

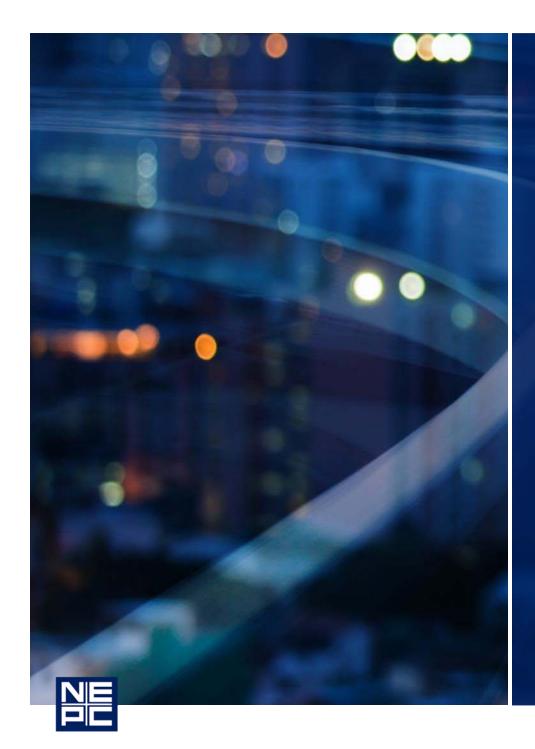


**INVESTMENT PERFORMANCE ANALYSIS FOR PERIOD ENDING JUNE 30, 2022** NEW MEXICO EDUCATIONAL RETIREMENT BOARD

### AUGUST 26, 2022

Allan Martin, Partner Sam Austin, Partner Michael Miranda, CFA, Senior Consulting Specialist

PROPRIETARY & CONFIDENTIAL



# MARKET ENVIRONMENT

# **ECONOMIC ENVIRONMENT**

### • Q2 Real GDP (advance estimate) decreased at an annual rate of -0.9%.

- Retail sales ended May at +6.9% on a YoY basis. In the same period last year the YoY growth rate was +24.5%.
- Corporate profits as a percent of GDP ended January 2022 at 11.2%, up from 10.7% in the same period last year and remain elevated relative to historical levels.
- The inventory-to-sales ratio ended May was 1.3. Levels have remained relatively constant since early 2010 with a spike to 1.7 in April 2020.
- The U.S. trade deficit narrowed in Q2, but remains elevated.
- The unemployment rate was 3.6% in Q2, flat when compared to Q1; U-6, a broader measure of unemployment, decreased to 6.7% in Q2 from 6.9% in Q1.
  - The labor force participation rate ended Q2 at 62.2% down from 62.4% Q1 after declining to 60.2% in April 2020 and is at levels below the 10 year pre-pandemic average of 63.0%.
- The Case-Shiller Home Price Index (ended May) increased to 305.98 up from 294.72 (in March) and remains at levels higher than that of pre-financial crisis levels of 150.9.
- Rolling 12-month seasonally-adjusted CPI ended Q2 at 9.10% up from 8.67% in Q1. In the same period last year, it was 5.44%; Capacity Utilization increased to 80% in Q2 up from 78.3% in Q1.
- Fed Funds rate was increased by 1.25% to a targeted range of 1.50%-to-1.75% up from 0.25%-to-0.50%. The 10-year Treasury Yield (constant maturity) finished Q2 at 3.1% up from 2.1% in Q1.
  - At its meeting on July 26 July 27, 2022 the Fed increased the Fed Funds rate 0.75% to a targeted rate of 2.25%-to-2.50%
- The Fed continues scaling back asset purchases. The Fed's balance sheet is beginning to shrink after a period of rapid growth post-pandemic.
- S&P valuations decreased in Q2 to 29.3 from 34.3 in Q1 and remain higher than the 10-year average of 28.6x.
  - Cyclically adjusted Shiller PE ratio remains above the long-term average of 16.95x.



# **MARKET ENVIRONMENT**

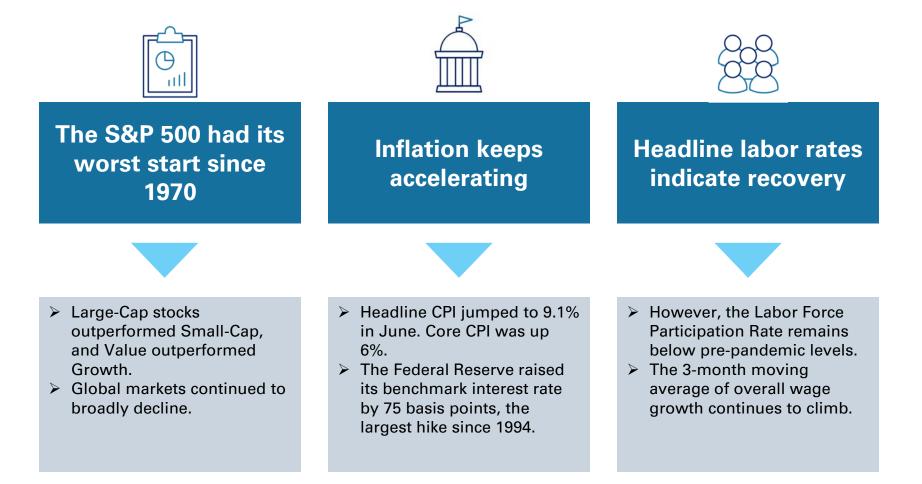
## **Q2 2022 OVERVIEW**

|                                    |                                  | Qtr.    | 1 Yr.   | 3 Yr.  | 5 Yr.  | 10 Yr. |                                    |                |               |            |     | _   |
|------------------------------------|----------------------------------|---------|---------|--------|--------|--------|------------------------------------|----------------|---------------|------------|-----|-----|
| World Equity Benchmarks            |                                  |         |         |        |        |        |                                    | · · · · ·      | _             |            |     | -   |
| MSCI ACWI IMI (Net)                | World with Small Cap             | -15.83% | -16.52% | 5.98%  | 6.70%  | 8.71%  | MSCI ACWI IMI (Net)                |                | <b></b>       |            |     |     |
| MSCI ACWI Net (USD)                | World W/O Small Cap              | -15.66% | -15.75% | 6.21%  | 7.00%  | 8.76%  | MSCI ACWI Net (USD)                |                |               |            |     |     |
| MSCI ACWI (Local)                  | World (Local Currency)           | -13.64% | -12.27% | 7.41%  | 7.68%  | 10.05% | MSCI ACWI (Local)                  |                | <b></b>       |            |     |     |
| Domestic Equity Benchmarks         |                                  |         |         |        |        |        | Russell 3000                       |                |               |            |     |     |
| Russell 3000                       | Domestic All Cap                 | -16.70% | -13.87% | 9.77%  | 10.60% | 12.57% | S&P 500                            |                |               |            |     |     |
| S&P 500                            | Large Core                       | -16.10% | -10.62% | 10.60% | 11.31% | 12.96% | Russell 1000                       |                |               |            |     |     |
| Russell 1000                       | Large Core                       | -16.67% | -13.04% | 10.17% | 11.00% | 12.82% | Russell 1000 Growth                |                |               |            |     |     |
| Russell 1000 Growth                | Large Growth                     | -20.92% | -18.77% | 12.58% | 14.29% | 14.80% | Russell 1000 Value                 |                |               |            |     |     |
| Russell 1000 Value                 | Large Value                      | -12.21% | -6.82%  | 6.87%  | 7.17%  | 10.50% | Russell 2000                       |                | :             |            |     |     |
| Russell 2000                       | Small Core                       | -17.20% | -25.20% | 4.21%  | 5.17%  | 9.35%  | Russell 2000 Growth                |                |               |            |     |     |
| Russell 2000 Growth                | Small Growth                     | -19.25% | -33.43% | 1.40%  | 4.80%  | 9.30%  | Russell 2000 Value                 |                |               |            |     |     |
| Russell 2000 Value                 | Small Value                      | -15.28% | -16.28% | 6.18%  | 4.89%  | 9.05%  |                                    |                | · · · ·       |            |     |     |
| NASDAQ Composite                   | Large Growth                     | -22.28% | -23.43% | 12.18% | 13.47% | 15.40% | NASDAQ Composite                   |                |               |            |     |     |
| NASDAQ Biotechnology               | Biotech                          | -9.78%  | -26.57% | 3.73%  | 3.56%  | 11.22% | NASDAQ Biotechnology               |                |               |            |     |     |
| International Equity Benchmarks    |                                  |         |         |        |        |        | MSCI ACWI Ex USA                   |                |               |            |     |     |
| MSCI ACWI Ex USA                   | World ex-US                      | -13.73% | -19.42% | 1.35%  | 2.50%  | 4.83%  | MSCI EAFE Net (USD)                |                |               |            |     |     |
| MSCI EAFE Net (USD)                | Int'l Developed                  | -14.51% | -17.77% | 1.07%  | 2.20%  | 5.40%  | MSCI EAFE (Local)                  |                |               |            |     |     |
| MSCI EAFE (Local)                  | Int'l Developed (Local Currency) | -7.83%  | -6.59%  | 4.37%  | 4.27%  | 8.33%  | MSCI EAFE Small Cap                |                |               |            |     |     |
| MSCI EAFE Small Cap                | Small Cap Int'l                  | -17.69% | -23.98% | 1.12%  | 1.72%  | 7.18%  | MSCI Emerging Markets              |                |               |            |     |     |
| MSCI Emerging Markets              | Emerging Equity                  | -11.45% | -25.29% | 0.57%  | 2.18%  | 3.06%  | Bloomberg Aggregate                |                |               |            |     |     |
| Domestic Fixed Income Benchmarks   |                                  |         |         |        |        |        | Barclays US High Yield             |                |               |            |     |     |
| Bloomberg Aggregate                | Core Bonds                       | -4.69%  | -10.29% | -0.93% | 0.88%  | 1.54%  | CSFB Levered Loans                 |                |               |            |     |     |
| Barclays US High Yield             | High Yield                       | -9.83%  | -12.82% | 0.21%  | 2.10%  | 4.47%  | BofA ML US 3-Month T-Bill          |                |               |            |     |     |
| CSFB Levered Loans                 | Bank Loans                       | -4.35%  | -2.68%  | 2.03%  | 2.97%  | 3.90%  | Bloomberg US TIPS 1-10 Yr          |                |               | 📕 🔳 Quarte | r   |     |
| BofA ML US 3-Month T-Bill          | Cash                             | 0.11%   | 0.17%   | 0.63%  | 1.11%  | 0.64%  | Barclays Global Aggregate          |                |               | ∎ 1 Yr     |     |     |
| Bloomberg US TIPS 1-10 Yr          | Inflation                        | -3.42%  | -2.03%  | 3.37%  | 3.24%  | 1.75%  | ,                                  |                |               |            |     |     |
| Global Fixed Income Benchmarks     |                                  |         |         |        |        |        | FTSE WGBI                          |                |               |            |     |     |
| Barclays Global Aggregate          | Global Core Bonds                | -8.26%  | -15.25% | -3.22% | -0.56% | 0.11%  | BC Global Credit                   |                |               |            |     |     |
| FTSE WGBI                          | World Gov. Bonds                 | -8.91%  | -16.77% | -4.28% | -1.17% | -0.69% | JPM GBI-EM Glob. Diversified       |                |               |            |     |     |
| BC Global Credit                   | Global Bonds                     | -8.58%  | -16.68% | -2.60% | -0.01% | 1.41%  | JPM EMBI+                          |                |               |            |     |     |
| JPM GBI-EM Glob. Diversified       | Em. Mkt. Bonds (Local Currency)  | -8.63%  | -19.28% | -5.80% | -2.31% | -1.49% | Bloomberg Commodity Index          |                |               |            |     |     |
| JPM EMBI+                          | Em. Mkt. Bonds                   | -12.46% | -27.71% | -8.66% | -4.02% | 0.37%  | HFRI Fund of Funds Composite Index |                |               |            |     |     |
| Alternative Benchmarks             |                                  |         |         |        |        |        | Cambridge PE Lagged*               |                |               |            |     |     |
| Bloomberg Commodity Index          | Commodities                      | -5.66%  | 24.27%  | 14.34% | 8.40%  | -0.82% | NCREIF ODCE Net Lagged*            |                |               |            |     |     |
| HFRI Fund of Funds Composite Index | Fund of Hedge Funds              | -3.88%  | -5.45%  | 3.96%  | 3.63%  | 3.75%  | FTSE NAREIT All Equity REITs       |                |               |            | _   |     |
| Cambridge PE Lagged*               | Private Equity                   | 0.76%   | 27.34%  | 22.67% | 19.33% | 15.93% | CPI + 2%                           |                |               |            |     |     |
| NCREIF ODCE Net Lagged*            | Real Estate                      | 7.14%   | 27.26%  | 10.31% | 8.90%  | 9.92%  |                                    | 10% -30% -20   | ;<br>% -10% 0 | ÷ 10% 20%  | 20% | 40% |
| FTSE NAREIT All Equity REITs       | REIT                             | -14.66% | -5.89%  | 5.34%  | 6.75%  | 8.34%  |                                    | +070 -3076 -20 | -10% 0        | 70 10% 20% | 30% | 40% |
| CPI + 2%                           | Inflation/Real Assets            | 3.15%   | 11.16%  | 7.06%  | 5.95%  | 4.64%  |                                    |                |               |            |     |     |



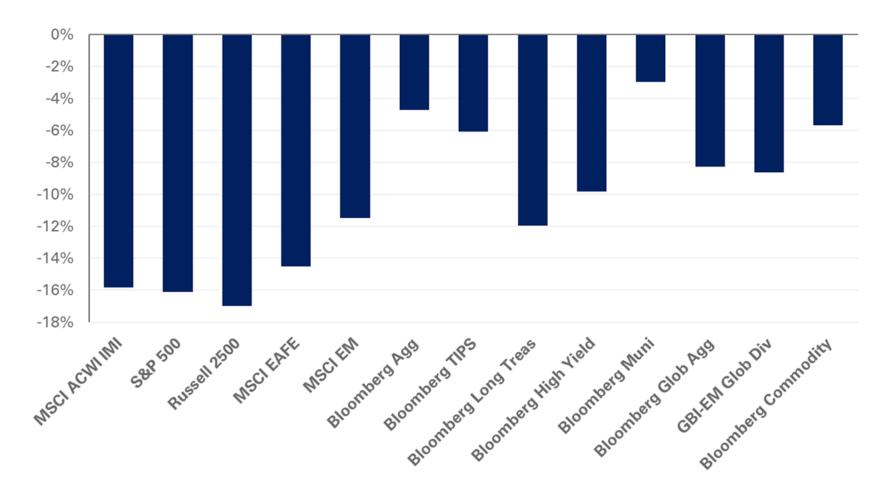
\* As of 3/31/2022

## **ECONOMIC ENVIRONMENT**





## **GLOBAL MARKETS BROADLY DECLINED** QUARTERLY TOTAL RETURNS

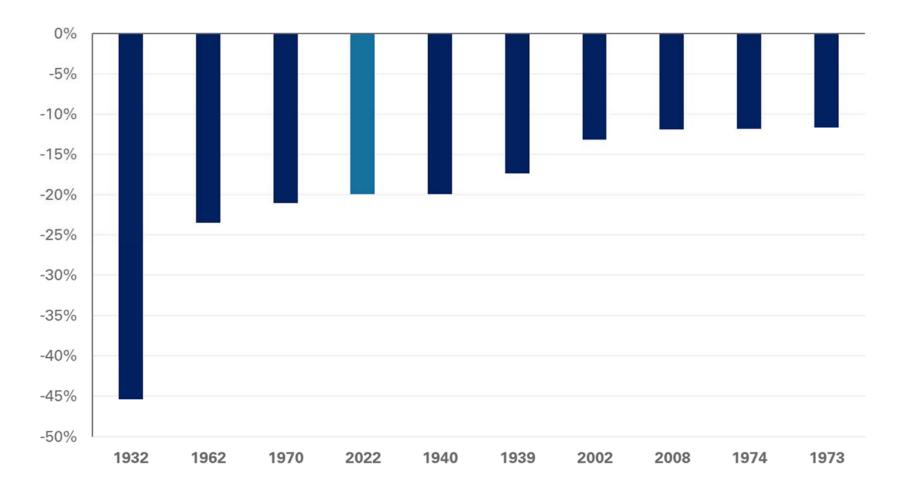




Source: MSCI, S&P, Russell, MSCI, Bloomberg, JPM, FactSet

# WORST START FOR THE S&P IN OVER 50 YEARS

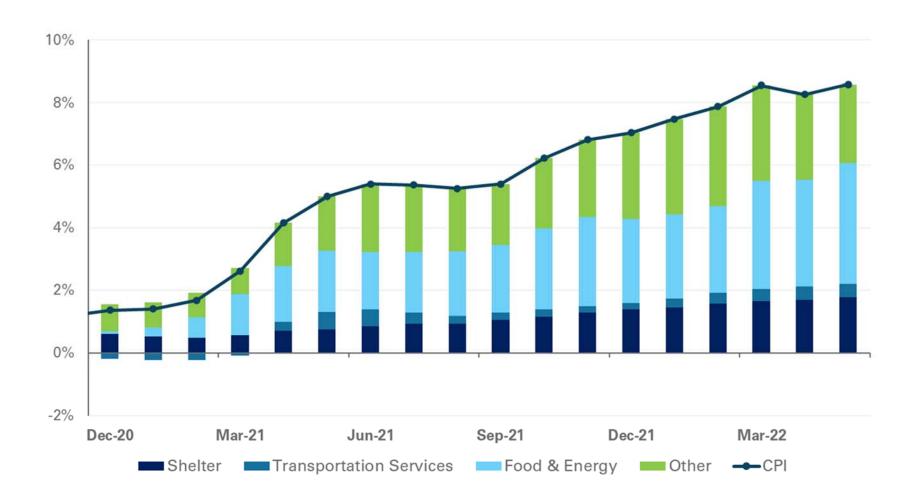
TOP 10 S&P 500 LOSSES IN FIRST HALF OF THE YEAR





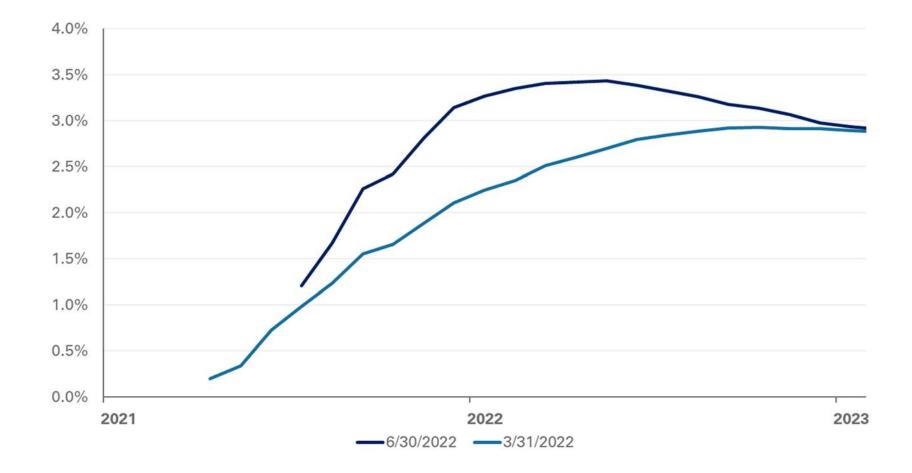
Source: S&P, FactSet

## **INFLATION CONTINUED TO TREND HIGHER** ANNUAL U.S. CPI-U CHANGES





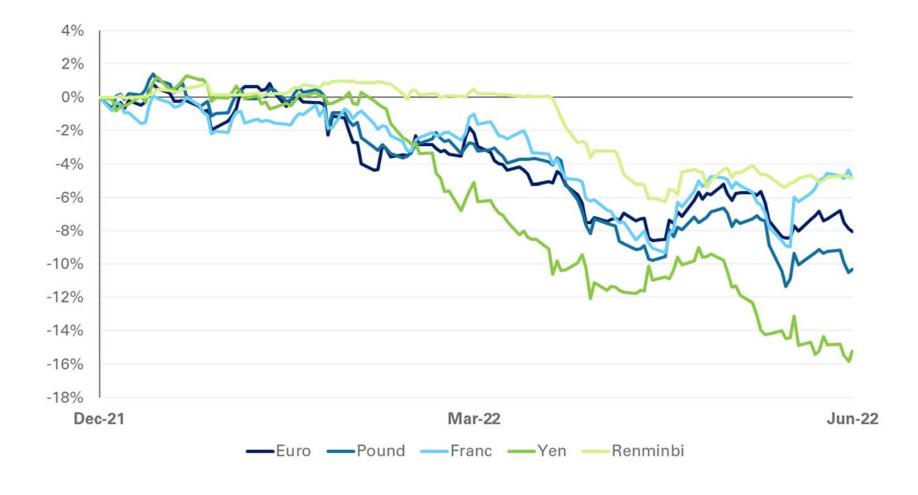
## **RATE HIKE EXPECTATIONS INCREASED** FEDERAL FUNDS FUTURES





Source: FactSet

## **DOLLAR STRENGTH WEIGHED ON NON-US ASSETS** CUMULATIVE CURRENCY RETURN





Source: FactSet

## THIRD PARTY PLACEMENT AGENT DISCLOSURE

The New Mexico Educational Retirement Board Policy Regarding Placement Agent Disclosures requires that quarterly performance reports to the Board include information regarding any third-party marketers that were used by recipients of investments including any fee, commission or retainer paid by the hired fund to the third-party marketer for services rendered. These fees are not paid by NMERB but are paid by the hired funds for marketing services to the third-party.

The following investments were approved by the NMERB Investment Committee during the quarter, with disclosures made under the policy:

#### Sares Regis IV Top Up

The investment was approved for a \$60 million commitment on April 14, 2022 as part of the Fund's allocation to Real Estate.

Sares Regis has provided documentation confirming no placement agent was used in connection with NMERB's investment.

Additionally, Sares Regis has completed the ERB Campaign Contribution Disclosure and reports no applicable campaign contributions.

#### RAM Realty Partners VI Top Up

The investment was approved for a \$50 million commitment on April 14, 2022 as part of the Fund's allocation to Real Estate.

RAM Realty has provided documentation confirming no placement agent was used in connection with NMERB's investment.

Additionally, RAM has completed the ERB Campaign Contribution Disclosure and reports no applicable campaign contributions.

#### **Real Term Logistics Fund IV Top Up**

The investment was approved for a \$10 million commitment on April 14, 2022 as part of the Fund's allocation to Real Estate.

Real Term has provided documentation confirming no placement agent was used in connection with NMERB's investment.

Additionally, Real Term has completed the ERB Campaign Contribution Disclosure and reports no applicable campaign contributions.

#### **Real Term European Logistics**

The investment was approved for a €50 million commitment on April 14, 2022 as part of the Fund's allocation to Real Estate.

Real Term has provided documentation confirming no placement agent was used in connection with NMERB's investment.

Additionally, Real Term has completed the ERB Campaign Contribution Disclosure and reports no applicable campaign contributions.



## THIRD PARTY PLACEMENT AGENT DISCLOSURE

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The following investments were approved by the NMERB Investment Committee during the quarter, with disclosures made under the policy:

#### Nova Infrastructure Fund I

The investment was approved for a \$50 million commitment on May 19, 2022 as part of the Fund's allocation to Infrastructure.

Nova has provided documentation confirming no placement agent was used in connection with NMERB's investment.

Additionally, Nova has completed the ERB Campaign Contribution Disclosure and reports no applicable campaign contributions.

#### Lyric Capital Royalty Fund II

The investment was approved for a \$100 million commitment on May 19, 2022 as part of the Fund's allocation to Private Equity.

Lyric Capital has provided documentation confirming Eaton Partners was engaged as a placement agent in connection with NMERB's investment but will not be paid placement fees by NMERB.

Additionally, Lyric Capital has completed the ERB Campaign Contribution Disclosure and reports no applicable campaign contributions.

#### Crow Holdings Realty Partners X

The investment was approved for a \$50 million commitment on May 19, 2022 as part of the Fund's allocation to Real Estate.

Crow has provided documentation confirming no placement agent was used in connection with NMERB's investment.

Additionally, Crow has completed the ERB Campaign Contribution Disclosure and reports no applicable campaign contributions.

#### **Bessemer Forge Institution Fund I**

The investment was approved for a \$40 million commitment on June 16, 2022 as part of the Fund's allocation to Private Equity.

Bessemer Forge has provided documentation confirming no placement agent was used in connection with NMERB's investment.

Additionally, Bessemer Forge has completed the ERB Campaign Contribution Disclosure and reports no applicable campaign contributions.



# THIRD PARTY PLACEMENT AGENT DISCLOSURE

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The following investments were approved by the NMERB Investment Committee during the quarter, with disclosures made under the policy:

#### **Orchard Platform SMA**

The investment was approved for a \$100 million commitment on June 16, 2022 as part of the Fund's allocation to Other Diversifying Assets.

Orchard has provided documentation confirming no placement agent was used in connection with NMERB's investment.

Additionally, Orchard has completed the ERB Campaign Contribution Disclosure and reports no applicable campaign contributions.

#### **Raith NMERB Core Plus Real Estate Tranche III**

The investment was approved for a \$100 million commitment on March 17, 2022 as part of the Fund's allocation to Real Estate.

Raith has provided documentation confirming no placement agent was used in connection with NMERB's investment.

Additionally, Raith has completed the ERB Campaign Contribution Disclosure and reports no applicable campaign contributions.



### New Mexico Educational Retirement Board-Top Plan TOTAL FUND PERFORMANCE SUMMARY (NET)

|   | Market<br>Value (\$) | 3 Mo<br>(%) | FYTD<br>(%) | 1 Yr<br>(%) | 3 Yrs<br>(%) | 5 Yrs<br>(%) | 10 Yrs<br>(%) | 15 Yrs<br>(%) | 20 Yrs<br>(%) | 1/1/199<br>6/30/20 |     | Inception<br>(%) | Inception<br>Date |
|---|----------------------|-------------|-------------|-------------|--------------|--------------|---------------|---------------|---------------|--------------------|-----|------------------|-------------------|
| Total Fund                                | 15,511,202,665       | -4.7 (7)    | 1.0 (3)     | 1.0 (3)     | 8.8 (7)      | 8.4 (7)      | 8.5 (9)       | 6.3 (16)      | 7.5 (13)      | 8.1 (              | 12) | 9.0 (13)         | Jul-83            |
| Policy Index                              |                      | -6.0 (12)   | -2.8 (15)   | -2.8 (15)   | 7.2 (21)     | 7.5 (22)     | 7.7 (48)      | 5.5 (53)      | 7.0 (40)      | 7.2 (              | 54) |                  |                   |
| Blmbg. U.S. Aggregate Index               |                      | -4.7 (4)    | -10.3 (75)  | -10.3 (75)  | -0.9 (100)   | 0.9 (100)    | 1.5 (100)     | 3.3 (100)     | 3.6 (100)     | 4.8 (              | 97) | 6.4 (63)         |                   |
| InvMetrics Public DB > \$1 Billion Median |                      | -8.6        | -7.5        | -7.5        | 6.3          | 6.8          | 7.6           | 5.6           | 6.8           | 7.3                |     | 7.8              |                   |

|                             | 3 Yea      | rs Ending June 30, 2022 |                 |                  |
|-----------------------------|------------|-------------------------|-----------------|------------------|
|                             | Return     | Standard<br>Deviation   | Sharpe<br>Ratio | Sortino<br>Ratio |
| Total Fund                  | 8.8 (7)    | 7.4 (2)                 | 1.1 (3)         | 1.7 (3)          |
| Policy Index                | 7.2 (21)   | 7.8 (3)                 | 0.8 (13)        | 1.3 (13)         |
| Blmbg. U.S. Aggregate Index | -0.9 (100) | 4.5 (1)                 | -0.3 (100)      | -0.4 (100)       |

|                             | 5 Yea     | ars Ending June 30, 2022 |                 |                  |
|-----------------------------|-----------|--------------------------|-----------------|------------------|
|                             | Return    | Standard<br>Deviation    | Sharpe<br>Ratio | Sortino<br>Ratio |
| Total Fund                  | 8.4 (7)   | 6.5 (2)                  | 1.1 (3)         | 1.7 (3)          |
| Policy Index                | 7.5 (22)  | 6.9 (4)                  | 0.9 (8)         | 1.4 (9)          |
| Blmbg. U.S. Aggregate Index | 0.9 (100) | 4.0 (1)                  | 0.0 (100)       | -0.1 (100)       |

Over the past five years, the Fund returned 8.5% per annum, outperforming the policy index by 0.8% and ranking in the 7<sup>th</sup> percentile of the Investment Metrics Public Funds > \$1 Billion universe and outperforming the actuarial assumed rate of 7.00%. The Fund's volatility was 6.5%, which ranks in the 2<sup>nd</sup> percentile of its peers over this period. The Fund's risk-adjusted performance, as measured by the Sharpe Ratio, ranks in the 3<sup>rd</sup> percentile of its peers.

Over the past three years, the Fund returned 8.8% per annum, outperforming the policy index by 1.6% and ranking in the 7<sup>th</sup> percentile of its peer group. Over the same period, the Fund's volatility ranks in the 2<sup>nd</sup> percentile of its peers, resulting in a three-year Sharpe Ratio of 1.1, which ranks in the 3<sup>rd</sup> percentile.

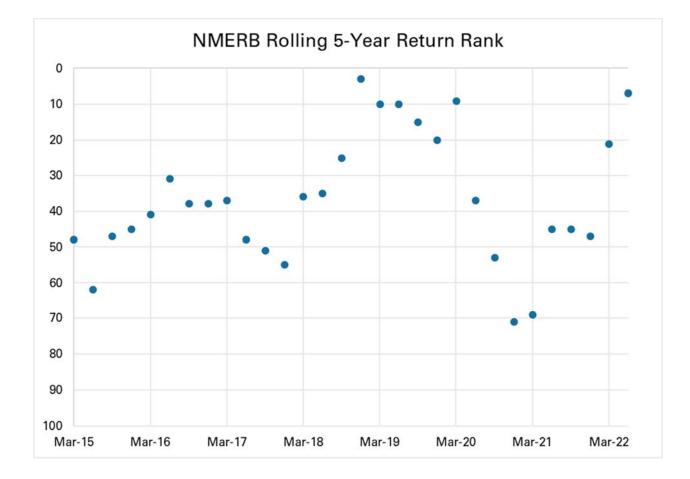
For the year ending June 30, 2022, the Fund experienced a net investment gain of \$183.9 million, which includes a net investment loss of \$772.9 million during the quarter. Assets decreased from \$15.8 billion twelve months ago, to \$15.5 billion on June 30, 2022, with \$514.5 million in net distributions during the year. The Fund returned 1.0%, outperforming the policy index by 3.8% and ranking in the 3<sup>rd</sup> percentile of its peers.

The InvMetrics Public Funds >\$1 Billion Net Universe contains 75 observations for the period ending December 31, 2022.



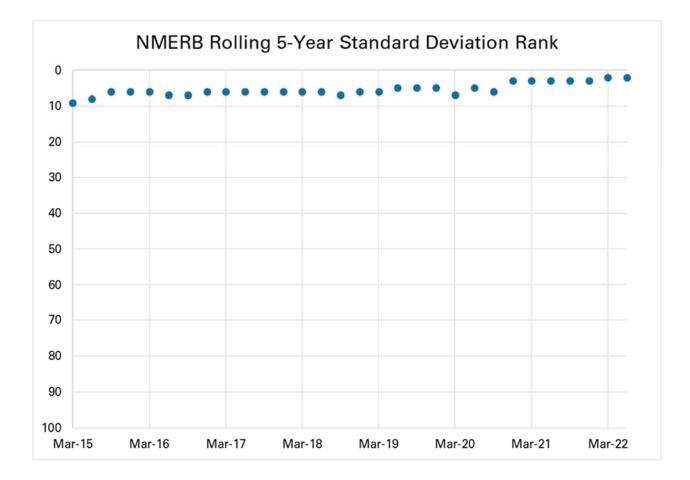
June 30, 2022

## NMERB ROLLING RETURN PEER RANKINGS



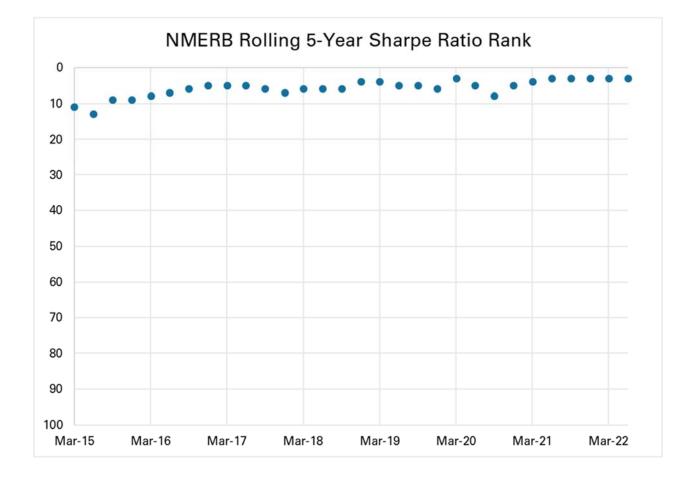


## NMERB ROLLING STANDARD DEVIATION RANKINGS





## **NMERB ROLLING SHARPE RATIO RANKINGS**





## NEW MEXICO EDUCATIONAL RETIREMENT BOARD POLICY INDEX HISTORY

- 4/1/2012 6/30/2012: 23% S&P 500 Index, 2% Russell 2500 Index, 5% MSCI EAFE Index, 10% MSCI Emerging Markets Index, 18% Barclays Aggregate, 15% Bank of America Merrill Lynch US High BB-B Constrained Index, 2% JP Morgan GBI EM Global Diversified Index, 5% (60% MSCI World HH / 40% CITI WGBI HH), 8% (90 Day T-Bill + 2%), 3% Wilshire REIT, 2% NCREIF Property Index, 5% Cambridge Associates US All PE 1 Quarter Lag, 1% (CPI + 4% Seasonally Adjusted), 1% 90 Day T-Bill.
- 7/1/2012 6/30/2013: 23% S&P 500 Index, 2% Russell 2500 Index, 5% MSCI EAFE Index, 10% MSCI Emerging Markets Index, 18% Barclays Aggregate Index, 15% (50% Credit Suisse Leveraged Loan Index / 50% Bank of America Merrill Lynch US HY BB-B Rated Constrained Index), 2% JP Morgan GBI – EM Global Diversified Index, 5% (60% MSCI World HH / 40% CITI WGBI HH), 3% Wilshire REIT, 2% NCREIF Property Index, 8% (91 Day T-Bill + 2% 1 month lag), 5% Cambridge Associates All US PE 1 Quarter Lag, 1% (CPI + 4% Seasonally Adjusted), 1% 91 Day T-Bill.
- 7/1/2013 6/30/2014: 20% S&P 500 Index, 2% Russell 2500 Index, 5% MSCI EAFE Index, 10% MSCI Emerging Markets Index, 7% Barclays Aggregate Index, 20% (50% Credit Suisse Leveraged Loan Index / 50% Bank of America Merrill Lynch US HY BB-B Rated Constrained Index), 2% JP Morgan GBI EM Global Diversified Index, 5% (60% MSCI World HH / 40% CITI WGBI HH), 5% Credit Suisse Hedge Global Macro Index, 3% Wilshire REIT Index, 2% NCREIF Property Index, 3% (91 Day T-Bill + 2% 1 Month Lag), 8% Cambridge Associates US All PE 1 Quarter Lag, 7% (CPI + 4% Seasonally Adjusted), 1% 91 Day T-Bill.
- 7/1/2014 9/30/2014: 20% S&P 500 Index, 2% Russell 2500 Index, 5% MSCI EAFE Index, 10% MSCI Emerging Markets Index, 7% Barclays Aggregate Index, 20% (50% Credit Suisse Leveraged Loan Index / 50% Bank of America Merrill Lynch US HY BB-B Rated Constrained Index), 2% JP Morgan GBI EM Global Diversified Index, 5% (60% MSCI World / 40% CITI WGBI), 5% Credit Suisse Hedge Global Macro Index, 3% Wilshire REIT Index, 2% NCREIF Property Index, 3% (91 Day T-Bill + 2% 1 Month Lag), 8% Cambridge Associates US All PE 1 Quarter Lag, 7% (CPI + 4% Seasonally Adjusted), 1% 91 Day T-Bill.



## NEW MEXICO EDUCATIONAL RETIREMENT BOARD POLICY INDEX HISTORY

- 10/1/2014 1/31/2016: 18% S&P 500 Index, 2% Russell 2500 Index, 5% MSCI EAFE Index, 10% MSCI Emerging Markets Index, 6% Barclays Aggregate Index, 20% (50% Credit Suisse Leveraged Loan Index / 50% Bank of America Merrill Lynch US HY BB-B Rated Constrained Index), 2% JP Morgan GBI – EM Global Diversified Index, 5% (60% MSCI World / 40% CITI WGBI), 5% Credit Suisse Hedge Global Macro Index, 4% Wilshire REIT Index, 3% NCREIF Property Index, 11% Cambridge Associates US All PE 1 Quarter Lag, 8% (CPI + 4% Seasonally Adjusted), 1% 91 Day T-Bill.
- 2/1/2016 12/31/2016: 18% S&P 500 Index, 2% Russell 2500 Index, 5% MSCI EAFE Index, 10% MSCI Emerging Markets Index, 6% Barclays Aggregate Index, 20% (50% Credit Suisse Leveraged Loan Index / 50% Bank of America Merrill Lynch US HY BB-B Rated Constrained Index), 2% (50% JP Morgan EMBI Global Diversified Index / 50% JP Morgan GBI – EM Global Diversified Index), 5% (60% MSCI World / 40% CITI WGBI), 5% Credit Suisse Hedge Global Macro Index, 4% Wilshire REIT Index, 3% NCREIF Property Index, 11% Cambridge Associates US All PE 1 Quarter Lag, 8% (CPI + 4% Seasonally Adjusted), 1% 91 Day T-Bill.
- 1/1/2017 9/30/2017: 18% S&P 500 Index, 2% Russell 2500 Index, 5% MSCI EAFE Index, 10% MSCI Emerging Markets Index, 6% Barclays Aggregate Index, 20% (50% Credit Suisse Leveraged Loan Index / 50% Bank of America Merrill Lynch US HY BB-B Rated Constrained Index), 2% (50% JP Morgan EMBI Global Diversified Index / 50% JP Morgan GBI EM Global Diversified Index), 5% (60% MSCI World / 40% CITI WGBI), 5% Credit Suisse Hedge Global Macro Index, 3% Wilshire REIT Index, 4% NCREIF Property Index, 11% Cambridge Associates US All PE 1 Quarter Lag, 8% (CPI + 4% Seasonally Adjusted), 1% 91 Day T-Bill.
- 10/1/2017 12/31/2017: 16% S&P 500 Index, 3% Russell 2500 Index, 5% MSCI EAFE Index, 9% MSCI Emerging Markets Index, 6% Barclays Aggregate Index, 18% (50% Credit Suisse Leveraged Loan Index / 50% Bank of America Merrill Lynch US HY BB-B Rated Constrained Index), 2% JP Morgan GBI – EM Global Diversified Index, 7% (60% MSCI World / 40% CITI WGBI), 5% Libor + 2%, 3% Wilshire REIT Index, 4% NCREIF Property Index, 13% Cambridge Associates US All PE 1 Quarter Lag, 8% (CPI + 4% Seasonally Adjusted), 1% 91 Day T-Bill.



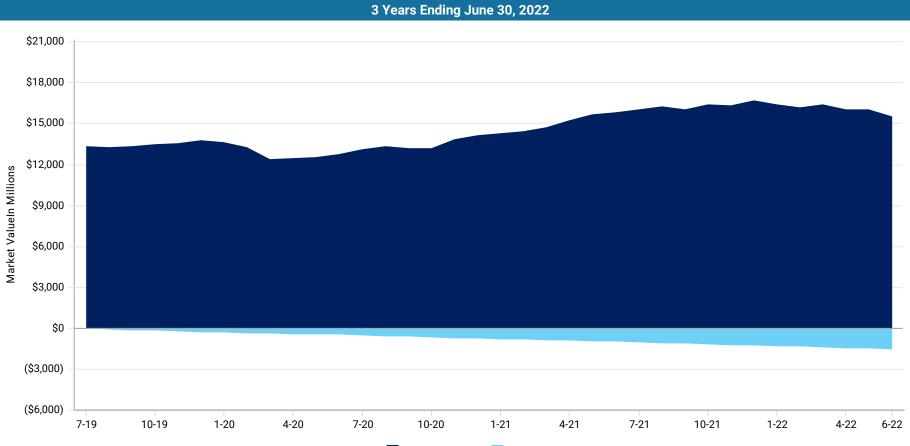
## NEW MEXICO EDUCATIONAL RETIREMENT BOARD POLICY INDEX HISTORY

- 1/1/2018 6/30/2019: 16% S&P 500 Index, 3% Russell 2500 Index, 5% MSCI EAFE Index, 9% MSCI Emerging Markets Index, 6% Barclays Aggregate Index, 18% (50% Credit Suisse Leveraged Loan Index / 50% Bank of America Merrill Lynch US HY BB-B Rated Constrained Index), 2% JP Morgan GBI – EM Global Diversified Index, 12% Libor + 2%, 3% Wilshire REIT Index, 4% NCREIF Property Index, 13% Cambridge Associates US All PE 1 Quarter Lag, 8% (CPI + 4% Seasonally Adjusted), 1% 91 Day T-Bill.
- 7/1/2019 9/30/2020: 16% S&P 500 Index, 3% Russell 2500 Index, 5% MSCI EAFE Index, 9% MSCI Emerging Markets Index, 6% Barclays Aggregate Index, 18% (50% Credit Suisse Leveraged Loan Index / 50% Bank of America Merrill Lynch US HY BB-B Rated Constrained Index), 2% JP Morgan GBI – EM Global Diversified Index, 12% Libor + 2%, 2% Wilshire REIT Index, 5% NCREIF Property Index, 13% Cambridge Associates US All PE 1 Quarter Lag, 8% (CPI + 4% Seasonally Adjusted), 1% 91 Day T-Bill.
- 10/1/2020 9/30/2021: 14% S&P 500 Index, 3% Russell 2500 Index, 5% MSCI EAFE Index, 9% MSCI Emerging Markets Index, 6% Barclays Aggregate Index, 16% (50% Credit Suisse Leveraged Loan Index / 50% Bank of America Merrill Lynch US HY BB-B Rated Constrained Index), 2% JP Morgan GBI EM Global Diversified Index, 12% Libor + 2%, 2% Wilshire REIT Index, 6% NCREIF Property Index, 15% ILPA All Private Markets 1 Quarter Lag, 9% (CPI + 4% Seasonally Adjusted), 1% 91 Day T-Bill.

**10/1/2021** – **Present:** 14% S&P 500 Index, 3% Russell 2500 Index, 5% MSCI EAFE Index, 9% MSCI Emerging Markets Index, 6% Barclays Aggregate Index, 16% (50% Credit Suisse Leveraged Loan Index / 50% Bank of America Merrill Lynch US HY BB-B Rated Constrained Index), 2% JP Morgan GBI – EM Global Diversified Index, 12% Libor + 2%, 2% Wilshire REIT Index, 6% NCREIF Property Index, 15% State Street Private Equity Index All PE 1 Quarter Lag, 9% (CPI + 4% Seasonally Adjusted), 1% 91 Day T-Bill.



# New Mexico Educational Retirement Board-Top Plan **ASSET GROWTH SUMMARY**



Market Value 📃 Net Cash Flow

|                        | Last Three<br>Months | 1 Year         | 3 Years        | 5 Years        | Since<br>10/1/05 |
|------------------------|----------------------|----------------|----------------|----------------|------------------|
| Beginning Market Value | 16,390,783,381       | 15,840,166,309 | 13,329,141,720 | 12,333,534,379 | 7,694,652,368    |
| Net Cash Flow          | -106,638,904         | -514,474,813   | -1,497,697,300 | -2,416,198,865 | -5,143,886,641   |
| Net Investment Change  | -772,941,812         | 183,865,929    | 3,678,113,005  | 5,592,221,911  | 13,840,739,159   |
| Ending Market Value    | 15,511,202,665       | 15,511,202,665 | 15,511,202,665 | 15,511,202,665 | 16,390,783,381   |
| Net Change             | -879,580,716         | -328,963,644   | 2,182,060,946  | 3,177,668,286  | 8,696,131,013    |



June 30, 2022

June 30, 2022

## **TOTAL FUND ASSET ALLOCATION VS. POLICY**

Curront

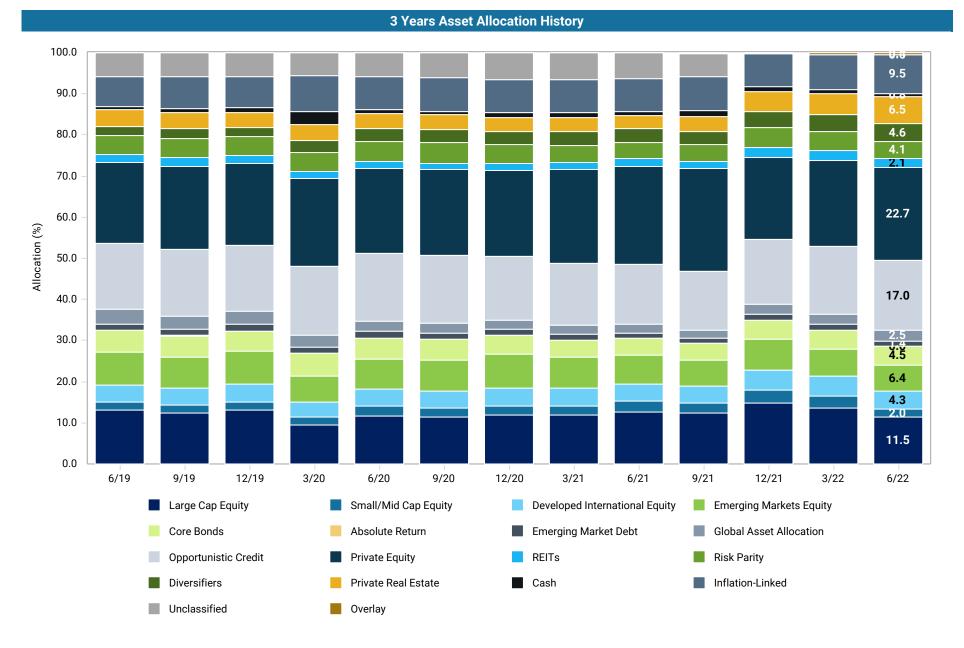
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| 14.0%                     | Current Mkt Value | Current<br>Allocation   | Policy Target <sup>1</sup>  | Policy Range  | Within Range   | Difference   |
|---------------------------|-------------------|---|---|---|--|--|
| Equity                    | \$3,735,614,905   | 24.1%   | 31.0%   | 15% - 55%   | Yes  | -6.9%  |
| U.S. Equity               | \$2,084,379,230   | 13.4%   | 17.0%   | 8% - 30%  | Yes  | -3.6%  |
| U.S. Large Cap Equity     |                   | 11.5%   | 14.0%   | 7% - 25%  | Yes  | -2.5%  |
| U.S. Small/Mid Cap Equity | / \$304,592,264   | 2.0%  | 3.0%  | 0% - 5%   | Yes  | -1.0%  |
| 5.0% Non-U.S. Equity      | \$1,651,235,675   | 10.6%   | 14.0%   | 5% - 25%  | Yes  | -3.4%  |
| Non-U.S. Developed Mkts   | \$663,527,846     | 4.3%  | 5.0%  | 0% - 10%  | Yes  | -0.7%  |
| Non-U.S. Emerging Mkts    | \$987,707,829     | 6.4%  | 9.0%  | 2% - 15%  | Yes  | -2.6%  |
| Fixed Income              | \$3,547,728,138   | 22.9%   | 24.0%   | 10% - 58%   | Yes  | -1.1%  |
| Core Fixed Income         | \$696,673,725     | 4.5%  | 6.0%  | 0% - 20%  | Yes  | -1.5%  |
| 6.0% Opportunistic Credit | t \$2,639,081,369 | 17.0%   | 16.0%   | 0% - 30%  | Yes  | 1.0%   |
| Emerging Mkts Debt        | \$211,973,044     | 1.4%  | 2.0%  | 0% - 8%   | Yes  | -0.6%  |
| Alternatives              | \$8,050,321,468   | 51.9%   | 44.0%   | 10% - 65%   | Yes  | 7.9%   |
| 16.0% Absolute Return     | \$169,272         | 0.0%  | 0.0%  | 0% - 10%  | Yes  | 0.0%   |
| Diversifying Assets       | \$1,729,532,793   | 11.2%   | 12.0%   |   |  | -0.8%  |
| Global Asset Allocation   |                   | 2.5%  | 2.0%  | 0% - 6%   | Yes  | 0.5%   |
| Risk Parity               | \$629,767,993     | 4.1%  | 3.0%  | 0% - 6%   | Yes  | 1.1%   |
| Other Diversifying Assets | \$707,477,777     | 4.6%  | 7.0%  | 0% - 12%  | Yes  | -2.4%  |
| 12.0% Real Estate         | \$1,339,058,125   | 8.6%  | 8.0%  | 0% - 15%  | Yes  | 0.6%   |
| REITs                     |                   | 2.1%  | 2.0%  |   |  | 0.1%   |
| Private Real Estate       | \$1,013,557,846   | 6.5%  | 6.0%  |   |  | 0.5%   |
| 8.0% Private Equity       | \$3,513,810,918   | 22.7%   | 15.0%   | 0% - 24%  | Yes  | 7.7%   |
| Inflation-Linked Assets   | \$1,467,750,360   | 9.5%  | 9.0%  | 0% - 16%  | Yes  | 0.5%   |
| 15.0% Cash                | \$177,538,148     | 1.1%  | 1.0%  | -20% - 15%  | Yes  | 0.1%   |
| Total                     | \$15,511,208,365  | 100.0%  | 100.0%  |   |  | 0.0%   |
|                           | Private Equity    | Private Equity         \$3,513,810,918           Inflation-Linked Assets         \$1,467,750,360           Cash         \$177,538,148 | Private Equity         \$3,513,810,918         22.7%           Inflation-Linked Assets         \$1,467,750,360         9.5%           Cash         \$177,538,148         1.1% | Private Equity         \$3,513,810,918         22.7%         15.0%           Inflation-Linked Assets         \$1,467,750,360         9.5%         9.0%           Cash         \$177,538,148         1.1%         1.0% | Private Equity         \$3,513,810,918         22.7%         15.0%         0% - 24%           Inflation-Linked Assets         \$1,467,750,360         9.5%         9.0%         0% - 16%           Cash         \$177,538,148         1.1%         1.0%         -20% - 15% | Private Equity         \$3,513,810,918         22.7%         15.0%         0% - 24%         Yes           Inflation-Linked Assets         \$1,467,750,360         9.5%         9.0%         0% - 16%         Yes           Cash         \$177,538,148         1.1%         1.0%         -20% - 15%         Yes |



4 4 92

# New Mexico Educational Retirement Board-Top Plan ASSET ALLOCATION HISTORY



# New Mexico Educational Retirement Board-Top Plan ALLOCATIONS VS. PEER UNIVERSE

95th Percentile

Population

5.4

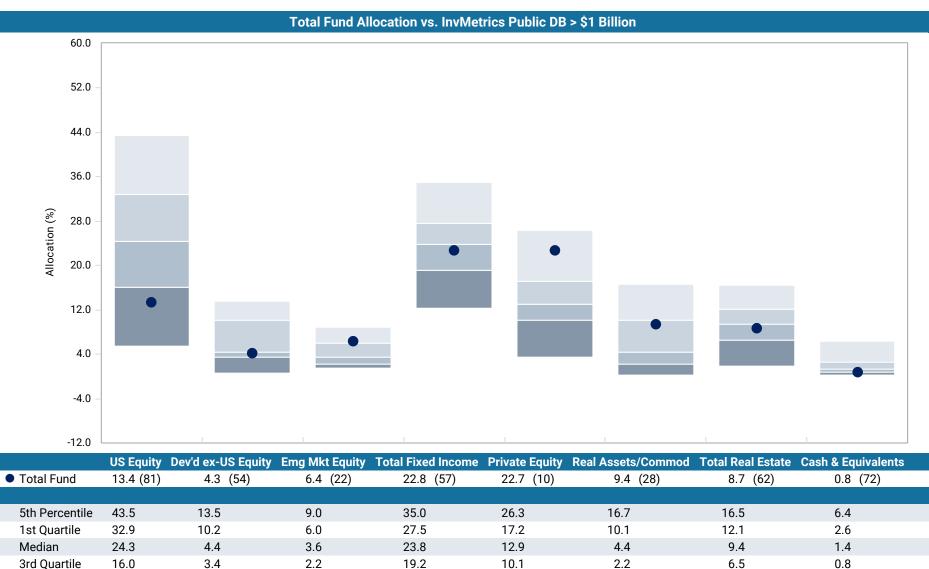
71

0.6

16

1.4

29



3.5

41

0.2

34

1.8

55

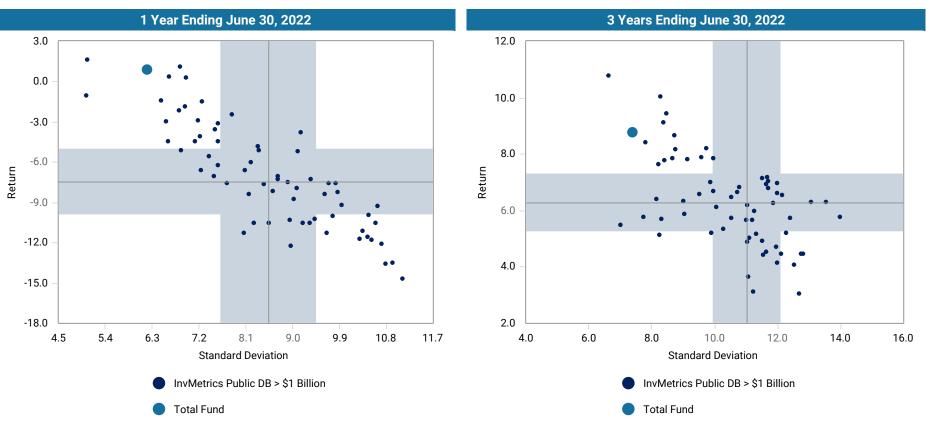
0.2

46

12.3

66

# New Mexico Educational Retirement Board-Top Plan TOTAL FUND COMPOSITE RISK/RETURN

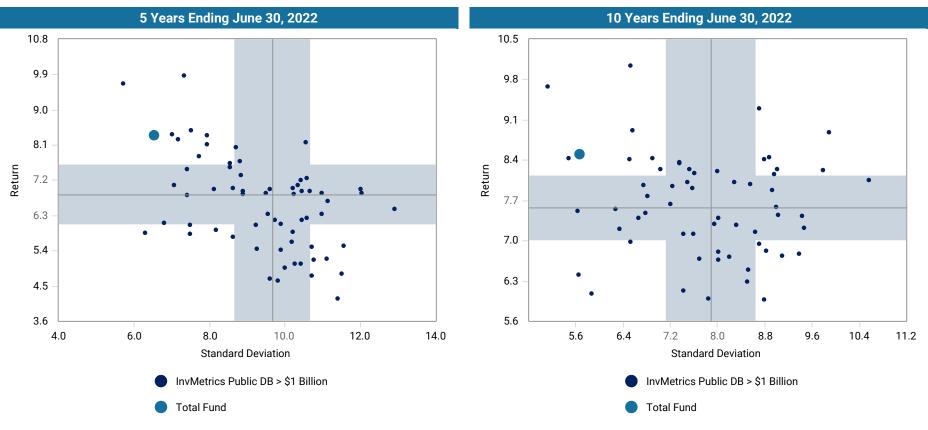


|              |        | 1 Year Ending June | 30, 2022     |               | 3 Years Ending June 30, 2022 |        |                    |              |               |  |  |  |
|--------------|--------|--------------------|--------------|---------------|------------------------------|--------|--------------------|--------------|---------------|--|--|--|
|              | Return | Standard Deviation | Sharpe Ratio | Sortino Ratio |                              | Return | Standard Deviation | Sharpe Ratio | Sortino Ratio |  |  |  |
| Total Fund   | 1.0    | 6.2                | 0.2          | 0.2           | Total Fund                   | 8.8    | 7.4                | 1.1          | 1.7           |  |  |  |
| Policy Index | -2.8   | 6.0                | -0.5         | -0.6          | Policy Index                 | 7.2    | 7.8                | 0.8          | 1.3           |  |  |  |

Note: Ranks are based on net returns



# New Mexico Educational Retirement Board-Top Plan TOTAL FUND COMPOSITE RISK/RETURN

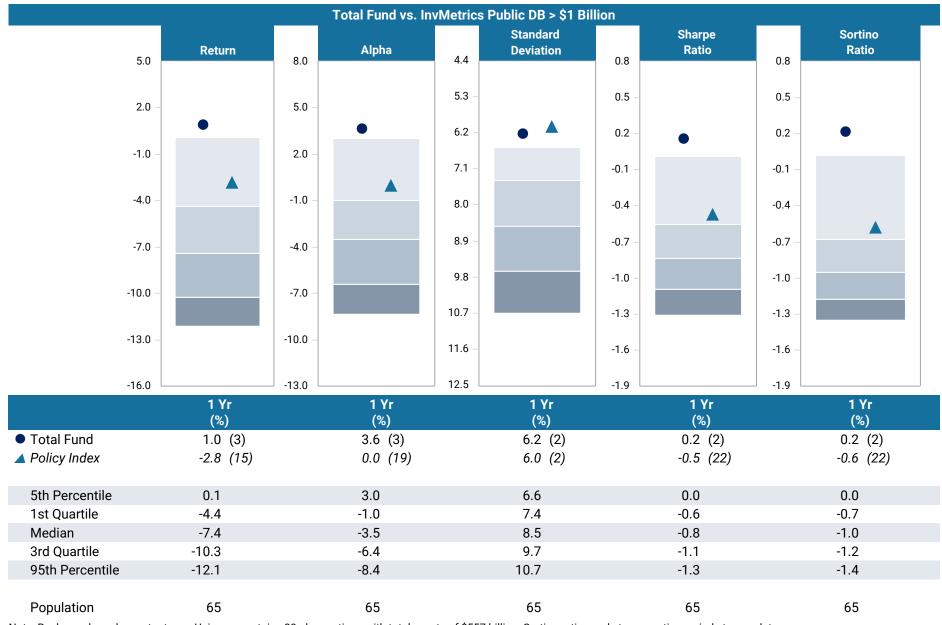


|              |        | 5 Years Ending June | 30, 2022     |               |              | 10 Years | s Ending June 30 | 0, 2022 |         |
|--------------|--------|---------------------|--------------|---------------|--------------|----------|------------------|---------|---------|
|              | Return | Standard Deviation  | Sharpe Ratio | Sortino Ratio |              | Return   | Standard         | Sharpe  | Sortino |
| Total Fund   | 8.4    | 6.5                 | 1.1          | 1.7           |              | Return   | Deviation        | Ratio   | Ratio   |
| Policy Index | 7.5    | 6.9                 | 0.9          | 1.4           | Total Fund   | 8.5      | 5.7              | 1.4     | 2.2     |
|              |        |                     |              |               | Policy Index | 7.7      | 6.0              | 1.2     | 1.9     |

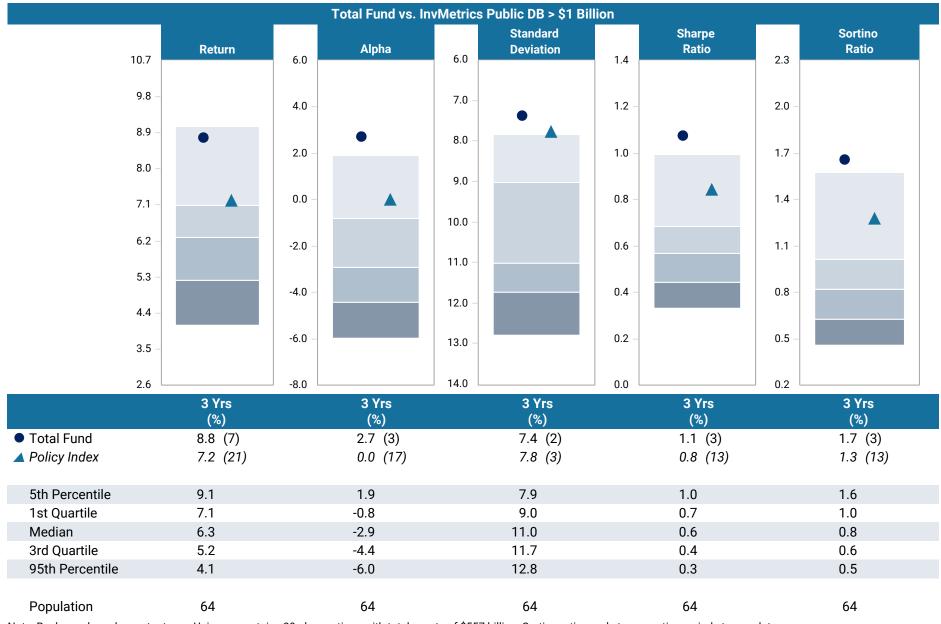
Note: Ranks are based on net returns



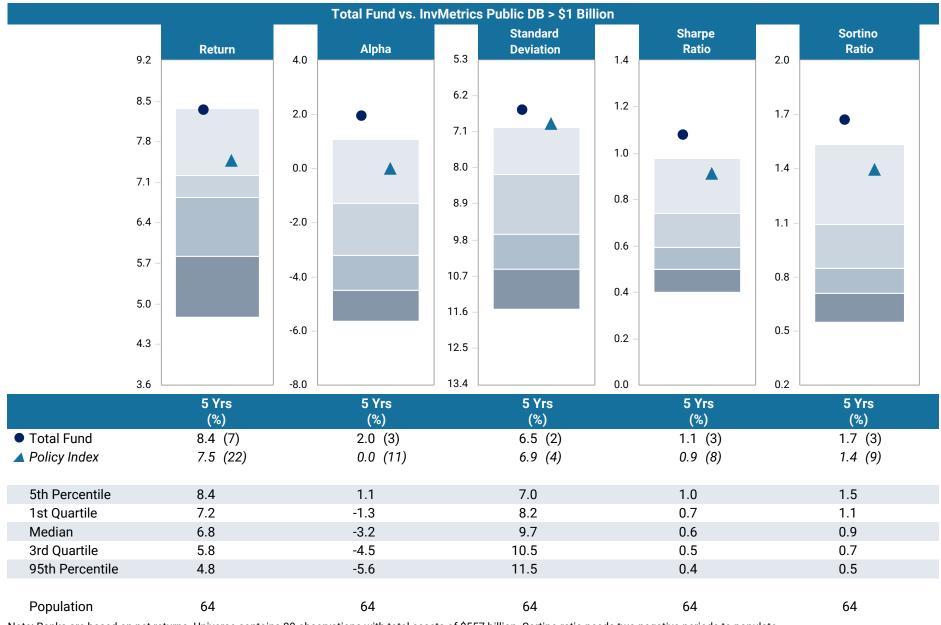
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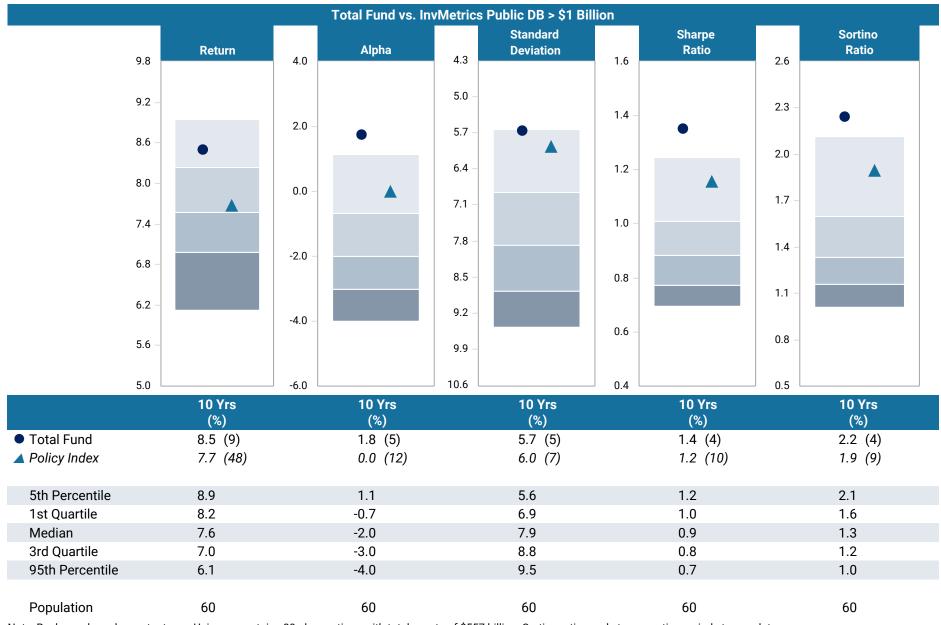






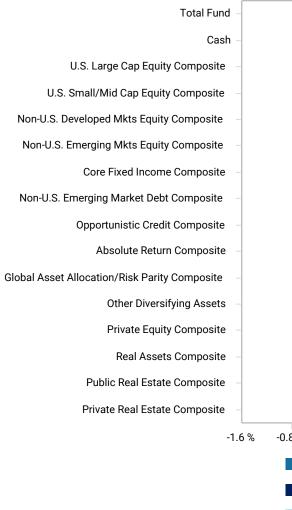


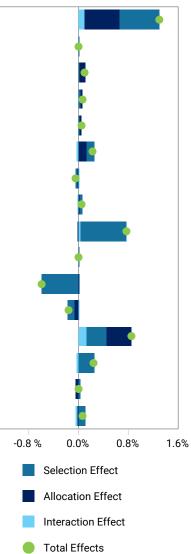






### Attribution Effects 1 Quarter Ending June 30, 2022



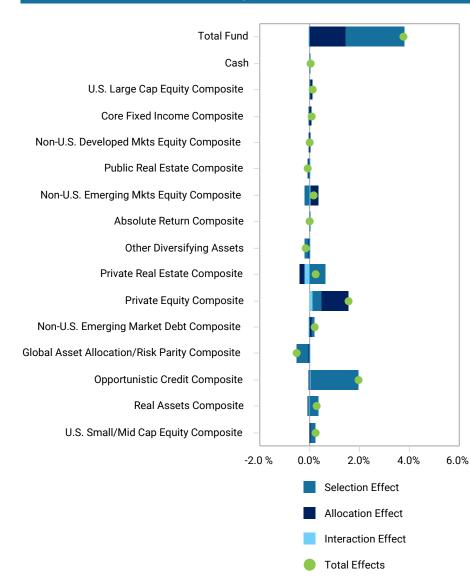


|   | rter En                         |                                |                         | ry<br>0, 2022              |                             |                               |                         |
|---|---------------------------------|--------------------------------|-------------------------|----------------------------|-----------------------------|-------------------------------|-------------------------|
|   | Wtd.<br>Actual<br>Return<br>(%) | Wtd.<br>Index<br>Return<br>(%) | Excess<br>Return<br>(%) | Selection<br>Effect<br>(%) | Allocation<br>Effect<br>(%) | Interaction<br>Effects<br>(%) | Total<br>Effects<br>(%) |
| Cash  | 0.1                             | 0.1                            | 0.0                     | 0.0                        | 0.0                         | 0.0                           | 0.0                     |
| U.S. Large Cap Equity Composite               | -16.1                           | -16.1                          | 0.0                     | 0.0                        | 0.1                         | 0.0                           | 0.1                     |
| U.S. Small/Mid Cap Equity Composite           | -16.2                           | -17.0                          | 0.7                     | 0.0                        | 0.0                         | 0.0                           | 0.1                     |
| Non-U.S. Developed Mkts Equity Composite      | -14.3                           | -14.5                          | 0.3                     | 0.0                        | 0.0                         | 0.0                           | 0.0                     |
| Non-U.S. Emerging Mkts Equity Composite       | -10.1                           | -11.4                          | 1.4                     | 0.1                        | 0.1                         | 0.0                           | 0.2                     |
| Core Fixed Income Composite                   | -5.2                            | -4.7                           | -0.5                    | 0.0                        | 0.0                         | 0.0                           | 0.0                     |
| Non-U.S. Emerging Market Debt Composite       | -8.1                            | -10.0                          | 1.9                     | 0.0                        | 0.0                         | 0.0                           | 0.1                     |
| Opportunistic Credit Composite                | -2.2                            | -6.9                           | 4.7                     | 0.8                        | 0.0                         | 0.0                           | 0.8                     |
| Absolute Return Composite                     | -4.9                            | 0.6                            | -5.5                    | 0.0                        | 0.0                         | 0.0                           | 0.0                     |
| Global Asset Allocation/Risk Parity Composite | -8.0                            | 0.5                            | -8.5                    | -0.6                       | 0.0                         | 0.0                           | -0.6                    |
| Other Diversifying Assets                     | -1.9                            | 0.5                            | -2.4                    | -0.1                       | -0.1                        | 0.0                           | -0.2                    |
| Private Equity Composite                      | 2.2                             | 0.0                            | 2.2                     | 0.5                        | 0.4                         | 0.1                           | 0.8                     |
| Real Assets Composite                         | 6.8                             | 3.7                            | 3.1                     | 0.2                        | 0.0                         | 0.0                           | 0.2                     |
| Public Real Estate Composite                  | -17.2                           | -18.5                          | 1.3                     | 0.0                        | 0.0                         | 0.0                           | 0.0                     |
| Private Real Estate Composite                 | 5.5                             | 3.2                            | 2.2                     | 0.1                        | 0.0                         | 0.0                           | 0.1                     |
| Total Fund                                    | -4.7                            | -6.0                           |                         | 1.0                        | 0.6                         |                               |                         |

Attribution Summary

#### June 30, 2022

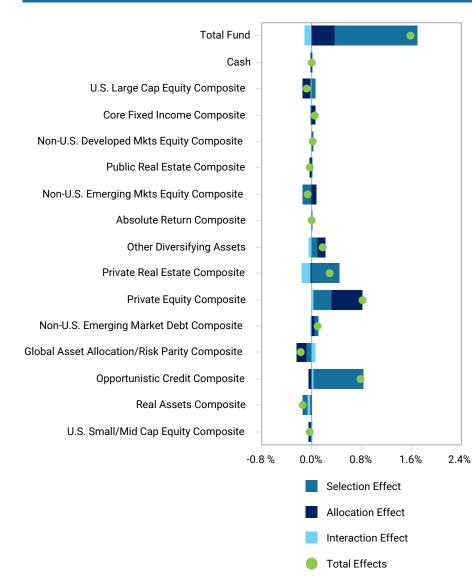
### Attribution Effects 1 Year Ending June 30, 2022



|   | Attribu<br>ar Endi              |                                |                         |                            |                             |                               |                         |
|---|---------------------------------|--------------------------------|-------------------------|----------------------------|-----------------------------|-------------------------------|-------------------------|
|   | Wtd.<br>Actual<br>Return<br>(%) | Wtd.<br>Index<br>Return<br>(%) | Excess<br>Return<br>(%) | Selection<br>Effect<br>(%) | Allocation<br>Effect<br>(%) | Interaction<br>Effects<br>(%) | Total<br>Effects<br>(%) |
| Cash  | 2.9                             | 0.2                            | 2.7                     | 0.0                        | 0.0                         | 0.0                           | 0.0                     |
| U.S. Large Cap Equity Composite               | -10.6                           | -10.6                          | 0.0                     | 0.0                        | 0.1                         | 0.0                           | 0.1                     |
| Core Fixed Income Composite                   | -10.8                           | -10.3                          | -0.5                    | 0.0                        | 0.1                         | 0.0                           | 0.1                     |
| Non-U.S. Developed Mkts Equity Composite      | -18.2                           | -17.8                          | -0.4                    | 0.0                        | 0.0                         | 0.0                           | 0.0                     |
| Public Real Estate Composite                  | -8.0                            | -6.7                           | -1.3                    | 0.0                        | 0.0                         | 0.0                           | -0.1                    |
| Non-U.S. Emerging Mkts Equity Composite       | -27.2                           | -25.3                          | -1.9                    | -0.2                       | 0.4                         | 0.0                           | 0.2                     |
| Absolute Return Composite                     | -11.3                           | 2.1                            | -13.5                   | 0.0                        | 0.0                         | 0.0                           | 0.0                     |
| Other Diversifying Assets                     | -1.3                            | 2.0                            | -3.3                    | -0.1                       | 0.0                         | 0.0                           | -0.2                    |
| Private Real Estate Composite                 | 35.1                            | 21.5                           | 13.6                    | 0.4                        | -0.2                        | -0.2                          | 0.3                     |
| Private Equity Composite                      | 21.9                            | 18.3                           | 3.6                     | 0.5                        | 1.1                         | 0.1                           | 1.6                     |
| Non-U.S. Emerging Market Debt Composite       | -15.2                           | -20.2                          | 5.0                     | 0.1                        | 0.1                         | 0.0                           | 0.2                     |
| Global Asset Allocation/Risk Parity Composite | -4.7                            | 2.0                            | -6.7                    | -0.5                       | 0.0                         | 0.0                           | -0.5                    |
| Opportunistic Credit Composite                | 4.6                             | -7.5                           | 12.1                    | 2.0                        | 0.0                         | 0.0                           | 2.0                     |
| Real Assets Composite                         | 17.7                            | 13.3                           | 4.4                     | 0.3                        | -0.1                        | 0.0                           | 0.3                     |
| U.S. Small/Mid Cap Equity Composite           | -15.4                           | -21.0                          | 5.6                     | 0.2                        | 0.0                         | 0.0                           | 0.2                     |
| Total Fund                                    | 1.0                             | -2.8                           | 3.8                     | 2.7                        | 1.5                         | 0.0                           | 3.8                     |

June 30, 2022

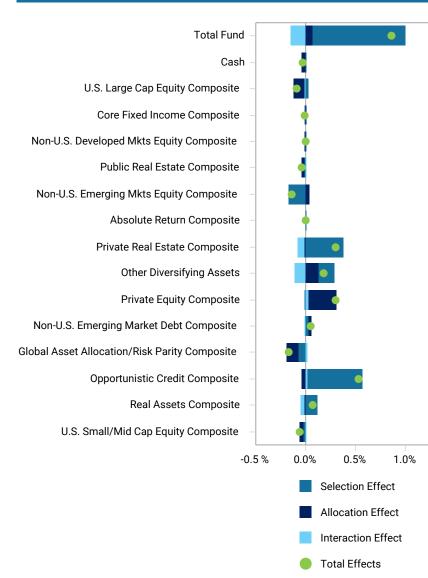
### Attribution Effects 3 Years Ending June 30, 2022



|   | irs End                         |                                |                         | , 2022                     |                             |                               |                         |
|---|---------------------------------|--------------------------------|-------------------------|----------------------------|-----------------------------|-------------------------------|-------------------------|
|   | Wtd.<br>Actual<br>Return<br>(%) | Wtd.<br>Index<br>Return<br>(%) | Excess<br>Return<br>(%) | Selection<br>Effect<br>(%) | Allocation<br>Effect<br>(%) | Interaction<br>Effects<br>(%) | Total<br>Effects<br>(%) |
| Cash  | 1.8                             | 0.6                            | 1.1                     | 0.0                        | 0.0                         | 0.0                           | 0.0                     |
| U.S. Large Cap Equity Composite               | 11.1                            | 10.6                           | 0.5                     | 0.1                        | -0.1                        | 0.0                           | -0.1                    |
| Core Fixed Income Composite                   | -1.1                            | -0.9                           | -0.2                    | 0.0                        | 0.1                         | 0.0                           | 0.0                     |
| Non-U.S. Developed Mkts Equity Composite      | 1.6                             | 1.1                            | 0.5                     | 0.0                        | 0.0                         | 0.0                           | 0.0                     |
| Public Real Estate Composite                  | 3.8                             | 4.0                            | -0.2                    | 0.0                        | 0.0                         | 0.0                           | 0.0                     |
| Non-U.S. Emerging Mkts Equity Composite       | -1.1                            | 0.6                            | -1.6                    | -0.1                       | 0.1                         | 0.0                           | -0.1                    |
| Absolute Return Composite                     | -7.3                            | 2.7                            | -10.1                   | 0.0                        | 0.0                         | 0.0                           | 0.0                     |
| Other Diversifying Assets                     | 4.0                             | 2.8                            | 1.2                     | 0.0                        | 0.1                         | -0.1                          | 0.2                     |
| Private Real Estate Composite                 | 17.8                            | 10.2                           | 7.6                     | 0.3                        | 0.0                         | -0.1                          | 0.3                     |
| Private Equity Composite                      | 23.8                            | 20.9                           | 2.9                     | 0.3                        | 0.5                         | 0.0                           | 0.8                     |
| Non-U.S. Emerging Market Debt Composite       | -2.9                            | -5.5                           | 2.5                     | 0.0                        | 0.1                         | 0.0                           | 0.1                     |
| Global Asset Allocation/Risk Parity Composite | 2.9                             | 2.6                            | 0.3                     | 0.0                        | -0.2                        | 0.1                           | -0.2                    |
| Opportunistic Credit Composite                | 6.0                             | 1.1                            | 4.9                     | 0.8                        | -0.1                        | 0.0                           | 0.8                     |
| Real Assets Composite                         | 7.7                             | 9.2                            | -1.4                    | -0.1                       | 0.0                         | 0.0                           | -0.1                    |
| U.S. Small/Mid Cap Equity Composite           | 5.7                             | 5.9                            | -0.2                    | 0.0                        | 0.0                         | 0.0                           | 0.0                     |
| Total Fund                                    | 8.8                             |                                | 1.6                     |                            | 0.4                         | -0.1                          |                         |

Attribution Summary

### Attribution Effects 5 Years Ending June 30, 2022



|   |                                 |                                | umma<br>ine 30          | , 2022                     |                             |                               |                         |
|---|---------------------------------|--------------------------------|-------------------------|----------------------------|-----------------------------|-------------------------------|-------------------------|
|   | Wtd.<br>Actual<br>Return<br>(%) | Wtd.<br>Index<br>Return<br>(%) | Excess<br>Return<br>(%) | Selection<br>Effect<br>(%) | Allocation<br>Effect<br>(%) | Interaction<br>Effects<br>(%) | Total<br>Effects<br>(%) |
| Cash  | 1.9                             | 1.1                            | 0.7                     | 0.0                        | 0.0                         | 0.0                           | 0.0                     |
| U.S. Large Cap Equity Composite               | 11.5                            | 11.3                           | 0.2                     | 0.0                        | -0.1                        | 0.0                           | -0.1                    |
| Core Fixed Income Composite                   | 0.8                             | 0.9                            | -0.1                    | 0.0                        | 0.0                         | 0.0                           | 0.0                     |
| Non-U.S. Developed Mkts Equity Composite      | 2.3                             | 2.2                            | 0.1                     | 0.0                        | 0.0                         | 0.0                           | 0.0                     |
| Public Real Estate Composite                  | 4.7                             | 5.3                            | -0.5                    | 0.0                        | 0.0                         | 0.0                           | 0.0                     |
| Non-U.S. Emerging Mkts Equity Composite       | 0.5                             | 2.2                            | -1.7                    | -0.2                       | 0.0                         | 0.0                           | -0.1                    |
| Absolute Return Composite                     | -5.3                            | 3.1                            | -8.4                    | 0.0                        | 0.0                         | 0.0                           | 0.0                     |
| Private Real Estate Composite                 | 16.4                            | 8.9                            | 7.5                     | 0.3                        | 0.0                         | -0.1                          | 0.3                     |
| Other Diversifying Assets                     | 5.6                             | 3.2                            | 2.4                     | 0.1                        | 0.1                         | -0.1                          | 0.2                     |
| Private Equity Composite                      | 18.7                            | 18.3                           | 0.4                     | 0.0                        | 0.3                         | 0.0                           | 0.3                     |
| Non-U.S. Emerging Market Debt Composite       | -0.5                            | -1.7                           | 1.2                     | 0.0                        | 0.0                         | 0.0                           | 0.1                     |
| Global Asset Allocation/Risk Parity Composite | 4.0                             | 4.2                            | -0.2                    | -0.1                       | -0.1                        | 0.0                           | -0.2                    |
| Opportunistic Credit Composite                | 5.9                             | 2.5                            | 3.3                     | 0.6                        | 0.0                         | 0.0                           | 0.5                     |
| Real Assets Composite                         | 9.4                             | 8.1                            | 1.3                     | 0.1                        | 0.0                         | 0.0                           | 0.1                     |
| U.S. Small/Mid Cap Equity Composite           | 6.6                             | 7.0                            | -0.5                    | 0.0                        | 0.0                         | 0.0                           | -0.1                    |
| Total Fund                                    | 8.4                             | 7.5                            | 0.9                     | 0.8                        | 0.1                         | -0.1                          | 0.9                     |

Attribution Summary

#### June 30, 2022

1.5%

## New Mexico Educational Retirement Board-Top Plan **RISK STATISTICS**

| 3 Years Ending June 30, 2022  |        |                       |       |                   |                      |      |  |  |  |  |
|---|--------|-----------------------|-------|-------------------|----------------------|------|--|--|--|--|
|   | Return | Standard<br>Deviation | Alpha | Tracking<br>Error | Information<br>Ratio | Beta |  |  |  |  |
| U.S. Large Cap Equity Composite   | 11.1   | 18.1                  | 0.6   | 0.6               | 0.6                  | 1.0  |  |  |  |  |
| S&P 500 Index   | 10.6   | 18.4                  | 0.0   | 0.0               |                      | 1.0  |  |  |  |  |
| U.S. Small/Mid Cap Equity Composite                                     | 5.7    | 22.6                  | 0.0   | 4.2               | -0.1                 | 1.0  |  |  |  |  |
| NMERB Small/Mid Cap Equity Blended Index                                | 5.9    | 23.1                  | 0.0   | 0.0               |                      | 1.0  |  |  |  |  |
| Non-U.S. Developed Mkts Equity Composite                                | 1.6    | 18.1                  | 0.5   | 1.1               | 0.5                  | 1.0  |  |  |  |  |
| MSCI EAFE (Net)   | 1.1    | 17.8                  | 0.0   | 0.0               |                      | 1.0  |  |  |  |  |
| Non-U.S. Emerging Mkts Equity Composite                                 | -1.1   | 18.1                  | -1.6  | 3.5               | -0.4                 | 1.0  |  |  |  |  |
| MSCI Emerging Markets (Net)   | 0.6    | 17.9                  | 0.0   | 0.0               |                      | 1.0  |  |  |  |  |
| Core Fixed Income Composite   | -1.1   | 5.1                   | -0.1  | 1.7               | -0.1                 | 1.1  |  |  |  |  |
| Blmbg. U.S. Aggregate Index   | -0.9   | 4.5                   | 0.0   | 0.0               |                      | 1.0  |  |  |  |  |
| Non-U.S. Emerging Market Debt Composite                                 | -2.9   | 11.6                  | 2.6   | 2.9               | 0.9                  | 1.0  |  |  |  |  |
| Non-U.S. EMD Custom Benchmark   | -5.5   | 11.5                  | 0.0   | 0.0               |                      | 1.0  |  |  |  |  |
| Opportunistic Credit Composite  | 6.0    | 6.8                   | 5.7   | 8.7               | 0.5                  | 0.3  |  |  |  |  |
| 50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index | 1.1    | 8.7                   | 0.0   | 0.0               |                      | 1.0  |  |  |  |  |
| Global Asset Allocation/Risk Parity Composite                           | 2.9    | 9.7                   | 1.8   | 9.7               | 0.1                  | 0.6  |  |  |  |  |
| GAA/Risk Parity Custom Index  | 2.8    | 0.3                   | 0.0   | 0.0               |                      | 1.0  |  |  |  |  |
| Real Estate Composite   | 13.3   | 7.4                   | 11.3  | 8.7               | 0.3                  | 0.2  |  |  |  |  |
| NCREIF Property Index   | 10.2   | 5.9                   | 0.0   | 0.0               |                      | 1.0  |  |  |  |  |
| Private Equity Composite  | 23.8   | 9.4                   | 22.5  | 17.2              | 0.0                  | 0.1  |  |  |  |  |
| Private Equity Index  | 23.4   | 15.5                  | 0.0   | 0.0               |                      | 1.0  |  |  |  |  |
| Real Assets Composite   | 7.7    | 4.7                   | -6.6  | 4.3               | -0.3                 | 1.6  |  |  |  |  |
| CPI + 4% (Seasonally Adjusted)  | 9.2    | 1.4                   | 0.0   | 0.0               |                      | 1.0  |  |  |  |  |

1 - Performance for Equity, Fixed Income, and Emerging Mkt Debt, Opportunistic Credit and GAA/Risk Parity composites are net of fees. Note: Percent of Total equals 94.8% because Absolute Return Composite, Diversifying Assets Composite, and Cash Composite are not included.



## New Mexico Educational Retirement Board-Top Plan **RISK STATISTICS**

| 5 Years Ending June 30, 2022  |        |                       |       |                   |                      |      |  |  |  |  |
|---|--------|-----------------------|-------|-------------------|----------------------|------|--|--|--|--|
|   | Return | Standard<br>Deviation | Alpha | Tracking<br>Error | Information<br>Ratio | Beta |  |  |  |  |
| U.S. Large Cap Equity Composite   | 11.5   | 16.6                  | 0.3   | 0.5               | 0.3                  | 1.0  |  |  |  |  |
| S&P 500 Index   | 11.3   | 16.8                  | 0.0   | 0.0               |                      | 1.0  |  |  |  |  |
| U.S. Small/Mid Cap Equity Composite                                     | 6.6    | 20.4                  | -0.2  | 3.7               | -0.1                 | 1.0  |  |  |  |  |
| NMERB Small/Mid Cap Equity Blended Index                                | 7.0    | 20.9                  | 0.0   | 0.0               |                      | 1.0  |  |  |  |  |
| Non-U.S. Developed Mkts Equity Composite                                | 2.3    | 16.0                  | 0.1   | 0.9               | 0.2                  | 1.0  |  |  |  |  |
| MSCI EAFE (Net)   | 2.2    | 15.7                  | 0.0   | 0.0               |                      | 1.0  |  |  |  |  |
| Non-U.S. Emerging Mkts Equity Composite                                 | 0.5    | 16.3                  | -1.6  | 3.4               | -0.5                 | 0.9  |  |  |  |  |
| MSCI Emerging Markets (Net)   | 2.2    | 16.9                  | 0.0   | 0.0               |                      | 1.0  |  |  |  |  |
| Core Fixed Income Composite   | 0.8    | 4.4                   | -0.1  | 1.4               | -0.1                 | 1.1  |  |  |  |  |
| Blmbg. U.S. Aggregate Index   | 0.9    | 4.0                   | 0.0   | 0.0               |                      | 1.0  |  |  |  |  |
| Non-U.S. Emerging Market Debt Composite                                 | -0.5   | 9.9                   | 1.2   | 2.8               | 0.4                  | 0.9  |  |  |  |  |
| Non-U.S. EMD Custom Benchmark   | -1.7   | 10.1                  | 0.0   | 0.0               |                      | 1.0  |  |  |  |  |
| Opportunistic Credit Composite  | 5.9    | 5.4                   | 5.1   | 6.9               | 0.4                  | 0.3  |  |  |  |  |
| 50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index | 2.5    | 7.1                   | 0.0   | 0.0               |                      | 1.0  |  |  |  |  |
| Global Asset Allocation/Risk Parity Composite                           | 4.0    | 7.9                   | 2.1   | 7.9               | 0.0                  | 0.5  |  |  |  |  |
| GAA/Risk Parity Custom Index  | 4.5    | 1.2                   | 0.0   | 0.0               |                      | 1.0  |  |  |  |  |
| Real Estate Composite   | 12.5   | 6.9                   | 11.4  | 8.0               | 0.4                  | 0.1  |  |  |  |  |
| NCREIF Property Index   | 8.9    | 4.9                   | 0.0   | 0.0               |                      | 1.0  |  |  |  |  |
| Private Equity Composite  | 18.7   | 7.6                   | 17.7  | 14.2              | -0.1                 | 0.1  |  |  |  |  |
| Private Equity Index  | 19.4   | 12.8                  | 0.0   | 0.0               |                      | 1.0  |  |  |  |  |
| Real Assets Composite   | 9.4    | 4.8                   | 1.0   | 4.6               | 0.3                  | 1.0  |  |  |  |  |
| CPI + 4% (Seasonally Adjusted)  | 8.0    | 1.2                   | 0.0   | 0.0               |                      | 1.0  |  |  |  |  |

1 - Performance for Equity, Fixed Income, and Emerging Mkt Debt, Opportunistic Credit and GAA/Risk Parity composites are net of fees. Note: Percent of Total equals 94.8% because Absolute Return Composite, Diversifying Assets Composite, and Cash Composite are not included.



|   | A                  | llocation      |                     |                     |                             | Pe                 | rformand           | :e (%)             |                    |           |
|---|--------------------|----------------|---------------------|---------------------|-----------------------------|--------------------|--------------------|--------------------|--------------------|-----------|
|   | % of               | Market         | 3 Mo                | FYTD                | 1 Yr                        | 3 Yrs              | 5 Yrs              | 10 Yrs             | Inception          | Inception |
|   | Portfolio          | Value (\$)     | (%)                 | (%)                 | (%)                         | (%)                | (%)                | (%)                | (%)                | Date      |
| Total Fund  | 100.0              | 15,511,202,665 | -4.7                | 1.0                 | 1.0                         | 8.8                | 8.4                | 8.5                | 9.0                | Jul-83    |
| Policy Index  |                    |                | <u>-6.0</u>         | <u>-2.8</u>         | <u>-2.8</u>                 | <u>7.2</u>         | <u>7.5</u>         | <u>7.7</u>         | -                  |           |
| Over/Under  |                    |                | 1.3                 | 3.8                 | 3.8                         | 1.6                | 0.9                | 0.8                | -                  |           |
| 60% MSCI World/40% FTSE WGBI  |                    |                | <u>-13.2</u>        | <u>-14.9</u>        | <u>-14.9</u>                | <u>3.0</u>         | <u>4.7</u>         | <u>5.9</u>         | -                  |           |
| Over/Under  |                    |                | 8.5                 | 15.9                | 15.9                        | 5.8                | 3.7                | 2.6                | -                  |           |
| S&P 500 Index   |                    |                | <u>-16.1</u>        | <u>-10.6</u>        | <u>-10.6</u>                | <u>10.6</u>        | <u>11.3</u>        | <u>13.0</u>        | <u>10.9</u>        |           |
| Over/Under  |                    |                | 11.4                | 11.6                | 11.6                        | -1.8               | -2.9               | -4.5               | -1.9               |           |
| Blmbg. U.S. Aggregate Index   |                    |                | <u>-4.7</u>         | <u>-10.3</u>        | <u>-10.3</u>                | <u>-0.9</u>        | <u>0.9</u>         | <u>1.5</u>         | <u>6.4</u>         |           |
| Over/Under  |                    |                | 0.0                 | 11.3                | 11.3                        | 9.7                | 7.5                | 7.0                | 2.6                |           |
| InvMetrics Public DB > \$1 Billion Median                                 | <b>00</b> <i>(</i> |                | -8.4                | -7.4                | -7.4                        | 6.3                | 6.8                | 7.6                | 7.8                |           |
| Total Fund Ex Parametric Overlay  | 99.6               | 15,450,366,265 | -4.3                | 1.4                 | 1.4                         | 8.9                | 8.4                | 8.5                | 9.0                | Jul-83    |
| Policy Index  |                    |                | <u>-6.0</u>         | <u>-2.8</u>         | <u>-2.8</u>                 | <u>7.2</u>         | <u>7.5</u>         | <u>7.7</u>         | -                  |           |
| Over/Under  |                    |                | 1.7                 | 4.2                 | 4.2                         | 1.7                | 0.9                | 0.8                | -                  |           |
| 60% MSCI World/40% FTSE WGBI  |                    |                | <u>-13.2</u>        | <u>-14.9</u>        | <u>-14.9</u>                | <u>3.0</u>         | <u>4.7</u>         | <u>5.9</u>         | -                  |           |
| Over/Under  |                    |                | 8.9                 | 16.3                | 16.3                        | 5.9                | 3.7                | 2.6                | -                  |           |
| S&P 500 Index   |                    |                | <u>-16.1</u>        | <u>-10.6</u>        | <u>-10.6</u>                | <u>10.6</u>        | <u>11.3</u>        | <u>13.0</u>        | <u>10.9</u>        |           |
| Over/Under  |                    |                | 11.8                | 12.0                | 12.0                        | -1.7               | -2.9               | -4.5               | -1.9               |           |
| Blmbg. U.S. Aggregate Index   |                    |                | <u>-4.7</u>         | <u>-10.3</u>        | <u>-10.3</u>                | <u>-0.9</u>        | <u>0.9</u>         | <u>1.5</u>         | <u>6.4</u>         |           |
| Over/Under  |                    |                | 0.4                 | 11.7                | 11.7                        | 9.8                | 7.5                | 7.0                | 2.6                |           |
| InvMetrics Public DB > \$1 Billion Median                                 | 10.1               |                | -8.4                | -7.4                | -7.4                        | 6.3                | 6.8                | 7.6                | -                  | 1 05      |
| U.S. Equity Composite   | 13.4               | 2,084,379,230  | -16.1               | -11.4               | -11.4                       | 10.2               | 10.7               | 12.7               | 11.2               | Jan-85    |
| Russell 3000 Index  |                    |                | <u>-16.7</u>        | <u>-13.9</u>        | <u>-13.9</u>                | <u>9.8</u>         | <u>10.6</u>        | <u>12.6</u>        | <u>11.0</u>        |           |
| Over/Under  |                    |                | 0.6                 | 2.5                 | 2.5                         | 0.4                | 0.1                | 0.1                | 0.2                |           |
| InvMetrics Public DB > \$1 Billion US Equity Median                       | 11 5               | 1 770 704 044  | -16.5               | -13.5               | -13.5                       | 9.2                | 10.0               | 12.0               | -                  | A         |
| U.S. Large Cap Equity Composite   | 11.5               | 1,779,786,966  | -16.1               | <b>-10.6</b>        | -10.6                       | 11.1               | 11.5               | 13.1               | 7.2                | Aug-99    |
| S&P 500 Index   |                    |                | <u>-16.1</u><br>0.0 | <u>-10.6</u><br>0.0 | <u>-10.6</u><br>0.0         | <u>10.6</u>        | <u>11.3</u><br>0.2 | <u>13.0</u><br>0.1 | <u>6.7</u><br>0.5  |           |
| Over/Under  |                    |                |                     | -13.5               | -13.5                       | 0.5<br>9.2         | 0.2<br>10.0        |                    | 0.5<br>6.7         |           |
| InvMetrics Public DB > \$1 Billion US Equity Median<br>S&P 500 Index Fund | 11.5               | 1 770 706 066  | -16.5               |                     |                             |                    | 11.5               | 12.0               | 6.3                | lan 00    |
| S&P 500 Index   | 11.5               | 1,779,786,966  | -16.1               | -10.7               | -10.7                       | 11.1               |                    | 13.1               |                    | Jan-00    |
|   |                    |                | <u>-16.1</u>        | <u>-10.6</u>        | <u>-10.6</u>                | <u>10.6</u>        | <u>11.3</u>        | <u>13.0</u>        | <u>6.3</u>         |           |
| Over/Under  |                    |                | 0.0<br>-14.8        | -0.1<br>-11.0       | - <mark>0.1</mark><br>-11.0 | 0.5                | 0.2<br>10.1        | 0.1                | 0.0<br>7.2         |           |
| eV US Large Cap Core Equity Median  | 2.0                | 204 502 264    |                     |                     |                             | 9.1                |                    | 11.9               |                    | Aug 00    |
| U.S. Small/Mid Cap Equity Composite                                       | 2.0                | 304,592,264    | <b>-16.2</b>        | - <b>15.4</b>       | -15.4                       | <b>5.7</b>         | <b>6.6</b>         | 10.5               | <b>7.2</b>         | Aug-99    |
| NMERB Small/Mid Cap Equity Blended Index<br>Over/Under                    |                    |                | <u>-17.0</u><br>0.8 | <u>-21.0</u><br>5.6 | <u>-21.0</u><br>5.6         | <u>5.9</u><br>-0.2 | <u>7.0</u><br>-0.4 | <u>10.5</u><br>0.0 | <u>7.9</u><br>-0.7 |           |
|   |                    |                |                     |                     |                             |                    |                    |                    | -0.7               |           |
| InvMetrics Public DB > \$1 Billion US Equity Median                       |                    |                | -16.5               | -13.5               | -13.5                       | 9.2                | 10.0               | 12.0               | 0.7                |           |

1 - Total Fund market value includes \$6.96 from Legacy Assets.

2-U.S. Small/Mid Cap Equity Composite includes the performance history of the U.S. Small Cap Equity Composite through November 2011.

3 - NMERB Small/Mid Cap Equity Blended Benchmark is the Russell 2000 Index through November 2011 and the Russell 2500 Index from December 2011 - forward. Note: Performance shown is net of fees.



|                             | Allo              | cation               |              |              |              | Per          | formanc      | e (%)         |                  |                   |
|-----------------------------|-------------------|----------------------|--------------|--------------|--------------|--------------|--------------|---------------|------------------|-------------------|
|                             | % of<br>Portfolio | Market<br>Value (\$) | 3 Mo<br>(%)  | FYTD<br>(%)  | 1 Yr<br>(%)  | 3 Yrs<br>(%) | 5 Yrs<br>(%) | 10 Yrs<br>(%) | Inception<br>(%) | Inception<br>Date |
| S&P 400 Mid-Cap             | 2.0               | 304,592,264          | -16.2        | -15.5        | -15.5        | 5.7          | -            | -             | 5.7              | Nov-17            |
| Russell 2500 Index          |                   |                      | <u>-17.0</u> | -21.0        | <u>-21.0</u> | <u>5.9</u>   | -            | -             | <u>6.2</u>       |                   |
| Over/Under                  |                   |                      | 0.8          | 5.5          | 5.5          | -0.2         | -            | -             | -0.5             |                   |
| eV US Mid Cap Equity Median |                   |                      | -15.1        | -14.4        | -14.4        | 6.6          | -            | -             | 7.3              |                   |
| S&P 400 Mid-Cap             |                   |                      | <u>-16.2</u> | <u>-15.5</u> | <u>-15.5</u> | <u>5.7</u>   | -            | -             | <u>5.7</u>       |                   |
| Over/Under                  |                   |                      | 0.0          | 0.0          | 0.0          | 0.0          | -            | -             | 0.0              |                   |



|   | AI                | location             |              |              |              | Per          | formanc      | e (%)         |                  |                   |
|---|-------------------|----------------------|--------------|--------------|--------------|--------------|--------------|---------------|------------------|-------------------|
|   | % of<br>Portfolio | Market<br>Value (\$) | 3 Mo<br>(%)  | FYTD<br>(%)  | 1 Yr<br>(%)  | 3 Yrs<br>(%) | 5 Yrs<br>(%) | 10 Yrs<br>(%) | Inception<br>(%) | Inception<br>Date |
| Non-U.S. Equity Composite                                     | 10.6              | 1,651,235,675        | -11.8        | -23.8        | -23.8        | 0.0          | 1.2          | 3.0           | 5.5              | Jul-95            |
| MSCI AC World ex USA  |                   |                      | <u>-13.5</u> | -19.0        | <u>-19.0</u> | <u>1.8</u>   | <u>3.0</u>   | <u>5.3</u>    | <u>5.3</u>       |                   |
| Over/Under  |                   |                      | 1.7          | -4.8         | -4.8         | -1.8         | -1.8         | -2.3          | 0.2              |                   |
| InvMetrics Public DB > \$1 Billion Global ex-US Equity Median |                   |                      | -14.1        | -20.9        | -20.9        | 1.6          | 2.5          | 5.1           | -                |                   |
| Non-U.S. Developed Mkts Equity Composite                      | 4.3               | 663,527,846          | -14.3        | -18.2        | -18.2        | 1.6          | 2.3          | 5.2           | 5.5              | Sep-95            |
| MSCI EAFE   |                   |                      | <u>-14.3</u> | <u>-17.3</u> | <u>-17.3</u> | <u>1.5</u>   | <u>2.7</u>   | <u>5.9</u>    | <u>4.9</u>       |                   |
| Over/Under  |                   |                      | 0.0          | -0.9         | -0.9         | 0.1          | -0.4         | -0.7          | 0.6              |                   |
| InvMetrics Public DB Dev Mkt ex-US Eq Median                  |                   |                      | -14.0        | -20.5        | -20.5        | 1.4          | 2.6          | 5.6           | 5.6              |                   |
| BlackRock MSCI EAFE   | 3.5               | 537,228,195          | -14.3        | -17.4        | -17.4        | 1.4          | 2.5          | -             | 3.8              | Aug-13            |
| MSCI EAFE   |                   |                      | <u>-14.3</u> | <u>-17.3</u> | <u>-17.3</u> | <u>1.5</u>   | <u>2.7</u>   | -             | <u>3.9</u>       |                   |
| Over/Under  |                   |                      | 0.0          | -0.1         | -0.1         | -0.1         | -0.2         | -             | -0.1             |                   |
| eV All EAFE Equity Median                                     |                   |                      | -14.2        | -18.9        | -18.9        | 1.5          | 2.2          | -             | 3.8              |                   |
| Global Alpha International Small Cap                          | 0.8               | 126,299,651          | -14.0        | -21.4        | -21.4        | -            | -            | -             | -0.3             | Dec-19            |
| MSCI EAFE   |                   |                      | <u>-14.3</u> | <u>-17.3</u> | <u>-17.3</u> | -            | -            | -             | <u>0.4</u>       |                   |
| Over/Under  |                   |                      | 0.3          | -4.1         | -4.1         | -            | -            | -             | -0.7             |                   |
| MSCI EAFE Small Cap (Net)                                     |                   |                      | <u>-17.7</u> | <u>-24.0</u> | <u>-24.0</u> | -            | -            | -             | <u>-1.1</u>      |                   |
| Over/Under  |                   |                      | 3.7          | 2.6          | 2.6          | -            | -            | -             | 0.8              |                   |
| eV EAFE Small Cap Equity Median                               |                   |                      | -17.0        | -24.7        | -24.7        | -            | -            | -             | -0.8             |                   |



|   | Allo              | ocation              |              |              |              | Per          | formanc      | e (%)         |                  |                   |
|---|-------------------|----------------------|--------------|--------------|--------------|--------------|--------------|---------------|------------------|-------------------|
|   | % of<br>Portfolio | Market<br>Value (\$) | 3 Mo<br>(%)  | FYTD<br>(%)  | 1 Yr<br>(%)  | 3 Yrs<br>(%) | 5 Yrs<br>(%) | 10 Yrs<br>(%) | Inception<br>(%) | Inception<br>Date |
| Non-U.S. Emerging Mkts Equity Composite | 6.4               | 987,707,829          | -10.1        | -27.2        | -27.2        | -1.1         | 0.5          | 1.8           | 5.3              | Sep-00            |
| MSCI Emerging Markets                   |                   |                      | <u>-11.4</u> | <u>-25.3</u> | <u>-25.3</u> | <u>0.6</u>   | <u>2.2</u>   | <u>3.1</u>    | <u>6.5</u>       |                   |
| Over/Under                              |                   |                      | 1.3          | -1.9         | -1.9         | -1.7         | -1.7         | -1.3          | -1.2             |                   |
| InvMetrics Public DB Emg Mkt Eq Median  |                   |                      | -11.4        | -24.7        | -24.7        | 0.7          | 1.5          | 2.4           | -                |                   |
| Neuberger Berman Emerging Markets       | 2.1               | 322,938,696          | -9.9         | -29.1        | -29.1        | -3.0         | -0.2         | -             | 2.1              | Aug-13            |
| MSCI Emerging Markets                   |                   |                      | <u>-11.4</u> | <u>-25.3</u> | <u>-25.3</u> | <u>0.6</u>   | <u>2.2</u>   | -             | <u>3.0</u>       |                   |
| Over/Under                              |                   |                      | 1.5          | -3.8         | -3.8         | -3.6         | -2.4         | -             | -0.9             |                   |
| eV Emg Mkts Equity Median               |                   |                      | -12.3        | -25.4        | -25.4        | 1.2          | 2.3          | -             | 3.2              |                   |
| RBC GAM EME Fund                        | 2.2               | 347,344,347          | -9.7         | -20.8        | -20.8        | -            | -            | -             | 0.4              | Aug-19            |
| MSCI Emerging Markets                   |                   |                      | -11.4        | <u>-25.3</u> | <u>-25.3</u> | -            | -            | -             | <u>1.0</u>       |                   |
| Over/Under                              |                   |                      | 1.7          | 4.5          | 4.5          | -            | -            | -             | -0.6             |                   |
| eV Emg Mkts Equity Median               |                   |                      | -12.3        | -25.4        | -25.4        | -            | -            | -             | 1.4              |                   |
| UBS Emerging Markets EQ OPP             | 2.0               | 317,420,095          | -10.6        | -31.3        | -31.3        | -            | -            | -             | 0.9              | Aug-19            |
| MSCI Emerging Markets                   |                   |                      | -11.4        | <u>-25.3</u> | <u>-25.3</u> | -            | -            | -             | <u>1.0</u>       |                   |
| Over/Under                              |                   |                      | 0.8          | -6.0         | -6.0         | -            | -            | -             | -0.1             |                   |
| eV Emg Mkts Equity Median               |                   |                      | -12.3        | -25.4        | -25.4        | -            | -            | -             | 1.4              |                   |

1 - State Street Bank + Trust Co was funded with \$1.5M in June 2019.

2 - RBC GAM EME fund was funded with \$285M in July 2019.

3 - UBS Emerging Markets EQ OPP funded with \$95M in July 2019. Note: Performance shown is net of fees. Fiscal year ends June 30.



|  | Al                | location             |             |             |              | Per          | formanc      | e (%)         |                  |                   |
|--|-------------------|----------------------|-------------|-------------|--------------|--------------|--------------|---------------|------------------|-------------------|
|  | % of<br>Portfolio | Market<br>Value (\$) | 3 Mo<br>(%) | FYTD<br>(%) | 1 Yr<br>(%)  | 3 Yrs<br>(%) | 5 Yrs<br>(%) | 10 Yrs<br>(%) | Inception<br>(%) | Inception<br>Date |
| Fixed Income Composite                                 | 22.9              | 3,547,728,137        | -3.2        | -0.2        | -0.2         | 3.9          | 4.3          | 5.4           | 3.2              | Jan-85            |
| Blmbg. U.S. Aggregate Index                            |                   |                      | <u>-4.7</u> | -10.3       | <u>-10.3</u> | <u>-0.9</u>  | <u>0.9</u>   | <u>1.5</u>    | <u>6.2</u>       |                   |
| Over/Under   |                   |                      | 1.5         | 10.1        | 10.1         | 4.8          | 3.4          | 3.9           | -3.0             |                   |
| InvMetrics Public DB > \$1 Billion Fixed Income Median |                   |                      | -3.8        | -0.5        | -0.5         | 3.6          | 4.1          | 4.8           | -                |                   |
| Core Fixed Income Composite                            | 4.5               | 696,673,725          | -5.2        | -10.8       | -10.8        | -1.1         | 0.8          | 1.8           | 4.4              | Dec-99            |
| Blmbg. U.S. Aggregate Index                            |                   |                      | -4.7        | -10.3       | -10.3        | <u>-0.9</u>  | <u>0.9</u>   | <u>1.5</u>    | <u>4.2</u>       |                   |
| Over/Under   |                   |                      | -0.5        | -0.5        | -0.5         | -0.2         | -0.1         | 0.3           | 0.2              |                   |
| InvMetrics Public DB > \$1 Billion Fixed Income Median |                   |                      | -3.8        | -0.5        | -0.5         | 3.6          | 4.1          | 4.8           | -                |                   |
| Core Fixed Income                                      | 4.5               | 696,673,725          | -5.2        | -10.8       | -10.8        | -1.1         | 0.8          | -             | 1.2              | Apr-15            |
| Blmbg. U.S. Aggregate Index                            |                   |                      | -4.7        | -10.3       | -10.3        | -0.9         | <u>0.9</u>   | -             | <u>1.1</u>       |                   |
| Over/Under   |                   |                      | -0.5        | -0.5        | -0.5         | -0.2         | -0.1         | -             | 0.1              |                   |
| eV US Core Fixed Inc Median                            |                   |                      | -4.9        | -10.5       | -10.5        | -0.7         | 1.1          | -             | 1.3              |                   |



|  | Allo              | ocation              |              |              |              | Per          | formanc      | e (%)         |                  |                   |
|--|-------------------|----------------------|--------------|--------------|--------------|--------------|--------------|---------------|------------------|-------------------|
|  | % of<br>Portfolio | Market<br>Value (\$) | 3 Mo<br>(%)  | FYTD<br>(%)  | 1 Yr<br>(%)  | 3 Yrs<br>(%) | 5 Yrs<br>(%) | 10 Yrs<br>(%) | Inception<br>(%) | Inception<br>Date |
| Non-U.S. Emerging Market Debt Composite                            | 1.4               | 211,973,044          | -8.1         | -15.2        | -15.2        | -2.9         | -0.5         | 0.8           | 0.6              | Sep-11            |
| Non-U.S. EMD Custom Benchmark                                      |                   |                      | <u>-10.0</u> | <u>-20.2</u> | <u>-20.2</u> | <u>-5.5</u>  | <u>-1.7</u>  | <u>-1.3</u>   | <u>-1.5</u>      |                   |
| Over/Under   |                   |                      | 1.9          | 5.0          | 5.0          | 2.6          | 1.2          | 2.1           | 2.1              |                   |
| InvMetrics Public DB Emg Mkt Eq Median                             |                   |                      | -11.4        | -24.7        | -24.7        | 0.7          | 1.5          | 2.4           | 1.6              |                   |
| EMSO   | 0.7               | 101,206,185          | -7.2         | -12.0        | -12.0        | -1.2         | 0.0          | 2.9           | 2.8              | Sep-11            |
| JP Morgan GBI - EM Global Diversified Index                        |                   |                      | <u>-8.6</u>  | -19.3        | <u>-19.3</u> | <u>-5.8</u>  | <u>-2.3</u>  | <u>-1.5</u>   | <u>-1.7</u>      |                   |
| Over/Under   |                   |                      | 1.4          | 7.3          | 7.3          | 4.6          | 2.3          | 4.4           | 4.5              |                   |
| eV All Emg Mkts Fixed Inc Median                                   |                   |                      | -9.1         | -18.7        | -18.7        | -4.3         | -1.0         | 1.4           | 1.9              |                   |
| Prudential   | 0.7               | 110,766,856          | -8.9         | -18.0        | -18.0        | -4.5         | -0.9         | -             | 2.6              | Feb-16            |
| 50% JPM EMBI Global Diversified/ 50% JPM GBI-EM Global Diversified |                   |                      | <u>-10.0</u> | -20.2        | -20.2        | <u>-5.5</u>  | <u>-1.7</u>  | -             | <u>1.4</u>       |                   |
| Over/Under   |                   |                      | 1.1          | 2.2          | 2.2          | 1.0          | 0.8          | -             | 1.2              |                   |
| eV All Emg Mkts Fixed Inc Median                                   |                   |                      | -9.1         | -18.7        | -18.7        | -4.3         | -1.0         | -             | 2.0              |                   |

1 - Non-U.S. Emerging Market Debt Composite market value includes \$17,676 in terminated manager account.

2 - InvMetrics Public DB > \$1B Emerging Mkt Fixed Income unavailable, universe includes all DB plans.

3 - Non-U.S. EMD Custom Benchmark Composition from 9/1/2011–1/31/2016: JP Morgan GBI– EM Diversified. 2/1/2016 – Current: 50% JPM EMBI Global Diversified / 50% JPM GBI–EM Global Diversified.

Note: Performance shown is net of fees. Fiscal year ends June 30.



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|   | A                 | location             |             |             |             | Ре           | rformand     | e (%)         |                  |                   |
|---|-------------------|----------------------|-------------|-------------|-------------|--------------|--------------|---------------|------------------|-------------------|
|   | % of<br>Portfolio | Market<br>Value (\$) | 3 Mo<br>(%) | FYTD<br>(%) | 1 Yr<br>(%) | 3 Yrs<br>(%) | 5 Yrs<br>(%) | 10 Yrs<br>(%) | Inception<br>(%) | Inception<br>Date |
| Opportunistic Credit Composite  | 17.0              | 2,639,081,369        | -2.2        | 4.6         | 4.6         | 6.0          | 5.9          | 7.5           | 7.8              | May-08            |
| 50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index |                   |                      | <u>-6.9</u> | <u>-7.5</u> | <u>-7.5</u> | <u>1.1</u>   | <u>2.5</u>   | <u>4.1</u>    | <u>5.0</u>       |                   |
| Over/Under  |                   |                      | 4.7         | 12.1        | 12.1        | 4.9          | 3.4          | 3.4           | 2.8              |                   |
| ICE BofA High Yield BB-B Constrained Index                              |                   |                      | -9.5        | -12.2       | -12.2       | 0.0          | 2.1          | 4.3           | 5.8              | Jan-97            |
| Beachpoint Combined   | 3.1               | 484,512,984          | -7.2        | -5.4        | -5.4        | 4.6          | 5.0          | 6.3           | 6.4              | Mar-04            |
| 50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index |                   |                      | <u>-6.9</u> | <u>-7.5</u> | <u>-7.5</u> | <u>1.1</u>   | <u>2.5</u>   | <u>4.1</u>    | <u>5.0</u>       |                   |
| Over/Under  |                   |                      | -0.3        | 2.1         | 2.1         | 3.5          | 2.5          | 2.2           | 1.4              |                   |
| GoldenTree Combined   | 1.6               | 247,405,853          | -4.9        | 2.0         | 2.0         | 7.7          | 7.3          | 8.0           | 8.6              | Oct-09            |
| 50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index |                   |                      | <u>-6.9</u> | <u>-7.5</u> | <u>-7.5</u> | <u>1.1</u>   | <u>2.5</u>   | <u>4.1</u>    | <u>5.2</u>       |                   |
| Over/Under  |                   |                      | 2.0         | 9.5         | 9.5         | 6.6          | 4.8          | 3.9           | 3.4              |                   |
| Medley Capital  | 0.1               | 13,303,328           | -6.6        | -10.2       | -10.2       | -10.9        | -10.1        | -1.5          | -1.0             | Aug-11            |
| 50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index |                   |                      | <u>-6.9</u> | <u>-7.5</u> | <u>-7.5</u> | <u>1.1</u>   | <u>2.5</u>   | <u>4.1</u>    | <u>4.2</u>       |                   |
| Over/Under  |                   |                      | 0.3         | -2.7        | -2.7        | -12.0        | -12.6        | -5.6          | -5.2             |                   |
| Waterfall - Eden  | 2.4               | 373,571,893          | 0.1         | 10.4        | 10.4        | 6.9          | 6.9          | 8.2           | 8.7              | Aug-11            |
| 50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index |                   |                      | <u>-6.9</u> | <u>-7.5</u> | <u>-7.5</u> | <u>1.1</u>   | <u>2.5</u>   | <u>4.1</u>    | <u>4.2</u>       |                   |
| Over/Under  |                   |                      | 7.0         | 17.9        | 17.9        | 5.8          | 4.4          | 4.1           | 4.5              |                   |
| Waterfall - Victoria  | 0.7               | 106,838,736          | 0.4         | 5.5         | 5.5         | 6.0          | 8.9          | 9.4           | 9.1              | Aug-11            |
| 50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index |                   |                      | <u>-6.9</u> | <u>-7.5</u> | <u>-7.5</u> | <u>1.1</u>   | <u>2.5</u>   | <u>4.1</u>    | <u>4.2</u>       |                   |
| Over/Under  |                   |                      | 7.3         | 13.0        | 13.0        | 4.9          | 6.4          | 5.3           | 4.9              |                   |
| Gramercy Distressed Opp II  | 0.4               | 68,455,803           | -0.3        | 0.3         | 0.3         | -8.3         | -7.5         | -1.2          | -1.2             | Jul-12            |
| 50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index |                   |                      | -6.9        | <u>-7.5</u> | <u>-7.5</u> | <u>1.1</u>   | <u>2.5</u>   | <u>4.1</u>    | <u>4.1</u>       |                   |
| Over/Under  |                   |                      | 6.6         | 7.8         | 7.8         | -9.4         | -10.0        | -5.3          | -5.3             |                   |
| ICE Canyon  | 0.0               | 87,708               | -55.8       | -69.1       | -69.1       | -39.4        | -25.3        | -12.3         | -12.2            | Jun-12            |
| 50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index |                   |                      | <u>-6.9</u> | <u>-7.5</u> | <u>-7.5</u> | <u>1.1</u>   | <u>2.5</u>   | <u>4.1</u>    | <u>4.2</u>       |                   |
| Over/Under  |                   |                      | -48.9       | -61.6       | -61.6       | -40.5        | -27.8        | -16.4         | -16.4            |                   |



|   | Allo              | ocation              |                    |                     |                     | Pe                 | rformanc           | e (%)         |                    |                   |
|---|-------------------|----------------------|--------------------|---------------------|---------------------|--------------------|--------------------|---------------|--------------------|-------------------|
|   | % of<br>Portfolio | Market<br>Value (\$) | 3 Mo<br>(%)        | FYTD<br>(%)         | 1 Yr<br>(%)         | 3 Yrs<br>(%)       | 5 Yrs<br>(%)       | 10 Yrs<br>(%) | Inception<br>(%)   | Inception<br>Date |
| Lone Star VIII  | 0.1               | 14,435,731           | 0.6                | -9.8                | -9.8                | -3.8               | -2.4               | -             | 3.6                | Oct-13            |
| 50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index<br>Over/Under |                   |                      | <u>-6.9</u><br>7.5 | <u>-7.5</u><br>-2.3 | <u>-7.5</u><br>-2.3 | <u>1.1</u><br>-4.9 | <u>2.5</u><br>-4.9 | -             | <u>3.6</u><br>0.0  |                   |
| Marathon European Credit Opportunity II   | 0.1               | 16,942,957           | -2.3               | -1.9                | -1.9                | -0.5               | 4.7                | -             | 5.2                | Mar-14            |
| 50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index<br>Over/Under |                   |                      | <u>-6.9</u><br>4.6 | <u>-7.5</u><br>5.6  | <u>-7.5</u><br>5.6  | <u>1.1</u><br>-1.6 | <u>2.5</u><br>2.2  | -             | <u>3.3</u><br>1.9  |                   |
| Lone Star IX  | 0.1               | 23,060,380           | 0.0                | 29.6                | 29.6                | 23.4               | 14.9               | -             | -0.6               | Apr-15            |
| 50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index<br>Over/Under |                   |                      | <u>-6.9</u><br>6.9 | <u>-7.5</u><br>37.1 | <u>-7.5</u><br>37.1 | <u>1.1</u><br>22.3 | <u>2.5</u><br>12.4 | -             | <u>3.3</u><br>-3.9 |                   |
| Kildare European Partners I LP  | 0.1               | 9,440,195            | 2.4                | 0.2                 | 0.2                 | -7.2               | 2.9                | -             | 5.4                | May-14            |
| 50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index<br>Over/Under |                   |                      | <u>-6.9</u><br>9.3 | <u>-7.5</u><br>7.7  | <u>-7.5</u><br>7.7  | <u>1.1</u><br>-8.3 | <u>2.5</u><br>0.4  | -             | <u>3.2</u><br>2.2  |                   |
| Black Forest  | 0.2               | 32,879,987           | 2.2                | 7.0                 | 7.0                 | -3.0               | 1.2                | -             | 3.5                | Aug-14            |
| 50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index<br>Over/Under |                   |                      | <u>-6.9</u><br>9.1 | <u>-7.5</u><br>14.5 | <u>-7.5</u><br>14.5 | <u>1.1</u><br>-4.1 | <u>2.5</u><br>-1.3 | -             | <u>3.2</u><br>0.3  |                   |
| Gramercy Distressed Opp III   | 0.3               | 45,155,868           | -3.7               | -5.8                | -5.8                | -5.7               | -4.2               | -             | -3.4               | Jan-16            |
| 50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index<br>Over/Under |                   |                      | <u>-6.9</u><br>3.2 | <u>-7.5</u><br>1.7  | <u>-7.5</u><br>1.7  | <u>1.1</u><br>-6.8 | <u>2.5</u><br>-6.7 | -             | <u>4.3</u><br>-7.7 |                   |
| GSO Capital Opp III   | 0.4               | 54,908,644           | -3.1               | 11.4                | 11.4                | 10.1               | 10.6               | -             | 9.4                | Oct-16            |
| 50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index<br>Over/Under |                   |                      | <u>-6.9</u><br>3.8 | <u>-7.5</u><br>18.9 | <u>-7.5</u><br>18.9 | <u>1.1</u><br>9.0  | <u>2.5</u><br>8.1  | -             | <u>3.1</u><br>6.3  |                   |
| Cross Ocean ESS II  | 0.1               | 21,376,234           | -0.7               | 6.6                 | 6.6                 | 8.4                | 7.9                | -             | 9.6                | May-17            |
| 50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index<br>Over/Under |                   |                      | <u>-6.9</u><br>6.2 | <u>-7.5</u><br>14.1 | <u>-7.5</u><br>14.1 | <u>1.1</u><br>7.3  | <u>2.5</u><br>5.4  | -             | <u>2.6</u><br>7.0  |                   |



|   | Allo              | ocation              |                      |                     |                     | Per                | formanc           | e (%)         |                    |                   |
|---|-------------------|----------------------|----------------------|---------------------|---------------------|--------------------|-------------------|---------------|--------------------|-------------------|
|   | % of<br>Portfolio | Market<br>Value (\$) | 3 Mo<br>(%)          | FYTD<br>(%)         | 1 Yr<br>(%)         | 3 Yrs<br>(%)       | 5 Yrs<br>(%)      | 10 Yrs<br>(%) | Inception<br>(%)   | Inception<br>Date |
| OWS CREDIT OPPORTUNITY FD   | 0.9               | 141,806,600          | 0.2                  | 6.3                 | 6.3                 | 6.0                | 7.2               | -             | 7.2                | Jul-17            |
| 50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index<br>Over/Under |                   |                      | <u>-6.9</u><br>7.1   | <u>-7.5</u><br>13.8 | <u>-7.5</u><br>13.8 | <u>1.1</u><br>4.9  | <u>2.5</u><br>4.7 | -             | <u>2.5</u><br>4.7  |                   |
| TAIGA SPECIAL OPP DAC LP  | 1.3               | 195,957,829          | 2.5                  | 7.1                 | 7.1                 | 5.1                | -                 | -             | 7.5                | Aug-17            |
| 50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index<br>Over/Under |                   |                      | <u>-6.9</u><br>9.4   | <u>-7.5</u><br>14.6 | <u>-7.5</u><br>14.6 | <u>1.1</u><br>4.0  | -                 | -             | <u>2.4</u><br>5.1  |                   |
| Sutherland Asset Management   | 0.3               | 53,996,944           | -18.0                | -10.9               | -10.9               | 5.4                | 4.0               | -             | 4.0                | Jul-17            |
| 50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index<br>Over/Under |                   |                      | <u>-6.9</u><br>-11.1 | <u>-7.5</u><br>-3.4 | <u>-7.5</u><br>-3.4 | <u>1.1</u><br>4.3  | <u>2.5</u><br>1.5 | -             | <u>2.5</u><br>1.5  |                   |
| OHA Strategic Credit II   | 0.5               | 71,170,939           | -0.9                 | 6.8                 | 6.8                 | 8.8                | -                 | -             | 15.0               | Dec-17            |
| 50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index<br>Over/Under |                   |                      | <u>-6.9</u><br>6.0   | <u>-7.5</u><br>14.3 | <u>-7.5</u><br>14.3 | <u>1.1</u><br>7.7  | -                 | -             | <u>2.3</u><br>12.7 |                   |
| Lone Star X   | 0.3               | 46,964,097           | 3.1                  | 46.3                | 46.3                | 25.8               | -                 | -             | 3.5                | Jan-18            |
| 50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index<br>Over/Under |                   |                      | <u>-6.9</u><br>10.0  | <u>-7.5</u><br>53.8 | <u>-7.5</u><br>53.8 | <u>1.1</u><br>24.7 | -                 | -             | <u>2.3</u><br>1.2  |                   |
| Kildare European Partners II LP   | 0.3               | 49,652,265           | 2.7                  | 23.0                | 23.0                | 16.8               | -                 | -             | 13.7               | Nov-18            |
| 50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index<br>Over/Under |                   |                      | <u>-6.9</u><br>9.6   | <u>-7.5</u><br>30.5 | <u>-7.5</u><br>30.5 | <u>1.1</u><br>15.7 | -                 | -             | <u>2.2</u><br>11.5 |                   |
| Riverstone Credit Partners II   | 0.4               | 55,020,185           | 18.0                 | 38.3                | 38.3                | 11.9               | -                 | -             | 8.7                | Dec-18            |
| 50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index<br>Over/Under |                   |                      | <u>-6.9</u><br>24.9  | <u>-7.5</u><br>45.8 | <u>-7.5</u><br>45.8 | <u>1.1</u><br>10.8 | -                 | -             | <u>2.4</u><br>6.3  |                   |
| RCP II N Strategic Credit   | 0.1               | 15,106,550           | 4.5                  | 14.3                | 14.3                | 13.0               | -                 | -             | 12.7               | Jan-19            |
| 50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index<br>Over/Under |                   |                      | <u>-6.9</u><br>11.4  | <u>-7.5</u><br>21.8 | <u>-7.5</u><br>21.8 | <u>1.1</u><br>11.9 | -                 | -             | <u>3.1</u><br>9.6  |                   |



|   | Allo              | ocation              |             |             |             | Per          | formanc      | e (%)         |                  |                   |
|---|-------------------|----------------------|-------------|-------------|-------------|--------------|--------------|---------------|------------------|-------------------|
|   | % of<br>Portfolio | Market<br>Value (\$) | 3 Mo<br>(%) | FYTD<br>(%) | 1 Yr<br>(%) | 3 Yrs<br>(%) | 5 Yrs<br>(%) | 10 Yrs<br>(%) | Inception<br>(%) | Inception<br>Date |
| OLEA SPECIAL OPPS OFFSHORE I  | 0.3               | 40,761,364           | -18.2       | -26.2       | -26.2       | -1.3         | -            | -             | 0.7              | Jun-19            |
| 50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index |                   |                      | <u>-6.9</u> | <u>-7.5</u> | <u>-7.5</u> | <u>1.1</u>   | -            | -             | <u>1.5</u>       |                   |
| Over/Under  |                   |                      | -11.3       | -18.7       | -18.7       | -2.4         | -            | -             | -0.8             |                   |
| Cross Ocean USD ESS III   | 0.8               | 123,818,527          | 3.7         | 10.6        | 10.6        | -            | -            | -             | 16.0             | Nov-19            |
| 50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index |                   |                      | <u>-6.9</u> | <u>-7.5</u> | <u>-7.5</u> | -            | -            | -             | <u>0.7</u>       |                   |
| Over/Under  |                   |                      | 10.6        | 18.1        | 18.1        | -            | -            | -             | 15.3             |                   |
| The Varde Fund XIII, L.P.   | 0.7               | 102,301,381          | -1.2        | 0.7         | 0.7         | -            | -            | -             | 9.6              | Jan-20            |
| 50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index |                   |                      | <u>-6.9</u> | <u>-7.5</u> | <u>-7.5</u> | -            | -            | -             | <u>-0.1</u>      |                   |
| Over/Under  |                   |                      | 5.7         | 8.2         | 8.2         | -            | -            | -             | 9.7              |                   |
| PIMCO Corp Opps Fund III  | 1.0               | 156,769,830          | -4.8        | 10.0        | 10.0        | -            | -            | -             | 38.8             | May-20            |
| 50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index |                   |                      | <u>-6.9</u> | <u>-7.5</u> | <u>-7.5</u> | -            | -            | -             | <u>4.3</u>       |                   |
| Over/Under  |                   |                      | 2.1         | 17.5        | 17.5        | -            | -            | -             | 34.5             |                   |
| BPC Tactical Fund LP  | 0.2               | 38,017,289           | -1.8        | 22.6        | 22.6        | -            | -            | -             | 16.9             | Jul-20            |
| 50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index |                   |                      | <u>-6.9</u> | <u>-7.5</u> | <u>-7.5</u> | -            | -            | -             | <u>2.0</u>       |                   |
| Over/Under  |                   |                      | 5.1         | 30.1        | 30.1        | -            | -            | -             | 14.9             |                   |
| Cross Ocean USD ESS IV FD   | 0.2               | 35,361,270           | 5.3         | -           | -           | -            | -            | -             | 6.7              | Oct-21            |
| 50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index |                   |                      | <u>-6.9</u> | -           | -           | -            | -            | -             | <u>-8.4</u>      |                   |
| Over/Under  |                   |                      | 12.2        | -           | -           | -            | -            | -             | 15.1             |                   |

Note: Performance shown is net of fees. Fiscal year ends June 30. Cross Ocean US ESS III funded 10/17/2019. The Varde Fund XIII, L.P. funded 12/31/2019. PIMCO Corp Opps Fund III funded 4/9/2020. BPC Tactical Fund LP funded 6/16/2020.



|   | A                 | location             |              |              |              | Pe           | rformanc     | e (%)         |                  |                   |
|---|-------------------|----------------------|--------------|--------------|--------------|--------------|--------------|---------------|------------------|-------------------|
|   | % of<br>Portfolio | Market<br>Value (\$) | 3 Mo<br>(%)  | FYTD<br>(%)  | 1 Yr<br>(%)  | 3 Yrs<br>(%) | 5 Yrs<br>(%) | 10 Yrs<br>(%) | Inception<br>(%) | Inception<br>Date |
| Absolute Return Composite                       | 0.0               | 169,272              |              |              |              |              |              |               |                  |                   |
| GAA, Risk Parity, and Other Diversifying Assets | 11.2              | 1,729,532,793        | -5.7         | -3.3         | -3.3         | 3.1          | 4.2          | 3.8           | 6.2              | Oct-09            |
| 3-Month LIBOR + 2%                              |                   |                      | <u>0.5</u>   | <u>2.0</u>   | <u>2.0</u>   | <u>2.8</u>   | <u>3.3</u>   | <u>2.9</u>    | <u>2.8</u>       |                   |
| Over/Under                                      |                   |                      | -6.2         | -5.3         | -5.3         | 0.3          | 0.9          | 0.9           | 3.4              |                   |
| Global Asset Allocation/Risk Parity Composite   | 6.6               | 1,022,055,016        | -8.0         | -4.7         | -4.7         | 2.9          | 4.0          | 3.6           | 6.1              | Oct-09            |
| GAA/Risk Parity Custom Index                    |                   |                      | <u>0.5</u>   | <u>2.0</u>   | <u>2.0</u>   | <u>2.8</u>   | <u>4.5</u>   | <u>5.8</u>    | <u>5.6</u>       |                   |
| Over/Under                                      |                   |                      | -8.5         | -6.7         | -6.7         | 0.1          | -0.5         | -2.2          | 0.5              |                   |
|   |                   |                      | -            | -            | -            | -            | -            | -             | -                |                   |
| Global Asset Allocation Composite               | 2.5               | 392,287,023          | 6.1          | 18.5         | 18.5         | 6.7          | 5.4          | -             | 3.7              | Nov-12            |
| Credit Suisse Hedge Global Macro                |                   |                      | <u>1.4</u>   | <u>21.6</u>  | <u>21.6</u>  | <u>12.3</u>  | <u>9.5</u>   | -             | <u>6.0</u>       |                   |
| Over/Under                                      |                   |                      | 4.7          | -3.1         | -3.1         | -5.6         | -4.1         | -             | -2.3             |                   |
| Bridgewater Pure Alpha                          | 2.4               | 376,863,238          | 8.7          | 24.9         | 24.9         | 7.1          | 6.4          | 4.6           | 6.5              | Oct-09            |
| Credit Suisse Hedge Global Macro                |                   |                      | <u>1.4</u>   | <u>21.6</u>  | <u>21.6</u>  | <u>12.3</u>  | <u>9.5</u>   | <u>6.1</u>    | <u>6.5</u>       |                   |
| Over/Under                                      |                   |                      | 7.3          | 3.3          | 3.3          | -5.2         | -3.1         | -1.5          | 0.0              |                   |
| eV Global TAA Median                            |                   |                      | -10.3        | -12.3        | -12.3        | 2.5          | 3.4          | 4.8           | 5.8              |                   |
| PIMCO All Asset All Authority                   | 0.1               | 15,423,785           | -12.6        | -13.0        | -13.0        | 1.3          | 1.6          | -             | 1.4              | Jul-13            |
| Credit Suisse Hedge Global Macro                |                   |                      | <u>1.4</u>   | <u>21.6</u>  | <u>21.6</u>  | <u>12.3</u>  | <u>9.5</u>   | -             | <u>6.1</u>       |                   |
| Over/Under                                      |                   |                      | -14.0        | -34.6        | -34.6        | -11.0        | -7.9         | -             | -4.7             |                   |
| eV Global TAA Median                            |                   |                      | -10.3        | -12.3        | -12.3        | 2.5          | 3.4          | -             | 4.4              |                   |
| Risk Parity                                     | 4.1               | 629,767,993          | -15.4        | -15.7        | -15.7        | 1.0          | 3.5          | -             | 3.6              | Nov-12            |
| GAA/Risk Parity Custom Index                    |                   |                      | <u>0.5</u>   | <u>2.0</u>   | <u>2.0</u>   | <u>2.8</u>   | <u>4.5</u>   | -             | <u>5.5</u>       |                   |
| Over/Under                                      |                   |                      | -15.9        | -17.7        | -17.7        | -1.8         | -1.0         | -             | -1.9             |                   |
| Bridgewater All Weather                         | 2.5               | 382,957,413          | -15.3        | -14.1        | -14.1        | 1.3          | 3.6          | 3.5           | 6.2              | Oct-09            |
| 60% MSCI World (Gross) / 40% FTSE WGBI          |                   |                      | <u>-13.2</u> | <u>-14.9</u> | <u>-14.9</u> | <u>3.0</u>   | <u>4.7</u>   | <u>5.9</u>    | <u>5.8</u>       |                   |
| Over/Under                                      |                   |                      | -2.1         | 0.8          | 0.8          | -1.7         | -1.1         | -2.4          | 0.4              |                   |
| eV Global TAA Median                            |                   |                      | -10.3        | -12.3        | -12.3        | 2.5          | 3.4          | 4.8           | 5.8              |                   |
| PanAgora  | 1.6               | 246,810,580          | -15.4        | -18.2        | -18.2        | 0.6          | 3.5          | -             | 5.6              | Dec-13            |
| GAA/Risk Parity Custom Index                    |                   |                      | <u>0.5</u>   | <u>2.0</u>   | <u>2.0</u>   | <u>2.8</u>   | <u>4.5</u>   | -             | <u>4.3</u>       |                   |
| Over/Under                                      |                   |                      | -15.9        | -20.2        | -20.2        | -2.2         | -1.0         | -             | 1.3              |                   |
| eV Global TAA Median                            |                   |                      | -10.3        | -12.3        | -12.3        | 2.5          | 3.4          | -             | 3.8              |                   |

1 - Absolute Return Composite includes \$299,819 in liquidating assets.

2 - GAA/Risk Parity Custom Index: 60% MSCI World Half Hedged/ 40% CITI WGBI Half Hedged

Inception - 6/30/2014; 60% MSCI World/ 40% CITI WGBI from 7/1/2014 - present.



|   | Allo              | ocation              |             |             |             | Per          | rformanc     | e (%)         |                  |                   |
|---|-------------------|----------------------|-------------|-------------|-------------|--------------|--------------|---------------|------------------|-------------------|
|   | % of<br>Portfolio | Market<br>Value (\$) | 3 Mo<br>(%) | FYTD<br>(%) | 1 Yr<br>(%) | 3 Yrs<br>(%) | 5 Yrs<br>(%) | 10 Yrs<br>(%) | Inception<br>(%) | Inception<br>Date |
| Other Diversifying Assets                 | 4.6               | 707,477,777          | -1.9        | -1.3        | -1.3        | 4.0          | -            | -             | 6.3              | Feb-18            |
| 3-Month LIBOR + 2%                        |                   |                      | <u>0.5</u>  | <u>2.0</u>  | <u>2.0</u>  | <u>2.8</u>   | -            | -             | <u>3.3</u>       |                   |
| Over/Under                                |                   |                      | -2.4        | -3.3        | -3.3        | 1.2          | -            | -             | 3.0              |                   |
| EIG Energy Fund XVII                      | 0.4               | 63,101,300           | 3.9         | 20.5        | 20.5        | 3.5          | -            | -             | 4.1              | Apr-18            |
| 3-Month LIBOR + 2%                        |                   |                      | <u>0.5</u>  | <u>2.0</u>  | <u>2.0</u>  | <u>2.8</u>   | -            | -             | <u>3.3</u>       |                   |
| Over/Under                                |                   |                      | 3.4         | 18.5        | 18.5        | 0.7          | -            | -             | 0.8              |                   |
| The 1609 Fund LTD.                        | 1.0               | 149,676,549          | -0.8        | -3.8        | -3.8        | -2.4         | -            | -             | 0.9              | Feb-18            |
| 3-Month LIBOR + 2%                        |                   |                      | <u>0.5</u>  | <u>2.0</u>  | <u>2.0</u>  | <u>2.8</u>   | -            | -             | <u>3.3</u>       |                   |
| Over/Under                                |                   |                      | -1.3        | -5.8        | -5.8        | -5.2         | -            | -             | -2.4             |                   |
| OLEA SPECIAL OPPS OFFSHORE I              | 0.8               | 117,993,744          | -17.5       | -25.7       | -25.7       | -1.0         | -            | -             | 3.5              | Oct-18            |
| 3-Month LIBOR + 2%                        |                   |                      | <u>0.5</u>  | <u>2.0</u>  | <u>2.0</u>  | <u>2.8</u>   | -            | -             | <u>3.2</u>       |                   |
| Over/Under                                |                   |                      | -18.0       | -27.7       | -27.7       | -3.8         | -            | -             | 0.3              |                   |
| Orchard Liquid Credit Fund                | 0.7               | 107,846,400          | 3.9         | 1.2         | 1.2         | 3.9          | -            | -             | 4.8              | Oct-18            |
| 3-Month LIBOR + 2%                        |                   |                      | <u>0.5</u>  | <u>2.0</u>  | <u>2.0</u>  | <u>2.8</u>   | -            | -             | <u>3.2</u>       |                   |
| Over/Under                                |                   |                      | 3.4         | -0.8        | -0.8        | 1.1          | -            | -             | 1.6              |                   |
| Orbimed Royalty Credit Opp III            | 0.2               | 31,239,108           | -3.0        | -9.6        | -9.6        | -            | -            | -             | 29.4             | Oct-19            |
| 3-Month LIBOR + 2%                        |                   |                      | <u>0.5</u>  | <u>2.0</u>  | <u>2.0</u>  | -            | -            | -             | <u>2.7</u>       |                   |
| Over/Under                                |                   |                      | -3.5        | -11.6       | -11.6       | -            | -            | -             | 26.7             |                   |
| IM U.S. Other Fixed Income (SA+CF) Median |                   |                      | -4.4        | -4.2        | -4.2        | -            | -            | -             | 1.9              |                   |
| AE Industrial Partners Aerospace          | 0.8               | 121,217,621          | 3.0         | 19.2        | 19.2        | -            | -            | -             | 14.5             | Apr-20            |
| 3-Month LIBOR + 2%                        |                   |                      | <u>0.5</u>  | <u>2.0</u>  | <u>2.0</u>  | -            | -            | -             | <u>2.3</u>       |                   |
| Over/Under                                |                   |                      | 2.5         | 17.2        | 17.2        | -            | -            | -             | 12.2             |                   |
| Cloverlay Solutions (Bravo)               | 0.6               | 97,618,496           | 3.1         | 5.8         | 5.8         | -            | -            | -             | -1.9             | Dec-20            |
| 3-Month LIBOR + 2%                        |                   |                      | <u>0.5</u>  | <u>2.0</u>  | <u>2.0</u>  | -            | -            | -             | <u>2.1</u>       |                   |
| Over/Under                                |                   |                      | 2.6         | 3.8         | 3.8         | -            | -            | -             | -4.0             |                   |
| Longford Capital Fund III, LP             | 0.1               | 18,784,559           | 1.2         | -           | -           | -            | -            | -             | 45.2             | Oct-21            |
| 3-Month LIBOR + 2%                        |                   |                      | <u>0.5</u>  | -           | -           | -            | -            | -             | <u>1.5</u>       |                   |
| Over/Under                                |                   |                      | 0.7         | -           | -           | -            | -            | -             | 43.7             |                   |



|   | A                 | location             |             |             |             | Pe           | rformand     | e (%)         |                  |                   |
|---|-------------------|----------------------|-------------|-------------|-------------|--------------|--------------|---------------|------------------|-------------------|
|   | % of<br>Portfolio | Market<br>Value (\$) | 3 Mo<br>(%) | FYTD<br>(%) | 1 Yr<br>(%) | 3 Yrs<br>(%) | 5 Yrs<br>(%) | 10 Yrs<br>(%) | Inception<br>(%) | Inception<br>Date |
| Private Equity Composite                            | 22.7              | 3,513,810,918        | 2.2         | 21.9        | 21.9        | 23.8         | 18.7         | 16.7          | 10.1             | Jun-06            |
| Private Equity Index                                |                   |                      | <u>-0.6</u> | <u>24.3</u> | <u>24.3</u> | <u>23.4</u>  | <u>19.4</u>  | <u>15.3</u>   | <u>13.7</u>      |                   |
| Over/Under  |                   |                      | 2.8         | -2.4        | -2.4        | 0.4          | -0.7         | 1.4           | -3.6             |                   |
| InvMetrics Public DB Private Eq Median              |                   |                      | 0.5         | 22.6        | 22.6        | 21.7         | 18.7         | 15.5          | 13.4             |                   |
| Real Assets Composite                               | 9.5               | 1,467,750,360        | 6.8         | 17.7        | 17.7        | 7.7          | 9.4          | 7.7           | 4.3              | Jul-08            |
| CPI + 4% (Seasonally Adjusted)                      |                   |                      | <u>3.7</u>  | <u>13.4</u> | <u>13.4</u> | <u>9.2</u>   | <u>8.0</u>   | <u>6.7</u>    | <u>6.3</u>       |                   |
| Over/Under  |                   |                      | 3.1         | 4.3         | 4.3         | -1.5         | 1.4          | 1.0           | -2.0             |                   |
| InvMetrics Public DB Real Assets/Commodities Median |                   |                      | 1.1         | 17.2        | 17.2        | 7.7          | 8.2          | 5.6           | 3.7              |                   |
| Infrastructure Composite                            | 3.9               | 600,410,430          | 9.1         | 17.6        | 17.6        | 11.5         | 10.0         | 8.6           | 5.2              | Jul-08            |
| Infrastructure                                      | 3.8               | 594,193,958          | 9.3         | 17.4        | 17.4        | 11.5         | 10.0         | 8.2           | 4.9              | Jul-08            |
| CPI + 4% (Seasonally Adjusted)                      |                   |                      | <u>3.7</u>  | <u>13.4</u> | <u>13.4</u> | <u>9.2</u>   | <u>8.0</u>   | <u>6.7</u>    | <u>6.3</u>       |                   |
| Over/Under  |                   |                      | 5.6         | 4.0         | 4.0         | 2.3          | 2.0          | 1.5           | -1.4             |                   |
| International Infrastructure                        | 0.0               | 6,216,472            | -7.1        | 46.7        | 46.7        | 16.2         | 12.8         | -             | 4.0              | Jan-13            |
| CPI + 4% (Seasonally Adjusted)                      |                   |                      | <u>3.7</u>  | <u>13.4</u> | <u>13.4</u> | <u>9.2</u>   | <u>8.0</u>   | -             | <u>6.7</u>       |                   |
| Over/Under  |                   |                      | -10.8       | 33.3        | 33.3        | 7.0          | 4.8          | -             | -2.7             |                   |
| Natural Resources                                   | 5.6               | 867,339,930          | 5.2         | 17.9        | 17.9        | 5.2          | 8.9          | 7.0           | 5.1              | Mar-09            |
| Harvest Fund  | 0.4               | 60,152,313           | -8.3        | 16.0        | 16.0        | 4.8          | 3.1          | -             | 3.0              | Aug-16            |
| Alerian MLP Index                                   |                   |                      | <u>-7.4</u> | <u>4.3</u>  | <u>4.3</u>  | <u>0.1</u>   | <u>-0.3</u>  | -             | <u>-0.3</u>      |                   |
| Over/Under  |                   |                      | -0.9        | 11.7        | 11.7        | 4.7          | 3.4          | -             | 3.3              |                   |
| Energy  | 1.8               | 283,614,131          | 14.8        | 32.6        | 32.6        | 2.3          | 13.7         | -             | 4.9              | Jan-14            |
| CPI + 4% (Seasonally Adjusted)                      |                   |                      | <u>3.7</u>  | <u>13.4</u> | <u>13.4</u> | <u>9.2</u>   | <u>8.0</u>   | -             | <u>6.8</u>       |                   |
| Over/Under  |                   |                      | 11.1        | 19.2        | 19.2        | -6.9         | 5.7          | -             | -1.9             |                   |
| Agriculture Composite                               | 1.6               | 245,473,264          | 1.9         | 10.3        | 10.3        | 7.5          | 6.2          | -             | 5.2              | Aug-12            |
| NCREIF Farmland                                     |                   |                      | <u>1.4</u>  | <u>9.7</u>  | <u>9.7</u>  | <u>6.1</u>   | <u>6.1</u>   | -             | <u>9.5</u>       |                   |
| Over/Under  |                   |                      | 0.5         | 0.6         | 0.6         | 1.4          | 0.1          | -             | -4.3             |                   |
| Timber Composite                                    | 0.8               | 124,461,877          | 2.3         | 13.6        | 13.6        | 6.1          | 6.3          | 6.0           | 4.5              | Mar-09            |
| NCREIF Timberland Index                             |                   |                      | <u>1.9</u>  | <u>12.0</u> | <u>12.0</u> | <u>5.0</u>   | <u>4.3</u>   | <u>5.7</u>    | <u>4.1</u>       |                   |
| Over/Under  |                   |                      | 0.4         | 1.6         | 1.6         | 1.1          | 2.0          | 0.3           | 0.4              |                   |
| Mitigation Banking                                  | 0.5               | 72,514,601           | 5.7         | 4.0         | 4.0         | 2.9          | 6.7          | 7.4           | 2.6              | Mar-11            |
| CPI + 4% (Seasonally Adjusted)                      |                   |                      | <u>3.7</u>  | <u>13.4</u> | <u>13.4</u> | <u>9.2</u>   | <u>8.0</u>   | <u>6.7</u>    | <u>6.7</u>       |                   |
| Over/Under  |                   |                      | 2.0         | -9.4        | -9.4        | -6.3         | -1.3         | 0.7           | -4.1             |                   |
| Water Property Investor, L.P.                       | 0.5               | 81,123,745           | -0.4        | 14.2        | 14.2        | 18.8         | 10.7         | -             | 8.8              | Jan-15            |
| CPI + 4% (Seasonally Adjusted)                      |                   |                      | <u>3.7</u>  | <u>13.4</u> | <u>13.4</u> | <u>9.2</u>   | <u>8.0</u>   | -             | <u>7.1</u>       |                   |
| Over/Under  |                   |                      | -4.1        | 0.8         | 0.8         | 9.6          | 2.7          | -             | 1.7              |                   |



|   | Al                | ocation              |              |             |             | Per          | formanc      | e (%)         |                  |                   |
|---|-------------------|----------------------|--------------|-------------|-------------|--------------|--------------|---------------|------------------|-------------------|
|   | % of<br>Portfolio | Market<br>Value (\$) | 3 Mo<br>(%)  | FYTD<br>(%) | 1 Yr<br>(%) | 3 Yrs<br>(%) | 5 Yrs<br>(%) | 10 Yrs<br>(%) | Inception<br>(%) | Inception<br>Date |
| Real Estate Composite                                 | 8.6               | 1,339,058,125        | -1.4         | 20.3        | 20.3        | 13.3         | 12.5         | 12.1          | 10.8             | Dec-03            |
| NCREIF Property Index                                 |                   |                      | <u>3.2</u>   | <u>21.5</u> | <u>21.5</u> | <u>10.2</u>  | <u>8.9</u>   | <u>9.7</u>    | <u>9.1</u>       |                   |
| Over/Under  |                   |                      | -4.6         | -1.2        | -1.2        | 3.1          | 3.6          | 2.4           | 1.7              |                   |
| Wilshire REIT   |                   |                      | -18.5        | -6.7        | -6.7        | 4.0          | 5.3          | 7.3           | 11.5             | Jan-78            |
| InvMetrics Public DB > \$1 Billion Real Estate Median |                   |                      | 7.5          | 23.4        | 23.4        | 10.1         | 10.3         | 11.4          | -                |                   |
| Public Real Estate Composite                          | 2.1               | 325,500,279          | -17.2        | -8.0        | -8.0        | 3.8          | 4.7          | 6.9           | 8.2              | Dec-03            |
| Wilshire REIT   |                   |                      | <u>-18.5</u> | <u>-6.7</u> | <u>-6.7</u> | <u>4.0</u>   | <u>5.3</u>   | <u>7.3</u>    | <u>8.4</u>       |                   |
| Over/Under  |                   |                      | 1.3          | -1.3        | -1.3        | -0.2         | -0.6         | -0.4          | -0.2             |                   |
| InvMetrics Public DB > \$1 Billion Real Estate Median |                   |                      | 7.5          | 23.2        | 23.2        | 10.6         | 10.5         | 11.6          | -                |                   |
| Brookfield  | 2.1               | 325,500,279          | -17.2        | -8.0        | -8.0        | 3.8          | 4.7          | 7.1           | 7.7              | Jul-11            |
| MSCI U.S. REIT  |                   |                      | -17.2        | <u>-7.3</u> | <u>-7.3</u> | <u>2.9</u>   | <u>4.1</u>   | <u>6.0</u>    | <u>6.6</u>       |                   |
| Over/Under  |                   |                      | 0.0          | -0.7        | -0.7        | 0.9          | 0.6          | 1.1           | 1.1              |                   |
| eV US REIT Median                                     |                   |                      | -16.6        | -6.9        | -6.9        | 5.4          | 6.3          | 7.5           | 8.0              |                   |
| Private Real Estate Composite                         | 6.5               | 1,013,557,846        | 5.5          | 35.1        | 35.1        | 17.8         | 16.4         | 15.4          | 10.6             | Jan-08            |
| NCREIF Property Index                                 |                   |                      | <u>3.2</u>   | <u>21.5</u> | <u>21.5</u> | <u>10.2</u>  | <u>8.9</u>   | <u>9.7</u>    | <u>7.0</u>       |                   |
| Over/Under  |                   |                      | 2.3          | 13.6        | 13.6        | 7.6          | 7.5          | 5.7           | 3.6              |                   |
| InvMetrics Public DB Real Estate Private Median       |                   |                      | 5.0          | 26.3        | 26.3        | 12.8         | 10.5         | 10.7          | 7.1              |                   |
| U.S. Private Real Estate                              | 6.2               | 964,408,087          | 5.6          | 36.2        | 36.2        | 18.3         | 16.7         | 15.6          | 11.2             | Jan-08            |
| NCREIF Property Index                                 |                   |                      | <u>3.2</u>   | <u>21.5</u> | <u>21.5</u> | <u>10.2</u>  | <u>8.9</u>   | <u>9.7</u>    | <u>7.0</u>       |                   |
| Over/Under  |                   |                      | 2.4          | 14.7        | 14.7        | 8.1          | 7.8          | 5.9           | 4.2              |                   |

1 - Energy composite includes Five Point Cap, Lime Rock, Enervest, BP Natural Gas, and Bluescape Energy.

2 - Agriculture Composite contains Halderman Farm Mgmt Services, Hancock Agriculture, and Blue Road Capital L.P.

3 - Timber Composite contains Brookfield Brazil Timber, Conservation Forestry II, Conservation Forestry IV, and ETO II Operating Partnership.

Note: Performance is shown net of fees. Fiscal year ends June 30. Q1 I

InvMetrics Public DB > \$1B Real Estate Private is unavailable, universe includes all public funds.



|                           | Allo              | ocation              |             |             |             | Per          | formanc      | e (%)         |                  |                   |
|---------------------------|-------------------|----------------------|-------------|-------------|-------------|--------------|--------------|---------------|------------------|-------------------|
|                           | % of<br>Portfolio | Market<br>Value (\$) | 3 Mo<br>(%) | FYTD<br>(%) | 1 Yr<br>(%) | 3 Yrs<br>(%) | 5 Yrs<br>(%) | 10 Yrs<br>(%) | Inception<br>(%) | Inception<br>Date |
| Cash                      | 0.8               | 116,701,748          |             |             |             |              |              |               |                  |                   |
| Cash                      | 0.7               | 103,796,627          | 0.1         | 3.3         | 3.3         | 1.9          | 2.1          | 1.3           | 1.3              | Dec-99            |
| 90 Day U.S. Treasury Bill |                   |                      | <u>0.1</u>  | <u>0.2</u>  | <u>0.2</u>  | <u>0.6</u>   | <u>1.1</u>   | <u>0.6</u>    | <u>1.6</u>       |                   |
| Over/Under                |                   |                      | 0.0         | 3.1         | 3.1         | 1.3          | 1.0          | 0.7           | -0.3             |                   |
| NM ERB Cash               | 0.1               | 12,905,121           | 0.1         | 0.1         | 0.1         | 0.8          | 0.5          | 0.6           | 0.9              | Jun-00            |
| 90 Day U.S. Treasury Bill |                   |                      | <u>0.1</u>  | <u>0.2</u>  | <u>0.2</u>  | <u>0.6</u>   | <u>1.1</u>   | <u>0.6</u>    | <u>1.5</u>       |                   |
| Over/Under                |                   |                      | 0.0         | -0.1        | -0.1        | 0.2          | -0.6         | 0.0           | -0.6             |                   |
| Liquid Reserves Fund      | 0.0               |                      | 0.0         | -           | -           | -            | -            | -             | 0.0              | Dec-21            |
| 90 Day U.S. Treasury Bill |                   |                      | <u>0.1</u>  | -           | -           | -            | -            | -             | <u>0.2</u>       |                   |
| Over/Under                |                   |                      | -0.1        | -           | -           | -            | -            | -             | -0.2             |                   |
| Parametric Overlay        | 0.4               | 60,836,400           |             |             |             |              |              |               |                  |                   |



#### NEW MEXICO EDUCATIONAL RETIREMENT BOARD OTHER DIVERSIFYING ASSETS PERFORMANCE

|              |  |               |             | Time Weighted |                |
|--------------|--|---------------|-------------|---------------|----------------|
| Vintage Year | Investment                               | Commitment    | Current MV  | Returns Since | Inception Date |
|              |  |               |             | Inception     |                |
| 2017         | EIG Energy Fund XVII                     | 100,000,000   | 63,101,300  | 4.1           | Apr-18         |
| 2017         | 1609 Fund                                | 150,000,000   | 149,676,549 | 0.9           | Feb-18         |
| 2018         | Olea Special Opportunities Offshore Fund | 135,000,000   | 117,993,744 | 3.5           | Oct-18         |
| 2018         | Orchard Liquid Credit Fund               | 100,000,000   | 107,846,400 | 4.8           | Nov-18         |
| 2019         | OrbiMed Royalty & Credit Opps. III       | 100,000,000   | 31,239,108  | 29.4          | Oct-19         |
| 2019         | AE Industrial AA                         | 150,000,000   | 121,217,621 | 14.5          | Apr-20         |
| 2019         | Cloverlay                                | 150,000,000   | 97,618,496  | -1.9          | Dec-20         |
| 2021         | Longford Capital Fund III                | 110,000,000   | 18,784,559  | 45.2          | Oct-21         |
| 2021         | Cloverlay Series Bravo II                | 150,000,000   |             |               |                |
| 2022         | Orchard SMA                              | 100,000,000   |             |               |                |
| Total        | Other Diversifying Assets                | 1,245,000,000 | 707,477,777 | 6.3           | Feb-18         |

\*Market Values and Performance data are through 6/30/2022

#### Correlation of Monthly Returns Since Inception

|                     | Total Fund | U.S. Equity | Non U.S.<br>Developed<br>Markets<br>Equity | Non U.S.<br>Emerging<br>Markets<br>Equity | Core Fixed<br>Income | Non U.S.<br>Emerging<br>Markets Debt | Opportunistic<br>Credit | Real Estate | Private Equity | Real Assets | Other<br>Diversifying<br>Assets | EIG Energy<br>Fund | 1609 Fund | OLEA  | Orchard | OLEA  | AE Industrial | Cloverlay |
|---------------------|------------|-------------|--|---|----------------------|--------------------------------------|-------------------------|-------------|----------------|-------------|---------------------------------|--------------------|-----------|-------|---------|-------|---------------|-----------|
| Diversifying Assets | 0.17       | 0.18        | 0.17                                       | 0.21                                      | 0.07                 | 0.18                                 | 0.13                    | 0.00        | -0.06          | -0.13       | 1.00                            |                    |           |       |         |       |               |           |
| EIG Energy Fund     | -0.17      | -0.17       | -0.15                                      | -0.20                                     | -0.28                | -0.12                                | 0.16                    | -0.11       | -0.25          | 0.12        | 0.28                            | 1.00               |           |       |         |       |               |           |
| 1609 Fund           | -0.01      | -0.01       | -0.01                                      | -0.01                                     | 0.00                 | 0.06                                 | 0.03                    | 0.00        | 0.01           | -0.01       | 0.45                            | -0.08              | 1.00      |       |         |       |               |           |
| OLEA                | 0.48       | 0.52        | 0.52                                       | 0.47                                      | 0.43                 | 0.47                                 | 0.15                    | 0.23        | 0.00           | -0.16       | 0.64                            | -0.17              | 0.10      | 1.00  |         |       |               |           |
| Orchard             | -0.67      | -0.51       | -0.57                                      | -0.53                                     | -0.27                | -0.63                                | -0.62                   | -0.56       | -0.13          | -0.21       | 0.00                            | -0.14              | 0.15      | -0.13 | 1.00    |       |               |           |
| Orbimed             | 0.08       | -0.02       | -0.03                                      | 0.22                                      | -0.08                | 0.05                                 | 0.20                    | -0.07       | 0.09           | -0.10       | 0.58                            | 0.02               | 0.09      | 0.09  | -0.10   | 1.00  |               |           |
| AE Industrial       | -0.05      | -0.07       | -0.19                                      | -0.36                                     | -0.24                | -0.15                                | 0.02                    | 0.29        | 0.21           | 0.19        | 0.31                            | 0.33               | 0.05      | -0.02 | -0.08   | 0.08  | 1.00          |           |
| Cloverlay           | -0.38      | -0.42       | -0.28                                      | -0.14                                     | -0.21                | -0.24                                | -0.47                   | -0.40       | -0.19          | -0.11       | -0.18                           | 0.09               | -0.16     | -0.47 | 0.24    | -0.01 | -0.33         | 1.00      |



#### NEW MEXICO EDUCATIONAL RETIREMENT BOARD PRIVATE MARKETS PERFORMANCE SUMMARY

|                          |          | Private Equity Dollar Weighted vs. Time Weighted Performance |          |          |           |                  |                   |  |  |  |
|--------------------------|----------|--|----------|----------|-----------|------------------|-------------------|--|--|--|
|                          | 3 Mo (%) | 1 Yr (%)   | 3 Yr (%) | 5 Yr (%) | 10 Yr (%) | Inception<br>(%) | Inception<br>Date |  |  |  |
| Dollar Weighted          |          |  |          |          |           |                  |                   |  |  |  |
| Total Net IRR            | 6.3      | 42.8   | 25.1     | 19.9     | 17.8      | 15.9             | Jun-06            |  |  |  |
| Time Weighted            |          |  |          |          |           |                  |                   |  |  |  |
| Net Time Weighted Return | 2.6      | 48.9   | 24.3     | 19.2     | 17.3      | 10.1             | Jun-06            |  |  |  |

|                          |          | Real Estate | e Dollar Weig | hted vs. Time | e Weighted P | erformance       |                   |
|--------------------------|----------|-------------|---------------|---------------|--------------|------------------|-------------------|
|                          | 3 Mo (%) | 1 Yr (%)    | 3 Yr (%)      | 5 Yr (%)      | 10 Yr (%)    | Inception<br>(%) | Inception<br>Date |
| Dollar Weighted          |          |             |               |               |              |                  |                   |
| Total Net IRR            | 9.7      | 40.5        | 17.5          | 13.4          | 13.5         | 12.4             | Jul-08            |
| Time Weighted            |          |             |               |               |              |                  |                   |
| Net Time Weighted Return | 4.6      | 34.9        | 14.9          | 13.6          | 12.6         | 11.0             | Jan-08            |

|                          |          | Infrastructu | re Dollar Wei | ghted vs. Tin | ne Weighted | Performance      |                   |
|--------------------------|----------|--------------|---------------|---------------|-------------|------------------|-------------------|
|                          | 3 Mo (%) | 1 Yr (%)     | 3 Yr (%)      | 5 Yr (%)      | 10 Yr (%)   | Inception<br>(%) | Inception<br>Date |
| Dollar Weighted          |          |              |               |               |             |                  |                   |
| Total Net IRR            | 12.0     | 18.9         | 12.5          | 6.8           | 8.8         | 8.4              | Jul-08            |
| Time Weighted            |          |              |               |               |             |                  |                   |
| Net Time Weighted Return | 9.1      | 17.6         | 11.5          | 10.0          | 8.6         | 5.2              | Jul-08            |

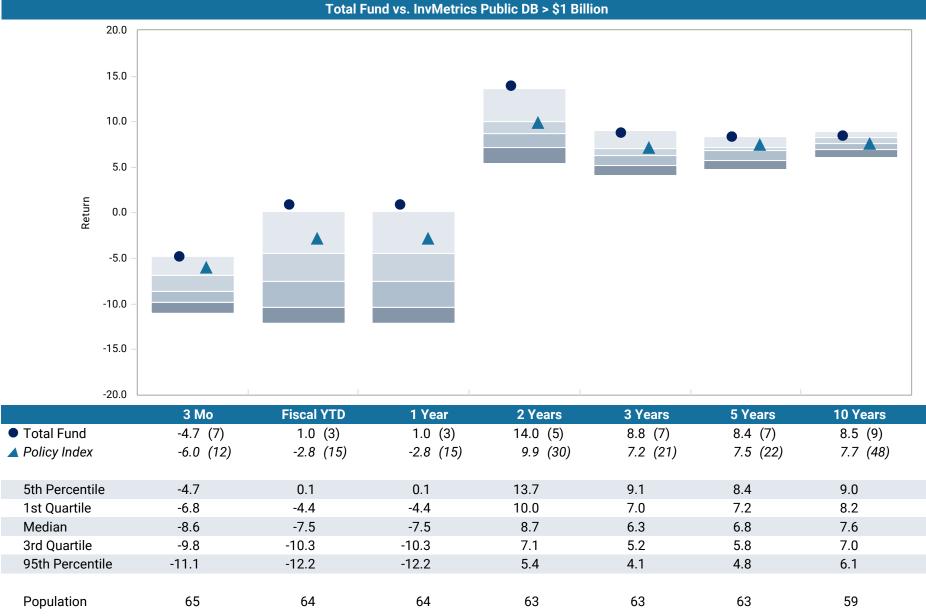
|                          | Natural Resources Dollar Weighted vs. Time Weighted Performance |          |          |          |           |                  |                   |  |  |  |
|--------------------------|---|----------|----------|----------|-----------|------------------|-------------------|--|--|--|
|                          | 3 Mo (%)  | 1 Yr (%) | 3 Yr (%) | 5 Yr (%) | 10 Yr (%) | Inception<br>(%) | Inception<br>Date |  |  |  |
| Dollar Weighted          |   |          |          |          |           |                  |                   |  |  |  |
| T otal Net IRR           | 7.0   | 19.4     | 5.8      | 8.1      | 8.0       | 7.9              | Mar-09            |  |  |  |
| Time Weighted            |   |          |          |          |           |                  |                   |  |  |  |
| Net Time Weighted Return | 5.5   | 17.1     | 5.9      | 8.2      | 6.4       | 4.8              | Mar-09            |  |  |  |



\* Time weighted performance as of 3/31/2021 for Real Estate, Natural Resources and Private Equity; 6/30/2022 for Infrastructure

\* Dollar weighted performance as of 12/31/2021 for Real Estate, Natural Resources and Private Equity; 3/31/2021 Infrastructure

#### New Mexico Educational Retirement Board-Top Plan RETURN SUMMARY VS. PEER UNIVERSE

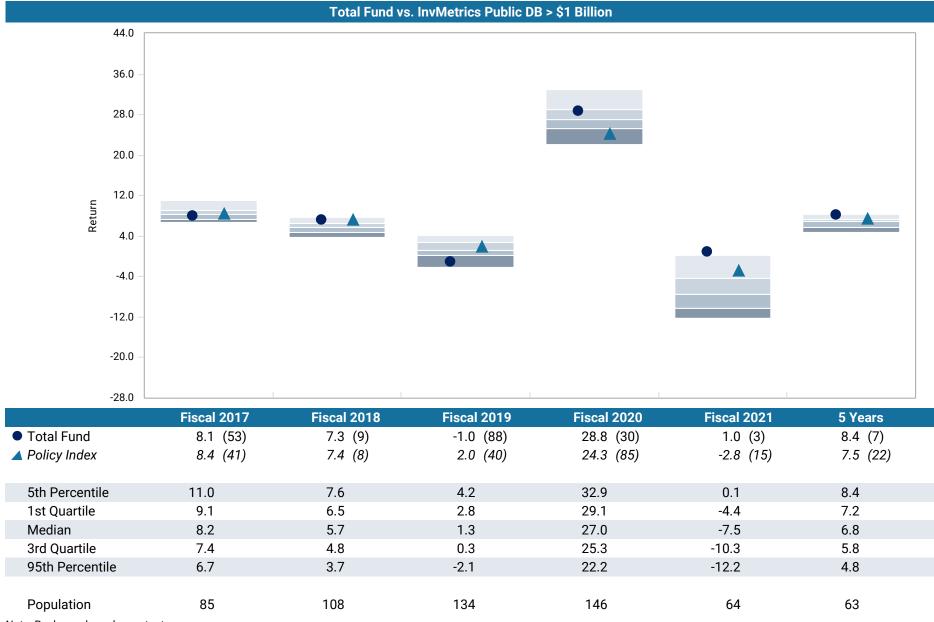


Note: Ranks are based on net returns.



June 30, 2022

#### New Mexico Educational Retirement Board-Top Plan RETURN SUMMARY VS. PEER UNIVERSE



Note: Ranks are based on net returns.



June 30, 2022

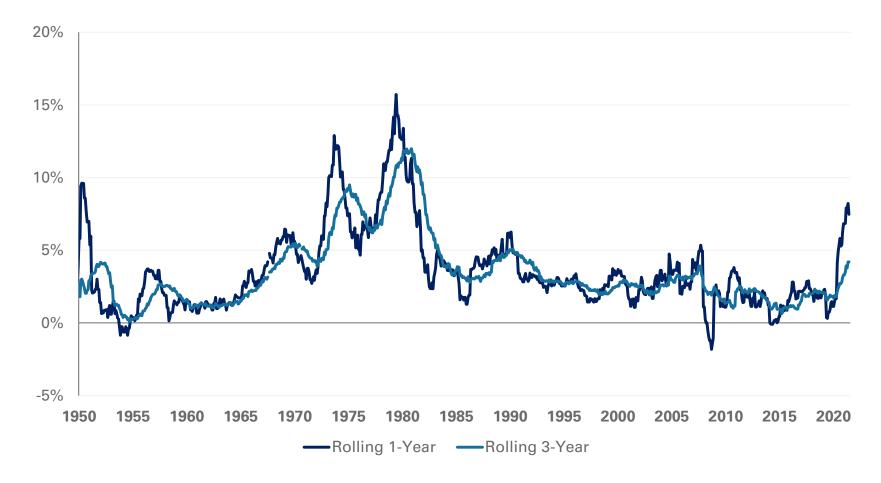


### APPENDIX



### MACRO

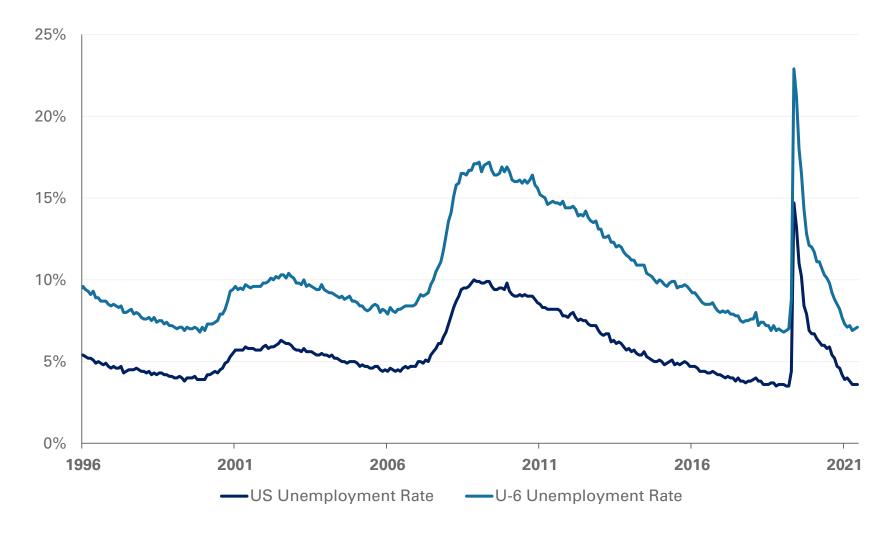
#### **INFLATION** U.S. CONSUMER PRICE INDEX





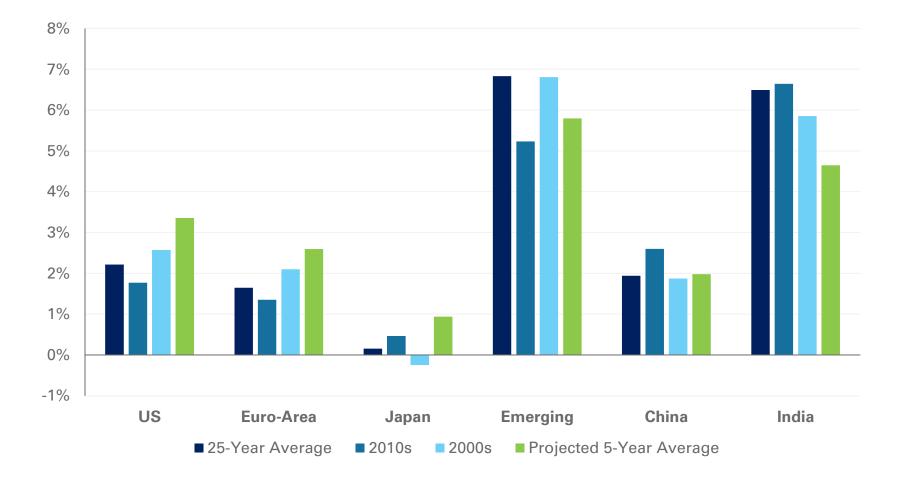
Source: Bureau of Labor Statistics, FactSet

#### **U.S. UNEMPLOYMENT RATES**



Source: FactSet

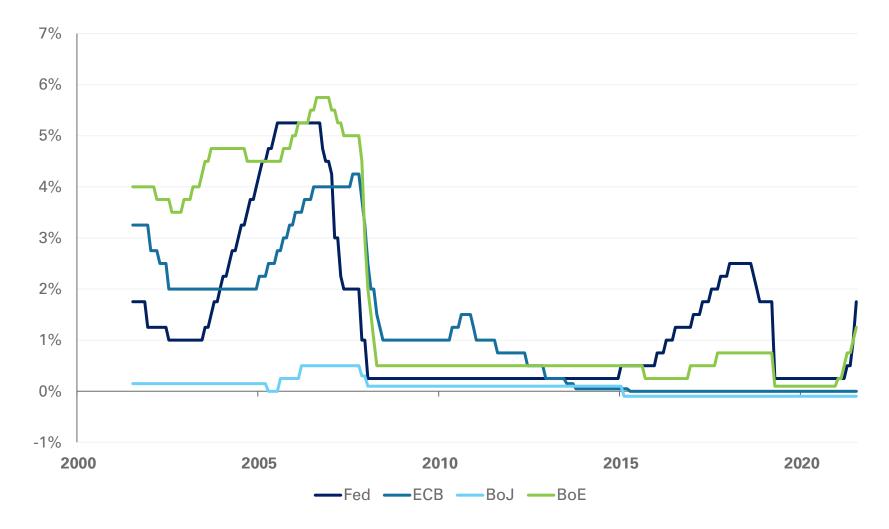
#### HISTORICAL INFLATION IMF PROJECTIONS





Source: IMF, FactSet

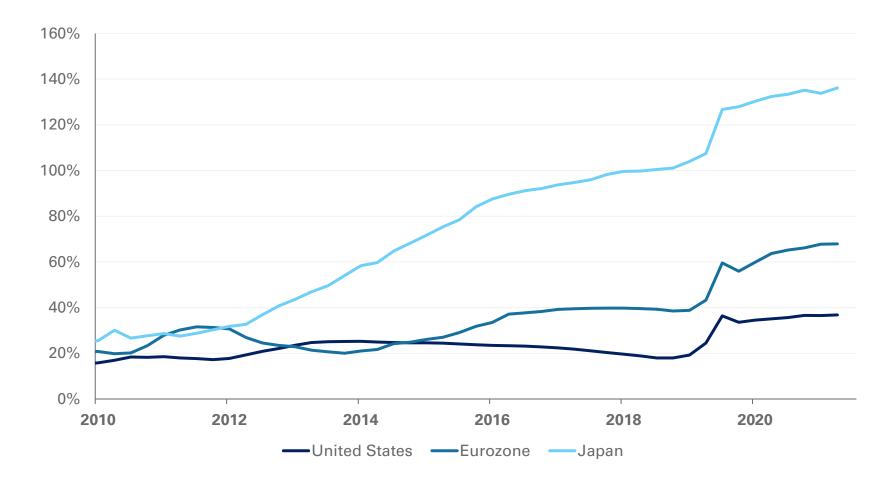
#### **CENTRAL BANK POLICY RATES**





Source: Federal Reserve, ECB, Bank of Japan, Bank of England, FactSet

#### **CENTRAL BANK BALANCE SHEETS** AS A PERCENTAGE OF GDP





Source: FactSet

#### **CURRENCIES** RELATIVE TO THE U.S. DOLLAR

| Currencies         | Spot   | 1 Month | YTD    | 1 Year |
|--------------------|--------|---------|--------|--------|
| Euro               | 1.05   | -2.4%   | -8.1%  | -11.8% |
| British Pound      | 1.21   | -3.6%   | -10.3% | -12.1% |
| Japanese Yen       | 135.86 | -5.3%   | -15.2% | -18.3% |
| Swiss Franc        | 0.96   | 0.1%    | -4.8%  | -3.4%  |
| Australian Dollar  | 0.69   | -4.1%   | -5.4%  | -8.4%  |
| New Zealand Dollar | 1.61   | -4.5%   | -9.2%  | -11.0% |
| Canadian Dollar    | 1.29   | -1.9%   | -2.1%  | -4.0%  |
| Chinese Yuan       | 6.69   | -0.6%   | -4.8%  | -3.5%  |
| Taiwanese Dollar   | 29.73  | -2.4%   | -7.0%  | -6.3%  |
| Korean Won         | 1298   | -4.7%   | -8.4%  | -13.3% |
| Vietnamese Dong    | 23265  | -0.3%   | -2.0%  | -1.1%  |
| Thai Baht          | 35.36  | -3.2%   | -5.5%  | -9.3%  |
| Philippines Peso   | 54.99  | -4.7%   | -7.3%  | -11.2% |
| Indian Rupee       | 78.97  | -1.7%   | -5.9%  | -5.9%  |
| Russian Ruble      | 54.75  | 15.1%   | 37.0%  | 33.4%  |
| Mexican Peso       | 20.18  | -2.3%   | 1.4%   | -1.3%  |
| Brazilian Real     | 5.23   | -9.4%   | 6.5%   | -4.0%  |
| Chilean Peso       | 0.03   | -9.3%   | -1.7%  | -12.5% |
| Argentine Peso     | 125.22 | -4.0%   | -18.0% | -23.6% |
| South African Rand | 16.38  | -4.9%   | -2.6%  | -12.8% |

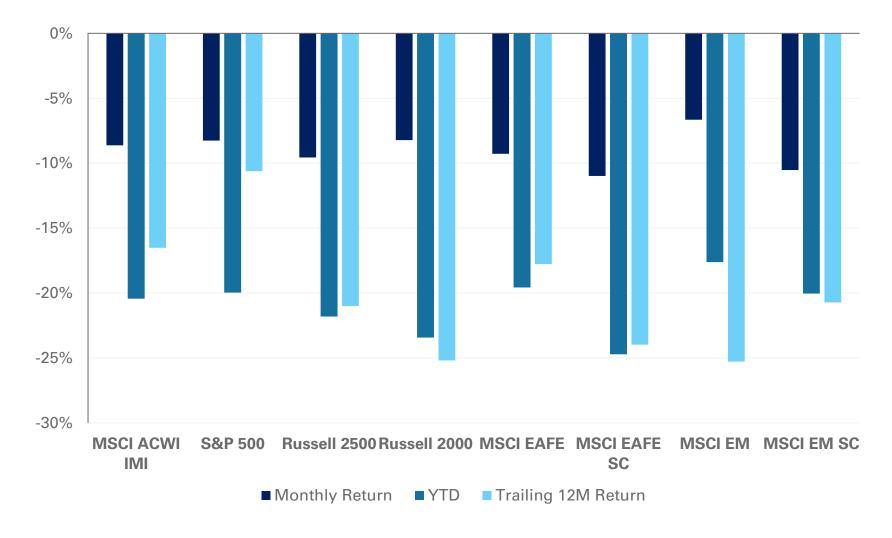


Source: FactSet



### EQUITY

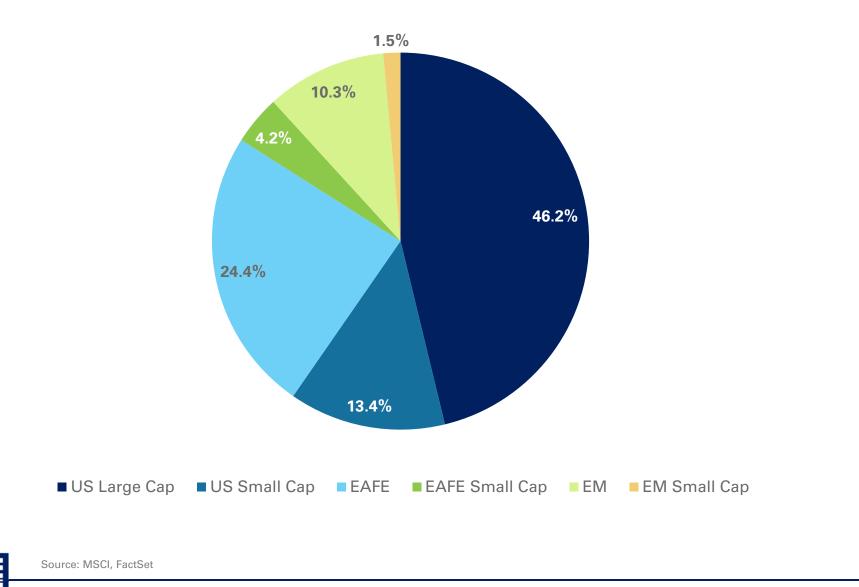
#### **EQUITY INDEX PERFORMANCE**





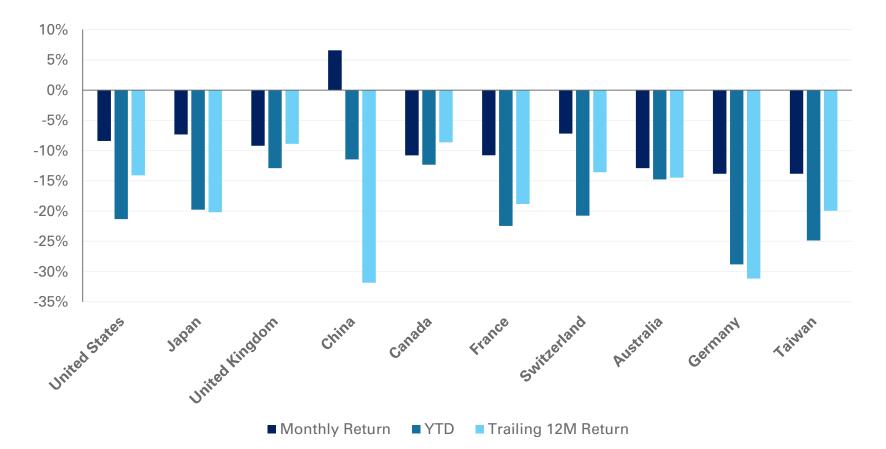
Source: MSCI, S&P, Russell, FactSet

#### **MSCI ACWI IMI WEIGHTS**



### **EQUITY INDEX PERFORMANCE**

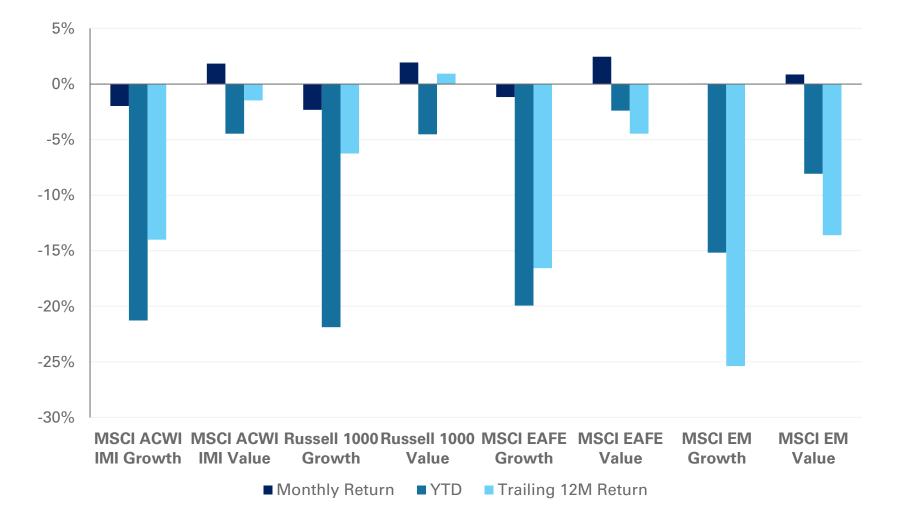
TOP 10 COUNTRIES BY MARKET CAP IN MSCI ACWI IMI INDEX





Source: MSCI, FactSet

#### **STYLE INDEX PERFORMANCE**





Source: MSCI, Russell, FactSet

#### **SECTOR INDEX PERFORMANCE**

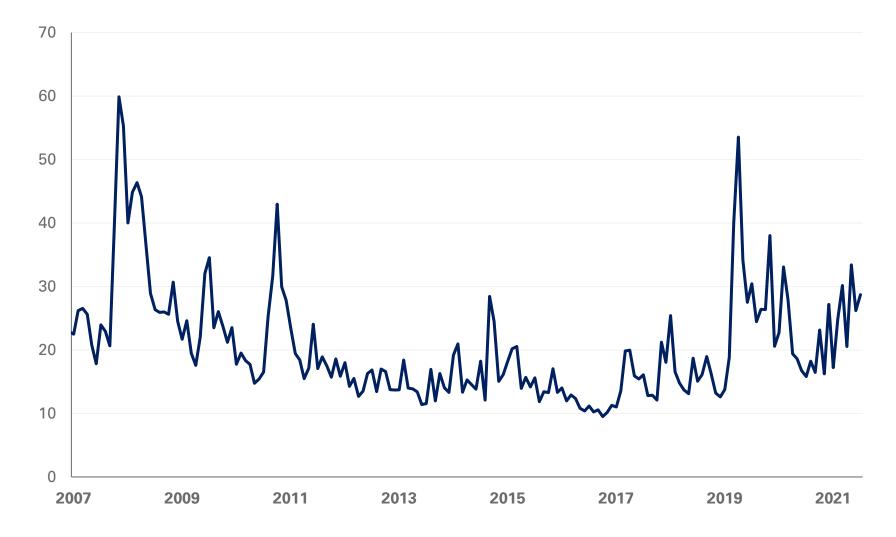
|                        | Monthly Return | YTD    | Trailing 12M Return | Index Weight |
|------------------------|----------------|--------|---------------------|--------------|
| MSCI ACWI IMI          | -8.6%          | -20.4% | -16.5%              | 100.0%       |
| Communication Services | -7.6%          | -26.9% | -30.0%              | 7.3%         |
| Consumer Discretionary | -8.1%          | -29.4% | -29.5%              | 11.2%        |
| Consumer Staples       | -3.5%          | -10.3% | -5.8%               | 7.3%         |
| Energy                 | -14.8%         | 15.6%  | 21.9%               | 4.9%         |
| Financials             | -10.0%         | -16.4% | -12.1%              | 14.4%        |
| Health Care            | -3.0%          | -12.8% | -8.7%               | 12.7%        |
| Industrials            | -8.7%          | -21.5% | -18.8%              | 10.4%        |
| Information Technology | -10.4%         | -29.8% | -21.0%              | 19.8%        |
| Materials              | -15.0%         | -18.1% | -16.5%              | 5.2%         |
| Real Estate            | -8.1%          | -20.1% | -14.4%              | 3.6%         |
| Utilities              | -6.5%          | -6.0%  | 2.8%                | 3.2%         |

|                        | Monthly Return | YTD    | Trailing 12M Return | Index Weight |
|------------------------|----------------|--------|---------------------|--------------|
| S&P 500                | -8.3%          | -20.0% | -10.6%              | 100.0%       |
| Communication Services | -7.7%          | -30.2% | -29.1%              | 8.9%         |
| Consumer Discretionary | -10.8%         | -32.8% | -24.2%              | 10.5%        |
| Consumer Staples       | -2.5%          | -5.6%  | 6.7%                | 7.0%         |
| Energy                 | -16.8%         | 31.8%  | 40.0%               | 4.4%         |
| Financials             | -10.9%         | -18.7% | -12.7%              | 10.8%        |
| Health Care            | -2.7%          | -8.3%  | 3.4%                | 15.1%        |
| Industrials            | -7.4%          | -16.8% | -13.4%              | 7.8%         |
| Information Technology | -9.3%          | -26.9% | -13.6%              | 26.8%        |
| Materials              | -13.8%         | -17.9% | -8.7%               | 2.6%         |
| Real Estate            | -6.9%          | -20.0% | -5.2%               | 2.9%         |
| Utilities              | -5.0%          | -0.6%  | 14.3%               | 3.1%         |



Source (Top): MSCI, FactSet Source (Bottom: S&P, FactSet

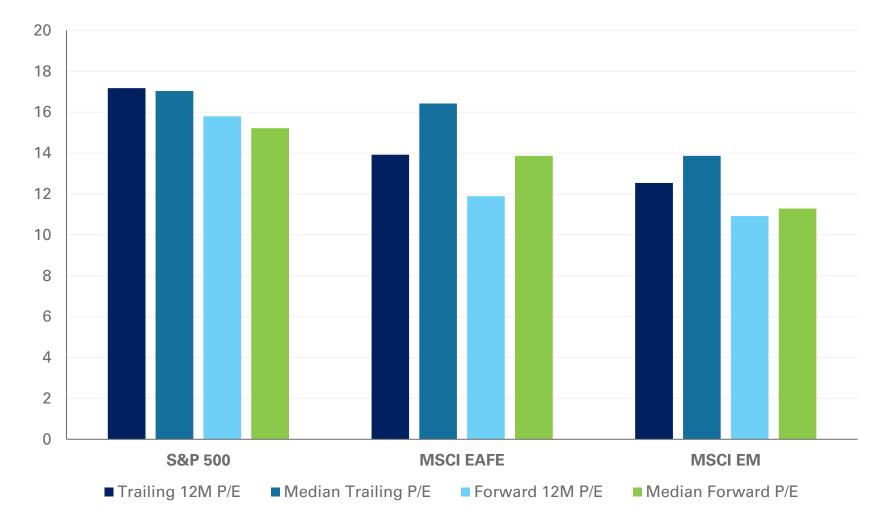
### EQUITY VOLATILITY INDEX (VIX)





Source: CBOE, FactSet

#### **GLOBAL EQUITY VALUATIONS**



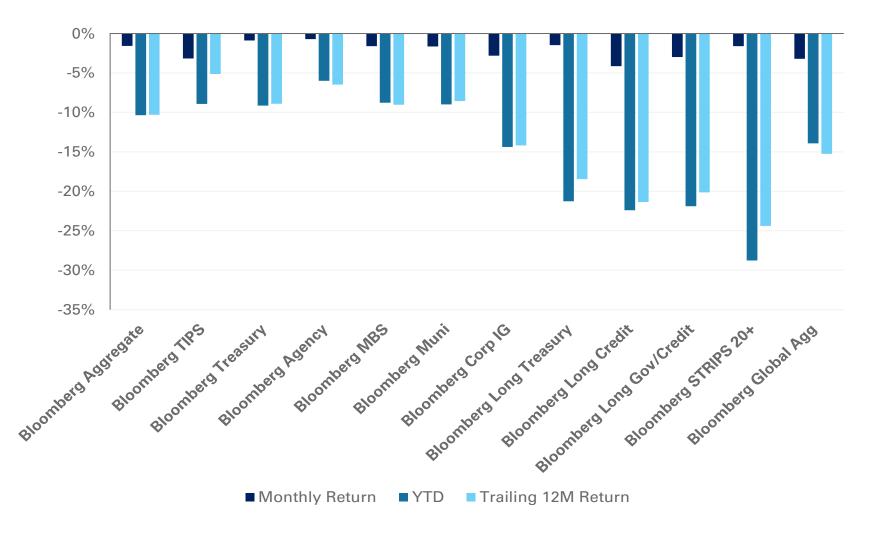


Median calculated based on 20-year monthly data Source: S&P, MSCI, FactSet



### SAFE-HAVEN FIXED INCOME

### **SAFE-HAVEN FIXED INCOME PERFORMANCE**



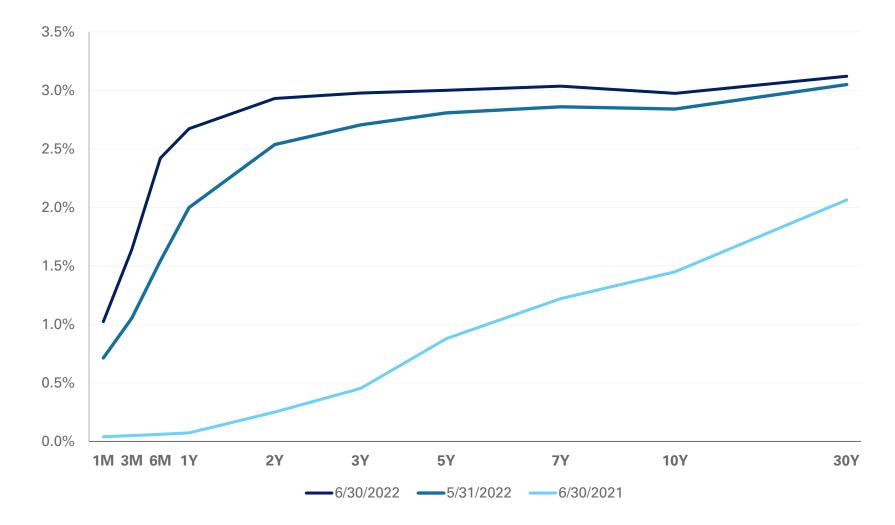


## **FIXED INCOME CHARACTERISTICS**

|                           | Yield to Worst | Spread (bps) | Duration (Years) |  |
|---------------------------|----------------|--------------|------------------|--|
| Bloomberg Aggregate       | 3.72%          | 55           | 6.4              |  |
| Bloomberg TIPS            | 3.38%          | -            | 5.1              |  |
| Bloomberg Treasury        | 3.09%          | -            | 6.4              |  |
| Bloomberg Agency          | 3.23%          | 17           | 3.6              |  |
| Bloomberg MBS             | 3.77%          | 46           | 5.9              |  |
| Bloomberg Muni            | 3.21%          | -            | 6.8              |  |
| Bloomberg Corp IG         | 4.70%          | 155          | 7.6              |  |
| Bloomberg Long Treasury   | 3.33%          | -            | 17.2             |  |
| Bloomberg Long Credit     | 5.09%          | 184          | 13.4             |  |
| Bloomberg Long Gov/Credit | 4.30%          | 101          | 15.1             |  |
| Bloomberg STRIPS 20+      | 3.34%          | - 25.4       |                  |  |
| Bloomberg Global Agg      | 2.91%          | 57           | 7.0              |  |

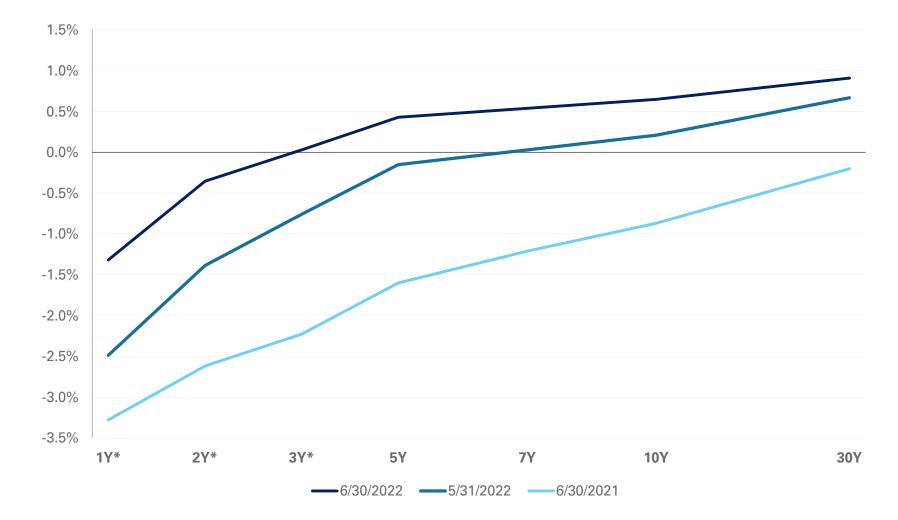


### **US TREASURY YIELD CURVE**



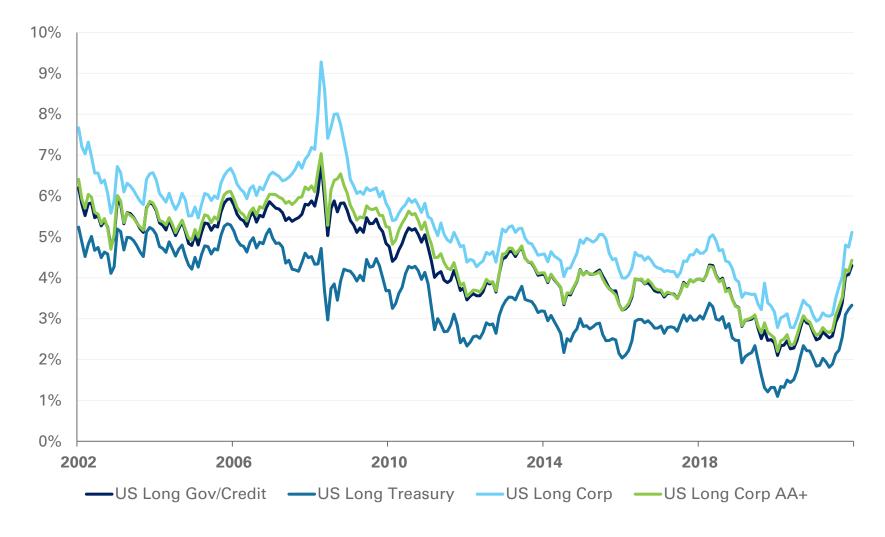
Source: FactSet

### **US TREASURY REAL YIELD CURVE**



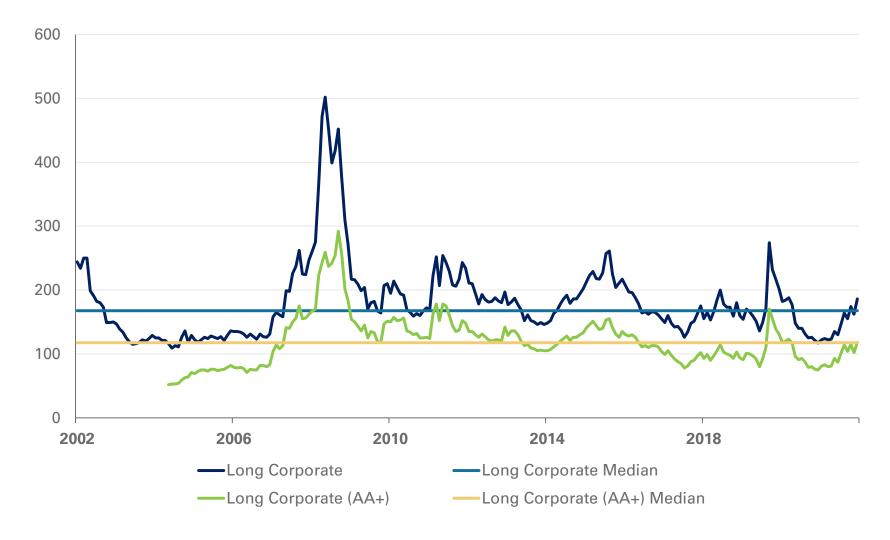
Notes: \*Real yields are calculated based on a weighted average of select off-the-run TIPS yields Source: NEPC, Bloomberg, FactSet

## LONG DURATION YIELDS





### LONG DURATION CORPORATE SPREADS



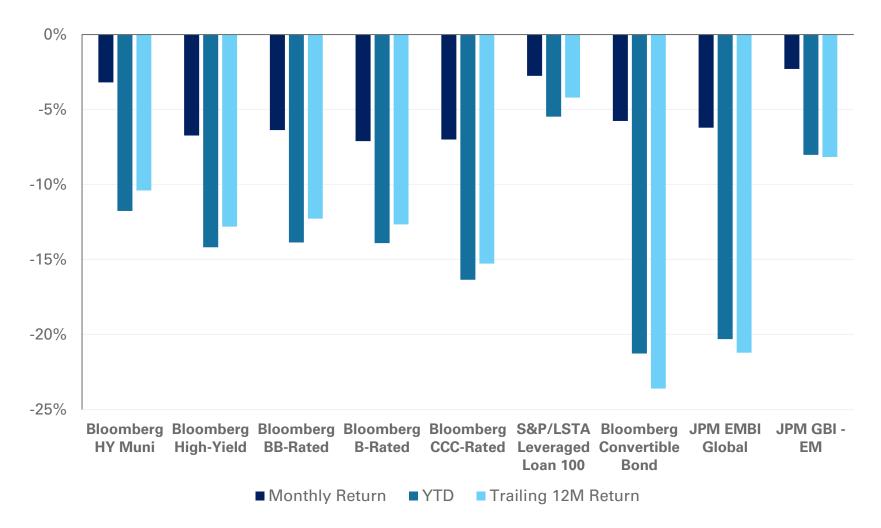


Median calculated based on 20-year of monthly data Source: Bloomberg, FactSet



## **RETURN-SEEKING CREDIT**

### **RETURN-SEEKING CREDIT INDEX PERFORMANCE**





Source: Bloomberg, S&P, JPM, FactSet

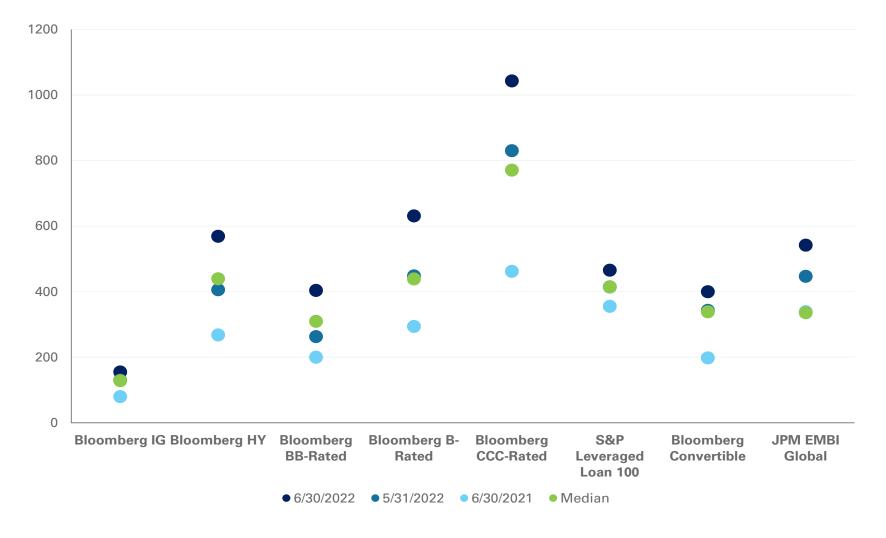
## **RETURN-SEEKING CREDIT CHARACTERISTICS**

|                             | Yield to Worst | Spread (bps) | Duration (Years) |  |
|-----------------------------|----------------|--------------|------------------|--|
| Bloomberg HY Muni           | 5.30%          | -            | 10.5             |  |
| Bloomberg High-Yield        | 8.89%          | 569          | 4.3              |  |
| Bloomberg BB-Rated          | 7.24%          | 404          | 4.7              |  |
| Bloomberg B-Rated           | 9.53%          | 631          | 4.0              |  |
| Bloomberg CCC-Rated         | 13.63%         | 1043         | 3.6              |  |
| S&P/LSTA Leveraged Loan 100 | 6.94%          | 466          | -                |  |
| Bloomberg Convertible Bond  | 0.68%          | 400          | 2.2              |  |
| JPM EMBI Global             | 8.57%          | 542          | 6.9              |  |
| JPM GBI - EM                | 5.21%          | -            | 5.3              |  |



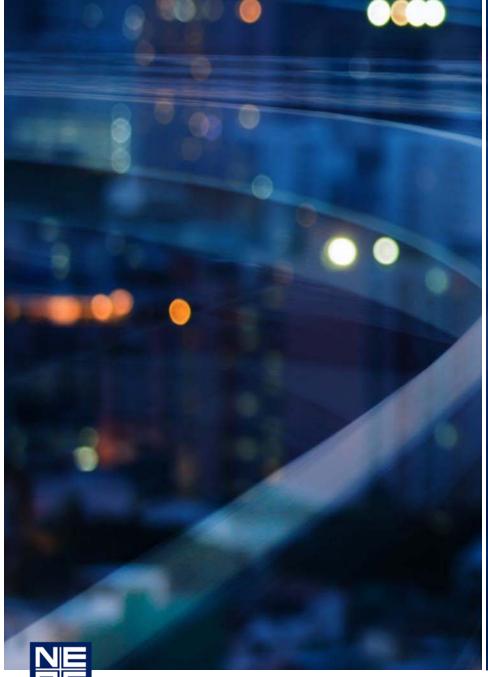
Source: Bloomberg, S&P, JPM, FactSet

### **CREDIT SPREADS**





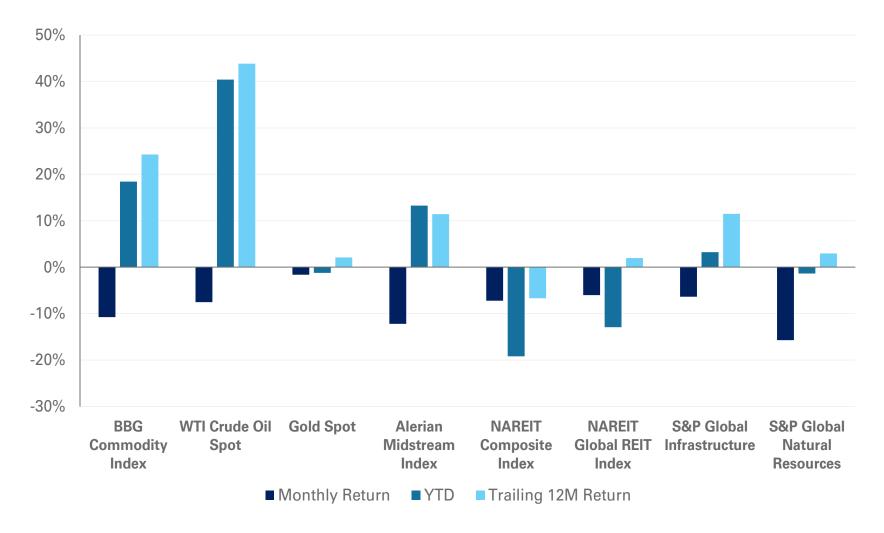
Median calculated based on 20-year of monthly data Source: Bloomberg, S&P, JPM, FactSet



# **REAL ASSETS**



### **REAL ASSETS INDEX PERFORMANCE**





Source: Bloomberg, Alerian, NAREIT, S&P, FactSet

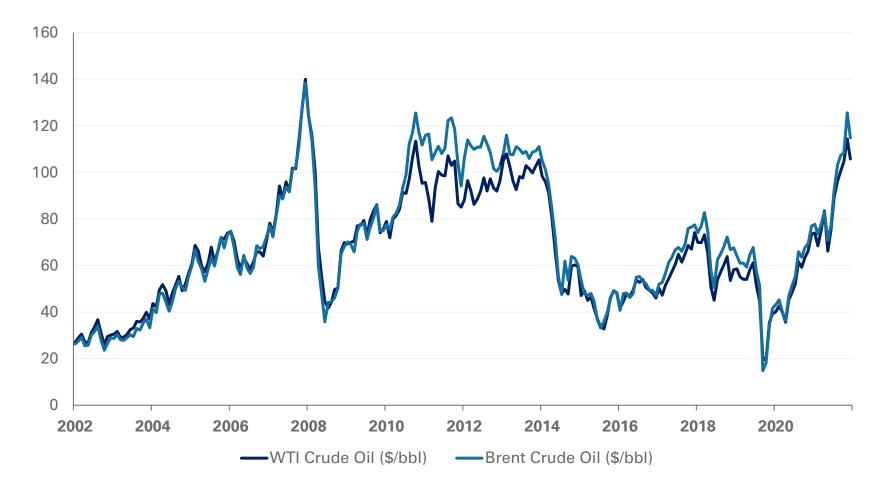
### **REAL ASSETS INDEX PERFORMANCE**

| Index                           | 1 Month | 3 Month | YTD    | 1 Year | 3 Year | 5 Year |
|---------------------------------|---------|---------|--------|--------|--------|--------|
| Bloomberg Commodity Index       | -10.8%  | -5.7%   | 18.4%  | 24.2%  | 14.3%  | 8.4%   |
| Bloomberg Sub Agriculture Index | -9.1%   | -5.7%   | 13.0%  | 18.8%  | 18.7%  | 6.8%   |
| Coffee                          | -0.4%   | 1.9%    | 1.9%   | 39.9%  | 19.0%  | 3.6%   |
| Corn                            | -12.1%  | -10.7%  | 12.8%  | 9.1%   | 14.6%  | 5.9%   |
| Cotton                          | -16.8%  | -13.7%  | 6.2%   | 45.1%  | 19.5%  | 10.6%  |
| Soybean                         | -3.4%   | 1.5%    | 22.6%  | 15.5%  | 21.0%  | 8.8%   |
| Soybean Oil                     | -12.5%  | -0.3%   | 23.4%  | 11.1%  | 36.9%  | 15.6%  |
| Sugar                           | -5.6%   | -5.5%   | -0.1%  | 1.8%   | 9.9%   | 1.7%   |
| Wheat                           | -19.6%  | -13.6%  | 12.0%  | 22.8%  | 14.0%  | 3.3%   |
| Bloomberg Sub Energy            | -14.6%  | 7.0%    | 58.3%  | 66.2%  | 11.6%  | 10.0%  |
| Brent Crude                     | -3.0%   | 9.5%    | 57.3%  | 74.6%  | 24.7%  | 23.1%  |
| Heating Oil                     | 0.0%    | 25.2%   | 93.7%  | 112.7% | 26.1%  | 22.3%  |
| Natural Gas                     | -33.5%  | -6.0%   | 48.9%  | 41.9%  | -3.4%  | -10.1% |
| Unleaded Gas                    | -5.1%   | 20.5%   | 64.8%  | 88.2%  | 27.8%  | 21.1%  |
| WTI Crude Oil                   | -6.0%   | 9.0%    | 50.8%  | 59.6%  | 8.4%   | 10.6%  |
| Bloomberg Sub Industrial Metals | -16.0%  | -26.4%  | -9.6%  | 0.2%   | 11.8%  | 7.5%   |
| Aluminum                        | -12.3%  | -30.4%  | -13.2% | -3.9%  | 7.8%   | 3.2%   |
| Copper                          | -13.8%  | -22.2%  | -17.1% | -13.3% | 10.2%  | 5.8%   |
| Nickel                          | -20.1%  | -29.3%  | 10.4%  | 26.5%  | 21.5%  | 19.2%  |
| Zinc                            | -19.2%  | -24.1%  | -9.8%  | 8.0%   | 8.4%   | 5.3%   |
| Bloomberg Sub Precious Metals   | -3.1%   | -10.5%  | -4.4%  | -4.8%  | 7.1%   | 5.6%   |
| Gold                            | -2.1%   | -7.6%   | -1.5%  | 1.3%   | 6.9%   | 6.5%   |
| Silver                          | -6.4%   | -19.4%  | -13.4% | -23.0% | 7.8%   | 2.6%   |
| Bloomberg Sub Livestock         | -0.3%   | -8.7%   | -3.4%  | -3.6%  | -6.7%  | -6.6%  |
| Lean Hogs                       | -3.5%   | -14.9%  | 2.8%   | 0.7%   | -8.1%  | -9.4%  |
| Live Cattle                     | 1.8%    | -4.3%   | -6.1%  | -5.6%  | -5.8%  | -5.3%  |



### **OIL MARKETS**

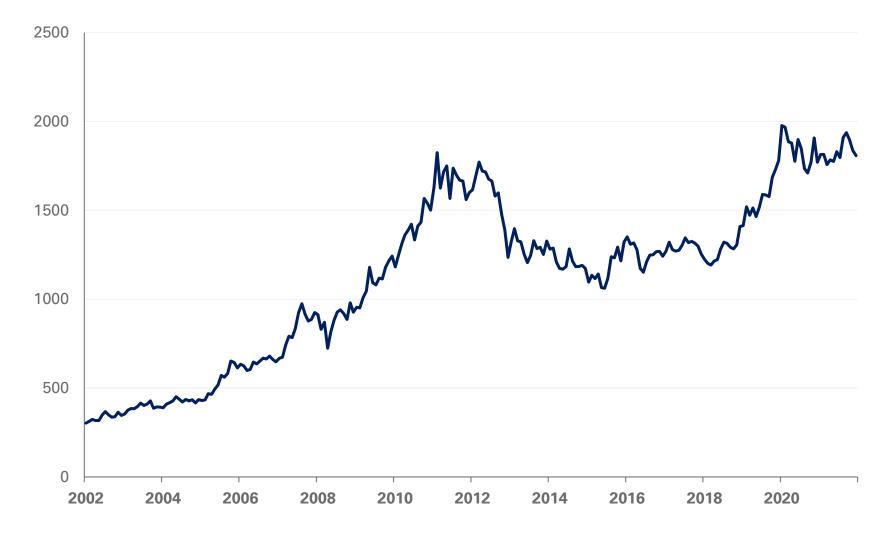
### WTI VERSUS BRENT CRUDE SPOT PRICES





Source: WTI, Brent, FactSet

### **GOLD SPOT PRICE**





Source: FactSet

#### # Of Portfolios/Observations<sup>1</sup>

- The total number of data points that make up a universe or sample.

#### Allocation Index<sup>3</sup>

 The Allocation Index measures the value added to (or subtracted from) each portfolio by active management. It is calculated monthly: The portfolio weight allocated to each category from the prior month-end is multiplied by a specified market index return.

#### Asset Allocation Effect<sup>2</sup>

Measures an investment manager's ability to effectively allocate their portfolio's assets to various sectors. The allocation effect determines whether the overweighting or underweighting of sectors relative to a benchmark contributes positively or negatively to the overall portfolio return. Positive allocation occurs when the portfolio is over weighted in a sector that outperforms the benchmark and underweighted in a sector that underperforms the benchmark. Negative allocation occurs when the portfolio is over weighted in a sector that underperforms the benchmark and underperforms the benchmark and underperforms the benchmark and under weighted in a sector that outperforms the benchmark and under weighted in a sector that outperforms the benchmark.

#### Agency Bonds (Agencies)<sup>3</sup>

The full faith and credit of the United States government is normally not pledged to payment of principal and interest on the majority of government agencies issuing these bonds, with maturities of up to ten years. Their yields, therefore, are normally higher than government and their marketability is good, thereby qualifying them as a low risk-high liquidity type of investment. They are eligible as security for advances to the member banks by the Federal Reserve, which attests to their standing.

#### Asset Backed Securities (ABS)<sup>3</sup>

 Bonds which are similar to mortgage-backed securities but are collateralized by assets other than mortgages; commonly backed by credit card receivables, auto loans, or other types of consumer financing.

#### Attribution<sup>3</sup>

 Attribution is an analytical technique used to evaluate the performance of a portfolio relative to a benchmark. A proper attribution highlights where value was added or subtracted as a result of the manager's decisions.

#### Average Effective Maturity<sup>4</sup>

- For a single bond, it is a measure of maturity that takes into account the possibility that a bond might be called back to the issuer.

For a portfolio of bonds, average effective maturity is the weighted average of the maturities of the underlying bonds. The measure is computed by weighing each bond's maturity by its market value with respect to the portfolio and the likelihood of any of the bonds being called. In a pool of mortgages, this would also account for the likelihood of prepayments on the mortgages.

#### Batting Average<sup>1</sup>

 A measurement representing an investment manager's history in surpassing an index.

*Formula:* Divide the number of days (or months, quarters, etc.) in which the manager beat or matched the index by the total number of days (or months, quarters, etc.) in the time period, and multiply that factor by 100.

#### Brinson Fachler (BF) Attribution<sup>1</sup>

 The BF methodology is a highly accepted industry standard for calculating the allocation, selection, and interaction effects within a portfolio that collectively explains a portfolio's underlying performance. The main advantage of the BF methodology is that rather than using the overall return of the benchmark, it goes a level deeper than BHB and measures whether the benchmark sector, country, etc. outperformed/or underperformed the overall benchmark.



Source: <sup>1</sup>InvestorForce, <sup>2</sup>Interaction Effect Performance Attribution, <sup>3</sup>NEPC, LLC, <sup>4</sup>Investopedia, <sup>5</sup>Hedgeco.net

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#### Brinson Hood Beebower (BHB) Attribution<sup>1</sup>

 The BHB methodology shows that excess return must be equal to the sum of all other factors (i.e., allocation effect, selection effect, interaction effect, etc.). The advantage to using the BHB methodology is that it is a highly accepted industry standard for calculating the allocation, selection, and interaction effects within a portfolio that collectively explains a portfolio's underlying performance.

#### Corporate Bond (Corp)<sup>4</sup>

 A debt security issued by a corporation and sold to investors. The backing for the bond is usually the payment ability of the company, which is typically money to be earned from future operations. In some cases, the company's physical assets may be used as collateral for bonds.

#### Correlation<sup>1</sup>

 A range of statistical relationships between two or more random variables or observed data values. A correlation is a single number that describes the degree of relationship between variables.

#### Coupon<sup>4</sup>

 The interest rate stated on a bond when it is issued. The coupon is typically paid semiannually. This is also referred to as the "coupon rate" or "coupon percent rate."

#### Currency Effect<sup>1</sup>

 The effect that changes in currency exchange rates over time affect excess performance.

#### Derivative Instrument<sup>3</sup>

 A financial obligation that derives its precise value from the value of one or more other instruments (or assets) at the same point of time.
 For example, the relationship between the value of an S&P 500 futures contract (the derivative instrument in this case) is determined by the value of the S&P 500 Index and the value of a U.S. Treasury bill that matures at the expiration of the futures contract.

#### Downside Deviation<sup>1</sup>

 The standard deviation of negative return or the measure of downside risk focusing on the standard deviation of negative returns.

*Formula:* Annualized Standard Deviation (Fund Return - Average Fund Return) where average fund return is greater than individual fund returns, monthly or quarterly.

#### Duration<sup>3</sup>

 Duration is a measure of interest rate risk. The greater the duration of a bond, or a portfolio of bonds, the greater its price volatility will be in response to a change in interest rates. A bond's duration is inversely related to interest rates and directly related to time to maturity.

#### Equity/Debt/Cash Ratio<sup>1</sup>

 The percentage of an investment or portfolio that is in Equity, Debt, and/or Cash (i.e. a 7/89/4 ratio represents an investment that is made up of 7% Equity, 89% Debt, and 4% Cash).

#### Foreign Bond<sup>3</sup>

 A bond that is issued in a domestic market by a foreign entity, in the domestic market's currency. A foreign bond is most often issued by a foreign firm to raise capital in a domestic market that would be most interested in purchasing the firm's debt. For foreign firms doing a large amount of business in the domestic market, issuing foreign bonds is a common practice.

#### Hard Hurdle<sup>5</sup>

A rate of return that, once beaten, allows a fund manager to charge a
performance fee on returns above the specified hurdle rate.

#### High-Water Mark<sup>4</sup>

 The highest value that an investment fund/account has reached. This term is often used in the context of fund manager compensation, which is performance-based. Some performance-based fees only get paid when fund performance exceeds the high-water mark. The high-water mark ensures that the manager does not get paid large sums for poor performance.



Source: <sup>1</sup>InvestorForce, <sup>2</sup>Interaction Effect Performance Attribution, <sup>3</sup>NEPC, LLC, <sup>4</sup>Investopedia, <sup>5</sup>Hedgeco.net

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#### Hurdle Rate<sup>4</sup>

 The minimum rate of return on an investment required for a manager to collect incentive fees from the investor, which is usually tied to a benchmark.

#### Interaction Effect<sup>2</sup>

The Interaction Effect measures the combined impact of an investment manager's selection and allocation decisions within a sector. For example, if an investment manager had superior selection and over weighted that particular sector, the interaction effect is positive. If an investment manager had superior selection, but underweighted that sector, the interaction effect is negative. In this case, the investment manager did not take advantage of the superior selection by allocating more assets to that sector. Since many investment managers consider the interaction effect to be part of the selection or the allocation, it is often combined with either effect.

#### Median<sup>3</sup>

 The value that exceeds one-half of the values in a population and that is exceeded by one-half of the values. The median has a percentile rank
 of 50.

#### Modified Duration<sup>3</sup>

 The percentage change in the price of a fixed income security that results from a change in yield.

#### Mortgage Backed Securities (MBS)<sup>3</sup>

 Bonds which are a general obligation of the issuing institution but are also collateralized by a pool of mortgages.

#### Municipal Bond (Muni) <sup>4</sup>

 A debt security issued by a state, municipality or county to finance its capital expenditures.

#### Net Investment Change<sup>1</sup>

- The change in an investment after accounting for all Net Cash Flows.

#### Performance Fee<sup>4</sup>

 A payment made to a fund manager for generating positive returns. The performance fee is generally calculated as a percentage of investment profits, often both realized and unrealized.

#### Policy Index<sup>3</sup>

 A custom benchmark designed to indicate the returns that a passive investor would earn by consistently following the asset allocation targets set forth in the investment policy statement.

#### Price to Book (P/B)<sup>4</sup>

 A ratio used to compare a stock's market value to its book value. It is calculated by dividing the current closing price of the stock by the latest quarter's book value per share, also known as the "price-equity ratio".

#### Price to Earnings (P/E)<sup>3</sup>

- The weighted equity P/E is based on current price and trailing 12 months earnings per share (EPS).

#### Price to Sales (P/S)<sup>4</sup>

 A ratio for valuing a stock relative to its own past performance, other companies, or the market itself. Price to sales is calculated by dividing a stock's current price by its revenue per share for the trailing 12 months.

#### Quartile<sup>3</sup>

 One of four segments of a distribution. The top quartile consists of observations that rank from 1 to 25, the second quartile consists of observations that rank between 25 and 50, etc.



Source: <sup>1</sup>InvestorForce, <sup>2</sup>Interaction Effect Performance Attribution, <sup>3</sup>NEPC, LLC, <sup>4</sup>Investopedia, <sup>5</sup>Hedgeco.net

#### Rank<sup>3</sup>

 The relative position of a single observation in a larger population. Universe rankings range from 1 to 100, with 1 being the best and 100 the worst.

#### Return on Equity (ROE)<sup>4</sup>

 The amount of net income returned as a percentage of shareholders equity. Return on equity measures a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested.

#### Selection (or Manager) Effect<sup>2</sup>

Measures the investment manager's ability to select securities within a given sector relative to a benchmark. The over or underperformance of the portfolio is weighted by the benchmark weight, therefore, selection is not affected by the manager's allocation to the sector. The weight of the sector in the portfolio determines the size of the effect: The larger the sector, the larger the effect, positive or negative.

#### Soft Hurdle<sup>5</sup>

 A rate of return that, once beaten, allows a fund manager to charge a performance fee based on the entire annualized return.

#### Tiered Fee<sup>1</sup>

 A fee structure that is paid to fund managers based on the size of the investment (i.e. 1.00% fee on the first \$10M invested, 0.90% on the next \$10M, and 0.80% on the remaining balance).

#### Total Effect<sup>2</sup>

 The active management (total) effect is the sum of the selection, allocation, and interaction effects. It is also the difference between the total portfolio return and the total benchmark return. You can use the active management effect to determine the amount the investment manager has added to a portfolio's return.

#### Total Return<sup>1</sup>

 The actual rate of return of an investment over a specified time period. Total return includes interest, capital gains, dividends, and distributions realized over the time period.

#### Universe<sup>3</sup>

- The list of all assets eligible for inclusion in a portfolio, or group of portfolios eligible for inclusion in a distribution.

#### Upside Deviation<sup>1</sup>

Standard Deviation of Positive Returns

#### Weighted Average Market Cap.<sup>4</sup>

 A stock market index weighted by the market capitalization of each stock in the index. In such a weighting scheme, larger companies account for a greater portion of the index. Most indexes are constructed in this manner, with the best example being the S&P 500.

#### Yield (%)<sup>3</sup>

- The current yield of a security is the current indicated annual dividend rate divided by current price.

#### Yield to Maturity<sup>3</sup>

- The discount rate that equates the present value of cash flows, both principal and interest, to market price.



Source: 1InvestorForce, 2Interaction Effect Performance Attribution, 3NEPC, LLC, 4Investopedia, 5Hedgeco.net

## **DISCLAIMERS & DISCLOSURES**

Past performance is no guarantee of future results.

Returns for pooled funds, e.g. mutual funds and collective investment trusts, are collected from third parties; they are not generally calculated by NEPC. Returns for separate accounts, with some exceptions, are calculated by NEPC. Returns are reported net of manager fees unless otherwise noted.

A "since inception" return, if reported, begins with the first full month after funding, although actual inception dates (e.g. the middle of a month) and the timing of cash flows are taken into account in Composite return calculations.

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Source of private fund performance benchmark data: Cambridge Associates, via Refinitiv

