

Commentary | Fourth Quarter 2024

Investment Research Update

From the desk of

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Market Strategy*



Performance Summary: Utilities and real estate led in Q3

The utilities, real estate, and industrials sectors led the way in the third quarter of 2024. Conversely, energy, information technology, and communications services lagged the return of the S&P 500[®] index over the same time frame. Looking out over the past three years, the energy sector has more than doubled the performance of the S&P 500, whereas real estate has lagged the index.












Performance as of 9/30/24

Sector	Latest Quarter	1-Year	3-Year Annualized	Dividend Yield	Weight in S&P 500 [®]
 Communication Services	1.7%	42.9%	6.5%	0.7%	8.9%
 Consumer Discretionary	7.8%	28.1%	4.8%	0.7%	10.1%
 Consumer Staples	9.0%	25.3%	10.4%	2.3%	5.9%
 Energy	-2.3%	0.8%	24.1%	3.3%	3.3%
 Financials	10.7%	39.0%	8.6%	1.5%	12.9%
 Health Care	6.1%	21.7%	8.4%	1.5%	11.6%
 Industrials	11.5%	35.9%	13.4%	1.3%	8.5%
 Information Technology	1.6%	52.7%	19.9%	0.6%	31.7%
 Materials	9.7%	25.2%	9.1%	1.7%	2.2%
 Real Estate	17.0%	36.4%	3.8%	3.2%	2.3%
 Utilities	19.4%	41.8%	11.7%	2.7%	2.5%
S&P 500[®]	5.9%	36.4%	11.9%	1.2%	

Past performance is no guarantee of future results. Sectors defined by the Global Industry Classification Standard (GICS[®]); see Index Definitions for details. Performance metrics reflect S&P 500 sector indexes. Changes were made to the GICS framework on 9/24/18; historical S&P 500 communication services sector data prior to 9/24/18 reflect the legacy telecommunication services sector. The top three performing sectors over each period are shaded green; the bottom three are shaded red. It is not possible to invest directly in an index. All indexes are unmanaged. Percentages may not total 100% due to rounding.

Scorecard: Several cyclical sectors still appeared attractive

Potential for an earnings recovery and the long-term fundamental picture favored information technology. Consumer discretionary looked attractive due to strong long-term fundamentals and constructive contrarian indicators. Relative valuations favored financials. Conversely, earnings growth for consumer staples seemed likely to lag in a broader recovery. Energy appeared favorable based on valuations, although several indicators suggested a negative risk-reward outlook.

		Time Horizon View			
		Longer		Shorter	
		Overweight	Neutral	Underweight	
Sector	Strategist View	Fundamentals	Valuations	Relative Strength	Comments
 Communication Services	■	+			Defensive characteristics may hinder performance.
 Consumer Discretionary	■	+			Constructive contrarian indicators.
 Consumer Staples	■		+		Earnings growth may lag in a broader recovery.
 Energy	■		+	—	Indicators suggest a negative risk-reward.
 Financials	■		+		Relative valuation may limit further deterioration.
 Health Care	■	—			Problematic fundamental trends offset low valuations.
 Industrials	■		—	—	Other predictive valuation indicators still compelling.
 Information Technology	■	+	—	+	Earnings increasingly likely to recover.
 Materials	■	—		—	Higher capital expenditures may weigh on the sector.
 Real Estate	■	—	—	+	Lower rates and high valuation spreads suggest attractive risk-reward.
 Utilities	■			+	Defensive characteristics may hinder performance.

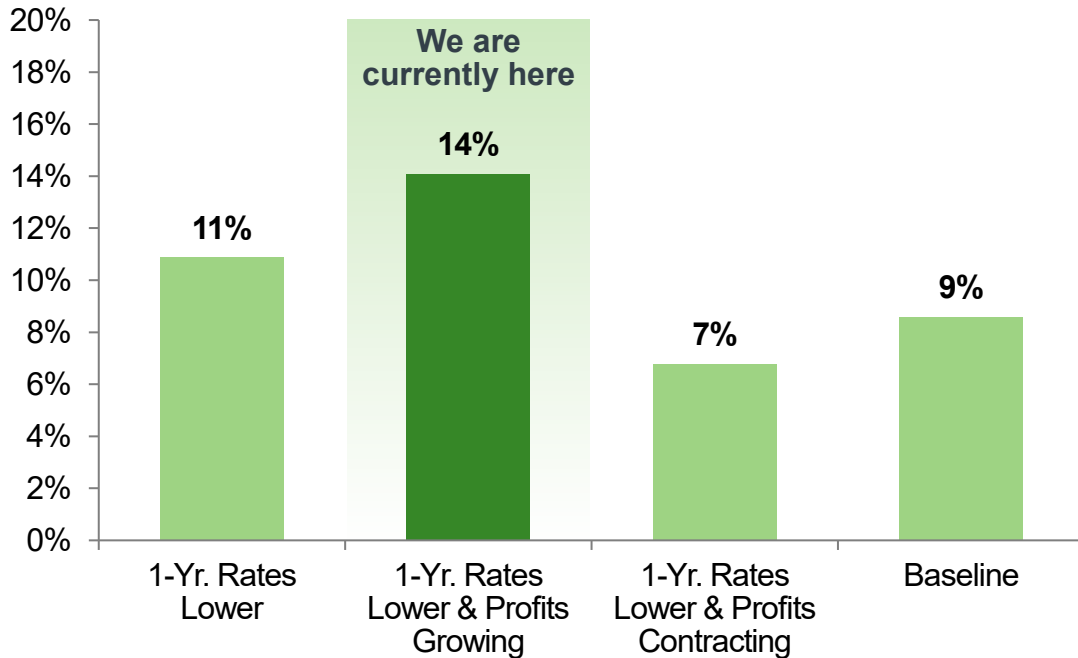
Past performance is no guarantee of future results. Strategist view, fundamentals, valuations, and relative strength are based on the top 3,000 U.S. stocks by market capitalization. Sectors defined by the GICS; see Index Definitions for details. Historical communication services data has been restated back to 1962 to account for changes to the GICS framework made on 9/24/18. **Strategist view** is as of the date indicated based on the information available at that time and may change based on market or other conditions. This is not necessarily the opinion of Fidelity Investments or its affiliates. Fidelity does not assume any duty to update any of the information. Overweight and underweight views represent opportunistic tilts in a hypothetical portfolio relative to broad market sector weights. Sector weights may vary depending on an individual's risk tolerance and goals. Time horizon view factors are based on historical analysis and are not a qualitative assessment by any individual investment professional. The top three sectors based on each time horizon view metric are shaded green; the bottom three are shaded red. See Glossary and Methodology for details. It is not possible to invest directly in an index. All indexes are unmanaged. Source: Haver Analytics, FactSet,

The Fed Lowered rates in September. Will stocks get a boost?

Two factors have been especially linked to stock returns when rates declined: The starting level of rates relative to inflation and earnings growth. Going back to 1962, the S&P 500 returned an average of 14% in 12-month periods in which one-year Treasury rates fell and corporate profits grew, on average (left). The S&P 500 managed the same average return (14%) when the federal funds rate fell from a starting point above 5%, and inflation was below 3%, roughly median levels for each (right).

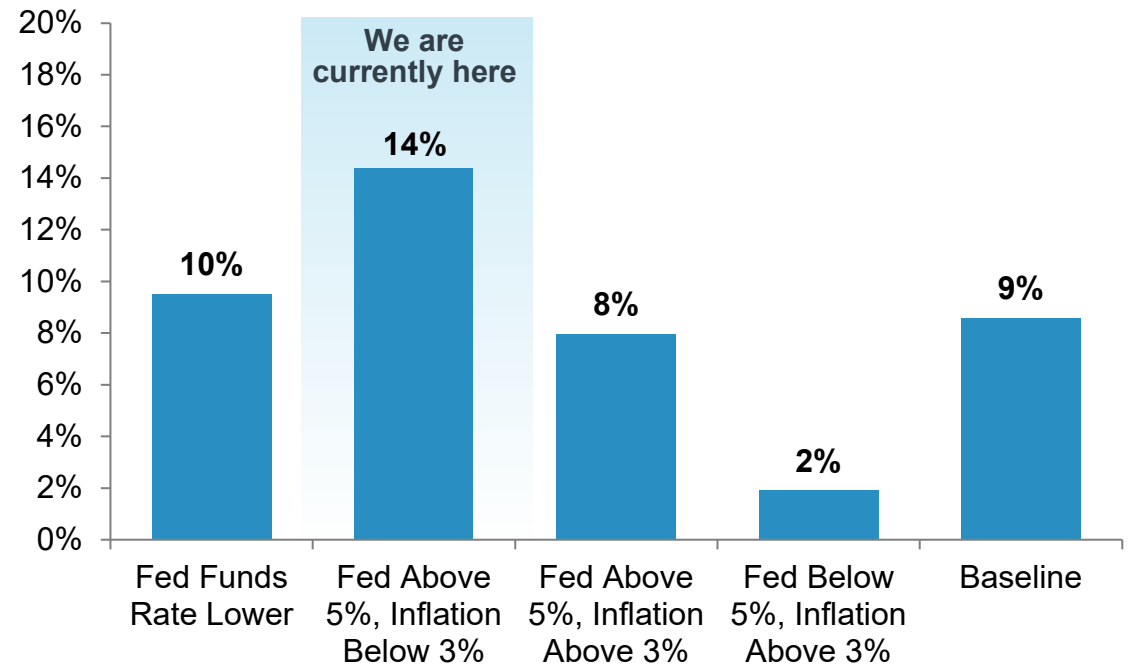
Stocks have outperformed when rates fell and earnings grew

Average Rolling 12-Month S&P 500 Returns When Rates Fall, 1962–Present



Another key: starting rates relative to inflation

Average Rolling 12-Month S&P 500 Returns with Falling Federal Funds Rate and Inflation Scenarios, 1962–Present



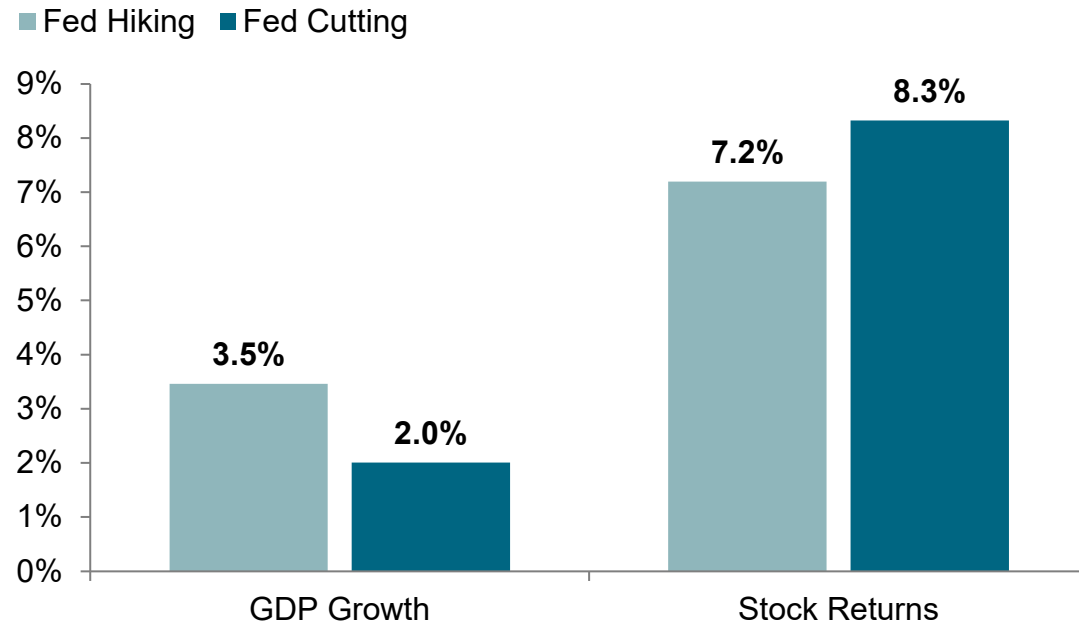
Past performance is no guarantee of future results. **LEFT:** Earnings growth measured among the largest 3,000 stocks using year-over-year trailing earnings. Analysis based on Fidelity top U.S. 3,000 stocks by market capitalization. **RIGHT:** Analysis based on the S&P 500. Inflation as measured by the 12-month change in the Consumer Price Index (CPI). “Fed above 5%” refers to the federal funds rate being above 5%. The 5% fed funds rate and 3% thresholds were chosen because they were roughly the median levels over the time frame studied. Sources: Haver Analytics, FactSet, Fidelity Investments, as of

Fed cuts have boosted banks' willingness to lend

Since 1962, GDP grew faster, on average, when the Fed was hiking versus cutting (left). In the same time frame, stocks performed slightly better amid Fed decreases than increases. Yet historically, lower rates frequently influenced bank lending. The Federal Reserve Bank Senior Officers Survey, which measures banks' willingness to lend, has been negative going back to December 2022. Since 1966, this metric increased 89% of the time in the 12 months after it was negative and the Fed cut rates (right).

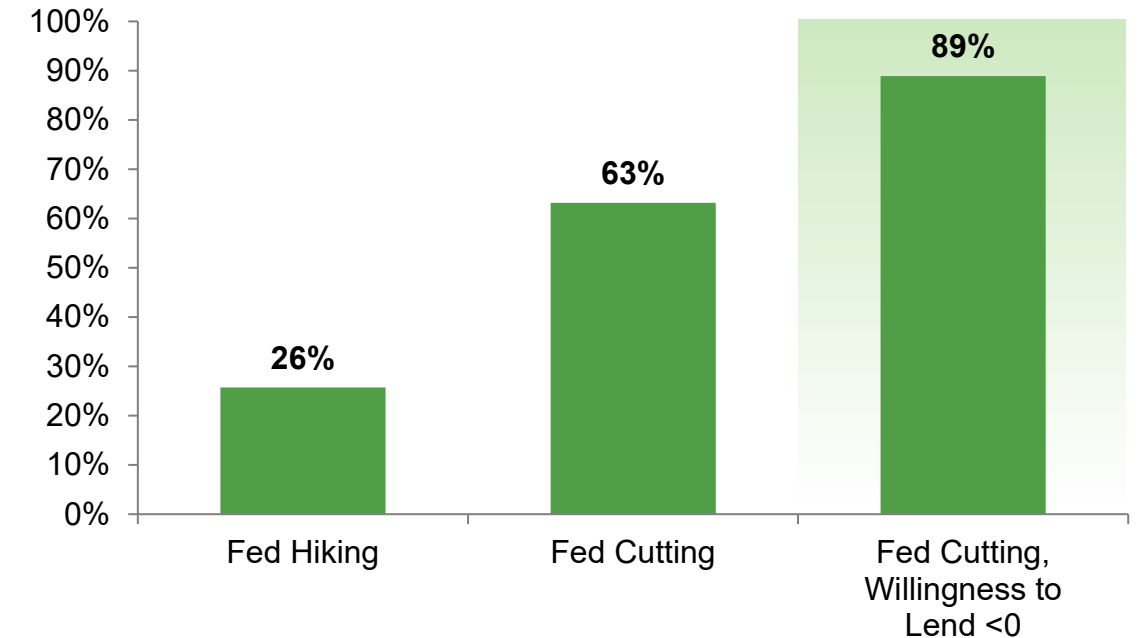
Rate cuts haven't had a big impact on GDP or stock-market growth

Coincident, Rolling Quarterly Average of GDP Growth and Stock Returns When the Fed is Hiking vs. Cutting, 1962–Present



But Fed cuts have increased bank willingness to lend

Quarterly Rolling Average Change in Willingness to Lend in Various Rate Scenarios 1966–Present



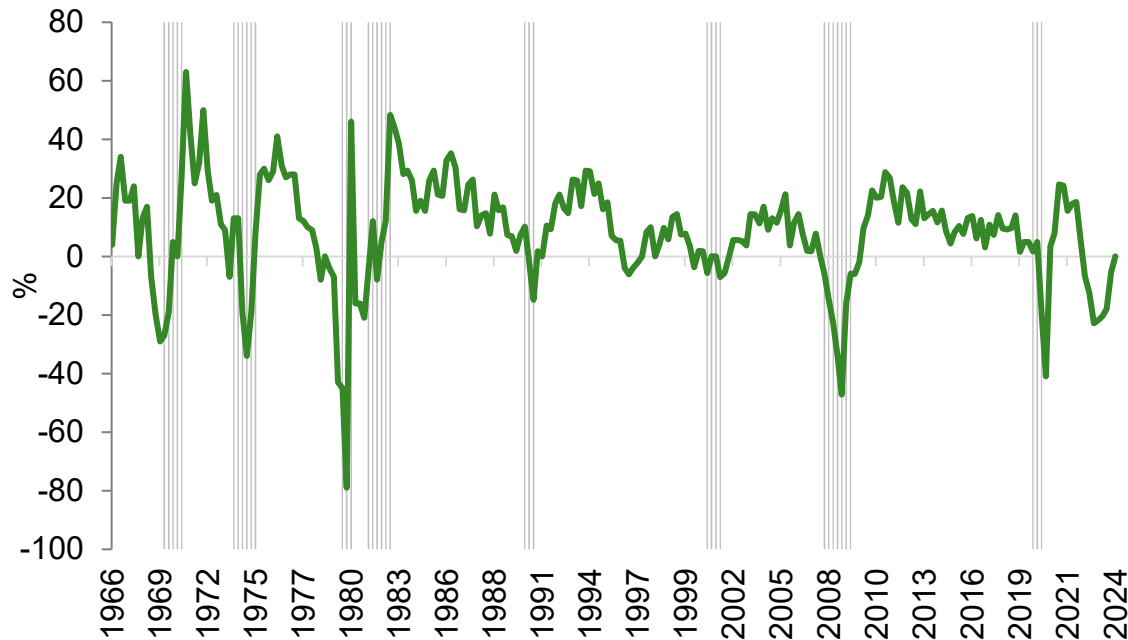
Past performance is no guarantee of future results. Sources: Haver Analytics, FactSet, Fidelity Investments. **LEFT:** GDP: Gross domestic product. Data analyzed quarterly from January 1962 through June 2024. **RIGHT:** Data analyzed quarterly from December 1966 through June 2024.

Willingness to lend has correlated with earnings growth

If Fed rate decreases do increase banks' willingness to lend, this could help companies sustain earnings growth. As noted above, the FRB Senior Officers Survey of banks' willingness to lend has been below zero since December 2022 (left). When Fed rate cuts improved willingness to lend in the past, earnings growth was positive over the next 12 months 98% of the time since 1966 (right).

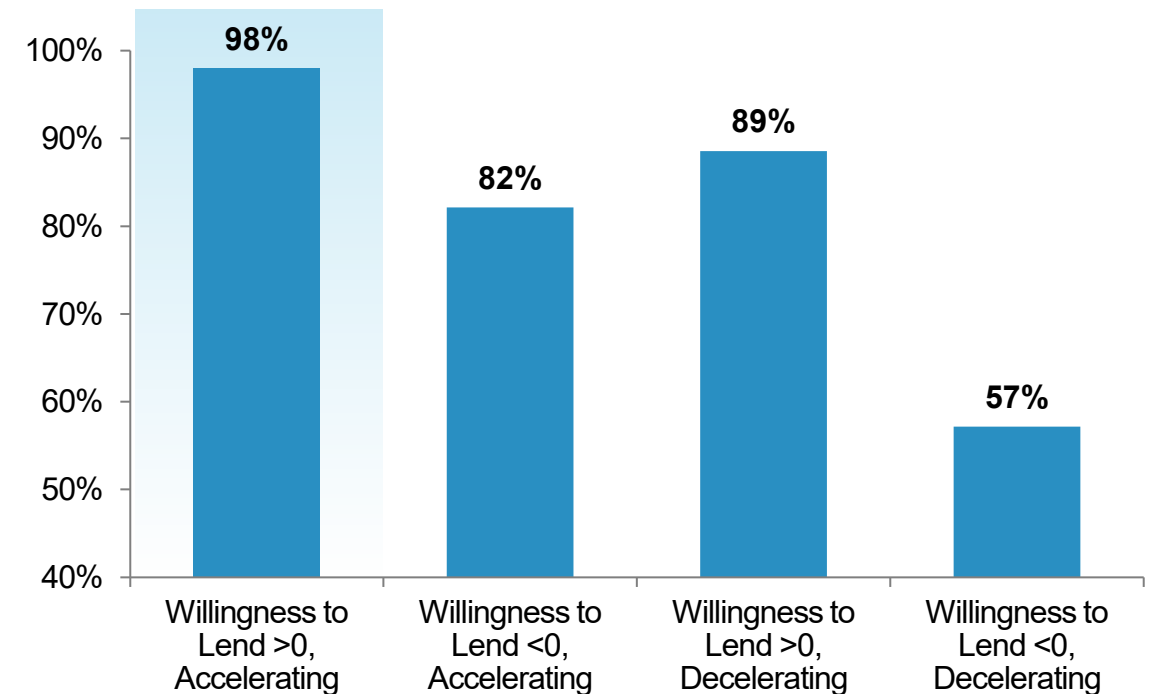
Willingness to lend just climbed out of negative territory

FRB Sr. Officers Survey Bank Willingness to Lend to Consumers



When willingness to lend accelerated year over year from negative levels, earnings growth followed

Average Rolling Quarterly Odds of Positive EPS Growth in Various Lending Survey Scenarios, 1966–Present



Past performance is no guarantee of future results. Sources: Haver Analytics, FactSet, Fidelity Investments, as of 6/30/24. LEFT: FRB Sr. Officers Survey: Federal Reserve Board Senior Loan Officer Opinion Survey. This quarterly survey by the U.S. Federal Reserve assesses the lending practices and demand for loans from banks. It asks surveyed banks (up to 80 in the U.S. and 24 branches of international banks) about their changes in lending policies and customer demand from various loan categories. Data analyzed quarterly since December 1966. RIGHT: EPS: Earnings per share. Data analyzed quarterly since September 1966.

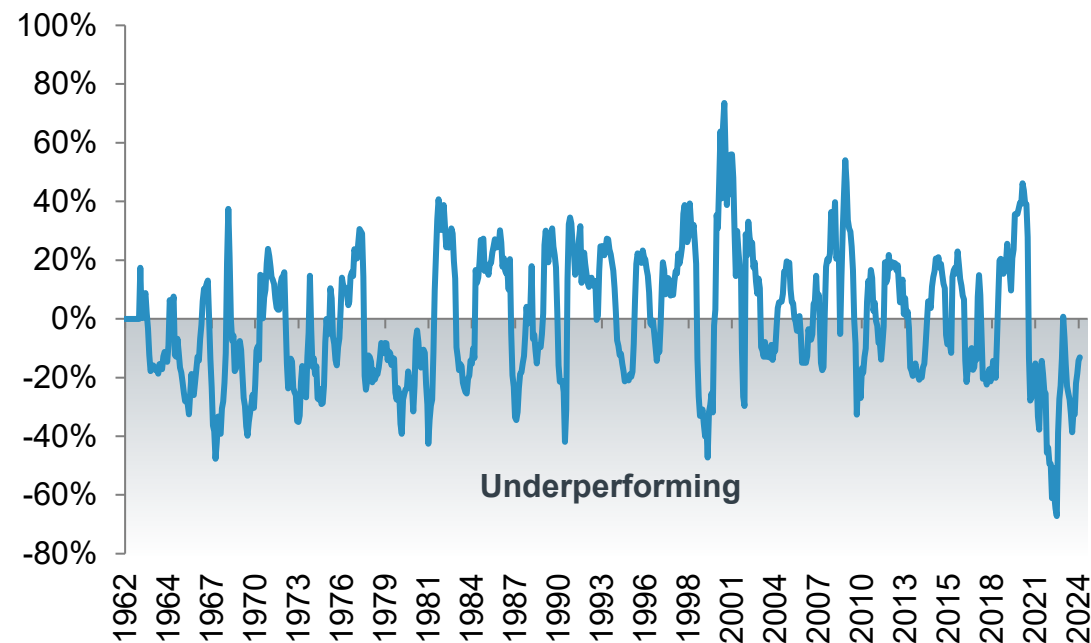


The setup looks good for the most rate-sensitive sectors

Did the market anticipate a rate cut? If it did, the most rate-sensitive sectors should have outperformed the least rate-sensitive sectors before the Fed's rate reduction. They didn't: Financials, real estate, and industrials—the three sectors with price moves most negatively correlated with interest rate changes—significantly underperformed (left). This trend is out of step with the historical pattern; rate-sensitive sectors typically outperformed prior to cuts (right).

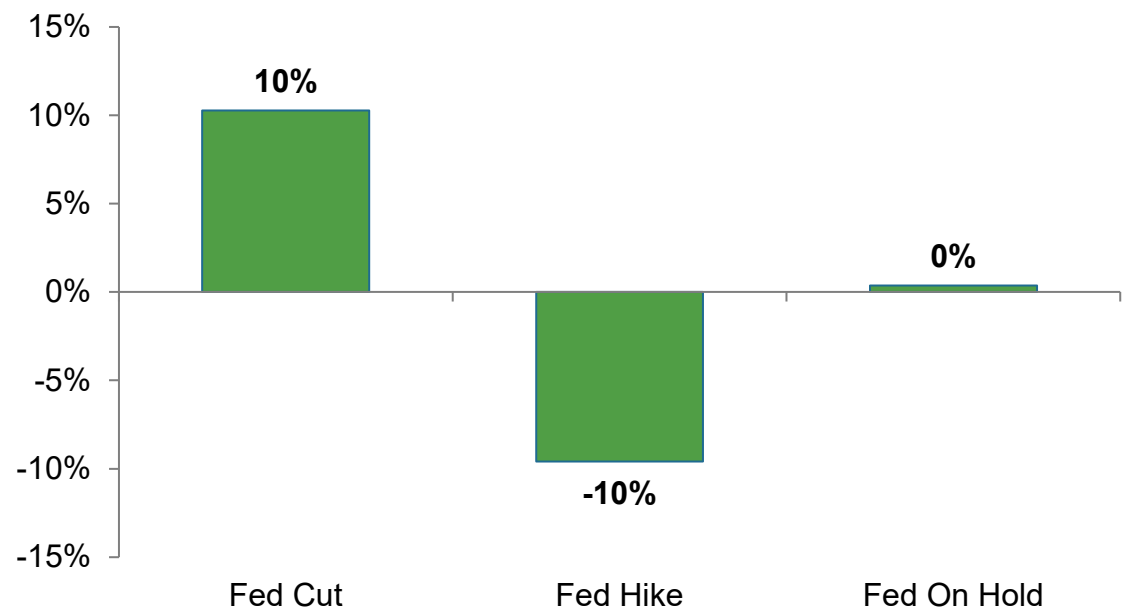
The most rate-sensitive sectors underperformed prior to the September rate cut

Year-over-Year Relative Performance of the Three Sectors Most Negatively Correlated to Rates Versus Bottom Three



In the past, rate-sensitive sectors outperformed before interest rate reductions

Average Rolling Relative Performance of Rate Sensitive Sectors in 12 Months Prior to Fed Cutting or Hiking, 1962–Present



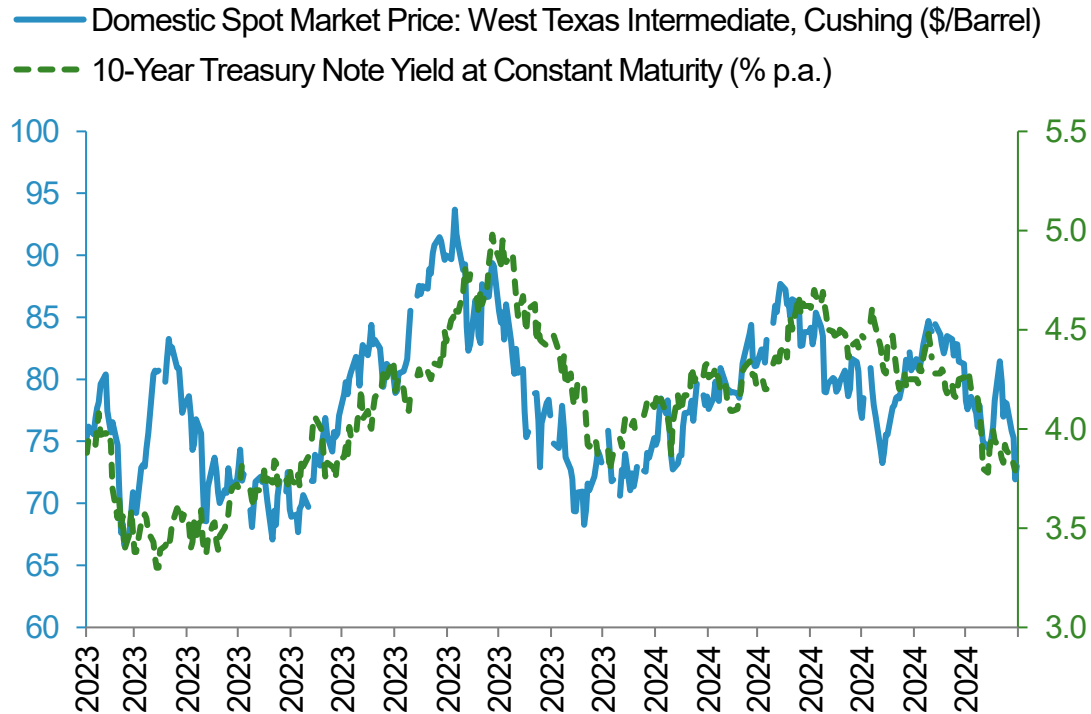
Past performance is no guarantee of future results. Analysis based on the S&P 500. Sources: Haver Analytics, FactSet, Fidelity Investments, as of 6/30/24. Data analyzed monthly since January 1962. LEFT: Most and least rate-sensitive sectors defined by 12-month correlations to interest rates. The most rate-sensitive sectors (financials, real estate, and industrials) had the most-negative correlations; the least rate-sensitive sectors (technology, communications services, and energy) had the least-negative correlations.

Concurrent drops in interest rates and oil price have helped stocks

Both 10-year Treasury interest rates and oil prices declined notably over the six- and 12-month periods through August (left). Simultaneous drops in rates and oil prices have been a strong tailwind for the stock market in the past. Since 1980, when both 10-year rates and oil prices fell 15% or more, the S&P 500 returned an average of 18.9% over the next 12 months (right)—even though oil and interest rates have tended to bounce back after such big declines.

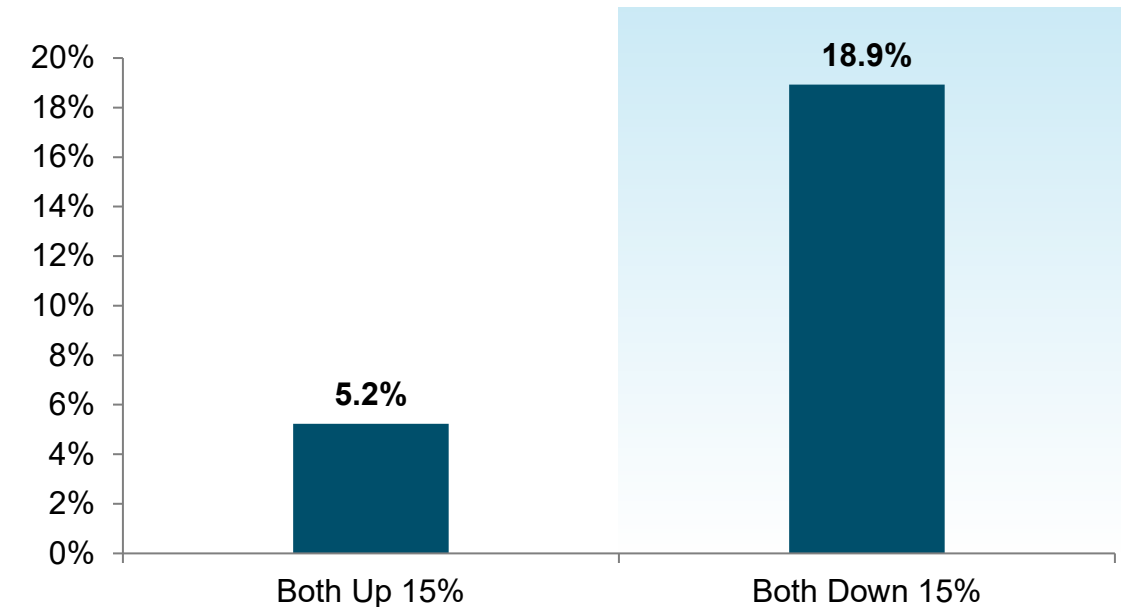
Oil prices and 10-year Treasury rates have fallen

Crude Prices and 10-Year Treasury Interest Rates, February 2023–Present



That dual tailwind has been good for stocks

Average rolling Next-12-month S&P 500 Returns When Crude Prices and Rates Are Up or Down, 1980–Present



Past performance is no guarantee of future results. Sources: Haver Analytics, FactSet, Fidelity Investments. LEFT: Data analyzed daily from February 23, 2023 through August 22, 2024. RIGHT: Analysis based on the S&P 500. Data analyzed monthly from January 1980 through August 2024. Ten-year rates and oil prices have fallen 15% or more 10% of the time since 1962.

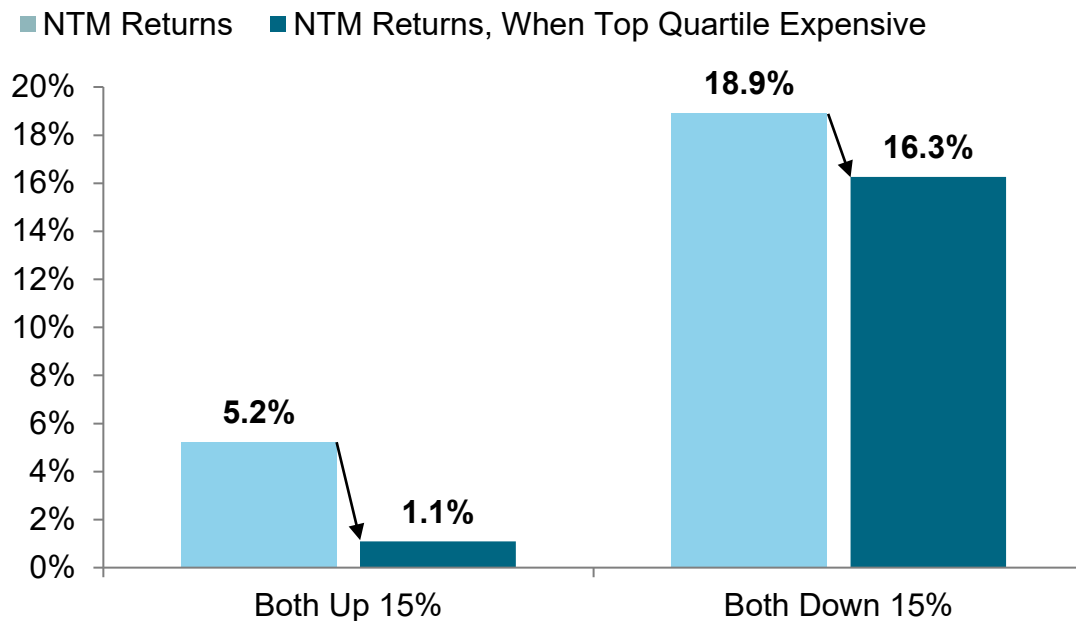


Stocks have benefited even when they've been expensive

Worried that high stock prices could nullify the positive impact of low oil prices and falling rates? This hasn't been the case historically. Since 1980, when the S&P 500 had a top-quartile P/E ratio and both 10-year rates and oil prices fell 15%, stocks returned 16.3% over the next 12 months, on average (left). The earnings tailwind from lower oil and rates was more potent for median stocks among the top 3,000 stocks than for cap-weighted averages, suggesting earnings growth might broaden (right).

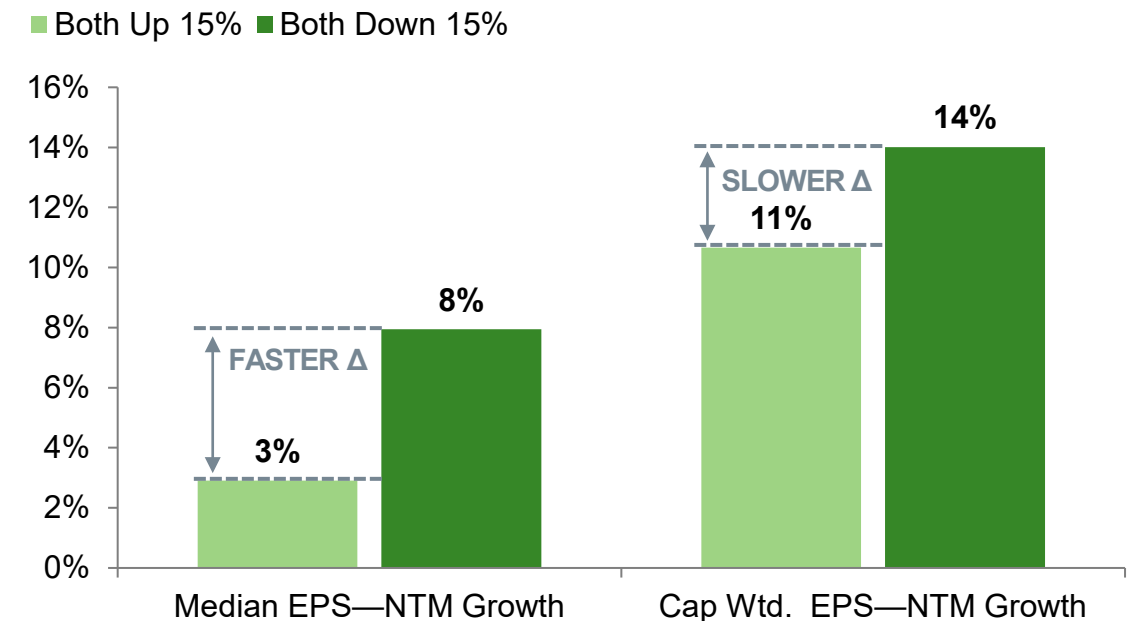
Even when expensive, stocks have outperformed after falling oil and rates

Average rolling NTM S&P 500 Returns when Crude Prices and Interest Rates Are Up or Down 15% and Fwd PE Is at Top-Quartile Levels, 1980–Present



Median stocks' earnings have benefited more than cap-weighted averages

Average rolling Median and Cap Wtd. NTM EPS Growth After Oil and Interest Rate Moves, 1980–Present



Past performance is no guarantee of future results. NTM: Next-12-month. Sources: Haver Analytics, FactSet, Fidelity Investments, as of 7/31/24. Data analyzed monthly since January 1980. **LEFT:** Fwd P/E: Forward price-to-earnings ratio. A forward P/E ratio typically uses an average of analysts' published earnings estimates for the next 12 months. Analysis based on the S&P 500. **RIGHT:** EPS: Earnings per share. Cap Wtd: Capitalization-weighted. A capitalization-weighted index is an index in which each component is weighted by its market capitalization. Delta signal (the triangle) signifies the rate of change. Analysis based on Fidelity top U.S. 3,000 stocks by market capitalization.

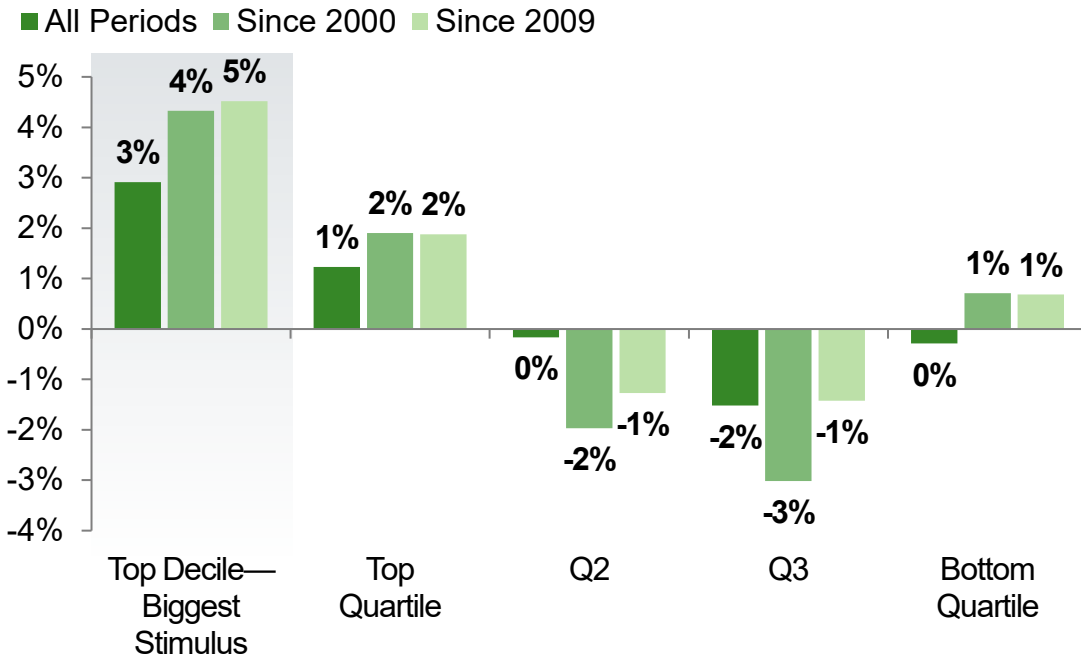


Falling rates and lower crude prices have been good for cyclicals

The combined percentage decline in one-year Treasury yields and crude prices is in the top decile since 1962. When these two key costs fell this far in the past, cyclical sectors tended to outperform the broad market (left), and defensive stocks typically underperformed (right).

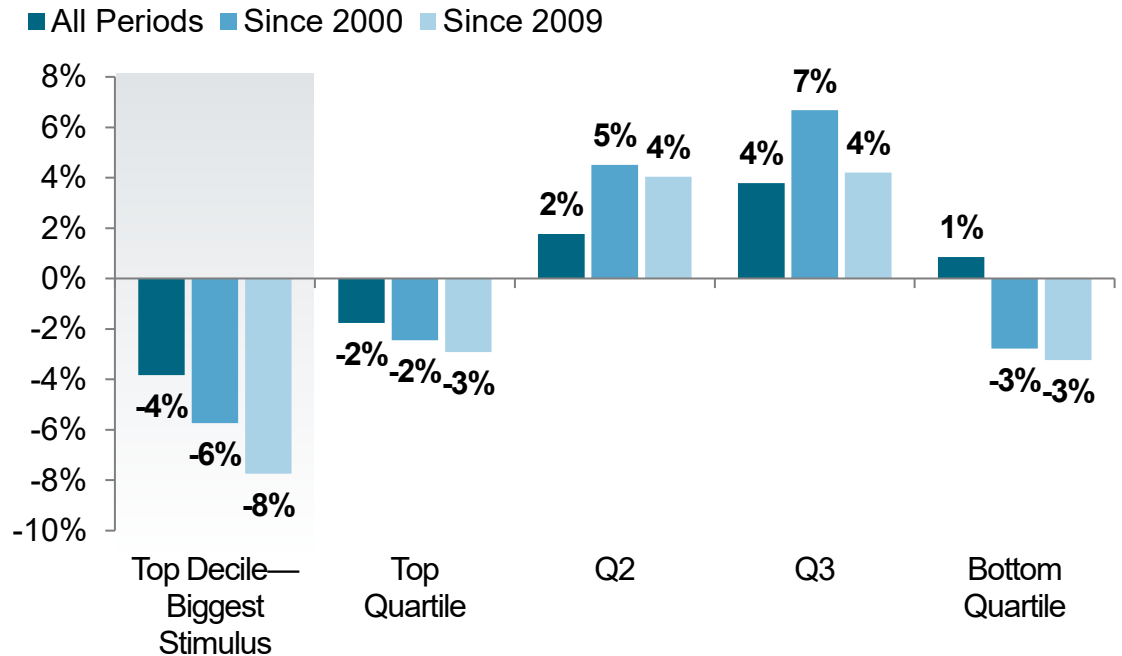
Cyclicals outperformed after declines in oil prices and yields

Cyclical Sectors NTM Relative Performance in Quartiles & Deciles of Prior Combination Percent Change Year Over Year in Crude and 1-Yr Yields, 1962–Present



Defensives lagged after comparable setups

Defensive Sector NTM Relative Performance in Quartiles & Deciles of Prior Combination Percent Change in Crude and 1-Yr Yields, 1962–Present



Past performance is no guarantee of future results. NTM: Next-12-months. Combination percent change year over year in crude prices and 1-yr yields measured by adding percent year over year change of crude prices and 1-yr yields. The result is a proxy for an equal-weighted measure of each. Sector analysis based on Fidelity top U.S. 3,000 stocks by market capitalization. Sources: Haver Analytics, FactSet, Fidelity Investments, as of 8/31/24. Data analyzed monthly since January 1962. **LEFT:** Cyclical sectors include communication services, consumer discretionary, energy, financials, industrials, materials, real estate, and technology. **RIGHT:** Defensive sectors include consumer staples, health care, and utilities.

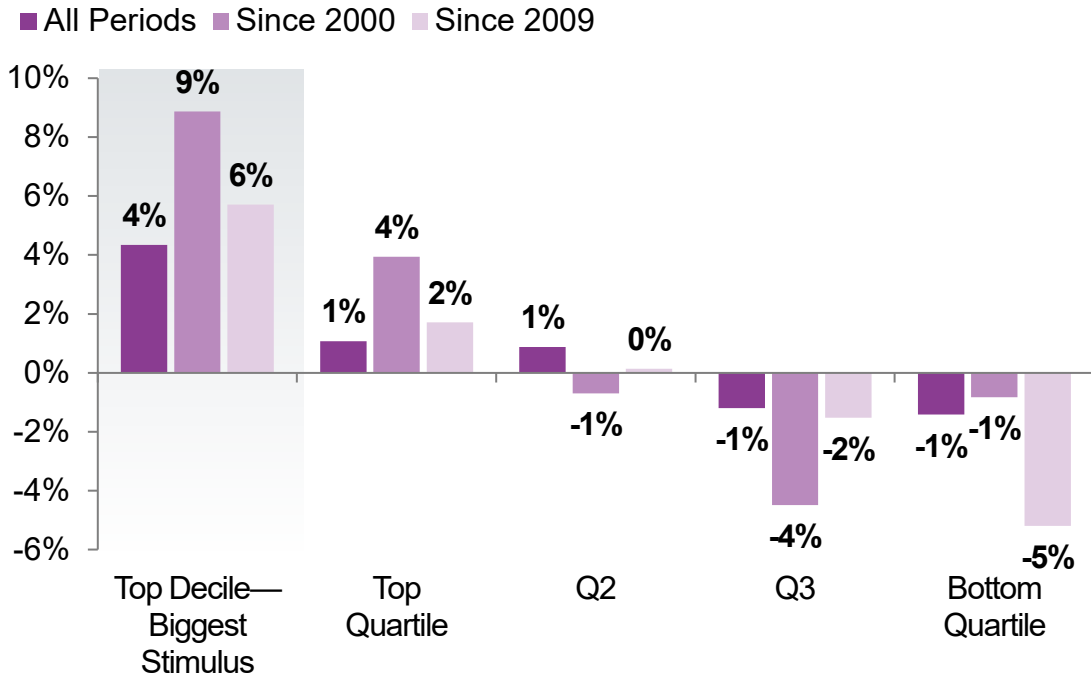


Real estate has benefited from falling rates and lower oil prices

Since 1962, real estate has gained more than any other sector, on average, due to falling rates and lower crude prices (left). This follows logically, as each can aid home affordability. Conversely, the utilities sector underperformed the most during comparable periods, on average (right). This may be because falling rates and lower crude prices made cyclical sectors relatively more attractive than utilities.

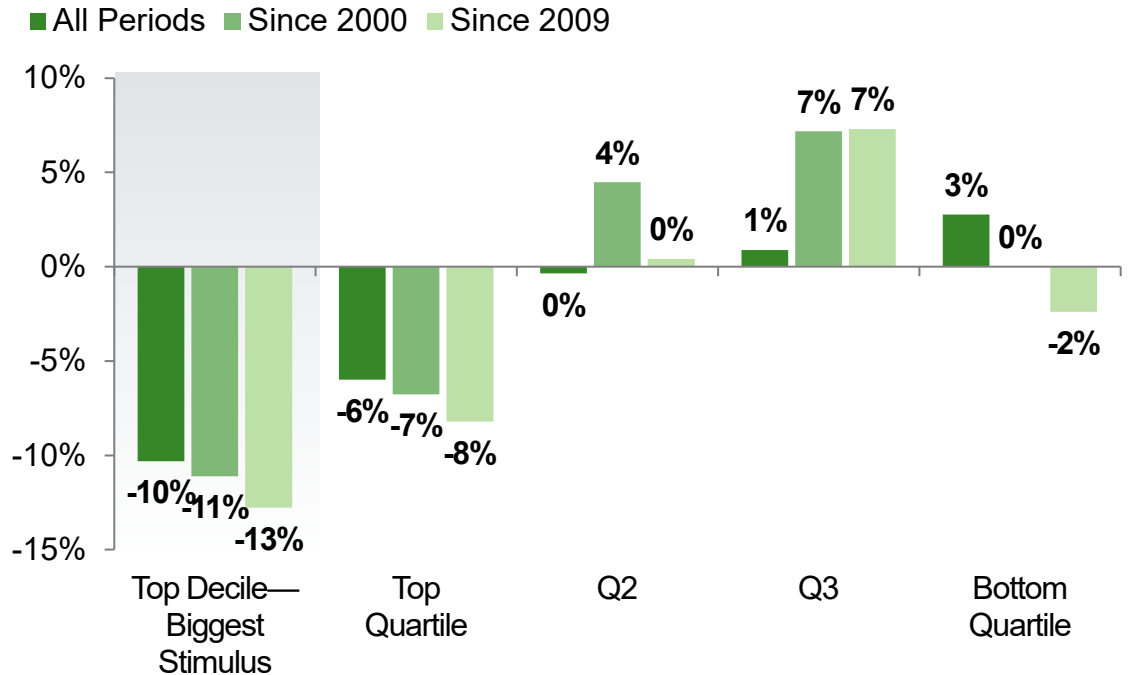
Real estate stocks have outperformed

Real Estate NTM Relative Performance in Quartiles & Deciles of Prior Combination Percent Change in Crude and 1-Yr Treasury Yields, 1962–Present



Utility stocks have underperformed

Utilities NTM Relative Performance in Quartiles & Deciles of Prior Combination Percent Change in Crude and 1-Yr Treasury Yields, 1962–Present



Past performance is no guarantee of future results. NTM: Next-12-months. Analysis based on Fidelity top U.S. 3,000 stocks by market capitalization. Sources: Haver Analytics, FactSet, Fidelity Investments, as of 8/31/2024. Data analyzed monthly since January 1962. LEFT: Combination percent change year over year in crude prices and 1-yr yields measured by adding percent year over year change of crude prices and 1-yr yields. The result is a proxy for an equal weighted measure of each.

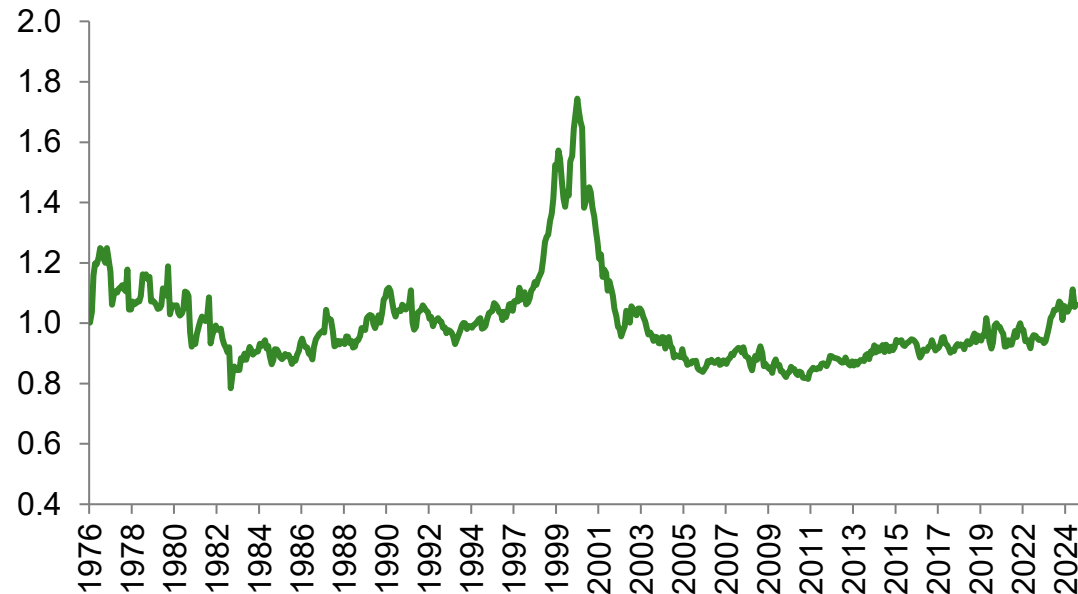


The valuation gap between big and smaller stocks might shrink

As of September 2024, the largest stocks by market cap were more expensive than smaller stocks. As a result, the valuation gap between cap-weighted indices and the median stock among the largest 3,000 stocks hit the top quartile of its historical range dating back to 1962 for the first time in close to 25 years (left). Since 1976, after this valuation discrepancy rose into the top quartile and the Fed cut rates, the gap subsequently shrunk, on average, giving a tailwind to smaller stocks (right).

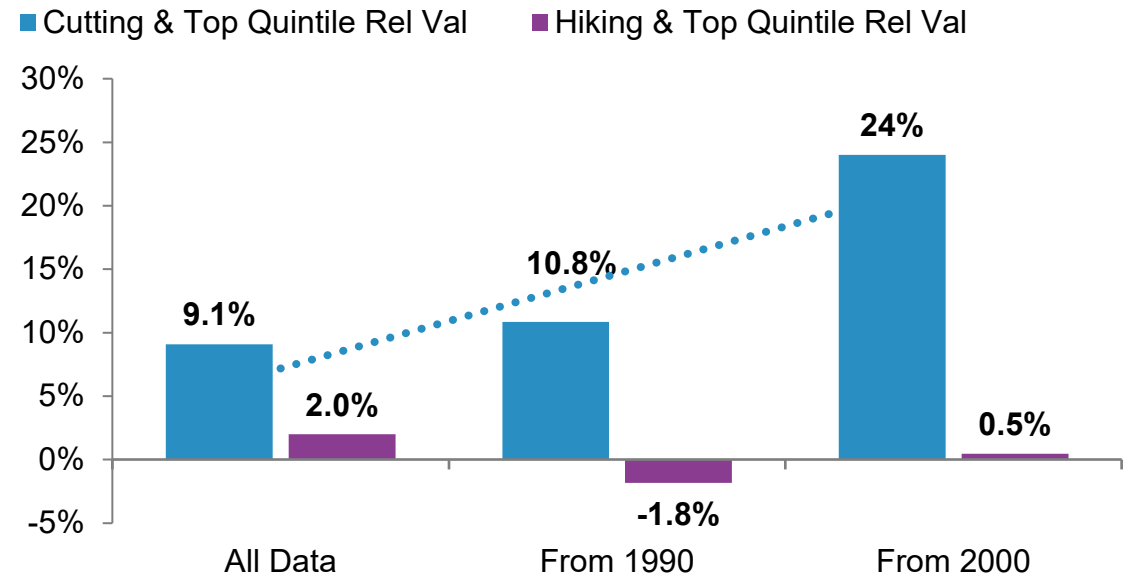
The valuation gap between cap- and equal-weighted indices has grown

Cap Weighted Fwd P/E vs. Median Fwd P/E in the Russell 3000, 1976-Present



Lower rates might help shrink that gap

Percent Change of Next-12-Month Fwd P/E, Median vs. Cap-Weighted, when Fed is Cutting or Hiking and Valuation Gap Is Top Quartile, 1976–Present



Past performance is no guarantee of future results. Rel Val is relative valuation. Fwd P/E: Forward price-to-earnings ratio. A forward P/E ratio typically uses an average of analysts' published earnings estimates for the next 12 months. Cap-Weighted Fwd P/E: Forward price-to-earning, weighted by company market capitalization. Analysis based on Fidelity top U.S. 3,000 stocks by market capitalization. Data analyzed monthly since January 1962. Sources: Haver Analytics, FactSet, Fidelity Investments, as of 6/30/24..

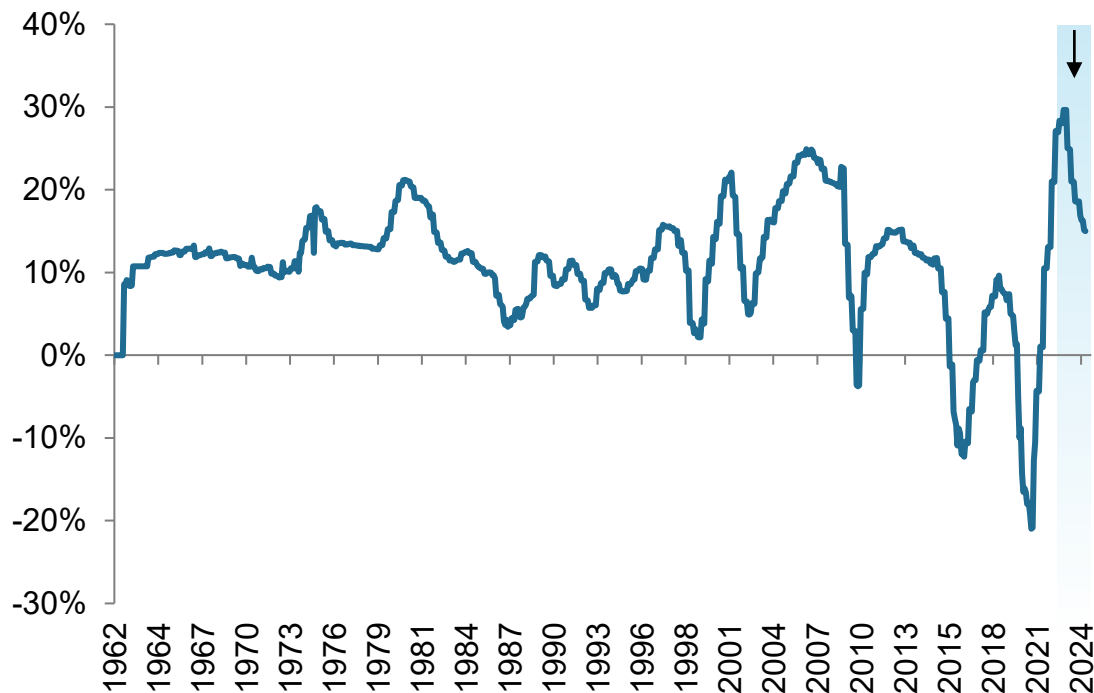


Energy stocks could struggle

Energy stock fundamentals have declined, with the sector's return on equity (ROE) dropping sharply from top-quartile levels (left). This has been a negative setup for the sector in the past. Since 1962, energy has lagged the market, on average, after reaching top-quartile ROE, especially when ROE already had started falling (right). The effect has been especially pronounced since 2008, which marked the end of the China-driven commodities super cycle.

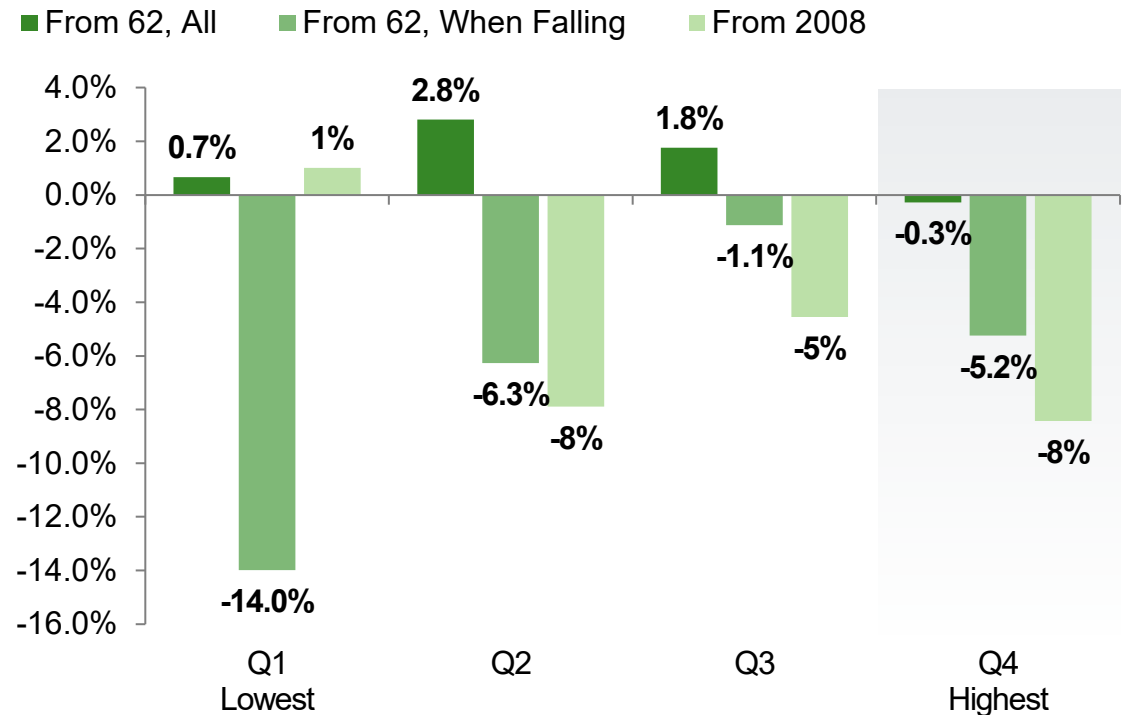
Energy fundamentals have fallen off their peaks

Energy Sector Return on Equity



Energy's relative performance has suffered after top-quartile ROE

Next-12-Month Relative Performance in Quartiles of ROE, 1962–Present



13 Past performance is no guarantee of future results. Analysis based on Fidelity top U.S. 3,000 stocks by market capitalization. Sources: Haver Analytics, FactSet, Fidelity Investments, as of 8/31/24. Data analyzed monthly since January 1962.

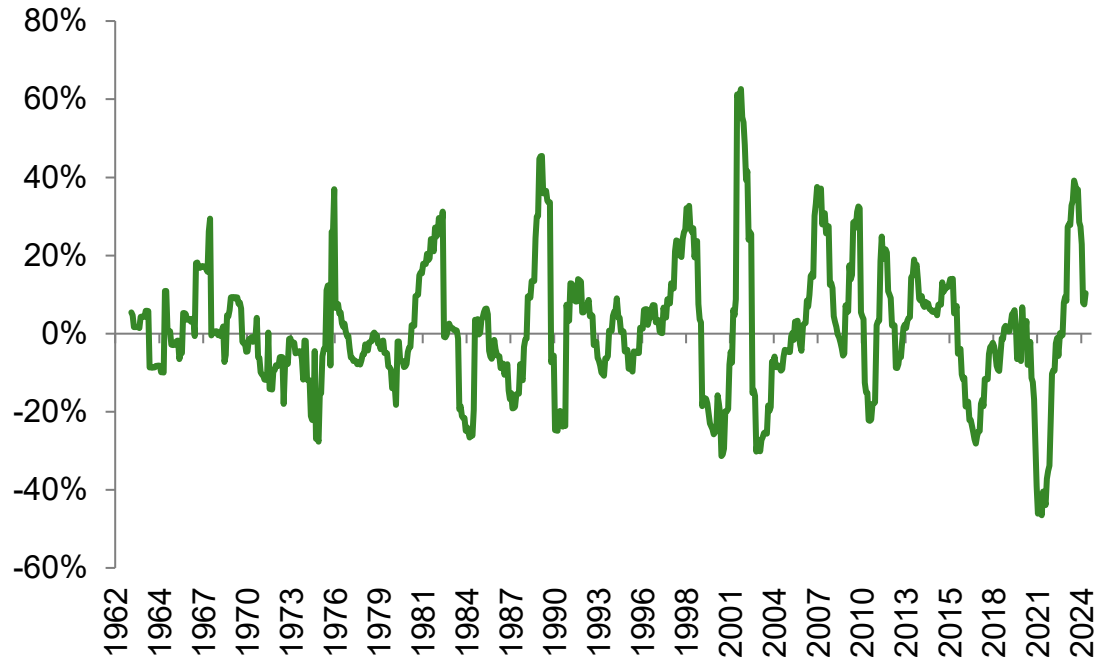


High capex-to-sales is another warning sign for energy stocks

More bad news for the energy sector: The rate of change of the capital expenditures-to-sales ratio has been in the top decile of its historical range since 1962 (left). Increasing capex-to-sales tends to be bad for energy companies' free cash flow, which can hurt stock performance. Historically, when the energy sector's increase in capex-to-sales reached the top quartile, the sector lagged the market over the next 12 months, on average (right).

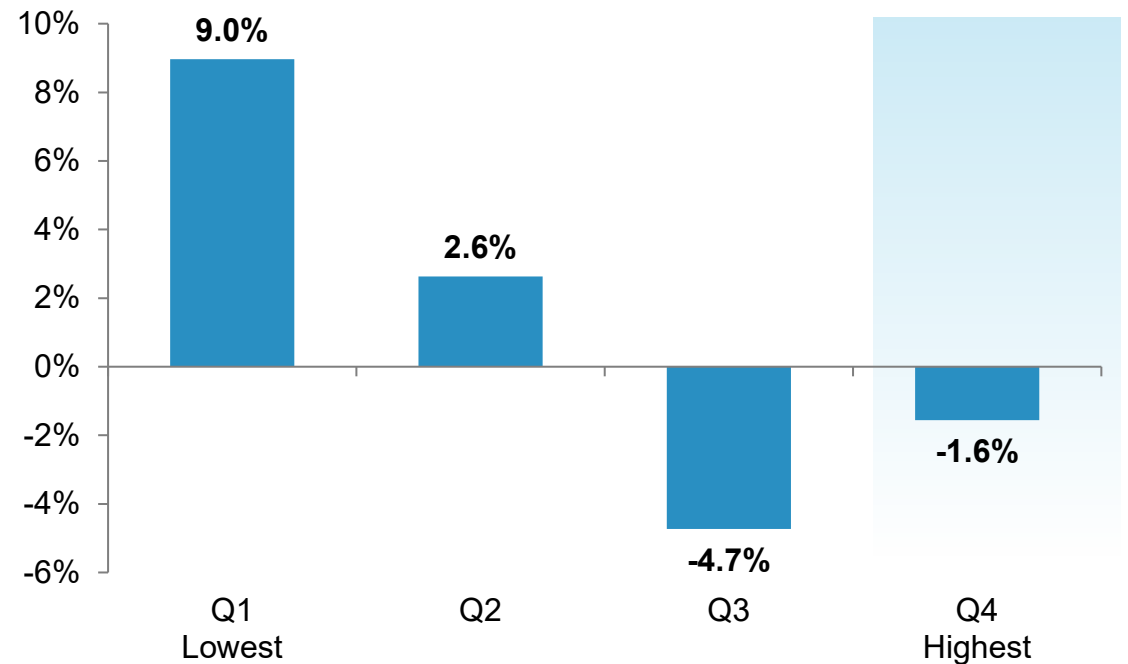
Energy capital expenditures-to-sales has been high

Year-to-Year Percent Change, Energy Sector CAPEX/Sales, 1962–Present



Energy has underperformed after elevated capex/sales

Next-12-Month Relative Performance in Quartiles of Percent Change in Capex/Sales, 1962–Present



High production is yet another bearish sign for energy

U.S. production of crude oil recently reached a near-historic high (left). Historically, this hasn't been good for oil stocks because greater production tends to lead to rising supplies, which in turn bring down oil prices and profits. Since 1962, energy stocks have lagged the market by 3.7% over the next 12 months, on average (right) after reaching top-quartile production levels.

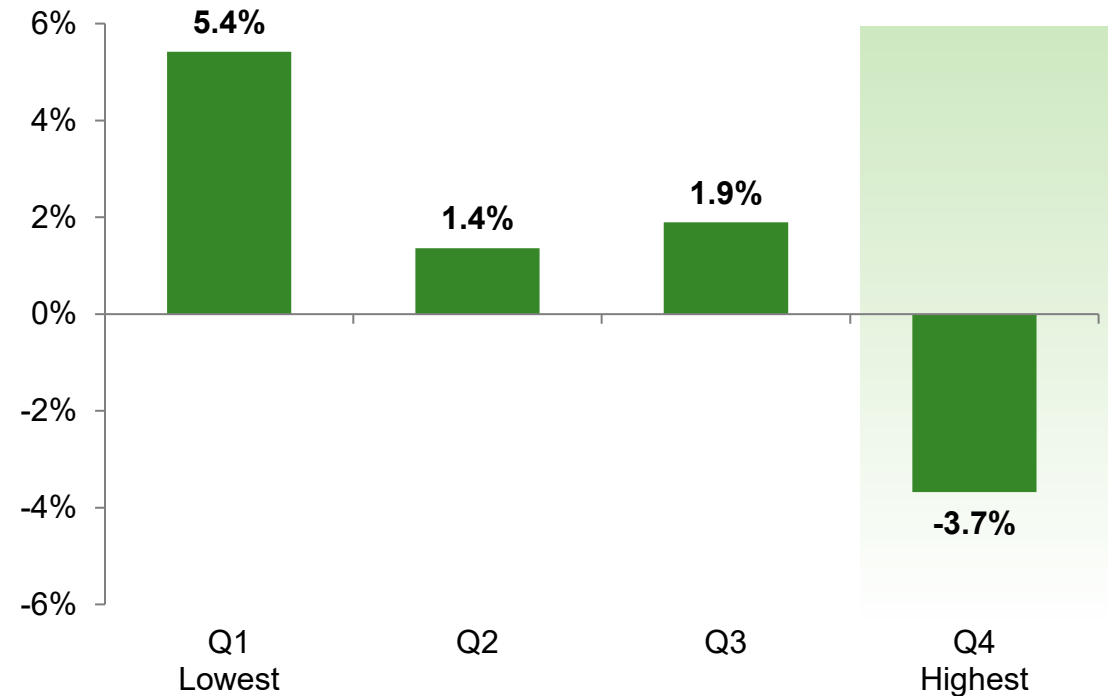
Crude production is near historic highs

U.S. Field Production of Crude Oil in Thousands of Barrels, 1921–Present



After big growth in U.S. oil production, energy stocks underperformed

Next-12-Month Relative Performance in Quartiles of U.S. Production Growth, 1962–Present



Past performance is no guarantee of future results. Sources: Haver Analytics, FactSet, Fidelity Investments, as of 8/31/2024. Data analyzed monthly since January 1962.

Glossary and methodology

Glossary

Book Yield: Calculates the yield to maturity, or the coupon return plus amortization, of a fixed-income investment.

Cycle Hit Rate: Calculates the frequency of a sector outperforming the broader equity market over each business cycle phase since 1962.

Dividend Yield: Annual dividends per share divided by share price.

Earnings before Interest, Taxes, Depreciation, and Amortization (EBITDA): A non-GAAP measure often used to compare profitability between companies and industries, because it eliminates the effects of financing and accounting decisions.

Earnings-per-Share Growth: Measures the growth in reported earnings per share over the specified past time period.

Earnings Yield: Earnings per share divided by share price. It is the inverse of the price-to-earnings (P/E) ratio.

Enterprise Value: A measure of a company's total value that includes its market capitalization as well as short- and long-term debt and cash on its balance sheet.

Free Cash Flow (FCF): The amount of cash a company has remaining after expenses, debt service, capital expenditures, and dividends. High free cash flow typically suggests stronger company value.

Free-Cash-Flow Margin: The amount of free cash flow as a percentage of revenue. High FCF margin often denotes strong profitability.

Free-Cash-Flow Yield: Free cash flow per share divided by share price. A high FCF yield often represents a good investment opportunity, because investors would be paying a reasonable price for healthy cash earnings.

Full-Phase Average Performance: Calculates the (geometric) average performance of a sector in a particular phase of the business cycle and subtracts the performance of the broader equity market.

Median Monthly Difference: Calculates the difference in the monthly performance of a sector compared with the broader market, and then takes the midpoint of those observations.

Price-to-Book (P/B) Ratio: The ratio of a company's share price to reported accumulated profits and capital.

Price-to-Earnings (P/E) Ratio: The ratio of a company's current share price to its reported earnings. A forward P/E ratio typically uses an average of analysts' published earnings estimates for the next 12 months.

Price-to-Sales (P/S) Ratio: The ratio of a company's current share price to reported sales.

Relative Strength: The comparison of a security's performance relative to a benchmark, typically a market index.

Return on Equity (ROE): The amount, expressed as a percentage, earned on a company's common stock investment for a given period.

Risk Decomposition: A mathematical analysis that estimates the relative contribution of various sources of volatility.

Methodology

Strategist View: Our sector strategist, Denise Chisholm, tracks key indicators that have influenced the historical likelihood of outperformance of each sector. This historical probability analysis informs the Strategist Views.

Fundamentals: Sector rankings are based on equally weighting the following four fundamental factors: EBITDA growth, earnings growth, ROE, and FCF margin. However, we evaluate the financials and real estate sectors only on earnings growth and ROE because of differences in their business models and accounting standards.

Relative Strength: Compares the strength of a sector versus the S&P 500 index over a six-month period, with a one-month reversal on the latest month; identifying relative strength patterns can be a useful indicator of short-term sector performance.

Relative Valuations: Valuation metrics for each sector are relative to the S&P 500. Ratios compute the current relative valuation divided by the 10-year historical average relative valuation, eliminating the top 5% and bottom 5% values to reduce the effect of potential outliers. Sectors are then ranked by their weighted average ratios, weighted as follows: P/E: 37%; P/B: 21%; P/S: 21%; and FCF yield: 21%. However, the financials and real estate sectors are weighted as follows: P/E: 65% and P/B: 35%.

Appendix

Information presented herein is for discussion and illustrative purposes only and is not a recommendation or an offer or a solicitation to buy or sell any securities. Views expressed are as of 9/30/24, based on the information available at that time, and may change based on market and other conditions. Unless otherwise noted, the opinions provided are those of the authors and not necessarily those of Fidelity Investments or its affiliates. Fidelity does not assume any duty to update any of the information.

Information provided in, and presentation of, this document are for informational and educational purposes only and are not a recommendation to take any particular action, or any action at all, nor an offer or solicitation to buy or sell any securities or services presented. It is not investment advice. Fidelity does not provide legal or tax advice.

References to specific investment themes are for illustrative purposes only and should not be construed as recommendations or investment advice. Investment decisions should be based on an individual's own goals, time horizon, and tolerance for risk.

This piece may contain assumptions that are "forward-looking statements," which are based on certain assumptions of future events. Actual events are difficult to predict and may differ from those assumed. There can be no assurance that forward-looking statements will materialize or that actual returns or results will not be materially different from those described here.

Past performance is no guarantee of future results.

Investing involves risk, including risk of loss.

All indexes are unmanaged. You cannot invest directly in an index. Index or benchmark performance presented in this document does not reflect the deduction of advisory fees, transaction charges, and other expenses, which would reduce performance.

Stock markets are volatile and can decline significantly in response to adverse issuer, political, regulatory, market, or economic developments.

Because of its narrow focus, sector investing tends to be more volatile than investments that diversify across many sectors and companies. Sector investing is also subject to the additional risks associated with its particular industry. The energy sector is defined as companies whose businesses are dominated by either of the following activities: the construction or provision of oil rigs, drilling equipment, or other energy-related services and equipment, including seismic

data collection; or the exploration, production, marketing, refining, and/or transportation of oil and gas products, coal, and consumable fuels. Financials: companies involved in activities such as banking, consumer finance, investment banking and brokerage, asset management, and insurance and investments.

The energy industries can be significantly affected by fluctuations in energy prices and supply and demand of energy fuels, energy conservation, the success of exploration projects, and tax and other government regulations.

The technology industries can be significantly affected by obsolescence of existing technology, short product cycles, falling prices and profits, competition from new market entrants, and general economic condition.

The health care industries are subject to government regulation and reimbursement rates, as well as government approval of products and services, which could have a significant effect on price and availability, and can be significantly affected by rapid obsolescence and patent expirations.

Industrial industries can be significantly affected by general economic trends, changes in consumer sentiment and spending, commodity prices, legislation, government regulation and spending, import controls, worldwide competition, and liability for environmental damage, depletion of resources, and mandated expenditures for safety and pollution control.

The materials industries can be significantly affected by the level and volatility of commodity prices, the exchange value of the dollar, import and export controls, worldwide competition, liability for environmental damage, depletion of resources, and mandated expenditures for safety and pollution control.

Changes in real estate values or economic downturns can have a significant negative effect on issuers in the real estate industry. The value of securities of issuers in the real estate industry can be affected by changes in real estate values and rental income, property taxes, interest rates, tax and regulatory requirements, and the management skill and creditworthiness of the issuer.

The utilities industries can be significantly affected by government regulation, financing difficulties, supply and demand of services or fuel, and natural resource conservation.

Appendix

Index Definitions: The Russell 3000® Index is a market capitalization-weighted index designed to measure the performance of the 3,000 largest companies in the U.S. equity market.

The S&P 500® index is a market capitalization-weighted index of 500 common stocks chosen for market size, liquidity, and industry group representation to represent U.S. equity performance. S&P 500 is a registered service mark of Standard & Poor's Financial Services LLC. Sectors and industries are defined by the Global Industry Classification Standard (GICS).

The S&P 500 sector indexes include the standard GICS sectors that make up the S&P 500 index. The market capitalization of all S&P 500 sector indexes together comprises the market capitalization of the parent S&P 500 index; each member of the S&P 500 index is assigned to one (and only one) sector.

Sectors are defined as follows: **Communication Services:** companies that facilitate communication or provide access to entertainment content and other information through various types of media. **Consumer Discretionary:** companies that provide goods and services that people want but don't necessarily need, such as televisions, cars, and sporting goods; these businesses tend to be the most sensitive to economic cycles. **Consumer Staples:** companies that provide goods and services that people use on a daily basis, like food, household products, and personal-care products; these businesses tend to be less sensitive to economic cycles. **Energy:** companies whose businesses are dominated by either of the following activities: the construction or provision of oil rigs, drilling equipment, or other energy-related services and equipment, including seismic data collection; or the exploration, production, marketing, refining, and/or transportation of oil and gas products, coal, and consumable fuels. **Financials:** companies involved in activities such as banking, consumer finance, investment banking and brokerage, asset management, and insurance and investments. **Health Care:** companies in two main industry groups: health care equipment suppliers and manufacturers, and providers of health care services; and companies involved in the research, development, production, and marketing of pharmaceuticals and biotechnology products. **Industrials:** companies whose businesses manufacture and distribute capital goods, provide commercial services and supplies, or provide transportation services. **Materials:** companies that are engaged in a wide range of commodity-related manufacturing. **Real Estate:** companies in two main industry groups—real estate investment trusts (REITs), and real estate management and development companies. **Technology:** companies in technology software and services and technology hardware and equipment. **Utilities:** companies considered to be electric, gas, or water utilities, or companies that operate as independent producers and/or distributors of power.

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