

Market commentary

U.S. ECONOMICS

- The U.S. CPI rose unexpectedly to a fresh 40 year high, climbing 8.6% year-over-year, as prices increased 1.0% in May. The print was ahead of expectations for an 8.3% rise. Food and energy costs have risen 10.1% and 34.6%, respectively, year-to-date. Additionally, shelter costs a notably sticky component of the CPI have risen 5.5% over the last year.
- University of Michigan U.S. Consumer Sentiment fell to an all time low of 50.2 in the most recent print as 46% of respondents attributed negative views to accelerating prices. Consensus expectations were for a modest decline from 58.4 to 58.1. Only 13% of those surveyed expect wages to keep pace with inflation.
- In the most recent release of Commerce Department data, U.S. households increased spending in every month this year, while at the same time decreasing savings rates. This may suggest that Americans are using their savings to offset the rising costs associated with persistent inflation. Savings rates fell to 4.4%, the lowest in 14 years.

U.S. EQUITIES

- The S&P 500 fell -18.2% from the start of the year intra-month. The index saw a strong rally in the final week of trading to end the month +0.2% higher. The index was just shy of bear market territory, usually marked by a -20% decline.
- The S&P 500 Index had declined for seven consecutive weeks prior to May's final week rally. This consistent amount of investor trepidation has only occurred four times since 1928.
- The S&P 500 index remains deep in the red year to date (-12.8%) and may be a testament to investor concern on rising inflation, a rising interest rate environment and geopolitical tensions.

U.S. FIXED INCOME

- The Fed enacted a 50-basis point rate increase in May, in line with market expectations. The hike represents the largest single-month increase in the key rate since 2000 as the Fed aims to tamp down inflation. The Fed also signaled confidence in the strength of the U.S. economy despite weak consumer sentiment.
- Fed officials announced that a portion of maturing Treasuries and mortgage-backed securities – initially capped at \$47.5B in June and increasing to \$95B in September – will be allowed to roll-off the balance sheet. The pace of quantitative tightening is notably more aggressive than tightening undertaken from 2017-2019, when the maximum monthly cap peaked at \$30B.
- The 10-Year U.S. Treasury yield hit an intra-month high of 3.1%, the highest yield since November 2018, before falling to end the month at 2.9%.

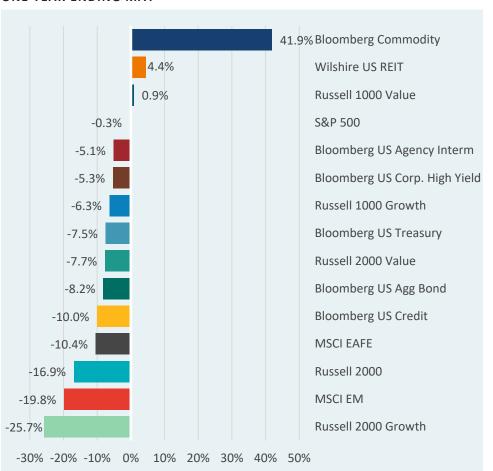
INTERNATIONAL MARKETS

- In a reversal of recent weakness, the Euro strengthened against the U.S. Dollar in a month of broad U.S. Dollar weakness against developed pairs. The Euro was likely helped higher by increased expectations that the European Central Bank would begin to raise rates in July. The Euro is -5.8% weaker year-to-date.
- Officials in Shanghai announced that city lockdown policies would begin easing in June, which helped the MSCI China Index post a positive return for the first time in 2022 (+0.9%). China's broader zero-covid policy is expected to continue, however.
- As the war in Ukraine pushed past 100-days, President Biden remarked that the U.S. would intervene if China were to invade Taiwan which stirred geopolitical tension on the world stage.

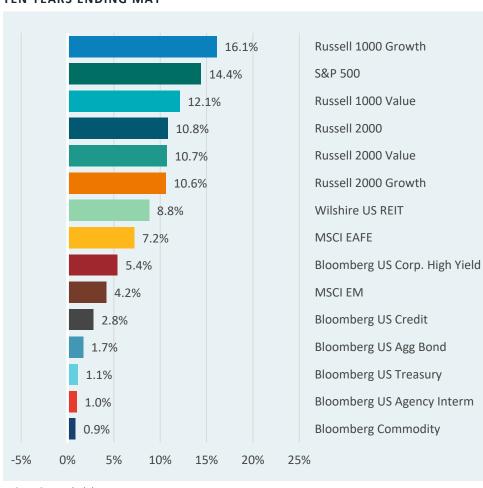


Major asset class returns

ONE YEAR ENDING MAY



TEN YEARS ENDING MAY



*Only publicly traded asset performance is shown here. Performance of private assets is typically released with a 3- to 6-month delay.

Source: Morningstar, as of 5/31/22

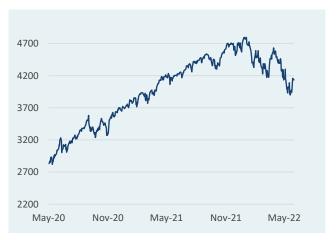
Source: Morningstar, as of 5/31/22



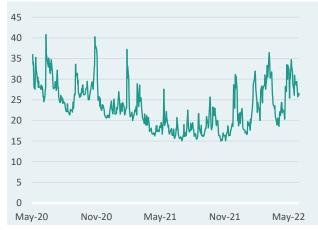
U.S. large cap equities

- The S&P 500 (+0.2%) ended a volatile month in positive territory. Investors balanced the Fed's stated resolve to drive down inflation against concerns surrounding weakening consumer demand and the potential that the Fed may not be able to coordinate a 'soft-landing'.
- The Consumer Discretionary (-4.9%) and Consumer Staples (-4.6%) sectors saw sharp declines as Q1 earnings for several retailers illustrated that sustained inflation has weighed on consumers. Large retailers including Target (-29.2%) and Walmart (-15.9%) cut full year earnings guidance which likely boosted concerns that inflation will continue to weigh on consumers.
- Of the 11 GICS S&P 500 sectors, six sectors posted positive returns led by Energy (+15.8), Utilities (+4.3%) and Financials (+2.7%). Of the five sectors which declined over the month, Consumer Staples (-4.6%), Consumer Discretionary (-4.9%), and Real Estate (-5.0%) recorded the largest losses.
- The Cboe VIX Index of implied volatility declined to 26.2 after reaching an intra-month high of 34.8. The index remained elevated above the 200-day moving average level of 22.7 as markets weighed potential weakness of U.S. consumers due to a continuation of increased inflation.

S&P 500 PRICE INDEX

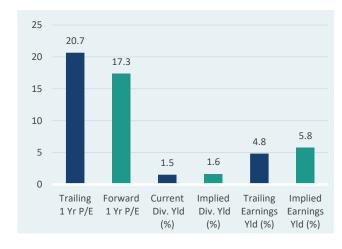


IMPLIED VOLATILITY (VIX INDEX)



Source: Choe, as of 5/31/22

S&P 500 VALUATION SNAPSHOT

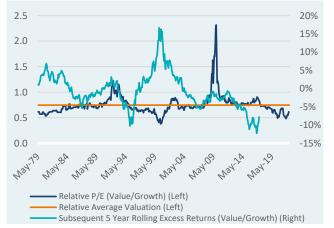


Source: Bloomberg, as of 5/31/22

Domestic equity size and style

- The Russell 3000 Value Index (+1.9%) outperformed the Russell 3000 Growth Index (-2.3%). The Fed's continued hawkishness and promise to raise interest rates likely weighed more on growth style equities. Companies with large growth expectations tend to have earnings further in the future that are then discounted at a higher rate when rates rise.
- Small-cap equities (Russell 2000 +0.2%) outperformed large-cap equities (Russell 1000 -0.2%). Usually, largercap companies outperform small-caps in lieu of worsening economic conditions. A smaller weight to information technology, a growth style sector, was accretive to relative performance of small caps.

VALUE VS. GROWTH RELATIVE VALUATIONS



Source: FTSE, Bloomberg, as of 5/31/22

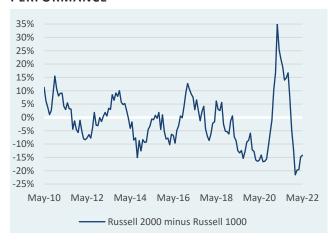
- Within the large-cap equity space, breadth was strong which can be seen by the S&P 500 Equal Weighted Index (+1.0%) which outperformed compared to the broader market (S&P 500 +0.2%).
- The S&P 500 High Dividend Index (+4.4%) strongly outperformed the S&P 500 (+0.2%). Often, companies who are paying dividends are not investing into large new projects relative to a company who uses all potential dividends to reinvest into the company. Companies that are reinvesting shareholder equity are likely to have cash flows further in the future which are more heavily discounted in a rising rate environment.

VALUE VS. GROWTH 1-YR ROLLING RELATIVE PERFORMANCE



Source: FTSE, Bloomberg, as of 5/31/22

SMALL VS. LARGE 1-YR ROLLING RELATIVE PERFORMANCE

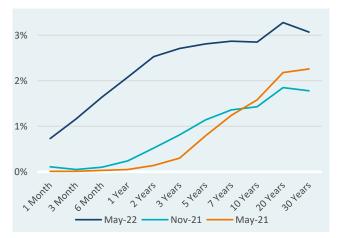




Fixed income

- Long term U.S. Treasuries (Bloomberg US Treasury Long -1.9%) were a weak spot within the U.S. fixed income space. The spread between 30- and 5-year Treasuries increased by 22 basis points to 0.3% as longer-term Treasuries sold off. The Bloomberg US Treasury Long Index has fallen -20.1% year-to-date.
- High yield spreads widened by 25 basis-points over the month to 4.2% (ICE BofA US High Yield Index OAS) as high yielding debt underperformed investment grade credit. High yield debt is typically characterized by a greater degree of default risk and sensitivity to economic conditions.
- Market expectations for the Fed Funds Rate at year end declined by 12 basis points to 2.7%, as implied by Fed Funds Futures at month end. Within the path for rate hikes, investors have fully priced in further 50 basis point rate hikes for the Fed's June and July meetings.
- On average, 30-year fixed mortgages in the U.S. had a rate of 5.2% in May, the highest measure since June of 2009. Rising mortgage rates have led to decreased refinancing activity, this coupled with the Fed's promise to unwind large amounts of mortgage-backed securities may put pressure on the space (Bloomberg US MBS +1.1%).

U.S. TREASURY YIELD CURVE



NOMINAL YIELDS



BREAKEVEN INFLATION RATES



Source: Morningstar, as of 5/31/22

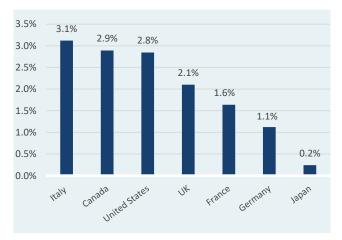
Source: Bloomberg, as of 5/31/22



Global markets

- Global equity market (MSCI ACWI +0.1%) returns were relatively flat over the month. On a regional basis developed markets (MSCI EAFE +0.7%) and emerging markets (MSCI EM +0.4%) led global equity returns.
- Within emerging markets, the MSCI EM Latin American Index posted an +8.2% return. Chile (MSCI Chile Index +18.4%) – which makes up more than 6% of the Latin American Sub-Index – was one of the countries that helped the overall emerging market sub-index higher. The country saw outsized returns within its materials and financial sectors.
- Elsewhere in the world, developed markets (MSCI EAFE +0.7%) fit a pattern consistent among all other major regions as value style stocks (MSCI EAFE Value +2.5%) outpaced growth style stocks (MSCI EAFE Growth -1.2%). Euro-area stocks (MSCI Euro +2.4%) were the top performer among developed equity markets.
- A mixed release of economic data weighed on the U.S.
 Dollar in a reversal of the Dollar's recent price movement. The WSJ Dollar Index measures the Dollar against 16 other currencies, this index peaked to multidecade highs in May before it fell -2.5% to end the month down -1.2%.

GLOBAL SOVEREIGN 10-YEAR YIELDS



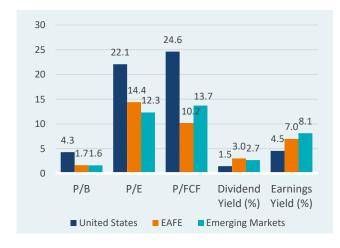
Source: Bloomberg, as of 5/31/22

U.S. DOLLAR MAJOR CURRENCY INDEX



Source: Federal Reserve, as of 5/31/22

MSCI VALUATION METRICS (3-MONTH AVG)





Commodities

- The Bloomberg Commodity Index (+1.5%) continued to move higher in a continuation of the pattern seen for the last six months, though gains were more moderate.
 Contributions to returns were focused within the energy sector where both supply and demand issues are putting upward pressure on the price of oil.
- The Bloomberg Energy Sub-Index (+10.4%) accounts for nearly 30% of the overall commodity space and continued to see significant tailwinds from sanctions related to the Russian invasion of Ukraine. European Union officials announced at the end of May that agreement had been met on a substantial partial ban of Russian oil imports.

INDEX AND SECTOR PERFORMANCE

| | Month | QTD | YTD | 1 Year | 3 Year | 5 Year | 10 Year |
|-----------------------------|-------|-------|-------|--------|--------|--------|---------|
| Bloomberg Commodity | 1.5 | 14.9 | 32.7 | 41.9 | 19.8 | 10.9 | 0.9 |
| Bloomberg Agriculture | (1.9) | 7.9 | 24.3 | 30.5 | 22.8 | 9.6 | 1.1 |
| Bloomberg Energy | 10.4 | 45.4 | 85.3 | 117.3 | 19.3 | 12.7 | (2.9) |
| Bloomberg Grains | (1.4) | 10.3 | 31.5 | 31.8 | 22.6 | 10.2 | 0.8 |
| Bloomberg Industrial Metals | (6.5) | (1.8) | 7.6 | 15.4 | 19.4 | 12.1 | 3.0 |
| Bloomberg Livestock | (1.7) | (7.3) | (3.1) | (6.0) | (7.7) | (6.9) | (4.0) |
| Bloomberg Petroleum | 10.2 | 32.2 | 70.3 | 102.6 | 23.9 | 18.0 | (0.9) |
| Bloomberg Precious Metals | (4.2) | (5.1) | (1.3) | (8.5) | 10.9 | 5.6 | (0.3) |
| Bloomberg Softs | 0.9 | 7.8 | 9.8 | 35.5 | 19.8 | 5.2 | (1.9) |

Source: Morningstar, as of 5/31/22

- The Bloomberg Industrial Metals Sub-Index fell -6.5% over the month, the Sub-Index is now down -22.4% in a continuation of the retreat from its March high. Nickel (-10.6%) and aluminum (-8.7%) led the losses across the industrial metals complex in May. This move likely reflects worries about the pace of global economic growth.
- Gold (-3.1%) and Silver (-5.4%) both saw a depreciation in price. The Fed's stated resolve to combat inflation has potentially constrained demand for precious metals as a hedge against inflation. The Bloomberg Precious Metals Sub-Index is the only broad index component, aside from Livestock, to decline year-to-date and is down -1.3%.

COMMODITY PERFORMANCE





Appendix



Periodic table of returns

Small Cap Equity

Small Cap Value

| | | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | YTD | 5-Year | 10-Year |
|---------------|--|-------|--------|--------|------|------|------|----------------------|------|-------------|--------|--------|-------|------|------|-------------|-------|------|------|-------|------|------|------|-------|--------|---------|
| Commod | dities | 31.8 | 14.0 | 25.9 | 56.3 | 26.0 | 34.5 | 32.6 | 39.8 | 5.2 | 79.0 | 29.1 | 14.3 | 18.6 | 43.3 | 13.5 | 13.3 | 31.7 | 37.3 | 6.7 | 36.4 | 38.5 | 28.3 | 32.7 | 16.1 | 16.1 |
| Real Esta | ate | 22.8 | 8.4 | 10.3 | 48.5 | 22.2 | 21.4 | 26.9 | 16.2 | 1.4 | 37.2 | 26.9 | 7.8 | 18.1 | 38.8 | 13.2 | 5.7 | 21.3 | 30.2 | 1.9 | 31.4 | 34.6 | 27.6 | 5.3 | 13.1 | 14.2 |
| Cash | 1 | 12.2 | 7.3 | 6.7 | 47.3 | 20.7 | 20.1 | 23.5 | 15.8 | -6.5 | 34.5 | 24.5 | 2.6 | 17.9 | 34.5 | 13.0 | 0.9 | 17.3 | 25.0 | 0.0 | 28.5 | 21.0 | 27.1 | 0.1 | 10.9 | 12.1 |
| Large Cap | Value | 11.6 | 3.3 | 1.6 | 46.0 | 18.3 | 14.0 | 22.2 | 11.8 | -21.4 | 32.5 | 19.2 | 1.5 | 17.5 | 33.5 | 11.8 | 0.6 | 12.1 | 22.2 | -1.5 | 26.5 | 20.0 | 26.5 | -4.5 | 9.5 | 10.8 |
| Hedge Funds | of Funds | 7.0 | 2.8 | 1.0 | 39.2 | 16.5 | 7.5 | 18.4 | 11.6 | -25.9 | 28.4 | 16.8 | 0.4 | 16.4 | 33.1 | 6.0 | 0.0 | 11.8 | 21.7 | -3.5 | 25.5 | 18.3 | 25.2 | -4.6 | 8.5 | 10.7 |
| Small Cap ' | Value | 4.1 | -2.4 | -6.0 | 29.9 | 14.3 | 6.3 | 15.5 | 10.3 | -33.8 | 23.3 | 16.1 | -2.1 | 15.3 | 23.3 | 4.9 | -0.8 | 11.2 | 14.6 | -6.0 | 22.4 | 14.0 | 17.7 | -8.2 | 7.8 | 10.6 |
| US Bon | nds | 6.0 | 2.5 | -5.9 | 30.0 | 14.5 | 7.1 | 16.6 | 10.9 | -28.9 | 27.2 | 16.7 | 0.1 | 16.3 | 32.5 | 5.6 | -0.4 | 11.3 | 17.1 | -4.8 | 22.0 | 10.3 | 14.8 | -8.9 | 7.7 | 9.6 |
| Internationa | al Equity | -3.0 | -5.6 | -11.4 | 29.7 | 12.9 | 5.3 | 15.1 | 7.0 | -35.6 | 20.6 | 15.5 | -2.9 | 14.6 | 12.1 | 4.2 | -1.4 | 8.0 | 13.7 | -8.3 | 18.6 | 7.8 | 11.3 | -11.3 | 6.9 | 7.2 |
| Emerging Mark | cets Equity | -7.3 | -9.1 | -15.5 | 25.2 | 11.4 | 4.7 | 13.3 | 7.0 | -36.8 | 19.7 | 13.1 | -4.2 | 11.5 | 11.0 | 3.4 | -2.5 | 7.1 | 7.8 | -9.3 | 18.4 | 7.5 | 8.9 | -11.8 | 5.6 | 6.4 |
| 60/40 Global | Portfolio | -7.8 | -9.2 | -15.7 | 23.9 | 9.1 | 4.6 | 10.4 | 5.8 | -37.6 | 18.9 | 10.2 | -5.5 | 10.5 | 9.0 | 2.8 | -3.8 | 5.7 | 7.7 | -11.0 | 8.7 | 4.6 | 6.5 | -12.1 | 4.2 | 4.2 |
| Large Cap I | Equity | -14.0 | -12.4 | -20.5 | 11.6 | 6.9 | 4.6 | 9.1 | 4.4 | -38.4 | 11.5 | 8.2 | -5.7 | 4.8 | 0.1 | 0.0 | -4.4 | 2.6 | 7.0 | -11.2 | 7.8 | 2.8 | 2.8 | -13.7 | 4.1 | 3.9 |
| Small Cap I | Equity | -22.4 | -19.5 | -21.7 | 9.0 | 6.3 | 4.2 | 4.8 | -0.2 | -38.5 | 5.9 | 6.5 | -11.7 | 4.2 | -2.0 | -1.8 | -7.5 | 1.0 | 3.5 | -12.9 | 7.7 | 0.5 | 0.0 | -16.6 | 3.8 | 1.7 |
| Large Cap G | Growth | -22.4 | -20.4 | -27.9 | 4.1 | 4.3 | 3.2 | 4.3 | -1.6 | -43.1 | 0.2 | 5.7 | -13.3 | 0.1 | -2.3 | -4.5 | -14.9 | 0.5 | 1.7 | -13.8 | 6.4 | 0.5 | -1.5 | -21.9 | 1.2 | 0.9 |
| Small Cap G | Growth | -30.6 | -21.2 | -30.3 | 1.0 | 1.4 | 2.4 | 2.1 | -9.8 | -53.2 | -16.9 | 0.1 | -18.2 | -1.1 | -9.5 | -17.0 | -24.7 | 0.3 | 0.9 | -14.6 | 2.1 | -3.1 | -2.5 | -24.8 | 1.0 | 0.6 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Large Cap Equity Small Cap Growth | | | | | | | | Co | Commodities | | | | | | | | | | | | | | | | |
| | | L | arge C | ap Val | lue | | | | In | terna | tional | Equity | , | | | Real Estate | | | | | | | | | | |
| | Large Cap Growth Emerging Markets Equity | | | | | | | Hedge Funds of Funds | | | | | | | | | | | | | | | | | | |

Source Data: Morningstar, Inc., Hedge Fund Research, Inc. (HFR), National Council of Real Estate Investment Fiduciaries (NCREIF). Indices used: Russell 1000, Russell 1000 Value, Russell 1000 Value, Russell 2000 Growth, MSCI EAFE, MSCI EM, Bloomberg US Aggregate, T-Bill 90 Day, Bloomberg Commodity, NCREIF Property, HFRI FOF, MSCI ACWI, Bloomberg Global Bond. NCREIF Property Index performance data as of 3/31/22.

US Bonds

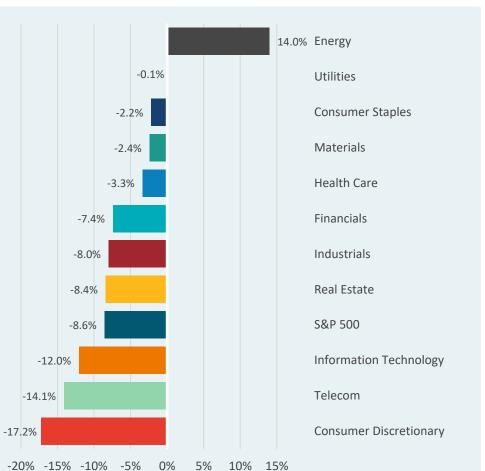
Cash



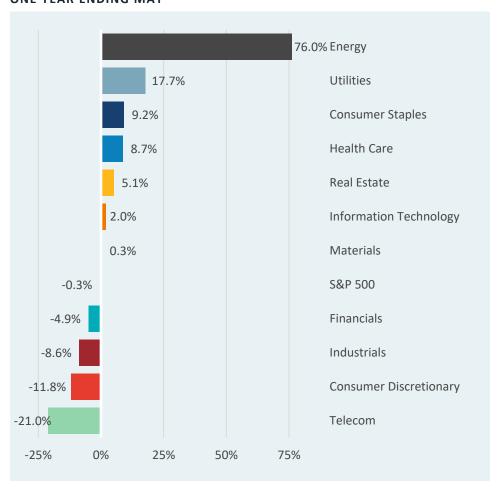
60% MSCI ACWI/40% Bloomberg Global Bond

S&P 500 sector returns

QTD



ONE YEAR ENDING MAY



Source: Morningstar, as of 5/31/22

Source: Morningstar, as of 5/31/22



Detailed index returns

| DOMESTIC EQUITY | | | | | | | | FIXED INCOME | | | | | | | |
|------------------------|-------|--------|--------|--------|--------|--------|---------|-------------------------------|-------|--------|--------|--------|--------|--------|---------|
| | Month | QTD | YTD | 1 Year | 3 Year | 5 Year | 10 Year | | Month | QTD | YTD | 1 Year | 3 Year | 5 Year | 10 Year |
| Core Index | | | | | | | | Broad Index | | | | | | | |
| S&P 500 | 0.2 | (8.6) | (12.8) | (0.3) | 16.4 | 13.4 | 14.4 | Bloomberg US TIPS | (1.0) | (3.0) | (5.9) | (1.4) | 4.4 | 3.7 | 2.0 |
| S&P 500 Equal Weighted | 1.0 | (5.5) | (8.0) | 0.2 | 16.2 | 12.3 | 14.2 | Bloomberg US Treasury Bills | 0.1 | 0.1 | 0.0 | 0.1 | 0.7 | 1.1 | 0.7 |
| DJ Industrial Average | 0.3 | (4.5) | (8.4) | (2.6) | 12.3 | 11.9 | 12.9 | Bloomberg US Agg Bond | 0.6 | (3.2) | (8.9) | (8.2) | 0.0 | 1.2 | 1.7 |
| Russell Top 200 | (0.2) | (9.5) | (14.0) | (1.2) | 17.2 | 14.1 | 14.8 | Bloomberg US Universal | 0.6 | (3.2) | (9.1) | (8.4) | 0.2 | 1.3 | 2.1 |
| Russell 1000 | (0.2) | (9.1) | (13.7) | (2.7) | 16.0 | 13.1 | 14.2 | Duration | | | | | | | |
| Russell 2000 | 0.2 | (9.8) | (16.6) | (16.9) | 9.7 | 7.7 | 10.8 | Bloomberg US Treasury 1-3 Yr | 0.6 | 0.1 | (2.4) | (3.1) | 0.6 | 1.0 | 0.8 |
| Russell 3000 | (0.1) | (9.1) | (13.9) | (3.7) | 15.6 | 12.7 | 14.0 | Bloomberg US Treasury Long | (1.9) | (10.6) | (20.1) | (14.3) | (2.0) | 0.9 | 1.6 |
| Russell Mid Cap | 0.1 | (7.6) | (12.9) | (6.8) | 12.9 | 10.5 | 12.8 | Bloomberg US Treasury | 0.2 | (2.9) | (8.3) | (7.5) | (0.3) | 0.9 | 1.1 |
| Style Index | | | | | | | | Issuer | | | | | | | |
| Russell 1000 Growth | (2.3) | (14.1) | (21.9) | (6.3) | 18.3 | 16.1 | 16.1 | Bloomberg US MBS | 1.1 | (2.4) | (7.3) | (7.6) | (0.7) | 0.6 | 1.4 |
| Russell 1000 Value | 1.9 | (3.8) | (4.5) | 0.9 | 12.8 | 9.5 | 12.1 | Bloomberg US Corp. High Yield | 0.2 | (3.3) | (8.0) | (5.3) | 3.3 | 3.6 | 5.4 |
| Russell 2000 Growth | (1.9) | (13.9) | (24.8) | (25.7) | 6.2 | 6.9 | 10.6 | Bloomberg US Agency Interm | 0.6 | (0.7) | (4.4) | (5.1) | 0.1 | 0.9 | 1.0 |
| Russell 2000 Value | 1.9 | (6.0) | (8.2) | (7.7) | 12.2 | 7.8 | 10.7 | Bloomberg US Credit | 0.9 | (4.4) | (11.5) | (10.0) | 0.6 | 1.8 | 2.8 |
| | | | | | | | | | | | | | | | |
| INTERNATIONAL EQUITY | | | | | | | | OTHER | | | | | | | |
| Broad Index | | | | | | | | Index | | | | | | | |
| MSCI ACWI | 0.1 | (7.9) | (12.8) | (6.8) | 11.7 | 9.0 | 10.3 | Bloomberg Commodity | 1.5 | 5.7 | 32.7 | 41.9 | 19.8 | 10.9 | 0.9 |
| MSCI ACWI ex US | 0.7 | (5.6) | (10.7) | (12.4) | 6.5 | 4.4 | 6.4 | Wilshire US REIT | (7.3) | (11.5) | (14.9) | 4.4 | 7.4 | 7.5 | 8.8 |
| MSCI EAFE | 0.7 | (5.8) | (11.3) | (10.4) | 6.4 | 4.2 | 7.2 | CS Leveraged Loans | (2.5) | (2.3) | (2.4) | (0.2) | 2.8 | 3.4 | 4.2 |
| MSCI EM | 0.4 | (5.1) | (11.8) | (19.8) | 5.0 | 3.8 | 4.2 | S&P Global Infrastructure | 3.7 | 0.3 | 7.8 | 12.5 | 8.2 | 6.5 | 8.7 |
| MSCI EAFE Small Cap | (0.7) | (7.5) | (15.4) | (16.0) | 6.6 | 4.1 | 8.9 | Alerian MLP | 7.7 | 7.6 | 27.9 | 28.5 | 4.7 | 1.7 | 2.6 |
| Style Index | | | | | | | | Regional Index | | | | | | | |
| MSCI EAFE Growth | (1.2) | (9.1) | (19.9) | (16.6) | 6.6 | 5.2 | 7.8 | JPM EMBI Global Div | 0.0 | (5.6) | (15.0) | (15.4) | (2.1) | 0.1 | 3.2 |
| MSCI EAFE Value | 2.5 | (2.7) | (2.4) | (4.5) | 5.6 | 2.7 | 6.2 | JPM GBI-EM Global Div | 1.8 | (4.4) | (10.5) | (16.5) | (2.6) | (1.3) | (0.5) |
| Regional Index | | | | | | | | Hedge Funds | | | | | | | |
| MSCI UK | 1.7 | (2.0) | (0.2) | 2.5 | 6.0 | 3.7 | 5.4 | HFRI Composite | (0.6) | (2.0) | (2.9) | (2.3) | 8.0 | 5.8 | 5.3 |
| MSCI Japan | 1.6 | (7.3) | (13.4) | (13.3) | 5.1 | 3.7 | 7.0 | HFRI FOF Composite | (0.6) | (1.9) | (4.6) | (2.9) | 5.2 | 4.1 | 3.9 |
| MSCI Euro | 2.4 | (5.1) | (15.7) | (15.9) | 5.5 | 2.6 | 7.5 | Currency (Spot) | | | | | | | |
| MSCI EM Asia | 0.4 | (4.7) | (13.0) | (22.0) | 7.0 | 4.7 | 6.3 | Euro | 1.5 | (3.7) | (5.8) | (12.4) | (1.3) | (1.0) | (1.4) |
| MSCI EM Latin American | 8.2 | (5.9) | 19.8 | 3.8 | 1.7 | 3.3 | 0.0 | Pound Sterling | 0.4 | (4.3) | (7.0) | (11.3) | (0.0) | (0.5) | (2.0) |
| | | | | | | | | Yen | 0.7 | (5.7) | (10.5) | (15.0) | (5.5) | (3.0) | (4.8) |
| | | | | | | | | | | | | | | | |

Source: Morningstar, HFRI, as of 5/31/22.



Detailed private market returns

Comparison to public market index returns

| Private Equity Pooled IRRs | 1 Year | 3 Year | 5 Year | 10 Year |
|--|--------|--------|--------|---------|
| Global Private Equity FoFs & Secondary Funds | 38.9 | 26.4 | 20.7 | 14.7 |
| Global Private Equity Direct Funds * | 37.9 | 29.1 | 23.6 | 17.7 |
| U.S. Private Equity Direct Funds * | 45.0 | 32.1 | 25.2 | 19.1 |
| Europe Private Equity Direct Funds * | 33.1 | 27.6 | 24.8 | 16.2 |
| Asia Private Equity Direct Funds * | 15.7 | 18.4 | 16.6 | 14.7 |
| Public Index Time-weighted Returns | | | | |
| MSCI World | 21.8 | 21.7 | 15.0 | 12.7 |
| S&P 500 | 28.7 | 26.1 | 18.5 | 16.6 |
| MSCI Europe | 16.3 | 14.9 | 10.1 | 8.2 |
| MSCI AC Asia Pacific | (1.5) | 12.1 | 9.9 | 8.0 |
| | | | | |

| Private Real Estate Pooled IRRs | 1 Year | 3 Year | 5 Year | 10 Year |
|------------------------------------|--------|--------|--------|---------|
| U.S. All Private Real Estate | 30.0 | 13.0 | 11.8 | 13.0 |
| Public Index Time-weighted Returns | | | | |
| FTSE NAREIT Equity REIT | 43.2 | 18.4 | 10.8 | 11.4 |

| Private Credit Pooled IRRs | 1 Year | 3 Year | 5 Year | 10 Year |
|--|--------|--------|--------|---------|
| U.S. All Private Debt ** | 32.4 | 16.8 | 13.9 | 12.6 |
| Public Index Time-weighted Returns | | | | |
| S&P / LSTA U.S. Leveraged Loan 100 Index | 3.5 | 5.6 | 3.9 | 4.3 |

| Private Real Assets Pooled IRRs | 1 Year | 3 Year | 5 Year | 10 Year |
|------------------------------------|--------|--------|--------|---------|
| Global Nature Resources *** | 31.3 | 1.9 | 2.5 | 2.1 |
| Global Infrastructure | 13.8 | 11.6 | 12.4 | 11.0 |
| Public Index Time-weighted Returns | | | | |
| S&P Global Natural Resources | 25.2 | 13.9 | 9.6 | 4.6 |
| S&P Global Infrastructure | 11.9 | 10.2 | 7.8 | 7.7 |

Source: Pooled IRRs are from Thompson Reuters C|A and Time-weighted Returns are from Investment Metrics, as of December 31st, 2021. All returns in U.S. dollars.

^{***} Includes Private Equity Energy, Timber and Upstream Energy & Royalties.



^{*} Includes Buyout, Growth Equity and Venture Capital.

^{**} Includes Control-Oriented Distressed, Credit Opportunities, Senior Debt and Subordinated Capital.

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