

Research Review

Second Quarter 2023

Despite a notably steep “wall of worry” that included ongoing banking system strains, persistent inflationary pressures, the most aggressive Federal Reserve (Fed) tightening campaign in four decades, elevated valuations across most major risky asset sectors, and unresolved geopolitical headwinds—e.g., Russia-Ukraine war, slumping Chinese economy, euro area at/near recession—performance across the financial markets in the second quarter appeared overwhelmingly positive. Domestic asset classes and sectors generally witnessed more robust performance during the quarter than their international brethren, reflecting the U.S. economy’s relative resilience amid incrementally tighter monetary conditions and souring global economic momentum. Incoming U.S. economic data over the quarter continued to surprise to the upside, however, which suggests the Fed’s efforts at tamping inflation and engineering a modest amount of demand destruction are only partially complete.

Significant performance gains were experienced within the mega-cap technology sector in the second quarter despite the space’s embedded interest rate sensitivity. Small and microcap equities also posted positive performance but lagged their larger cap counterparts meaningfully. International developed and emerging market equities underperformed domestic equity indices for the second quarter, with fundamental challenges coming into focus—particularly in China and across the euro area. Bond returns were mixed, with higher quality and rate-sensitive sectors lagging the shorter duration and credit-oriented sectors as rates saw a material increase and credit spreads tightened. Real asset performance was similarly mixed, with a seemingly deflating global economic engine serving as a headwind to commodity prices and real estate and global listed infrastructure sectors posting essentially flat performance.

INSIDE THIS ISSUE

Economic Update	2
Market Summary	4
Global Equity	5
Fixed Income	6
Real Assets	7
Diversifying Strategies	8
Disclosures	9



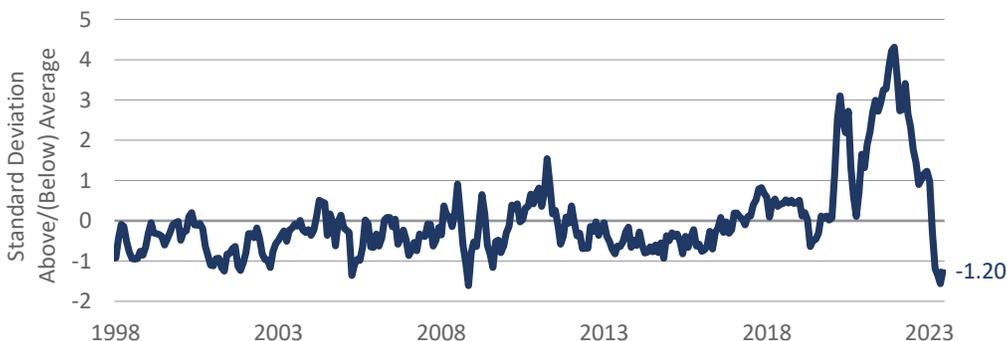
Economic Update

At their mid-June policy meeting, the Fed maintained the 5.25% targeted upper bound on the federal funds rate, a decision that market participants had largely priced in throughout the weeks that preceded the announcement. Through updates to their Summary of Economic Projections (SEP)—including a refreshed “dot plot” overview of where committee members expect the appropriate rate of the policy rate should stand in the coming quarters—the Fed opened the door for future rate hikes. Notably, Chairman Jerome Powell described the July 25-26 meeting as “live” numerous times during the post-announcement press conference.

After more than a year of tightening monetary conditions, which included ongoing quantitative tightening and a 500-basis-point increase to the policy rate to date, the Fed appears close to declaring “mission accomplished.” Supporting this potential shift in the trajectory of monetary accommodation is a significant deceleration in the rate-of-change of inflation; while still elevated versus the Fed’s 2% desired level, both core and, more so, headline inflation rates have trended lower in recent months.

Annual headline consumer price inflation, for example, reached a cyclical peak of 9.1% in June 2022 but deflated to a more modest 4.0% pace through May 2023. Core inflation has followed a similar downward path, albeit at a more measured decelerating pace. Central to the disinflationary pressures that have surfaced in recent months are global supply chain bottlenecks which have largely been worked off. In fact, the New York Federal Reserve’s gauge of global supply chain pressures reflects the greatest spare capacity among global supply chains since the end of the Global Financial Crisis, a trend that may help dampen further inflationary gains.

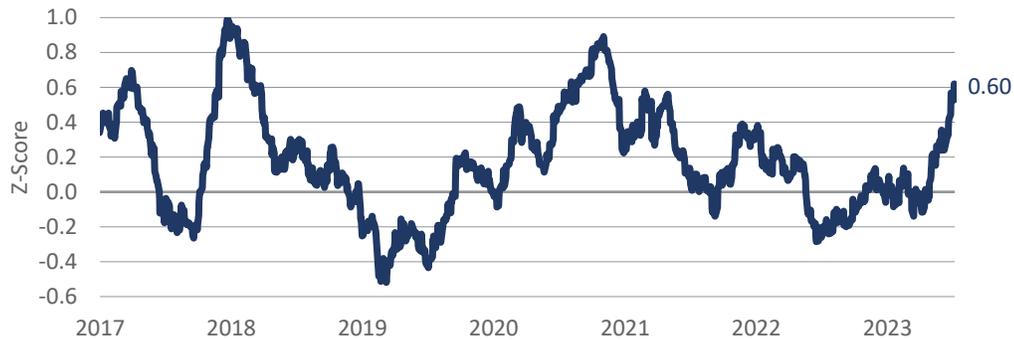
GLOBAL SUPPLY CHAIN PRESSURE INDEX



Data sources: Federal Reserve Bank of New York, Bloomberg L.P.; Data as of June 2023

The flip side of the decelerating path of inflation is the U.S. economy's pronounced resiliency. Despite the most aggressive Fed tightening campaign in over 40 years and percolating economic weakness abroad, incoming U.S. economic data has predominantly surprised to the upside since March. Indeed, the Bloomberg U.S. Economic Surprise Index spent the second quarter trending higher, lending some credence to the "soft landing" narrative—one which had seemed a near impossibility during the brief banking system crisis this past spring.

BLOOMBERG U.S. ECONOMIC SURPRISE INDEX



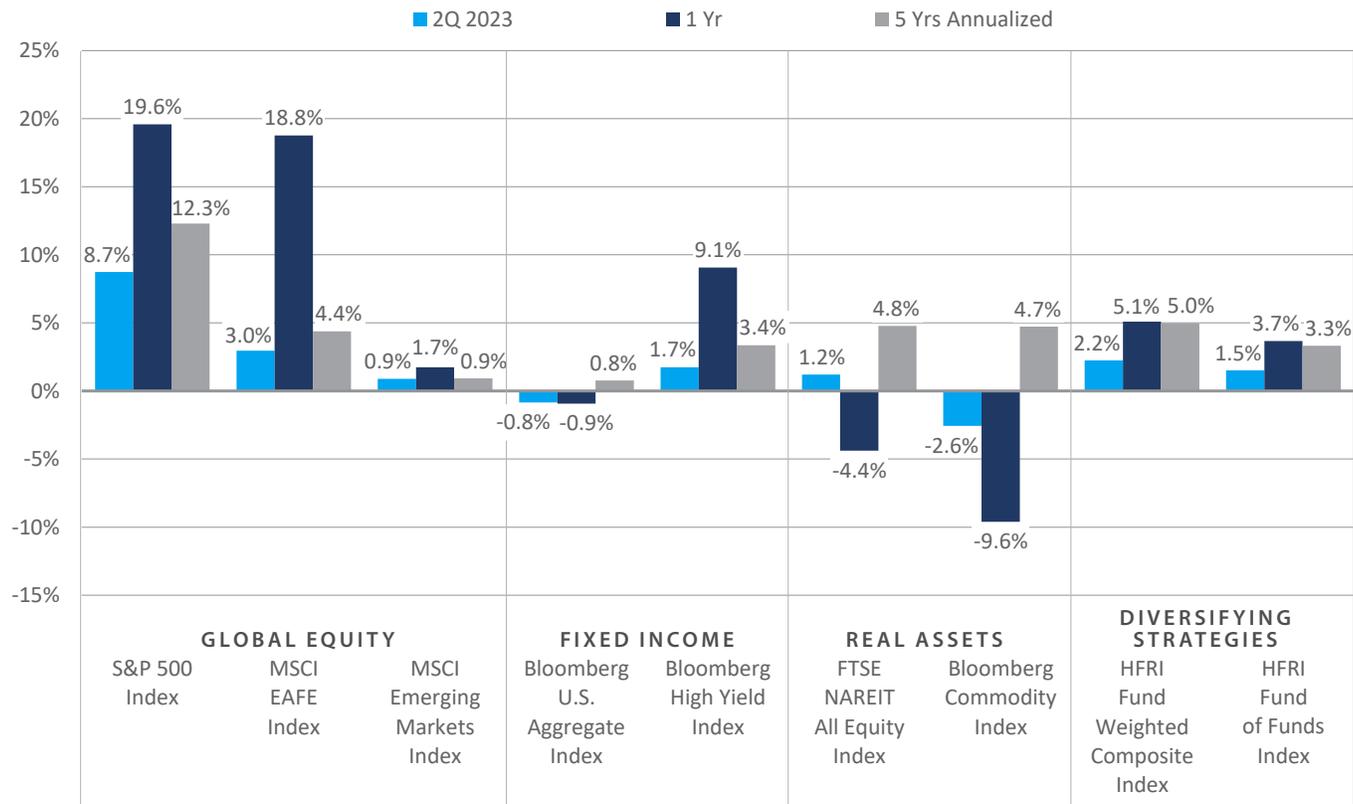
Data source: Bloomberg, L.P.; Data as of July 7 2023

It would be premature to declare smooth sailing for the U.S. economy as growth rates across leading economic indicators continue to suggest a downturn is likely in the coming quarters. Moreover, the labor market, while strong in absolute terms, has exhibited few signs of further improvement/tightening; the slope of the Treasury yield curve remains deeply inverted; the manufacturing sector—a historically reliable harbinger of swings in the business cycle—has appeared stuck in contraction for nearly the past eight months; and sticky inflation, while on a clear downward trajectory, remains stubbornly elevated and at risk of reaccelerating should the Fed fail at fully restoring price stability given the historically tight labor situation.

To conclude, the second quarter of 2023 presented global investors with outsized performance gains across many widely followed asset classes and categories, particularly in the U.S., where investors embraced the renewed potential for an economic soft landing amid relatively strong incoming economic data and cooling inflation, a scenario seemingly off the table just a few months ago. Relatedly, the risk-on sentiment that permeated the investment community during the quarter served to underpin a meaningful increase in many commonly referenced valuation measures, which, when paired with stubborn fundamental headwinds, continues to demand a cautious approach when flexing risk budgets over the near-term.

Market Summary

Second Quarter 2023



Data sources: Lipper, HedgeFund Research

Global Equity

Global equity markets finished the quarter with positive returns, led by U.S. equity markets. The June U.S. jobs report showed 497,000 jobs added, a significant surprise to the upside. Positive economic data coupled with positive momentum supported a risk-on environment.

U.S. equity markets ended the quarter higher, with most of the performance seen in June. Growth outperformed value by over eight percentage points over the quarter, led by the information technology, consumer discretionary, and communication services sectors. The theme of artificial intelligence (AI) was prevalent, benefiting chipmakers, as they are essential to the industry. Energy and utilities were the worst performers in the face of slowing global demand.

European equities produced positive returns. The financials sector was the top performer, driven by improved expectations of near-term bank earnings. Similar to the U.S., AI themes benefited semiconductor stocks.

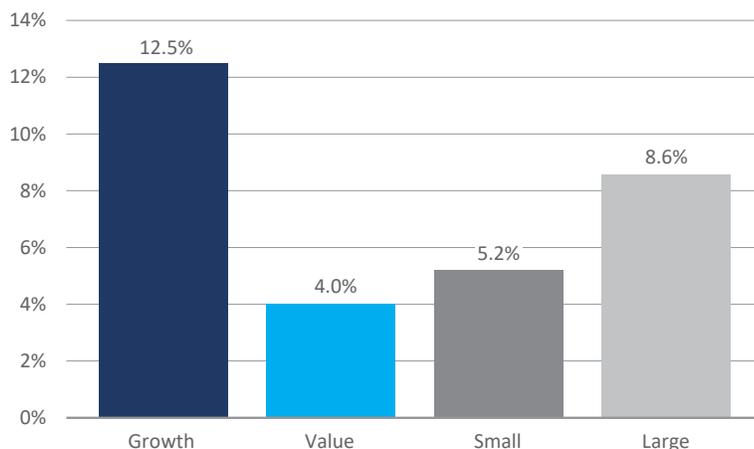
UK equity returns were slightly positive in U.S. dollar terms (USD) but down slightly in local currency. The UK market's significant exposure to energy and materials weighed on the country's performance due primarily to slowing demand and downward price pressures.

Japanese equities finished the quarter with a gain of over 15% in local terms but under 7% in U.S. dollar terms due to the yen's weakness. The Bank of Japan's dovish stance has led to increasing divergence in interest rate expectations versus other central banks, driving the yen's continued depreciation relative to the USD.

Emerging market equities posted with a slight gain. The AI market theme benefited countries with significant technology presence, like Taiwan and Korea. The Latin American region was a bright spot within emerging markets, gaining 14%, led by Brazil amid expectations for rate cuts and continued growth. China's slow economic recovery hampered its equity market, which declined almost 10% and offset gains elsewhere.

AI-RELATED STOCKS BOOST GROWTH

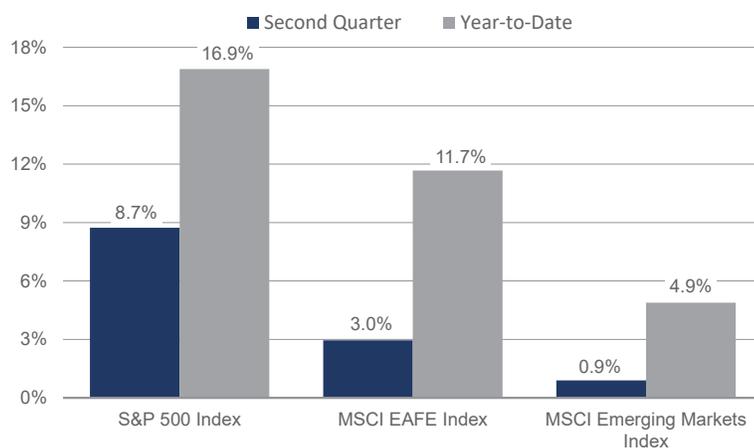
U.S. Style Returns



Data source: FTSE Russell

U.S. MARKETS LEADING FOR THE YEAR

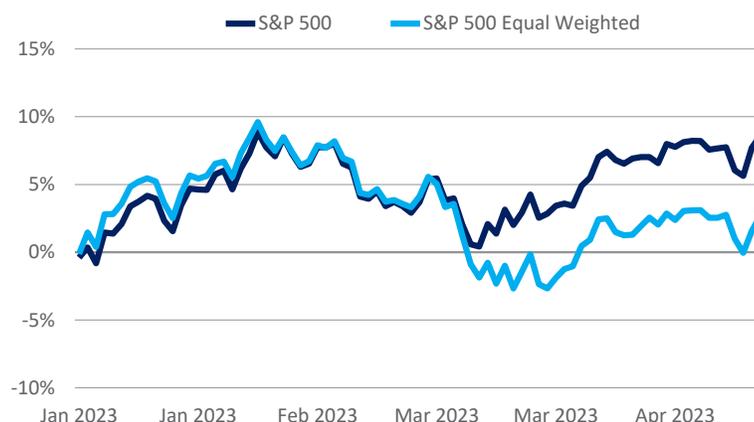
Equity Indices Performance (Returns in U.S. Dollars)



Data sources: S&P, MSCI

MARKET CONCENTRATION LEAVES EQUAL-WEIGHTED INDEX LAGGING

S&P 500 and S&P 500 Equal Weighted Indices



Data source: FactSet

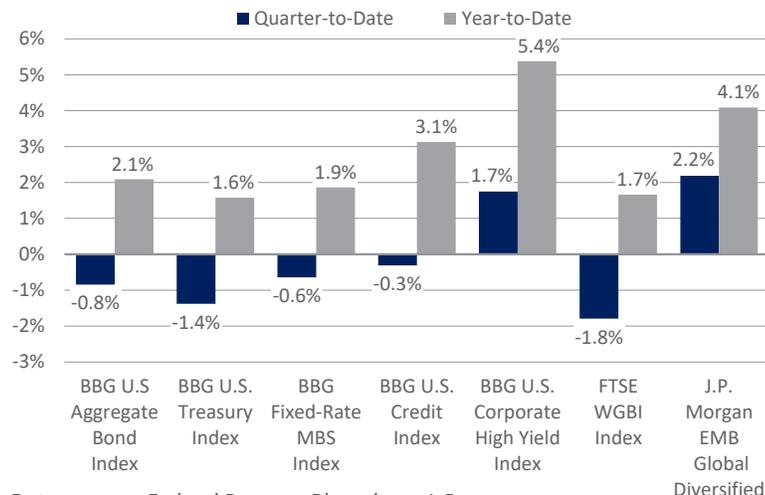
Fixed Income

By the start of the second quarter, market participants had priced in multiple rate cuts through the end of 2023. At the June Federal Open Market Committee (FOMC) meeting, voting members projected the median federal funds rate to surpass the previously expected level to an implied level of 5.6%. Supported by the Fed's hawkish guidance and strong economic data, expectations of interest rate cuts were swiftly removed from futures markets while Treasury yields raced higher. The 2-year Treasury yields rose 81 bps to 4.87%, and the 10-year Treasury yields rose 33 bps to 3.81% during the second quarter. The asymmetry in the magnitude of increases in the shorter and longer parts of the yield curve resulted in the 10-2 year Treasury yield spread reaching its deepest inversion in more than 40 years.

Credit sectors continued to benefit from resilient spreads, which saw further tightening over the second quarter. Since the end of the first quarter, investment grade (IG) spreads tightened 14 bps to 1.3%, and high yield (HY) spreads tightened 44 bps to 4.1%. Overall yields for the credit sectors have reached favorable levels for investors. However, most of the movement has been influenced by the Fed's monetary policy, which has driven an increase of more than 5% in the Fed funds rate since the beginning of 2022. Spreads, on the other hand, have tightened with the broader risk rally. All-in yield levels still look attractive across corporate credit despite credit spreads sitting closer to the low end of their historical range.

Following the resolution of the debt ceiling crisis in the second quarter, the Treasury turned its focus toward replenishing the Treasury General Account (TGA), which has been depleted over the past year. This has far-reaching consequences for capital markets, including the draining of liquidity from the market, as illustrated by the decline in the M2 money supply. At the same time, the Fed continues its monthly quantitative tightening in the form of reducing its balance sheet. The refilling of the TGA has primarily come from a reduction in the Fed's Reverse Repo (RRP) facility as money market managers swap exposure at the RRP for newly issued Treasury bills. Thus far, the TGA rebuild has not materially impacted reserves in the banking system.

SPREAD TIGHTENING BOOSTS HIGH YIELD CREDIT Fixed Income Returns



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

DRAINING LIQUIDITY, MONEY SUPPLY GROWTH IS NEGATIVE

M2 Change From One Year Ago



Data source: Federal Reserve of St. Louis

Real Assets

Real Estate

Global real estate returns were mixed across geographies in June, with U.S. REITs outperforming international REITs. While dispersion among REIT sectors remains, REIT indexes are generally holding flat as real estate markets continue to seek guidance on future interest rate paths from central banks.

Data center REITs outperformed through the first half of 2023 and were a top performer in June. Data centers entered 2023 having underperformed in 2022, and have benefitted from the push across industries to incorporate artificial intelligence (AI) capabilities. Residential REITs such as single-family homes and apartments also outperformed their broader index year-to-date—a sharp improvement from posting the lowest returns among REIT sectors the year prior.

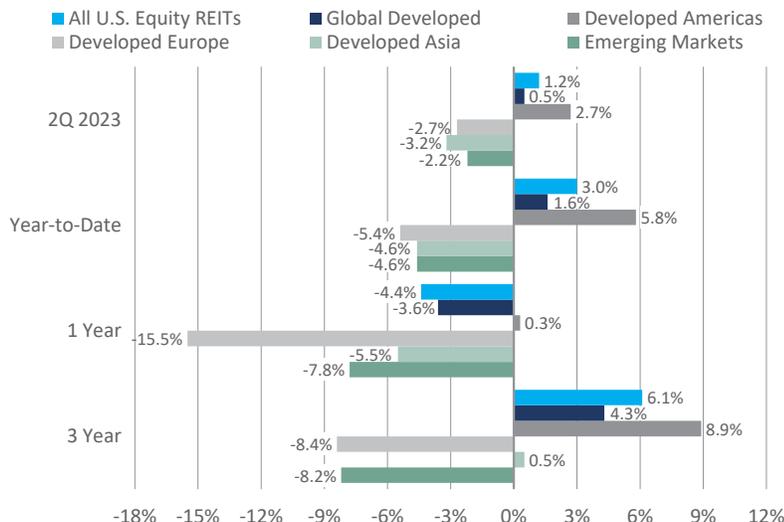
Natural Resources

Energy prices stabilized through the second quarter after dropping sharply at the end of 2022 and into the first quarter of 2023. Oil oscillated around \$70/barrel as the market digested the significant production cuts announced by OPEC+ countries in early June, offset partly by weaker demand from China. Natural gas improved significantly in June and finished the second quarter in positive territory, with hotter-than-expected summer temperatures across the northern hemisphere contributing to increased demand.

Both oil and natural gas prices appear to have found their respective price support levels after a year of record-high volatility. At the same time as OPEC+ producers announced significant production cuts, U.S. producers have been laying down drilling rigs, most notably natural gas drilling rigs. Rig counts had been steadily increasing since the lows of the pandemic. However, recent price drawdowns have forced producers to pull back and wait for signs of price support.

REITS HOLD FLAT TO FINISH FIRST HALF OF 2023

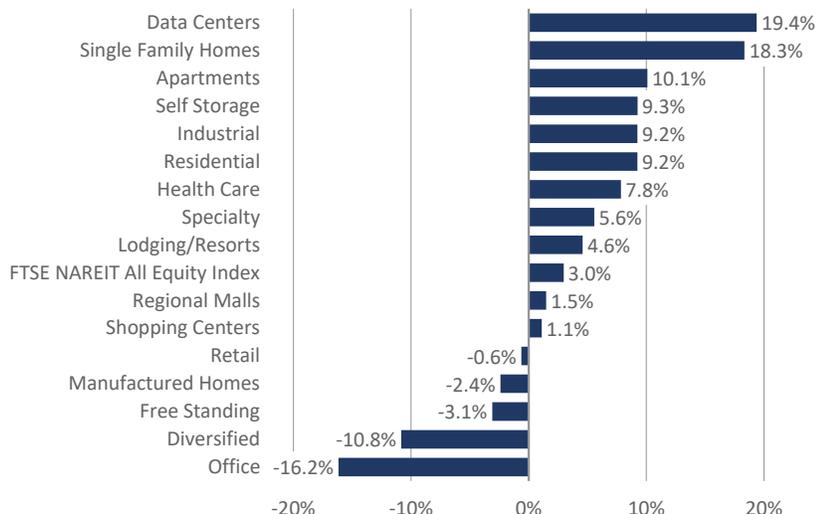
U.S. REIT Trailing Performance by Geography



Data source: FactSet

DATA CENTERS FURTHER OUTPERFORM

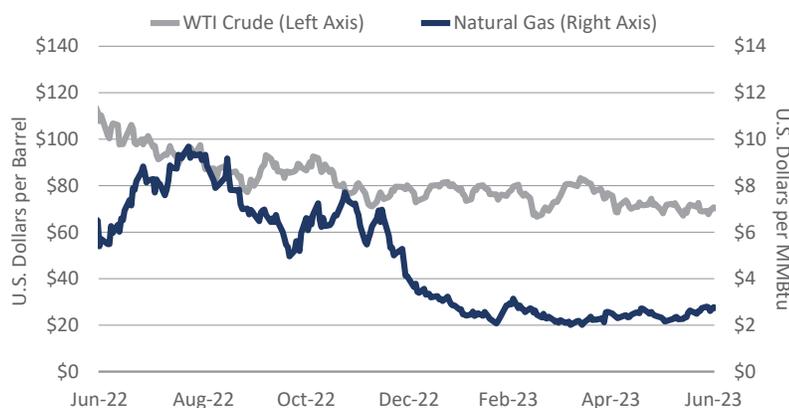
U.S. REIT Sub-Index Performance – YTD Performance



Data source: FactSet

OIL AND NATURAL GAS PRICES FIND SUPPORT

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



Data source: FactSet

Infrastructure

Global listed infrastructure sub-sectors posted disparate performance. Master Limited Partnerships (MLPs) were the strongest performer, benefiting from rising natural gas prices. Communication infrastructure rallied in June but remained the worst performer, falling over 6% for the quarter, as investors digested the potentially delayed 5G rollout among carriers.

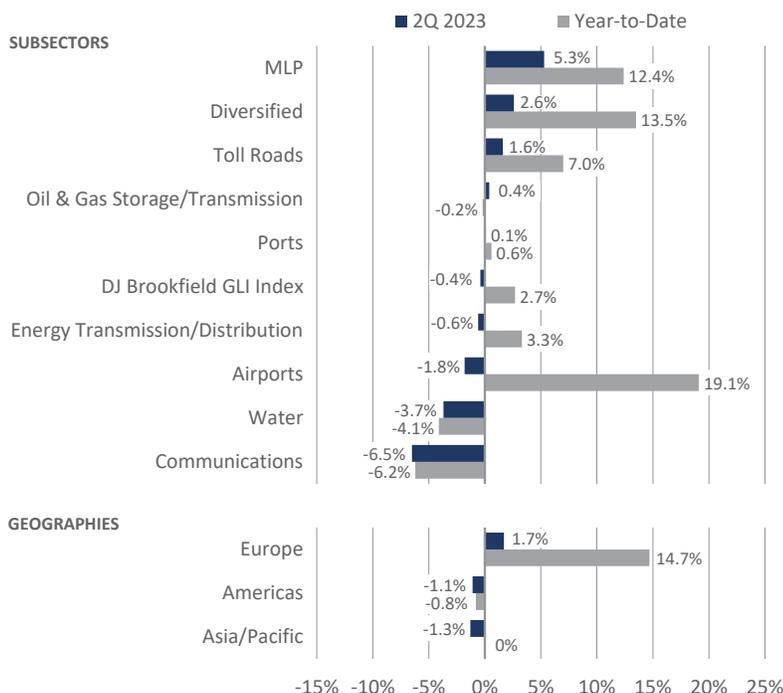
Diversifying Strategies

Hedge fund returns were positive over the quarter, with the HFRI Fund Weighted Composite Index up 2.2%. Each strategy was in positive territory; the highest performer was the HFRI Equity Hedge (Total) Index, followed by the HFRI Macro Index and the HFRI Event-Driven Index.

Macro strategies slightly rebounded following the regional bank-related rates move in March. Discretionary and systematic strategies were challenged in navigating global markets as the directionality of energy prices, metals, and rates in 2022 has yet to be replicated in 2023. OPEC+ supply cuts were met with uncertain global demand, making it difficult to trade around. Macro strategies were prompt to create positions around outlying sectors trending either positively or negatively, such as agricultural goods, which have been prone to supply chain disruptions.

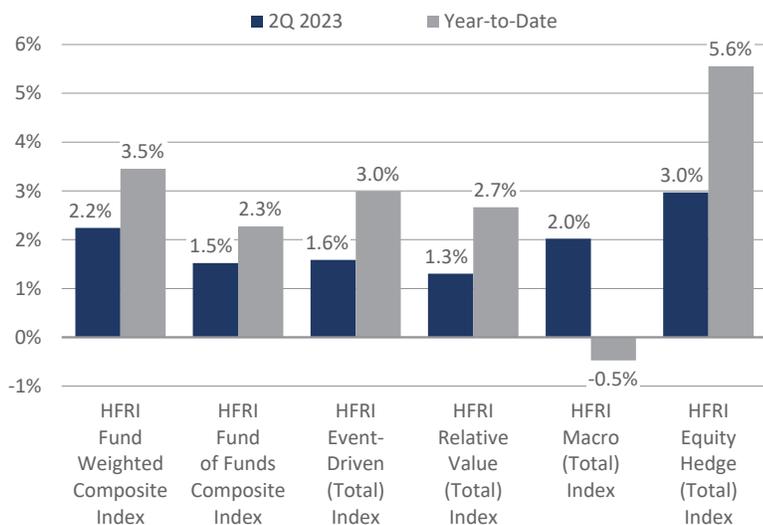
Trend following strategies broadly reeled in short U.S. rate positions in favor of more neutral holdings as leading indicators pointed toward June's rate hike freeze. April was the largest month of global equities selling since March 2022, while May was the largest month of net buying of U.S. equities since 2010. Throughout the quarter, trend followers capitalized on this reversal, adding to equities as positive earnings data in large cap technology-related stocks outweighed continued fears surrounding regional bank liquidity pressure.

DISPERSION OF INFRASTRUCTURE RETURNS IN Q2 Listed Infrastructure Trailing Returns



Data source: FactSet

HEDGE FUNDS HAVE A STRONG QUARTER HFRI Indices Performance Returns (U.S. Dollars)



Data source: HedgeFund Research

IMPORTANT DISCLOSURE INFORMATION

This document is for information purposes only and is not intended as an offer or solicitation, or as the basis for any contract to purchase or sell any security, or other instrument, or to enter into or arrange any type of transaction as a consequence of any information contained herein.

The information enclosed in this presentation is confidential. By accepting it, you agree to treat it as such and any unauthorized use or disclosure of this presentation or the information enclosed herein is strictly prohibited.

This presentation does not take into account your particular investment objectives, financial situation or needs, and should not be construed as financial or legal advice. The information contained herein is preliminary, is merely a summary, and is subject to change without notice.

Certain information contained herein has been obtained or derived from unaffiliated third-party sources believed by Certuity to be reliable. Neither Certuity nor any of its affiliates or representatives makes any representation or warranty, express or implied, as to the accuracy or completeness of the information contained herein and nothing contained herein may be relied upon as an indicator or representation as to prior or future performance. Some of the materials contained herein may be characterized as "forward-looking statements", which can be identified by the use of forward-looking terminology such as "may", "will", "should", "expect", "anticipate", "target", "project", "estimate", "intend", "continue" or "believe" or the negatives thereof or other variations thereon or comparable terminology, and which may include, among other things, projections of future performance, estimates, forecasts, scenario analysis, or pro forma information. Such forward-looking statements are based on assumptions with respect to significant factors that may not prove to be correct and you should understand the assumptions and evaluate whether they are reasonable and appropriate for your purposes.

All analyses and projections depicted herein are for illustration only, and are not intended to be representations of performance or expected results. The results achieved by individual clients will vary and will depend on a number of factors including prevailing dividend yields, market liquidity, interest rate levels, market volatilities, and the client's expressed return and risk parameters at the time the service is initiated and during the term. Past performance is not a guarantee of future results.

Investors should seek financial advice regarding the appropriateness of investing in any securities, other investment or investment strategies discussed in this report and should understand that statements regarding future prospects may not be realized.

Although information in this document has been obtained from sources believed to be reliable, we do not guarantee its accuracy, completeness or fairness, and it should not be relied upon as such. This document may not be reproduced or circulated without our written authority.

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

CERTUITY®

Providing guidance, knowledge and access to solutions that empower clients to approach life with certitude.



This document is confidential and intended solely for the addressee. This document may not be published nor distributed without the written consent of Certuity, LLC. Advisory Services offered through Certuity, LLC, an SEC registered Investment Advisor.

©2023 Certuity, LLC. All rights reserved.