



Market Intel Exchange

Market data and insights from Lincoln and industry asset management partners

As of 2/29/2024

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Market Intel Exchange.

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J.P.Morgan
Asset Management



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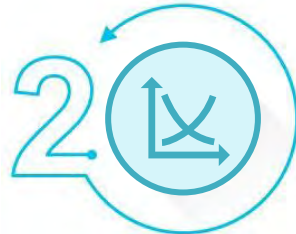
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On the minds of investors

Three key themes on the minds of investors



State of the U.S. economy and what's ahead



What the start of rate cuts could mean for markets



The potential market impact of the presidential election

The state of the U.S. economy and what's ahead

CEO confidence

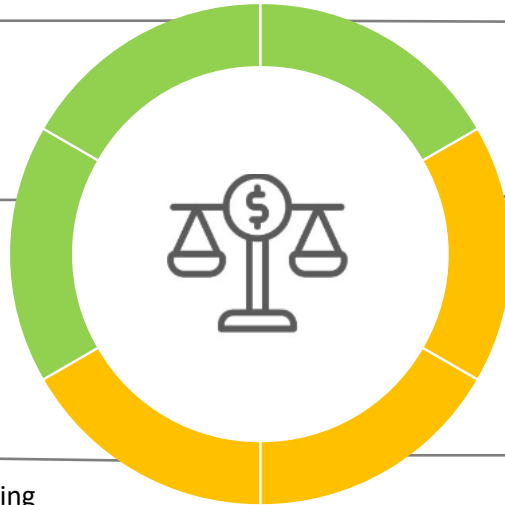
For the first time in two years, optimism outweighs pessimism among CEOs.

Inflation

Cooling, pushed lower in large part by falling shelter inflation. Continued slowing of price pressures expected in 2024.

Economic growth

Resilient, powered by strong gains in spending in 2023. Growth is expected to moderate in 2024 but remain positive.



Trend of economic data	
■	Negative trend/deteriorating
■	Positive trend/improving
■	Moderating trend/mixed signals

Labor market

Unemployment remains historically low. After showing signs of moderate cooling, job growth re-accelerating.

Consumer finances

Household debt servicing ratio remains below pre-pandemic levels, but pockets of potential stress can be seen in signals like rising credit card delinquencies.

Retail spending

Retail sales slipped in January, but consumer confidence remains strong.

What is this chart showing?

This chart uses a combination of hard (numerical) and soft (survey) data to provide a snapshot of how several important economic indicators are trending.

Why is it important?

Despite widespread forecasts for a 2023 recession, the U.S. economy remained surprisingly resilient.

Inflation continued its orderly decline throughout the year, while high interest rates proved to be no match for American consumers, who powered economic growth through robust spending.

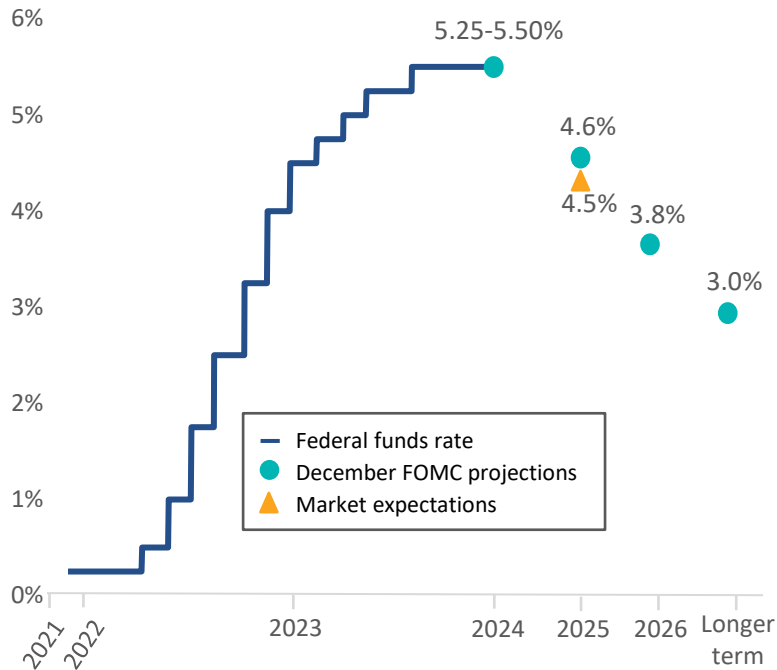
Despite modest cooling in some areas, there are signs the economic resiliency could continue in the near term.

That said, the biggest risks to the economy are often the ones we don't see coming. So, there is the potential that this picture could change rapidly.

What the start of rate cuts could mean for markets

The Fed is done hiking, and cuts may be coming

Fed funds policy rate and median FOMC dot plot projections



What has happened when the Fed cuts rates?

S&P 500 12-month average performance following first cut: cycles since 1965



What is this chart showing?

The chart on the left shows the current Fed funds rate, as well as future projections from both the Federal Open Market Committee (FOMC) and market participants.

The chart on the right shows S&P 500 returns for the twelve months following the first rate cut in previous cycles.

Why is it important?

Thanks in large part to declining inflation, a pivot in FOMC policy is on the horizon.

What this could mean for equity markets is likely to come down to the state of the U.S. economy.

History shows that on average, returns in the twelve months following the first rate cut are positive, but roughly half the long-term average of stocks.

However, there is a stark difference in results during times where the economy avoided a recession throughout these twelve months, versus those when a recession occurred.

Source: (Left): Federal Reserve, Federal Reserve Bank of St. Louis, Bloomberg as of February 29, 2024. Projected rates listed for 2025 and 2026 represent values as of year-end of the previous year. I.e. 2025= 12/31/2024. (Right): Federal Reserve, NBER, Bloomberg Finance L.P. Analysis provided by J.P. Morgan as of December 11, 2023. Analysis incorporates cutting cycles that began in: Nov '66, Aug '69, June '74, May '81, Oct '84, Jun '89, Jul '95, Sep '98, Jan '01, Sep '07, Jul '19, and Mar '20. Recession is determined by an NBER-defined contraction that occurred within 12 months of the first cut, excluding the 2019 cycle preceding the COVID-19 pandemic. Past performance does not guarantee future results

Potential market impact of the presidential election

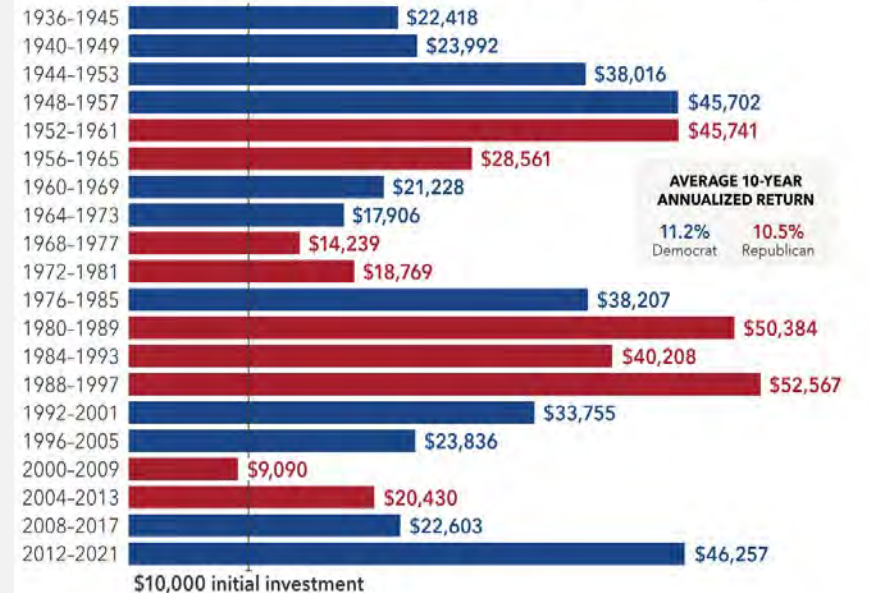


The first five months of election years have historically had lower average returns and higher volatility. However, regardless of outcome, markets tended to bounce back and return to an upward trajectory following both primaries and election days, when uncertainty is lifted. Despite the short-term volatility election years often bring, for long-term investors, the political party that wins the White House has had little impact on returns. Since 1936, the 10-year annualized return of an investment in U.S. stocks (as measured by the S&P 500 Index) made at the start of an election year was strong, regardless of whether a Democrat or Republican prevailed.

S&P 500 Index average cumulative returns since 1932



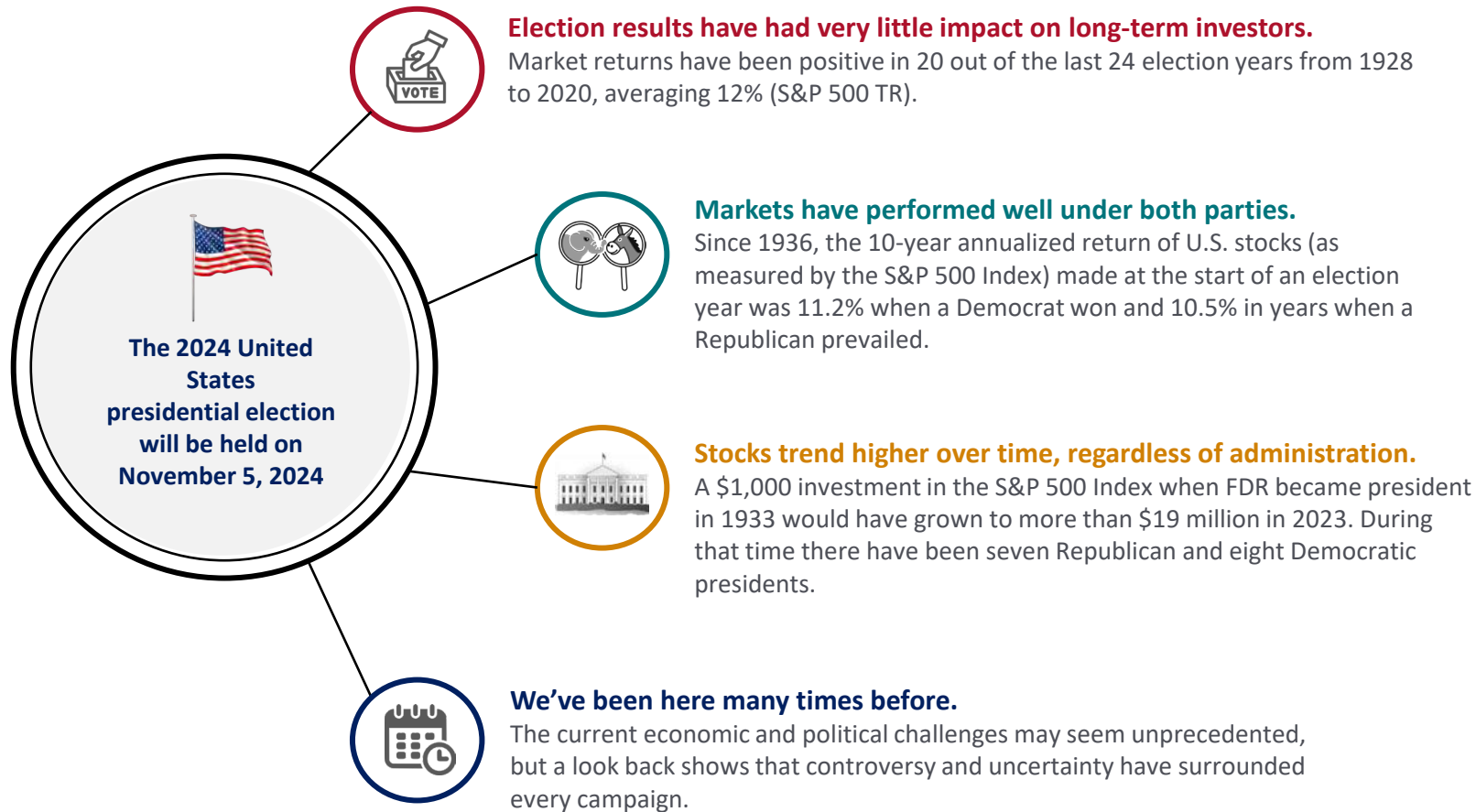
10-year growth of hypothetical \$10k investment made at start of election year (USD)



Source: Capital Group, (left chart): *Guide to Investing in an Election Year*. Capital Group, IMES, Standard & Poor's. Includes all daily price returns from January 1, 1932, through December 31, 2022. Non-election years exclude all years with either a presidential or midterm elections. (Right chart): Sources: Capital Group, Standard & Poor's. Each 10-year period begins on January 1 of the first year shown and ends on December 31 of the tenth year. For example, the first period covers January 1, 1936, through December 31, 1945. Figures shown are past results and are not predictive of results in future periods. https://www.capitalgroup.com/advisor/insights/articles/2024-economic-outlook.html?sfid=1995476238&cid=81086127&et_cid=81086127&cgsrc=SFMC&alias=btn-LP-A1cta-advisor.

2024 election

Markets and election years



What is this chart showing?

This chart highlights key points related to election years and market performance — a timely and relevant topic given the U.S. presidential election that is upon us in 2024.

Why is it important?

Investors may be thinking about how the added uncertainty that comes with an election year could impact markets, and their portfolios.

The highlighted points can help ease concerns and reinforce the fact that while near-term events like presidential elections can bring short-term volatility, it is often short-lived.

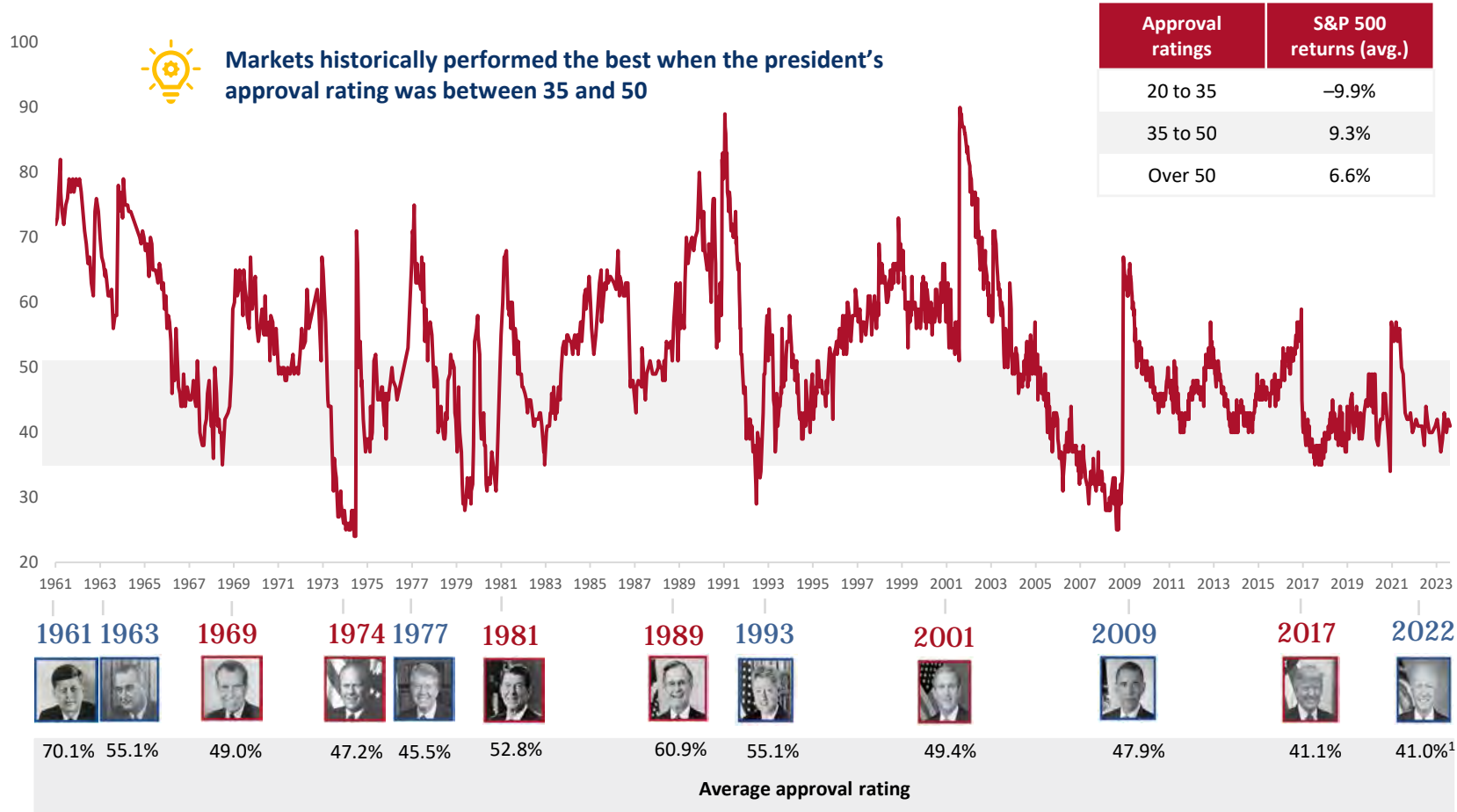
Therefore, the best approach for many is to tune the noise out and stay focused on their long-term goals.

Source: DFA matrix book for S&P total returns, Invesco, Capital Group.

Past performance is not indicative of future returns. Index performance is for illustrative purposes only. You cannot invest directly in the index.

Presidential approval ratings and market performance

Presidential approval ratings, Gallup poll (%)



What is this chart showing?

This chart shows the average presidential approval ratings from 1961 through September 30, 2023, as well as the average historical market performance under different presidential approval rating ranges.

Why is it important?

Investors don't need to agree with political agendas to do well in the markets. In fact, some of the best returns in the market happened when approval ratings were between 35% and 50%. In other words, strong returns came even when less than half the country approved of the current administration.

Source: Presidential portraits. Library of Congress, <https://www.loc.gov/free-to-use/presidential-portraits>. Invesco.

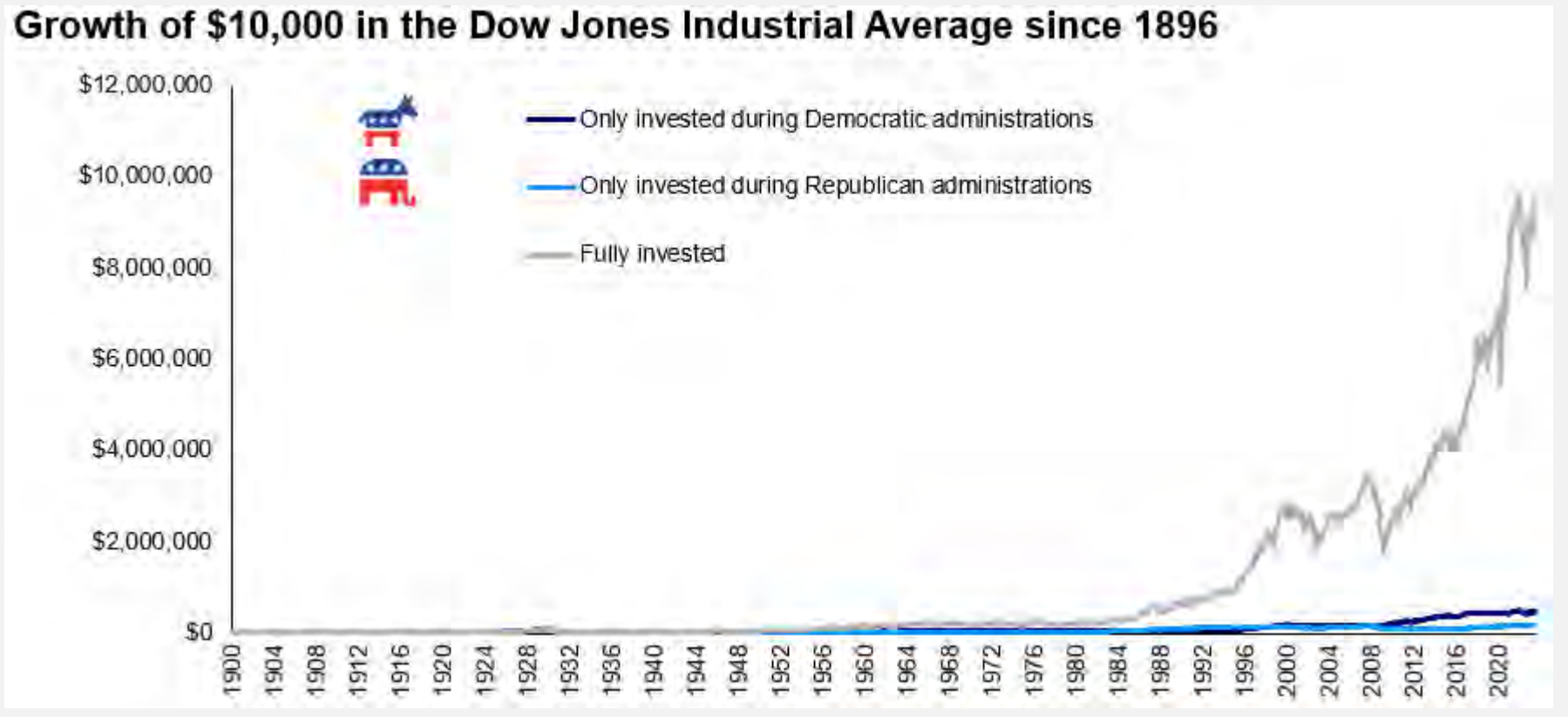
Bloomberg, Gallup. Data as of 9/30/23. ¹Biden approval rating as of 9/30/23. **Past performance is not indicative of future returns.** Index performance is for illustrative purposes only. You cannot invest directly in the index.

Investors would have been better off “bipartisan” (fully invested) vs. “partisan”



Hypothetically, the best-performing portfolio during the past 127 years was the “bipartisan” one that stayed fully invested during both Democratic and Republican administrations.

A “partisan” portfolio, only invested during times when a single party held the White House, underperformed by a wide margin.



Source: Invesco, Haver. Invesco, “Trending Conversations: People care about elections. Markets don’t,” 9/30/23. The Dow Jones Industrial Average is a price-weighted index of the 30 largest, most widely held stocks traded on the New York Stock Exchange. An investment cannot be made in an index. **Past performance does not guarantee future results.**

Neither party can claim fiscal responsibility

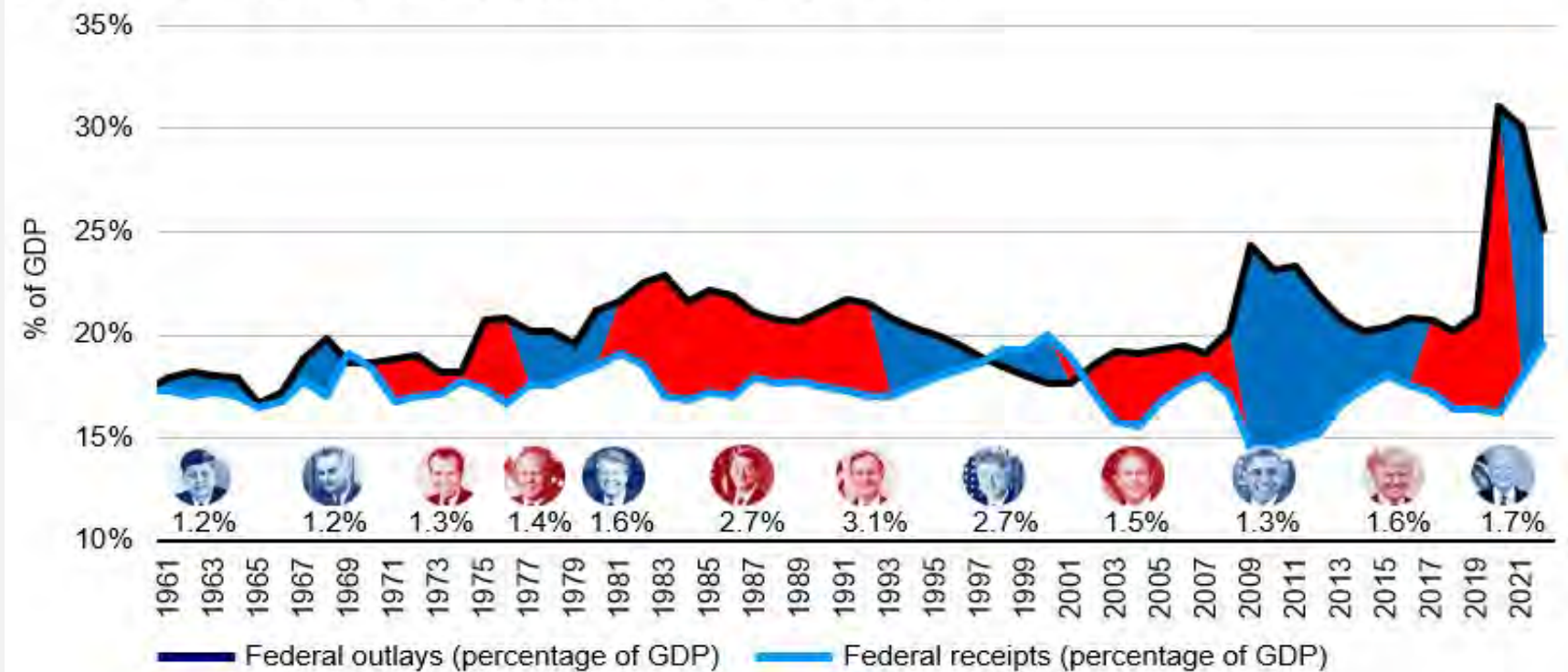


Federal spending has outpaced taxes and other sources of government revenue in most years and across most administrations. No party can claim fiscal responsibility.

It hasn't been a significant issue to this point for a variety of reasons, including the U.S. having the world's largest reserve currency and nominal economic growth outpacing the interest expense as a percent of gross domestic product (GDP).

Currently, interest outlays as a percent of GDP are below 2%, a low bar for growth to surpass.

Federal outlays and receipts as a percentage of GDP



Source: Invesco, "Trending Conversations: People Care About Elections. Markets Don't," 9/30/23. U.S. Department of Treasury, 6/30/23. Gross domestic product (GDP) is a broad indicator of a region's economic activity, measuring the monetary value of all the finished goods and services produced in that region over a specified period of time.

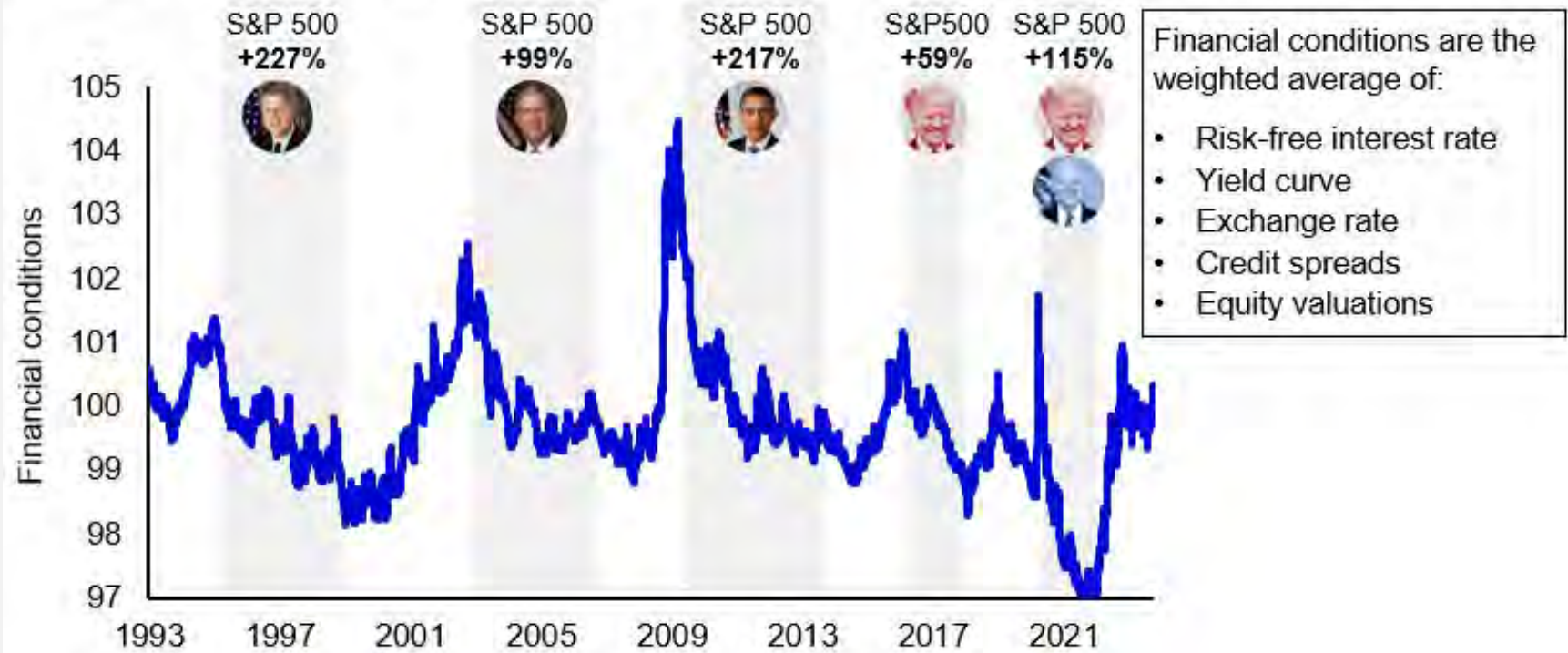
Monetary policy matters more



For all the focus on the executive branch, historically, it's been monetary policy that's mattered more for markets.

Presidents have often been helped or hurt by whether the Federal Reserve has been working to ease or tighten financial conditions.

Financial conditions and S&P 500 Index performance during easing conditions



Source: Invesco, "Trending Conversations: People Care About Elections. Markets Don't," 9/30/23. Goldman Sachs, Bloomberg L.P., 9/30/23. An investment cannot be made in an index. Past performance does not guarantee future results.

Views from our network

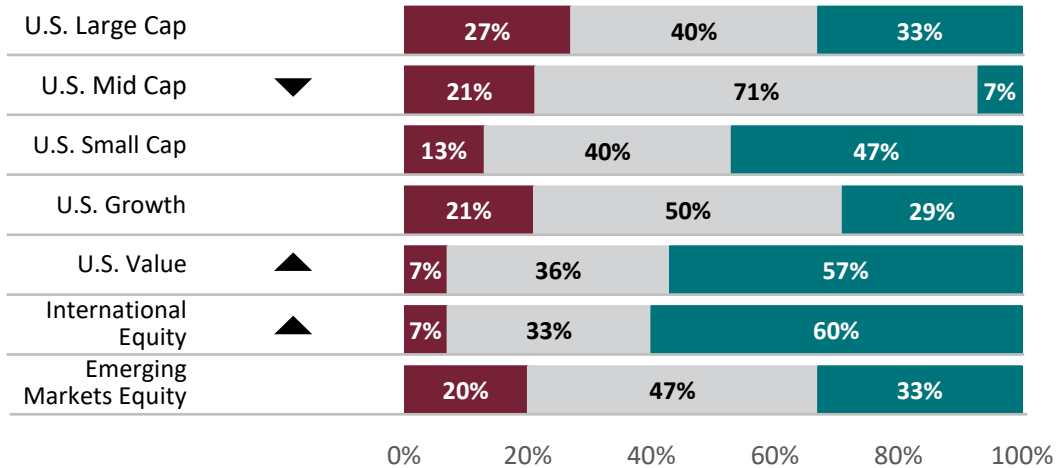
Asset class sentiment from our network

Bearish: Potential to underperform its class or subclass on a risk-adjusted basis

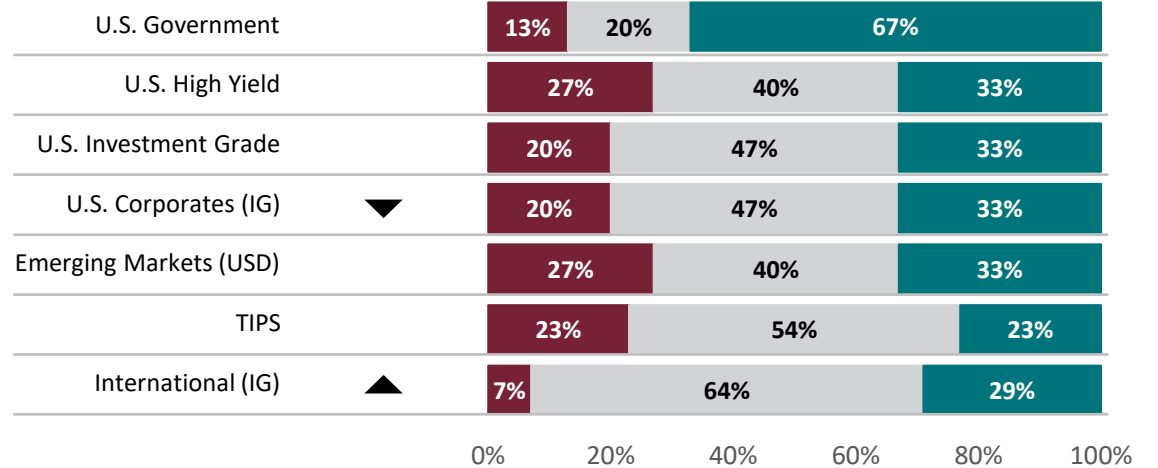
Neutral: Potential for performance to be in line with asset's historical average

Bullish: Potential to outperform its class or subclass on a risk-adjusted basis

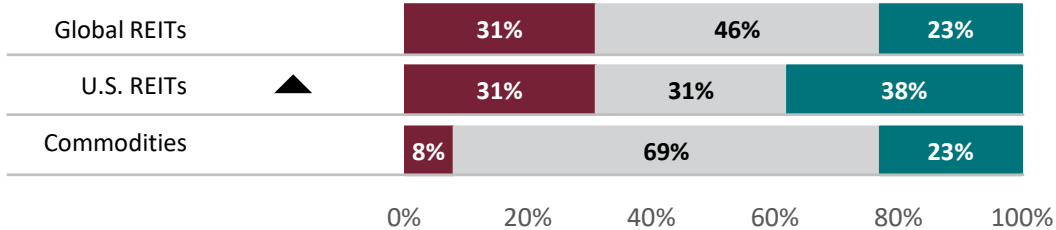
Equities vs. prior quarter



Fixed Income vs. prior quarter



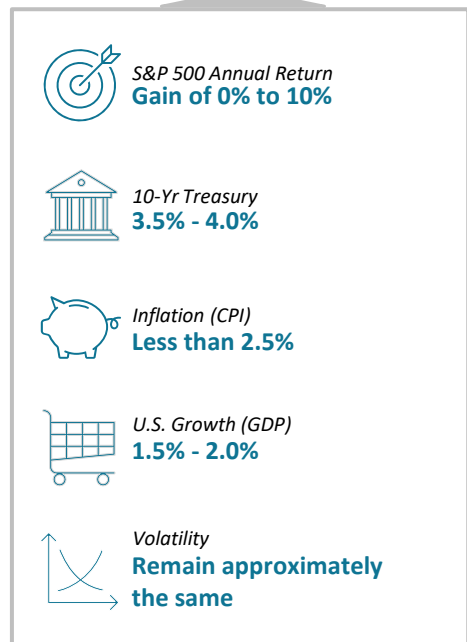
Alternatives vs. prior quarter



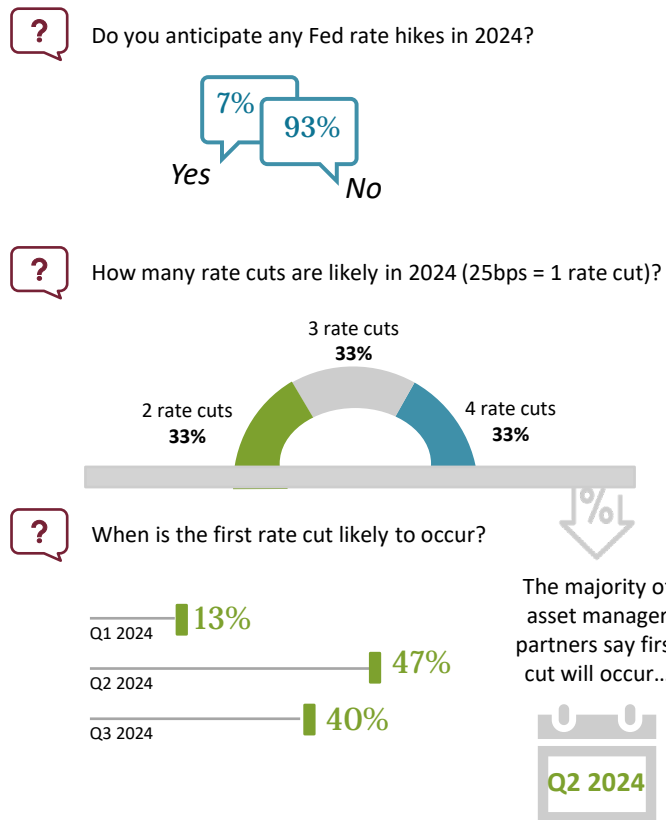
Survey results as 12/31/2023. Survey results may not add up to 100% due to rounding. Every quarter, Lincoln collects, and aggregates in this chart, various asset class sentiments from our network of asset management partners, to provide readers a consensus view from industry leaders on asset class outlooks for the next 12 to 18 months. Asset manager views are compiled each quarter-end through a survey process. This quarter's results include the views of 15 asset managers. The views expressed above are those of the select asset managers only and not necessarily of any Lincoln Financial Group affiliate. The survey results are not based on any particularized financial situation, or need, and are not intended to be, and should not be construed as, a forecast, research, investment advice or a recommendation for any specific strategy, product or service from any of the participating investment managers. Investors should speak to their financial professionals regarding the investment mix that may be right for them based on their financial situation and investment objectives.

What we're hearing from our network: survey results

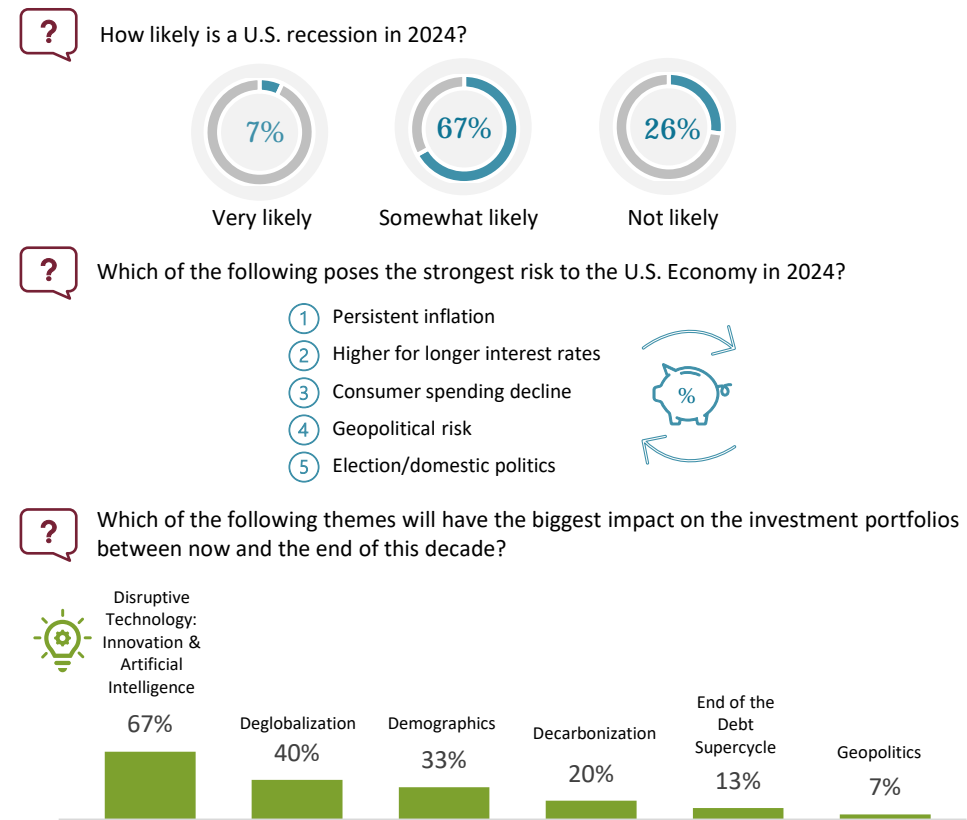
2024 Year-End Expectations of Respondents*



On the Federal Reserve...



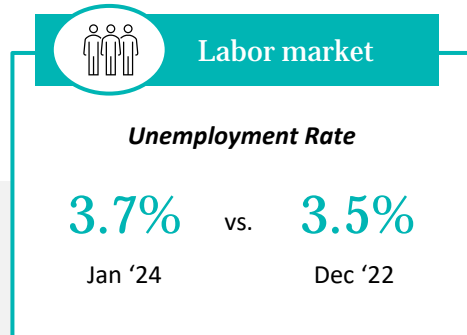
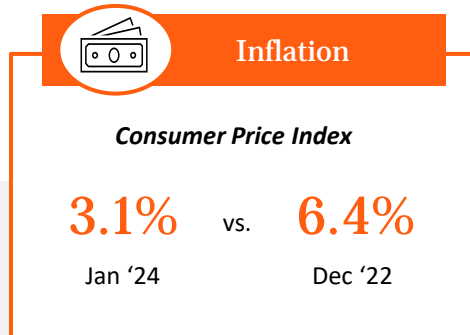
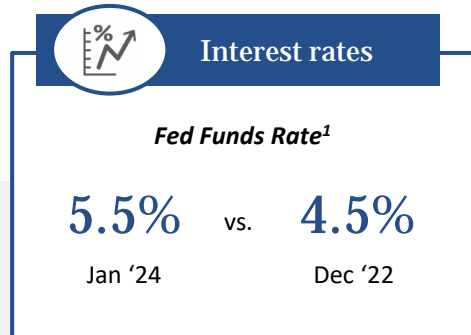
On the U.S. Economy and markets...





Source: Collection of views from a select group of asset manager partners from our network, dated 12/31/2023. Survey results may not add up to 100% due to rounding. The expectations expressed above are those of the select asset managers only and not necessarily of any Lincoln Financial Group affiliate. Results are not based on any particularized financial situation, or need, and are not intended to be, and should not be construed as, a forecast, research, investment advice or a recommendation for any specific strategy, product or service from any of the participating investment managers. Investors should speak to their financial professionals regarding the investment mix that may be right for them based on their financial situation and investment objectives. *2024 year-end expectations reflect the range with the highest concentration of votes from respondents.

Economy

Trends shaping the economic landscape



- 
- Macro backdrop**
- Higher interest rates
 - Declining inflation
 - Moderating labor market
 - Resilient consumer/corporations
 - Geopolitical uncertainty

- 
- Structural trends**
- Tech disruptions and AI
 - Proliferation of private markets
 - Demographic shifts
 - Deglobalization
 - Decarbonization/energy transition

What is this chart showing?

This chart is showing where several key economic data points both started and ended in 2023, along with considerations for investors regarding both the current macro backdrop, as well as long-term structural trends.

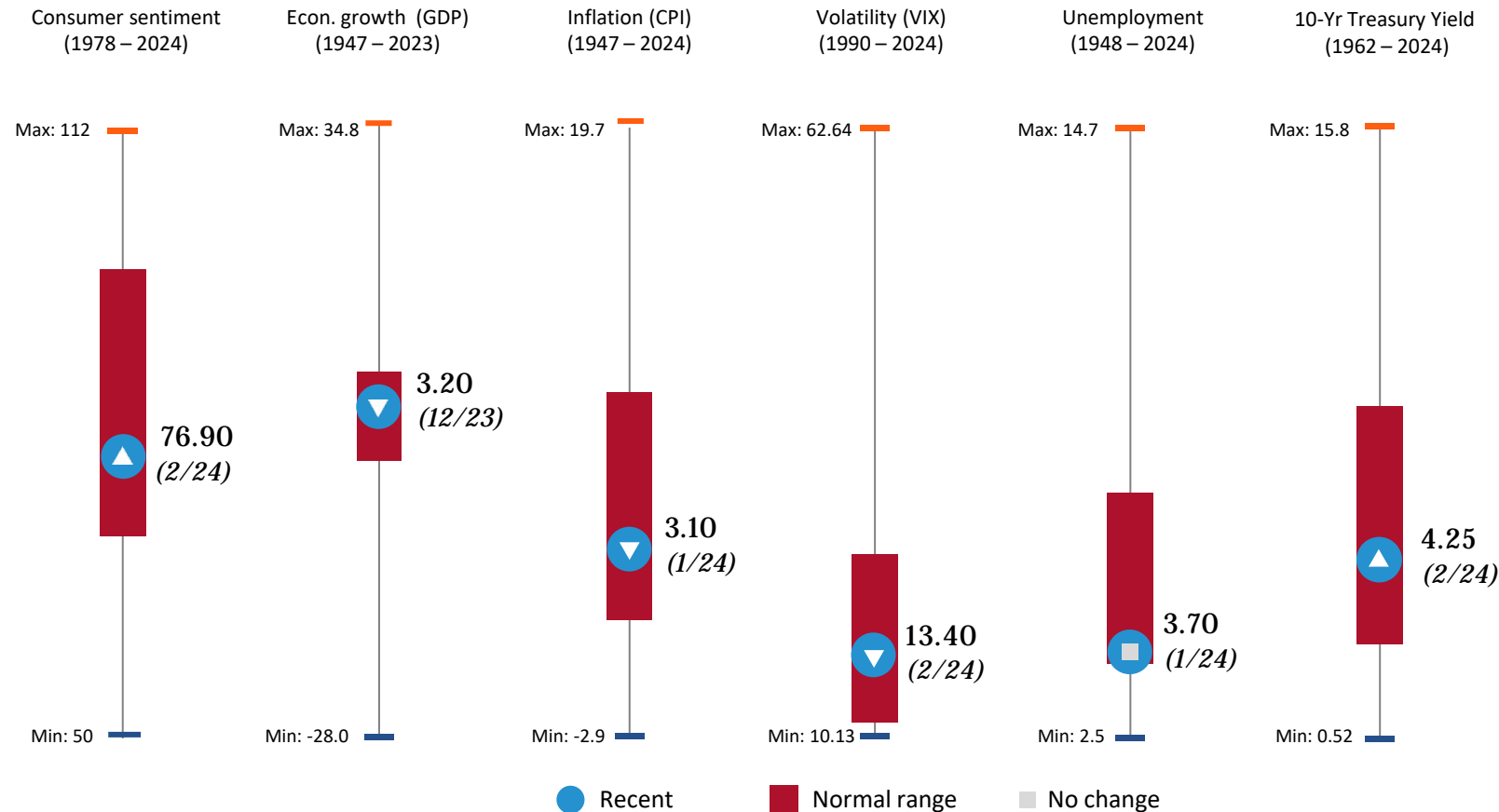
Why is it important?

Inflation, interest rates, and labor markets were closely watched in 2023. Rate hikes largely helped drive disinflation, but investors remained concerned about how these actions could impact the economy and the markets. Despite the economy's resilience to date, astute investors will continue to keep a close eye on the macro backdrop for any signs of weakening.

The latest data will continue to dominate short-run concerns, but there are several dominant trends playing out that will likely shape the economy and markets in 2024 and beyond. Some are more firmly intact, like demographic shifts, while others will take time to unfold, like the climate transition. Thinking about these structural themes may provide insights into longer term investment opportunities.

Sources: Bureau of Labor Statistics, Bloomberg, Lincoln Financial Group. Based on available data as of 2/29/24 ¹Represents top end of Fed Funds target range.

Key economic and market metrics



What is this chart showing?

This chart shows the historical range and recent level of six key economic and market indicators.

Why is it important?

Investors can use this chart to quickly determine if economic indicators are at, above, or below historical ranges. Indicators that are outside of their normal range may provide insight into the health or direction of the economy and the market.

Consumer Sentiment as measured by the Michigan Consumer Sentiment Index is calculated each month on the basis of a household survey of consumers' opinions on current conditions and future expectations of the economy.

Economic Growth (GDP) is the total monetary or market value of all the finished goods and services produced within a country's borders in a specific time period.

Inflation (CPI) is a measure of inflation that calculates the change in the prices of a basket of goods and services. This measure includes food and energy. Core CPI (excludes food and energy) was +3.9% YOY January 2024.

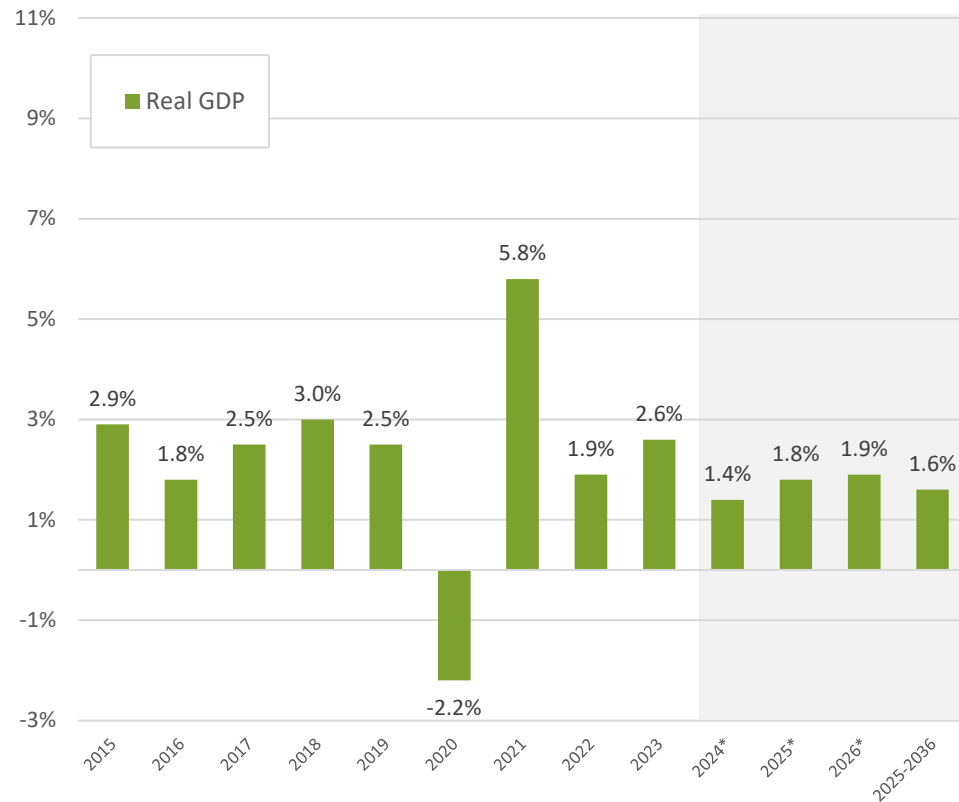
Volatility VIX is a real-time market index representing the market's expectations for volatility over the coming 30 days.

Unemployment rate as measured by the U.S. Bureau of Labor Statistics.

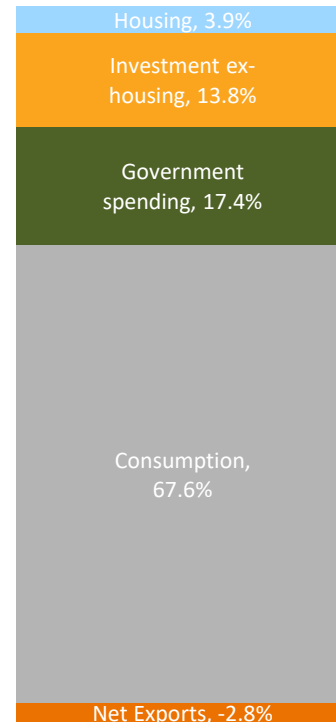
Source: Most recent data available as of February 29, 2024. Bloomberg. Arrows in the blue circles are indicative of most recent three-month trend, with exception of GDP, which is based on quarter-over-quarter trend. Normal range represents +/- one standard deviation to the mean over timeframe referenced. See Additional Information for more details. **Past performance is not indicative of future returns.**

U.S. gross domestic product

Real gross domestic product, actuals and future projections



Components of GDP as of 4Q23



What is this chart showing?

The chart on the left shows historical real GDP, as well as the most recently reported economic growth projections prepared by the Federal Open Market Committee.

The chart on the right shows the components of GDP as of the latest available data.

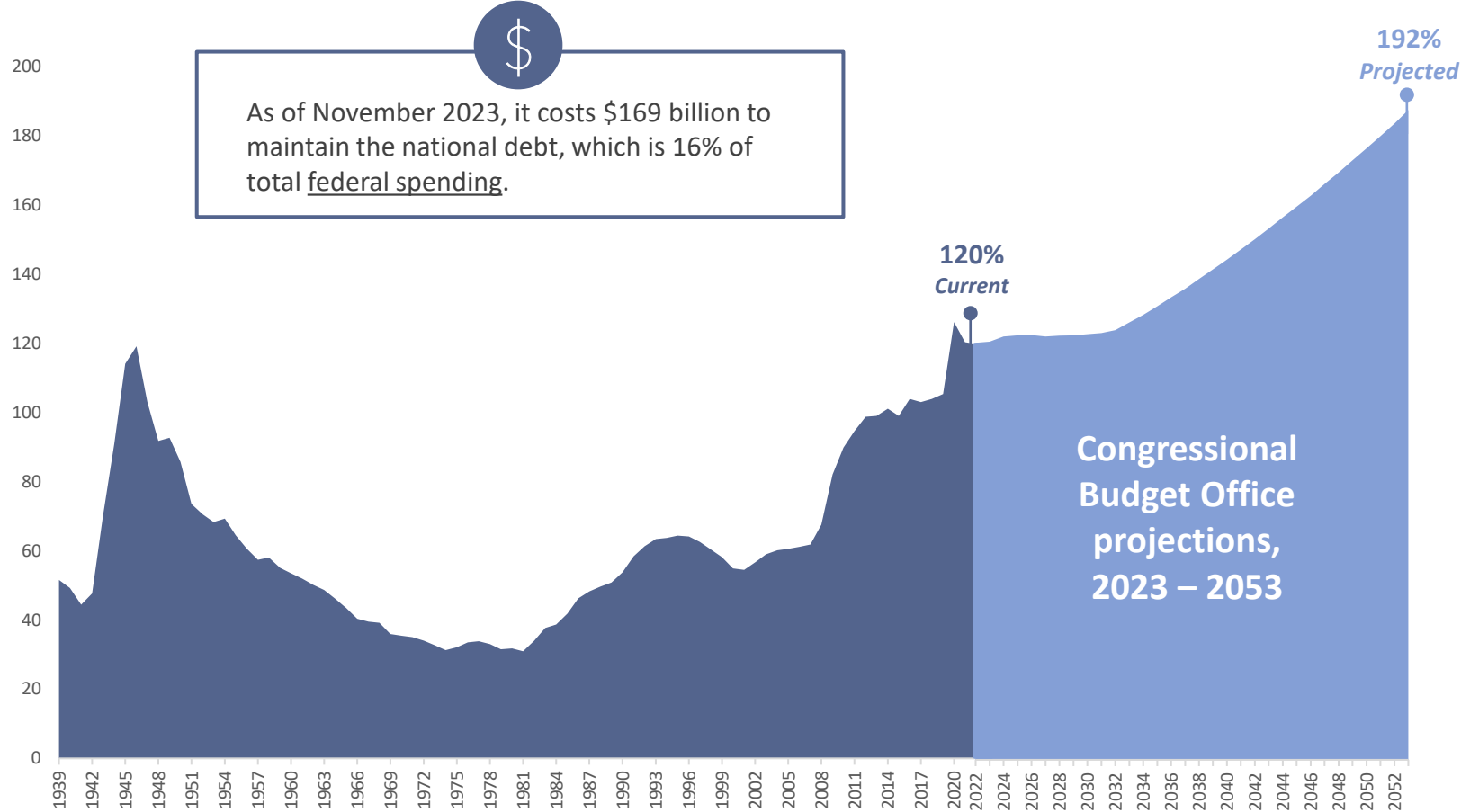
Why is it important?

Economic growth influences many factors that can impact the long-term performance of the markets, including interest rates and corporate earnings growth. As such, these GDP projections can be a valuable input for investors looking to set future portfolio return expectations.

Source: Federal Reserve Bank of St. Louis Economic Research, Federal Open Market Committee, The Conference Board. *Indicates future projections as of December 2023. 2025-2036 long-term projections are as of February 2024. Components of GDP depicted as 4Q23 nominal. Values may not sum to 100% due to rounding.

U.S. debt levels

U.S. federal debt as a % of GDP



What is this chart showing?

This chart shows historical U.S. national debt levels as a percentage of gross domestic product (GDP), as well as projections by the Congressional Budget Office through 2053.

Why is it important?

The U.S. government has been running a consistent fiscal deficit since the Global Financial Crisis, with spending outpacing revenue.

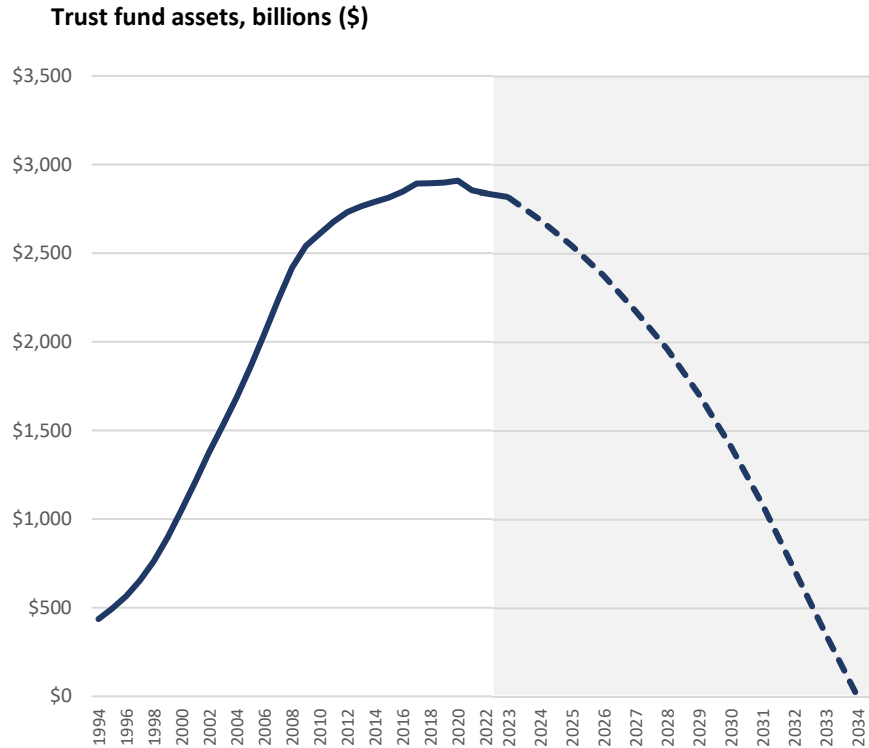
This has contributed to a rapidly rising pool of national debt, and more recently, increased interest expense as rates have risen.

The ratio of a country's total debt to GDP helps show the burden of its debt relative to total economic output, and therefore its ability to pay it.

It remains to be seen how this issue will be addressed, but it is likely to be an ongoing challenge requiring careful management and bipartisan policy decisions to help ensure long-term fiscal sustainability.

Source: Historical data sourced from Federal Reserve Bank of St. Louis. 2023 – 2053 U.S. federal debt projections sourced from Congressional Budget Office (CBO). Federal spending statistic sourced from U.S. Treasury Fiscal Data.

The long-term outlook for Social Security



Source: Social Security Administration (SSA). Historical data sourced from Social Security Administration Operations of the OASDI Trust Fund Report, Calendar Years 1937-2022. 2023 onwards data sourced from Social Security Administration Operations of the OASDI Trust Fund Report, Fiscal Year 2022. Shaded region on chart indicates future projections.



Common questions about Social Security

- 1 Why is Social Security important?**

→ For millions of Americans, Social Security provides an essential source of income in retirement, along with disability benefits.
- 2 How is Social Security financed?**

→ Social Security is funded by payroll tax deductions.
- 3 When will trust fund reserves be depleted?**

→ Without reform, the Social Security Trust Fund is scheduled to be depleted in 2034.
- 4 What are the differences in life expectancy when Social Security was created vs. now?**

→ Life expectancy at birth in the 1930s was about 58 for men and 62 for women, with a retirement age of 65. In recent years, the average life expectancy at birth is approximately 79, with a retirement age of 67.

What is this chart showing?

This chart shows the actual and projected Social Security Asset Trust Fund reserve amounts at year-end from 1994 through 2034, in billions of U.S. dollars.

Why is it important?

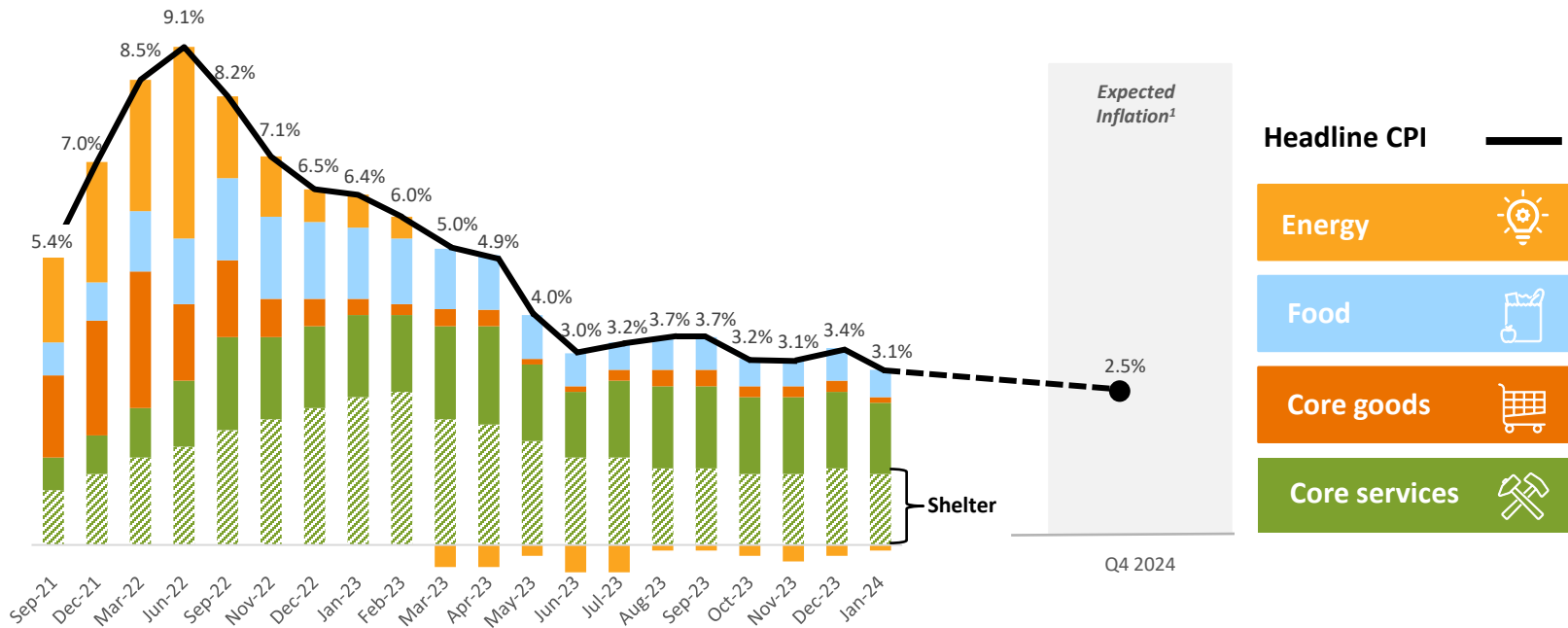
The 2023 annual Old-Age, Survivors, and Disability Insurance (OASDI) trustees report by the Social Security Administration (SSA) showed that given current conditions, the asset reserve dedicated to the benefit program could be depleted sooner rather than later.

Absent reform, the projected depletion date for the combined OASDI trust funds is 2034, a year earlier than in last year's report.

Even after this happens, the program will still collect taxes, which means that it will be able to continue to pay benefits to retirees. However, the benefits will likely be smaller than they are now.

Inflation trends and components

Headline CPI and components of CPI inflation (year-over-year)



What is this chart showing?

This chart shows the recent trend in year-over-year U.S. inflation, along with analyst forecasts for the fourth quarter of 2024.

Why is it important?

Headline inflation has continued to fall from the 2022 highs, and market expectations are for CPI to fall to 2.5% by the end of 4Q 2024.

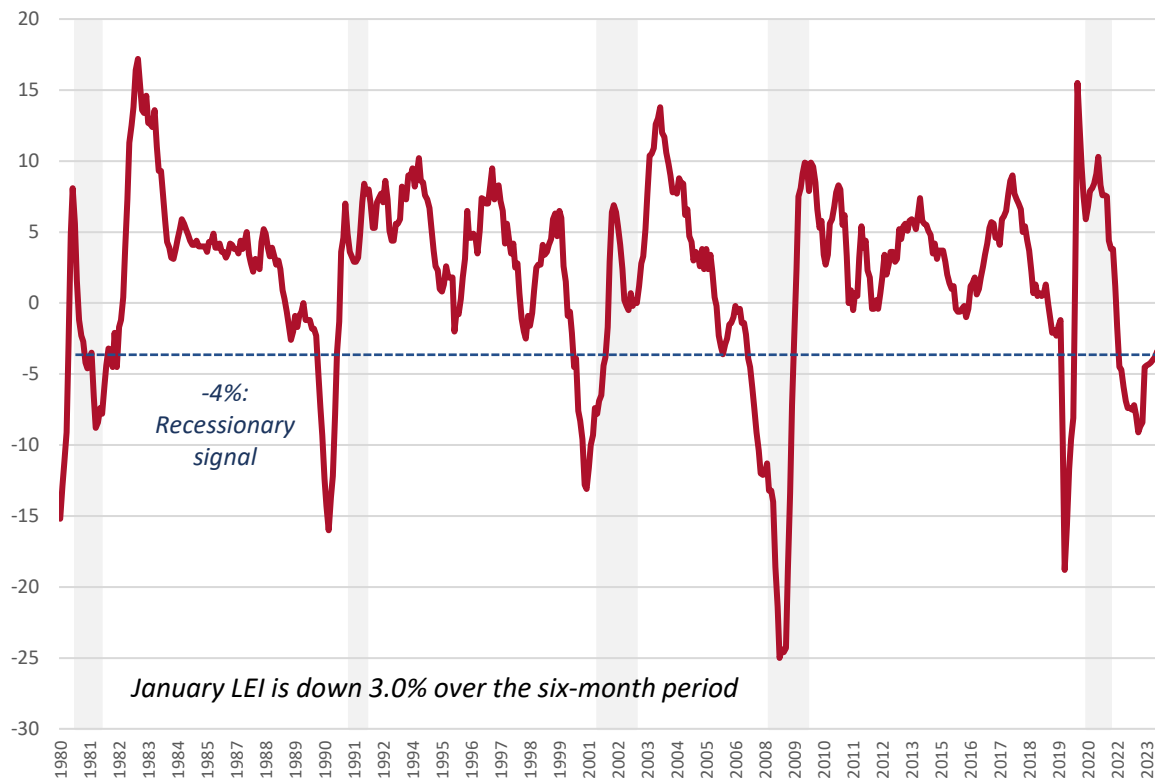
After a brief uptick in late summer of 2023, headline inflation resumed its downward trend.

This progress on inflation is expected to support a Fed pivot in 2024, though the timing of cuts continues to be uncertain due to the stickiness of services inflation.

Source: U.S. Bureau of Labor Statistics. The Consumer Price Index (CPI) is a measure of the average change over time in the prices paid by urban consumers for a market basket of consumer goods and services. This measure includes food and energy, which tend to have more price volatility and whose price shocks cannot be damped through monetary policy. Percentages may not sum due to rounding. ¹Inflation expectations for Q4 2024 represent median analyst expectations compiled by Bloomberg as of 02/29/2024.

Despite ongoing resiliency, U.S. LEI suggests economic weakness ahead

U.S. Leading Economic Index, 6-months % change



LEI Constituents (Ranked by Weightings in the Index)

Weekly manufacturing hours worked	▼
ISM index of new orders	▼
Consumer expectations	▼
Yield spread	▼
Leading credit index	▲
New orders of consumer goods and materials	▲
New orders of nondefense capital goods	▲
Stock prices	▲
Building permits	▲
Weekly initial claims, unemployment	▲

What is this chart showing?

This chart shows the 6-month percentage change in the Leading Economic Index (LEI), published by the Conference Board. LEI aggregates 10 individual leading indicators into one index, attempting to cut through the volatility of individual economic indicators.

Why is it important?

The LEI Index can be a helpful data point to look to for forecasting turning points in the economy. Historically, when the index has fallen more than 4 percent over a span of six months, a recession has followed not long after.

While financial markets and the economy are not the same, they do move similarly. However, the stock market tends to lead the economy, as investors often anticipate turning points in the economy – both to the upside and downside.

Source: The Conference Board. Leading Economic Index weightings reported 6 mo. ending January 2024.

ClearBridge U.S. Recession Risk Dashboard still signaling recession

ClearBridge
Investments



This chart shows ClearBridge Investments' U.S. Recession Risk Dashboard, which uses twelve different economic indicators to assess the overall risk of recession.

Each individual indicator can signal expansion, caution or recession in the economy. The signals from each of the twelve indicators are then combined into an overall dashboard signal of green, yellow or red.

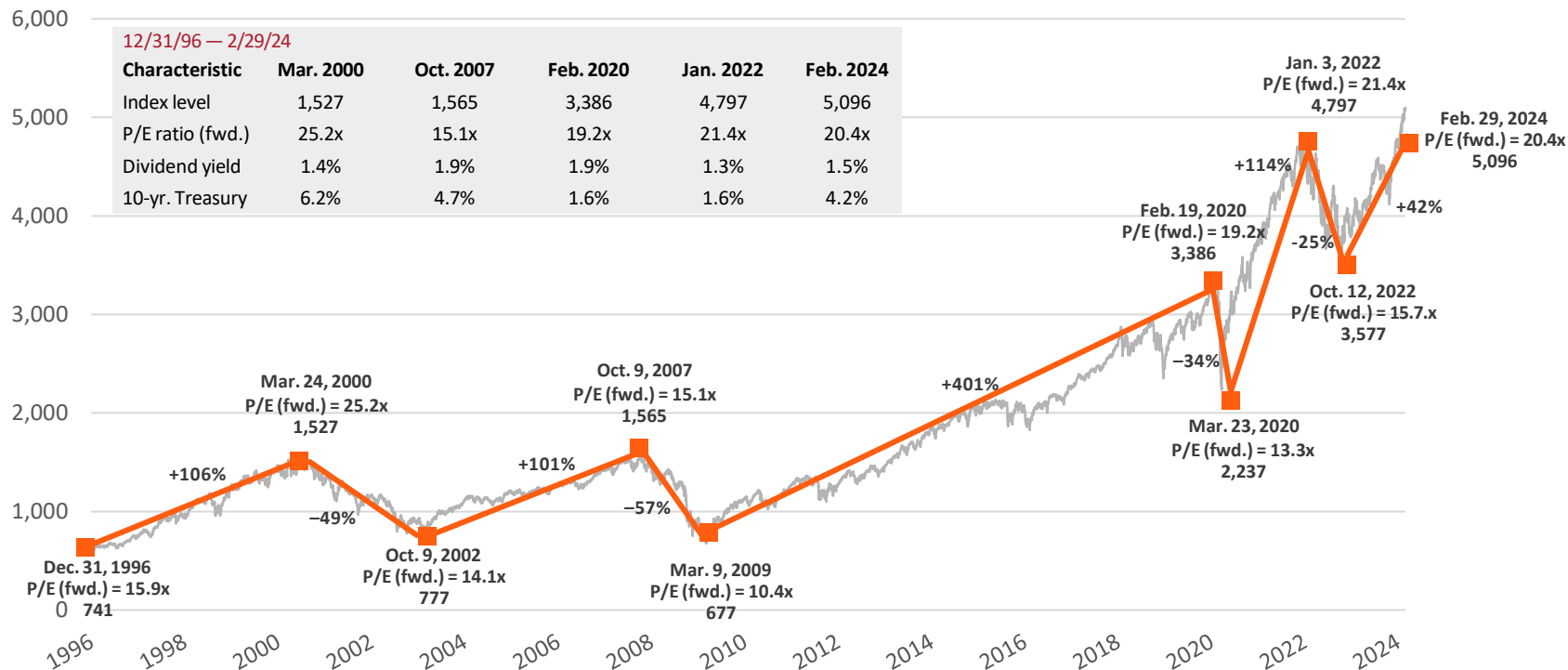
	January 31, 2024	2020	2007–2009	2001	
Consumer	Housing Permits	✘	↑	✘	●
	Job Sentiment	✘	●	✘	✘
	Jobless Claims	●	↑	●	✘
	Retail Sales	●	↑	✘	✘
	Wage Growth	✘	✘	✘	✘
Business Activity	Commodities	●	↑	✘	✘
	ISM New Orders	●	●	✘	✘
	Profit Margins	✘	✘	✘	✘
	Truck Shipments	●	↑	●	✘
Financial	Credit Spreads	●	↑	✘	✘
	Money Supply	✘	↑	✘	✘
	Yield Curve	✘	✘	✘	✘
Overall Signal	✘	●	✘	✘	

↑ Expansion
 ● Caution
 ✘ Recession

Source: ClearBridge Investments, BLS, Federal Reserve, Census Bureau, ISM, BEA, American Chemistry Council, American Trucking Association, Conference Board, and Bloomberg. Data as of January 31, 2024. The ClearBridge Recession Risk Dashboard was created in January 2016. References to the signals it would have sent in the years prior to January 2016 are based on how the underlying data was reflected in the component indicators at the time.

Equities

S&P 500: Cumulative returns



What is this chart showing?

This chart shows the cumulative return of the S&P 500 Index from 1996 to present. It also highlights the return of major expansionary and contraction periods during this time.

Why is this important?

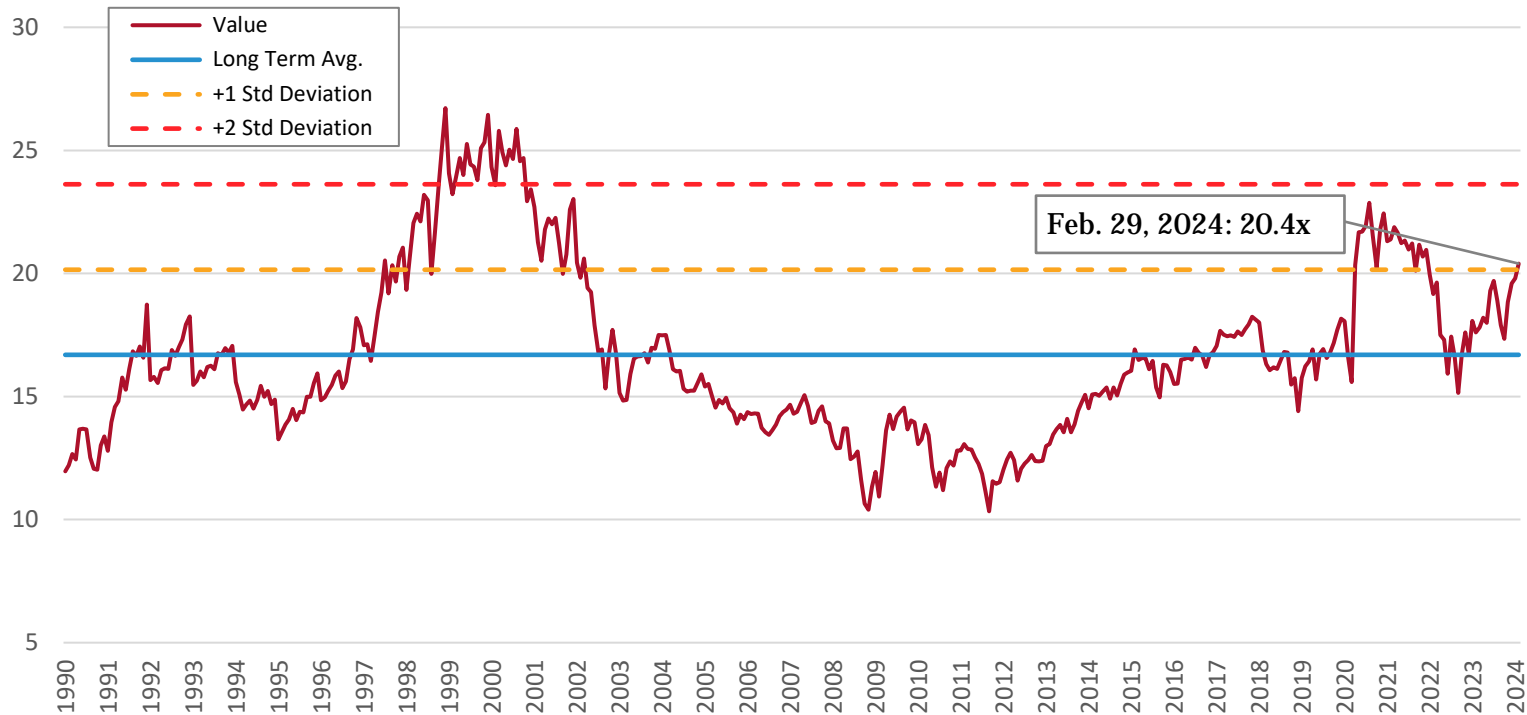
This chart can help put market cycles in context by comparing the magnitude and duration of bull and bear markets, along with the long-term trend of the S&P 500.

Past performance is not indicative of future returns. You cannot invest directly in an index. All indices are unmanaged and do not include fees or expenses. Please see the back of this presentation for index definitions and disclosures.

Source: FactSet, Standard & Poor's. Data as of February 29, 2024. **Dividend yield** is calculated as consensus estimates of dividends for the next 12 months, divided by most recent price, as provided by Compustat. **Forward price-to-earnings ratio** is a bottom-up calculation based on the most recent S&P 500 Index price, divided by consensus estimates for earnings in the next 12 months (NTM). The S&P 500® Price Return Index tracks the stock performance of 500 large U.S. companies. The index used is a price index and does not reflect dividends paid on the underlying stocks.

S&P 500: Valuation measures

Forward P/E ratio valuation



Source: FactSet, S&P, Robert Shiller, Bloomberg. Data as of February 29, 2024.

Forward P/E ratio (or forward price-to-earnings ratio) is the most-recent stock price divided by the forward-looking EPS estimate. **Shiller's P/E ratio** is the most recent stock price divided by the average of 10 years of inflation-adjusted earnings. **Dividend yield** is the percentage of its stock price that a company is projected to pay out as dividends. It is calculated by dividing estimated annual dividends per share for the current fiscal year by the company's most recent month-end stock price. **Price-to-book** compares a firm's market capitalization to its book value. It's calculated by dividing the company's stock price per share by its book value per share (BVPS). **Price-to-cash flow** is a valuation indicator or multiple that measures the value of a stock's price relative to its operating cash flow per share. **Standard deviation** is a statistical measurement of dispersion about an average, which, for a mutual fund, depicts how widely the returns varied over a certain period of time.

Valuation measures	Recent	20-year average
Forward P/E	20.4x	15.6x
Shiller's P/E	34.3	26.4
Dividend yield	1.5%	2.1%
Price-to-book	4.2	2.7
Price-to-cash flow	15.6	11.0

What is this chart showing?

This chart shows the historical trend of the S&P 500 forward P/E ratio compared to the modern-era historical average.

Why is it important?

Equity valuation measures, like the forward P/E, can help investors gauge if the market is overvalued or undervalued relative to the historical average.

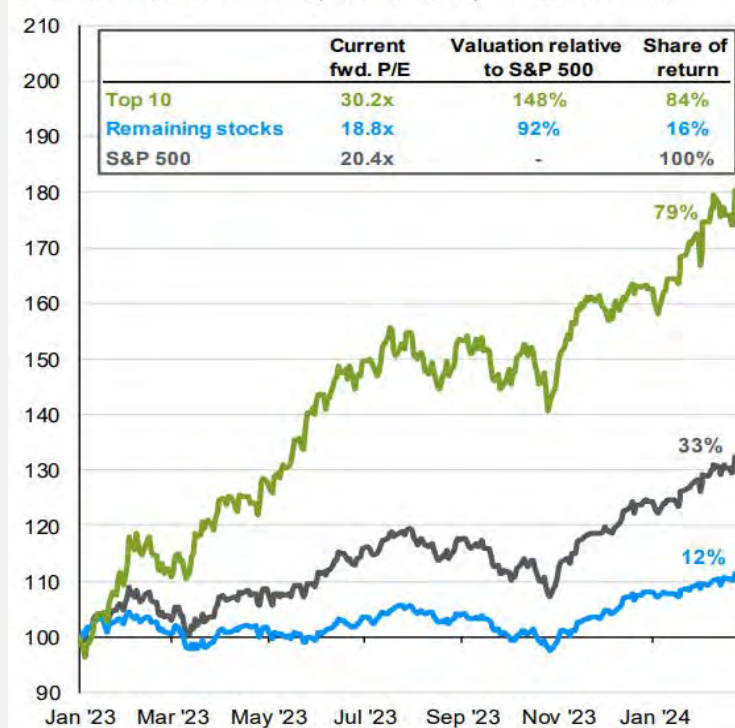
S&P 500: Index concentration, valuations and earnings

J.P.Morgan Asset Management

The left-hand side chart shows how inflated the P/E valuations are for the top 10 stocks in the S&P 500 relative to the remainder of the index. This gap widened in 2023 as large technology companies rallied. The right side shows how the market capitalization of the top 10 stocks has increased recently despite the earnings contribution remaining muted.

Source: FactSet, Standard & Poor's, J.P. Morgan Asset Management. (Left) The top 10 companies used for this analysis are held constant and represent the S&P 500's 10 largest index constituents at the start of 2023. The top 10 stocks are: AAPL, MSFT, AMZN, NVDA, GOOGL, BRK.B, GOOG, META, XOM, UNH, and TSLA. The remaining stocks represent the rest of the 494 companies in the S&P 500. (Right) The top 10 companies used for these two analyses are updated monthly and are based on the 10 largest index constituents at the beginning of each month. As of 2/29/2024, the top 10 companies in the index were MSFT (7.2%), AAPL(6.2%), NVDA (4.6%), AMZNN (3.8%), META (2.5%), GOOGL (1.9%), BRK.B (1.7%), GOOG (1.6%), LLY (1.4%), AVGO (1.3%) and LLY (1.3%).
Guide to the Markets – U.S. Data are as of February 29, 2024.

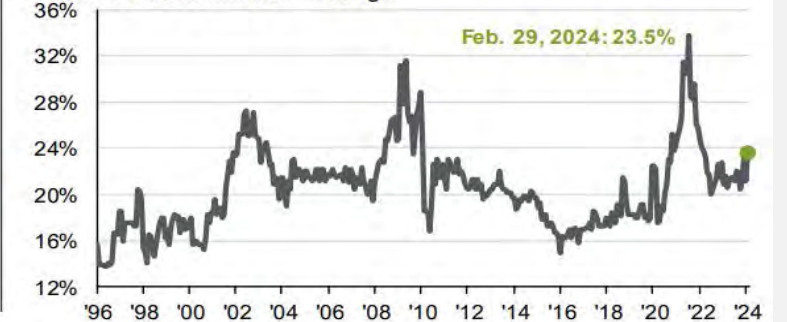
Performance of the top 10 stocks in the S&P 500
Indexed to 100 on 1/1/2023, price return, top 10 held constant



Weight of the top 10 stocks in the S&P 500
% of market capitalization of the S&P 500



Earnings contribution of the top 10 in the S&P 500
Based on last 12 months' earnings



Source: J.P. Morgan Asset Management, as of February 29, 2024.

S&P 500: Calendar returns and intra-year declines

What is this chart showing?

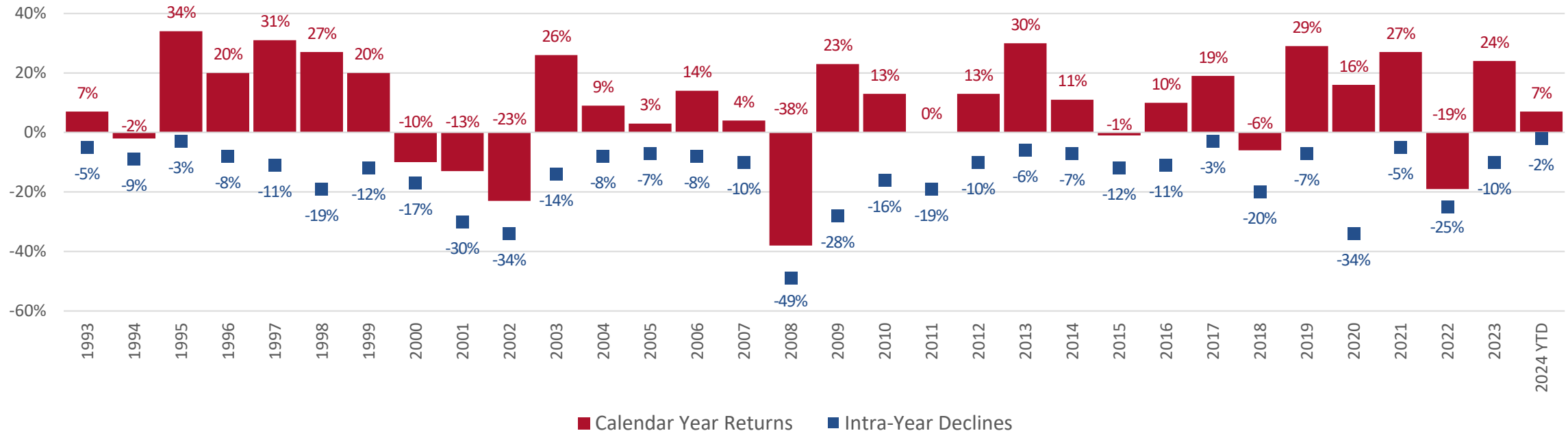
This chart shows calendar year returns of the S&P 500 Price Index from 1992 to present. It also shows the largest intra-year declines (lows) for each year.

Why is it important?

Investors can use this to understand how looking at annual returns alone can hide that there are often large drops that occur within the year.



Despite average intra-year declines of 14.8%, annual returns were positive in 22 of 31 years.



You cannot invest directly in an index. All indices are unmanaged and do not include fees or expenses. Please see the back of this presentation for index definitions and disclosures.

Source: Morningstar, Standard & Poor's. Data as of February 29, 2024. Returns are based on price index only and do not include dividends. Intra-year declines refer to the largest market drops from a peak to a trough during the year. For illustrative purposes only. **Past performance is not indicative of future returns.**

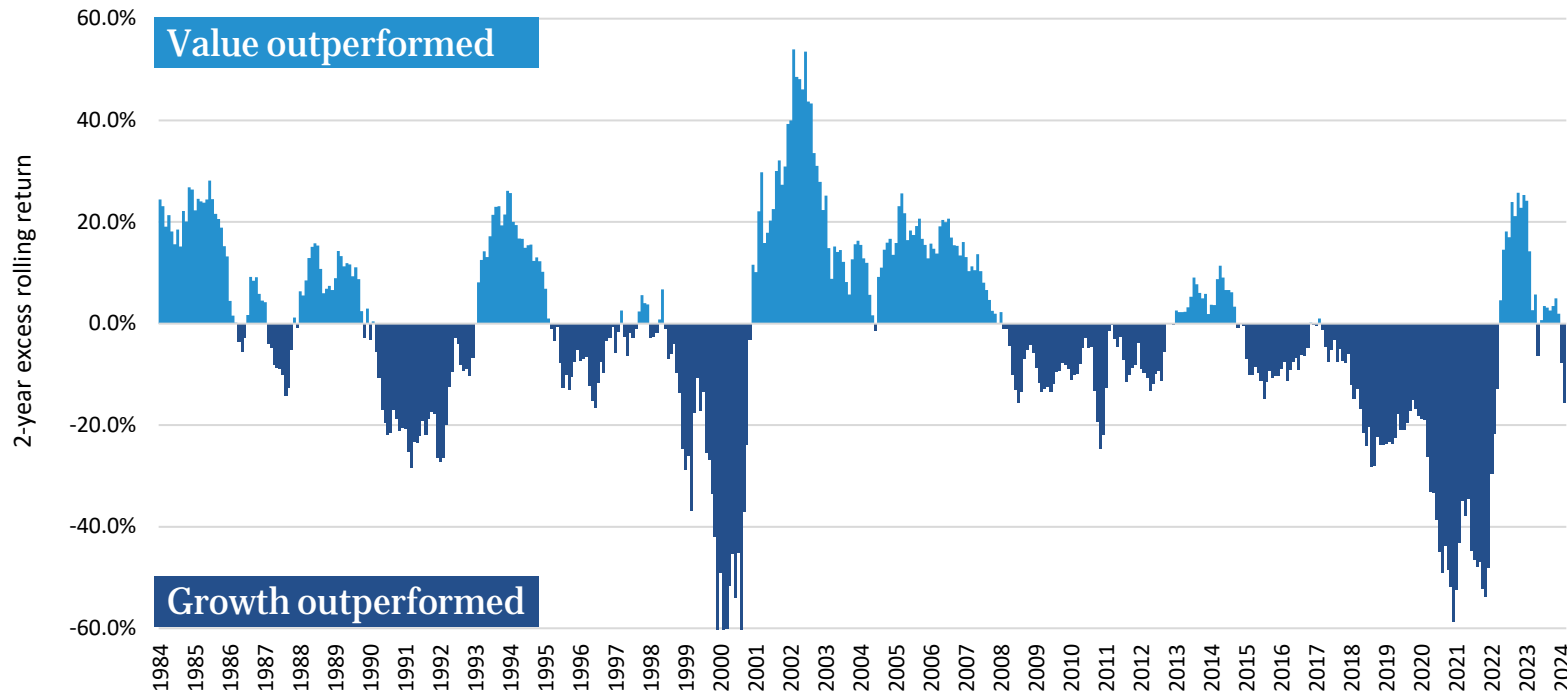
Growth vs. Value leadership rotation

What is this chart showing?

Growth and Value styles have rotated leadership during different market and economic environments.

Why is it important?

Historically, Value has led early in the economic recovery and when rates are rising, where Growth has led when interest rates are falling, and earnings are strong.



Value sectors

- Industrials
- Financials
- Energy
- Manufacturing
- Real Estate
- Utilities
- Consumer Staples

Growth sectors

- Communication Services
- Technology
- Healthcare
- Consumer Discretionary

Source: Morningstar. Value represented by Russell 1000 Value Index, Growth represented by Russell 1000 Growth Index. Both indices are total return. Data through February 29, 2024. **Past performance is not indicative of future returns.**

International valuations and dividend yields

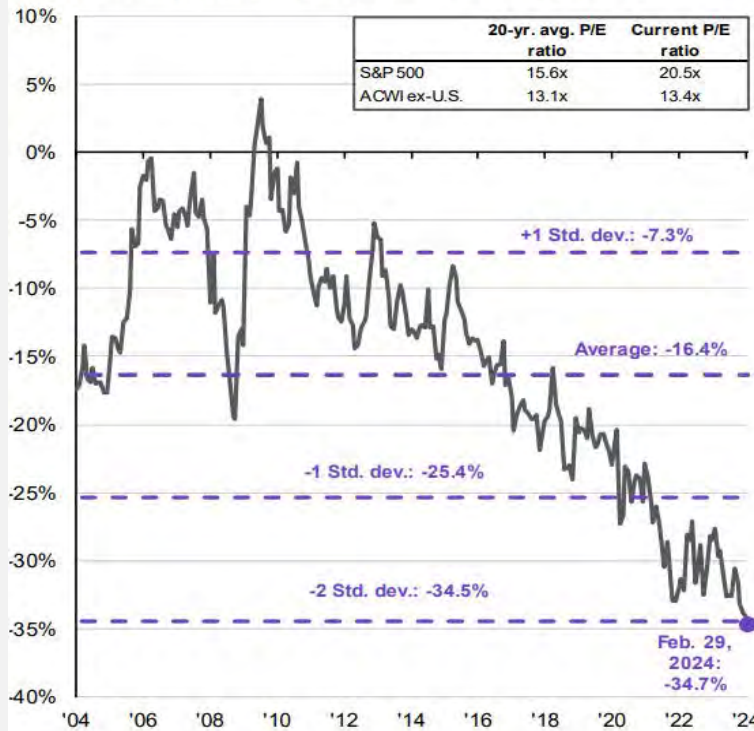
J.P.Morgan Asset Management

This shows valuation measures for international equity markets. The left-hand side shows the price-to-earnings discount of international vs. U.S. equities. On the right-hand side, we show the difference in dividend yields between international and U.S. stocks.

Investors can see that international equities are trading at a significant discount today, and that they generally offer an attractive yield relative to U.S. equities.

Source: FactSet, MSCI, Standard & Poor's, J.P. Morgan Asset Management.
Guide to the Markets – U.S. Data are as of February 29, 2024.

International: Price-to-earnings discount vs. U.S.
MSCI All Country World ex-U.S. vs. S&P 500, next 12 months



International: Difference in dividend yields vs. U.S.
MSCI All Country World ex-U.S. minus S&P 500, next 12 months



Past performance does not guarantee or predict future performance. Index performance is for illustrative purposes only. You cannot invest directly in the index.

Source: J.P. Morgan Asset Management, as of February 29, 2024.

Cycles of U.S. equity outperformance

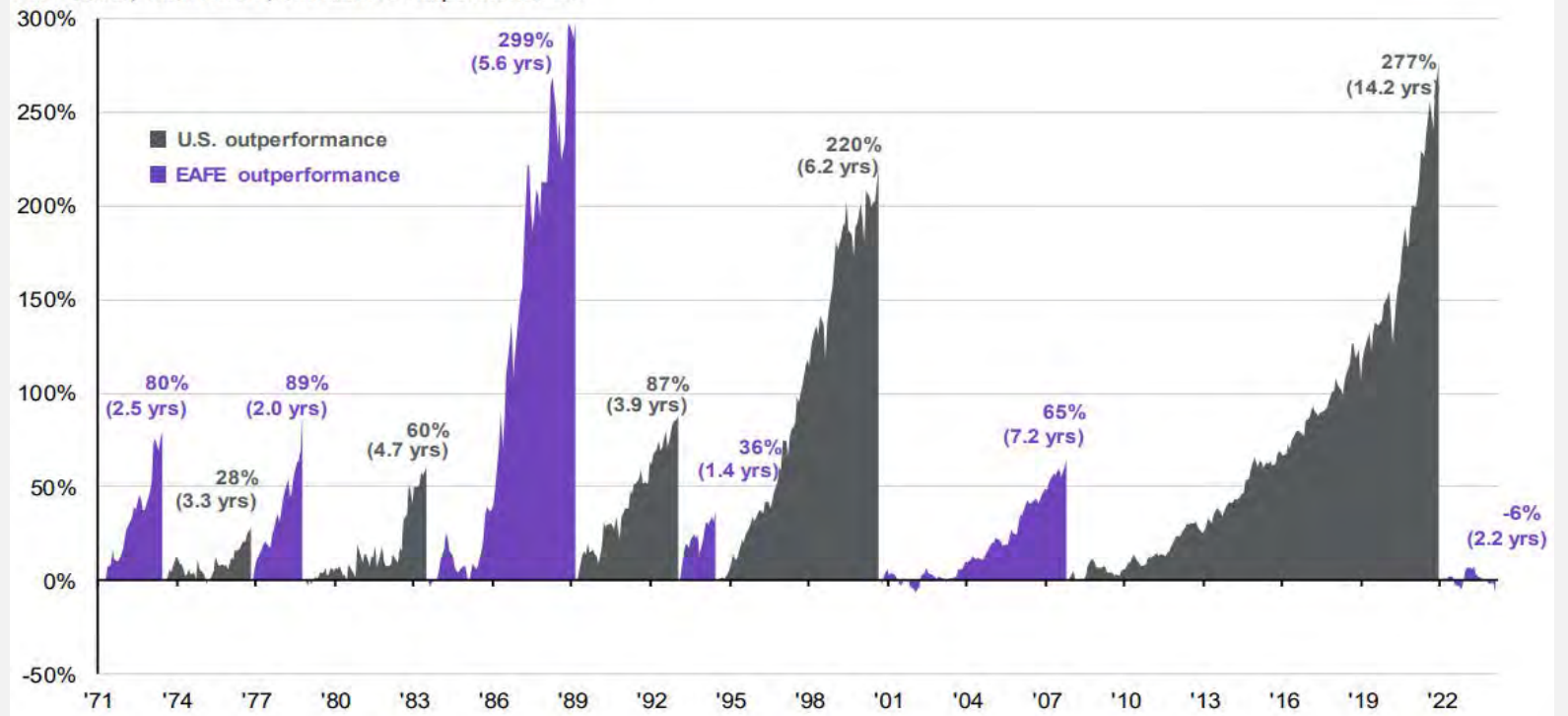
J.P.Morgan Asset Management

Over the past 50 years, there have been different regimes of U.S. vs. international outperformance. In other words, outperformance comes in waves. After a long period of U.S. outperformance, it is worth considering whether we may be transitioning to a new wave. The regime changes are determined when cumulative outperformance peaks and is not reached again in the subsequent 12-month period.

Source: FactSet, MSCI, J.P. Morgan Asset Management. Regime change determined when cumulative outperformance peaks and is not reached again in the subsequent 12-month period. *Peak MSCI EAFE outperformance vs. MSCI USA occurred in April 2023. If this is sustained for 12 months, the regime will switch in April 2024. *Guide to the Markets* – U.S. Data are as of February 29, 2024.

MSCI EAFE and MSCI USA relative performance

U.S. dollar, total return, cumulative outperformance



Past performance does not guarantee or predict future performance. Index performance is for illustrative purposes only. You cannot invest directly in the index.

Source: J.P. Morgan Asset Management, as of February 29, 2024.

Consumer confidence and subsequent S&P returns

J.P.Morgan Asset Management

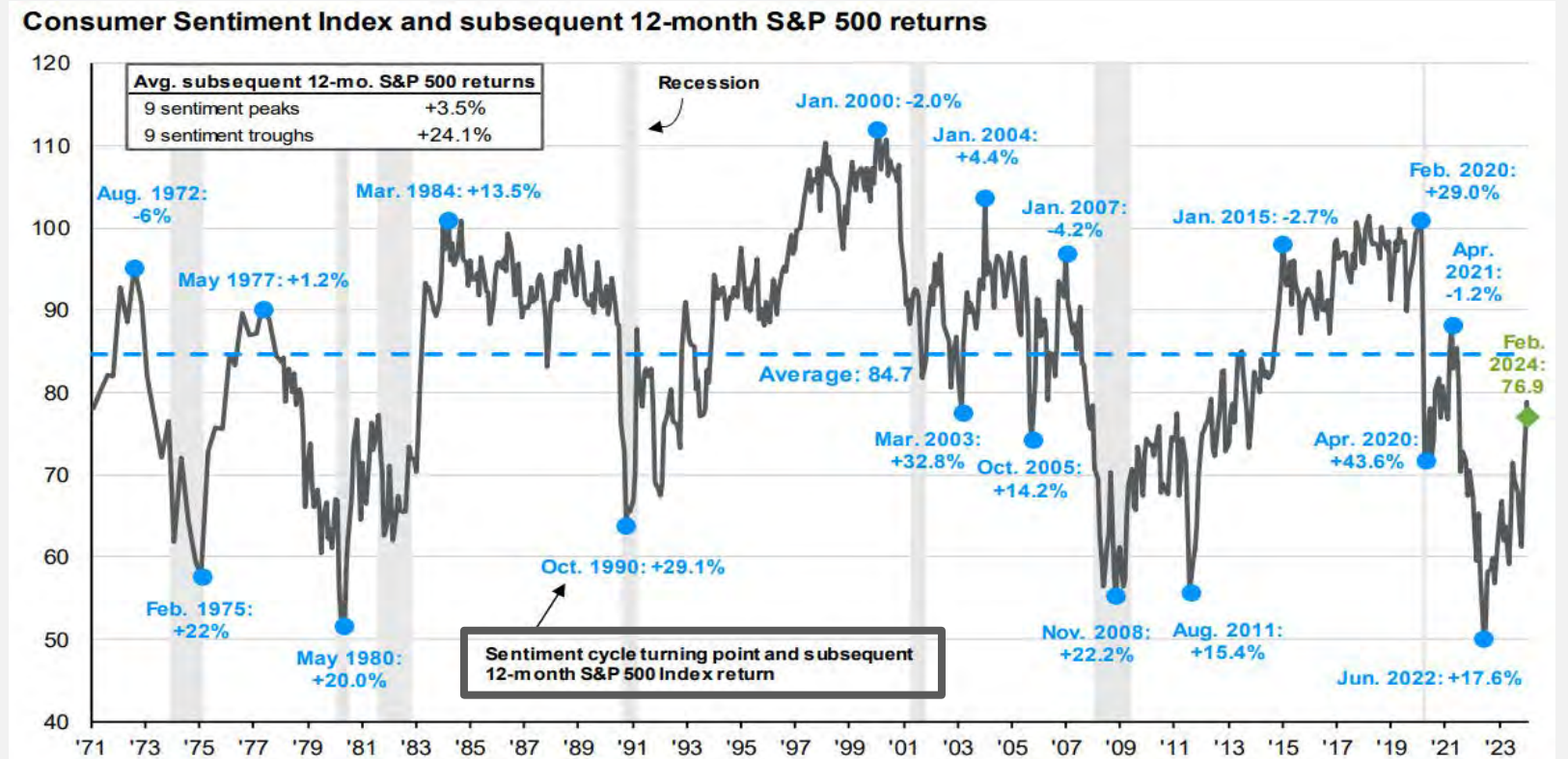
This chart shows consumer sentiment over the past 50 years and how much the S&P 500 gained or lost on average 12 months after nine distinct peaks and troughs. Buying at a confidence peak returned on average 3.5%, while buying at a trough returned 24.1%.

This underscores that when investors feel gloomy and worried about the outlook, history shows they should consider resisting the temptation to sell risk assets.

Source: FactSet, Standard & Poor's, University of Michigan, J.P. Morgan Asset Management.

Peak is defined as the highest index value before a series of lower lows, while a trough is defined as the lowest index value before a series of higher highs. Subsequent 12-month S&P 500 returns are price returns only starting from the end of the month and excluding dividends. Past performance is not a reliable indicator of current and future results.

Guide to the Markets – U.S. Data are as of February 29, 2024.



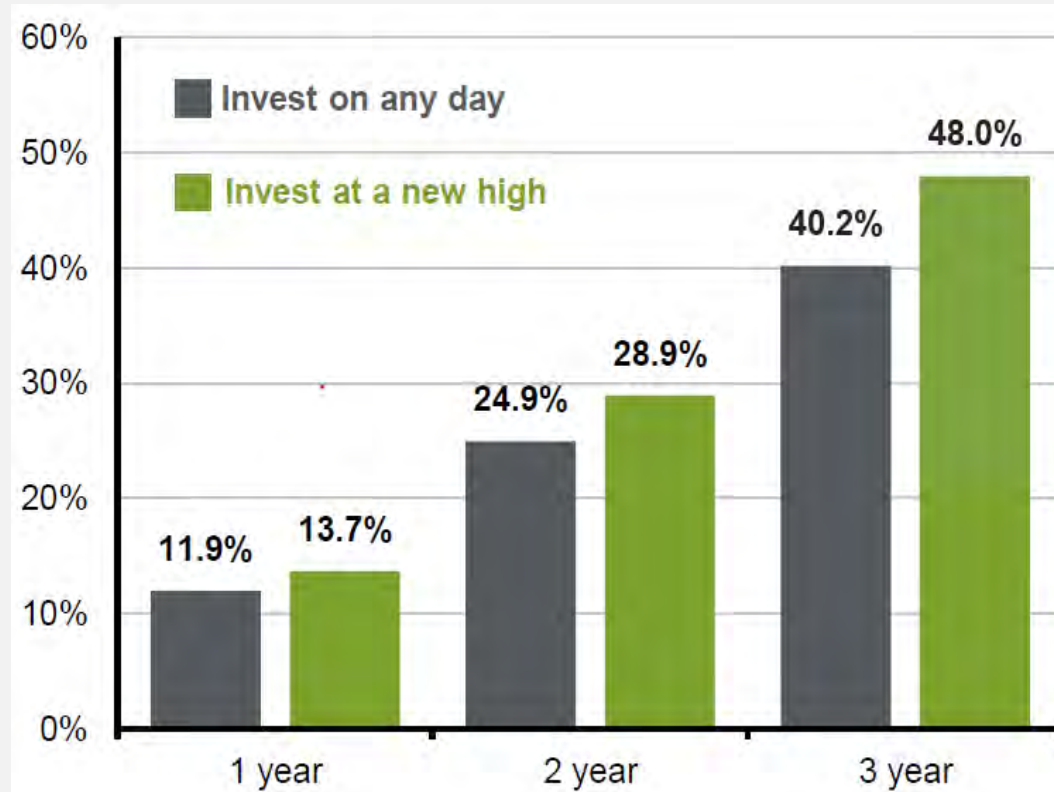
Past performance does not guarantee or predict future performance. Index performance is for illustrative purposes only. You cannot invest directly in the index.

Source: J.P. Morgan Asset Management, as of February 29, 2024.

S&P 500: Investing at all-time highs

J.P.Morgan Asset Management

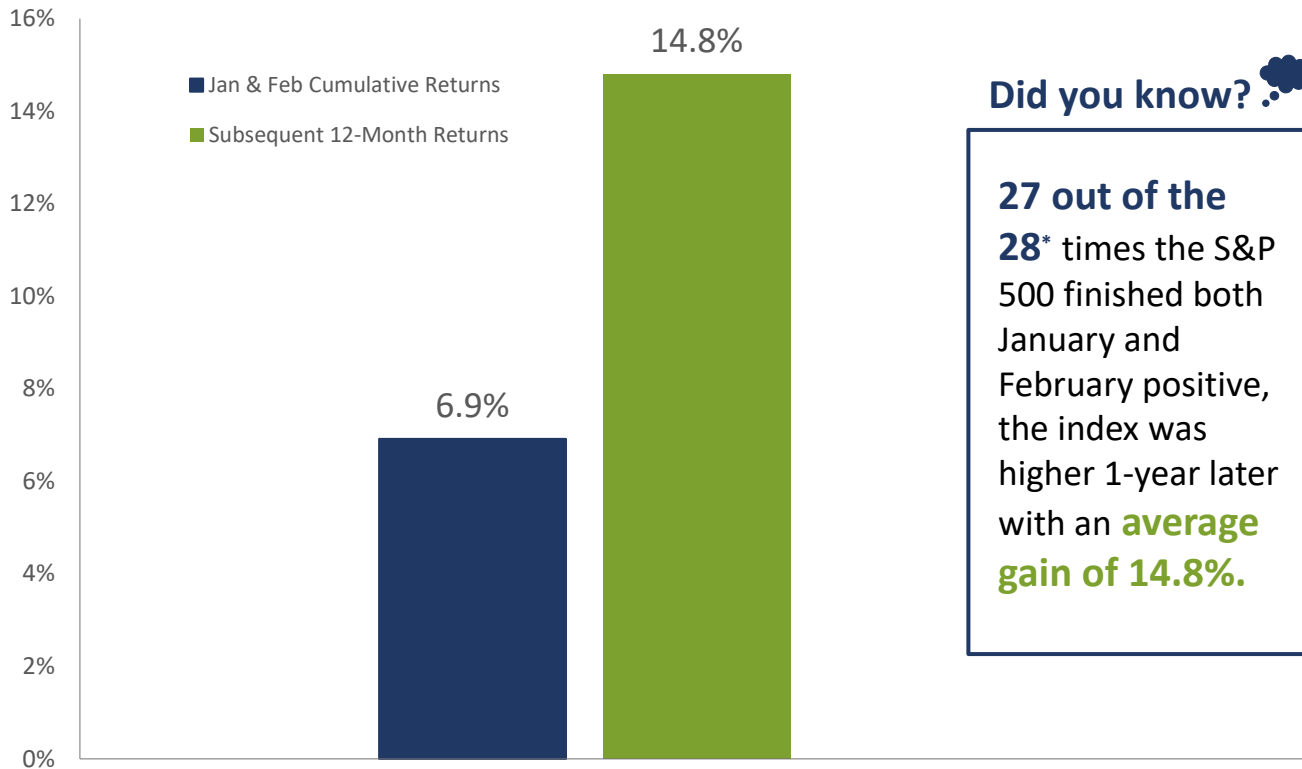
Market highs can lead to worry for investors wary of potential corrections. However, historical data suggest that all-time highs are more common and less daunting than perceived. Since 1988, the S&P 500 has, on average, reached new highs 20 times per year. More importantly, nearly 85% of the time, one-year forward returns from these highs were positive. In fact, during this period one, two and three-year forward returns were more favorable when investing at all-time highs compared to a random day. Given that markets spend about half the time within 5% of all-time highs, remaining on the sidelines can result in significant opportunity cost.



Source: FactSet, Standard & Poor's, J.P. Morgan Asset Management. Average cumulative S&P 500 total return data from January 1, 1988, to January 29, 2024.

Strong starts: a historical prelude to continued strength

S&P 500 return in years both January and February finished positive (1950-2023)



What is this chart showing?

This chart shows how the S&P 500 has performed in the subsequent twelve months following years in which both January and February finished positive since 1950.

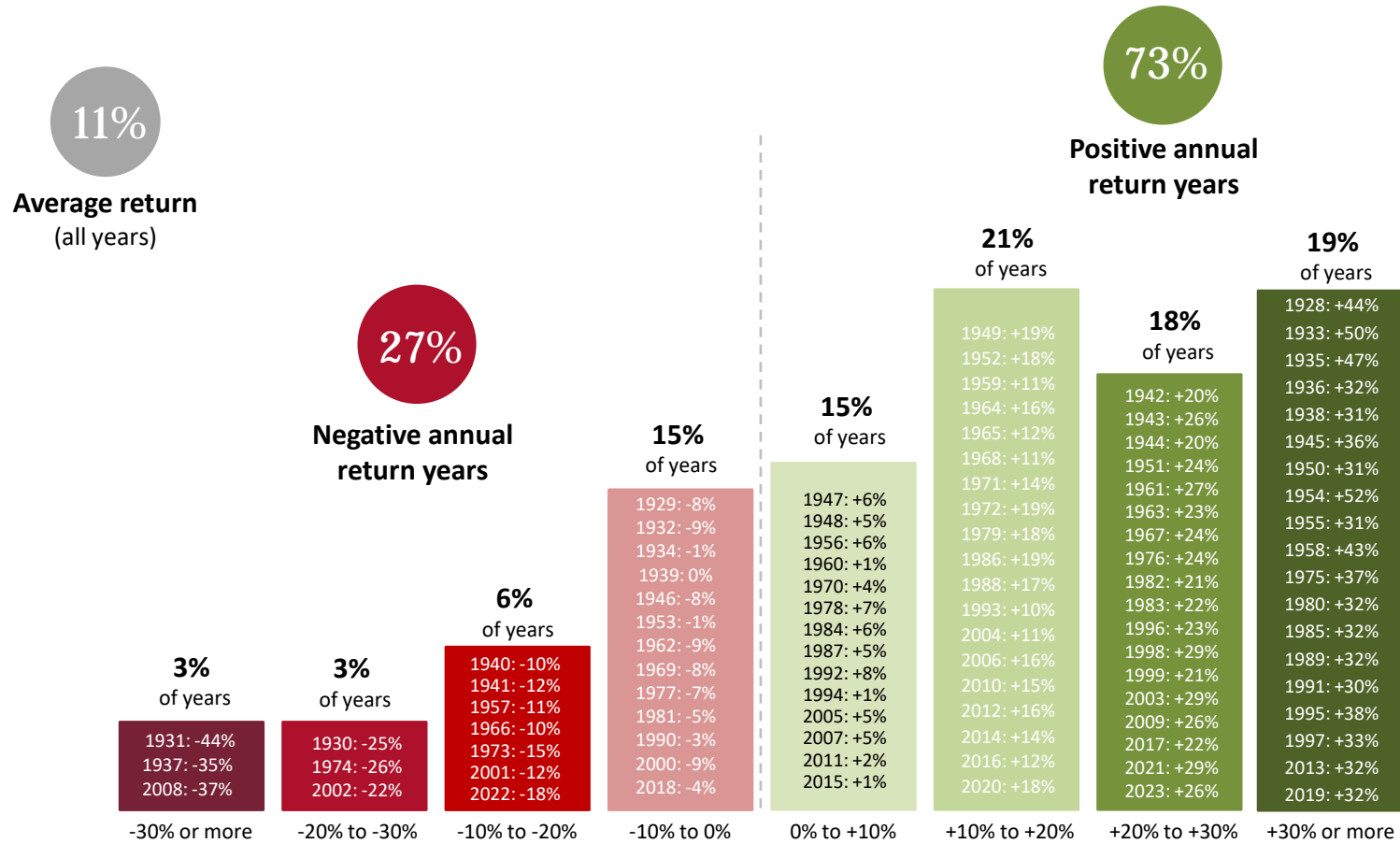
Why is it important?

Strength often begets strength. 2024 was the 29th time that the S&P 500 finished with a gain in both January and February.

In the twelve months following the previous 28 occurrences, the index finished positive 27 times, with an average gain of 14.8%.

Source: Morningstar, Lincoln Financial Group. 1950-2023. S&P 500 Price Return Index (does not include dividends). *2024 was the 29th occurrence and is not included in the returns. Past performance does not guarantee future results.

Stocks rise far more often than they fall



What is this chart showing?

This chart shows the distribution of calendar year returns for the S&P 500 Index from 1928 through 2023.

Why is it important?

While the market has certainly suffered down years, they've been far outweighed by good – and even great – ones.

From 1928 to 2023, the average calendar year return for the S&P 500 Index was 11%.

Over that timeframe, 73% of yearly returns were positive while only 27% experienced a negative return.

Not only has the market risen far more often than it has fallen, many of the worst years for stocks were followed by strong rallies – rewarding investors who chose to stay the course.

Past performance is not indicative of future returns. Index performance is for illustrative purposes only. You cannot invest directly in the index.

Source: NYU.edu for S&P 500 returns (including dividends) from 1928 – 1936. Morningstar for returns from 1937 – 2023.

Equity performance around U.S. recessions

S&P 500 Index Price Return

Recession Start Date	Duration (Months)	Return During Recession	Return 1 Yr. After Recession	Return 3 Yrs. After Recession	Return 5 Yrs. After Recession
July 1953	10	18%	30%	62%	101%
August 1957	8	-4%	33%	50%	61%
April 1960	10	17%	10%	23%	44%
December 1969	11	-5%	8%	10%	5%
November 1973	16	-13%	23%	7%	22%
January 1980	6	7%	8%	34%	57%
July 1981	16	6%	20%	46%	66%
July 1990	8	5%	8%	19%	72%
March 2001	8	-2%	-18%	3%	23%
December 2007	18	-38%	12%	48%	113%
February 2020	2	-1%	44%	43%	N/A
Average return		-1%	+16%	+31%	+56%
Number of positive periods (%)		45%	91%	100%	100%

Did you know?

+16%
Average S&P return
1 year after
recession

+31%
Average S&P return
3 years after
recession

+56%
Average S&P return
5 years after
recession

What is this chart showing?

This chart shows performance of the S&P 500 Index in the periods during and after past U.S. recessions.

Why is it important?

Although recessions can be a time of uncertainty, investors likely shouldn't let the prospect of a bumpy landing for the economy keep them from staying invested.

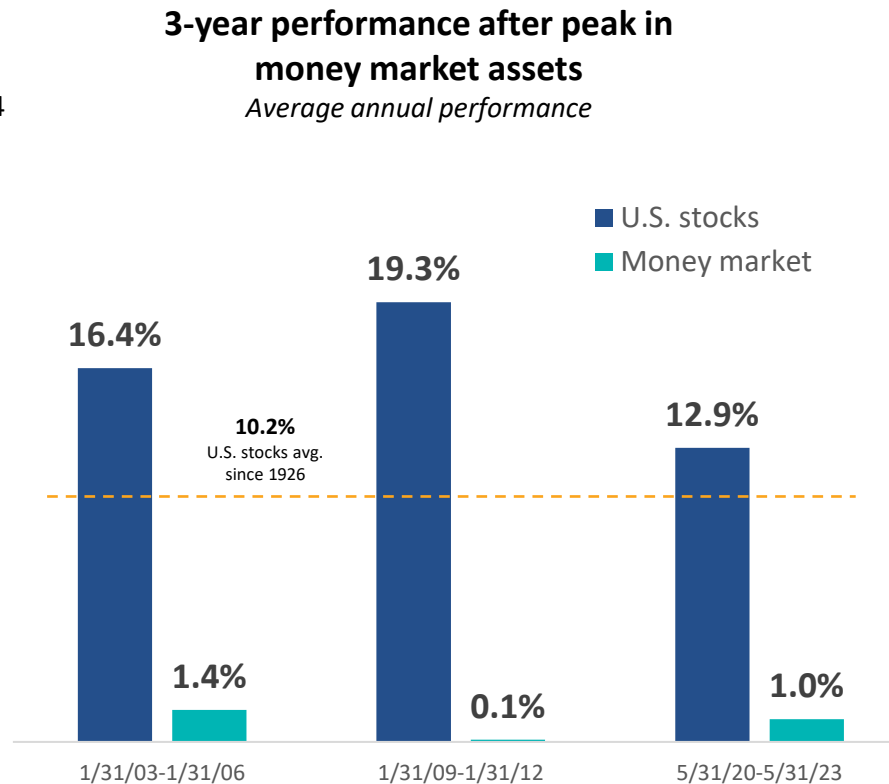
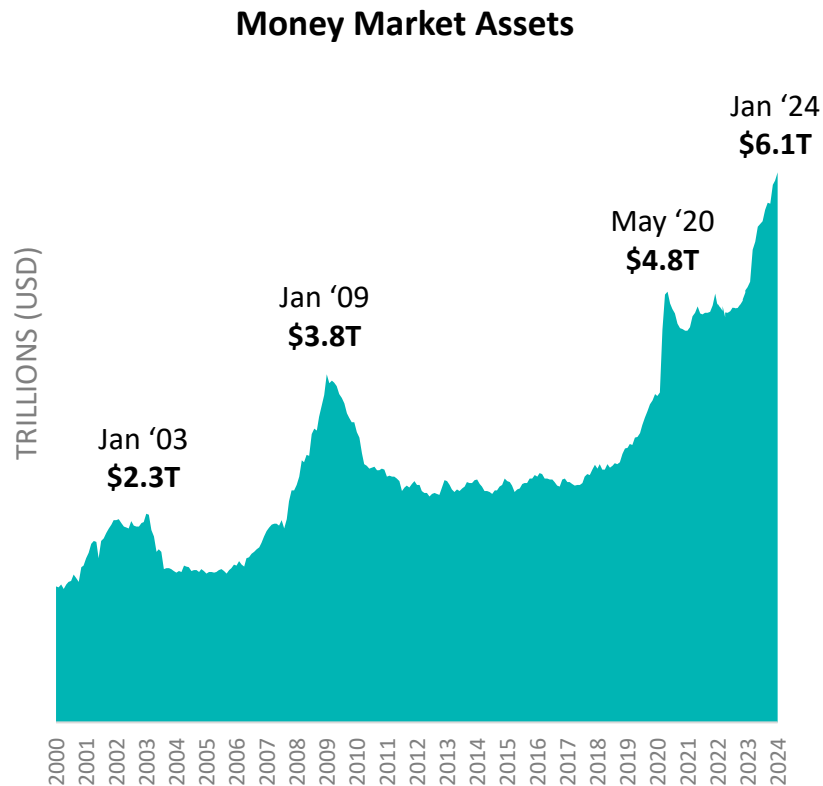
History shows that returns during recessionary periods have been relatively mixed, lending itself to the adage that the stock market is not the economy.

Returns following recessions have been strong, with cumulative gains 1, 3 and 5 years later of 16%, 31%, and 56%.

Additionally, the S&P 500 was negative only one time twelve months following the end of a recession and generated a positive return 100% of the time both three and five years later.

Source: Morningstar, NBER. Cumulative price return of the S&P 500 Index. Past performance does not guarantee future results. Recession duration is measured from the first day of the month following the peak month, to the end of the trough month.

Returns following money market asset peaks



What is this chart showing?

This chart shows the rise in money market assets over time, and how money markets and U.S. stocks performed over the 3-year period following peak money market assets.

Why is it important?

While it can be beneficial for investors to hold cash for preservation or liquidity purposes, holding too much can lead to suboptimal results.

Money market fund assets continue to touch new all-time highs.

Historically, this has been a bullish sign for stocks as they have performed better than average following periods of peak money market assets.

Source: Chart (left): Morningstar. Data most recently available as of 2/29/24. Chart (right): Morningstar, BlackRock Student of the Markets, Lincoln Financial Group. Returns calculated from end of peak month listed. US Stocks = S&P 500 TR; Money Market = Morningstar taxable money market category average returns. Past performance does not guarantee or predict future performance.

Fixed income

U.S. Treasury yield

What is this chart showing?

This chart shows the historical yield for the 10-year Treasury, along with an expanded view of more recent yield movements and bond asset class returns.

U.S. 10-year Treasury yield



Past performance is not indicative of future returns.

Core bonds represented by Bloomberg US Aggregate Bond Index; Intermediate Treasuries represented by ICE BofA 5-10Y US Trsy TR USD; Long-term Treasuries represented by ICE BofA 10+Y US Trsy TR USD.

You cannot invest directly in an index. All indices are unmanaged and do not include fees or expenses. See index definitions and disclosures at back of presentation.

Source: Morningstar, Bloomberg, J.P. Morgan Asset Management. Data as of February 29, 2024. ¹Real 10-year Treasury yields are calculated as the daily Treasury yield less year-over-year core CPI inflation for that month. For the current month, we use the prior month's core CPI figures until the latest data is available.

Why is it important?

Experts view the 10-year Treasury yield as a benchmark for the state of the economy and investor confidence. It drives interest rates throughout the market, making money more or less expensive to borrow. Movements can signal a need to reevaluate stock valuations and portfolio investment risks.

U.S. 10-year Treasury yield, EOY December 2021 thru February 2024

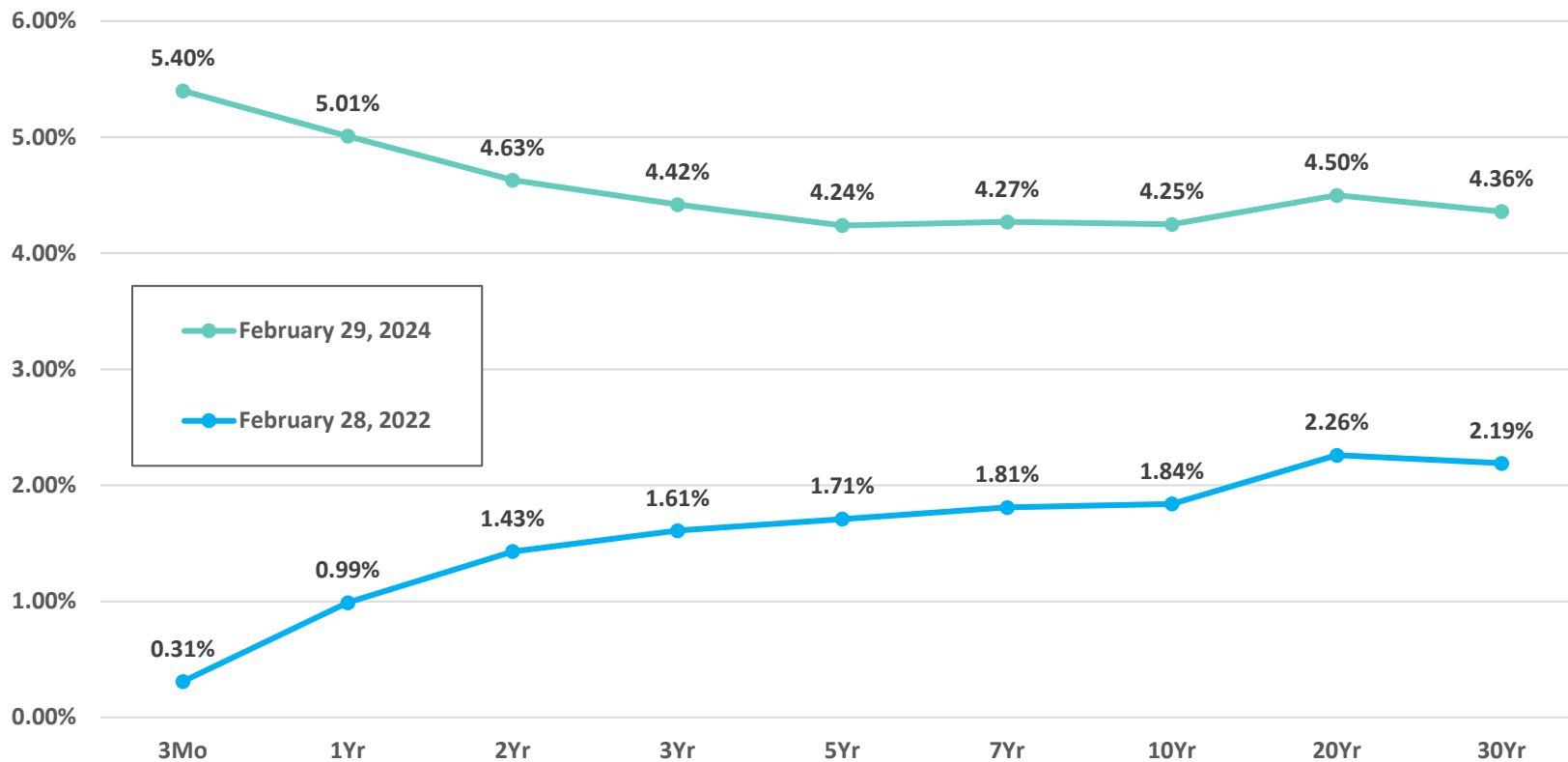


	YTD return (thru 2/29/2024)
Core bonds	-1.68%
Intermediate Treasuries	-1.66%
Long-term Treasuries	-3.94%

	Nominal yield	Core inflation ¹	Real yield
10-year Treasury	4.25%	3.87%	0.38%

Yield curve

U.S. Treasury yield curve



Source: FactSet, U.S. Department of the Treasury. Data as of February 29, 2024.

What is this chart showing?

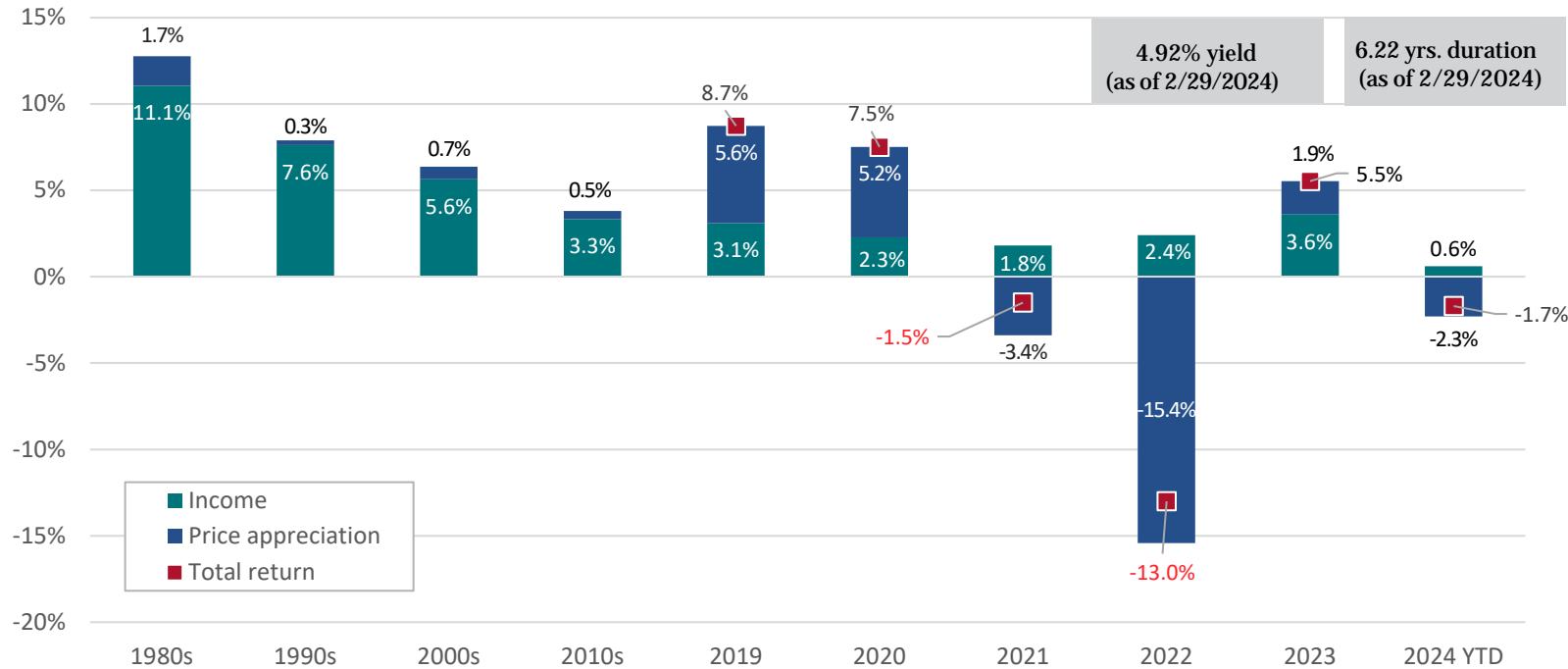
This chart shows the U.S. Treasury yield curve as of the latest month end, as well as in February 2022 — just before the Federal Reserve began raising interest rates.

Why is it important?

The yield curve is an economic indicator as it is a representation of investors' expectations for future interest rates, economic growth and inflation. The yield curve is currently inverted, meaning shorter rates are higher than longer rates. This tends to happen when investors believe the economy could be weakening and likely to slow down in the future.

Core bonds: Total return breakdown

Bloomberg U.S. Aggregate Bond Index



What is this chart showing?

This chart breaks down the total return of the Barclays U.S. Aggregate Bond Index into separate income and price appreciation components throughout different time periods.

Why is it important?

Investors can use this to see what has historically contributed to the total return of bonds, and how it has shifted over the decades. In 2022, a spike in interest rates resulted in significant price declines in core bonds. With little income to offset this price loss, the asset class ended the year deeply in the red.

While returns for the index were negative for most of the 2023, bonds rallied in the fourth quarter, ending the year with a healthy 5.5% return.

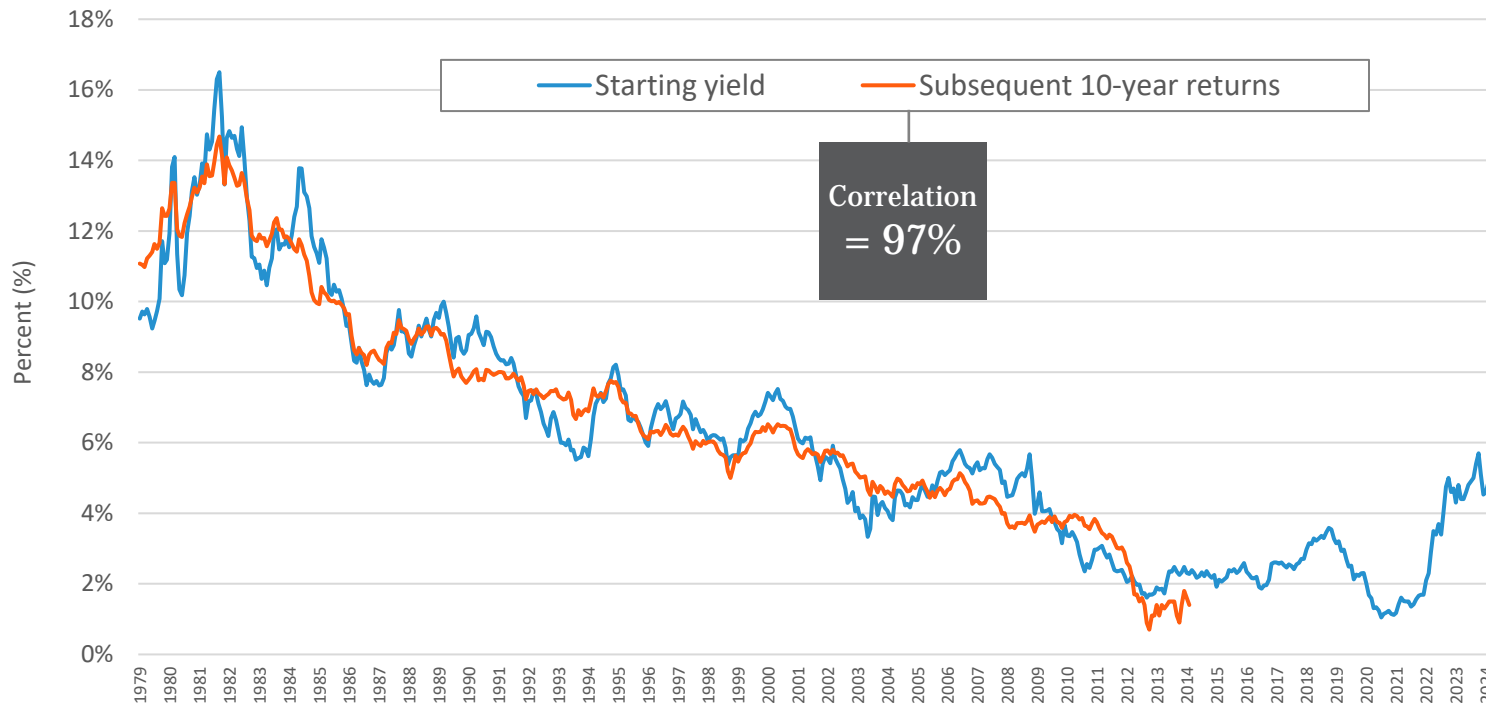
Looking ahead, attractive starting yields could prove beneficial for the longer term returns of core bonds.

You cannot invest directly in an index. All indices are unmanaged and do not include fees or expenses. Please see the back of this presentation for index definitions and disclosures.

Source: Bloomberg, Morningstar. YTD data as of February 29, 2024. **Past performance is not indicative of future returns.**

Core bonds: Starting yields and subsequent returns

Bloomberg U.S. Aggregate Bond Index



What is this chart showing?

This chart shows the starting yield of U.S. core bonds for the past 40+ years, along with the subsequent 10-year total returns from that point.

Why is it important?

Investors commonly look to current yields to inform their total return expectations, as historically, the starting yield is an accurate predictor of future bond returns (97% correlation).

You cannot invest directly in an index. All indices are unmanaged and do not include fees or expenses. Please see the back of this presentation for index definitions and disclosures.

Source: Research affiliates based on data from Bloomberg and FactSet as of February 29, 2024. Proxy: Bloomberg U.S. Aggregate Bond Index. **Past performance is not a guarantee or a reliable indicator of future results.**

Long-term bond returns and changes to interest rates

BlackRock

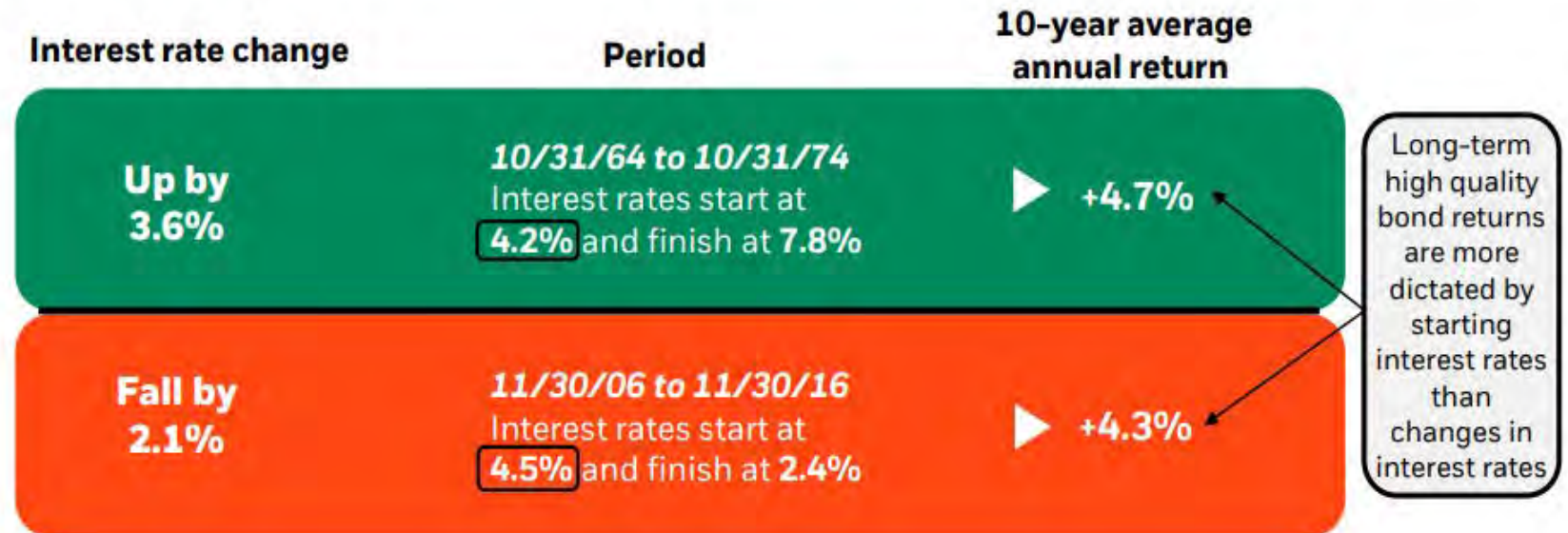
The starting interest rate often dictates the longer-term total return for bond investors.

This slide shows two ten-year historical examples of this concept, one in which interest rates rose over the decade, and another where they fell.

In both cases, the average annual return was very close to the starting yield.

Using history to better understand changes to interest rates and bond returns

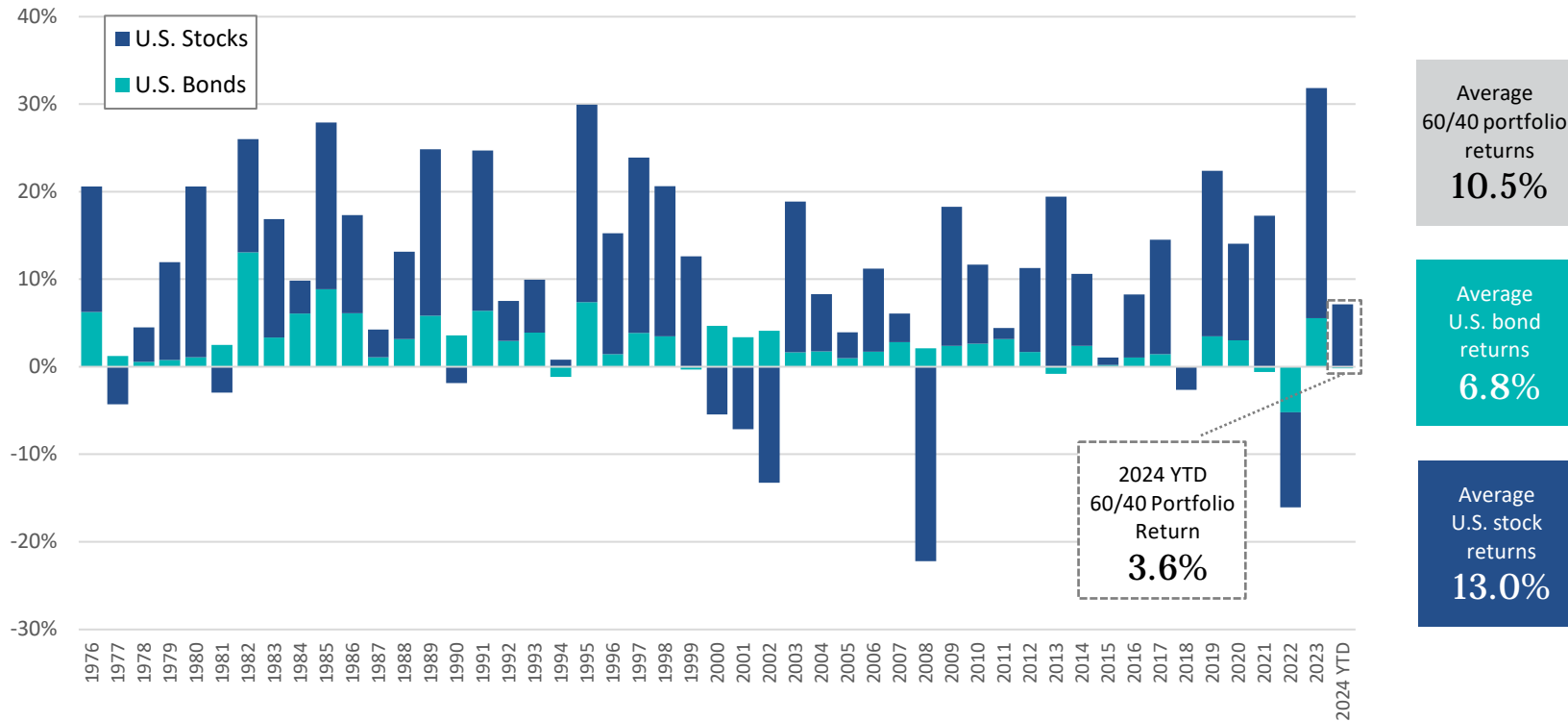
Bloomberg U.S. Aggregate Bond Index (10/31/64 - 11/30/23)



Source: BlackRock, Student of the Market. Morningstar as of 11/30/23. U.S. bonds represented by the U.S. Agg Bond TR Index. Past performance does not guarantee or indicate future results. Index performance is for illustrative purposes only. You cannot invest directly in the index.

Asset allocation

60/40 portfolio returns



What is this chart showing?

This chart shows both the annual and long-term average returns of a portfolio consisting of 60% U.S. stocks and 40% U.S. bonds.

Why is it important?

Investors can use this to compare the performance of a domestic 60/40 portfolio to other strategies, as well as view the respective contribution to total return from both stocks and bonds.

Average 60/40 portfolio returns
10.5%

Average U.S. bond returns
6.8%

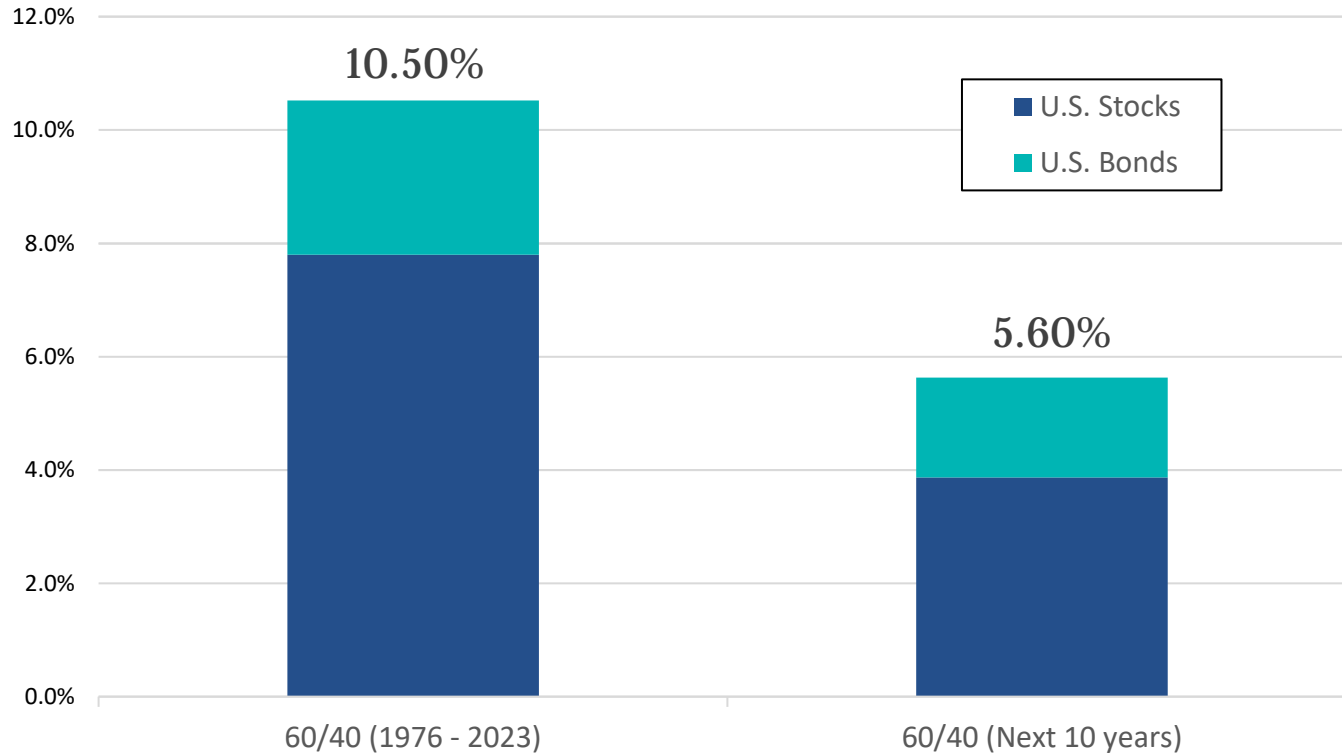
Average U.S. stock returns
13.0%

2024 YTD 60/40 Portfolio Return
3.6%

Stocks are represented by the S&P 500 Index. Bonds are represented by the Bloomberg Barclays U.S. Aggregate Bond Index. You cannot invest directly in an index. All indices are unmanaged and do not include fees or expenses. Please see the back of this presentation for index definitions and disclosures.

Source: Data from Morningstar, Stocks = S&P 500 TR, Bonds = Barclays US Aggregate Bond Index, 1976 through February 29, 2024; 60/40 Portfolio = 60% S&P 500 TR + 40% Barclays US Aggregate Index. Arithmetic averages used. **Past performance is not indicative of future returns. Asset allocation does not ensure a profit nor protect against loss.**

60/40 portfolio return expectations



Stocks are represented by the S&P 500 Index. Bonds are represented by the Bloomberg U.S. Aggregate Bond Index.

You cannot invest directly in an index. All indices are unmanaged and do not include fees or expenses. Please see the back of this presentation for index definitions and disclosures. **Past performance is not indicative of future returns. This market forecast is based on the latest forward-looking expectations from select fund partners and is not intended as a recommendation to invest in any particular asset class or strategy or as a promise — or even estimate — of future performance.**

Source: Morningstar, S&P, Bloomberg. Data as of February 29, 2024. 60/40 Portfolio Then = 60% S&P 500 TR + 40% Barclays US Aggregate Index; 60/40 (Next 10 years) = Average Equity and bond returns based on capital market expectations shown in the table. Core equity = US Equity, Core bonds = US aggregate bonds. **See Additional Information for more information.**

Capital market expectations	U.S. stocks	U.S. bonds
J.P. Morgan Asset Management	8.19%	5.19%
Goldman Sachs Asset Management	7.20%	4.30%
BlackRock	4.80%	4.00%
State Street	5.60%	4.10%
Average	6.45%	4.40%

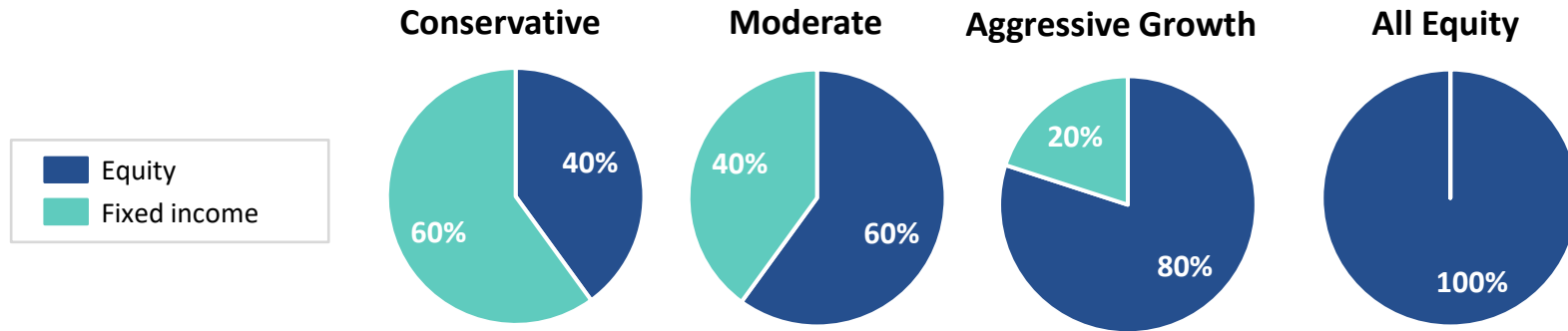
What is this chart showing?

This chart shows the average historical return of a portfolio allocated to 60% equity and 40% bonds, compared to the projected 10-year future return of a similarly weighted portfolio based on the average of capital market expectations from several of our asset management partners.

Why is it important?

Understanding what future returns may look like relative to the past can help inform investment decisions and be a valuable input for planning purposes.

The value of diversification



Average annual return	9.10%	10.27%	11.44%	12.60%
Standard deviation (Volatility)	8.55%	10.77%	13.43%	16.30%
Sharpe ratio (Risk adjusted return)	0.64	0.61	0.58	0.55
Worst 12-month return	-16.09%	-25.17%	-34.24%	-43.32%
Best 12-month return	42.61%	48.80%	54.99%	61.18%

What is this chart showing?

This chart shows return, volatility, and risk-adjusted return statistics for four hypothetical portfolio mixes.

Why is it important?

Diversification, or investing in a variety of assets such as stocks and bonds, has historically helped reduce the overall risk of a portfolio and improve risk-adjusted returns over time.

Past performance is not indicative of future returns. Index performance is for illustrative purposes only. You cannot invest directly in the index.

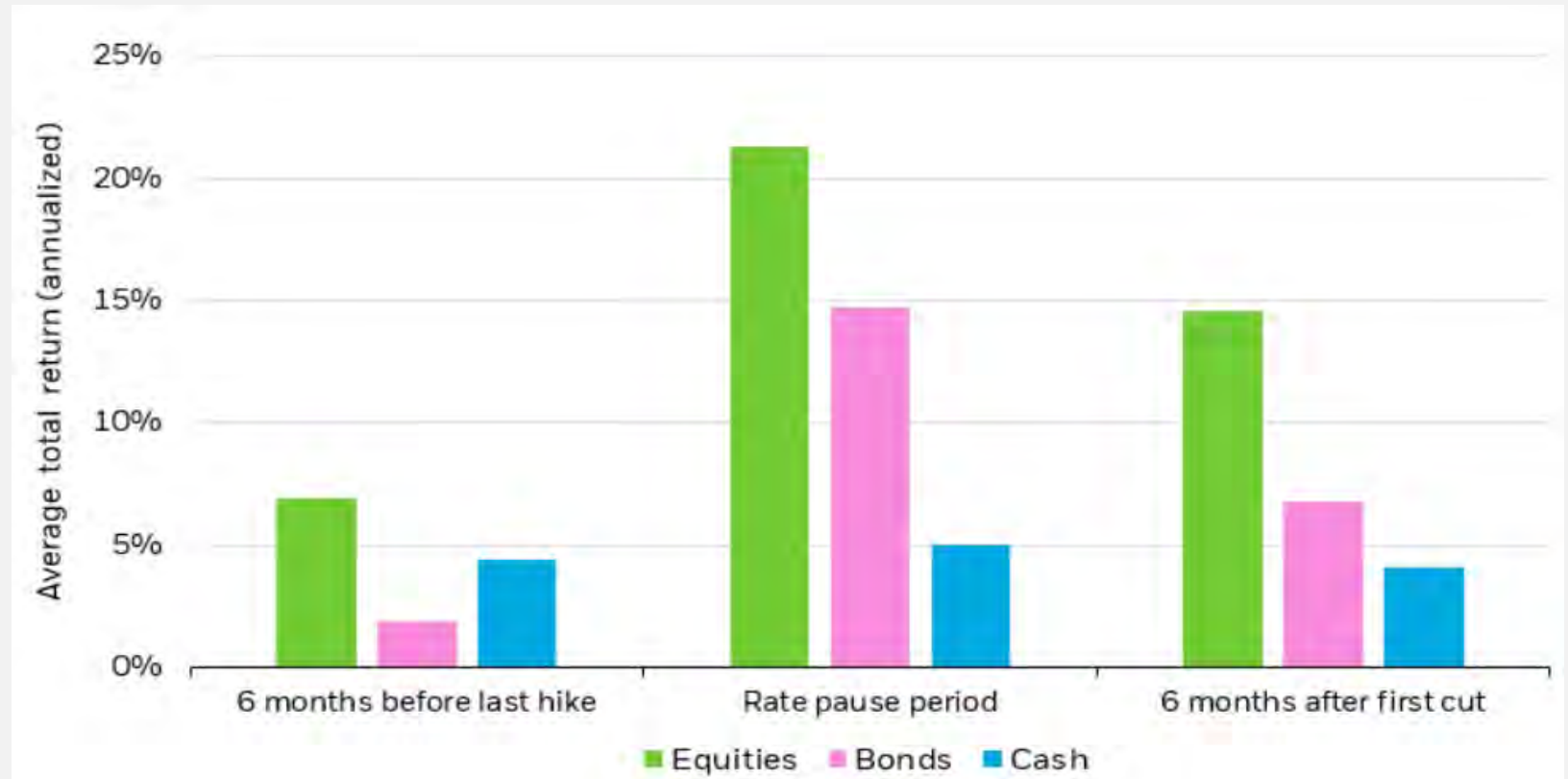
Source: Morningstar. Data is based on 1-year rolling returns. Equity represented by the S&P 500 Total Return Index. Fixed Income represented by the Bloomberg U.S. Aggregate Bond Index. Data is from January 1976 to December 2023.

Fed pauses have paid off, even more than easing periods

BlackRock

This chart shows the average annualized total return of equities, bonds, and cash during the following periods of the Fed rate cycle: 6 months before the last rate hike, 6 months after the first rate cut, and the pause period between the last hike and first cut of the rate cycle.

During both the rate pause and first cut periods, equities and bonds have tended to outperform cash.



Source: BlackRock, Bloomberg, as of November 16, 2023. Total return analysis produced by iShares Investment Strategy. Historical analysis calculates average performance of the S&P 500 Index (equities), the Bloomberg U.S. Aggregate Bond Index (bonds), and the Bloomberg U.S. Treasury Bills: 1-3 Months TR Index (cash) in the 6 months leading up to the last Fed rate hike, between the last rate hike and first cut, and the 6 months after the first cut. The dates used for the last rate hike of a cycle are: 2/1/1995, 3/25/1997, 5/16/2000, 6/29/2006, 12/19/2018. Dates used for the first-rate cut are: 7/6/1995, 9/29/1998, 1/3/2001, 9/18/2007, 8/1/2019. Index performance is for illustrative purposes only. Index performance does not reflect any management fees, transaction costs or expenses. Indexes are unmanaged and one cannot invest directly in an index. Past performance does not guarantee future results.

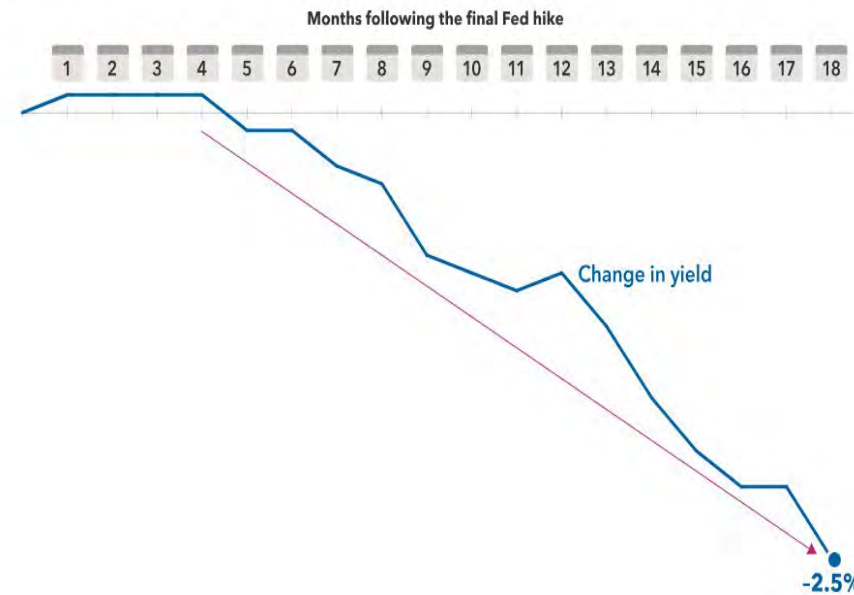
History shows cash has lagged when Fed hikes end



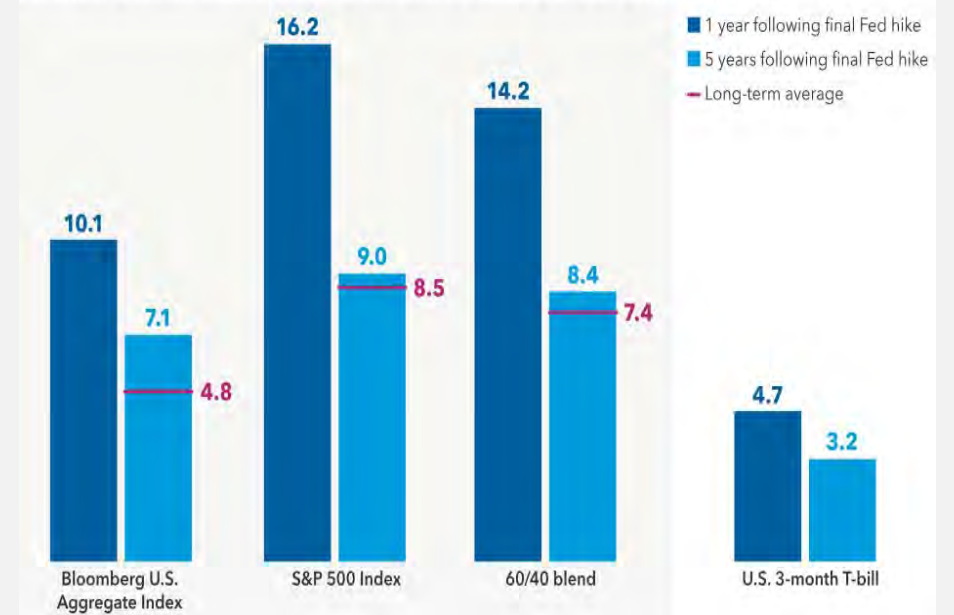
Cash-like holdings may see little additional upside as the Fed finishes hiking rates. History shows that in the 18 months after the Fed ended hikes in the last four cycles, yields on cash-like investments have decayed rapidly. The 3-month Treasury yield, a benchmark Treasury security with a yield similar to cash-like investments, fell an average of 2.5%.

If history were to repeat, money market yields are likely to decline, and investors may be better served by being invested in stocks and bonds.

3-month T-bill yields declined sharply following the Fed's final hike in the last four cycles



Results have been front-loaded following the final Federal Reserve hike in the last four cycles (%)



Source: Capital Group, (Left chart): Bloomberg, Federal Reserve. Chart represents the average decline in 3-month Treasury bills starting in the month of the last Fed hike in the last four transition cycles from 1995 to 2018. Past results are not predictive of results in future periods. (Right chart): Capital Group, Morningstar. Chart represents the average returns across respective sector proxies in a forward extending window starting in the month of the last Fed hike in the last four transition cycles from 1995 to 2018 with data through 6/30/23. The 60/40 blend represents 60% S&P 500 Index and 40% Bloomberg U.S. Aggregate Index, rebalanced monthly. Long-term averages represented by the average five-year annualized rolling returns from 1995. Past results are not predictive of results in future periods. <https://www.capitalgroup.com/advisor/insights/articles/rate-hikes-near-end-historic-investor-opportunity-may-begin.html>.

What's the real return on 12-month CDs?

HARTFORDFUNDS

Our benchmark is the investor.*

Twelve-month rates on certificates of deposit (CDs) were below 3% from 2008 to 2022 but have recently increased.

However, when taxes and inflation are factored in, 12-month CDs have provided negative real returns in 17 out of the last 20 years.

Inflation and taxes have had a significantly negative effect on CD return rates

Year	12-Month CD Yield (%) ¹	Taxes (%) ²	Inflation (%)	Real Return After Taxes & Inflation (%)
2004	2.58	25	3.34	-1.41
2005	4.22	25	3.34	-0.18
2006	4.91	25	2.52	1.16
2007	4.43	25	4.11	-0.79
2008	2.65	25	-0.02	2.01
2009	1.44	25	2.81	-1.73
2010	0.96	25	1.44	-0.72
2011	0.77	25	3.06	-2.48
2012	0.69	25	1.76	-1.24
2013	0.67	25	1.51	-1.01
2014	0.70	25	0.65	-0.13
2015	0.62	25	0.64	-0.18
2016	0.59	25	2.05	-1.61
2017	0.80	25	2.10	-1.50
2018	1.29	22	1.92	-0.91
2019	1.14	22	2.26	-1.37
2020	0.39	22	1.28	-0.98
2021	0.28	22	7.10	-6.88
2022	2.35	22	6.42	-4.59
2023	5.32	22	3.40	0.75

Source: Hartford Funds, Bloomberg, FactSet. Past performance does not guarantee future results, 1/24.

Portfolio diversification

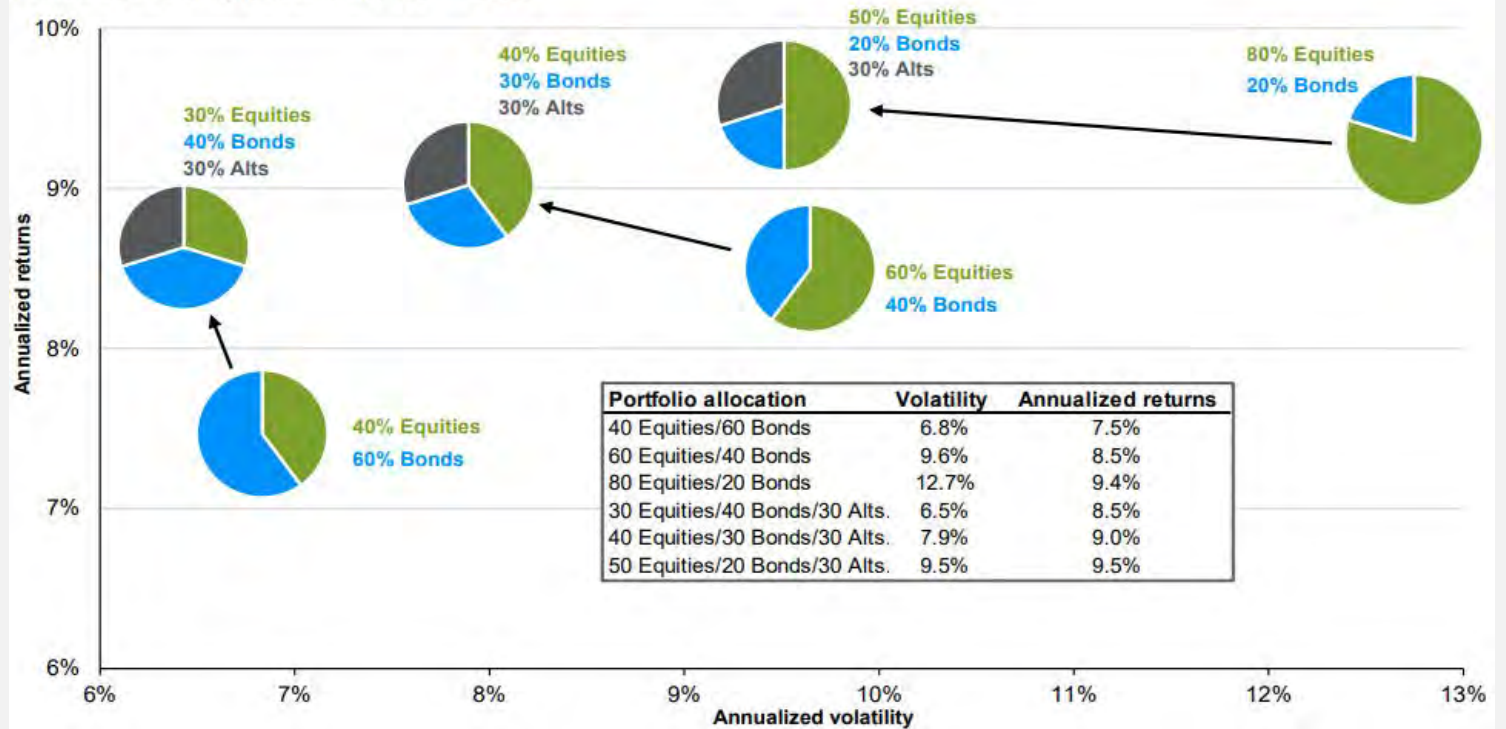
J.P.Morgan Asset Management

This chart shows how adding a diversified sleeve of alternatives (real estate, private equity and hedge funds) to traditional stock/bond portfolios can help manage risk and improve return.

Source: Bloomberg, Burgiss, HFRI, NCREIF, Standard & Poor's, FactSet, J.P. Morgan Asset Management. Alts include hedge funds, real estate, and private equity, with each receiving an equal weight. Portfolios are rebalanced at the start of the year.

Data are based on availability as of November 30, 2023.

Alternatives and portfolio risk/return
Annualized volatility and returns, 1989 – 2Q23



Source: J.P. Morgan Asset Management, "Guide to Alternatives," 2023.

Asset class returns

J.P.Morgan Asset Management

This table shows the annual returns for a range of different asset classes across a 16-year time period. It has everything from stocks and bonds to commodities and cash. On the far left-hand side of the chart, we show both the annualized return and annualized volatility over the last 15 years for each asset class.

Cutting through the middle of the chart is a hypothetical diversified portfolio composed of different weights of these asset classes.

2009-2023		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	YTD
Large Cap 14.0%	Small Cap 21.9%	EM Equity 79.0%	REITs 27.9%	REITs 8.3%	REITs 19.7%	Small Cap 38.8%	REITs 28.0%	REITs 2.8%	Small Cap 21.3%	EM Equity 37.8%	Cash 1.8%	Large Cap 31.5%	Small Cap 20.0%	REITs 41.3%	Comdty. 16.1%	Large Cap 26.3%	Large Cap 7.1%
Small Cap 11.3%	REITs 21.2%	High Yield 59.4%	Small Cap 26.9%	Fixed Income 7.8%	High Yield 19.6%	Large Cap 32.4%	Large Cap 13.7%	Large Cap 1.4%	High Yield 14.3%	DM Equity 25.6%	Fixed Income 0.0%	REITs 28.7%	EM Equity 18.7%	Large Cap 28.7%	Cash 1.5%	DM Equity 18.9%	DM Equity 2.4%
REITs 10.9%	EM Equity 20.3%	DM Equity 32.5%	EM Equity 19.2%	High Yield 3.1%	EM Equity 18.6%	DM Equity 23.3%	Fixed Income 6.0%	Fixed Income 0.5%	Large Cap 12.0%	Large Cap 21.8%	REITs -4.0%	Small Cap 25.5%	Large Cap 18.4%	Comdty. 27.1%	High Yield -12.7%	Small Cap 16.9%	Asset Alloc. 1.7%
High Yield 8.6%	DM Equity 18.4%	REITs 28.0%	Comdty. 16.8%	Large Cap 2.1%	DM Equity 17.9%	Asset Alloc. 14.9%	Asset Alloc. 5.2%	Cash 0.0%	Comdty. 11.8%	Small Cap 14.6%	High Yield -4.1%	DM Equity 22.7%	Asset Alloc. 10.6%	Small Cap 14.8%	Fixed Income -13.0%	Asset Alloc. 14.1%	Small Cap 1.5%
Asset Alloc. 8.1%	Comdty. 16.6%	Small Cap 27.2%	Large Cap 15.1%	Cash 0.1%	Small Cap 16.3%	High Yield 7.3%	Small Cap 4.9%	DM Equity -0.4%	EM Equity 11.6%	Asset Alloc. 14.6%	Large Cap -4.4%	Asset Alloc. 19.5%	DM Equity 8.3%	Asset Alloc. 13.5%	Asset Alloc. -13.9%	High Yield 14.0%	Cash 0.9%
DM Equity 7.4%	Large Cap 16.1%	Large Cap 26.5%	High Yield 14.8%	Asset Alloc. -0.7%	Large Cap 16.0%	REITs 2.9%	Cash 0.0%	Asset Alloc. -2.0%	REITs 8.6%	High Yield 10.4%	Asset Alloc. -5.8%	EM Equity 18.9%	Fixed Income 7.5%	DM Equity 11.8%	DM Equity -14.0%	REITs 11.4%	High Yield 0.6%
EM Equity 6.9%	High Yield 11.5%	Asset Alloc. 25.0%	Asset Alloc. 13.3%	Small Cap -4.2%	Asset Alloc. 12.2%	Cash 0.0%	High Yield 0.0%	High Yield -2.7%	Asset Alloc. 8.3%	REITs 8.7%	Small Cap -11.0%	High Yield 12.6%	High Yield 7.0%	High Yield 1.0%	Large Cap -18.1%	EM Equity 10.3%	EM Equity -0.1%
Fixed Income 2.7%	Asset Alloc. 11.5%	Comdty. 18.9%	DM Equity 8.2%	DM Equity -11.7%	Fixed Income 4.2%	Fixed Income -2.0%	EM Equity -1.8%	Small Cap -4.4%	Fixed Income 2.6%	Fixed Income 3.5%	Comdty. -11.2%	Fixed Income 8.7%	Cash 0.5%	Cash 0.0%	EM Equity -19.7%	Fixed Income 5.5%	Comdty. -1.1%
Cash 0.8%	Fixed Income 4.5%	Fixed Income 5.9%	Fixed Income 6.5%	Comdty. -13.3%	Cash 0.1%	EM Equity -2.3%	DM Equity -4.5%	EM Equity -14.6%	DM Equity 1.5%	Comdty. 1.7%	DM Equity -13.4%	Comdty. 7.7%	Comdty. -3.1%	Fixed Income -1.5%	Small Cap -20.4%	Cash 5.1%	Fixed Income -1.7%
Comdty. -0.2%	Cash 0.7%	Cash 0.1%	Cash 0.1%	EM Equity -18.2%	Comdty. -1.1%	Comdty. -9.5%	Comdty. -17.0%	Comdty. -24.7%	Cash 0.3%	Cash 0.8%	EM Equity -14.2%	Cash 2.2%	REITs -5.1%	EM Equity -2.2%	REITs -24.9%	Comdty. -7.9%	REITs -3.0%

Source: Bloomberg, FactSet, MSCI, NAREIT, Russell, Standard & Poor's, J.P. Morgan Asset Management. Large cap: S&P 500, Small cap: Russell 2000, EM Equity: MSCI EME, DM Equity: MSCI EAFE, Comdty: Bloomberg Commodity Index, High Yield: Bloomberg Global HY Index, Fixed Income: Bloomberg US Aggregate, REITs: NAREIT Equity REIT Index, Cash: Bloomberg 1-3m Treasury. The "Asset Allocation" portfolio assumes the following weights: 25% in the S&P 500, 10% in the Russell 2000, 15% in the MSCI EAFE, 5% in the MSCI EME, 25% in the Bloomberg US Aggregate, 5% in the Bloomberg 1-3m Treasury, 5% in the Bloomberg Global High Yield Index, 5% in the Bloomberg Commodity Index and 5% in the NAREIT Equity REIT Index. Balanced portfolio assumes annual rebalancing. Annualized (Ann.) return and volatility (Vol.) represents period from 12/31/2009 to 12/31/2023. Please see disclosure page at end for index definitions. All data represents total return for stated period. The "Asset Allocation" portfolio is for illustrative purposes only. Past performance is not indicative of future returns. *Guide to the Markets* – U.S. Data are as of February 29, 2024.

Foundations

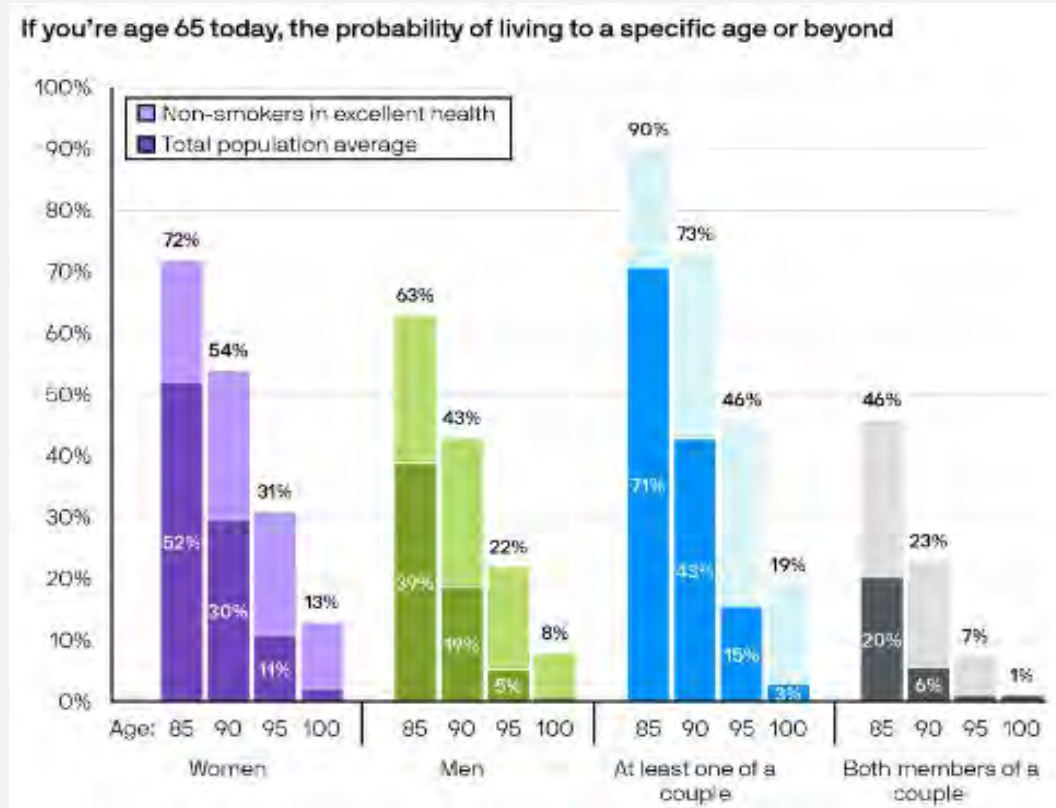
Life expectancy probabilities

J.P.Morgan Asset Management

Life expectancies in the United States continue to increase as more people are living to older ages.

This chart shows the probability that 65-year-old men and women today will reach various ages. For a 65-year-old couple, there is nearly an even chance that one of them will live to age 90 or beyond.

Individuals should plan for living well beyond the average – to age 95 or even 100 – especially those in good health. Shown on the purple bars, half of women will make it at least to 85, and more than half of female non-smokers in excellent health will pass age 90. Men are not that far behind, with 4 in 10 healthy non-smoking men expected to surpass age 90.



Source: Social Security Administration, Period Life Table, 2020 (published in the 2023 OASDI Trustees Report); American Academy of Actuaries and Society of Actuaries, Actuaries Longevity Illustrator, <http://www.longevityillustrator.org/> (accessed January 2024), J.P. Morgan Asset Management.

Source: J.P. Morgan Asset Management, "Guide to Retirement," 2024.

Effect of withdrawal rates and portfolio allocations

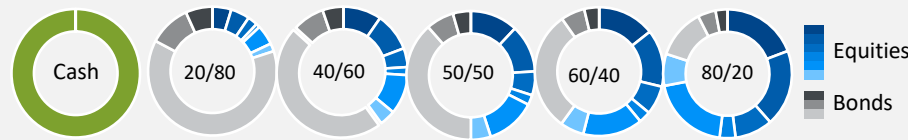
J.P.Morgan Asset Management

The table on the left shows the probability of systematic withdrawal rates ranging from 1–10% successfully lasting for 35 years given various diversified asset allocations.

The table on the right reflects the probability of success after 30 years.

Likelihood of success after 35 years

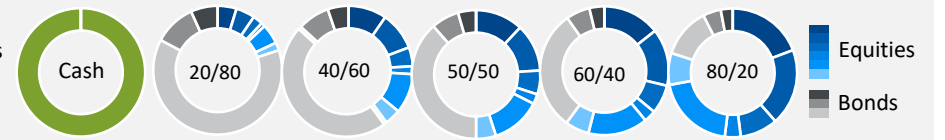
Various initial withdrawal rates and diversified asset allocations



Initial withdrawal rate	1%	95-100	95-100	95-100	95-100	95-100
	2%	95-100	95-100	95-100	95-100	95-100
	3%	0-5	95-100	95-100	95-100	90-95
	4%	0-5	55-60	70-75	70-75	75-80
	5%	0-5	5-10	30-35	35-40	45-50
	6%	0-5	0-5	5-10	10-15	20-25
	7%	0-5	0-5	0-5	0-5	5-10
	8%	0-5	0-5	0-5	0-5	0-5
	9%	0-5	0-5	0-5	0-5	0-5
	10%	0-5	0-5	0-5	0-5	0-5

Likelihood of success after 30 years

Various initial withdrawal rates and diversified asset allocations



Initial withdrawal rate	1%	95-100	95-100	95-100	95-100	95-100	High Confidence
	2%	95-100	95-100	95-100	95-100	95-100	
	3%	95-100	95-100	95-100	95-100	95-100	
	4%	0-5	75-80	85-90	80-85	80-85	Med Confidence
	5%	0-5	20-25	45-50	50-55	55-60	
	6%	0-5	0-5	15-20	20-25	30-35	
	7%	0-5	0-5	0-5	5-10	10-15	Low Confidence
	8%	0-5	0-5	0-5	0-5	0-5	
	9%	0-5	0-5	0-5	0-5	5-10	
	10%	0-5	0-5	0-5	0-5	0-5	

Source: J.P. Morgan Asset Management. This chart is for illustrative purposes only and must not be used, or relied upon, to make investment decisions. Portfolios are described using equity/bonds. For asset allocation details, see “Model Portfolio Details” on the Disclosure page. J.P. Morgan Asset Management’s (JPMAM) model is based on a blend of proprietary Long-Term Capital Market Assumptions (first 10 years) and equilibrium returns (25 years). The resulting projections include only the benchmark return associated with the portfolio and do not include alpha from the underlying product strategies within each asset class. The yearly withdrawal amount (1% to 10%) is set as a fixed percentage of the initial amount of \$1,000,000 and is then inflation adjusted over the period (2.3%). The percentile outcomes represent the percentage of simulated results with an account balance greater than \$0 after 35 years (e.g., “95–100” means that 95–100% of simulations had account balances greater than \$0 after 35 years). Overlap percentiles are included in the lower bracket (e.g., 80 is included in “75–80”; 85 is included in “80–85”). Allocations, assumptions and expected returns are not meant to represent JPMAM performance. Given the complex risk/reward trade-offs involved, we advise clients to rely on judgment as well as quantitative optimization approaches in setting strategic allocations. References to future returns for either asset allocation strategies or asset classes are not promises or even estimates of actual returns a client portfolio may achieve.

The power of a retirement paycheck

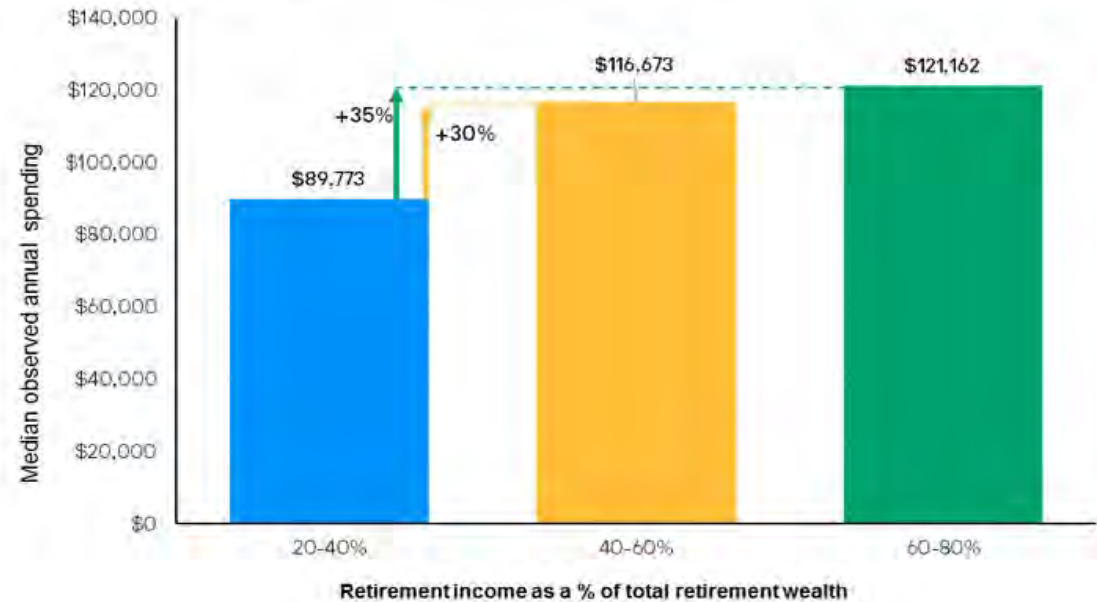
J.P.Morgan Asset Management

When comparing households with similar total retirement wealth, those who are more heavily weighted to retirement income spend significantly more per year. Total retirement wealth includes investable assets plus the present value of retirement income sources like Social Security, pensions and annuities.

Source: Chase data including select Chase credit and debit card, electronic payment, ATM withdrawal and check transactions in 2022. Information that would have allowed identification of specific customers was removed prior to the analysis. Asset estimates for de-identified and aggregated households supplied by IXI/Equifax, Inc. *Total retirement wealth is the sum of investable wealth and the present value of observed retirement income sources including Social Security (inflated), pensions and annuities (both not inflated) until age 90. Inflation rate assumption is 2.5%. Observed retirement income sources are adjusted to pre-tax values to be consistent with investable wealth. The 40 – 60% retirement income percentile mean values: Total retirement wealth: \$3.6M comprised of \$1.9M of investable wealth and \$1.7M of total retirement income (present value of \$102K annual retirement income until age 90).

Spending levels: total retirement wealth* \$3-5M

Spending based on level of retirement income ages 70-75 Median annual spending



Source: J.P. Morgan Asset Management, "Annuities Improve Outcomes," 2023.

Sequence of returns: A tale of two investors



Investor 1

- \$500,000 investment
- 7.4% average annual return
- 4% withdrawals, increasing 3% each year
- Negative returns during early years
- Ran out of money in year 24
- Positive returns in later years were not enough to sustain income



Investor 2

- \$500,000 investment
- 7.4% average annual return
- 4% withdrawals, increasing 3% each year
- Positive returns early in retirement
- Still had substantial cash value, even with negative returns in later years
- Will likely have a legacy to leave behind

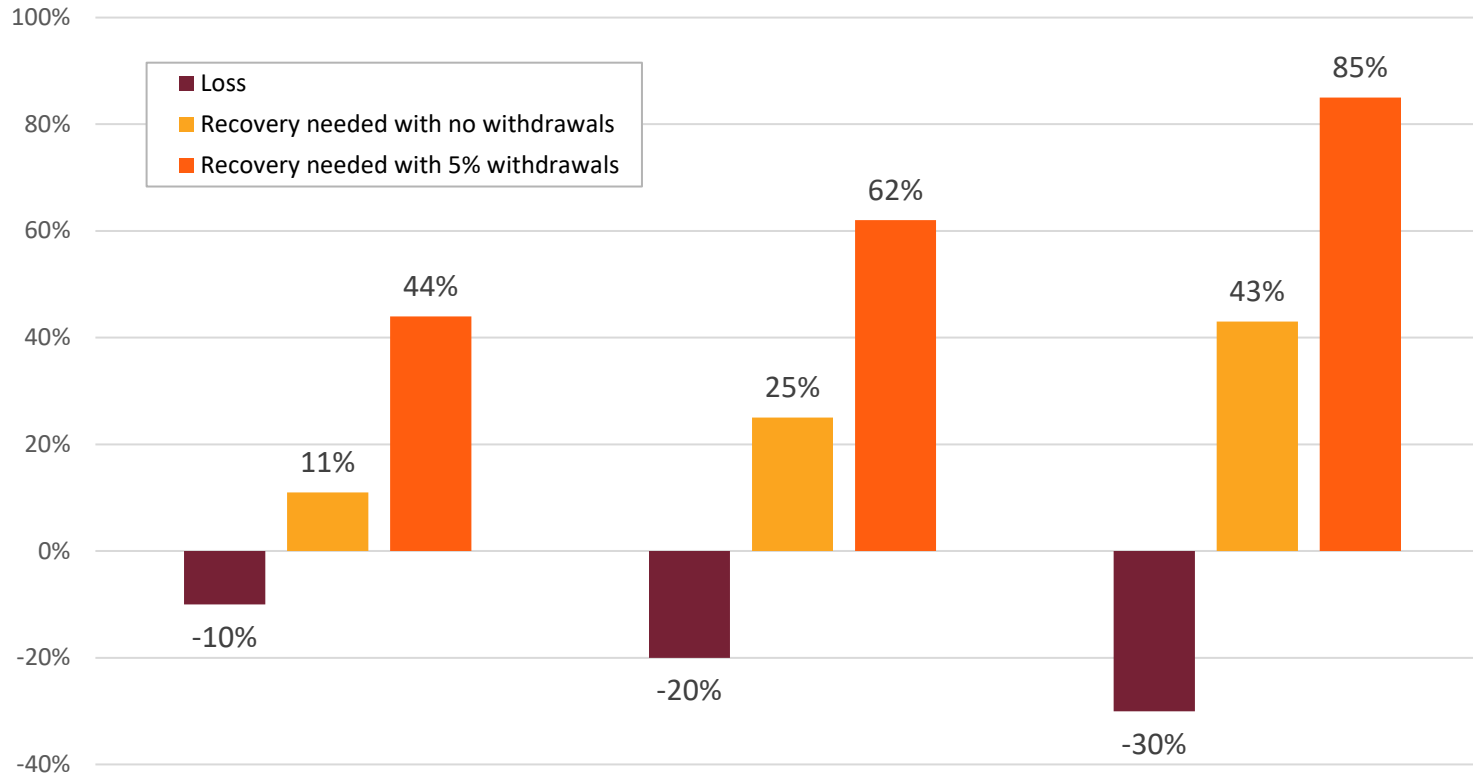
Investor 1's portfolio			
Year	Annual return	4% withdrawals	Year-end value
1	-11.36%	\$20,000	\$425,472
2	-0.10%	\$20,600	\$405,277
3	10.79%	\$21,218	\$425,499
4	15.63%	\$21,855	\$466,734
5	-17.37%	\$22,510	\$367,062
6	-29.72%	\$23,185	\$241,676
7	31.55%	\$23,881	\$286,510
8	19.15%	\$24,597	\$312,069
9	-11.50%	\$25,335	\$253,759
10	1.06%	\$26,095	\$230,077
11	12.31%	\$26,878	\$228,212
12	25.77%	\$27,685	\$252,203
13	-9.73%	\$28,515	\$201,923
14	14.76%	\$29,371	\$198,021
15	17.27%	\$30,252	\$196,743
16	1.40%	\$31,159	\$167,902
17	26.33%	\$32,094	\$171,566
18	14.62%	\$33,057	\$158,759
19	2.03%	\$34,049	\$127,242
20	12.40%	\$35,070	\$103,601
21	27.25%	\$36,122	\$85,867
22	-6.56%	\$37,206	\$45,469
23	26.31%	\$38,322	\$9,028
24	4.46%	\$9,028	\$0
25	7.06%	\$0	\$0

Investor 2's portfolio			
Year	Annual return	4% withdrawals	Year-end value
1	7.06%	\$20,000	\$513,888
2	4.46%	\$20,600	\$515,289
3	26.31%	\$21,218	\$624,061
4	-6.56%	\$21,855	\$562,701
5	27.25%	\$22,510	\$687,393
6	12.40%	\$23,185	\$746,570
7	2.03%	\$23,881	\$737,359
8	14.62%	\$24,597	\$816,967
9	26.33%	\$25,335	\$1,000,069
10	1.40%	\$26,095	\$987,609
11	17.27%	\$26,878	\$1,126,649
12	14.76%	\$27,685	\$1,261,171
13	-9.73%	\$28,515	\$1,112,718
14	25.77%	\$29,371	\$1,362,527
15	12.31%	\$30,252	\$1,496,278
16	1.06%	\$31,159	\$1,480,649
17	-11.50%	\$32,094	\$1,281,971
18	19.15%	\$33,057	\$1,488,081
19	31.55%	\$34,049	\$1,912,779
20	-29.72%	\$35,070	\$1,319,654
21	-17.37%	\$36,122	\$1,060,582
22	15.63%	\$37,206	\$1,183,330
23	10.79%	\$38,322	\$1,268,554
24	-0.10%	\$39,472	\$1,230,312
25	-11.36%	\$40,656	\$1,054,511

Source: This hypothetical is for illustrative purposes only and does not reflect the performance of any product. Investor 1's portfolio is based on S&P 500 Index returns, price only (dividends not reinvested), from January 1, 1969, to December 31, 1993. Investor 2's portfolio is based on reversing the order of Investor 1's returns. Average annual return is a simple average of the yearly returns and does not account for cash flows. Indices are unmanaged and unavailable for direct investment. **Past performance does not indicate future results.**

Mathematics of loss

Gains required to recover from losses



Source: Lincoln Financial Group.

The calculation of the cumulative gains required over five years with withdrawals includes the initial loss (-10%, -20%, -30%) and the continued 5% annual withdrawals from the portfolio. It does not include the impact of investment returns. This is a hypothetical example. No actual investment is being illustrated.

What is this chart showing?

This chart shows the gains needed to recover from losses, both with and without distributions.

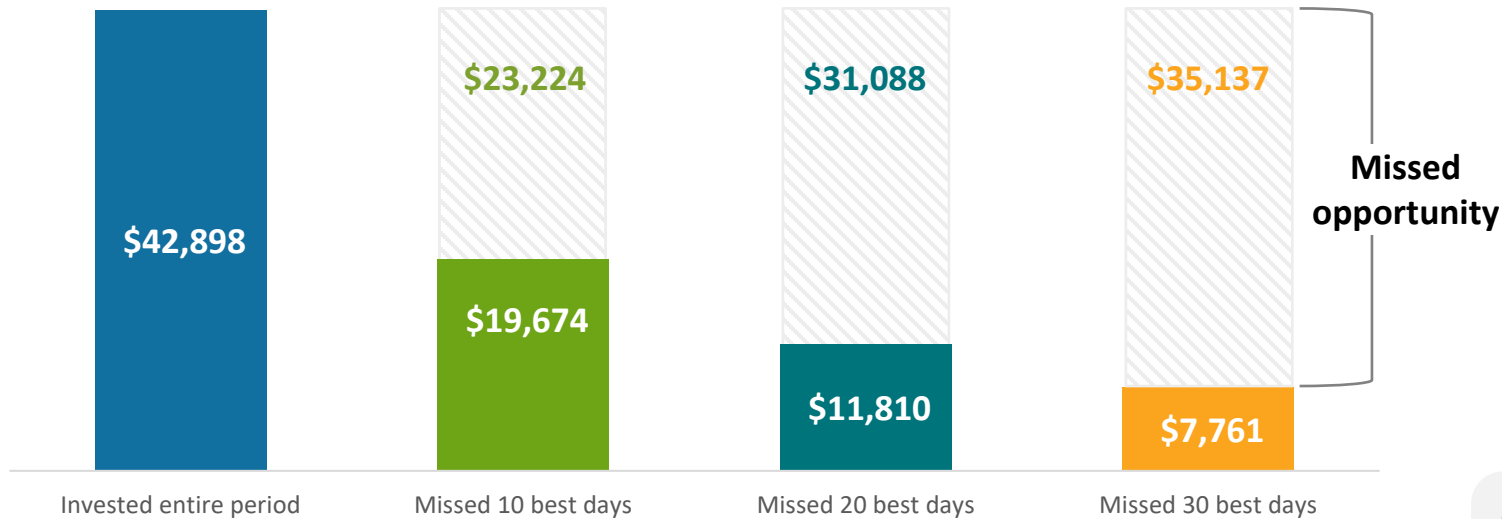
Why is it important?

Many investors underestimate the gains needed to recover from investment losses — especially when withdrawals are being taken.

Recouping losses always requires a larger percentage of gains than the loss itself to fully recover.

Impact of being out of the market

Performance of \$10,000 investment between January 1, 2004, and December 31, 2023.



	Invested entire period	Missed 10 best days	Missed 20 best days	Missed 30 best days
Cumulative Return	329.0%	96.7%	18.1%	-22.4%
Annualized Return	7.6%	3.4%	0.8%	-1.3%

What is this chart showing?

This chart shows how missing the best days in the market over the last 20 years would have impacted returns of an investment in the S&P 500 Index.

Why is it important?

Missing the best days can be costly, while avoiding the worst days can be beneficial. However, because the best days often follow the worst, it is nearly impossible to accurately time the market.

For this reason, simply staying the course is generally the best approach.

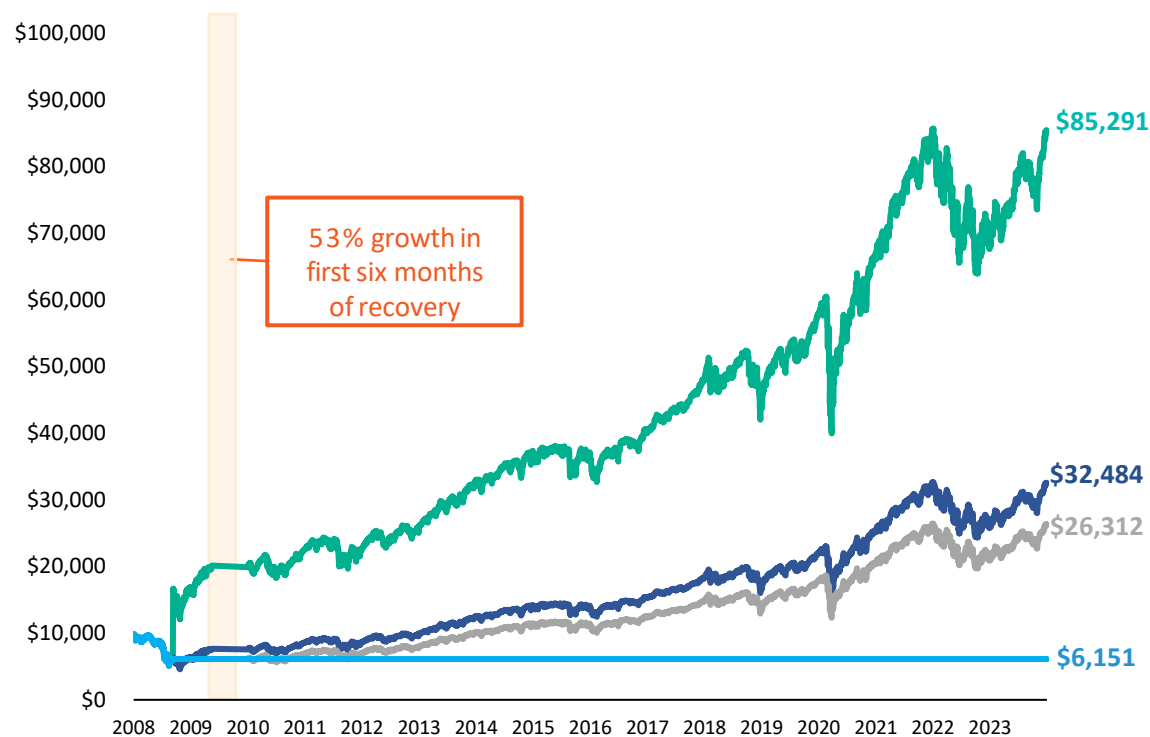
6 of the **best 10 days** happened within 10 trading days following one of the worst 10 days.

Source: Bloomberg, Lincoln Financial Group. Equity represented by the S&P 500 Price Return Index. Data is from January 1, 2004, to December 31, 2023. **Past performance is not indicative of future returns.** Index performance is for illustrative purposes only. You cannot invest directly in the index.

Your response to volatility matters

Four investor reactions to the 208 Financial Crisis

Hypothetical growth of \$10,000 investment, January 2008 to December 2023



Opportunistic Investor

Invested an additional \$10,000 at the start of 2009



Steady Investor

Stayed the course, making no changes to portfolio



Uncertain Investor

Moved to cash at the start of 2009 and reinvested after 1 year



Apprehensive Investor

Moved to cash at the start of 2009 and remained there

What is this chart showing?

This chart shows how four different investors may have responded to the market volatility during the 2008 Financial Crisis.

Why is it important?

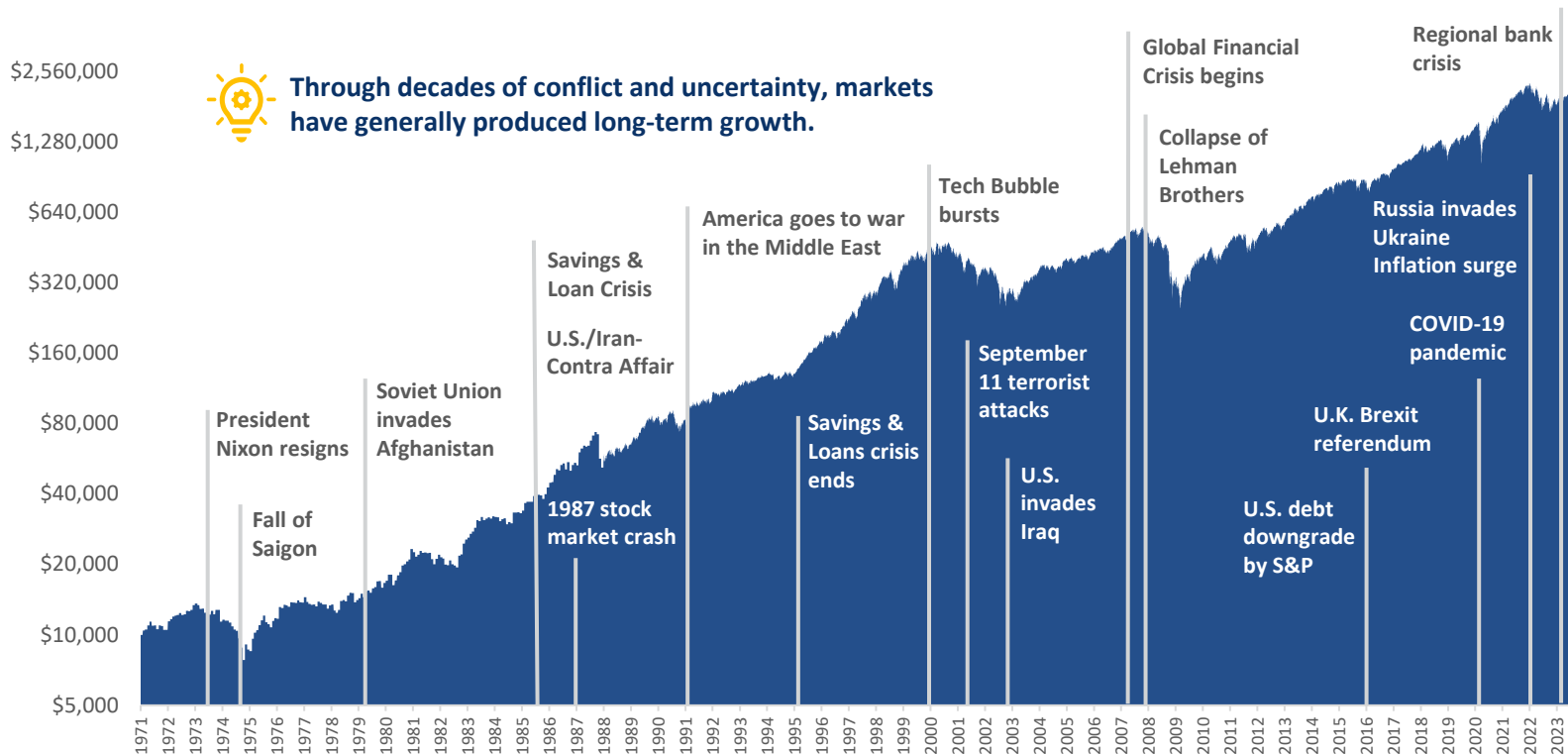
Investors can use this to help understand how different reactions to market volatility can impact their long-term outcomes.

While the steady investor outperformed those who moved to cash, the opportunistic investor who invested an additional \$10,000 during this period of market volatility had the most positive outcome of the group.

Source: Morningstar, Lincoln Financial Group. 1/1/2008 – 12/31/2023. S&P 500 Price Return Index used, which does not include dividends. Cash assumed to have a net yield of 0%. **Past performance is not indicative of future returns.** You cannot invest directly in an index. All indices are unmanaged and do not include fees or expenses. Please see the back of this presentation for index definitions and disclosures.

Market resiliency

Growth of \$10,000, S&P 500 (1971 – 2023)



What is this chart showing?

This chart shows that \$10,000 invested in the S&P 500 Index from January 1, 1971, to December 31, 2023, grew to over \$2.3 million throughout various crisis events. This equates to an annualized return of more than 10.5%.

Why is it important?

Market volatility has always been a source of concern for investors — whether it's caused by geopolitical events, pandemics, inflation, interest rates or other economic conditions.

It's important to remember that while current events may feel unprecedented to us, markets have seen and tackled these types of challenges before — and are poised to do so again.

Source: Morningstar, S&P 500 Total Return Index, January 1, 1971, through December 31, 2023. Scale is logarithmic. **Past performance is no guarantee of future results.** This chart is for illustrative purposes only and not indicative of any actual investment. Investors cannot invest directly in an index. Index returns do not reflect any fees, expenses, or sales charges. Stocks are not guaranteed and have been more volatile than the other asset classes. These returns were the result of certain market factors and events which may not be repeated in the future. The information presented is not intended to constitute an investment recommendation for, or advice to, any specific person. Data as of December 29, 2023

Time in the market, not timing the market

Rolling returns, range of outcomes (1976 – 2023)



What is this chart showing?

This chart shows rolling returns of the S&P 500 Index, as well as an 80/20 and 60/40 portfolio of U.S. stocks and core bonds over 1-, 5-, 10-, 15-, 20-, 25- and 30-year periods.

Why is it important?

While returns can be volatile over short periods of time, staying the course over the long term in a balanced portfolio can help shrink the range of potential investment outcomes.

Source: Morningstar. 80/20 portfolio = 80% S&P 500 TR and 20% Bloomberg U.S. Aggregate Bond Index TR. 60/40 portfolio = 60% S&P 500 TR and 40% Bloomberg U.S. Aggregate Bond Index TR.

Rolling returns are annualized on a 5-, 10-, 15-, 20-, 25- and 30-year basis. Using monthly S&P 500 Total Return and Bloomberg U.S. Aggregate Bond Index data starting in January of 1976, summary return statistics were calculated based on the total number of rolling return periods existing for each given period of time with a one-month step. For each rolling return period, a range of returns (maximum and minimum) as well as the average return has been calculated to provide a historical reference for how equities and balanced portfolios have performed. Returns >1yr annualized. **Past performance is not indicative of future returns.**

Despite the headlines...it's always a good time to invest for the long term

Year	Worrisome event	Cumulative Returns ¹	Year	Worrisome event	Cumulative Returns ¹
2000	Tech wreck; bubble bursts	410.9%	2012	Second Greek bailout; existential threat to Euro	378.4%
2001	September 11	462.1%	2013	Taper Tantrum	312.4%
2002	Dot-com bubble; market down -49%	537.9%	2014	Ebola epidemic; Russia annexes Crimea	211.5%
2003	War on Terror – U.S. invades Iraq	718.9%	2015	Global deflation scare; China FX devaluation	174.0%
2004	Boxing Day Tsunami kills 225,000+ in Southeast Asia	536.4%	2016	Brexit vote; U.S. election	170.3%
2005	Hurricane Katrina	473.9%	2017	Fed rate hikes; North Korea tensions	141.4%
2006	Not a bad year, but Pluto demoted from planet status	447.0%	2018	Trade war; February inflation scare	98.1%
2007	Subprime meltdown	372.4%	2019	Trade war; impeachment inquiry, global growth slowdown	107.2%
2008	Global Financial Crisis; bank failures	347.8%	2020	Covid-19 pandemic; U.S. presidential election	57.6%
2009	GFC; market down -56%; depths of despair	610.8%	2021	Omicron variant, China regulatory crackdown	33.1%
2010	Flash crash; BP oil spill; QE1 ends	462.1%	2022	Russia invasion of Ukraine, inflation hits 40-year high	3.4%
2011	S&P downgrades U.S. debt; 50% write-down of Greek debt	388.5%	2023	Fed rate hikes; bank failures, recession concerns	26.3%

What is this chart showing?

This chart shows annual worrisome events, along with the cumulative returns from the beginning of each year through 2023.

Why is it important?

It always feels like there are compelling reasons not to invest. This is just a sampling of worrying headlines over the past two decades.

Bad news may make short-term waves, but over time, those waves tend to smooth out and not disturb the long-term trajectory of markets.

¹Cumulative total returns for S&P 500 Index are calculated from December 31 of the year prior to December 29, 2023, sourced from Morningstar. Worrisome events sourced from J.P. Morgan Private Bank from 2000-2021, Lincoln Financial Group for 2022 and 2023. You cannot invest directly in an index. **Past performance does not guarantee or predict future performance.**

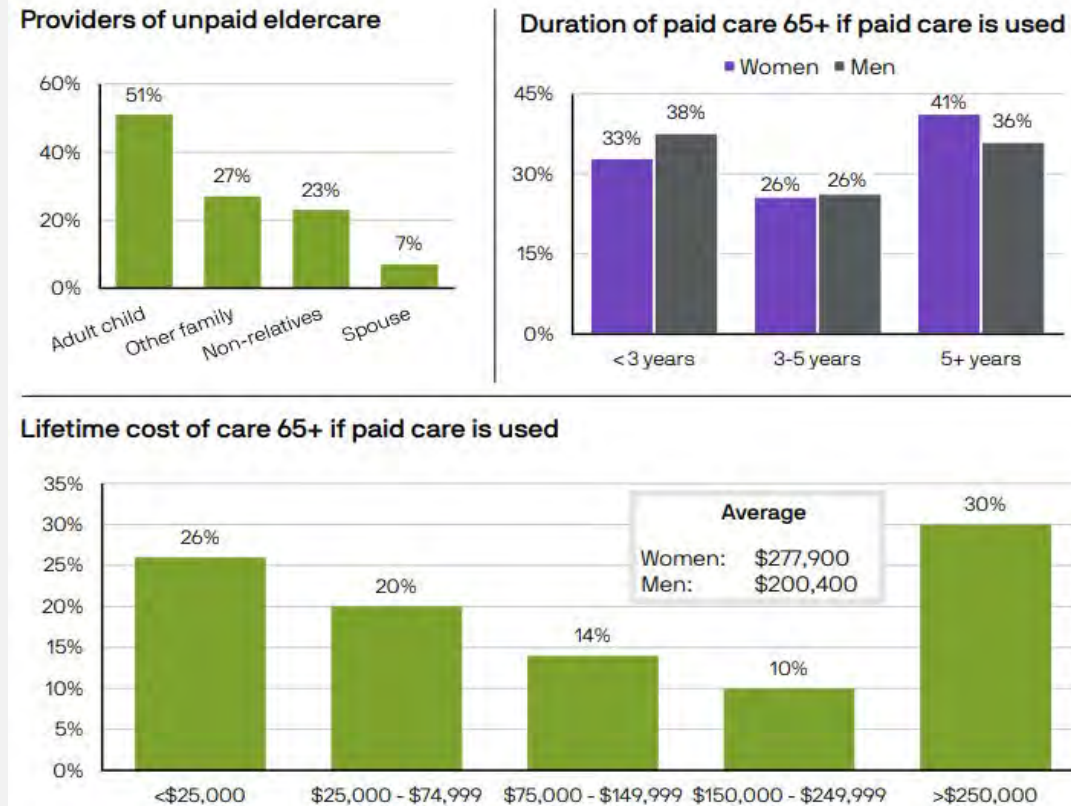
Long-term care planning

J.P.Morgan Asset Management

Family members and friends often provide unpaid eldercare – but it typically falls on adult children.

Duration of paid care varies, but when used, 36% of men and 41% of women need it for five years or more. The lifetime cost of care averages \$277,900 for women and \$200,400 for men, although there is a wide range of outcomes.

A care plan may help individuals avoid burdening others, ensure their family understands their wishes, and allow them to have more control over their care.



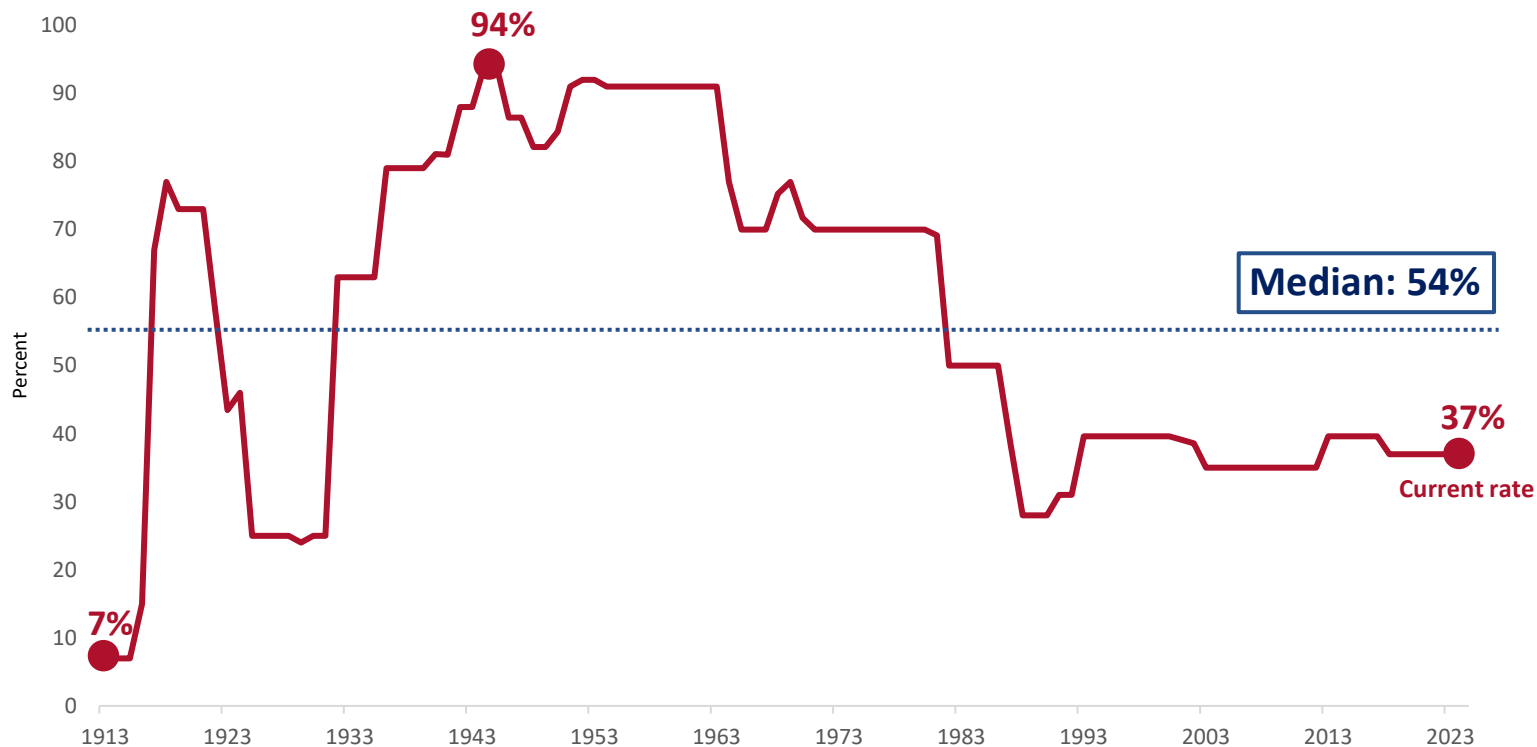
Source: Long-term care includes needing help with two or more activities of daily living such as eating, dressing, bathing, transferring, and toileting or severe cognitive impairment. Average of cost is in 2020 dollars and includes all payors.

Source: U.S. Department of Health and Human Services, *APSE Brief*, August 2022, "Long-term Services and Supports for Older Americans," Risks and Financing, 2022; "Retirement Security, Some Parental and Spousal Caregivers Face Financial Risk," May 2019, Figure 1. Latest data available as of December 31, 2022.

Source: J.P. Morgan Asset Management, "Guide to Retirement," 2023.

Historical income tax rates

Top marginal individual federal tax rate



What is this chart showing?

This chart shows the historical top marginal individual federal tax rate over time, along with the long-term median.

Why is it important?

Today's income tax rates, especially for those in the top individual bracket, are relatively low compared to the median over the last 100+ years.

Investors may benefit from working with a tax expert to determine the most effective and appropriate tax planning strategies to meet their long-term goals.

Source: Federal Reserve Bank of St. Louis U.S. Individual Income Tax: Tax Rates for Regular Tax: Highest Bracket, Percent, Annual, Not Seasonally Adjusted for 1913-2018. Taxfoundation.org for years 2019-2024.

How the expiration of the TCJA may impact taxes in the future



Today's tax code has been in place since the Tax Cuts and Jobs Act (TCJA) was signed into law in late 2017. But tax rates could rise in a couple of years unless Congress acts. Under the current law, these tax brackets would expire at the end of 2025 and be replaced with the tax brackets that were in place prior to the TCJA. Still, Congress could act before 2025 and extend the current tax structure or make other changes. This chart shows a comparison of how taxes may differ upon expiration of the TCJA.

Married couples filing a joint return:

Taxable Income	2023 tax rates	Projected tax rates	Difference
\$0 - \$22,000	10%	10%	0.0%
\$22,001 - \$89,450	12	15	3.0
\$89,451 - \$180,000	22	25	3.0
\$180,001 - \$190,750	22	28	6.0
\$190,751 - \$274,400	24	28	4.0
\$274,401 - \$364,200	24	33	9.0
\$364,201 - \$462,500	32	33	1.0
\$462,501 - \$490,000	35	33	2.0
\$490,001 - \$553,600	35	35	0.0
\$553,601 - \$693,750	35	39.6	4.6
Over \$693,750	37	39.6	2.6

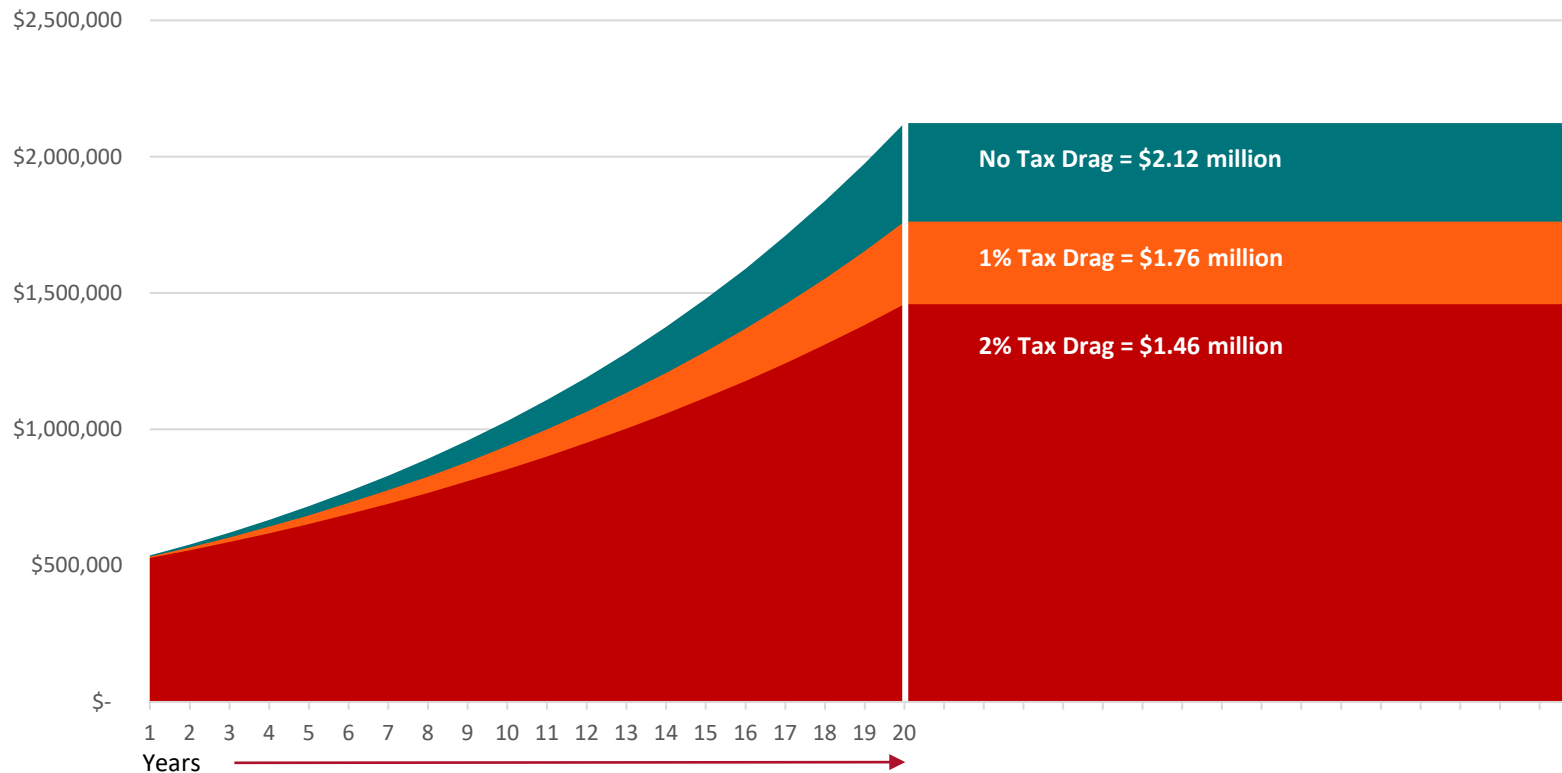
Single filers:

Taxable Income	2023 tax rates	Projected tax rates	Difference
\$0 - \$11,000	10%	10%	0.0%
\$11,001 - \$44,725	12	15	3.0
\$44,726 - \$95,375	22	25	3.0
\$95,376 - \$108,000	24	25	1.0
\$108,001 - \$182,100	24	28	4.0
\$182,101 - \$225,400	32	28	4.0
\$225,401 - \$231,250	32	33	1.0
\$231,251 - \$490,000	35	33	2.0
\$490,001 - \$492,000	35	35	0.0
\$492,001 - \$578,125	35	39.6	4.6
Over \$578,125	37	39.6	2.6


Source: Putnam Investments. Internal Revenue Service and Putnam Research. Projected tax rates are estimated and based on analysis of 2017 tax rates prior to passage of the TCJA, with tax bracket figures adjusted to account for annual inflation adjustments through 2023. Figures in red indicate an increase in tax rate upon TCJA expiration. Figures in green indicate where tax rates at certain income levels would decrease upon expiration of the TCJA.

Impact of taxes

Hypothetical growth of \$500,000 over 20 years at 7.5% per year, with 0%, 1% and 2% tax drag scenarios.



Asset Class	Lost to taxes each year ¹
US Equity	1.5%
International Equity	1.2%
Fixed Income	1.4%

 Every dollar paid in taxes is a dollar less invested for your long-term goals.

What is this chart showing?

This chart shows the financial impact that taxes can have on a portfolio over an extended period of time.

Why is it important?

Taxes can have a meaningful impact on the long-term growth of portfolios. Because of this, investors often benefit from considering strategies to improve their after-tax returns.

Note: This illustration is for hypothetical purposes only and may not represent an actual experience. Tax drag represents the reduction in portfolio returns due to taxes paid on distributions (stock dividends, bond dividends and capital gains). ¹Average 5yr tax cost ratio as of 12/31/23 for U.S. funds within the Morningstar categories of U.S. equity, international equity, and taxable bond. Source: Morningstar. Assumes that distributions are taxed at the highest federal tax-rate prevailing for each type of distribution, and the appropriate current or historical federal tax rate is applied to each distribution date. State and local taxes are ignored, as are the effects of AMT, exemptions, phase-out credits, or any individual specific issues.

Additional information

Index Descriptions

S&P 500 Index is a market-cap weighted index that measures the performance of 500 widely held large capitalization stocks in the U.S. equity market. It is regarded as the best gauge of the U.S. equity market.

Russell 2000 Index measures the performance of the small cap segment of the U.S. equity universe. It is a subset of the Russell 3000.

MSCI Emerging Markets Index is a free float-adjusted market capitalization index that measures equity market performance in large and mid cap representation across 27 emerging market countries.

MSCI EAFE Index is a free float-adjusted equity index that captures large and mid cap representation across 21 developed market countries, excluding the U.S. and Canada.

MSCI All Country World Index (ACWI) is a free float-adjusted market capitalization index that captures large and mid cap representation across 23 developed markets and 27 emerging market countries.

Bloomberg Commodity Total Return Index is composed of futures contracts and reflects the returns on a fully collateralized investment in the BCOM. This combines the returns of the BCOM with the returns on cash collateral invested in 13-week (3-month) U.S. Treasury bills.

Bloomberg Barclays Global High Yield Index is a multicurrency flagship measure of the global high yield debt market. The index represents the union of the U.S. High Yield, the Pan-European High Yield, and Emerging Markets (EM) Hard Currency High Yield Indices.

The Bloomberg Barclays U.S. Aggregate Bond Index is a broad-based flagship benchmark that measures the investment-grade, U.S. dollar-denominated, fixed-rate taxable bond market. The index includes Treasuries, government-related and corporate securities, MBS, ABS and CMBS.

The FTSE Nareit All Equity REITs Index is a free float-adjusted market capitalization-weighted index of U.S. equity REITs. Constituents of the index include all tax-qualified REITs with more than 50 percent of total assets in qualifying real estate assets other than mortgages secured by real property.

The Bloomberg Barclays U.S. Treasury Bills 1–3 Month Index includes all publicly issued zero coupon U.S. Treasury bills that have a remaining maturity of less than three months and at least one month, are rated investment-grade, are U.S.-dollar denominated, nonconvertible, and have \$300 million or more of outstanding face value.

University of Michigan (UoM) Inflation Expectations measures the percentage that consumers expect the price of goods and services to change during the next 12 months.

Capital Market Expectations

- BlackRock: <https://www.blackrock.com/institutions/en-us/insights/charts/capital-market-assumptions>, as of February 2024. [10-year return time period.](#)
- J.P. Morgan Asset Management, 2024 Long Term Capital Market Assumptions: <https://am.jpmorgan.com/us/en/asset-management/adv/insights/portfolio-insights/lcma/>.
- StateStreet: <https://www.ssga.com/us/en/intermediary/ic/insights/long-term-asset-class-forecasts-q2-2023>, as of May 2023. [10+ year return time period.](#)
- Goldman Sachs: Goldman Sachs: US Q4 2023 Multi-Asset Solutions (MAS) Team Strategic Long-Term Assumptions. 10-year return time period, as of December 31, 2023. <https://visit.lfg.com/GSMAS>

Sources and Methodology for Economic Dashboard

- CEO Confidence via. The Conference Board. The Conference Board Measure of CEO Confidence™ is a barometer of the health of the U.S. economy from the perspective of U.S. chief executives. The Measure of CEO Confidence™ is based on CEOs' perceptions of current and expected business and industry conditions. The survey also gauges CEOs' expectations about future actions their companies plan on taking in four key areas: capital spending, employment, recruiting, and wages. A reading below 40 indicates that CEOs maintain a negative outlook regarding what's ahead for the economy. A measure in the range of 40–50 indicates that CEOs maintain a cautious outlook regarding what's ahead for the economy. A reading above 50 indicates that CEOs maintain a positive outlook regarding what's ahead for the economy.
- Inflation: Based on the 3-month moving average trend (last 3 observations) in headline CPI as of Dec. 2023 via. the U.S. Bureau of Labor Statistics. 2024 expectations based on PCE inflation median projection from the Dec. 2023 FOMC Summary of Economic Projections.
- Economic Growth: Based on 3-quarter trend in U.S. GDP (percent change seasonally adjusted annual rate as of Q4 2023) via. the U.S. Bureau of Economic Analysis. 2024 expectations based on median projection from the Dec. 2023 FOMC Summary of Economic Projections.
- Labor market: Based on the 3-month moving average trend (last 3 observations) in total nonfarm job additions and the 3-month moving average trend (last 3 observations) in unemployment rate via. the U.S. Bureau of Labor Statistics as of data available on February 2, 2024.
- Consumer finances: Household debt service payments as a percent of disposable personal income as of Q3 2023 via. The Board of Governors of the Federal Reserve System. Pre-pandemic level defined as ratio value in Q1 2020. Credit card delinquencies as of Q3 2023 and based on 3-quarter trend in delinquency rate on credit card loans, all commercial banks via. the Board of Governors of the Federal Reserve System.
- Retail spending: Based on the 3-month moving average trend (last 3 observations) in year-over-year retail sales growth as of December 2023 via the U.S. Census Bureau, and the 3-month moving average trend (last 3 observations) in consumer confidence as measured by the Conference Board Consumer Confidence Index as of January 2024.

Economic and Market Indicators

- Consumer sentiment based on month-end data, starting in Jan. 1978 to February 2024. +/- 1 std. deviation of historical value range from 98.18% to 71.71%.
- Economic expansion (CQOQ Index) based on QOQ % change data of quarterly data, starting in June 1947 to December 2023. +/- 1 std. deviation of historical value range from 7.75% to -1.38%.
- Inflation (CPI) based on YOY % change of monthly CPI seasonally adjusted data, starting in Jan. 1947 to January 2024. +/- 1 std. deviation of historical value range from 7.03% to 0.46%.
- Market volatility (VIX) based on average daily closing values for the month of the CBOE VIX index from Jan. 1990 to February 2024. +/- 1 std. deviation of historical value range from 25.82% to 11.30%.
- Unemployment based on month-end data, starting in Jan. 1948 to January 2024. +/- 1 std. deviation of historical value range from 7.41% to 3.99%.
- 10Y U.S. Treasury yield based on daily data, starting in Jan. 1962 to February 2024. +/- 1 std. deviation of historical value range from 8.84% to 2.89%.

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The MSCI EAFE Price Return Index follows the performance of large and mid-cap securities across 21 developed markets, including countries in Europe, Australasia and the Far East, excluding the U.S. and Canada.

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