

## City of Cincinnati Retirement System Investment Committee

City Hall, Committee Room B August 1, 2019 - 12:00 P.M.

### AGENDA

### **Members**

Chris Meyer, Chair Bill Moller, Vice Chair Christopher Baucom Steven Dietrich Tom Gamel Don Stiens Kathy Rahtz <u>CRS Staff</u> Paula Tilsley Renee Tyree Peter Wilson Ron Wilson

### Call to Order

Approval of Minutes May 2, 2019

+ Way 2, 201

### **New Business**

- 4 2nd Quarter Investment Report
- **4** Asset Allocation Study
- Private Equity Education

### Adjournment

Next Meeting: November 7, 2019, 12:00 P.M. - City Hall, Committee Room B





### **Cincinnati Retirement System**

City of Cincinnati Retirement System Executive Summary June 30, 2019



### Manager Status

Market Value: \$2,228.0 Million and 100.0% of Fund

| Investment Manager                   | Asset Class                           | Status        | Reason |
|--------------------------------------|---------------------------------------|---------------|--------|
| BlackRock Strategic Income Opps      | Unconstrained Fixed Income            | In Compliance |        |
| Loomis Sayles Core-Plus              | Core Plus Fixed Income                | In Compliance |        |
| Shenkman - Four Points               | High Yield Fixed Income               | In Compliance |        |
| Northern Trust                       | US & Non-US Equity Indexes            | In Compliance |        |
| Vanguard Mid Cap Value               | Mid-Cap Value                         | In Compliance |        |
| DFA International Small Value        | Non-U.S. Small-Cap Value              | In Compliance |        |
| DFA Emerging Markets Value           | Emerging Markets                      | In Compliance |        |
| DFA Emerging Markets Core            | Emerging Markets                      | In Compliance |        |
| DFA Emerging Markets Small Cap       | EM Small-Cap                          | In Compliance |        |
| AQR Risk Parity                      | Risk Parity                           | In Compliance |        |
| J.P. Morgan SPF                      | Core Real Estate                      | In Compliance |        |
| Morgan Stanley P.P.                  | Core Real Estate                      | In Compliance |        |
| PRISA III                            | Value-Added Real Estate               | In Compliance |        |
| Principal Enhanced                   | Value-Added Real Estate               | In Compliance |        |
| Mesirow/Courtland I                  | Non-U.S. Core Real Estate             | In Compliance |        |
| Alinda Fund II                       | Core Infrastructure                   | In Compliance |        |
| Macquarie Fund II                    | Core Infrastructure                   | In Compliance |        |
| J.P. Morgan Infrastructure           | Core Infrastructure                   | In Compliance |        |
| IFM Global Infrastructure (U.S)      | Global Infrastructure                 | In Compliance |        |
| Blue Chip Fund IV                    | Venture Private Equity                | In Compliance |        |
| Fort Washington Fund V               | Divers. Private Equity                | In Compliance |        |
| Fort Washington Fund VI              | Divers. Private Equity                | In Compliance |        |
| Fort Washington Fund VIII            | Divers. Private Equity                | In Compliance |        |
| Fort Washington Fund IX              | Divers. Private Equity                | In Compliance |        |
| Fort Washington Fund X               | Divers. Private Equity                | In Compliance |        |
| Fort Washington Opp Fund III         | Secondary Private Equity FoF          | In Compliance |        |
| North Sky Fund III - LBO             | LBO Private Equity                    | In Compliance |        |
| North Sky Fund III - VC              | Venture Private Equity                | In Compliance |        |
| North Sky Fund IV - LBO              | LBO Private Equity                    | In Compliance |        |
| North Sky Fund IV - VC               | Venture Private Equity                | In Compliance |        |
| North Sky Fund V                     | Divers. Private Equity                | In Compliance |        |
| Portfolio Advisors IV - Special Sit  | Mezz./Special Sit. Private Equity FoF | In Compliance |        |
| Portfolio Advisors V - Special Sit   | Mezz./Special Sit. Private Equity FoF | In Compliance |        |
| JP Morgan Global Private Equity VIII | Global Divers. Private Equity FoF     | In Compliance |        |
|                                      |                                       |               |        |

### **Investment Manager Evaluation Terminology**

The following terminology has been developed by Marquette Associates to facilitate efficient communication among the Investment Manager, Investment Consultant, and the Plan Sponsor. Each term signifies a particular status with the Fund and any conditions that may require improvement. In each case, communication is made only after consultation with the Trustees and/or the Investment Committee of the Plan.

In Compliance - The investment manager states it is acting in accordance with the Investment Policy Guidelines.

Alert – The investment manager is notified of a problem in performance (usually related to a benchmark or volatility measure), a change in investment characteristics, an alteration in management style or key investment professionals, and/or any other irregularities.

**On Notice** – The investment manager is notified of continued concern with one or more Alert issues. Failure to improve upon stated issues within a specific time frame justifies termination.

Termination - The Trustees have decided to terminate the investment manager. The investment manager is notified and transition plans are in place.

Total Fund Composite

|                                 |                               | E                    | nding June 30, 2              | 2019           |          |                           |
|---------------------------------|-------------------------------|----------------------|-------------------------------|----------------|----------|---------------------------|
|                                 | Asset Class                   | Market Value<br>(\$) | 3 Mo Net م<br>Cash Flows (\$) | 6 of Portfolio | Policy % | Policy Difference<br>(\$) |
| Total Fund Composite            |                               | 2,227,975,124        | -36,325,895                   | 100.0          | 100.0    | 0                         |
| Fixed Income Composite          |                               | 393,238,365          | -109,799                      | 17.7           | 17.0     | 14,482,594                |
| Loomis Sayles Core-Plus         | Core Plus Fixed Income        | 160,389,703          | -109,799                      | 7.2            | 7.0      | 4,431,444                 |
| BlackRock Strategic Income Opps | Unconstrained Fixed<br>Income | 157,120,615          | 0                             | 7.1            | 7.0      | 1,162,356                 |
| Shenkman - Four Points          | High Yield Fixed Income       | 75,728,048           | 0                             | 3.4            | 3.0      | 8,888,794                 |
| U.S. Equity Composite           |                               | 638,844,347          | -5,058,771                    | 28.7           | 27.5     | 26,151,187                |
| NTGI Russell 1000 Value         | Large-Cap Value               | 161,652,641          | -7,783                        | 7.3            | 7.0      | 5,694,382                 |
| NTGI Russell 1000 Growth        | Large-Cap Growth              | 122,613,959          | -5,859                        | 5.5            | 5.0      | 11,215,203                |
| NTGI S&P 400                    | Mid-Cap Core                  | 94,509,192           | -4,585                        | 4.2            | 4.0      | 5,390,187                 |
| Vanguard Mid Cap Value          | Mid-Cap Value                 | 94,783,336           | -5,000,000                    | 4.3            | 4.0      | 5,664,331                 |
| NTGI Russell 2000 Value         | Small-Cap Value               | 161,180,132          | -7,948                        | 7.2            | 7.5      | -5,918,002                |
| Clifton Group                   | Cash Overlay                  | 4,105,086            | -32,596                       | 0.2            |          |                           |
| Non-U.S. Equity Composite       |                               | 499,103,643          | -130,652                      | 22.4           | 23.0     | -13,330,635               |
| NTGI MSCI EAFE                  | Non-U.S. Large-Cap<br>Core    | 224,723,958          | -10,819                       | 10.1           | 10.0     | 1,926,446                 |
| DFA International Small Value   | Non-U.S. Small-Cap<br>Value   | 100,763,860          | 0                             | 4.5            | 5.0      | -10,634,896               |
| DFA Emerging Markets Value      | Emerging Markets              | 52,938,486           | 0                             | 2.4            | 2.5      | -2,760,893                |
| DFA Emerging Markets Core       | Emerging Markets              | 51,964,859           | 0                             | 2.3            | 2.5      | -3,734,519                |
| DFA Emerging Markets Small Cap  | EM Small-Cap                  | 67,123,059           | 0                             | 3.0            | 3.0      | 283,805                   |
| Risk Parity Composite           |                               | 117,204,504          | 0                             | 5.3            | 5.0      | 5,805,748                 |
| AQR Risk Parity                 | Risk Parity                   | 117,204,504          | 0                             | 5.3            | 5.0      | 5,805,748                 |
| Real Estate Composite           |                               | 230,914,766          | -11,679,180                   | 10.4           | 10.0     | 8,117,253                 |
| J.P. Morgan SPF                 | Core Real Estate              | 72,865,654           | -3,847,822                    | 3.3            | 2.5      | 17,166,276                |
| Morgan Stanley P.P.             | Core Real Estate              | 67,201,463           | -5,914,294                    | 3.0            | 2.5      | 11,502,084                |
| PRISA III                       | Value-Added Real Estate       | 39,114,609           | -252,531                      | 1.8            | 2.5      | -16,584,769               |
| Principal Enhanced              | Value-Added Real Estate       | 47,403,540           | -614,532                      | 2.1            | 2.5      | -8,295,838                |
| Mesirow/Courtland I             | Non-U.S. Core Real<br>Estate  | 4,329,500            | -1,050,000                    | 0.2            | 0.0      | 4,329,500                 |
| Infrastructure Composite        |                               | 156,992,381          | -28,627,640                   | 7.0            | 7.5      | -10,105,754               |
| Alinda Fund II                  | Core Infrastructure           | 29,477,828           | -331,646                      | 1.3            | 2.5      | -26,221,550               |
| Macquarie Fund II               | Core Infrastructure           | 33,173,684           | -28,295,994                   | 1.5            | 2.5      | -22,525,694               |
| J.P. Morgan Infrastructure      | Core Infrastructure           | 31,255,210           | 0                             | 1.4            | 2.5      | -24,444,168               |
| IFM Global Infrastructure (U.S) | Global Infrastructure         | 63,085,659           | 0                             | 2.8            |          |                           |

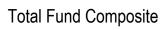
#### Market Value: \$2,228.0 Million and 100.0% of Fund

Total Fund Composite

|                                      |  | L                    | nung sune so,               | 2013           |          |                           |
|--------------------------------------|--|----------------------|-----------------------------|----------------|----------|---------------------------|
|                                      | Asset Class                              | Market Value<br>(\$) | 3 Mo Net<br>Cash Flows (\$) | % of Portfolio | Policy % | Policy Difference<br>(\$) |
| Private Equity Composite             |  | 177,151,426          | -1,928,950                  | 8.0            | 10.0     | -45,646,087               |
| Private Equity w/o Blue Chip         |  | 175,724,782          | -1,928,950                  | 7.9            | -        | 175,724,782               |
| Fort Washington Fund V               | Divers. Private Equity                   | 17,797,234           | -1,400,000                  | 0.8            |          |                           |
| Fort Washington Fund VI              | Divers. Private Equity                   | 13,188,768           | -825,000                    | 0.6            |          |                           |
| Fort Washington Fund VIII            | Divers. Private Equity                   | 37,988,852           | 0                           | 1.7            |          |                           |
| Fort Washington Fund IX              | Divers. Private Equity                   | 19,141,697           | 0                           | 0.9            |          |                           |
| Fort Washington Fund X               | Divers. Private Equity                   | 4,000,000            | 4,000,000                   | 0.2            |          |                           |
| Fort Washington Opp Fund III         | Secondary Private Equity<br>FoF          | 17,284,575           | -3,000,000                  | 0.8            |          |                           |
| North Sky Fund III - LBO             | LBO Private Equity                       | 7,861,456            | -755,967                    | 0.4            |          |                           |
| North Sky Fund III - VC              | Venture Private Equity                   | 3,055,697            | -239,284                    | 0.1            |          |                           |
| North Sky Fund IV - LBO              | LBO Private Equity                       | 7,809,427            | -1,203,774                  | 0.4            |          |                           |
| North Sky Fund IV - VC               | Venture Private Equity                   | 2,285,271            | -1,145,545                  | 0.1            |          |                           |
| North Sky Fund V                     | Divers. Private Equity                   | 37,375,513           | 0                           | 1.7            |          |                           |
| Portfolio Advisors IV - Special Sit  | Mezz./Special Sit.<br>Private Equity FoF | 3,305,891            | -38,242                     | 0.1            |          |                           |
| Portfolio Advisors V - Special Sit   | Mezz./Special Sit.<br>Private Equity FoF | 1,832,850            | -118,689                    | 0.1            |          |                           |
| JP Morgan Global Private Equity VIII | Global Divers. Private<br>Equity FoF     | 2,797,551            | 2,797,551                   | 0.1            |          |                           |
| Blue Chip Fund IV                    | Venture Private Equity                   | 1,426,644            | 0                           | 0.1            |          |                           |
| Total Cash Equivalents               |  | 14,525,693           | 11,307,385                  | 0.7            |          | 14,525,693                |

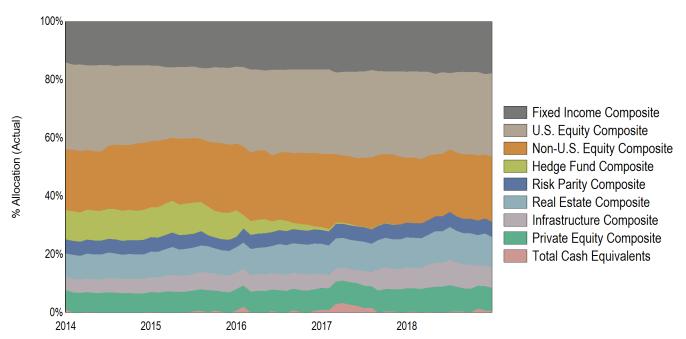
### Ending June 30, 2019

Market Value: \$2,228.0 Million and 100.0% of Fund



### Asset Allocation

Market Value: \$2,228.0 Million and 100.0% of Fund



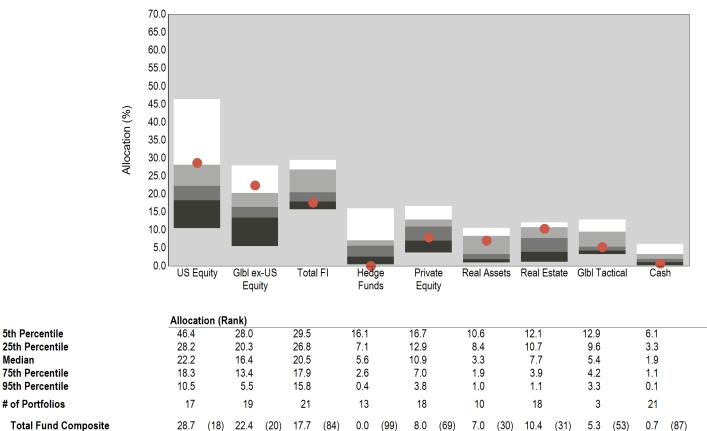
|                           | Current         | Policy        | Difference    | %     |
|---------------------------|-----------------|---------------|---------------|-------|
| Fixed Income Composite    | \$393,238,365   | \$378,755,771 | \$14,482,594  | 0.7%  |
| U.S. Equity Composite     | \$638,844,347   | \$612,693,159 | \$26,151,187  | 1.2%  |
| Non-U.S. Equity Composite | \$499,103,643   | \$512,434,278 | -\$13,330,635 | -0.6% |
| Hedge Fund Composite      |                 | \$0           |               |       |
| Risk Parity Composite     | \$117,204,504   | \$111,398,756 | \$5,805,748   | 0.3%  |
| Real Estate Composite     | \$230,914,766   | \$222,797,512 | \$8,117,253   | 0.4%  |
| Infrastructure Composite  | \$156,992,381   | \$167,098,134 | -\$10,105,754 | -0.5% |
| Private Equity Composite  | \$177,151,426   | \$222,797,512 | -\$45,646,087 | -2.0% |
| Total Cash Equivalents    | \$14,525,693    | -             |               |       |
| Total                     | \$2,227,975,124 |               |               |       |

**Historic Asset Allocation** 



.

Market Value: \$2,228.0 Million and 100.0% of Fund



Total Plan Allocation vs. InvMetrics Public DB > \$1B Net

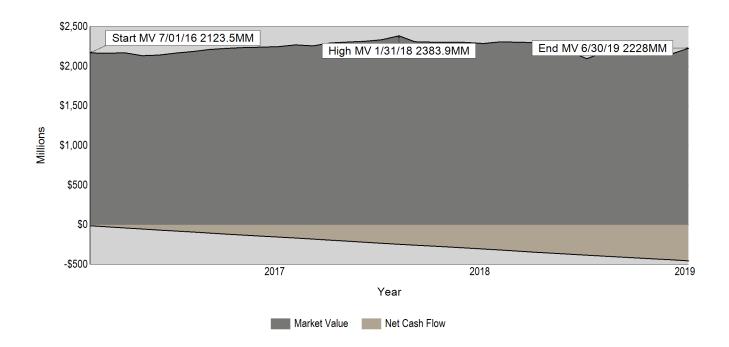
**Total Fund Composite** 

Median



### Market Value History

Market Value: \$2,228.0 Million and 100.0% of Fund



### Summary of Cash Flows

|                        | Second Quarter     | Year-To-Date       | One Year           | Three Years        |
|------------------------|--------------------|--------------------|--------------------|--------------------|
| Beginning Market Value | \$2,211,892,543.59 | \$2,095,589,169.17 | \$2,286,723,358.82 | \$2,123,454,764.16 |
| Net Cash Flow          | -\$35,659,824.14   | -\$70,275,876.11   | -\$146,825,056.89  | -\$442,188,623.30  |
| Net Investment Change  | \$51,742,404.45    | \$202,661,830.84   | \$88,076,821.97    | \$546,708,983.04   |
| Ending Market Value    | \$2,227,975,123.90 | \$2,227,975,123.90 | \$2,227,975,123.90 | \$2,227,975,123.90 |



## Attribution

Market Value: \$2,228.0 Million and 100.0% of Fund

| Attribution Summary       |                              |                      |                  |                     |                      |                        |                  |  |  |  |  |  |  |  |
|---------------------------|------------------------------|----------------------|------------------|---------------------|----------------------|------------------------|------------------|--|--|--|--|--|--|--|
|                           | 5 Years Ending June 30, 2019 |                      |                  |                     |                      |                        |                  |  |  |  |  |  |  |  |
|                           | Wtd. Actual<br>Return        | Wtd. Index<br>Return | Excess<br>Return | Selection<br>Effect | Allocation<br>Effect | Interaction<br>Effects | Total<br>Effects |  |  |  |  |  |  |  |
| Fixed Income Composite    | 3.59%                        | 2.95%                | 0.64%            | 0.11%               | -0.01%               | 0.01%                  | 0.11%            |  |  |  |  |  |  |  |
| U.S. Equity Composite     | 8.16%                        | 10.19%               | -2.03%           | -0.50%              | -0.01%               | -0.04%                 | -0.55%           |  |  |  |  |  |  |  |
| Non-U.S. Equity Composite | 2.39%                        | 2.16%                | 0.22%            | 0.05%               | 0.00%                | 0.00%                  | 0.04%            |  |  |  |  |  |  |  |
| Hedge Fund Composite      |                              | 1.91%                |                  | 0.04%               | -0.07%               | -0.10%                 | -0.13%           |  |  |  |  |  |  |  |
| Risk Parity Composite     | 3.01%                        | 7.42%                | -4.41%           | -0.22%              | 0.00%                | 0.00%                  | -0.22%           |  |  |  |  |  |  |  |
| Real Estate Composite     | 10.86%                       | 8.77%                | 2.09%            | 0.19%               | 0.02%                | 0.00%                  | 0.22%            |  |  |  |  |  |  |  |
| Infrastructure Composite  | 5.43%                        | 4.90%                | 0.52%            | -0.01%              | 0.05%                | 0.03%                  | 0.07%            |  |  |  |  |  |  |  |
| Private Equity Composite  | 10.94%                       | 10.78%               | 0.16%            | 0.01%               | -0.08%               | 0.00%                  | -0.06%           |  |  |  |  |  |  |  |
| Total Cash Equivalents    | 1.71%                        | 0.87%                | 0.84%            |                     |                      |                        |                  |  |  |  |  |  |  |  |
| Total                     | 5.87%                        | 6.44%                | -0.58%           | -0.33%              | -0.11%               | -0.09%                 | -0.53%           |  |  |  |  |  |  |  |

#### **Calendar Years**

|                     | YTD   | 2018  | 2017  | 2016  | 2015  | Quarter | 1 Yr  | 3 Yrs |
|---------------------|-------|-------|-------|-------|-------|---------|-------|-------|
| Wtd. Actual Return  | 9.8%  | -4.1% | 15.1% | 9.1%  | 0.3%  | 2.4%    | 4.2%  | 8.6%  |
| Wtd. Index Return * | 10.9% | -2.7% | 16.0% | 7.2%  | 0.8%  | 2.8%    | 6.7%  | 9.5%  |
| Excess Return       | -1.1% | -1.5% | -0.9% | 2.0%  | -0.6% | -0.4%   | -2.5% | -0.8% |
| Selection Effect    | -0.8% | -1.2% | -0.7% | 2.5%  | -0.6% | -0.4%   | -2.0% | -0.5% |
| Allocation Effect   | -0.3% | -0.1% | 0.2%  | -0.2% | -0.1% | -0.1%   | -0.2% | -0.1% |
| Interaction Effect  | 0.0%  | -0.2% | -0.2% | -0.3% | 0.1%  | 0.0%    | -0.2% | -0.1% |

\*Calculated from the benchmark returns and weightings of each composite. Returns will differ slightly from the official Policy Benchmark.

### Attribution

Market Value: \$2,228.0 Million and 100.0% of Fund

|                                      | Market Value  | 3 Mo   | Contribution | % Contribution |
|--------------------------------------|---------------|--------|--------------|----------------|
|                                      | (\$)          | Return | to Return    | to Return      |
| Total Fund Composite                 | 2,227,975,124 | 2.4    | 2.4          | 100.0%         |
| Fixed Income Composite               | 393,238,365   | 2.8    | 0.5          | 20.9%          |
| Loomis Sayles Core-Plus              | 160,389,703   | 3.0    | 0.2          | 9.2%           |
| BlackRock Strategic Income Opps      | 157,120,615   | 2.6    | 0.2          | 7.7%           |
| Shenkman - Four Points               | 75,728,048    | 2.8    | 0.1          | 4.0%           |
| U.S. Equity Composite                | 638,844,347   | 3.2    | 0.9          | 39.1%          |
| NTGI Russell 1000 Value              | 161,652,641   | 3.9    | 0.3          | 11.7%          |
| NTGI Russell 1000 Growth             | 122,613,959   | 4.6    | 0.3          | 10.6%          |
| NTGI S&P 400                         | 94,509,192    | 3.1    | 0.1          | 5.4%           |
| Vanguard Mid Cap Value               | 94,783,336    | 3.9    | 0.2          | 7.0%           |
| NTGI Russell 2000 Value              | 161,180,132   | 1.4    | 0.1          | 4.3%           |
| Clifton Group                        | 4,105,086     | 1.8    | 0.0          | 0.1%           |
| Non-U.S. Equity Composite            | 499,103,643   | 2.0    | 0.4          | 18.6%          |
| NTGI MSCI EAFE                       | 224,723,958   | 3.9    | 0.4          | 16.3%          |
| DFA International Small Value        | 100,763,860   | 0.2    | 0.0          | 0.3%           |
| DFA Emerging Markets Value           | 52,938,486    | 0.3    | 0.0          | 0.3%           |
| DFA Emerging Markets Core            | 51,964,859    | 0.9    | 0.0          | 0.8%           |
| DFA Emerging Markets Small Cap       | 67,123,059    | 0.8    | 0.0          | 1.0%           |
| Risk Parity Composite                | 117,204,504   | 5.1    | 0.3          | 11.0%          |
| AQR Risk Parity                      | 117,204,504   | 5.1    | 0.3          | 11.0%          |
| Real Estate Composite                | 230,914,766   | 1.2    | 0.1          | 5.5%           |
| J.P. Morgan SPF                      | 72,865,654    | 0.9    | 0.0          | 1.3%           |
| Morgan Stanley P.P.                  | 67,201,463    | 1.8    | 0.1          | 2.4%           |
| PRISA III                            | 39,114,609    | 1.6    | 0.0          | 1.2%           |
| Principal Enhanced                   | 47,403,540    | 0.6    | 0.0          | 0.6%           |
| Mesirow/Courtland I                  | 4,329,500     | 0.0    | 0.0          | 0.0%           |
| Infrastructure Composite             | 156,992,381   | 1.5    | 0.1          | 4.8%           |
| Alinda Fund II                       | 29,477,828    | 0.0    | 0.0          | 0.0%           |
| Macquarie Fund II                    | 33,173,684    | 0.0    | 0.0          | 0.0%           |
| J.P. Morgan Infrastructure           | 31,255,210    | 0.0    | 0.0          | 0.0%           |
| IFM Global Infrastructure (U.S)      | 63,085,659    | 3.8    | 0.1          | 4.6%           |
| Private Equity Composite             | 177,151,426   | 0.0    | 0.0          | 0.0%           |
| Private Equity w/o Blue Chip         | 175,724,782   | 0.0    | 0.0          | 0.0%           |
| Fort Washington Fund V               | 17,797,234    | 0.0    | 0.0          | 0.0%           |
| Fort Washington Fund VI              | 13,188,768    | 0.0    | 0.0          | 0.0%           |
| Fort Washington Fund VIII            | 37,988,852    | 0.0    | 0.0          | 0.0%           |
| Fort Washington Fund IX              | 19,141,697    | 0.0    | 0.0          | 0.0%           |
| Fort Washington Fund X               | 4,000,000     | 0.0    | 0.0          | 0.0%           |
| Fort Washington Opp Fund III         | 17,284,575    | 0.0    | 0.0          | 0.0%           |
| North Sky Fund III - LBO             | 7,861,456     | 0.0    | 0.0          | 0.0%           |
| North Sky Fund III - VC              | 3,055,697     | 0.0    | 0.0          | 0.0%           |
| North Sky Fund IV - LBO              | 7,809,427     | 0.0    | 0.0          | 0.0%           |
| North Sky Fund IV - VC               | 2,285,271     | 0.0    | 0.0          | 0.0%           |
| North Sky Fund V                     | 37,375,513    | 0.0    | 0.0          | 0.0%           |
| Portfolio Advisors IV - Special Sit  | 3,305,891     | 0.0    | 0.0          | 0.0%           |
| Portfolio Advisors V - Special Sit   | 1,832,850     | 0.0    | 0.0          | 0.0%           |
| JP Morgan Global Private Equity VIII | 2,797,551     | 0.0    | 0.0          | 0.0%           |
| Blue Chip Fund IV                    | 1,426,644     | 0.0    | 0.0          | 0.0%           |
| Total Cash Equivalents               | 14,525,693    | 0.6    | 0.0          | 0.1%           |



# Total Fund Composite

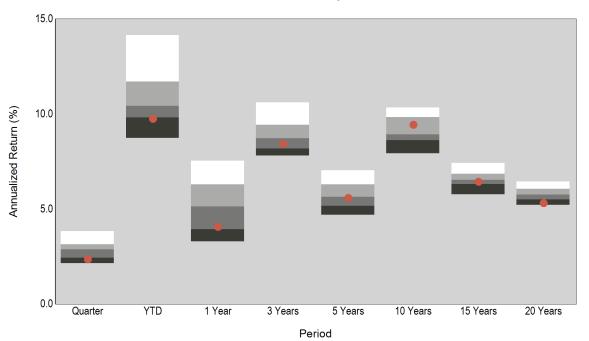
# Annualized Performance (Net of Fees)

Market Value: \$2,228.0 Million and 100.0% of Fund

|  |       |        |        |        | Enc    | ding Jun | e 30, 201 | 19     |        |        |        |
|--|-------|--------|--------|--------|--------|----------|-----------|--------|--------|--------|--------|
|  | 3 Mo  | YTD    | 1 Yr   | 2 Yrs  | 3 Yrs  | 4 Yrs    | 5 Yrs     | 7 Yrs  | 10 Yrs | 15 Yrs | 20 Yrs |
| Total Fund Composite                           | 2.36% | 9.75%  | 4.06%  | 6.15%  | 8.43%  | 6.08%    | 5.58%     | 8.34%  | 9.44%  | 6.44%  | 5.31%  |
| Target Benchmark                               | 2.34% | 10.33% | 4.74%  | 6.70%  | 8.95%  | 6.60%    | 6.05%     | 8.46%  | 9.23%  | 6.62%  | 5.54%  |
| InvMetrics Public DB > \$1B Net Rank           | 80    | 78     | 72     | 80     | 60     | 61       | 57        | 46     | 35     | 62     | 93     |
| Fixed Income Composite                         | 2.82% | 6.57%  | 6.00%  | 4.09%  | 4.75%  | 3.76%    | 3.46%     | 3.73%  | 5.58%  | 5.20%  | 5.71%  |
| BBgBarc US Aggregate TR                        | 3.08% | 6.11%  | 7.87%  | 3.65%  | 2.31%  | 3.22%    | 2.95%     | 2.62%  | 3.90%  | 4.27%  | 4.93%  |
| InvMetrics Public DB Total Fix Inc Net<br>Rank | 42    | 36     | 89     | 14     | 7      | 27       | 7         | 17     | 23     | 28     | 45     |
| U.S. Equity Composite                          | 3.24% | 17.21% | 3.42%  | 8.61%  | 12.49% | 8.67%    | 8.03%     | 12.48% | 13.76% | 8.30%  | 5.90%  |
| Russell 3000                                   | 4.10% | 18.71% | 8.98%  | 11.84% | 14.02% | 10.93%   | 10.19%    | 13.79% | 14.67% | 8.88%  | 6.30%  |
| InvMetrics Public DB US Eq Net Rank            | 95    | 94     | 99     | 97     | 83     | 88       | 91        | 79     | 64     | 79     | 99     |
| Non-U.S. Equity Composite                      | 1.97% | 11.20% | -1.76% | 1.63%  | 7.46%  | 3.76%    | 2.10%     | 6.60%  | 7.43%  | 6.28%  | 4.10%  |
| MSCI ACWI ex USA                               | 2.98% | 13.60% | 1.29%  | 4.24%  | 9.39%  | 4.11%    | 2.16%     | 6.36%  | 6.54%  | 5.85%  | 4.51%  |
| InvMetrics Public DB ex-US Eq Net<br>Rank      | 86    | 96     | 86     | 88     | 88     | 65       | 71        | 68     | 40     | 33     | 81     |
| Risk Parity Composite                          | 5.06% | 15.57% | 8.36%  | 8.68%  | 6.57%  | 4.89%    | 3.01%     |        |        |        |        |
| 60% Wilshire 5000/40% BarCap<br>Aggregate      | 3.83% | 13.74% | 8.98%  | 8.77%  | 9.41%  | 8.00%    | 7.42%     | 9.34%  | 10.50% | 7.35%  | 6.12%  |
| Real Estate Composite                          | 1.22% | 2.27%  | 5.93%  | 6.87%  | 7.31%  | 8.57%    | 9.62%     | 10.65% | 9.98%  |        |        |
| NFI  | 0.78% | 1.99%  | 5.48%  | 6.47%  | 6.61%  | 7.65%    | 8.77%     | 9.52%  | 8.87%  | 7.02%  | 7.35%  |
| NPI  | 0.00% | 1.80%  | 4.92%  | 6.05%  | 6.36%  | 7.41%    | 8.50%     | 9.20%  | 9.08%  | 8.59%  | 8.79%  |
| InvMetrics All DB Real Estate Priv Net<br>Rank | 49    | 55     | 61     | 47     | 37     | 26       | 28        | 10     | 13     |        |        |
| Infrastructure Composite                       | 1.48% | 3.34%  | 5.39%  | 3.75%  | 2.82%  | 3.82%    | 4.95%     | 5.91%  | 8.00%  |        |        |
| 3 Month T-Bill +4%                             | 1.56% | 3.17%  | 6.35%  | 5.90%  | 5.45%  | 5.13%    | 4.90%     | 4.66%  | 4.49%  | 5.35%  | 5.78%  |
| Private Equity Composite                       | 0.00% | 3.41%  | 11.32% | 13.76% | 13.11% | 10.54%   | 10.75%    | 12.67% | 13.63% | 9.32%  | 5.24%  |
| Cambridge Associates All PE                    | 0.00% | 4.72%  | 7.29%  | 12.64% | 13.78% | 11.03%   | 10.78%    | 12.90% | 13.67% | 13.29% | 12.05% |
| Private Equity w/o Blue Chip                   | 0.00% | 3.44%  | 11.65% | 14.30% | 13.91% | 11.17%   | 11.57%    | 13.68% | 14.75% |        |        |



Market Value: \$2,228.0 Million and 100.0% of Fund



### InvMetrics Public DB > \$1B Net Return Comparison

|                      | Return |      |     |      |     |      |     |     |  |
|----------------------|--------|------|-----|------|-----|------|-----|-----|--|
| 5th Percentile       | 3.8    | 14.1 | 7.5 | 10.6 | 7.0 | 10.3 | 7.4 | 6.4 |  |
| 25th Percentile      | 3.2    | 11.7 | 6.3 | 9.4  | 6.3 | 9.8  | 6.9 | 6.1 |  |
| Median               | 2.9    | 10.4 | 5.1 | 8.7  | 5.6 | 8.9  | 6.5 | 5.8 |  |
| 75th Percentile      | 2.4    | 9.8  | 3.9 | 8.2  | 5.2 | 8.6  | 6.3 | 5.5 |  |
| 95th Percentile      | 2.2    | 8.7  | 3.3 | 7.8  | 4.7 | 7.9  | 5.8 | 5.2 |  |
| # of Portfolios      | 27     | 27   | 27  | 27   | 27  | 25   | 22  | 19  |  |
| Total Fund Composite | 2.4    | 9.7  | 4.1 | 8.4  | 5.6 | 9.4  | 6.4 | 5.3 |  |

# Total Fund Composite

# Calendar Performance (Net of Fees)

Market Value: \$2,228.0 Million and 100.0% of Fund

|  |        |       |       |       | Cale  | endar Ye | ar    |        |       |        |        |
|--|--------|-------|-------|-------|-------|----------|-------|--------|-------|--------|--------|
|  | 2018   | 2017  | 2016  | 2015  | 2014  | 2013     | 2012  | 2011   | 2010  | 2009   | 2008   |
| Total Fund Composite                           | -4.3%  | 14.9% | 8.9%  | -0.1% | 6.4%  | 17.5%    | 12.0% | 1.1%   | 13.9% | 20.7%  | -28.1% |
| Target Benchmark                               | -4.1%  | 15.4% | 8.9%  | 0.4%  | 5.8%  | 17.2%    | 12.1% | -1.8%  | 14.7% | 20.8%  | -29.3% |
| InvMetrics Public DB > \$1B Net Rank           | 59     | 62    | 13    | 46    | 18    | 13       | 69    | 32     | 20    | 39     | 69     |
| Fixed Income Composite                         | -0.6%  | 5.6%  | 7.2%  | -2.1% | 5.6%  | 0.7%     | 8.6%  | 5.6%   | 9.7%  | 21.1%  | -5.7%  |
| BBgBarc US Aggregate TR                        | 0.0%   | 3.5%  | 2.6%  | 0.5%  | 6.0%  | -2.0%    | 4.2%  | 7.8%   | 6.5%  | 5.9%   | 5.2%   |
| InvMetrics Public DB Total Fix Inc Net<br>Rank | 57     | 45    | 14    | 78    | 17    | 20       | 36    | 67     | 25    | 13     | 67     |
| U.S. Equity Composite                          | -8.6%  | 17.8% | 16.4% | -3.0% | 10.8% | 35.4%    | 15.4% | -0.1%  | 19.4% | 28.1%  | -36.6% |
| Russell 3000                                   | -5.2%  | 21.1% | 12.7% | 0.5%  | 12.6% | 33.6%    | 16.4% | 1.0%   | 16.9% | 28.3%  | -37.3% |
| InvMetrics Public DB US Eq Net Rank            | 92     | 95    | 3     | 88    | 54    | 24       | 58    | 66     | 29    | 65     | 36     |
| Non-U.S. Equity Composite                      | -16.2% | 27.7% | 7.3%  | -4.9% | -1.4% | 14.5%    | 18.2% | -10.2% | 12.9% | 36.1%  | -39.1% |
| MSCI ACWI ex USA                               | -14.2% | 27.2% | 4.5%  | -5.7% | -3.9% | 15.3%    | 16.8% | -13.7% | 11.2% | 41.4%  | -45.5% |
| InvMetrics Public DB ex-US Eq Net<br>Rank      | 68     | 59    | 7     | 68    | 13    | 79       | 49    | 6      | 40    | 59     | 20     |
| Risk Parity Composite                          | -6.1%  | 11.9% | 11.2% | -9.4% | 6.5%  | -2.9%    |       |        |       |        |        |
| 60% Wilshire 5000/40% BarCap<br>Aggregate      | -2.9%  | 13.8% | 8.7%  | 0.7%  | 9.9%  | 18.1%    | 11.5% | 4.1%   | 13.6% | 19.6%  | -22.2% |
| Real Estate Composite                          | 7.5%   | 7.9%  | 9.3%  | 14.8% | 12.4% | 14.8%    | 11.0% | 16.9%  | 15.9% | -31.9% | -8.3%  |
| NFI  | 7.4%   | 6.7%  | 7.8%  | 13.9% | 11.5% | 12.9%    | 9.8%  | 15.0%  | 15.3% | -30.4% | -10.7% |
| NPI  | 6.7%   | 7.0%  | 8.0%  | 13.3% | 11.8% | 11.0%    | 10.5% | 14.3%  | 13.1% | -16.9% | -6.5%  |
| InvMetrics All DB Real Estate Priv Net<br>Rank | 39     | 20    | 7     | 22    | 31    | 17       | 30    | 14     | 25    | 77     | 24     |
| Infrastructure Composite                       | 4.8%   | 2.5%  | 0.4%  | 11.2% | 12.5% | 4.2%     | 5.6%  | 11.7%  | 23.9% | 2.9%   |        |
| 3 Month T-Bill +4%                             | 6.0%   | 5.0%  | 4.3%  | 4.0%  | 4.0%  | 4.1%     | 4.1%  | 4.0%   | 4.1%  | 4.1%   | 5.4%   |
| Private Equity Composite                       | 16.0%  | 14.3% | 8.1%  | 8.2%  | 8.4%  | 26.5%    | 8.4%  | 11.8%  | 17.5% | 17.4%  | -10.5% |
| Cambridge Associates All PE                    | 10.4%  | 19.3% | 9.8%  | 7.3%  | 11.3% | 20.7%    | 12.7% | 8.2%   | 19.6% | 14.0%  | -25.8% |
| Private Equity w/o Blue Chip                   | 16.8%  | 15.0% | 9.0%  | 9.5%  | 8.8%  | 28.8%    | 9.0%  | 14.3%  | 19.8% | 17.0%  | -15.3% |

# Annualized Performance (Net of Fees)

|  |      |      |       |      |       |       | •     |       |       |        |           |                   |
|--|------|------|-------|------|-------|-------|-------|-------|-------|--------|-----------|-------------------|
|  | 1 Mo | 3 Mo | YTD   | 1 Yr | 2 Yrs | 3 Yrs | 4 Yrs | 5 Yrs | 7 Yrs | 10 Yrs | Inception | Inception<br>Date |
| Total Fund Composite                           | 4.0% | 2.4% | 9.7%  | 4.1% | 6.1%  | 8.4%  | 6.1%  | 5.6%  | 8.3%  | 9.4%   | 8.9%      | May-85            |
| Target Benchmark                               | 3.6% | 2.3% | 10.3% | 4.7% | 6.7%  | 8.9%  | 6.6%  | 6.1%  | 8.5%  | 9.2%   |           | May-85            |
| InvMetrics Public DB > \$1B Net<br>Rank        | 27   | 80   | 78    | 72   | 80    | 60    | 61    | 57    | 46    | 35     | 16        | May-85            |
| Fixed Income Composite                         | 1.5% | 2.8% | 6.6%  | 6.0% | 4.1%  | 4.7%  | 3.8%  | 3.5%  | 3.7%  | 5.6%   | 5.8%      | Nov-95            |
| BBgBarc US Aggregate TR                        | 1.3% | 3.1% | 6.1%  | 7.9% | 3.7%  | 2.3%  | 3.2%  | 2.9%  | 2.6%  | 3.9%   | 5.1%      | Nov-95            |
| InvMetrics Public DB Total Fix<br>Inc Net Rank | 12   | 42   | 36    | 89   | 14    | 7     | 27    | 7     | 17    | 23     | 26        | Nov-95            |
| Loomis Sayles Core-Plus                        | 1.3% | 3.0% | 6.8%  | 7.4% | 4.1%  | 3.6%  |       |       |       |        | 3.8%      | Jul-15            |
| BBgBarc US Aggregate TR                        | 1.3% | 3.1% | 6.1%  | 7.9% | 3.7%  | 2.3%  | 3.2%  | 2.9%  | 2.6%  | 3.9%   | 3.1%      | Jul-15            |
| eV US Core Plus Fixed Inc Net<br>Rank          | 68   | 69   | 51    | 79   | 35    | 31    |       |       |       |        | 35        | Jul-15            |
| BlackRock Strategic Income Opps                | 1.7% | 2.6% | 5.2%  | 5.1% | 3.5%  | 4.2%  | 3.1%  |       |       |        | 2.9%      | Dec-14            |
| BBgBarc US Aggregate TR                        | 1.3% | 3.1% | 6.1%  | 7.9% | 3.7%  | 2.3%  | 3.2%  | 2.9%  | 2.6%  | 3.9%   | 2.8%      | Dec-14            |
| 3 Month T-Bill +4%                             | 0.5% | 1.6% | 3.2%  | 6.4% | 5.9%  | 5.5%  | 5.1%  | 4.9%  | 4.7%  | 4.5%   | 5.0%      | Dec-14            |
| eV US Core Plus Fixed Inc Net<br>Rank          | 11   | 91   | 98    | 99   | 83    | 8     | 90    |       |       |        | 82        | Dec-14            |
| Shenkman - Four Points                         | 1.8% | 2.8% | 9.2%  | 4.9% | 5.4%  | 8.3%  | 5.4%  | 4.7%  | 6.6%  |        | 6.6%      | Aug-10            |
| BBgBarc US High Yield TR                       | 2.3% | 2.5% | 9.9%  | 7.5% | 5.0%  | 7.5%  | 6.0%  | 4.7%  | 6.4%  | 9.2%   | 7.2%      | Aug-10            |
| eV US High Yield Fixed Inc<br>Net Rank         | 72   | 28   | 63    | 88   | 12    | 7     | 40    | 26    | 16    |        | 56        | Aug-10            |

# Investment Manager

|   | 1 Mo | 3 Mo | YTD   | 1 Yr  | 2 Yrs | 3 Yrs | 4 Yrs | 5 Yrs | 7 Yrs | 10 Yrs | Inception | Inception<br>Date |
|---|------|------|-------|-------|-------|-------|-------|-------|-------|--------|-----------|-------------------|
| U.S. Equity Composite                     | 7.2% | 3.2% | 17.2% | 3.4%  | 8.6%  | 12.5% | 8.7%  | 8.0%  | 12.5% | 13.8%  | 9.2%      | Feb-89            |
| Russell 3000                              | 7.0% | 4.1% | 18.7% | 9.0%  | 11.8% | 14.0% | 10.9% | 10.2% | 13.8% | 14.7%  | 10.3%     | Feb-89            |
| InvMetrics Public DB US Eq Net<br>Rank    | 9    | 95   | 94    | 99    | 97    | 83    | 88    | 91    | 79    | 64     | 99        | Feb-89            |
| NTGI Russell 1000 Value                   | 7.2% | 3.9% | 16.3% | 8.5%  | 7.7%  | 10.3% | 8.4%  | 7.6%  |       |        | 8.4%      | Dec-13            |
| Russell 1000 Value                        | 7.2% | 3.8% | 16.2% | 8.5%  | 7.6%  | 10.2% | 8.3%  | 7.5%  | 12.1% | 13.2%  | 8.3%      | Dec-13            |
| eV US Large Cap Value Equity<br>Net Rank  | 43   | 45   | 38    | 28    | 47    | 58    | 40    | 39    |       |        | 37        | Dec-13            |
| NTGI Russell 1000 Growth                  | 6.9% | 4.6% | 21.5% | 11.6% | 16.9% | 18.1% | 14.1% | 13.4% |       |        | 13.4%     | Dec-13            |
| Russell 1000 Growth                       | 6.9% | 4.6% | 21.5% | 11.6% | 16.9% | 18.1% | 14.1% | 13.4% | 15.8% | 16.3%  | 13.4%     | Dec-13            |
| eV US Large Cap Growth<br>Equity Net Rank | 43   | 61   | 53    | 47    | 42    | 47    | 25    | 27    |       |        | 18        | Dec-13            |
| NTGI S&P 400                              | 7.6% | 3.1% | 18.0% | 1.4%  | 7.3%  | 11.0% | 8.5%  | 8.1%  |       |        | 8.8%      | Dec-13            |
| S&P 400 MidCap                            | 7.6% | 3.0% | 18.0% | 1.4%  | 7.3%  | 10.9% | 8.4%  | 8.0%  | 12.7% | 14.6%  | 8.7%      | Dec-13            |
| eV US Mid Cap Equity Net<br>Rank          | 29   | 73   | 65    | 69    | 58    | 61    | 49    | 50    |       |        | 48        | Dec-13            |
| Vanguard Mid Cap Value                    | 7.8% | 3.9% | 18.2% | 3.5%  |       |       |       |       |       |        | -0.2%     | Jan-18            |
| CRSP US Mid Cap Value TR<br>USD           | 7.9% | 3.9% | 18.3% | 3.6%  | 6.5%  | 10.2% | 7.9%  | 7.5%  | 13.1% | 15.1%  | -0.1%     | Jan-18            |
| Mid-Cap Value MStar MF<br>Rank            | 23   | 32   | 32    | 27    |       |       |       |       |       |        | 37        | Jan-18            |
| NTGI Russell 2000 Value                   | 6.4% | 1.4% | 13.6% | -6.1% | 3.2%  | 10.0% | 6.8%  | 5.6%  |       |        | 5.9%      | Dec-13            |
| Russell 2000 Value                        | 6.4% | 1.4% | 13.5% | -6.2% | 3.0%  | 9.8%  | 6.6%  | 5.4%  | 10.3% | 12.4%  | 5.7%      | Dec-13            |
| eV US Small Cap Value Equity<br>Net Rank  | 70   | 66   | 66    | 57    | 46    | 33    | 30    | 33    |       |        | 40        | Dec-13            |

# Investment Manager

|  | 1 Mo | 3 Mo  | YTD   | 1 Yr   | 2 Yrs | 3 Yrs | 4 Yrs | 5 Yrs | 7 Yrs | 10 Yrs | Inception | Inception<br>Date |
|--|------|-------|-------|--------|-------|-------|-------|-------|-------|--------|-----------|-------------------|
| Non-U.S. Equity Composite                  | 5.5% | 2.0%  | 11.2% | -1.8%  | 1.6%  | 7.5%  | 3.8%  | 2.1%  | 6.6%  | 7.4%   | 5.9%      | May-93            |
| MSCI ACWI ex USA                           | 6.0% | 3.0%  | 13.6% | 1.3%   | 4.2%  | 9.4%  | 4.1%  | 2.2%  | 6.4%  | 6.5%   |           | <i>May</i> -93    |
| InvMetrics Public DB ex-US Eq<br>Net Rank  | 86   | 86    | 96    | 86     | 88    | 88    | 65    | 71    | 68    | 40     | 71        | May-93            |
| NTGI MSCI EAFE                             | 5.8% | 3.9%  | 14.2% |        |       |       |       |       |       |        | -1.1%     | Jul-18            |
| MSCI EAFE                                  | 5.9% | 3.7%  | 14.0% | 1.1%   | 3.9%  | 9.1%  | 3.9%  | 2.2%  | 7.3%  | 6.9%   | -1.3%     | Jul-18            |
| eV EAFE Large Cap Core Net<br>Rank         | 56   | 44    | 47    |        |       |       |       |       |       |        | 34        | Jul-18            |
| DFA International Small Value              | 5.2% | 0.2%  | 8.8%  | -11.5% | -3.4% | 6.3%  | 2.2%  | 1.1%  | 8.5%  | 8.2%   | 3.1%      | Nov-07            |
| MSCI EAFE Small Cap                        | 4.2% | 1.7%  | 12.5% | -6.3%  | 2.6%  | 9.1%  | 5.7%  | 4.4%  | 9.9%  | 9.7%   | 3.9%      | Nov-07            |
| Foreign Small/Mid Value<br>MStar MF Rank   | 38   | 54    | 61    | 72     | 79    | 54    | 62    | 55    | 26    | 51     | 99        | Nov-07            |
| DFA Emerging Markets Value                 | 5.1% | 0.3%  | 7.5%  | 2.0%   |       |       |       |       |       |        | -6.0%     | Mar-18            |
| MSCI Emerging Markets                      | 6.2% | 0.6%  | 10.6% | 1.2%   | 4.6%  | 10.7% | 4.5%  | 2.5%  | 4.2%  | 5.8%   | -5.5%     | Mar-18            |
| Diversified Emerging Mkts<br>MStar MF Rank | 81   | 83    | 95    | 41     |       |       |       |       |       |        | 41        | Mar-18            |
| DFA Emerging Markets Core                  | 5.6% | 0.9%  | 9.5%  | 1.3%   |       |       |       |       |       |        | -7.0%     | Mar-18            |
| MSCI Emerging Markets                      | 6.2% | 0.6%  | 10.6% | 1.2%   | 4.6%  | 10.7% | 4.5%  | 2.5%  | 4.2%  | 5.8%   | -5.5%     | Mar-18            |
| Diversified Emerging Mkts<br>MStar MF Rank | 69   | 67    | 82    | 49     |       |       |       |       |       |        | 54        | Mar-18            |
| DFA Emerging Markets Small Cap             | 5.0% | 0.8%  | 9.6%  | -1.3%  | 2.0%  | 7.6%  | 4.1%  |       |       |        | 4.9%      | Dec-14            |
| MSCI Emerging Markets Small<br>Cap         | 3.9% | -1.0% | 6.7%  | -5.1%  | 0.1%  | 5.5%  | 0.6%  | 0.5%  | 3.7%  | 5.9%   | 2.3%      | Dec-14            |
| eV Emg Mkts Small Cap<br>Equity Net Rank   | 38   | 42    | 59    | 30     | 46    | 44    | 23    |       |       |        | 29        | Dec-14            |
| Risk Parity Composite                      | 5.4% | 5.1%  | 15.6% | 8.4%   | 8.7%  | 6.6%  | 4.9%  | 3.0%  |       |        |           | Jul-12            |
| 60% Wilshire 5000/40% BarCap<br>Aggregate  | 4.7% | 3.8%  | 13.7% | 9.0%   | 8.8%  | 9.4%  | 8.0%  | 7.4%  | 9.3%  | 10.5%  | 9.3%      | Jul-12            |
| AQR Risk Parity                            | 5.4% | 5.1%  | 15.6% | 8.4%   | 8.7%  | 6.6%  | 4.9%  | 3.0%  |       |        |           | Jul-12            |
| 60% Wilshire 5000/40% BarCap<br>Aggregate  | 4.7% | 3.8%  | 13.7% | 9.0%   | 8.8%  | 9.4%  | 8.0%  | 7.4%  | 9.3%  | 10.5%  | 9.3%      | Jul-12            |
| 60% MSCI World / 40% BarCap<br>Aggregate   | 4.5% | 3.8%  | 12.7% | 7.3%   | 6.9%  | 8.1%  | 6.2%  | 5.3%  | 7.5%  | 8.2%   | 7.5%      | Jul-12            |

# Investment Manager

|  |      |      |      |       |       |       | •     |       |       |        |           |                 |
|--|------|------|------|-------|-------|-------|-------|-------|-------|--------|-----------|-----------------|
|  | 1 Mo | 3 Mo | YTD  | 1 Yr  | 2 Yrs | 3 Yrs | 4 Yrs | 5 Yrs | 7 Yrs | 10 Yrs | Inception | Inceptio<br>Dat |
| eal Estate Composite                           | 1.0% | 1.2% | 2.3% | 5.9%  | 6.9%  | 7.3%  | 8.6%  | 9.6%  | 10.6% | 10.0%  | 5.4%      | Aug-0           |
| NFI  | 0.3% | 0.8% | 2.0% | 5.5%  | 6.5%  | 6.6%  | 7.6%  | 8.8%  | 9.5%  | 8.9%   | 4.5%      | Aug-0           |
| NPI  | 0.0% | 0.0% | 1.8% | 4.9%  | 6.1%  | 6.4%  | 7.4%  | 8.5%  | 9.2%  | 9.1%   | 6.2%      | Aug-(           |
| InvMetrics All DB Real Estate<br>Priv Net Rank | 40   | 49   | 55   | 61    | 47    | 37    | 26    | 28    | 10    | 13     | 15        | Aug-0           |
| J.P. Morgan SPF                                | 0.3% | 0.9% | 1.1% | 4.3%  | 5.6%  | 6.0%  | 7.0%  | 8.0%  | 9.5%  | 8.9%   |           | Jan-C           |
| NFI  | 0.3% | 0.8% | 2.0% | 5.5%  | 6.5%  | 6.6%  | 7.6%  | 8.8%  | 9.5%  | 8.9%   | 4.4%      | Jan-(           |
| NPI  | 0.0% | 0.0% | 1.8% | 4.9%  | 6.1%  | 6.4%  | 7.4%  | 8.5%  | 9.2%  | 9.1%   | 6.0%      | Jan-(           |
| InvMetrics All DB Real Estate<br>Pub Net Rank  | 90   | 56   | 99   | 98    | 97    | 75    | 88    | 77    | 53    | 61     |           | Jan-            |
| Morgan Stanley P.P.                            | 1.8% | 1.8% | 3.1% | 7.2%  | 7.8%  | 8.2%  | 9.0%  | 10.4% | 11.4% | 10.4%  | 6.0%      | Aug-0           |
| NFI  | 0.3% | 0.8% | 2.0% | 5.5%  | 6.5%  | 6.6%  | 7.6%  | 8.8%  | 9.5%  | 8.9%   | 4.5%      | Aug-            |
| NPI  | 0.0% | 0.0% | 1.8% | 4.9%  | 6.1%  | 6.4%  | 7.4%  | 8.5%  | 9.2%  | 9.1%   | 6.2%      | Aug-            |
| InvMetrics All DB Real Estate<br>Pub Net Rank  | 5    | 18   | 48   | 30    | 19    | 3     | 17    | 4     | 2     | 15     | 7         | Aug-            |
| PRISA III                                      | 1.6% | 1.6% | 3.4% | 7.4%  | 8.0%  | 8.6%  | 11.5% | 13.6% | 13.4% | 12.1%  | 3.9%      | Dec-            |
| NFI  | 0.3% | 0.8% | 2.0% | 5.5%  | 6.5%  | 6.6%  | 7.6%  | 8.8%  | 9.5%  | 8.9%   | 4.4%      | Dec-            |
| NPI  | 0.0% | 0.0% | 1.8% | 4.9%  | 6.1%  | 6.4%  | 7.4%  | 8.5%  | 9.2%  | 9.1%   | 6.0%      | Dec-            |
| InvMetrics All DB Real Estate<br>Pub Net Rank  | 16   | 26   | 47   | 29    | 17    | 2     | 1     | 1     | 1     | 10     | 90        | Dec             |
| Principal Enhanced                             | 0.6% | 0.6% | 2.2% | 6.8%  | 8.4%  | 9.3%  | 11.4% | 12.1% | 13.1% | 10.4%  | 4.0%      | Mar-            |
| NFI  | 0.3% | 0.8% | 2.0% | 5.5%  | 6.5%  | 6.6%  | 7.6%  | 8.8%  | 9.5%  | 8.9%   | 4.3%      | Mar-            |
| NPI  | 0.0% | 0.0% | 1.8% | 4.9%  | 6.1%  | 6.4%  | 7.4%  | 8.5%  | 9.2%  | 9.1%   | 6.0%      | Mar             |
| InvMetrics All DB Real Estate<br>Pub Net Rank  | 69   | 67   | 82   | 41    | 14    | 1     | 1     | 1     | 1     | 15     | 74        | Mar             |
| Mesirow/Courtland I                            | 0.0% | 0.0% | 0.0% | -4.7% | -3.8% | -2.3% | -1.0% | -0.5% | 2.2%  | 6.1%   |           | Aug-            |
| NFI  | 0.3% | 0.8% | 2.0% | 5.5%  | 6.5%  | 6.6%  | 7.6%  | 8.8%  | 9.5%  | 8.9%   | 4.5%      | Aug-            |
| NPI  | 0.0% | 0.0% | 1.8% | 4.9%  | 6.1%  | 6.4%  | 7.4%  | 8.5%  | 9.2%  | 9.1%   | 6.2%      | Aug-            |
| frastructure Composite                         | 1.5% | 1.5% | 3.3% | 5.4%  | 3.7%  | 2.8%  | 3.8%  | 5.0%  | 5.9%  | 8.0%   |           | Aug             |
| 3 Month T-Bill +4%                             | 0.5% | 1.6% | 3.2% | 6.4%  | 5.9%  | 5.5%  | 5.1%  | 4.9%  | 4.7%  | 4.5%   | 4.5%      | Aug-            |
| Alinda Fund II                                 | 0.0% | 0.0% | 0.5% | -9.3% | -9.6% | -8.0% | -4.7% | -1.4% | 1.3%  | 4.7%   |           | Aug-            |
| 3 Month T-Bill +4%                             | 0.5% | 1.6% | 3.2% | 6.4%  | 5.9%  | 5.5%  | 5.1%  | 4.9%  | 4.7%  | 4.5%   | 4.5%      | Aug-            |
| Macquarie Fund II                              | 0.0% | 0.0% | 2.0% | 3.5%  | 5.6%  | 6.8%  | 7.3%  | 6.6%  | 6.3%  | 8.3%   |           | Sep             |
| 3 Month T-Bill +4%                             | 0.5% | 1.6% | 3.2% | 6.4%  | 5.9%  | 5.5%  | 5.1%  | 4.9%  | 4.7%  | 4.5%   | 4.5%      | Sep-            |
| J.P. Morgan Infrastructure                     | 0.0% | 0.0% | 1.2% | 4.3%  |       |       |       |       |       |        | 4.0%      | Dec-            |
| CPI +4%  | 0.3% | 1.8% | 4.0% | 5.7%  | 6.3%  | 6.1%  | 5.9%  | 5.5%  | 5.6%  | 5.8%   | 6.7%      | Dec-            |
| IFM Global Infrastructure (U.S)                | 3.9% | 3.8% | 6.6% | 16.4% |       |       |       |       |       |        | 19.0%     | Feb-            |
| CPI +4%  | 0.3% | 1.8% | 4.0% | 5.7%  | 6.3%  | 6.1%  | 5.9%  | 5.5%  | 5.6%  | 5.8%   | 6.2%      | Feb-            |

# Investment Manager

|   |      |      |       |        |        |        | •      |        |        |        |           |                   |
|---|------|------|-------|--------|--------|--------|--------|--------|--------|--------|-----------|-------------------|
|   | 1 Mo | 3 Mo | YTD   | 1 Yr   | 2 Yrs  | 3 Yrs  | 4 Yrs  | 5 Yrs  | 7 Yrs  | 10 Yrs | Inception | Inception<br>Date |
| Private Equity Composite                | 0.0% | 0.0% | 3.4%  | 11.3%  | 13.8%  | 13.1%  | 10.5%  | 10.7%  | 12.7%  | 13.6%  | 7.8%      | Jul-9             |
| Cambridge Associates All PE             | 0.0% | 0.0% | 4.7%  | 7.3%   | 12.6%  | 13.8%  | 11.0%  | 10.8%  | 12.9%  | 13.7%  | 15.3%     | Jul-9             |
| Private Equity w/o Blue Chip            | 0.0% | 0.0% | 3.4%  | 11.7%  | 14.3%  | 13.9%  | 11.2%  | 11.6%  | 13.7%  | 14.7%  |           |                   |
| Fort Washington Fund V                  | 0.0% | 0.0% | 7.8%  | 11.4%  | 10.4%  | 9.9%   | 6.8%   | 7.0%   | 9.9%   | 13.0%  |           | Sep-0             |
| Cambridge Associates All PE             | 0.0% | 0.0% | 4.7%  | 7.3%   | 12.6%  | 13.8%  | 11.0%  | 10.8%  | 12.9%  | 13.7%  | 9.2%      | Sep-0             |
| Fort Washington Fund VI                 | 0.0% | 0.0% | 7.8%  | 15.8%  | 16.7%  | 15.7%  | 11.0%  | 13.5%  | 15.3%  | 14.1%  |           | Apr-0             |
| Cambridge Associates All PE             | 0.0% | 0.0% | 4.7%  | 7.3%   | 12.6%  | 13.8%  | 11.0%  | 10.8%  | 12.9%  | 13.7%  | 9.3%      | Apr-0             |
| Fort Washington Fund VIII               | 0.0% | 0.0% | 2.6%  | 9.5%   | 12.5%  | 11.9%  | 12.7%  | 17.3%  |        |        | 9.9%      | Jan-1             |
| Cambridge Associates All PE             | 0.0% | 0.0% | 4.7%  | 7.3%   | 12.6%  | 13.8%  | 11.0%  | 10.8%  | 12.9%  | 13.7%  | 11.3%     | Jan-1             |
| Fort Washington Fund IX                 | 0.0% | 0.0% | 2.9%  | 2.8%   | 8.0%   |        |        |        |        |        | 22.7%     | Sep-1             |
| Cambridge Associates All PE             | 0.0% | 0.0% | 4.7%  | 7.3%   | 12.6%  | 13.8%  | 11.0%  | 10.8%  | 12.9%  | 13.7%  | 13.5%     | Sep-1             |
| Fort Washington Fund X                  | 0.0% |      |       |        |        |        |        |        |        |        | 0.0%      | May-1             |
| Cambridge Associates All PE             | 0.0% | 0.0% | 4.7%  | 7.3%   | 12.6%  | 13.8%  | 11.0%  | 10.8%  | 12.9%  | 13.7%  | 0.0%      | May-1             |
| Fort Washington Opp Fund III            | 0.0% | 0.0% | 1.5%  | 15.9%  | 17.5%  | 16.1%  | 17.3%  |        |        |        | 26.8%     | Jul-1             |
| Cambridge Associates All PE             | 0.0% | 0.0% | 4.7%  | 7.3%   | 12.6%  | 13.8%  | 11.0%  | 10.8%  | 12.9%  | 13.7%  | 11.0%     | Jul-1             |
| North Sky Fund III - LBO                | 0.0% | 0.0% | 8.4%  | -2.9%  | 11.6%  | 15.1%  | 12.7%  | 12.6%  | 14.9%  | 15.7%  | 11.5%     | May-0             |
| Cambridge Associates All PE             | 0.0% | 0.0% | 4.7%  | 7.3%   | 12.6%  | 13.8%  | 11.0%  | 10.8%  | 12.9%  | 13.7%  | 9.7%      | May-0             |
| North Sky Fund III - VC                 | 0.0% | 0.0% | 0.3%  | 13.8%  | 19.0%  | 18.5%  | 11.0%  | 11.1%  | 13.7%  | 13.2%  | 11.5%     | May-0             |
| Cambridge Associates All PE             | 0.0% | 0.0% | 4.7%  | 7.3%   | 12.6%  | 13.8%  | 11.0%  | 10.8%  | 12.9%  | 13.7%  | 9.7%      | May-0             |
| North Sky Fund IV - LBO                 | 0.0% | 0.0% | 1.4%  | 10.8%  | 17.0%  | 17.4%  | 16.5%  | 16.7%  | 16.5%  | 15.4%  |           | Aug-0             |
| Cambridge Associates All PE             | 0.0% | 0.0% | 4.7%  | 7.3%   | 12.6%  | 13.8%  | 11.0%  | 10.8%  | 12.9%  | 13.7%  | 9.9%      | Aug-0             |
| North Sky Fund IV - VC                  | 0.0% | 0.0% | 2.3%  | -4.3%  | 5.8%   | 10.6%  | 7.3%   | 7.9%   | 12.4%  | 16.1%  |           | May-0             |
| Cambridge Associates All PE             | 0.0% | 0.0% | 4.7%  | 7.3%   | 12.6%  | 13.8%  | 11.0%  | 10.8%  | 12.9%  | 13.7%  | 9.4%      | May-0             |
| North Sky Fund V                        | 0.0% | 0.0% | 2.2%  | 21.6%  | 21.3%  | 16.6%  | 15.2%  | 7.2%   |        |        | 4.1%      | Apr-1             |
| Cambridge Associates All PE             | 0.0% | 0.0% | 4.7%  | 7.3%   | 12.6%  | 13.8%  | 11.0%  | 10.8%  | 12.9%  | 13.7%  | 11.1%     | Apr-1             |
| Portfolio Advisors IV - Special Sit     | 0.0% | 0.0% | -0.3% | -1.2%  | 0.6%   | 2.6%   | -0.1%  | 0.6%   | 4.5%   | 7.2%   |           | Jun-C             |
| Cambridge Associates All PE             | 0.0% | 0.0% | 4.7%  | 7.3%   | 12.6%  | 13.8%  | 11.0%  | 10.8%  | 12.9%  | 13.7%  | 9.5%      | Jun-(             |
| Portfolio Advisors V - Special Sit      | 0.0% | 0.0% | -0.3% | 2.3%   | 2.8%   | 5.0%   | 3.9%   | 4.4%   | 7.1%   | 8.3%   |           | Aug-(             |
| Cambridge Associates All PE             | 0.0% | 0.0% | 4.7%  | 7.3%   | 12.6%  | 13.8%  | 11.0%  | 10.8%  | 12.9%  | 13.7%  | 9.9%      | Aug-(             |
| JP Morgan Global Private Equity<br>VIII |      |      |       |        |        |        |        |        |        |        |           | Jun-1             |
| Cambridge Associates All PE             | 0.0% | 0.0% | 4.7%  | 7.3%   | 12.6%  | 13.8%  | 11.0%  | 10.8%  | 12.9%  | 13.7%  |           | Jun-1             |
| Blue Chip Fund IV                       | 0.0% | 0.0% | 0.0%  | -21.6% | -25.4% | -25.8% | -20.2% | -18.9% | -13.2% | -8.3%  |           | Dec-0             |
| Cambridge Associates All PE             | 0.0% | 0.0% | 4.7%  | 7.3%   | 12.6%  | 13.8%  | 11.0%  | 10.8%  | 12.9%  | 13.7%  | 9.6%      | Dec-0             |

# Calendar Performance (Net of Fees)

|  |       |       |       |               |      | Calenda | r Year |       |       |       |        |
|--|-------|-------|-------|---------------|------|---------|--------|-------|-------|-------|--------|
|  | 2018  | 2017  | 2016  | 2015          | 2014 | 2013    | 2012   | 2011  | 2010  | 2009  | 2008   |
| Total Fund Composite                           | -4.3% | 14.9% | 8.9%  | -0.1%         | 6.4% | 17.5%   | 12.0%  | 1.1%  | 13.9% | 20.7% | -28.1% |
| Target Benchmark                               | -4.1% | 15.4% | 8.9%  | 0.4%          | 5.8% | 17.2%   | 12.1%  | -1.8% | 14.7% | 20.8% | -29.3% |
| InvMetrics Public DB > \$1B Net Rank           | 59    | 62    | 13    | 46            | 18   | 13      | 69     | 32    | 20    | 39    | 69     |
| Fixed Income Composite                         | -0.6% | 5.6%  | 7.2%  | <b>-2</b> .1% | 5.6% | 0.7%    | 8.6%   | 5.6%  | 9.7%  | 21.1% | -5.7%  |
| BBgBarc US Aggregate TR                        | 0.0%  | 3.5%  | 2.6%  | 0.5%          | 6.0% | -2.0%   | 4.2%   | 7.8%  | 6.5%  | 5.9%  | 5.2%   |
| InvMetrics Public DB Total Fix Inc Net<br>Rank | 57    | 45    | 14    | 78            | 17   | 20      | 36     | 67    | 25    | 13    | 67     |
| Loomis Sayles Core-Plus                        | -0.5% | 5.2%  | 6.9%  |               |      |         |        |       |       |       |        |
| BBgBarc US Aggregate TR                        | 0.0%  | 3.5%  | 2.6%  | 0.5%          | 6.0% | -2.0%   | 4.2%   | 7.8%  | 6.5%  | 5.9%  | 5.2%   |
| eV US Core Plus Fixed Inc Net<br>Rank          | 47    | 24    | 17    |               |      |         |        |       |       |       |        |
| BlackRock Strategic Income Opps                | -0.5% | 5.0%  | 3.7%  | -0.3%         |      |         |        |       |       |       |        |
| BBgBarc US Aggregate TR                        | 0.0%  | 3.5%  | 2.6%  | 0.5%          | 6.0% | -2.0%   | 4.2%   | 7.8%  | 6.5%  | 5.9%  | 5.2%   |
| 3 Month T-Bill +4%                             | 6.0%  | 5.0%  | 4.3%  | 4.0%          | 4.0% | 4.1%    | 4.1%   | 4.0%  | 4.1%  | 4.1%  | 5.4%   |
| eV US Core Plus Fixed Inc Net<br>Rank          | 41    | 36    | 75    | 62            |      |         |        |       |       |       |        |
| Shenkman - Four Points                         | -1.0% | 7.5%  | 16.1% | -4.2%         | 2.6% | 10.7%   | 11.9%  | 1.7%  |       |       |        |
| BBgBarc US High Yield TR                       | -2.1% | 7.5%  | 17.1% | -4.5%         | 2.5% | 7.4%    | 15.8%  | 5.0%  | 15.1% | 58.2% | -26.2% |
| eV US High Yield Fixed Inc Net<br>Rank         | 28    | 39    | 20    | 66            | 35   | 10      | 91     | 86    |       |       |        |

# Calendar Performance (Net of Fees)

|   |        |       |       |       |       | Calenda | r Year |       |       |       |        |
|---|--------|-------|-------|-------|-------|---------|--------|-------|-------|-------|--------|
|   | 2018   | 2017  | 2016  | 2015  | 2014  | 2013    | 2012   | 2011  | 2010  | 2009  | 2008   |
| U.S. Equity Composite                     | -8.6%  | 17.8% | 16.4% | -3.0% | 10.8% | 35.4%   | 15.4%  | -0.1% | 19.4% | 28.1% | -36.6% |
| Russell 3000                              | -5.2%  | 21.1% | 12.7% | 0.5%  | 12.6% | 33.6%   | 16.4%  | 1.0%  | 16.9% | 28.3% | -37.3% |
| InvMetrics Public DB US Eq Net Rank       | 92     | 95    | 3     | 88    | 54    | 24      | 58     | 66    | 29    | 65    | 36     |
| NTGI Russell 1000 Value                   | -8.2%  | 13.8% | 17.3% | -3.6% | 13.5% |         |        |       |       |       |        |
| Russell 1000 Value                        | -8.3%  | 13.7% | 17.3% | -3.8% | 13.5% | 32.5%   | 17.5%  | 0.4%  | 15.5% | 19.7% | -36.8% |
| eV US Large Cap Value Equity Net<br>Rank  | 42     | 83    | 19    | 57    | 23    |         |        |       |       |       |        |
| NTGI Russell 1000 Growth                  | -1.5%  | 30.1% | 7.2%  | 5.7%  | 13.1% |         |        |       |       |       |        |
| Russell 1000 Growth                       | -1.5%  | 30.2% | 7.1%  | 5.7%  | 13.0% | 33.5%   | 15.3%  | 2.6%  | 16.7% | 37.2% | -38.4% |
| eV US Large Cap Growth Equity<br>Net Rank | 52     | 40    | 19    | 35    | 26    |         |        |       |       |       |        |
| NTGI S&P 400                              | -11.0% | 16.3% | 20.8% | -2.1% | 9.9%  |         |        |       |       |       |        |
| S&P 400 MidCap                            | -11.1% | 16.2% | 20.7% | -2.2% | 9.8%  | 33.5%   | 17.9%  | -1.7% | 26.6% | 37.4% | -36.2% |
| eV US Mid Cap Equity Net Rank             | 57     | 61    | 14    | 49    | 40    |         |        |       |       |       |        |
| Vanguard Mid Cap Value                    |        |       |       |       |       |         |        |       |       |       |        |
| CRSP US Mid Cap Value TR USD              | -12.4% | 17.1% | 15.3% | -1.8% | 14.1% | 37.4%   | 17.9%  | -0.4% | 24.6% | 35.2% | -37.9% |
| Mid-Cap Value MStar MF Rank               |        |       |       |       |       |         |        |       |       |       |        |
| NTGI Russell 2000 Value                   | -12.7% | 8.1%  | 31.9% | -7.3% | 4.4%  |         |        |       |       |       |        |
| Russell 2000 Value                        | -12.9% | 7.8%  | 31.7% | -7.5% | 4.2%  | 34.5%   | 18.0%  | -5.5% | 24.5% | 20.6% | -28.9% |
| eV US Small Cap Value Equity Net<br>Rank  | 29     | 67    | 12    | 72    | 56    |         |        |       |       |       |        |

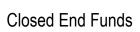
Clifton Group

# Calendar Performance (Net of Fees)

|  |              |       |       |        |       | Calenda | r Year |        |       |        |        |
|--|--------------|-------|-------|--------|-------|---------|--------|--------|-------|--------|--------|
|  | 2018         | 2017  | 2016  | 2015   | 2014  | 2013    | 2012   | 2011   | 2010  | 2009   | 2008   |
| Non-U.S. Equity Composite                  | -16.2%       | 27.7% | 7.3%  | -4.9%  | -1.4% | 14.5%   | 18.2%  | -10.2% | 12.9% | 36.1%  | -39.1% |
| MSCI ACWI ex USA                           | -14.2%       | 27.2% | 4.5%  | -5.7%  | -3.9% | 15.3%   | 16.8%  | -13.7% | 11.2% | 41.4%  | -45.5% |
| InvMetrics Public DB ex-US Eq Net<br>Rank  | 68           | 59    | 7     | 68     | 13    | 79      | 49     | 6      | 40    | 59     | 20     |
| NTGI MSCI EAFE                             |              |       |       |        |       |         |        |        |       |        |        |
| MSCI EAFE                                  | -13.8%       | 25.0% | 1.0%  | -0.8%  | -4.9% | 22.8%   | 17.3%  | -12.1% | 7.8%  | 31.8%  | -43.4% |
| eV EAFE Large Cap Core Net<br>Rank         |              |       |       |        |       |         |        |        |       |        |        |
| DFA International Small Value              | -23.3%       | 28.0% | 8.0%  | 4.0%   | -5.0% | 32.4%   | 22.3%  | -17.5% | 18.1% | 39.5%  | -41.7% |
| MSCI EAFE Small Cap                        | -17.9%       | 33.0% | 2.2%  | 9.6%   | -4.9% | 29.3%   | 20.0%  | -15.9% | 22.0% | 46.8%  | -47.0% |
| Foreign Small/Mid Value MStar MF<br>Rank   | 88           | 65    | 24    | 43     | 41    | 8       | 37     | 62     | 72    | 41     | 17     |
| DFA Emerging Markets Value                 |              |       |       |        |       |         |        |        |       |        |        |
| MSCI Emerging Markets                      | -14.6%       | 37.3% | 11.2% | -14.9% | -2.2% | -2.6%   | 18.2%  | -18.4% | 18.9% | 78.5%  | -53.3% |
| Diversified Emerging Mkts MStar<br>MF Rank |              |       |       |        |       |         |        |        |       |        |        |
| DFA Emerging Markets Core                  |              |       |       |        |       |         |        |        |       |        |        |
| MSCI Emerging Markets                      | -14.6%       | 37.3% | 11.2% | -14.9% | -2.2% | -2.6%   | 18.2%  | -18.4% | 18.9% | 78.5%  | -53.3% |
| Diversified Emerging Mkts MStar<br>MF Rank |              |       |       |        |       |         |        |        |       |        |        |
| DFA Emerging Markets Small Cap             | -17.6%       | 35.3% | 10.9% | -8.7%  |       |         |        |        |       |        |        |
| MSCI Emerging Markets Small Cap            | -18.6%       | 33.8% | 2.3%  | -6.8%  | 1.0%  | 1.0%    | 22.2%  | -27.2% | 27.2% | 113.8% | -58.2% |
| eV Emg Mkts Small Cap Equity Net<br>Rank   | 46           | 55    | 15    | 59     |       |         |        |        |       |        |        |
| Risk Parity Composite                      | <b>-6.1%</b> | 11.9% | 11.2% | -9.4%  | 6.5%  | -2.9%   |        |        |       |        |        |
| 60% Wilshire 5000/40% BarCap<br>Aggregate  | -2.9%        | 13.8% | 8.7%  | 0.7%   | 9.9%  | 18.1%   | 11.5%  | 4.1%   | 13.6% | 19.6%  | -22.2% |
| AQR Risk Parity                            | -6.1%        | 11.9% | 11.2% | -9.4%  | 6.5%  | -2.9%   |        |        |       |        |        |
| 60% Wilshire 5000/40% BarCap<br>Aggregate  | -2.9%        | 13.8% | 8.7%  | 0.7%   | 9.9%  | 18.1%   | 11.5%  | 4.1%   | 13.6% | 19.6%  | -22.2% |
| 60% MSCI World / 40% BarCap<br>Aggregate   | -5.1%        | 14.5% | 5.7%  | -0.1%  | 5.4%  | 14.5%   | 11.3%  | 0.0%   | 10.2% | 20.4%  | -24.7% |

# Calendar Performance (Net of Fees)

|  |        |       |       |       |       | Calenda | r Year |       |       |        |        |
|--|--------|-------|-------|-------|-------|---------|--------|-------|-------|--------|--------|
|  | 2018   | 2017  | 2016  | 2015  | 2014  | 2013    | 2012   | 2011  | 2010  | 2009   | 2008   |
| Real Estate Composite                          | 7.5%   | 7.9%  | 9.3%  | 14.8% | 12.4% | 14.8%   | 11.0%  | 16.9% | 15.9% | -31.9% | -8.3%  |
| NFI  | 7.4%   | 6.7%  | 7.8%  | 13.9% | 11.5% | 12.9%   | 9.8%   | 15.0% | 15.3% | -30.4% | -10.7% |
| NPI  | 6.7%   | 7.0%  | 8.0%  | 13.3% | 11.8% | 11.0%   | 10.5%  | 14.3% | 13.1% | -16.9% | -6.5%  |
| InvMetrics All DB Real Estate Priv Net<br>Rank | 39     | 20    | 7     | 22    | 31    | 17      | 30     | 14    | 25    | 77     | 24     |
| J.P. Morgan SPF                                | 7.0%   | 6.2%  | 7.3%  | 14.1% | 10.3% | 14.8%   | 10.9%  | 16.0% | 14.2% | -26.5% |        |
| NFI  | 7.4%   | 6.7%  | 7.8%  | 13.9% | 11.5% | 12.9%   | 9.8%   | 15.0% | 15.3% | -30.4% | -10.7% |
| NPI  | 6.7%   | 7.0%  | 8.0%  | 13.3% | 11.8% | 11.0%   | 10.5%  | 14.3% | 13.1% | -16.9% | -6.5%  |
| InvMetrics All DB Real Estate Pub<br>Net Rank  | 53     | 56    | 45    | 31    | 85    | 10      | 34     | 29    | 53    | 26     |        |
| Morgan Stanley P.P.                            | 8.0%   | 8.7%  | 9.2%  | 14.6% | 14.1% | 16.2%   | 11.7%  | 16.5% | 15.2% | -33.1% | -4.5%  |
| NFI  | 7.4%   | 6.7%  | 7.8%  | 13.9% | 11.5% | 12.9%   | 9.8%   | 15.0% | 15.3% | -30.4% | -10.7% |
| NPI  | 6.7%   | 7.0%  | 8.0%  | 13.3% | 11.8% | 11.0%   | 10.5%  | 14.3% | 13.1% | -16.9% | -6.5%  |
| InvMetrics All DB Real Estate Pub<br>Net Rank  | 15     | 10    | 11    | 21    | 25    | 5       | 22     | 21    | 46    | 79     | 12     |
| PRISA III                                      | 7.9%   | 9.9%  | 13.2% | 22.7% | 16.9% | 14.9%   | 13.7%  | 23.1% | 20.8% | -50.1% | -19.6% |
| NFI  | 7.4%   | 6.7%  | 7.8%  | 13.9% | 11.5% | 12.9%   | 9.8%   | 15.0% | 15.3% | -30.4% | -10.7% |
| NPI  | 6.7%   | 7.0%  | 8.0%  | 13.3% | 11.8% | 11.0%   | 10.5%  | 14.3% | 13.1% | -16.9% | -6.5%  |
| InvMetrics All DB Real Estate Pub<br>Net Rank  | 20     | 9     | 1     | 1     | 14    | 8       | 16     | 1     | 7     | 99     | 92     |
| Principal Enhanced                             | 9.5%   | 9.3%  | 13.5% | 20.3% | 13.8% | 18.0%   | 12.6%  | 16.7% | 12.5% | -43.7% |        |
| NFI  | 7.4%   | 6.7%  | 7.8%  | 13.9% | 11.5% | 12.9%   | 9.8%   | 15.0% | 15.3% | -30.4% | -10.7% |
| NPI  | 6.7%   | 7.0%  | 8.0%  | 13.3% | 11.8% | 11.0%   | 10.5%  | 14.3% | 13.1% | -16.9% | -6.5%  |
| InvMetrics All DB Real Estate Pub<br>Net Rank  | 1      | 10    | 1     | 1     | 27    | 2       | 17     | 21    | 71    | 97     |        |
| Mesirow/Courtland I                            | -6.6%  | 1.7%  | 1.8%  | 0.0%  | 6.9%  | 7.9%    | 4.1%   | 7.3%  | 15.0% | -10.2% | -31.8% |
| NFI  | 7.4%   | 6.7%  | 7.8%  | 13.9% | 11.5% | 12.9%   | 9.8%   | 15.0% | 15.3% | -30.4% | -10.7% |
| NPI  | 6.7%   | 7.0%  | 8.0%  | 13.3% | 11.8% | 11.0%   | 10.5%  | 14.3% | 13.1% | -16.9% | -6.5%  |
| Infrastructure Composite                       | 4.8%   | 2.5%  | 0.4%  | 11.2% | 12.5% | 4.2%    | 5.6%   | 11.7% | 23.9% | 2.9%   |        |
| 3 Month T-Bill +4%                             | 6.0%   | 5.0%  | 4.3%  | 4.0%  | 4.0%  | 4.1%    | 4.1%   | 4.0%  | 4.1%  | 4.1%   | 5.4%   |
| Alinda Fund II                                 | -13.0% | -5.3% | -4.4% | 13.1% | 21.9% | 0.2%    | 0.4%   | 8.6%  | 27.9% | 8.9%   |        |
| 3 Month T-Bill +4%                             | 6.0%   | 5.0%  | 4.3%  | 4.0%  | 4.0%  | 4.1%    | 4.1%   | 4.0%  | 4.1%  | 4.1%   | 5.4%   |
| Macquarie Fund II                              | 4.5%   | 10.1% | 7.8%  | 8.2%  | 0.8%  | 6.2%    | 8.6%   | 14.0% | 22.5% | 0.4%   |        |
| 3 Month T-Bill +4%                             | 6.0%   | 5.0%  | 4.3%  | 4.0%  | 4.0%  | 4.1%    | 4.1%   | 4.0%  | 4.1%  | 4.1%   | 5.4%   |
| J.P. Morgan Infrastructure                     | 4.9%   |       |       |       |       |         |        |       |       |        |        |
| CPI +4%  | 6.0%   | 6.2%  | 6.2%  | 4.8%  | 4.8%  | 5.6%    | 5.8%   | 7.1%  | 5.6%  | 6.8%   | 4.1%   |
| IFM Global Infrastructure (U.S)                |        |       |       |       |       |         |        |       |       |        |        |
| CPI +4%  | 6.0%   | 6.2%  | 6.2%  | 4.8%  | 4.8%  | 5.6%    | 5.8%   | 7.1%  | 5.6%  | 6.8%   | 4.1%   |



### Statistics

#### Annualized Performance<sup>1</sup>

| Asset Class  | Fund Company  | Vintage Yr.  | Category  | Net IRR  | Median Fund IRR <sup>2</sup>  | Rank <sup>3</sup>  | Perf. as of:  |
|--|---|--|---|--|---|--|---|
| Real Estate  | Mesirow/Courtland I   | 2007   |   | 1.4%   |   |  | 12/31/2018  |
| Total Real Estate  |   |  |   | 1.4%   |   |  | 12/31/2018  |
| Infrastructure<br>Infrastructure<br>Total Infrastructure   | Alinda II<br>Macquarie II   | 2008<br>2008   | 2007 Infrastructure<br>2008 Infrastructure<br>  | 1.1%<br>7.0%<br><b>4.4%</b>  | 4.4%<br>2.0%<br>  | 1st Quartile<br>1st Quartile<br>   | 12/31/2018<br>12/31/2018<br><b>12/31/2018</b>   |
| Private Equity Venture<br>Private Equity Venture<br>Private Equity Venture<br>Private Equity Venture<br>Private Equity FoFs Specialized<br>Private Equity Buy-Out<br>Private Equity Venture<br>Private Equity Venture<br>Private Equity Venture<br>Private Equity FoFs Diversified<br>Private Equity FoFs Diversified<br>Private Equity FoFs Specialized | Blue Chip I<br>Blue Chip II<br>Blue Chip III<br>Blue Chip IV<br>Fort Washington Fund V<br>Fort Washington Fund VII<br>Fort Washington Fund VIII<br>Fort Washington Fund IX<br>Fort Washington Fund IX<br>North Sky III - LBO<br>North Sky III - VC<br>North Sky IV - LBO<br>North Sky IV - VC<br>North Sky V<br>Portfolio Advisors IV - Special Sit | 1993<br>1997<br>1999<br>2000<br>2007<br>2008<br>2014<br>2014<br>2014<br>2016<br>2007<br>2007<br>2008<br>2008<br>2014<br>2014 | 1992 US Venture<br>1997 US Venture<br>2000 US Venture<br>2000 US Venture<br>2006 US FoF<br>2007 US FoF<br>2013 US FoF<br>2014 Secondaries<br>2016 US FoF<br>2007 US FoF<br>2007 US FoF<br>2009 US FoF<br>2009 US FoF<br>2015 US FoF<br>2006 All FoF | $\begin{array}{c} 13.4\%\\ 0.9\%\\ -13.1\%\\ -3.4\%\\ 10.8\%\\ 14.7\%\\ 15.1\%\\ 24.4\%\\ 12.8\%\\ 9.2\%\\ 6.4\%\\ 9.5\%\\ 12.4\%\\ 15.4\%\\ 5.3\%\end{array}$ | 18.2%<br>16.0%<br>-5.9%<br>0.5%<br>7.2%<br>8.0%<br>13.1%<br>10.1%<br>9.9%<br>9.9%<br>13.1%<br>13.1%<br>6.9% | 3rd Quartile<br>3rd Quartile<br>4th Quartile<br>3rd Quartile<br>1st Quartile<br>2nd Quartile<br>2nd Quartile<br>3rd Quartile<br>3rd Quartile<br>3rd Quartile<br>1st Quartile<br>2nd Quartile<br>2nd Quartile | 12/31/2007<br>12/31/2013<br>9/30/2013<br>12/31/2018<br>12/31/2018<br>12/31/2018<br>12/31/2018<br>12/31/2018<br>12/31/2018<br>12/31/2018<br>12/31/2018<br>12/31/2018<br>12/31/2018<br>12/31/2018<br>12/31/2018 |
| Private Equity FoFs Specialized  | Portfolio Advisors V - Special Sit  | 2008   | 2007 All FoF  | 8.7%   |   |  | 12/31/2018  |
| Total Private Equity   |   |  |   | 6.3%   |   |  | 12/31/2018  |
| Total Private Equity Excluding   | Blue Chip   |  |   | 10.8%  |   |  | 12/31/2018  |

### Since Inception Cash Flows

| Asset Class  | Fund Company   | Commitment  | Capital Calls   | Distributions  | Ending Value  | Cash Multiple <sup>4</sup>   |
|--|--|---|---|--|---|--|
| Real Estate  | Mesirow/Courtland I  | \$30,000,000  | \$24,100,863  | \$20,695,438   | \$5,379,500   | 1.1  |
| Total Real Estate  |  | \$30,000,000  | \$24,100,863  | \$20,695,438   | \$5,379,500   | 1.1  |
| Infrastructure<br>Infrastructure<br>Total Infrastructure   | Alinda II<br>Macquarie II  | \$65,000,000<br>\$65,000,000<br><b>\$130,000,000</b>  | \$72,836,793<br>\$68,180,388<br><b>\$141,017,181</b>  | \$55,871,455<br>\$46,254,159<br><b>\$102,125,614</b>   | \$29,921,607<br>\$60,252,259<br><b>\$90,173,866</b>   | 1.2<br>1.6<br><b>1.4</b>   |
| Private Equity Venture<br>Private Equity Venture<br>Private Equity Venture<br>Private Equity Venture<br>Private Equity FoFs Specialized<br>Private Equity Buy-Out<br>Private Equity Venture<br>Private Equity Venture<br>Private Equity FoFs Diversified | Blue Chip I<br>Blue Chip II<br>Blue Chip II<br>Blue Chip IV<br>Fort Washington Fund V<br>Fort Washington Fund VII<br>Fort Washington Fund VIII<br>Fort Washington Opp Fund III<br>Fort Washington Fund IX<br>North Sky III - LBO<br>North Sky III - VC<br>North Sky IV - LBO<br>North Sky IV - VC<br>North Sky V | \$4,000,000<br>\$10,000,000<br>\$15,000,000<br>\$40,000,000<br>\$30,000,000<br>\$50,000,000<br>\$30,000,000<br>\$30,000,000<br>\$30,000,000<br>\$10,000,000<br>\$15,000,000<br>\$15,000,000<br>\$40,000,000 | \$4,000,000<br>\$10,000,000<br>\$15,000,000<br>\$32,493,882<br>\$18,143,165<br>\$32,999,999<br>\$22,200,000<br>\$16,500,000<br>\$21,700,017<br>\$9,183,339<br>\$9,075,000<br>\$12,300,000<br>\$26,394,820 | \$6,314,076<br>\$10,396,215<br>\$5,957,739<br>\$23,670,550<br>\$46,854,212<br>\$28,772,881<br>\$4,874,999<br>\$6,000,000<br>\$0<br>\$35,414,489<br>\$14,367,360<br>\$10,505,353<br>\$26,619,556<br>\$1,227,804 | \$0<br>\$0<br>\$1,426,644<br>\$17,800,963<br>\$15,325,108<br>\$41,265,808<br>\$31,090,558<br>\$18,608,078<br>\$7,948,104<br>\$3,284,055<br>\$9,565,523<br>\$3,352,439<br>\$36,584,384 | 1.6<br>1.0<br>0.4<br>1.0<br>2.0<br>2.4<br>1.4<br>1.7<br>1.1<br>2.0<br>1.9<br>2.2<br>2.4<br>1.4 |
| Private Equity FoFs Specialized<br>Private Equity FoFs Specialized   | Portfolio Advisors IV - Special Sit<br>Portfolio Advisors V - Special Sit  | \$20,000,000<br>\$10,000,000  | \$17,186,419<br>\$6,921,414   | \$20,180,550<br>\$9,096,367  | \$3,442,209<br>\$2,060,461  | 1.4<br>1.6   |
| Total Private Equity   |  | \$394,000,000   | \$279,098,055   | \$250,252,151  | \$191,754,334   | 1.6  |
| <b>Total Private Equity Excluding</b>  | Blue Chip  | \$340,000,000   | \$225,098,055   | \$203,913,571  | \$190,327,690   | 1.8  |

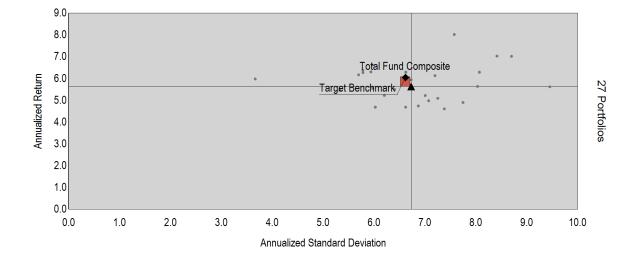
<sup>1</sup> All data is preliminary and subject to change

<sup>2</sup> Represents IRR of median fund in Pitchbook category

<sup>3</sup> Represents quartile rank in Pitchbook category

<sup>4</sup> Calculated as the sum of the distributions and ending value divided by the amount of all capital calls

Market Value: \$2,228.0 Million and 100.0% of Fund





### 15.0 • Annualized Return (%) 10.0 • . 5.0 0.0 7/1/13 -6/30/18 7/1/12 -6/30/17 7/1/14 -7/1/11 -7/1/10 -6/30/19 6/30/16 6/30/15

|                      | Return (Ranl | k)   |     |      |      |      |     |      |      |      |
|----------------------|--------------|------|-----|------|------|------|-----|------|------|------|
| 5th Percentile       | 7.0          |      | 9.3 |      | 10.0 |      | 7.7 |      | 11.8 |      |
| 25th Percentile      | 6.3          |      | 8.3 |      | 9.2  |      | 6.9 |      | 11.1 |      |
| Median               | 5.6          |      | 7.5 |      | 8.6  |      | 6.0 |      | 10.3 |      |
| 75th Percentile      | 5.2          |      | 7.0 |      | 7.6  |      | 5.3 |      | 9.4  |      |
| 95th Percentile      | 4.7          |      | 6.2 |      | 3.2  |      | 4.4 |      | 8.0  |      |
| # of Portfolios      | 27           |      | 51  |      | 64   |      | 53  |      | 52   |      |
| Total Fund Composite | 5.9          | (48) | 8.7 | (12) | 9.6  | (15) | 7.1 | (18) | 11.5 | (14) |

### **Rolling 5 Year Returns**

•

### Statistics

Market Value: \$2,228.0 Million and 100.0% of Fund

### 3 Years Ending June 30, 2019

|                                 | Sharpe<br>Ratio | Tracking<br>Error | Anlzd Alpha | Beta | R-Squared | Information<br>Ratio | Anlzd<br>Standard<br>Deviation | Up Mkt<br>Capture<br>Ratio | Down Mkt<br>Capture<br>Ratio |
|---------------------------------|-----------------|-------------------|-------------|------|-----------|----------------------|--------------------------------|----------------------------|------------------------------|
| Total Fund Composite            | 1.1             | 6.6%              | 1.6%        | 0.5  | 0.9       | -0.8                 | 6.5%                           | 47.9%                      | 53.0%                        |
| S&P 500                         | 1.0             |                   |             |      |           |                      | 12.2%                          |                            |                              |
|                                 |                 |                   |             |      |           |                      |                                |                            |                              |
| Total Fund Composite            | 1.1             | 5.1%              | 2.1%        | 0.6  | 1.0       | -0.6                 | 6.5%                           | 56.7%                      | 55.2%                        |
| MSCI ACWI                       | 0.9             |                   |             |      |           |                      | 11.3%                          |                            |                              |
|                                 |                 |                   |             |      |           |                      |                                |                            |                              |
| Total Fund Composite            | 1.1             | 1.0%              | -0.3%       | 1.0  | 1.0       | -0.3                 | 6.5%                           | 96.1%                      | 97.1%                        |
| Target Benchmark                | 1.2             | -                 |             |      |           |                      | 6.4%                           |                            |                              |
| Fixed Income Composite          | 1.6             | 2.6%              | 4.0%        | 0.4  | 0.3       | 1.0                  | 2.1%                           | 89.2%                      | -4.6%                        |
| BBgBarc US Aggregate TR         | 0.3             |                   |             |      |           |                      | 3.0%                           |                            |                              |
| Loomis Sayles Core-Plus         | 0.9             | 1.3%              | 2.0%        | 0.8  | 0.8       | 1.2                  | 2.8%                           | 105.9%                     | 56.2%                        |
| BBgBarc US Aggregate TR         | 0.3             |                   |             |      |           |                      | 3.0%                           |                            |                              |
| BlackRock Strategic Income Opps | 1.6             | 3.1%              | 3.8%        | 0.2  | 0.1       | 0.6                  | 1.8%                           | 64.4%                      | -25.8%                       |
| BBgBarc US Aggregate TR         | 0.3             |                   |             |      |           |                      | 3.0%                           |                            |                              |
| Shenkman - Four Points          | 1.6             | 1.6%              | 1.3%        | 0.9  | 0.9       | 0.5                  | 4.4%                           | 101.8%                     | 78.7%                        |
| BBgBarc US High Yield TR        | 1.4             |                   |             |      |           |                      | 4.4%                           |                            |                              |
|                                 |                 |                   |             |      |           |                      |                                |                            |                              |
| U.S. Equity Composite           | 0.8             | 4.0%              | -2.8%       | 1.1  | 0.9       | -0.4                 | 13.8%                          | 97.4%                      | 108.1%                       |
| S&P 500                         | 1.0             |                   |             |      |           |                      | 12.2%                          |                            |                              |
|                                 |                 |                   |             |      |           |                      |                                |                            |                              |
| U.S. Equity Composite           | 0.8             | 5.9%              | -0.3%       | 1.1  | 0.8       | 0.2                  | 13.8%                          | 113.9%                     | 110.7%                       |
| MSCI ACWI                       | 0.9             |                   |             |      |           |                      | 11.3%                          |                            |                              |
|                                 |                 |                   |             |      |           |                      |                                |                            |                              |
| U.S. Equity Composite           | 0.8             | 3.1%              | -2.5%       | 1.1  | 1.0       | -0.5                 | 13.8%                          | 96.7%                      | 105.8%                       |
| Russell 3000                    | 1.0             |                   |             |      |           |                      | 12.5%                          |                            |                              |
| NTGI Russell 1000 Value         | 0.7             | 0.0%              | 0.1%        | 1.0  | 1.0       | 2.1                  | 12.1%                          | 100.3%                     | 99.7%                        |
| Russell 1000 Value              | 0.7             |                   |             |      |           |                      | 12.1%                          |                            |                              |
| NTGI Russell 1000 Growth        | 1.2             | 0.0%              | 0.0%        | 1.0  | 1.0       | 0.0                  | 13.4%                          | 99.9%                      | 99.9%                        |
| Russell 1000 Growth             | 1.2             |                   |             |      |           |                      | 13.4%                          |                            |                              |
| NTGI S&P 400                    | 0.6             | 0.0%              | 0.1%        | 1.0  | 1.0       | 5.7                  | 15.1%                          | 100.2%                     | 99.9%                        |
| S&P 400 MidCap                  | 0.6             |                   |             |      |           |                      | 15.1%                          |                            |                              |
| NTGI Russell 2000 Value         | 0.5             | 0.1%              | 0.2%        | 1.0  | 1.0       | 3.9                  | 17.3%                          | 100.6%                     | 99.6%                        |
| Russell 2000 Value              | 0.5             |                   |             |      |           |                      | 17.3%                          |                            |                              |
|                                 |                 |                   |             |      |           |                      |                                |                            |                              |

### Statistics

Market Value: \$2,228.0 Million and 100.0% of Fund

### 3 Years Ending June 30, 2019

|   | Sharpe<br>Ratio | Tracking<br>Error | Anlzd Alpha | Beta | R-Squared | Information<br>Ratio | Anlzd<br>Standard<br>Deviation | Up Mkt<br>Capture<br>Ratio | Down Mkt<br>Capture<br>Ratio |
|---|-----------------|-------------------|-------------|------|-----------|----------------------|--------------------------------|----------------------------|------------------------------|
| Mondrian                                  | 0.9             | 9.1%              | 4.8%        | 0.4  | 0.4       | 0.0                  | 8.2%                           | 64.9%                      | 56.5%                        |
| MSCI EAFE                                 | 0.7             |                   |             |      |           |                      | 11.1%                          |                            |                              |
| Harding Loevner                           | 1.5             | 9.0%              | 9.1%        | 0.4  | 0.4       | 0.4                  | 8.1%                           | 70.9%                      | 31.0%                        |
| MSCI EAFE                                 | 0.7             |                   |             |      |           |                      | 11.1%                          |                            |                              |
| DFA International Small Value             | 0.4             | 4.2%              | -3.1%       | 1.0  | 0.9       | -0.7                 | 13.4%                          | 90.9%                      | 106.9%                       |
| MSCI EAFE Small Cap                       | 0.6             |                   |             |      |           |                      | 12.3%                          |                            |                              |
| DFA Emerging Markets Small Cap            | 0.4             | 2.7%              | 1.8%        | 1.1  | 1.0       | 0.8                  | 13.7%                          | 113.8%                     | 100.3%                       |
| MSCI Emerging Markets Small<br>Cap        | 0.3             |                   |             |      |           |                      | 12.7%                          |                            |                              |
| Risk Parity Composite                     | 0.7             | 5.0%              | -0.4%       | 0.7  | 0.6       | -0.6                 | 7.2%                           | 64.1%                      | 68.7%                        |
| 60% Wilshire 5000/40% BarCap<br>Aggregate | 1.1             |                   |             |      |           |                      | 7.5%                           |                            |                              |
| AQR Risk Parity                           | 0.7             | 5.0%              | -0.4%       | 0.7  | 0.6       | -0.6                 | 7.2%                           | 64.1%                      | 68.7%                        |
| 60% Wilshire 5000/40% BarCap<br>Aggregate | 1.1             |                   |             |      |           |                      | 7.5%                           |                            |                              |



### Statistics

Market Value: \$2,228.0 Million and 100.0% of Fund

|                          |                 |                   |             | -    |           |                      |                                |                            |                              |
|--------------------------|-----------------|-------------------|-------------|------|-----------|----------------------|--------------------------------|----------------------------|------------------------------|
|                          | Sharpe<br>Ratio | Tracking<br>Error | Anlzd Alpha | Beta | R-Squared | Information<br>Ratio | Anlzd<br>Standard<br>Deviation | Up Mkt<br>Capture<br>Ratio | Down Mkt<br>Capture<br>Ratio |
| Total Fund Composite     | 0.8             | 6.4%              | 0.4%        | 0.5  | 0.9       | -0.8                 | 6.6%                           | 40.7%                      | 59.1%                        |
| S&P 500                  | 0.8             |                   |             |      |           |                      | 12.0%                          |                            |                              |
|                          |                 |                   |             |      |           |                      |                                |                            |                              |
| Total Fund Composite     | 0.8             | 5.6%              | 2.5%        | 0.5  | 0.9       | -0.1                 | 6.6%                           | 50.5%                      | 53.6%                        |
| MSCI ACWI                | 0.4             |                   |             |      |           |                      | 11.8%                          |                            |                              |
|                          |                 |                   |             |      |           |                      |                                |                            |                              |
| Total Fund Composite     | 0.8             | 1.0%              | -0.1%       | 1.0  | 1.0       | -0.2                 | 6.6%                           | 95.6%                      | 97.0%                        |
| Target Benchmark         | 0.8             |                   |             |      |           |                      | 6.6%                           |                            |                              |
| Fixed Income Composite   | 1.1             | 2.7%              | 2.3%        | 0.5  | 0.3       | 0.2                  | 2.6%                           | 77.2%                      | 33.7%                        |
| BBgBarc US Aggregate TR  | 0.7             |                   |             |      |           |                      | 2.9%                           |                            |                              |
| Shenkman - Four Points   | 0.7             | 1.9%              | 0.5%        | 0.9  | 0.9       | 0.0                  | 5.2%                           | 88.9%                      | 86.0%                        |
| BBgBarc US High Yield TR | 0.7             |                   |             |      |           |                      | 5.5%                           |                            |                              |
| U.S. Equity Composite    | 0.5             | 3.0%              | -2.7%       | 1.1  | 1.0       | -0.7                 | 13.4%                          | 94.2%                      | 106.6%                       |
| Russell 3000             | 0.8             |                   |             |      |           |                      | 12.3%                          |                            |                              |
|                          |                 |                   |             |      |           |                      |                                |                            |                              |
| U.S. Equity Composite    | 0.5             | 5.8%              | 1.8%        | 1.0  | 0.8       | 0.3                  | 13.4%                          | 113.4%                     | 98.2%                        |
| MSCI ACWI                | 0.4             |                   |             |      |           |                      | 11.8%                          |                            |                              |
| U.S. Equity Composite    | 0.5             | 4.0%              | -3.2%       | 1.1  | 0.9       | -0.6                 | 13.4%                          | 94.1%                      | 109.8%                       |
| S&P 500                  | 0.8             |                   |             |      |           |                      | 12.0%                          |                            |                              |
| NTGI Russell 1000 Value  | 0.6             | 0.1%              | 0.1%        | 1.0  | 1.0       | 1.7                  | 11.9%                          | 100.4%                     | 99.7%                        |
| NTGI Russell 1000 Growth | 1.0             | 5.9%              | 6.1%        | 1.0  | 0.8       | 1.0                  | 13.0%                          | 124.3%                     | 83.6%                        |
| NTGI S&P 400             | 0.5             | 5.3%              | -0.2%       | 1.1  | 0.9       | 0.1                  | 14.2%                          | 114.6%                     | 106.6%                       |

### 5 Years Ending June 30, 2019

| U.S. Equity Composite     | 0.5 | 5.8% | 1.8%  | 1.0 | 0.8 | 0.3  | 13.4% | 113.4% | 98.2%  |
|---------------------------|-----|------|-------|-----|-----|------|-------|--------|--------|
| MSCI ACWI                 | 0.4 |      |       |     |     |      | 11.8% |        |        |
|                           |     |      |       |     |     |      |       |        |        |
| U.S. Equity Composite     | 0.5 | 4.0% | -3.2% | 1.1 | 0.9 | -0.6 | 13.4% | 94.1%  | 109.8% |
| S&P 500                   | 0.8 |      |       |     |     |      | 12.0% |        |        |
|                           |     |      |       |     |     |      |       |        |        |
| NTGI Russell 1000 Value   | 0.6 | 0.1% | 0.1%  | 1.0 | 1.0 | 1.7  | 11.9% | 100.4% | 99.7%  |
| NTGI Russell 1000 Growth  | 1.0 | 5.9% | 6.1%  | 1.0 | 0.8 | 1.0  | 13.0% | 124.3% | 83.6%  |
| NTGI S&P 400              | 0.5 | 5.3% | -0.2% | 1.1 | 0.9 | 0.1  | 14.2% | 114.6% | 106.6% |
| NTGI Russell 2000 Value   | 0.3 | 8.5% | -3.3% | 1.2 | 0.8 | -0.2 | 16.4% | 115.5% | 119.6% |
| Non-U.S. Equity Composite | 0.1 | 8.4% | -3.5% | 0.8 | 0.6 | -0.6 | 12.4% | 48.5%  | 81.6%  |

# Loomis Sayles Core-Plus

### Characteristics

Q2-19

15.0%

12.8%

9.9%

21.0%

24.6%

0.9%

1.0%

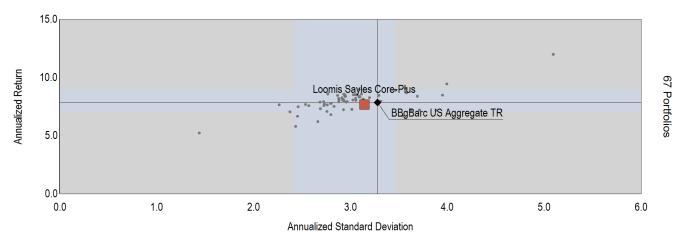
14.9%

0.0%

Market Value: \$160.4 Million and 7.2% of Fund

As of June 30, 2019

#### Risk / Return - 1 Year

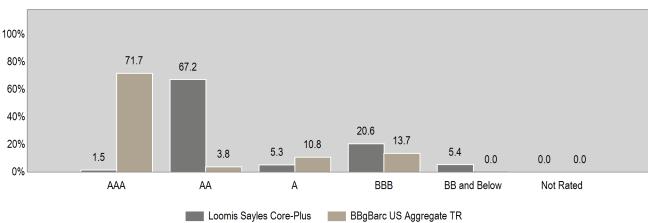


### Characteristics

|                    | Portfolio | Index     |
|--------------------|-----------|-----------|
|                    | Q2-19     | Q2-19     |
| Yield to Maturity  | 2.9%      | 2.5%      |
| Avg. Eff. Maturity | 8.7 yrs.  | 13.0 yrs. |
| Avg. Duration      | 6.5 yrs.  | 6.1 yrs.  |
| Avg. Quality       | А         |           |

| Region                 | Number Of<br>Assets |
|------------------------|---------------------|
| North America ex U.S.  | 2                   |
| United States          | 311                 |
| Europe Ex U.K.         | 5                   |
| United Kingdom         | 3                   |
| Pacific Basin Ex Japan | 1                   |
| Emerging Markets       | 11                  |

#### Maturity Sector Portfolio Index Q2-19 Q2-19 <1 Year UST/Agency 45.2% 41.3% 1-3 Years Corporate 27.7% 25.1% 3-5 Years MBS 29.3% 5-7 Years 34.8% ABS 0.3% 0.5% 7-10 Years 3.7% 10-15 Years Foreign ---15-20 Years Muni ---------Other -7.9% >20 Years Not Rated/Cash



### **Quality Distribution**

# U.S. Equity Composite

### As of June 30, 2019

### Characteristics

Market Value: \$638.8 Million and 28.7% of Fund



### NTGI Russell 1000 Growth

- NTGI S&P 400
- \* NTGI Russell 2000 Value

U.S. Equity Composite

NTGI Russell 1000 Value

Russell 3000

83

#### Characteristics

|                                 | Portfolio | Russell<br>3000 |
|---------------------------------|-----------|-----------------|
| Number of Holdings              | 2,398     | 2,954           |
| Weighted Avg. Market Cap. (\$B) | 90.0      | 190.7           |
| Median Market Cap. (\$B)        | 3.5       | 1.6             |
| Price To Earnings               | 18.6      | 20.5            |
| Price To Book                   | 2.5       | 3.4             |
| Price To Sales                  | 1.4       | 1.9             |
| Return on Equity (%)            | 16.1      | 21.8            |
| Yield (%)                       | 2.1       | 1.9             |
| Beta                            | 1.1       | 1.0             |
| R-Squared                       | 1.0       | 1.0             |

#### Characteristics

|   | Portfolio | Russell<br>3000 |
|---|-----------|-----------------|
| INDUSTRY SECTOR DISTRIBUTION (% Equity) |           |                 |
| Energy                                  | 4.6       | 4.7             |
| Materials                               | 4.7       | 3.0             |
| Industrials                             | 10.7      | 10.2            |
| Consumer Discretionary                  | 10.2      | 10.4            |
| Consumer Staples                        | 4.7       | 6.5             |
| Health Care                             | 9.6       | 14.0            |
| Financials                              | 19.2      | 13.6            |
| Information Technology                  | 15.7      | 21.4            |
| Communication Services                  | 5.9       | 9.1             |
| Utilities                               | 6.1       | 3.2             |
| Real Estate                             | 7.1       | 3.9             |
| Unclassified                            | 0.3       | 0.0             |

| Large                  | est Holdings |        |
|------------------------|--------------|--------|
|                        | End Weight   | Return |
| MICROSOFT              | 1.4          | 14.0   |
| APPLE                  | 1.3          | 4.6    |
| AMAZON.COM             | 1.1          | 6.3    |
| BERKSHIRE HATHAWAY 'B' | 0.7          | 6.1    |
| JP MORGAN CHASE & CO.  | 0.7          | 11.3   |

### Top Contributors

|                       | End Weight | Return | Contribution |
|-----------------------|------------|--------|--------------|
| MICROSOFT             | 1.4        | 14.0   | 0.2          |
| FACEBOOK CLASS A      | 0.6        | 15.8   | 0.1          |
| WALT DISNEY           | 0.4        | 25.8   | 0.1          |
| JP MORGAN CHASE & CO. | 0.7        | 11.3   | 0.1          |
| AMAZON.COM            | 1.1        | 6.3    | 0.1          |

#### **Bottom Contributors**

INTEL ALPHABET 'C' ALPHABET A MYLAN EXXON MOBIL

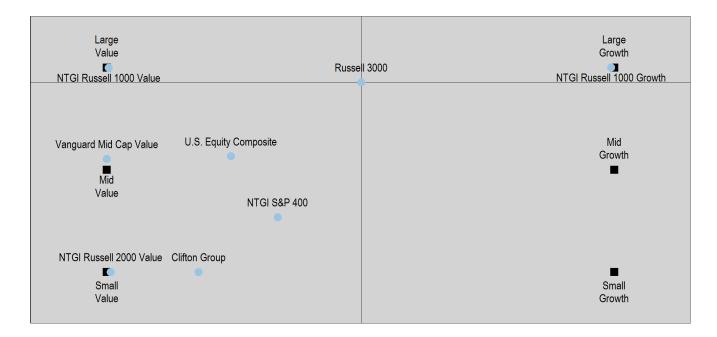
| End Weight | Return | Contribution |
|------------|--------|--------------|
| 0.4        | -10.3  | 0.0          |
| 0.5        | -7.9   | 0.0          |
| 0.4        | -8.0   | 0.0          |
| 0.1        | -32.8  | 0.0          |
| 0.6        | -4.1   | 0.0          |

#### **Market Capitalization**

|                       | Small<br>Cap | Small/<br>Mid | Mid<br>Cap | Mid/<br>Large | Large<br>Cap |
|-----------------------|--------------|---------------|------------|---------------|--------------|
| U.S. Equity Composite | 21.3%        | 23.0%         | 22.0%      | 13.6%         | 20.0%        |
| Russell 3000          | 5.4%         | 8.6%          | 16.1%      | 27.9%         | 42.1%        |
| Weight Over/Under     | 15.9%        | 14.5%         | 5.9%       | -14.3%        | -22.0%       |







### **Common Holdings Matrix**

|                          | // o // | º. Equity Composite | Mr.C. | VI GI RUSSell 1000 Value | MT. | VI GI RUSSell 1000 Growth | MT. | 1 61 S&P 400 |     | unguard Mid Cap Value | Mr.C. | " Val Russell 2000 Value |
|--------------------------|---------|---------------------|-------|--------------------------|-----|---------------------------|-----|--------------|-----|-----------------------|-------|--------------------------|
|                          | #       | %                   | #     | %                        | #   | %                         | #   | %            | #   | %                     | #     | %                        |
| U.S. Equity Composite    |         |                     | 723   | 100                      | 546 | 100                       | 404 | 99           | 208 | 100                   | 1,346 | 98                       |
| NTGI Russell 1000 Value  | 723     | 52                  |       |                          | 290 | 31                        | 183 | 52           | 182 | 90                    | 1     | 0                        |
| NTGI Russell 1000 Growth | 546     | 36                  | 290   | 30                       |     |                           | 110 | 37           | 60  | 29                    | 0     | 0                        |
| NTGI S&P 400             | 404     | 24                  | 183   | 5                        | 110 | 3                         |     |              | 11  | 3                     | 118   | 26                       |
| Vanguard Mid Cap Value   | 208     | 20                  | 182   | 14                       | 60  | 3                         | 11  | 5            |     |                       | 0     | 0                        |
| NTGI Russell 2000 Value  | 1,346   | 28                  | 1     | 0                        | 0   | 0                         | 118 | 19           | 0   | 0                     |       |                          |

U.S. Equity Composite

As of June 30, 2019

Market Value: \$638.8 Million and 28.7% of Fund

|                          |                  |                        | 3 Years              |              |                         |                        |              |  |
|--------------------------|------------------|------------------------|----------------------|--------------|-------------------------|------------------------|--------------|--|
|                          | U.S. Equity Com- | NTG/ Russell 1000 V.S. | NTG/ Russell 1000 C. | NTGI S&P 400 | Vanguard Mid Cap Value. | NTGI Russell 2000 V.S. | Russell 3000 |  |
| U.S. Equity Composite    |                  |                        |                      |              |                         |                        |              |  |
| NTGI Russell 1000 Value  | 0.97             | 1.00                   |                      | -            |                         |                        |              |  |
| NTGI Russell 1000 Growth | 0.90             | 0.87                   | 1.00                 |              |                         |                        |              |  |
| NTGI S&P 400             | 0.99             | 0.95                   | 0.88                 | 1.00         |                         |                        |              |  |
| Vanguard Mid Cap Value   | -                |                        |                      |              |                         |                        |              |  |
| NTGI Russell 2000 Value  | 0.94             | 0.88                   | 0.73                 | 0.95         |                         | 1.00                   |              |  |
| Russell 3000             | 0.98             | 0.97                   | 0.96                 | 0.96         |                         | 0.85                   | 1.00         |  |

**Correlation Matrix** 

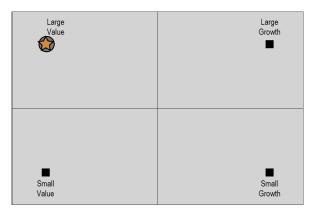
## NTGI Russell 1000 Value

As of June 30, 2019

### Characteristics

Market Value: \$161.7 Million and 7.3% of Fund

#### Style Drift - 3 Years



NTGI Russell 1000 Value

🔶 Russell 1000 Value

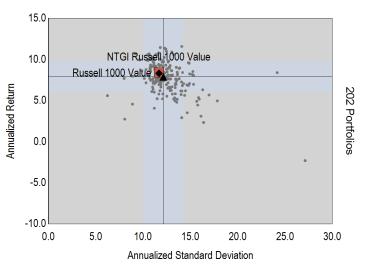
#### Characteristics

|                                 | Portfolio | Russell<br>1000<br>Value |
|---------------------------------|-----------|--------------------------|
| Number of Holdings              | 724       | 722                      |
| Weighted Avg. Market Cap. (\$B) | 123.0     | 123.1                    |
| Median Market Cap. (\$B)        | 9.2       | 9.2                      |
| Price To Earnings               | 17.4      | 17.4                     |
| Price To Book                   | 2.3       | 2.3                      |
| Price To Sales                  | 1.5       | 1.5                      |
| Return on Equity (%)            | 14.4      | 14.4                     |
| Yield (%)                       | 2.6       | 2.6                      |
| Beta                            | 1.0       | 1.0                      |
| R-Squared                       | 1.0       | 1.0                      |

#### **Characteristics**

|                                   | Portfolio | Russell<br>1000<br>Value |
|-----------------------------------|-----------|--------------------------|
| INDUSTRY SECTOR DISTRIBUTION (% E | quity)    |                          |
| Energy                            | 9.0       | 9.0                      |
| Materials                         | 4.0       | 4.0                      |
| Industrials                       | 8.0       | 8.0                      |
| Consumer Discretionary            | 5.3       | 5.3                      |
| Consumer Staples                  | 7.8       | 7.8                      |
| Health Care                       | 15.1      | 15.2                     |
| Financials                        | 22.5      | 22.5                     |
| Information Technology            | 9.7       | 9.7                      |
| Communication Services            | 7.1       | 7.1                      |
| Utilities                         | 6.4       | 6.4                      |
| Real Estate                       | 5.1       | 5.0                      |
| Unclassified                      | 0.1       | 0.0                      |

**Risk / Return - Since Inception** 



### Largest Holdings

|                        | End Weight | Return |
|------------------------|------------|--------|
| JP MORGAN CHASE & CO.  | 2.7        | 11.3   |
| BERKSHIRE HATHAWAY 'B' | 2.7        | 6.1    |
| EXXON MOBIL            | 2.4        | -4.1   |
| JOHNSON & JOHNSON      | 2.3        | 0.3    |
| PROCTER & GAMBLE       | 2.0        | 6.1    |

### **Top Contributors**

|                        | End Weight | Return | Contribution |
|------------------------|------------|--------|--------------|
| JP MORGAN CHASE & CO.  | 2.7        | 11.3   | 0.3          |
| QUALCOMM               | 0.7        | 34.6   | 0.2          |
| WALT DISNEY            | 0.7        | 25.8   | 0.2          |
| BERKSHIRE HATHAWAY 'B' | 2.7        | 6.1    | 0.2          |
| CITIGROUP              | 1.2        | 13.3   | 0.2          |

#### **Bottom Contributors** End Weight Contribution Return INTEL 1.6 -10.3 -0.2 EXXON MOBIL 2.4 -4.1 -0.1 PHILIP MORRIS INTL. 0.9 -9.8 -0.1 OCCIDENTAL PTL. -22.8 -0.1 0.3 WALGREENS BOOTS ALLIANCE 0.3 -12.9 0.0

#### **Market Capitalization**

|                         | Small<br>Cap | Small/<br>Mid | Mid<br>Cap | Mid/<br>Large | Large<br>Cap |
|-------------------------|--------------|---------------|------------|---------------|--------------|
| NTGI Russell 1000 Value | 0.9%         | 9.1%          | 20.3%      | 29.0%         | 40.7%        |
| Russell 1000 Value      | 1.2%         | 8.6%          | 20.4%      | 29.1%         | 40.7%        |
| Weight Over/Under       | -0.3%        | 0.5%          | -0.1%      | 0.0%          | 0.0%         |

# NTGI Russell 1000 Value

As of June 30, 2019

### Attribution

Market Value: \$161.7 Million and 7.3% of Fund

#### Sector Attribution vs Russell 1000 Value

| GICS Sector            | Portfolio<br>Weight | Index<br>Weight | Excess<br>Weight | Portfolio<br>USD<br>Return | Index<br>USD<br>Return | Excess<br>Return | Allocation<br>Effect<br>(Local) | Selection<br>Effect<br>(Local) | Active<br>Contrib. | Passive<br>Contrib. | Total<br>Contrib. |
|------------------------|---------------------|-----------------|------------------|----------------------------|------------------------|------------------|---------------------------------|--------------------------------|--------------------|---------------------|-------------------|
| Energy                 | 9.7%                | 9.7%            | 0.0%             | -3.6%                      | -3.6%                  | 0.0%             | 0.0%                            | 0.0%                           | 0.0%               | -0.7%               | -0.7%             |
| Materials              | 4.0%                | 4.0%            | 0.0%             | 4.4%                       | 4.4%                   | 0.0%             | 0.0%                            | 0.0%                           | 0.0%               | 0.0%                | 0.0%              |
| Industrials            | 7.8%                | 7.8%            | 0.0%             | 6.6%                       | 6.6%                   | 0.0%             | 0.0%                            | 0.0%                           | 0.0%               | 0.2%                | 0.2%              |
| Consumer Discretionary | 5.3%                | 5.3%            | 0.0%             | 3.7%                       | 3.6%                   | 0.1%             | 0.0%                            | 0.0%                           | 0.0%               | 0.0%                | 0.0%              |
| Consumer Staples       | 7.9%                | 7.9%            | 0.0%             | 2.6%                       | 2.6%                   | 0.0%             | 0.0%                            | 0.0%                           | 0.0%               | -0.1%               | -0.1%             |
| Health Care            | 15.3%               | 15.3%           | 0.0%             | 2.8%                       | 2.8%                   | 0.0%             | 0.0%                            | 0.0%                           | 0.0%               | -0.2%               | -0.2%             |
| Financials             | 21.7%               | 21.7%           | 0.0%             | 7.7%                       | 7.7%                   | 0.0%             | 0.0%                            | 0.0%                           | 0.0%               | 0.8%                | 0.8%              |
| Information Technology | 9.8%                | 9.8%            | 0.0%             | 3.2%                       | 3.2%                   | 0.0%             | 0.0%                            | 0.0%                           | 0.0%               | -0.1%               | -0.1%             |
| Communication Services | 6.9%                | 6.9%            | 0.0%             | 6.4%                       | 6.4%                   | 0.0%             | 0.0%                            | 0.0%                           | 0.0%               | 0.2%                | 0.2%              |
| Utilities              | 6.5%                | 6.5%            | 0.0%             | 3.4%                       | 3.4%                   | 0.0%             | 0.0%                            | 0.0%                           | 0.0%               | 0.0%                | 0.0%              |
| Real Estate            | 5.2%                | 5.2%            | 0.0%             | 1.0%                       | 1.0%                   | 0.0%             | 0.0%                            | 0.0%                           | 0.0%               | -0.1%               | -0.1%             |
| Unclassified           | 0.0%                | 0.0%            | 0.0%             | 2.7%                       |                        | 0.0%             | 0.0%                            | 0.0%                           | 0.0%               | 0.0%                | 0.0%              |

### NTGI Russell 1000 Value Performance Attribution vs. Russell 1000 Value

|                        | Total   | Selection | Allocation | Interaction |
|------------------------|---------|-----------|------------|-------------|
|                        | Effects | Effect    | Effect     | Effects     |
| Energy                 | 0.0%    | 0.0%      | 0.0%       | 0.0%        |
| Materials              | 0.0%    | 0.0%      | 0.0%       | 0.0%        |
| Industrials            | 0.0%    | 0.0%      | 0.0%       | 0.0%        |
| Consumer Discretionary | 0.0%    | 0.0%      | 0.0%       | 0.0%        |
| Consumer Staples       | 0.0%    | 0.0%      | 0.0%       | 0.0%        |
| Health Care            | 0.0%    | 0.0%      | 0.0%       | 0.0%        |
| Financials             | 0.0%    | 0.0%      | 0.0%       | 0.0%        |
| Information Technology | 0.0%    | 0.0%      | 0.0%       | 0.0%        |
| Communication Services | 0.0%    | 0.0%      | 0.0%       | 0.0%        |
| Utilities              | 0.0%    | 0.0%      | 0.0%       | 0.0%        |
| Real Estate            | 0.0%    | 0.0%      | 0.0%       | 0.0%        |
| Cash                   | 0.0%    | 0.0%      | 0.0%       | 0.0%        |
| Portfolio              | 0.0% =  | 0.0% +    | 0.0% +     | 0.0%        |

### Market Cap Attribution vs. Russell 1000 Value

|                              | Portfolio<br>Weight | Index<br>Weight | Excess<br>Weight | Portfolio<br>USD<br>Return | Index<br>USD<br>Return | Excess<br>USD<br>Return | Allocation<br>Effect<br>(Local) | Selection<br>Effect<br>(Local) | Active<br>Contrib. | Passive<br>Contrib. | Total<br>Contrib. |
|------------------------------|---------------------|-----------------|------------------|----------------------------|------------------------|-------------------------|---------------------------------|--------------------------------|--------------------|---------------------|-------------------|
| Market Cap. Quintile (\$Bil) |                     |                 |                  |                            |                        |                         |                                 |                                |                    |                     |                   |
| 1) Above 241.49              | 19.2%               | 19.3%           | 0.0%             | 2.8%                       | 2.8%                   | 0.0%                    | 0.0%                            | 0.0%                           | 0.0%               | -0.2%               | -0.2%             |
| 2) 119.66 - 241.49           | 20.6%               | 20.6%           | 0.0%             | 3.9%                       | 3.9%                   | 0.0%                    | 0.0%                            | 0.0%                           | 0.0%               | 0.0%                | 0.0%              |
| 3) 42.08 - 119.66            | 20.0%               | 20.1%           | 0.0%             | 4.4%                       | 4.5%                   | 0.0%                    | 0.0%                            | 0.0%                           | 0.0%               | 0.1%                | 0.1%              |
| 4) 15.89 - 42.08             | 20.2%               | 20.2%           | 0.0%             | 5.9%                       | 5.9%                   | 0.0%                    | 0.0%                            | 0.0%                           | 0.0%               | 0.4%                | 0.4%              |
| 5) 0.00 - 15.89              | 19.9%               | 19.9%           | 0.0%             | 2.2%                       | 2.2%                   | 0.0%                    | 0.0%                            | 0.0%                           | 0.0%               | -0.3%               | -0.3%             |
| Total                        |                     |                 |                  | 3.9%                       | 3.9%                   | 0.0%                    | 0.0%                            | 0.0%                           | 0.0%               | 0.0%                | 0.0%              |

## NTGI Russell 1000 Growth

As of June 30, 2019

### Characteristics

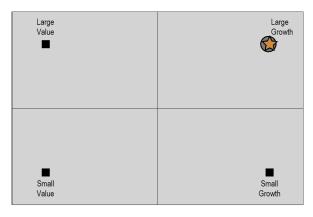
Market Value: \$122.6 Million and 5.5% of Fund

15.0

20.0

Contribution

#### Style Drift - 3 Years



NTGI Russell 1000 Growth

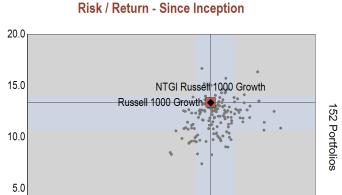
Russell 1000 Growth 

### **Characteristics**

|                                 | Portfolio | Russell<br>1000<br>Growth |
|---------------------------------|-----------|---------------------------|
| Number of Holdings              | 548       | 546                       |
| Weighted Avg. Market Cap. (\$B) | 283.3     | 283.4                     |
| Median Market Cap. (\$B)        | 12.1      | 12.1                      |
| Price To Earnings               | 24.9      | 24.9                      |
| Price To Book                   | 7.2       | 7.2                       |
| Price To Sales                  | 2.9       | 2.9                       |
| Return on Equity (%)            | 37.6      | 37.6                      |
| Yield (%)                       | 1.3       | 1.3                       |
| Beta                            | 1.0       | 1.0                       |
| R-Squared                       | 1.0       | 1.0                       |

#### **Characteristics**

|                                   | Portfolio | Russell<br>1000<br>Growth |
|-----------------------------------|-----------|---------------------------|
| INDUSTRY SECTOR DISTRIBUTION (% E | quity)    |                           |
| Energy                            | 0.7       | 0.7                       |
| Materials                         | 1.9       | 1.9                       |
| Industrials                       | 11.5      | 11.5                      |
| Consumer Discretionary            | 15.1      | 15.2                      |
| Consumer Staples                  | 5.7       | 5.7                       |
| Health Care                       | 12.6      | 12.6                      |
| Financials                        | 4.4       | 4.4                       |
| Information Technology            | 33.4      | 33.6                      |
| Communication Services            | 11.9      | 12.0                      |
| Utilities                         | 0.0       | 0.0                       |
| Real Estate                       | 2.3       | 2.4                       |
| Unclassified                      | 0.1       | 0.0                       |



10.0

Annualized Standard Deviation

Annualized Return

0.0

0.0

#### Largest Holdings End Weight Return MICROSOFT 6.9 14.0 APPLE 6.7 4.6 AMAZON.COM 5.6 6.3 FACEBOOK CLASS A 3.3 15.8 ALPHABET 'C' 2.4 -7.9

5.0

#### **Top Contributors**

|                  | End Weight | Return | Contribution |
|------------------|------------|--------|--------------|
| MICROSOFT        | 6.9        | 14.0   | 1.0          |
| FACEBOOK CLASS A | 3.3        | 15.8   | 0.5          |
| AMAZON.COM       | 5.6        | 6.3    | 0.4          |
| APPLE            | 6.7        | 4.6    | 0.3          |
| WALT DISNEY      | 1.1        | 25.8   | 0.3          |

#### **Bottom Contributors** End Weight Doturn

|              | End weight | Return | Contribution |
|--------------|------------|--------|--------------|
| ALPHABET 'C' | 2.4        | -7.9   | -0.2         |
| ALPHABET A   | 2.3        | -8.0   | -0.2         |
| ALTRIA GROUP | 0.7        | -16.3  | -0.1         |
| 3M           | 0.6        | -15.9  | -0.1         |
| ABBVIE       | 0.8        | -8.6   | -0.1         |
|              |            |        |              |

#### **Market Capitalization**

|                          | Small<br>Cap | Small/<br>Mid | Mid<br>Cap | Mid/<br>Large | Large<br>Cap |
|--------------------------|--------------|---------------|------------|---------------|--------------|
| NTGI Russell 1000 Growth | 0.3%         | 5.3%          | 14.2%      | 30.7%         | 49.5%        |
| Russell 1000 Growth      | 0.3%         | 5.2%          | 14.2%      | 30.8%         | 49.6%        |
| Weight Over/Under        | 0.0%         | 0.2%          | 0.0%       | -0.1%         | 0.0%         |

## NTGI Russell 1000 Growth

### As of June 30, 2019

### Attribution

Market Value: \$122.6 Million and 5.5% of Fund

### Sector Attribution vs Russell 1000 Growth

| GICS Sector            | Portfolio<br>Weight | Index<br>Weight | Excess<br>Weight | Portfolio<br>USD<br>Return | Index<br>USD<br>Return | Excess<br>Return | Allocation<br>Effect<br>(Local) | Selection<br>Effect<br>(Local) | Active<br>Contrib. | Passive<br>Contrib. | Total<br>Contrib. |
|------------------------|---------------------|-----------------|------------------|----------------------------|------------------------|------------------|---------------------------------|--------------------------------|--------------------|---------------------|-------------------|
| Energy                 | 0.7%                | 0.7%            | 0.0%             | -3.3%                      | -3.3%                  | 0.0%             | 0.0%                            | 0.0%                           | 0.0%               | -0.1%               | -0.1%             |
| Materials              | 1.8%                | 1.8%            | 0.0%             | 8.0%                       | 8.0%                   | 0.0%             | 0.0%                            | 0.0%                           | 0.0%               | 0.1%                | 0.1%              |
| Industrials            | 11.8%               | 11.8%           | 0.0%             | 2.6%                       | 2.6%                   | 0.0%             | 0.0%                            | 0.0%                           | 0.0%               | -0.2%               | -0.2%             |
| Consumer Discretionary | 15.1%               | 15.1%           | 0.0%             | 5.6%                       | 5.5%                   | 0.1%             | 0.0%                            | 0.0%                           | 0.0%               | 0.1%                | 0.1%              |
| Consumer Staples       | 5.8%                | 5.8%            | 0.0%             | 4.8%                       | 4.8%                   | 0.0%             | 0.0%                            | 0.0%                           | 0.0%               | 0.0%                | 0.0%              |
| Health Care            | 13.2%               | 13.2%           | 0.0%             | 0.2%                       | 0.2%                   | 0.0%             | 0.0%                            | 0.0%                           | 0.0%               | -0.6%               | -0.6%             |
| Financials             | 4.3%                | 4.3%            | 0.0%             | 8.9%                       | 8.9%                   | 0.0%             | 0.0%                            | 0.0%                           | 0.0%               | 0.2%                | 0.2%              |
| Information Technology | 32.9%               | 32.9%           | 0.0%             | 6.6%                       | 6.6%                   | 0.0%             | 0.0%                            | 0.0%                           | 0.0%               | 0.7%                | 0.7%              |
| Communication Services | 12.1%               | 12.1%           | 0.0%             | 3.6%                       | 3.6%                   | 0.0%             | 0.0%                            | 0.0%                           | 0.0%               | -0.1%               | -0.1%             |
| Utilities              | 0.0%                | 0.0%            | 0.0%             |                            |                        |                  |                                 | 0.0%                           | 0.0%               |                     |                   |
| Real Estate            | 2.4%                | 2.4%            | 0.0%             | 3.6%                       | 3.6%                   | 0.0%             | 0.0%                            | 0.0%                           | 0.0%               | 0.0%                | 0.0%              |
| Unclassified           | 0.0%                | 0.0%            | 0.0%             | 2.7%                       |                        | 0.0%             | 0.0%                            | 0.0%                           | 0.0%               | 0.0%                | 0.0%              |

#### NTGI Russell 1000 Growth Performance Attribution vs. Russell 1000 Growth

|                        | Total   | Selection | Allocation | Interaction |
|------------------------|---------|-----------|------------|-------------|
|                        | Effects | Effect    | Effect     | Effects     |
| Energy                 | 0.0%    | 0.0%      | 0.0%       | 0.0%        |
| Materials              | 0.0%    | 0.0%      | 0.0%       | 0.0%        |
| Industrials            | 0.0%    | 0.0%      | 0.0%       | 0.0%        |
| Consumer Discretionary | 0.0%    | 0.0%      | 0.0%       | 0.0%        |
| Consumer Staples       | 0.0%    | 0.0%      | 0.0%       | 0.0%        |
| Health Care            | 0.0%    | 0.0%      | 0.0%       | 0.0%        |
| Financials             | 0.0%    | 0.0%      | 0.0%       | 0.0%        |
| Information Technology | 0.0%    | 0.0%      | 0.0%       | 0.0%        |
| Communication Services | 0.0%    | 0.0%      | 0.0%       | 0.0%        |
| Utilities              | 0.0%    |           |            | -           |
| Real Estate            | 0.0%    | 0.0%      | 0.0%       | 0.0%        |
| Cash                   | 0.0%    | 0.0%      | 0.0%       | 0.0%        |
| Portfolio              | 0.0% =  | 0.0% +    | 0.0% +     | 0.0%        |

#### Market Cap Attribution vs. Russell 1000 Growth

|                              | Portfolio<br>Weight | Index<br>Weight | Excess<br>Weight | Portfolio<br>USD<br>Return | Index<br>USD<br>Return | Excess<br>USD<br>Return | Allocation<br>Effect<br>(Local) | Selection<br>Effect<br>(Local) | Active<br>Contrib. | Passive<br>Contrib. | Total<br>Contrib. |
|------------------------------|---------------------|-----------------|------------------|----------------------------|------------------------|-------------------------|---------------------------------|--------------------------------|--------------------|---------------------|-------------------|
| Market Cap. Quintile (\$Bil) |                     |                 |                  |                            |                        |                         |                                 |                                |                    |                     |                   |
| 1) Above 874.71              | 18.6%               | 18.6%           | 0.0%             | 8.3%                       | 8.3%                   | 0.0%                    | 0.0%                            | 0.0%                           | 0.0%               | 0.7%                | 0.7%              |
| 2) 172.09 - 874.71           | 21.1%               | 21.1%           | 0.0%             | 4.8%                       | 4.8%                   | 0.0%                    | 0.0%                            | 0.0%                           | 0.0%               | 0.0%                | 0.0%              |
| 3) 77.89 - 172.09            | 20.1%               | 20.1%           | 0.0%             | 1.8%                       | 1.8%                   | 0.0%                    | 0.0%                            | 0.0%                           | 0.0%               | -0.6%               | -0.6%             |
| 4) 28.01 - 77.89             | 20.2%               | 20.2%           | 0.0%             | 3.0%                       | 3.0%                   | 0.0%                    | 0.0%                            | 0.0%                           | 0.0%               | -0.3%               | -0.3%             |
| 5) 0.00 - 28.01              | 20.0%               | 20.0%           | 0.0%             | 5.6%                       | 5.6%                   | 0.0%                    | 0.0%                            | 0.0%                           | 0.0%               | 0.2%                | 0.2%              |
| Total                        |                     |                 |                  | 4.7%                       | 4.6%                   | 0.0%                    | 0.0%                            | 0.0%                           | 0.0%               | 0.0%                | 0.0%              |

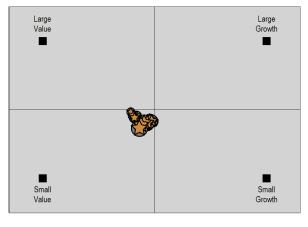


As of June 30, 2019

# Characteristics

Market Value: \$94.5 Million and 4.2% of Fund

## Style Drift - 3 Years



NTGI S&P 400

S&P 400 MidCap

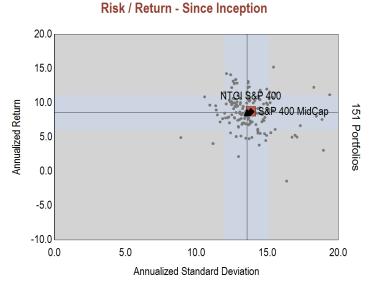
## Characteristics

☆

|                                 | Portfolio | S&P 400<br>MidCap |
|---------------------------------|-----------|-------------------|
| Number of Holdings              | 402       | 400               |
| Weighted Avg. Market Cap. (\$B) | 5.8       | 5.8               |
| Median Market Cap. (\$B)        | 4.1       | 4.1               |
| Price To Earnings               | 19.8      | 19.8              |
| Price To Book                   | 2.6       | 2.6               |
| Price To Sales                  | 1.2       | 1.2               |
| Return on Equity (%)            | 16.2      | 16.2              |
| Yield (%)                       | 1.7       | 1.7               |
| Beta                            | 1.0       | 1.0               |
| R-Squared                       | 1.0       | 1.0               |

#### Characteristics

|                                    | Portfolio | S&P 400<br>MidCap |
|------------------------------------|-----------|-------------------|
| INDUSTRY SECTOR DISTRIBUTION (% Eq | uity)     |                   |
| Energy                             | 3.1       | 3.1               |
| Materials                          | 6.4       | 6.4               |
| Industrials                        | 15.8      | 15.9              |
| Consumer Discretionary             | 12.2      | 12.3              |
| Consumer Staples                   | 2.7       | 2.7               |
| Health Care                        | 9.6       | 9.7               |
| Financials                         | 16.8      | 16.9              |
| Information Technology             | 15.6      | 15.7              |
| Communication Services             | 2.5       | 2.5               |
| Utilities                          | 4.7       | 4.7               |
| Real Estate                        | 10.1      | 10.1              |
| Unclassified                       | 0.2       | 0.0               |



#### Largest Holdings

|                      | End Weight | Return |
|----------------------|------------|--------|
| IDEX                 | 0.8        | 13.8   |
| STERIS               | 0.7        | 16.6   |
| MARKETAXESS HOLDINGS | 0.7        | 30.9   |
| LEIDOS HOLDINGS      | 0.7        | 25.1   |
| DOMINO'S PIZZA       | 0.7        | 8.1    |

# **Top Contributors**

|                       | End Weight | Return | Contribution |
|-----------------------|------------|--------|--------------|
| CYPRESS SEMICON.      | 0.5        | 49.8   | 0.2          |
| MARKETAXESS HOLDINGS  | 0.7        | 30.9   | 0.2          |
| LEIDOS HOLDINGS       | 0.7        | 25.1   | 0.2          |
| CATALENT              | 0.5        | 33.6   | 0.2          |
| CAESARS ENTERTAINMENT | 0.4        | 36.0   | 0.1          |

#### **Bottom Contributors**

|                     | End Weight | Return | Contribution |
|---------------------|------------|--------|--------------|
| CHEMOURS            | 0.2        | -34.7  | -0.1         |
| UNITED THERAPEUTICS | 0.2        | -33.5  | -0.1         |
| EQT                 | 0.2        | -23.7  | -0.1         |
| CDK GLOBAL          | 0.3        | -15.7  | -0.1         |
| STEEL DYNAMICS      | 0.4        | -13.7  | -0.1         |

## **Market Capitalization**

|                   | Small<br>Cap | Small/<br>Mid | Mid<br>Cap | Mid/<br>Large | Large<br>Cap |
|-------------------|--------------|---------------|------------|---------------|--------------|
| NTGI S&P 400      | 14.6%        | 71.7%         | 13.7%      | 0.0%          | 0.0%         |
| S&P 400 MidCap    | 14.6%        | 70.8%         | 14.6%      | 0.0%          | 0.0%         |
| Weight Over/Under | 0.0%         | 0.9%          | -0.9%      | 0.0%          | 0.0%         |





As of June 30, 2019

# Attribution

Market Value: \$94.5 Million and 4.2% of Fund

## Sector Attribution vs S&P 400 MidCap

| GICS Sector            | Portfolio<br>Weight | Index<br>Weight | Excess<br>Weight | Portfolio<br>USD<br>Return | Index<br>USD<br>Return | Excess<br>Return | Allocation<br>Effect<br>(Local) | Selection<br>Effect<br>(Local) | Active<br>Contrib. | Passive<br>Contrib. | Total<br>Contrib. |
|------------------------|---------------------|-----------------|------------------|----------------------------|------------------------|------------------|---------------------------------|--------------------------------|--------------------|---------------------|-------------------|
| Energy                 | 3.8%                | 3.8%            | 0.0%             | -3.2%                      | -16.0%                 | 12.9%            |                                 | 0.0%                           | 0.0%               | -0.7%               | -0.7%             |
| Materials              | 6.9%                | 6.9%            | 0.0%             | 0.7%                       | 0.9%                   | -0.2%            |                                 | 0.0%                           | 0.0%               | -0.1%               | -0.1%             |
| Industrials            | 15.1%               | 15.2%           | 0.0%             | 6.8%                       | 6.8%                   | 0.0%             |                                 | 0.0%                           | 0.0%               | 0.6%                | 0.6%              |
| Consumer Discretionary | 11.9%               | 11.9%           | 0.0%             | 6.6%                       | 5.0%                   | 1.6%             |                                 | 0.0%                           | 0.0%               | 0.2%                | 0.2%              |
| Consumer Staples       | 2.8%                | 2.8%            | 0.0%             | 2.2%                       | -2.7%                  | 4.9%             |                                 | 0.0%                           | 0.0%               | -0.2%               | -0.2%             |
| Health Care            | 9.7%                | 9.7%            | 0.0%             | -2.3%                      | 1.7%                   | -4.1%            |                                 | 0.0%                           | 0.0%               | -0.1%               | -0.1%             |
| Financials             | 16.0%               | 16.0%           | 0.0%             | 7.9%                       | 7.0%                   | 0.9%             |                                 | 0.0%                           | 0.0%               | 0.6%                | 0.6%              |
| Information Technology | 16.3%               | 16.3%           | 0.0%             | 6.5%                       | 5.0%                   | 1.5%             |                                 | 0.0%                           | 0.0%               | 0.3%                | 0.3%              |
| Communication Services | 2.6%                | 2.6%            | 0.0%             | 4.4%                       | 0.7%                   | 3.7%             |                                 | 0.0%                           | 0.0%               | -0.1%               | -0.1%             |
| Utilities              | 4.6%                | 4.6%            | 0.0%             | 0.2%                       | 2.4%                   | -2.2%            |                                 | 0.0%                           | 0.0%               | 0.0%                | 0.0%              |
| Real Estate            | 10.1%               | 10.1%           | 0.0%             | -0.5%                      | -2.0%                  | 1.5%             |                                 | 0.0%                           | 0.0%               | -0.5%               | -0.5%             |
| Total                  |                     |                 |                  | 4.0%                       | 3.0%                   | 1.0%             |                                 | 0.0%                           | 0.0%               | 0.0%                | 0.0%              |

## NTGI S&P 400 Performance Attribution vs. S&P 400 MidCap

|                        | Total   | Selection | Allocation | Interaction |
|------------------------|---------|-----------|------------|-------------|
|                        | Effects | Effect    | Effect     | Effects     |
| Energy                 | 0.0%    | 0.0%      | 0.0%       | 0.0%        |
| Materials              | 0.0%    | 0.0%      | 0.0%       | 0.0%        |
| Industrials            | 0.0%    | 0.0%      | 0.0%       | 0.0%        |
| Consumer Discretionary | 0.0%    | 0.0%      | 0.0%       | 0.0%        |
| Consumer Staples       | 0.0%    | 0.0%      | 0.0%       | 0.0%        |
| Health Care            | 0.0%    | 0.0%      | 0.0%       | 0.0%        |
| Financials             | 0.0%    | 0.0%      | 0.0%       | 0.0%        |
| Information Technology | -0.1%   | 0.0%      | 0.0%       | 0.0%        |
| Communication Services | 0.0%    | 0.0%      | 0.0%       | 0.0%        |
| Utilities              | 0.0%    | 0.0%      | 0.0%       | 0.0%        |
| Real Estate            | 0.0%    | 0.0%      | 0.0%       | 0.0%        |
| Cash                   | 0.0%    | 0.0%      | 0.0%       | 0.0%        |
| Portfolio              | 0.0% =  | 0.0% +    | 0.0% +     | 0.0%        |

# Market Cap Attribution vs. S&P 400 MidCap

|                              | Portfolio<br>Weight | Index<br>Weight | Excess<br>Weight | Portfolio<br>USD<br>Return | Index<br>USD<br>Return | Excess<br>USD<br>Return | Allocation<br>Effect<br>(Local) | Selection<br>Effect<br>(Local) | Active<br>Contrib. | Passive<br>Contrib. | Total<br>Contrib. |
|------------------------------|---------------------|-----------------|------------------|----------------------------|------------------------|-------------------------|---------------------------------|--------------------------------|--------------------|---------------------|-------------------|
| Market Cap. Quintile (\$Bil) |                     |                 |                  |                            |                        |                         |                                 |                                |                    |                     |                   |
| 1) Above 7.55                | 19.9%               | 19.9%           | 0.0%             | 3.7%                       | 7.5%                   | -3.8%                   | 0.0%                            | 6.2%                           | 6.2%               | 0.9%                | 7.1%              |
| 2) 5.60 - 7.55               | 20.0%               | 20.0%           | 0.0%             | 4.6%                       | 4.2%                   | 0.4%                    | -0.1%                           | 3.5%                           | 3.4%               | 0.2%                | 3.6%              |
| 3) 4.51 - 5.60               | 19.8%               | 19.8%           | 0.0%             | 3.8%                       | 1.6%                   | 2.2%                    | -0.1%                           | -0.2%                          | -0.3%              | -0.3%               | -0.5%             |
| 4) 3.34 - 4.51               | 20.1%               | 20.1%           | 0.0%             | 4.4%                       | 2.5%                   | 1.9%                    | 0.0%                            | -0.9%                          | -0.9%              | -0.1%               | -1.0%             |
| 5) 0.00 - 3.34               | 20.2%               | 20.2%           | 0.0%             | 3.3%                       | -0.9%                  | 4.2%                    | 0.2%                            | -7.7%                          | -7.4%              | -0.8%               | -8.2%             |
| Total                        |                     |                 |                  | 4.0%                       | 3.0%                   | 1.0%                    | 0.0%                            | 0.9%                           | 1.0%               | 0.0%                | 1.0%              |

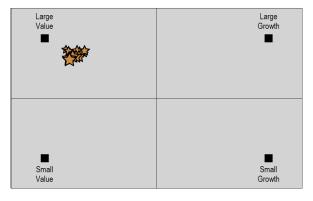
# Vanguard Mid Cap Value

As of June 30, 2019

# Characteristics

Market Value: \$94.8 Million and 4.3% of Fund

## Style Drift - 3 Years



Duesell

Russell

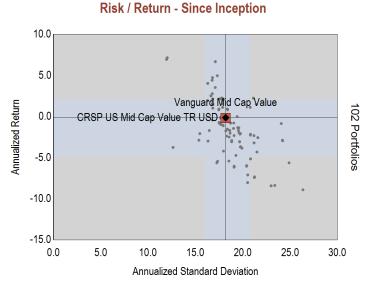
Vanguard Mid Cap Value CRSP US Mid Cap Value TR USD

## **Characteristics**

|                                 | Portfolio | Russell<br>MidCap<br>Value |
|---------------------------------|-----------|----------------------------|
| Number of Holdings              | 208       | 587                        |
| Weighted Avg. Market Cap. (\$B) | 14.6      | 15.6                       |
| Median Market Cap. (\$B)        | 11.2      | 7.5                        |
| Price To Earnings               | 17.0      | 18.8                       |
| Price To Book                   | 2.3       | 2.2                        |
| Price To Sales                  | 1.2       | 1.4                        |
| Return on Equity (%)            | 15.5      | 11.2                       |
| Yield (%)                       | 2.3       | 2.3                        |
| Beta                            |           | 1.0                        |
| R-Squared                       |           | 1.0                        |

#### **Characteristics**

| Materials8.8Industrials8.5Industrials8.5Consumer Discretionary13.6Consumer Staples4.3Health Care6.7Financials19.7Information Technology11.0Communication Services5.2 |                                 | Portfolio | MidCap<br>Value |
|--|---------------------------------|-----------|-----------------|
| Materials8.8Industrials8.5Industrials8.5Consumer Discretionary13.6Consumer Staples4.3Health Care6.7Financials19.7Information Technology11.0Communication Services5.2 | INDUSTRY SECTOR DISTRIBUTION (% | 5 Equity) |                 |
| Industrials8.511Consumer Discretionary13.61Consumer Staples4.31Health Care6.71Financials19.71Information Technology11.01Communication Services5.21                   | Energy                          | 3.2       | 5.4             |
| Consumer Discretionary13.6Consumer Staples4.3Health Care6.7Financials19.7Information Technology11.0Communication Services5.2   | Materials                       | 8.8       | 6.0             |
| Consumer Staples4.3Health Care6.7Financials19.7Information Technology11.0Communication Services5.2   | Industrials                     | 8.5       | 12.7            |
| Health Care6.7Financials19.7Information Technology11.0Communication Services5.2  | Consumer Discretionary          | 13.6      | 8.4             |
| Financials19.71Information Technology11.0Communication Services5.2   | Consumer Staples                | 4.3       | 4.7             |
| Information Technology11.0Communication Services5.2  | Health Care                     | 6.7       | 7.1             |
| Communication Services 5.2   | Financials                      | 19.7      | 17.8            |
|  | Information Technology          | 11.0      | 9.0             |
| Litilities 12.5 1  | Communication Services          | 5.2       | 3.2             |
|  | Utilities                       | 12.5      | 11.4            |
| Real Estate 5.4 14   | Real Estate                     | 5.4       | 14.0            |
| Unclassified 1.2   | Unclassified                    | 1.2       | 0.0             |



#### Largest Holdings

|                      | End Weight | Return |
|----------------------|------------|--------|
| NEWMONT GOLDCORP     | 1.5        | 10.7   |
| MOTOROLA SOLUTIONS   | 1.3        | 19.2   |
| WEC ENERGY GROUP     | 1.2        | 6.2    |
| WILLIS TOWERS WATSON | 1.2        | 9.4    |
| EVERSOURCE ENERGY    | 1.2        | 7.6    |

#### **Top Contributors**

|   | End Weight | Return | Contribution |
|---|------------|--------|--------------|
| MOTOROLA SOLUTIONS                        | 1.3        | 19.2   | 0.2          |
| BALL                                      | 1.1        | 21.3   | 0.2          |
| L3 TECHNOLOGIES DEAD -<br>DELIST.01/07/19 | 0.9        | 19.2   | 0.2          |
| PG&E                                      | 0.6        | 28.8   | 0.2          |
| CINCINNATI FINL.                          | 0.8        | 21.3   | 0.2          |

#### **Bottom Contributors**

|              | End Weight | Return | Contribution |
|--------------|------------|--------|--------------|
| MYLAN        | 0.5        | -32.8  | -0.2         |
| KOHL'S       | 0.4        | -29.9  | -0.1         |
| MARATHON OIL | 0.6        | -14.7  | -0.1         |
| NETAPP       | 0.7        | -10.5  | -0.1         |
| PVH          | 0.3        | -22.4  | -0.1         |

#### **Market Capitalization**

|                        | Small<br>Cap | Small/<br>Mid | Mid<br>Cap | Mid/<br>Large | Large<br>Cap |
|------------------------|--------------|---------------|------------|---------------|--------------|
| Vanguard Mid Cap Value | 0.3%         | 17.3%         | 80.9%      | 1.5%          | 0.0%         |
| Russell MidCap Value   | 2.8%         | 26.7%         | 59.0%      | 11.5%         | 0.0%         |
| Weight Over/Under      | -2.5%        | -9.4%         | 21.9%      | -10.1%        | 0.0%         |

# Vanguard Mid Cap Value

## As of June 30, 2019

# Attribution

Market Value: \$94.8 Million and 4.3% of Fund

## Sector Attribution vs Russell MidCap Value

| GICS Sector            | Portfolio<br>Weight | Index<br>Weight | Excess<br>Weight | Portfolio<br>USD<br>Return | Index<br>USD<br>Return | Excess<br>Return | Allocation<br>Effect<br>(Local) | Selection<br>Effect<br>(Local) | Active<br>Contrib. | Passive<br>Contrib. | Total<br>Contrib. |
|------------------------|---------------------|-----------------|------------------|----------------------------|------------------------|------------------|---------------------------------|--------------------------------|--------------------|---------------------|-------------------|
| Energy                 | 3.7%                | 6.1%            | -2.4%            | 1.0%                       | -8.2%                  | 9.2%             | 0.1%                            | 0.0%                           | 0.1%               | -0.7%               | -0.6%             |
| Materials              | 8.1%                | 6.0%            | 2.1%             | 0.1%                       | 2.9%                   | -2.8%            | -0.1%                           | 0.0%                           | -0.1%              | 0.0%                | -0.1%             |
| Industrials            | 8.1%                | 12.1%           | -4.0%            | 4.9%                       | 8.3%                   | -3.4%            | -0.1%                           | -0.1%                          | -0.3%              | 0.6%                | 0.3%              |
| Consumer Discretionary | 15.4%               | 8.7%            | 6.6%             | 3.0%                       | -0.6%                  | 3.6%             | 0.0%                            | -0.1%                          | -0.1%              | -0.3%               | -0.4%             |
| Consumer Staples       | 4.7%                | 5.0%            | -0.2%            | 3.2%                       | -1.5%                  | 4.7%             | 0.0%                            | 0.0%                           | 0.0%               | -0.2%               | -0.2%             |
| Health Care            | 6.1%                | 7.1%            | -1.0%            | 0.6%                       | 3.0%                   | -2.3%            | 0.0%                            | 0.1%                           | 0.1%               | 0.0%                | 0.1%              |
| Financials             | 18.9%               | 17.1%           | 1.8%             | 8.2%                       | 7.5%                   | 0.7%             | 0.1%                            | 0.0%                           | 0.1%               | 0.7%                | 0.8%              |
| Information Technology | 11.5%               | 8.9%            | 2.6%             | 5.9%                       | 5.4%                   | 0.5%             | 0.1%                            | 0.0%                           | 0.1%               | 0.2%                | 0.3%              |
| Communication Services | 4.8%                | 3.1%            | 1.7%             | 6.4%                       | 7.7%                   | -1.4%            | 0.0%                            | 0.1%                           | 0.1%               | 0.1%                | 0.2%              |
| Utilities              | 13.3%               | 11.4%           | 1.9%             | 1.3%                       | 3.5%                   | -2.2%            | -0.1%                           | 0.1%                           | 0.0%               | 0.0%                | 0.0%              |
| Real Estate            | 5.2%                | 14.5%           | -9.3%            | -1.3%                      | 0.2%                   | -1.5%            | 0.4%                            | 0.0%                           | 0.4%               | -0.4%               | 0.0%              |
| Unclassified           | 0.3%                | 0.0%            | 0.3%             | 1.3%                       |                        | 0.0%             | 0.0%                            | 0.0%                           | 0.0%               | 0.0%                | 0.0%              |
| Total                  |                     |                 |                  | 3.7%                       | 3.2%                   | 0.5%             | 0.5%                            | 0.0%                           | 0.5%               | 0.0%                | 0.5%              |

# Vanguard Mid Cap Value Performance Attribution vs. Russell MidCap Value

|                        | Total   | Selection | Allocation | Interaction |
|------------------------|---------|-----------|------------|-------------|
|                        | Effects | Effect    | Effect     | Effects     |
| Energy                 | 0.2%    | 0.0%      | 0.2%       | 0.0%        |
| Materials              | 0.2%    | 0.1%      | 0.0%       | 0.0%        |
| Industrials            | -0.4%   | -0.1%     | -0.3%      | 0.0%        |
| Consumer Discretionary | -0.1%   | 0.0%      | 0.0%       | 0.0%        |
| Consumer Staples       | 0.1%    | 0.1%      | 0.0%       | 0.0%        |
| Health Care            | 0.1%    | 0.1%      | 0.0%       | 0.0%        |
| Financials             | 0.4%    | 0.3%      | 0.1%       | 0.0%        |
| Information Technology | 0.0%    | -0.1%     | 0.1%       | 0.0%        |
| Communication Services | 0.2%    | 0.1%      | 0.1%       | 0.0%        |
| Utilities              | 0.1%    | 0.1%      | 0.1%       | 0.0%        |
| Real Estate            | -0.1%   | -0.1%     | 0.0%       | 0.1%        |
| Cash                   | 0.0%    | 0.0%      | 0.0%       | 0.0%        |
| Portfolio              | 0.8% =  | 0.4% +    | 0.3% +     | 0.1%        |

## Market Cap Attribution vs. Russell MidCap Value

|                              | Portfolio<br>Weight | Index<br>Weight | Excess<br>Weight | Portfolio<br>USD<br>Return | Index<br>USD<br>Return | Excess<br>USD<br>Return | Allocation<br>Effect<br>(Local) | Selection<br>Effect<br>(Local) | Active<br>Contrib. | Passive<br>Contrib. | Total<br>Contrib. |
|------------------------------|---------------------|-----------------|------------------|----------------------------|------------------------|-------------------------|---------------------------------|--------------------------------|--------------------|---------------------|-------------------|
| Market Cap. Quintile (\$Bil) |                     |                 |                  |                            |                        |                         |                                 |                                |                    |                     |                   |
| 1) Above 22.68               | 6.5%                | 20.0%           | -13.5%           | 1.8%                       | 4.5%                   | -2.8%                   | 0.2%                            | 0.0%                           | 0.2%               | 0.3%                | 0.5%              |
| 2) 15.45 - 22.68             | 22.8%               | 19.9%           | 3.0%             | 2.4%                       | 4.9%                   | -2.5%                   | 0.0%                            | -0.3%                          | -0.3%              | 0.3%                | 0.0%              |
| 3) 10.98 - 15.45             | 37.2%               | 20.0%           | 17.2%            | 4.5%                       | 2.0%                   | 2.5%                    | 0.1%                            | 0.3%                           | 0.4%               | -0.3%               | 0.2%              |
| 4) 6.70 - 10.98              | 27.2%               | 20.1%           | 7.1%             | 4.3%                       | 3.4%                   | 0.9%                    | 0.0%                            | 0.3%                           | 0.3%               | 0.0%                | 0.3%              |
| 5) 0.00 - 6.70               | 6.3%                | 20.1%           | -13.7%           | 4.0%                       | 1.3%                   | 2.7%                    | -0.1%                           | 0.0%                           | -0.1%              | -0.4%               | -0.5%             |
| Total                        |                     |                 |                  | 3.7%                       | 3.2%                   | 0.5%                    | 0.3%                            | 0.3%                           | 0.5%               | 0.0%                | 0.5%              |

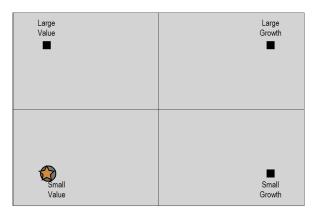
# NTGI Russell 2000 Value

As of June 30, 2019

# Characteristics

Market Value: \$161.2 Million and 7.2% of Fund

## Style Drift - 3 Years



NTGI Russell 2000 Value 

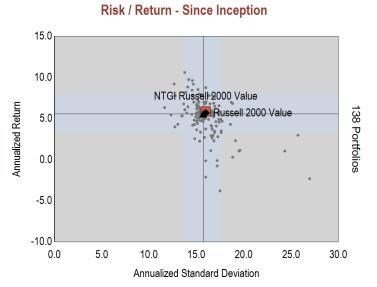
Russell 2000 Value 

## **Characteristics**

|                                 | Portfolio | Russell<br>2000<br>Value |
|---------------------------------|-----------|--------------------------|
| Number of Holdings              | 1,351     | 1,347                    |
| Weighted Avg. Market Cap. (\$B) | 2.2       | 2.2                      |
| Median Market Cap. (\$B)        | 0.7       | 0.7                      |
| Price To Earnings               | 16.2      | 16.2                     |
| Price To Book                   | 1.7       | 1.7                      |
| Price To Sales                  | 0.9       | 0.9                      |
| Return on Equity (%)            | 6.0       | 6.0                      |
| Yield (%)                       | 2.2       | 2.2                      |
| Beta                            | 1.0       | 1.0                      |
| R-Squared                       | 1.0       | 1.0                      |

#### **Characteristics**

|                                   | Portfolio | Russell<br>2000<br>Value |
|-----------------------------------|-----------|--------------------------|
| INDUSTRY SECTOR DISTRIBUTION (% E | quity)    |                          |
| Energy                            | 5.0       | 4.9                      |
| Materials                         | 4.1       | 4.2                      |
| Industrials                       | 11.3      | 11.6                     |
| Consumer Discretionary            | 8.3       | 8.5                      |
| Consumer Staples                  | 2.3       | 2.4                      |
| Health Care                       | 4.0       | 4.1                      |
| Financials                        | 28.9      | 29.4                     |
| Information Technology            | 11.7      | 11.9                     |
| Communication Services            | 2.9       | 2.9                      |
| Utilities                         | 7.5       | 7.7                      |
| Real Estate                       | 12.1      | 12.3                     |
| Unclassified                      | 0.1       | 0.0                      |



## Largest Holdings

|                        | End Weight | Return |
|------------------------|------------|--------|
| CIENA                  | 0.6        | 10.1   |
| CREE                   | 0.6        | -1.8   |
| COUSINS PROPS.         | 0.5        | -5.7   |
| IDACORP                | 0.5        | 1.5    |
| CACI INTERNATIONAL 'A' | 0.5        | 12.4   |

## **Top Contributors**

|                        | End Weight | Return | Contribution |
|------------------------|------------|--------|--------------|
| ENPHASE ENERGY         | 0.2        | 97.5   | 0.2          |
| KBR                    | 0.4        | 31.1   | 0.1          |
| SELECTIVE IN.GP.       | 0.4        | 18.7   | 0.1          |
| SINCLAIR BROADCAST 'A' | 0.2        | 39.9   | 0.1          |
| ADVERUM BIOTCHS.       | 0.1        | 126.9  | 0.1          |

| Bottom Contributors    |            |        |              |  |  |  |
|------------------------|------------|--------|--------------|--|--|--|
|                        | End Weight | Return | Contribution |  |  |  |
| SOUTHWESTERN ENERGY    | 0.2        | -32.6  | -0.1         |  |  |  |
| EDGEWELL PERSONAL CARE | 0.1        | -38.6  | -0.1         |  |  |  |
| OFFICE DEPOT           | 0.1        | -42.5  | 0.0          |  |  |  |
| BED BATH & BEYOND      | 0.2        | -30.7  | 0.0          |  |  |  |
| MALLINCKRODT           | 0.1        | -57.8  | 0.0          |  |  |  |

#### **Market Capitalization**

|                         | Small<br>Cap | Small/<br>Mid | Mid<br>Cap | Mid/<br>Large | Large<br>Cap |
|-------------------------|--------------|---------------|------------|---------------|--------------|
| NTGI Russell 2000 Value | 74.8%        | 25.2%         | 0.0%       | 0.0%          | 0.0%         |
| Russell 2000 Value      | 74.4%        | 25.6%         | 0.0%       | 0.0%          | 0.0%         |
| Weight Over/Under       | 0.4%         | -0.4%         | 0.0%       | 0.0%          | 0.0%         |



## As of June 30, 2019

# Attribution

Market Value: \$161.2 Million and 7.2% of Fund

# Sector Attribution vs Russell 2000 Value

| GICS Sector            | Portfolio<br>Weight | Index<br>Weight | Excess<br>Weight | Portfolio<br>USD<br>Return | Index<br>USD<br>Return | Excess<br>Return | Allocation<br>Effect<br>(Local) | Selection<br>Effect<br>(Local) | Active<br>Contrib. | Passive<br>Contrib. | Total<br>Contrib. |
|------------------------|---------------------|-----------------|------------------|----------------------------|------------------------|------------------|---------------------------------|--------------------------------|--------------------|---------------------|-------------------|
| Energy                 | 5.5%                | 5.5%            | 0.0%             | -0.4%                      | -8.4%                  | 8.0%             |                                 | 0.0%                           | 0.0%               | -0.5%               | -0.5%             |
| Materials              | 4.3%                | 4.3%            | 0.0%             | 1.2%                       | -1.6%                  | 2.8%             |                                 | 0.0%                           | 0.0%               | -0.1%               | -0.1%             |
| Industrials            | 11.3%               | 11.3%           | 0.0%             | 7.2%                       | 7.3%                   | -0.2%            |                                 | 0.0%                           | 0.0%               | 0.7%                | 0.7%              |
| Consumer Discretionary | 9.2%                | 9.2%            | 0.0%             | 3.0%                       | -4.8%                  | 7.8%             |                                 | 0.0%                           | 0.0%               | -0.6%               | -0.6%             |
| Consumer Staples       | 2.6%                | 2.6%            | 0.0%             | 0.9%                       | -8.2%                  | 9.0%             |                                 | 0.0%                           | 0.0%               | -0.3%               | -0.3%             |
| Health Care            | 4.3%                | 4.3%            | 0.0%             | -5.1%                      | -5.0%                  | -0.1%            |                                 | 0.0%                           | 0.0%               | -0.3%               | -0.3%             |
| Financials             | 28.3%               | 28.3%           | 0.0%             | 6.2%                       | 5.3%                   | 1.0%             |                                 | 0.0%                           | 0.0%               | 1.1%                | 1.1%              |
| Information Technology | 11.5%               | 11.5%           | 0.0%             | 6.6%                       | 1.4%                   | 5.2%             |                                 | 0.0%                           | 0.0%               | 0.0%                | 0.0%              |
| Communication Services | 3.2%                | 3.2%            | 0.0%             | 4.7%                       | -7.6%                  | 12.3%            |                                 | 0.0%                           | 0.0%               | -0.3%               | -0.3%             |
| Utilities              | 7.3%                | 7.3%            | 0.0%             | 0.7%                       | 5.3%                   | -4.6%            |                                 | 0.0%                           | 0.0%               | 0.3%                | 0.3%              |
| Real Estate            | 12.5%               | 12.4%           | 0.1%             | 1.1%                       | 1.5%                   | -0.3%            |                                 | 0.0%                           | 0.0%               | 0.0%                | 0.0%              |
| Total                  |                     |                 |                  | 3.8%                       | 1.4%                   | 2.4%             |                                 | 0.0%                           | 0.0%               | 0.0%                | 0.0%              |

## NTGI Russell 2000 Value Performance Attribution vs. Russell 2000 Value

|                        | Total   | Selection | Allocation | Interaction |
|------------------------|---------|-----------|------------|-------------|
|                        | Effects | Effect    | Effect     | Effects     |
| Energy                 | 0.0%    | 0.0%      | 0.0%       | 0.0%        |
| Materials              | 0.0%    | 0.0%      | 0.0%       | 0.0%        |
| Industrials            | 0.1%    | 0.1%      | 0.0%       | 0.0%        |
| Consumer Discretionary | 0.0%    | 0.0%      | 0.0%       | 0.0%        |
| Consumer Staples       | 0.0%    | 0.0%      | 0.0%       | 0.0%        |
| Health Care            | 0.0%    | 0.0%      | 0.0%       | 0.0%        |
| Financials             | 0.0%    | 0.0%      | 0.0%       | 0.0%        |
| Information Technology | -0.1%   | -0.1%     | 0.0%       | 0.0%        |
| Communication Services | 0.0%    | 0.0%      | 0.0%       | 0.0%        |
| Utilities              | 0.0%    | 0.0%      | 0.0%       | 0.0%        |
| Real Estate            | 0.0%    | 0.0%      | 0.0%       | 0.0%        |
| Cash                   | 0.0%    | 0.0%      | 0.0%       | 0.0%        |
| Portfolio              | 0.0% =  | 0.0% +    | 0.0% +     | 0.0%        |

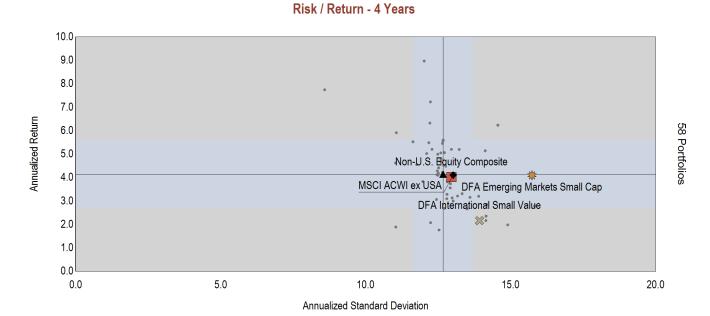
## Market Cap Attribution vs. Russell 2000 Value

|                              | Portfolio<br>Weight | Index<br>Weight | Excess<br>Weight | Portfolio<br>USD<br>Return | Index<br>USD<br>Return | Excess<br>USD<br>Return | Allocation<br>Effect<br>(Local) | Selection<br>Effect<br>(Local) | Active<br>Contrib. | Passive<br>Contrib. | Total<br>Contrib. |
|------------------------------|---------------------|-----------------|------------------|----------------------------|------------------------|-------------------------|---------------------------------|--------------------------------|--------------------|---------------------|-------------------|
| Market Cap. Quintile (\$Bil) |                     |                 |                  |                            |                        |                         |                                 |                                |                    |                     |                   |
| 1) Above 3.11                | 19.9%               | 19.9%           | 0.0%             | 4.2%                       | 3.2%                   | 1.1%                    | -0.4%                           | 0.0%                           | -0.5%              | 0.3%                | -0.1%             |
| 2) 2.23 - 3.11               | 20.2%               | 20.1%           | 0.0%             | 5.3%                       | 3.1%                   | 2.2%                    | -1.9%                           | 1.4%                           | -0.5%              | 0.3%                | -0.1%             |
| 3) 1.54 - 2.23               | 20.0%               | 20.0%           | 0.0%             | 3.5%                       | 1.2%                   | 2.3%                    | 0.0%                            | -2.0%                          | -1.9%              | 0.0%                | -2.0%             |
| 4) 0.85 - 1.54               | 20.0%               | 20.1%           | -0.1%            | 2.9%                       | 0.6%                   | 2.3%                    | -3.4%                           | 1.7%                           | -1.7%              | -0.2%               | -1.8%             |
| 5) 0.00 - 0.85               | 19.9%               | 19.9%           | 0.0%             | 2.9%                       | -1.0%                  | 3.9%                    | 1.4%                            | 5.5%                           | 6.9%               | -0.5%               | 6.4%              |
| Total                        |                     |                 |                  | 3.8%                       | 1.4%                   | 2.4%                    | -4.2%                           | 6.6%                           | 2.4%               | 0.0%                | 2.4%              |

# Characteristics

Market Value: \$499.1 Million and 22.4% of Fund

As of June 30, 2019



# **Characteristics**

|                                 | Portfolio | MSCI<br>ACWI ex<br>USA |
|---------------------------------|-----------|------------------------|
| Number of Holdings              | 8,259     | 2,204                  |
| Weighted Avg. Market Cap. (\$B) | 35.7      | 65.4                   |
| Median Market Cap. (\$B)        | 0.4       | 7.6                    |
| Price To Earnings               | 13.3      | 15.0                   |
| Price To Book                   | 2.0       | 2.3                    |
| Price To Sales                  | 0.8       | 1.2                    |
| Return on Equity (%)            | 11.8      | 15.3                   |
| Yield (%)                       | 3.2       | 3.2                    |
| Beta                            | 1.0       | 1.0                    |
| R-Squared                       | 1.0       | 1.0                    |

| Region                 | % of<br>Total | % of<br>Bench |
|------------------------|---------------|---------------|
| North America ex U.S.  | 1.8%          | 6.8%          |
| United States          | 0.4%          | 0.0%          |
| Europe Ex U.K.         | 28.9%         | 30.8%         |
| United Kingdom         | 9.4%          | 11.2%         |
| Pacific Basin Ex Japan | 12.1%         | 8.6%          |
| Japan                  | 15.9%         | 15.9%         |
| Emerging Markets       | 30.9%         | 25.6%         |
| Other                  | 0.5%          | 1.1%          |
| Total                  | 100.0%        | 100.0%        |
|                        |               |               |

#### **Characteristics**

|                                     | Portfolio | MSCI<br>ACWI ex<br>USA |
|-------------------------------------|-----------|------------------------|
| INDUSTRY SECTOR DISTRIBUTION (% Equ | uity)     |                        |
| Energy                              | 6.4       | 7.1                    |
| Materials                           | 11.0      | 7.7                    |
| Industrials                         | 15.4      | 12.0                   |
| Consumer Discretionary              | 11.7      | 11.3                   |
| Consumer Staples                    | 8.5       | 9.8                    |
| Health Care                         | 6.8       | 8.3                    |
| Financials                          | 18.7      | 21.9                   |
| Information Technology              | 8.6       | 8.5                    |
| Communication Services              | 4.8       | 6.9                    |
| Utilities                           | 3.4       | 3.4                    |
| Real Estate                         | 4.1       | 3.2                    |
| Unclassified                        | 0.2       | 0.0                    |

## **Market Capitalization**

|                           | Small<br>Cap | Mid<br>Cap | Large<br>Cap |
|---------------------------|--------------|------------|--------------|
| Non-U.S. Equity Composite | 42.1%        | 15.2%      | 42.7%        |
| MSCI ACWI ex USA          | 6.2%         | 19.9%      | 73.8%        |

# Attribution

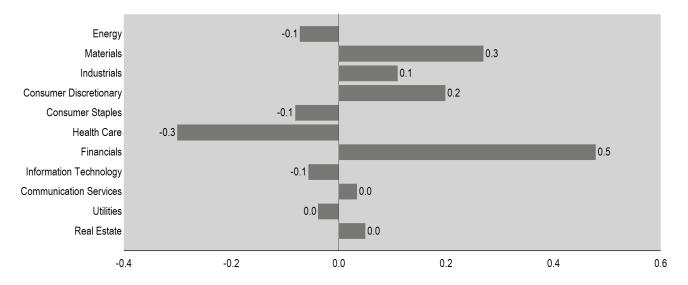
Market Value: \$499.1 Million and 22.4% of Fund

As of June 30, 2019

Americas Europe Asia/Pacific Other Total -1.0% -0.8% -0.6% -0.2% 0.0% 0.2% 0.4% 0.6% -0.4% Selection Effect Allocation Effect Currency Effect Interaction Effect Total Effects

Non-U.S. Equity Composite Performance Attribution vs. MSCI ACWI ex USA

Active Contribution vs. MSCI ACWI ex USA



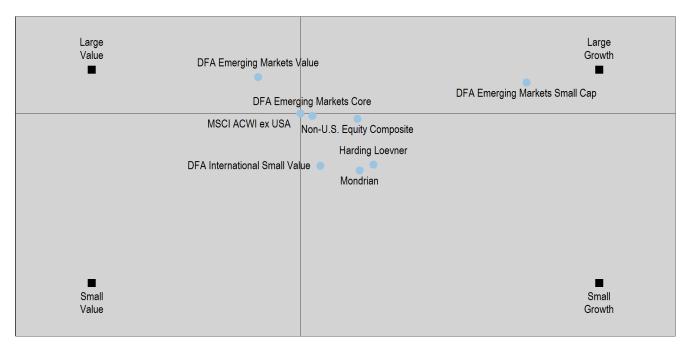
Non-U.S. Equity Composite

# Market Cap Attribution vs. MSCI ACWI ex USA

|                              | Portfolio<br>Weight | Index<br>Weight | Excess<br>Weight | Portfolio<br>USD<br>Return | Index<br>USD<br>Return | Excess<br>USD<br>Return | Allocation<br>Effect<br>(Local) | Selection<br>Effect<br>(Local) | Active<br>Contrib. | Passive<br>Contrib. | Total<br>Contrib. |
|------------------------------|---------------------|-----------------|------------------|----------------------------|------------------------|-------------------------|---------------------------------|--------------------------------|--------------------|---------------------|-------------------|
| Market Cap. Quintile (\$Bil) |                     |                 |                  |                            |                        |                         |                                 |                                |                    |                     |                   |
| 1) Above 99.69               | 8.2%                | 19.6%           | -11.4%           | 1.3%                       | 3.6%                   | -2.3%                   | 0.1%                            | 0.0%                           | 0.0%               | 0.1%                | 0.1%              |
| 2) 46.28 - 99.69             | 10.1%               | 20.4%           | -10.3%           | 3.3%                       | 5.5%                   | -2.3%                   | -0.2%                           | 0.0%                           | -0.2%              | 0.5%                | 0.3%              |
| 3) 22.83 - 46.28             | 10.0%               | 20.0%           | -9.9%            | 2.5%                       | 3.4%                   | -0.8%                   | -0.1%                           | 0.0%                           | -0.1%              | 0.0%                | -0.1%             |
| 4) 10.43 - 22.83             | 12.9%               | 20.1%           | -7.2%            | 2.9%                       | 2.2%                   | 0.6%                    | 0.0%                            | 0.2%                           | 0.3%               | -0.2%               | 0.1%              |
| 5) 0.00 - 10.43              | 58.8%               | 19.9%           | 38.9%            | 2.2%                       | 1.1%                   | 1.0%                    | -0.8%                           | 0.0%                           | -0.8%              | -0.4%               | -1.2%             |
| Total                        |                     |                 |                  | 2.3%                       | 3.2%                   | -0.8%                   | -1.0%                           | 0.2%                           | -0.8%              | 0.0%                | -0.8%             |

As of June 30, 2019

# **Equity Style Map**



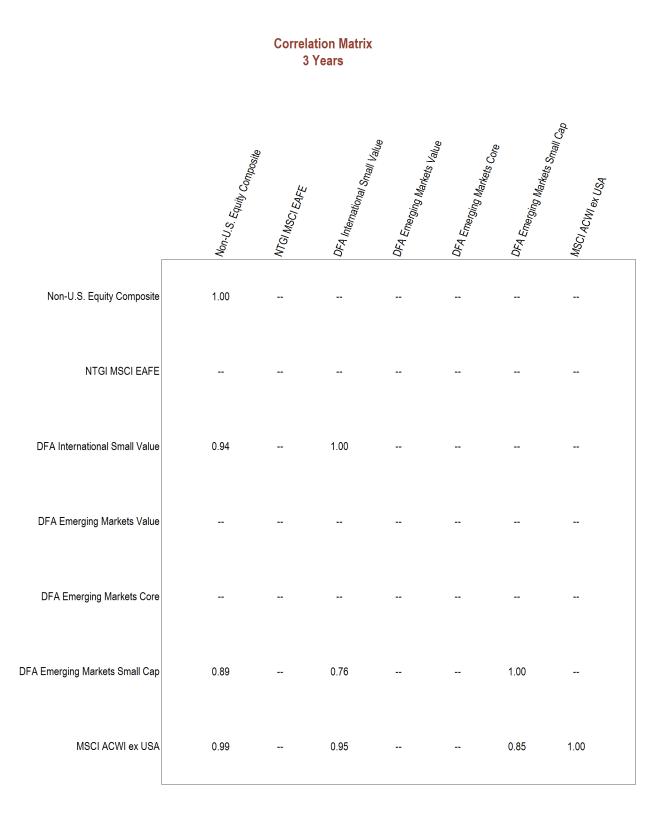
## **Common Holdings Matrix**

|                                |    | N SCI EAFE | Dr. | of A International Small Value |       | or A Emerging Markets Value |       | of A Emerging Markets Core |       | et A Emerging Markets Small Cap |
|--------------------------------|----|------------|-----|--------------------------------|-------|-----------------------------|-------|----------------------------|-------|---------------------------------|
|                                | #  | %          | #   | %                              | #     | %                           | #     | %                          | #     | %                               |
| NTGI MSCI EAFE                 |    |            | 40  | 4                              | 0     | 0                           | 0     | 0                          | 0     | 0                               |
| DFA International Small Value  | 40 | 1          |     |                                | 0     | 0                           | 1     | 0                          | 0     | 0                               |
| DFA Emerging Markets Value     | 0  | 0          | 0   | 0                              |       |                             | 2,451 | 48                         | 2,080 | 50                              |
| DFA Emerging Markets Core      | 0  | 0          | 1   | 0                              | 2,451 | 100                         |       |                            | 3,947 | 98                              |
| DFA Emerging Markets Small Cap | 0  | 0          | 0   | 0                              | 2,080 | 25                          | 3,947 | 31                         |       |                                 |



As of June 30, 2019

Market Value: \$499.1 Million and 22.4% of Fund

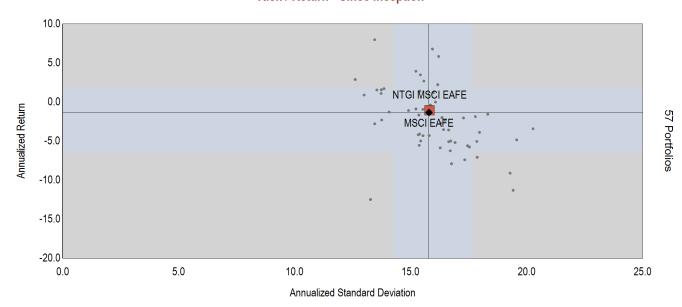




# As of June 30, 2019

# Characteristics

Market Value: \$224.7 Million and 10.1% of Fund



## Characteristics

|                                 | Portfolio | MSCI<br>EAFE |
|---------------------------------|-----------|--------------|
| Number of Holdings              | 997       | 922          |
| Weighted Avg. Market Cap. (\$B) | 61.6      | 61.2         |
| Median Market Cap. (\$B)        | 9.7       | 10.1         |
| Price To Earnings               | 15.5      | 15.5         |
| Price To Book                   | 2.3       | 2.3          |
| Price To Sales                  | 1.1       | 1.1          |
| Return on Equity (%)            | 14.6      | 14.6         |
| Yield (%)                       | 3.3       | 3.4          |
| Beta                            |           | 1.0          |
| R-Squared                       |           | 1.0          |

| Region                 | % of<br>Total | % of<br>Bench |
|------------------------|---------------|---------------|
| North America ex U.S.  | 0.0%          | 0.0%          |
| United States          | 0.6%          | 0.0%          |
| Europe Ex U.K.         | 47.4%         | 46.1%         |
| United Kingdom         | 13.6%         | 16.7%         |
| Pacific Basin Ex Japan | 13.9%         | 12.8%         |
| Japan                  | 23.9%         | 23.8%         |
| Emerging Markets       | 0.2%          | 0.0%          |
| Other                  | 0.5%          | 0.6%          |
| Total                  | 100.0%        | 100.0%        |

## Characteristics

|                                 | Portfolio | MSCI<br>EAFE |
|---------------------------------|-----------|--------------|
| INDUSTRY SECTOR DISTRIBUTION (% | Equity)   |              |
| Energy                          | 5.4       | 5.5          |
| Materials                       | 6.9       | 7.4          |
| Industrials                     | 14.8      | 14.8         |
| Consumer Discretionary          | 11.1      | 11.1         |
| Consumer Staples                | 11.9      | 11.7         |
| Health Care                     | 11.1      | 11.2         |
| Financials                      | 18.8      | 18.9         |
| Information Technology          | 6.6       | 6.7          |
| Communication Services          | 5.3       | 5.4          |
| Utilities                       | 3.7       | 3.7          |
| Real Estate                     | 3.5       | 3.6          |
| Unclassified                    | 0.3       | 0.0          |
|                                 |           |              |

## Market Capitalization

|                | Small<br>Cap | Mid<br>Cap | Large<br>Cap |
|----------------|--------------|------------|--------------|
| NTGI MSCI EAFE | 5.8%         | 21.3%      | 72.9%        |
| MSCI EAFE      | 5.7%         | 20.7%      | 73.6%        |

# Risk / Return - Since Inception

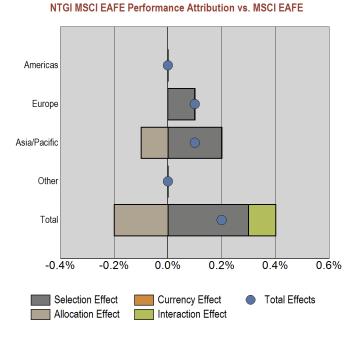


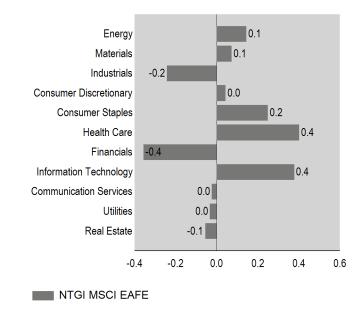
# Attribution

As of June 30, 2019

Market Value: \$224.7 Million and 10.1% of Fund

## **Active Contribution**





# Performance By Characteristic

|                              | Portfolio<br>Weight | Index<br>Weight | Excess<br>Weight | Portfolio<br>USD<br>Return | Index<br>USD<br>Return | Excess<br>USD<br>Return | Allocation<br>Effect<br>(Local) | Selection<br>Effect<br>(Local) | Active<br>Contrib. | Passive<br>Contrib. | Total<br>Contrib. |
|------------------------------|---------------------|-----------------|------------------|----------------------------|------------------------|-------------------------|---------------------------------|--------------------------------|--------------------|---------------------|-------------------|
| Market Cap. Quintile (\$Bil) |                     |                 |                  |                            |                        |                         |                                 |                                |                    |                     |                   |
| 1) Above 99.69               | 13.5%               | 19.5%           | -5.9%            | 1.1%                       | 5.7%                   | -4.7%                   | -0.2%                           | 0.1%                           | -0.1%              | 0.4%                | 0.2%              |
| 2) 49.00 - 99.69             | 16.9%               | 20.5%           | -3.6%            | 3.7%                       | 5.4%                   | -1.7%                   | 0.1%                            | -0.1%                          | -0.1%              | 0.3%                | 0.2%              |
| 3) 26.24 - 49.00             | 16.7%               | 20.0%           | -3.3%            | 3.5%                       | 3.1%                   | 0.3%                    | 0.1%                            | 0.0%                           | 0.1%               | -0.2%               | -0.1%             |
| 4) 12.21 - 26.24             | 18.2%               | 20.0%           | -1.8%            | 2.8%                       | 4.0%                   | -1.2%                   | 0.0%                            | 0.2%                           | 0.2%               | 0.0%                | 0.2%              |
| 5) 0.00 - 12.21              | 34.6%               | 20.0%           | 14.6%            | 3.6%                       | 1.4%                   | 2.2%                    | 0.2%                            | -1.0%                          | -0.8%              | -0.5%               | -1.3%             |

# DFA International Small Value

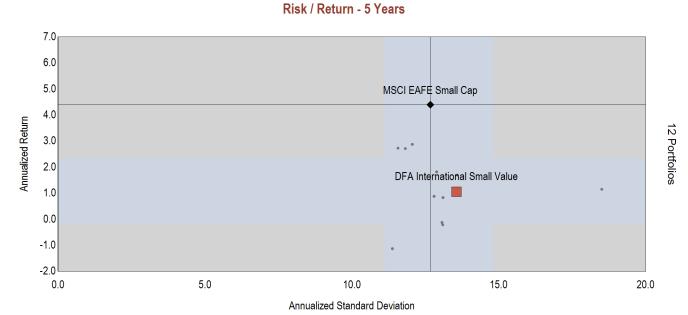
## As of June 30, 2019

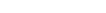
# Characteristics

Market Value: \$100.8 Million and 4.5% of Fund

% of

% of





#### **Characteristics**

|                                 | Portfolio | MSCI<br>EAFE<br>Small Cap |
|---------------------------------|-----------|---------------------------|
| Number of Holdings              | 2,144     | 2,340                     |
| Weighted Avg. Market Cap. (\$B) | 1.9       | 2.5                       |
| Median Market Cap. (\$B)        | 0.4       | 1.0                       |
| Price To Earnings               | 11.7      | 15.1                      |
| Price To Book                   | 1.4       | 2.1                       |
| Price To Sales                  | 0.5       | 0.9                       |
| Return on Equity (%)            | 6.7       | 12.7                      |
| Yield (%)                       | 3.2       | 2.8                       |
| Beta                            | 1.0       | 1.0                       |
| R-Squared                       | 0.9       | 1.0                       |

#### Region Total Bench North America ex U.S. 8.9% 0.0% United States 0.2% 0.0% Europe Ex U.K. 36.9% 37.6% United Kingdom 17.9% 16.2% Pacific Basin Ex Japan 11.8% 12.7% Japan 25.2% 30.2% 0.0% 0.0% **Emerging Markets** Other 0.8% 1.6% Total 100.0% 100.0%

#### Characteristics

|                                    | Portfolio | MSCI<br>EAFE<br>Small Cap |
|------------------------------------|-----------|---------------------------|
| INDUSTRY SECTOR DISTRIBUTION (% Eq | luity)    |                           |
| Energy                             | 6.9       | 2.7                       |
| Materials                          | 16.4      | 8.6                       |
| Industrials                        | 24.0      | 21.5                      |
| Consumer Discretionary             | 14.1      | 12.4                      |
| Consumer Staples                   | 4.8       | 6.4                       |
| Health Care                        | 2.1       | 7.6                       |
| Financials                         | 19.3      | 10.9                      |
| Information Technology             | 4.3       | 9.5                       |
| Communication Services             | 2.6       | 5.1                       |
| Utilities                          | 1.9       | 2.4                       |
| Real Estate                        | 3.5       | 13.0                      |
| Unclassified                       | 0.1       | 0.0                       |

## **Market Capitalization**

|                               | Small<br>Cap | Mid<br>Cap | Large<br>Cap |
|-------------------------------|--------------|------------|--------------|
| DFA International Small Value | 97.4%        | 2.6%       | 0.0%         |
| MSCI EAFE Small Cap           | 96.1%        | 3.9%       | 0.0%         |

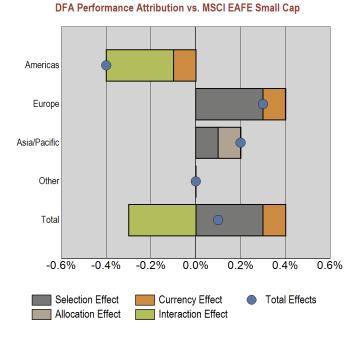
# DFA International Small Value

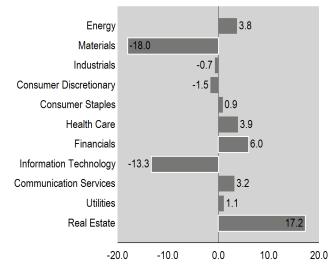
As of June 30, 2019

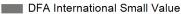
# Attribution

Market Value: \$100.8 Million and 4.5% of Fund

#### **Active Contribution**







## Performance By Characteristic

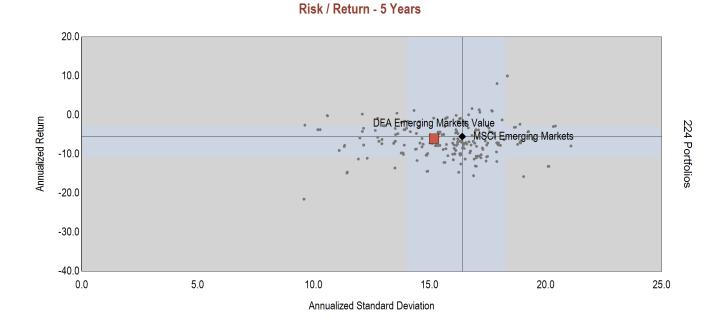
|                              | Portfolio<br>Weight | Index<br>Weight | Excess<br>Weight | Portfolio<br>USD<br>Return | Index<br>USD<br>Return | Excess<br>USD<br>Return | Allocation<br>Effect<br>(Local) | Selection<br>Effect<br>(Local) | Active<br>Contrib. | Passive<br>Contrib. | Total<br>Contrib. |
|------------------------------|---------------------|-----------------|------------------|----------------------------|------------------------|-------------------------|---------------------------------|--------------------------------|--------------------|---------------------|-------------------|
| Market Cap. Quintile (\$Bil) |                     |                 |                  |                            |                        |                         |                                 |                                |                    |                     |                   |
| 1) Above 3.94                | 11.8%               | 20.0%           | -8.2%            | 2.6%                       | 3.6%                   | -1.1%                   | 0.5%                            | 0.4%                           | 0.8%               | 0.3%                | 1.2%              |
| 2) 2.72 - 3.94               | 12.6%               | 20.0%           | -7.4%            | 6.3%                       | 3.4%                   | 2.9%                    | -0.7%                           | 3.9%                           | 3.2%               | 0.3%                | 3.5%              |
| 3) 1.74 - 2.72               | 17.1%               | 20.1%           | -3.0%            | 2.6%                       | 1.2%                   | 1.5%                    | 0.0%                            | -0.5%                          | -0.5%              | -0.2%               | -0.7%             |
| 4) 1.02 - 1.74               | 22.3%               | 20.0%           | 2.2%             | 2.4%                       | 1.5%                   | 0.9%                    | -0.1%                           | -1.1%                          | -1.2%              | -0.1%               | -1.3%             |
| 5) 0.00 - 1.02               | 36.1%               | 19.9%           | 16.3%            | 3.0%                       | 0.4%                   | 2.5%                    | -0.1%                           | -1.1%                          | -1.2%              | -0.3%               | -1.5%             |

# DFA Emerging Markets Value

# Characteristics

Market Value: \$52.9 Million and 2.4% of Fund

As of June 30, 2019



#### **Characteristics**

|                                 | Portfolio | MSCI<br>Emerging<br>Markets |
|---------------------------------|-----------|-----------------------------|
| Number of Holdings              | 2,492     | 1,193                       |
| Weighted Avg. Market Cap. (\$B) | 27.0      | 81.7                        |
| Median Market Cap. (\$B)        | 0.4       | 5.6                         |
| Price To Earnings               | 10.7      | 14.1                        |
| Price To Book                   | 1.5       | 2.4                         |
| Price To Sales                  | 0.6       | 1.2                         |
| Return on Equity (%)            | 9.7       | 17.0                        |
| Yield (%)                       | 3.4       | 2.8                         |
| Beta                            |           | 1.0                         |
| R-Squared                       |           | 1.0                         |

| Region                  | % of<br>Total | % of<br>Bench |
|-------------------------|---------------|---------------|
| EM Asia                 | 65.5%         | 72.3%         |
| EM Latin America        | 13.9%         | 11.9%         |
| EM Europe & Middle East | 5.2%          | 6.0%          |
| EM Africa               | 7.2%          | 6.1%          |
| Other                   | 8.2%          | 3.7%          |
| Total                   | 100.0%        | 100.0%        |

#### Characteristics

|                                    | Portfolio | MSCI<br>Emerging<br>Markets |
|------------------------------------|-----------|-----------------------------|
| INDUSTRY SECTOR DISTRIBUTION (% Eq | luity)    |                             |
| Energy                             | 15.7      | 7.9                         |
| Materials                          | 16.2      | 7.7                         |
| Industrials                        | 9.1       | 5.5                         |
| Consumer Discretionary             | 7.1       | 13.5                        |
| Consumer Staples                   | 3.0       | 6.4                         |
| Health Care                        | 1.2       | 2.6                         |
| Financials                         | 29.5      | 25.2                        |
| Information Technology             | 7.7       | 13.8                        |
| Communication Services             | 4.8       | 11.5                        |
| Utilities                          | 1.5       | 2.7                         |
| Real Estate                        | 4.1       | 3.0                         |
| Unclassified                       | 0.1       | 0.0                         |

# Market CapitalizationSmall<br/>CapMid<br/>CapLarge<br/>CapDFA Emerging Markets Value26.7%21.3%52.1%MSCI Emerging Markets5.0%18.1%76.9%

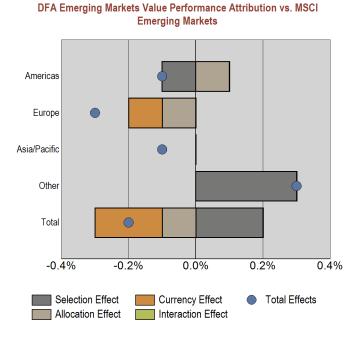
# DFA Emerging Markets Value

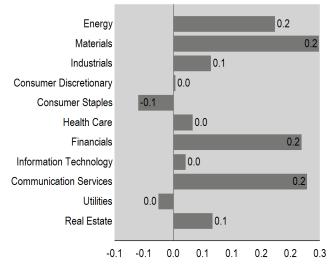
As of June 30, 2019

# Attribution

Market Value: \$52.9 Million and 2.4% of Fund

#### **Active Contribution**





## DFA Emerging Markets Value

## Performance By Characteristic

|                              | Portfolio<br>Weight | Index<br>Weight | Excess<br>Weight | Portfolio<br>USD<br>Return | Index<br>USD<br>Return | Excess<br>USD<br>Return | Allocation<br>Effect<br>(Local) | Selection<br>Effect<br>(Local) | Active<br>Contrib. | Passive<br>Contrib. | Total<br>Contrib. |
|------------------------------|---------------------|-----------------|------------------|----------------------------|------------------------|-------------------------|---------------------------------|--------------------------------|--------------------|---------------------|-------------------|
| Market Cap. Quintile (\$Bil) |                     |                 |                  |                            |                        |                         |                                 |                                |                    |                     |                   |
| 1) Above 159.64              | 4.2%                | 19.5%           | -15.3%           | -1.3%                      | -1.8%                  | 0.5%                    | 0.0%                            | 0.0%                           | 0.0%               | -0.5%               | -0.5%             |
| 2) 35.87 - 159.64            | 18.5%               | 20.6%           | -2.1%            | -0.3%                      | 3.4%                   | -3.7%                   | 0.0%                            | 0.0%                           | 0.0%               | 0.5%                | 0.5%              |
| 3) 14.62 - 35.87             | 15.7%               | 20.0%           | -4.3%            | 3.6%                       | 1.8%                   | 1.8%                    | 0.0%                            | 0.0%                           | 0.0%               | 0.2%                | 0.2%              |
| 4) 6.45 - 14.62              | 19.1%               | 20.1%           | -1.0%            | 1.8%                       | 1.0%                   | 0.7%                    | 0.0%                            | 0.0%                           | 0.0%               | 0.0%                | 0.0%              |
| 5) 0.00 - 6.45               | 42.5%               | 19.9%           | 22.6%            | 0.1%                       | -0.4%                  | 0.5%                    | 0.0%                            | 0.0%                           | 0.0%               | -0.2%               | -0.2%             |
| Total                        |                     |                 |                  | 0.8%                       | 0.8%                   | 0.0%                    | 0.0%                            | 0.0%                           | 0.0%               | 0.0%                | 0.0%              |

# DFA Emerging Markets Core

# Characteristics

Market Value: \$52.0 Million and 2.3% of Fund

As of June 30, 2019



#### **Characteristics**

|                                 | Portfolio | MSCI<br>Emerging<br>Markets |
|---------------------------------|-----------|-----------------------------|
| Number of Holdings              | 4,926     | 1,193                       |
| Weighted Avg. Market Cap. (\$B) | 44.3      | 81.7                        |
| Median Market Cap. (\$B)        | 0.4       | 5.6                         |
| Price To Earnings               | 13.0      | 14.1                        |
| Price To Book                   | 2.1       | 2.4                         |
| Price To Sales                  | 0.9       | 1.2                         |
| Return on Equity (%)            | 15.0      | 17.0                        |
| Yield (%)                       | 3.0       | 2.8                         |
| Beta                            |           | 1.0                         |
| R-Squared                       |           | 1.0                         |

| Region                  | % of<br>Total | % of<br>Bench |
|-------------------------|---------------|---------------|
| EM Asia                 | 63.0%         | 72.3%         |
| EM Latin America        | 14.8%         | 11.9%         |
| EM Europe & Middle East | 4.7%          | 6.0%          |
| EM Africa               | 7.3%          | 6.1%          |
| Other                   | 10.3%         | 3.7%          |
| Total                   | 100.0%        | 100.0%        |

#### Characteristics

|                                    | Portfolio | MSCI<br>Emerging<br>Markets |
|------------------------------------|-----------|-----------------------------|
| INDUSTRY SECTOR DISTRIBUTION (% Eq | luity)    |                             |
| Energy                             | 7.0       | 7.9                         |
| Materials                          | 11.0      | 7.7                         |
| Industrials                        | 9.0       | 5.5                         |
| Consumer Discretionary             | 10.6      | 13.5                        |
| Consumer Staples                   | 7.2       | 6.4                         |
| Health Care                        | 3.0       | 2.6                         |
| Financials                         | 19.2      | 25.2                        |
| Information Technology             | 17.7      | 13.8                        |
| Communication Services             | 7.7       | 11.5                        |
| Utilities                          | 3.5       | 2.7                         |
| Real Estate                        | 4.0       | 3.0                         |
| Unclassified                       | 0.1       | 0.0                         |

# Market Capitalization

|                           | Small<br>Cap | Mid<br>Cap | Large<br>Cap |
|---------------------------|--------------|------------|--------------|
| DFA Emerging Markets Core | 31.3%        | 20.2%      | 48.6%        |
| MSCI Emerging Markets     | 5.0%         | 18.1%      | 76.9%        |

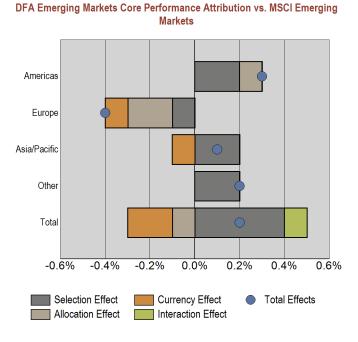
# DFA Emerging Markets Core

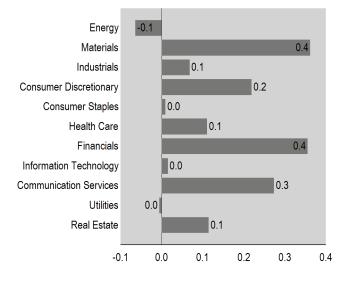
As of June 30, 2019

# Attribution

Market Value: \$52.0 Million and 2.3% of Fund

#### **Active Contribution**





#### DFA Emerging Markets Core

## **Performance By Characteristic**

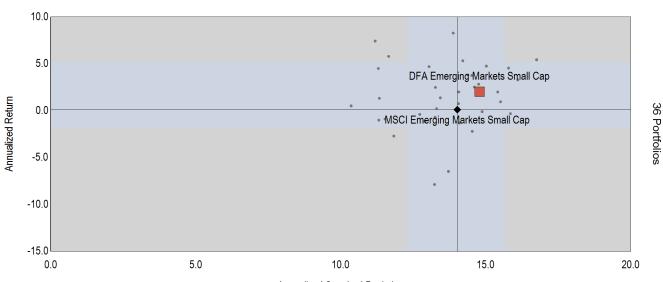
|                              | Portfolio<br>Weight | Index<br>Weight | Excess<br>Weight | Portfolio<br>USD<br>Return | Index<br>USD<br>Return | Excess<br>USD<br>Return | Allocation<br>Effect<br>(Local) | Selection<br>Effect<br>(Local) | Active<br>Contrib. | Passive<br>Contrib. | Total<br>Contrib. |
|------------------------------|---------------------|-----------------|------------------|----------------------------|------------------------|-------------------------|---------------------------------|--------------------------------|--------------------|---------------------|-------------------|
| Market Cap. Quintile (\$Bil) |                     |                 |                  |                            |                        |                         |                                 |                                |                    |                     |                   |
| 1) Above 159.64              | 10.9%               | 19.5%           | -8.6%            | 2.6%                       | -1.8%                  | 4.4%                    | 0.1%                            | 0.0%                           | 0.1%               | -0.5%               | -0.5%             |
| 2) 35.87 - 159.64            | 13.1%               | 20.6%           | -7.5%            | 1.5%                       | 3.4%                   | -2.0%                   | 0.0%                            | 0.1%                           | 0.1%               | 0.5%                | 0.6%              |
| 3) 14.62 - 35.87             | 12.9%               | 20.0%           | -7.1%            | 2.5%                       | 1.8%                   | 0.7%                    | 0.0%                            | 0.0%                           | 0.0%               | 0.2%                | 0.2%              |
| 4) 6.45 - 14.62              | 15.7%               | 20.1%           | -4.4%            | 1.6%                       | 1.0%                   | 0.6%                    | 0.0%                            | 0.0%                           | 0.0%               | 0.0%                | 0.0%              |
| 5) 0.00 - 6.45               | 47.4%               | 19.9%           | 27.6%            | 0.5%                       | -0.4%                  | 0.8%                    | 0.2%                            | 0.1%                           | 0.3%               | -0.2%               | 0.1%              |
| Total                        |                     |                 |                  | 1.3%                       | 0.8%                   | 0.4%                    | 0.3%                            | 0.2%                           | 0.4%               | 0.0%                | 0.4%              |

# DFA Emerging Markets Small Cap

# Characteristics

Market Value: \$67.1 Million and 3.0% of Fund

As of June 30, 2019



# Annualized Standard Deviation

#### Characteristics

|                                 | Portfolio | MSCI<br>Emerging<br>Markets<br>Small Cap |
|---------------------------------|-----------|--|
| Number of Holdings              | 4,187     | 1,625                                    |
| Weighted Avg. Market Cap. (\$B) | 1.4       | 1.3                                      |
| Median Market Cap. (\$B)        | 0.3       | 0.7                                      |
| Price To Earnings               | 12.7      | 13.4                                     |
| Price To Book                   | 2.0       | 2.2                                      |
| Price To Sales                  | 0.7       | 0.8                                      |
| Return on Equity (%)            | 12.1      | 12.7                                     |
| Yield (%)                       | 2.8       | 2.7                                      |
| Beta                            | 1.1       | 1.0                                      |
| R-Squared                       | 1.0       | 1.0                                      |

## Characteristics

|                                    | Portfolio | MSCI<br>Emerging<br>Markets<br>Small Cap |
|------------------------------------|-----------|--|
| INDUSTRY SECTOR DISTRIBUTION (% Ed | quity)    |  |
| Energy                             | 1.4       | 2.2                                      |
| Materials                          | 12.5      | 11.9                                     |
| Industrials                        | 14.9      | 14.5                                     |
| Consumer Discretionary             | 15.0      | 13.9                                     |
| Consumer Staples                   | 7.8       | 6.6                                      |
| Health Care                        | 6.7       | 7.9                                      |
| Financials                         | 8.7       | 10.9                                     |
| Information Technology             | 15.4      | 14.6                                     |
| Communication Services             | 3.8       | 4.1                                      |
| Utilities                          | 6.1       | 4.9                                      |
| Real Estate                        | 7.4       | 8.3                                      |
| Unclassified                       | 0.3       | 0.0                                      |

| Region                  | % of<br>Total | % of<br>Bench |
|-------------------------|---------------|---------------|
| EM Asia                 | 60.4%         | 72.8%         |
| EM Latin America        | 15.9%         | 12.5%         |
| EM Europe & Middle East | 2.5%          | 3.6%          |
| EM Africa               | 7.4%          | 6.2%          |
| Other                   | 13.9%         | 5.0%          |
| Total                   | 100.0%        | 100.0%        |

| Market Capitaliza               | ation        |            |              |
|---------------------------------|--------------|------------|--------------|
|                                 | Small<br>Cap | Mid<br>Cap | Large<br>Cap |
| DFA Emerging Markets Small Cap  | 88.7%        | 11.3%      | 0.0%         |
| MSCI Emerging Markets Small Cap | 93.7%        | 6.3%       | 0.0%         |

# Risk / Return - 2 Years

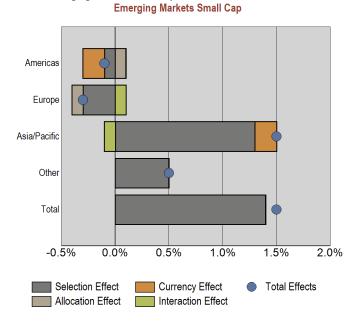
# DFA Emerging Markets Small Cap

As of June 30, 2019

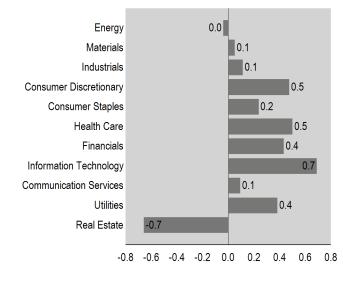
# Attribution

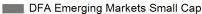
Market Value: \$67.1 Million and 3.0% of Fund

#### **Active Contribution**



DFA Emerging Markets Small Cap Performance Attribution vs. MSCI





#### **Performance By Characteristic**

|                              | Portfolio<br>Weight | Index<br>Weight | Excess<br>Weight | Portfolio<br>USD<br>Return | Index<br>USD<br>Return | Excess<br>USD<br>Return | Allocation<br>Effect<br>(Local) | Selection<br>Effect<br>(Local) | Active<br>Contrib. | Passive<br>Contrib. | Total<br>Contrib. |
|------------------------------|---------------------|-----------------|------------------|----------------------------|------------------------|-------------------------|---------------------------------|--------------------------------|--------------------|---------------------|-------------------|
| Market Cap. Quintile (\$Bil) |                     |                 |                  |                            |                        |                         |                                 |                                |                    |                     |                   |
| 1) Above 1.82                | 27.1%               | 20.0%           | 7.0%             | 1.1%                       | 1.8%                   | -0.8%                   | -0.3%                           | 1.3%                           | 1.0%               | 0.5%                | 1.6%              |
| 2) 1.26 - 1.82               | 11.8%               | 20.1%           | -8.3%            | -0.2%                      | 1.5%                   | -1.7%                   | 0.0%                            | 0.1%                           | 0.1%               | 0.5%                | 0.5%              |
| 3) 0.88 - 1.26               | 12.8%               | 20.1%           | -7.3%            | 0.9%                       | -0.4%                  | 1.3%                    | -0.1%                           | 0.3%                           | 0.2%               | 0.1%                | 0.3%              |
| 4) 0.56 - 0.88               | 14.7%               | 20.1%           | -5.3%            | 0.1%                       | -2.2%                  | 2.3%                    | -0.1%                           | 0.0%                           | -0.1%              | -0.3%               | -0.4%             |
| 5) 0.00 - 0.56               | 33.6%               | 19.7%           | 13.9%            | 0.9%                       | -4.9%                  | 5.8%                    | 0.2%                            | 0.1%                           | 0.3%               | -0.8%               | -0.5%             |
| Total                        |                     |                 |                  | 0.7%                       | -0.8%                  | 1.5%                    | -0.2%                           | 1.7%                           | 1.5%               | 0.0%                | 1.5%              |

# Characteristics

#### Market Value: \$111.6 Million and 5.0% of Fund

| Manager: | AQR Capital Management |
|----------|------------------------|

 Product:
 Global Risk Premium Strategy AUM: \$13,312.23 MM 6/30/2017

 Strategy:
 Hedge Funds - Risk Parity

#### Date as of: Mar 31st, 2019 Benchmark 1: 60% MSCI World/40% BarCap Aggregate Benchmark 2:

#### Investment Strategy:

AQR has one of the longest active track records in the risk parity space, which includes 2008. The GRP-EL ("enhanced liquidity") product does not include exposure to credit spreads and as a result has better liquidity terms. AQR's approach to risk parity includes a very active monitoring process that reduces exposure to asset classes as the volatility increases. AQR does this to help maintain the 10% volatility target they have set for the fund. As a result, exposures in this fund typically fluctuate more than peers.

#### Monthly Returns: (Net of Fees)

|      | Jan   | Feb    | Mar    | Apr   | May    | Jun    | Jul    | Aug    | Sep    | Oct    | Nov    | Dec    | YTD    |
|------|-------|--------|--------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 2019 | 5.46% | 1.08%  | 3.22%  |       |        |        |        |        |        |        |        |        | 10.03% |
| 2018 | 0.26% | -2.82% | 0.48%  | 0.71% | 2.68%  | -1.10% | -0.51% | 1.16%  | -0.66% | -3.98% | 0.14%  | -2.30% | -5.95% |
| 2017 | 0.90% | 3.04%  | -1.15% | 0.99% | 0.87%  | -1.76% | 2.36%  | 1.89%  | -0.39% | 2.67%  | 0.48%  | 1.45%  | 11.83% |
| 2016 | 0.33% | 1.26%  | 2.94%  | 1.76% | 0.87%  | 3.94%  | 0.31%  | -0.38% | 1.40%  | -2.29% | -1.41% | 1.74%  | 10.80% |
| 2015 | 2.07% | 1.21%  | -0.55% | 1.85% | -0.96% | -2.54% | -2.14% | -5.04% | -0.17% | 1.81%  | -1.96% | -3.07% | -9.36% |
| 2014 | 1.46% | 4.05%  | -0.11% | 1.78% | 2.84%  | 1.80%  | -1.67% | 2.60%  | -4.11% | 0.80%  | 0.38%  | -2.76% | 6.94%  |

#### Growth of \$1000 Since Inception \$2,000 \$1,500 \$1,000 \$500 \$0 Oct-11 Oct-13 Oct-15 Oct-17 Manager \_\_\_\_\_\_\_\_OW MSCI World/40% BarCap Aggregate

| Trailing Returns                    |      |      | YTD    | 3MO    | 1YR    | 3YR    | 5YR   | 10YR   | INCEPT |        |        |
|-------------------------------------|------|------|--------|--------|--------|--------|-------|--------|--------|--------|--------|
| Manager                             |      |      | 10.03% | 10.03% | 5.70%  | 7.03%  | 3.34% |        | 3.79%  |        |        |
| 60% MSCI World/40% BarCap Aggregate |      |      | 8.63%  | 8.63%  | 4.46%  | 7.28%  | 5.31% |        | 6.62%  |        |        |
|                                     |      |      |        |        |        |        |       |        |        |        |        |
| Calendar Returns                    | 2008 | 2009 | 2010   | 2011   | 2012   | 2013   | 2014  | 2015   | 2016   | 2017   | 2018   |
| Manager                             |      |      |        | 3.85%  | 11.74% | -2.71% | 6.94% | -9.36% | 10.80% | 11.83% | -5.95% |
| 60% MSCI World/40% BarCap Aggregate |      |      |        | 5.08%  | 11.29% | 14.46% | 5.43% | -0.07% | 5.71%  | 14.52% | -5.07% |

| Risk and Return 3YR | Statistics |             | Risk and Return Since | Risk and Return Since Inception Statistics |             |  |  |  |
|---------------------|------------|-------------|-----------------------|--|-------------|--|--|--|
|                     | Manager    | Benchmark 1 |                       | Manager                                    | Benchmark 1 |  |  |  |
| Annualized Return   | 7.03%      | 7.28%       | Annualized Return     | 3.79%                                      | 6.62%       |  |  |  |
| Standard Deviation  | 6.83%      | 6.14%       | Standard Deviation    | 7.47%                                      | 6.98%       |  |  |  |
| Sharpe Ratio        | 0.85       | 0.99        | Sharpe Ratio          | 0.44                                       | 0.96        |  |  |  |
| Skew                | -0.07      | -0.63       | Skew                  | -0.61                                      | -0.26       |  |  |  |
| Kurtosis            | 0.37       | 1.86        | Kurtosis              | 0.55                                       | 0.93        |  |  |  |
| Up Capture          |            | 95.19%      | Up Capture            |  | 69.11%      |  |  |  |
| Down Capture        |            | 95.22%      | Down Capture          |  | 101.08%     |  |  |  |

| Benchmark Based | Return Statistics 3 Year | Benchmark Based | Return Statistics Since Inception |
|-----------------|--------------------------|-----------------|-----------------------------------|
|                 | Benchmark1               |                 | Benchmark1                        |
| Alpha           | 1.19%                    | Alpha           | -1.49%                            |
| Beta            | 0.80                     | Beta            | 0.77                              |
| R2              | 51.89%                   | R2              | 46.89%                            |

| Crisis Performance    |                   | Investment Terms     | & Service Providers |                     |                |                             |
|-----------------------|-------------------|----------------------|---------------------|---------------------|----------------|-----------------------------|
|                       | Financial Crisis  | Euro Crisis          | High Yield Crash    | Taper Tantrum       | Inception Date | 10/31/2011                  |
|                       | May '07 - Feb '09 | April '11 - Sept '11 | May '15 - Jan '16   | April '13 - Aug '13 | Management Fee | 0.38%                       |
| Manager               |                   |                      | -12.2%              | -8.9%               | Liquidity      | Weekly                      |
| 60% MSCI World/40% Ba |                   |                      | -6.4%               | -1.1%               | Administrator  | Institutional Fund Services |
|                       |                   |                      |                     |                     | Auditors       | PricewaterhouseCoopers      |



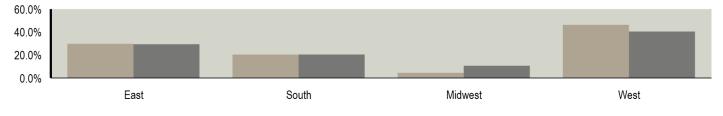
# Characteristics

Market Value: \$72.9 Million and 3.3% of Fund

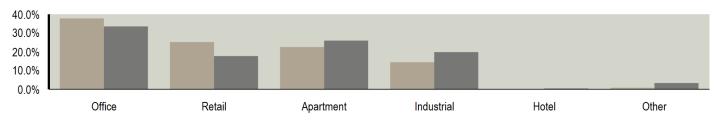
|         | Characteristic        | cs         |                               | Strateg        | y Breakdown        |                 |         |
|---------|-----------------------|------------|-------------------------------|----------------|--------------------|-----------------|---------|
|         |                       |            |                               | % of Portfolio | Top Five Metro A   | reas            | % of N/ |
| Fund (  | GAV (\$MM)            | \$42,757.0 | Pre-Development               | 0.0%           | New York-Northern  | n New Jersey-   | 12      |
| Fund I  | NAV (\$MM)            | \$32,550.0 | Development                   | 3.0%           | Dallas-Fort Worth- | Arlington, TX   | 11      |
| Cash (  | (% of NAV)            | 1.3%       | Initial Leasing               | 1.3%           | Los Angeles-Long   | Beach-Santa     | 10      |
| # of In | vestments             | 167        | Operating                     | 95.8%          | Boston-Cambridge   | -Quincy, MA-N   | 9       |
| % in T  | op 10 by NAV          | 27.0%      | Re-Development                | 0.0%           | San Jose-Sunnyva   | ale-Santa Clara | 7       |
| Levera  | age %                 | 23.9%      | Other                         | 0.0%           |                    |                 |         |
| Occup   | bancy                 | 92.9%      |                               |                |                    |                 |         |
| # of M  | SAs                   | 59         | <u>Queue In:</u>              |                | Queue_Out:         |                 |         |
| 1-Year  | r Dividend Yield      | 3.8%       | Contribution Queue (\$MM)     | \$45.30        | Redemption Queu    | e (\$MM)        | \$72    |
| As of I | Date                  | 31-Mar-19  | Anticipated Drawdown (Months) | 3              | Anticipated Payou  | t (Months)      |         |
|         |                       |            | Top Ten Holdings Inves        | stment Detail  |                    |                 |         |
| #       | Property              |            |                               | Туре           | Location           | % of Fund N     | VAV     |
| 1       | Valley Fair Mall      |            |                               | Retail         | San Jose, CA       | 3.9             | %       |
| 2       | Edens - SPF           |            |                               | Retail         | Various            | 3.7             | '%      |
| 3       | DSRG - SPF            |            |                               | Retail         | Various            | 3.0             | 1%      |
| 4       | Royal Hawaiian Cen    | ter        |                               | Retail         | Honolulu, HI       | 2.9             | 1%      |
| 5       | Alliance Texas - Indu | istrial    |                               | Industrial     | Fort Worth TX      | 2.8             | 20/2    |

| 1     |                             | Retail     | San Jose, CA      | 3.9%  |
|-------|-----------------------------|------------|-------------------|-------|
| 2     | Edens - SPF                 | Retail     | Various           | 3.7%  |
| 3     | DSRG - SPF                  | Retail     | Various           | 3.0%  |
| 4     | Royal Hawaiian Center       | Retail     | Honolulu, HI      | 2.9%  |
| 5     | Alliance Texas - Industrial | Industrial | Fort Worth, TX    | 2.8%  |
| 6     | Century Plaza Towers        | Office     | Los Angeles, CA   | 2.3%  |
| 7     | 1345 Avenue of the Americas | Office     | New York, NY      | 2.3%  |
| 8     | University Towne Center     | Retail     | San Diego, CA     | 2.2%  |
| 9     | China Basin                 | Office     | San Francisco, CA | 2.1%  |
| 10    | NorthPark Center JV         | Retail     | Dallas, TX        | 2.0%  |
| Total |                             |            |                   | 27.0% |

# Regional Breakdown by NAV (Excluding Cash & Debt)



Property Type Breakdown by NAV (Excluding Cash & Debt)



## Property Size Breakdown by NAV (Excluding Cash & Debt)



■ JPMorgan Strategic Property Fund ■ NFI-ODCE EqW



6

7

8

9

10

Total

Dadeland Mall

Waterview Tower

155 North Wacker

AMLI Marina del Rey

Rosedale Shopping Center

# Characteristics

2.0%

1.8%

1.8%

1.8%

1.6%

21.9%

Market Value: \$67.2 Million and 3.0% of Fund

| Characteristics |                        |            |                               | Strateg        | y Breakdown       |                |
|-----------------|------------------------|------------|-------------------------------|----------------|-------------------|----------------|
|                 |                        |            |                               | % of Portfolic | Top Five Metro    | Areas % of NAV |
| Fund C          | GAV (\$MM)             | \$28,948.1 | Pre-Development               | 0.3%           | Los Angeles, CA   | 13.6%          |
| Fund N          | IAV (\$MM)             | \$23,705.6 | Development                   | 3.5%           | Boston, MA        | 8.49           |
| Cash (          | % of NAV)              | 0.7%       | Initial Leasing               | 3.9%           | Chicago, IL       | 8.49           |
| # of Inv        | vestments              | 434        | Operating                     | 89.0%          | New York, NY      | 7.6%           |
| % in To         | op 10 by NAV           | 21.9%      | Re-Development                | 3.3%           | San Francisco, 0  | CA 7.0%        |
| Levera          | ge %                   | 17.5%      | Other                         |                |                   |                |
| Occupa          | ancy                   | 93.9%      |                               |                |                   |                |
| # of MS         | SAs                    | 34         | <u>Queue_In:</u>              |                | <u>Queue_Out:</u> |                |
| 1-Year          | Dividend Yield         | 4.0%       | Contribution Queue (\$MM)     | \$687.70       | Redemption Que    | eue (\$MM)     |
| As of D         | Date                   | 31-Mar-19  | Anticipated Drawdown (Months) |                | Anticipated Payo  | out (Months)   |
|                 |                        |            | Top Ten Holdings Inves        | tment Detail   |                   |                |
| #               | Property               |            |                               | Туре           | Location          | % of Fund NAV  |
| 1               | Hills Plaza            |            |                               | Office         | San Francisco ,CA | 2.9%           |
| 2               | Fashion Valley Mall    |            |                               | Retail         | San Diego ,CA     | 2.8%           |
| 3               | Two Park Avenue        |            |                               | Office         | New York ,NY      | 2.8%           |
| 4               | One Post Office Square |            |                               | Office         | Boston ,MA        | 2.4%           |
| 5               | One Maritime Plaza     |            |                               | Office         | San Francisco ,CA | 2.1%           |

#### Office Chicago ,IL Apartment Marina del Rey ,CA

Retail

Office

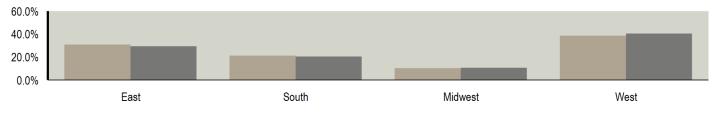
Retail

Miami ,FL

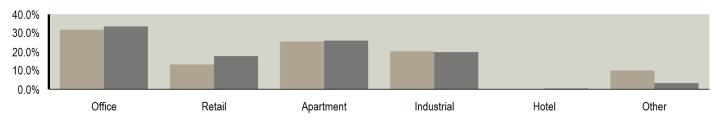
Arlington ,VA

Roseville ,MN

## **Regional Breakdown by NAV (Excluding Cash & Debt)**



Property Type Breakdown by NAV (Excluding Cash & Debt)



## Property Size Breakdown by NAV (Excluding Cash & Debt)



■ Morgan Stanley PRIME Property Fund, LLC ■ NFI-ODCE EqW



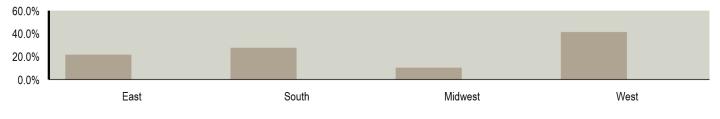
# Characteristics

Market Value: \$39.1 Million and 1.8% of Fund

| Characterist          | ics       |                               | Strategy Brea  | Ikdown                      |          |
|-----------------------|-----------|-------------------------------|----------------|-----------------------------|----------|
|                       |           |                               | % of Portfolio | Top Five Metro Areas        | % of NAV |
| Fund GAV (\$MM)       | \$4,160.0 | Pre-Development               | 0.9%           | San Francisco, CA           | 12.5%    |
| Fund NAV (\$MM)       | \$1,886.8 | Development                   | 19.1%          | Chicago, IL                 | 9.19     |
| Cash (% of NAV)       | 0.9%      | Initial Leasing               | 3.3%           | San Diego, CA               | 9.09     |
| # of Investments      | 70        | Operating                     | 65.8%          | Miami, FL                   | 8.39     |
| % in Top 10 by NAV    | 42.4%     | Re-Development                | 9.2%           | Washington, DC              | 7.89     |
| Leverage %            | 48.8%     | Other                         | 1.7%           |                             |          |
| Occupancy             | 84.6%     |                               |                |                             |          |
| # of MSAs             | 30        | <u>Queue_In:</u>              |                | Queue_Out:                  |          |
| 1-Year Dividend Yield | 9.8%      | Contribution Queue (\$MM)     | \$368.70       | Redemption Queue (\$MM)     | \$0.0    |
| As of Date            | 31-Mar-19 | Anticipated Drawdown (Months) | 0              | Anticipated Payout (Months) |          |
|                       |           | Top Ten Holdings Investr      | ment Detail    |                             |          |

| #     | Property                  | Туре      | Location          | % of Fund NAV |
|-------|---------------------------|-----------|-------------------|---------------|
| 1     | 255 California            | Office    | San Francisco, CA | 8.5%          |
| 2     | Coronado Bay Club         | Apartment | Coronado, CA      | 4.6%          |
| 3     | 2305 Mission College Blvd | Office    | Santa Clara, CA   | 4.5%          |
| 4     | Terraces at Copley Point  | Office    | San Diego, CA     | 4.4%          |
| 5     | Arkadia Tower             | Apartment | Chicago, IL       | 3.8%          |
| 6     | CityPlace - Retail        | Retail    | Doral, FL         | 3.8%          |
| 7     | Alexan Union Market       | Apartment | Washington, DC    | 3.7%          |
| 8     | Alta Potrero Hill         | Apartment | San Francisco, CA | 3.2%          |
| 9     | Broadstone Trino          | Apartment | Santa Monica, CA  | 3.2%          |
| 10    | Montrose & Claredon       | Apartment | Chicago, IL       | 2.7%          |
| Total |                           |           |                   | 42.4%         |

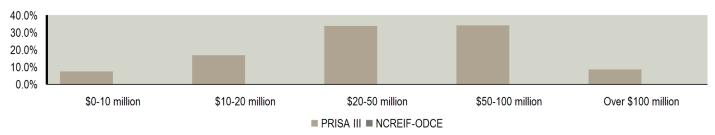
## Regional Breakdown by NAV (Excluding Cash & Debt)



# Property Type Breakdown by NAV (Excluding Cash & Debt)



## Property Size Breakdown by NAV (Excluding Cash & Debt)





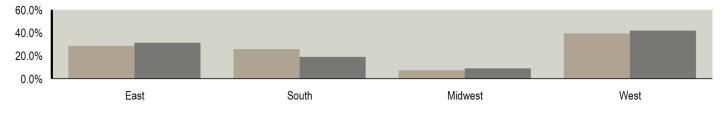
# Characteristics

Market Value: \$47.4 Million and 2.1% of Fund

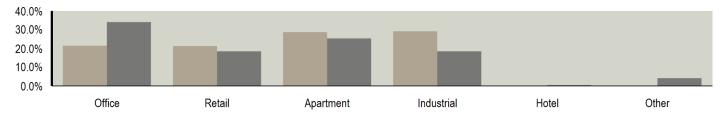
|          | Characte        | ristics            |                               | Strategy       | y Breakdown        |                  |
|----------|-----------------|--------------------|-------------------------------|----------------|--------------------|------------------|
|          |                 |                    |                               | % of Portfolio | Top Five Metro A   | reas % of NAV    |
| Fund G   | GAV (\$MM)      | \$3,408,849,786.0  | Pre-Development               | 0.0%           | Seattle            | 13.1%            |
| Fund N   | AV (\$MM)       | \$1,850,352,330.0  | Development                   | 10.8%          | Houston            | 11.8%            |
| Cash (   | % of NAV)       | 1.6%               | Initial Leasing               | 7.5%           | Phoenix            | 9.6%             |
| # of Inv | vestments       | 54                 | Operating                     | 81.7%          | Oakland            | 7.6%             |
| % in To  | op 10 by NAV    | 36.4%              | Re-Development                | 0.0%           | Denver             | 7.3%             |
| Levera   | ge %            | 39.2%              | Other                         | 0.0%           |                    |                  |
| Occupa   | ancy            | 90.5%              |                               |                |                    |                  |
| # of MS  | SAs             | 22                 | <u>Queue In:</u>              |                | Queue_Out:         |                  |
| 1-Year   | Dividend Yield  | 4.0%               | Contribution Queue (\$MM)     | \$164.90       | Redemption Queue   | e (\$MM) \$47.14 |
| As of D  | Date            | 31-Mar-19          | Anticipated Drawdown (Months) | 6              | Anticipated Payout | (Months) 3       |
|          |                 |                    | Top Ten Holdings Inves        | tment Detail   |                    |                  |
| #        | Property        |                    |                               | Туре           | Location           | % of Fund NAV    |
| 1        | Mid-South Logis | stics Center       |                               | Industrial     | Nashville, TN      | 4.8%             |
| 2        | Bay Area Busin  | ess Park (Phase I) |                               | Industrial     | Houston, TX        | 4.7%             |
| 3        | Piedmont Office | )                  |                               | Office         | Charlotte, NC      | 3.9%             |
| 4        | Bay Center      |                    |                               | Office         | Oakland, CA        | 3.8%             |
| 5        | San Leandro Br  | usiness Center     |                               | Industrial     | Oakland, CA        | 3.8%             |

| 5     |                                   | muusinai  | Oakialiu, CA | 3.0%  |
|-------|-----------------------------------|-----------|--------------|-------|
| 6     | The Courts at Spring Mill Station | Apartment | Phoenix, AZ  | 2.7%  |
| 7     | 1760 3rd Avenue                   | Apartment | New York, NY | 2.7%  |
| 8     | Baybrooke Square                  | Retail    | Houston, TX  | 2.7%  |
| 9     | Solaris Key                       | Apartment | Tampa, FL    | 2.1%  |
| 10    | M-Line Tower                      | Apartment | Dallas, TX   | 2.0%  |
| Total |                                   |           |              | 33.1% |

## Regional Breakdown by NAV (Excluding Cash & Debt)



## Property Type Breakdown by NAV (Excluding Cash & Debt)



## Property Size Breakdown by NAV (Excluding Cash & Debt)



# Alinda

# As of December 31, 2017

## Characteristics

# Characteristics

Market Value: \$29.5 Million and 1.3% of Fund

\$203.3

7.3%

\$767.6

# Strategy Breakdown

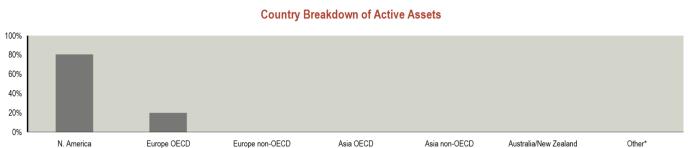
\$276.4

|                          | Alinda Capital Partners LLC |                            | # of Cos. | Current or Realized MV (\$M) | % of Portfolic |
|--------------------------|-----------------------------|----------------------------|-----------|------------------------------|----------------|
| Fund Vintage Year        | 2008                        | Assets in Portfolio        | 7         | \$2,783.40                   | 100.0%         |
| Total Size of Fund (\$M) | \$4,065.08                  | Active Assets in Portfolio | 7         | \$2,783.40                   | 100.0%         |
| % of Capital Called      | 0.56%                       | Assets Realized            | 4         | -\$5.30                      | 0.0%           |
| Total Fund GAV (\$M)     | \$2,809.70                  | Assets Written Off         | 0         | \$0.00                       | 0.0%           |
| Total Fund NAV (\$M)     | \$2,788.80                  | Assets Written Down        | 2         | -\$129.51                    | 0.0%           |
|                          |                             | Assets Written Up          | 5         | \$1,032.24                   | 0.0%           |
|                          |                             |                            |           |                              |                |

## **Active Assets**

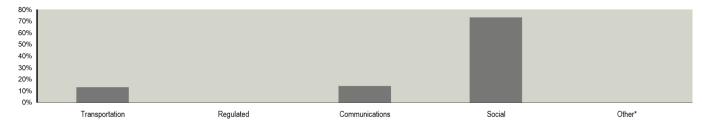
|  |                |                         | Investment | Distributions | Fair Mkt Val |                |
|--|----------------|-------------------------|------------|---------------|--------------|----------------|
| Holding  | Sector         | Location                | (\$M)      | (\$M)         | (\$M)        | % of Portfolio |
| Binnenlandse Container Terminals Nederland b.v | Transportaion  | Netherlands             | \$103.7    | \$50.6        | \$151.0      | 5.4%           |
| Regency Gas Pipeline System                    | Regulated      | Louisiana               | \$159.8    | \$717.0       | \$45.0       | 1.6%           |
| BCTN Currency Options                          | Not Applicable | Not Applicable          | \$12.9     | \$0.0         | \$7.3        | 0.3%           |
| Santa Paula Water LLC                          | Other          | Santa Paula, California | \$0.0      | \$0.0         | \$0.0        | 0.0%           |
|  |                |                         |            |               |              |                |

Total



#### Europe non-OECD Asia OECD Asia non-OECD

## Sector Breakdown of Active Assets



#### Total Fund Annual Cash Flow Summary (\$M)

|                   | 2011     | 2012     | 2013     | 2014     | 2015     | 2016     | 2017     |
|-------------------|----------|----------|----------|----------|----------|----------|----------|
| Paid-In Capital   | -\$1,541 | -\$133   | -\$730   | -\$1,111 | -\$172   | -\$112   | -\$86    |
| Return of Capital | 98       | 141      | 334      | 651      | 333      | 316      | 1,273    |
| Income + Gains    | 3        | 24       | -9       | 774      | 639      | -236     | -325     |
| Fees              | -65      | -63      | -59      | -46      | -52      | 43       | 40       |
| Yearly Total      | -1,508   | -55      | -455     | -506     | 109      | 160      | 1,146    |
| Cumulative Total  | -\$2,335 | -\$2,391 | -\$2,846 | -\$3,352 | -\$3,243 | -\$3,082 | -\$1,936 |

Other \* =

# Macquarie

## As of December 31, 2018

### **Characteristics**

# Characteristics

Market Value: \$33.2 Million and 1.5% of Fund

## Strategy Breakdown

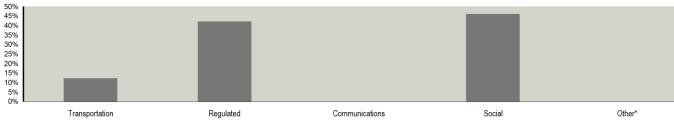
|                          | Macquarie Asset Management |                            | # of Cos. | Current or Realized MV (\$M) | % of Portfolio |
|--------------------------|----------------------------|----------------------------|-----------|------------------------------|----------------|
| Fund Vintage Year        | 2008                       | Assets in Portfolio        | 6         | \$1,631.50                   | 104.0%         |
| Total Size of Fund (\$M) | \$1,568.95                 | Active Assets in Portfolio | 5         | \$1,631.50                   | 104.0%         |
| % of Capital Called      | 94.94%                     | Assets Realized            | 1         | \$965.62                     | 61.5%          |
| Total Fund GAV (\$M)     | \$1,644.86                 | Assets Written Off         | 0         | \$0.00                       | 0.0%           |
| Total Fund NAV (\$M)     | \$1,640.09                 | Assets Written Down        | 2         | \$244.10                     | 15.6%          |
|                          |                            | Assets Written Up          | 3         | \$1,387.40                   | 88.4%          |

#### **Active Assets**

|                          |                |                              | Investment | Distributions | Fair Mkt Val |                |
|--------------------------|----------------|------------------------------|------------|---------------|--------------|----------------|
| Holding                  | Sector         | Location                     | (\$M)      | (\$M)         | (\$M)        | % of Portfolio |
| Puget                    | Regulated      | USA - WA                     | \$342.4    | \$142.6       | \$684.5      | 42.0%          |
| WCA Waste Corporation    | Other          | USA - Texas                  | \$275.4    | \$4.7         | \$504.9      | 30.9%          |
| Elizabeth River Tunnels  | Transportation | USA - VA                     | \$75.6     | \$3.0         | \$198.0      | 12.1%          |
| Leaf River Energy Center | Other          | USA - MS                     | \$238.5    | \$0.0         | \$144.7      | 8.9%           |
| Broadrock Renewables     | Other          | Brea, California and Johnsto | \$128.0    | \$0.0         | \$99.4       | 6.1%           |
| GTP                      | Communication  | USA, Puerto Rico & Mexico    | \$0.0      | \$1,019.7     | \$0.0        | 0.0%           |

Total



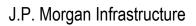


## Total Fund Annual Cash Flow Summary (\$M)

|                   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019   |
|-------------------|--------|--------|--------|--------|--------|--------|--------|
| Paid-In Capital   | -\$43  | \$0    | \$0    | -\$75  | \$0    | \$0    | \$0    |
| Return of Capital | 889    | 20     | 0      | 0      | 40     | 0      | 0      |
| Income + Gains    | 161    | -51    | 110    | 107    | 258    | 46     | 42     |
| Fees              | -22    | -17    | -16    | -16    | -16    | -16    | -4     |
| Yearly Total      | 824    | 3      | -16    | -91    | 24     | -16    | -4     |
| Cumulative Total  | -\$745 | -\$742 | -\$758 | -\$849 | -\$825 | -\$841 | -\$845 |

Other \* =





# Characteristics

## Market Value: \$31.3 Million and 1.4% of Fund

#### Characteristics

#### Strategy Breakdown

| Ondracteristics             |            |                            | onalogy bit | anuowii   |           |
|-----------------------------|------------|----------------------------|-------------|-----------|-----------|
| JPMorgan                    |            |                            |             |           |           |
| Fund Inception/Vintage Year | 2007       | # of Investments           |             |           | 19        |
| Total Fund GAV (\$M)        | \$24,815.0 | # of Investors             |             |           | 458       |
| Total Fund NAV (\$M)        | \$11,252.0 | # OECD Countries           |             |           | 25        |
| Cash Balance % of NAV       | 0.0%       | Trailing 12-month Dividend | Yield       |           | 5.3%      |
| % in Top 10 by NAV          | 73.5%      | Queue Out:                 | \$7.2       | Queue In: | \$2,598.8 |
|                             |            |                            |             |           |           |

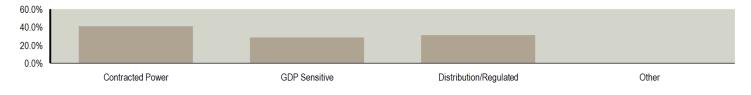
#### Top 10 Fund investments by NAV

| Investment                                 | Sector   | Location         | Investment (\$M) | Fair Mkt Val (\$M) | % of Portfolio |
|--|----------|------------------|------------------|--------------------|----------------|
| Ventient Energy/Vortex                     | Wind     | UK               | \$1,795.9        | \$1,519.7          | 13.0%          |
| Sonnedix Power Holdings                    | Solar    | Various (Global) | \$1,442.0        | \$1,283.8          | 10.9%          |
| NorteGas Energía Distribución ("NorteGas") | Gas      | Spain            | \$899.2          | \$924.5            | 7.9%           |
| Summit Utilities                           | Gas      | US               | \$822.4          | \$850.2            | 7.2%           |
| North Queensland Airports                  | Airports | Australia        | \$420.7          | \$793.6            | 6.8%           |
| Koole Terminals                            | Storage  | Various (Europe) | \$568.8          | \$709.5            | 6.0%           |
| Novatus Energy                             | Wind     | US               | \$681.3          | \$666.5            | 5.7%           |
| Beacon Rail Leasing                        | Other    | Various (Europe) | \$589.3          | \$654.6            | 5.6%           |
| Southwest Generation                       | Electric | US               | \$941.0          | \$629.1            | 5.4%           |
| Electricity North West                     | Gas      | UK               | \$512.7          | \$585.1            | 5.0%           |
| Total                                      |          |                  | \$8,673.3        | \$8,616.6          | 73.5%          |

**Country Breakdown of Active Assets** 









# Characteristics

## Market Value: \$63.1 Million and 2.8% of Fund

#### Characteristics

#### Strategy Breakdown

| Industry Funds Management   |            |                                  |       |           |           |
|-----------------------------|------------|----------------------------------|-------|-----------|-----------|
| Fund Inception/Vintage Year | 2009       | # of Investments                 |       |           | 15        |
| Total Fund GAV (\$M)        | \$35,137.0 | # of Investors                   |       |           | 312       |
| Total Fund NAV (\$M)        | \$22,746.0 | # OECD Countries                 |       |           | 15        |
| Cash Balance % of NAV       | 1.9%       | Trailing 12-month Dividend Yield |       |           | 7.2%      |
| % in Top 10 by NAV          | 88.3%      | Queue Out:                       | \$0.0 | Queue In: | \$3,000.0 |
|                             |            |                                  |       |           |           |

#### Top 10 Fund investments by NAV

| Investment                | Sector             | Location       | Investment (\$M) | Fair Mkt Val (\$M) | % of Portfolio |
|---------------------------|--------------------|----------------|------------------|--------------------|----------------|
| Indiana Toll Road         | Toll Roads         | United States  | \$3,705.2        | \$4,830.1          | 21.3%          |
| Aleatica                  | Toll Roads         | Mexico         | \$5,206.7        | \$4,375.5          | 19.3%          |
| Manchester Airports Group | Airports           | United Kingdom | \$1,515.5        | \$2,600.7          | 11.5%          |
| Freeport Train 2          | Midstream Services | United States  | \$1,180.6        | \$1,760.9          | 7.8%           |
| Vienna Airport            | Airports           | Austria        | \$876.2          | \$1,448.8          | 6.4%           |
| VTTI                      | Other              | Global         | \$1,192.5        | \$1,255.2          | 5.5%           |
| FCC Aqualia               | Water              | Spain          | \$1,206.5        | \$1,228.4          | 5.4%           |
| Anglian Water Group       | Water              | United Kingdom | \$630.6          | \$847.6            | 3.7%           |
| Mersin International Port | Ports              | Turkey         | \$877.5          | \$846.1            | 3.7%           |
| M6Toll                    | Toll Roads         | United Kingdom | \$613.0          | \$800.0            | 3.5%           |
| Total                     |                    |                | \$17,004.3       | \$19,993.3         | 88.1%          |



**Country Breakdown of Active Assets** 

## Sector Breakdown of Active Assets



Contracted Power

GDP Sensitive

Distribution/Regulated

Other





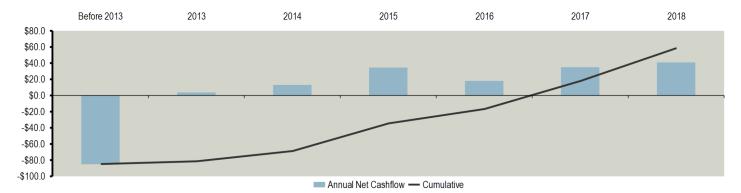
#### Characteristics

| Fort Wa                                       | ashington Capital Partners |
|---|----------------------------|
| Total Size of Fund (\$M)                      | \$169.1                    |
| Total Capital Called to Date                  | \$144.8                    |
| % of Committed Capital Called                 | 85.6%                      |
| Capital Distributed (\$M)                     | \$203.4                    |
| Capital Distributed (as a % of Capital Called | 140.5%                     |
|   |                            |

#### Top Ten Funds by Market Value

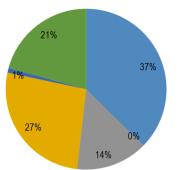
|   |                 |              |                | Total      |                  |                   |                    |
|---|-----------------|--------------|----------------|------------|------------------|-------------------|--------------------|
|   |                 |              |                | Commitment | Total Investment | Fair Market Value | Total Distribution |
| Fund  | Туре            | Vintage Year | % of Portfolio | (\$M)      | (\$M)            | (\$M)             | (\$M)              |
| Hellman & Friedman Capital Partners VII, L.P. | Intl Buyout     |              | 11.2%          | \$7.5      | \$7.1            | \$10.5            | \$7.8              |
| Shasta Ventures II, L.P.                      | Venture Capital |              | 7.6%           | \$2.5      | \$2.4            | \$7.1             | \$2.3              |
| OrbiMed Private Investments IV, L.P.          | Venture Capital |              | 5.2%           | \$4.0      | \$7.1            | \$4.8             | \$7.1              |
| Highland Capital Partners VIII, L.P.          | Venture Capital |              | 5.1%           | \$5.0      | \$1.4            | \$4.8             | \$1.4              |
| Pangaea Two, L.P.                             | Other           |              | 5.1%           | \$5.0      | \$4.0            | \$4.8             | \$1.0              |
| Draper Fisher Jurvetson Fund IX, L.P.         | Venture Capital |              | 5.0%           | \$5.0      | \$5.0            | \$4.7             | \$6.3              |
| New Enterprise Associates 13, L.P.            | Venture Capital |              | 4.9%           | \$5.0      | \$4.9            | \$4.6             | \$4.6              |
| Atlas Capital Resources, L.P.                 | Distressed      |              | 4.3%           | \$5.0      | \$4.0            | \$4.1             | \$4.7              |
| H.I.G. Bayside Debt & LBO Fund II, L.P.       | Distressed      |              | 4.2%           | \$7.5      | \$6.2            | \$4.0             | \$7.9              |
| NGP Midstream & Resources, L.P.               | Other           |              | 4.2%           | \$7.5      | \$7.5            | \$4.0             | \$9.8              |

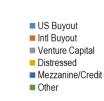
## Annual Cash Flow Summary (\$M)



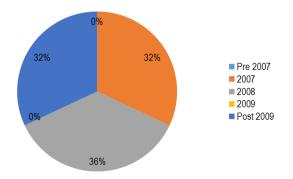
|                          | Before 2013 | 2013    | 2014    | 2015    | 2016    | 2017   | 2018   |
|--------------------------|-------------|---------|---------|---------|---------|--------|--------|
| Paid In Capital w/o Fees | \$109.3     | \$20.3  | \$11.0  | \$0.0   | \$4.2   | \$0.0  | \$0.0  |
| Fees Paid                | \$0.0       | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0  | \$0.0  |
| Distribution             | \$24.5      | \$23.7  | \$23.7  | \$34.2  | \$22.0  | \$34.7 | \$40.6 |
| Cumulative               | -\$84.8     | -\$81.4 | -\$68.7 | -\$34.5 | -\$16.7 | \$18.0 | \$58.6 |

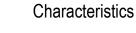
Strategy Exposure





Vintage Year Exposure





# Market Value: \$13.2 Million and 0.6% of Fund



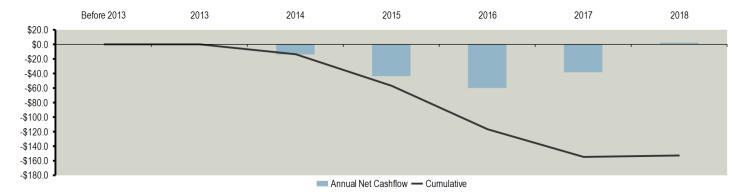
#### Characteristics

| onaraotonoti                                  | 00                        |
|---|---------------------------|
| Fort Wa                                       | shington Capital Partners |
| Total Size of Fund (\$M)                      | \$271.4                   |
| Total Capital Called to Date                  | \$179.1                   |
| % of Committed Capital Called                 | 66.0%                     |
| Capital Distributed (\$M)                     | \$26.5                    |
| Capital Distributed (as a % of Capital Callec | 14.8%                     |
|   |                           |

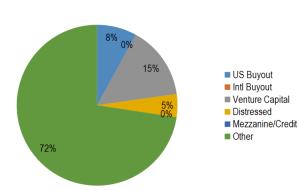
#### Top Ten Funds by Market Value

|   |                 |              |                | Total      |                  |                   |                    |
|---|-----------------|--------------|----------------|------------|------------------|-------------------|--------------------|
|   |                 |              |                | Commitment | Total Investment | Fair Market Value | Total Distribution |
| Fund  | Туре            | Vintage Year | % of Portfolio | (\$M)      | (\$M)            | (\$M)             | (\$M)              |
| Ascent Venture Partners IV-B, L.P.              | Venture Capital |              | 7.7%           | \$11.7     | \$11.4           | \$17.7            | \$0.7              |
| Invision Diversified Holdings, LLC              | Other           |              | 7.3%           | \$9.0      | \$9.0            | \$16.6            | \$0.0              |
| Cressey & Company Fund V, L.P.                  | US Buyout       |              | 5.8%           | \$14.0     | \$12.4           | \$13.2            | \$4.0              |
| OrbiMed Private Investments VI, L.P.            | Venture Capital |              | 5.3%           | \$14.0     | \$11.6           | \$12.2            | \$1.3              |
| 5AM Ventures IV, L.P.                           | Venture Capital |              | 4.6%           | \$6.0      | \$5.7            | \$10.6            | \$0.1              |
| ABRY Partners VIII, L.P.                        | US Buyout       |              | 4.6%           | \$12.8     | \$10.6           | \$10.5            | \$2.8              |
| HitecVision VII, L.P.                           | Other           |              | 4.3%           | \$12.8     | \$7.1            | \$10.0            | \$0.0              |
| EnCap Energy Capital Fund X, L.P.               | US Buyout       |              | 4.1%           | \$11.2     | \$8.4            | \$9.4             | \$1.1              |
| Scribe Aggregator, LLC                          | Other           |              | 3.7%           | \$4.6      | \$4.6            | \$8.5             | \$0.1              |
| Accel-KKR Growth Capital Partners Fund II, L.P. | Other           |              | 3.6%           | \$11.1     | \$6.5            | \$8.2             | \$0.0              |

## Annual Cash Flow Summary (\$M)

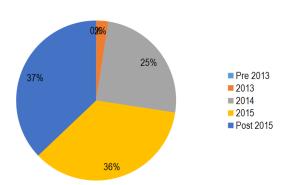


|                          | Before 2013 | 2013  | 2014    | 2015    | 2016     | 2017     | 2018     |
|--------------------------|-------------|-------|---------|---------|----------|----------|----------|
| Paid In Capital w/o Fees | \$0.0       | \$0.0 | \$13.6  | \$43.4  | \$59.7   | \$48.8   | \$13.6   |
| Fees Paid                | \$0.0       | \$0.0 | \$0.0   | \$0.0   | \$0.0    | \$0.0    | \$0.0    |
| Distribution             | \$0.0       | \$0.0 | \$0.0   | \$0.0   | \$0.0    | \$10.8   | \$15.6   |
| Cumulative               | \$0.0       | \$0.0 | -\$13.6 | -\$57.0 | -\$116.7 | -\$154.7 | -\$152.7 |

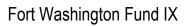


Strategy Exposure

Vintage Year Exposure



# Characteristics



#### Characteristics

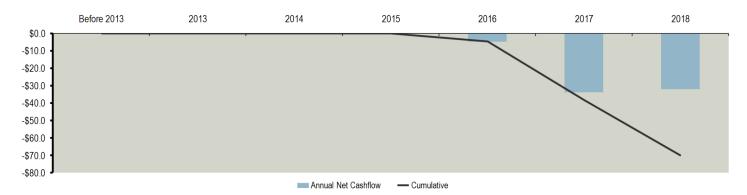
|                                    | Fort Washington Capital Partners |
|------------------------------------|----------------------------------|
| Total Size of Fund (\$M)           | \$212.6                          |
| Total Capital Called to Date       | \$70.2                           |
| % of Committed Capital Called      | 33.0%                            |
| Capital Distributed (\$M)          | \$0.0                            |
| Capital Distributed (as a % of Cap | bital Callec 0.0%                |

#### Top Ten Funds by Market Value

Net IRR

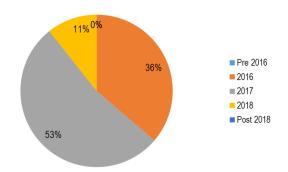
| Fund                               | Туре            | Vintage Year | % of Portfolio | Total<br>Commitment<br>(\$M) | Total Investment<br>(\$M) | Fair Market Value<br>(\$M) | Total Distribution<br>(\$M) |
|------------------------------------|-----------------|--------------|----------------|------------------------------|---------------------------|----------------------------|-----------------------------|
| G Square Capital II, L.P.          | Intl Buyout     |              | 11.7%          | \$10.5                       | \$7.3                     | \$9.1                      | \$0.0                       |
| Luminate Capital Partners, LP      | Other           |              | 11.2%          | \$8.5                        | \$7.5                     | \$8.7                      | \$0.0                       |
| HV Momentum Co-invest AS           | Other           |              | 9.9%           | \$3.5                        | \$3.5                     | \$7.7                      | \$0.0                       |
| Ascent Venture Partners IV-B, L.P. | Venture Capital |              | 9.5%           | \$4.9                        | \$4.7                     | \$7.4                      | \$0.3                       |
| Scribe Aggregator, LLC             | Other           |              | 7.6%           | \$3.2                        | \$3.2                     | \$5.9                      | \$0.4                       |
| Bambino Group Holdings, LLC        | Other           |              | 4.5%           | \$3.0                        | \$3.0                     | \$3.5                      | \$0.0                       |
| Livingbridge 6 L.P.                | Other           |              | 4.4%           | \$8.9                        | \$3.8                     | \$3.4                      | \$0.0                       |
| True Ventures Select II, L.P.      | Venture Capital |              | 4.3%           | \$3.3                        | \$3.3                     | \$3.4                      | \$0.9                       |
| Lime Rock Partners IV AF, L.P.     | US Buyout       |              | 4.0%           | \$3.5                        | \$3.5                     | \$3.1                      | \$0.0                       |
| EBS Aggregator LLC                 | Other           |              | 3.0%           | \$2.4                        | \$2.3                     | \$2.3                      | \$0.0                       |

## Annual Cash Flow Summary (\$M)



|                          | Before 2013 | 2013  | 2014  | 2015  | 2016   | 2017    | 2018    |
|--------------------------|-------------|-------|-------|-------|--------|---------|---------|
| Paid In Capital w/o Fees | \$0.0       | \$0.0 | \$0.0 | \$0.0 | \$4.6  | \$33.7  | \$31.9  |
| Fees Paid                | \$0.0       | \$0.0 | \$0.0 | \$0.0 | \$0.0  | \$0.0   | \$0.0   |
| Distribution             | \$0.0       | \$0.0 | \$0.0 | \$0.0 | \$0.0  | \$0.0   | \$0.0   |
| Cumulative               | \$0.0       | \$0.0 | \$0.0 | \$0.0 | -\$4.6 | -\$38.3 | -\$70.2 |

Vintage Year Exposure



# Characteristics

12.5%

# Fort Washington Opp Fund III

## As of December 31, 2018

#### Characteristics

| Fort W                                       | ashington Capital Partners |
|--|----------------------------|
| Total Size of Fund (\$M)                     | \$133.4                    |
| Total Capital Called to Date                 | \$98.7                     |
| % of Committed Capital Called                | 74.0%                      |
| Capital Distributed (\$M)                    | \$26.7                     |
| Capital Distributed (as a % of Capital Calle | c 27.1%                    |

# Characteristics

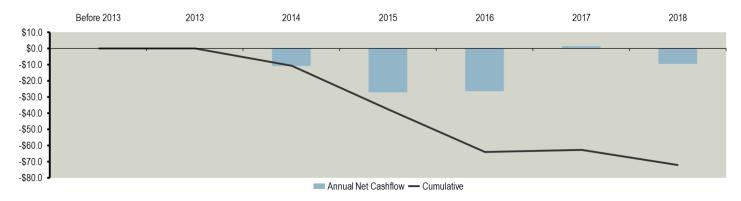
## Market Value: \$17.3 Million and 0.8% of Fund

| Fund Vintage Year            | 2014    |
|------------------------------|---------|
| Total Underlying Commitments | \$110.7 |
| # of Underlying Commitments  | 14      |
| % of Capital Commited        | 83.0%   |
| Fund NAV (\$M)               | \$150.5 |
| Net Multiple                 | 1.69x   |
| Net IRR                      | 24.9%   |

#### Top Ten Funds by Market Value

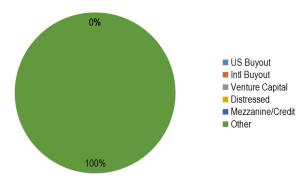
|  |                  |              |                | Total      |                  |                   |                    |
|--|------------------|--------------|----------------|------------|------------------|-------------------|--------------------|
|  |                  |              |                | Commitment | Total Investment | Fair Market Value | Total Distribution |
| Fund                                   | Туре             | Vintage Year | % of Portfolio | (\$M)      | (\$M)            | (\$M)             | (\$M)              |
| Ascent Venture Partners IV-B, L.P.     | Venture Capital  |              | 17.1%          | \$16.9     | \$16.4           | \$25.5            | \$1.0              |
| Gridsmart Technologies, Inc.           | Other            |              | 15.6%          | \$3.3      | \$3.3            | \$23.2            | \$0.0              |
| Invision Diversified Holdings, LLC     | Other            |              | 15.1%          | \$12.2     | \$12.2           | \$22.5            | \$0.0              |
| Airdrie Partners I, L.P.               | Other            |              | 10.3%          | \$8.1      | \$8.1            | \$15.4            | \$0.9              |
| Arch Global Precision, LLC             | Other            |              | 8.7%           | \$6.7      | \$6.3            | \$13.0            | \$0.1              |
| Scribe Aggregator, LLC                 | Other            |              | 8.2%           |            |                  |                   |                    |
| Capital Resource Partners V, L.P.      | Mezzanine/Credit |              | 6.0%           | \$8.1      | \$8.1            | \$8.9             | \$0.0              |
| DCCP (FW) SPV Fund, L.P.               | US Buyout        |              | 4.7%           | \$12.8     | \$7.2            | \$7.0             | \$0.3              |
| Pangaea Two, L.P.                      | Other            |              | 4.3%           | \$6.3      | \$5.0            | \$6.4             | \$1.1              |
| Exaltare Capital Partners Fund I, L.P. | US Buyout        |              | 4.2%           | \$6.7      | \$4.5            | \$6.2             | \$0.0              |

#### Annual Cash Flow Summary (\$M)

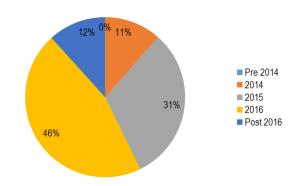


|                          | Before 2013 | 2013  | 2014    | 2015    | 2016    | 2017    | 2018    |
|--------------------------|-------------|-------|---------|---------|---------|---------|---------|
| Paid In Capital w/o Fees | \$0.0       | \$0.0 | \$10.7  | \$27.0  | \$26.3  | \$12.0  | \$22.7  |
| Fees Paid                | \$0.0       | \$0.0 | \$0.0   | \$0.0   | \$0.0   | \$0.0   | \$0.0   |
| Distribution             | \$0.0       | \$0.0 | \$0.0   | \$0.0   | \$0.0   | \$13.3  | \$13.3  |
| Cumulative               | \$0.0       | \$0.0 | -\$10.7 | -\$37.7 | -\$64.0 | -\$62.7 | -\$72.1 |

Strategy Exposure



Vintage Year Exposure





# Characteristics

## Market Value: \$7.8 Million and 0.4% of Fund

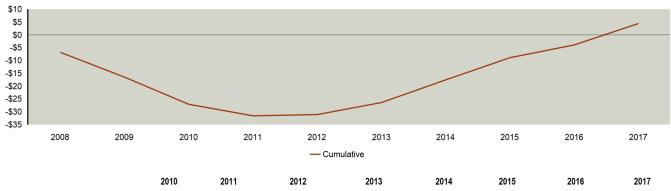
| Characteristics                                |                   |
|--|-------------------|
|  | North Sky Capital |
| Total Size of Fund (\$M)                       | \$60.0            |
| Total Capital Called to Date                   | \$43.1            |
| % of Committed Capital Called                  | 71.8%             |
| Capital Distributed (\$M)                      | \$49.7            |
| Capital Distributed (as a % of Capital Called) | 115.3%            |
| Client Commitment (\$M)                        | \$30.0            |
| Client % Ownership of Fund                     | 48.0%             |
|  |                   |

| Fund Vintage Year            | 2008              |
|------------------------------|-------------------|
| Total Underlying Commitments | \$65.0            |
| # of Underlying Commitments  | 16                |
| % of Capital Committed       | 108.45%           |
| Fund NAV (\$M)               | \$42.8            |
| Net Multiple                 | 1.88170273199071x |
| Net IRR                      | 14.90%            |

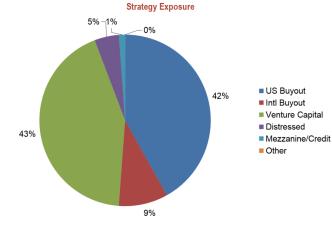
#### Top Ten Funds by Market Value

|                            |                 |               |                | Total               |                           |              |                             |
|----------------------------|-----------------|---------------|----------------|---------------------|---------------------------|--------------|-----------------------------|
| Fund                       | Туре            | Vintage Year  | % of Portfolio | Commitment<br>(\$M) | Total Investment<br>(\$M) | Fair Market  | Total<br>Distribution (\$M) |
| i ullu                     | туре            | viiitage Teal |                | . ,                 | (\$P(M))                  | Value (VIVI) |                             |
| Stone Arch Capital II      | US Buyout       | 2008          | 11.7%          | \$7.5               | \$6.2                     | \$4.7        | \$4.8                       |
| GGV Capital III            | Venture Capital | 2006          | 11.4%          | \$8.0               | \$7.9                     | \$4.6        | \$15.1                      |
| IVP XII                    | Venture Capital | 2007          | 11.4%          | \$10.0              | \$10.0                    | \$4.6        | \$22.1                      |
| Clarus Ventures II         | Venture Capital | 2008          | 11.2%          | \$5.0               | \$4.8                     | \$4.5        | \$5.0                       |
| DW Healthcare Partners III | US Buyout       | 2012          | 7.2%           | \$4.0               | \$3.3                     | \$2.9        | \$2.4                       |
| CapStreet III              | US Buyout       | 2010          | 7.1%           | \$4.0               | \$3.9                     | \$2.8        | \$4.9                       |
| AEA Small Business Fund II | US Buyout       | 2010          | 6.8%           | \$3.0               | \$3.2                     | \$2.7        | \$2.2                       |
| ABS Capital Partners VI    | Venture Capital | 2008          | 5.4%           | \$5.0               | \$4.9                     | \$2.1        | \$2.2                       |
| Incline Equity III         | US Buyout       | 2012          | 5.2%           | \$4.0               | \$3.9                     | \$2.1        | \$4.1                       |
| REF IV                     | Intl' Buyout    | 2009          | 4.9%           | \$3.2               | \$3.4                     | \$2.0        | \$3.1                       |

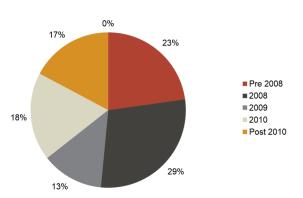
Annual Cash Flow Summary (\$M)



|                          | 2010    | 2011    | 2012    | 2013    | 2014    | 2015   | 2016   | 2017   |
|--------------------------|---------|---------|---------|---------|---------|--------|--------|--------|
| Paid In Capital w/o Fees | -\$10.9 | -\$6.7  | -\$4.7  | -\$1.8  | -\$2.9  | \$0.0  | \$0.0  | \$0.0  |
| Fees Paid                | -\$0.3  | -\$0.3  | -\$0.3  | -\$0.3  | -\$0.2  | -\$0.2 | -\$0.2 | -\$0.1 |
| Distribution             | \$0.6   | \$2.5   | \$5.4   | \$6.8   | \$12.0  | \$8.9  | \$5.2  | \$8.5  |
| Cumulative               | -\$27.1 | -\$31.6 | -\$31.1 | -\$26.4 | -\$17.5 | -\$8.9 | -\$3.9 | \$4.4  |
|                          |         |         |         |         |         |        |        |        |
|                          |         |         |         |         |         |        |        |        |



Vintage Year Exposure





# Characteristics

## Market Value: \$37.4 Million and 1.7% of Fund

# As of December 31, 2017

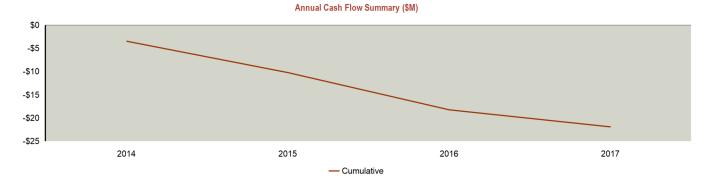
#### Characteristics

|  | North Sky Capital |
|--|-------------------|
| Total Size of Fund (\$M)                       | \$50.9            |
| Total Capital Called to Date                   | \$21.1            |
| % of Committed Capital Called                  | 41.5%             |
| Capital Distributed (\$M)                      | \$0.0             |
| Capital Distributed (as a % of Capital Called) | 0.0%              |
| Client Commitment (\$M)                        | \$40.0            |
| Client % Ownership of Fund                     | 78.7%             |

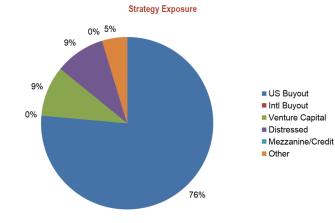
| Fund Vintage Year            | 2014              |
|------------------------------|-------------------|
| Total Underlying Commitments | \$53.0            |
| # of Underlying Commitments  | 11                |
| % of Capital Committed       | 104.08%           |
| Fund NAV (\$M)               | \$22.9            |
| Net Multiple                 | 1.13084572290494x |
| Net IRR                      | 4.28%             |

#### Top Ten Funds by Market Value

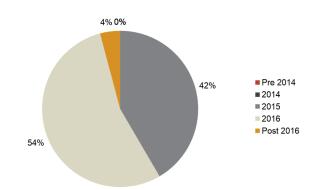
| Fund                        | Туре            | Vintage Year | % of Portfolio | Total<br>Commitment<br>(\$M) | Total Investment<br>(\$M) | Fair Market<br>Value (\$M) | Total<br>Distribution (\$M) |
|-----------------------------|-----------------|--------------|----------------|------------------------------|---------------------------|----------------------------|-----------------------------|
| Tower Arch I                | US Buyout       | 2014         | 13.7%          | \$6.5                        | \$3.0                     | \$3.5                      | \$0.5                       |
| Francisco Partners IV       | US Buyout       | 2015         | 13.6%          | \$4.0                        | \$2.8                     | \$3.4                      | \$0.0                       |
| Cressey & Company V         | US Buyout       | 2015         | 13.5%          | \$5.0                        | \$3.3                     | \$3.4                      | \$0.2                       |
| IVP XV                      | Venture Capital | 2015         | 13.4%          | \$5.0                        | \$3.6                     | \$3.4                      | \$0.3                       |
| Guardian II                 | US Buyout       | 2014         | 12.1%          | \$6.5                        | \$3.1                     | \$3.1                      | \$0.0                       |
| PEP V Co-Invest             | Other           | 2014         | 11.7%          | \$2.5                        | \$2.5                     | \$3.0                      | \$0.3                       |
| CapStreet IV                | US Buyout       | 2015         | 7.7%           | \$5.0                        | \$1.7                     | \$2.0                      | \$0.1                       |
| AEA Small Business Fund III | US Buyout       | 2016         | 4.1%           | \$3.5                        | \$1.2                     | \$1.1                      | \$0.0                       |
| Tritium I                   | US Buyout       | 2014         | 4.1%           | \$2.0                        | \$0.9                     | \$1.0                      | \$0.0                       |
| Southfield II               | US Buyout       | 2015         | 2.7%           | \$3.0                        | \$0.6                     | \$0.7                      | \$0.0                       |



|                          | 2014   | 2015    | 2016    | 2017    |
|--------------------------|--------|---------|---------|---------|
| Paid In Capital w/o Fees | -\$3.3 | -\$6.5  | -\$7.8  | -\$3.5  |
| Fees Paid                | -\$0.2 | -\$0.3  | -\$0.2  | -\$0.2  |
| Distribution             | \$0.0  | \$0.0   | \$0.0   | \$0.0   |
| Cumulative               | -\$3.5 | -\$10.2 | -\$18.3 | -\$21.9 |



Vintage Year Exposure



\*Other:(freeform)

As of June 30, 2019

| 2019_Securities | l ending | Revenue             |
|-----------------|----------|---------------------|
| ZUID_OCUUIIIICS | Lonanig  | <u>I (C V CIIUC</u> |

| Month                          | <b>v</b>               | <u>CRS Earnings</u> |
|--------------------------------|------------------------|---------------------|
| January                        |                        | -\$8,776            |
| February                       |                        | -\$8,035            |
| March                          |                        | -\$7,127            |
| April                          |                        | -\$6,680            |
| Мау                            |                        | -\$7,597            |
| June                           |                        | -\$6,330            |
| Total 2019 BNY Mellon YTD Secu | rities Lending Revenue | -\$44,546           |

| M                     |                                    |                     |
|-----------------------|------------------------------------|---------------------|
| <u>Year</u>           |                                    | <u>CRS</u> Earnings |
| 2018                  |                                    | -\$29,442           |
| 2017                  |                                    | \$125,636           |
| 2016                  |                                    | \$351,379           |
| 2015                  |                                    | \$542,312           |
| 2014                  |                                    | \$562,374           |
| 2013                  |                                    | \$321,534           |
| 2012                  |                                    | \$277,849           |
| 2011                  |                                    | \$362,989           |
| 2010                  |                                    | \$340,835           |
| 2009                  |                                    | \$964,503           |
| 2008                  |                                    | \$2,365,591         |
| 2007                  |                                    | \$1,432,567         |
| 2006                  |                                    | \$983,293           |
| 2005                  |                                    | \$989,492           |
| 2004                  |                                    | \$1,513,575         |
| 2003                  |                                    | \$352,142           |
| Total Securities Lend | ding Revenue (July 2003 - Present) | \$11,412,084        |

# Historic Securities Lending Revenue

# Update on Collateral Pool Deficiency

| Realized loss from Lehman (CRS Share):                      | \$10,427,589 |
|---|--------------|
| <sup>1</sup> Securities lending credit towards Lehman loss: | \$1,873,793  |
| Remaining balance from Lehman loss:                         | \$8,553,796  |

<sup>1</sup> Beginning in March 2013, all securities lending revenue is being directed to the CRS collateral account to pay down the realized loss from Lehman.

**Total Fund Composite** 

#### Fee Schedule

Market Value: \$2,228.0 Million and 100.0% of Fund

| Asset Class             | Expense Ratio &<br>Estimated Annual Fee <sup>1</sup> | Industry<br>Average <sup>2</sup> |
|-------------------------|--|----------------------------------|
| Fixed Income            | 0.44%<br>\$1,731,642                                 | 0.37%                            |
| US Equity               | 0.03%<br>\$174,340                                   | 0.21%                            |
| Non-US Equity           | 0.34%<br>\$1,714,940                                 | 0.67%                            |
| Hedge Funds/Risk Parity | 0.38%<br>\$445,377                                   | 0.83%                            |
| Real Estate             | 1.03%<br>\$2,375,868                                 | 1.01%                            |
| Infrastructure          | 1.75%<br>\$2,748,312                                 | 1.49%                            |
| Private Equity          | 0.95%<br>\$1,674,416                                 | 1.22%                            |
| Total                   | 0.49%<br>\$10,864,895                                | 0.81%                            |

<sup>1</sup> Expense Ratio & Estimated Annual Fee are Based on Market Value at Quarter End.

<sup>2</sup> Source: Marquette Associates Investment Management Fee Study.





#### Fee Schedule

#### Market Value: \$2,228.0 Million and 100.0% of Fund

| Asset Class  | Investment Manager              | Fee Schedule  | Expense Ratio &<br>Estimated Annual Fee <sup>1</sup> | Industry<br>Average <sup>2</sup> |
|--|---------------------------------|---|--|----------------------------------|
| Unconstrained Fixed Income   | BlackRock Strategic Income Opps | 0.55% on the balance  | 0.55%<br>\$864,163                                   | 0.29%                            |
| Core Plus Fixed Income   | Loomis Sayles Core-Plus         | 0.30% on the first \$100 million<br>0.25% on the next \$100 million<br>0.20% on the next \$200 million<br>0.15% on the balance  | 0.28%<br>\$450,974                                   | 0.28%                            |
| High Yield Fixed Income  | Shenkman - Four Points          | 0.55% on the balance  | 0.55%<br>\$416,504                                   | 0.72%                            |
| Large-Cap Value<br>Large-Cap Growth<br>Mid-Cap Core<br>Small-Cap Value<br>Int'l Developed Large Cap Core | Northern Trust                  | 0.02% on the balance  | 0.02%<br>\$152,936                                   | 0.10%                            |
| Mid-Cap Value  | Vanguard Mid Cap Value          | 0.070% on the balance   | 0.07%<br>\$66,348                                    | 0.65%                            |
| Non-U.S. Small-Cap Value   | DFA International Small Value   | 0.71% on the balance  | 0.71%<br>\$715,423                                   | 1.08%                            |
| Emerging Markets   | DFA Emerging Markets Value      | 0.37% on the balance  | 0.37%<br>\$195,872                                   | 1.27%                            |
| Emerging Markets   | DFA Emerging Markets Core       | 0.53% on the balance  | 0.53%<br>\$275,414                                   | 0.90%                            |
| EM Small-Cap   | DFA Emerging Markets Small Cap  | 0.72% on the balance  | 0.72%<br>\$483,286                                   | 1.27%                            |
| Risk Parity  | AQR Risk Parity                 | 0.38% on the balance  | 0.38%<br>\$445,377                                   | 0.83%                            |
| Core Real Estate   | J.P. Morgan SPF                 | 1.00% on the balance  | 1.00%<br>\$728,657                                   | 1.01%                            |
| Core Real Estate   | Morgan Stanley P.P.             | 0.90% on the balance<br>Incentive Fee: 5%*NAV*(Return-NCREIF)   | 0.90%<br>\$604,813                                   | 1.01%                            |
| Value-Added Real Estate  | PRISA III                       | 1.10% on assets<br>0.10% on cash balance<br>0.40% on distributions<br>All expenses capped at 2.0%   | 1.10%<br>\$430,261                                   | 1.01%                            |
| Value-Added Real Estate  | Principal Enhanced              | 1.20% on the balance<br>15% performance fee on returns > 11%  | 1.20%<br>\$568,842                                   | 1.01%                            |
| Non-U.S. Core Real Estate  | Mesirow/Courtland I             | 1.00% on the balance<br>(Following seventh anniversary,<br>fee drops to 90% of prior years fee).<br>(8% preferred internal rate of return to investor)<br>5% carry with 100% catch up provision | 1.00%<br>\$43,295                                    | 1.01%                            |
| Core Infrastructure  | Alinda Fund II                  | 1.50% on committed assets (20% incentive over 8% preferred return)  | 3.31%<br>\$975,000                                   | 4.41%                            |

#### Total Fund Composite

#### Fee Schedule

Market Value: \$2,228.0 Million and 100.0% of Fund

| Asset Class                           | Investment Manager                   | Fee Schedule   | Expense Ratio &<br>Estimated Annual Fee <sup>1</sup> | Industry<br>Average <sup>2</sup> |
|---------------------------------------|--------------------------------------|--|--|----------------------------------|
| Core Infrastructure                   | Macquarie Fund II                    | 1.50% on committed assets (20% incentive over 8% preferred return)   | 2.94%<br>\$975,000                                   | 3.92%                            |
| Core Infrastructure                   | J.P. Morgan Infrastructure           | 1.00% on the first \$100 million<br>0.90% on the next \$200 million<br>0.80% on the balance  | 1.00%<br>\$312,552                                   | 1.41%                            |
| Global Infrastructure                 | IFM Global Infrastructure (U.S)      | 0.77% on the Balance   | 0.77%<br>\$485,760                                   | 2.00%                            |
| Venture Private Equity                | Blue Chip Fund IV                    | \$100,000 annual fee for administrative expenses<br>Plus 20% of profits after all capital returned   | 7.01%<br>\$100,000                                   | 1.25%                            |
| Divers. Private Equity                | Fort Washington Fund V               | 0.40% on committed assets<br>(5% incentive over 8% return)   | 0.90%<br>\$160,000                                   | 2.81%                            |
| Divers. Private Equity                | Fort Washington Fund VI              | 0.40% on committed assets<br>(5% incentive over 8% return)   | 0.91%<br>\$120,000                                   | 2.84%                            |
| Divers. Private Equity                | Fort Washington Fund VIII            | 0.20% on committed assets Yr 1<br>0.30% on committed assets Yr 2<br>0.40% on committed assets Yrs 3-8  | 0.53%<br>\$200,000                                   | 1.65%                            |
| Divers. Private Equity                | Fort Washington Fund IX              | 0.09% on committed assets Yr 1<br>0.18% on committed assets Yr 2<br>0.27% on committed assets Yr 3<br>0.36% on committed assets Yrs 4-10                   | 0.71%<br>\$135,000                                   | 3.27%                            |
| Divers. Private Equity                | Fort Washington Fund X               | 0.15% on committed assets Yr 1<br>0.30% on committed assets Yr 2<br>0.45% on committed assets Yr 3<br>0.60% on committed assets Yrs 4-10                   | 1.50%<br>\$60,000                                    | 12.50%                           |
| Secondary Private Equity FoF          | Fort Washington Opp Fund III         | 0.75% on committed assets (15% incentive over 8% preferred return)   | 1.30%<br>\$225,000                                   | 2.17%                            |
| LBO Private Equity                    | North Sky Fund III - LBO             | 0.45% on committed assets (5% incentive over 8% return)  | 1.72%<br>\$135,000                                   | 4.77%                            |
| Venture Private Equity                | North Sky Fund III - VC              | 0.45% on committed assets (5% incentive over 8% return)  | 1.47%<br>\$45,000                                    | 4.09%                            |
| LBO Private Equity                    | North Sky Fund IV - LBO              | 0.45% on committed assets (5% incentive over 8% return)  | 0.86%<br>\$67,500                                    | 2.40%                            |
| Venture Private Equity                | North Sky Fund IV - VC               | 0.45% on committed assets (5% incentive over 8% return)  | 2.95%<br>\$67,500                                    | 8.20%                            |
| Divers. Private Equity                | North Sky Fund V                     | 0.65% on committed assets Yrs 1-3<br>0.55% on committed assets Yrs 4-6<br>0.45% on committed assets Yrs 7-9<br>0.35% on committed assets thereafter        | 0.59%<br>\$220,000                                   | 1.34%                            |
| Mezz./Special Sit. Private Equity FoF | Portfolio Advisors IV - Special Sit  | 0.375% on committed assets Yrs 1-3<br>0.30% on committed assets Yrs 4-5<br>0.30% on invested capital thereafter<br>(5% incentive over 8% preferred return) | 0.30%<br>\$9,918                                     | 1.25%                            |
| Mezz./Special Sit. Private Equity FoF | Portfolio Advisors V - Special Sit   | 0.375% on committed assets Yrs 1-3<br>0.30% on committed assets Yrs 4-5<br>0.30% on invested capital thereafter<br>(5% incentive over 8% preferred return) | 0.30%<br>\$5,499                                     | 1.25%                            |
| Global Divers. Private Equity FoF     | JP Morgan Global Private Equity VIII | 0.31% on committed capital (est.)<br>Performance Fee (Hurdle Rate 8%):<br>Primary: 5%<br>Secondary: 10%<br>Direct: 15%                                     | 4.43%<br>\$124,000                                   | 17.87%                           |
| Total Investment Management Fees      |                                      |  | 0.49%<br>\$10,864,895                                | 0.81%                            |

Marquette Associates



July 26, 2019

#### **Cincinnati Retirement**

Pension

Asset Allocation Study

| Client Name              | Cincinnati Retirement |
|--------------------------|-----------------------|
| Plan Type                | Pension               |
| Number of Runs Evaluated | 1000                  |
| Holding Period           | 120 Months            |
| Most Recent Data Inputs  | March 31, 2019        |
| Market Value of Assets   | \$2,227,975,124       |
| Return Target            | 7.50%                 |
|                          |                       |

#### **Description of Software**

Our asset allocation studies evaluate potential client portfolios under a variety of macroeconomic environments, which directly impact the performance of asset classes. The studies are built to analyze often overlooked – but critical – features of portfolio construction, including liquidity, rebalancing, and net cash flow. We offer customized reports and analytics to evaluate circumstances unique to each plan, such as spending policies for endowments and funding ratios for pension funds. More generally, our asset allocation studies offer a comprehensive and rigorous analysis that will formulate the most effective portfolios to achieve client goals. Specifically, the following initiatives are included in our asset allocation studies:

- Identify and quantify sources of risk, beyond the use of standard deviation as the sole risk metric
- Establish a forward looking methodology that is not anchored by pre-determined expected returns, standard deviations and correlations
- Recognize the illiquid nature of alternative asset classes, along with the liquidity needs of each client
- Incorporate the client's return goals, liabilities, and cash flows
- Allow for portfolio re-balancing to keep asset allocations within target ranges
- Allow for non-normal return patterns
- Reflect current economic conditions in the analysis.

Our software is based on a Monte Carlo simulation of macroeconomic factors, which are used to model monthly return outcomes of capital markets. The simulations are created by a powerful economic scenario generator ("ESG"), which is the driving force behind our asset allocation model. The economic scenario generator simulates the future performance of the capital markets and macro-economy; the underlying models are calibrated based on the long-term historical record, so that they will reproduce the kinds of volatility and stress scenarios that have been observed over the 20th and 21st centuries. The models are linked and correlated so that the behavior of different asset classes and economic variables is consistent within each random scenario.

Portfolio performance over the course of the study reflects projected net cash flows-using actual benefit payments and contributions / historical cash flows-as well as overall portfolio composition, rebalancing rules, and beginning market value. When coupled with the simulated returns, these inputs provide the monthly market value of all asset classes for each proposed portfolio and of the total fund. We also calculate average annualized returns and standard deviations for each portfolio. These statistics allow us to calculate risk adjusted returns that figure heavily into determining the recommended portfolio.

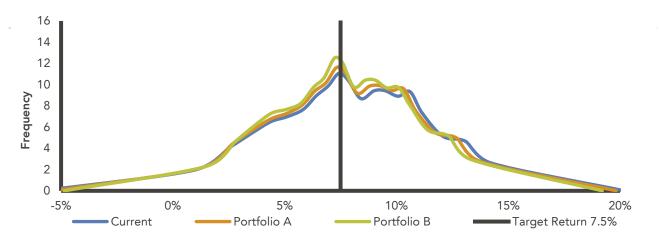
#### **Executive Summary**

#### **Portfolio Options**

| Asset Class                    | Current | Portfolio A | Portfolio B |
|--------------------------------|---------|-------------|-------------|
| Core Plus                      | 7.0%    | 10.0%       | 13.0%       |
| Global Aggregate               | 7.0%    | 7.0%        | 7.0%        |
| Opportunistic Credit           | 3.0%    | 3.0%        | 3.0%        |
| Total Fixed Income             | 17.0%   | 20.0%       | 23.0%       |
| US Large-Cap Value             | 7.0%    | 6.8%        | 6.3%        |
| US Large-Cap Growth            | 5.0%    | 4.6%        | 4.2%        |
| US Mid-Cap Core                | 4.0%    | 3.8%        | 3.5%        |
| US Mid-Cap Value               | 4.0%    | 3.8%        | 3.5%        |
| US Small-Cap Value             | 7.5%    | 7.0%        | 6.5%        |
| Total U.S. Equity              | 27.5%   | 26.0%       | 24.0%       |
| Developed Large-Cap            | 10.0%   | 9.3%        | 8.7%        |
| Non-US Small-Cap               | 5.0%    | 4.7%        | 4.5%        |
| Emerging Market                | 5.0%    | 4.7%        | 4.5%        |
| Emerging Market Small-Cap      | 3.0%    | 2.8%        | 2.8%        |
| Total Non-U.S. Equity          | 23.0%   | 21.5%       | 20.5%       |
| Hedge Fund - Global Macro      | 5.0%    | 5.0%        | 5.0%        |
| Total Hedge Funds              | 5.0%    | 5.0%        | 5.0%        |
| Real Estate - Core             | 10.0%   | 10.0%       | 10.0%       |
| Total Real Assets              | 10.0%   | 10.0%       | 10.0%       |
| Global Infrastructure          | 7.5%    | 7.5%        | 7.5%        |
| Private Equity - Fund of Funds | 10.0%   | 10.0%       | 10.0%       |
| Total Illiquid Assets          | 17.5%   | 17.5%       | 17.5%       |

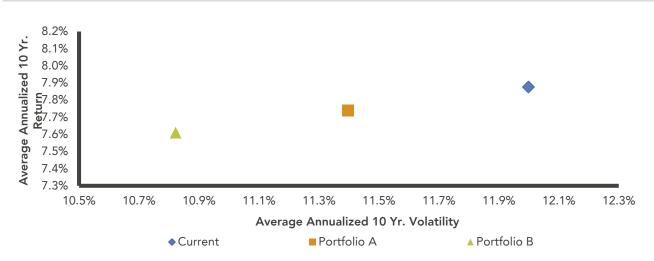
#### **Summary of Portfolio Characteristics**

|                                   | Current | Portfolio A | Portfolio B |
|-----------------------------------|---------|-------------|-------------|
| Avg. Annualized 10 Yr. Return     | 7.88%   | 7.74%       | 7.61%       |
| Avg. Annualized 10 Yr. Volatility | 12.00%  | 11.40%      | 10.82%      |
| Avg. Return/Avg. Volatility       | 0.66    | 0.68        | 0.70        |





#### Average Annualized 10 Yr. Return/Volatility







#### Summary of Downside Risk

| Percentile                  | Current | Portfolio A | Portfolio B |
|-----------------------------|---------|-------------|-------------|
| Downside Probability (7.5%) | 45.3%   | 46.5%       | 48.4%       |
| Downside Risk (7.5%)        | 3.2%    | 3.1%        | 2.9%        |
| Downside Probability (0%)   | 2.5%    | 2.3%        | 2.0%        |
| Downside Risk (0%)          | 1.9%    | 1.6%        | 1.5%        |

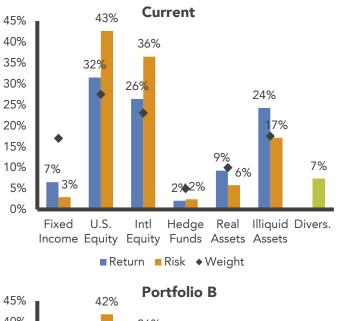
#### **Distribution of Average Annualized 10 Year Returns**

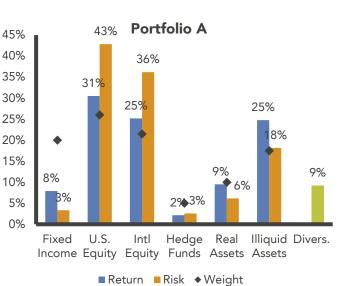
| Percentile     | Current | Portfolio A | Portfolio B |
|----------------|---------|-------------|-------------|
| Average (Mean) | 7.9%    | 7.7%        | 7.6%        |
| 5%             | 1.0%    | 1.3%        | 1.5%        |
| 25%            | 5.1%    | 5.1%        | 5.1%        |
| 50%            | 7.9%    | 7.7%        | 7.6%        |
| 75%            | 10.6%   | 10.3%       | 10.1%       |
| 95%            | 14.2%   | 13.8%       | 13.3%       |

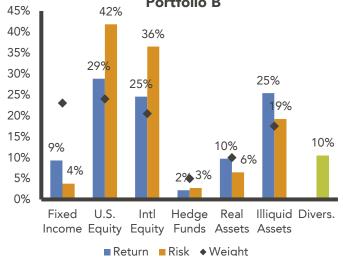


#### Portfolio Risk and Return Decomposition by Asset Class

The charts below illustrate the contribution of each asset class to a portfolio's total risk and return, as well as the benefit of diversification to each portfolio's risk.







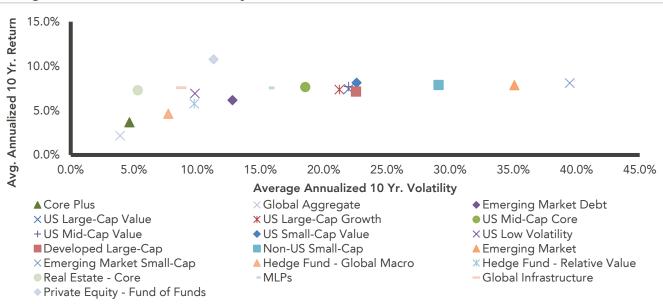


#### Simulated Asset Class Characteristics

The results of the simulated capital market returns are shown below. It is important to note that these values represent output from the software simulations, and not deterministic views of future capital market performance. The first column is the average annualized 10 year return of all the simulations, and the second column is the average annualized 10 year volatility. The last five columns indicate the annualized 10 year return for the 5th, 25th, 50th, 75th, and 95th percentile; the higher the percentiles, the better the performance.

|                                | Average              | 10 Year                  | 10 Year Annualized Returns |                    |                    |                    |                    |  |  |
|--------------------------------|----------------------|--------------------------|----------------------------|--------------------|--------------------|--------------------|--------------------|--|--|
| Asset Class                    | Annualized<br>Return | Annualized<br>Volatility | 5th<br>Percentile          | 25th<br>Percentile | 50th<br>Percentile | 75th<br>Percentile | 95th<br>Percentile |  |  |
| Core Plus                      | 3.7%                 | 4.6%                     | 2.7%                       | 3.3%               | 3.5%               | 3.9%               | 5.3%               |  |  |
| Global Aggregate               | 2.2%                 | 3.9%                     | 0.2%                       | 1.4%               | 2.2%               | 2.9%               | 4.2%               |  |  |
| Emerging Market Debt           | 6.2%                 | 12.8%                    | -0.7%                      | 3.3%               | 6.1%               | 9.1%               | 13.4%              |  |  |
| US Large-Cap Value             | 7.4%                 | 22.0%                    | -4.8%                      | 2.6%               | 7.5%               | 12.6%              | 18.3%              |  |  |
| US Large-Cap Growth            | 7.3%                 | 21.3%                    | -4.5%                      | 2.6%               | 7.4%               | 12.4%              | 17.8%              |  |  |
| US Mid-Cap Core                | 7.6%                 | 18.6%                    | -2.7%                      | 3.5%               | 7.9%               | 12.0%              | 17.1%              |  |  |
| US Mid-Cap Value               | 7.7%                 | 22.0%                    | -4.4%                      | 3.1%               | 7.8%               | 12.6%              | 19.2%              |  |  |
| US Small-Cap Value             | 8.1%                 | 22.6%                    | -4.4%                      | 3.4%               | 8.4%               | 13.0%              | 19.4%              |  |  |
| US Low Volatility              | 6.9%                 | 9.8%                     | 1.6%                       | 4.7%               | 7.0%               | 9.2%               | 11.7%              |  |  |
| Developed Large-Cap            | 7.1%                 | 22.6%                    | -4.0%                      | 2.2%               | 7.3%               | 12.1%              | 19.5%              |  |  |
| Non-US Small-Cap               | 7.9%                 | 29.1%                    | -7.0%                      | 1.5%               | 7.9%               | 13.5%              | 24.3%              |  |  |
| Emerging Market                | 7.9%                 | 35.1%                    | -10.3%                     | -0.6%              | 7.8%               | 15.0%              | 28.6%              |  |  |
| Emerging Market Small-Cap      | 8.1%                 | 39.5%                    | -10.9%                     | -1.0%              | 7.9%               | 16.2%              | 30.4%              |  |  |
| Hedge Fund - Global Macro      | 4.6%                 | 7.7%                     | -0.3%                      | 2.0%               | 3.8%               | 6.3%               | 12.4%              |  |  |
| Hedge Fund - Relative Value    | 5.8%                 | 9.8%                     | -0.2%                      | 3.3%               | 5.7%               | 8.1%               | 11.6%              |  |  |
| Real Estate - Core             | 7.3%                 | 5.3%                     | 3.7%                       | 5.8%               | 7.2%               | 8.8%               | 10.9%              |  |  |
| MLPs                           | 7.5%                 | 15.7%                    | -1.2%                      | 4.1%               | 7.5%               | 11.1%              | 16.5%              |  |  |
| Global Infrastructure          | 7.6%                 | 8.7%                     | 2.9%                       | 5.6%               | 7.5%               | 9.6%               | 12.5%              |  |  |
| Private Equity - Fund of Funds | 10.7%                | 11.3%                    | 4.7%                       | 8.3%               | 11.0%              | 13.2%              | 16.3%              |  |  |

Average Annualized 10 Yr. Return/Volatility







August 2019

## **Private Equity Funding Review**

Presented by

Brett Christenson, CFA, CFP® Managing Director

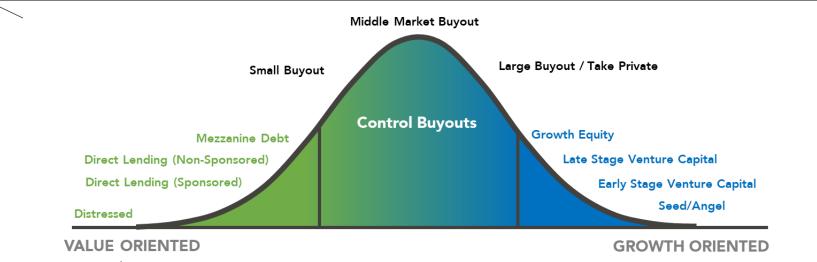
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# Private Equity OVERVIEW

### **Private equity introduction**

- Private equity encompasses any privately held debt or equity investment
- The global private equity industry currently manages over \$2.9 trillion in assets, as the industry has doubled in size over the past decade
- Strong investor demand for private equity has led to a steadily growing level of dry powder, which now exceeds \$1.0 trillion
- Private equity is broken down into four main investment categories:
  - Venture Capital
  - Growth Equity
  - Buyout
  - Private Debt / Mezzanine
  - Distressed

### Private equity market segmentation



| Sub Cate            | gory | Expected<br>Return | Financing      | Duration of<br>Investment | Relative Risk   | Stage                 | Success Rate | Ownership<br>Stake |
|---------------------|------|--------------------|----------------|---------------------------|-----------------|-----------------------|--------------|--------------------|
| Venture<br>Capital  |      | 20%+               | 100%<br>Equity | 5 years +                 | High            | Early                 | Low          | Less than<br>50%   |
| Growth<br>Equity    |      | 15% - 20%          | 100%<br>Equity | 3-5 years +               | Medium-<br>High | Early Growth          | Medium       | Less than<br>50%   |
| Buyout              |      | 13% – 20%          | 100%<br>Equity | 3–5 years +               | Medium          | Mature                | Medium       | More than<br>50%   |
| Private D<br>/ Mezz | Debt | 7% – 15%           | 100% Debt      | 1–5 years +               | Low             | Mature                | High         | None               |
| Distresse           |      | Varies             | Varies         | 1–5 years +               | Low -<br>Medium | Mature –<br>Declining | Medium       | 0 – 100%           |

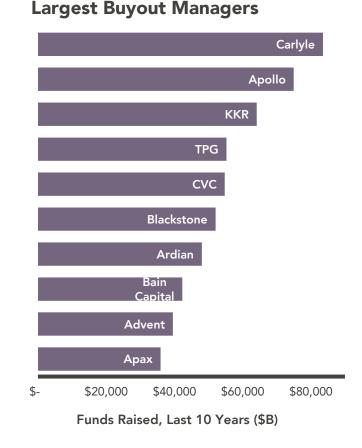
Source: Marquette Associates. This table represents Marquette's best estimate of typical returns, risk, duration, and investment style of each investment category.

### **Venture Capital**

- Seed/Angel Usually the first outside capital raised by an entrepreneur in order to launch a company, develop a concept, or build prototypes prior to entering the market
- Early Stage Capital provided to setup or expand the production, marketing, and/or distribution network of a company that is often generating revenues but typically unprofitable
- Late Stage Expansion capital provided to a company that has proven a sustainable concept by generating a significant level of revenue but may or may not be profitable. Capital may be considered bridge financing for a business near the point of "going public" through an IPO
- Growth Capital provided to accelerate the growth of a company with little or no debt

#### **Buyout**

- Buyouts feature a private equity firm taking a controlling position in a company with management often contributing some capital and maintaining a minority stake
- Buyouts typically target mature companies that are profitable and generate substantial free cash flow
- The private equity firm will often make substantial changes to the management team, capital structure, and strategic direction
- In a buyout, the private equity firm frequently takes an aggressive capital structure with leverage used to magnify returns



Source: Preqin. Largest buyout firms globally by funds raised over the last decade as of December 31, 2017.



### **Private Debt / Mezz**

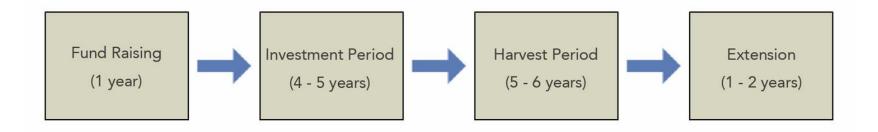
- Mezzanine financing provides debt capital to companies and is the most junior piece of debt in the capital structure
- Mezzanine debt often yields anywhere from 10-15% and commonly includes an upfront fee of 2-3% of the loan value as well as potential equity participation
- Most mezzanine debt has a five year duration and is not callable for the first two or three years
- Direct Lending can be either "sponsored" when lending capital to a business being acquired by a private equity firm or "nonsponsored" when lending capital to privately owned businesses without private equity ownership

### Distressed

- Distressed debt investments target more senior pieces of debt in distressed companies
- Distressed debt investments can generate returns in two ways:
  - Appreciation Distressed debt is purchased below par value and as the financial situation improves the investor is paid back at par value
  - Bankruptcy Recovery In a Chapter 11 reorganization control of the company is transferred to the debt holders or in a Chapter 7 liquidation the company's assets are sold and the proceeds are transferred to the debt holders

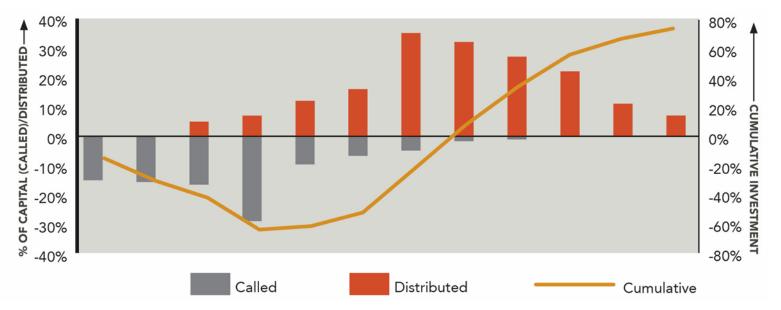
### Private equity fund lifecycle

- After fundraising concludes, investments are made for a four to five year period, followed by a five to six year period to grow and sell the portfolio companies
- Capital is called from investors as investments and fees are generated by the fund
- Private equity funds on average have a defined life of ten years for a direct fund and twelve years for a fund-of-funds
- Funds commonly include annual extension options of 1-3 years



### Investment cash flows and j-curve

- Committed capital is called from investors as investments are completed and as fees are generated
- Management fees are often calculated on committed capital not invested capital
- Capital is invested by a private equity fund over time producing large cash initial fund outflows
- Fees and slow deployment of capital often generates a negative return during the early years of a fund with positive returns in the later years as investments mature and exit, forming a "j-curve"



This chart shows the amount of capital called and distributed each year on the left axis and shows the investor's total invested capital, as a percentage of committed capital, in each year on the right axis. Private equity funds typically have large capital calls in the early years of the fund's life and then make large distributions towards the end of the fund's life as portfolio companies are sold. In this example we show a fund with a 1.75x multiple, a 14% IRR, and two one-year extensions.

### **Competitive advantage of private equity**

- The persistently higher returns in private equity compared to other asset classes is primarily due to:
  - Control Majority ownership allows for a greater ability to affect positive operational improvements in the underlying firm by leveraging the experience, sector knowledge, and network of a private equity firm
  - Alignment of interest The relationship between the owners of a company and senior management ensures management maintains a large stake in the company
  - Long-term horizon Deals tend to be large and infrequent allowing for a high level of due diligence, often leading to better price discovery over the longer term

### **Historical performance**

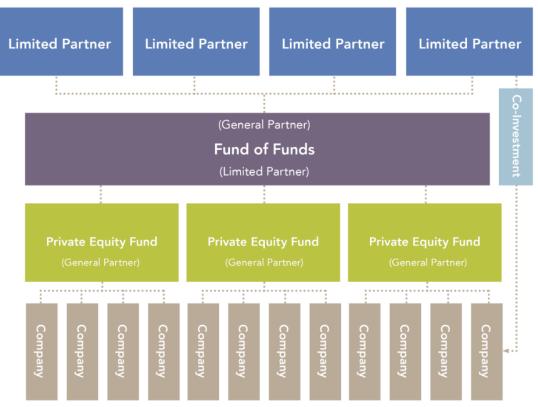
- Private equity's historical outperformance of public asset classes can be attributed to four main characteristics of private equity investments:
  - The significant resources, knowledge, and capital brought to a private business provides a catalyst to improve the growth and profitability
  - The long-term focus and structure of private equity investment aligns the interest of management and investors and allows for more strategic deployment of capital
  - Expanded flexibility in structuring deals provides excellent risk/reward characteristics
  - Substantial leverage used to enhance investment returns

### **Benefits of fund-of-funds**

- Access Investors are provided exposure to difficult-to-access funds from some of the best performing managers due to the consistent capital these managers provide and their deep relationships in the market
- Portfolio Construction Portfolios are constructed by experienced managers who actively manage and diversify exposures across investment strategies, managers, geographies, sectors, fund sizes, and vintage years
- Administration Significantly less due diligence efforts, legal fees, and administrative time required to manage a larger number of capital calls and distributions
- Investment Terms Investors benefit from the negotiating power of a larger investment into a fund which can provide beneficial fees and terms that can enhance investment returns
- Co-Investments / Secondary Investments Investors benefit from the manager's underwriting experience and ongoing monitoring of opportunities in the market to purchase attractive assets that help to mitigate the j-curve and can enhance investment returns

### Private equity fund-of-funds legal structure

• With private equity fund-of-funds, the investors are still the limited partners but the fund-of-funds is the general partner



### **Risks of private equity**

- Private equity carries substantial risk for investors, including:
  - Investment risks Private equity is riskier public market investments because target firms tend to be smaller, capital structures are more aggressively leveraged, regulatory oversight is weaker, and funds tend to be highly concentrated.
  - Illiquidity Private equity investments are illiquid, and after an investor makes a commitment they have little to no control over the size and timing of future cash flows.
  - High fees Private equity investments tend to have high fees due to the extensive amount of work that goes into each transaction. Because fees are charged on committed capital, there is substantial performance risk for funds that are slow to invest capital.
  - Subjective performance calculations Over the life of the fund, managers have substantial control over the interim portfolio valuation because investments are not listed on public exchanges.
  - Manager selection There is a large dispersion in returns between the top and bottom quartiles of funds.

## Private Equity Market Environment

### **Private equity: Outperformance continues**

#### Private equity significantly outperformed public markets in 2018

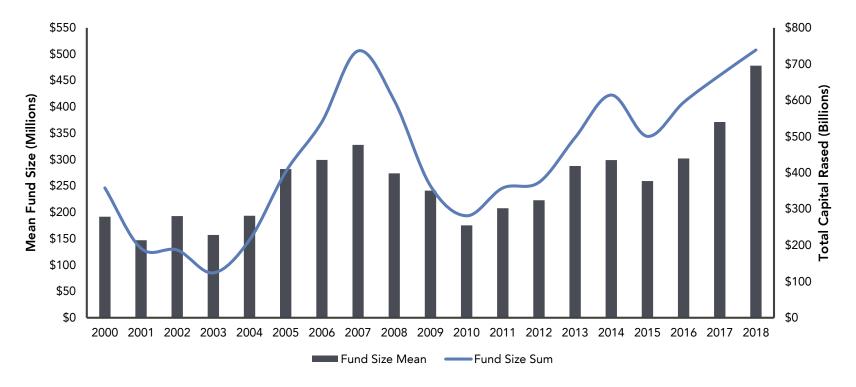
|  | QTR (%) | 1 Year (%) | 3 Year (%) | 5 Year (%) | 10 Year (%) | 15 Year (%) | 20 Year (%) |
|--|---------|------------|------------|------------|-------------|-------------|-------------|
| Cambridge Associates U.S. PE Index       | -1.7    | 10.7       | 14.1       | 11.8       | 14.3        | 13.4        | 12.0        |
| Global Buyout and Growth Equity<br>Index | -0.8    | 10.0       | 14.5       | 12.2       | 14.3        | 13.6        | 12.4        |
| Ex-U.S. Developed PE and VC Index        | -1.4    | 8.3        | 15.8       | 10.5       | 12.3        | 13.3        | 13.3        |
| Cambridge Associates VC Index            | 1.7     | 18.1       | 9.5        | 12.9       | 12.8        | 10.7        | 21.4        |
| U.S. VC Early Stage Index                | 2.3     | 19.2       | 10.2       | 14.2       | 13.6        | 10.7        | nm          |
| U.S. VC Late & Expansion Stage Index     | 2.6     | 21.0       | 10.1       | 9.6        | 13.2        | 11.3        | 9.2         |
| NASDAQ Composite Index                   | -17.5   | -3.9       | 9.8        | 9.7        | 15.5        | 8.3         | 5.7         |
| Russell 1000 Index                       | -13.8   | -4.8       | 9.1        | 8.2        | 13.3        | 7.9         | 5.9         |
| Russell 2000 Index                       | -20.2   | -11.0      | 7.4        | 4.4        | 12.0        | 7.5         | 7.4         |
| S&P 500 Index                            | -13.5   | -4.4       | 9.3        | 8.5        | 13.1        | 7.8         | 5.6         |
| Wilshire 5000 Total Market Index         | -14.3   | -5.3       | 9.1        | 8.1        | 13.2        | 8.0         | 6.1         |

Source: Cambridge Associates as of December 31, 2018



### **Fundraising remains robust**

Global private equity annual fundraising and average fund size

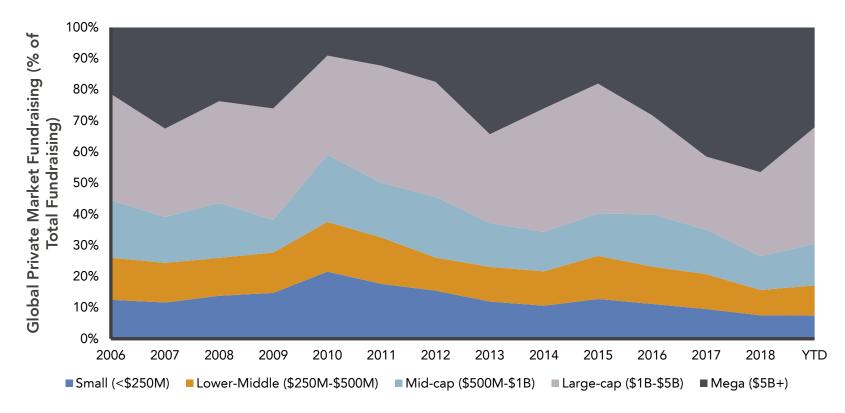


Source: Pitchbook as of December 31, 2018



### Large funds continue to dominate fundraising

Nearly 80% of private equity commitments are allocated to historically successful managers raising large and mega funds

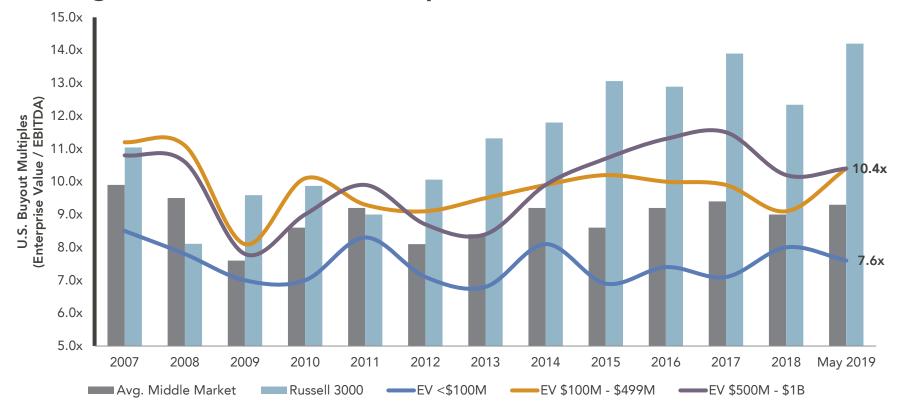


Source: Pitchbook as of July 2019



#### Private equity provides relative value opportunity

Average middle market U.S. buyout transaction multiples remain at a significant discount relative to public market valuations



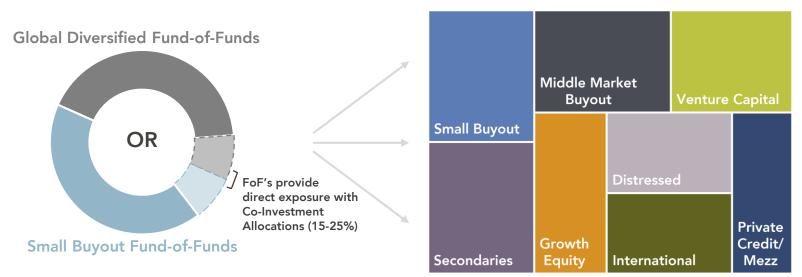
Source: Bloomberg; Robert W. Baird Global M&A Monthly Report





### Customized private equity program

#### Core Managers (50-70%)



**Tactical Satellites** (30-50%)

- Fund-of-Funds provide a quality core position as they offer diversification and access and highquality managers
- Program's tactical allocations should complement core and be selected strategically to take advantage of current investment environment
- 20-40% of overall program should be allocated to primary funds or co-investments to increase overall return and lower program cost
- Program goal is to evenly deploy capital into the asset class on an annual basis

#### Private equity investments are unique

Each private equity program and investment requires monitoring as funds have unique investment term structures. The goal of a well-constructed private equity program is to have a consistent amount of capital called each year to minimize vintage year risk.

|                              | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 |    |                              |
|------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|----|------------------------------|
| Annual Fund-of-Funds         |        |        |        |        |        |        |        |        | L  | EGEND                        |
| (2 year commitment period)   | С      | с      |        |        |        |        |        |        | ~  | Annual                       |
| Manager 1                    | \$     | \$     | \$     | \$     | \$     |        |        |        | С  | Commitment by<br>Fund        |
| Manager 2                    |        | \$     | \$     | \$     | \$     | \$     |        |        |    | Annual                       |
| Fund-of-Funds                |        |        |        |        |        |        |        |        | \$ | Investment Into<br>Companies |
| (4 year commitment period)   | С      | С      | С      | С      |        |        |        |        |    |                              |
| Year 1 Managers Invest       | \$     | \$     | \$     | \$     | \$     |        |        |        |    |                              |
| Year 2 Managers Invest       |        | \$     | \$     | \$     | \$     | \$     |        |        |    |                              |
| Year 3 Managers Invest       |        |        | \$     | \$     | \$     | \$     | \$     |        |    |                              |
| Year 4 Managers Invest       |        |        |        | \$     | \$     | \$     | \$     | \$     |    |                              |
| Secondary Fund               | С      |        |        |        |        |        |        |        |    |                              |
| (5 year investment period)   | \$     | \$     | \$     | \$     | \$     |        |        |        |    |                              |
| Primary Fund                 | С      | •      |        |        |        |        |        |        |    |                              |
| (5 year investment period)   | \$     | \$     | \$     | \$     | \$     |        |        |        |    |                              |
| Cumulative Annual Investment | \$ =   | : \$ = | = \$ = | = \$ = | : \$ = | = \$ = | = \$ = | = \$   |    |                              |

### Manager selection

The key factors to consider in manager selection include:

- Investment Performance Historical performance of previous funds is important to evaluate due to the strong persistence of returns in private equity due to the considerable skill, industry knowledge, and network that can be beneficial to a private business.
- Investment Team A consistent and experienced team should be in place capable of deploying the size of the current fund. It is preferred that resources are added to the team prior to raising larger funds.
- Alignment of Interests All General Partners should commit a material amount of capital to their fund with incentive fees heavily allocated to the investment team responsible for the fund. It is preferred that this capital is sourced primarily from the investment team. Additional fund terms should further support alignment, including limitations on raising future funds prior to a significant level of capital in the current fund has been deployed.
- Deal Flow It is important to generate a significant and consistent level of deal flow in order to execute on attractive investments. It is preferable to have a sourcing advantage that differentiates a manager's capital and attracts proprietary deals which tend to generate better returns.

### Performance measurement

- Internal Rate of Return (IRR) The annualized effective compounded return provided to investors in the fund calculated by determining the discount rate that sets the net present value of all cash distributions from the fund equal to the cash invested
  - IRR considers the time-value of money and is useful in measuring and comparing the relative performance of different investments
  - Strategies that quickly return capital to investors tend to generate attractive IRRs, but often low multiples
- Public Market Equivalent (PME) The timing and size of cash investments into a private equity fund is matched and converted to an equal purchase of a public index in order to generate a directly comparable IRR for evaluating relative performance
  - Performance metric has mathematical issues with either a strong performing private equity funds with large distributions or in a declining public market where returns are negative
- Return Multiple Total Value of Paid-In Capital (TVPI) multiple is a cash-on-cash return multiple which is unaffected by the timing of cash flows and is calculated using the total cash returned to LPs divided by the total cash called by the GP
  - Private equity strategies with long time horizons tend to generate high multiples but lower IRRs
- Investors should consider all three metrics when evaluating absolute and relative investment performance by vintage year



- Management Fees Typically 2% of committed capital for direct funds and 0.50% – 1.00% for fund-of-funds
- Performance Fees Typically 20% of profits ("carried interest") after an 8% preferred return ("hurdle rate") is achieved for investors in a direct fund and 5% of profits after an 8% hurdle rate is achieved for investors in a fund-of-funds