



## ECONOMIC OVERVIEW

October may just yet mark the beginning of the end for inflationary pressures here in the U.S. The Fed's relentless pursuit of higher interest rates is starting to take hold, as prices across a wide range of industries are softening, albeit at a slow pace. With the Federal Funds rate now at a 3.00% to 3.25% range, and with the Fed poised to increase by another 75 basis points this week, QT measures are finally taking hold. We would anticipate economic data going forward to reflect a gradually slowing U.S. economy, although one with a still-strong labor market.

Consumer prices edged higher by +0.4% in September for a +8.2% YoY increase. Core CPI surged +0.6% on the month for a higher than expected +6.6% YoY increase. Producer prices remained elevated with PPI registering a +0.4% MoM increase (+8.5% YoY), while Core PPI rose +0.3% MoM and +7.2% YoY. Lastly, the PCE Deflator rose +0.3% in September (+6.2% YoY), while the Core Deflator grew by +0.5% MoM and +5.1% YoY.

The Employment picture remained strong in September with the Unemployment Rate coming in at a lower than expected +3.5%, with Nonfarm Payrolls growing by 263k. Average Hourly Earnings rose +0.3% on the month (+5.0% YoY) while the Labor Force Participation Rate came in slightly lower than expected at 62.3%. Weekly Initial Jobless Claims remained low in October averaging 219k per week. The JOLTS (US Job Openings By Industry Total) showed over 10mm openings in August while the just released September number came in at a higher than expected +10.7mm.

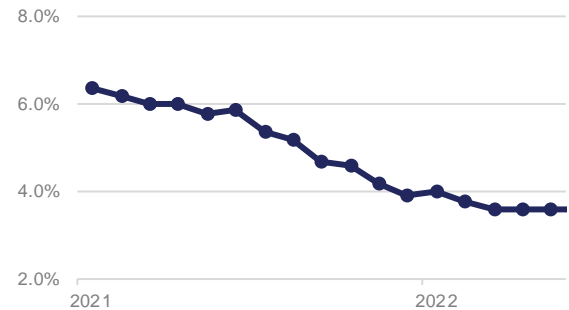
Purchasing Managers Indices continue to hover around the 50 mark (below 50 representing contraction and above 50 expansion). The S&P Global US Manufacturing PMI registered 50.4 in October, up from the prior reading of 49.9, while the ISM Manufacturing PMI came in at 50.2.

As we enter November, the Federal Reserve continues to raise interest rates to combat historically high inflation. Further, the Fed is reducing its balance sheet at an increasing rate, and M2 continues to decline. More restrictive monetary policy should serve to tame inflation in coming months, all the while sending the US economy dangerously close to recession. If the US can maintain stable employment into 2023, the odds of a severe recession would be significantly diminished.

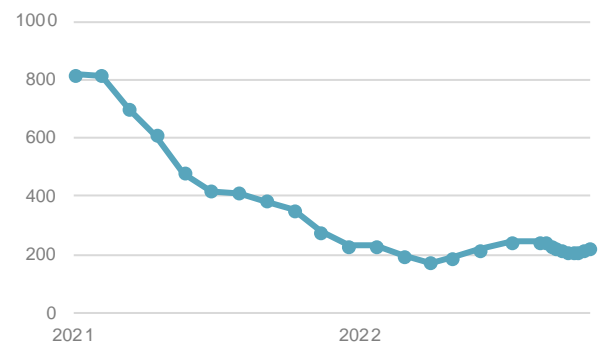
### KEY DATA POINTS

Data Point	Current	For	Previous	For
Retail Sales ex. Autos MOM %	0.1%	Sep	-0.1%	Aug
Housing Starts	1439K	Sep	1566K	Aug
Factory Orders MOM %	0.0%	Aug	-1.0%	July
Leading Indicators MOM %	-0.4%	Sep	0.0%	Aug
Unit Labor Costs	10.2%	Q2 2022	10.8%	Q1 2022
GDP QOQ (Annualized)	2.6%	Q3 2022	-0.6%	Q2 2022
Wholesale Inventories	0.8%	Sep	1.4%	Aug
MBA Mortgage Applications	-1.7%	Oct	-14.2%	Sep

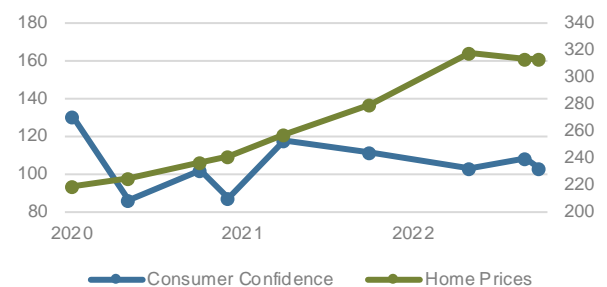
### UNEMPLOYMENT RATE (%)



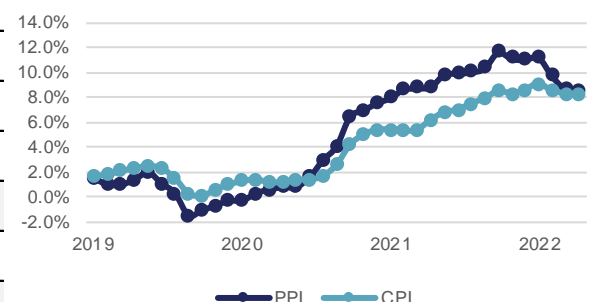
### 4-WK MOVING AVERAGE OF INITIAL CLAIMS (000S), SA



### CONSUMER CONFIDENCE LHS VS. HOME PRICES RHS



### PPI & CPI YOY % CHANGE





## DOMESTIC EQUITY

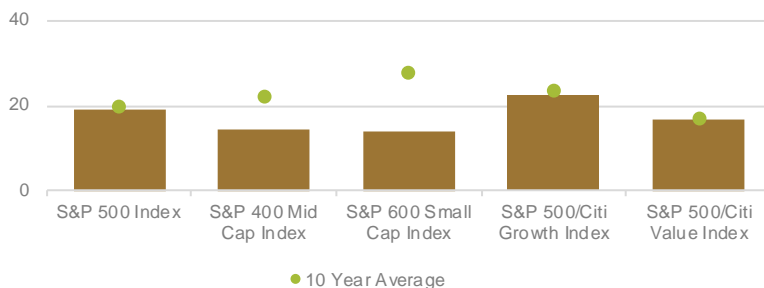
U.S. equities rallied sharply in October, with the benchmark S&P 500 Index gaining +8.1% to close at 3,872. Small- and Mid-Caps, as measured by the Smallcap 600 and Midcap 400 gained +12.4% and +10.5%, respectively, in a broad sign of a risk on rally. Small- and Mid-Caps have outperformed their Large-Cap peers in recent months thanks to greater exposure to the US (Small-Caps garner nearly 80% of their revenues domestically), less impact from a strong US Dollar, and a more Value tilted sector exposure (i.e. less Technology). Taken as a whole, Small- and Mid-Caps are down -13.7% and -13.3%, respectively for the year, more than +400bps ahead of Large-Caps.

From a style perspective, Value continued to outperform Growth during the period, with the S&P 500 Value Index gaining +11.5%, compared to a mere +4.5% for the S&P 500 Growth Index. For the year, Value has returned a relatively strong -7.0%, compared with -27.3% for the S&P 500 Growth Index. That more than 20 percentage point gap has been helped broadly speaking by underlying stocks rather than sector exposure alone. For example, Energy, the year's top performer up +68.0%, is only an 8.8% weight in the Value Index, not much larger than its 5.3% weight in the broader S&P 500.

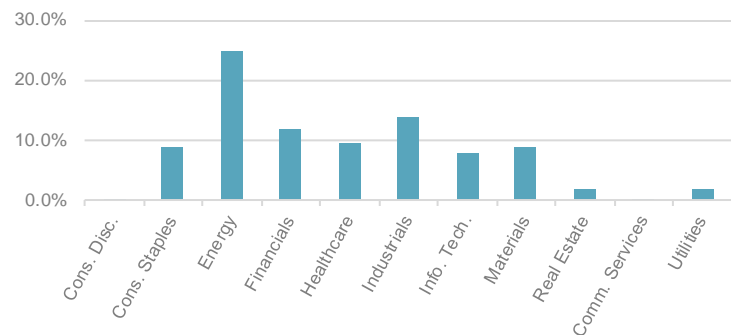
At the sector level, the aforementioned Energy sector was the best performer, gaining +25.0% in October as crude oil prices rose and Energy companies recorded record profits. Industrials were the next best performing sector, up +13.9%, while Financials and Healthcare gained +12.0% and +9.7%, respectively. Bottom performing sectors included Communication Services, Consumer Discretionary, Real Estate and Utilities, up +0.14%, +0.23%, +2.04%, and +2.05%, respectively. It's not surprising that Communication Services (home to Facebook and Google) and Consumer Discretionary (home to Amazon) were at the back of the pack, after their largest constituents reported weak Q3 earnings amidst a global slowdown in advertising spend and cloud computing usage. Real Estate and Utilities lagged due to a broad based rally, and the fact that their relative yield advantages have been diminished from higher interest rates.

From an earnings standpoint, nearly 1/3 of the S&P 500 is scheduled to report this week, after nearly the same amount reported strong results last week. On balance, earnings season has been better than feared, despite negative reactions to 4 of the top 5 largest companies (Apple was the lone positive market reaction after beating estimates on the top and bottom line, and reporting better than expected growth in China). So far this year, estimates for 2023 have come down nearly -6%, from \$252 to a recent \$235, not far from historical averages. Should that \$235 figure hold, it would put the Large-Cap Index at roughly 16.5x next year's estimates, in line with long-term averages, but above historical trough levels. As we head into year end, the opportunity for a Santa Claus rally remains, but should be greeted with an eye of caution, absent a change in tone from the Federal Reserve, as significant unknowns remain around the impact of higher rates on the economy, and the future state of global growth. Stay tuned.

DOMESTIC EQUITY MARKET  
P/E RATIOS



MTDS&P 500 SECTOR RETURNS



S&P 500 SECTOR RETURNS

Sector	MTD	QTD	YTD	1 Year	3 Year	5 Year	%S&P 500
Consumer Discretionary	0.23%	0.23%	-29.73%	-28.53%	6.66%	10.09%	1126%
Consumer Staples	9.04%	9.04%	-3.86%	4.86%	9.39%	9.78%	7.53%
Energy	24.96%	24.96%	68.05%	64.25%	22.90%	10.95%	5.28%
Financials	11.99%	11.99%	-11.81%	-14.09%	8.00%	7.20%	10.96%
Healthcare	9.71%	9.71%	-4.64%	0.81%	14.07%	12.40%	15.05%
Industrials	13.92%	13.92%	-9.68%	-8.21%	8.22%	7.57%	8.23%
Information Technology	7.82%	7.82%	-26.08%	-20.26%	16.34%	16.73%	26.02%
Materials	9.00%	9.00%	-16.88%	-11.03%	10.73%	6.91%	2.47%
Real Estate	2.04%	2.04%	-27.47%	-20.73%	1.07%	6.02%	2.58%
Communication Services*	0.14%	0.14%	-38.96%	-40.64%	-0.99%	3.61%	7.76%
Utilities	2.05%	2.05%	-4.59%	2.88%	4.64%	7.44%	2.86%

DOMESTIC EQUITY RETURNS

Name	MTD	QTD	YTD	1 Year	3 Year	5 Year
S&P 500 Index	8.10%	8.10%	-17.72%	-14.63%	10.18%	10.42%
S&P 400 Mid Cap Index	10.52%	10.52%	-13.29%	-11.58%	9.16%	7.45%
S&P 600 Small Cap Index	12.37%	12.37%	-13.69%	-11.88%	8.89%	7.05%
S&P 500/Citi Growth Index	4.49%	4.49%	-27.29%	-24.43%	10.88%	11.66%
S&P 500/Citi Value Index	11.50%	11.50%	-7.00%	-3.70%	8.01%	8.23%

S&P 500 FACTOR RETURNS

Name	MTD	QTD	YTD	1 Year	3 Year	5 Year
S&P 500 Quality	9.41%	9.41%	-17.11%	-14.07%	10.12%	10.35%
S&P 500 Momentum	13.74%	13.74%	-10.34%	-10.39%	13.70%	12.91%
S&P 500 Equal Weight	9.80%	9.80%	-12.91%	-9.86%	10.61%	9.82%
S&P 500 High Beta	8.82%	8.82%	-20.41%	-19.77%	16.01%	11.27%
S&P 500 Low Volatility	-4.27%	-6.99%	-8.58%	3.98%	6.45%	9.29%

\*The S&P 500 Communication Services Sector was reclassified from the Telecommunications Sector on September 21st, 2018



## INTERNATIONAL EQUITY

International equities saw mixed results during the month of October as political drama remained center stage across the globe. Developed Markets (DM) equities, as measured by the MSCI EAFE Index rose by +5.38% on the month while Emerging Markets (EM) equities, as measured by the MSCI EM Index fell by -3.09%.

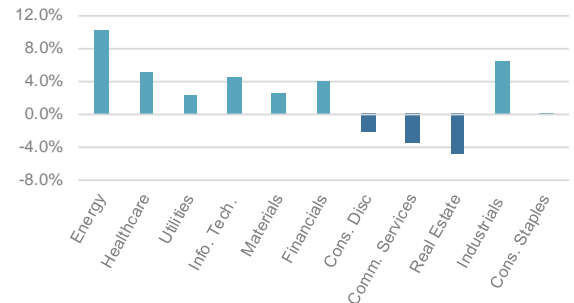
The continued decline in EM risk assets was largely driven by political concern in China as Xi Jinping secured a norm-breaking third term controlling China's ruling Communist Party. Chinese markets tumbled on the news that he added six men to his top team- all Xi Jinping loyalists, clearing the path for him to rule with minimal opposition underscoring investors' concerns that what has shaken markets isn't an irregularity, but a sign of what's ahead. The MSCI China Index fell -16.80% during the month of October, bringing the index to a staggering -42.30% fall year-to-date.

In the UK, however, markets were calmed as Prime Minister Liz Truss resigned following a failed tax-cutting budget which had rocked the U.K. bond market prompting emergency intervention from the Bank of England. Markets responded positively when Rishi Sunak, former Chancellor of the Exchequer, was announced as the new U.K. Prime Minister. Mr. Sunak has already signed off on tax increases to shore up the costs of hundreds of billions of pounds spent through the Covid-19 pandemic and massive support for U.K. households' energy bills. During the month of October, the FTSE 100 Index gained 2.99% in GBP terms and 6.12% in USD terms - highlighting the continued strength of the greenback internationally.

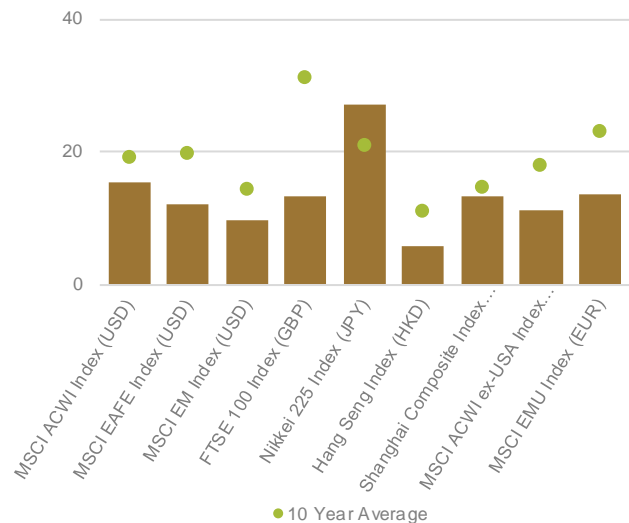
Political drama was also seen in Brazil as former president, Luiz Inácio Lula da Silva beat incumbent Jair Bolsonaro by securing 50.9% of the electorate, marking it the country's closest presidential race in history. While market participants await direction on fiscal policy from the incoming President, the Brazilian Real climbed 2% against the US Dollar during the final trading day of the month.

Most MSCI ACWI ex U.S. sector's reversed course in October posting positive gains. Leaders came from Energy (+10.22%), Industrials (+6.63%) & Healthcare (+5.11%), while losses were found in Real Estate (-4.90%), Communication Services (-3.53%) & Consumer Discretionary (-2.05%).

MTD MSCI ACWI SECTOR RETURNS



INTERNATIONAL EQUITY MARKET P/E RATIOS



MSCI ACWI EX U.S. SECTOR RETURNS

Sector	MTD	QTD	YTD	1 Year	3 Year	5 Year	% of ACWI
Energy	10.22%	10.22%	5.96%	1.99%	3.03%	3.23%	11.33%
Healthcare	5.11%	5.11%	-19.38%	-20.00%	1.34%	4.02%	8.04%
Utilities	2.30%	2.30%	-10.88%	-5.78%	1.90%	4.81%	6.47%
Information Technology	4.63%	4.63%	-39.45%	-37.19%	3.84%	3.64%	9.28%
Materials	2.46%	2.46%	-21.37%	-19.89%	4.33%	2.40%	7.65%
Financials	4.15%	4.15%	-15.97%	-17.45%	-0.28%	-0.56%	18.53%
Consumer Discretionary	-2.05%	-2.05%	-32.96%	-36.47%	-6.29%	-3.64%	10.19%
Communication Services*	-3.53%	-3.53%	-32.26%	-34.21%	-7.03%	-5.18%	5.50%
Real Estate	-4.90%	-4.90%	-31.49%	-33.44%	-14.50%	-7.86%	2.07%
Industrials	6.63%	6.63%	-25.53%	-24.63%	-0.69%	0.26%	11.74%
Consumer Staples	-0.08%	-0.08%	-19.52%	-18.07%	-2.41%	0.01%	9.22%

\*The MSCI ACWI Ex U.S. Communication Services Sector was reclassified on November 30th, 2018

INTERNATIONAL EQUITY RETURNS

Name	MTD	QTD	YTD	1 Year	3 Year	5 Year
MSCI ACWI Index (USD)	6.06%	6.06%	-20.81%	-19.57%	5.35%	5.78%
MSCI EAFE Index (USD)	5.38%	5.38%	-22.76%	-22.55%	-0.72%	0.48%
MSCI EM Index (USD)	-3.09%	-3.09%	-29.22%	-30.77%	-4.10%	-2.76%
FTSE 100 Index (GBP)	2.99%	2.99%	-0.91%	1.56%	2.83%	2.77%
Nikkei 225 Index (JPY)	6.36%	6.36%	-2.30%	-2.50%	8.40%	6.69%
Hang Seng Index (HKD)	-14.72%	-14.72%	-35.17%	-40.17%	-15.73%	-9.37%
Shanghai Composite Index (CNY)	-4.29%	-4.29%	-18.45%	-16.31%	1.95%	-0.81%
MSCI ACWI ex-USA Index (USD)	3.00%	3.00%	-23.95%	-24.32%	-1.18%	-0.08%
MSCI EMU Index (EUR)	7.92%	7.92%	-15.54%	-14.24%	2.47%	2.32%
MSCI China Index (USD)	-16.80%	-16.80%	-42.30%	-47.34%	-13.69%	-9.45%
MSCI Canada Index (USD)	5.71%	5.71%	-6.07%	-4.55%	8.57%	6.82%
MSCI EM ex-China (USD)	3.14%	3.14%	-22.87%	-21.89%	0.39%	0.21%



## FIXED INCOME

Interest rates moved broadly higher in the month of October. This put downward pressure on bond prices and led to negative returns for most exposures. Treasuries were most impacted, with a -1.38% return for the month. The Aggregate bond index performed similarly, and is heavily weighted towards Treasury market exposure.

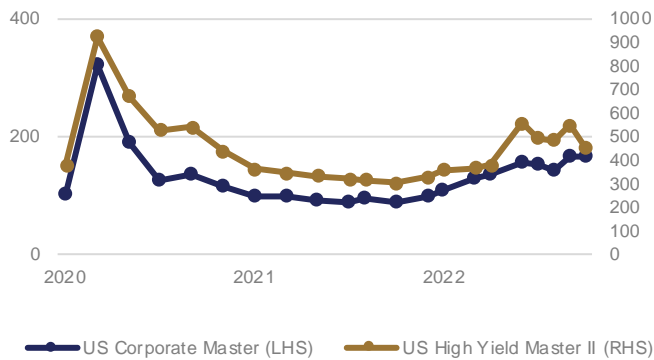
High Yield corporate bonds were the standout performer in the month, with a positive return of +2.6%. This was driven by spread tightening specifically to junk bonds. Investment Grade corporate bonds did not experience a similar tailwind, with their spreads roughly flat for the month. With the recent outperformance, High Yield bonds have become one of the better performing fixed income allocations in 2022. With rising debt costs, and default rates beginning to move higher, a slowing economy in 2023 could pose problems for the most levered borrowers in this category.

Investment Grade corporate bond performance declined just over -1% in October, with the additional yield they offer over Treasury bonds being offset by the negative price impact caused by the rise in the yield curve. In 2022, Investment Grade corporates have had a very difficult time. They have been negatively impacted by rising rates and widening credit spreads, but without the additional level of yield provided by junk bonds which has allowed that allocation to earn-out of the negative price impact experienced. Given the underperformance already incurred, and the attractive yield levels on Investment Grade corporates (higher than we have seen in many years), limited Duration exposure broadly makes sense, with longer Duration positions for Asset Liability Matching (ALM) accounts.

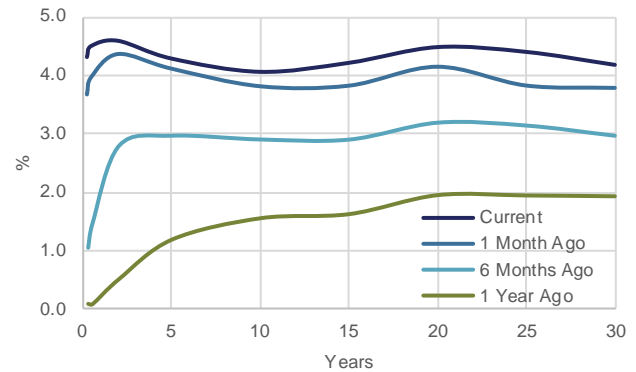
Municipal bonds held up well in the month, and have offered a similar return to High Yield in 2022, with less volatility. Many clients look to Municipal bonds for high quality tax-free income, and some ballast in their portfolio to counter equity market volatility. In a tough year for bonds, the case can be made that on a relative basis, municipal bonds have been doing just that.

Jerome Powell's Federal Reserve Board will meet on Tuesday and Wednesday, with the expectation of another 75 basis point increase in the Federal Funds Rate to be announced on Wednesday afternoon. This will push the target rate up to 3.75% to 4.00%. The market is expecting the Fed to raise rates again in December, but to a lesser degree. Currently, 50 basis points is the consensus view.

OPTION-ADJUSTED SPREAD (OAS)



TREASURY YIELD CURVE



U.S. TREASURY YIELDS

Period	3 Month	2 Year	5 Year	10 Year	20 Year	30 Year
Current	4.31%	4.59%	4.29%	4.06%	4.48%	4.18%
1 Month Ago	3.66%	4.35%	4.10%	3.80%	4.13%	3.77%
6 Months Ago	1.04%	2.80%	2.97%	2.90%	3.19%	2.97%
1 Year Ago	0.08%	0.51%	1.19%	1.56%	1.96%	1.94%

CENTRAL BANK ACTIVITY

Name	Current	1 Month Ago	6 Months Ago	1 Year Ago
Fed Funds Rate	3.25%	3.25%	0.50%	0.25%
Bank of Japan Target Rate	0.10%	0.10%	0.10%	0.10%
European Central Bank Rate	2.00%	1.25%	0.00%	0.00%
Bank of England Base Rate	2.25%	2.25%	0.75%	0.10%

FIXED INCOME RETURNS

Name	MTD	QTD	YTD	1 Year	3 Year	5 Year
Bloomberg Barclays US Government Index	-1.37%	-1.37%	-14.14%	-13.94%	-3.52%	-0.45%
Bloomberg Barclays US Agg Index	-1.30%	-1.30%	-15.72%	-15.68%	-3.77%	-0.54%
Bloomberg Barclays US Corporate Index	-1.03%	-1.03%	-19.56%	-19.57%	-4.18%	-0.32%
Bloomberg Barclays US Corporate High Yield Index	2.60%	2.60%	-12.53%	-11.76%	0.31%	2.01%
Bloomberg Barclays EM USD Agg Index	-0.88%	-0.88%	-21.20%	-21.28%	-5.71%	-1.81%
Bloomberg Barclays Global Agg Treasuries USD Index	-0.12%	-0.12%	-10.97%	-10.64%	-3.05%	0.33%
Bloomberg Barclays Municipal Index	-0.83%	-0.83%	-12.86%	-11.98%	-2.18%	0.37%



## ALTERNATIVE INVESTMENTS

Alternative investments had mixed results in October. Broad commodities, as measured by the Bloomberg Commodity Index, were up +1.67% over the period, helped by a slightly weaker dollar and rally in oil prices.

WTI Crude oil increased by +8.86% during the month to close at \$86.53 per barrel. This reverses a several month decline after oil prices peaked at above \$120 per barrel earlier this year. The monthly increase in prices was largely caused by OPEC+ announcing they would cut output by 2 million barrels per day. Despite this, the national average gas price finished the month at \$3.76 per gallon according to AAA, slightly down from last month and much lower than the high of \$5.01 seen in June.

In contrast to oil, natural gas prices continued to decline in October and now are more than 40% below their highs in late August, a welcome sign for consumers hit by high inflation in many other areas of their life. Record domestic production and warmer than usual autumn weather has led to the price decline. Forecasts for next year look lower as well due to more efficient North American drillers increasing supply and potentially slower growing demand from a weaker economy. A colder than expected winter is one big risk that could cause prices to escalate quickly.

Gold finished the month down -1.63%, bringing its YTD return to -10.70%. Gold's disappointing returns relative to its safe haven status have been caused by rising interest rates and a strong US Dollar. However, the shiny metal has outperformed longer dated Treasuries, another classic portfolio hedge and safe haven, by a wide margin in 2022. Looking forward, Gold may be a useful portfolio diversifier and alternative to international equity exposure if the US Dollar weakens.

Hedge fund strategies had mixed results during the month, with six out of nine strategies tracked posting positive returns on average. Merger Arbitrage strategies were the top performer, up +1.98%. Merger Arbitrage strategies often provide a low, steady return and diversification benefits that complement equities and fixed income.

### SPOT RATES

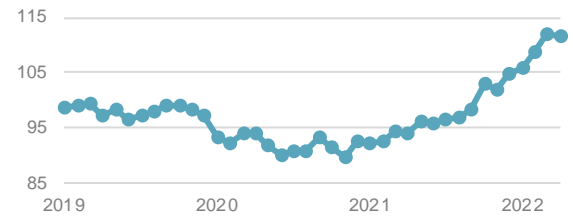
Description	Current	1 M th Ago	3 M ths Ago	6 M ths Ago	1 Year Ago
CAD / USD	1.35	1.38	1.28	1.28	1.24
JPY / USD	147.14	144.74	131.61	129.77	114
USD / GBP	1.16	1.12	1.23	1.26	1.37
USD / EUR	0.99	0.98	1.03	1.06	1.16

### HEDGE FUNDS

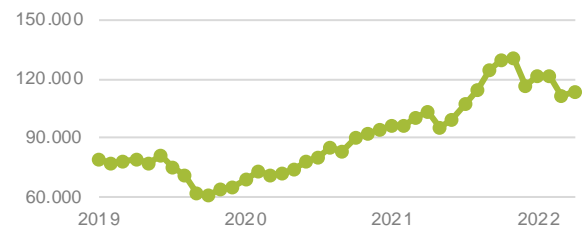
Name	MTD	QTD	YTD	1 Year	3 Year	5 Year
Global Hedge	0.02%	0.02%	-4.54%	-5.33%	2.62%	154%
Convertible Arbitrage	123%	123%	-13.52%	-14.03%	175%	177%
Equity Hedge (L/S)	0.95%	0.95%	-3.89%	-3.43%	4.80%	2.87%
Equity Market Neutral	0.36%	0.36%	-0.86%	-0.01%	-167%	-192%
Event Driven	-161%	-161%	-6.89%	-8.92%	199%	-0.20%
Macro	-0.06%	-0.06%	6.02%	4.00%	3.53%	2.29%
Merger Arbitrage	198%	198%	-0.81%	-0.51%	2.89%	123%
Relative Value Arbitrage	0.71%	0.71%	-9.18%	-9.42%	-0.03%	0.84%
Absolute Return	-0.03%	-0.03%	1.13%	1.23%	2.35%	1.89%

Note: Price Return, Returns as of 10/28/2022

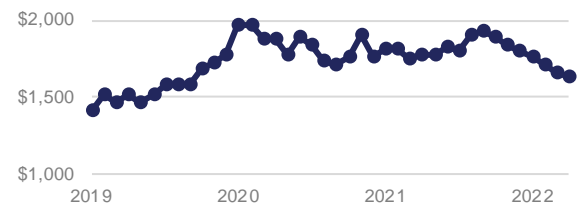
### U.S. DOLLAR INDEX SPOT



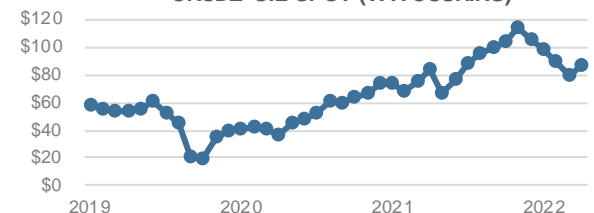
### BLOOMBERG COMMODITY INDEX



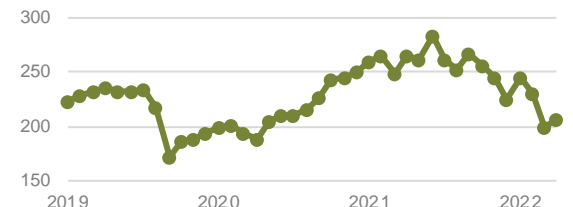
### GOLD SPOT



### CRUDE OIL SPOT (WTI CUSHING)



### FTSE NAREIT All REIT's



### COMMODITIES

	MTD	QTD	YTD	1 Year	3 Year	5 Year
Dollar	-0.24%	-0.24%	13.70%	14.97%	3.72%	2.47%
BCOM	167%	167%	14.30%	9.67%	12.66%	5.63%
Gold	-163%	-163%	-10.70%	-8.40%	2.59%	5.14%
WTI	8.86%	8.86%	50.02%	34.49%	26.05%	15.19%
FTSENAREIT	3.38%	3.38%	-25.49%	-19.16%	-0.33%	4.75%





## ESG

In October, the International Sustainability Standards Board (ISSB), of the International Financial Reporting Standards (IFRS) Foundation, announced that Reporting on Scope 3 emissions will be included as part of required company disclosures. The SEC has proposed requiring disclosure of Scope 1 (emissions that occur from sources that are controlled or owned by an organization) and Scope 2 (emissions associated with the purchase of electricity, steam, heat, or cooling) emissions, with some flexibility around Scope 3 (emissions originating in a company's value chain and beyond its direct control) disclosures. The ISSB announcement may put some pressure on the SEC to adopt compatible requirements.

In October, the ESG integrated S&P 500 and the ESG integrated Emerging Markets exposures outperformed their non-ESG integrated counterparts. The ESG integrated EAFE index trailed its non ESG benchmark slightly. The ESG integrated corporate bond index matched the performance of its non-ESG integrated benchmark in the month. 2022 has been a difficult year for the ESG integrated indices performance in general, but the October numbers offer a moment of respite.

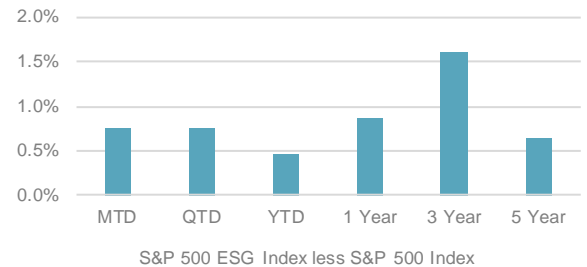
The ESG aligned U.S. index outperformed its non-ESG counterpart by 77 basis points in the month of October. Year-to-date the ESG exposure outperformed by 48 basis points. The one year, three year, and five year time periods all remain additive to performance compared to the non-ESG aligned benchmark, strongly supporting ESG integration within this exposure.

ESG integrated EAFE returns experienced 22 basis points of underperformance in October. Year-to-date, the performance of ESG integrated EAFE trailed its benchmark by 102 basis points. Longer time periods also demonstrate some level of underperformance, with the five year number being close to breakeven.

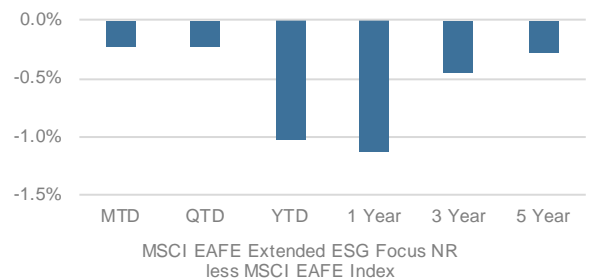
Emerging Markets ESG equity performance led its benchmark in October, outperforming by 50 basis points. This year has been particularly volatile in the Emerging Market category, reversing its strong track record of being accretive to performance. The year-to-date number shows 181 basis points of underperformance. All longer time horizons also currently trail the non-ESG integrated benchmarks with the five year number approaching breakeven.

ESG integrated fixed income returns were flat to its benchmark in October. Year-to-date, the performance of ESG integrated fixed income trailed its benchmark by 8 basis points. The three year and five year return numbers continue to show outperformance for ESG integrated fixed income.

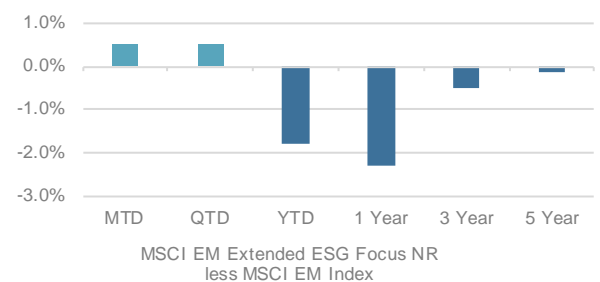
### ESG US RELATIVE PERFORMANCE



### ESG EAFE RELATIVE PERFORMANCE



### ESG EM RELATIVE PERFORMANCE



### ESG INDEX RETURNS VS ORDINARY INDEX RETURNS

Name	MTD	QTD	YTD	1 Year	3 Year	5 Year
S&P 500 Index	8.10%	8.10%	-17.72%	-14.63%	10.18%	10.42%
S&P 500 ESG Index	8.87%	8.87%	-17.24%	-13.77%	11.79%	11.07%
MSCI USA GR Index	7.94%	7.94%	-18.85%	-16.49%	10.12%	10.36%
MSCI USA Extended ESG Focus GR Index	8.03%	8.03%	-19.51%	-17.37%	10.30%	10.57%
MSCI EAFE Index	5.38%	5.38%	-22.76%	-22.55%	-0.72%	0.48%
MSCI EAFE Extended ESG Focus NR Index	5.16%	5.16%	-23.78%	-23.69%	-1.18%	0.20%
MSCI EM Index	-3.09%	-3.09%	-29.22%	-30.77%	-4.10%	-2.76%
MSCI EM Extended ESG Focus NR Index	-2.59%	-2.59%	-31.03%	-33.08%	-4.59%	-2.91%
Bloomberg Barclays MSCI US Corp 1-5 Yr ESG Focus TR Index	-0.33%	-0.33%	-7.79%	-7.95%	-0.88%	0.90%
Bloomberg Barclays US Corporate Index	-1.03%	-1.03%	-19.56%	-19.57%	-4.18%	-0.32%
Bloomberg Barclays MSCI US Corp ESG Focus TR Index	-1.03%	-1.03%	-19.64%	-19.68%	-3.99%	-0.21%



If you have any questions or comments, please feel free to contact any member of our investment team:

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**S&P 500 Index (SPX)** – Standard and Poor's 500 Index is a capitalization-weighted index of 500 stocks. The index is designed to measure performance of the broad domestic economy through changes in the aggregate market value of 500 stocks representing all major industries.

**S&P 500 Sector Indices (S5COND, S5CONS, S5ENRS, S5FINL, S5HLTH, S5INDU, S5INFT, S5MATR, S5TELS, S5UTIL, S5RLST)** – The S&P 500 is broken down into eleven sub-indices according to the Global Industry Classification Standard (GICS) sectors. These eleven sectors include Consumer Discretionary, Consumer Staples, Energy, Financials, Health Care, Industrials, Information Technology, Materials, Communication Services, Utilities, and Real Estate.

**S&P 400 Mid Cap Index (MID)** – Standard and Poor's Mid Cap 400 Index is a capitalization-weighted index, which measures the performance of the mid-range sector of the U.S. stock market.

**S&P 600 Small Cap Index (SML)** – Standard & Poor's Small Cap 600 Index is a capitalization-weighted index that measures the performance of selected U.S. stocks with a small market capitalization.

**S&P 500/Citigroup Growth Index (SGX)** – The S&P 500/Citigroup Growth Index is a market capitalization weighted index. All the stocks in the underlying parent index are allocated into value or growth. Stocks that do not have pure value or pure growth characteristics have their market caps distributed between the value & growth indices.

**S&P 500/Citigroup Value Index (SVX)** – The S&P 500/Citigroup Value Index is a market capitalization-weighted index. All the stocks in the underlying parent index are allocated into value or growth. Stocks that do not have pure value or pure growth characteristics have their market caps distributed between the value & growth indices.

**MSCI AC World Index (MXWD)** – The MSCI AC World Index is a free float-weighted equity index. The index includes both emerging and developed world markets.

**MSCI EAFE Index (MXEA)** – The MSCI EAFE Index is a capitalization-weighted index that monitors the performance of stocks from developed markets in Europe, Australia-Asia, and the Far East.

**MSCI Emerging Market Index (MXEF)** – The MSCI Emerging Market Index is a free-float weighted index that is designed to measure the equity performance of international emerging markets.

**FTSE 100 Index (UKX)** – The FTSE 100 Index is a capitalization weighted index of the 100 most highly capitalized companies traded on the London Stock Exchange. The equities use an investability quotient weighting in the index calculation.

**Nikkei 225 Stock Average Index (NKY)** – The Nikkei-225 Stock Average is a price-weighted average of 225 top-rated Japanese companies listed in the First Section of the Tokyo Stock Exchange.

**Hang Seng Index (HSI)** – The Hang Seng is a free-float capitalization-weighted index of selected companies from the Stock Exchange of Hong Kong. The components of the index are divided into four sub-indices: Commerce and Industry, Finance, Utilities, and Properties.

**Shanghai Stock Exchange Composite Index (SHCOMP)** – The Shanghai Stock Exchange Composite Index is a capitalization weighted index. The index tracks the daily price performance of all A-shares and B-shares listed on the Shanghai Stock Exchange.

**MSCI USA Extended ESG Focus Index** – The Index is designed to maximize exposure to positive environmental, social and governance (ESG) factors while exhibiting risk and return characteristics similar to those of the MSCI USA Index.

**MSCI EAFE Extended ESG Focus Index** – The Index is designed to maximize exposure to positive environmental, social and governance (ESG) factors while exhibiting risk and return characteristics similar to those of the MSCI EAFE Index.

**MSCI Emerging Markets Extended ESG Focus Index** – The Index is designed to maximize exposure to positive environmental, social and governance (ESG) factors while exhibiting risk and return characteristics similar to those of the MSCI Emerging Markets Index.

**MSCI ACWI ex USA Index (MXWDU)** – The MSCI ACWI ex USA Index is a free-float weighted index.

**MSCI ACWI ex USA Sector Indices** – The MSCI ACWI ex USA Index is broken down into eleven sub-indices according to the Global Industry Classification Standard (GICS) sectors. These eleven sectors include Consumer Discretionary, Consumer Staples, Energy, Financials, Health Care, Industrials, Information Technology, Materials, Communication Services, Utilities, and Real Estate.

**MSCI EMU Index (MXEM)** – The MSCI EMU (European Economic and Monetary Union) Index is a free-float weighted equity index.

**Bloomberg Barclays Global Treasuries USD Hedged Index (LGTTRUHU)** – The Bloomberg Barclays Global Treasury Index tracks fixed-rate, local currency government debt of investment grade countries. The index represents the treasury sector of the Global Aggregate Index and contains issues from 37 countries denominated in 24 currencies.

**Bloomberg Barclays Municipal Bond Index (LMBITR)** – The Bloomberg Barclays Municipal Bond Index covers the USD denominated long-term tax exempt bond market. The index has four main sectors: state and local general obligation bonds, revenue bonds, insured bonds, and pre-refunded bonds.

**Bloomberg Barclays U.S. Government Index** – Bloomberg Barclays US Government Bond Index is comprised of the US Treasury and US Agency Indices. The index includes US dollar-denominated, fixed-rate, nominal US Treasuries and US agency debentures (securities issued by US government owned or government sponsored entities, and debt explicitly guaranteed by the US government).

**Bloomberg Barclays EM Hard Currency Aggregate Index (LG20TRUU)** – The Bloomberg Barclays Emerging Markets Hard Currency Aggregate Index is a hard currency Emerging Markets debt benchmark that includes USD-denominated debt from sovereign, quasi-sovereign, and corporate EM issuers.

**Bloomberg Barclays U.S. Aggregate Bond Index (LBSTRUU)** – The Bloomberg Barclays US Aggregate Bond Index is 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, MBS (agency fixed-rate and hybrid ARM pass-through), ABS and CMBS (agency and non-agency).

**Bloomberg Barclays U.S. Corporate Index (LUACTRUU)** – The Bloomberg Barclays US Corporate Bond Index measures the investment grade, fixed-rate, taxable corporate bond market. It includes USD denominated securities publicly issued by US and non-US industrial, utility and financial issuers.

**Bloomberg Barclays U.S. Corp High Yield Index (LFTR ML U.S. Corporate Index (COAO))** – The Bloomberg Barclays US Corporate High Yield Bond Index measures the USD denominated, high yield, below-investment grade fixed-rate corporate bond market.

**S&P Green Bond Select Index (SPGRSLLT)** – The S&P Green Bond Select Index is a market value-weighted subset of the S&P Green Bond Index that seeks to measure the performance of green-labeled bonds issued globally, subject to stringent financial and extra-financial eligibility criteria.

**ML U.S. Corporate Index (COAO)** – The Merrill Lynch U.S. Corporate Index tracks the performance of U.S. dollar denominated investment grade corporate debt publicly issued in the U.S. domestic market.

**ML U.S. High Yield Index (HOOA)** – The Merrill Lynch U.S. High Yield Index tracks the performance of U.S. dollar denominated below investment grade corporate debt publicly issued in the U.S. domestic market.

**FTSE NAREIT All REITs Index (FNAR)** – The FTSE NAREIT All REITs Index is a free float adjusted market capitalization-weighted index that includes all tax qualified REITs listed in the NYSE, AMEX, and NASDAQ National Market.

**Bloomberg Commodity Index (BCOM)** – Bloomberg Commodity Index (BCOM) is calculated on an excess return basis and reflects commodity futures price movements. The index rebalances annually weighted 2/3 by trading volume and 1/3 by world production and weight-caps are applied at the commodity, sector and group level for diversification. Roll period typically occurs from 6th-10th business day based on the roll schedule.

**U.S. Dollar Index (DXY)** – The U.S. Dollar Index (USDXY) indicates the general int'l value of the USD. The USDXY does this by averaging the exchange rates between the USD and 6 major world currencies. The ICE US computes this by using the rates supplied by some 500 banks.





**HFRX Global Hedge Fund Index (HFRXGL)** – The HFRX Global Hedge Fund Index is designed to be representative of the overall composition of the hedge fund universe. It is comprised of all eligible hedge fund strategies.

**HFRX Convertible Arbitrage Index (HFRXCA)** – The HFRX Convertible Arbitrage Index is designed to reflect the general performance of strategies in which the investment thesis is predicated on realization of a spread between related instruments in which one or multiple components of the spread is a convertible fixed income instrument.

**HFRX Distressed Securities Index (HFRXDS)** – The HFRX Distressed Securities Index is designed to reflect the general performance of strategies focused on corporate fixed income instruments, primarily on corporate credit instruments of companies trading at significant discounts to their value at issuance of obliged (par value) at maturity as a result of either formal bankruptcy pro

**HFRX Macro Index (HFRXM)** – The HFRX Macro Index reflects the general performance of strategies in which the investment process is predicated on movements in underlying economic variables and the impact these have on equity, fixed income, hard currency, and commodity markets.

**HFRX Equity Hedge Index (HFRXEH)** – The HFRX Equity Hedge Index is designed to reflect the general performance of strategies that maintain both long and short positions in primarily equity and equity derivative securities. A wide variety of investment processes can be employed to arrive at an investment decision, including both quantitative and fundamental techniques. Strategies can be broadly diversified or narrowly focused.

**HFRX Equity Market Neutral Index (HFRXEMN)** – The HFRX Equity Market Neutral Index is designed to reflect the general performance of strategies that employ sophisticated quantitative techniques of analyzing price data to ascertain information about future price movement and relationships between securities.

**HFRX Event Driven Index (HFRXED)** – The HFRX Event Driven Index reflects the general performance of strategies that maintain positions in companies currently or prospectively involved in corporate transactions of a wide variety including, but not limited to, mergers, restructurings, financial distress, tender offers, shareholder buybacks, debt exchanges, security issuance, or other capital structure adjustments.

**HFRX Merger Arbitrage Index (HFRXMA)** – The HFRX Merger Arbitrage Index reflects the general performance of strategies which employ an investment process primarily focused on opportunities in equity and equity related instruments of companies which are current engaged in a corporate transaction.

**HFRX Relative Value Arbitrage Index (HFRXRVA)** – The HFRX Relative Value Arbitrage Index reflects the general performance of strategies that maintain positions in which the investment thesis is predicated on realization of a valuation discrepancy in the relationship between multiple securities.

#### **Economic Data Sources:**

**PPI & CPI** – Bureau of Labor Statistics

**Unemployment Rate** – Bureau of Labor Statistics

**Consumer Confidence** – Conference Board

**SP/Case-Shiller Composite 20** – Case-Shiller

**Industrial Production** – Federal Reserve

**Capacity Utilization** – Federal Reserve

**Retail Sales** – U.S. Census Bureau

**Housing Starts** – U.S. Department of Commerce

**Factory Orders** – U.S. Census Bureau

**Leading Indicators** – Conference Board

**Unit Labor Costs** – Bureau of Labor Statistics

**GDP** – Bureau of Economic Analysis

**Wholesale Inventories** – U.S. Census Bureau

**MBA Mortgage Applications** – Mortgage Bankers Association

**4-Week Moving Average of Initial Claims, SA** – Bureau of Labor Statistics

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