		
32%	\$383,901 to \$487,450		
35%	\$487,451 to \$731,200		
37%	\$731,201 or more		

Bars represent National Bureau of Economic Research defined recession periods.

Source: Charles Schwab, the Schwab Center for Financial Research, Bloomberg as of 12/31/2023. Tax table source: 2024 IRS. The information and content provided herein is general in nature and is for informational purposes only. It is not intended, and should not be construed, as a specific recommendation, individualized tax, legal, or investment advice. Tax laws are subject to change, either prospectively or retroactively. Where specific advice is necessary or appropriate, individuals should contact their own professional tax and investment advisors or other professionals (CPA, Financial Planner, Investment Manager) to help answer questions about specific situations or needs prior to taking any action based upon this information.

Global inflation

Global inflation is in the process of rolling over, although the disinflationary process is expected to be choppy, especially as some countries continue to face tight labor markets and the effects associated with higher interest rates.

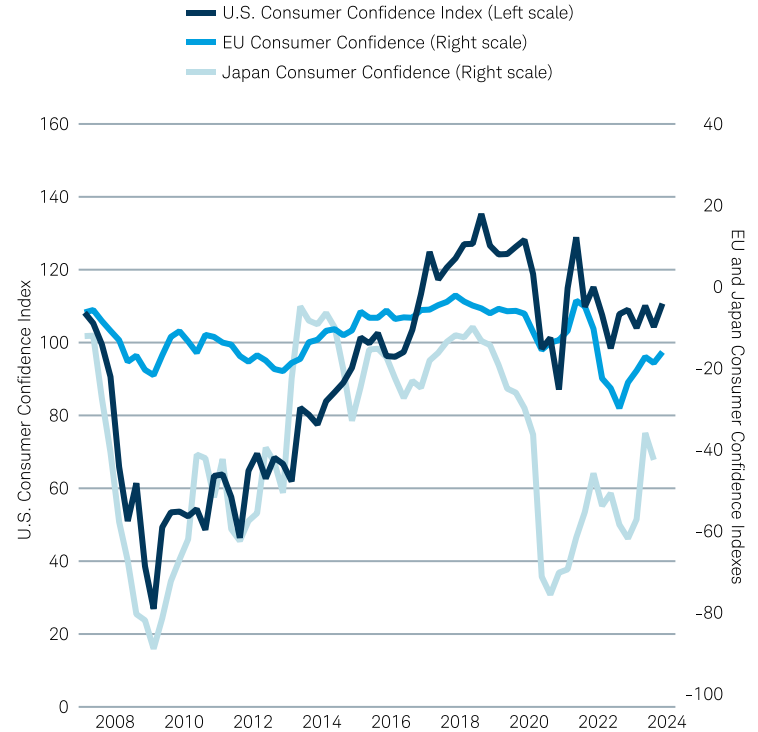
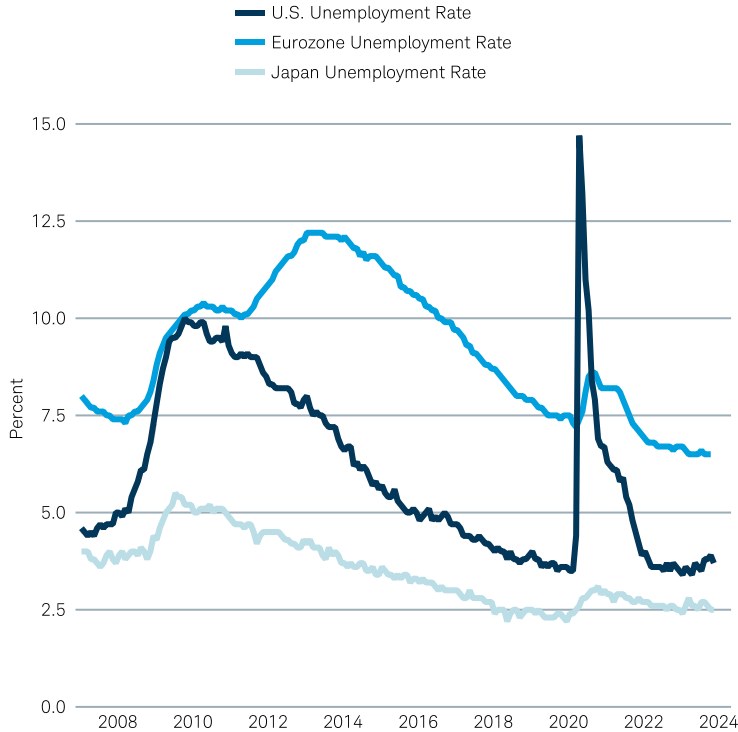


Consumer Price Index year-over-year %	
Russia	7.5
India	5.6
Brazil	4.7
United Kingdom	3.9
France	3.5
South Korea	3.3
Germany	3.2
United States	3.1
Canada	3.1
Japan	2.8
Eurozone	2.4
Italy	0.7
China	-0.5

Source: Charles Schwab, Bloomberg as of 12/31/2023. Major 7 refers to the seven major countries as defined by the OECD: Canada, the U.S., Japan, France, Germany, Italy, and the U.K.
Past performance is no guarantee of future results.

Global unemployment and consumer confidence

Labor markets around the globe look relatively tight. Consumer confidence metrics have started to find some stable footing, but recoveries have been uneven (i.e., Japan over the past year).



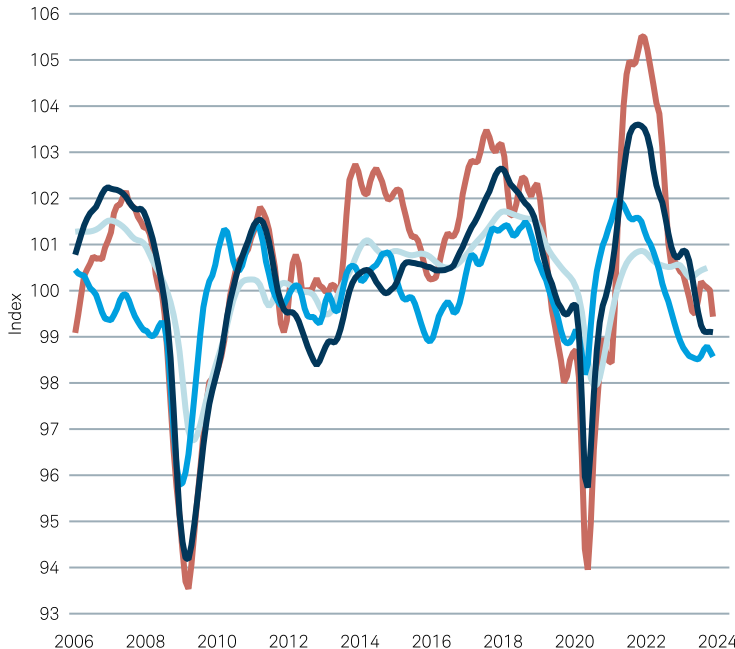
Source: Charles Schwab, Macrobond as of 12/31/2023.

Global business sentiment

Global leading economic indicators and business confidence metrics have not yet confirmed broad-based expansions for economies across the world. While there are signs of stabilization, durable recoveries have yet to take hold.

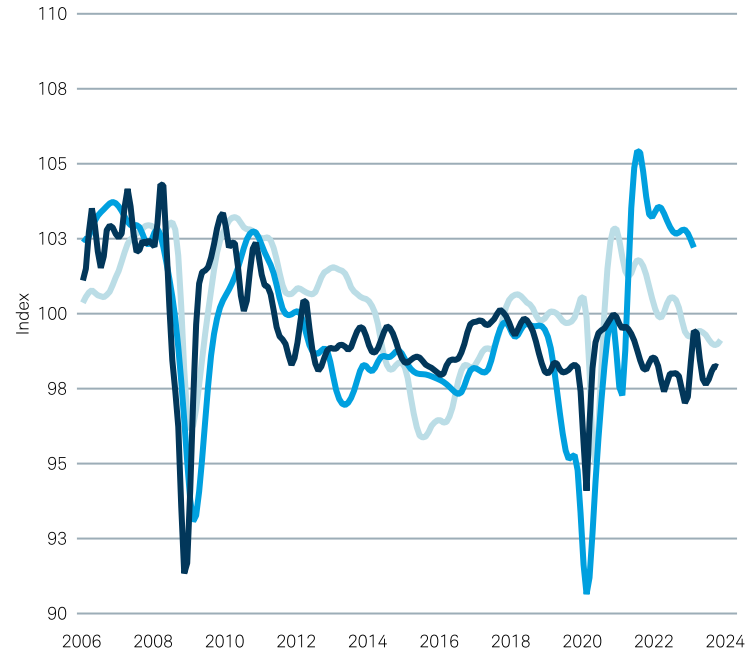
Developed Markets

- Eurozone Business Confidence
- Japan Business Confidence
- U.S. Business Confidence
- United Kingdom, Business Confidence



Emerging Markets

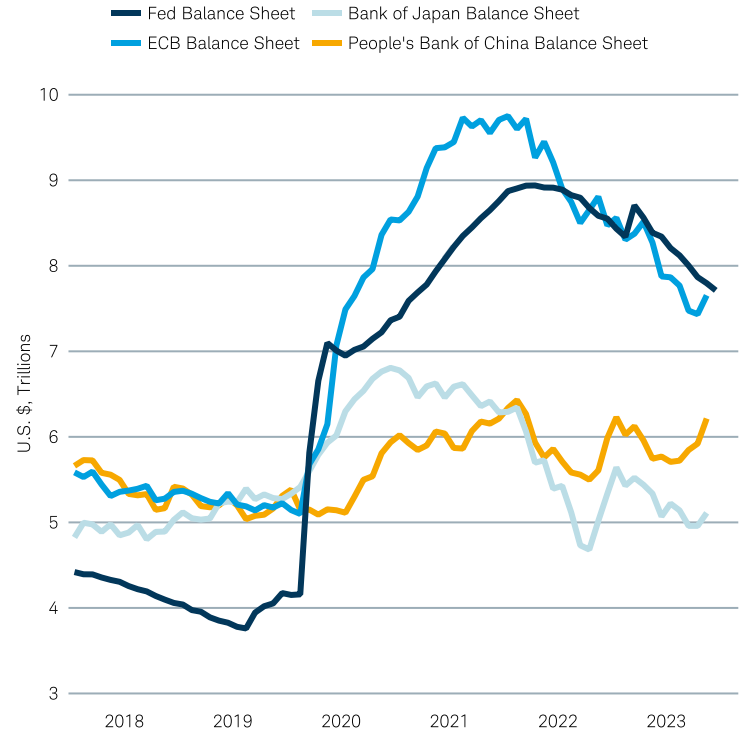
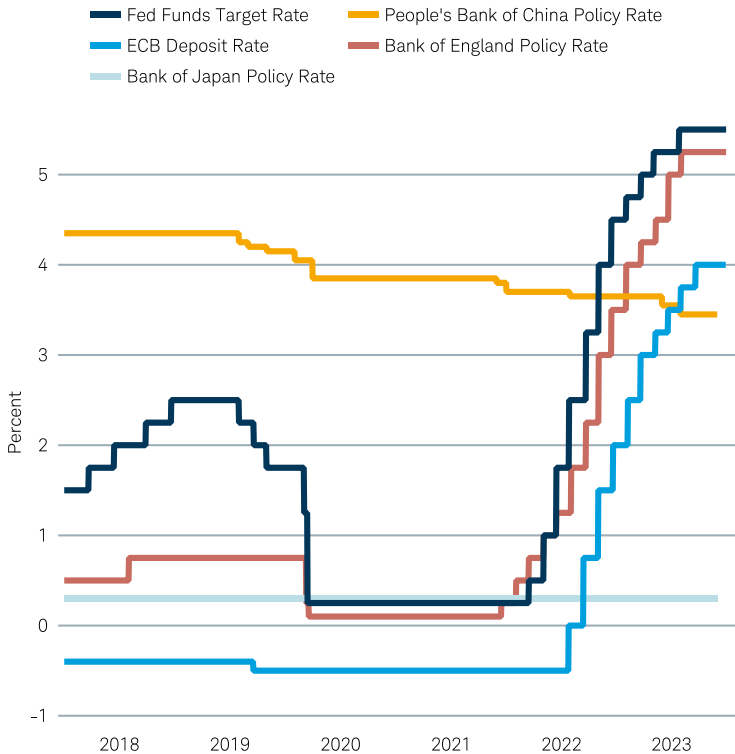
- China Business Confidence
- Brazil Business Confidence
- India Business Confidence



Source: Charles Schwab, Macrobond as of 12/31/2023. Business Confidence, released by the OECD, provides information on future developments, based upon opinion surveys on developments in production, orders, and stocks of finished goods in the industry sector. Numbers above 100 suggest an increased confidence in near future business performance, and numbers below 100 indicate pessimism towards future performance.

Global central banks

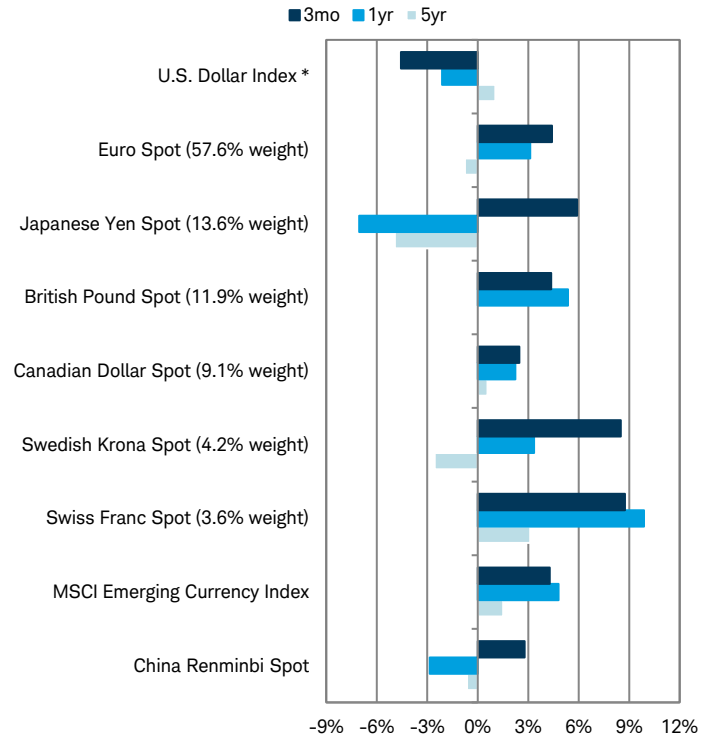
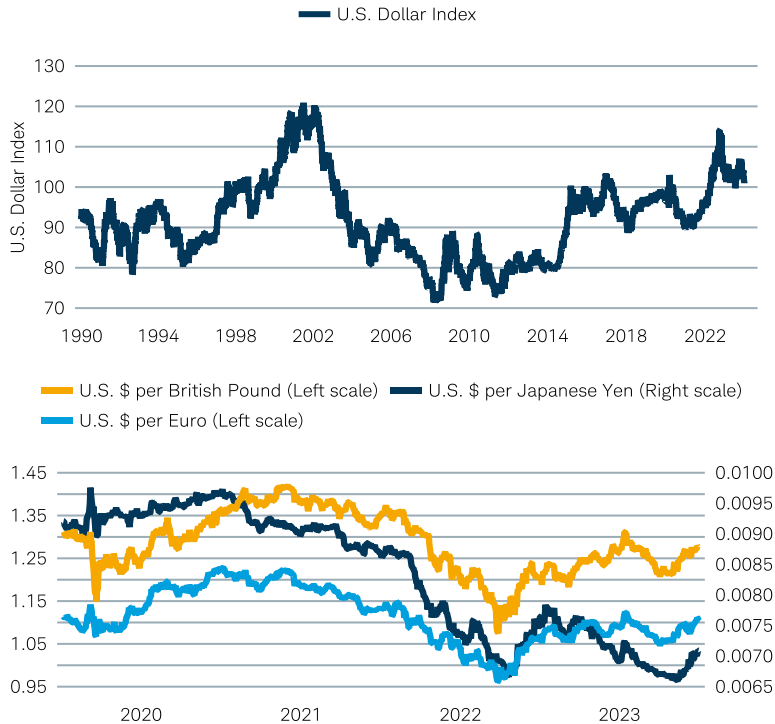
The Federal Reserve, European Central Bank, and Bank of England all opted to keep policy restrictive in 2023. A drawdown in balance sheets may further exacerbate tightening financial conditions.



Source: Charles Schwab, Bloomberg, Macrobond as of 12/31/2023.

Global currencies

The U.S. dollar has mainly moved sideways this year after rallying in 2022. Recent weakness has been driven by expectations that the Federal Reserve is not only finished hiking rates, but also is expected to start cutting rates sometime in 2024.



Source: Charles Schwab, Bloomberg, Macrobond as of 12/31/2023.

*The U.S. Dollar Index is a measure of the value of the dollar relative to a basket of U.S. trade partners' currencies. It is a weighted geometric mean of the dollar's value relative to other currencies. Weights of those currencies are shown in parentheses. Currencies are speculative, very volatile and are not suitable for all investors. MSCI Emerging Currency Index measures the total return of 25 emerging market currencies relative to the U.S. Dollar. **Past performance is no guarantee of future results.**

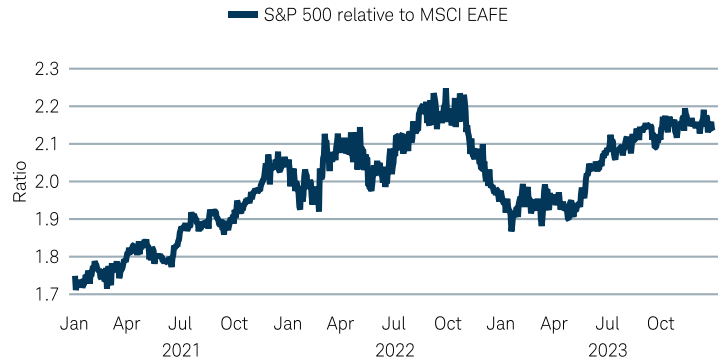
Global equity market summary

Total returns as of 12/31/2023

Global						
	Price	3-month	1-year	3-year	5-year	10-year
MSCI All Country World Index	727	11.1%	22.8%	6.2%	12.2%	8.5%
Americas						
USA Dow Jones Index	37,576	13.1%	16.2%	9.4%	12.5%	11.1%
USA S&P 500 Index	4,770	11.7%	26.3%	10.0%	15.7%	12.0%
USA NASDAQ Index	14,830	13.8%	44.7%	6.1%	18.8%	14.9%
Canada S&P/TSX Index	20,958	8.1%	11.8%	9.7%	11.3%	7.6%
MSCI Latin America Index	2,663	17.6%	33.2%	10.3%	6.4%	2.3%
EMEA						
Europe Euro Stoxx 50 Index	4,506	8.6%	23.1%	11.8%	11.9%	7.3%
UK FTSE 100 Index	7,709	2.3%	7.6%	10.0%	6.7%	5.3%
France CAC 40 Index	7,514	5.9%	20.1%	13.9%	12.9%	9.0%
Germany DAX Index	16,749	8.9%	20.3%	6.9%	9.7%	5.8%
Spain IBEX 35 Index	10,166	8.0%	27.0%	10.8%	6.4%	3.3%
Italy MIB Index	30,470	8.4%	34.3%	15.6%	14.8%	8.4%
Asia/Pacific						
Japan Nikkei 225 Index	33,464	5.2%	30.9%	9.0%	13.1%	9.5%
Hong Kong Hang Seng Index	17,047	-3.9%	-10.5%	-11.6%	-4.9%	0.3%
China CSI 300 Index	3,431	-6.8%	-9.2%	-11.1%	4.9%	6.2%
Australia S&P/ASX 200 Index	7,591	8.4%	12.4%	9.2%	10.2%	7.9%

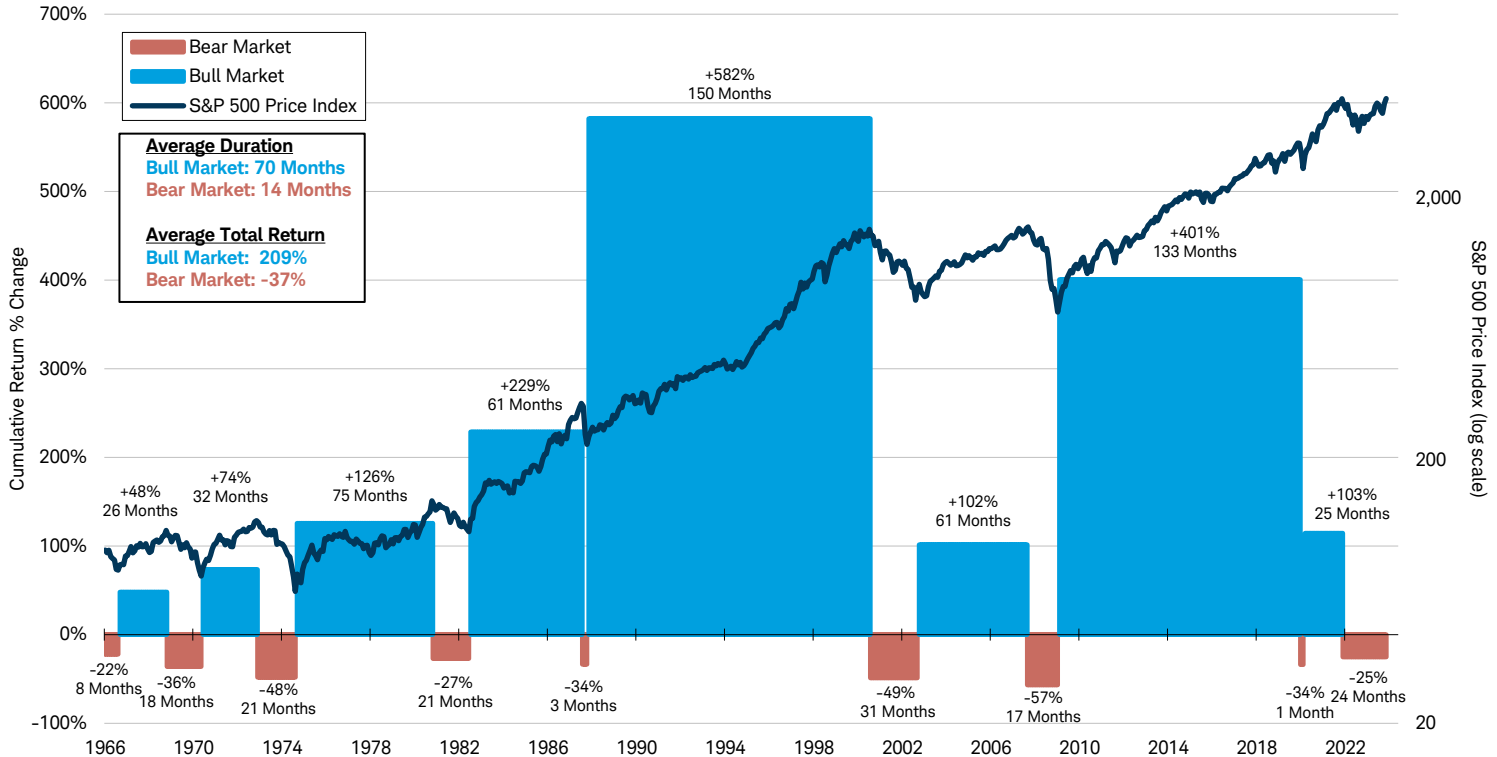
Returns are annualized for periods over one year.

Source: Charles Schwab, Bloomberg, Macrobond, FTSE, STOXX, S&P Dow Jones indexes, Nikkei Inc., MSCI as of 12/31/2023. Total return includes the reinvestment of dividends, interest, and other cash flows. Indexes are unmanaged, do not incur management fees, costs and expenses, and cannot be invested in directly. Investing involves risk, including loss of principal. **Past performance is no guarantee of future results.** A number greater/less than one for the S&P 500 and MSCI Emerging Markets indexes within the charts indicates better/worse performance of the respective performance of the MSCI EAFE and MSCI World indexes.



U.S. bull and bear markets

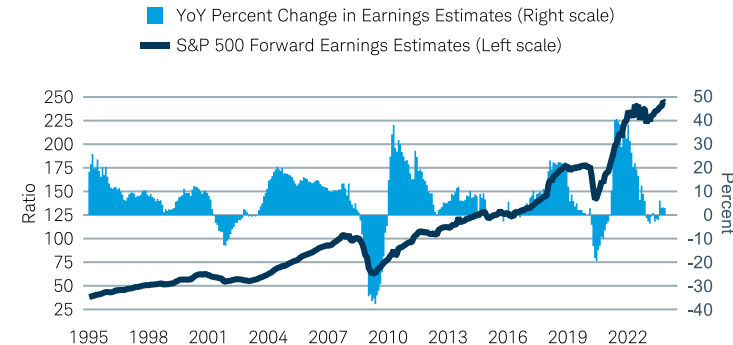
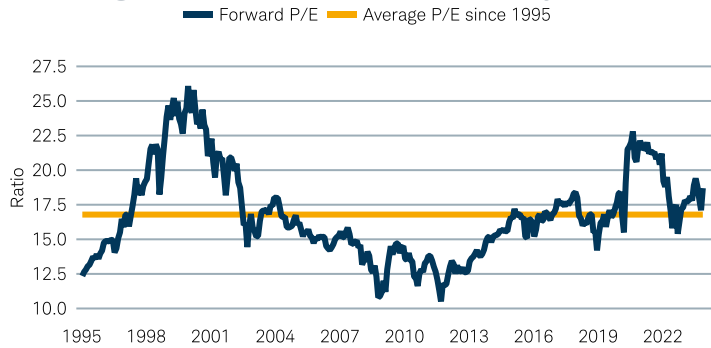
With the S&P 500 close to an all-time high, it is notable that bull markets have generally been longer in duration and greater in magnitude than bear markets, resulting in gains over time.



Source: Bloomberg. Bull and bear markets as defined by Yardeni Research. Bear Market starting in 2022 is showing the current trough as of 10/12/2022, but the bear market is still ongoing. Cumulative return is the total change in the investment over a set period of time. Logarithmic (log) scale is a way of displaying a wide range of data in a compact way by increasing the numbers exponentially. Indexes are unmanaged, do not incur management fees, costs and expenses, and cannot be invested in directly. For illustrative purposes only. Investing involves risk, including loss of principal. **Past performance is no guarantee of future results.**

S&P 500 Index valuations and earnings expectations

Several valuation metrics continue to suggest stocks are still overvalued, although valuation is often in the eye of the beholder. Fortunately, disinflation has alleviated pressure on multiples; however, earnings also need to rise sustainably for valuations to look attractive.



Valuation	
Metric	Current percentile ranking (relative to history)
S&P 500 forward P/E	Very Expensive
S&P 500 trailing P/E	Expensive
S&P 500 5-year normalized P/E	Very expensive
S&P 500 price/book value ratio	Very expensive
S&P 500 price/cash flow	Expensive
S&P 500 dividend yield	Very expensive
Shiller's CAPE (cyclically adjusted P/E)	Very expensive
Rule of 20	Expensive
Equity risk premium (10-year Treasury yield)	Expensive
Equity risk premium (Baa corporate bond yield)	Fairly valued
Fed Model	Expensive
Tobin's Q	Very Expensive
Market cap/GDP	Very expensive

Source: Charles Schwab, the Schwab Center for Financial Research, Bloomberg, Macrobond as of 12/31/2023. Indexes are unmanaged, do not incur management fees, costs, and expenses, and cannot be invested in directly. **Past performance is no guarantee of future results.** Source: Charles Schwab, Bloomberg, The Leuthold Group, as of 9/30/2023. For illustrative purposes only. Investing involves risk, including loss of principal. Due to data limitations, start dates for each metric vary and are as follows: CAPE: 1900; Dividend yield: 1928; Normalized P/E: 1946; Market cap/GDP, Tobin's Q: 1952; Forward P/E, trailing P/E, price/book, price/cash flow, rule of 20, equity risk premium, Fed Model: 1995. "Very expensive" refers to 80-100th percentile rankings; "expensive" refers to 60-80th percentile rankings; "fairly valued" refers to 40-60th percentile rankings; "inexpensive" refers to 20-40th percentile rankings; and "cheap" refers to 0-20th percentile rankings.

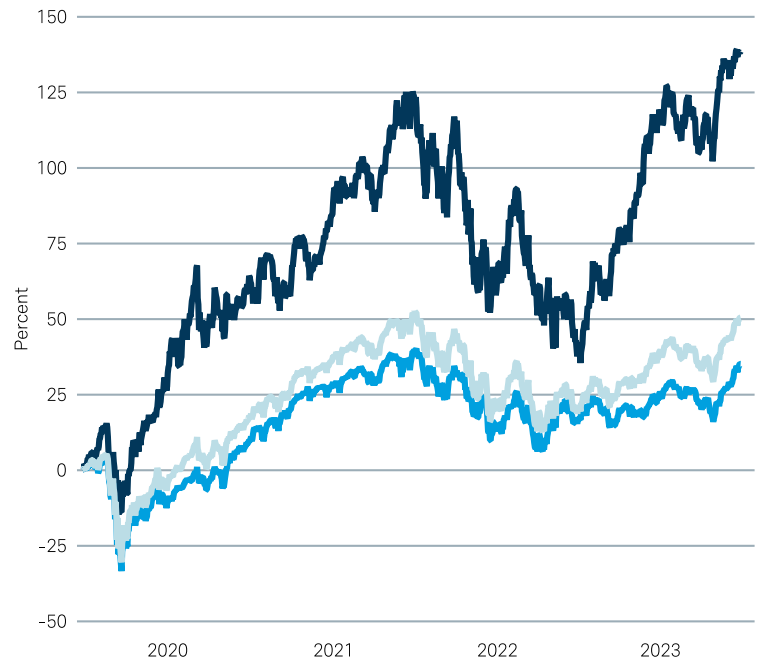
Market overly concentrated

Just five companies account for nearly 25% of the S&P 500's market cap. Concentration remained a risk in the fourth quarter.

— S&P 500 Top 5 Stocks % Weight by Market Cap



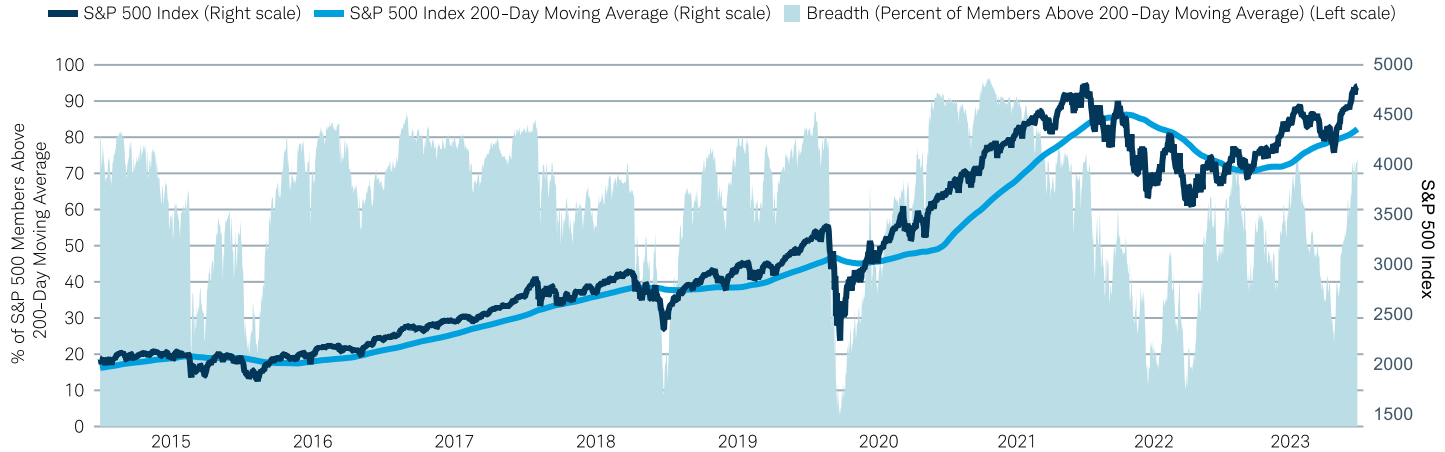
— Performance of S&P 500 Index
 — Performance of S&P 500 less Top 5
 — Performance of Top 5



Source: Charles Schwab, Bloomberg, Macrobond as of 12/31/2023. Right chart is showing cumulative price return from beginning of 2020. Top 5 stocks in the S&P 500 are Apple, Microsoft, Amazon, NVIDIA, and Alphabet. Performance does not include the effects of taxes, commissions, or fees. Indexes are unmanaged, do not incur management fees, costs, and expenses, and cannot be invested in directly. Investing involves risk, including loss of principal. All corporate names and market data shown above are for illustrative purposes only and are not a recommendation, offer to sell, or a solicitation of an offer to buy any security. Supporting documentation for any claims or statistical information is available upon request. Schwab does not recommend the use of technical analysis as a sole means of investment research. **Past performance is no guarantee of future results.**

Technical indicators

The S&P 500 Index rose above all major moving averages in the fourth quarter. Notably, there was a considerable rebound in the percentage of members trading above their 200-day moving averages, which is a key underpinning for sustainable bull markets.

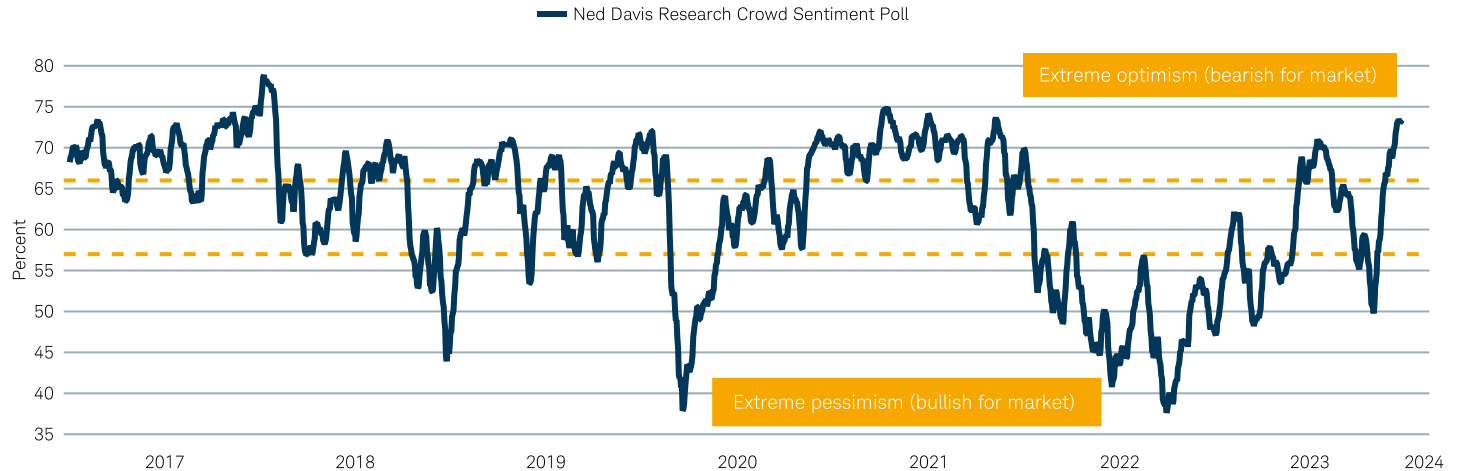


Index	2023			Since 10/12/2022 S&P 500 low			
	2023 return	Index maximum drawdown from 2023 high	Average member maximum drawdown from 2023 high	Index return from 2023 low	Index maximum drawdown from 10/12/2022	Average member maximum drawdown from 10/12/2022	Index return from 10/12/2022
S&P 500	24%	0%	-25%	25%	-10%	-26%	33%
NASDAQ	43%	-1%	-51%	46%	-12%	-53%	44%
Russell 2000	15%	-2%	-43%	24%	-18%	-45%	20%
Dow Jones	14%	0%	-19%	18%	-9%	-20%	29%

Source: Charles Schwab, Bloomberg, Macrobond, Ned Davis Research, Inc. as of 12/31/2023. Indexes are unmanaged, do not incur management fees, costs, and expenses, and cannot be invested in directly. Some members excluded from year-to-date return columns given additions to indices were after January 2023. Schwab does not recommend the use of technical analysis as a sole means of investment research. Investing involves risk, including loss of principal. **Past performance is no guarantee of future results.**

Investor sentiment indicators

The bounce in risk assets since late October coincided with a significant upturn in investor sentiment. The Crowd Sentiment Poll from Ned Davis Research jumped into “extreme optimism” territory, which has historically been a weaker zone for the stock market.

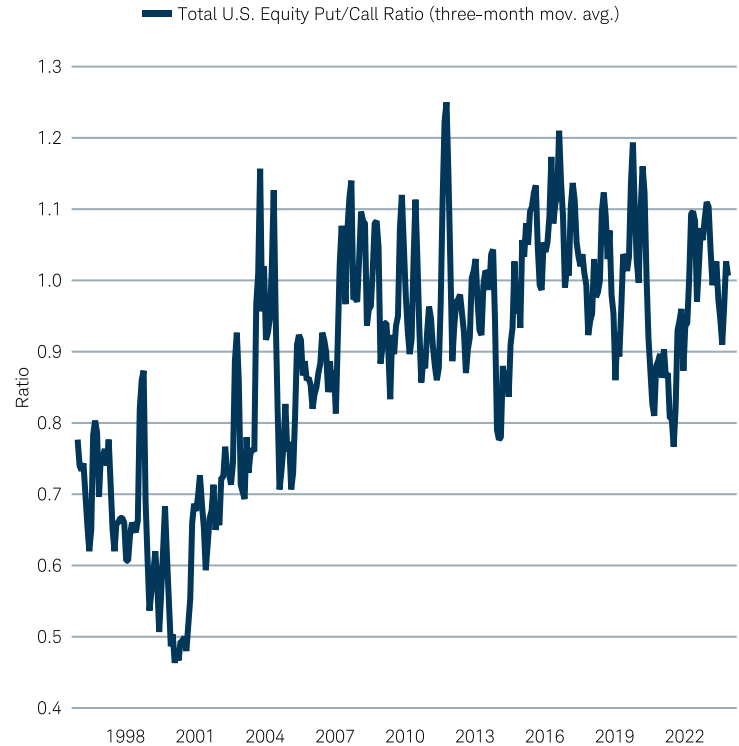
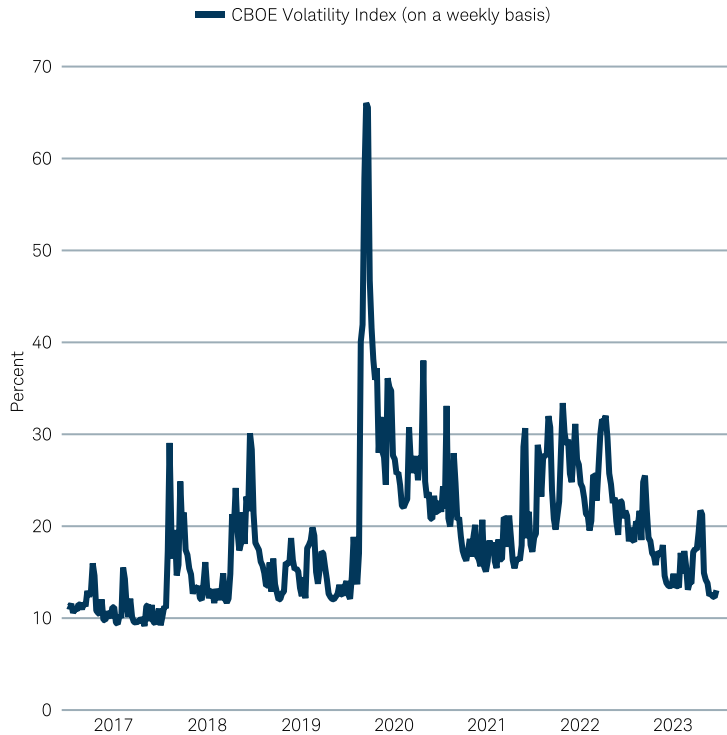


Ned Davis Research Crowd Sentiment Poll	S&P 500 annualized gain (12/01/1995-12/31/2023)	Percent of time
Above 66	-0.06%	27.21%
57-66 from above	1.91%	17.44%
57-66 from below	19.80%	18.41%
Below 57	10.82%	36.55%

Source: Charles Schwab, Ned Davis Research, Inc. as of 12/31/2023. See NDR Disclaimer at www.ndr.com/copyright.html. Further distribution prohibited without prior permission. All Rights Reserved. For data vendor disclaimers refer to www.ndr.com/vendorinfo. Investing involves risk, including loss of principal. Schwab does not recommend the use of technical analysis as a sole means of investment research. **Past performance is no guarantee of future results.**

Equity market volatility

The Volatility Index hasn't climbed to levels consistent with prior bear market panics. The put/call ratio has remained subdued relative to history, reflecting an improvement in investor optimism.



Source: Charles Schwab, Macrobond as of 12/31/2023. Equity put/call ratio measures the ratio of put options sold divided by call options sold for a given time period. A higher ratio indicates the market is more bearish, while a lower ratio indicates the market is more bullish. Options carry a high level of risk and are not suitable for all investors. Certain requirements must be met to trade options through Schwab. Please read the options disclosure document titled "Characteristics and Risks of Standardized Options" before considering any option transaction by [CLICKING HERE](#). Call Schwab at 1-800-435-4000 for a current copy. Supporting documentation for any claims or statistical information is available upon request. Schwab does not recommend the use of technical analysis as a sole means of investment research. For illustrative purposes only. **Past performance is no guarantee of future results.**

U.S. equity sector returns and valuations

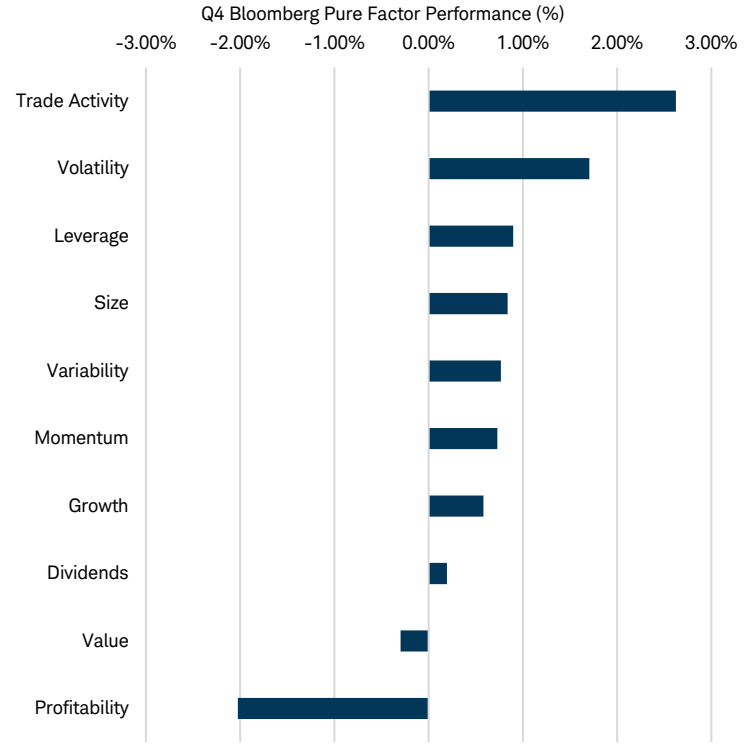
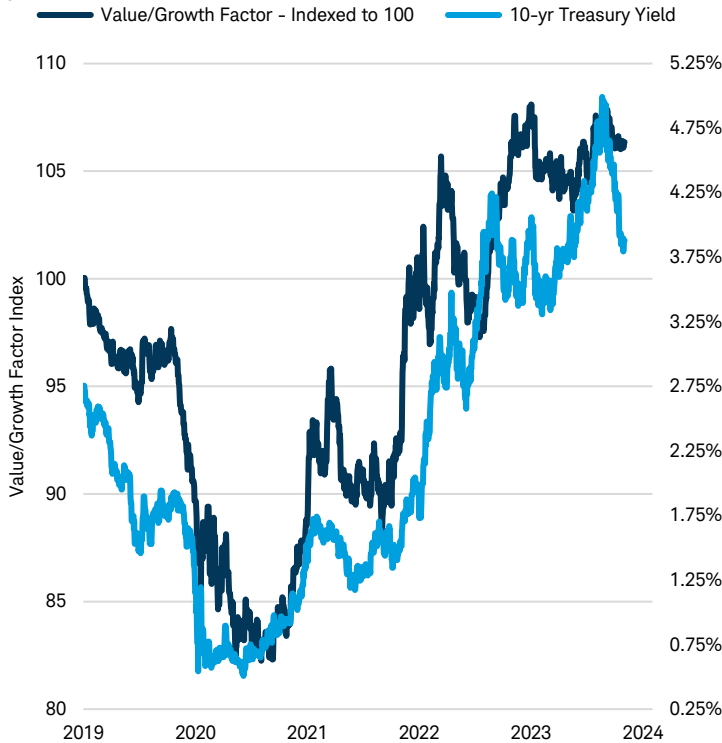
Data as of 12/31/2023

S&P 500 Sectors									
Index	S&P Weight	3-month Total Return	1-year Total Return	Total Return since last market peak (1/2022)	Total Return since last market low (3/2020)	Forward P/E	Median Forward P/E since 1990	Long-Term Est EPS Growth	Dividend Yield
S&P 500 Index	100.0%	11.7%	26.3%	2.7%	126.4%	19.7	16.9	4.6%	1.5%
Information Technology	28.3%	17.2%	57.8%	12.2%	184.3%	26.7	18.9	12.7%	0.8%
Financials	12.9%	14.0%	12.1%	-1.0%	130.2%	14.8	12.8	5.9%	1.8%
Health Care	12.7%	6.4%	2.1%	1.1%	94.5%	18.0	16.4	1.0%	1.7%
Consumer Discretionary	10.8%	12.4%	42.3%	-12.8%	104.6%	24.3	18.7	9.6%	0.8%
Industrials	8.8%	13.0%	18.1%	12.5%	149.2%	20.0	16.2	6.8%	1.6%
Communication Services	8.5%	10.9%	55.8%	-6.9%	85.0%	17.0	15.6	23.3%	0.8%
Consumer Staples	6.2%	5.5%	0.5%	-0.1%	68.4%	19.2	17.2	5.8%	2.9%
Energy	3.9%	-7.0%	-1.4%	58.2%	316.0%	10.8	15.5	9.9%	3.6%
Real Estate	2.5%	18.8%	12.3%	-16.3%	78.4%	37.6	n/a	4.3%	3.4%
Materials	2.4%	9.7%	12.5%	0.1%	141.0%	19.8	16.2	16.7%	2.0%
Utilities	2.3%	8.6%	-7.1%	-4.7%	59.7%	15.7	14.6	9.6%	3.5%

Source: Bloomberg. Total return includes the reinvestment of dividends, interest, and other cash flows. Sectors listed are S&P 500 sector indexes according to GICS classification. Indexes are unmanaged, do not incur management fees, costs, and expenses, and cannot be invested in directly. Returns assume reinvestment of dividends and interest. Investing involves risk, including loss of principal. **Past performance is no guarantee of future results.**

Equity investment styles and factors

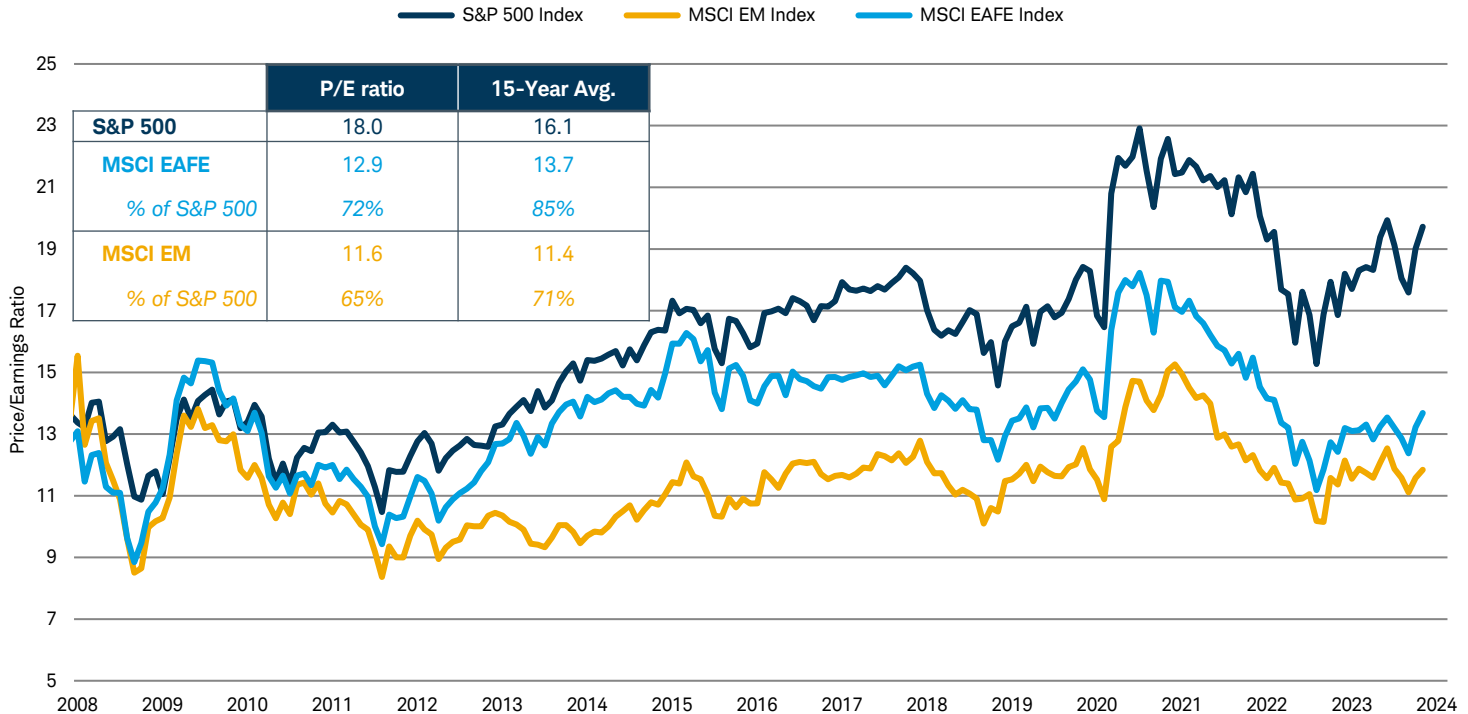
Value tends to outperform growth when interest rates rise. Beyond growth and value, there are several factors, including profitability and momentum, that can help explain overall market performance.



Source: Charles Schwab, Bloomberg as of 12/31/2023. Value/growth factor performance is based on Bloomberg pure factor indexes. Value factor attempts to differentiate "rich" and "cheap" stocks. Growth factor aims to capture companies' historical and forward-looking growth. Ten-year generic U.S. Treasury rate. Indexes are unmanaged, do not incur management fees, costs, and expenses, and cannot be invested in directly. Investing involves risk, including loss of principal. **Past performance is no guarantee of future results.**

Global equity valuations

International equity valuations are less expensive than U.S. valuations, both currently and historically. However, the outsized impact of the war in Ukraine is pressuring EAFE valuations, while China's sluggish growth has weighed on emerging market valuations.



Source: Bloomberg, the Schwab Center for Financial Research as of 12/31/2023. Indexes are unmanaged, do not incur management fees, costs, and expenses, and cannot be invested in directly. Investing involves risk, including loss of principal. **Past performance is no guarantee of future results.**

Comparing valuations around the globe

In this alternative metric, the cyclically adjusted measure of valuations is based on long-term earnings. Many markets have more attractive valuations than the U.S. market. This helps support the case for global diversification.

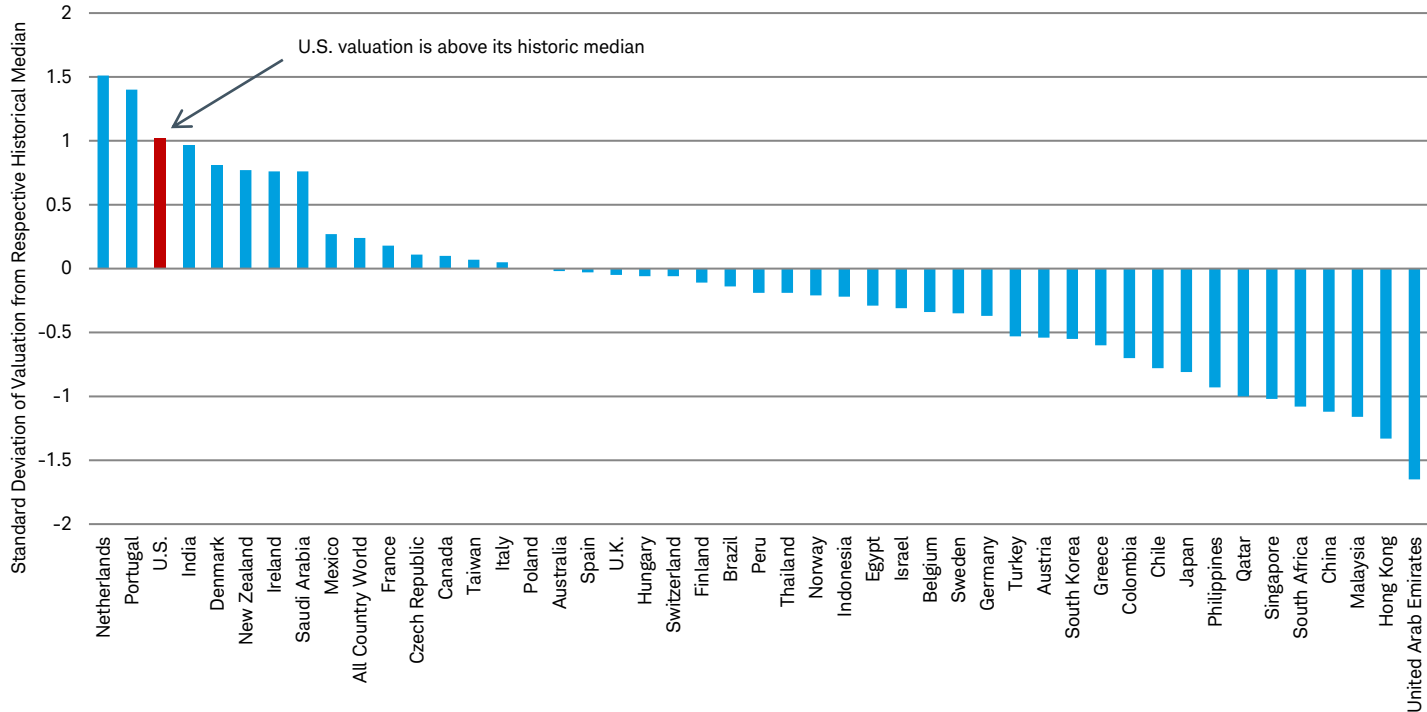


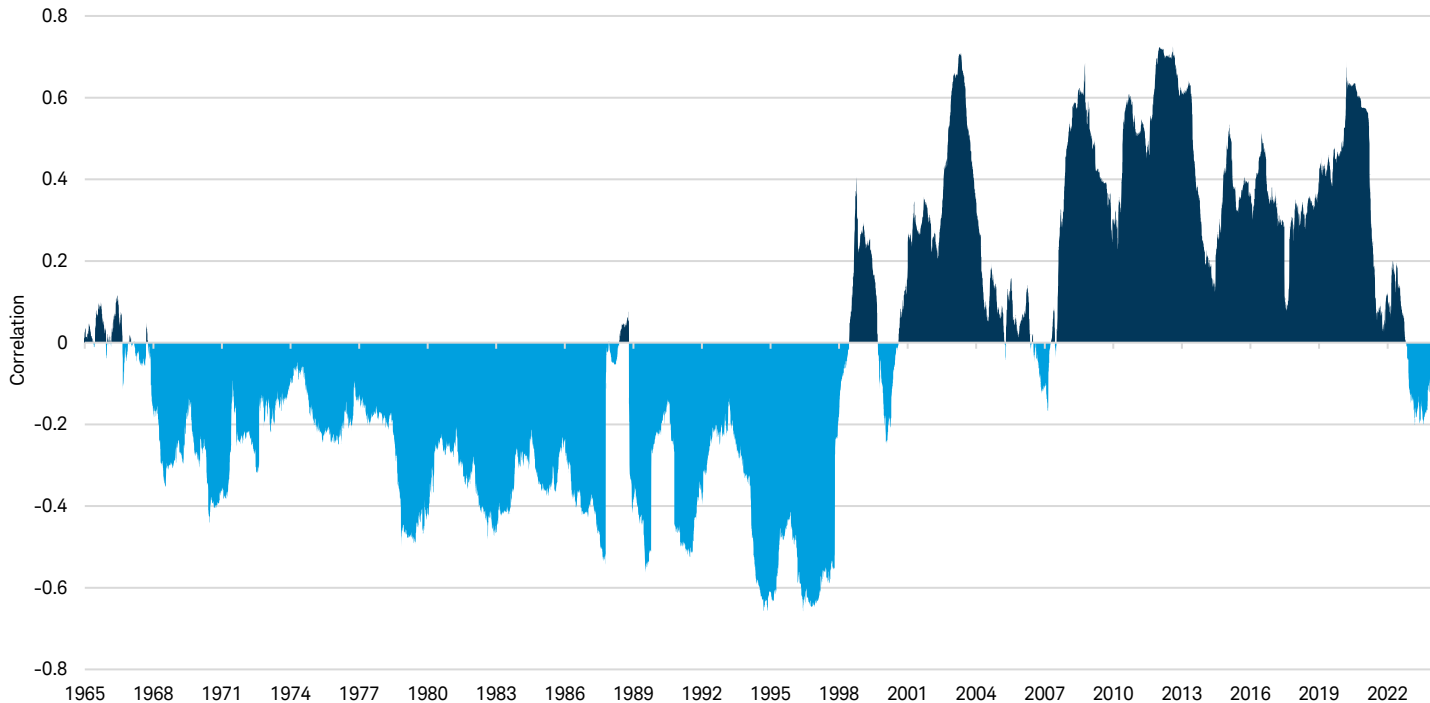
Chart shows the number of standard deviations each market's valuation currently is from its historical median. A value above zero indicates the market is above its historical valuation, and a value below zero indicates a market is below its historical valuation. Valuation is measured by the Cyclically Adjusted Price/Earnings (P/E). Cyclically Adjusted P/E = MSCI Country Price Index/10-Year average earnings per share (inflation adjusted). Median based on 1980-present period, based on data availability. All countries shown above are represented by their respective MSCI index.

Source: Ned Davis Research. Data as of 12/31/2023. Investing involves risk, including loss of principal. Diversification strategies do not ensure a profit and do not protect against losses in declining markets. These countries named are for informational purposes only and are not to be construed as a recommendation. For illustrative purposes only.

Stock market and bond yields

The correlation between changes in bond yields and stock prices has fallen back into negative territory—painting a similar backdrop to what was considered normal from the mid-1960s to the mid-1990s.

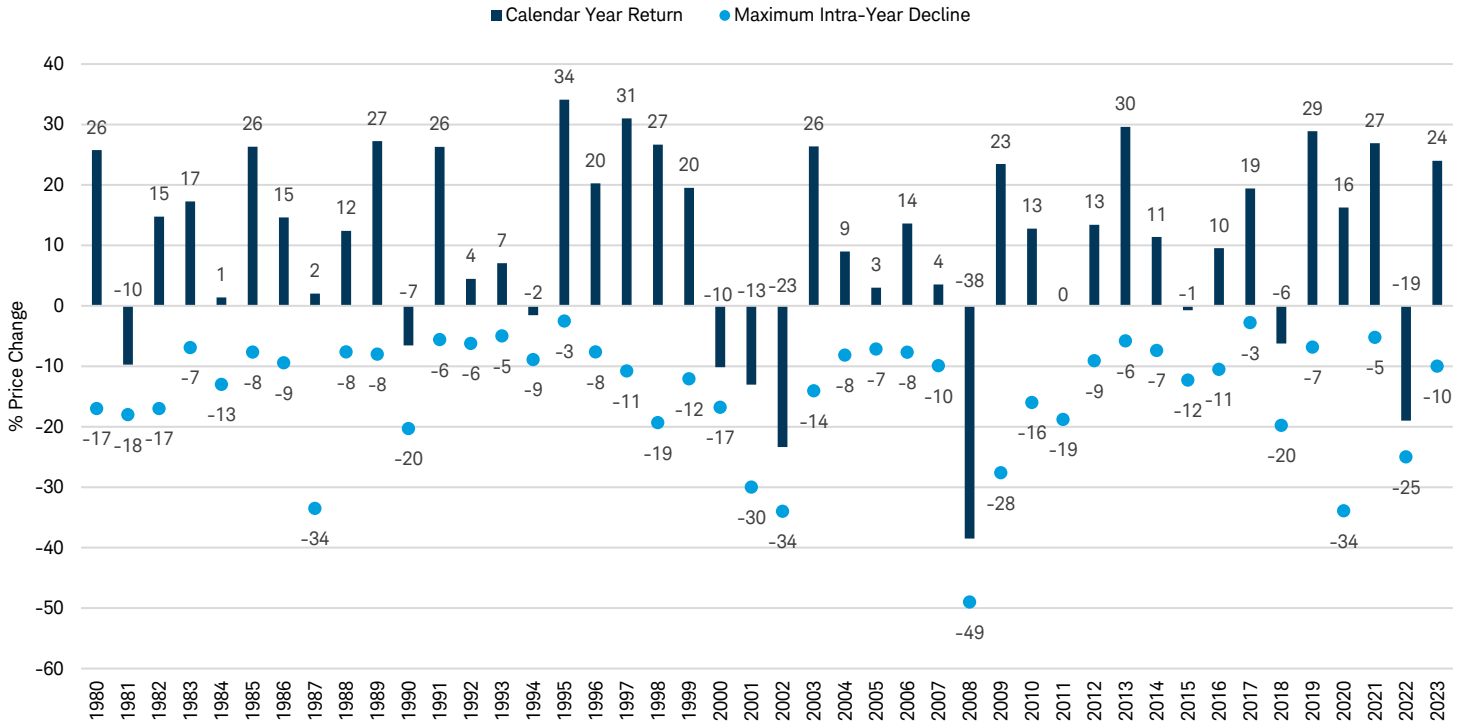
Rolling 1-year correlation between S&P 500 Index and 10-year Treasury yield



Source: Charles Schwab, Bloomberg as of 12/31/2023. Treasury yield is represented by the U.S. Generic 10-year Treasury Yield (USGG10YR INDEX). Diversification strategies do not ensure a profit and do not protect against losses in declining markets. Investing involves risk, including loss of principal. Indexes are unmanaged, do not incur management fees, costs and expenses, and cannot be invested in directly. For illustrative purposes only. **Past performance is no guarantee of future results.**

Stocks can rise despite drawdowns during the year

While we've seen large intra-year declines, annual performance has managed to be positive most of the time, with two of the three biggest intra-year drawdowns accompanying yearly gains in 1987 and 2020.



Source: Schwab Center for Financial Research with data provided by Morningstar, Inc. and Bloomberg. Data as of 12/31/2023. Shown in the chart are annual price returns for the S&P 500 Index and do not include reinvestment of dividends, interest, or the effects of taxes. Intra-year declines are the largest stock market drops during the year, representing a peak-to-trough change in index value. The annual return for 2011 was -0.32%. Indexes are unmanaged, do not incur management fees, costs, and expenses, and cannot be invested in directly. Investing involves risk, including loss of principal. **Past performance is no guarantee of future results.**

Income index returns

Total returns of income-generating investments as of 12/31/2023.

Core Bonds					
	3-month	1-year	3-year	5-year	10-year
Bloomberg U.S. Aggregate	6.8%	5.5%	-3.3%	1.1%	1.8%
Treasuries	5.5%	3.9%	-3.9%	0.5%	1.2%
Municipal Bonds	7.9%	6.4%	-0.4%	2.3%	3.0%
Mortgage Backed	7.5%	5.0%	-2.9%	0.3%	1.4%
Agency Bonds	3.7%	5.1%	-1.5%	1.3%	1.6%
Investment Grade Corporate	7.9%	8.4%	-3.2%	2.6%	3.0%
Commercial Mortgage Backed	5.2%	5.3%	-2.4%	1.6%	2.1%
Asset Backed	3.5%	5.5%	0.2%	1.9%	1.8%
Aggressive Income					
High-Yield Bonds	7.2%	13.4%	2.0%	5.4%	4.6%
Bank Loans	2.9%	13.3%	5.8%	5.8%	4.4%
Preferred Stock	6.0%	12.0%	-1.1%	4.2%	4.7%
Convertible Bonds	7.2%	14.6%	-1.9%	12.4%	9.4%

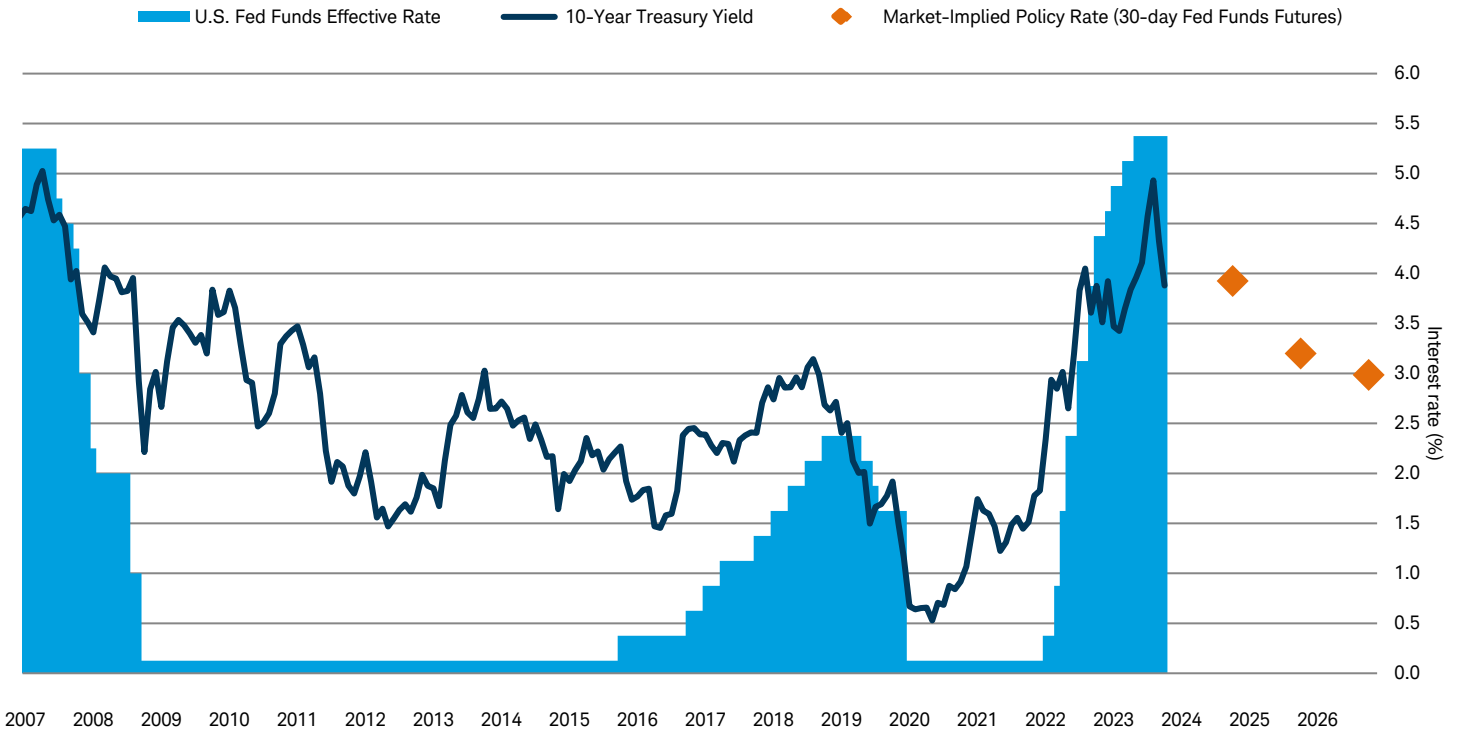
International					
	3-month	1-year	3-year	5-year	10-year
International Treasuries	9.9%	6.2%	-7.9%	-1.8%	-0.8%
International Investment Grade	8.7%	9.2%	-4.2%	1.4%	1.5%
Emerging Market Bonds (USD)	9.7%	10.8%	-4.0%	1.7%	3.1%
Emerging Market Bonds (Local)	6.9%	10.9%	-3.3%	0.6%	-0.2%
Dividend Equity					
U.S. Dividend Stocks	8.7%	4.6%	9.6%	14.1%	11.1%

Returns are annualized for periods over one year.

Source: Bloomberg. Indexes are unmanaged, do not incur management fees, costs and expenses, and cannot be invested in directly. Returns assume reinvestment of dividends and interest. Indexes are: Bloomberg U.S. Agg Total Return (U.S. Aggregate Bond), ICE U.S. Treasury Core Bond Total Return (Treasuries), Bloomberg Municipal Index (Municipal Bonds), Bloomberg U.S. MBS Index (Mortgage Backed), Bloomberg U.S. Aggregate Agency Bond Index (Agency Bonds), ICE BofA U.S. Corporate Index (Investment Grade Corporate), Bloomberg CMBS Investment Grade Total Return Index Value Unhedged USD (Commercial Mortgage Backed), Bloomberg U.S. Agg ABS Total Return Value Unhedged USD (Asset Backed), Bloomberg U.S. Corporate High Yield Bond (High Yield Bonds), Morningstar LSTA Leveraged Loan Total Return Index (Bank Loans), S&P U.S. Preferred Stock Total Return Index (Preferred Stock), Bloomberg U.S. Convertibles Liquid Bond Index TR Unhedged USD (Convertible Bonds), Bloomberg Global Treasury ex-U.S. Capped TR Index Value Unhedged USD (International Treasuries), Bloomberg Global Agg Credit Total Return Index Value Unhedged USD (International Investment Grade), J.P. Morgan EMBI Index (Emerging Market Bonds [USD]) J.P. Morgan GBI-EM Index (Emerging Market Bonds [Local]), Dow Jones U.S. Dividend 100 Total Return Index (U.S. Dividend Stocks). Investing involves risk, including loss of principal. **Past performance is no guarantee of future results.** For illustrative purposes only. See additional information on the disclosures page.

Federal funds rate path

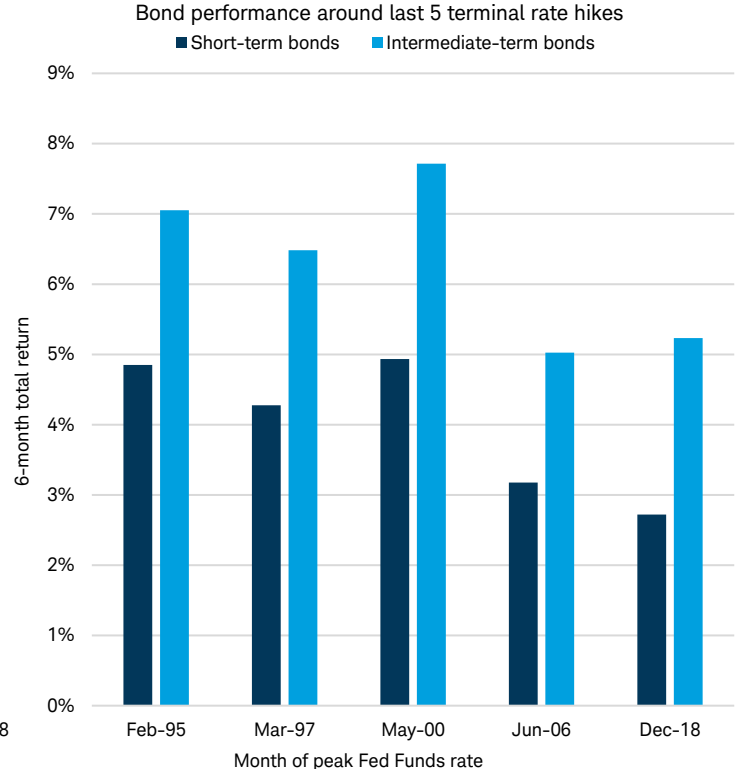
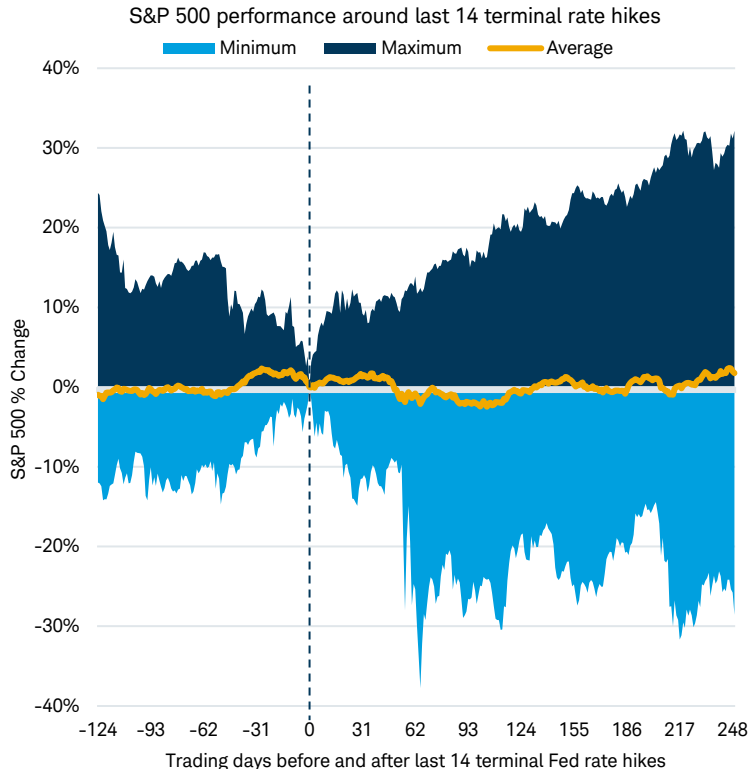
FOMC projections suggest that rate cuts are on the horizon in 2024. Market expectations are pricing in a larger number of cuts than the Fed's median projection indicates.



Source: Bloomberg as of 12/31/2023. Market-implied policy rates for 12/2024, 12/2025 and 12/2026. For illustrative purposes only. Futures and futures options trading involves substantial risk and is not suitable for all investors. Please read the [Risk Disclosure Statement for Futures and Options](#) prior to trading futures products. **Past performance is no guarantee of future results.**

Rate hike cycle

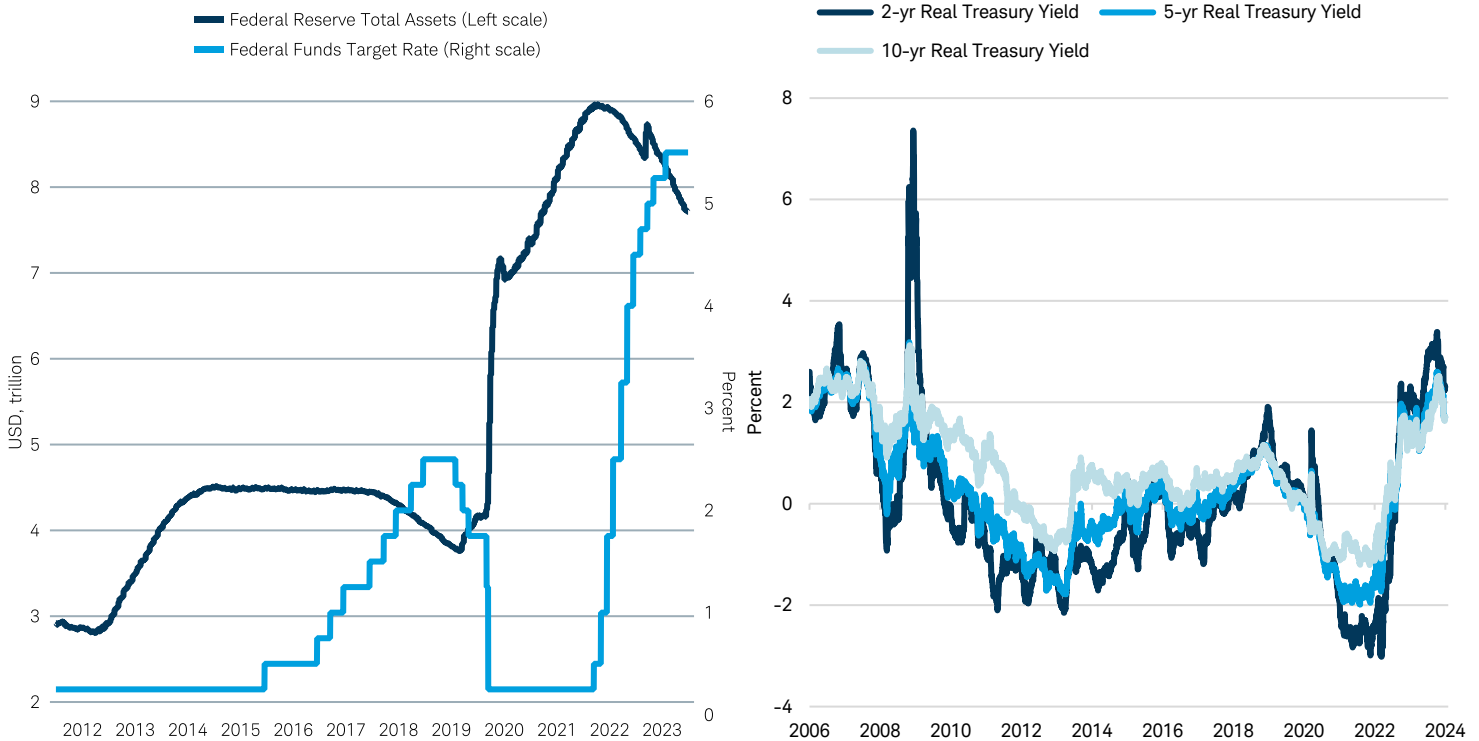
Intermediate-term bonds have outperformed short-term bonds in the six months following the last rate hike over the last five cycles, while stock returns have varied.



Source: Charles Schwab, Bloomberg. Left: 1929-2019. Dark blue shading represents best historical performance before and after last 14 terminal Fed rate hikes. Light blue shading represents worst historical performance before and after last 14 terminal Fed rate hikes. Right: Six-month total returns for each period are as of month-end. The indexes used for each asset class are the Bloomberg U.S. Aggregate 1-3 Year Index for "Short-term" and the Bloomberg U.S. Aggregate 5-7 Year Index for "Intermediate-term." Indexes are unmanaged, do not incur management fees, costs, and expenses, and cannot be invested in directly. Schwab does not recommend the use of technical analysis as a sole means of investment research. Investing involves risk, including loss of principal. **Past performance is no guarantee of future results.**

Federal Reserve balance sheet and real yields

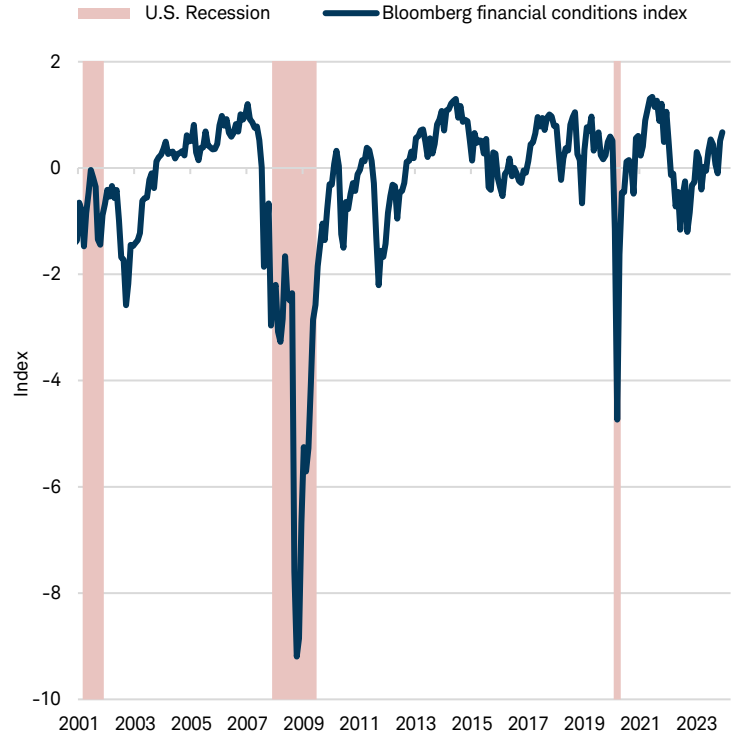
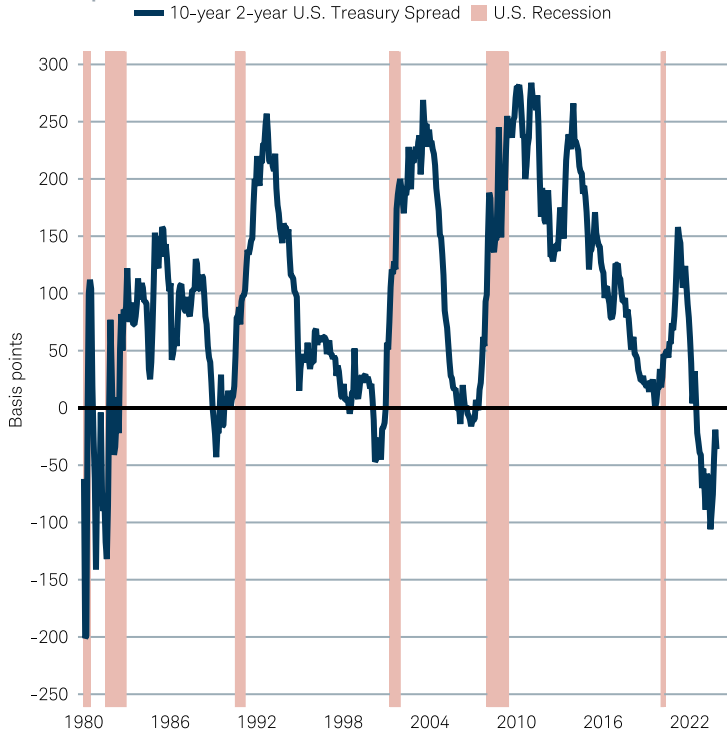
Balance sheet runoff, or “quantitative tightening,” has resulted in more than \$1 trillion rolling off the balance sheet. “Real” yields remain near their highest levels in years.



Source: Macrobond as of 12/31/2023. Left chart reflects top of Fed Funds Target Rate range. Real yields are nominal yields that are adjusted for inflation. **Past performance is no guarantee of future results.**

Yield curve slope and recessions

The spread between the 2-year and 10-year Treasury yields remained inverted in the fourth quarter. The curve flattened early in the quarter as the “higher for longer” theme pulled up long-term yields, however the potential for Fed rate cuts in 2024 reversed that trend and the yield curve inversion deepened.

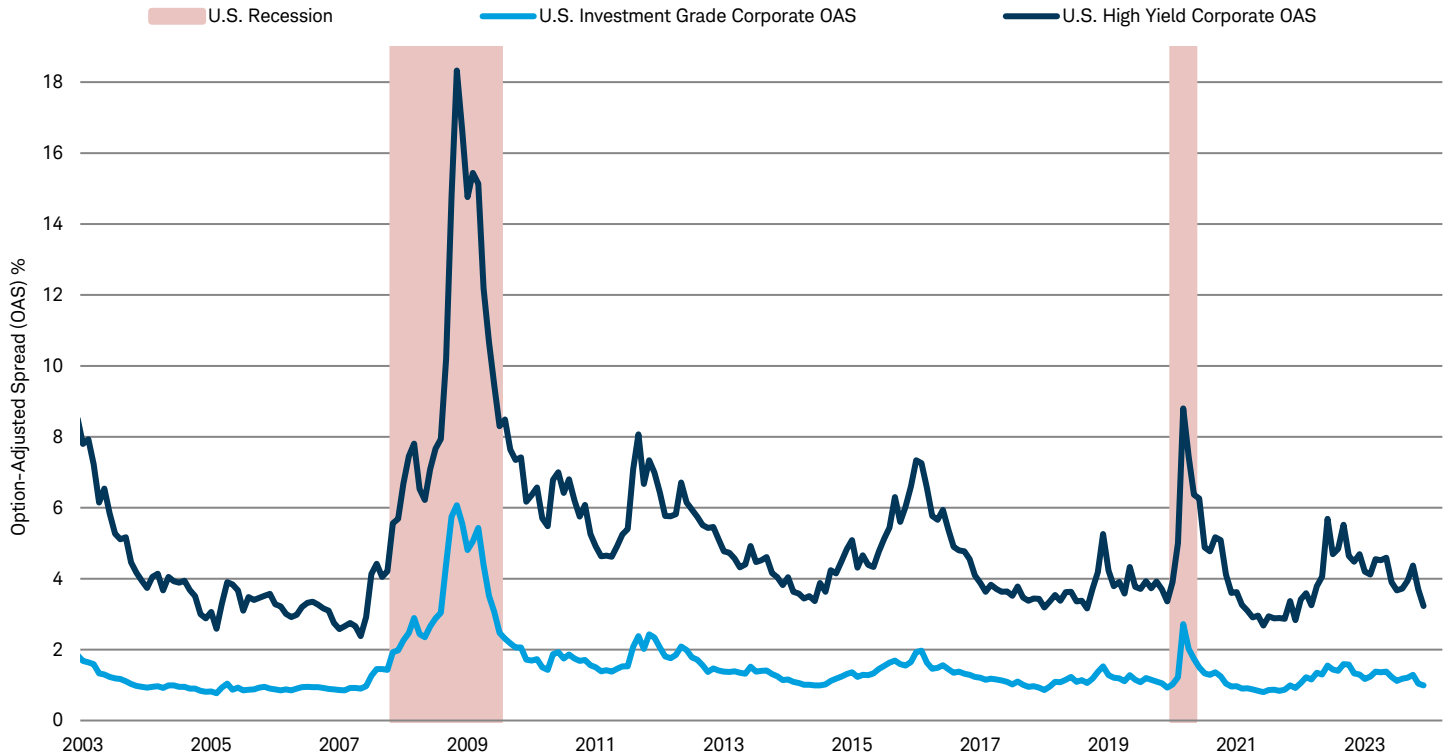


Bars represent National Bureau of Economic Research defined recession periods.

Source: Charles Schwab, Bloomberg, and Macrobond as of 12/31/2023. Schwab does not recommend the use of technical analysis as a sole means of investment research. Investing involves risk, including loss of principal. **Past performance is no guarantee of future results.**

Corporate bond spreads

Bond spreads provide insight into the ease of securing financing and the risk premium demanded by investors. Spreads fell in the fourth quarter based on rising optimism for a “soft landing”.

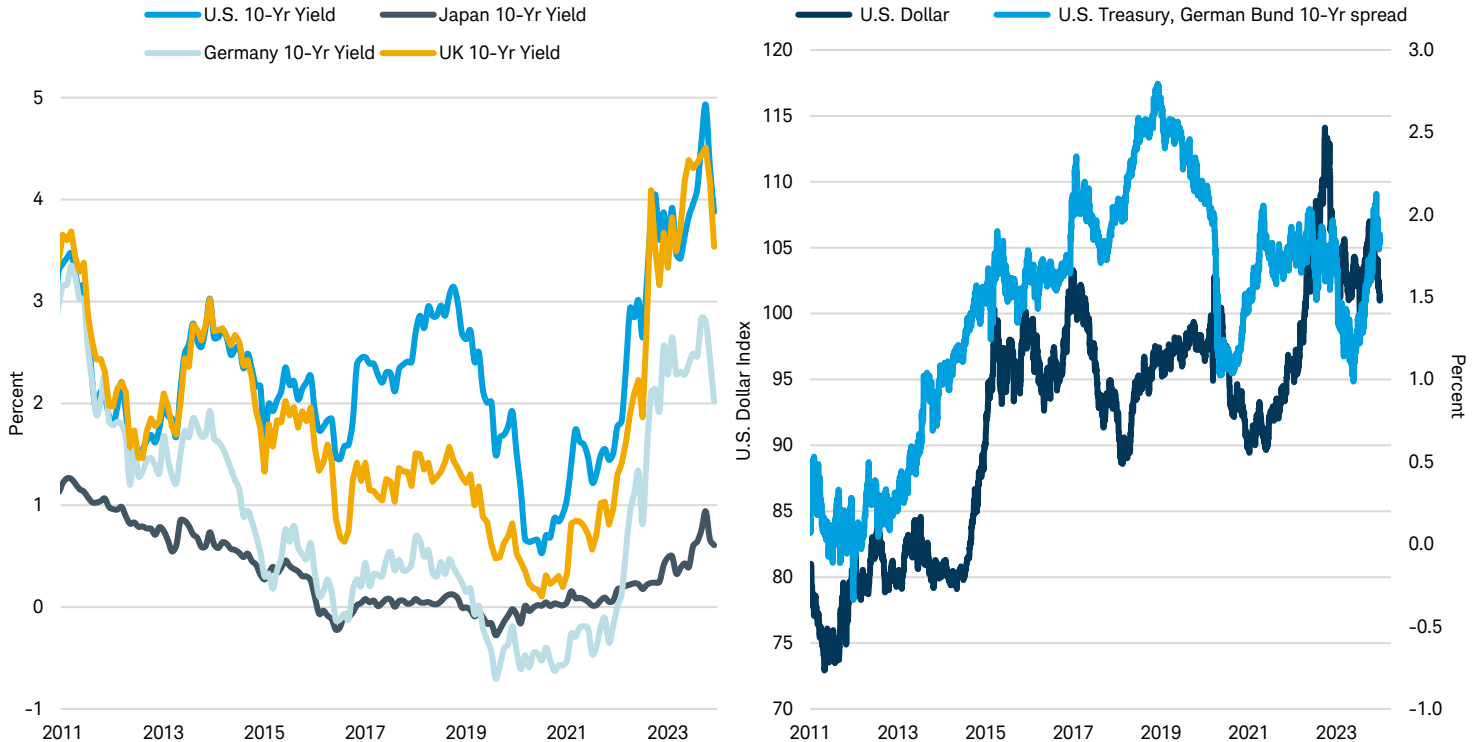


Bars represent National Bureau of Economic Research defined recession periods.

Option-adjusted spreads (OAS) are quoted as a fixed spread, or differential, over U.S. Treasury issues. OAS is a method used in calculating the relative value of a fixed income security containing an embedded option, such as a borrower's option to prepay a loan. Source: Charles Schwab, Bloomberg as of 12/31/2023. Investing involves risk, including loss of principal. **Past performance is no guarantee of future results.**

Global yields

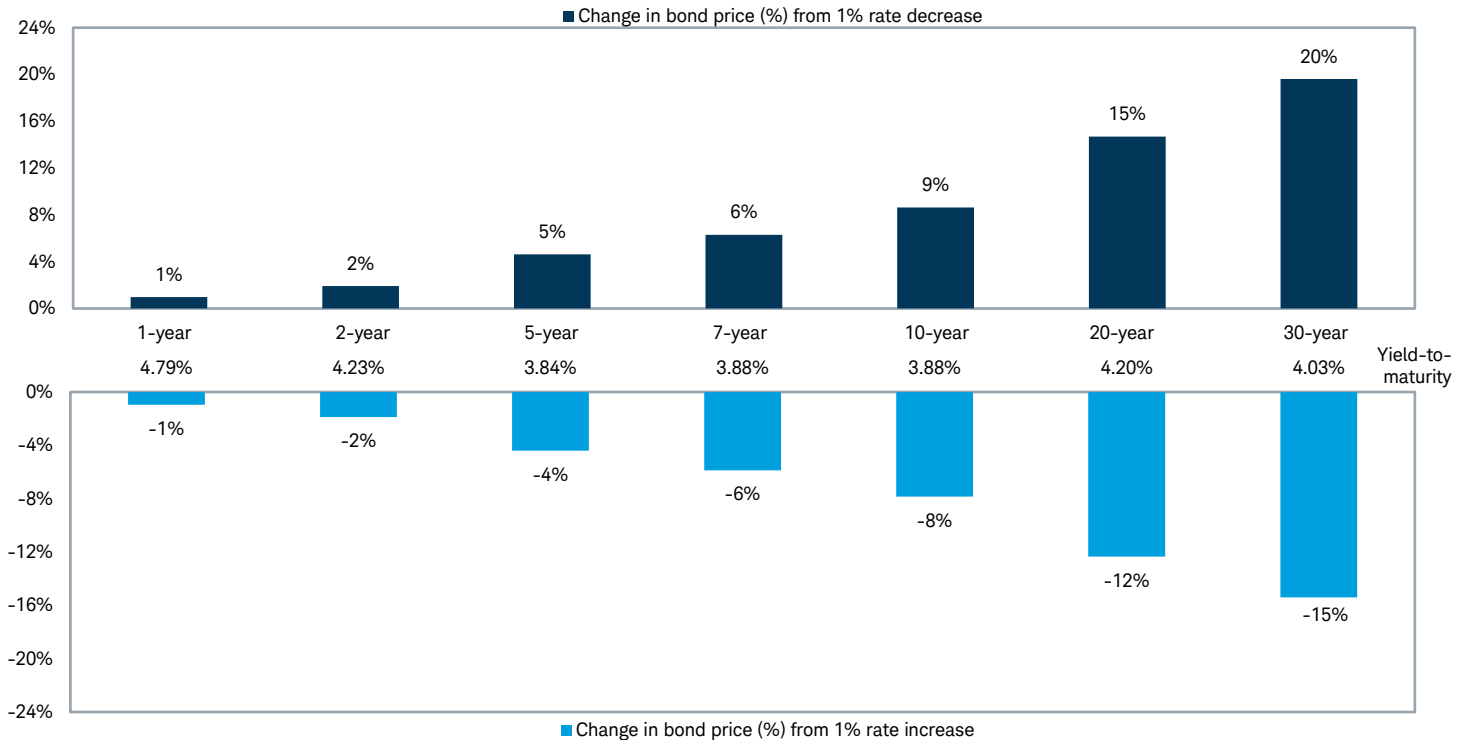
Interest rate differentials can influence the value of currencies. Yields in the U.S. are higher than most other developed market government bond yields, although that gap is off its highs.



Source: Charles Schwab, Bloomberg as of 12/31/2023. Spread shown in the right chart is the 10-Yr Treasury yield minus the 10-Yr German Bund yield. Currencies are speculative, very volatile and are not suitable for all investors. **Past performance is no guarantee of future results.**

Interest rates and bond prices

Bond prices and yields move in opposite directions, and the magnitude of the price change generally depends on the bond's maturity. Long-term bonds tend to be the most sensitive to yield changes.

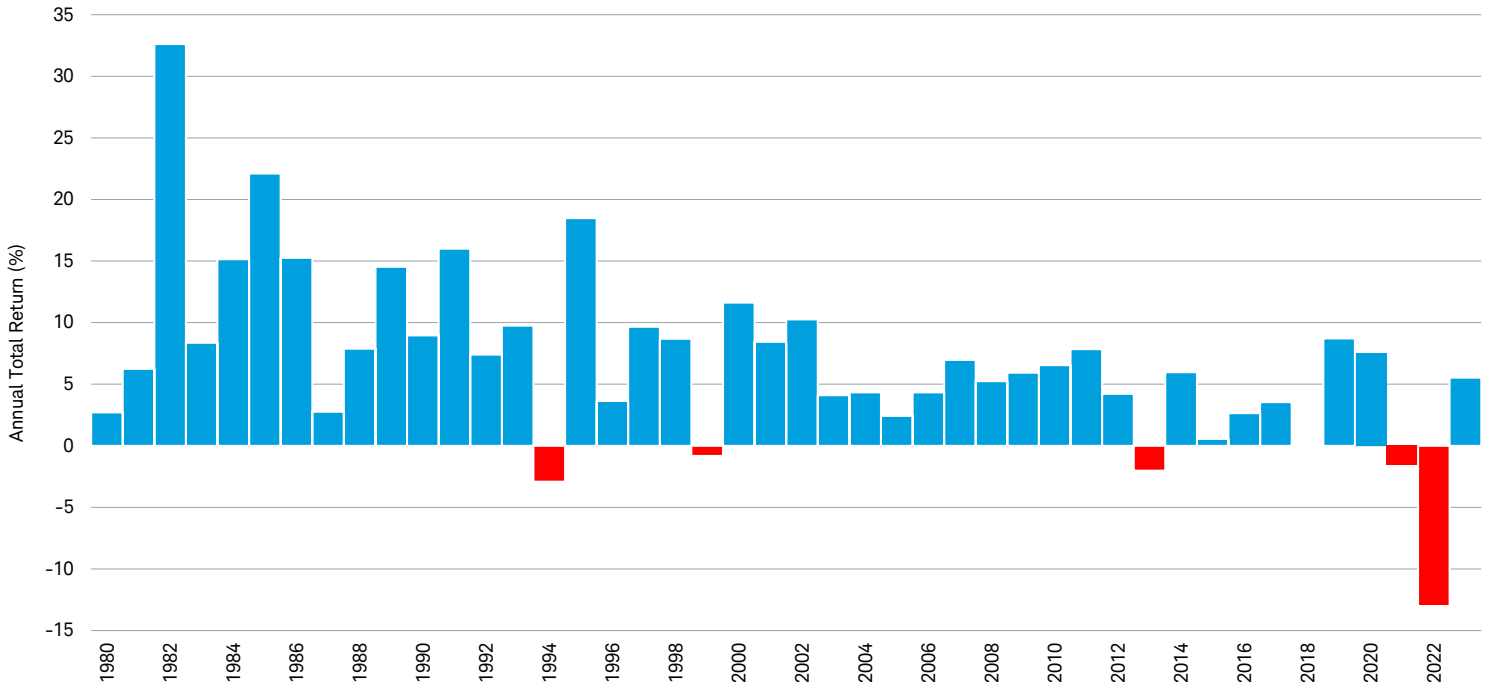


Source: Charles Schwab and Federal Reserve, using yields as of 12/31/2023. This chart assumes a "parallel" upward and downward shift in yields from current rates by 1%. There is no single interest rate, and a rise in the short-term Fed Funds rate does not always result in a corresponding rise in longer-term Treasury rates. Investing involves risk, including loss of principal. For illustrative purposes only. **Past performance is no guarantee of future results.**

Negative returns have been uncommon in a diversified bond portfolio

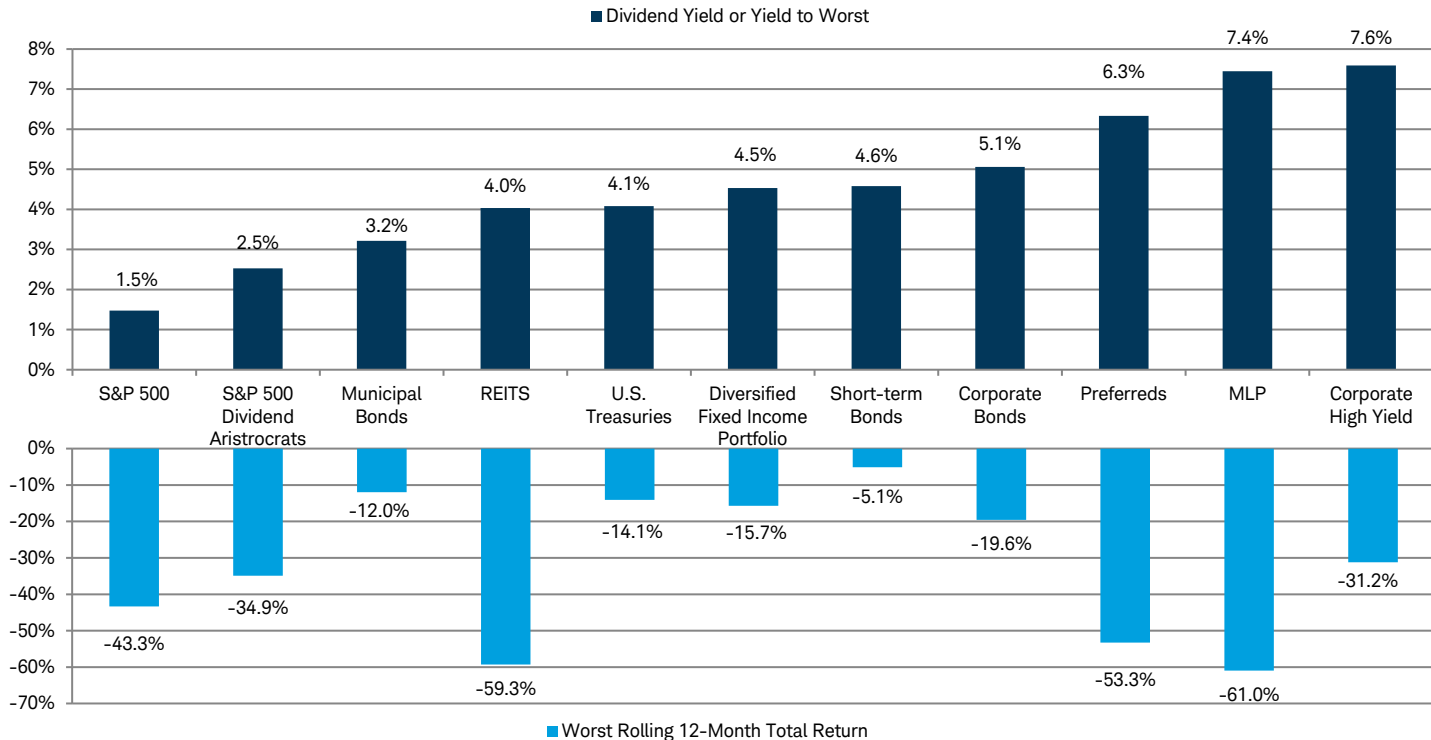
After the worst year in the U.S. Aggregate's history, total returns were positive in 2023. Given the high starting yields, positive returns seem likely in 2024 as well.

Annual Total Return for Bloomberg U.S. Aggregate Bond Index



Source: Bloomberg as of 12/31/2023. Shown in the chart are annual total returns including price change and income for the Bloomberg U.S. Aggregate Bond Index. Returns include reinvestment of interest. Indexes are unmanaged, do not incur management fees, costs, and expenses, and cannot be invested in directly. Investing involves risk, including loss of principal. **Past performance is no guarantee of future results. Diversification strategies do not ensure a profit and do not protect against losses in declining markets.**

Higher yields usually come with higher risks



Diversified Fixed Income Portfolio is represented by the Bloomberg U.S. Aggregate Bond Index. Dividend yield on the S&P 500 Index (S&P 500), S&P 500 Dividend Aristocrats Index (S&P 500 Dividend Aristocrats), S&P U.S. REIT Index (REITs), and Alerian MLP Index (MLPs). Yield to worst on the Bloomberg U.S. Aggregate Bond Index (Diversified Fixed Income Portfolio), Bloomberg U.S. Aggregate 1-3 Year Index (Short-term Bonds), BofA Fixed Rate Preferred Securities Index (Preferreds), Bloomberg U.S. Corporate High Yield Index (Corporate High Yield), Bloomberg U.S. Treasury Index (U.S. Treasuries), Bloomberg Municipal Bond Index (Municipal Bonds), and Bloomberg Corporate Bond Index (Corporate Bonds). Indexes are unmanaged, do not incur management fees, costs, and expenses, and cannot be invested in directly. Investing involves risk, including loss of principal.

Source: Dividend yield or yield to worst data obtained from Bloomberg as of 12/31/2023. Worst rolling 12-month total returns are from 12/31/1999 to 12/31/2023 using monthly data. Returns assume reinvestment of dividends and interest. **For illustrative purposes only. Past performance is no guarantee of future results.**

Municipal bond index returns and yields

Data as of 12/31/2023

Fixed Income				
	1-month	3-month	6-month	12-month
Municipal	2.32%	7.89%	3.63%	6.40%
Municipal High Yield	3.00%	9.21%	4.57%	9.21%
Taxable Municipal	4.96%	7.89%	3.90%	8.84%
By Maturity				
1 Year (1-2)	0.58%	2.32%	2.23%	3.39%
3 Year (2-4)	0.96%	3.61%	2.54%	3.46%
5 Year (4-6)	1.53%	5.22%	3.08%	4.31%
7 Year (6-8)	2.00%	6.47%	3.43%	4.99%
10 Year (8-12)	2.32%	7.47%	3.55%	5.78%
15 Year (12-17)	2.73%	9.39%	4.12%	7.38%
20 Year (17-22)	2.80%	10.13%	4.06%	7.78%
Long Bond (22+)	3.45%	11.61%	4.18%	9.35%
Quality				
Aaa	2.21%	8.35%	3.65%	5.80%
Aa	2.25%	7.62%	3.43%	5.92%
A	2.52%	7.96%	3.97%	7.34%
Baa	2.61%	9.19%	4.28%	8.93%
Municipal High Yield	3.00%	9.21%	4.57%	9.21%

Fixed Income	Current	Tax-equivalent yield		
		CA Resident*	NY Resident [†]	National [†]
Municipal	3.22%	7.01%	6.38%	5.93%
Municipal High Yield	5.57%	12.12%	11.05%	10.27%
Taxable Municipal	4.86%	4.86%	4.86%	4.86%
By Maturity				
1 Year (1-2)	2.90%	6.31%	5.75%	5.35%
3 Year (2-4)	2.75%	6.00%	5.47%	5.08%
5 Year (4-6)	2.72%	5.92%	5.40%	5.02%
7 Year (6-8)	2.73%	5.96%	5.43%	5.05%
10 Year (8-12)	2.74%	5.97%	5.44%	5.05%
15 Year (12-17)	3.27%	7.13%	6.49%	6.04%
20 Year (17-22)	3.71%	8.08%	7.36%	6.84%
Long Bond (22+)	4.01%	8.74%	7.96%	7.40%
Quality				
Aaa	2.98%	6.49%	5.91%	5.49%
Aa	3.04%	6.62%	6.03%	5.61%
A	3.57%	7.78%	7.08%	6.58%
Baa	4.22%	9.20%	8.38%	7.79%
Municipal High Yield	5.57%	12.12%	11.05%	10.27%

*CA assumes a 37% federal, 13.3% state tax, and 3.8% ACA tax

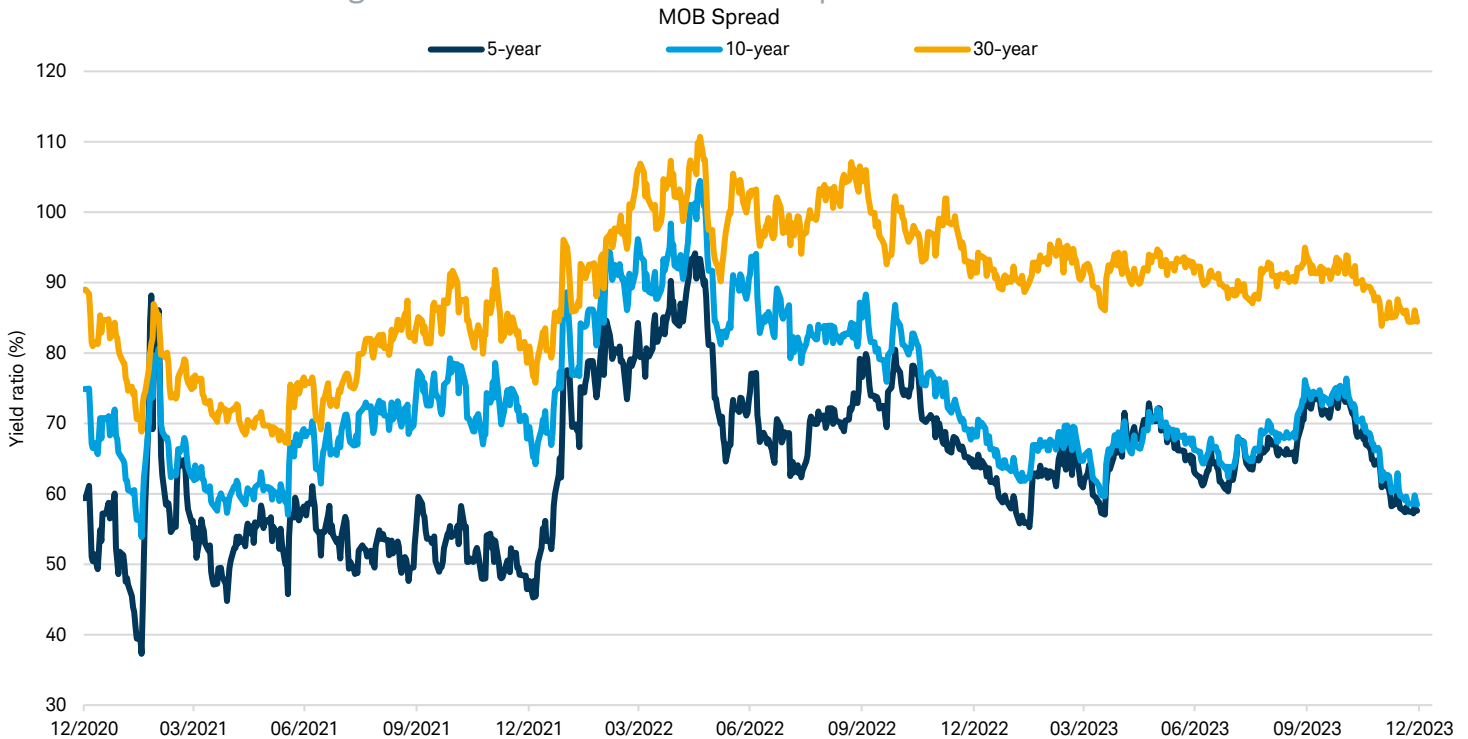
[†]NY assumes a 37% federal, 8.82% state tax, and 3.8% ACA tax

[†]National assumes a 37% federal, 5% state tax, and 3.8% ACA tax

Source: Charles Schwab, Bloomberg. Yields do not include a local tax. Indexes shown are variations of the Bloomberg U.S. Municipal Bond Index. Indexes are unmanaged, do not incur management fees, costs, and expenses, and cannot be invested in directly. Tax-exempt bonds are not necessarily a suitable investment for all persons. Information related to a security's tax-exempt status (federal and in-state) is obtained from third parties and Charles Schwab & Co., Inc. does not guarantee its accuracy. Tax-exempt income may be subject to the Alternative Minimum Tax (AMT). Capital appreciation from bond funds and discounted bonds may be subject to state or local taxes. Capital gains are not exempt from federal income tax. Investing involves risk, including loss of principal. For illustrative purposes only. **Past performance is no guarantee of future results.**

Municipal bonds: Relative yields

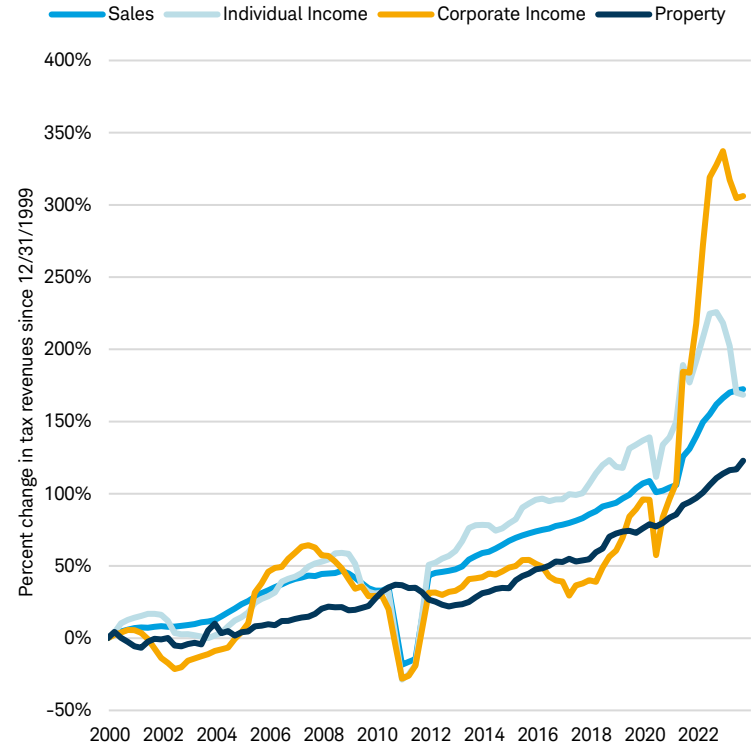
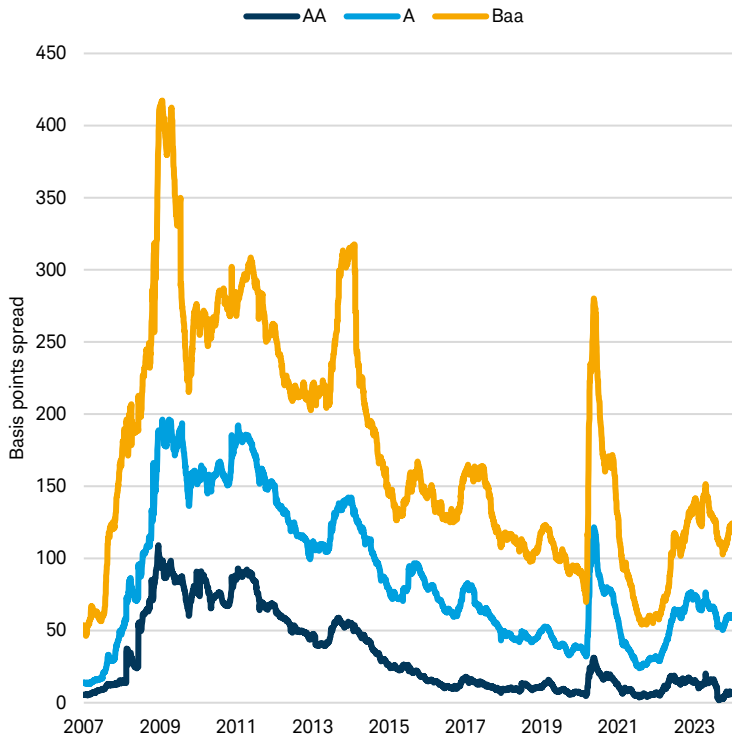
Relative to Treasuries, muni yields ended the fourth quarter near the lows of the year. Although muni yields aren't overly attractive relative to Treasuries, they may still make sense for investors in high tax brackets who are looking for more conservative income options.



Source: Bloomberg. Daily data as of 12/31/2023. Yield ratio (municipal-over-bond spread) is the ratio of the yield of a AAA-rated municipal bond compared to the yield on a Treasury bond of a similar maturity. The information and content provided herein is general in nature and is for informational purposes only. It is not intended, and should not be construed as a specific recommendation, individualized tax, legal, or investment advice. Tax laws are subject to change, either prospectively or retroactively. Where specific advice is necessary or appropriate, individuals should contact their own professional tax and investment advisors or other professionals (CPA, Financial Planner, Investment Manager) to help answer questions about specific situations or needs prior to taking any action based upon this information. **Past performance is no guarantee of future results.** Investing involves risk, including loss of principal. For illustrative purposes only.

Municipals: Credit spreads and fundamentals

Credit quality has likely peaked but remains high. Despite a slowdown in revenues, many states have used the strong tax growth and substantial fiscal support during the COVID-19 crisis to build their liquidity levels to record highs. Looking ahead, we don't anticipate broad credit downgrades.

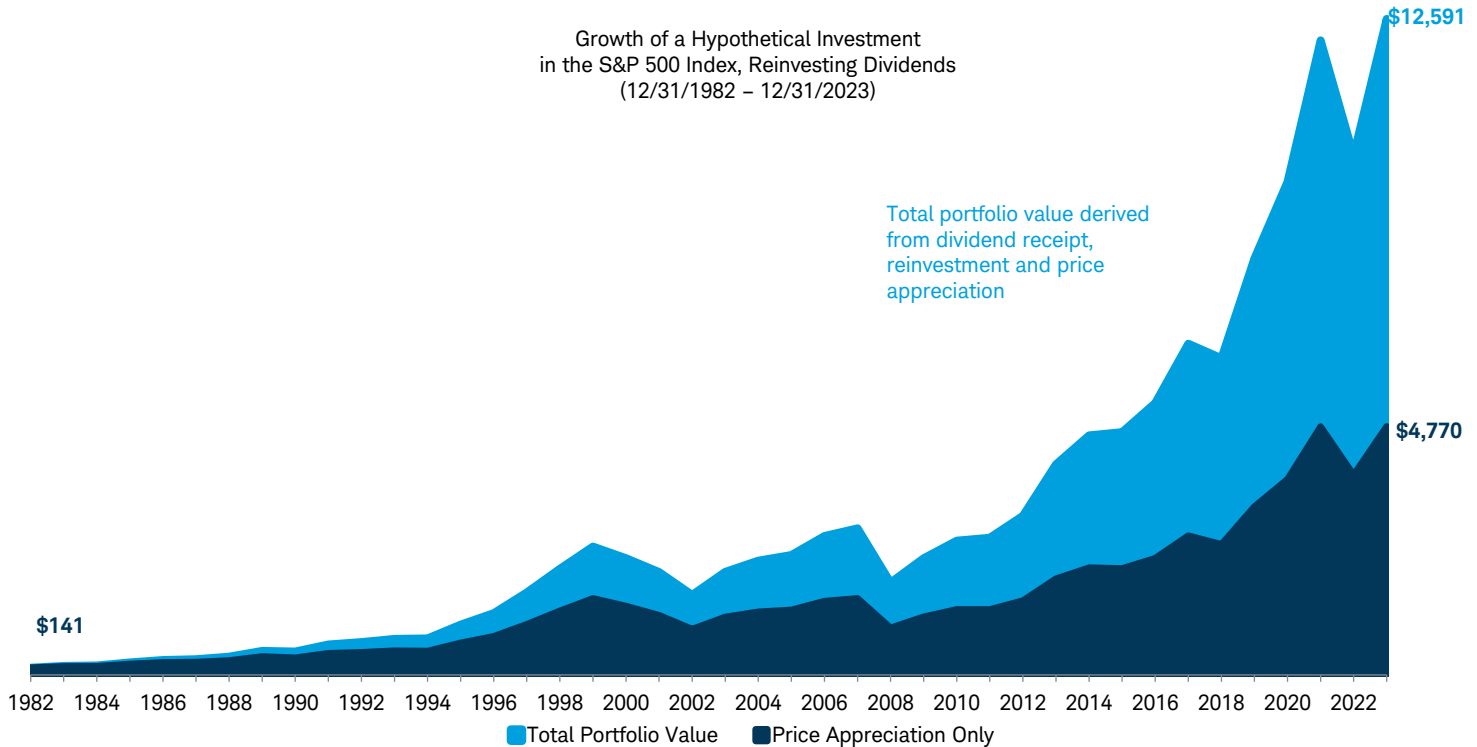


Source: Bloomberg AA, A, and Baa Municipal Bond Indexes. As of 12/31/2023. Difference in yields over time may be due to different index characteristics such as durations, average coupons, or other characteristics. U.S. Census Bureau, Quarterly Summary of State and Local Taxes, as of Q3 2023, which is the most recent data available. Percent change is based on the four-quarter rolling average. Indexes are unmanaged, do not incur management fees, costs, and expenses, and cannot be invested in directly. Investing involves risk, including loss of principal. **Past performance is no guarantee of future results.**

Impact of dividends on total return

Dividend-paying stocks can be an income-generating security.

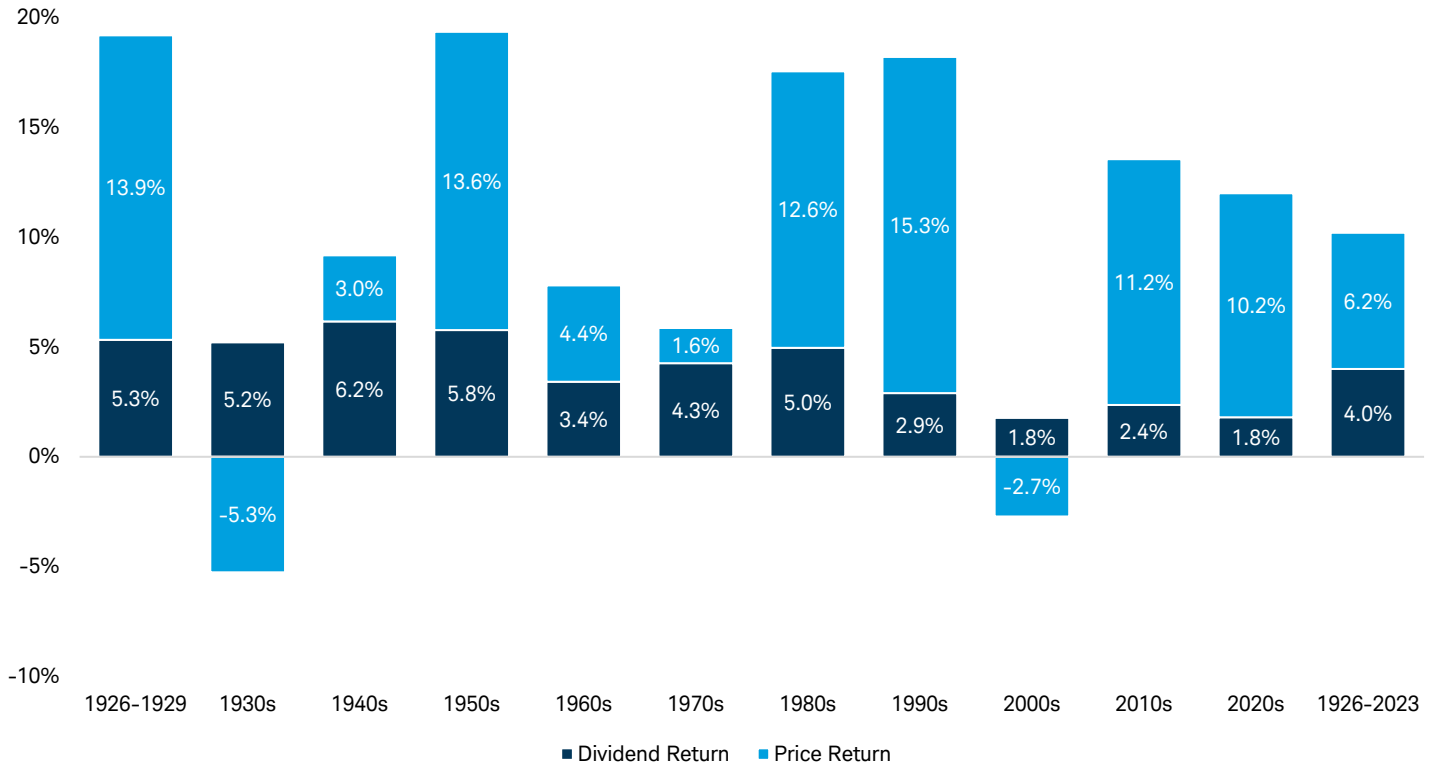
Growth of a Hypothetical Investment
in the S&P 500 Index, Reinvesting Dividends
(12/31/1982 – 12/31/2023)



Growth of the S&P 500 Total Return Index assumes reinvestment of dividends, includes capital gains, and does not reflect the effect of taxes and fees. The \$141 is the S&P 500 Index price on 12/31/1982. The example is hypothetical and provided for illustrative purposes only. It is not intended to represent a specific investment product. Source: S&P Global Indices and Bloomberg as of 12/31/2023. Indexes are unmanaged, do not incur management fees, costs and expenses, and cannot be invested in directly. Investing involves risk, including loss of principal. There are risks associated with investing in dividend paying stocks, including but not limited to the risk that stocks may reduce or stop paying dividends. **Past performance is no guarantee future results.**

Contribution of dividends to S&P 500 Index total return

From 1926–2023, dividends have been a meaningful part of total return.

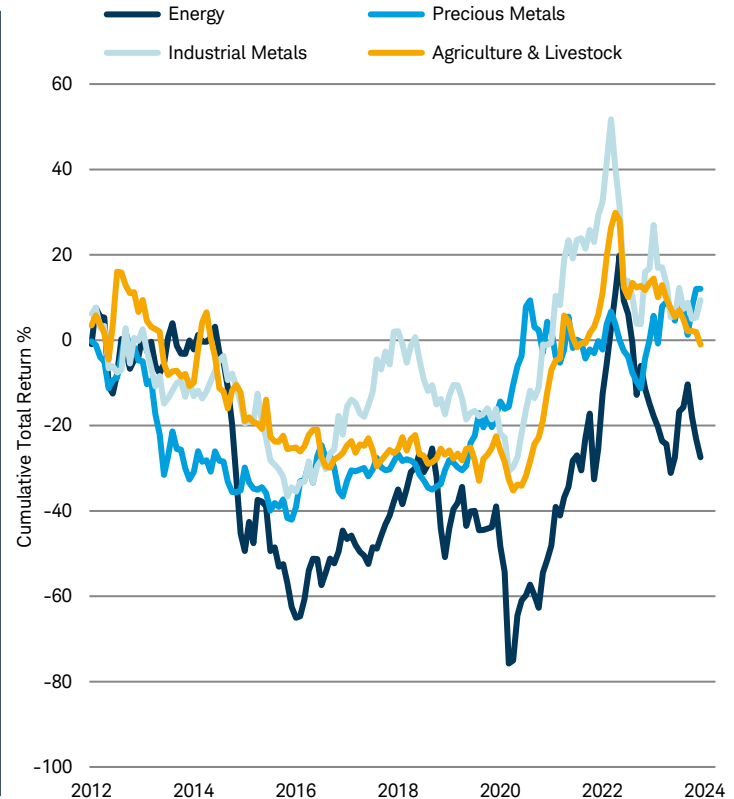


Source: 2019 Stocks, Bonds, Bills & Inflation® (SBBI®) Yearbook (1926-2018); Bloomberg (2019 - 2023). The S&P 500® Total Return Index assumes reinvestment of dividends, includes capital gains and does not reflect the effect of taxes and fees. Indexes are unmanaged, do not incur management fees, costs, and expenses, and cannot be invested in directly. Investing involves risk, including loss of principal. There are risks associated with investing in dividend paying stocks, including but not limited to the risk that stocks may reduce or stop paying dividends. For illustrative purposes only. **Past performance is no guarantee of future results.**

Commodities

Price returns as of 12/31/2023.

Energy						
	Price	3-month	1-year	3-year	5-year	10-year
WTI Crude Oil Futures	71.65	-21.1%	-10.7%	13.9%	9.6%	-3.1%
Brent Crude Oil Futures	77.04	-19.2%	-10.3%	14.1%	7.4%	-3.6%
Gasoline Futures	210.26	-13.8%	-14.5%	14.3%	9.7%	-2.8%
NY Harbor ULSD Futures	255.31	-24.1%	-24.1%	20.0%	8.7%	-1.8%
Sulphur Gasoil Futures	750.75	-25.0%	-18.5%	21.3%	8.0%	-2.3%
Natural Gas Futures	2.51	-14.2%	-43.8%	-0.3%	-3.1%	-5.1%
Metals						
Gold Spot \$/Oz	2,062.98	11.6%	13.1%	2.8%	10.0%	5.6%
Silver Spot \$/Oz	23.80	7.3%	-0.7%	-3.4%	9.0%	2.0%
Platinum Spot \$/Oz	991.90	9.3%	-7.7%	-2.6%	4.5%	-3.2%
Palladium Spot \$/Oz	1,100.24	-11.9%	-38.6%	-23.4%	-2.7%	4.4%
LME Aluminum 3MO (\$)	2,384.00	1.6%	0.3%	6.4%	5.2%	2.8%
LME COPPER 3MO (\$)	8,559.00	3.5%	2.2%	3.3%	7.5%	1.5%
Agriculture						
Corn Futures	471.25	-1.2%	-30.5%	-0.9%	4.7%	1.1%
Wheat Futures	628.00	16.0%	-20.7%	-0.7%	4.5%	0.4%
Soybean Futures	1,293.50	1.5%	-14.9%	-0.6%	7.9%	-0.1%
Coffee Futures	188.30	28.8%	12.6%	13.7%	13.1%	5.5%
Sugar Futures	20.58	-21.7%	2.7%	9.9%	11.3%	2.3%
Cotton Futures	81.00	-6.7%	-2.8%	1.2%	2.3%	-0.4%
Broad indexes						
Bloomberg Commodity Index	98.65	-5.9%	-12.6%	8.1%	5.2%	-2.4%
S&P GSCI Index	535.64	-12.1%	-12.2%	9.4%	7.4%	-1.6%

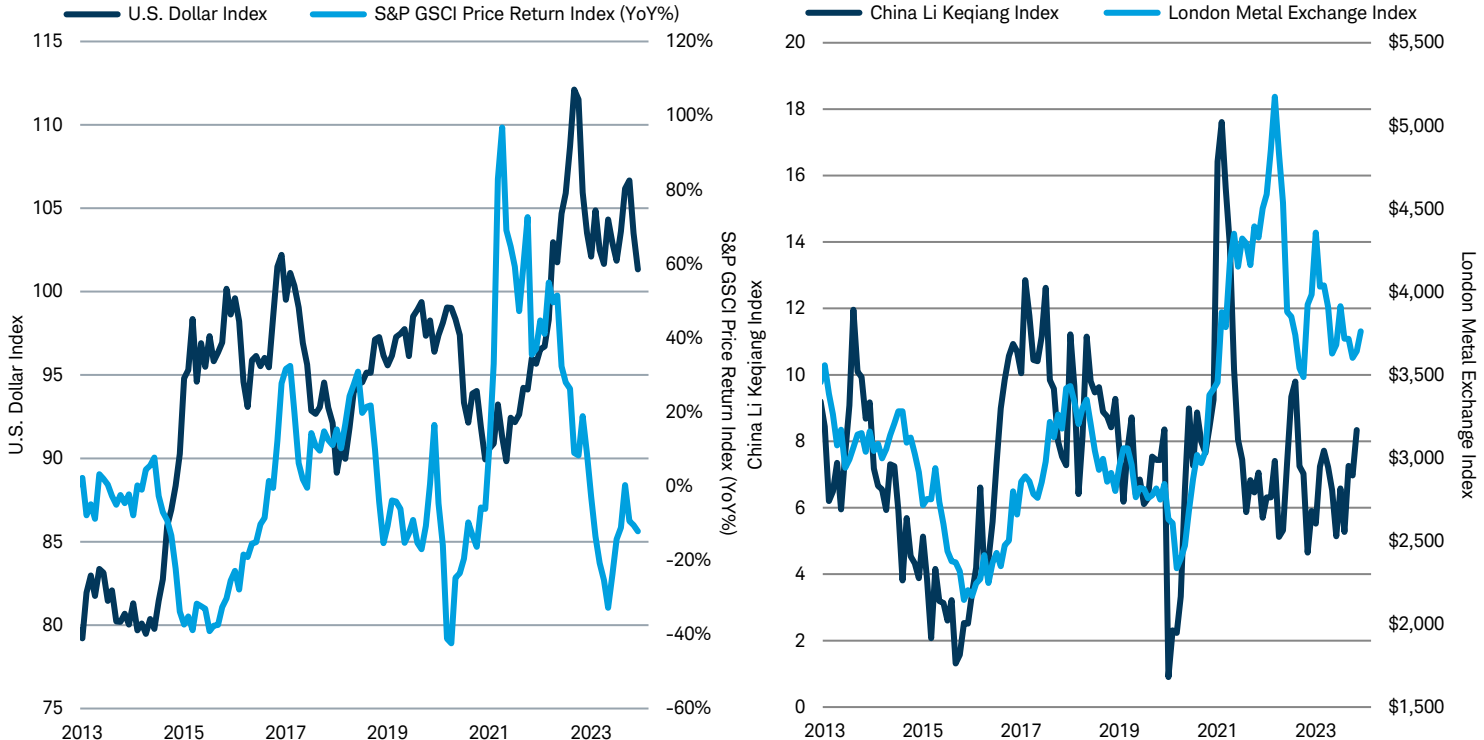


Returns are annualized for periods over one year.

Source: Bloomberg, S&P Goldman-Sachs Commodities Index. Price return does not include the effects of reinvested cash flows. Right chart is showing performance of the listed components of the S&P GSCI Index. Indexes are unmanaged, do not incur management fees, costs and expenses, and cannot be invested in directly. For illustrative purposes only. Futures and futures options trading involves substantial risk and is not suitable for all investors. Please read the [Risk Disclosure Statement for Futures and Options](#) prior to trading futures products. Investing involves risk, including loss of principal. **Past performance is no guarantee of future results.**

Commodity relationships

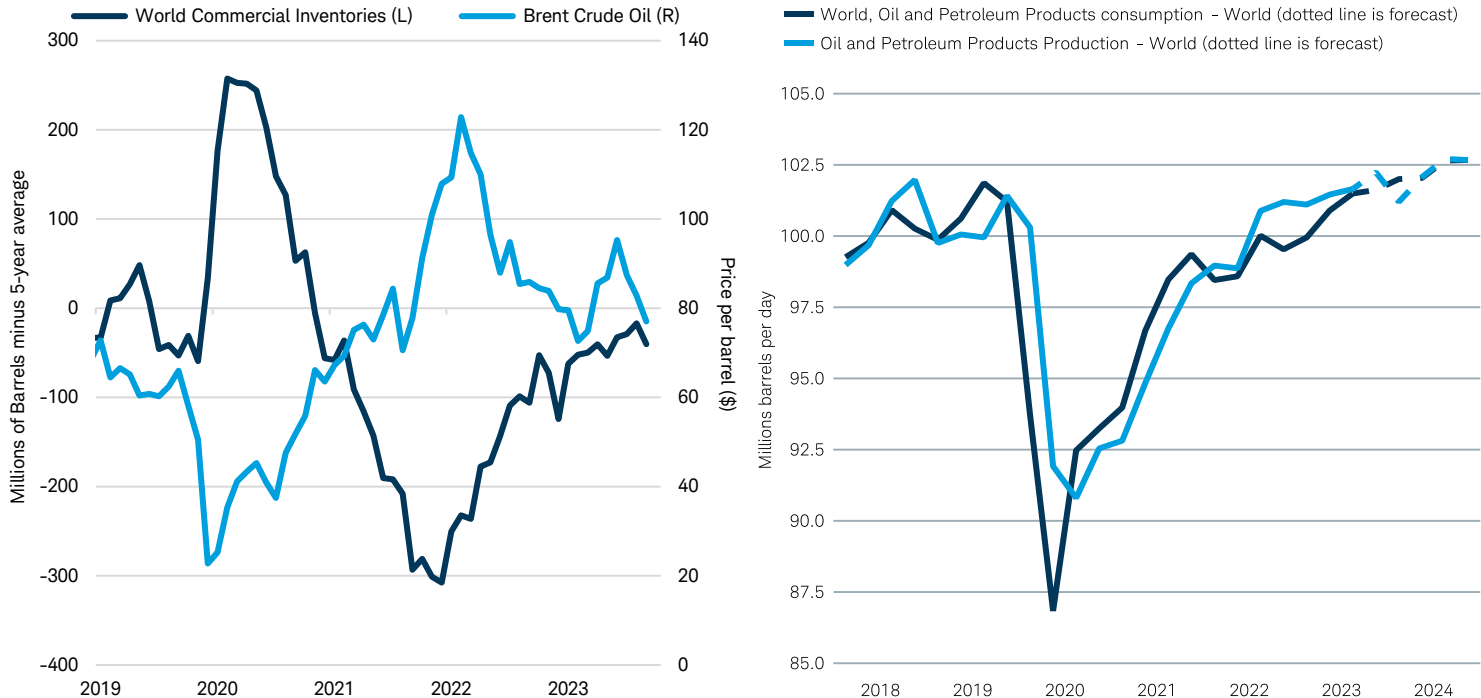
Can oil stabilize after a Q4 downside reversal—given energy’s massive weight—and will industrial metals find some life? These are key questions for the GSCI’s performance in Q1. However, China’s economy—a major contributor to the commodity space—remains sluggish and the U.S. dollar could see heightened volatility amid anticipated global monetary policy pivots.



Source: Charles Schwab, Bloomberg as of 12/31/2023. Price return does not include the effects of reinvested cash flows. Indexes are unmanaged, do not incur management fees, costs, and expenses, and cannot be invested in directly. Investing involves risk, including loss of principal. Currencies are speculative, very volatile and are not suitable for all investors. Commodity-related products carry a high level of risk and are not suitable for all investors. Commodity-related products may be extremely volatile, may be illiquid, and can be significantly affected by underlying commodity prices, world events, import controls, worldwide competition, government regulations, and economic conditions. **Past performance is no guarantee of future results.**

Oil supply remains the story

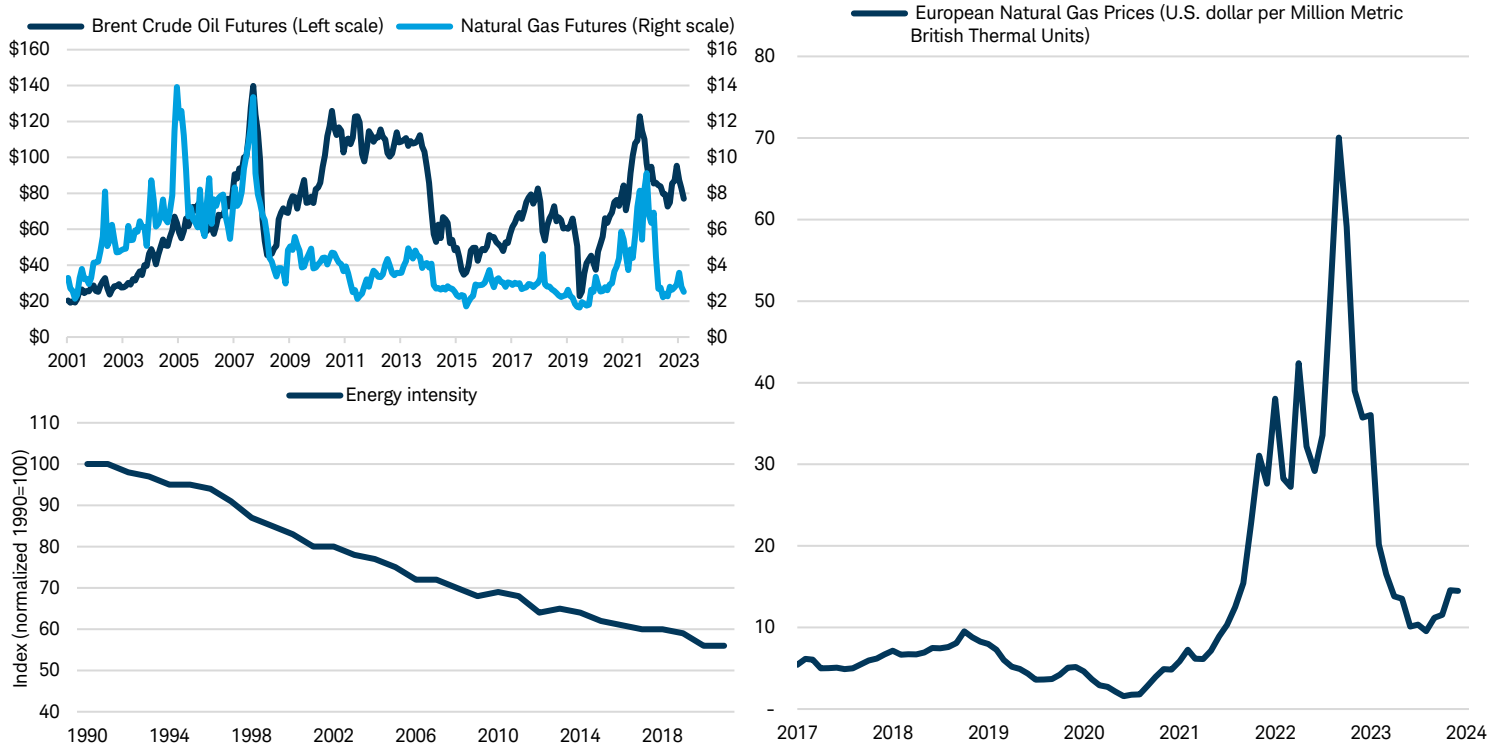
Global oil inventories are likely to remain subdued in Q1 amid extended OPEC+ production cuts, which could offset decelerating global economic output, weighing on oil consumption. However, any reversal in OPEC+ production cuts in addition to the increased production of non-OPEC countries—led by record output in the U.S.—could see stockpiles rise.



Source: Charles Schwab, International Energy Agency, Macrobond as of 12/31/2023. World commercial inventories measures the number of barrels of commercial oil held worldwide each month. World oil and petroleum products consumption measures the number of barrels of oil consumed per day worldwide. Oil and petroleum products production measures the number of barrels of oil produced per day worldwide. The dashed lines in the chart on the right reflect the Energy Information Administration's forecasts. Forecasts are for Q4 2023 to Q4 2024. **Past performance is no guarantee of future results.**

Global energy security

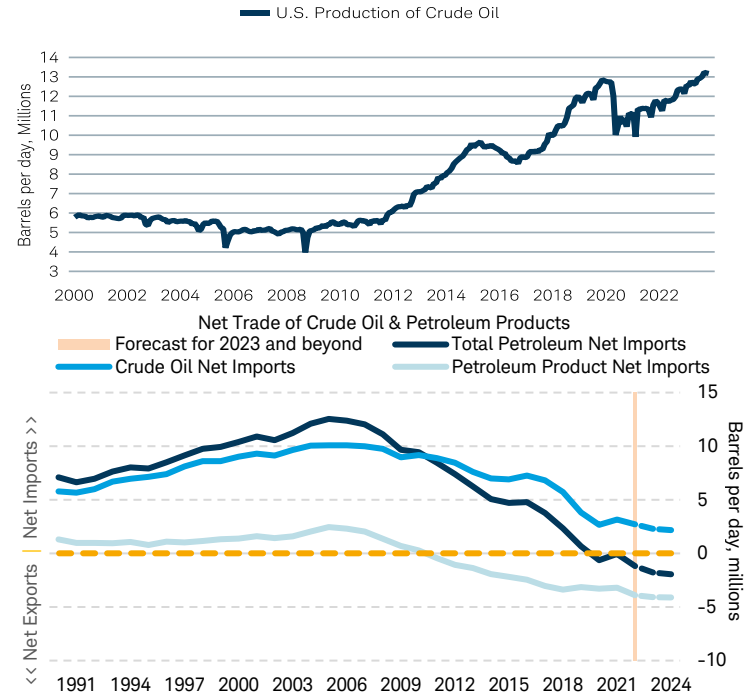
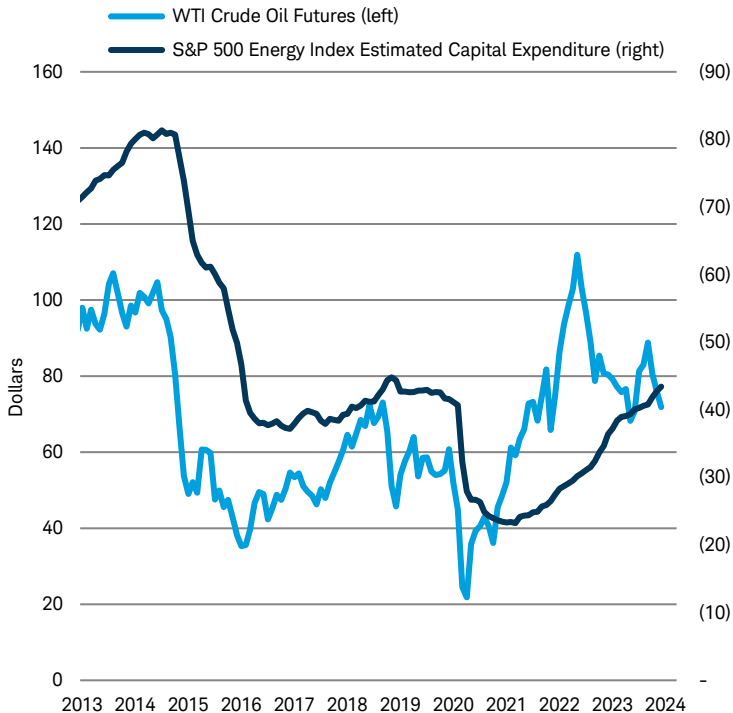
Crude oil and natural gas prices are likely to remain subdued in Q1 amid global economic growth concerns and warmer-than-expected winter weather, notably in Europe, while keeping global energy crisis concerns in check, bolstered by the continued downtrend in world energy dependence.



Source: Charles Schwab, U.S. Energy Information Administration, Bloomberg as of 12/31/2023. Energy intensity, as of 2021, is defined as a unit of energy per dollar of GDP. **Past performance is no guarantee of future results.** For illustrative purposes only. Futures and futures options trading involves substantial risk and is not suitable for all investors. Please read the [Risk Disclosure Statement for Futures and Options](#) prior to trading futures products.

U.S. energy production

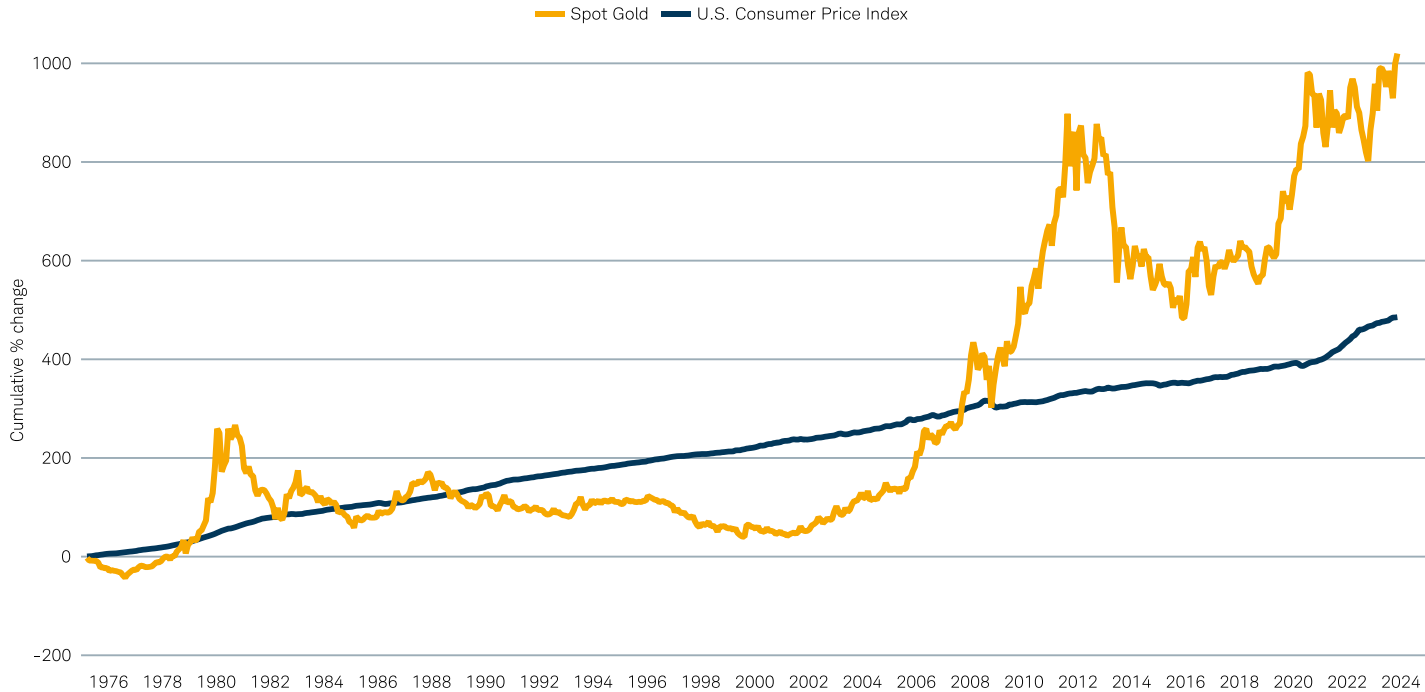
Record high oil production in the U.S. has helped offset the impact of OPEC+ production cuts, while also maintaining the U.S. status as a net petroleum product exporter and closing the gap on crude oil import dependency. This fact, coupled with heightened domestic merger and acquisition activity in the oil industry, suggests capital expenditures may continue to trend higher.



Source: Charles Schwab, Bloomberg, Macrobond, U.S. Energy Information Administration as of 12/31/2023. For illustrative purposes only. Futures and futures options trading involves substantial risk and is not suitable for all investors. Please read the [Risk Disclosure Statement for Futures and Options](#) prior to trading futures products. Commodity-related products carry a high level of risk and are not suitable for all investors. Commodity-related products may be extremely volatile, may be illiquid, and can be significantly affected by underlying commodity prices, world events, import controls, worldwide competition, government regulations, and economic conditions. **Past performance is no guarantee of future results.**

Gold and inflation

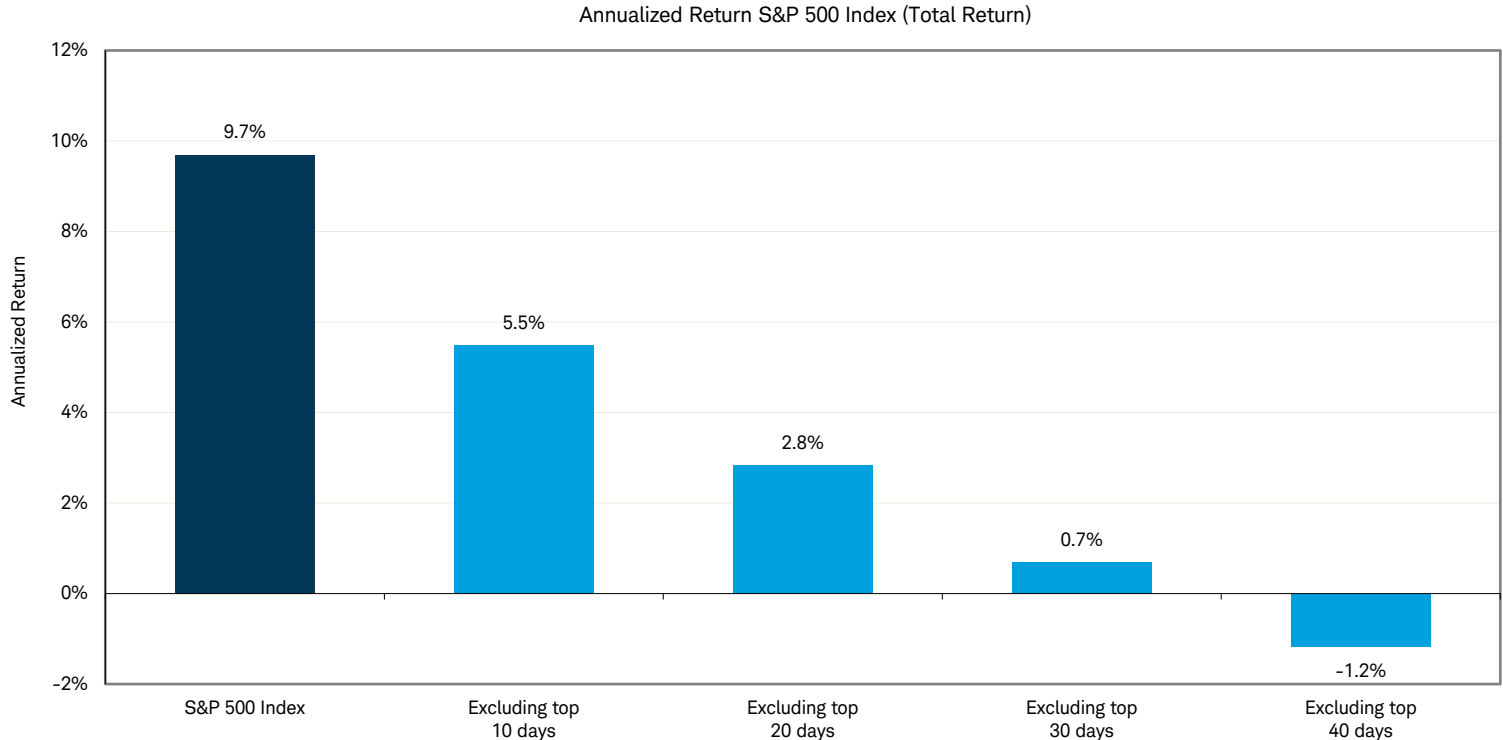
While gold is generally considered a good hedge against inflation, there has been a very loose relationship through time. The path of global interest rates, geopolitical developments, and global economic growth expectations may prove more important to the performance of the precious metal.



Source: Charles Schwab, Macrobond as of 12/31/2023. Cumulative percentage change of spot gold price and U.S. CPI. Spot gold is the price per ounce of gold at a given point in time. For illustrative purposes only. Investing involves risk, including loss of principal. **Past performance is no guarantee of future results.**

Time in the market is more important than timing the market

Missing the 10 strongest days of the market from 2004–2023 resulted in a significantly weaker annualized total return, compared to staying invested throughout the entire period.

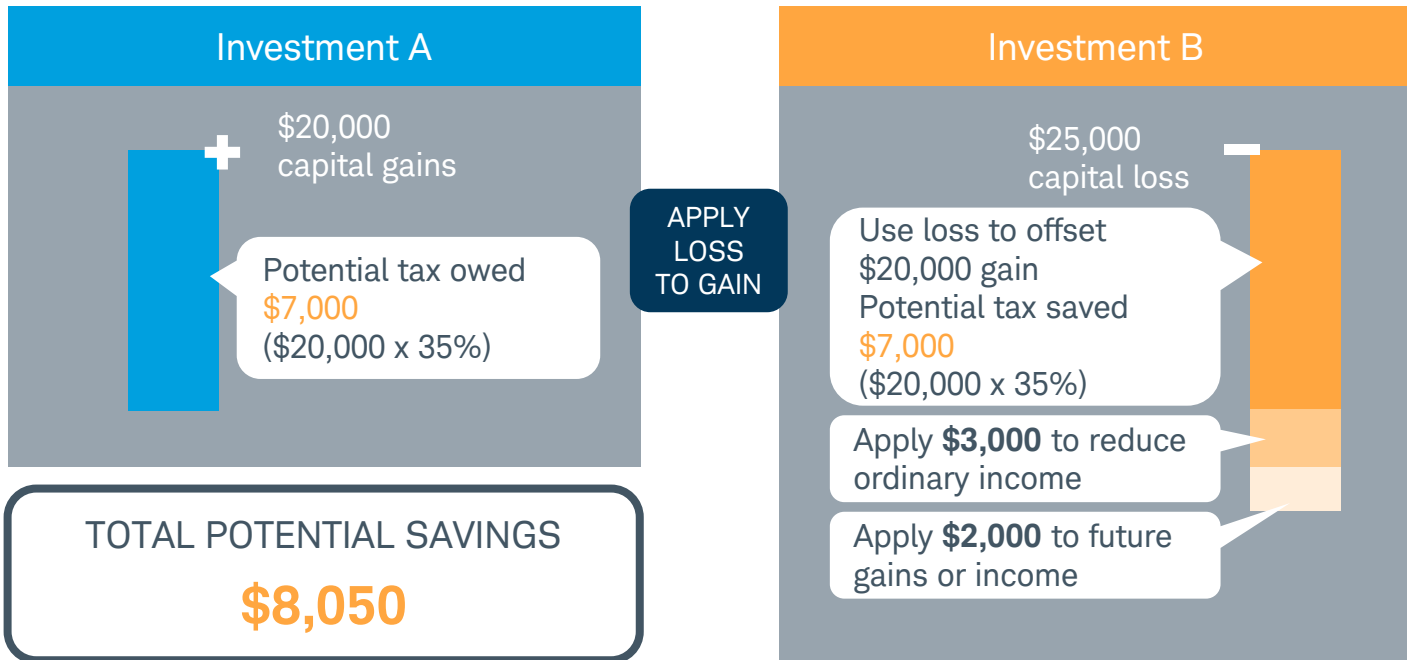


Source: Bloomberg as of 12/31/2023. Returns assume reinvestment of dividends and interest. Indexes are unmanaged, do not incur management fees, costs, and expenses, and cannot be invested in directly. Schwab does not recommend the use of technical analysis as a sole means of investment research. Investing involves risk, including loss of principal. For illustrative purposes only. **Past performance is no guarantee of future results.**

Tax-efficient investing

Use losses to your advantage with tax-loss harvesting.

Example: Use your losses to get a tax break. In this example, an investor realized \$20,000 in capital gains from Investment A, and a \$25,000 capital loss from Investment B. Capital losses offset gains first; the excess is then applied to ordinary income, and finally to future gains or income.

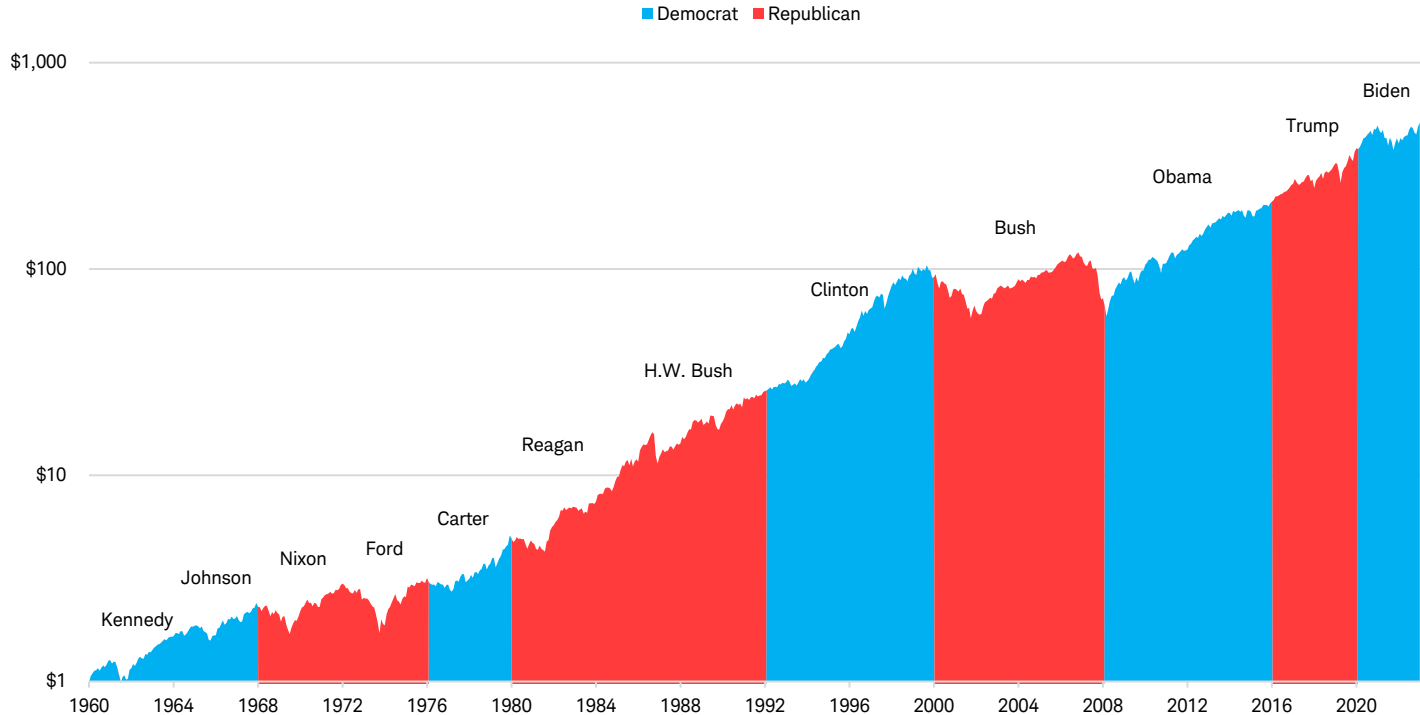


Source: Schwab Center for Financial Research. Assumes a 35% combined federal/state marginal income tax bracket. The example is hypothetical and provided for illustrative purposes only. It is not intended to represent a specific investment product and the example does not reflect the effects of fees. Neither the tax-loss harvesting strategy, nor any discussion herein, is intended as tax advice and Charles Schwab & Co., Inc. does not represent that any particular tax consequences will be obtained. Tax-loss harvesting involves certain risks including unintended tax implications. Investors should consult with their tax advisors and refer to the Internal Revenue Service (IRS) website at www.irs.gov about the consequences of tax-loss harvesting.

Politics versus sound investment principles

Despite a lot of noise around politics and elections, markets have historically rewarded long-term investors regardless of the presidential party.

Growth of \$1 (January 1961 - December 2023)

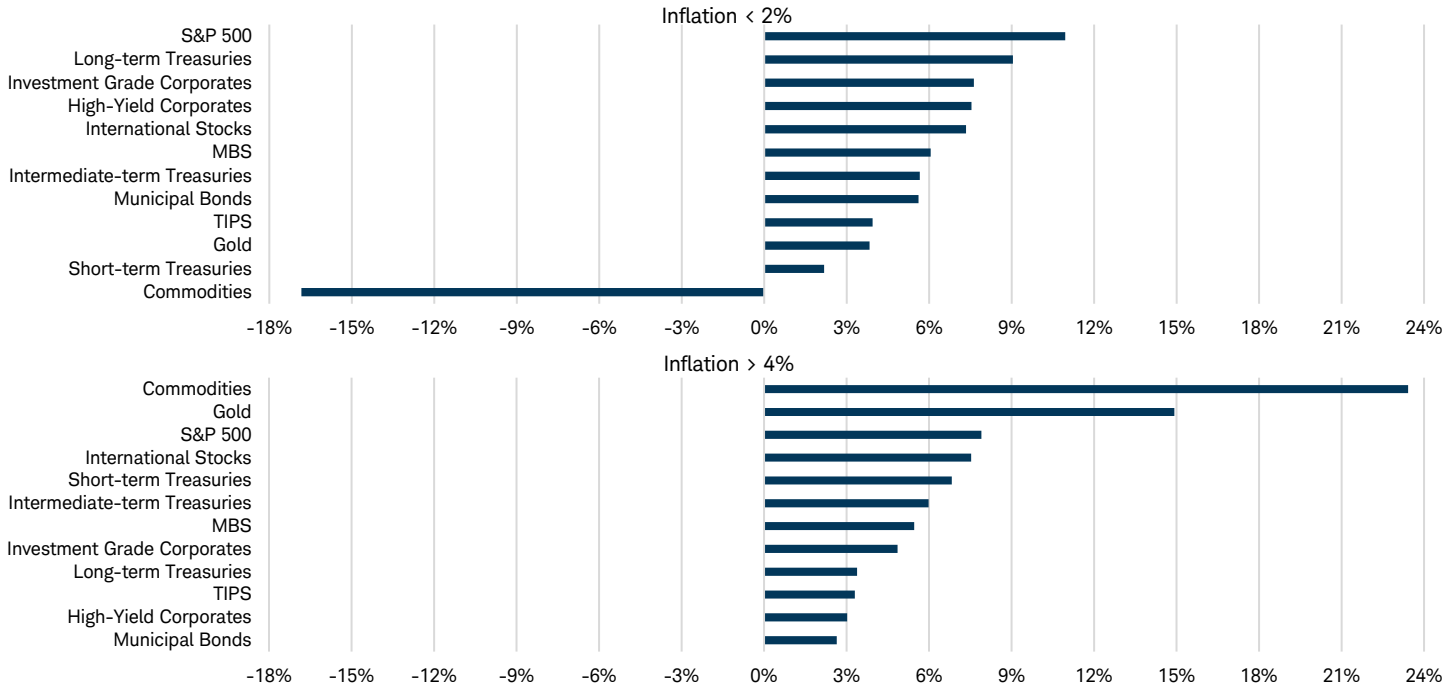


Source: Schwab Center for Financial Research, with data provided by Morningstar, Inc. The chart above shows the growth of \$1 invested in a hypothetical portfolio that tracks the Ibbotson U.S. Large Stock Index starting on January 1, 1961. January returns in inauguration years are assumed to be under the party that is being inaugurated. Returns include investment of dividends and interest. For illustrative purposes only. The policy analysis provided by the Charles Schwab & Co., Inc. does not constitute and should not be interpreted as an endorsement of any political party. Indexes are unmanaged, do not incur management fees, costs, and expenses, and cannot be invested in directly. Investing involves risk, including loss of principal. **Past performance is no guarantee of future results.**

Hedges against inflation

Stocks have been an effective hedge against inflation over the long term by helping preserve purchasing power. Gold, commodities, and short-term Treasuries have also provided inflation protection.

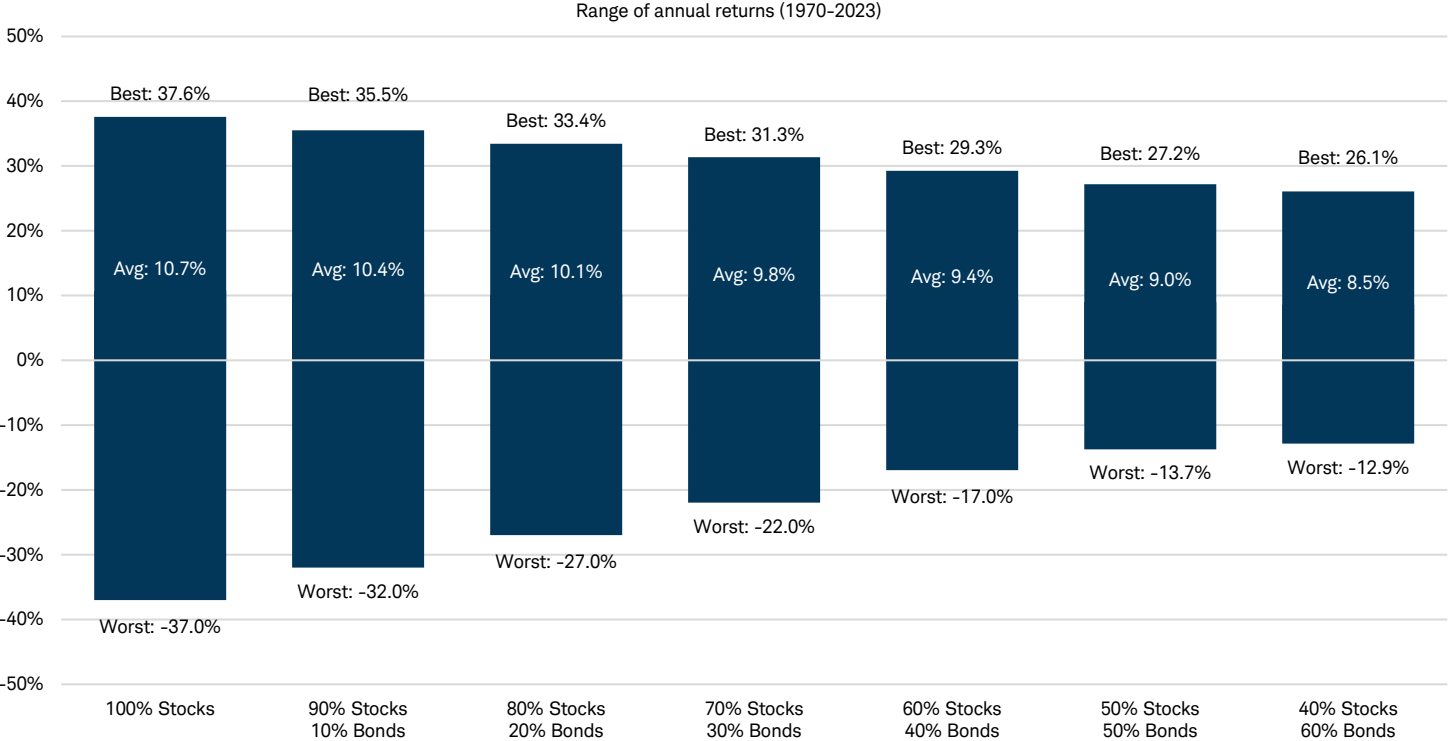
Average 12-month total returns (Jan 1960 – Dec 2022)



Source: Schwab Center for Financial Research with data provided by Bloomberg and Morningstar. Returns assume reinvestment of dividends and interest. Inflation is measured by the year-over-year change in the Consumer Price Index. ***Due to data limitations, not every investment type has readily available total return data going back to 1960.** For this study, the start date for each investment type is as follows: U.S. Equities, Treasury Bills, Intermediate-Term Treasuries, and Long-Term Treasuries: 1/1960; Gold: 1/1962; International Stocks: 12/1970; Commodities: 1/1971; Investment Grade Corporates: 1/1974; MBS: 1/1977; High-Yield Corporates: 7/1984; Municipal Bonds: 12/1989; TIPS: 3/1998. Indexes are unmanaged, do not incur management fees, costs, and expenses, and cannot be invested in directly. Diversification strategies do not ensure a profit and do not protect against losses in declining markets. Investing involves risk, including loss of principal. For illustrative purposes only. **Past performance is no guarantee of future results.** See full disclosure of chart and indexes in the back of the document under Important Information.

Importance of diversification

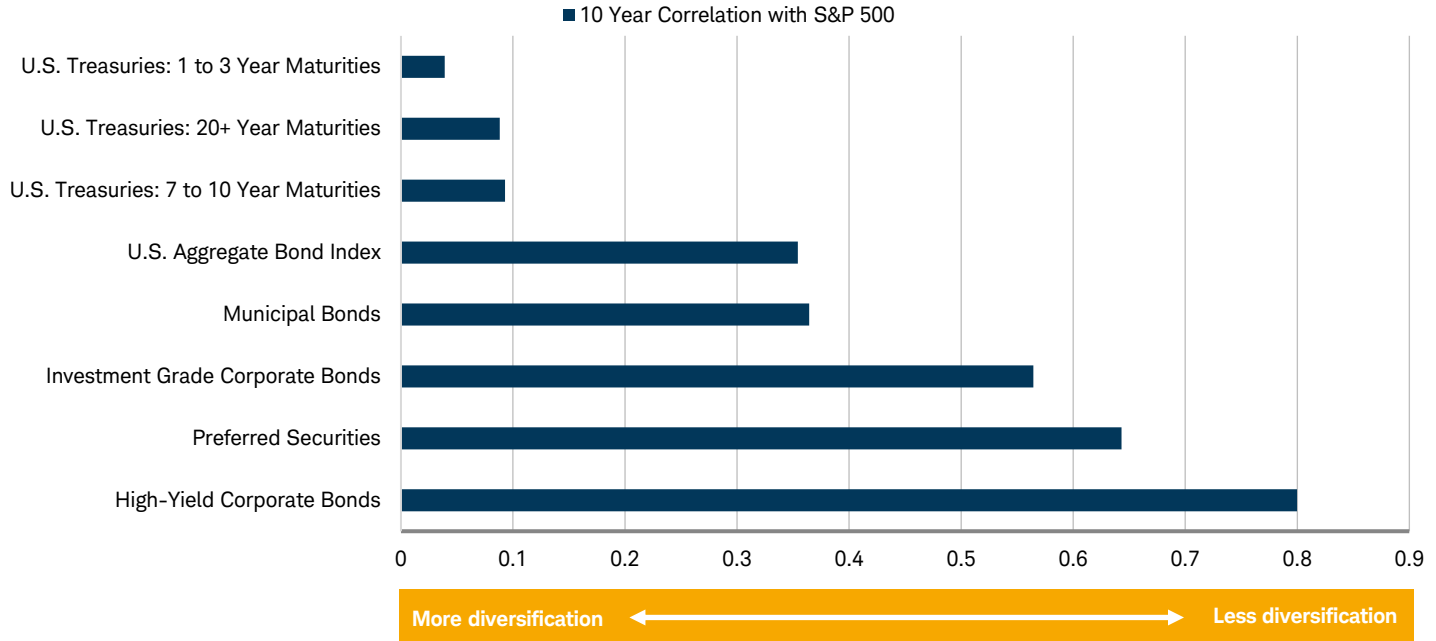
Adding fixed income investments to a portfolio of equities can help lower volatility.



Source: Schwab Center for Financial Research, with data provided by Morningstar, Inc. Stocks are represented by total annual returns of the S&P 500 Index, and bonds are represented by total annual returns of the Ibbotson U.S. Intermediate Government Bond Index. Return figures are the average, maximum, and minimum annual total returns for the portfolios represented in the chart and are rebalanced annually. Returns include reinvestment of dividends, interest, and capital gains. Investing involves risk, including loss of principal. Indexes are unmanaged, do not incur management fees, costs, and expenses and cannot be invested in directly. **Past performance is no guarantee of future results. Diversification strategies do not ensure a profit and do not protect against losses in declining markets.**

Bonds offer potential diversification benefits

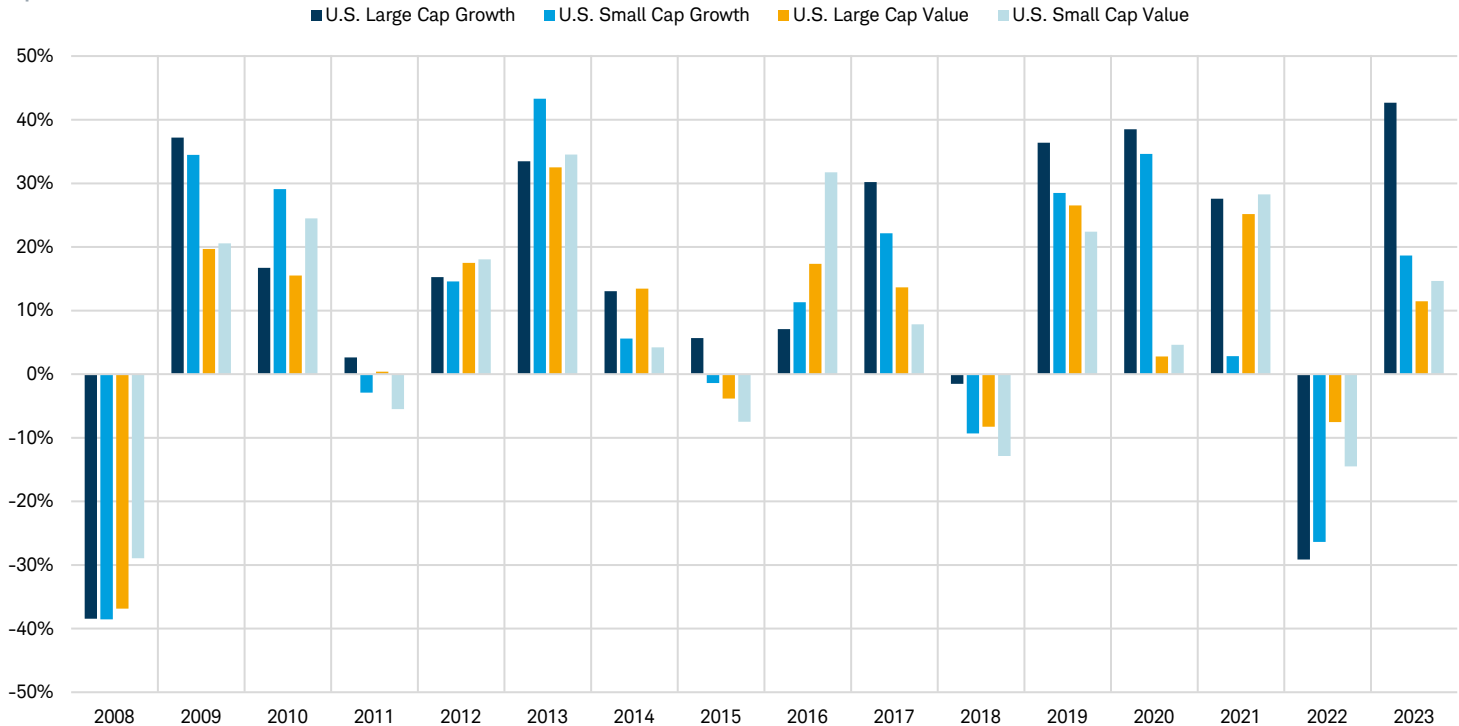
Based on historically low correlations, high-quality bonds such as U.S. Treasuries offer diversification benefits when added to a portfolio of stocks. Riskier bonds have provided less diversification benefits but can still make sense as part of a diversified portfolio.



Source: Charles Schwab, data by Bloomberg, as of 12/31/2023. Indexes used: Bloomberg US Treasury 1-3 Year Index (U.S. Treasuries: 1 to 3 Year Maturities), Bloomberg US Treasury 7-10 Year Index (U.S. Treasuries 7 to 10 Year Maturities), Bloomberg US Treasury 20+ Year Index (U.S. Treasuries: 20+ Year Maturities), Bloomberg Municipal Bond Index (Municipal Bonds), Bloomberg US Aggregate Bond Index (U.S. Aggregate Bond Index), Bloomberg Corporate Bond Index (Investment Grade Corporate Bonds), ICE BofA Preferred Stock Index (Preferred Securities), and Bloomberg Corporate High Yield Index (High-Yield Corporate Bonds). Correlations shown represent the correlations of each asset class with the S&P 500 during the 10-year period between December 2013 and December 2023. Correlation is a statistical measure of how two investments have historically moved in relation to each other and range from -1 to +1. A correlation of 1 indicates a perfect positive correlation, while a correlation of -1 indicates a perfect negative correlation. Indexes are unmanaged, do not incur management fees, costs, and expenses, and cannot be invested in directly. Investing involves risk, including loss of principal. **Past performance is no guarantee of future results. Diversification strategies do not ensure a profit and do not protect against losses in declining markets.**

Growth vs. value

Leadership between growth and value tends to rotate throughout the years. Although indexes can be used as proxies, investors should focus on specific growth and value characteristics in their own portfolios.



Source: Schwab Center for Financial Research, with data provided by Morningstar, Inc. as of 12/31/2023. Indices representing each asset class are Russell 1000® Growth Index (large-cap growth), Russell 1000® Value Index (large-cap value), Russell 2000® Growth Index (small-cap growth), and Russell 2000® Value Index (small-cap value). Returns assume reinvestment of dividends. Small cap investments are subject to greater volatility than those in other asset categories. Indexes are unmanaged, do not incur management fees, costs, and expenses and cannot be invested in directly. **Past performance is no guarantee of future results. Diversification strategies do not ensure a profit and do not protect against losses in declining markets.**

Sector diversification

Variation in sector returns offers opportunities for tactical tilts but concentration in too few sectors can increase risk in a portfolio.

Schwab Asset Class Quilt®, monthly returns ranked in order from best to worst.

Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	1-year
Cons. Discr. 15.0%	Info. Tech. 0.3%	Info. Tech. 10.9%	Comm. Serv. 3.6%	Info. Tech. 9.3%	Cons. Discr. 12.0%	Energy 7.3%	Energy 1.3%	Energy 2.5%	Utilities 1.2%	Info. Tech. 12.7%	Real Estate 8.0%	Info. Tech. 56.4%
Comm. Serv. 14.2%	Industrials -1.2%	Comm. Serv. 10.4%	Cons. Staples 3.4%	Comm. Serv. 6.2%	Industrials 11.2%	Comm. Serv. 6.7%	Comm. Serv. -0.4%	Health Care -3.1%	Info. Tech. -0.1%	Real Estate 12.3%	Industrials 6.8%	Comm. Serv. 54.4%
Real Estate 9.9%	Cons. Discr. -2.3%	Utilities 4.6%	Energy 3.2%	Cons. Discr. 3.1%	Materials 10.8%	Financials 4.7%	Health Care -0.8%	Financials -3.2%	Cons. Staples -1.4%	Cons. Discr. 10.8%	Cons. Discr. 6.1%	Cons. Discr. 41.0%
Info. Tech. 9.3%	Financials -2.4%	Cons. Staples 3.8%	Financials 3.0%	S&P 500 0.2%	Info. Tech. 6.5%	Materials 3.4%	Cons. Discr. -1.3%	Comm. Serv. -3.3%	Comm. Serv. -2.0%	Financials 10.7%	Financials 5.3%	S&P 500 24.2%
Materials 9.0%	Cons. Staples -2.5%	S&P 500 3.5%	Health Care 3.0%	Industrials -3.5%	Financials 6.5%	S&P 500 3.1%	Info. Tech. -1.5%	Cons. Staples -4.8%	S&P 500 -2.2%	S&P 500 8.9%	Comm. Serv. 4.8%	Industrials 16.0%
Financials 6.7%	S&P 500 -2.6%	Cons. Discr. 3.0%	Utilities 1.8%	Health Care -4.4%	S&P 500 6.5%	Industrials 2.9%	S&P 500 -1.8%	S&P 500 -4.9%	Financials -2.6%	Industrials 8.5%	S&P 500 4.4%	Materials 10.2%
S&P 500 6.2%	Materials -3.5%	Health Care 2.1%	S&P 500 1.5%	Financials -4.5%	Energy 6.5%	Info. Tech. 2.6%	Industrials -2.3%	Materials -5.0%	Real Estate -2.9%	Materials 8.1%	Materials 4.3%	Financials 9.9%
Industrials 3.7%	Comm. Serv. -4.7%	Industrials 0.6%	Real Estate 0.8%	Real Estate -4.6%	Real Estate 4.8%	Cons. Discr. 2.4%	Financials -2.9%	Utilities -5.8%	Industrials -3.0%	Comm. Serv. 7.8%	Health Care 4.1%	Real Estate 8.3%
Energy 2.7%	Health Care -4.7%	Energy -0.5%	Info. Tech. 0.4%	Cons. Staples -6.2%	Health Care 4.2%	Utilities 2.4%	Real Estate -3.1%	Cons. Discr. -3.2%	Materials -3.2%	Health Care 5.2%	Info. Tech. 3.8%	Health Care 0.3%
Cons. Staples -1.1%	Real Estate -6.1%	Materials -1.3%	Materials -0.2%	Utilities -6.4%	Cons. Staples 2.9%	Cons. Staples 2.0%	Materials -3.5%	Industrials -6.1%	Health Care -3.3%	Utilities 4.5%	Cons. Staples 2.4%	Cons. Staples -2.2%
Health Care -2.0%	Utilities -6.4%	Real Estate -2.1%	Cons. Discr. -1.0%	Materials -7.1%	Comm. Serv. 2.6%	Real Estate 1.2%	Cons. Staples -3.8%	Info. Tech. -6.9%	Cons. Discr. -4.5%	Cons. Staples 3.7%	Utilities 1.7%	Energy -4.8%
Utilities -2.0%	Energy -7.6%	Financials -9.7%	Industrials -1.2%	Energy -10.6%	Utilities 1.5%	Health Care 0.9%	Utilities -6.7%	Real Estate -7.8%	Energy -6.1%	Energy -1.6%	Energy -0.2%	Utilities -10.2%

Source: Charles Schwab, Bloomberg, as of 12/31/2023. Sector performance is represented by price returns of the following 11 GICS sector indexes: Consumer Discretionary Sector, Consumer Staples Sector, Energy Sector, Financials Sector, Health Care Sector, Industrials Sector, Information Technology Sector, Materials Sector, Real Estate Sector, Communication Services Sector, and Utilities Sector. Returns of the broad market are represented by the S&P 500. Returns assume reinvestment of dividends and interest. Indexes are unmanaged, do not incur management fees, costs, and expenses, and cannot be invested in directly. Investing involves risk, including loss of principal. Diversification strategies do not ensure a profit and do not protect against losses in declining markets. For illustrative purposes only. **Past performance is no guarantee of future results.**

Why global diversification makes sense

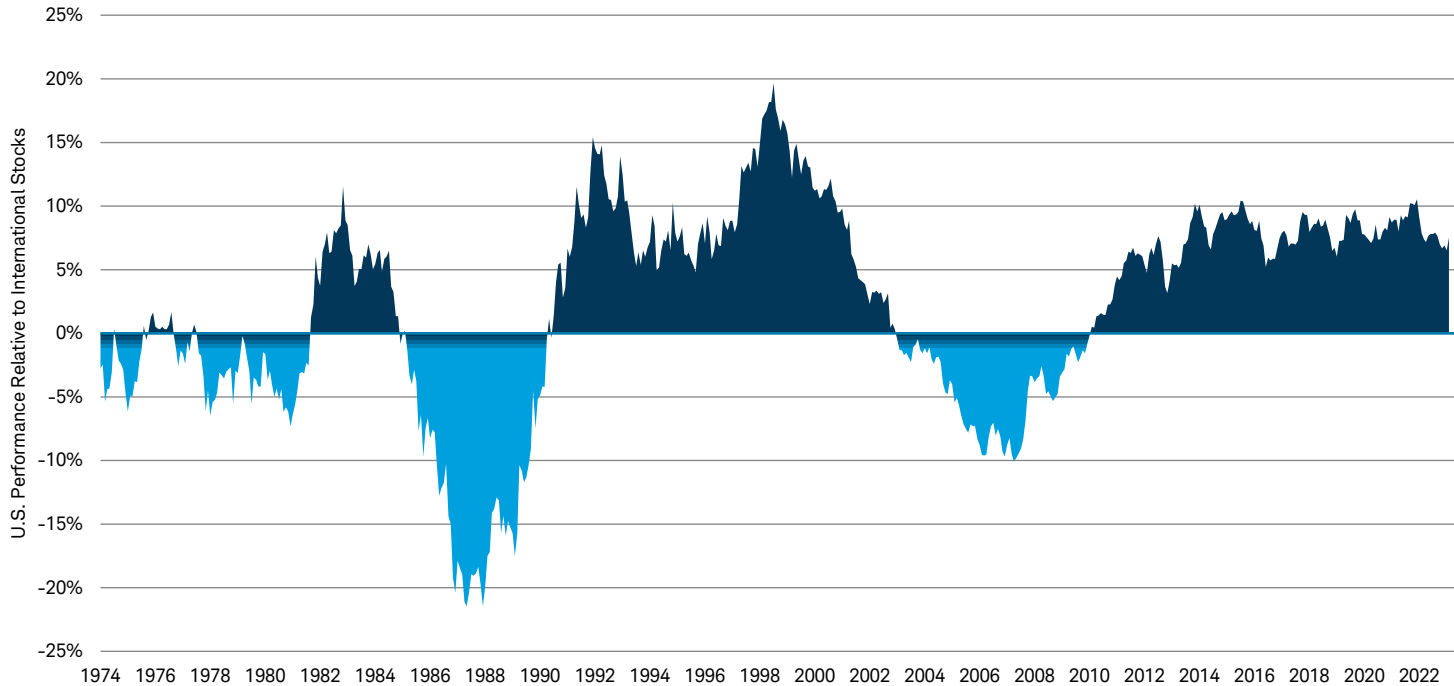
2014										2015										2016										2017										2018										2019										2020										2021										2022										2023										Average of periods																																																						
																																																																																																				Ann. Return		Std Dev																																																				
US REITs 30.3%	Int'l Dev SC 9.6%	US Sm Cap 21.3%	EM 37.3%	T-bills 1.8%	US Lg Cap 31.5%	Gold & Other PM 23.0%	US REITs 43.1%	T-bills 1.5%	US Lg Cap 26.3%	US Lg Cap 12.0%	US Sm Cap 20.2%	US Lg Cap 13.7%	US REITs 2.5%	High Yield Bonds 16.6%	Int'l Dev SC 33.0%	Core Bonds 0.0%	US Sm Cap 25.5%	US Sm Cap 20.0%	US Lg Cap 28.7%	Gold & Other PM -0.4%	Int'l Dev SC 18.2%	US REITs 7.5%	US REITs 18.0%	Core Bonds 6.0%	US Lg Cap 1.4%	US Lg Cap 12.0%	Int'l Dev LC 25.0%	TIPS -1.3%	Int'l Dev SC 25.0%	US Lg Cap 18.4%	US Sm Cap 14.8%	EM Bonds -8.0%	US Sm Cap 16.9%	US Sm Cap 7.2%	EM 17.0%	US Sm Cap 4.9%	Core Bonds 0.5%	EM 11.2%	US Lg Cap 21.8%	High Yield Bonds -2.6%	US REITs 24.4%	EM 18.3%	Int'l Dev LC 11.3%	TIPS -11.8%	US REITs 13.8%	Diversified Portfolio 5.5%	Int'l Dev SC 16.0%	Diversified Portfolio 3.9%	T-bills 0.0%	US REITs 8.5%	EM Bonds 17.1%	Gold & Other PM -3.6%	Int'l Dev LC 22.0%	Int'l Dev SC 12.3%	Diversified Portfolio 10.2%	High Yield Bonds -11.9%	High Yield Bonds 13.8%	Int'l Dev SC 4.8%	US Lg Cap 15.2%	TIPS 3.6%	Int'l Dev LC -0.8%	Gold & Other PM 8.4%	Diversified Portfolio 15.1%	US REITs -3.8%	Diversified Portfolio 18.4%	Diversified Portfolio 11.7%	Int'l Dev SC 10.0%	Core Bonds -13.0%	Diversified Portfolio 13.8%	Int'l Dev SC 4.3%	Int'l Dev LC 14.9%	High Yield Bonds 2.1%	Diversified Portfolio -1.0%	Diversified Portfolio 7.7%	US Sm Cap 14.6%	US Lg Cap -4.4%	EM 18.4%	TIPS 6.0%	Diversified Portfolio -14.0%	Int'l Dev SC 13.2%	Int'l Dev LC 4.3%	Gold & Other PM 14.3%	T-bills 0.0%	TIPS -1.4%	EM Bonds 6.3%	Gold & Other PM 12.0%	Diversified Portfolio -6.1%	Gold & Other PM 17.6%	Int'l Dev LC 7.8%	High Yield Bonds 4.5%	Int'l Dev LC -14.5%	EM Bonds 11.6%	High Yield Bonds 4.1%	EM Bonds 10.2%	EM -2.2%	US Sm Cap -4.4%	TIPS 4.7%	High Yield Bonds 6.8%	EM Bonds -6.3%	High Yield Bonds 15.3%	Core Bonds 7.5%	T-bills 0.0%	US Lg Cap -18.1%	Gold & Other PM 11.5%	EM 2.7%	Diversified Portfolio 10.1%	Gold & Other PM -4.1%	High Yield Bonds -5.3%	Core Bonds 2.6%	US REITs 4.3%	US Sm Cap -11.0%	EM Bonds 9.0%	High Yield Bonds 5.9%	Core Bonds -1.5%	EM -20.1%	EM 9.8%	TIPS 2.4%	High Yield Bonds 7.7%	Int'l Dev LC -4.9%	Gold & Other PM -11.1%	Int'l Dev SC 2.2%	Core Bonds 3.5%	Int'l Dev LC -13.8%	Core Bonds 8.7%	EM Bonds 3.8%	EM -2.5%	US Sm Cap -20.4%	Core Bonds 5.5%	Core Bonds 1.8%	TIPS 5.0%	Int'l Dev SC -4.9%	EM Bonds -11.1%	Int'l Dev LC 1.0%	TIPS 3.0%	EM -14.6%	TIPS 8.4%	T-bills 0.6%	Gold & Other PM -5.1%	Int'l Dev SC -21.4%	T-bills 5.1%	T-bills 1.2%	Core Bonds 4.4%	EM Bonds -5.8%	EM -14.9%	T-bills 0.3%	T-bills 0.8%	Int'l Dev SC -17.9%	T-bills 2.2%	US REITs -7.5%	EM Bonds -8.2%	US REITs -24.4%	TIPS 3.9%	EM Bonds 0.4%	T-bills 0.4%

Source: Morningstar Direct. Data is from January 1, 2014-December 31, 2023. For illustrative purposes only. Investing involves risk, including loss of principal. Diversification strategies do not ensure a profit and do not protect against losses in declining markets. Indexes are unmanaged, do not incur management fees, costs, and expenses, and cannot be invested in directly. **Past performance is no guarantee of future results.** See full disclosure of chart and indexes in the back of the document under Important Information.

International equities versus U.S. equities

Rolling five-year returns show that outperformance of U.S. equities versus international equities rotates over time, reinforcing the benefit of a globally diversified portfolio.

■ U.S. Stocks Minus International, Rolling Five-Year Return

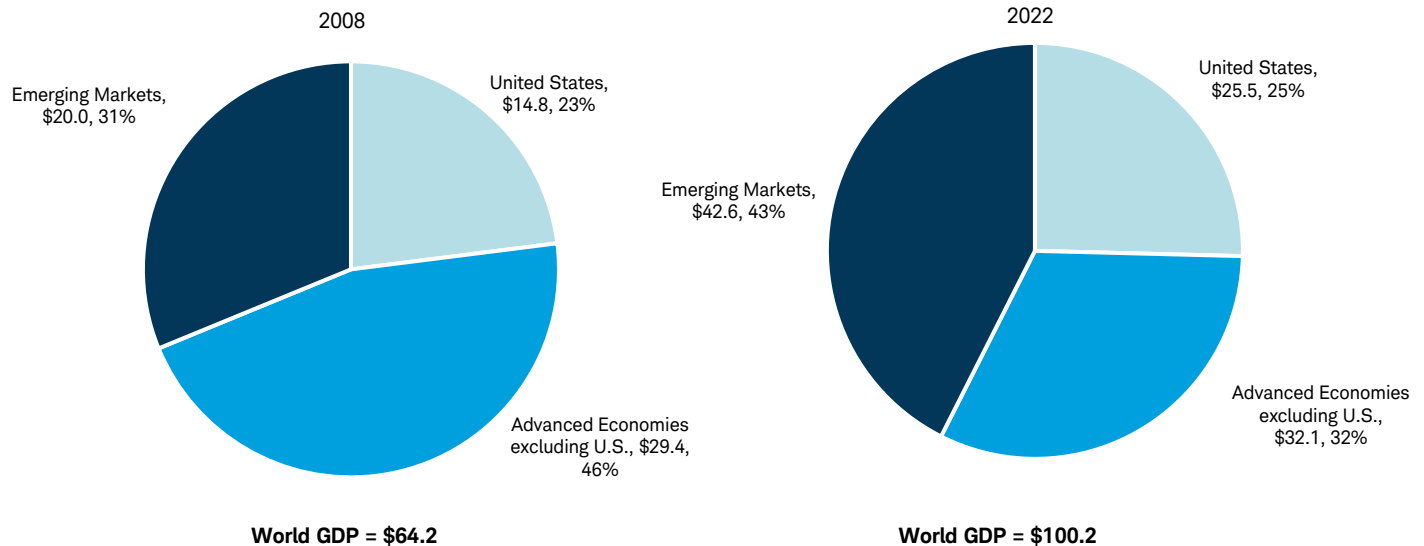


Source: Bloomberg as of 12/31/2023. The graph shows the rolling five-year annualized total returns of the S&P 500® Index, representing U.S. stocks and MSCI EAFE® Index-Net of Taxes representing international stocks, from January 1970 through December 2023. The first rolling five-year period is January 1970 through December 1974. Returns assume reinvestment of dividends. Indexes are unmanaged, do not incur management fees, costs, and expenses, and cannot be invested in directly. For illustrative purposes only. Investing involves risk, including loss of principal. Diversification strategies do not ensure a profit and do not protect against losses in declining markets. **Past performance is no guarantee of future results.**

The impact of international and emerging markets growth

Emerging markets now represent a larger share of world GDP and could be part of a well-diversified portfolio.

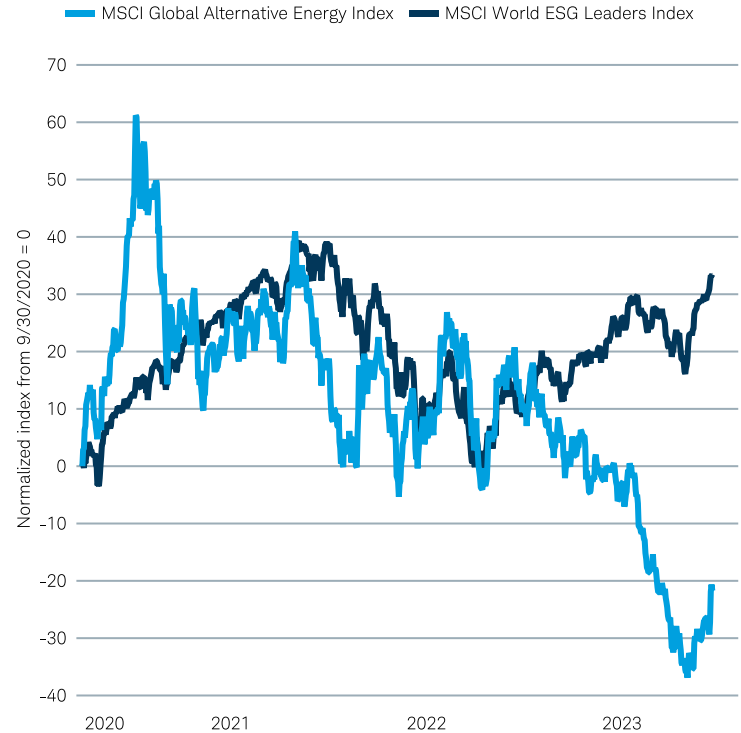
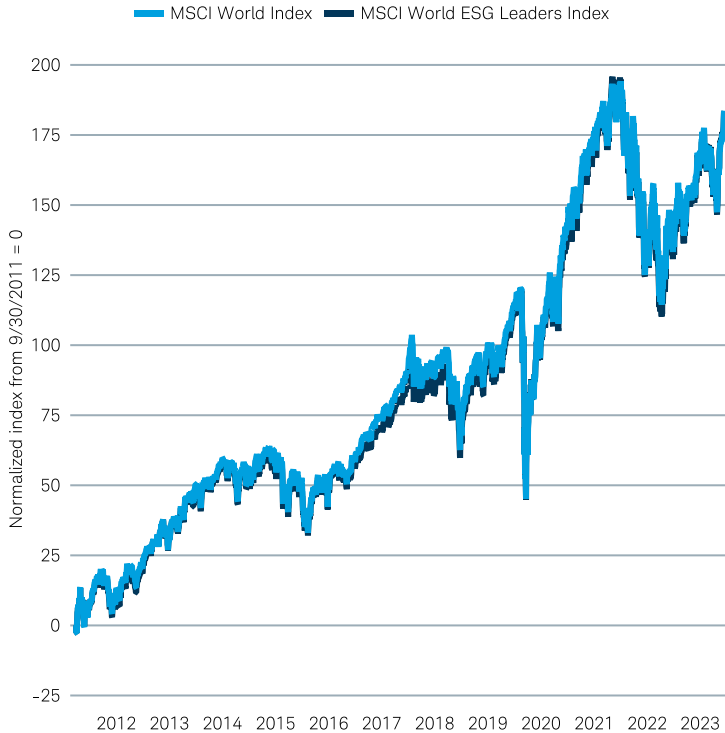
World Nominal GDP in \$ Trillions



Source: International Monetary Fund, World Economic Outlook Database. Estimate as of October 2023. International investments involve additional risks, which include differences in financial accounting standards, currency fluctuations, geopolitical risk, foreign taxes and regulations, and the potential for illiquid markets. Investing in emerging markets may accentuate these risks. **Diversification strategies do not ensure a profit and do not protect against losses in declining markets. Investing involves risk, including loss of principal.**

Environmental, social, and governance (ESG)

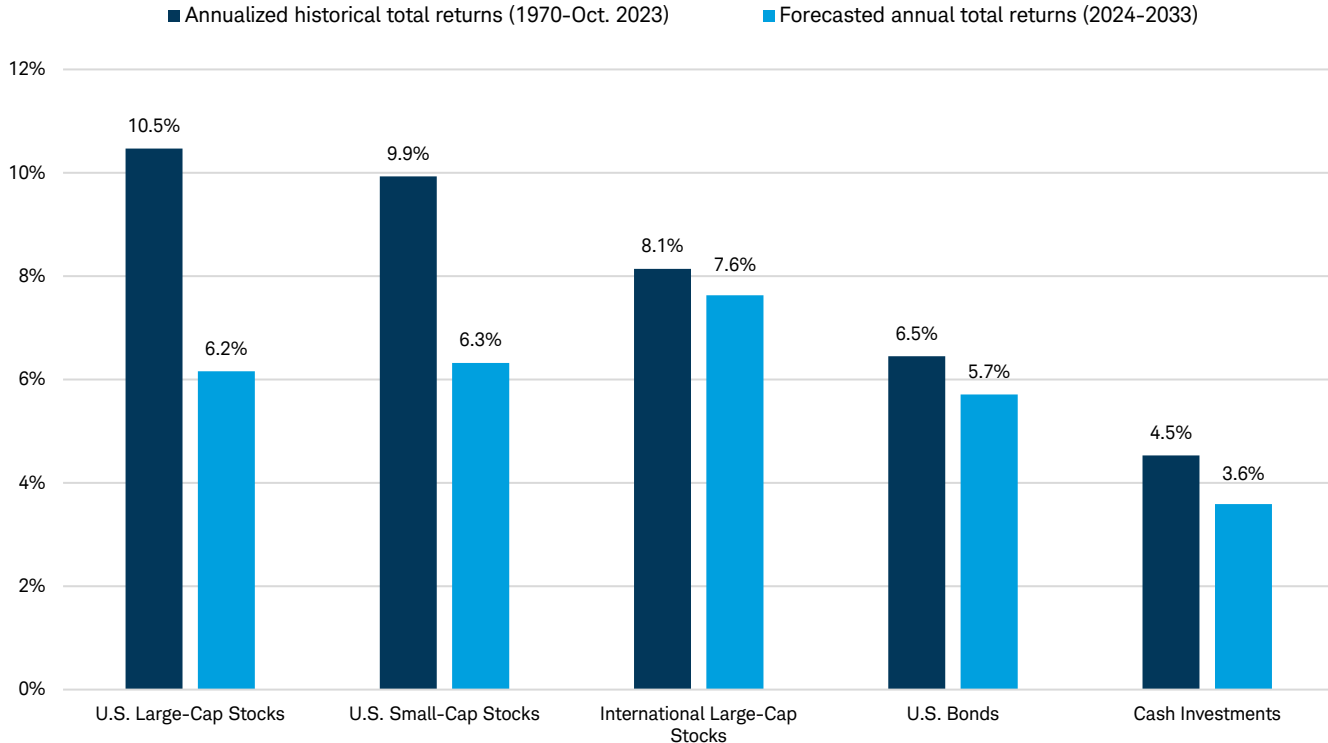
Historically, ESG index performance has been competitive with standard indexes. However, diversification within ESG is important. Excessive optimism in segments such as alternative energy can result in higher volatility relative to a broader index.



Source: Bloomberg, Macrobond as of 12/31/2023. Indexes are unmanaged, do not incur management fees, costs, and expenses, and cannot be invested in directly. Indexes are normalized to start at zero on the dates listed on the axes. Investing involves risk, including loss of principal. **Past performance is no guarantee of future results. Diversification strategies do not ensure a profit and do not protect against losses in declining markets.**

Expected asset class returns

Expectations for all asset classes are lower than historical returns due to macroeconomic headwinds and high equity valuations.



Source: Charles Schwab as of 10/31/2023. Forecasts are derived by Charles Schwab Investment Advisory, Inc. Charles Schwab Investment Advisory, Inc. ("CSIA") is an affiliate of Charles Schwab & Co., Inc. ("Schwab"). Indexes used: S&P 500 Index (U.S. Large-Cap Stocks), Russell 2000 Index (U.S. Small-Cap Stocks), MSCI EAFE Index (International Large-Cap Stocks), Bloomberg US Aggregate Bond Index (U.S. Bonds), and FTSE US 3-Month U.S. Treasury Bill Index (Cash Investments). Returns assume reinvestment of dividends and interest. Forecasts contained herein are for illustrative purposes only, may be based upon proprietary research and are developed through analysis of historical public data. Indexes are unmanaged, do not incur management fees, costs, and expenses, and cannot be invested in directly. Investing involves risk, including loss of principal. **Past performance is no guarantee of future results.**

Important Disclosures

Investing involves risk, including risk of principal.

Past performance is no guarantee of future results, and the opinions presented cannot be viewed as an indicator of future performance.

The information provided here is for general informational purposes only and should not be considered an individualized recommendation or personalized investment advice. The investment strategies mentioned here may not be suitable for everyone. Each investor needs to review an investment strategy for his or her own particular situation before making any investment decision. All expressions of opinion are subject to change without notice in reaction to shifting market conditions. Data contained herein from third-party providers is obtained from what are considered reliable sources. However, its accuracy, completeness, or reliability cannot be guaranteed. Examples provided are for illustrative purposes only and not intended to be reflective of results you can expect to achieve.

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Schwab does not recommend the use of technical analysis as a sole means of investment research.

Diversification strategies do not ensure a profit and do not protect against losses in declining markets.

International investments involve additional risks, which include differences in financial accounting standards, currency fluctuations, political instability, foreign taxes and regulations, and the potential for illiquid markets. Investing in emerging markets may accentuate these risks.

Environmental, social and governance (ESG) strategies implemented by mutual funds, exchange-traded funds (ETFs), and separately managed accounts are currently subject to inconsistent industry definitions and standards for the measurement and evaluation of ESG factors; therefore, such factors may differ significantly across strategies. As a result, it may be difficult to compare ESG investment products. Further, some issuers may present their investment products as employing an ESG strategy, but may overstate or inconsistently apply ESG factors. An investment product's ESG strategy may significantly influence its performance. Because securities may be included or excluded based on ESG factors rather than other investment methodologies, the product's performance may differ (either higher or lower) from the overall market or comparable products that do not have ESG strategies. Environmental ("E") factors can include climate change, pollution, waste, and how an issuer protects and/or conserves natural resources. Social ("S") factors can include how an issuer manages its relationships with individuals, such as its employees, shareholders, and customers as well as its community. Governance ("G") factors can include how an issuer operates, such as its leadership composition, pay and incentive structures, internal controls, and the rights of equity and debt holders. Carefully review an investment product's prospectus or disclosure brochure to learn more about how it incorporates ESG factors into its investment strategy.

Fixed income securities are subject to increased loss of principal during periods of rising interest rates. Fixed-income investments are subject to various other risks including changes in credit quality, market valuations, liquidity, prepayments, early redemption, corporate events, tax ramifications, and other factors. Lower rated securities are subject to greater credit risk, default risk and liquidity risk.

Commodity-related products carry a high level of risk and are not suitable for all investors. Commodity-related products may be extremely volatile, may be illiquid, and can be significantly affected by underlying commodity prices, world events, import controls, worldwide competition, government regulations, and economic conditions.

Investments in securities of MLPs involve risks that differ from an investment in common stock. MLPs are controlled by their general partners, which generally have conflicts of interest and limited fiduciary duties to the MLP, which may permit the general partner to favor its own interests over the MLPs.

Risks of the REITs are similar to those associated with direct ownership of real estate, such as changes in real estate values and property taxes, interest rates, cash flow of underlying real estate assets, supply and demand, and the management skill and credit worthiness of the issuer. Investing in REITs may pose additional risks such as real estate industry risk, interest rate risk, risks related to the uncertainty of and compliance with certain tax regime rules, and liquidity risk.

Important Disclosures

Preferred stocks: (1) generally have lower credit ratings than a firm's individual bonds; (2) generally have a lower claim to assets than a firm's individual bonds; (3) often have higher yields than a firm's individual bonds due to these risk characteristics; (4) are often callable, meaning the issuing company may redeem the stock at a certain price after a certain date.

A bond ladder, depending on the types and amount of securities within the ladder, may not ensure adequate diversification of your investment portfolio. This potential lack of diversification may result in heightened volatility of the value of your portfolio. As compared to other fixed income products and strategies, engaging in a bond ladder strategy may potentially result in future reinvestment at lower interest rates and may necessitate higher minimum investments to maintain cost-effectiveness. Evaluate whether a bond ladder and the securities held within it are consistent with your investment objective, risk tolerance and financial circumstances.

Bank loans typically have below investment-grade credit ratings and may be subject to more credit risk, including the risk of nonpayment of principal or interest. Most bank loans have floating coupon rates that are tied to short-term reference rates like the Secured Overnight Financing Rate (SOFR), so substantial increases in interest rates may make it more difficult for issuers to service their debt and cause an increase in loan defaults. A rise in short-term reference rates typically result in higher income payments for investors, however. Bank loans are typically secured by collateral posted by the issuer, or guarantees of its affiliates, the value of which may decline and be insufficient to cover repayment of the loan. Many loans are relatively illiquid or are subject to restrictions on resales, have delayed settlement periods, and may be difficult to value. Bank loans are also subject to maturity extension risk and prepayment risk.

Treasury Inflation Protected Securities (TIPS) are inflation-linked securities issued by the US Government whose principal value is adjusted periodically in accordance with the rise and fall in the inflation rate. Thus, the dividend amount payable is also impacted by variations in the inflation rate, as it is based upon the principal value of the bond. It may fluctuate up or down. Repayment at maturity is guaranteed by the US Government and may be adjusted for inflation to become the greater of the original face amount at issuance or that face amount plus an adjustment for inflation. Treasury Inflation-Protected Securities are guaranteed by the US Government, but inflation-protected bond funds do not provide such a guarantee.

Tax-exempt bonds are not necessarily a suitable investment for all persons. Information related to a security's tax-exempt status (federal and in-state) is obtained from third parties, and Charles Schwab & Co., Inc. does not guarantee its accuracy. Tax-exempt income may be subject to the Alternative Minimum Tax (AMT). Capital appreciation from bond funds and discounted bonds may be subject to state or local taxes. Capital gains are not exempt from federal income tax.

There are risks associated with investing in dividend paying stocks, including but not limited to the risk that stocks may reduce or stop paying dividends.

Mortgage-backed securities (MBS) may be more sensitive to interest rate changes than other fixed income investments. They are subject to extension risk, where borrowers extend the duration of their mortgages as interest rates rise, and prepayment risk, where borrowers pay off their mortgages earlier as interest rates fall. These risks may reduce returns.

Small-cap investments are subject to greater volatility than those in other asset categories.

Asset Class Performance Quilt Chart: Source: Morningstar Direct. Data is from January 1, 2013–December 31, 2022. This chart represents a hypothetical investment and is for illustrative purposes only. Diversification strategies do not ensure a profit and do not protect against losses in declining markets. Core bonds consists of Treasuries, investment-grade corporate bonds, and securitized bonds. The diversified portfolio is a hypothetical portfolio consisting of 19% U.S. large cap stocks (S&P 500 Index), 11% U.S. small cap stocks (Russell 2000 Index), 12% international developed market large cap stocks (MSCI EAFE Index), 7% international developed market small cap stocks (MSCI EAFE Small Cap Index), 7% emerging markets stocks (MSCI Emerging Markets Index), 3% U.S. REITs (S&P U.S. REIT Index), 2% international REITs (S&P Global REITs ex-U.S. Index), 7.5% Treasuries (Bloomberg 3-7 Year Treasury Bond Index), 1% investment-grade corporate bonds (Bloomberg U.S. Corporate Bond Index), 6% securitized bonds (Bloomberg U.S. Securitized Bond Index), 7% Treasury Inflation Protected Securities (Bloomberg U.S. TIPS Index), 3% high-yield bonds (Bloomberg Very Liquid High Yield Bond Index), 2% emerging markets bonds (Bloomberg Emerging Market Local Basket Index), 2% gold and other precious metals (S&P GSCI Precious Metals Index), and 10.5% cash (Bloomberg 1-3 Month Treasury Bill Index). Including fees and expenses in the diversified portfolio would lower returns. The portfolio is rebalanced annually. Returns include reinvestment of dividends, interest, and capital gains.

Hedges against inflation chart: The indexes representing each asset class are the Ibbotson US Large Stock Index (US Equities), MSCI EAFE Index (International Stocks), Bloomberg US Aggregate Corporate Bond Index (Investment Grade Corporates), Ibbotson US Long-Term Government Index (Long-term Treasuries), ICE BofA U.S. Mortgage Backed Securities Index (MBS), Ibbotson US Intermediate-Term Government Index (Intermediate-term Treasuries), Gold Dollar Spot (Gold), Ibbotson US 10Month Treasury Bills (Treasury Bills), S&P GSCI Index (Commodities), Bloomberg US Corporate High Yield Bond Index (High-Yield Corporates), ICE BofA US Municipal Securities Index (Municipal Bonds), US Treasury Inflation Protected Securities (TIPS).

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