

ALPS Advisors, Inc.

Laton Spahr, CFA
President and Portfolio Manager

Eric Hewitt
Co-Chief Investment Officer, Portfolio Manager

Alex Hagemeyer, CFA
Co-Chief Investment Officer, Senior Director
Quantitative Research

Multi-Asset Research Team



Robert McClure
Director of Research
robert.mcclure@sscinc.com



Chris Proctor, CFA
Director of Research, Fixed Income
chris.proctor@sscinc.com



Richard Baker, CAIA
Director of Research, Real Assets
and Alternatives
richard.baker@sscinc.com



Warren Beth, CFA
Chief Equity Strategist
warren.beth@sscinc.com



Jimmy Wenger
Real Assets Strategist
jimmy.wenger@sscinc.com

Investment Committee Review

Q2 2024

SS&C ALPS Advisors is an open architecture boutique investment manager offering portfolio building blocks, active insight and an unwavering drive to guide clients to investment outcomes across sustainable income, thematic and alternative growth strategies.

Q2 2024 Asset Class Reviews

- p. 2 **Introduction**
- p. 3 **Macro Summary**
- p. 5 **Equities Summary**
- p. 8 **Fixed Income Summary**
- p. 12 **Real Estate Summary**
- p. 15 **Commodities Summary**

Robert McClure
 Director of Research
 robert.mcclure@sscinc.com

Introduction

Second Quarter Review

Equities continued their strong start to the year, with large-cap growth stocks leading this quarter and interest rate sensitive sectors lagging. Fixed Income returns were mostly positive as high yield and securitized outperformed. Publicly traded real estate investment trusts (REITs) finished the quarter with a small decline, and Commodities were modestly positive after a disappointing 8% decline in 2023.

Third Quarter Outlook

Executive Summary

We believe the economy and the job market show signs of softening, but GDP should continue to grow in the third quarter. Inflation has slowed, which could mean Federal Reserve (Fed) easing could commence before the end of the year. The profit cycle is improving as margins start to expand. The market remains resilient despite clear headwinds. We continue to believe that investors should allocate to appropriate risk targets.

Equities

Following a strong first quarter, US Equities continued to perform well. The S&P 500 Index gained over 4.28%, driven by outperformance in large-cap growth stocks.

Going forward, we believe performance in US Equities could extend beyond the very largest growth stocks. If the next move from the Fed is toward lower rates, the pieces could fall into place to the benefit of smaller and more cyclical companies. The valuation gap between large- and small-cap stocks continues to favor small-caps, but we would focus on quality companies. Finally, we continue to favor international exposure based on valuations, diversification benefits and the impact of a potentially weaker dollar.

Fixed Income

Fixed Income returns were positive across most sectors in the second quarter, led by the High Yield and Securitized sectors. In our view, interest rates will remain higher for longer even as the Fed nears the end of its tightening cycle. With that in mind, we recommend investors **strengthen their Core with Active Management**. Specifically, we recommend investors:

- Selectively extend duration into the Intermediate Core.
- Upgrade in Credit Quality across sectors.
- Move into certain sectors with better valuations. Our favorites would be high quality (AAA/AA) **Asset-Backed Securities (ABS)** and **Investment Grade Municipal Bonds**.
- Stay diversified and do not get over-weighted in US Treasuries as volatility is likely to continue. We do favor a slight overweight in **Agency Mortgage-Backed Securities (MBS)** in the intermediate part of the yield curve.

Real Estate

REIT returns were negative in the second quarter, with the FTSE NAREIT All Equity REITs Index returning -0.90% for the quarter and 5.78% for the prior twelve months. Leading sectors included Health Care, Residential and Self-Storage, while Lodging, Industrial and Office were laggards.

While the Office sector dominates the headlines, it only represents about 5% of publicly traded REITs. In our view, several tailwinds exist for select sectors such as Data Centers, Health Care and Retail (Malls). Publicly traded REITs also benefit from strong balance sheets and attractive operating income growth. We believe much of the negative news may be priced in at current levels.

Commodities

Performance in Commodities was mixed in the second quarter. In Energy, oil was down modestly while natural gas rallied. Industrial Metals rallied on the back of copper, which rallied strongly in May but pulled back a bit in June. Precious Metals, driven primarily by gold prices, by some measures appear extended from a valuation standpoint.

While we are neutral in the near-term, we continue to be constructive on commodities as a diversifying portfolio allocation, given the longer-term supply/demand imbalances.

Summary

We believe investors should remain fully invested at target allocations. In Equities, we continue to prefer quality, dividend paying stocks and see an opportunity in high quality smaller-cap stocks and international equities. In Fixed Income, we would encourage investors selectively extend duration and take advantage of sectors with attractive valuations. The opportunity in Real Estate is in select REITs experiencing secular tailwinds. Finally, our view on Commodities broadly remains neutral in the near-term but constructive longer-term.

Alex Hagemeyer, CFA

Co-Chief Investment Officer, Senior
Director Quantitative Research
alexander.hagemeyer@sscinc.com

Macro Summary

Liquidity Cycle

Both stocks and high yield bonds climbed in the second quarter of 2024, continuing to ease financial conditions into slow summer trading. The US 10-Year Bond Yield peaked on April 25th at 4.73% and has since fallen as much as 55 basis points, settling in around 4.35% at quarter end. The Federal Reserve has kept their benchmark interest rate steady at the range of 5.25% to 5.50% but has signaled willingness to reduce that interest rate pursuant to inflation continuing to fall to its long-term target of 2%. We believe US consumer and labor market growth may be finally softening from its remarkable run over the last two years, which would also encourage the Federal Reserve to cut its benchmark rate.

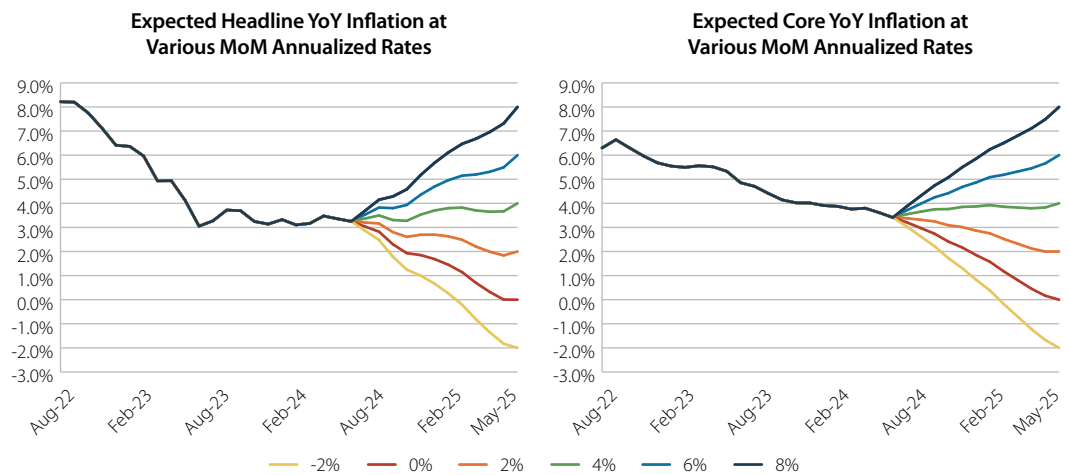
What hasn't changed is the liquidity impulse in the United States. The Treasury continues to run a near 6% fiscal deficit in an economic expansion, countering the Federal Reserve's restrictive policy and forward guidance that began in 2022. Our tracking of the US fiscal impulse shows a 27% quarter-over-quarter growth in private sector investments and 16% quarter-over-quarter growth in public infrastructure investments. Among the private investments, the major category totals reported by this administration are \$395 billion invested in Semiconductors and Electronics, \$177 billion in Electric Vehicles and Batteries and \$80 billion in Clean Energy.

Inflation Cycle

In May, core inflation month-over-month stood at just +0.16% (1.9% annualized run-rate), a desirable downtick from last quarter and below the Federal Reserve's target. Inflation appears likely to eventually slow to the Fed's target, just perhaps at a slower pace than market participants have imagined.

We modify our 2024 outlook for both headline and core inflation from 3% – 4% to 2.5% – 3.5% and we reduce our probability of inflation becoming a significant risk this year. Part of this change is influenced by the softer growth data we're seeing in the economy from April and May, which we discuss in the next section.

This trend lower in inflation catalyzes the implied volatility in bonds lower, making bonds generally more attractive, especially those with convexity, in the asset allocation portfolio.



Source: Bloomberg, 8/31/2022 – 5/31/2025

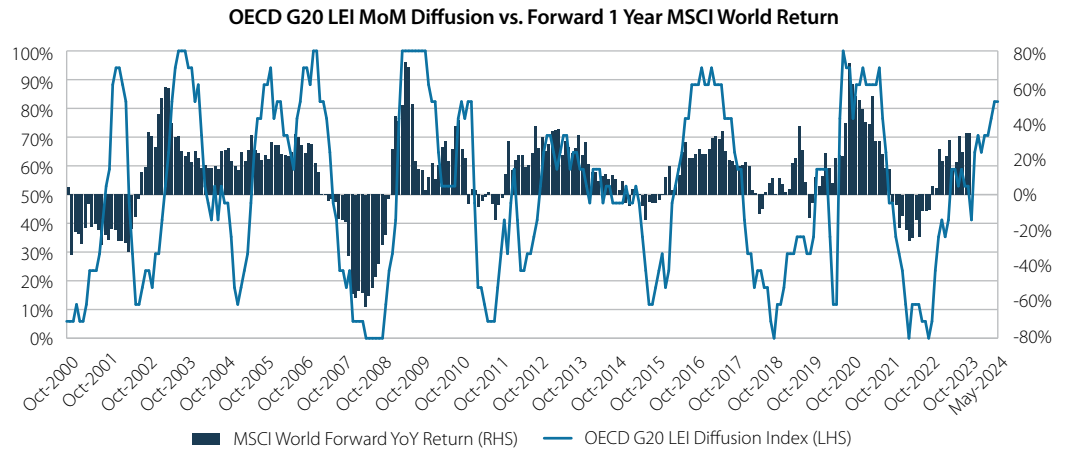
Headline Inflation represented by the Consumer Price Index (CPI) and Core Inflation represented by the Personal Consumption Expenditures Price Index (PCE).

Growth Cycle

In last quarter's review, we discussed the sustained economic cycle in the United States since COVID-19 and its link to the US Treasury's fiscal impulse. For the first time in almost two years, we're beginning to see what may be a soft patch beginning to form in the US economy. The important data reads are from labor, consumers and housing.

According to quit rates, wages and job openings relative to those looking for work, the labor market has been normalizing back to its pre-pandemic state. Recently released data from the second half of 2023 accounting for unemployment due to business deaths signal that the job market may be weaker than the monthly establishment survey indicates. Monthly retail sales in the US for the last 30 years averages 4.5% year-over-year growth, but the average of the first five months in 2024 has slowed to half the pace, 2.2% year-over-year. Finally, housing starts and building permits, traditionally thought of as early signals in the housing market, have turned over the last few months. Housing starts in May hit a new post-COVID-19 low, with multi-family leading the way lower. Similarly, building permits are also on their post-COVID-19 low, falling below their previous low made in November 2022.

However, economic growth is broadening across the globe. Of the 18 Group of 20 (G20) countries (excluding Argentina), 82% are experiencing positive month-over-month Leading Economic Indicator readings as of the end of May 2024. This diffusion index is positively related to returns in global equities over the following 12 months. We continue to believe this may be a catalyst to refocus portfolio exposures to international developed markets that have attractive risk and return prospects relative to the United States.

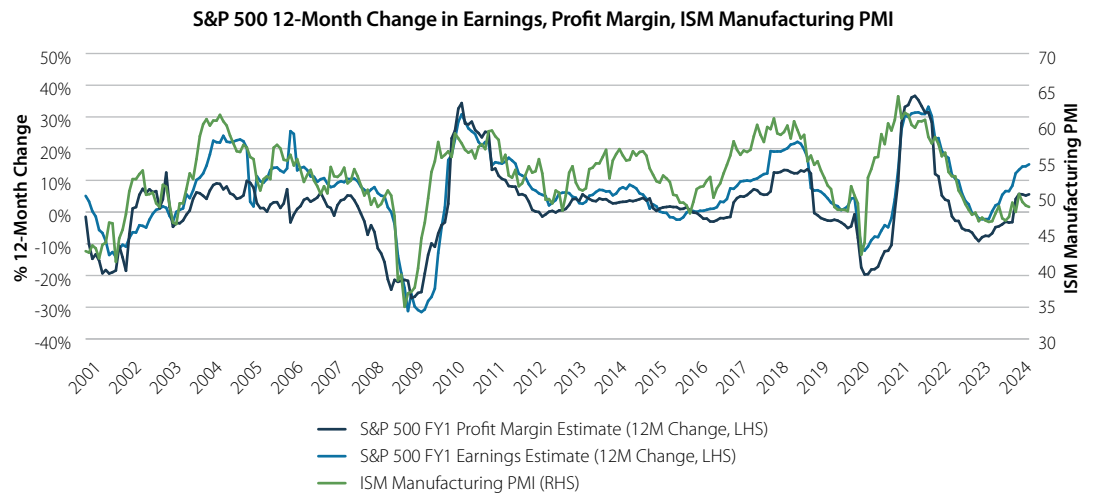


Source: Bloomberg, as of 5/31/2024

Profit Cycle

The earnings recovery remains intact, for now. Following an earnings recession in 2022, US Large Cap earnings expectations have risen by +15% over the last 12 months. The rate of rising expectations has slowed and remains concentrated in large mega cap technology and semiconductor stocks. If economic growth is poised to pick up around the world, the profit cycle may be extended further.

Both recent returns and fundamental expectations remain unevenly distributed in equities. Thematic plays in Artificial Intelligence have dominated as expectations for certain companies involved continue to be met. As the durability of expected excess returns declines alongside even higher expectations, portfolios may benefit from the thoughtful use of active management to be able to adjust exposure to this growth context as time passes.



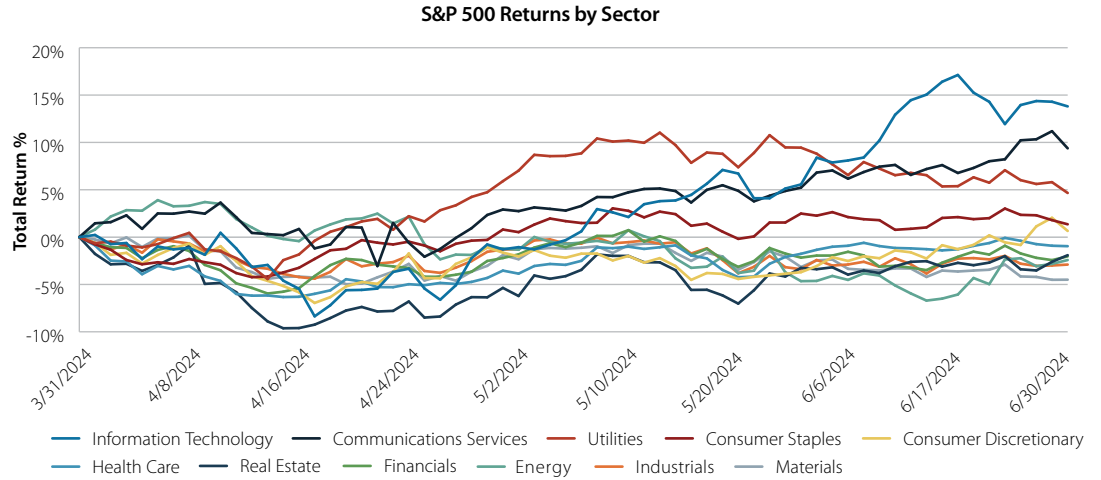
Source: Bloomberg, as of 3/31/2024

Warren Beth, CFA
 Chief Equity Strategist
 warren.beth@sscinc.com

Equities Summary

Second Quarter Review

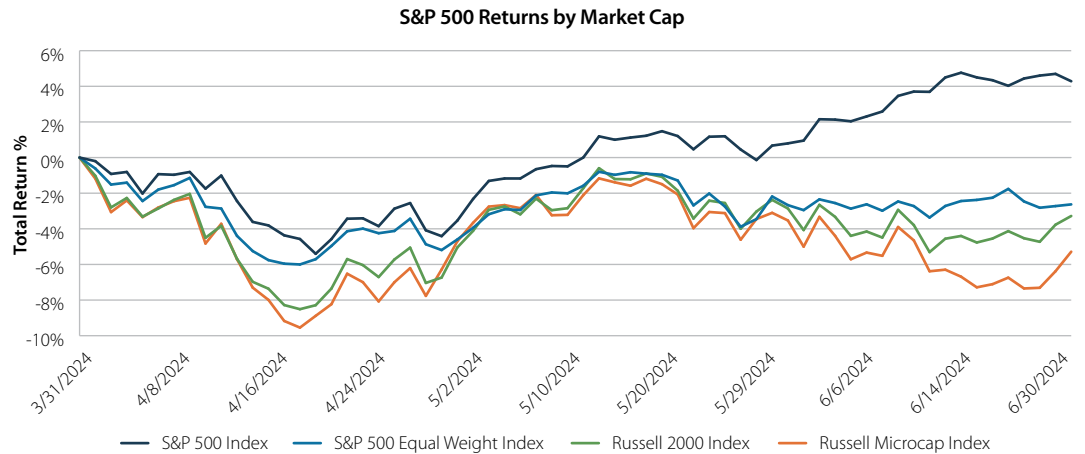
The second quarter exemplified the higher-interest-rate environment we've experienced over the past couple of years. Technology stocks, especially semiconductors, continued to outperform, driving the S&P 500 Index's performance. In contrast, more leveraged sectors of the market underperformed. The quarter ended with the S&P 500 Index gaining 4.28%, the Nasdaq 100 Index rising by 8.05% and the Dow Jones Industrial Average decreasing by -1.27%.



Source: Bloomberg, 3/31/2024 – 6/30/2024

Past performance is no guarantee of future results.

Throughout the second quarter, large companies consistently outperformed smaller ones, highlighting the burden of leverage, which tends to be higher in smaller companies. This trend also underscores the concentration of returns driving the market. A transition to lower interest rates could significantly broaden the market rally as more leveraged firms find relief. However, for now, higher interest rates are impacting broad swaths of the market.

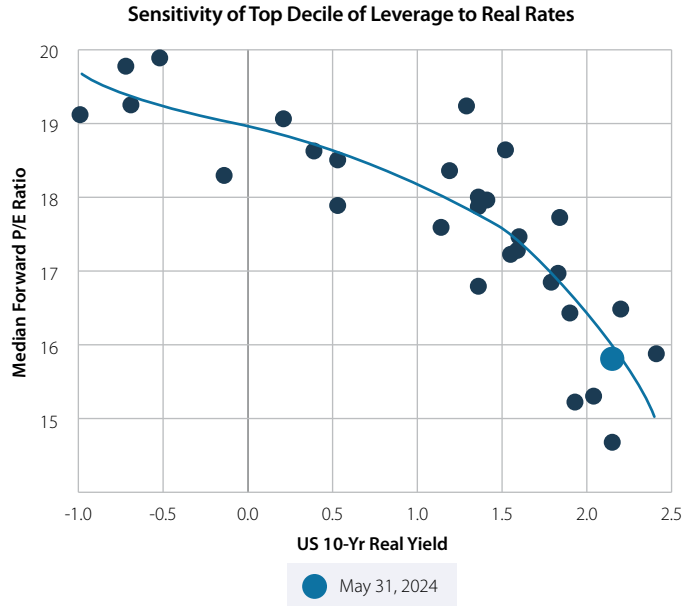


Source: Bloomberg, 3/31/2024 – 6/30/2024

Past performance is no guarantee of future results.

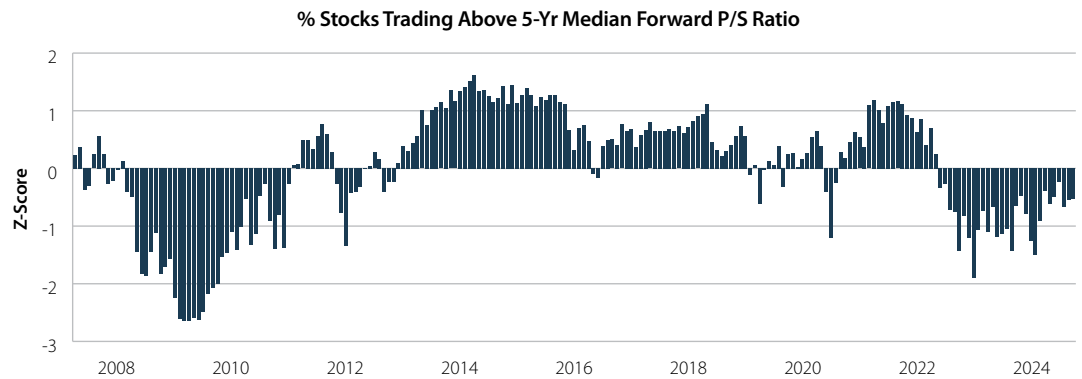
Third Quarter Outlook

One way to view the effect of higher interest rates on the stock returns of more leveraged firms is by examining the monthly median valuation of the top decile of leveraged companies since the Federal Reserve started raising interest rates at the beginning of 2022. As depicted to the right, higher real rates have penalized more indebted companies, which previously benefited from higher inflation and lower real rates. If real yields decrease in the future, either due to higher inflation or lower interest rates, more leveraged companies—and thus smaller-cap stocks—could benefit. Until then, we may continue to witness the same concentration in market returns.

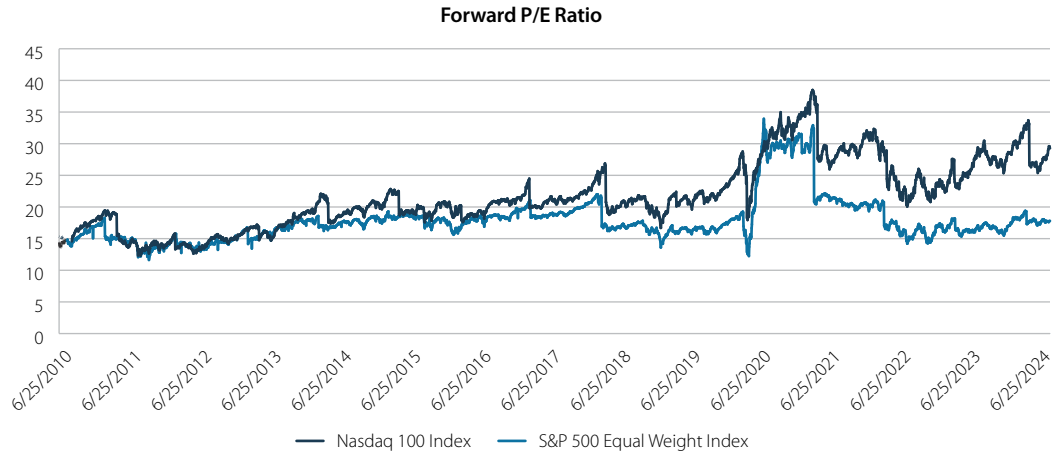


Sources: Bloomberg, SS&C ALPS Advisors Proprietary Research, 12/31/2021 – 5/31/2024
 Median forward P/E (price/earnings) of constituents of the Bloomberg 1000 Index in the top decile of leverage based on net debt/EBITDA ratio.
 US 10-Yr Real Yield is based on the Federal Reserve US Treasury H15 Constant Maturity 10-Year Real Yield Index (H15X10YR).

As a result of market concentration, valuations remain relatively benign for the average stock and are only relatively high in specific large-cap technology names. Overall, this does not suggest a particularly worrying scenario for a well-diversified portfolio. We can observe this relationship in the number of stocks trading above their five-year median valuations and the discrepancy between valuations in the Nasdaq 100 Index versus the S&P 500 Equal Weight Index.

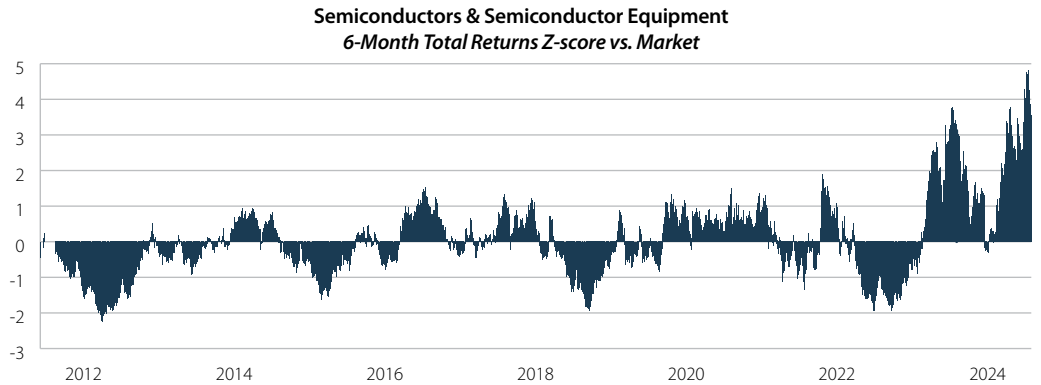


Sources: Bloomberg, SS&C ALPS Advisors Proprietary Research, 12/31/2006 – 6/30/2024
 Z-score of stocks trading above their 5-year median forward price/sales ratio of all constituents of the Bloomberg 1000 Index.



Source: Bloomberg, 6/30/2010 – 6/30/2024

We must also mention the exceptional performance of semiconductors relative to the rest of the stock market. The chart below shows that the relative outperformance of this industry group over the past six months is nearly a five-standard deviation event from the norm. While the valuation of these stocks, on balance, is not overly concerning, it is worth noting that continued outperformance at this level would be highly unusual.



Sources: Bloomberg, SS&C ALPS Advisors Proprietary Research, 12/31/2011 – 6/30/2024
 Z-score of 6-month rolling returns of the S&P 500 Semiconductors & Semiconductor Equipment Industry GICS Level 3 Index (S5SSEQ) minus the S&P 500 Index.

We believe there is a significant difference between the current economic environment and the decade preceding the COVID-19 pandemic, primarily due to the impact of fiscal policy on markets, in contrast to the previous reliance on the Federal Reserve's monetary tools. This shift will likely lead to different winners in the future compared to the past. Although the continued rise in technology stocks may seem like business as usual, we must remain aware of the evolving environment, potential pitfalls and future developments. If interest rates remain higher for longer, we expect more leveraged companies to continue underperforming, whereas ample rate cuts could create a more favorable backdrop for these companies. Additionally, the Federal Reserve is nearing the end of a tightening cycle, which historically has not ended well.

Navigating conflicting signals and growth drivers, our focus remains on maintaining a foundation rooted in quality and dividends, irrespective of the sector. Should we get a soft landing alongside rate cuts, these stocks are poised to benefit as market returns broaden. Conversely, in the face of potential downside risks materializing, stocks with these qualities can function as a protective shield.

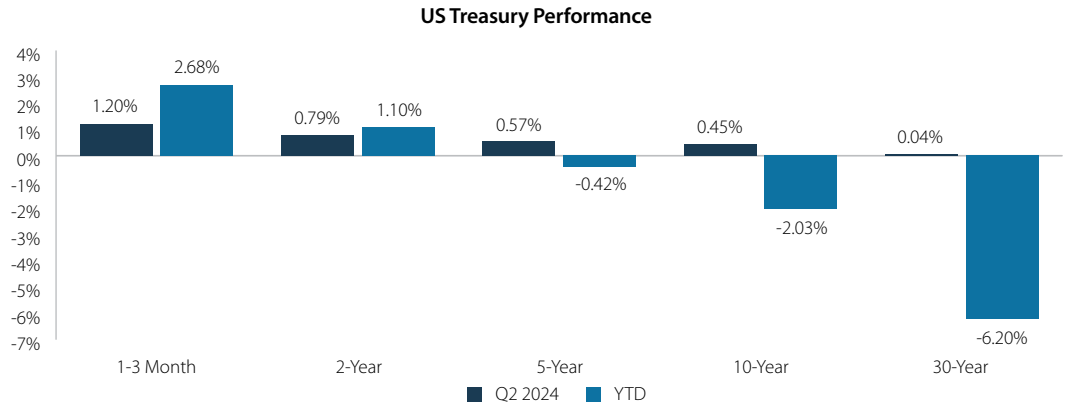
Additionally, we advocate for a broad preference for international exposure, driven by the advantages of diversification, more appealing valuations and the potential weakening of the dollar following the conclusion of rate hikes. In the event of this scenario unfolding, foreign exchange dynamics could act as a favorable tailwind for international markets.

Chris Proctor, CFA
 Director of Research, Fixed Income
 chris.proctor@sscinc.com

Fixed Income Summary

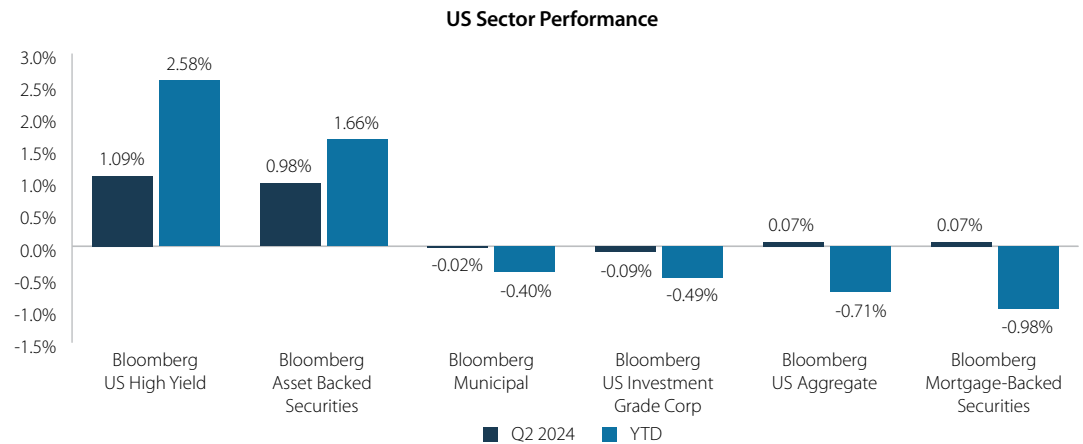
Second Quarter Review

Despite volatility in the second quarter of 2024, most fixed income sectors achieved modest returns. The majority of these gains occurred in June, when the Federal Reserve indicated it would halt raising short-term rates and projected possible rate cuts of up to 50 basis points by the end of the year. Weaker than expected macroeconomic data and declining core inflation trends also contributed to the improved performance. Nonetheless, the core bond market, as measured by the intermediate Bloomberg US Aggregate Bond Index, remains relatively flat for the year, with a total return of just +7 basis points. For the quarter and the year, losses remain concentrated in longer duration sectors, while shorter duration sectors, particularly in credit, continued to outperform as the nearby charts illustrate:



Source: Bloomberg, total returns as of 6/30/2024

Past performance is no guarantee of future results.



Source: Bloomberg, total returns as of 6/30/2024

Past performance is no guarantee of future results.

Policy Analysis and Third Quarter Outlook

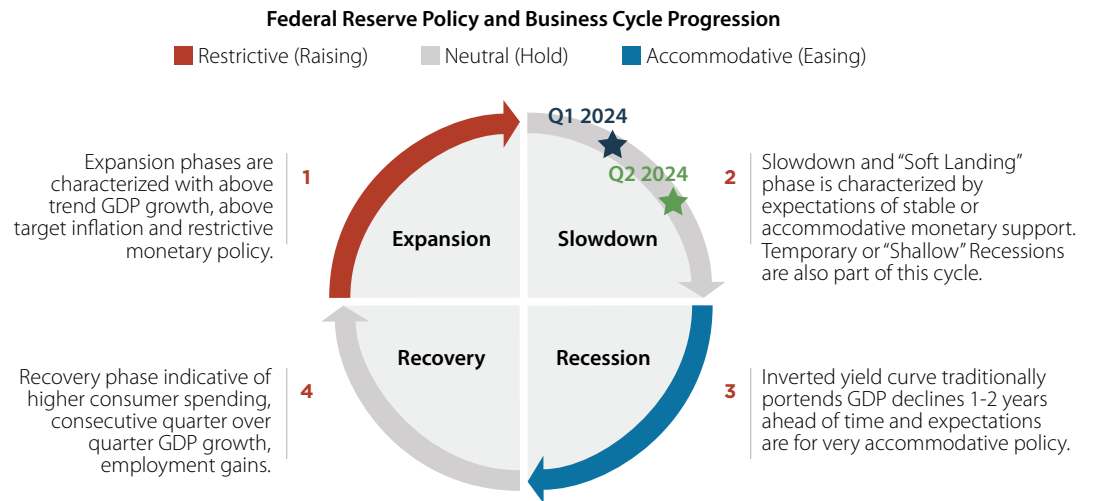
Entering 2024 the Federal Reserve had forecast up to 125 basis points of cuts in 2024. By the end of the second quarter the market assumption for rate cuts had dwindled down to only 50 basis points. By the Fed’s own admission “stickier” inflation remains, driven by the service level gauges (which importantly includes the housing and rental sectors). Still, core inflation continued to trend lower towards the Fed’s 2% target while other important economic indicators also indicate the economy is indeed slowing down.

Despite the volatility underpinned by the Fed’s changing projections, what has really changed is that the market and the Fed have merely pushed out the rate cuts in an attempt to achieve a “soft landing” for the economy. Beginning the rate cut cycle this year does make sense as job market data supports the Fed’s notion that the economy is, or will be, slowing and unemployment has bottomed.

Short-term rates have been on hold at 5.50% since Q2 of 2023. But time and time again market participants have misjudged the resilience of the US economy, which continues to add jobs (albeit at a slower pace) and exhibits above-trend GDP growth. Therefore, many of the same macro and policy risks we experienced last year remain for 2024. If the economy remains resilient enough to support wage gains and spending, inflation may remain stickier than anticipated and completely reverse the Federal Reserve’s recent guidance.

There are also a new set of risks for 2024, including concerns over the record national debt, the national elections and level of fiscal spending. Also, the debt ceiling will need to be addressed on January 1, 2025, a tall task for a lame duck congress and newly elected President. We feel all these risks will contribute to an environment that may further elevate economic risks and create even more volatility in fixed income prices, but which may also provide a tailwind for bond investors in the end.

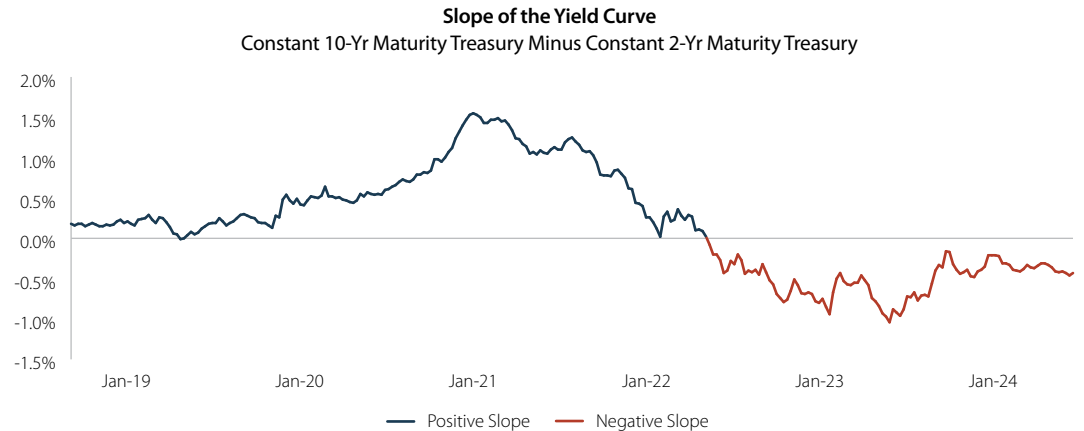
With a balanced risks baseline, the underpinning of an overall constructive view for fixed income in 2024 is based on the transition in the business cycle converging with a change in monetary policy—the timing of which is clearer than it was even a few months ago. A high-level view of this framework is shown in the chart nearby with an estimate of where we are in the cycle:



Source: SS&C ALPS Advisors Proprietary Research
For Illustrative Purposes Only

Yield Curve

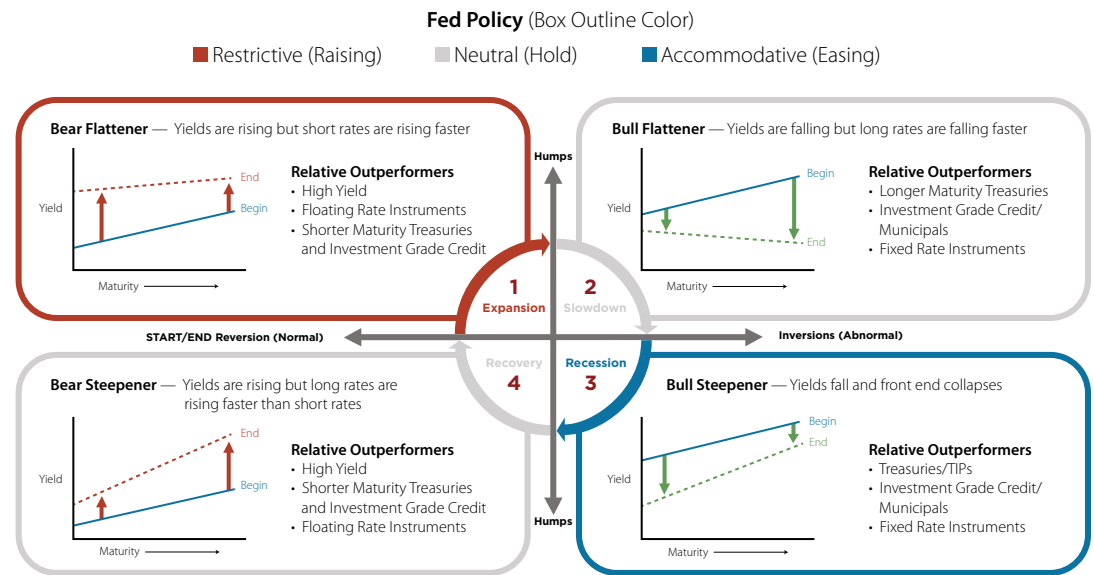
The yield curve has been inverted for almost two years, with short-term rates higher than longer-term rates. This has impacted investor positioning with more investments being parked in the very front of the yield curve. For example, money market fund assets have increased over \$3 trillion since the COVID-19 pandemic began. Investors were scarred by larger than normal bond losses when the Fed dramatically raised rates in 2022 and have not returned, despite Core bonds beating most cash investments in 2023. Historically, the best annual returns for core bonds are when the curve becomes positively sloped, and policy is supportive. The yield curve could quickly become un-inverted if the Fed follows through on even one rate cut this year. When this occurs, a lot of money will be in motion seeking higher yields which will exist further out the curve. Therefore, given that there is practically no yield-give up in moving excess cash to core bond funds for example, we think it prudent to begin the transition now.



Source: Federal Reserve Economic Data-FRED, 10-Year Treasury constant maturity minus the 2-Year Treasury constant maturity yield, 1/23/2019 – 6/26/2024

Positioning

Historically, fixed income has provided positive returns in later business cycle environments in quadrants 2 and 3 in the chart below. The implications for positioning in an environment where the yield curve gets flatter and begins to steepen are similar as the chart nearby illustrates:



Source: SS&C ALPS Advisors Proprietary Research For Illustrative Purposes Only

While we continue to feel 2024 will be the year of *Yield Curve Normalization*—where the yield curve reverts to its normal upward sloping shape—the second half of 2024 is likely to see this event come to fruition. However, if the economy slows more than anticipated, fixed rate investments and higher quality securities tend to outperform.

Recommendation – Strengthen Your Core

While we are in a new regime of higher rates due to changing demographics and the persistence of higher inflation, the role of fixed income in an asset allocation framework only becomes more important as an equity ballast over intermediate time periods. Additionally, the need for income becomes more acute as rates level out, become range-bound or fall later in 2024 as the market predicts. While shorter-term correlations between US Treasuries and the S&P 500 Index have been positive, longer-term correlations continue to show the ballast properties of intermediate/longer maturities with negative correlations. Short-term bonds, while less volatile, do not exhibit these ballast properties to the same degree and if short rates fall, so will the corresponding security yields.

However, in this environment (post-pandemic and as the Treasury debt continues to rise) we feel that Bloomberg US Aggregate Bond Index returns do not reflect the benefits of active Core positioning, the advantages of diversification (given that 2/3 of the Index are US Government-related debt) and most certainly do not represent the range of choices available for investors. Also, we feel valuations are currently expensive across most credit sectors, with a few exceptions.

Therefore, we feel now is a good time to **Strengthen Your Core with Active Management**. In this process we recommend the following actions as the market allows:

- Selectively extend duration into the Core (Intermediate sectors).
- Upgrade in Credit Quality, even within High Yield allocations.
- Move into certain sectors with better valuations. Our favorites would be high quality (AAA/AA) **Asset-Backed Securities (ABS)** and **Investment Grade Municipal Bonds**.
- Stay diversified and do not get over-weighted in US Treasuries as volatility is likely to continue, especially during the election season and heading into the Debt Ceiling events early next year. We do favor a slight overweight in **Agency Mortgage-Backed Securities (MBS)** in the intermediate part of the yield curve.

While we still recommend overweighting higher quality, shorter duration securities, we feel now is the time to begin to reduce that weight and increase weights in other high quality parts of the market, including in the intermediate part of the curve which we previously underweighted. Now that the Fed has signaled its intention that short rates have peaked, the odds increase that **active management** will be able to get back to its knitting—**picking the right bonds**.

Richard Baker, CAIA
 Director of Research, Real Assets
 and Alternatives
 richard.baker@sscinc.com

Real Estate Summary

Second Quarter Review

REIT returns were negative in Q2 2024, with the FTSE NAREIT All Equity REITs Index returning -0.90% for the quarter and 5.78% for the prior twelve months. Health Care (11.53%), Residential (7.62%) and Self-Storage (2.69%) sectors were positive for the quarter, while Lodging (-11.30%), Industrial (-10.58%) and Office (-5.10%) sectors lagged.

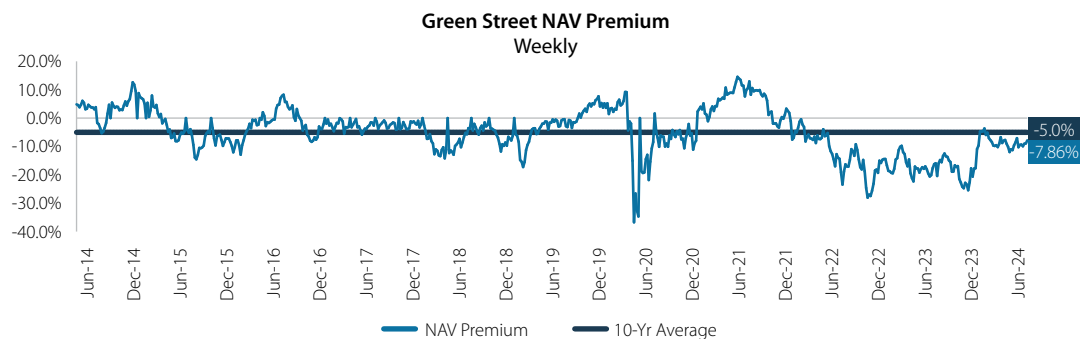
Since late 2021, REITs have faced significant headwinds as the US 10-Year yield more than doubled, from 1.52% to 3.88%, dramatically increasing the cost of capital and earnings discount rates and effectuating significant real estate valuation haircuts of 10% – 20% or more. Most notably, the US office market has been transformed by post-COVID-19 work-from-home policies, which have created record vacancies in major US downtown cores. Sharply lower office occupancies have created negative spillover impacts on related businesses (retail, restaurants, hotels, among others), with little change in back-to-office numbers over the past 18 months.

REIT Indices	QTD	YTD	1 Year
	4/1/2024 - 6/30/2024	1/1/2024 - 6/30/2024	7/1/2023 - 6/30/2024
FTSE NAREIT All Equity REITs	-0.90	-2.19	5.78
REIT Sector Indices			
Residential			
FTSE NAREIT Equity Residential	7.62	7.94	6.39
Retail			
FTSE NAREIT Equity Retail	-0.40	0.22	11.50
Lodging			
FTSE NAREIT Equity Lodging/Resorts	-11.30	-6.30	11.02
Office			
FTSE NAREIT Equity Office	-5.10	-5.56	14.96
Industrial Warehouses			
FTSE NAREIT Equity Industrial	-10.58	-12.82	-4.91
Technology - Cell Towers and Data Centers			
FTSE NAREIT Infrastructure REITs	-3.42	-11.90	-2.85
FTSE NAREIT Equity Data Centers	-2.61	1.99	11.14
Health Care			
FTSE NAREIT Equity Health Care	11.53	10.27	16.51
Self-Storage			
FTSE NAREIT Equity Self Storage	2.69	-2.28	5.98

Source: Morningstar, as of 6/30/2024, returns presented are total return
Past performance is no guarantee of future results.

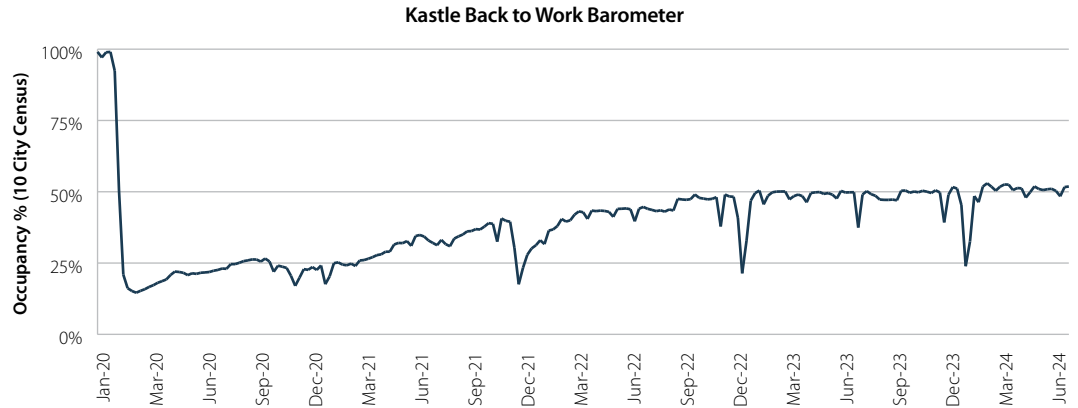
REIT NAV (net asset value) premiums ended the quarter at -7.86%, declining slightly from last quarter as investors processed “higher for longer” rates, increases in supplies and changes in work, demographics and consumer behavior.

The last 30 months are one of the longest periods on record with discounts wider than 5%.



Source: Green Street, as of 6/30/2024

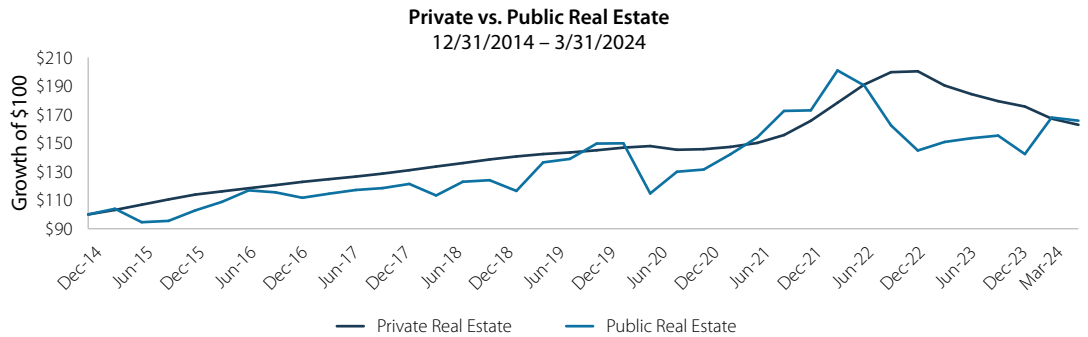
Despite significant incentives and mandates, companies have been unable to return to pre-COVID-19 occupancy levels. The Kastle Back to Work Barometer has hovered around 50% for the past 18 months, with little indication of catalysts on the horizon that could materially increase occupancies to pre-COVID-19 levels.



Source: Bloomberg, as of 6/30/2024

Periodically, valuation and return disparities emerge between publicly listed and privately held real estate, as highlighted nearby. In general, markets are efficient over longer investment cycles, and public and private real estate have provided similar returns over longer periods. However, from time to time, the valuations and returns between public and private real estate can vary widely, and it can take some time for the values to converge.

Privately held real estate, where individual properties are valued around once per year and returns are reported quarterly, provides relatively “smoothed” returns. In contrast, public REITs provide more volatile returns as their shares are bought and sold daily on exchanges. As public REITs appeared to have bottomed in late 2023, private real estate continued its repricing process. It appears that valuations converged in March 2024, which could be a potential positive sign for REITs.



Sources: Morningstar, NCREIF, quarterly returns as of 3/31/2024

Private Real Estate represented by the NCREIF NFI-ODCE Index (net return); Public Real Estate represented by the FTSE NAREIT All Equity REITs Index (total return).

Past performance is no guarantee of future results. One may not invest directly in an index.

Third Quarter Outlook

Office REITs, at approximately 5% of the aggregate US REIT market cap, represent a relatively small percentage of the total REIT universe. Office market debt levels and demand fundamentals create persistent headwinds, which could continue for several years as excess supply is absorbed (or converted to other uses) and debt is unwound through the banking and debt markets. At some point, valuations will become attractive, creating significant opportunities for investors with access to capital and expertise, potentially re-igniting mergers and acquisitions (M&A) in the Office and related sectors.

However, the negative sentiment and headlines from the Office sector appear to overshadow several constructive themes, notably Data Centers, Health Care and Retail (Malls). Public REITs continue to generate attractive operating income growth and, in general, have strong balance sheets with relatively low leverage, attractive debt terms and access to additional capital for potential M&A.

Commercial real estate is one of the largest asset classes, with an estimated global value of \$118.8 trillion in 2024, according to Statista. Real estate is perhaps the oldest alternative investment, providing attractive risk-adjusted returns, income, inflation protection and potential for growth. Much of the negative sentiment, higher rates, behavioral changes and supply challenges appear to be priced in at current levels, with potential for both favorable returns and income for investors.

Jimmy Wenger
 Real Assets Strategist
 jimmy.wenger@sscinc.com

Commodities Summary

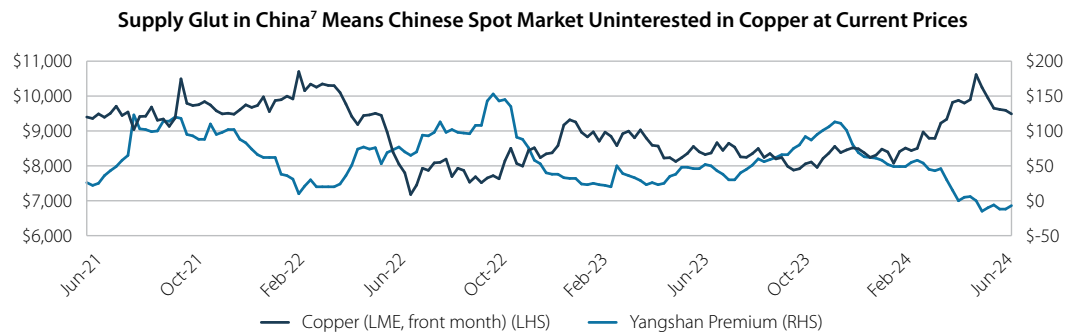
Second Quarter Review

Oil experienced a lackluster quarter, with softer-than-anticipated demand and an OPEC+ announcement that spooked markets. A 47.3% return for natural gas buoyed the energy sector, leading to a 3% return for the quarter.¹ Precious Metals pushed higher on positive inflation surprises, returning 7.9%.¹ The big surprise was Industrial Metals, which posted an intra-quarter peak of 24%, an impressive move after being stuck in a relatively narrow channel since May of 2023.² The big upward move was kicked off by large flows from money managers into copper futures contracts, but turned into a short squeeze as copper traders struggled to cover their short positions.³ Agriculture and livestock were both slightly down, falling -3.4% and -1.2% respectively.¹ Overall return for commodities for the quarter was 2.9%.¹

Third Quarter Outlook

We are downgrading our broad commodities outlook to neutral. The labor market in the US is showing some signs of softness, and the International Energy Agency (IEA) revised its forecast for oil markets lower.⁴ OPEC's announcement that it would begin returning supply to the market later this year and a huge upward move in natural gas over the quarter lead us to believe there may be less downside support than previously thought for energy broadly, which is a key factor in the asset class downgrade.^{5,6} Oil markets also seem largely unimpressed by the ongoing conflict in the Middle East, a factor we previously considered as a potential catalyst for an upward move in energy.

Industrial metals also show signs of weakness after a massive run-up in Q2. While prices have pulled back somewhat from their peak, the present copper supply glut in China is an apparent disconnect with the futures markets.⁷

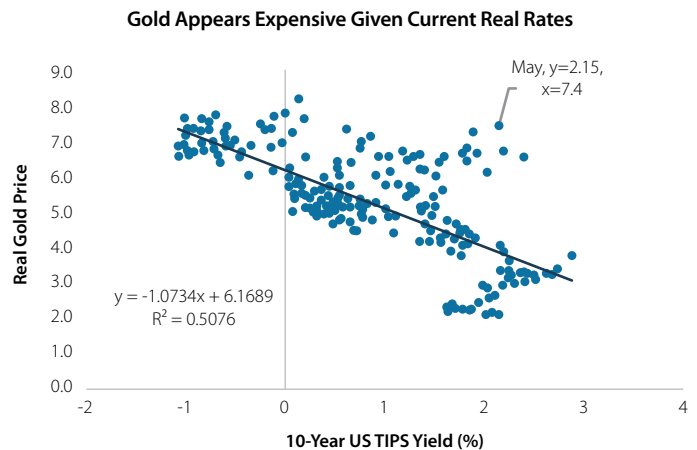


Source: Bloomberg, 6/27/2021 – 6/16/2024

Yangshan Premium: the premium over London Metal Exchange (LME) copper prices that traders pay to import copper to the Shanghai Metals Market.

While our long-term outlooks for both sectors, Energy and Industrial Metals, see significant upside potential due to infrastructure and green energy spending, near-term concerns outweigh our longer-term expectations.

The outlook for Precious Metals has also soured somewhat, as another 7.9% climb in Q2 puts the index at 30.7% increase since the lows in October. Central bank buying, a growing middle class in India and heightened geopolitical tensions are themes we believe will drive interest in gold for years to come, but we are increasingly concerned about a short-term correction causing tourists in the Precious Metal sector to exit en masse.



Sources: Bloomberg, SS&C ALPS Advisors Proprietary Research, 5/31/2004 – 5/31/2024
 Real gold price is calculated as the price of gold in USD divided by the same date's CPI index value.

While gold prices cannot be entirely explained by a single factor, we like to look at the “real” price of gold (gold price / US CPI) relative to the yield on 10-year US TIPS (real yield) as a guide. The two variables display an inverse relationship, and there is currently a severe disconnect between the current real price of gold and the real yield. The last time the real price of gold rose above its present value of 7.4 was in August 2020, which was also the previous gold price peak of \$2,064 that wasn’t reached again until March of this year.

The Last Time the Real Gold Price Hit 7.4 Was at a Multi-Year Peak



Sources: Bloomberg, SS&C ALPS Advisors Proprietary Research, 6/24/2019 – 6/30/2024

Risks to Outlook

We are concerned about escalation in the Middle East precipitating a large state-on-state conflict. Although oil markets perceive the tit-for-tat attacks between Iran and Israel as mere posturing, the risk of a highly successful attack—one that forces a decisive response—remains ever-present. This is not part of our base case but presents an upside risk from our current expectations.

Another high-impact risk to our outlook is the potential for high interest rates to spark a crisis within the financial system. Crises in the financial economy tend to spill over into the real economy, presenting a downside risk to our outlook.

¹ Source: Bloomberg, Q1 data 3/31/2024 – 6/30/2024; YTD data 12/31/2023 – 6/30/2024. Energy sector represented by the Bloomberg Energy Subindex (BCOMENTR Index); Precious Metals sector represented by the Bloomberg Precious Metals Subindex (BCOMPRTR Index); Industrial Metals sector represented by the Bloomberg Industrial Metals Subindex (BCOMINTR Index); Agriculture sector represented by the Bloomberg Agriculture Subindex (BCOMAGTR Index).

² Source: Bloomberg. From 5/9/2023 – 4/2/2024, the Bloomberg Industrial Metals Subindex (BCOMINTR Index) did not break out over 338 or fall below 305. The intra-quarter peak was 3/31/2024 – 5/21/2024.

³ Luk, J., Desai, P. and Liu, S. (May 15, 2024). *Trafigura, IXM caught in COMEX copper short squeeze as prices hit record*. Reuters.

⁴ *Oil Market Report (OMR)*. (July 2024). IEA.

⁵ Ghaddar, A., Lawler, A. and El Dahan, M. (June 2, 2024). *OPEC+ extends deep oil production cuts into 2025*. Reuters.

⁶ Source (natural gas returns): Bloomberg. *The front month natural gas contract on the NYMEX exchange rose 47.3% between 3/31/2024 and 6/30/2024*.

⁷ Home, A. (May 22, 2024). *Copper squeezed in the United States but China has plenty*. Reuters.

Definitions

Basis Point (bps): a unit that is equal to 1/100th of 1% and is used to denote the change in a financial instrument.

Bloomberg Agriculture Subindex (BCOMAGTR Index): formerly known as the Dow Jones-UBS Agriculture Subindex (DJUBAGTR), the index is a commodity group subindex of the Bloomberg CTR. The index is composed of futures contracts on coffee, corn, cotton, soybeans, soybean oil, soybean meal, sugar and wheat. It reflects the return on fully collateralized futures positions and is quoted in USD.

Bloomberg Energy Subindex (BCOMENTR Index): a commodity index composed of futures contracts on crude oil, heating oil, unleaded gasoline and natural gas. It reflects the return of underlying commodity futures price movements only and is quoted in USD.

Bloomberg Industrial Metals Subindex (BCOMINTR Index): reflects the returns that are potentially available through an unleveraged investment in the futures contracts on industrial metal commodities.

Bloomberg Intermediate US High Yield Index: measures the USD-denominated, high yield, fixed-rate corporate bond market. Securities are classified as high yield if the middle rating of Moody's, Fitch and S&P is Ba1/BB+/BB+ or below. The intermediate duration segment of the index includes bonds with maturities of 1 to 10 years.

Bloomberg Municipal Index: serves as a benchmark for the US municipal bond market.

Bloomberg Precious Metals Subindex (BCOMPTR Index): reflects the returns that are potentially available through an unleveraged investment in the futures contracts on precious metals commodities. The Index currently consists of two precious metals commodities futures contracts (gold and silver).

Bloomberg US 1000 Index: a float market-cap-weighted benchmark of the 1000 most highly capitalized US companies.

Bloomberg US Aggregate Bond Index: a broad-based benchmark that measures the investment grade, US dollar-denominated, fixed-rate taxable bond market. The index includes Treasuries, government-related and corporate securities, fixed-rate agency MBS, ABS and CMBS (agency and non-agency).

Bloomberg US Asset-Backed Securities Index: a broad-based flagship benchmark that measures the investment grade, US dollar-denominated, fixed-rate taxable bond market. The index only includes ABS securities.

Bloomberg US Corporate Bond Index: measures the investment grade, fixed-rate, taxable corporate bond market.

Consumer Price Index (CPI): a measure of the average change over time in the prices paid by urban consumers for a representative basket of consumer goods and services.

Dow Jones Industrial Average: a stock market index of 30 prominent companies listed on stock exchanges in the United States. The DJIA is one of the oldest and most commonly followed equity indexes.

Earnings Before Interest, Taxes, Depreciation and Amortization (EBITDA): a measure of a company's overall financial performance.

Federal Reserve US Treasury H15 Constant Maturity 10-Year Real Yield Index: the interest rates for US Treasury securities that have a constant maturity of 10 years, adjusted for inflation. These rates are derived from the yields on Treasury Inflation-Protected Securities (TIPS). The "real yield" indicates the return on investment after accounting for inflation, providing a more accurate reflection of the purchasing power of the returns.

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

FTSE NAREIT Equity Data Centers Index: a subsector index of the FTSE NAREIT US Real Estate Index containing all Data Center REITs in the parent index.

FTSE NAREIT Equity Health Care Index: a subsector index of the FTSE NAREIT US Real Estate Index containing all Health Care REITs in the parent index.

FTSE NAREIT Equity Industrial Index: a subsector index of the FTSE NAREIT US Real Estate Index containing all Industrial REITs in the parent index.

FTSE NAREIT Equity Lodging/Resorts Index: a subsector index of the FTSE NAREIT US Real Estate Index containing all Lodging/Resorts REITs in the parent index.

FTSE NAREIT Equity Office Index: a subsector index of the FTSE NAREIT US Real Estate Index containing all Office REITs in the parent index.

FTSE NAREIT Equity Residential REIT Index: a subsector index of the FTSE NAREIT US Real Estate Index containing all Equity Residential REITs in the parent index.

FTSE NAREIT Equity Retail Index: a subsector index of the FTSE NAREIT US Real Estate Index containing all Retail REITs in the parent index.

FTSE NAREIT Equity Self Storage Index: a subsector index of the FTSE NAREIT US Real Estate Index containing all Self Storage REITs in the parent index.

FTSE NAREIT Infrastructure REITs Index: a subsector index of the FTSE NAREIT US Real Estate Index containing all Infrastructure REITs in the parent index.

Group of 20 (G20): an intergovernmental forum comprising 19 sovereign countries, the European Union (EU) and the African Union (AU).

Investment Grade (IG): a rating that signifies that a municipal or corporate bond presents a relatively low risk of default. To be considered an investment grade issue, the company must be rated at 'BBB' or higher by Standard and Poor's or Moody's. Anything below this 'BBB' rating is considered non-investment grade.

ISM Manufacturing PMI: measures the change in production levels across the US Economy from month to month.

Kastle Back to Work Barometer: a measure of current average weekly (first time a day) swipe activity across a 10-city sample of commercial office buildings which utilize Kastle building security, compared to a weekly average from before office use dropped due to COVID-19. The 10-city sample includes: Houston, Chicago, Austin, New York, Dallas, Los Angeles, San Francisco, Washington D.C., San Jose and Philadelphia.

MSCI World Index: measures the performance of equity markets across developed countries.

NASDAQ 100 Index: one of the world's preeminent large-cap growth indexes. It includes 100 of the largest domestic and international non-financial companies listed on the Nasdaq Stock Market based on market capitalization.

NCREIF Fund Index - Open End Diversified Core Equity (NFI-ODCE Index): an index of investment returns reporting on both a historical and current basis the results of 38 open-end commingled funds pursuing a core investment strategy. The NFI-ODCE Index is capitalization-weighted and is reported gross of fees. Measurement is time-weighted. NCREIF (National Council of Real Estate Investment Fiduciaries) will calculate the overall aggregated Index return.

Net Debt-to-EBITDA Ratio: a debt ratio that shows how many years it would take for a company to pay back its debt if net debt and EBITDA are held constant.

OECD G20 LEI Diffusion Index: reflects the proportion of countries whose composite leading indicators are rising or remain unchanged year over year.

Personal Consumption Expenditures Price Index (PCE): a measure of the prices that people living in the United States, or those buying on their behalf, pay for goods and services. The PCE is known for capturing inflation (or deflation) across a wide range of consumer expenses and reflecting changes in consumer behavior.

Definitions (continued)

Price/Earnings (P/E) Ratio: a valuation ratio of a company's current share price compared to its per-share earnings.

Price/Sales (P/S) Ratio: represents the weighted average of the price/sales ratios of the stocks in a portfolio. Price/sales represent the amount an investor is willing to pay for a dollar generated from a particular company's operations.

Real Estate Investment Trust (REIT): companies that own or finance income-producing real estate across a range of property sectors. Listed REITs have characteristics of both the income potential of bonds and growth potential of stocks.

R-Squared (R²): in investing, R-squared is generally interpreted as the percentage of a fund or security's movements that can be explained by movements in a benchmark index. An R-squared of 100% means that all movements of a security are completely explained by movements in the index.

S&P 500 Equal Weight Index: the equal-weight version of the widely-used S&P 500. The index includes the same constituents as the capitalization weighted S&P 500, but each company in the index is allocated a fixed weight.

S&P 500 Index: widely regarded as the best single gauge of large-cap US equities. The index includes 500 leading companies and covers approximately 80% of available market capitalization.

S&P 500 Semiconductors & Semiconductor Equipment Industry GICS Level 3 Index: the Standard and Poor's 500 Semiconductor Equipment Index Sub-Industry Index is a capitalization weighted index.

Z-Score: a numerical measurement that describes a value's relationship to the mean of a group of values, measured as standard deviations from the mean. If a Z-score is 0, it indicates that the data point's score is identical to the mean score. A Z-score of 1.0 would indicate a value that is one standard deviation from the mean.

One may not invest directly in an index.

Important Disclosures

ALPS Advisors, Inc. ("SS&C ALPS Advisors" or "ALPS Advisors") is a SEC registered investment adviser located in Denver, Colorado. Registration does not imply a certain level of skill or training. ALPS Advisors may only transact business in those states in which it is registered or qualifies for an exemption or exclusion from registration requirements.

Information presented herein is provided for educational or informational purposes only. ALPS Advisors does not transact business via this material. Nothing herein should be construed as financial advice.

Information developed by ALPS Advisors is subject to change at any time without notice. ALPS Advisors provides such information for illustrative and informational purposes only. This information may represent personal opinions and viewpoints of the commentators and should not be regarded as a description of advisory services provided by ALPS Advisors.

Information presented herein does not constitute investment, legal or tax advice; performance data; an endorsement of any third party or such third party's views; or any recommendation that any particular security, portfolio of securities, transaction or investment strategy is suitable for any specific person. Information is impersonal and not tailored to the circumstances or investment needs of any specific person. Any mention of a particular security and related performance data is not a recommendation to buy or sell that security. Whenever there are hyperlinks to third-party content, this information is intended to provide additional perspective and should not be construed as an endorsement of any services, products, guidance, individuals or points of view outside ALPS Advisors. All examples are hypothetical and for illustrative purposes only.

ALPS Advisors does not warrant information presented herein to be correct, complete, accurate or timely, and is not responsible for any errors or omissions in the information or for any investment decisions, damages or other losses resulting from, or related to, use of the information. No assurance can be made regarding the profitability of any security mentioned or regarding the accuracy of any forecast made. Not all past forecasts were, nor future forecasts may be, as accurate as those presented. Past performance is no guarantee of future returns.

Investing involves risk, including the possible loss of principal and fluctuation of value. There is no assurance that the stated objective will be met. Please consider the charges, risks, expenses and investment objective carefully before investing. Information presented herein is for discussion and illustrative purposes only and is not a recommendation or an offer or solicitation to buy, sell or hold any securities. Past performance is no guarantee of future results.

AAI000715