3RD QUARTER 2024
Investment Landscape

Verus business update

Since our last Investment Landscape webinar:

— Verus hired Dillon Kuk, Kacey Franich, Nico Caballero, and Sarah Khan as Performance Analysts, and Margie Lane as a Marketing Associate, in our Seattle office.

— The Los Angeles office relocated to N. Continental Blvd., 2 miles from our prior location.

— Verus hired Dawit Ewnetu as a Summer Intern in our Seattle office, in partnership with Rainier Scholars.

— Recent research, found at *verusinvestments.com/research*:

- ***2024 Real Assets Outlook***
- ***Mid-year Capital Markets Update***
- ***Is the U.S. heading for a recession?***

Table of contents

VERUSINVESTMENTS.COM
SEATTLE 206.622.3700
CHICAGO 312.815.5228
PITTSBURGH 412.784.6678
LOS ANGELES 310.297.1777
SAN FRANCISCO 415.362.3484

Recent Verus research

Visit: verusinvestments.com/research

Thought leadership

REAL ASSETS OUTLOOK

As inflation has moderated and interest rates have stabilized, the market has been eager for the Fed to pivot towards a looser monetary policy. Asset prices are broadly rich, pricing in an economic soft landing and a couple rate cuts by year-end. While we are less bearish this year across real assets, given more positive signs of a soft landing, rich asset valuations temper our enthusiasm.

MID-YEAR CAPITAL MARKETS UPDATE

Equity forecasts fell across U.S., International, and Emerging markets. The cash forecast decreased slightly. High cash rates have mixed impacts, while model changes mitigated some effects. Falling yields and spread compression lowered fixed income forecasts, especially U.S. Treasury and emerging market debt. Real Estate forecasts increased due to rising capitalization rates and higher U.S. real GDP expectations.

IS THE U.S. HEADING FOR A RECESSION?

Many market strategies have been predicting a U.S. recession since the start of 2023. This short video presents our team's analysis of key indicators to determine whether a recession is likely in the coming year.

2nd quarter summary

THE ECONOMY

— U.S. inflation (CPI) fell to 3.0% YoY in June, following two consecutive months of flat prices (0.0% in May and -0.1% in June). The report reflected a slowing in shelter costs, which have been a primary hurdle for inflation reaching the 2% Federal Reserve target. If the slowing of shelter prices persists, inflation could fall rather quickly. Core inflation (ex-Food & Energy) was 3.3% year-over-year in June. ***p. 9***

— The U.S. labor market remains strong, but recently some cracks of weakness have appeared. Unemployment jumped unexpectedly to 4.1% in June—a level not seen since 2021. Jobless claims have also been rising. This negative data could prove to be a continuation of the trend towards a more balanced labor market, though it will be important to monitor conditions closely. ***p. 12***

EQUITY

— Emerging market equities outperformed during Q2, up +5.0%, despite significant ongoing underperformance of China. U.S. equities were close behind (S&P 500 +4.3%), setting a new all-time-high price level. In contrast, international developed equities were flat. ***p. 27***

— Small cap and value style investing underperformed. Small cap lagged large cap by -6.9% while value underperformed growth by -10.5%. The style premia performance gap was even wider over the past year, as small cap underperformed large cap by -13.8% and value underperformed growth by -20.4%. ***p. 29***

FIXED INCOME

— The 10-year U.S. Treasury yield increased slightly from 4.20% to 4.36% during Q2, resulting in near-zero or negative performance for high quality fixed income of a longer duration profile. ***p. 21***

— Default activity in loans and credit reached a one-year low at the end of Q2. However, the gap between bank loan and high yield default activity has increased to a 10-year high, with total volume of distressed or defaults comprised of loans (80%) to bonds (20%) on pace for a record high. ***p. 20***

ASSET ALLOCATION ISSUES

— Many goods and services prices have been falling in areas such as autos, energy, and transportation. This trend has occurred alongside signs of weakness in the job market and consumer spending, and has reignited hopes for lower inflation, which would ease pressures on household budgets and allow for interest rate cuts. It is possible that an economic *soft landing* may be occurring, which would suggest lower rates and further gains for risk assets. ***p. 9***

— Market-priced volatility (Cboe VIX Index) remained very low, ending at 12.4% in June. This has raised eyebrows, given a variety of risks that domestic equities face, but low volatility is typical of strongly up trending equity environments. Markets continue to present a unique environment of low equity volatility but high fixed income volatility. This gap has closed somewhat, as bond market implied volatility has receded. ***p. 34***

Risk assets delivered moderate returns in Q2, while fixed income was flat to mildly positive, depending on duration profile.

A *soft landing* appears possible for the U.S. economy.

What drove the market in Q2?

"The US Economy is showing clear signs of a slowdown"

Employment change, Non-farm payrolls					
January	February	March	April	May	June
256k	236k	240k	108k	218k	206k

Article Source: Bloomberg, July 8th, 2024

"Earnings bolster US stocks, but crucial inflation report looms"

S&P 500 EPS Growth, Year-over-year					
Q4 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023	Q1 2024
+4.3%	-1.5%	-2.0%	-5.0%	+4.1%	+6.9%

Article Source: Reuters, May 14th, 2024

"Slowing U.S. inflation fuels expectations of interest rate cuts"

Consumer Price Index, Year-over-year change					
Jan 23	Feb 24	March 24	April 24	May 24	June 24
3.1%	3.2%	3.5%	3.4%	3.3%	3.0%

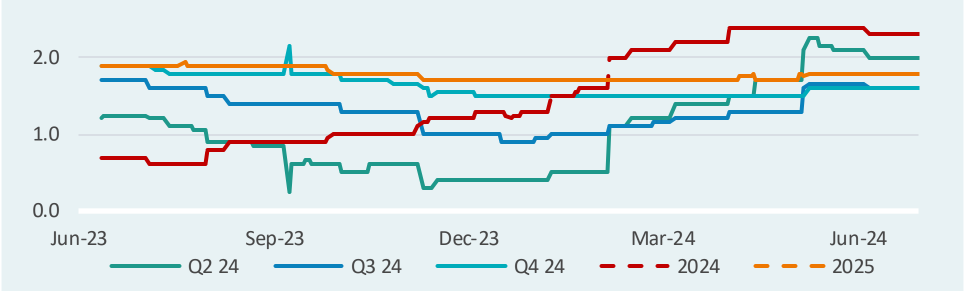
Article Source: Wall Street Journal, June 28th, 2024

"European Central Bank cuts interest rates for first time in 5 years"

ECB Overnight Rate, Actual and Implied					
March 24	June 24	Sep 24 (E)	Dec 24 (E)	March 25 (E)	June 25 (E)
4.0%	3.75%	3.45%	3.20%	2.98%	2.75%

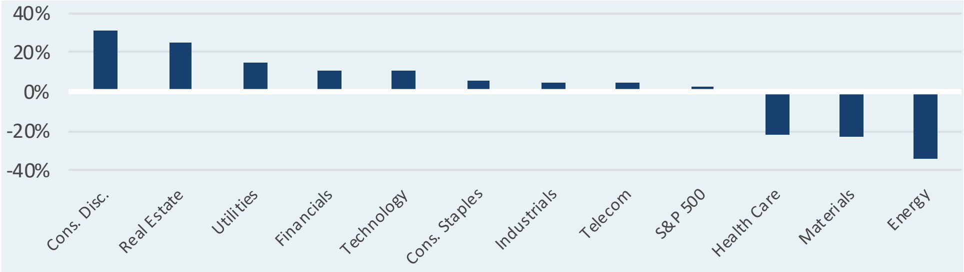
Article Source: Financial Times, June 6th, 2024

US GDP GROWTH PROJECTIONS (%)



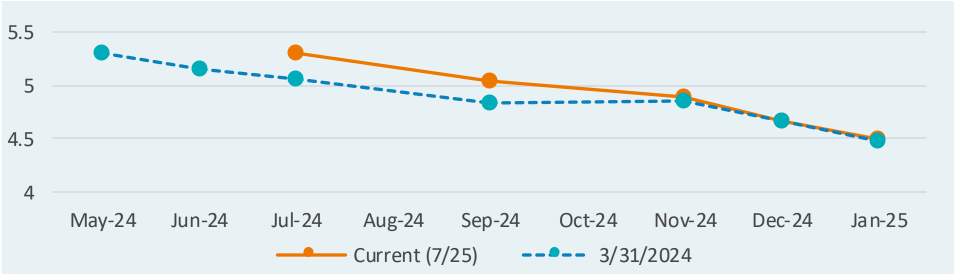
Source: Bloomberg, as of 6/30/24

S&P 500 TRAILING 12M EARNINGS GROWTH, YOY



Source: Bloomberg, as of 6/30/24

U.S. MARKET IMPLIED FUTURE INTEREST RATES (%)



Source: Bloomberg, as of 7/25/24

Economic environment

U.S. economics summary

— Real GDP growth was substantially higher than expected in Q2, rising 2.8% quarter-over-quarter (3.1% year-over-year), beating economist forecasts of a 2.0% increase on the quarter. The GDP release reflected an increase in consumer spending, as well as increased investment in inventories and capital goods. Residential fixed investment detracted from GDP growth, as did the trade deficit.

— U.S. inflation (CPI) fell to 3.0% YoY in June, following two consecutive months of flat prices (0.0% in May and -0.1% in June). The report reflected a slowing in shelter costs, which have been a primary hurdle for inflation reaching the 2% Federal Reserve target. If a slowing of shelter prices persists, inflation could fall rather quickly. Core inflation (e.g., Food & Energy) was 3.3% year-over-year in June.

— Inflation adjusted personal spending growth was 2.6% year-over-year in June, remaining in a 2-3% range for the past two years and suggesting more moderate economic expansion in line with pre-pandemic conditions. Purchases of goods have been weaker than services, perhaps partly a reflection of higher interest rates, which impact the affordability of big-ticket items such as autos and homes.

— The U.S. labor market remains strong, but in recent months some cracks of weakness have appeared. Unemployment jumped unexpectedly to 4.1% in June—a level not seen since 2021. Jobless claims have also been rising. This negative data could prove to be a continuation of the trend towards a more balanced labor market.

— Consumer sentiment deteriorated in Q2, moving back towards the lows of 2022. The University of Michigan Consumer Sentiment survey dropped from 79.4 to 66.4 on concerns over high goods and services prices and the impacts of inflation on personal income. Household expectations for lower interest rates in the future helped to buoy the index somewhat.

	Most Recent	**12 Months Prior**
Real GDP *(YoY)*	3.1% *6/30/24*	2.4% *6/30/23*
Inflation *(CPI YoY, Core)*	3.3% *6/30/24*	3.1% *6/30/23*
Expected Inflation *(5yr-5yr forward)*	2.3% *6/30/24*	2.3% *6/30/23*
Fed Funds Target Range	5.25–5.50% *6/30/24*	5.00–5.25% *6/30/23*
10-Year Rate	4.20% *6/30/24*	3.80% *6/30/23*
U-3 Unemployment	4.1% *6/30/24*	3.6% *6/30/23*
U-6 Unemployment	7.4% *6/30/24*	6.9% *6/30/23*

Inflation

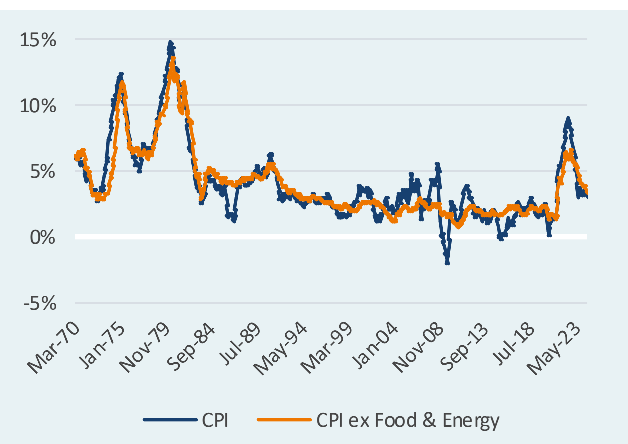
U.S. inflation (CPI) fell to 3.0% year-over-year in June, following two consecutive months of flat prices (0.0% in May and -0.1% in June). The June report was the first which reflected slower shelter cost increases, which have been a large hurdle for inflation falling to the Fed's 2% target. If this slowing in shelter prices persists, inflation could fall much more quickly to the Fed's 2% target. Core inflation (ex-Food & Energy) dropped to 3.3% year-over-year in June. Many goods and services prices have been *falling* in recent months in areas such as automobiles, energy, and transportation services. This trend has occurred alongside signs of weakness in the job market and other areas of the economy, and has reignited hopes for inflation to normalize, easing pressures on household budgets and allowing for interest rate cuts.

Investors have been watching monthly inflation reports very closely for potential signs of the future inflation path. If monthly inflation reports come in at a 0.2% to 0.3%, we can expect inflation to remain around today's level. However, if additional inflation reports come in at 0.1% or lower, inflation would fall rather quickly to 2%.

Inflation has fluctuated between 3-3.5% over the past year.

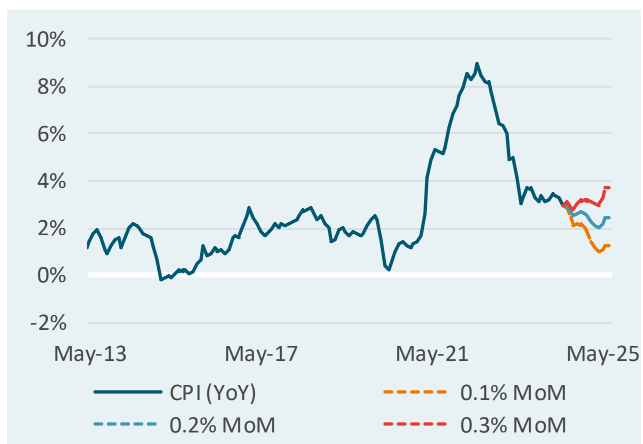
Shelter will likely need to slow further for inflation to reach 2%.

U.S. CPI (YOY)



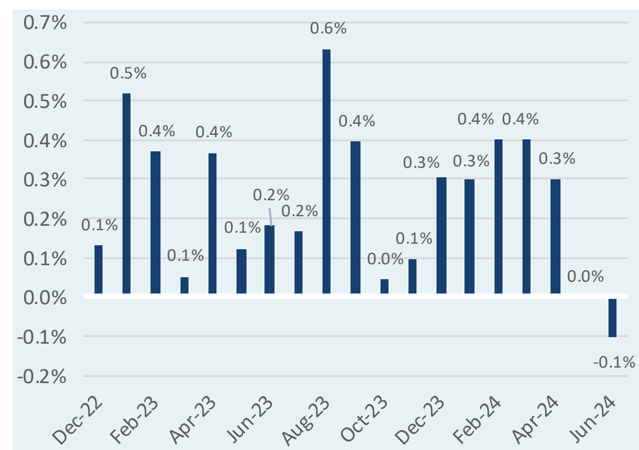
Source: BLS, as of 6/30/24

POTENTIAL INFLATION PATHS



Source: FRED, Verus, of 6/30/24

MONTHLY PRICE MOVEMENT (CPI)



Source: BLS, as of 6/30/24

GDP growth

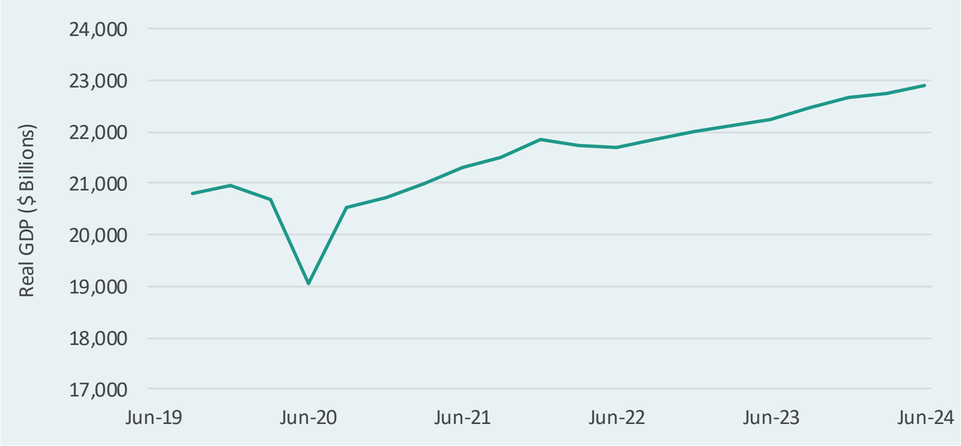
Real GDP growth was substantially higher than expected in Q2, rising 2.8% quarter-over-quarter (3.1% year-over-year), beating economist forecasts of a 2.0% increase on the quarter. The GDP release reflected an increase in consumer spending, as well as increased investment in inventories and capital goods. Residential fixed investment detracted from GDP growth, as did the trade deficit.

While consumption increased this quarter, economists are wary of the sustainability of consumer spending growth. Much of the increase in spending was concentrated in necessities, and with a cooling labor market and low savings rate, consumer spending could slow if these issues persist.

Recent economic data seems to reaffirm the idea that the U.S. economy is moving towards a more moderate growth phase after many quarters of surprisingly hot growth and spending. Unlike past periods of economic weakening, many trends today could reasonably be summarized as a *return to normalcy*. For example, following the pandemic, the domestic labor market was experiencing a historic mismatch between the number of jobs available and the number of workers available. Resolving that mismatch required a material weakening in the labor market from *extreme tightness* to *relatively strong*, but not a move (yet) towards anything that suggests recession.

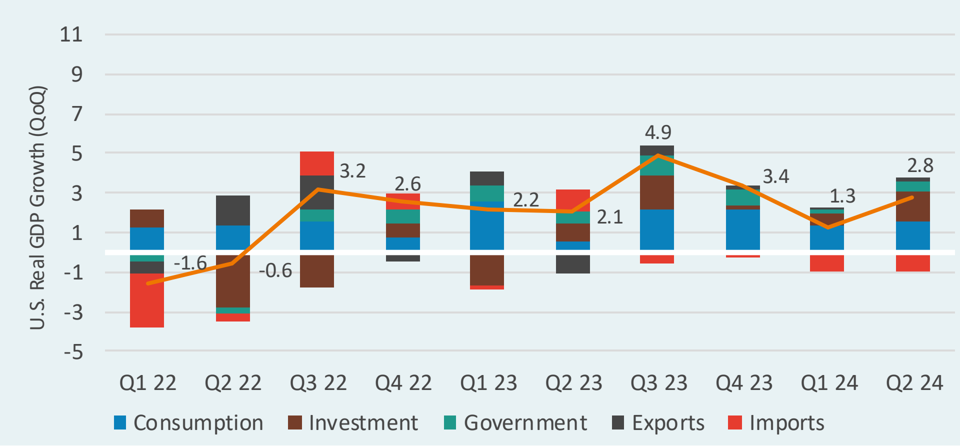
U.S. growth picked up in Q2, but concerns remain regarding the strength of the consumer.

U.S. REAL GROSS DOMESTIC PRODUCT



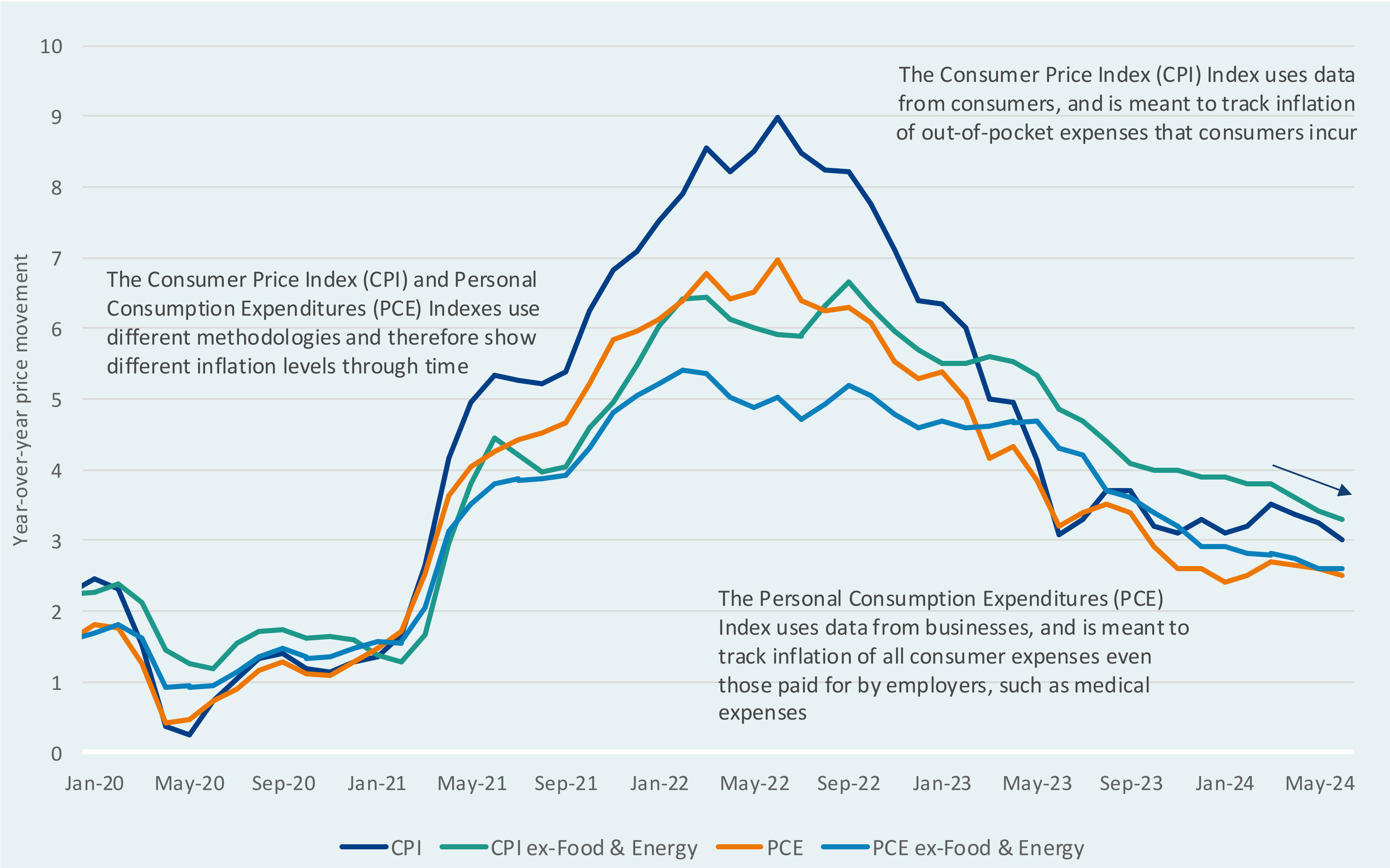
Source: FRED, as of 6/30/24

U.S. REAL GDP COMPONENTS (QOQ)



Source: FRED, as of 6/30/24

Inflation conditions are normalizing



Moderating price pressures in recent months have helped to push year-over-year CPI inflation to 3.0%.

Source: FRED, Verus, as of 6/30/24

Labor market

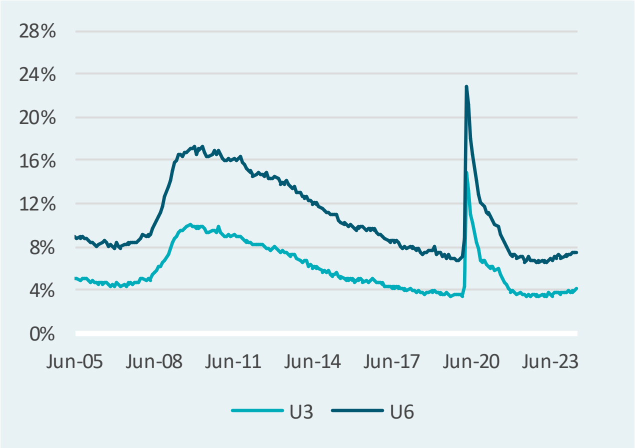
The U.S. labor market remains strong relative to history, but in recent months some cracks of weakness have appeared. The rate of unemployment jumped unexpectedly to 4.1% in June—a level not seen since 2021. Jobless claims have also been rising throughout the year. This negative data could prove to be a continuation of the trend towards a more balanced labor market, though it will be important to monitor conditions closely.

Average hourly earnings growth was 3.9% year-over-year in June, slightly outpacing the rate of inflation. As inflation has fallen, wage growth has also slowed, likely a reflection of a more normal balance between jobs available and workers available, as well as less urgency for cost-of-living adjustments.

In many past instances of increasing unemployment, job losses were quick and accelerating, which often preceded recession. In contrast, more recently the rate of unemployment has more gradually moved up. Recessions have rarely occurred without a sharper downtrend in employment, which given current conditions might suggest we are seeing a moderation of economic growth rather than a move towards something worse.

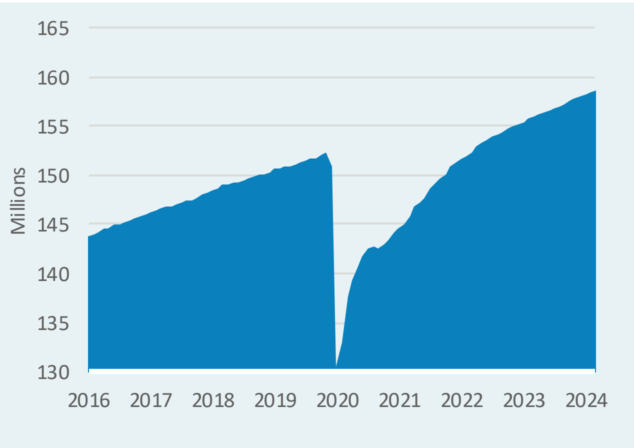
The labor market remains strong by historical standards, though conditions have moved in a weaker direction.

U.S. UNEMPLOYMENT



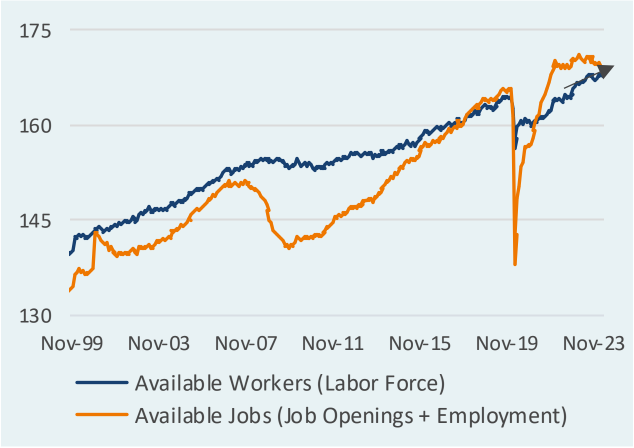
Source: FRED, as of 6/30/24

TOTAL U.S. EMPLOYMENT



Source: FRED, as of 6/30/24

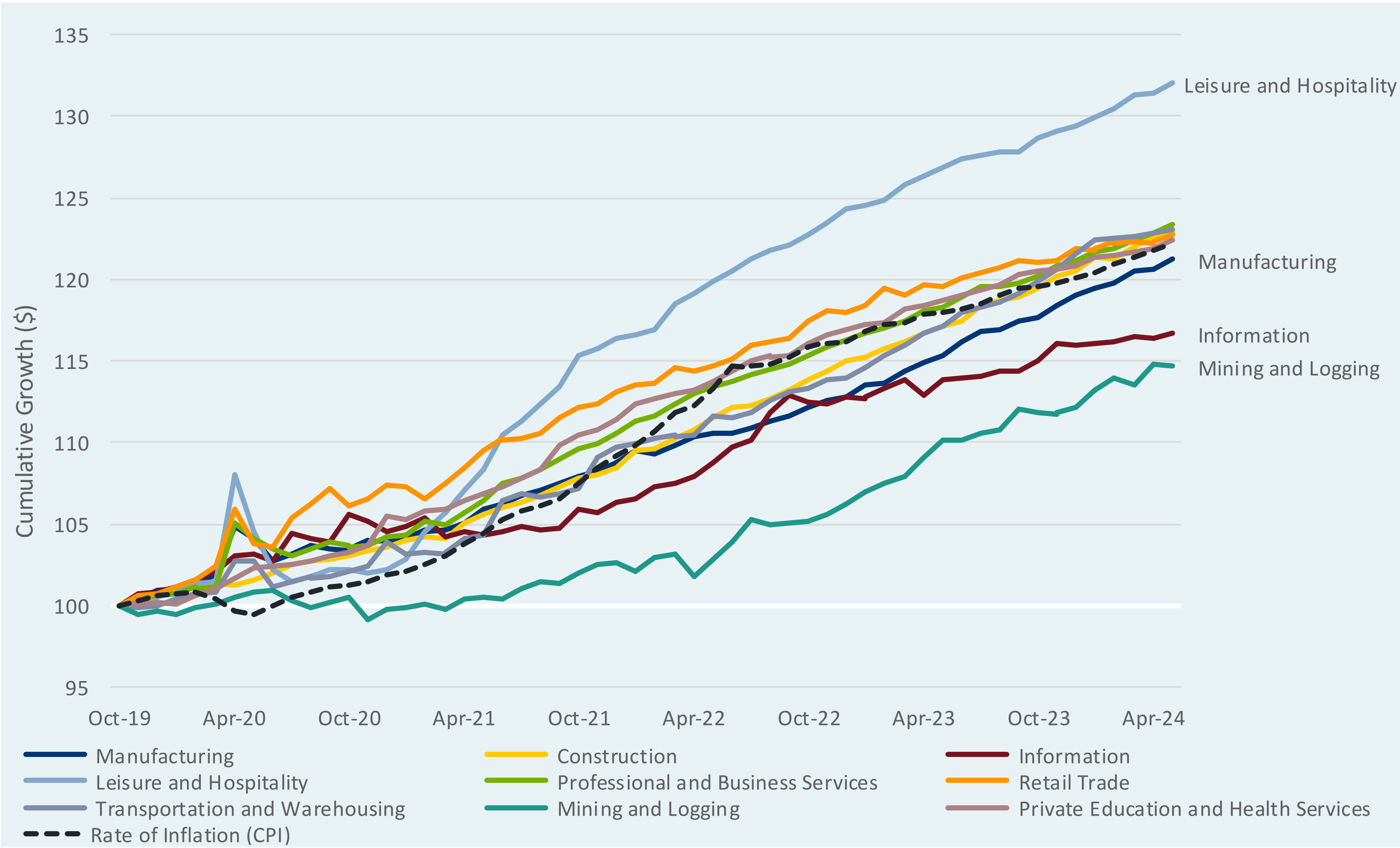
WORKERS AVAILABLE VS. AVAILABLE JOBS



Source: BLS, Verus, as of 5/31/24

Wage gains vs. rate of inflation

AVERAGE HOURLY EARNINGS



Source: FRED, Verus, as of 6/30/24

Over the past few years, inflation has eaten into wallets and resulted in shrinking pay for many types of work.

If inflation were to move higher, many households do not have much room to maneuver financially.

The consumer

Inflation adjusted personal spending growth was 2.6% year-over-year in June, and has remained in a 2-3% range for the past two years. This rate indicates moderate economic expansion in line with pre-pandemic rates of growth. Purchases of goods have been much weaker than purchases of services, perhaps partly a reflection of higher interest rates which have impacted the affordability of big ticket items such as automobiles and homes.

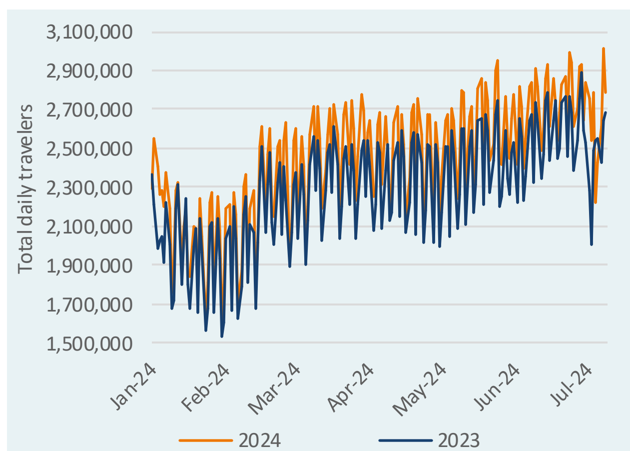
Many Americans continue to spend rather freely despite higher costs of goods and services taking up a greater portion of take-home income, and extreme discontent around inflation. However, certain non-essential spending such as for vacations has been robust. Total traveler volumes at U.S. airports in late June reached a record level.

Personal savings rates improved slightly over the quarter, from 3.5% to 3.9%. It seems reasonable to assume that savings rates should improve if wage gains continue to outpace the rate of inflation, all else equal.

REAL PERSONAL SPENDING

Source: FRED, as of 6/30/24

U.S. TSA AIRPORT ACTIVITY



Source: FRED, as of 7/8/24

PERSONAL SAVINGS RATE

Source: FRED, as of 6/30/24

Sentiment

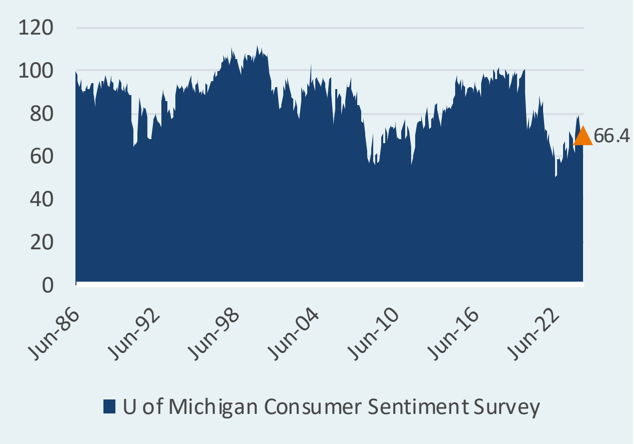
Consumer sentiment deteriorated over the quarter, moving back towards the lows of 2022. The University of Michigan Consumer Sentiment survey dropped from 79.4 to 66.4 on concerns over high goods and services prices and impacts of inflation on personal income. Household expectations for lower interest rates in the future helped to buoy the index somewhat.

Poor consumer sentiment and the discontent around higher prices can only be partially captured by the rate of inflation. Higher prices of goods and services make life more difficult, but the jump in interest rates further exacerbated the problem, in some cases substantially. The total monthly loan cost of a car or a home has rocketed upward with increased prices for those items and much higher interest costs baked into payments. For example, if a family had purchased an average home in 2021, the monthly payment would have been $1,206. In early 2024, if the same family purchased an average home, the monthly payment for that home would be $2,209 – an 83% increase!

The NFIB Small Business Optimism index was flat during the quarter, continuing to show an extremely poor reading. Inflation remains the top business concern. NFIB Chief Economist Bill Dunkelberg explained that "Increasing compensation costs has led to higher prices all around. Meanwhile, no relief from inflation is in sight for small business owners as they prepare for the uncertain months ahead."

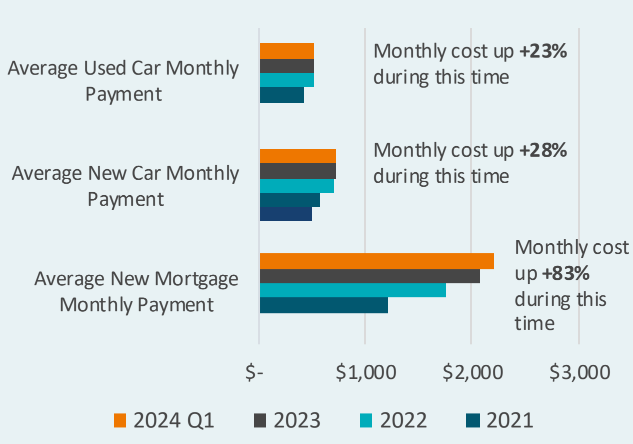
Consumer sentiment weakened during Q2, while small business optimism remained depressed.

CONSUMER SENTIMENT



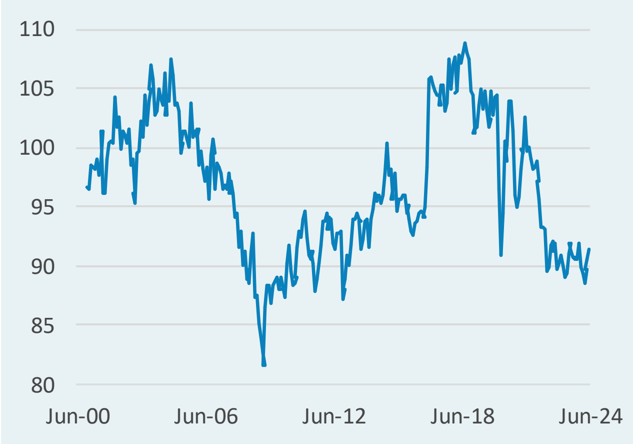
Source: University of Michigan, as of 6/30/24

INFLATION EATING UP BUDGETS



Source: Edmunds, Verus, as of April 2024

NFIB SMALL BUSINESS SENTIMENT



Source: NFIB, as of 6/30/24

Housing

Imbalances in the U.S. housing market appear to be here to stay, at least for a while, as sharply lower home prices and/or lower mortgage rates (the conditions needed for reasonable affordability) seem unlikely. Affordability is extremely difficult for new homebuyers, currently near record lows, and has worsened as the average home price was up +5.8% year-over-year in May. The other saving grace for potential homebuyers would be lower mortgage rates, but Federal Reserve rate cuts are expected to be moderate and may not have a large impact on the longer end of the yield curve. A driver of ultra-low mortgage rates during the pandemic was government quantitative easing, much of which was focused on mortgage debt and therefore pushed mortgage interest rate spreads to unusually low levels. In short, mortgage rates may fall in the next few years but perhaps only mildly.

Fortunately, rent price growth has slowed considerably, up only 0.8% year-over-year in May, according to Redfin. As the cost of renting versus owning has dramatically shifted, a strong surge in activity towards renting and away from homeownership would not be surprising in the near future.

Depressed home sales activity reflects extreme unaffordability. Monthly home sales are at levels similar to that which followed the 2008-2009 housing bubble. Prior to that crisis, the mid-1990s were the most recent time that compares to this level of sales activity. On the other hand, *new home sales* activity has been fairly robust, which may provide some incremental easing to home prices through increased supply.

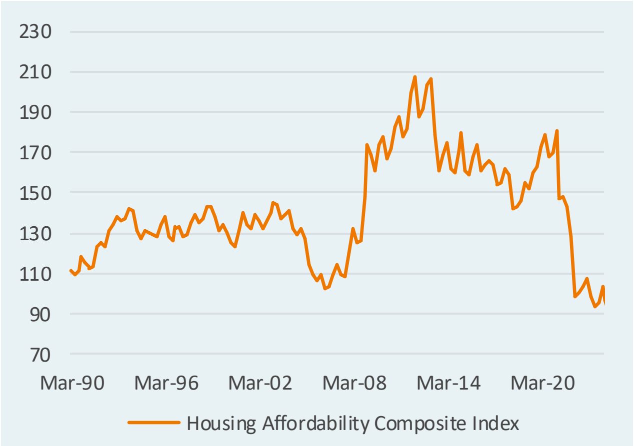
30-YEAR MORTGAGE RATE (%)

Source: Freddie Mac, as of 6/30/24

EXISTING HOME SALES

Source: FRED, as of 6/30/24

HOUSING AFFORDABILITY



Source: FRED, as of 3/31/24 – Housing affordability is calculated as the cost of a median priced single-family home at the current mortgage rate, as a percentage of the median family income

International economics summary

— Global economic data continues to paint a picture of slower but positive growth—a move back to pre-pandemic rates of expansion in the United States and across emerging markets, but with concerning weakness in Europe and Japan. Moderating conditions have allowed for rate cut signaling from central banks, which will likely provide an incremental boost to activity in the near-term.

— Inflation has fallen to a 2-3% range for most developed countries. Big inflation trends have tended historically to rhyme across the developed world, as crises often impact prices of global goods and services in similar ways. Recently, pandemic effects such as global supply chain issues, government stimulus, and higher energy prices had resulted in a similar ebb and flow to prices across marketplaces.

— India's economy continues to face uncertainty for this upcoming quarter. In the last five out of six years, India's real GDP growth rate has fallen short of the Economic Survey projections, but they have seen growth in private investments and infrastructure spending. Annual retail inflation rose to 5.1% in June compared to 4.8% from the previous month, primarily due to food prices. The Reserve Bank of India paused rate hikes, with the goal of not obstructing growth, and bringing inflation to its target rate of 4%.

— China year-over-year inflation was just 0.2% in June, as the country struggles with deflationary pressures, given a real estate slump, a weak job market, and generally poor economic conditions. According to some reports, excess manufacturing capacity and government incentives for overinvestment have created a situation where supply is outstripping demand. A declining population significantly adds to uncertainty around these issues.

Area	GDP (Real, YoY)	Inflation (CPI, YoY)	Unemployment
United States	3.1% *6/30/24*	3.0% *6/30/24*	4.1% *6/30/24*
Eurozone	0.4% 3/31/24	2.5% *6/30/24*	6.4% *5/31/24*
Japan	(0.7%) 3/31/24	2.3% *6/30/24*	2.8% *5/31/24*
BRICS Nations	5.3% 3/31/24	1.9% *6/30/24*	4.8% *12/31/22*
Brazil	2.5% 3/31/24	4.2% *6/30/24*	7.1% *5/31/24*
Russia	5.4% 3/31/24	8.6% *6/30/24*	2.6% *5/31/24*
India	7.8% 3/31/24	5.1% *6/30/24*	9.2% *6/30/24*
China	4.7% *6/30/24*	0.2% *6/30/24*	5.0% *6/30/24*

NOTE: India lacks reliable government unemployment data. Unemployment rate shown above is estimated from the Centre for Monitoring Indian Economy. The Chinese unemployment rate represents the monthly surveyed urban unemployment rate in China.

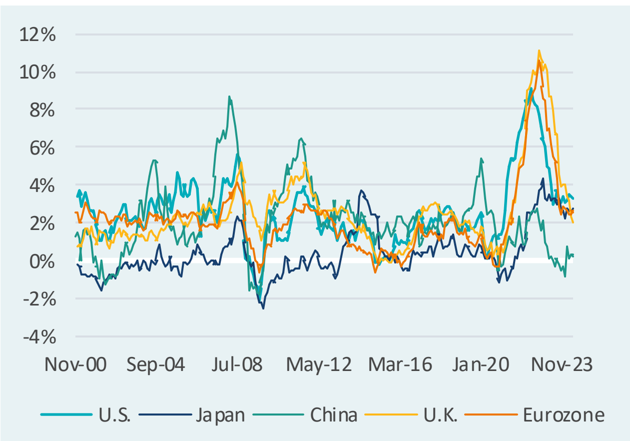
International economics

The global narrative appears to remain intact—that many economies are set to slow in 2024 but will likely avoid recession. The United States leads the developed world in growth with a 3.1% YoY real rate of GDP expansion. Europe and Japan have demonstrated anemic economic growth.

Inflation moderation continues, and in much of the world has normalized. Big inflation trends have tended historically to rhyme across developed countries, as crises often impact prices of global goods and services in similar ways. This seems to be at least partially the case recently, as pandemic effects such as global supply chain issues, government stimulus, and higher energy prices have followed global growth outpacing expectations. This resulted in a similar ebb and flow in prices across most economies. If history is a guide, normal rates of inflation elsewhere may be a good sign for domestic inflation issues.

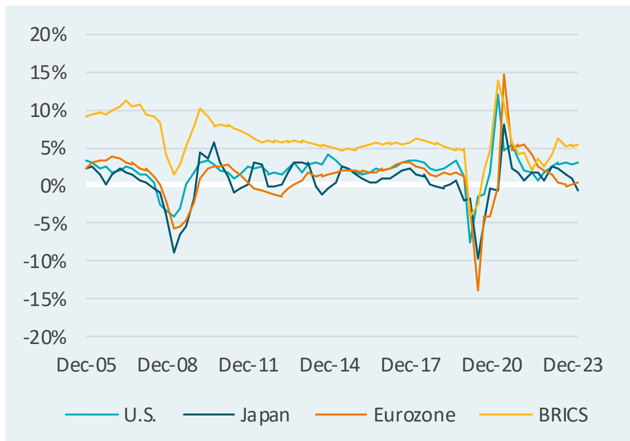
China year-over-year inflation was just 0.2% in June, as the country struggles with deflationary pressures, given a real estate slump, weak job market, and generally poor economic conditions. According to some reports, excess manufacturing capacity and government incentives for overinvestment have created conditions where supply has outstripped demand. A declining population significantly adds to uncertainty around these issues.

INFLATION (CPI YEAR-OVER-YEAR)



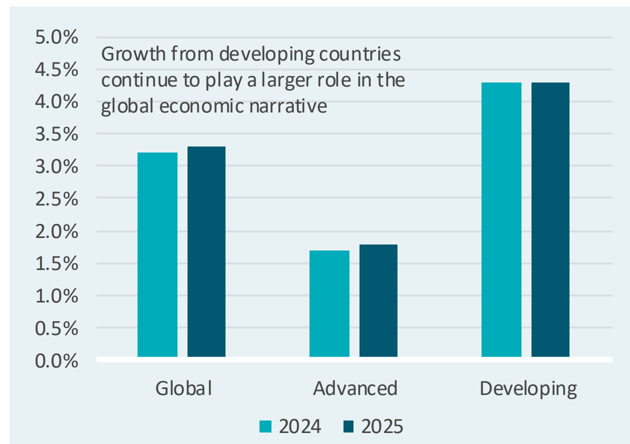
Source: Bloomberg, as of 6/30/24

REAL GDP GROWTH (YEAR-OVER-YEAR)



Source: Bloomberg, as of 6/30/24 – or most recent release

IMF JULY 2024 GDP FORECASTS



Source: IMF April World Economic Outlook, as of 7/17/24

Fixed income rates & credit

Fixed income environment

— The 10-year U.S. Treasury yield initially increased in Q2, rising from 4.20% to a peak of 4.70% before gradually falling to 4.36%, resulting in an overall increase in yields with a downward trend going into Q3. These movements resulted in near-zero performance for short to intermediate duration high quality fixed income and negative performance for longer duration.

— By comparison, most credit indices saw positive returns. High yield gained +1.1% (Bbg U.S. Corporate High Yield), while bank loans rose +1.9% (S&P/LSTA Leveraged Loan). Longer duration investment grade corporate bonds declined by -1.6% (Bloomberg U.S. Long Corporate Credit) as sensitivity to rising yields in April overwhelmed gradual returns in the latter half of the quarter. This reflects a continued concern in the market over inflation and higher-for-longer Fed policy.

— The U.S. yield curve, indicated by the 10-year minus the 2-year Treasury yield, continues to remain inverted, marking over two years of continuous yield curve inversion (June 6th, 2022). The curve ended the quarter inverted by -35bps. While an inverted yield curve has been a common metric for predicting recessions, the recent continued economic resilience has increased public optimism of a potential soft-landing.

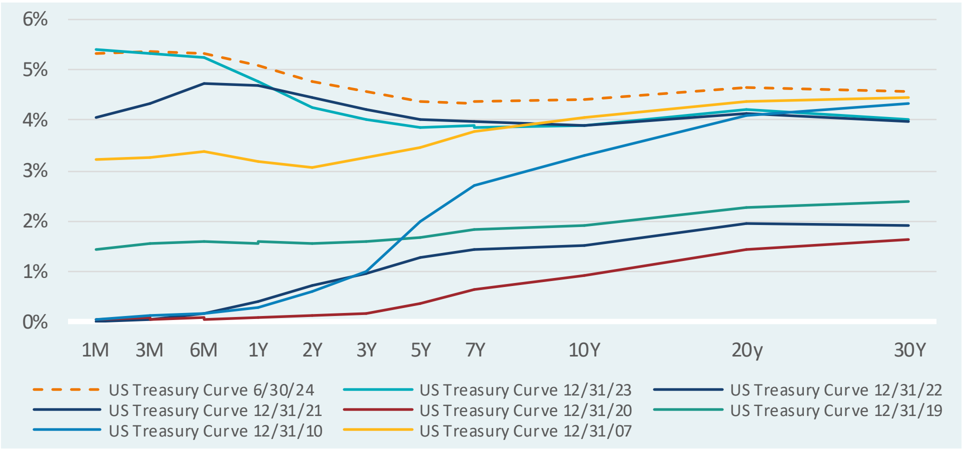
— Default activity in loans and credit reached a one-year low at the end of Q2. However, the gap between bank loan and high yield default activity has increased to a 10-year high, with total volume of distressed or defaults comprised of loans (80%) to bonds (20%) is on pace to be a record high proportion. During the period, a total of $15.2 billion of bank loan and high yield bonds were impacted by default or distressed exchanges, down from $20.6 billion in the prior quarter. Notably, default/distressed exchange volume averaged $17.9 billion quarterly since 2020 and $14 billion quarterly over the last 17.5 years.

	QTD Total Return	1 Year Total Return
Core Fixed Income (Bloomberg U.S. Aggregate)	0.1%	2.6%
Core Plus Fixed Income (Bloomberg U.S. Universal)	0.2%	3.5%
U.S. Treasuries (Bloomberg U.S. Treasury)	0.1%	1.5%
U.S. Treasuries: Long (Bloomberg U.S. Treasury 20+)	(2.2%)	(7.2%)
U.S. High Yield (Bloomberg U.S. Corporate HY)	1.1%	10.4%
Bank Loans (S&P/LSTA Leveraged Loan)	1.9%	11.1%
Emerging Market Debt Local (JPM GBI-EM Global Diversified)	-1.6%	0.7%
Emerging Market Debt Hard (JPM EMBI Global Diversified)	0.3%	9.2%
Mortgage-Backed Securities (Bloomberg MBS)	0.1%	2.1%

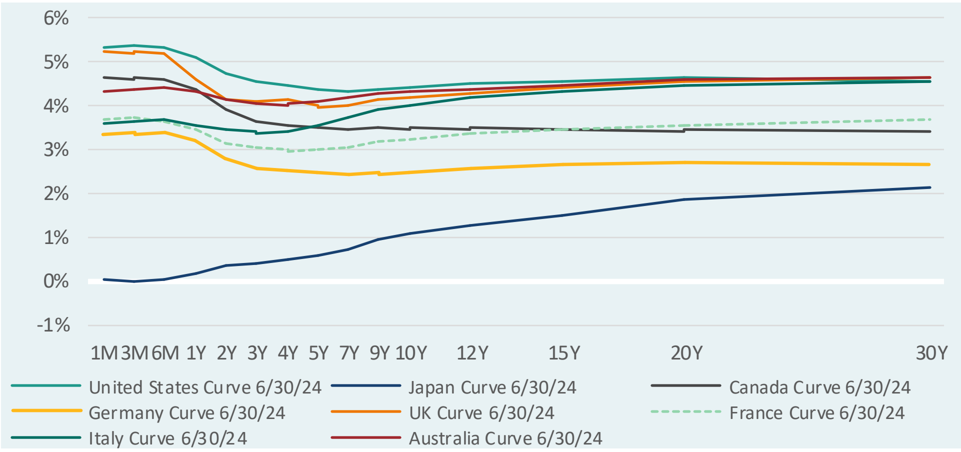
Source: Bloomberg, as of 6/30/24

Yield environment

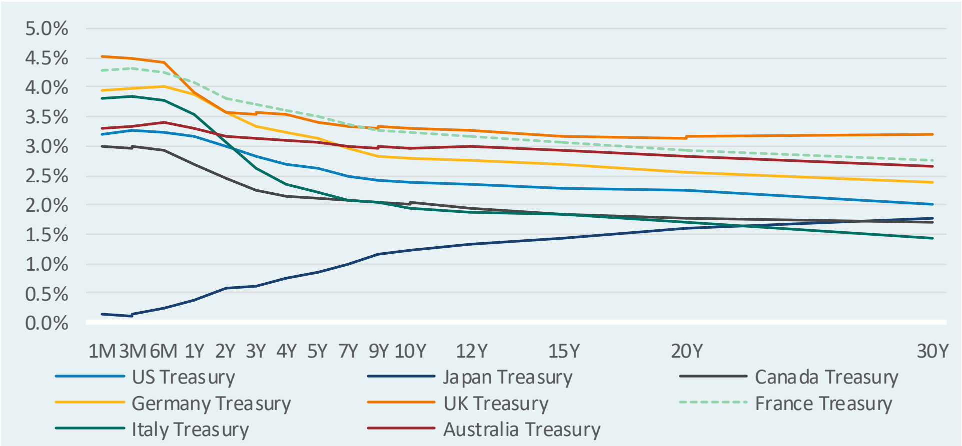
U.S. YIELD CURVE



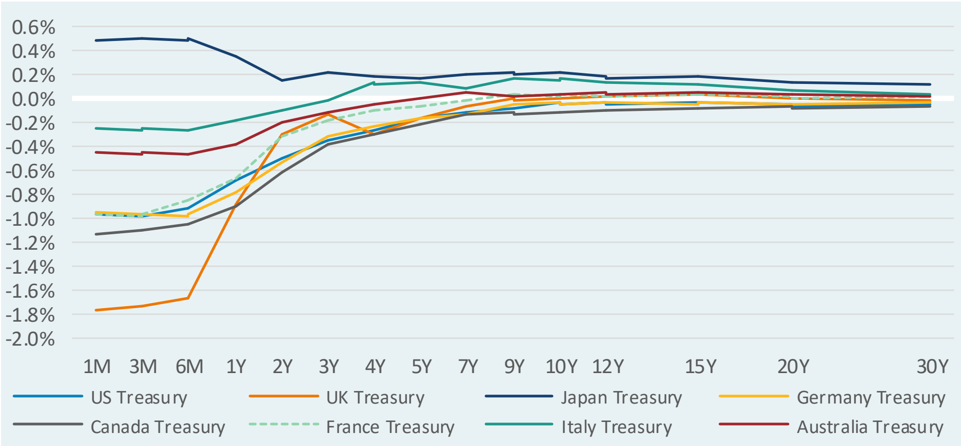
GLOBAL GOVERNMENT YIELD CURVES



YIELD CURVE CHANGES OVER LAST FIVE YEARS



IMPLIED CHANGES OVER NEXT YEAR



Source: Bloomberg, as of 6/30/24

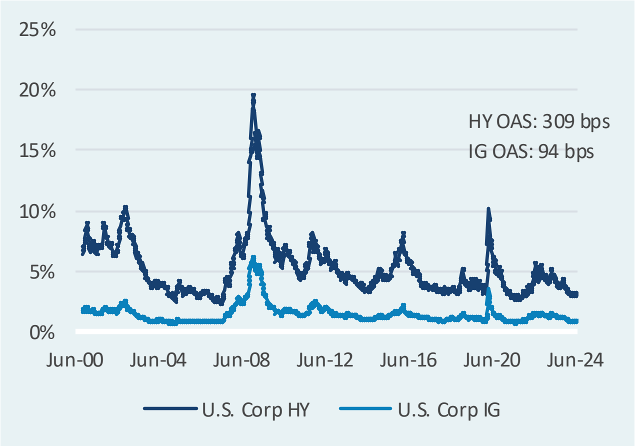
Credit environment

During the second quarter, credit markets delivered mostly positive returns with lower-quality credit such as high yield bonds and bank loans leading. Bank loans rose +1.9% (CS Leveraged Loans), while high yield bonds increased by +1.1% (Bbg U.S. Corporate High Yield). Longer duration investment grade corporate bonds (Bloomberg U.S. Long Corporate Credit) fell by -1.6% as concerns over rising interest rates and higher expected inflation acted as a headwind to performance.

Returns across credit ratings were broadly positive during Q2. Higher-quality BB-rated bonds returned +1.4% compared to +1.1% for B-rated, while non-distressed CCC's led with +2.0% returns. CCC-rated bonds including distressed lagged other credits with +0.2% returns. Higher-quality bank loans outperformed lower quality, with BB- and B- rated loans returning +1.88% and +2.13%, while CCC-rated loans only returned +0.14%.

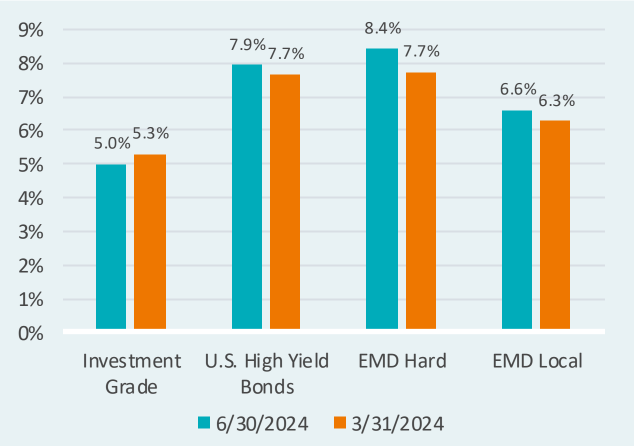
High quality credit spreads declined during the quarter while high yield spreads were mixed as recession concerns contended with further resilience in the corporate sector. Lower-quality high yield bond spreads rose by roughly 0.1% to 3.2%, while investment grade spreads continued to tighten by 0.3% to 0.9%. These trends continue to show spreads below long-term historical averages, suggesting that investors remain confident in the ability of most businesses to service debt. However, widening spreads and lower returns in CCC and distressed suggest that the highest risk credit sectors are beginning to show strain under the continued pressure of higher lending rates.

SPREADS



Source: Barclays, Bloomberg, as of 6/30/24

YIELD TO MATURITY



Source: Bloomberg, J.P. Morgan as of 6/30/24

CREDIT SPREAD (OAS)

Market	6/30/24	6/30/23
Long U.S. Corp	1.2%	1.5%
U.S. Inv Grade Corp	0.9%	1.2%
U.S. High Yield	3.1%	3.9%
U.S. Bank Loans*	3.9%	3.8%

Source: Barclays, Credit Suisse, Bloomberg, as of 6/30/24
**Discount margin (4-year life)*

Default & issuance

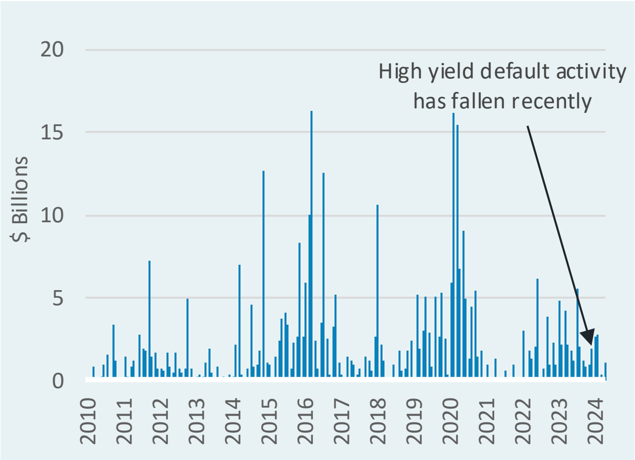
Default activity declined during the quarter as concerns around slowing economic growth abated. During the period, $15 billion of bank loans and high yield bonds were affected by default or distressed exchanges, down from $22 billion in the prior quarter. Year-to-date, 19 defaults and 23 distressed exchanges have occurred totaling more than $37 billion, down roughly -14% from the same period last year.

The bank loan market has shown notable weakness compared to high yield bonds. Year-to-date, roughly 80%, or $29.6 billion of loans, have either defaulted or resulted in distressed exchanges compared to $7.5 billion for high yield bonds.

High yield bond default rates declined to roughly 1.8%, down from 2.7% a year ago, and are well below the long-term annual average of roughly 3.4%. High-yield default recovery rates ended the quarter at 38.8%, up significantly from 17.4% at the same time last year.

The issuance of investment grade credit declined significantly from the prior quarter, $343 billion versus $531 billion. Year-to-date issuance stands at $874 billion, up 23% compared to last year at the same time. High yield bond issuance declined slightly to $79.4 billion, down from $86.6 billion during the previous quarter. Broadly, credit spreads remain near their recent lows, which despite the higher yield environment, allows companies to issue at more competitive rates.

U.S. HY MONTHLY DEFAULTS (PAR WEIGHTED)

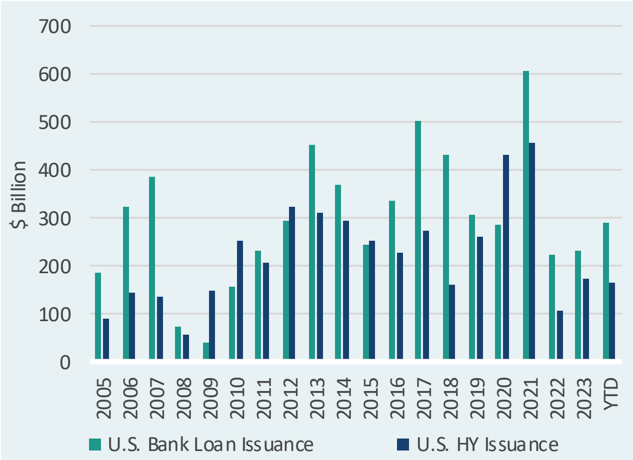


Source: BofA Merrill Lynch, as of 6/30/24

U.S. HY SECTOR DEFAULTS (LAST 12 MONTHS)

Source: BofA Merrill Lynch, as of 6/30/24 – par weighted

DEVELOPED MARKET ISSUANCE ($ BILLIONS)



Source: BofA Merrill Lynch, all developed markets, as of 6/30/24

Credit hedge funds

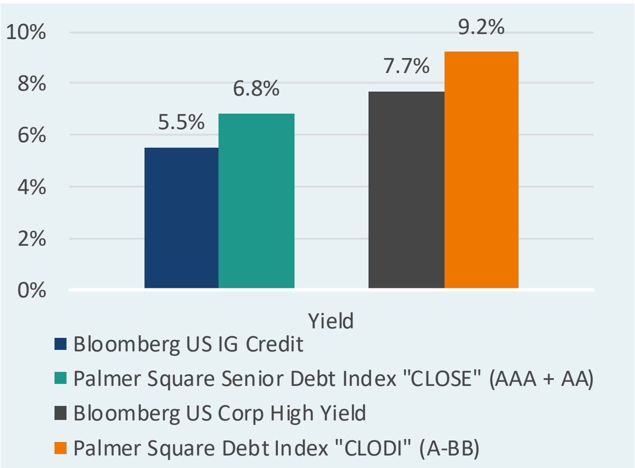
Credit hedge funds have outperformed high yield and leveraged loans through 2Q 2024, benefiting from high total yields and low duration.

Even though headline default numbers imply a benign opportunity set, according to JP Morgan, although default volume is lower year over year, the volume of distressed exchanges is already the third highest annual total since at least 2008. Additionally, the volume of Loan distressed transactions YTD is already the largest annual total on record for loans. Credit hedge funds are a natural participant in these types of transactions and are finding no shortage of actionable ideas even as broad markets are at or near highs.

Hedge funds focused on structured credit continue to take advantage of excess yield in CLO and other securitized markets. In the CLO market, an index of AAA and AA tranches (as proxied by the Palmer Square Indexes) are offering 1.3% excess yield over US Investment Grade Credit and A, BBB, and BB tranches are yielding 1.5% more than the Bloomberg US High Yield index.

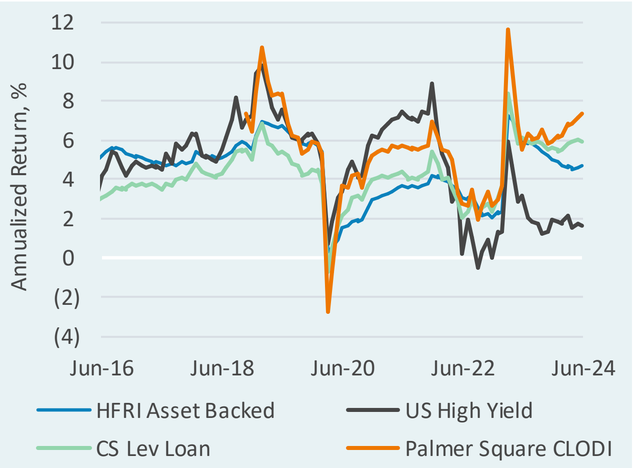
Distressed funds should continue to benefit from elevated levels of capital market activity in credit markets, with strong issuance in both HY and Loan markets set against a backdrop of tight credit spreads and low defaults.

CLO VS CORPORATE BOND YIELDS AS OF JUNE 30



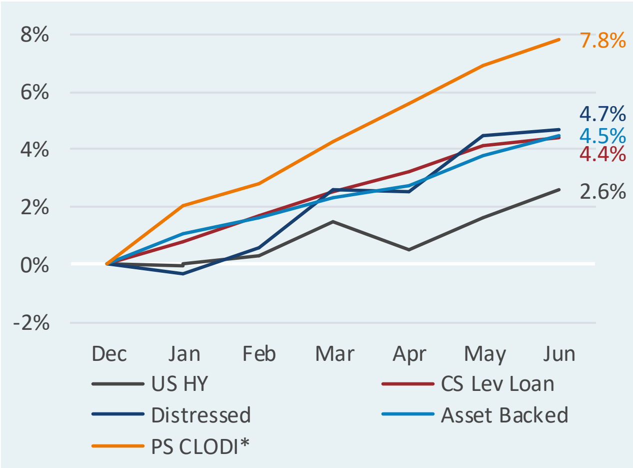
Source: MPI, Bloomberg, Palmer Square. As of 6/30/2024

3 YEAR ROLLING RETURN



Source: CS, HFR, Bloomberg, Palmer Square, MPI

YTD RETURN



Source: Bloomberg, Palmer Square, HFR, MPI

Equity

Equity environment

— Emerging market equities outperformed during Q2, up +5.0% (MSCI Emerging Markets), despite ongoing poor returns from China. U.S. equities were close behind (S&P 500 +4.3%), setting a new all-time-high price level. In contrast, international developed equities were relatively rangebound (MSCI EAFE -0.4%).

— Blended S&P 500 year-over-year Q2 earnings growth was +9.3% as of July 12th. If total reported earnings growth ends at this +9.3% rate, it would mark the largest year-over-year earnings growth rate since Q1 of 2022.

— The U.S. dollar rose moderately in value during Q2, resulting in losses for U.S. investors with unhedged foreign currency exposure. Given that the Federal Reserve is expected to engage in similar rate cuts as other developed economies, it is unclear the extent to which the global rate cutting path will impact relative currency valuations. Unexpected central bank actions will likely have the greatest directional impact in the future.

— Small cap and value style investing drastically underperformed during Q1. Small cap lagged large cap by -6.9% (Russell 2000 -3.3% vs. Russell 1000 +3.6%), while value underperformed growth by -10.5% (Russell 1000 Value -2.2% vs. Russell 1000 Growth +8.3%). The style premia performance gap was even wider over the last year, as small cap underperformed large cap by -13.8% and value underperformed growth by -20.4%.

— Markets continue to present a unique environment of low equity volatility but high fixed income volatility. This gap has closed somewhat, as bond market implied volatility has moved a bit back towards normal levels since reaching a nearly all-time high 2023.

	QTD TOTAL RETURN		1 YEAR TOTAL RETURN	
	(unhedged)	(hedged)	(unhedged)	(hedged)
U.S. Large Cap (S&P 500)	4.3%		24.6%	
U.S. Small Cap (Russell 2000)	(3.3%)		10.1%	
U.S. Equity (Russell 3000)	3.2%		23.1%	
U.S. Large Value (Russell 1000 Value)	(2.2%)		13.1%	
US Large Growth (Russell 1000 Growth)	8.3%		33.5%	
Global Equity (MSCI ACWI)	2.9%	3.5%	19.4%	21.6%
International Large (MSCI EAFE)	(0.4%)	1.7%	11.5%	18.5%
Eurozone (EURO STOXX 50)	(2.8%)	(1.7%)	12.0%	16.3%
U.K. (FTSE 100)	3.8%	3.8%	12.1%	13.2%
Japan (TOPIX)	(4.3%)	3.0%	12.7%	32.5%
Emerging Markets (MSCI Emerging Markets)	5.0%	6.3%	12.5%	15.8%

Source: Russell Investments, MSCI, STOXX, FTSE, JPX, as of 6/30/24

Domestic equity

U.S. equities further outperformed international developed equities, but lagged emerging market shares, with the S&P 500 finishing up +4.3% during the quarter. The artificial intelligence boom provided a tailwind to earnings of chip manufacturers and has likely helped to lift valuations more broadly. Signs of cooling in the labor market, as well as surprisingly weak inflation figures, helped reignite investor hopes for an economic *soft landing* and interest rate cuts.

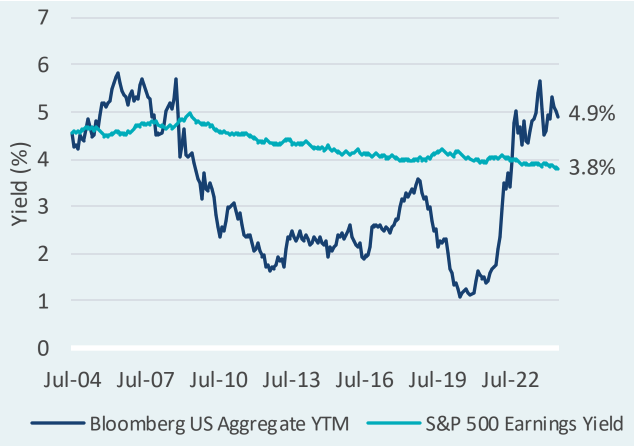
Blended S&P 500 year-over-year Q2 earnings growth was +9.3% as of July 12th. If total reported earnings growth ends at this +9.3% rate, it would mark the largest year-over-year earnings growth rate since Q1 of 2022. Communication Services (+18.4%) and Information Technology (+16.4%) were the earnings leaders, while Materials (-11.8%) and Industrials (-3.7%) lagged.

Strong price gains have moved valuations towards the richer side of the historical range. This effect, alongside higher interest rates and more attractive bond yields, has resulted in a regime shift regarding the attractiveness of equity and fixed income. Expensive equity prices have pushed total U.S. equity yield to below 4%, at a time when holding cash yields materially more than 5% and core fixed income yields 5%. This new regime is captured in institutional capital market assumptions which now tend to reflect mild future domestic equity returns and robust fixed income returns.

S&P 500 PRICE INDEX

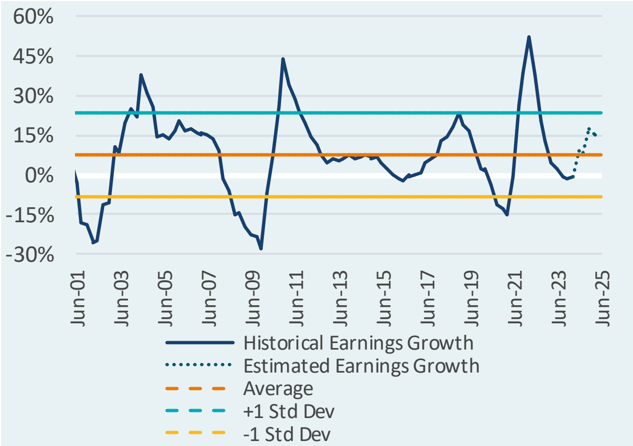
Source: Bloomberg, as of 6/30/24

RELATIVE YIELD: EQUITY VS FIXED INCOME



Source: Bloomberg, Standard & Poor's, Verus, as of 6/30/24

S&P 500 EPS GROWTH (YEAR-OVER-YEAR)



Source: Bloomberg, Factset, Verus, as of 7/19/24

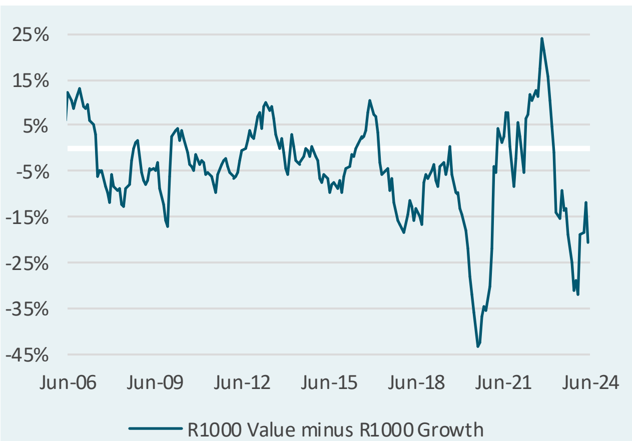
Domestic equity size & style

Small cap and value style investing drastically underperformed during Q1. Small cap lagged large cap by -6.9% (Russell 2000 -3.3% vs. Russell 1000 +3.6%), while value underperformed growth by -10.5% (Russell 1000 Value -2.2% vs. Russell 1000 Growth +8.3%). The style premia performance gap was even wider over the last year, as small cap underperformed large cap by -13.8% and value underperformed growth by -20.4%.

Much of the difference in style performance is driven by sector differences. Growth has a much greater exposure to mega cap technology companies, which continued to overshadow all other sectors in the second quarter. Nvidia extended its historic run, while Apple and Tesla bounced back from a poor first quarter. Technology and Communication companies led earnings growth and this is expected to persist going forward. Per Factset, Communication Services and Technology companies within the S&P 500 are expected to provide earnings growth of 21% and 18.7%, respectively, leading all other sectors. This has translated into volatility between sectors, where Technology (+13.8%) and Communications (+9.4%) led the S&P 500 in Q2, while six out of eleven sectors declined in value over the quarter.

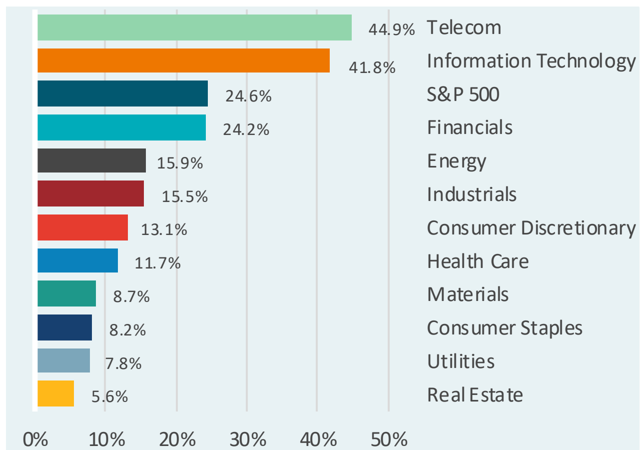
Unusually large disparities in style performance has been apparent, driven by sector trends and mega cap stock dominance. Market behavior continues to support our stance that short-term factor timing decisions should in most circumstances be pursued only in the rare occasion of obvious market mispricing and with a clear catalyst for price correction.

VALUE VS. GROWTH 1-YR ROLLING



Source: FTSE, Bloomberg, as of 6/30/24

S&P 500 SECTOR RETURNS (1 YEAR ROLLING)



Source: FTSE, Bloomberg, as of 6/30/24

1-YEAR SIZE & STYLE PERFORMANCE

	Value	Core	Growth
Large Cap	13.1%	23.9%	33.5%
Mid Cap	12.0%	12.9%	15.1%
Small Cap	10.9%	10.1%	9.1%

Source: FTSE, Bloomberg, as of 6/30/24

International developed equity

International developed shares had a weak second quarter, trailing domestic and emerging markets equities. The MSCI EAFE Index returned +1.7% in U.S. dollar terms, while losing value (-0.4%) if the exposure remained unhedged. The ECB cut rates for the first time in five years in June, with the intention of stimulating a set of economies that had been otherwise stagnant, especially in comparison to the U.S. economy. The dollar's advance was likely fueled by this ECB rate cut, which increased the interest rate differential between the U.S. dollar and the Euro, providing a headwind for unhedged investors.

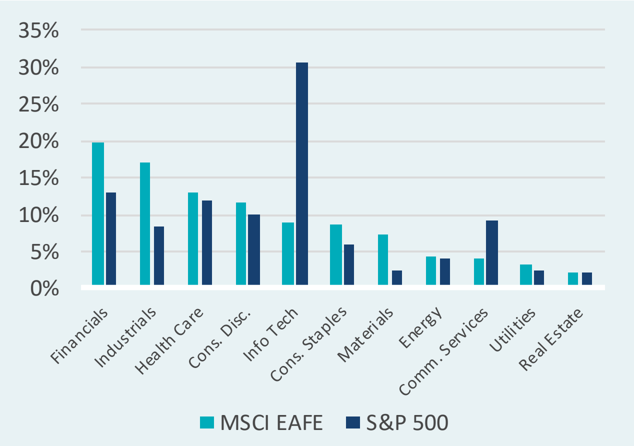
Some of the discrepancy in performance between U.S. and international developed equities can be attributed to sector differences. U.S. equities are heavily concentrated in technology companies, while developed markets have a more diversified sector breakdown, with Financials and Industrials – two sectors that tilt towards value – more heavily weighted in developed markets. This lower exposure to technology companies has not helped developed equity performance over the past couple of years, but if richly valued U.S. tech companies have a pullback, it would provide a material boost.

Markets will continue to watch the effect of adjustments to rate cut expectations, as European economies attempt to stimulate growth that has been lackluster this year without reigniting inflation.

INTERNATIONAL DEVELOPED EQUITY

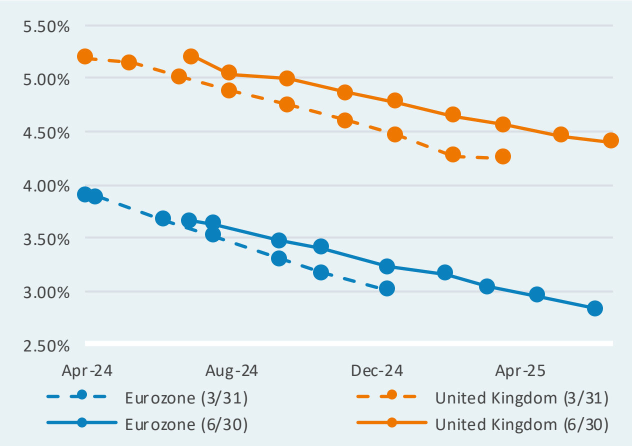
Source: MSCI, as of 6/30/24

MSCI EAFE VS. S&P 500 SECTOR DISTRIBUTION



Source: MSCI, S&P, as of 5/31/24

ECB & BOE RATE EXPECTATIONS VS Q1



Source: Bloomberg, as of 6/30/24

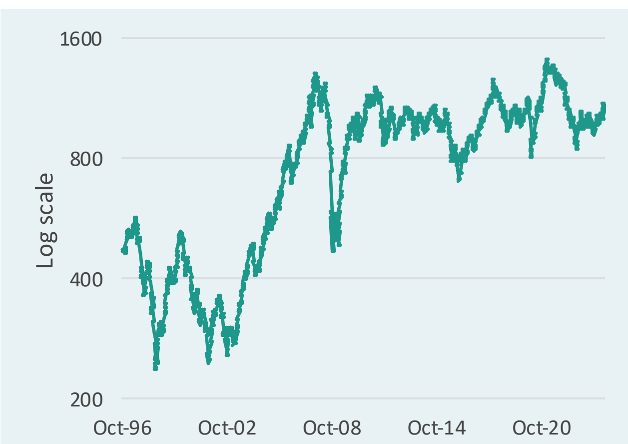
Emerging market equity

Emerging market equities were the highest performing equity market in portfolios (MSCI EM +5.0%), outpacing the domestic market (S&P 500 +4.3%) and international developed equities (MSCI EAFE -0.4%).

Sector differences played out in Emerging Markets, much as they did in the U.S., with Info Tech (+11.9%) being the best performing sector in the MSCI EM Index. This growth was bolstered by Taiwan Semiconductor Manufacturing Company (TSMC), who reported earnings growth of +36% in Q2. TSMC works directly with several domestic mega cap tech companies and makes up nearly 10% of the MSCI EM index.

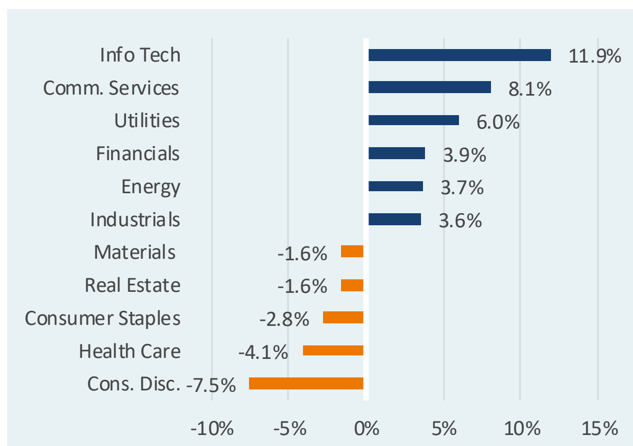
Chinese equities continue to be cheap from a valuation perspective but face serious structural issues which could further act as a drag on performance. Real estate market shakiness has come back to the forefront of many investors' minds. A large inventory of real estate sits empty, China's population is in decline and that decline is expected to accelerate, and a large portion of the economic boom has only been possible through ongoing real estate construction. It is difficult to imagine how these woes are resolved without a serious downward resetting of prices which would be incredibly painful for Chinese citizens who, on average, hold a large portion of their wealth in real estate.

EMERGING MARKET EQUITY



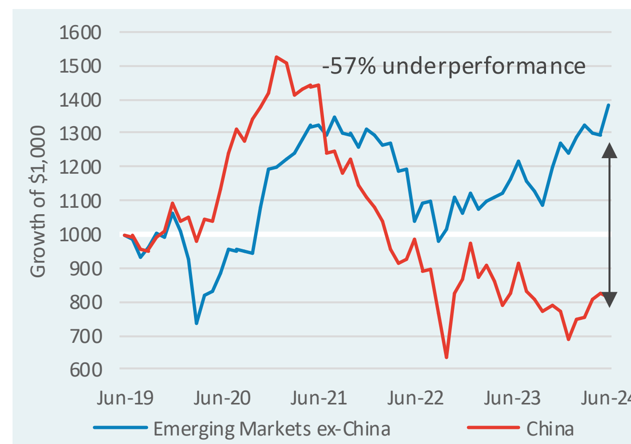
Source: MSCI, as of 6/30/24

MSCI EM Q2 2024 SECTOR RETURNS (USD)



Source: MSCI, J.P. Morgan, as of 6/30/24

SUBSTANTIAL CHINA UNDERPERFORMANCE



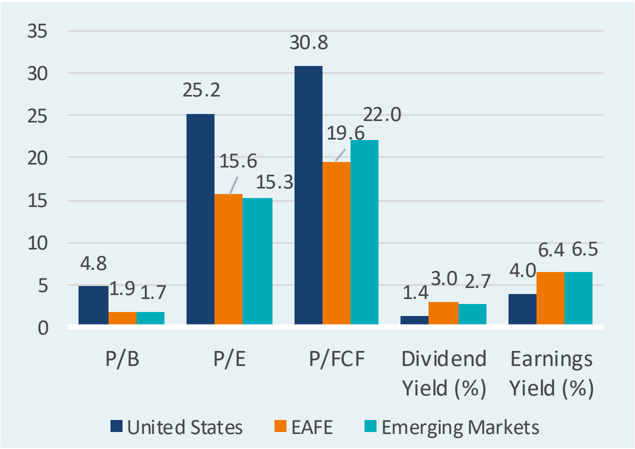
Source: MSCI, as of 6/30/24

Equity valuations

Valuations moved higher in Q2 across each market. The S&P 500 traded at a Forward P/E of 21.4 at the end of June and a Trailing P/E of 25.2. High valuations have pushed the U.S. dividend yield to a nearly all-time historic low of 1.4%.

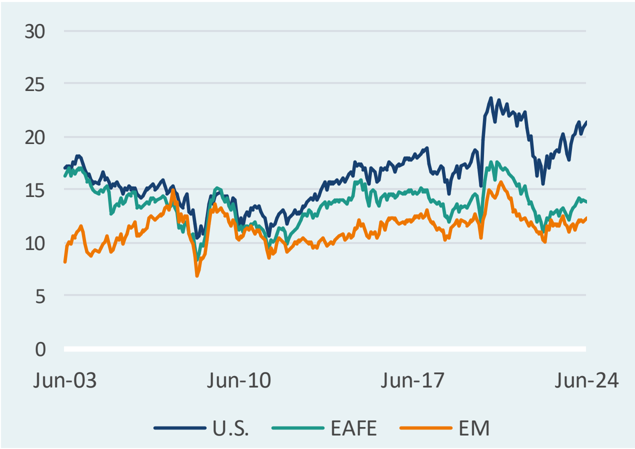
Lofty prices, along with a much more attractive environment for fixed income, suggest to us that the next decade may look much different than the past decade of unusually strong U.S. equity performance. The past decade was made possible by a very low equity valuation starting point, the impressive rise of mega cap tech / social media / online retailing businesses, extreme government stimulus pumped into the system, corporate tax cuts, and financial engineering following ultra low interest rates which contributed to a very large gain in corporate profit margins. Now, looking at the next 10 years, we are starting with high valuations, already high corporate profit margins, large debt burdens across many segments of the economy, and arguably a lower chance of future debt-driven stimulus. Fixed income may be very competitive with equity in terms of yields and prospective return over the next ten years. We believe this change in regime is noteworthy and may reasonably act as a theme for institutional asset allocation.

MSCI VALUATION METRICS (3-MONTH AVG)



Source: Bloomberg, as of 6/30/24 – Trailing P/E

FORWARD PRICE/EARNINGS RATIO

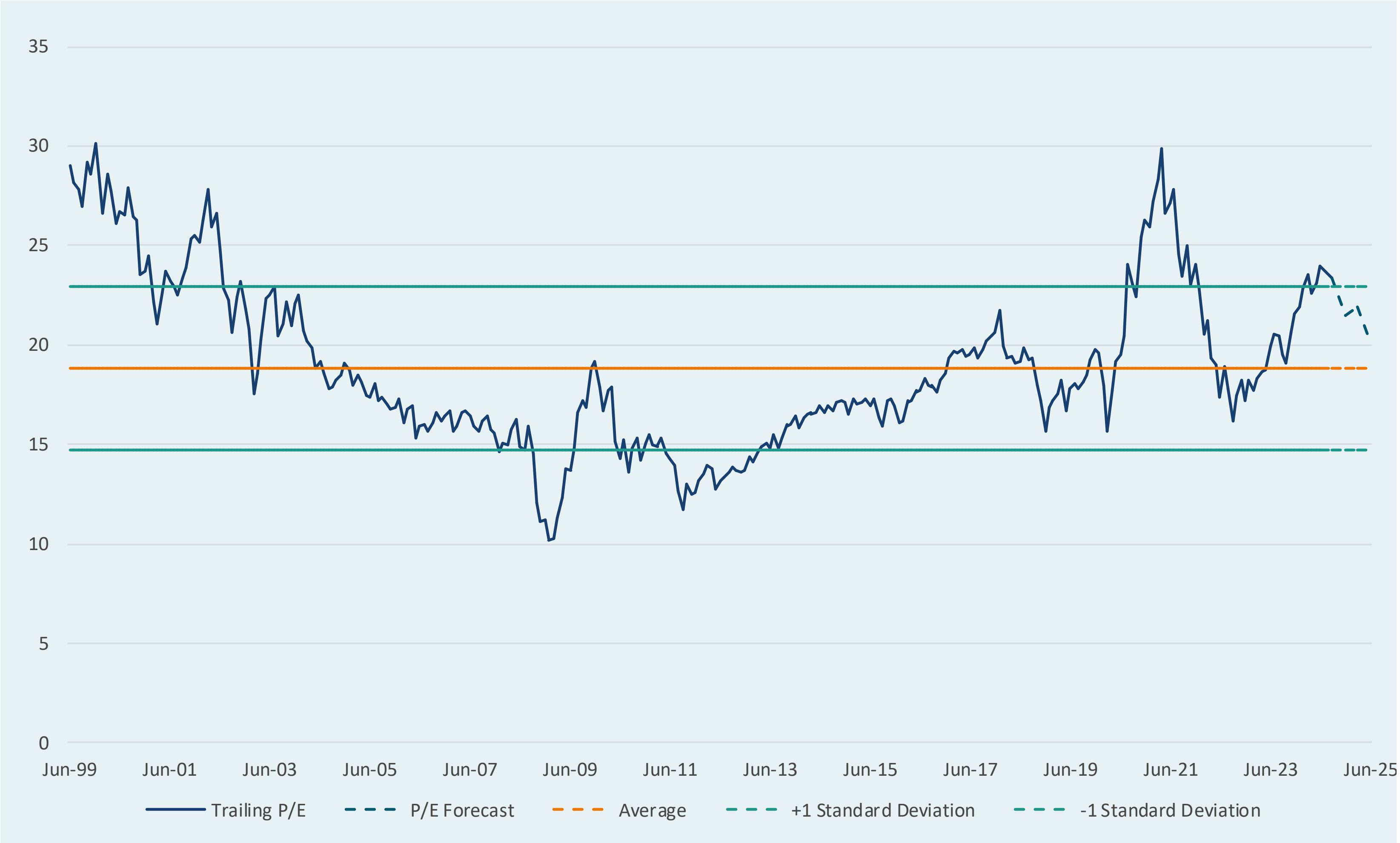


Source: MSCI, Bloomberg, as of 6/30/24

S&P 500 HISTORICAL DIVIDEND YIELD

Source: S&P, Bloomberg, as of 6/30/24

U.S. valuations & expected earnings



If projected earnings growth rates hold over the next two years, and the market increases in price at a more moderate rate, then valuations will come down toward historical averages.

Source: Bloomberg, Verus, as of 7/19/24 – here we assume that both: a) the S&P 500 delivers earnings growth over the next two years in line with current estimates (11% in 2024 and 14.7% in 2025) , and b) The S&P 500 delivers a total return in those years equivalent to the Verus 2024 CMA return estimate. If both of things occur, the S&P 500 Price/Earnings ratio will move back towards the historical average.

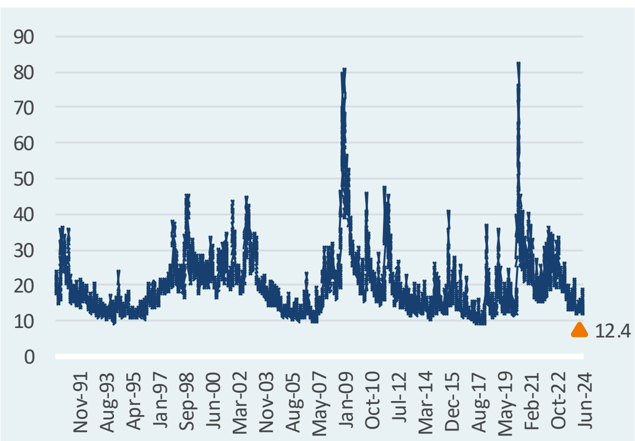
Market volatility

Market-priced volatility (Cboe VIX Index) remained very low during the second quarter, ending at 12.4% in June. This has reasonably raised eyebrows, given a variety of risks that domestic equities face, but low volatility is typical of strongly up trending equity environments.

Recent realized one-year volatility has also been fairly mild across global markets, relative to history. Domestic, international developed, and emerging market equities have all delivered between 14.6% and 15.8% volatility during that time, with emerging markets marking the upper end of the range.

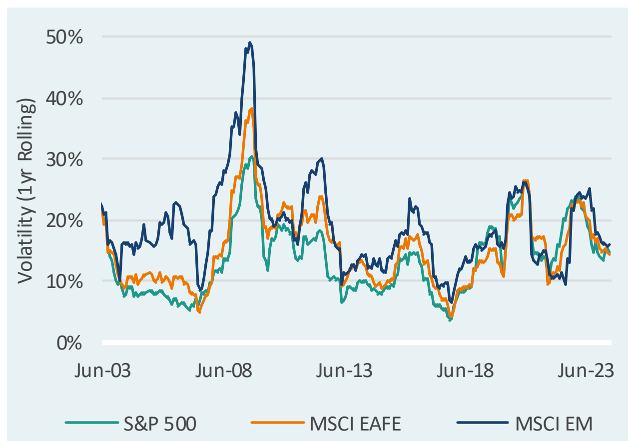
This asset allocation environment is unique in terms of low equity volatility but high fixed income volatility. This gap has closed somewhat, as bond market implied volatility has moved a bit back towards normal levels since reaching a nearly all time high in 2023. Bond characteristics are captured by the "MOVE" Index—which calculates the implied volatility of U.S. Treasury securities. As further clarity is gained around the path of the Federal Reserve, we would expect that bond volatility will further moderate.

U.S. IMPLIED VOLATILITY (VIX)



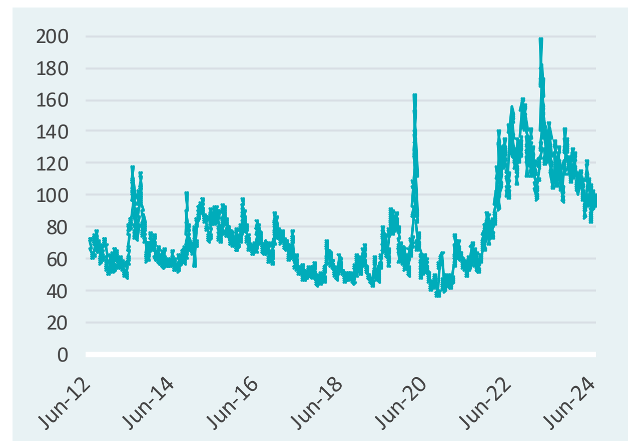
Source: Cboe, as of 6/30/24

REALIZED VOLATILITY



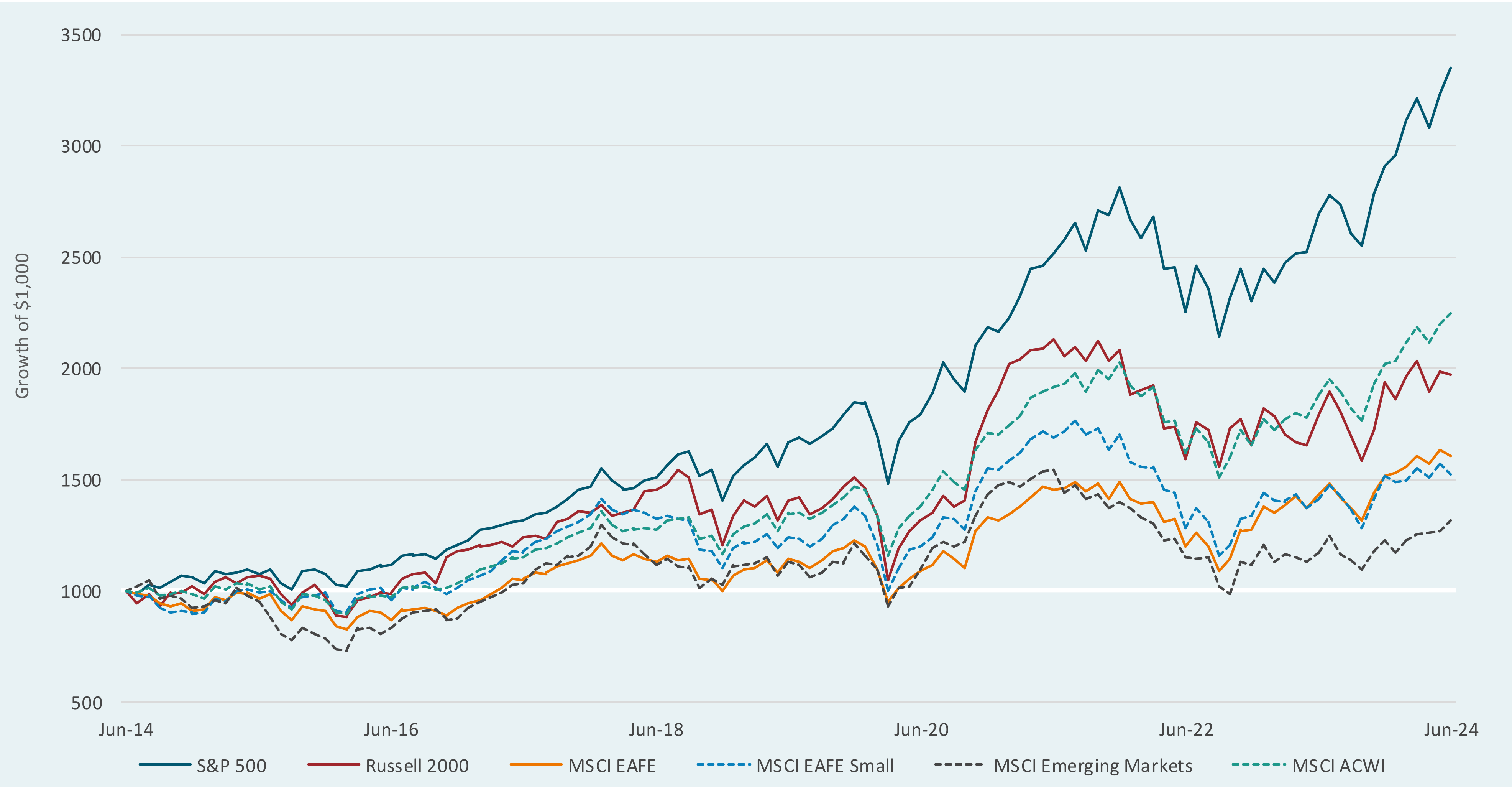
Source: S&P, MSCI, as of 6/30/24

U.S. TREASURY IMPLIED VOL ("MOVE" INDEX)



Source: Bloomberg, as of 6/30/24

Long-term equity performance



Source: MPI, as of 6/30/24

Other assets

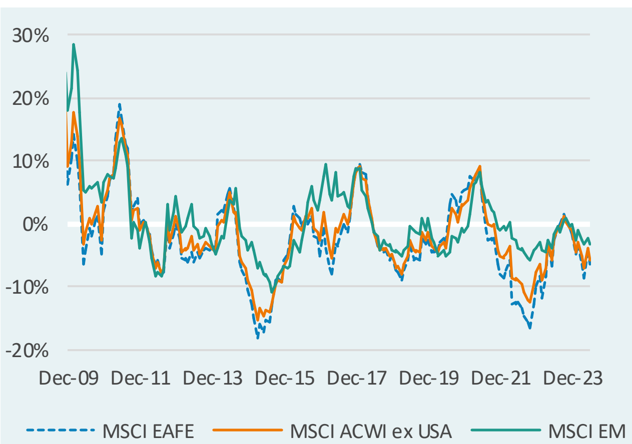
Currency

The U.S. dollar rose modestly in value during Q2, resulting in losses for investors with unhedged foreign currency exposure. Given that the Federal Reserve is expected to engage in similar sized rate cuts as other developed central banks, it is unclear the extent to which the *rate cutting path* will impact relative currency valuations. Unexpected central bank actions will likely have the greatest directional impact in the future.

Investors without a currency hedging program lost -1.2% from their international developed equity exposure (MSCI EAFE) during Q2 due to currency movements and -7.0% over the past year. Losses from unhedged Japanese currency exposure have once again been extreme (-7.3% over the quarter, -19.8% over the past year, based on the TOPIX Index), while unhedged European equity exposure losses due to currency were milder (-1.1% over the quarter, -4.3% over the past year, EURO Stoxx 50 Index).

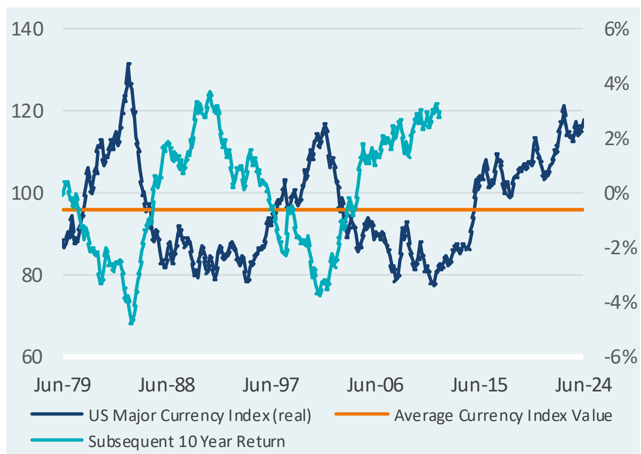
A more thoughtful portfolio approach to currency exposure has provided the dual benefit of lower portfolio volatility and also higher returns—a rare proposition in markets. This approach involves reducing the uncompensated risk of unhedged foreign currency exposure, and instead of unhedged exposure, making a passive investment in the currency market by investing in currencies with higher interest rates, currencies that are undervalued, and currencies that are showing positive price momentum. This approach, represented by the MSCI Currency Factor Mix Index—has offered a positive one-year rolling return over most periods with far lower volatility than the unhedged currency exposure that many investors hold. The past year is testament to this approach, this program would have far outperformed unhedged currency exposure, and with much less volatility.

EFFECT OF CURRENCY (1-YEAR ROLLING)



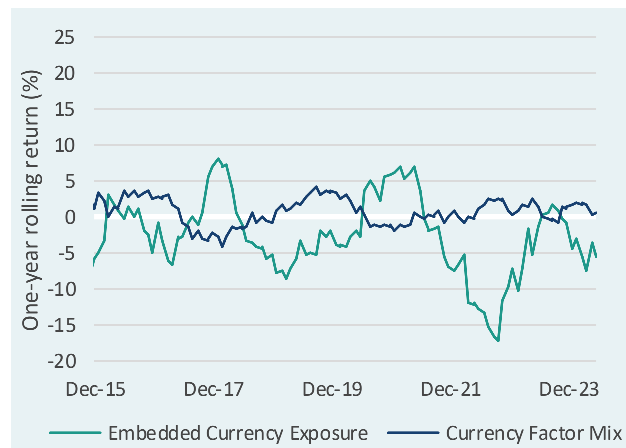
Source: MSCI, as of 6/30/24

U.S. DOLLAR MAJOR CURRENCY INDEX



Source: Bloomberg, as of 6/30/24

EMBEDDED CURRENCY VS CURRENCY FACTORS



Source: Bloomberg, MSCI, as of 6/30/24

Appendix

Periodic table of returns

BEST

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	YTD	5-Year	10-Year
Large Cap Growth	26.0	34.5	32.6	39.8	5.2	79.0	29.1	14.3	18.6	43.3	13.5	13.3	31.7	37.3	6.7	36.4	38.5	28.3	16.1	42.7	20.7	19.3	16.3
Large Cap Equity	22.2	21.4	26.9	16.2	1.4	37.2	26.9	7.8	18.1	38.8	13.2	5.7	21.3	30.2	1.9	31.4	34.6	27.6	9.4	26.5	14.2	14.6	12.5
Emerging Markets Equity	20.7	20.1	23.5	15.8	-6.5	34.5	24.5	2.6	17.9	34.5	13.0	0.9	17.3	25.0	0.0	28.5	21.0	27.1	1.5	18.7	7.5	9.0	8.2
Large Cap Value	18.3	14.0	22.2	11.8	-21.4	32.5	19.2	1.5	17.5	33.5	11.8	0.6	12.1	22.2	-1.5	26.5	20.0	26.5	-4.7	18.2	6.6	7.2	7.4
International Equity	16.5	7.5	18.4	11.6	-25.9	28.4	16.8	0.4	16.4	33.1	6.0	0.0	11.8	21.7	-3.5	25.5	18.3	25.2	-7.5	16.9	5.3	7.1	7.0
60/40 Global Portfolio	14.5	7.1	16.6	10.9	-28.9	27.2	16.7	0.1	16.3	32.5	5.6	-0.4	11.3	17.1	-4.8	22.4	14.0	17.7	-13.0	15.4	5.3	6.9	6.4
Commodities	14.3	6.3	15.5	10.3	-33.8	23.3	16.1	-2.1	15.3	23.3	4.9	-0.8	11.2	14.6	-6.0	22.0	10.3	14.8	-14.5	14.6	5.1	6.5	6.2
Hedge Funds of Funds	12.9	5.3	15.1	7.0	-35.6	20.6	15.5	-2.9	14.6	12.1	4.2	-1.4	8.0	13.7	-8.3	18.6	7.8	11.3	-14.5	11.5	4.6	6.2	5.0
Small Cap Growth	11.4	4.7	13.3	7.0	-36.8	19.7	13.1	-4.2	11.5	11.0	3.4	-2.5	7.1	7.8	-9.3	18.4	7.5	8.9	-17.3	9.8	4.4	5.7	4.3
Cash	9.1	4.6	10.4	5.8	-37.6	18.9	10.2	-5.5	10.5	9.0	2.8	-3.8	5.7	7.7	-11.0	8.7	4.6	6.5	-19.1	6.3	2.6	4.8	3.5
Small Cap Equity	6.9	4.6	9.1	4.4	-38.4	11.5	8.2	-5.7	4.8	0.1	0.0	-4.4	2.6	7.0	-11.2	7.8	2.8	2.8	-20.1	5.5	1.7	3.8	2.8
US Bonds	6.3	4.2	4.8	-0.2	-38.5	5.9	6.5	-11.7	4.2	-2.0	-1.8	-7.5	1.0	3.5	-12.9	7.7	0.5	0.0	-20.4	5.0	-0.7	3.1	1.5
Small Cap Value	4.3	3.2	4.3	-1.6	-43.1	0.2	5.7	-13.3	0.1	-2.3	-4.5	-14.9	0.5	1.7	-13.8	6.4	0.5	-1.5	-26.4	-7.9	-0.8	2.1	1.3
Real Estate	1.4	2.4	2.1	-9.8	-53.2	-16.9	0.1	-18.2	-1.1	-9.5	-17.0	-24.7	0.3	0.9	-14.6	2.1	-3.1	-2.5	-29.1	-7.9	-1.0	-0.2	-1.3

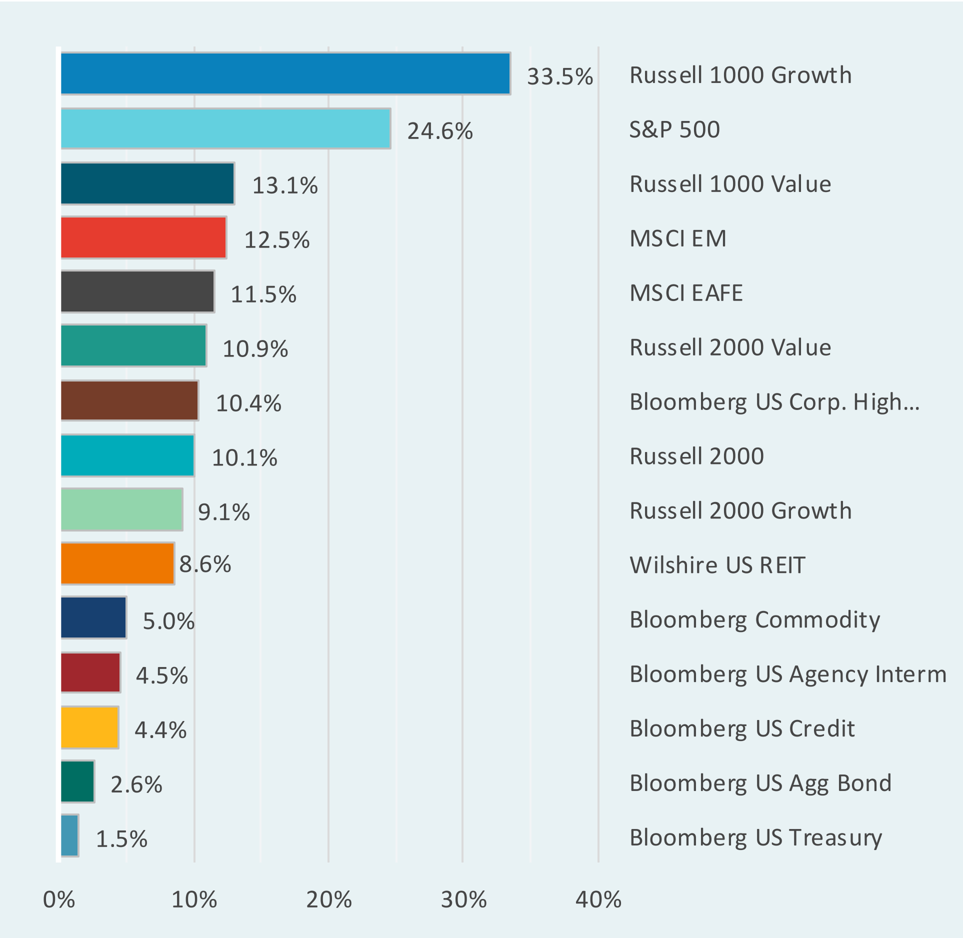
WORST

- Large Cap Equity
- Large Cap Value
- Large Cap Growth
- Small Cap Equity
- Small Cap Value
- Small Cap Growth
- International Equity
- Emerging Markets Equity
- US Bonds
- Cash
- Commodities
- Real Estate
- Hedge Funds of Funds
- 60% MSCI ACWI/40% Bloomberg Global Bond

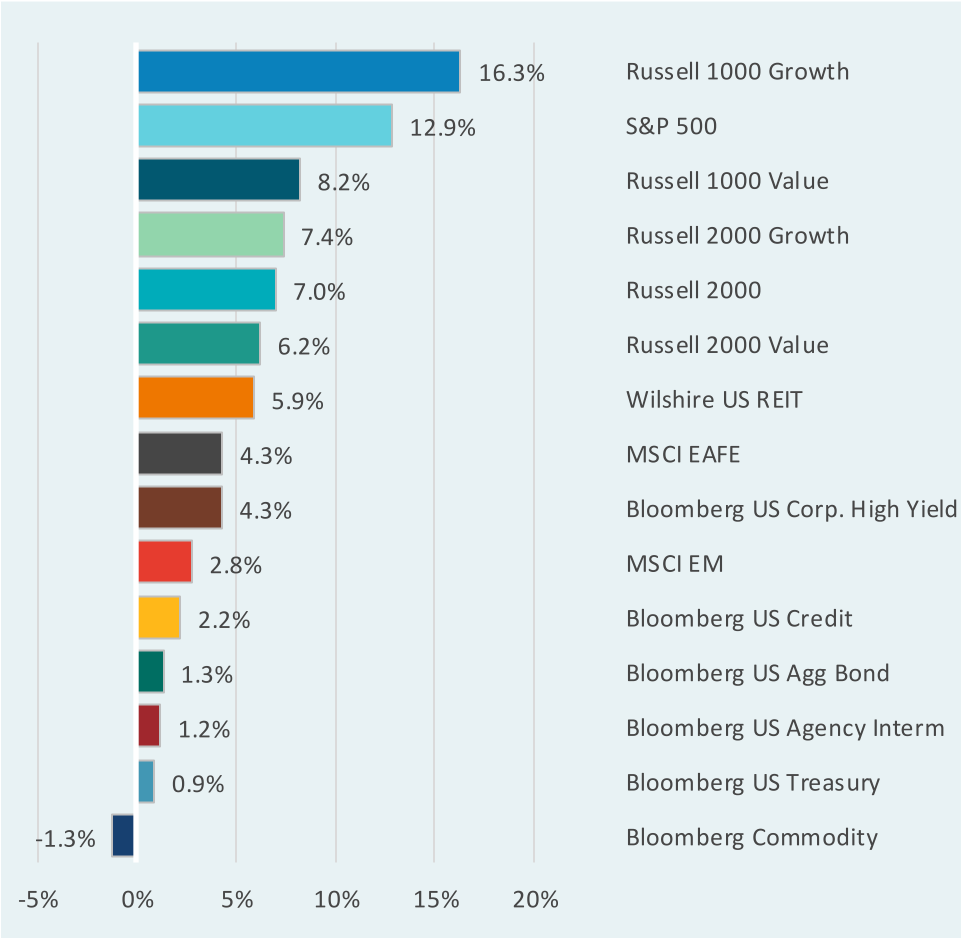
Source Data: Morningstar, Inc., Hedge Fund Research, Inc. (HFR), National Council of Real Estate Investment Fiduciaries (NCREIF). Indices used: Russell 1000, Russell 1000 Value, Russell 1000 Growth, Russell 2000, Russell 2000 Value, Russell 2000 Growth, MSCI EAFE, MSCI EM, Bloomberg US Aggregate, T-Bill 90 Day, Bloomberg Commodity, NCREIF Property, HFRI FOF, MSCI ACWI, Bloomberg Global Bond. NCREIF Property Index performance data as of 12/31/23.

Major asset class returns

ONE YEAR ENDING JUNE



TEN YEARS ENDING JUNE



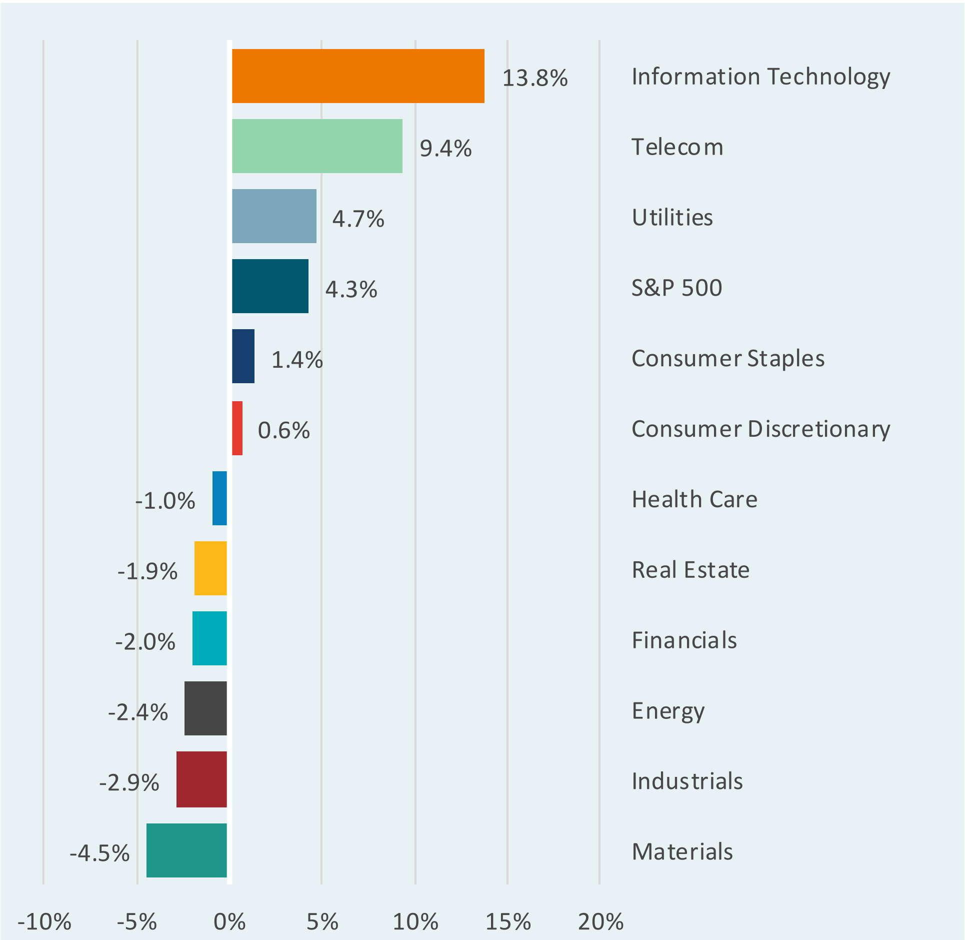
**Only publicly traded asset performance is shown here. Performance of private assets is typically released with a 3- to 6-month delay.*

Source: Morningstar, as of 6/30/24

Source: Morningstar, as of 6/30/24

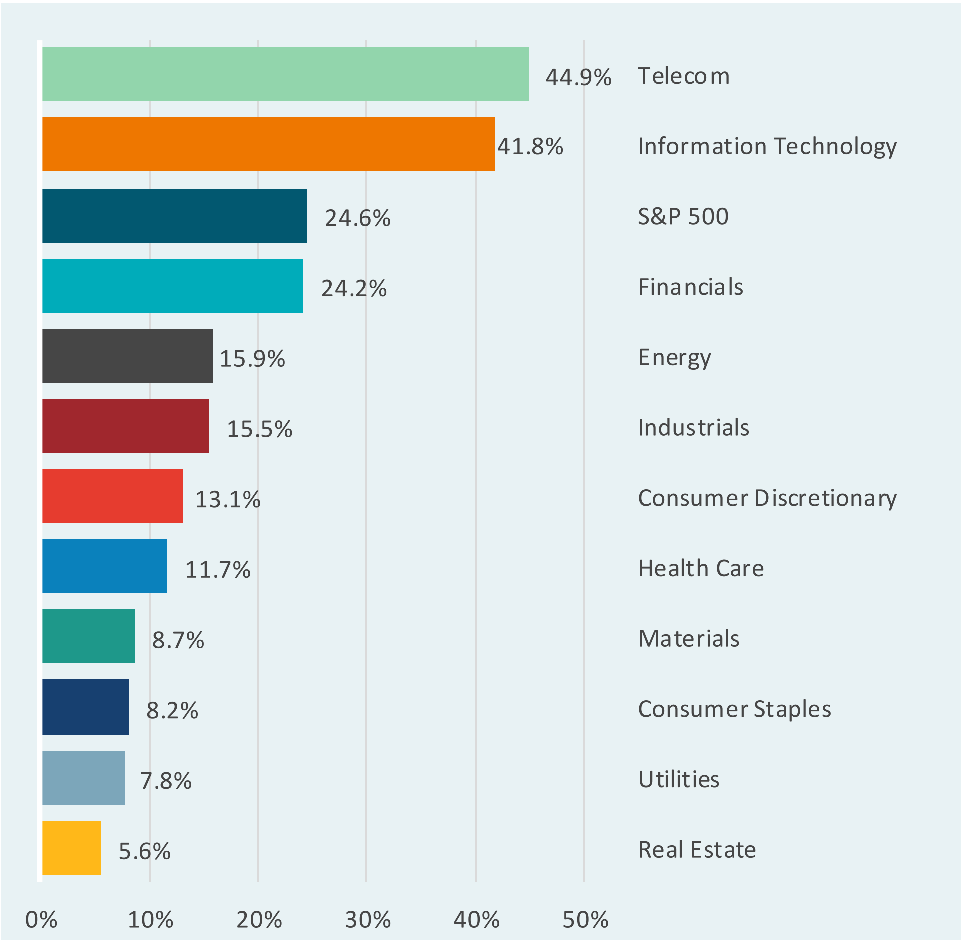
S&P 500 sector returns

QTD



Source: Morningstar, as of 6/30/24

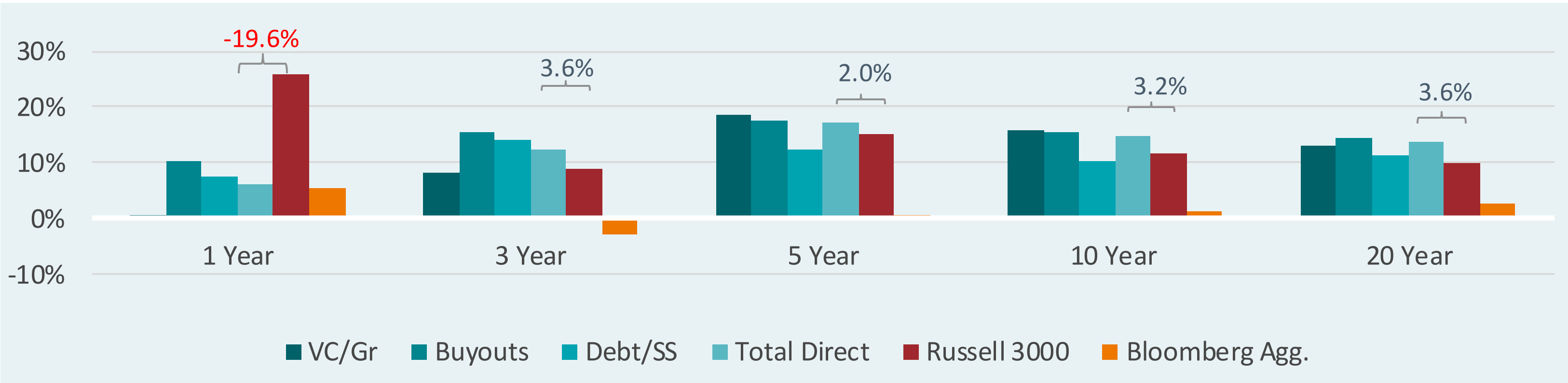
ONE YEAR ENDING JUNE



Source: Morningstar, as of 6/30/24

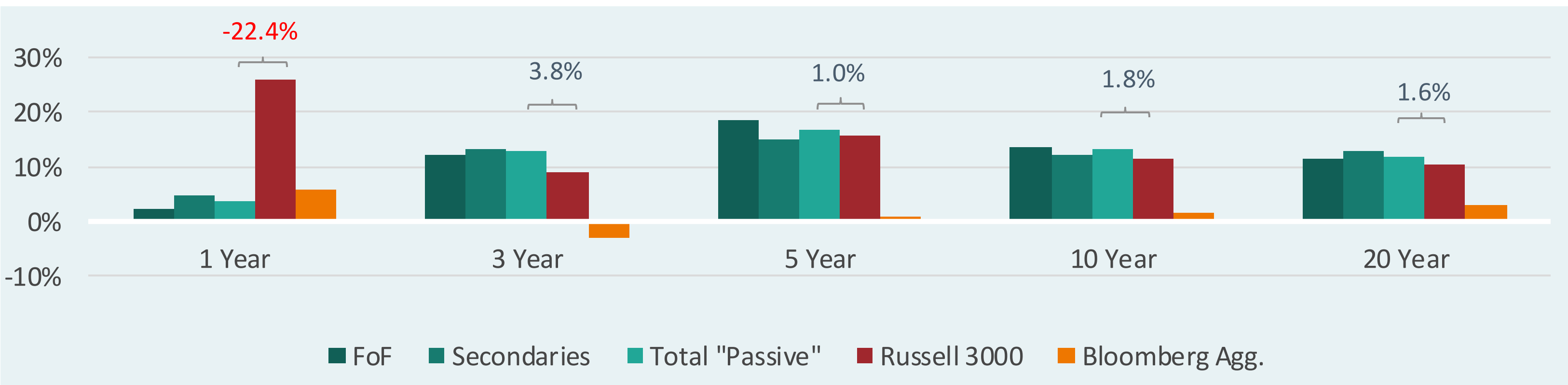
Private equity vs. traditional assets performance

DIRECT PRIVATE EQUITY FUND INVESTMENTS



Direct P.E Fund Investments outperformed comparable public equites across all time periods, aside from the 1-year.

"PASSIVE" STRATEGIES

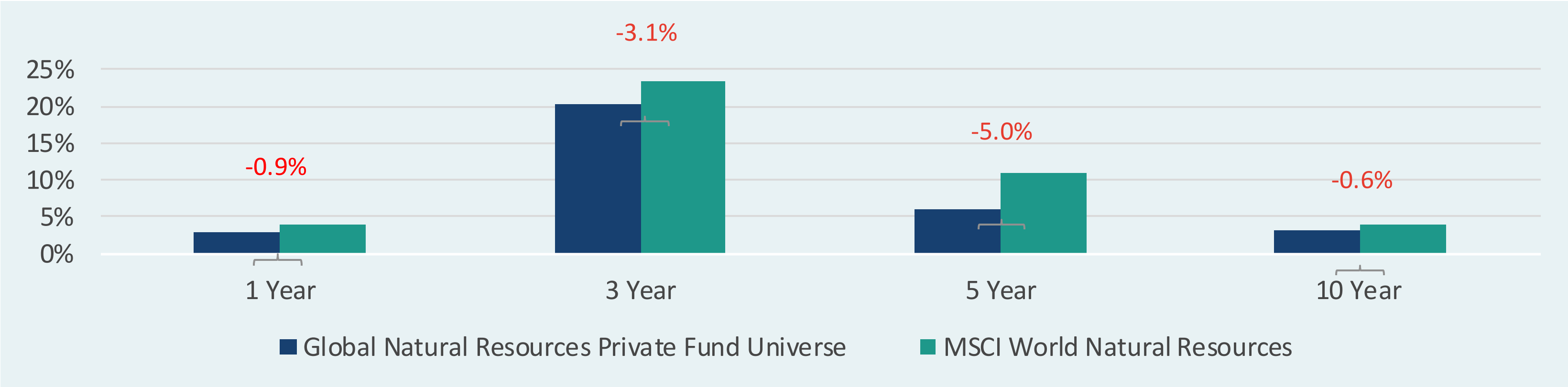


"Passive" strategies outperformed comparable public equities across all time periods, aside from the 1-year.

Sources: Refinitiv PME: U.S. Private Equity Funds sub asset classes as of September 30, 2023. Public Market Equivalent returns resulted from "Total Passive" and Total Direct's identical cash flows invested into and distributed from respective traditional asset comparable.

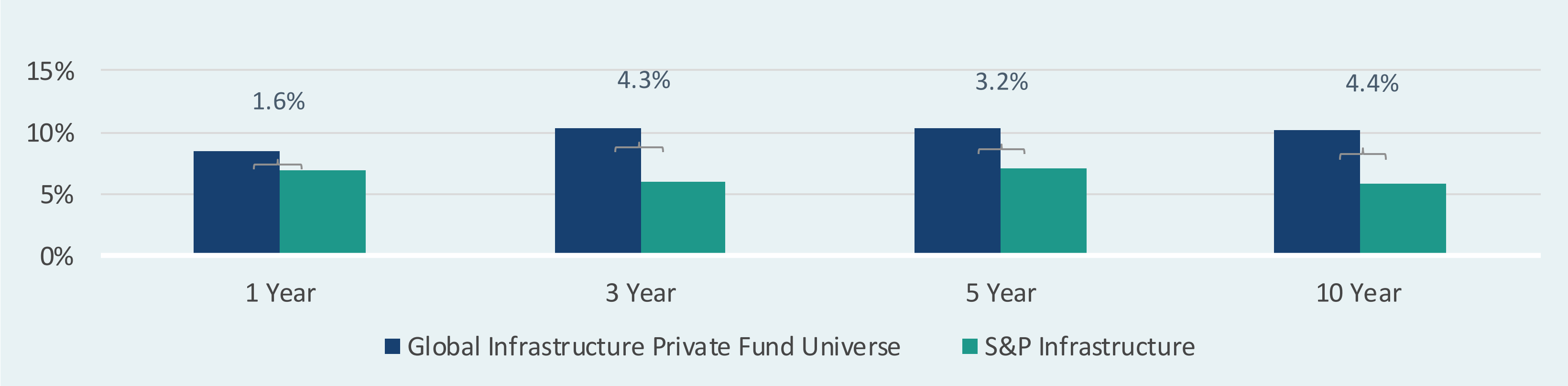
Private vs. liquid real assets performance

GLOBAL NATURAL RESOURCES FUNDS



N.R. funds underperformed the MSCI World Natural Resources benchmark across all periods.

GLOBAL INFRASTRUCTURE FUNDS

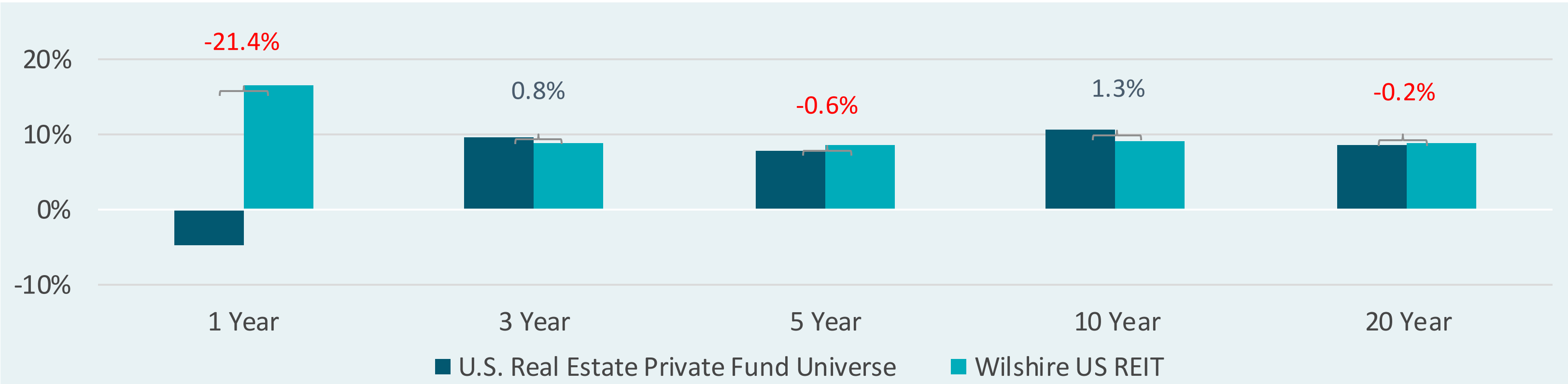


Infra. funds outperformed the S&P Infra. across all periods.

Sources: Refinitiv PME: Global Natural Resources (vintage 1999 and later, inception of MSCI World Natural Resources benchmark) and Global Infrastructure (vintage 2002 and later, inception of S&P Infrastructure benchmark) universes as of September 30, 2023. Public Market Equivalent returns resulted from identical cash flows invested into and distributed from respective liquid real assets universes.

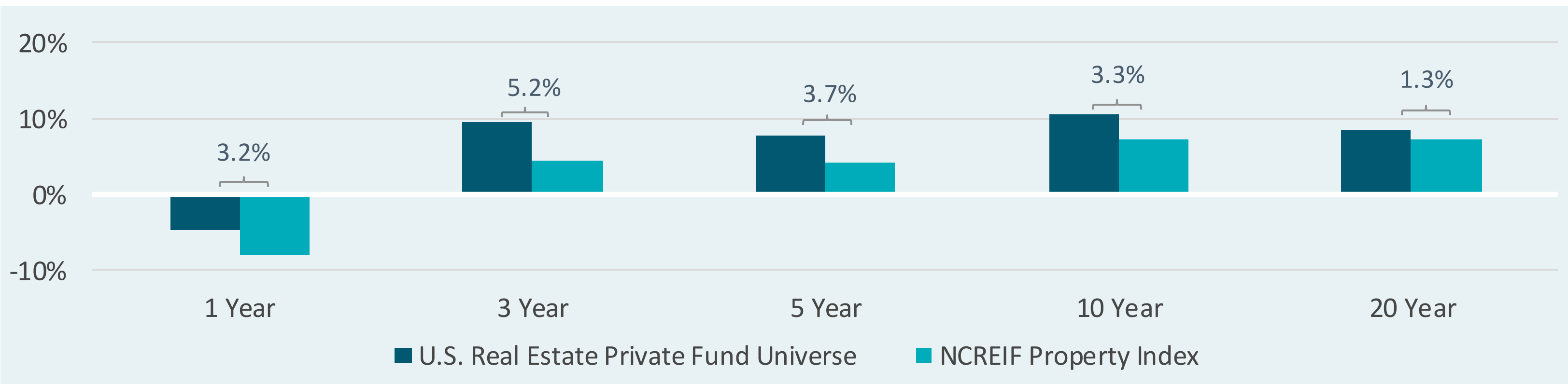
Private vs. liquid and core real estate performance

U.S. PRIVATE REAL ESTATE FUNDS VS. LIQUID UNIVERSE



U.S. Private R.E. fund performance vs. the Wilshire U.S. REIT Index has been mixed.

U.S. PRIVATE REAL ESTATE FUNDS VS. CORE FUNDS



U.S. Private R.E. Funds outperformed the NCREIF Property Index across all time periods.

Sources: Refinitiv PME: U.S. Real Estate universes as of September 30, 2023. Public Market Equivalent returns resulted from identical cash flows invested into and distributed from respective liquid real estate universes.

Detailed index returns

DOMESTIC EQUITY

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Core Index							
S&P 500	3.6	4.3	15.3	24.6	10.0	15.0	12.9
S&P 500 Equal Weighted	(0.5)	(2.6)	5.1	11.8	4.8	10.9	10.0
DJ Industrial Average	1.2	(1.3)	4.8	16.0	6.4	10.3	11.3
Russell Top 200	4.5	5.7	17.2	27.4	10.9	16.4	13.8
Russell 1000	3.3	3.6	14.2	23.9	8.7	14.6	12.5
Russell 2000	(0.9)	(3.3)	1.7	10.1	(2.6)	6.9	7.0
Russell 3000	3.1	3.2	13.6	23.1	8.1	14.1	12.1
Russell Mid Cap	(0.7)	(3.3)	5.0	12.9	2.4	9.5	9.0
Style Index							
Russell 1000 Growth	6.7	8.3	20.7	33.5	11.3	19.3	16.3
Russell 1000 Value	(0.9)	(2.2)	6.6	13.1	5.5	9.0	8.2
Russell 2000 Growth	(0.2)	(2.9)	4.4	9.1	(4.9)	6.2	7.4
Russell 2000 Value	(1.7)	(3.6)	(3.6)	10.9	(0.5)	7.1	6.2

FIXED INCOME

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Broad Index							
Bloomberg US TIPS	0.8	0.8	0.7	2.7	(1.3)	2.1	1.9
Bloomberg US Treasury Bills	0.4	1.3	2.6	5.5	3.0	2.2	1.5
Bloomberg US Agg Bond	0.9	0.1	(0.7)	2.6	(3.0)	(0.2)	1.3
Bloomberg US Universal	0.9	0.2	(0.3)	3.5	(2.7)	0.1	1.6
Duration							
Bloomberg US Treasury 1-3 Yr	0.6	0.9	1.2	4.5	0.3	1.0	1.1
Bloomberg US Treasury Long	1.7	(1.8)	(5.0)	(5.6)	(10.5)	(4.3)	0.6
Bloomberg US Treasury	1.0	0.1	(0.9)	1.5	(3.3)	(0.7)	0.9
Issuer							
Bloomberg US MBS	1.2	0.1	(1.0)	2.1	(2.9)	(0.8)	0.9
Bloomberg US Corp. High Yield	0.9	1.1	2.6	10.4	1.6	3.9	4.3
Bloomberg US Agency Interm	0.7	0.8	1.0	4.5	(0.5)	0.6	1.2
Bloomberg US Credit	0.7	(0.0)	(0.5)	4.4	(2.9)	0.5	2.2

INTERNATIONAL EQUITY

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Broad Index							
MSCI ACWI	2.2	2.9	11.3	19.4	5.4	10.8	8.4
MSCI ACWI ex US	(0.1)	1.0	5.7	11.6	0.5	5.5	3.8
MSCI EAFE	(1.6)	(0.4)	5.3	11.5	2.9	6.5	4.3
MSCI EM	3.9	5.0	7.5	12.5	(5.1)	3.1	2.8
MSCI EAFE Small Cap	(3.0)	(1.8)	0.5	7.8	(3.4)	4.2	4.3
Style Index							
MSCI EAFE Growth	(0.4)	(0.8)	6.2	9.4	0.1	6.5	5.4
MSCI EAFE Value	(2.8)	0.0	4.5	13.7	5.5	6.1	3.0
Regional Index							
MSCI UK	(1.8)	3.7	6.9	12.5	6.9	5.7	2.7
MSCI Japan	(0.7)	(4.3)	6.3	13.1	2.3	6.6	5.5
MSCI Euro	(3.3)	(2.8)	5.4	10.1	3.6	7.2	4.1
MSCI EM Asia	5.0	7.4	11.0	15.1	(5.5)	4.6	4.5
MSCI EM Latin American	(6.1)	(12.2)	(15.7)	(5.6)	0.9	0.1	(0.3)

OTHER

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Index							
Bloomberg Commodity	(1.5)	2.9	5.1	5.0	5.7	7.2	(1.3)
Wilshire US REIT	3.0	(0.2)	(0.3)	8.6	0.3	4.0	5.9
CS Leveraged Loans	0.3	1.9	4.4	11.0	6.0	5.4	4.6
S&P Global Infrastructure	(2.9)	2.7	4.0	7.0	5.6	4.3	4.6
Alerian MLP	4.7	3.8	19.2	34.2	22.3	11.1	1.9
Regional Index							
JPM EMBI Global Div	0.6	0.3	2.3	9.2	(3.5)	0.6	3.2
JPM GBI-EM Global Div	(1.1)	(1.6)	0.7	0.7	(3.3)	(1.3)	(0.9)
Hedge Funds							
HFRI Composite	(0.2)	0.4	4.8	9.6	2.8	6.6	4.8
HFRI FOF Composite	0.1	0.4	4.6	8.4	2.0	4.8	3.5
Currency (Spot)							
Euro	(1.3)	(1.8)	(3.0)	(1.8)	(3.3)	(1.2)	(2.4)
Pound Sterling	(0.7)	0.3	(0.8)	(0.6)	(2.9)	(0.1)	(3.0)
Yen	(2.3)	(10.1)	(12.4)	(10.2)	(11.6)	(7.7)	(4.5)

Source: Morningstar, HFRI, as of 6/30/24

Definitions

Bloomberg US Weekly Consumer Comfort Index *- tracks the public's economic attitudes each week, providing a high-frequency read on consumer sentiment. The index, based on cell and landline telephone interviews with a random, representative national sample of U.S. adults, tracks Americans' ratings of the national economy, their personal finances and the buying climate on a weekly basis, with views of the economy's direction measured separately each month. (www.langerresearch.com)*

University of Michigan Consumer Sentiment Index *- A survey of consumer attitudes concerning both the present situation as well as expectations regarding economic conditions conducted by the University of Michigan. For the preliminary release approximately three hundred consumers are surveyed while five hundred are interviewed for the final figure. The level of consumer sentiment is related to the strength of consumer spending. (www.Bloomberg.com)*

NFIB Small Business Outlook *- Small Business Economic Trends (SBET) is a monthly assessment of the U.S. small-business economy and its near-term prospects. Its data are collected through mail surveys to random samples of the National Federal of Independent Business (NFIB) membership. The survey contains three broad question types: recent performance, near-term forecasts, and demographics. The topics addressed include: outlook, sales, earnings, employment, employee compensation, investment, inventories, credit conditions, and single most important problem. (http://www.nfib-sbet.org/about/)*

NAHB Housing Market Index – *the housing market index is a weighted average of separate diffusion induces for three key single-family indices: market conditions for the sale of new homes at the present time, market conditions for the sale of new homes in the next six months, and the traffic of prospective buyers of new homes. The first two series are rated on a scale of Good, Fair, and Poor and the last is rated on a scale of High/Very High, Average, and Low/Very Low. A diffusion index is calculated for each series by applying the formula "(Good-Poor + 100)/2" to the present and future sales series and "(High/Very High-Low/Very Low + 100)/2" to the traffic series. Each resulting index is then seasonally adjusted and weighted to produce the HMI. Based on this calculation, the HMI can range between 0 and 100.*

Notices & disclosures