## **ECONOMIC OVERVIEW**

January's economic reports highlighting December activity were the first to reflect the rise of the Omicron variant and its impact on the broader US economy. A crucial FOMC meeting, inflation reports and the advance reading for Q4 GDP also headlined the month.

The Federal Reserve met in January and Chair Powell appeared every bit chastened by the very non-transitory nature of the surge in inflation. Accelerated tapering followed by a well-telegraphed series of interest rate hikes are what investors should expect in the months ahead, as the Fed struggles to get its arms around pandemic induced labor and supply chain shortages.

The Consumer Price Index rose +0.5% in December for a +7.0% YoY rise, the highest reading since 1982. Ex-Food & Energy, prices surged +0.6%, or +5.5% YoY. Producer Prices only ticked up +0.2% for the month, but are up an astounding +9.7% for the year. Core PPI rose +8.3% YoY, while the Fed's preferred measure of inflation, the PCE Deflator, gained +0.4% in December for a +5.8% annual increase. No matter which measure one uses, prices for nearly everything are materially higher and likely to stay that way for the foreseeable future, or until the Fed hikes interest rates.

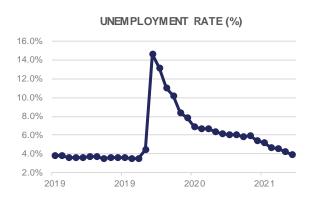
The advance reading of 4<sup>th</sup> quarter GDP showed economic output surging by a +6.9% annualized rate in Q4, up from Q3's +2.3% rate and topping estimates for a +5.5% rise. Personal Consumption was up +3.3%, beating the prior quarter's +2.0% reading, but slightly below analyst expectations for a +3.4% gain.

Rising prices are beginning to impact the all-important US consumer as Personal Income rose +0.3% in December while Personal Spending dropped by -0.6%. As we begin year 3 of the pandemic, multiple variants and COVID-related mitigation measures have weighed heavily on reopening plans and directly impacted the travel and leisure arena.

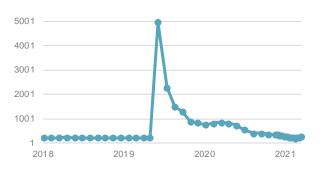
The Federal Reserve is likely to end asset purchases in February while teeing up the March FOMC meeting for its first interest rate hike since the end of 2018. Squarely behind the curve as it relates to today's inflation readings, the only debate taking place today is how many quarter-point hikes will it take to nip inflation in the bud, without sending the equity market into a tailspin. Having waited too long to make its move, the Fed will be challenged to stick the landing on this one.

#### **KEY DATA POINTS**

Data Point	Current	ent For Pr		For
Retail Sales ex. Autos MOM	-2.3%	December	0.1%	November
Housing Starts	1702K	December	1679K	November
Factory Orders MOM %	1.6%	November	1.0%	October
Leading Indicators MOM %	0.8%	December	1.1%	November
Unit Labor Costs	9.6%	Q3 2021	1.3%	Q2 2021
GDP QOQ (Annualized)	6.9%	Q4 2021	2.3%	Q3 2021
Wholesale Inventories	2.1%	December	1.2%	November
MBA Mortgage Applications	-7.1%	January	-5.6%	December

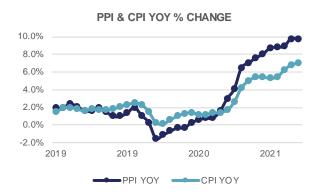


4-WK MOVING AVERAGE OF INITIAL CLAIMS (000S), SA



CONSUMER CONFIDENCE LHS VS. HOME PRICES RHS







# DOMESTIC EQUITY

U.S. equities suffered their worst month since the onset of the pandemic with the benchmark S&P 500 Index losing -5.17% on the month to close at 4515.55. The intra-month drawdown was much worse than the month end data suggest, with a maximum drawdown of more than -13% at the low, followed by a more than +3.6% rally over the final two days of trading. The NASDAQ 100 fared much worse, given its large weighting to high growth and high valuation parts of the market such as Technology and Biotechnology. The NASDAQ 100 finished the month down -8.49%, after being down as much as -16% intra-month, only to rebound more than +6.6% to close out the month. The NASDAQ's one month return is the worst since November 2000, an analogue that perhaps speaks to companies with high valuations and little earnings having their stock prices reset.

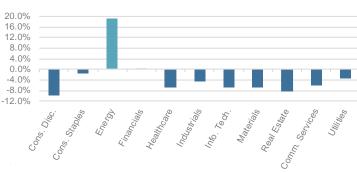
Small- and Mid-Caps, as measured by the S&P 600 and 400 Indices were also hard hit, falling -7.27% and -7.21%, respectively. While SMID caps generally have less exposure to Technology and Growth areas when compared to the S&P 500, they are still sensitive to a risk-off environment. Interestingly, and importantly, the distinction within Small-Caps between the S&P 600 and Russell 2000 should be highlighted. The former has an inherent quality bias due to its index methodology requiring companies to have four straight quarters of profitability (i.e. actual earnings), whereas the latter does not (i.e. currently more than 35% of the index is not profitable). Perhaps not surprisingly, the Russell 2000 lost -9.63% on the month, or more than two percentage points more than the S&P 600.

Value outperformed Growth in January, with the S&P 500/Citi Value Index returning -1.62% compared to the S&P 500/Citi Growth's -8.37% loss. Value has now outperformed Growth over the trailing 1-year period by +325bps, but continues to lag on a longer term basis by a wide margin, perhaps speaking to the opportunity within Value stocks as inflation remains elevated and interest rates begin to rise.

At the sector level, Energy was the clear standout, gaining +19.10% on the month as crude oil prices surged. Financials were the only other sector in positive territory, up +0.06% on the month as short-term interest rates bounced higher as the Fed appeared more hawkish at its January meeting. The selloff in equities was felt the most across Consumer Discretionary, Real Estate, and Technology sectors, which returned -9.68%, -8.50%, and -6.89%, respectively. Strong earnings reports from Apple and Microsoft weren't enough to buoy Technology as a whole, speaking to the valuation premium that the sector commands, and the re-rating taking place within the market.



### 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	-9.68%	-9.68%	-9.68%	11.94%	20.21%	17.91%	12.59%
Consumer Staples	-1.37%	-1.37%	-1.37%	23.38%	16.26%	11.08%	6.59%
Energy	19.10%	19.10%	19.10%	77.13%	7.05%	2.77%	3.33%
Financials	0.06%	0.06%	0.06%	37.34%	17.16%	13.15%	10.89%
Healthcare	-6.76%	-6.76%	-6.76%	15.96%	15.40%	15.42%	12.84%
Industrials	-4.73%	-4.73%	-4.73%	20.56%	14.13%	11.37%	7.78%
Information Technology	-6.89%	-6.89%	-6.89%	26.42%	36.26%	29.12%	28.29%
Materials	-6.85%	-6.85%	-6.85%	21.47%	19.11%	12.47%	2.47%
Real Estate	-8.50%	-8.50%	-8.50%	33.02%	15.05%	12.84%	2.62%
Communication Services*	-6.21%	-6.21%	-6.21%	15.52%	19.20%	10.61%	10.22%
Utilities	-3.27%	-3.27%	-3.27%	14.87%	11.80%	10.75%	2.45%

### DOMESTIC EQUITY RETURNS

Name	MTD	QTD	YTD	1 Year	3 Year	5 Year
S&P 500 Index	-5.17%	-5.17%	-5.17%	23.27%	20.68%	16.76%
S&P 400 Mid Cap Index	-7.21%	-7.21%	-7.21%	14.02%	14.52%	11.01%
S&P 600 Small Cap Index	-7.27%	-7.27%	-7.27%	10.58%	13.18%	10.77%
S&P 500/Citi Growth Index	-8.37%	-8.37%	-8.37%	21.57%	25.31%	21.22%
S&P 500/Citi Value Index	-1.62%	-1.62%	-1.62%	24.82%	14.77%	11.36%

<sup>\*</sup>The S&P 500 Communciation Services Sector was reclassifed from the Telecommunications Sector on September 21st, 2018

### INTERNATIONAL EQUITY

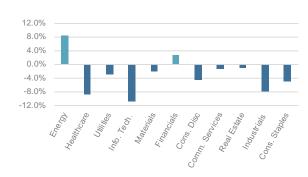
International equities lost ground in absolute terms during January with both Developed Markets (DM) and Emerging Markets (EM) equities posting negative returns. DM equities, as measured by the MSCI EAFE Index lost -4.82%, worse than their EM counterparts which lost -1.90%. In relative terms, both sets of international indices outperformed their U.S. counterparts, largely due to a more Value oriented and Cyclically tilted benchmark. A strong U.S. Dollar also weighed on returns, as the DXY Index hit the highest level in well over a year. International equities also may have benefitted from underperformance in 2021, and the fact that most major international central banks remain highly accommodative from a monetary policy standpoint. Taken as a whole, the MSCI ACWI ex-USA Index lost -3.67% in USD terms, outperforming U.S. equities.

Getting more granular, the Eurozone, as measured by the MSCI EMU Index, performed in line with DM equities, returning -3.44% in EUR terms and -4.86% in USD. Broadening out, the United Kingdom, as measured by the FTSE 100 Index, posted a positive +1.12% in GBP terms, and +0.38% in USD, bolstered by highly Value oriented exposures. Also rebounding from the depths of despair were Hong Kong based equities, as measured by the Hang Seng Index, which returned +1.73% in HKD terms, and 1.74% in USD.

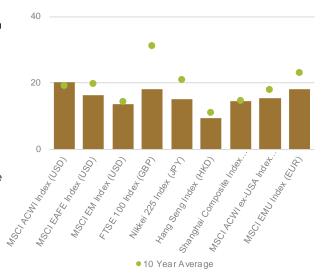
At the MSCI ACWI ex-USA sector level, Energy was the top performer, up +8.27%, as energy prices continued to rise globally. Geopolitical tensions remain high with the Russia and Ukraine standoff taking center stage, likely providing an additional bid for oil. Financials also posted positive performance, gaining +2.83%. Technology, Healthcare, and Industrials were the worst performers, losing -10.73%, -8.79%, and -7.91%, respectively.

Looking forward, both DM and EM equities look highly attractive compared to U.S. equities. As global growth looks set to rebound in 2022, international markets could benefit as they have yet to see the full rebound that the U.S. has. Furthermore, valuations look increasingly attractive on both an absolute and relative basis. Coupled with both a Value orientation and Cyclical tilt, a lack of high valuation growth companies, higher interest rates, above trend inflation should bode well for the group as a whole. From a monetary policy standpoint, many EM central banks have already raised interest rates, many significantly, due to high inflation. In DM, the U.K has raised rates, and the Reserve Bank of Australia (RBA) has stopped buying bonds. The Eurozone is set to halt additional liquidity measures later this year, however, that could remain a moving target should geopolitical tensions reach a boiling point. Finally, we could start to see a divergence in monetary policies in the second half of 2022 that may provide support for international currencies, bolstering forward return prospects for international equities.

#### MTDMSCIACWISECTOR RETURNS



## INTERNATIONAL EQUITY MARKET P/E RATIOS



#### MSCI ACWI EX U.S. SECTOR RETURNS

Sector	MTD	QTD	YTD	1 Year	3 Year	5 Year	6 of ACW
Energy	8.27%	8.27%	8.27%	36.82%	3.94%	6.22%	9.39%
Healthcare	-8.79%	-8.79%	-8.79%	-4.40%	10.36%	9.36%	7.46%
Utilities	-2.87%	-2.87%	-2.87%	9.20%	9.52%	10.02%	5.42%
Information Technology	-10.73%	-10.73%	-10.73%	-0.22%	24.88%	20.05%	10.68%
Materials	-2.10%	-2.10%	-2.10%	8.63%	13.22%	10.18%	7.87%
Financials	2.83%	2.83%	2.83%	22.43%	8.29%	6.86%	18.77%
Consumer Discretionary	-4.55%	-4.55%	-4.55%	-11.35%	9.14%	7.42%	11.39%
Communication Services*	-1.24%	-1.24%	-1.24%	-12.44%	5.52%	4.18%	6.21%
Real Estate	-0.97%	-0.97%	-0.97%	-0.99%	-2.16%	2.52%	2.48%
Industrials	-7.91%	-7.91%	-7.91%	5.23%	10.37%	8.99%	11.20%
Consumer Staples	-5.04%	-5.04%	-5.04%	3.16%	6.47%	6.64%	9.12%

#### INTERNATIONAL EQUITY RETURNS

IIII EI UU III OI						
Name	MTD	QTD	YTD	1 Year	3 Year	5 Year
M SCI A CWI Index (USD)	-4.89%	-4.89%	-4.89%	13.71%	15.98%	13.22%
M SCI EAFE Index (USD)	-4.82%	-4.82%	-4.82%	7.60%	9.94%	8.45%
M SCI EAFE Ext. ESG Focus Index (USD)	-4.92%	-4.92%	-4.92%	7.50%	10.07%	8.48%
M SCI EM Index (USD)	-1.90%	-1.90%	-1.90%	-7.02%	7.51%	8.64%
M SCI EM Ext. ESG Focus Index (USD)	-1.79%	-1.79%	-1.79%	-6.97%	8.01%	8.97%
FTSE 100 Index (GBP)	1.12%	1.12%	1.12%	20.68%	6.25%	5.00%
Nikkei 225 Index (JPY)	-6.21%	-6.21%	-6.21%	-0.80%	11.21%	9.29%
Hang Seng Index (HKD)	1.73%	1.73%	1.73%	-13.65%	-2.21%	3.76%
Shanghai Composite Index (CNY)	-7.65%	-7.65%	-7.65%	-1.42%	11.71%	3.56%
M SCI A CWI ex-USA Index (USD)	-3.67%	-3.67%	-3.67%	4.09%	9.63%	8.58%
M SCI EM U Index (EUR)	-3.44%	-3.44%	-3.44%	20.31%	12.12%	8.60%

 $<sup>{}^{\</sup>star}\text{The M SCI ACWI Ex U.S. Communication Services Sector was reclassified on November 30th, 2018}$ 

### FIXED INCOME

The Federal Reserve's January meeting concluded on the 26<sup>th</sup> and was followed by a press conference hosted by Chairperson Jerome Powell. The pace of tapering asset purchases was not sped up as some had speculated, but remained on pace for a March completion date. This information makes the March Fed meeting "live", or the first meeting that a rate hike is likely. Expectations have grown from three interest rate hikes in 2022 to as many as six or seven, depending on whose forecast you find most credible. One consideration when looking at the most aggressive estimates is that all must be right in the world for the Fed to maintain an aggressive tightening posture. If anything goes off the rails, due to their actions or otherwise, they may be sidetracked addressing other concerns.

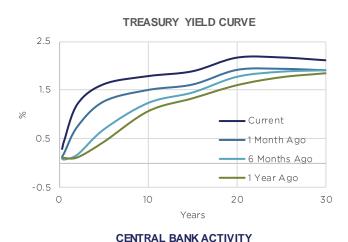
With this backdrop, interest rates moved higher across the Treasury curve for the second month in a row. Unlike last month, credit spreads have widened and acted as a headwind to Investment Grade corporate and High Yield bond returns. This has reversed some of the outperformance that was earned by taking additional credit risk in 2021. The reversion has been experienced differently across the ratings spectrum.

Within Investment Grade corporates, the lower quality holdings have underperformed, perhaps as investors have "traded up" to less volatile issuers, hoping to avoid additional spread widening. In the High Yield Market, the lowest quality bonds have performed the best. They also offer the highest yields, and may be sought out as a buffer against the negative price impact of rising rates.

Floating rate bonds have continued to do well and are in high demand as a hedge to rising rates. TIPS, which had a banner year in 2021, have hit a rough patch this month, as their own duration has taken its toll.

Municipal bonds are also coming off a string of strong performance. As of late, this string has been broken. Valuations of Municipal bonds had become a bit stretched last year, with restricted supply battling increased demand. So far, 2022 has been rapidly adjusting Municipal bond valuations to more compelling levels, approaching their historical fair value.





#### U.S. TREASURY YIELDS

	•					
Period	3 Month	2 Year	5 Year	10 Year	20 Year	30 Year
Current	0.30%	1.22%	1.62%	1.79%	2.16%	2.11%
1M onth Ago	0.13%	0.76%	1.27%	1.51%	1.92%	1.91%
6 Months Ago	0.09%	0.18%	0.70%	1.24%	1.77%	1.91%
1Year Ago	0.11%	0.12%	0.44%	1.07%	1.60%	1.84%

Name	Current	1 M onth Ago	6 M onths 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	0.25%	0.25%	0.10%	0.10%

#### FIXED INCOME RETURNS

Name	MTD	QTD	YTD	1 Year	3 Year	5 Year
Bloomberg Barclays US Government Index	-1.87%	-1.87%	-1.87%	-3.21%	3.25%	2.63%
Bloomberg Barclays US Agg Index	-2.15%	-2.15%	-2.15%	-2.97%	3.66%	3.08%
Bloomberg Barclays US Corporate Index	-3.37%	-3.37%	-3.37%	-3.13%	5.55%	4.48%
Bloomberg Barclays US Corporate High Yield Index	-2.73%	-2.73%	-2.73%	2.06%	6.25%	5.40%
Bloomberg Barclays EM USD Agg Index	-2.63%	-2.63%	-2.63%	-3.42%	3.79%	3.75%
Bloomberg Barclays Global Agg Treasuries USD Index	-1.35%	-1.35%	-1.35%	-2.59%	2.67%	2.91%
Bloomberg Barclays Municipal Index	-2.74%	-2.74%	-2.74%	-1.89%	3.50%	3.46%



## ALTERNATIVE INVESTMENTS

Alternative investments had mixed results for January, with energy prices spiking as other risk assets fell sharply. The Bloomberg Commodity Index finished the month up +8.77%.

WTI Crude Oil finished the month at \$88.15 per barrel, up +20.80% from year end. Omicron has done less to slow fuel demand than expected and oil supplies remain constrained after years of lower investment.

The European natural gas market remains very tight, with geopolitical factors coinciding with the coldest winter months. Europe relies on Russia for almost 50% of its natural gas supply which has only become more scrutinized as the Russia and Ukraine border conflict intensifies. Gas prices have more than quadrupled since last year and further rations by Russia threaten further price increases.

US natural gas prices were up for the month as well, impacted by cold temperature projections over the next few weeks and tight supply. On January 28th, the US natural gas price rose a staggering +46% in the highest daily percentage gain on record. However, a short-squeeze and low volume day as February contracts expired played more of a factor than the underlying energy demand/supply.

Real Estate, as measured by the FTSE NAREIT Index, fell -7.93% in January after a strong 2021. Concerns over the Fed raising rates and a sell-off in broad risk assets led to the decline. However, concerns over higher mortgage rates haven't seeped into the residential real estate market. Redfin observed that 35% of homes are going under contract within a week, the highest metric its recorded for this time of year. A hot January housing market comes after national home prices increased +18.5% YoY in December 2021 according to CoreLogic.

Hedge Fund strategies had negative results overall during the month, with eight of nine strategies tracked posting negative returns on average. However, all nine strategies outperformed global equities for the month. Higher volatility in the current market environment may provide the opportunity for hedge fund managers to outperform the market after a decade of underperformance.

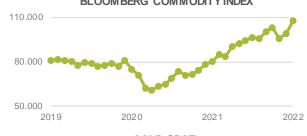
#### **SPOT RATES**

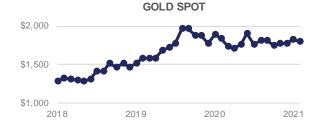
Description	Current	1 M th Ago	3 M ths Ago	6 M ths Ago	1 Year Ago
CAD/USD	1.27	1.26	1.24	1.25	1.29
JPY/USD	114.68	115.08	114.00	109.69	104.93
USD / GBP	1.35	1.35	1.37	1.39	1.37
USD / EUR	1.13	1.14	1.16	1.19	1.21

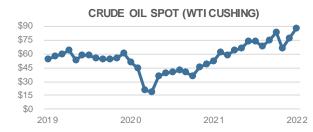
#### **HEDGE FUNDS**

Name	MTD	QTD	YTD	1 Year	3 Year	5 Year	
Global Hedge	-1.81%	-1.81%	-1.81%	1.94%	4.95%	3.04%	
Convertible Arbitrage	-2.82%	-2.82%	-2.82%	-0.38%	6.51%	5.29%	
Equity Hedge (L/S)	-2.77%	-2.77%	-2.77%	10.18%	6.70%	4.52%	
Equity Market Neutral	0.52%	0.52%	0.52%	0.49%	-1.50%	-1.32%	Ī
Event Driven	-1.06%	-1.06%	-1.06%	-1.19%	5.10%	2.07%	Ī
Macro	-1.94%	-1.94%	-1.94%	-2.19%	2.72%	1.26%	-
M erger Arbitrage	-1.20%	-1.20%	-1.20%	0.58%	2.08%	1.56%	ľ
Relative Value Arbitrage	-1.39%	-1.39%	-1.39%	-1.30%	3.64%	3.07%	'
Absolute Return	-1.02%	-1.02%	-1.02%	1.22%	2.29%	2.13%	











#### COMMODITIES

	MTD	QTD	YTD	1 Year	3 Year	5 Year
Dollar	0.84%	0.84%	0.84%	4.73%	0.07%	-0.84%
ВСОМ	8.77%	8.77%	8.77%	34.66%	10.13%	4.25%
Gold	-1.75%	-1.75%	-1.75%	-2.73%	10.79%	8.22%
WTI	20.80%	20.80%	20.80%	76.23%	16.13%	9.14%
FTSENAREIT	-7.93%	-7.93%	-7.93%	30.18%	12.72%	10.84%

Note: Price Return, Returns as of 1/28/2021

### **ESG**

While ESG concerns and interests continue to grow in the background, they have been a bit further away from the headlines than they were throughout 2021. The new year brought with it many additional concerns such as the Federal Reserve progressing towards higher rates and less monetary accommodation, persistent elevated inflation, stock market volatility, conflict in Europe, and more.

As we move further into the year, attention will find its way back to Environmental, Social, and Governance related topics. The regulatory implications around these issues will be significant. The SEC is expected to provide guidance this year regarding more detailed climate change disclosures for public companies. Chair Gary Gensler has spoke of a rule requiring U.S.-listed companies to disclose scope 1 and scope 2 greenhouse gas emissions from their own operations, and could potentially include scope 3 emissions from company suppliers around the world. This was initially expected by the end of 2021, but has not yet materialized.

January returns for the ESG equity indices were a bit choppy, with the U.S. and EAFE trailing slightly, and EM outperforming their respective benchmarks. ESG integrated Fixed Income continued to show strength, continuing its steady trend of outperformance compared to its non-ESG integrated counterpart.

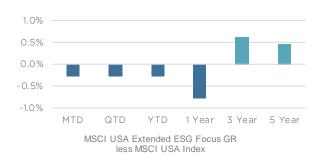
The ESG aligned U.S. equity index underperformed its non-ESG counterpart in the month. Longer time periods remain additive to performance compared to the non-ESG aligned benchmark.

ESG integrated EAFE returns experienced underperformance similar to that of the U.S. Performance of ESG integration in EAFE markets continues to struggle a bit, however, it may be less impacted by the current market move favoring value over growth.

Emerging Markets ESG equity performance was positive in January, continuing to support the track record of being accretive. Longer time horizons remain strongly supportive of ESG integration into Emerging Markets portfolios.

ESG integrated Investment Grade corporate bonds outperformed their non-ESG equivalent in January. This continues the trend of consistently being additive to performance in a category where risk management is key to strong performance.

#### ESG US RELATIVE PERFORMANCE



#### ESG EAFE RELATIVE PERFORMANCE



#### ESG EM RELATIVE PERFORMANCE



less MSCI EM Index

#### ESG INDEX RETURNS VS ORDINARY INDEX RETURNS

Name	MTD	QTD	YTD	1 Year	3 Year	5 Year
S&P 500 Index	-5.17%	-5.17%	-5.17%	23.27%	20.68%	16.76%
M SCI USA GR Index	-5.66%	-5.66%	-5.66%	20.90%	20.91%	16.89%
M SCI USA Extended ESG Focus GR Index	-5.93%	-5.93%	-5.93%	20.14%	21.53%	17.36%
M SCI EAFE Index	-4.82%	-4.82%	-4.82%	7.60%	9.94%	8.45%
M SCI EAFE Extended ESG Focus NR Index	-4.92%	-4.92%	-4.92%	7.50%	10.07%	8.48%
MSCIEM Index	-1.90%	-1.90%	-1.90%	-7.02%	7.51%	8.64%
M SCI EM Extended ESG Focus NR Index	-1.79%	-1.79%	-1.79%	-6.97%	8.01%	8.97%
Bloomberg Barclays M SCI US Corp 1-5 Yr ESG Focus TR Index	-1.18%	-1.18%	-1.18%	-1.57%	3.23%	2.78%
Bloomberg Barclays US Corporate Index	-3.37%	-3.37%	-3.37%	-3.13%	5.55%	4.48%
Bloomberg Barclays M SCI US Corp ESG Focus TR Index	-3.34%	-3.34%	-3.34%	-3.05%	5.82%	4.61%
S&P Green Bond U.S. Dollar Select Index TR	-2.30%	-2.30%	-2.30%	-3.52%	3.72%	3.23%



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

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NEW YORK OFFICE PH: 716-633-3800 FAX: 716-633-3810 100 Corporate Parkway Suite 338 Amherst, NY 14226

PH: 800-281-8974 4400 PGA Boulevard Suite 404 Palm Beach Gardens, FL 33410 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 dollardenominated, 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, quasisovereign, 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 (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 (HOAO) – 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 weightcaps 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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