NOTTINGHAM ADVISORS
ASSET MANAGEMENT

Monthly Market Wrap
as of 2/28/2022

ECONOMIC OVERVIEW

February may have marked "peak inflation" as the Federal Reserve prepares to raise interest rates off the zero-bound at its upcoming March FOMC meeting. The one caveat to that thesis is the recent invasion of Ukraine by Russia, which has sent the price of oil surging past $100 per barrel as we go to press. Reports out just today have analysts walking back the number of estimated quarter-point interest rate hikes in 2022, which could have meaningful ramification for both stock and bond markets alike. Although with the FOMC only now concluding its asset purchase program, the Fed has a long way to go before monetary policy could be interpreted as "restrictive".

Consumer prices rose +0.6% MoM in January, and +7.5% YoY, the highest reading since the early 1980's. Producer prices soared +1.0% for the month and are up +9.7% from the period a year ago. The Fed's favored measure of inflation, the PCE Core Deflator rose +0.5% in January and is up +5.2% YoY, far ahead of the Fed's +2.0% target. As mentioned above, the price of Brent crude has soared +33% YTD, and with the Russia/Ukraine conflict looking like it will last some time, the price of oil is likely to remain elevated.

The latest report on home prices had the S&P CoreLogic CS 20-City Home Price Index rising +1.46% in December, which represents a staggering +18.56% 1-year rise in home prices. Fueled by ultra-low mortgage rates, a booming economy and a pandemic-induced shift from urban multi-family to more rural single-family housing, a normalization of interest rates can't come soon enough. The National Association of Realtors Housing Affordability Index has dropped -18% over the past year and is nearing the lowest level seen over the past decade.

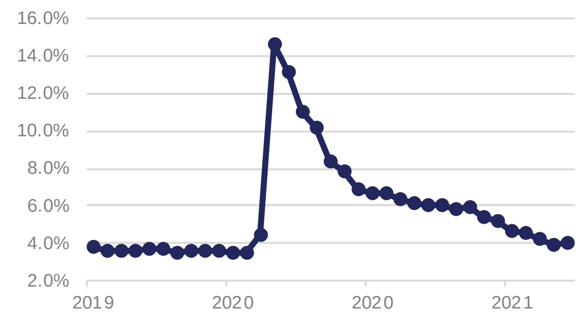
The U.S. labor market remains tight, with unemployment coming in at 4.0% in January and the latest JOLTS survey for December showed nearly 11 million job openings in America. The spread of the omicron variant no doubt impacted these numbers but the bottom line is the labor force has shrunk during the pandemic and has yet to recover. There is a fundamental mismatch currently between the demand for and the supply of labor. With minimum wages surging (Target stores today announced entry level wages of between $15 and $24 per hour) and government benefits waning, time will tell if workers will be forced to re-enter the labor market. Regardless, higher wage costs will likely be passed on to consumers, while negatively impacting corporate profit margins as well.

The Federal Reserve is currently caught between a rock (way behind the curve on inflation) and a hard place (the Russia/Ukraine war), and it will take courage to follow through.

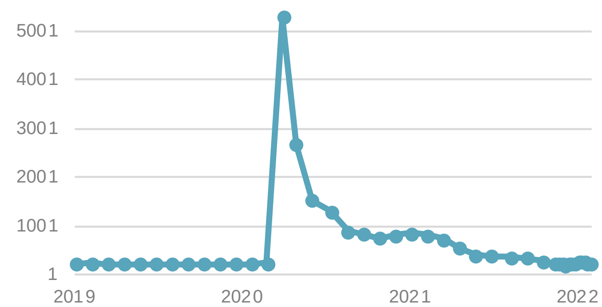
KEY DATA POINTS

Data Point	Current	For	Previous	For
Retail Sales ex. Autos MOM %	3.3%	January	-2.3%	December
Housing Starts	1638K	January	1708K	December
Factory Orders MOM %	-0.4%	December	1.8%	November
Leading Indicators MOM %	-0.3%	January	0.7%	December
Unit Labor Costs	6.6%	Q4 2021	9.3%	Q3 2021
GDP QOQ (Annualized)	6.9%	Q4 2021	2.3%	Q3 2021
Wholesale Inventories	0.8%	January	2.3%	December
MBA Mortgage Applications	-13.1%	February	-7.1%	January

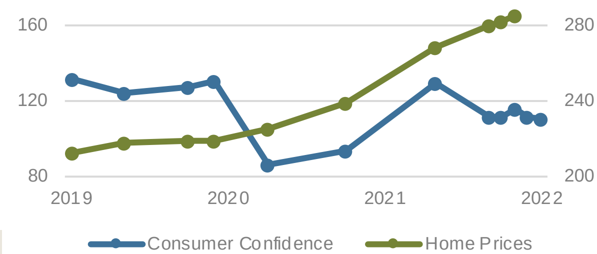
UNEMPLOYMENT RATE (%)



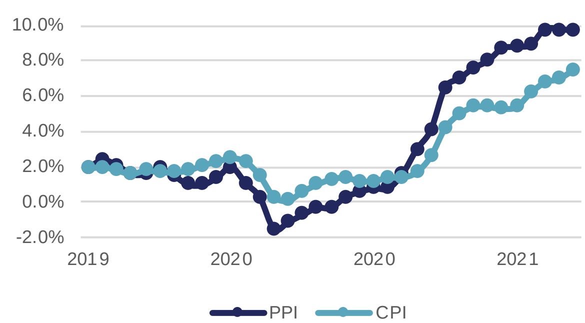
4-WK MOVING AVERAGE OF INITIAL CLAIMS (000S), SA



CONSUMER CONFIDENCE LHS VS. HOME PRICES RHS



PPI & CPI YOY % CHANGE



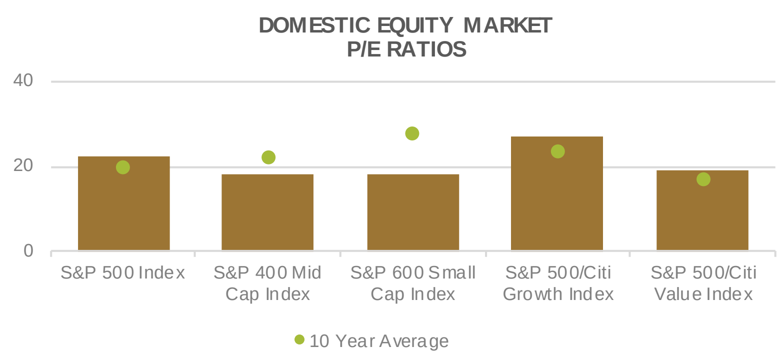
DOMESTIC EQUITY

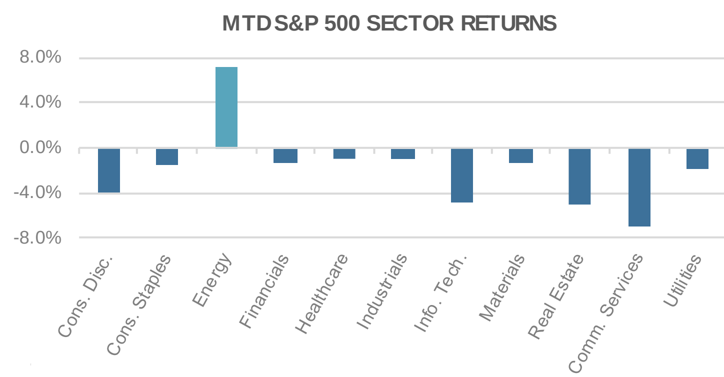
U.S. Equities finished the month of February in the red as tensions in Europe escalated as Russia invaded Ukraine. The benchmark S&P 500 Index shed -3.00% to close at 4373.94, while Mid- and Small-Caps, as measured by the S&P 400 and 600 Indices fared meaningfully better, returning +1.11%, and +1.40%, respectively. For the year, equities of all sizes remain firmly in negative territory, down -8.02%, -6.18%, and –5.97%, respectively.

At the sector level, Energy was the top performing sector, benefitting from a surge in crude oil prices globally, and the potential for Russia energy disruption. What's more, the invasion of Ukraine likely masks the continued supply and demand imbalance that has persisted prior to current events, and may not take into account the possibility for additional Asian demand should China end its "Zero Covid" policy. The S&P 500 Energy sector returned +7.14% on the month, adding to last month's more than +20% gain. For the year, energy remains the only sector in positive territory, up +27.61%. Financials were another top performer, despite lower absolute yields amidst a risk off environment and an overall flatter yield curve. Financials lost -1.35% on the month, and are down only -1.30% on the year.

Communication Services, Technology, and Consumer Discretionary were some of the worst performing sectors on the month as sectors with higher valuations and longer duration growth prospects were the hardest hit, returning -6.98%, -4.90%, and -3.99%, respectively. Taken as a whole, Growth stocks again underperformed Value, with the S&P 500 Growth Index losing -4.50%, compared to a lesser -1.44% loss for the S&P 500 Value Index. For the year, the gap between Growth and Value now stands at more than 10 percentage points. Growth's underperformance for the year can also be seen in the S&P 500 Equal Weight Index, which outperformed during the month (-1.71%) and year (+1.01%) from de-emphasizing Technology, Growth, and the largest companies by market value.

Despite the geopolitical risk that has been ratcheted up over the past weeks, valuation on the S&P 500 looks compelling as earnings estimates continue to rise. U.S. stocks continue to look attractive as corporate earnings remain strong.





S&P 500 SECTOR RETURNS

Sector	MTD	QTD	YTD	1 Year	3 Year	5 Year	%S&P 500
Consumer Discretionary	-3.99%	-13.28%	-13.28%	8.48%	18.28%	16.50%	12.53%
Consumer Staples	-1.42%	-2.77%	-2.77%	23.37%	14.83%	9.69%	6.69%
Energy	7.14%	27.61%	27.61%	54.73%	8.60%	4.66%	3.65%
Financials	-1.35%	-1.30%	-1.30%	21.52%	15.71%	11.71%	11.10%
Healthcare	-1.02%	-7.71%	-7.71%	17.25%	14.56%	13.76%	13.07%
Industrials	-0.87%	-5.56%	-5.56%	11.80%	11.47%	10.35%	7.95%
Information Technology	-4.90%	-11.45%	-11.45%	18.80%	31.06%	26.56%	27.70%
Materials	-1.24%	-8.00%	-8.00%	15.49%	17.34%	12.04%	2.50%
Real Estate	-5.02%	-13.09%	-13.09%	24.42%	12.67%	10.67%	2.59%
Communication Services*	-6.98%	-12.75%	-12.75%	1.20%	16.05%	9.11%	9.83%
Utilities	-1.85%	-5.06%	-5.06%	20.10%	9.60%	9.20%	2.47%

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

DOMESTIC EQUITY RETURNS

Name	MTD	QTD	YTD	1 Year	3 Year	5 Year
S&P 500 Index	-3.00%	-8.02%	-8.02%	16.37%	18.21%	15.15%
S&P 400 Mid Cap Index	1.11%	-6.18%	-6.18%	7.95%	13.36%	10.68%
S&P 600 Small Cap Index	1.40%	-5.97%	-5.97%	4.15%	12.11%	10.73%
S&P 500/Citi Growth Index	-4.50%	-12.49%	-12.49%	16.11%	21.77%	19.15%
S&P 500/Citi Value Index	-1.44%	-3.04%	-3.04%	16.15%	13.38%	10.20%

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INTERNATIONAL EQUITY

International equities were not immune to February's market selloff, with both Developed Markets (DM), as measured by the MSCI EAFE Index, and Emerging Markets (EM), as measured by the MSCI EM Index finishing the month in negative territory. Interestingly, broad based DM and EM didn't fare materially worse than the S&P 500, despite closer proximity and potential impact from the Ukraine invasion. Moreover, the MSCI ACWI ex USA Index actually outperformed the S&P 500, losing only -1.95% on the month.

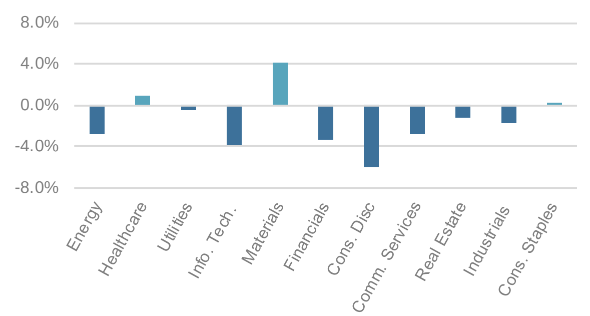
The Eurozone, as measured by the MSCI EMU Index, felt the brunt of the impact, losing -5.21%; however, given the threat that Russia poses, and its control over Europe from an energy supply standpoint, it's difficult to assess the potential impact on Eurozone GDP or corporate earnings, which continue to see their estimates increase. From a valuation standpoint, trading at less than 14 times 2022 earnings, Eurozone stocks potentially have some valuation buffer compared to their 7-year average of nearly 16 times. Emerging Markets trade below 12 times earnings, the cheapest levels since 2019, and below their 7-year average of more than 13 times. The broad MSCI EAFE Index trades at 14 times 2022 earnings, its cheapest levels since pre-pandemic, and below its 7-year average of 16 times. Taken as a whole, international equity markets remain attractive from a valuation standpoint, despite the unknowns amidst the current crisis.

Russian sanctions came from nearly every angle, with most countries (India and China remain notably absent) ramping up sanctions aimed at crippling the Russian economy. While many Russian banks were outcast from SWIFT, the global payments network, Russia's energy sector has thus far escaped a larger bite given the dependence of Europe on Russian energy. In perhaps the biggest about face, German Chancellor Scholz vowed to spend an immediate 100 Billion Euros on defense, increase defense spending to 2% of GDP (in line with NATO obligations) and set a goal to increase energy infrastructure to import and store energy from other countries, a departure from his predecessor Angela Merkel.

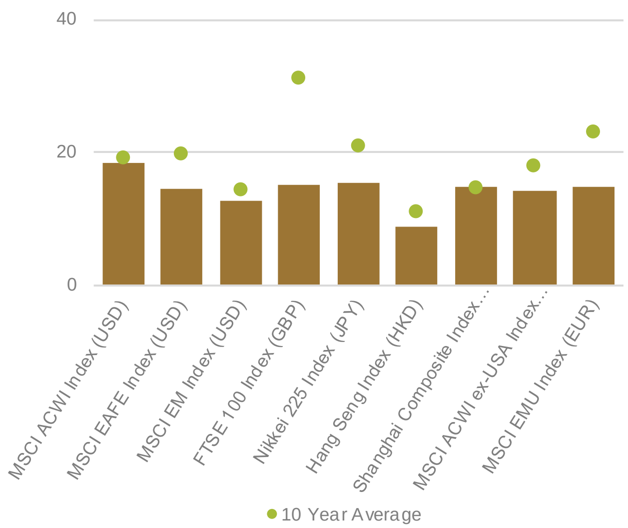
As a result of sanctions, Russian stocks lost more than half their value in February, with the MSCI Russia Index shedding -52.75% on the month. The Ruble hit an all-time low, settling at more than 105 USD/RUB, a nearly -25% loss from just Friday's close, and more than -36% loss on the month.

At the sector level, Materials, Healthcare, and Consumer Staples, were top performers, returning +4.19%, +0.94%, and +0.22%, respectively. Materials stocks likely benefited from rising commodities prices during the period, while Healthcare and Staples are notoriously defensive. In a notable divergence, Energy stocks lost -2.74% on the month (compared to a more than +7% gain in the US) but do remain in positive territory for the year up +5.3%.

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	-2.74%	5.30%	5.30%	23.72%	2.22%	5.98%	9.72%
Healthcare	0.94%	-7.94%	-7.94%	0.55%	9.44%	8.61%	7.60%
Utilities	-0.50%	-3.36%	-3.36%	14.46%	8.53%	9.04%	5.47%
Information Technology	-3.90%	-14.21%	-14.21%	-5.13%	22.09%	18.49%	10.50%
Materials	4.19%	2.00%	2.00%	8.71%	14.02%	11.29%	8.29%
Financials	-3.35%	-0.62%	-0.62%	10.71%	6.25%	5.92%	18.44%
Consumer Discretionary	-5.90%	-10.18%	-10.18%	-17.85%	6.12%	5.85%	10.84%
Communication Services*	-2.85%	-4.05%	-4.05%	-16.88%	4.79%	3.57%	6.12%
Real Estate	-1.17%	-2.13%	-2.13%	-5.89%	-2.16%	1.65%	2.46%
Industrials	-1.70%	-9.48%	-9.48%	0.69%	8.90%	8.16%	11.37%
Consumer Staples	0.22%	-4.83%	-4.83%	7.47%	5.95%	5.93%	9.19%

*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)	-2.55%	-7.32%	-7.32%	8.28%	13.97%	12.01%
MSCI EAFE Index (USD)	-1.72%	-6.46%	-6.46%	3.41%	8.38%	7.76%
MSCI EAFE Ext. ESG Focus Index (USD)	-2.17%	-6.98%	-6.98%	2.77%	8.40%	7.66%
MSCI EM Index (USD)	-3.01%	-4.85%	-4.85%	-10.44%	6.36%	7.34%
MSCI EM Ext. ESG Focus Index (USD)	-3.57%	-5.29%	-5.29%	-10.47%	6.66%	7.53%
FTSE 100 Index (GBP)	0.32%	1.45%	1.45%	19.18%	5.56%	4.43%
Nikkei 225 Index (JPY)	-1.71%	-7.82%	-7.82%	-6.88%	9.49%	8.82%
Hang Seng Index (HKD)	-4.58%	-2.92%	-2.92%	-19.58%	-4.58%	2.40%
Shanghai Composite Index (CNY)	3.00%	-4.88%	-4.88%	0.79%	8.03%	3.65%
MSCI ACWI ex-USA Index (USD)	-1.95%	-5.56%	-5.56%	0.08%	8.21%	7.81%
MSCI EMU Index (EUR)	-5.21%	-8.48%	-8.48%	10.06%	8.72%	6.88%

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FIXED INCOME

Year to date we have seen a swift move higher in yields as expectations for the Federal Reserve to raise interest rates and battle persistent inflation have been priced in to the market. At one point, the market was clearly expecting the first rate increase (at the March meeting later this month) to be a 50 basis point increase. Through the second half of February, as geopolitical tensions increased, interest rates began to decline. Current market expectations are for a 25 basis point increase later this month.

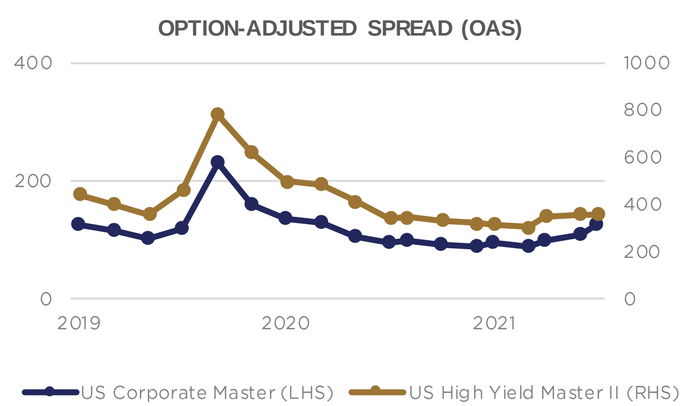
On March 2nd and 3rd, Fed Chairperson Jerome Powell will be providing his semiannual monetary policy report to congress. Expectations are for him to try to stick to the script, focusing on the policy report released last week. Traditionally, the report is followed by Q&A. This will likely be quite lively, and Powell may have some difficulty limiting the conversation to the content of the report.

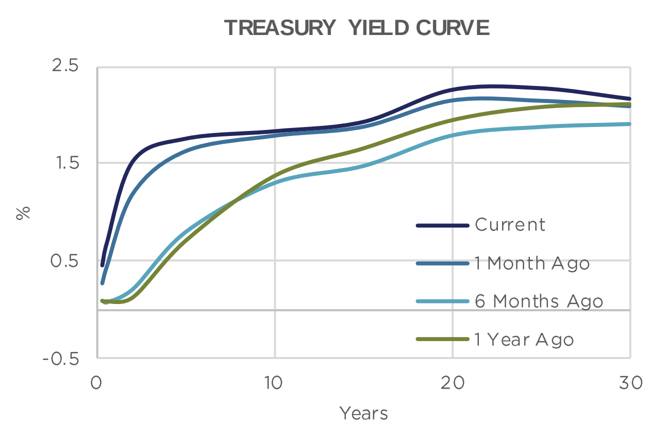
Government bonds were one of the top performers in the month. While their return was negative, they provided relative outperformance due to spread widening in Investment Grade and High Yield bonds. This spread widening provided additional downward price movement in those categories.

Investment Grade bonds trailed all categories except Emerging Market bonds in March. Credit spreads have continued their move higher as geopolitical risks grew significantly in the month. So far, it is purely speculative fear in the market. Default rates are unchanged, and many companies have cash on the balance sheet to ride out temporary market turmoil. The yields offered by corporate bonds are historically attractive, but have the potential to become even more attractive.

High Yield bonds have experienced similar spread widening, which also creates downward price pressure. The tailwind that High Yield bonds have is more coupon income to offset some of that price downside, and a shorter average maturity, limiting the negative impact of rising rates. In the month of February, and year to date, this has allowed High Yield bonds to outperform Investment Grade corporates.

Tax-free municipal bonds were the best performer in February, reversing some months of underperformance. Year to date they are in the middle of the pack. Demand had fallen off, as the likelihood of higher taxes declined. Current valuations are relatively attractive, particularly given that the historical default rates of equivalent credit quality munis are significantly lower than corporate bonds.





U.S. TREASURY YIELDS

Period	3 Month	2 Year	5 Year	10 Year	20 Year	30 Year
Current	0.46%	153%	176%	184%	2.26%	2.17%
1 Month Ago	0.28%	120%	163%	178%	2.14%	2.08%
6 Months Ago	0.08%	0.21%	0.80%	130%	179%	191%
1 Year Ago	0.09%	0.13%	0.72%	139%	196%	2.12%

CENTRAL BANK ACTIVITY

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

FIXED INCOME RETURNS

Name	MTD	QTD	YTD	1 Year	3 Year	5 Year
Bloomberg Barclays US Government Index	-0.66%	-2.52%	-2.52%	-2.12%	3.11%	2.39%
Bloomberg Barclays US Agg Index	-112%	-3.25%	-3.25%	-2.64%	3.30%	2.71%
Bloomberg Barclays US Corporate Index	-2.00%	-5.30%	-5.30%	-3.40%	4.76%	3.82%
Bloomberg Barclays US Corporate High Yield Index	-103%	-3.73%	-3.73%	0.64%	5.31%	4.88%
Bloomberg Barclays EM USD Agg Index	-4.54%	-7.06%	-7.06%	-6.48%	192%	2.45%
Bloomberg Barclays Global Agg Treasuries USD Index	-102%	-2.36%	-2.36%	-176%	2.32%	2.53%
Bloomberg Barclays Municipal Index	-0.36%	-3.09%	-3.09%	-0.66%	3.19%	3.24%

ALTERNATIVE INVESTMENTS

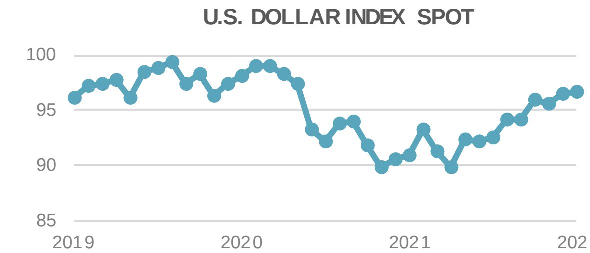
Alternative investments were mainly positive in February, outperforming most fixed income and equity indices. Broad commodities, as measured by the Bloomberg Commodity Index, rose +5.51% on the month and are up +15.51% for the year. It's too early to determine if this is the beginning of another commodity supercycle, but commodities have functioned as an adequate inflation hedge recently.

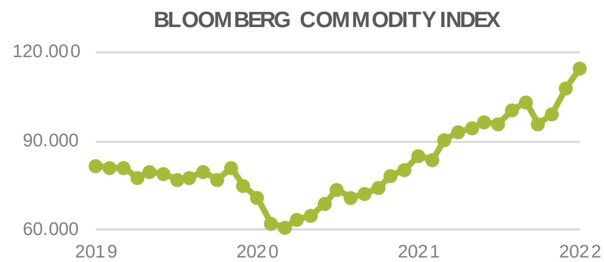
The Russian invasion of Ukraine shook oil markets, as WTI crude oil rose +9.52% in February. Oil prices rose above $100 per barrel intra-month for the first time since 2014 as a variety of factors have caused prices to more than double in less than 2 years. The West has so far avoided imposing any sanctions on Russia that would directly disrupt Russian oil-and-gas exports but any implementation would likely cause another supply shock and crude oils to rise even further. Russia is a major player in many commodities markets and military conflict comes at a time where central banks are only beginning to address the global inflation issue.

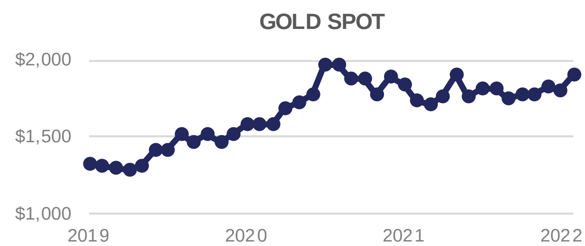
Additionally, global food supplies may be affected as Ukraine and Russia account for a third of the world's wheat exports and a fifth of its corn trade. Ukraine is known as the "breadbasket of Europe" and many countries will be left scrambling to find new imports for grains.

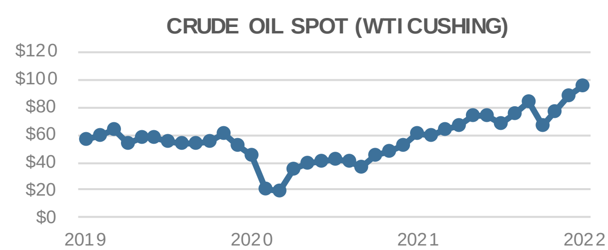
Gold performed well out of the non-energy alternatives, as the shiny metal returned +5.98% for the month. After underperforming global equities for the last decade in a risk-on environment, gold still is viewed as a safe haven during times of global crises and offers uncorrelated diversification benefits.

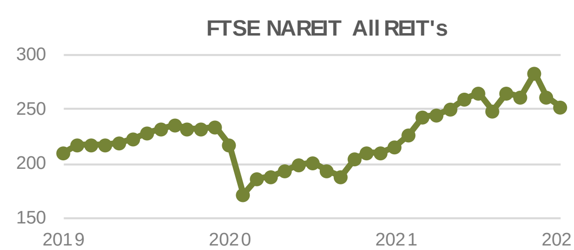
Hedge funds offered mixed results for the month, with four out of nine strategies tracked posting positive results on average.











SPOT RATES

Description	Current	1 Mth Ago	3 Mths Ago	6 Mths Ago	1 Year Ago
CAD / USD	127	127	128	126	126
JPY / USD	114.85	114.71	112.78	110.01	106.76
USD / GBP	134	135	133	138	139
USD / EUR	112	113	113	118	120

HEDGE FUNDS

Name	MTD	QTD	YTD	1 Year	3 Year	5 Year
Global Hedge	-0.11%	-157%	-157%	0.66%	4.82%	2.86%
Convertible Arbitrage	-189%	-4.05%	-4.05%	-3.04%	5.89%	4.70%
Equity Hedge (L/S)	0.45%	-168%	-168%	8.34%	6.69%	4.51%
Equity Market Neutral	-0.03%	0.44%	0.44%	0.20%	-105%	-134%
Event Driven	-0.04%	-0.79%	-0.79%	-2.22%	5.26%	181%
Macro	0.50%	-125%	-125%	-2.75%	2.71%	117%
Merger Arbitrage	124%	0.35%	0.35%	112%	3.65%	186%
Relative Value Arbitrage	-121%	-2.49%	-2.49%	-2.80%	3.15%	2.71%
Absolute Return	0.21%	-0.66%	-0.66%	103%	2.44%	2.18%

Note: Price Return, Returns as of 2/25/2021

COMMODITIES

	MTD	QTD	YTD	1 Year	3 Year	5 Year
Dollar	0.10%	0.60%	0.60%	3.98%	-0.26%	-0.97%
BCOM	5.51%	15.51%	15.51%	34.33%	12.06%	5.48%
Gold	5.98%	4.36%	4.36%	10.09%	13.26%	8.86%
WTI	9.52%	32.03%	32.03%	64.00%	17.64%	10.94%
FTSENAREIT	-3.89%	-11.52%	-11.52%	21.80%	10.90%	8.90%

ESG

Geopolitical tensions are not typically good for risk assets in general. The current tensions *have* been good for the prices of fossil fuels, which are currently in high demand and short supply. This is an exposure that many ESG funds avoid, or significantly underweight. While this is likely to have a *temporary* impact on performance, it has an impact no less.

There are concerns that ESG risks will receive less focus while there are such significant, near-term issues to focus on. When a peaceful, democratic country is attacked and invaded by a malevolent autocracy, it's understandable that some focus will shift from what we hope to achieve over the next thirty years, to what we need to achieve today, so that we are here for the following thirty years. We may have to accept some backsliding in the short-term, while keeping our eye on the big picture.

SEC regulations have yet to come regarding climate risk disclosures. The Securities and Exchange Commission appears to still be finding its way, looking to companies for guidance on what is considered material. Some large companies, including Facebook and Target, have received inquiries from the SEC requesting information on climate related risks that the companies are exposed to, and their justification for having disclosed those risks. This process is moving much slower than many had expected.

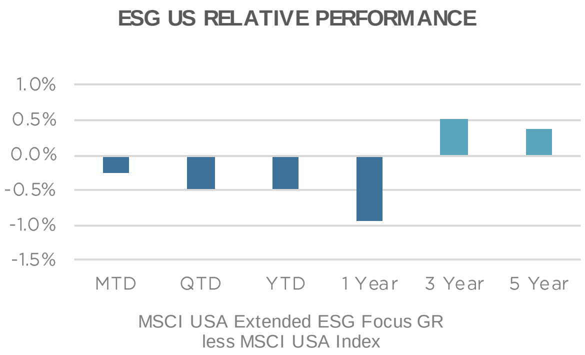
2022 returns for the ESG equity indices continue to be volatile. In February the ESG integrated U.S., EAFE, and Emerging Markets indices all trailed their respective benchmarks. Even ESG integrated Fixed income stumbled slightly, failing to build upon its trend of outperformance compared to its non-ESG integrated counterpart.

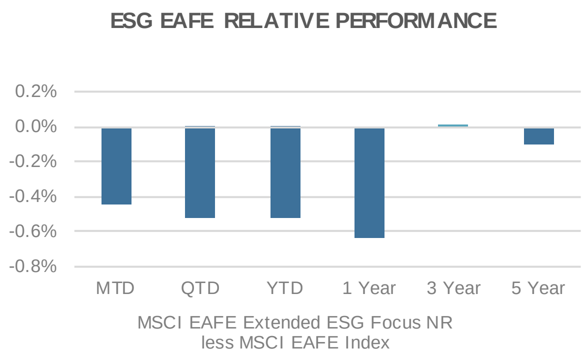
The ESG aligned U.S. index underperformed its non-ESG counterpart by 25 basis points in the month. Year to date it also trails by 49 basis points. Three year and Five year time periods remain additive to performance compared to the non-ESG aligned benchmark.

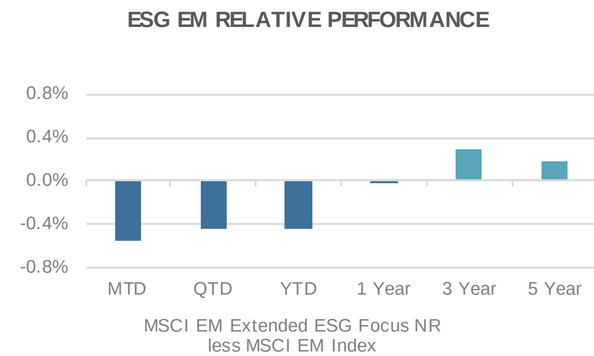
ESG integrated EAFE returns experienced 45 basis points of underperformance in February. Year to date, the performance of ESG integrated EAFE trailed its benchmark by 52 basis points. Longer time periods are much less negative, with the three number continuing to show marginal outperformance.

Emerging Markets ESG equity performance lagged its benchmark by 56 basis points in February, breaking with its strong track record of being accretive to performance. The year to date number is better, with only 44 basis points of underperformance. Longer time horizons remain supportive of ESG integration into Emerging Markets portfolios.

ESG integrated Investment Grade corporate bonds marginally trailed their non-ESG equivalent by 4 basis points in February. Year to date ESG integrated IG bonds are right on top in their benchmark, with a 1 basis point lag. Longer time periods remain supportive of ESG integration into fixed income portfolios.







ESG INDEX RETURNS VS ORDINARY INDEX RETURNS

Name	MTD	QTD	YTD	1 Year	3 Year	5 Year
S&P 500 Index	-3.00%	-8.02%	-8.02%	16.37%	18.21%	15.15%
S&P 500 ESG Index	-2.63%	-7.40%	-7.40%	20.23%	20.58%	15.52%
MSCI USA GR Index	-2.93%	-8.43%	-8.43%	14.38%	18.41%	15.30%
MSCI USA Extended ESG Focus GR Index	-3.18%	-8.92%	-8.92%	13.43%	18.93%	15.69%
MSCI EAFE Index	-1.72%	-6.46%	-6.46%	3.41%	8.38%	7.76%
MSCI EAFE Extended ESG Focus NR Index	-2.17%	-6.98%	-6.98%	2.77%	8.40%	7.66%
MSCI EM Index	-3.01%	-4.85%	-4.85%	-10.44%	6.36%	7.34%
MSCI EM Extended ESG Focus NR Index	-3.57%	-5.29%	-5.29%	-10.47%	6.66%	7.53%
Bloomberg Barclays MSCI US Corp 1-5 Yr ESG Focus TR Index	-0.77%	-1.95%	-1.95%	-2.13%	2.83%	2.53%
Bloomberg Barclays US Corporate Index	-2.00%	-5.30%	-5.30%	-3.40%	4.76%	3.82%
Bloomberg Barclays MSCI US Corp ESG Focus TR Index	-2.04%	-5.31%	-5.31%	-3.41%	5.01%	3.95%

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-indexes: 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 (LGTRTRUH) – 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 compromised 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 (LBUSTRUU) - 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 (C0A0) – 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 (C0A0) – 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 (H0A0) – 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 (USDX) indicates the general int'l value of the USD. The USDX 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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