CERTUITY®

Research Review

November 2023

Following three consecutive months of performance struggles, financial markets rallied strongly in November as global investors welcomed evidence of cooling inflation and anticipated a near-term policy pivot by the Federal Reserve (Fed)—both of which helped drive a historical monthly easing across U.S. financial conditions. Global equity returns were robust and reflected an increase in breadth during the month, as international developed equities (MSCI EAFE Index) slightly outperformed domestic markets (S&P 500 Index), with emerging markets (MSCI Emerging Markets Index) close behind, earning total returns of 9.3%, 9.1%, and 8.0%, respectively. Consistent with the ongoing strong positive correlation between stock and bond returns, fixed income markets enjoyed solid performance in November, with core bonds (Bloomberg U.S. Aggregate Bond Index) returning 4.5%, the largest monthly gain since May 1985. A similar upward bias was witnessed across most major real assets sectors, with the rate-sensitive real estate investment trust (REIT) sector posting a double-digit gain and global listed infrastructure also exhibiting performance tailwinds. However, the global economic growth-sensitive commodity futures sector was one of the few major asset categories that declined in November.

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Economic Update

Financial Markets Regain Footing as Financial Conditions Ease Meaningfully

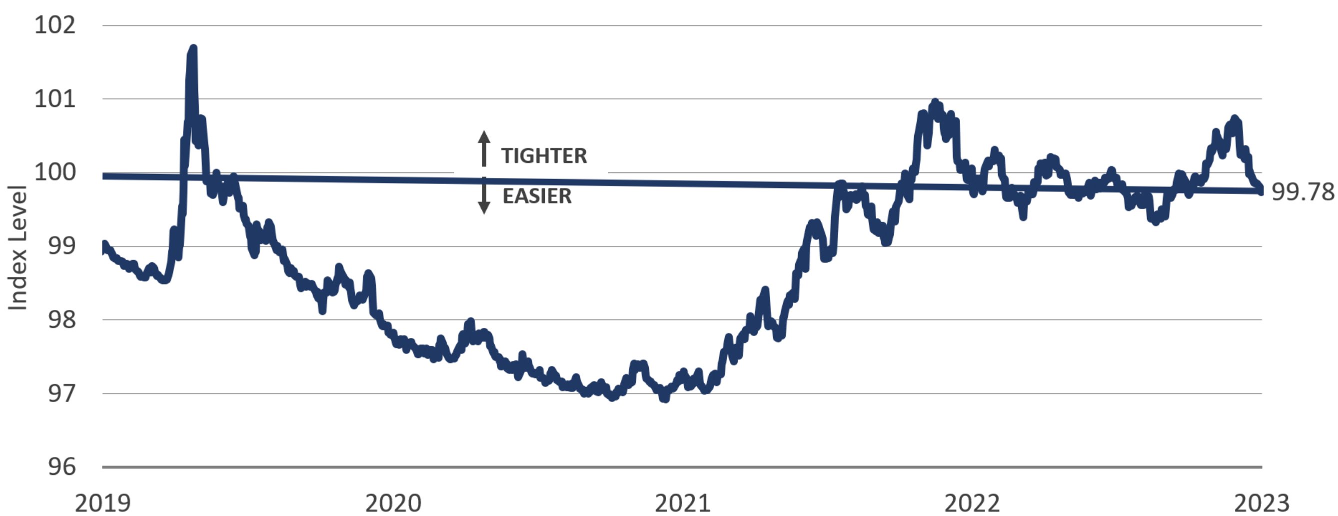
"In November, incoming inflationary data continued to reflect a clear disinflationary trajectory." - Mike O'Connor, CFA, CAIA

The Fed's initiation of the monetary policy tightening process following the global pandemic easing largesse, a move launched in December 2021, helped to tighten broader financial cond-itions considerably and represented a pivotal headwind to financial markets throughout 2022. This deliberate tightening in monetary conditions to reduce inflationary pressures meant a sharp increase in interest rates that also supported the U.S. dollar (USD), helped to invert the Treasury yield curve, and placed downward pressure on risk premiums across many key financial sectors.

When viewed in conjunction with early warning signs of a slowdown across the labor market, this data prompted financial market participants to quickly revise downward their expectations for how the policy rate might trend over the coming quarters.

Through October, the fed funds futures curve implied an expected year-end level for the policy rate of 4.67%. By November, however, futures traders had re-priced their expectations for the year-end policy level nearly 50 basis points lower to a 4.19% expected rate. Importantly, expectations for the first 25 basis-point cut to the policy rate were pulled forward as well, with October's fed funds futures curve implying the first cut is expected in July 2024—versus the May 2024 implication of November's pricing.

GOLDMAN SACHS U.S. FINANCIAL CONDITIONS INDEX



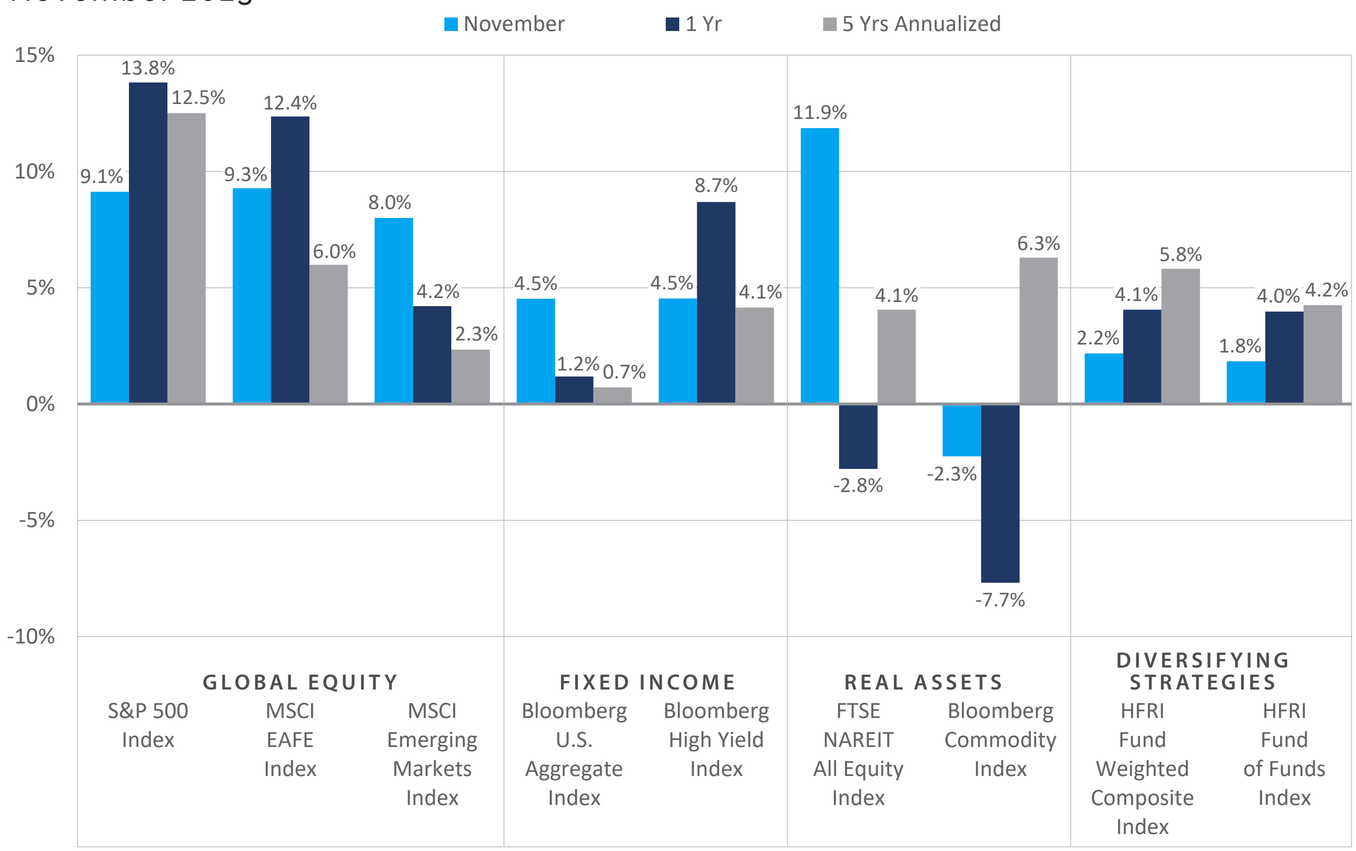
Data sources: Goldman Sachs, Bloomberg, L.P.

Increasing market-based sentiment for a near-term Fed policy pivot helped lead to a dramatic easing in financial conditions in November, a key pillar of support behind November's exceptionally strong financial market performance. The Goldman Sachs U.S. Financial Conditions Index, a composite comprised of inputs such as riskless interest rates, the U.S. dollar exchange rate, equity valuations, and credit risk premiums, notched its strongest monthly easing reading in its more than 40-year history, with a 0.9 percentage point decline in November.

To conclude, increased visibility on a potential near-term policy reversal by the Fed—supported by moderating inflation, a recent cooling bias across the labor markets, and persistent cyclical growth pressures—helped ease financial conditions considerably and underpinned a broad-based rally across the financial market in November.

Market Summary

November 2023



Data source: Lipper, HedgeFund Research.

Global Equity

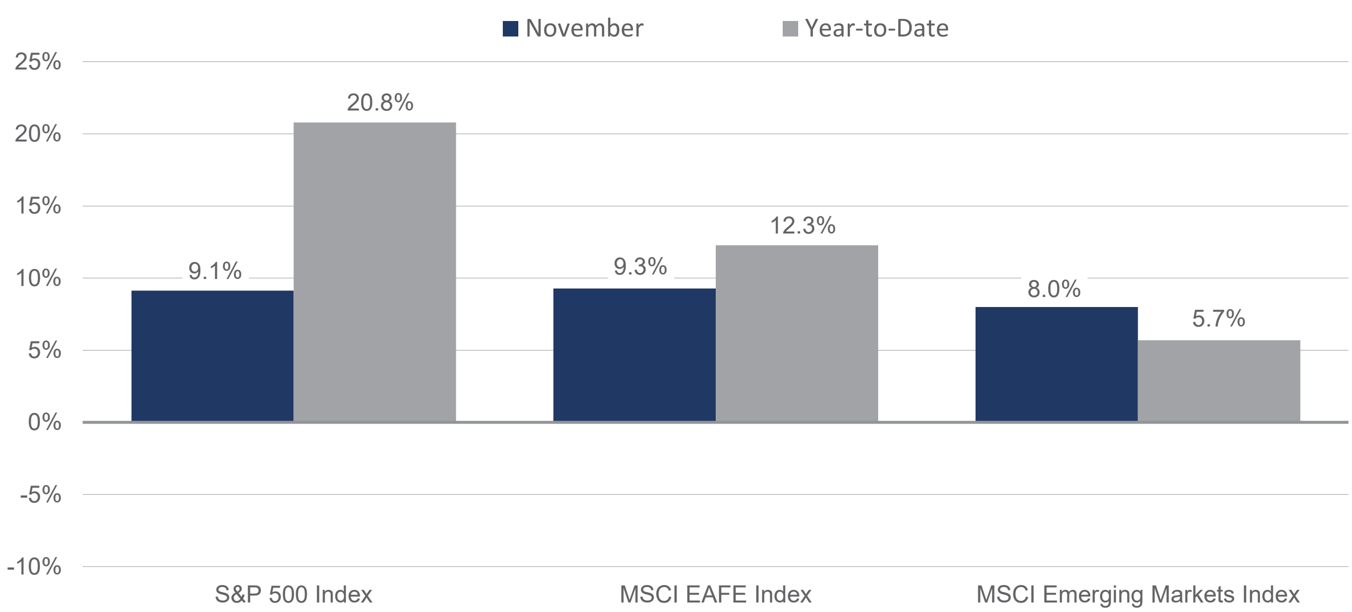
Global equity markets produced positive returns over the month of November. Falling inflation across developed markets benefited equity performance as investors saw reasons for easing hawkish monetary policies. Performance globally was led by information technology (IT), which was the top-performing sector across major regional equity indices, benefiting from expectations of lower interest rates.

Globally, the U.S. equity market was one of the top-performing regions. The S&P 500 Index and NASDAQ Index saw their most substantial monthly gains since July 2022. Performance over November was partly driven by October's consumer price index (CPIprint, falling to 3.2% year-over-year from 3.7% in September. The so-called Magnificent Seven technology-related mega-cap stocks have been a primary driver of S&P 500 Index performance in 2023, but their influence declined in November's rally, indicating a better breadth of solid performance.

European equities gained over 10%, outpacing the S&P 500 Index. Similar to the U.S., lower-than-expected inflation provided a positive backdrop for European stocks. Although inflation is declining, other economic data points showed weakness in the European economy. November's PMI figure came in below 50, which marks the sixth consecutive month the data has signaled economic contraction. The financials sector was one of the top-performing sectors in the region, benefitting from stronger interest margins and higher profits.

PERFORMANCE ACROSS GLOBAL MARKETS WAS STRONG

Equity Indices Performance Returns (U.S. Dollars



Data sources: S&P, MSCI

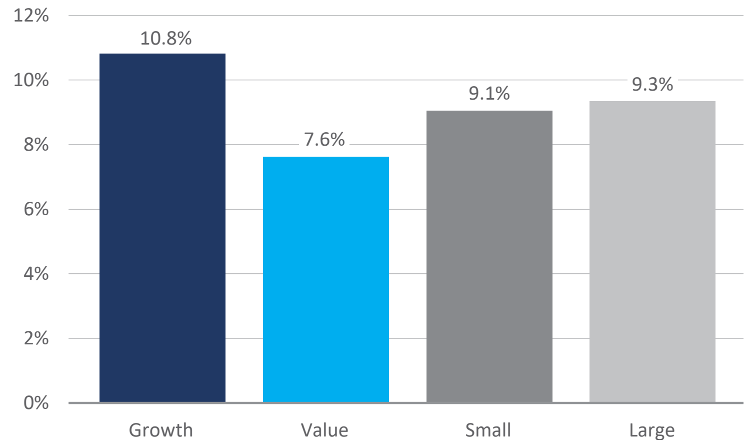
The United Kingdom finished the month with positive equity returns, although the market lagged the European region. In the UK, energy was the worst-performing sector due to declining energy and gas prices, which were the major contributors to declining inflationary pressures.

Japanese stocks posted gains only slightly below those of other major regions. U.S. investors have experienced dampened returns from a strengthening dollar in recent years. November marked a reversal as the Japanese yen appreciated against the USD, benefiting U.S. investor returns. Smaller cap stocks in Japan lagged large cap as economically sensitive areas of the market underperformed due to a contraction of the nation's GDP.

Emerging market equity returns were positive for the month but underperformed developed markets. South Korea and Taiwan produced strong returns due to a rally in technology-related stocks. China lagged other Asian emerging market countries as concerns around the ongoing real estate crisis hurt sentiment. Latin America was the top-performing region, led by Mexico and Brazil. Substantial currency gains supported the Mexico market's performance, and the Brazilian economy showed positive signs of disinflation.

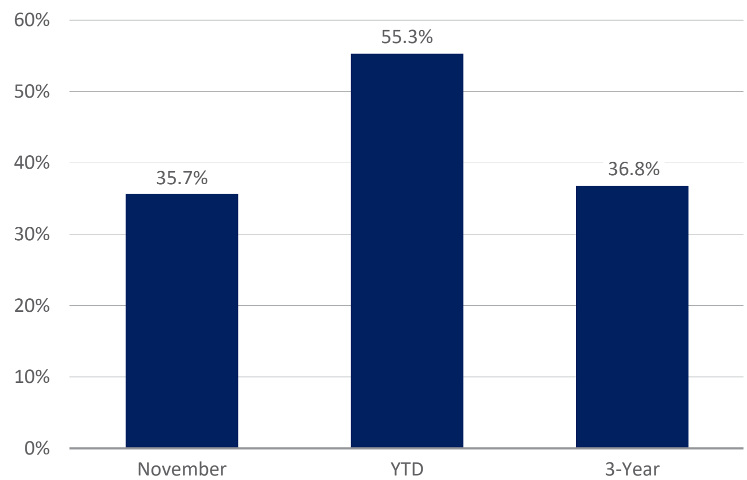
GROWTH LEADS AMID DECLINING RATE RALLY

U.S. Style Returns



Data source: FTSE Russell

MAGNIFICENT SEVEN CONTRIBUTION TO S&P 500 MAY BE NORMALIZING



Data source: FactSet

Fixed Income

Global bond markets rallied in response to weaker economic data, which shifted expectations of future monetary policy and led to tighter spreads. The Fed's confidence in moderating inflation led the market to perceive a reduced likelihood of further rate hikes.

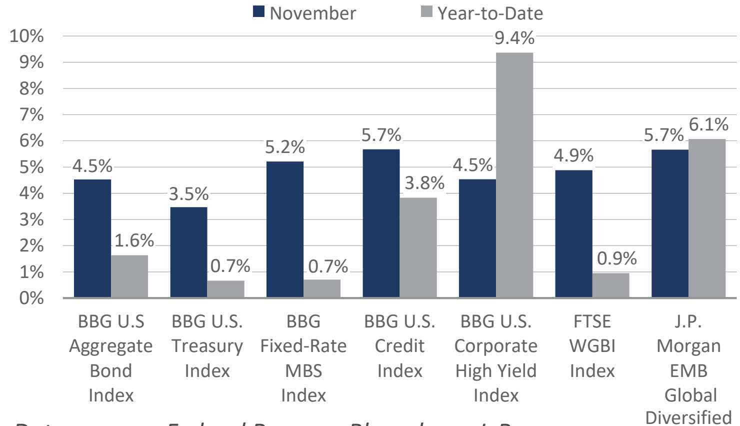
As signs of a cooling economy emerge and expectations for easier monetary policy are anticipated, investors previously positioned short on duration hastened their short covering amid the Treasury rally. Active asset managers aimed to safeguard capital entering 2023 by positioning portfolio duration shorter than the Bloomberg U.S. Aggregate Bond Index (BAGG). In anticipation of a Fed policy shift in 2024, active managers have begun shifting away from this stance, even moving to overweight positions. This enabled some active managers to outperform the BAGG in November.

Recent trends in credit markets highlight a preference for higher-quality assets, with lower-rated segments trailing their higher-quality counterparts. Commercial real estate fundamentals have been weakened by increased downgrades and defaults. Borrowing costs have increased dramatically, and credit tightening from regional banks has constrained access to capital for borrowers, intensifying downward pressure on property values.

Recessionary fears are still on the rise in the euro zone. However, November provided some positive data as the Eurozone Purchasing Managers' Index came in at 44.2, which was better than consensus expectations yet still down from October's 46.5. This was the weakest figure in nearly three years, as both services and manufacturing showed weakness. The data reinforced the impression of a sluggish economy flirting with recession.

FALLING RATES TRIGGER BOND RALLY

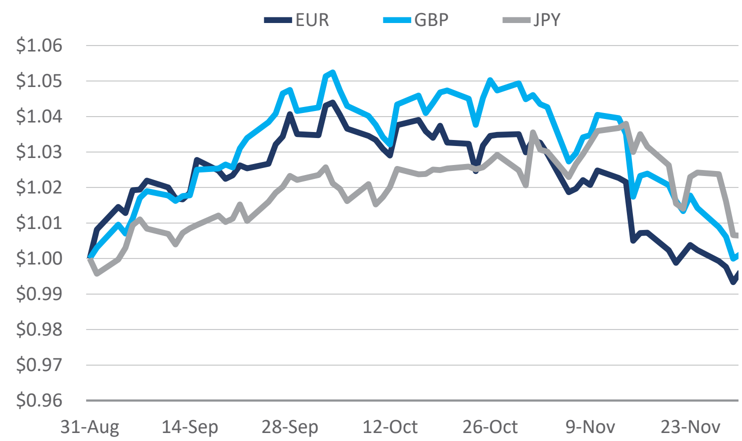
Fixed Income Returns



Data sources: Federal Reserve, Bloomberg, L.P.

THE DOLLAR'S RECENT GAINS RECEDE WITH FALLING RATES

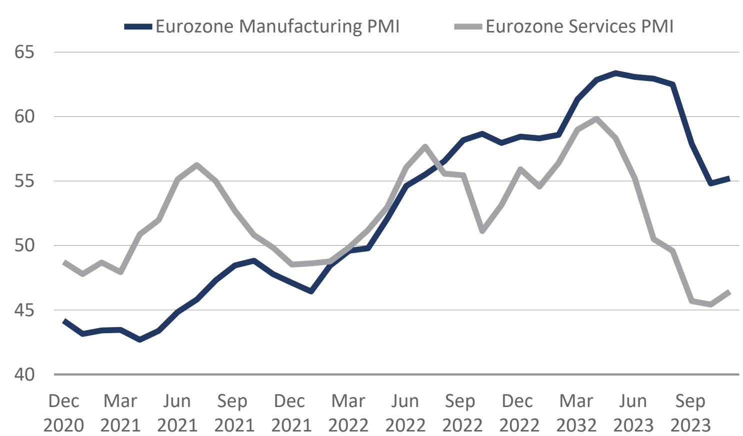
USD/Developed Market Currencies (Growth of $1)



Data source: FactSet

THE EURO ZONE CONTINUES TO SHOW WEAKNESS

Eurozone PMI



Data source: FactSet; Data as of December 11, 2023

Real Assets

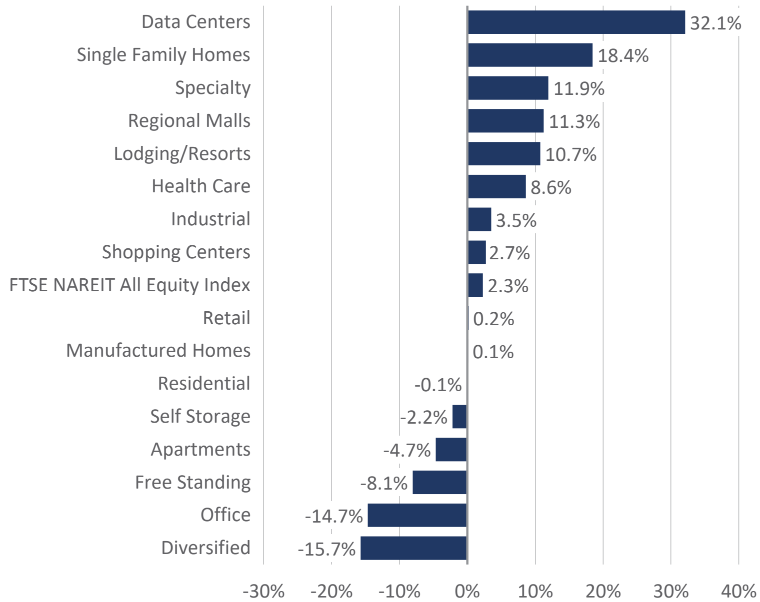
Real Estate

U.S. and Global Developed Real Estate Investment Trusts (REITs) rallied in November as nominal rates declined. REITs have remained under pressure in 2023 as higher interest rates have led to declining property values and higher interest expenses. A pause or cut in rates by central banks would be supportive for the real estate market and could lead to REITs rebounding strongly.

The U.S. infrastructure REIT sector, which is mainly comprised of cell tower REITs, was the top-performing sub-index in November. In 2023, cell towers faced underperformance due to higher interest rates, prompting an increased discounting of future cash flows. The long-term contracts associated with cell towers exacerbated this effect, as the heightened discounting, coupled with a reassessment of valuations in the sector, lowered the financial outlook of these infrastructure assets for most of the year.

DATA CENTERS HAVE BEEN THE STRONGEST SECTOR IN 2023

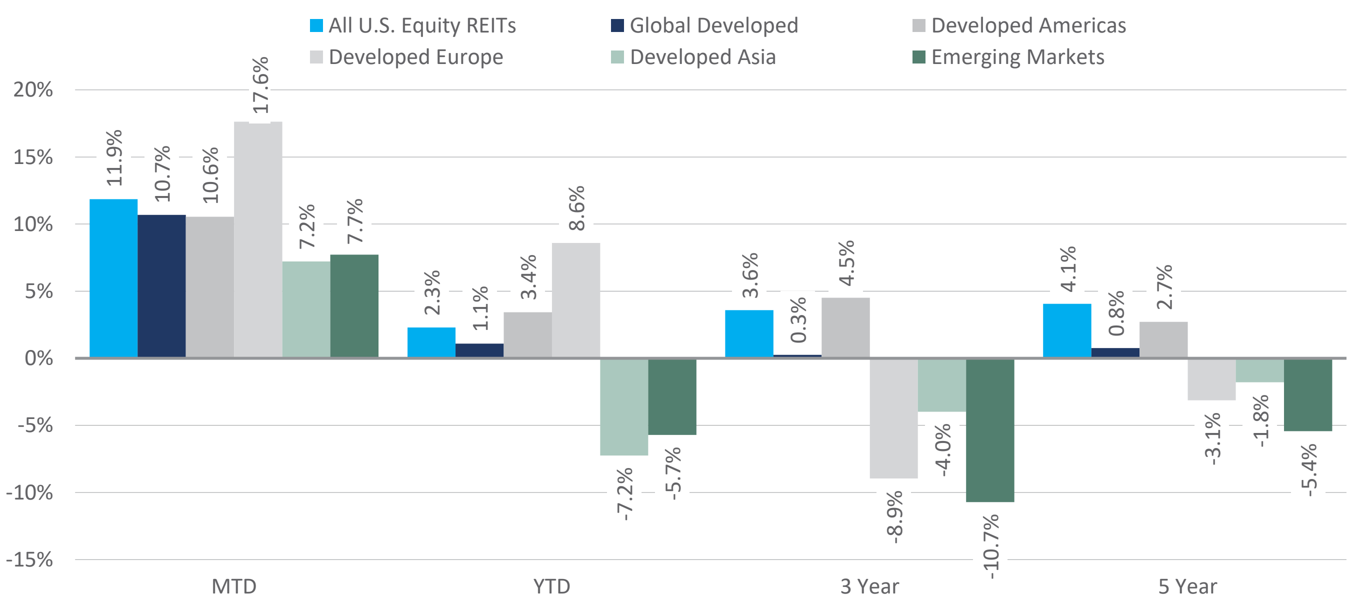
U.S. REIT Trailing Performance by Property Type (Year-to-Date)



Data source: FactSet

NOVEMBER SURGE: STRONG PERFORMANCE IN GLOBAL REIT INDICES

Trailing REIT Performance by Geography



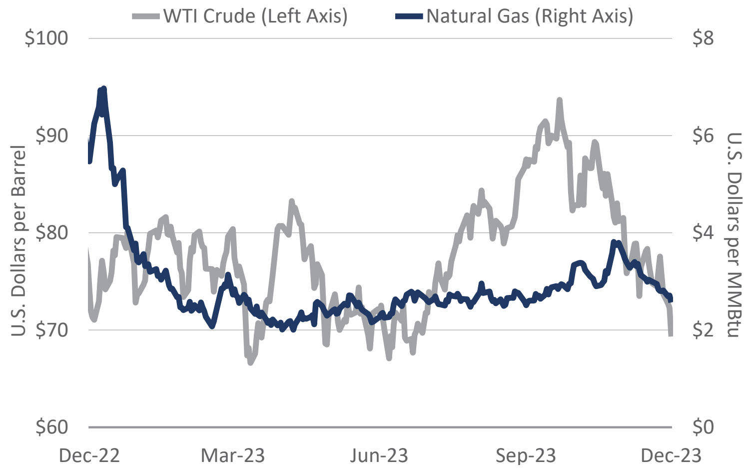
Data source: FactSet

Natural Resources

U.S. oil and gas prices declined in November despite heightened geopolitical tension in the Middle East, OPEC+ production cuts announced for early 2024, and the winter season nearing. The West Texas Intermediate (WTI) continuous contract price tumbled below $70 per barrel in early December as concerns about slowing economic growth and low demand from China continued to dampen demand.

OIL & GAS PRICES DROP HEADING INTO WINTER

Price of West Texas Intermediate (WTI) Crude and U.S. Natural Gas



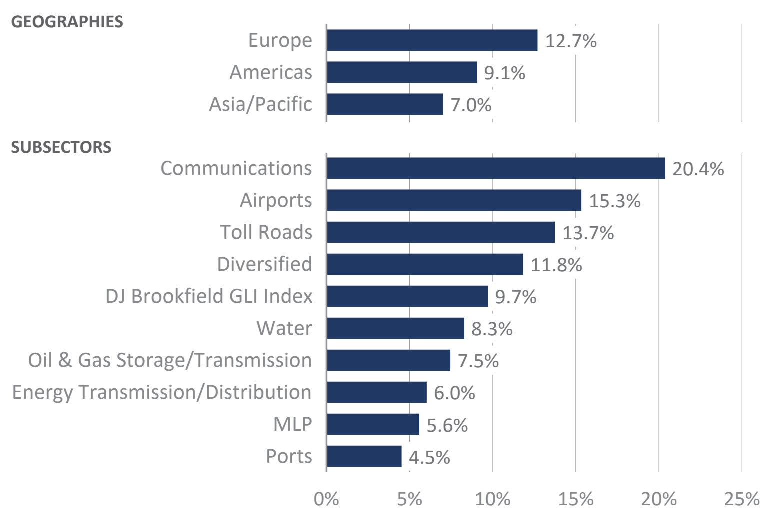
Data source: FactSet

Infrastructure

Global listed infrastructure rallied in November, as measured by the Dow Jones Brookfield Global Infrastructure Index. Midstream energy infrastructure MLPs have outperformed the listed infrastructure sector year-to-date in 2023, benefitting from relatively higher oil prices and strong balance sheets, positioning them well for the current higher interest rate environment. The communications infrastructure was the top-performing sector in the month, mainly driven by the rebound in cell towers.

NOVEMBER REVERSAL: CELL TOWERS RALLY

Listed Infrastructure Trailing Returns



Data source: FactSet

Diversifying Strategies

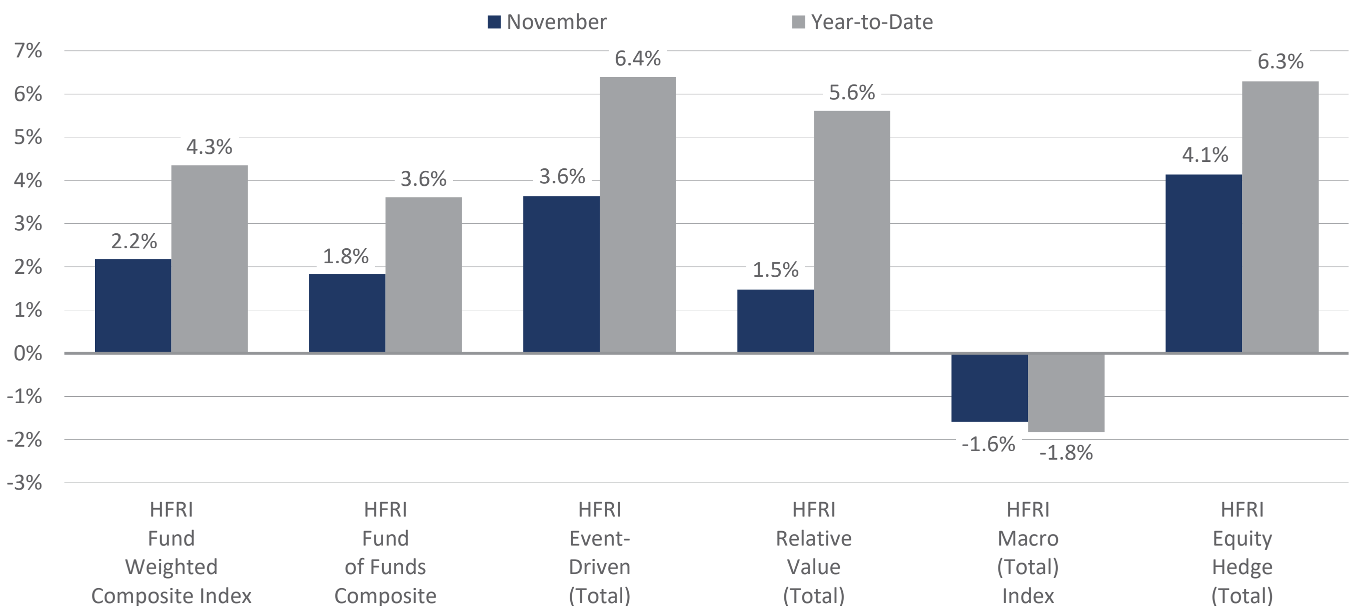
Most hedge fund strategies rallied with other asset classes during the month. The broad hedge fund benchmark was up 2.2%, with only the global macro index in negative territory. Overall, November was a strong month for hedge funds.

Long/short equity and event-driven managers posted strong returns with the tailwind of a bullish equity market. Within long/short equity, biotech-focused strategies generated outsized gains during the month.

Systematic trend-following strategies faced significant challenges during November. Reversals in the recent direction of equity and fixed income markets resulted in losses. The U.S. dollar also witnessed a correction which caught macro managers off guard. The losses impacted long positions in the U.S. dollar relative to the euro and Japanese yen.

HEDGE FUNDS POST GAINS IN NOVEMBER

HFRI Indices Performance Returns (U.S. Dollars)



Data source: HedgeFund Research

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All data is as of November 30, 2023 unless otherwise noted.

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