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Research Review

July 2023

Strong risk-on tailwinds that developed throughout the first half of 2023 persisted into July, with global investors embracing resilient U.S. economic data, an easing of inflationary pressures, and a potential end in sight for the Fed's historic tightening campaign. Performance across global equities was overwhelmingly positive on the month, particularly within the emerging markets, which nearly doubled the return generated by U.S. large cap. The risk-on market sentiment was also evident across the bond market, with performance favoring credit-oriented sectors, sending credit spreads to well-below historical averages. Real asset returns were similarly positive in July, particularly among the commodity indices, as the Bloomberg Commodity Index posted a 6.3% gain, the strongest monthly performance since March 2022. A further rise across commodity prices, however, could support a reacceleration in headline inflationary pressures, in turn potentially leading the Federal Reserve (Fed) to remain on its tightening path

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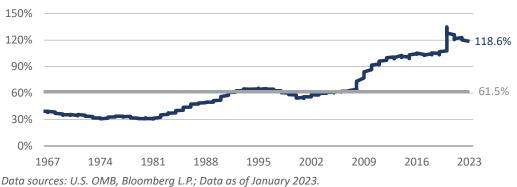


Economic Update

Fitch Strips U.S. of 'AAA' Credit Rating, Citing Near- and Long-Term Fiscal Challenges

On August 1, Fitch Ratings stripped the U.S. of its 'AAA' long-term credit rating, with a one-notch downgrade to 'AA+' citing "expected fiscal deterioration over the next three years, a high and growing general government debt burden, and the erosion of governance relative to 'AA' and 'AAA' rated peers over the last two decades that has manifested in repeated debt limit standoffs and last-minute resolutions." (Source: Fitch Ratings, 8/1/2023)

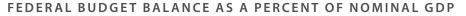
Through January, gross government debt as a share of nominal gross domestic product (GDP) stood just below 120%, a ratio modestly below the 135% peak established during the brief COVID-19 economic downturn and a level anticipated to increase further during the next economic downturn. Moreover, at 118.6%, federal debt-to-GDP is more than 20 percentage points higher than the last time the U.S. suffered a credit rating downgrade in August 2011 by Standard and Poor's.





In addition to a growing government debt burden and erosion of fiscal governance, Fitch cited "expected fiscal deterioration over the next three years." Similar to the current elevated ratio of government debt relative to GDP, the Treasury's budget deficit as a percentage of GDP also paints a worrisome picture of the country's fiscal health. Despite the economy still in the midst of an economic expansion, the Treasury's budget deficit as a share of GDP has deteriorated in recent months and is nearing a double-digit reading.

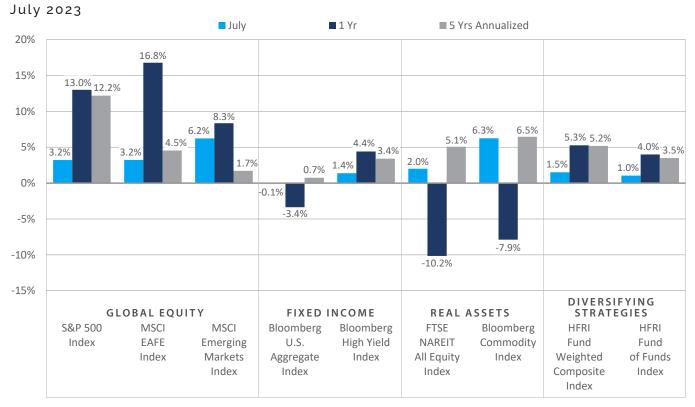
Through June, the budget deficit, at 8.5% of GDP, is trending in a particularly unfavorable direction. Excluding the COVID-era extraordinary fiscal actions aimed at shoring up the U.S. economy and the brief, sharp decline in GDP growth, the current outsized budget deficit relative to GDP is closing in on the 10% reading that was breached in 2010 as the economy was clawing itself out of the 2008-2009 Global Financial Crisis. Moreover, due to a sharp rise in Treasury interest rates and a ballooning debt overhang, the Congressional Budget Office (CBO) anticipates that the U.S. could spend more than \$1 trillion annually on interest expense over the coming ten years.





Data sources: U.S. Treasury, NBER, Bloomberg L.P.; Data as of June 2023.

In summary, financial market performance was significantly positive in July, as risk-on sentiment supported performance across most major asset classes and categories, while a modest monthly rise in Treasury rates negatively impacted performance across the higher quality, rate-sensitive sectors of the bond market. Despite 12 years having passed since Standard and Poor's (S&P's) downgraded the U.S. from 'AAA' to 'AA+', Fitch Ratings finally followed in S&P's footsteps by stripping the U.S. of its 'AAA' long-term sovereign credit rating, with an early-August one-notch downgrade to 'AA+' amid current and anticipated fiscal challenges.



Market Summary

Data sources: Lipper, HedgeFund Research

Global Equity

Global equity markets produced positive returns over July, with emerging markets outperforming developed markets. In the U.S., small cap performance was strong and beat large caps stocks. Positive economic data supporting the soft-landing narrative has boosted the risk-on sentiment in recent months, and earnings beats have improved from levels witnessed in the latter half of 2022.

U.S. equity markets showed breadth as every sector produced positive returns. The energy and communication services sectors finished as the top performers. Improving economic growth data and expectations of a tighter oil supply drove energy's performance.

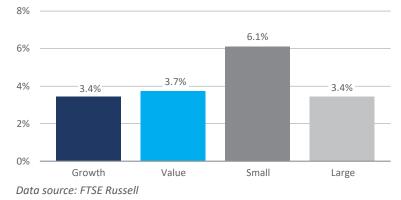
Eurozone shares rose, as the real estate sector posted the most significant gains, up 13.0%, supported by falling inflation and economic growth data surprising to the upside. In the UK, equity performance was positive as the country experienced easing inflationary pressures, with June's headline Consumer Price Index (CPI) producing the first positive inflation surprise in nearly a year.

Japanese equities underperformed their developed peers. The Bank of Japan (BoJ) loosened its yield curve control framework, leading the yen to rally. During its July meeting, the BoJ raised its 10-year yield limit. This news positively impacted financials as a potential for higher rates would benefit Japanese banks. With positive economic data and a rallying yen, small and mid cap stocks were the strongest performers.

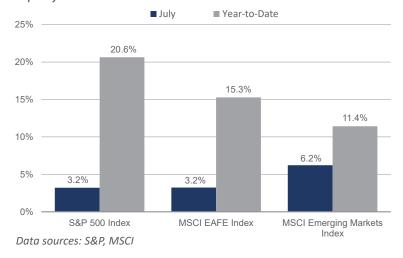
Emerging markets were the best-performing global region in July, with all sectors producing a positive return. Country performance had wide breadth as well. The real estate and consumer discretionary sectors were top performers, backed by Chinese authorities indicating support for the real estate sector and consumption through policy easing and possible stimulus. Latin America was the worst performing region, a reversal from the first half of 2023, as market sentiment tempered.

SMALL CAPS OUTPERFORMS

U.S. Equity Style Returns



EMERGING MARKET EQUITIES OUTPERFORM... A REVERSAL FROM THE FIRST HALF OF 2023 Equity Indices Performance in U.S. Dollars



EARNINGS BEATING EXPECTATIONS AS AN **IMPROVED RATE**



S&P 500 Index Earnings vs. Expectations

Data source: Bloomberg, L.P.; Data as of August 6, 2023.

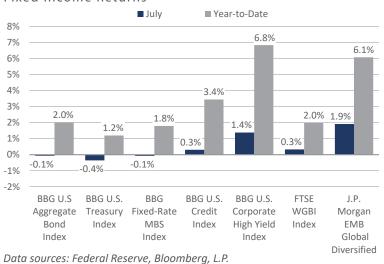
Fixed Income

Appetite for risk and continued strength spurred rates higher. Interest rates pushed yearto-date highs before rallying on a softerthan-expected CPI reading from June. The 10-year Treasury yield rose to 3.97% after trading within a roughly 0.25% range in July. The inversion between the 10-year and 2-year Treasury reached cycle lows in early July before modestly steepening in the final weeks of the month in a bear steepener. The majority of the yield curve remains in inverted territory. As previously mentioned, Fitch downgraded their rating of U.S. debt on August 1, citing worsening fiscal conditions. Yields have been on an upward trend, differing from the direction of yields during S&P's 2011 U.S. credit rating downgrade.

After pausing in their June meeting, the Fed voted to increase the policy rate by 0.25%to 5.25-5.50%. While the increase in policy rate was in line with market expectations, fixed income investors were surprised by the BoJ tweak to yield curve control. After the BoJ widened the tolerance bands for Japanese Government Bonds (JGBs) earlier this year, Governor Kazuo surprised markets by raising the band once more to an upper limit of 1.0%. This sparked a selloff in the intermediate and long end of the Japanese yield curve as JGP yields reached the highest levels in over nine years. Despite the tweak in policy, the BoJ again unexpectedly intervened in the bond market with unscheduled purchases to dampen volatility.

Corporate earnings came in broadly in line with expectations as corporate fund-amentals remain resilient, supporting credit markets. Positive earnings outlook and strong risk appetite drove spreads tighter across investment grade (IG) and high yield (HY), offsetting the negative impact of interest rates. Spreads remain historically tight, with IG and HY spreads falling to 1.19% and 3.79%, respectively.

RATE SENSITIVE BONDS FLAT IN JULY Fixed Income Returns



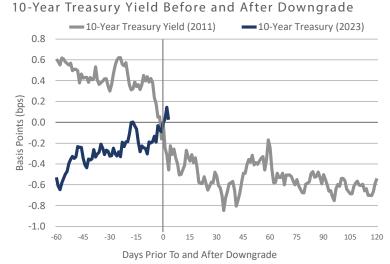
DEBT BURDEN CONTINUES TO RISE

Interest Rate on U.S. Marketable Debt and 10-Year U.S. Treasury Yield



2001 2003 2005 2007 2009 2011 2013 2015 2017 2019 2021 2023 Data sources: FactSet, U.S. Treasury Department; Data as of January 2023.

RATE MOVEMENT DIFFERS FROM THE 2011 U.S. RATING DOWNGRADE



Data source: FactSet

Real Assets

Real Estate

Global real estate transaction volumes remain suppressed to the lowest quarterly level in five years, according to Preqin, while the National Council of Real Estate Investment Fiduciary (NCREIF) Private Property Index (PPI) index returned its third straight negative quarterly return.

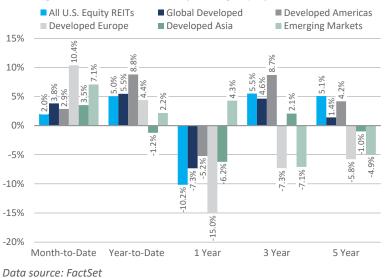
All U.S. real estate investment trust (REIT) sectors, excluding apartments, cell towers, and self-storage, had positive returns in July. The office sector was the top-performing sector, as market participants looked to capitalize on significant discounts to net asset value (NAV). The office sector remained challenged by the hybrid work schedules. shift towards Alternatively, the telecommunications infrastructure sector (cell tower companies) underperformed for the month and year-to-date due partly to concerns about slower spending on 5G.

Natural Resources

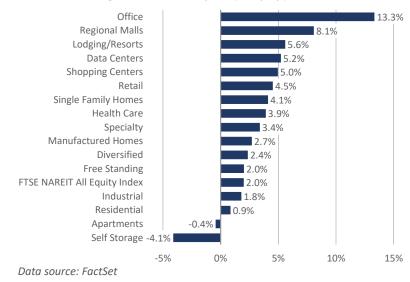
West Texas Intermediate (WTI) crude oil rose more than 15% in July, and gasoline prices reached their highest level in eight months. Global oil demand hit an all-time high of 102.5 million barrels per day, surpassing the pre-COVID high. The U.S. oil rig count fell to its lowest level in 16 months, and Saudia Arabia extended its voluntary one million barrels per day crude oil production cut into September.

Global food commodity prices rose modestly in July after Russia terminated the Black Sea Grain Initiative. The deal was brokered to alleviate a global food crisis due to Russia's invasion of Ukraine, one of the world's top exporters of grains.

GLOBAL REITS POSITIVE IN JULY Trailing REIT Performance by Geography

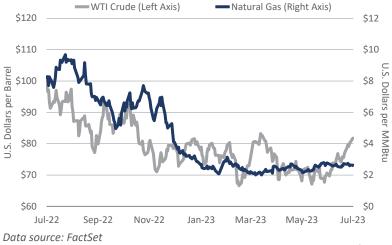


OFFICE REITS OUTPERFORM IN JULY U.S. REIT Trailing Performance by Property Type (Month-to-Date)



OIL PRICE RALLIES IN JULY





Infrastructure

Nearly all global infrastructure subsectors were positive during July, excluding marine ports and communications. Midstream energy master limited partnerships (MLPs) outperformed in July, and year-to-date, as the crude oil price rally gained momentum and company fundamentals continued to telecommunications improve. The sector remained challenged by rising interest rates and concerns about a slower 5G rollout.

Diversifying Strategies

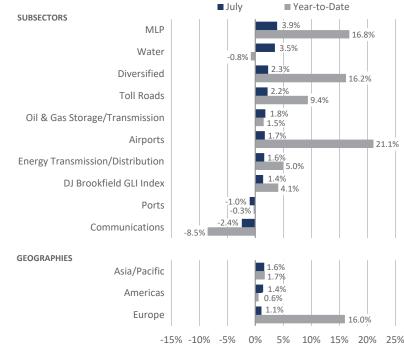
Hedge fund returns were positive over the month, with the HFRI Fund Weighted Composite Index up 1.5%. Each major strategy ended July in positive territory, with the strongest performer being the HFRI Event-Driven Index, followed by the HFRI Equity Hedge (EH) Index and the HFRI Fund Weighted Composite Index.

HFRI Macro Index combined two consecutive positive months for the first time in 2023. Long positions in gasoline, crude oil, and heating oil were notable contributors to macro strategies. The short Japanese yen against the U.S. dollar position struggled in July due to a choppy trade environment caused by Bank of Japan policy change speculation, improved U.S. inflation data, and higher wage growth. The weakening dollar, due partly to cooling inflation, may challenge traders to change their conviction about the short yen position.

Within hedged equity, only the HFRI EH: Multi-Strategy Index had negative performance in July. The highest-performing indexes were the HFRI EH Technology Index, the HFRI EH: Quantitative Directional Index, and the HFRI EH: Fundamental Value Index. Throughout July, hedged equity funds accounted for most of the net selling of long equities, while hedge funds, as a whole, positioned themselves directionally longer in equity markets. The overall movement long was primarily achieved via funds covering short positions as opposed to adding longs.

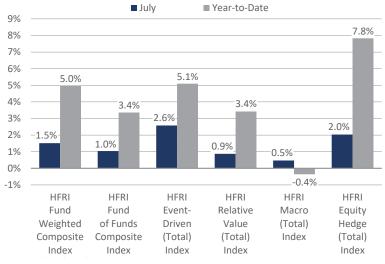
MIDSTREAM INFRASTRUCTURE OUTPERFORMS

Listed Infrastructure Trailing Returns



Data source: FactSet

HEDGE FUNDS ADD TO A POSITIVE YEAR HFRI Indices Performance Returns in U.S. Dollars



Data source: HedgeFund Research

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