Capital Markets Review | 4th Quarter 2022

December 31, 2022

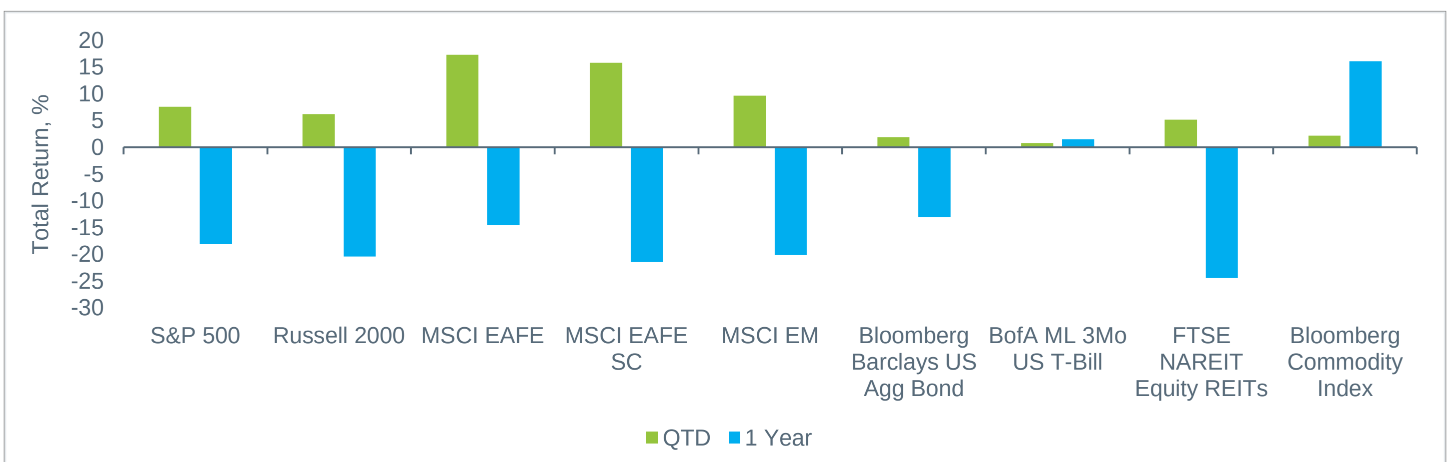
Overview

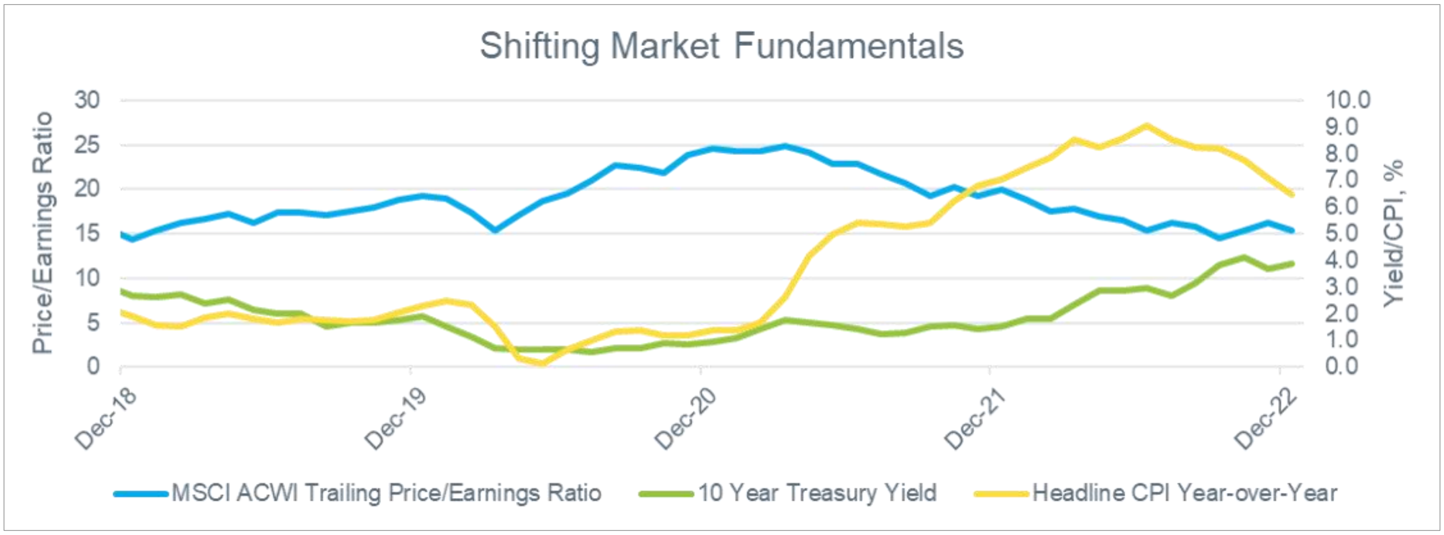
During Q4, equity and fixed income markets delivered improved results while continuing to experience elevated volatility. However, the positive returns for the quarter came on the tail of a year that yielded significantly negative returns for many investors. Global equities ended 2022 with an annual return of -19.4%, as measured by the MSCI All Countries World Investable Market Index, while bonds finished with a return of -13.0%, as measured by the Bloomberg US Aggregate Bond Index. Capital markets during the final quarter of 2022 were driven by similar themes as prior quarters, with investors remaining focused on central bank activity, inflation data, and geopolitical turmoil.

While current economic growth estimates for the US remained positive at the end of 2022, the outlook for 2023 is more dour. The most recent reading of the Atlanta Federal Reserve's GDP Nowcast pointed to growth above 3% for Q4, and a survey conducted by the Federal Reserve Bank of Philadelphia in November indicated an expected range of 1.5% to 2.4% for GDP growth in 2022. However, estimates for 2023 GDP growth remain muted at 0.7%, on average. The combination of tightening monetary policy and persistent inflation, as well as continued supply shocks and energy availability concerns in Europe, led some industry observers to increase odds of a global recession in 2023. One commonly cited recession indicator, the spread between the 2-year and 10-year Treasuries, remained inverted—indicating a potential recession to come. Some other economic activity indicators started to indicate slowing as well as the ISM Services Purchasing Managers Indexes, for Manufacturing and Services, dipped into contractionary territory (below 50) at the end of December. In contrast to these indicators, labor markets remained tight. The unemployment rate was 3.5% at quarter-end, though there were some signs of slowing wage growth.

While inflation remains a concern for policymakers, recent data indicated that it is showing some signs of abating. In December, the US Consumer Price Index calculated year-over-year overall inflation at 6.5%, the lowest reading since October 2021. As the impact of its prior rate increases began to show in inflation and other data, the Federal Reserve Open Market Committee (FOMC) began to slow its pace of interest rate hikes. In December, the FOMC raised its key policy rate by only 50 basis points, following a series of four straight 75 basis point increases. Current market pricing indicates that the federal funds rate is expected to settle in the 4.75% to 5.25% range in 2023, increasing from the current range of 4.25% to 4.50%. *(continued on next page)*

4th Quarter and Calendar Year Performance



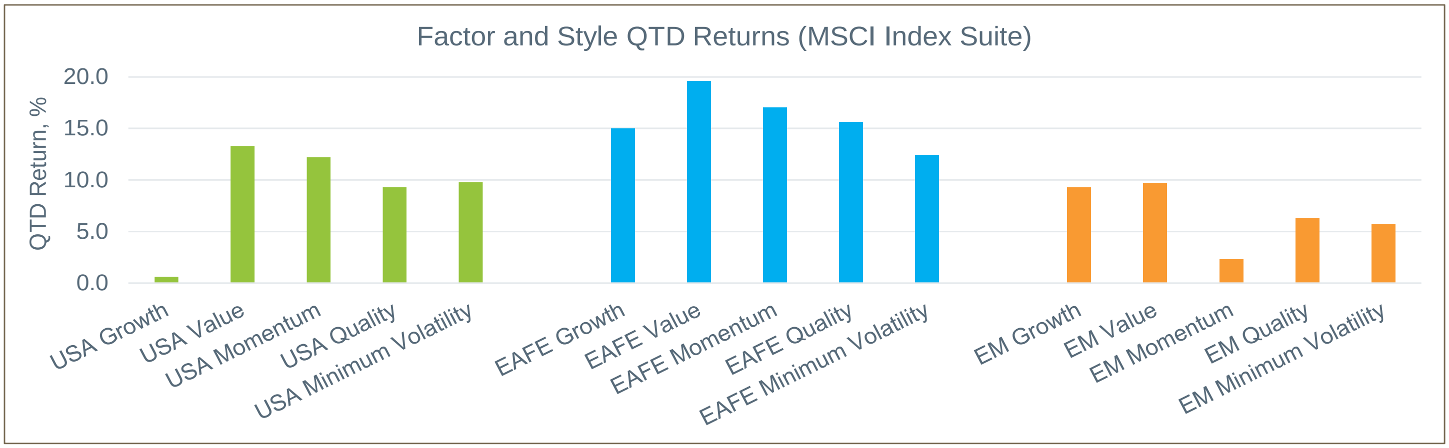


International events, including the war in Ukraine, energy price shocks, and trade tensions continued to test economic and political relationships across multiple countries and regions. Similar to the US, forecasts of global inflation indicate an expectation for moderating levels. The Organization for Economic Co-operation and Development (OECD) recently estimated inflation of 6.6% among developed countries during 2023, compared to its current estimate of 9.4% for 2022. During Q4, the Bank of Japan made an unexpected move to increase the upper target of its 10 year government bond yield from 0.25% to 0.50%. While Japan's policy interest rate level still trails other major central banks, the move was viewed as a signal that Japan is taking steps away from accommodative policies.

Economic news from emerging markets was primarily focused on China, where signs of a softening stance toward pandemic restrictions and past interest rate cuts were viewed as reasons for optimism regarding the country's outlook. However, concerns over lockdown-related social unrest and the consolidation of power around President Xi Jinping provided cautionary notes for investors. Overall, global GDP growth, estimated by the OECD at 3.1% in 2022, was forecasted by the organization to decline to 2.2% in 2023.

Expanded Review of Key Economic Indicators

	Q4 2022	Q3 2022	Q2 2022	10 Year Average
Federal Funds Rate	4.33%	3.08%	1.58%	0.78%
Treasury - 1 Year	4.73%	4.05%	2.80%	1.00%
Treasury - 10 Year	3.88%	3.83%	2.98%	2.15%
Treasury - 30 Year	3.97%	3.79%	3.14%	2.75%
Breakeven Inflation - 5 Year	2.38%	2.16%	2.62%	1.88%
Breakeven Inflation - 10 Year	2.30%	2.15%	2.34%	1.98%
Breakeven Inflation - 30 Year	2.35%	2.09%	2.21%	2.04%
BB US Corp: Hi Yld Index - OAS	4.69%	5.52%	5.69%	4.29%
Capacity Utilization	79.66%	80.06%	79.84%	77.21%
Unemployment Rate	3.50%	3.50%	3.60%	5.25%
ISM PMI - Manufacturing	48.40%	50.90%	53.00%	54.51%
Baltic Dry Index - Shipping	1,760	1,760	2,240	1,351
Consumer Confidence (Conf. Board)	108.30	108.00	98.40	105.50
CPI YoY (Headline)	6.50%	8.20%	9.10%	2.52%
PPI YoY - Producer Prices	10.60%	11.50%	18.30%	2.65%
US Dollar Total Weighted Index	122.09	127.64	121.05	110.10
WTI Crude Oil per Barrel	$77	$79	$106	$66
Gold Spot per Ounce	$1,819	$1,661	$1,807	$1,438



US Equity

US equity markets experienced a decrease in volatility in Q4 with short-term spikes around CPI release dates and Fed meetings. Returns were positive across market cap and style groups in Q4.

The reversal to growth seen in Q3 was short-lived, as value stocks led growth by a wide margin in Q4. In 2022, value outperformed growth by the largest margin since 2000, with the Russell 3000 Value Index outperforming its growth counterpart by 21.0%. Energy and utilities were the only sectors that generated positive returns on the year. The energy sector had its best year on record with the S&P 500 Energy Index gaining 65.7%.

Overall, this year marks the worst performance of US equities across market cap groups since the GFC, and only the third time in the last 15 years that the Russell 3000 Index has generated negative returns.

Active managers performed well in Q4, with the exception of mid-cap growth. Value-oriented managers had a higher success rate than core or growth managers in the small- and mid-cap spaces, while large-cap core and growth managers fared better than value managers.

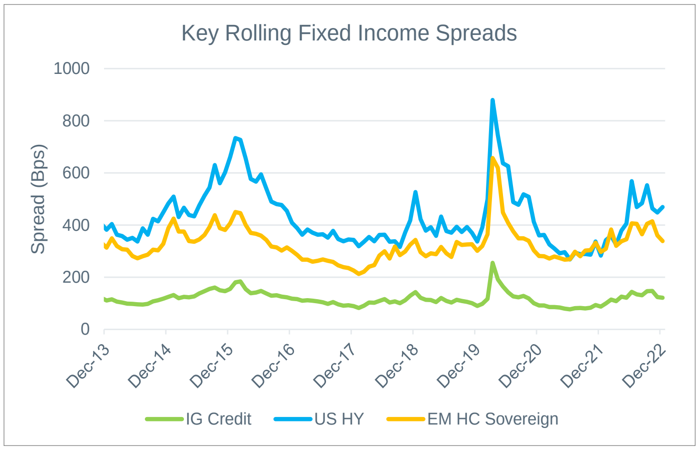
Growth managers across the market cap spectrum struggled to provide downside protection in 2022, while value and core managers were broadly successful.

Non-US Equity

Developed international markets meaningfully outperformed their domestic counterparts in Q4 with the MSCI EAFE Index realizing a 17.3% return for the period. Value stocks rebounded back into favor, outperforming growth in a reversal from the prior quarter, while large-cap continued its outperformance over small-cap stocks. All developed market countries and sectors were positive for the quarter with Europe and financials leading markets higher. Overall, market trends pointed to investors anticipating moderating inflation and easing of rate hikes despite the ongoing uncertainty led by the conflict in Ukraine and near-term recession fears.

Emerging markets lagged developed during the quarter with the MSCI Emerging Markets Index finishing with a 9.7% return. Value stocks narrowly outperformed growth and large-cap beat small-cap. As the largest country within emerging markets, China continued to drive news headlines and index returns in Q4. Notably, President Xi Jinping secured an unprecedented third term, started a rollback of their zero-COVID policy, and reiterated a pro-growth stance through additional economic stimulus and a more accommodative monetary policy. As measured by the MSCI China Index, the country finished Q4 with a return of 13.5%.

The majority of active managers in emerging markets outperformed in Q4; however, active managers in international developed mostly underperformed.



Fixed Income

The Bloomberg US Aggregate Index finished Q4 with a return of 1.9%, capping off a decline of -13.0% in 2022, the most negative calendar year on record for the index. The year was defined by rising interest rates, as Treasury yields rose 236 basis points from 1.5% to 3.9% as measured by the 10-year US Treasury yield. The FOMC aggressively hiked the federal funds rate in response to persistent inflation over the course of the year, resulting in a yield curve that is notably higher across maturities and in some cases inverted among short-term and long-term treasury interest rates.

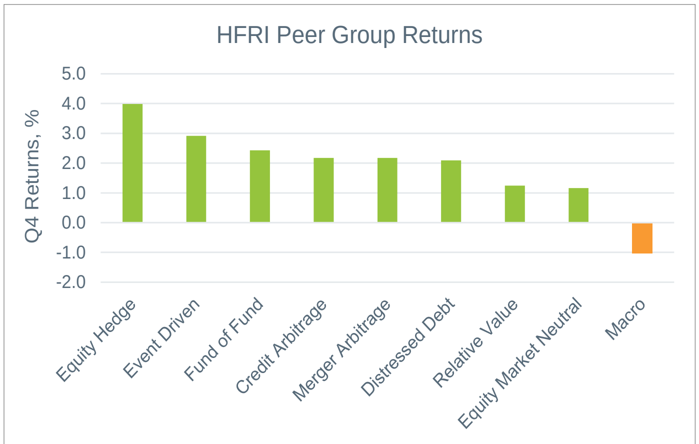
US investment grade corporate bonds returned 3.4% in Q4 as low supply and softer FOMC rhetoric bolstered credit markets, however, the index still declined -15.3% in 2022 as measured by the Bloomberg US Credit Index. Non-investment grade corporate credit, bolstered by lower interest rate sensitivity, relatively outperformed investment grade over the year, but still detracted -11.2% as measured by the Bloomberg US High Yield Index for its second worst year on record.

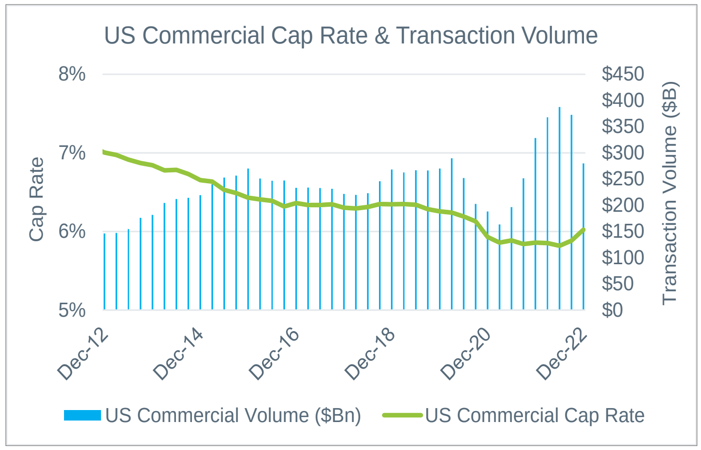
Outside the US, conditions in global fixed income markets were defined by concerns over low growth, persistent inflation, rising interest rates, a strong US Dollar, and geopolitical conflict. The Bloomberg Global Aggregate Index returned 1.0% in Q4 and -11.2% in 2022, while the JPM EMBI Global Diversified returned 8.1% and -17.8% over these respective periods.

Multi-Asset

Global Tactical Asset Allocation (GTAA) strategies that RVK follows closely posted significant gains with moderate dispersion to close an otherwise challenging year. Given a strong quarter for non-US equity, as well as value-oriented equity within the US, nearly all active managers with significant diversification outperformed a US centric blend of 60% equity and 40% fixed income. The top performing long-biased GTAA strategies were those that have included meaningful market neutral idiosyncratic relative valuation exposures. While those that moderately underperformed peers benefitted from a value bias despite maintaining US equity and fixed income exposures. Multi-asset managers that target reduced correlations, low volatility, and limited market sensitivity produced widely disparate absolute returns. Most Alternative Risk Premia strategies were largely flat for the quarter with a notable exception being where US value equity exposure contributed meaningfully.

Diversified Inflation Strategies (DIS) managers tracked closely by RVK have outperformed a US-centric blend of 60% equity and 40% fixed income both for the year, and in Q4. After responding positively to record inflationary pressures in the first quarter of 2022, DIS managers posted losses in the second and third quarters. Strong Q4 performance has materialized across the peer group, with those that rely on income-oriented investment processes and those that hold larger TIPS allocation lagging the group to a moderate degree.





Diversified Hedge Funds

Despite a highly challenging market backdrop, hedge funds broadly delivered capital preservation to institutional investors in 2022. The year ended on a strong note given most managers were reducing leverage and overall market exposure going into Q4. The HFRI Fund-Asset-Weighted Composite Index delivered an annual return of 1.0% while it's Asset-Weighted counterpart ended the year at -4.0%.

While long alpha generation ended the year in negative territory after a difficult 1H, 2022 marks the strongest year for short alpha generation since 2009. Successful short selling was spread broadly across sectors, while overall alpha generation was the most challenged in the communication services, real estate, and energy sectors.

Market Neutral platforms and macro strategies, both systematic and discretionary in nature, were the runaway winners across industry peers for the year, benefitting from low correlations to equity and credit markets and a rich backdrop of trends across interest rates, commodity prices, and general uncertainty around global economic conditions.

In contrast, key laggards were highly directional long/short equity and event-driven strategies, although these strategies still generally avoided the full equity market drawdown. Within the event-driven space, pressure on corporate credit led to a slowdown of IPOs, secondary issuance events, and M&A activity which contributed to a sideways annual result for these managers.

Real Estate

Core private real estate generated a negative return of -5.0% in Q4 (on a preliminary and gross of fee basis), as reported by the NFI-ODCE Index, with contributions of 0.8% from income and -5.8% from price appreciation. The income return continues to trend at the lower end of historical levels while price appreciation turned significantly negative. Investors of publicly traded real estate significantly outperformed their private market counterparts by a meaningful margin. Publicly traded real estate delivered a return of 4.5% in Q4, as measured by FTSE/NAREIT All REITs Index.

Current market conditions have led to a period of elevated volatility and a resetting of pricing assumptions. Bid-ask spreads remain wide with the number of deals completed decreasing compared to previous quarters. The current elevated inflationary environment, coupled with rising interest rates, is contributing to cap rate expansion, increased discount rates and compression in real estate yields. Traditional sectors with strong fundamentals, such as industrial and residential, have fared better than the office and hospitality sectors. The retail sector has performed better than many would have anticipated due, in part, to the sector having been through a resetting of valuation assumptions in prior years. Additionally, non-traditional sectors, such as self-storage, life-science and medical office properties outperformed their traditional counterparts.

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RVK

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