

Investment Performance Review  
Period Ending December 31, 2020

## **Butler County Employees Retirement Plan**

---



As we start this new year, and on behalf of our entire AndCo family, Thank You for the opportunity to continue to serve you! I'm sure most of us are ready to turn the page on 2020 and all of the unique "firsts" we had to deal with – social distancing, masks, quarantining, and virtual meetings just to name a few. While 2020 definitely introduced new features into our daily routines, one constant remained the same at AndCo, our unwavering commitment to serve you within a model that is independent, singularly focused, customized, and passionately delivered. We take our role as your consultant and trusted advisor earnestly and will continue to work hard to maintain your trust and confidence in this unique and dynamic time. We are honored and privileged you have chosen AndCo as your consultant and we wanted to provide a brief update on the firm.

As we start 2021, we are 91 team members strong advising approximately \$100 billion in client assets – both around record highs. All departments within AndCo have grown over the years as we thoughtfully invest in our firm to provide the services you expect and we demand from our team.

Looking back at 2020, it represented another year of significant investment in the organization. We made personnel and technology investments within consulting, research, client solutions, compliance, finance, IT and marketing. We created an intranet for our team members to efficiently and effectively stay connected within the organization to collectively serve you, our valued clients, and our team members better. We continued enhancing our research team with two new hires in the department who have significant experience and tailored skillsets in certain asset classes. We added additional management within our client solutions department to provide more support and structure to the team. We also restructured our marketing department to enhance the quality of our deliverables and further promote the AndCo brand. While 2020 was a busy year for AndCo in terms of reinvesting and enhancing our structure, please know we are not done. We are strong believers that if you are not evolving, adapting and moving forward, you will get left behind. In the service business, that would mean our clients would not get the service they expect or deserve and that does not work for AndCo. As we budget for 2021 and continue to reinvest in our organization, you'll likely see additional hires made firmwide along with continued investments in technologies. All of these efforts are to better serve you!

Every January our firm hosts our firmwide retreat in Central Florida. It is a great time for everyone in the firm to spend time with one another. Along with this valuable time together we also review how the firm did strategically the previous year, renew our goals and initiatives the upcoming year, and conduct activities and discussions to strengthen our culture. Due to the pandemic, we did not hold our firmwide retreat in person this year.

However, we did utilize our new intranet to provide a series of virtual firm updates where we covered many of the topics we normally present in person. While we cannot replace being physically together for several days, we were thrilled to have a virtual venue to provide this valuable information to our team and demonstrate new ways for us to stay connected during this unique time.

At the beginning of each year we also discuss the AndCo partnership, and when earned, announce new partners. This year I am happy to report two new team members made partner at AndCo - Jacob Peacock and Dan Osika. Jacob has been with the firm for almost 9 years and is currently a Consulting Director. Dan has been with AndCo for 6 years and has held multiple roles at the firm. Today Dan serves as a Marketing Consultant in our marketing department. We are extremely happy for both Jacob and Dan and are very lucky to have them as valuable team members. With the additions of Jacob and Dan, we now have 11 partners at AndCo with the majority of departments represented. We are looking to create a multigeneration employee-owned and employee-managed organization with our equity program. This will allow us to protect our mission, vision and values going forward as well as our commitment to serve you the best we possibly can.

In closing, our name, AndCo, reminds us who we work for every day - "Our Client" &Co. You, our clients, will always be our first priority. As we continue to discuss strategic decisions and reinvestments regarding our firm, please know that our decisions are filtered through the following question: "How does this benefit our clients?" If it doesn't benefit you, we don't do it, it's that simple. We said this last year and we'll say it again next year. If this commitment ever falters, you need to find a new consultant.

We know that each of our clients is facing many challenges and we will be there to help support you through all environments. We are honored and humbled that you have chosen AndCo as your partner. We do not take that relationship for granted and will continue to work tirelessly to exceed your expectations.

Thank you again for your valued partnership and the opportunity to serve you. Happy New Year!



Mike Welker, CFA  
CEO

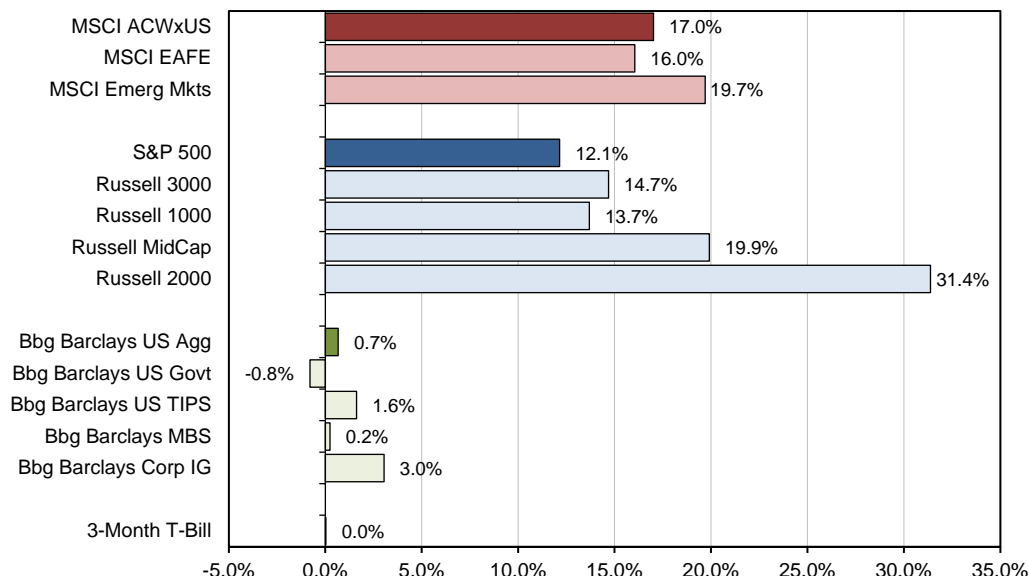


Page Intentionally Left Blank

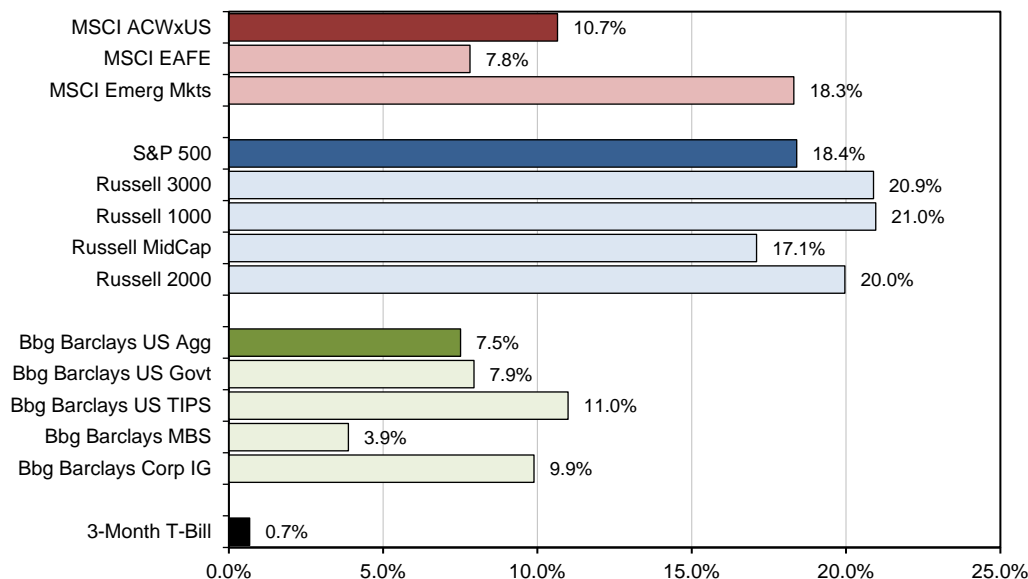


- Investment market index returns were broadly positive during the 4<sup>th</sup> quarter of 2020 except for the US Government bond benchmark. Performance during the period was largely driven by expectations related to the rollout of vaccines to treat the pandemic, the resolution of the US Presidential election, and the potential for additional government stimulus. Within domestic equity markets, there was a reversal in a recent trend with small cap stocks outperforming large cap issues. The Russell 2000 returned 31.4% compared to a 12.1% return for the S&P 500. This was the small cap benchmark's single strongest quarterly return since its inception in 1979. US equity markets ended 2020 with robust positive performance despite continued uncertainty associated with pandemic and slower than expected vaccine rollouts. For the full year, performance for domestic equities was strong across the capitalization spectrum with large cap stocks returning 18.4%, mid-caps 17.1%, and small caps 20.0%.
- Similar to domestic stocks, international equity returns were strong during the 4<sup>th</sup> quarter of 2020. International markets also benefited from the release of vaccines in addition to monetary policy relief from the European Central Bank. International returns were also amplified by a weakening US dollar which continued its decline against most major currencies. Emerging markets outperformed developed markets for the period with the MSCI Emerging Markets Index returning 19.7% compared to a return of 16.0% for the MSCI EAFE Index. Developed markets posted a modest return of 7.8% over the 1-year period while emerging markets returned a stronger 18.3%.
- Fixed income index performance was disparate during the 4<sup>th</sup> quarter. Corporate bonds performed well during the period as evidenced by the 3.0% return of the Bloomberg Barclays Corporate Investment Grade Index. In contrast, the Bloomberg Barclays US Government Bond Index returned -0.8% and was negatively affected by rising US interest rates. TIPS continued to outpace nominal bonds over concerns about rising US inflation and posted a return of 1.6% for the period. For the year, bonds posted solid returns across most sectors led by TIPS and Corporate bonds which returned 11.0% and 9.9%, respectively. For the year, the benchmark Bloomberg Barclays US Aggregate Bond Index returned a solid 7.5%.

### Quarter Performance



### 1-Year Performance



Source: Investment Metrics



PLEASE NOTE ALL PERFORMANCE IN THIS REPORT IS NET OF FEES.



# Comparative Performance

## Total Fund

As of December 31, 2020

### Comparative Performance Trailing Returns

|  | QTR               | FYTD             | 1 YR             | 2 YR              | 3 YR             | 5 YR             | 10 YR             | 15 YR             | Inception         | Inception Date    |
|--|-------------------|------------------|------------------|-------------------|------------------|------------------|-------------------|-------------------|-------------------|-------------------|
| <b>Total Fund Performance</b>                                      | <b>10.59 (47)</b> | <b>9.84 (91)</b> | <b>9.84 (91)</b> | <b>14.91 (80)</b> | <b>7.56 (86)</b> | <b>9.01 (80)</b> | <b>8.46 (51)</b>  | <b>7.14 (50)</b>  | <b>6.57 (34)</b>  | <b>01/01/2001</b> |
| Total Fund Policy  | 11.04 (34)        | 11.44 (82)       | 11.44 (82)       | 15.40 (75)        | 8.11 (79)        | 9.28 (74)        | 8.65 (44)         | 7.43 (27)         | 6.68 (28)         |                   |
| Allocation Index   | 10.60 (47)        | 9.90 (91)        | 9.90 (91)        | 14.39 (88)        | 7.50 (86)        | 8.58 (88)        | N/A               | N/A               | N/A               |                   |
| All Public Plans-Total Fund Median                                 | 10.40             | 14.66            | 14.66            | 17.58             | 9.77             | 10.19            | 8.48              | 7.13              | 6.30              |                   |
| <b>All Public Plan Sponsor Universes with 50% or Less Equities</b> |                   |                  |                  |                   |                  |                  |                   |                   |                   |                   |
| <b>Total Fund Performance</b>                                      | <b>10.59 (1)</b>  | <b>9.84 (50)</b> | <b>9.84 (50)</b> | <b>14.91 (24)</b> | <b>7.56 (45)</b> | <b>9.01 (14)</b> | <b>8.46 (N/A)</b> | <b>7.14 (N/A)</b> | <b>6.57 (N/A)</b> | <b>01/01/2001</b> |
| Total Fund Policy  | 11.04 (1)         | 11.44 (32)       | 11.44 (32)       | 15.40 (20)        | 8.11 (34)        | 9.28 (11)        | 8.65 (N/A)        | 7.43 (N/A)        | 6.68 (N/A)        |                   |
| All Public Plans =< 50% Equities Median                            | 5.44              | 9.83             | 9.83             | 10.88             | 6.46             | 6.13             | N/A               | N/A               | N/A               |                   |
| <b>All Public Plan Sponsor Universes with 60% or More Equities</b> |                   |                  |                  |                   |                  |                  |                   |                   |                   |                   |
| <b>Total Fund Performance</b>                                      | <b>10.59 (50)</b> | <b>9.84 (95)</b> | <b>9.84 (95)</b> | <b>14.91 (89)</b> | <b>7.56 (90)</b> | <b>9.01 (88)</b> | <b>8.46 (55)</b>  | <b>7.14 (48)</b>  | <b>6.57 (29)</b>  | <b>01/01/2001</b> |
| Total Fund Policy  | 11.04 (35)        | 11.44 (88)       | 11.44 (88)       | 15.40 (84)        | 8.11 (85)        | 9.28 (82)        | 8.65 (48)         | 7.43 (22)         | 6.68 (22)         |                   |
| All Public Plans >=60% Equities Median                             | 10.56             | 14.76            | 14.76            | 17.88             | 9.97             | 10.35            | 8.54              | 7.10              | 6.29              |                   |

Returns for periods greater than one year are annualized.  
Returns are expressed as percentages.



# Comparative Performance

## Total Fund

As of December 31, 2020

|  | QTR          | FYTD         | 1 YR         | 2 YR         | 3 YR         | 5 YR         | 10 YR      | 15 YR      | Inception    | Inception Date    |
|--|--------------|--------------|--------------|--------------|--------------|--------------|------------|------------|--------------|-------------------|
| <b>Domestic Equity</b>                                 |              |              |              |              |              |              |            |            |              |                   |
| <b>Total Fund Domestic Equity</b>                      | <b>16.64</b> | <b>13.96</b> | <b>13.96</b> | <b>21.61</b> | <b>11.15</b> | <b>13.34</b> | <b>N/A</b> | <b>N/A</b> | <b>10.93</b> | <b>07/01/2014</b> |
| Twin Capital Low Volatility                            | 8.50 (89)    | 5.51 (88)    | 5.51 (88)    | 16.78 (84)   | 8.87 (82)    | 12.27 (76)   | N/A        | N/A        | 11.18 (84)   | 06/01/2013        |
| S&P 500 Index  | 12.15 (49)   | 18.40 (40)   | 18.40 (40)   | 24.77 (38)   | 14.18 (36)   | 15.22 (32)   | 13.88 (38) | 9.88 (57)  | 13.91 (36)   |                   |
| IM U.S. Large Cap Core Equity (SA+CF) Median           | 12.14        | 15.78        | 15.78        | 22.83        | 12.81        | 14.25        | 13.58      | 10.00      | 13.40        |                   |
| Twin Capital Enhanced Index                            | 11.07 (96)   | 15.07 (52)   | 15.07 (52)   | 22.18 (45)   | 11.79 (52)   | 13.43 (55)   | N/A        | N/A        | 12.84 (61)   | 06/01/2013        |
| S&P 500 Index  | 12.15 (63)   | 18.40 (34)   | 18.40 (34)   | 24.77 (29)   | 14.18 (29)   | 15.22 (36)   | 13.88 (54) | 9.88 (53)  | 13.91 (42)   |                   |
| IM U.S. Large Cap Enhanced Index Equity (SA+CF) Median | 12.42        | 16.16        | 16.16        | 21.37        | 11.90        | 13.76        | 13.98      | 10.01      | 13.50        |                   |
| Vanguard Inst'l Index Fund (VINIX)                     | N/A          | N/A          | N/A          | N/A          | N/A          | N/A          | N/A        | N/A        | N/A          | 11/01/2020        |
| S&P 500 Index  | 12.15 (9)    | 18.40 (9)    | 18.40 (9)    | 24.77 (4)    | 14.18 (3)    | 15.22 (3)    | 13.88 (4)  | 9.88 (3)   | 15.21 (12)   |                   |
| IM S&P 500 Index (MF) Median                           | 12.05        | 18.05        | 18.05        | 24.36        | 13.81        | 14.80        | 13.37      | 9.44       | 15.15        |                   |
| Vanguard Growth Index (VIGIX)                          | 11.45 (43)   | 40.20 (31)   | 40.20 (31)   | 38.72 (20)   | 22.99 (39)   | 20.33 (25)   | 16.66 (28) | N/A        | 16.59 (27)   | 05/01/2010        |
| Vanguard Growth Index Hybrid                           | 11.46 (43)   | 40.27 (31)   | 40.27 (31)   | 38.78 (20)   | 23.02 (39)   | 20.37 (24)   | 16.74 (27) | 12.33 (26) | 16.66 (25)   |                   |
| Russell 1000 Growth Index                              | 11.39 (45)   | 38.49 (37)   | 38.49 (37)   | 37.44 (29)   | 22.99 (39)   | 21.00 (16)   | 17.21 (20) | 12.54 (19) | 17.12 (17)   |                   |
| IM U.S. Large Cap Growth Equity (MF) Median            | 11.12        | 36.17        | 36.17        | 35.00        | 22.09        | 19.00        | 15.75      | 11.42      | 15.70        |                   |
| Vanguard Value Index (VIVIX)                           | 14.52 (68)   | 2.30 (56)    | 2.30 (56)    | 13.46 (58)   | 6.78 (31)    | 10.76 (17)   | 11.23 (13) | N/A        | 12.98 (14)   | 07/01/2009        |
| Vanguard Value Index Hybrid                            | 14.53 (67)   | 2.26 (57)    | 2.26 (57)    | 13.45 (58)   | 6.78 (31)    | 10.77 (17)   | 11.28 (13) | 7.90 (18)  | 13.02 (13)   |                   |
| Russell 1000 Value Index                               | 16.25 (43)   | 2.80 (48)    | 2.80 (48)    | 14.05 (50)   | 6.07 (47)    | 9.74 (38)    | 10.50 (26) | 7.34 (34)  | 12.47 (25)   |                   |
| IM U.S. Large Cap Value Equity (MF) Median             | 15.77        | 2.62         | 2.62         | 13.98        | 5.82         | 9.28         | 9.74       | 6.87       | 11.59        |                   |
| Vanguard Mid-Cap 400 Index Fund I (VSPMX)              | 24.36 (11)   | 13.58 (35)   | 13.58 (35)   | 19.69 (46)   | N/A          | N/A          | N/A        | N/A        | 12.17 (53)   | 12/01/2018        |
| S&P MidCap 400 Index                                   | 24.37 (11)   | 13.66 (35)   | 13.66 (35)   | 19.77 (45)   | 8.45 (41)    | 12.35 (25)   | 11.51 (16) | 9.55 (15)  | 12.24 (52)   |                   |
| IM U.S. Mid Cap Core Equity (MF) Median                | 19.40        | 10.02        | 10.02        | 19.12        | 7.85         | 10.12        | 9.70       | 7.95       | 12.35        |                   |
| Vanguard Small-Cap 600 Index I (VSMSX)                 | 31.31 (27)   | 11.46 (43)   | 11.46 (43)   | 16.96 (48)   | N/A          | N/A          | N/A        | N/A        | 9.27 (50)    | 12/01/2018        |
| S&P SmallCap 600 Index                                 | 31.31 (27)   | 11.29 (44)   | 11.29 (44)   | 16.89 (49)   | 7.74 (31)    | 12.37 (23)   | 11.92 (6)  | 9.44 (6)   | 9.21 (50)    |                   |
| IM U.S. Small Cap Core Equity (MF) Median              | 28.43        | 10.36        | 10.36        | 16.76        | 6.28         | 10.35        | 9.52       | 7.95       | 9.19         |                   |

Returns for periods greater than one year are annualized.  
Returns are expressed as percentages.



# Comparative Performance

## Total Fund

As of December 31, 2020

|  | QTR          | FYTD         | 1 YR         | 2 YR         | 3 YR        | 5 YR        | 10 YR      | 15 YR      | Inception   | Inception Date    |
|--|--------------|--------------|--------------|--------------|-------------|-------------|------------|------------|-------------|-------------------|
| <b>International Equity</b>                          |              |              |              |              |             |             |            |            |             |                   |
| <b>Total Fund Performance - International Equity</b> | <b>17.09</b> | <b>10.24</b> | <b>10.24</b> | <b>15.76</b> | <b>4.63</b> | <b>9.07</b> | <b>N/A</b> | <b>N/A</b> | <b>4.50</b> | <b>07/01/2014</b> |
| Vanguard FTSE AW ex-US SC Index (VFSNX)              | 17.80 (66)   | N/A          | N/A          | N/A          | N/A         | N/A         | N/A        | N/A        | 59.18 (16)  | 04/01/2020        |
| FTSE Global ex U.S. Small Cap Index (Net)            | 17.89 (64)   | 11.40 (23)   | 11.40 (23)   | 16.37 (28)   | 3.17 (31)   | 8.17 (44)   | N/A        | N/A        | 58.40 (18)  |                   |
| IM International SMID Cap Core Equity (MF) Median    | 19.47        | 8.99         | 8.99         | 14.62        | 1.76        | 7.96        | 6.02       | 5.87       | 53.60       |                   |
| Vanguard Developed Markets Index (VTMNX)             | 17.00 (33)   | 10.27 (47)   | 10.27 (47)   | 16.05 (48)   | 4.82 (46)   | 8.34 (42)   | 5.96 (39)  | N/A        | 7.70 (46)   | 07/01/2009        |
| Vanguard Spliced Developed ex U.S. Index (Net)       | 17.08 (32)   | 10.00 (49)   | 10.00 (49)   | 16.01 (48)   | 4.67 (48)   | 8.18 (44)   | 5.92 (40)  | 4.76 (49)  | 7.67 (47)   |                   |
| MSCI EAFE (Net) Index                                | 16.05 (44)   | 7.82 (60)    | 7.82 (60)    | 14.70 (58)   | 4.28 (54)   | 7.45 (57)   | 5.51 (51)  | 4.48 (54)  | 7.30 (55)   |                   |
| IM International Multi-Cap Equity (MF) Median        | 15.62        | 9.47         | 9.47         | 15.73        | 4.50        | 7.76        | 5.52       | 4.62       | 7.55        |                   |
| Vanguard Emerging Markets Index (VEMIX)              | 16.87 (79)   | 15.26 (63)   | 15.26 (63)   | 17.79 (58)   | 5.84 (47)   | 11.74 (51)  | 3.06 (60)  | N/A        | 3.74 (59)   | 10/01/2010        |
| FTSE Emerging Mkts All Cap China A Inclusion Index   | 17.53 (71)   | 15.84 (60)   | 15.84 (60)   | 18.30 (54)   | 6.17 (44)   | 11.72 (51)  | 3.68 (49)  | 7.06 (38)  | 4.31 (48)   |                   |
| MSCI Emerging Markets (Net) Index                    | 19.70 (41)   | 18.31 (46)   | 18.31 (46)   | 18.37 (54)   | 6.17 (44)   | 12.81 (38)  | 3.63 (50)  | 6.59 (49)  | 4.26 (49)   |                   |
| IM Emerging Markets Equity (MF) Median               | 19.11        | 17.49        | 17.49        | 18.90        | 5.56        | 11.74       | 3.60       | 6.51       | 4.18        |                   |
| <b>Fixed Income</b>                                  |              |              |              |              |             |             |            |            |             |                   |
| <b>Total Fund Performance - Fixed Income</b>         | <b>1.88</b>  | <b>6.75</b>  | <b>6.75</b>  | <b>8.44</b>  | <b>5.30</b> | <b>4.90</b> | <b>N/A</b> | <b>N/A</b> | <b>3.64</b> | <b>07/01/2014</b> |
| Vanguard Short Term Bond Index (VBITX)               | 0.28 (73)    | 4.71 (11)    | 4.71 (11)    | 4.78 (13)    | 3.63 (10)   | 2.71 (26)   | N/A        | N/A        | 2.04 (21)   | 04/01/2013        |
| Bloomberg Barclays 1-5 Year Gov/Credit Idx           | 0.33 (69)    | 4.71 (11)    | 4.71 (11)    | 4.86 (11)    | 3.69 (8)    | 2.77 (23)   | 2.19 (23)  | 3.13 (11)  | 2.09 (19)   |                   |
| IM U.S. Short Term Investment Grade (MF) Median      | 0.66         | 3.02         | 3.02         | 3.64         | 2.71        | 2.29        | 1.80       | 2.39       | 1.65        |                   |
| Vanguard Total Bond Index (VBTIX)                    | 0.67 (88)    | 7.73 (65)    | 7.73 (65)    | N/A          | N/A         | N/A         | N/A        | N/A        | 5.29 (68)   | 09/01/2019        |
| Blmbg. Barc. U.S. Aggregate Index                    | 0.67 (88)    | 7.51 (72)    | 7.51 (72)    | 8.11 (69)    | 5.34 (53)   | 4.44 (61)   | 3.84 (56)  | 4.49 (45)  | 5.30 (68)   |                   |
| IM U.S. Broad Market Core Fixed Income (MF) Median   | 1.36         | 8.19         | 8.19         | 8.56         | 5.38        | 4.56        | 3.91       | 4.41       | 5.81        |                   |
| Vanguard High Yield Bond Fund (VWEAX)                | 4.63 (89)    | 5.38 (47)    | 5.38 (47)    | 10.52 (16)   | 5.86 (17)   | 7.18 (42)   | N/A        | N/A        | 5.57 (11)   | 12/01/2014        |
| Blmbg. Barc. U.S. Corp High Yield                    | 6.45 (38)    | 7.11 (19)    | 7.11 (19)    | 10.66 (15)   | 6.24 (8)    | 8.59 (5)    | 6.80 (5)   | 7.50 (2)   | 5.95 (5)    |                   |
| IM U.S. High Yield Bonds (MF) Median                 | 6.02         | 5.28         | 5.28         | 9.33         | 4.96        | 7.04        | 5.61       | 6.16       | 4.68        |                   |
| Vanguard International Bond (VTIFX)                  | 1.03 (84)    | 4.59 (76)    | 4.59 (76)    | 6.23 (69)    | 5.14 (17)   | 4.50 (46)   | N/A        | N/A        | 4.13 (14)   | 05/01/2015        |
| Blmbg. Barc. Global Agg ex-USD Flt Adj RIC Cpd (H)   | 1.08 (80)    | 4.75 (72)    | 4.75 (72)    | 6.39 (63)    | 5.30 (13)   | 4.67 (41)   | N/A        | N/A        | 4.11 (14)   |                   |
| IM International Fixed Income (MF) Median            | 4.77         | 6.92         | 6.92         | 7.05         | 3.73        | 4.46        | 2.11       | 4.68       | 2.73        |                   |
| <b>REIT</b>  |              |              |              |              |             |             |            |            |             |                   |
| Vanguard Real Estate Index Fund (VGSNX)              | 9.24 (50)    | -4.67 (56)   | -4.67 (56)   | 10.90 (39)   | 4.98 (40)   | 5.67 (37)   | 8.71 (27)  | N/A        | 9.25 (29)   | 10/01/2010        |
| Vanguard Spliced REIT Index                          | 9.28 (48)    | -4.55 (54)   | -4.55 (54)   | 10.97 (39)   | 5.05 (38)   | 5.76 (36)   | 8.78 (26)  | 6.93 (29)  | 9.31 (27)   |                   |
| IM Real Estate Sector (MF) Median                    | 9.24         | -4.23        | -4.23        | 10.02        | 4.69        | 5.03        | 7.98       | 6.16       | 8.54        |                   |

Returns for periods greater than one year are annualized.  
Returns are expressed as percentages.





# Comparative Performance

## Total Fund

As of December 31, 2020

|  | QTR          | FYTD         | 1 YR         | 2 YR         | 3 YR         | 5 YR         | 10 YR      | 15 YR      | Inception    | Inception Date    |
|--|--------------|--------------|--------------|--------------|--------------|--------------|------------|------------|--------------|-------------------|
| <b>Total Fund - Domestic Equity</b>                | <b>16.64</b> | <b>13.96</b> | <b>13.96</b> | <b>21.61</b> | <b>11.15</b> | <b>13.34</b> | <b>N/A</b> | <b>N/A</b> | <b>10.93</b> | <b>07/01/2014</b> |
| Total Domestic Large Cap Equity                    | 11.23        | 14.02        | 14.02        | 21.89        | 12.11        | 13.97        | N/A        | N/A        | 11.91        | 06/01/2014        |
| S&P 500 Index                                      | 12.15        | 18.40        | 18.40        | 24.77        | 14.18        | 15.22        | 13.88      | 9.88       | 12.95        |                   |
| Large Cap Growth                                   | 12.58        | 41.61        | 41.61        | 39.47        | 23.35        | 20.49        | N/A        | N/A        | 17.36        | 06/01/2014        |
| Vanguard Growth Index Hybrid                       | 11.46        | 40.27        | 40.27        | 38.78        | 23.02        | 20.37        | 16.74      | 12.33      | 17.20        |                   |
| Russell 1000 Growth Index                          | 11.39        | 38.49        | 38.49        | 37.44        | 22.99        | 21.00        | 17.21      | 12.54      | 17.99        |                   |
| Large Cap Core                                     | 9.78         | 9.03         | 9.03         | 18.78        | 9.98         | 12.70        | N/A        | N/A        | 10.78        | 06/01/2014        |
| S&P 500 Index                                      | 12.15        | 18.40        | 18.40        | 24.77        | 14.18        | 15.22        | 13.88      | 9.88       | 12.95        |                   |
| Large Cap Value                                    | 14.52        | 2.30         | 2.30         | 13.46        | 6.75         | 10.74        | N/A        | N/A        | 9.21         | 06/01/2014        |
| Vanguard Value Index Hybrid                        | 14.53        | 2.26         | 2.26         | 13.45        | 6.78         | 10.77        | 11.28      | 7.90       | 9.15         |                   |
| Russell 1000 Value Index                           | 16.25        | 2.80         | 2.80         | 14.05        | 6.07         | 9.74         | 10.50      | 7.34       | 7.86         |                   |
| Mid Cap Equity                                     | 24.36        | 13.58        | 13.58        | 19.69        | 8.66         | 11.23        | N/A        | N/A        | 9.56         | 06/01/2014        |
| Mid Cap Hybrid Index                               | 24.37        | 13.66        | 13.66        | 19.77        | 8.61         | 11.20        | 11.39      | N/A        | 9.55         |                   |
| Small Cap Equity                                   | 31.31        | 11.46        | 11.46        | 16.96        | 7.00         | 11.00        | N/A        | N/A        | 8.61         | 06/01/2014        |
| Small Cap Hybrid Index                             | 31.31        | 11.29        | 11.29        | 16.89        | 7.01         | 10.99        | 10.70      | N/A        | 8.59         |                   |
| <b>Total Fund - International Equity</b>           | <b>17.09</b> | <b>10.24</b> | <b>10.24</b> | <b>15.76</b> | <b>4.63</b>  | <b>9.07</b>  | <b>N/A</b> | <b>N/A</b> | <b>4.50</b>  | <b>07/01/2014</b> |
| Small Cap - International Equity                   | 17.80        | N/A          | N/A          | N/A          | N/A          | N/A          | N/A        | N/A        | 59.18        | 04/01/2020        |
| FTSE Global ex U.S. Small Cap Index (Net)          | 17.89        | 11.40        | 11.40        | 16.37        | 3.17         | 8.17         | N/A        | N/A        | 58.40        |                   |
| Developed Markets - International Equity           | 17.00        | 11.80        | 11.80        | 16.86        | 5.30         | 8.63         | N/A        | N/A        | 4.91         | 06/01/2014        |
| Vanguard Spliced Developed ex U.S. Index (Net)     | 17.08        | 10.00        | 10.00        | 16.01        | 4.67         | 8.18         | 5.92       | 4.76       | 4.72         |                   |
| Emerging Markets - International Equity            | 16.87        | 15.26        | 15.26        | 17.79        | 5.84         | 11.74        | N/A        | N/A        | 5.48         | 06/01/2014        |
| FTSE Emerging Mkts All Cap China A Inclusion Index | 17.53        | 15.84        | 15.84        | 18.30        | 6.17         | 11.72        | 3.68       | 7.06       | 6.26         |                   |
| MSCI Emerging Markets (Net) Index                  | 19.70        | 18.31        | 18.31        | 18.37        | 6.17         | 12.81        | 3.63       | 6.59       | 6.03         |                   |

Returns for periods greater than one year are annualized.  
Returns are expressed as percentages.



# Comparative Performance

## Total Fund

As of December 31, 2020

|  | QTR         | FYTD         | 1 YR         | 2 YR         | 3 YR        | 5 YR        | 10 YR      | 15 YR      | Inception   | Inception Date    |
|--|-------------|--------------|--------------|--------------|-------------|-------------|------------|------------|-------------|-------------------|
| <b>Total Fund - Fixed Income</b>                   | <b>1.88</b> | <b>6.75</b>  | <b>6.75</b>  | <b>8.44</b>  | <b>5.30</b> | <b>4.90</b> | <b>N/A</b> | <b>N/A</b> | <b>3.64</b> | <b>07/01/2014</b> |
| Short - Term Fixed Income                          | 0.28        | 4.71         | 4.71         | 4.71         | 3.58        | 2.69        | N/A        | N/A        | 2.21        | 06/01/2014        |
| Bloomberg Barclays 1-5 Year Gov/Credit Idx         | 0.33        | 4.71         | 4.71         | 4.86         | 3.69        | 2.77        | 2.19       | 3.13       | 2.29        |                   |
| High Yield - Fixed Income                          | 4.63        | 5.38         | 5.38         | 10.52        | 5.86        | 7.01        | N/A        | N/A        | 5.52        | 11/01/2014        |
| Blmbg. Barc. U.S. Corp High Yield                  | 6.45        | 7.11         | 7.11         | 10.66        | 6.24        | 8.59        | 6.80       | 7.50       | 5.74        |                   |
| Non-US Fixed Income                                | 1.03        | 4.59         | 4.59         | 6.23         | 5.14        | 4.50        | N/A        | N/A        | 4.22        | 05/01/2015        |
| Blmbg. Barc. Global Agg ex-USD Flt Adj RIC Cpd (H) | 1.08        | 4.75         | 4.75         | 6.39         | 5.30        | 4.67        | N/A        | N/A        | 4.11        |                   |
| <b>Real Estate</b>                                 | <b>9.24</b> | <b>-4.67</b> | <b>-4.67</b> | <b>10.90</b> | <b>4.98</b> | <b>5.67</b> | <b>N/A</b> | <b>N/A</b> | <b>6.29</b> | <b>06/01/2014</b> |
| Vanguard Spliced REIT Index                        | 9.28        | -4.55        | -4.55        | 10.97        | 5.05        | 5.76        | 8.78       | 6.93       | 6.57        |                   |

Returns for periods greater than one year are annualized.  
Returns are expressed as percentages.



| Comparative Performance Trailing Returns               |      |            |      |             |      |            |      |            |      |            |      |            |      |            |      |            |      |            |      |            |  |
|--|------|------------|------|-------------|------|------------|------|------------|------|------------|------|------------|------|------------|------|------------|------|------------|------|------------|--|
|  | 2019 |            | 2018 |             | 2017 |            | 2016 |            | 2015 |            | 2014 |            | 2013 |            | 2012 |            | 2011 |            | 2010 |            |  |
| Total Fund Performance                                 |      | 20.21      |      | -5.76       |      | 13.91      |      | 8.58       |      | -0.72      |      | 8.24       |      | 18.07      |      | 13.88      |      | 1.26       |      | 12.93      |  |
| Total Fund Policy                                      |      | 19.49      |      | -4.94       |      | 13.67      |      | 8.48       |      | -0.69      |      | 8.15       |      | 16.99      |      | 14.31      |      | 2.15       |      | 15.28      |  |
| Allocation Index                                       |      | 19.06      |      | -5.06       |      | 13.50      |      | 7.04       |      | -0.43      |      | N/A        |      | N/A        |      | N/A        |      | N/A        |      | N/A        |  |
| Domestic Equity  |      |            |      |             |      |            |      |            |      |            |      |            |      |            |      |            |      |            |      |            |  |
| Total Fund Domestic Equity                             |      | 29.77      |      | -7.16       |      | 20.07      |      | 13.45      |      | -0.10      |      | N/A        |      | 33.56      |      | 16.18      |      | -0.54      |      | 17.92      |  |
| Twin Capital Low Volatility                            |      | 29.24 (59) |      | -5.37 (55)  |      | 19.16 (79) |      | 16.03 (10) |      | -1.31 (79) |      | 12.91 (59) |      | N/A        |      | N/A        |      | N/A        |      | N/A        |  |
| S&P 500 Index  |      | 31.49 (35) |      | -4.38 (38)  |      | 21.83 (51) |      | 11.96 (34) |      | 1.38 (52)  |      | 13.69 (44) |      | 32.39 (59) |      | 16.00 (46) |      | 2.11 (50)  |      | 15.06 (45) |  |
| IM U.S. Large Cap Core Equity (SA+CF) Median           |      | 30.00      |      | -5.15       |      | 21.84      |      | 10.54      |      | 1.43       |      | 13.43      |      | 32.98      |      | 15.65      |      | 2.02       |      | 14.85      |  |
| Twin Capital Enhanced Index                            |      | 29.73 (55) |      | -6.43 (67)  |      | 20.37 (75) |      | 11.66 (60) |      | 2.42 (22)  |      | 13.42 (65) |      | N/A        |      | N/A        |      | N/A        |      | N/A        |  |
| S&P 500 Index  |      | 31.49 (32) |      | -4.38 (23)  |      | 21.83 (62) |      | 11.96 (59) |      | 1.38 (40)  |      | 13.69 (60) |      | 32.39 (70) |      | 16.00 (62) |      | 2.11 (65)  |      | 15.06 (43) |  |
| IM U.S. Large Cap Enhanced Index Equity (SA+CF) Median |      | 29.91      |      | -5.35       |      | 22.45      |      | 12.45      |      | 0.94       |      | 14.12      |      | 33.43      |      | 16.52      |      | 2.86       |      | 14.74      |  |
| Vanguard Inst'l Index Fund (VINIX)                     |      | N/A        |      | N/A         |      | N/A        |      | N/A        |      | N/A        |      | N/A        |      | N/A        |      | N/A        |      | N/A        |      | N/A        |  |
| S&P 500 Index  |      | 31.49 (3)  |      | -4.38 (7)   |      | 21.83 (1)  |      | 11.96 (3)  |      | 1.38 (2)   |      | 13.69 (1)  |      | 32.39 (1)  |      | 16.00 (1)  |      | 2.11 (3)   |      | 15.06 (2)  |  |
| IM S&P 500 Index (MF) Median                           |      | 31.06      |      | -4.66       |      | 21.35      |      | 11.54      |      | 0.95       |      | 13.16      |      | 31.76      |      | 15.43      |      | 1.63       |      | 14.56      |  |
| Vanguard Growth Index (VIGIX)                          |      | 37.25 (13) |      | -3.32 (77)  |      | 27.82 (66) |      | 6.11 (17)  |      | 3.23 (78)  |      | 13.70 (15) |      | 32.44 (66) |      | 16.99 (31) |      | 1.80 (16)  |      | N/A        |  |
| Vanguard Growth Index Hybrid                           |      | 37.31 (13) |      | -3.34 (77)  |      | 27.86 (65) |      | 6.16 (16)  |      | 3.38 (76)  |      | 13.69 (15) |      | 32.51 (65) |      | 17.14 (29) |      | 1.95 (15)  |      | 17.27 (28) |  |
| Russell 1000 Growth Index                              |      | 36.39 (21) |      | -1.51 (58)  |      | 30.21 (41) |      | 7.08 (8)   |      | 5.67 (54)  |      | 13.05 (22) |      | 33.48 (55) |      | 15.26 (46) |      | 2.64 (11)  |      | 16.71 (33) |  |
| IM U.S. Large Cap Growth Equity (MF) Median            |      | 33.38      |      | -0.87       |      | 29.46      |      | 2.18       |      | 6.01       |      | 10.47      |      | 33.94      |      | 14.81      |      | -1.76      |      | 15.15      |  |
| Vanguard Value Index (VIVIX)                           |      | 25.83 (54) |      | -5.42 (13)  |      | 17.14 (37) |      | 16.87 (22) |      | -0.81 (11) |      | 13.20 (11) |      | 33.01 (43) |      | 15.12 (61) |      | 1.17 (21)  |      | 14.45 (32) |  |
| Vanguard Value Index Hybrid                            |      | 25.85 (54) |      | -5.40 (13)  |      | 17.16 (36) |      | 16.93 (21) |      | -0.86 (11) |      | 13.29 (10) |      | 33.20 (40) |      | 15.22 (59) |      | 1.26 (21)  |      | 14.54 (31) |  |
| Russell 1000 Value Index                               |      | 26.54 (45) |      | -8.27 (36)  |      | 13.66 (77) |      | 17.34 (19) |      | -3.83 (58) |      | 13.45 (9)  |      | 32.53 (48) |      | 17.51 (28) |      | 0.39 (28)  |      | 15.51 (21) |  |
| IM U.S. Large Cap Value Equity (MF) Median             |      | 26.07      |      | -9.08       |      | 16.29      |      | 13.82      |      | -3.54      |      | 10.81      |      | 32.30      |      | 15.84      |      | -2.20      |      | 13.00      |  |
| Vanguard Mid-Cap 400 Index Fund I (VSPMX)              |      | 26.13 (71) |      | N/A         |      | N/A        |      | N/A        |      | N/A        |      | N/A        |      | N/A        |      | N/A        |      | N/A        |      | N/A        |  |
| S&P MidCap 400 Index                                   |      | 26.20 (70) |      | -11.08 (42) |      | 16.24 (42) |      | 20.74 (10) |      | -2.18 (31) |      | 9.77 (40)  |      | 33.50 (61) |      | 17.88 (25) |      | -1.73 (28) |      | 26.64 (10) |  |
| IM U.S. Mid Cap Core Equity (MF) Median                |      | 28.08      |      | -11.52      |      | 15.44      |      | 14.23      |      | -3.40      |      | 8.91       |      | 35.08      |      | 15.84      |      | -3.38      |      | 23.12      |  |
| Vanguard Small-Cap 600 Index I (VSMSX)                 |      | 22.74 (62) |      | N/A         |      | N/A        |      | N/A        |      | N/A        |      | N/A        |      | N/A        |      | N/A        |      | N/A        |      | N/A        |  |
| S&P SmallCap 600 Index                                 |      | 22.78 (62) |      | -8.48 (10)  |      | 13.23 (40) |      | 26.56 (14) |      | -1.97 (23) |      | 5.76 (34)  |      | 41.31 (18) |      | 16.33 (33) |      | 1.02 (9)   |      | 26.31 (41) |  |
| IM U.S. Small Cap Core Equity (MF) Median              |      | 23.86      |      | -12.67      |      | 12.38      |      | 21.35      |      | -4.34      |      | 4.61       |      | 36.95      |      | 14.57      |      | -3.78      |      | 25.53      |  |

Returns for periods greater than one year are annualized.  
Returns are expressed as percentages.



# Comparative Performance

## Total Fund

As of December 31, 2020

|  | 2019         | 2018          | 2017         | 2016        | 2015         | 2014       | 2013         | 2012         | 2011          | 2010        |
|--|--------------|---------------|--------------|-------------|--------------|------------|--------------|--------------|---------------|-------------|
| <b>International Equity</b>                          |              |               |              |             |              |            |              |              |               |             |
| <b>Total Fund Performance - International Equity</b> | <b>21.55</b> | <b>-14.50</b> | <b>28.00</b> | <b>5.26</b> | <b>-5.56</b> | <b>N/A</b> | <b>13.97</b> | <b>19.18</b> | <b>-16.04</b> | <b>7.09</b> |
| Vanguard FTSE AW ex-US SC Index (VFSNX)              | N/A          | N/A           | N/A          | N/A         | N/A          | N/A        | N/A          | N/A          | N/A           | N/A         |
| FTSE Global ex U.S. Small Cap Index (Net)            | 21.55 (32)   | -18.91 (48)   | 29.78 (65)   | 3.93 (34)   | -0.61 (85)   | -4.34 (24) | N/A          | N/A          | N/A           | N/A         |
| IM International SMID Cap Core Equity (MF) Median    | 20.74        | -19.09        | 32.40        | -0.71       | 5.09         | -6.28      | 24.95        | 20.35        | -17.32        | 21.91       |
| Vanguard Developed Markets Index (VTMNX)             | 22.14 (47)   | -14.49 (36)   | 26.46 (46)   | 2.46 (31)   | -0.19 (45)   | -5.62 (55) | 22.07 (36)   | 18.92 (29)   | -12.54 (41)   | 8.51 (74)   |
| Vanguard Spliced Developed ex U.S. Index (Net)       | 22.34 (45)   | -14.79 (39)   | 26.31 (48)   | 2.29 (32)   | -0.28 (46)   | -4.85 (46) | 22.71 (30)   | 17.32 (58)   | -12.14 (34)   | 7.75 (79)   |
| MSCI EAFE (Net) Index                                | 22.01 (49)   | -13.79 (25)   | 25.03 (64)   | 1.00 (47)   | -0.81 (53)   | -4.90 (46) | 22.78 (29)   | 17.32 (58)   | -12.14 (34)   | 7.75 (79)   |
| IM International Multi-Cap Equity (MF) Median        | 21.84        | -15.74        | 25.93        | 0.68        | -0.67        | -5.26      | 20.56        | 17.78        | -13.47        | 10.93       |
| Vanguard Emerging Markets Index (VEMIX)              | 20.37 (49)   | -14.54 (30)   | 31.43 (70)   | 11.76 (26)  | -15.39 (68)  | 0.72 (19)  | -5.06 (79)   | 18.06 (57)   | -18.73 (40)   | N/A         |
| FTSE Emerging Mkts All Cap China A Inclusion Index   | 20.81 (47)   | -14.49 (29)   | 31.46 (70)   | 10.66 (34)  | -13.28 (47)  | 2.96 (10)  | -2.82 (60)   | 18.48 (54)   | -19.81 (52)   | 20.03 (35)  |
| MSCI Emerging Markets (Net) Index                    | 18.44 (62)   | -14.58 (30)   | 37.28 (42)   | 11.19 (30)  | -14.92 (63)  | -2.19 (43) | -2.60 (58)   | 18.23 (56)   | -18.42 (36)   | 18.88 (44)  |
| IM Emerging Markets Equity (MF) Median               | 20.06        | -16.39        | 35.37        | 8.35        | -13.66       | -2.92      | -1.42        | 18.78        | -19.51        | 18.32       |
| <b>Fixed Income</b>                                  |              |               |              |             |              |            |              |              |               |             |
| <b>Total Fund Performance - Fixed Income</b>         | <b>10.16</b> | <b>-0.71</b>  | <b>3.82</b>  | <b>4.79</b> | <b>-0.18</b> | <b>N/A</b> | <b>-3.65</b> | <b>7.39</b>  | <b>12.20</b>  | <b>6.03</b> |
| Vanguard Short Term Bond Index (VBITX)               | 4.84 (24)    | 1.37 (42)     | 1.19 (72)    | 1.51 (60)   | 0.98 (9)     | 1.32 (12)  | N/A          | N/A          | N/A           | N/A         |
| Bloomberg Barclays 1-5 Year Gov/Credit Idx           | 5.01 (18)    | 1.38 (41)     | 1.27 (67)    | 1.56 (56)   | 0.97 (9)     | 1.42 (10)  | 0.28 (64)    | 2.24 (70)    | 3.14 (4)      | 4.08 (36)   |
| IM U.S. Short Term Investment Grade (MF) Median      | 4.12         | 1.25          | 1.47         | 1.69        | 0.28         | 0.67       | 0.48         | 3.12         | 1.08          | 3.51        |
| Vanguard Total Bond Index (VBTIX)                    | N/A          | N/A           | N/A          | N/A         | N/A          | N/A        | N/A          | N/A          | N/A           | N/A         |
| Blmbg. Barc. U.S. Aggregate Index                    | 8.72 (53)    | 0.01 (18)     | 3.54 (54)    | 2.65 (61)   | 0.55 (20)    | 5.97 (26)  | -2.02 (53)   | 4.21 (81)    | 7.84 (11)     | 6.54 (70)   |
| IM U.S. Broad Market Core Fixed Income (MF) Median   | 8.76         | -0.63         | 3.59         | 2.86        | 0.09         | 5.55       | -1.98        | 5.99         | 6.65          | 7.25        |
| Vanguard High Yield Bond Fund (VWEAX)                | 15.90 (8)    | -2.87 (49)    | 7.13 (34)    | 11.27 (80)  | -1.31 (17)   | N/A        | N/A          | N/A          | N/A           | N/A         |
| Blmbg. Barc. U.S. Corp High Yield                    | 14.32 (34)   | -2.08 (28)    | 7.50 (24)    | 17.13 (7)   | -4.47 (62)   | 2.45 (24)  | 7.44 (30)    | 15.81 (29)   | 4.98 (16)     | 15.12 (28)  |
| IM U.S. High Yield Bonds (MF) Median                 | 13.51        | -2.91         | 6.65         | 13.49       | -3.85        | 1.49       | 6.61         | 14.72        | 3.32          | 14.04       |
| Vanguard International Bond (VTIFX)                  | 7.89 (24)    | 3.00 (2)      | 2.43 (86)    | 4.69 (35)   | N/A          | N/A        | N/A          | N/A          | N/A           | N/A         |
| Blmbg. Barc. Global Agg ex-USD Fit Adj RIC Cpd (H)   | 8.06 (24)    | 3.16 (1)      | 2.57 (82)    | 4.90 (33)   | 1.34 (3)     | 9.14 (9)   | 1.26 (16)    | N/A          | N/A           | N/A         |
| IM International Fixed Income (MF) Median            | 6.60         | -2.68         | 9.80         | 3.34        | -5.82        | 0.63       | -3.74        | 7.43         | 2.56          | 7.26        |
| <b>REIT</b>  |              |               |              |             |              |            |              |              |               |             |
| Vanguard Real Estate Index Fund (VGSNX)              | 29.02 (34)   | -5.93 (54)    | 4.93 (56)    | 8.51 (19)   | 2.56 (58)    | 30.17 (35) | 2.46 (28)    | 17.64 (32)   | 8.73 (35)     | N/A         |
| Vanguard Spliced REIT Index                          | 29.03 (34)   | -5.86 (52)    | 5.07 (52)    | 8.60 (19)   | 2.52 (58)    | 30.38 (30) | 2.47 (28)    | 17.77 (30)   | 8.69 (37)     | 28.48 (32)  |
| IM Real Estate Sector (MF) Median                    | 27.38        | -5.75         | 5.20         | 6.28        | 2.91         | 29.43      | 1.64         | 16.89        | 7.86          | 27.46       |

Returns for periods greater than one year are annualized.  
Returns are expressed as percentages.



# Comparative Performance

## Total Fund

As of December 31, 2020

|  | 2019         | 2018          | 2017         | 2016         | 2015         | 2014       | 2013         | 2012         | 2011          | 2010         |
|--|--------------|---------------|--------------|--------------|--------------|------------|--------------|--------------|---------------|--------------|
| <b>Total Fund - Domestic Equity</b>                | <b>29.77</b> | <b>-7.16</b>  | <b>20.07</b> | <b>13.45</b> | <b>-0.10</b> | <b>N/A</b> | <b>33.56</b> | <b>16.18</b> | <b>-0.54</b>  | <b>17.92</b> |
| Total Domestic Large Cap Equity                    | 30.31        | -5.16         | 20.67        | 13.09        | 1.00         | N/A        | N/A          | N/A          | N/A           | N/A          |
| S&P 500 Index                                      | 31.49        | -4.38         | 21.83        | 11.96        | 1.38         | 13.69      | 32.39        | 16.00        | 2.11          | 15.06        |
| Large Cap Growth                                   | 37.36        | -3.51         | 27.82        | 5.87         | 3.78         | N/A        | N/A          | N/A          | N/A           | N/A          |
| Vanguard Growth Index Hybrid                       | 37.31        | -3.34         | 27.86        | 6.16         | 3.38         | 13.69      | 32.51        | 17.14        | 1.95          | 17.27        |
| Russell 1000 Growth Index                          | 36.39        | -1.51         | 30.21        | 7.08         | 5.67         | 13.05      | 33.48        | 15.26        | 2.64          | 16.71        |
| Large Cap Core                                     | 29.41        | -5.71         | 19.57        | 14.29        | 0.18         | N/A        | N/A          | N/A          | N/A           | N/A          |
| S&P 500 Index                                      | 31.49        | -4.38         | 21.83        | 11.96        | 1.38         | 13.69      | 32.39        | 16.00        | 2.11          | 15.06        |
| Large Cap Value                                    | 25.83        | -5.50         | 17.14        | 16.87        | -0.27        | N/A        | N/A          | N/A          | N/A           | N/A          |
| Vanguard Value Index Hybrid                        | 25.85        | -5.40         | 17.16        | 16.93        | -0.86        | 13.29      | 33.20        | 15.22        | 1.26          | 14.54        |
| Russell 1000 Value Index                           | 26.54        | -8.27         | 13.66        | 17.34        | -3.83        | 13.45      | 32.53        | 17.51        | 0.39          | 15.51        |
| Mid Cap Equity                                     | 26.13        | -10.44        | 19.29        | 11.23        | -1.31        | N/A        | N/A          | N/A          | N/A           | N/A          |
| Mid Cap Hybrid Index                               | 26.20        | -10.67        | 19.30        | 11.25        | -1.28        | 13.83      | 35.21        | 16.04        | -1.91         | N/A          |
| Small Cap Equity                                   | 22.74        | -10.45        | 16.25        | 18.32        | -3.63        | N/A        | N/A          | N/A          | N/A           | N/A          |
| Small Cap Hybrid Index                             | 22.78        | -10.32        | 16.24        | 18.26        | -3.68        | 7.54       | 37.77        | 18.20        | -2.75         | 27.82        |
| <b>Total Fund - International Equity</b>           | <b>21.55</b> | <b>-14.50</b> | <b>28.00</b> | <b>5.26</b>  | <b>-5.56</b> | <b>N/A</b> | <b>13.97</b> | <b>19.18</b> | <b>-16.04</b> | <b>7.09</b>  |
| Small Cap - International Equity                   | N/A          | N/A           | N/A          | N/A          | N/A          | N/A        | N/A          | N/A          | N/A           | N/A          |
| FTSE Global ex U.S. Small Cap Index (Net)          | 21.55        | -18.91        | 29.78        | 3.93         | -0.61        | -4.34      | N/A          | N/A          | N/A           | N/A          |
| Developed Markets - International Equity           | 22.14        | -14.49        | 26.46        | 2.46         | -0.41        | N/A        | N/A          | N/A          | N/A           | N/A          |
| Vanguard Spliced Developed ex U.S. Index (Net)     | 22.34        | -14.79        | 26.31        | 2.29         | -0.28        | -4.85      | 22.71        | 17.32        | -12.14        | 7.75         |
| Emerging Markets - International Equity            | 20.37        | -14.54        | 31.43        | 11.76        | -15.80       | N/A        | N/A          | N/A          | N/A           | N/A          |
| FTSE Emerging Mkts All Cap China A Inclusion Index | 20.81        | -14.49        | 31.46        | 10.66        | -13.28       | 2.96       | -2.82        | 18.48        | -19.81        | 20.03        |
| MSCI Emerging Markets (Net) Index                  | 18.44        | -14.58        | 37.28        | 11.19        | -14.92       | -2.19      | -2.60        | 18.23        | -18.42        | 18.88        |

Returns for periods greater than one year are annualized.  
Returns are expressed as percentages.



# Comparative Performance

## Total Fund

As of December 31, 2020

|  | 2019         | 2018         | 2017        | 2016        | 2015         | 2014       | 2013         | 2012        | 2011         | 2010        |
|--|--------------|--------------|-------------|-------------|--------------|------------|--------------|-------------|--------------|-------------|
| <b>Total Fund - Fixed Income</b>                   | <b>10.16</b> | <b>-0.71</b> | <b>3.82</b> | <b>4.79</b> | <b>-0.18</b> | <b>N/A</b> | <b>-3.65</b> | <b>7.39</b> | <b>12.20</b> | <b>6.03</b> |
| Short - Term Fixed Income                          | 4.71         | 1.37         | 1.19        | 1.51        | 0.98         | N/A        | N/A          | N/A         | N/A          | N/A         |
| Bloomberg Barclays 1-5 Year Gov/Credit Idx         | 5.01         | 1.38         | 1.27        | 1.56        | 0.97         | 1.42       | 0.28         | 2.24        | 3.14         | 4.08        |
| High Yield - Fixed Income                          | 15.90        | -2.87        | 6.65        | 10.89       | -1.28        | N/A        | N/A          | N/A         | N/A          | N/A         |
| Blmbg. Barc. U.S. Corp High Yield                  | 14.32        | -2.08        | 7.50        | 17.13       | -4.47        | 2.45       | 7.44         | 15.81       | 4.98         | 15.12       |
| Non-US Fixed Income                                | 7.89         | 3.00         | 2.43        | 4.69        | N/A          | N/A        | N/A          | N/A         | N/A          | N/A         |
| Blmbg. Barc. Global Agg ex-USD Flt Adj RIC Cpd (H) | 8.06         | 3.16         | 2.57        | 4.90        | 1.34         | 9.14       | 1.26         | N/A         | N/A          | N/A         |
| <b>Real Estate</b>                                 | <b>29.02</b> | <b>-5.93</b> | <b>4.93</b> | <b>8.51</b> | <b>2.56</b>  | <b>N/A</b> | <b>N/A</b>   | <b>N/A</b>  | <b>N/A</b>   | <b>N/A</b>  |
| Vanguard Spliced REIT Index                        | 29.03        | -5.86        | 5.07        | 8.60        | 2.52         | 30.38      | 2.47         | 17.77       | 8.69         | 28.48       |

Returns for periods greater than one year are annualized.  
Returns are expressed as percentages.



**Multi Timeperiod Statistics**  
**Butler County Employees Retirement Plan**  
As of December 31, 2020

**Multi Timeperiod Statistics**

|  | 3 YR<br>Return |      | 3 YR<br>Standard<br>Deviation |      | 3 YR<br>Sharpe<br>Ratio |      | 5 YR<br>Return |      | 5 YR<br>Standard<br>Deviation |      | 5 YR<br>Sharpe<br>Ratio |      |
|--|----------------|------|-------------------------------|------|-------------------------|------|----------------|------|-------------------------------|------|-------------------------|------|
| Total Fund Performance                                 | 7.56           |      | 12.57                         |      | 0.51                    |      | 9.01           |      | 10.25                         |      | 0.77                    |      |
| Total Fund Policy                                      | 8.11           |      | 12.30                         |      | 0.56                    |      | 9.28           |      | 10.08                         |      | 0.81                    |      |
| Twin Capital Enhanced Index                            | 11.79          | (52) | 18.39                         | (87) | 0.61                    | (55) | 13.43          | (55) | 15.03                         | (92) | 0.84                    | (52) |
| S&P 500 Index  | 14.18          |      | 18.53                         |      | 0.72                    |      | 15.22          |      | 15.13                         |      | 0.94                    |      |
| IM U.S. Large Cap Enhanced Index Equity (SA+CF) Median | 11.90          |      | 19.24                         |      | 0.61                    |      | 13.76          |      | 15.76                         |      | 0.85                    |      |
| Twin Capital Low Volatility                            | 8.87           | (82) | 16.85                         | (83) | 0.49                    | (79) | 12.27          | (75) | 13.85                         | (83) | 0.82                    | (63) |
| S&P 500 Index  | 14.18          |      | 18.53                         |      | 0.72                    |      | 15.22          |      | 15.13                         |      | 0.94                    |      |
| IM U.S. Large Cap Core Equity (SA+CF) Median           | 12.79          |      | 18.53                         |      | 0.67                    |      | 14.24          |      | 15.26                         |      | 0.87                    |      |
| Vanguard Inst'l Index Fund (VINIX)                     | N/A            |      | N/A                           |      | N/A                     |      | N/A            |      | N/A                           |      | N/A                     |      |
| S&P 500 Index  | 14.18          |      | 18.53                         |      | 0.72                    |      | 15.22          |      | 15.13                         |      | 0.94                    |      |
| IM S&P 500 Index (MF) Median                           | 13.81          |      | 18.52                         |      | 0.71                    |      | 14.80          |      | 15.12                         |      | 0.91                    |      |
| Vanguard Growth Index (VIGIX)                          | 22.99          | (39) | 19.81                         | (34) | 1.07                    | (43) | 20.33          | (25) | 16.38                         | (46) | 1.14                    | (28) |
| Vanguard Growth Index Hybrid                           | 23.02          |      | 19.82                         |      | 1.07                    |      | 20.37          |      | 16.37                         |      | 1.15                    |      |
| IM U.S. Large Cap Growth Equity (MF) Median            | 22.09          |      | 19.43                         |      | 1.03                    |      | 19.00          |      | 16.31                         |      | 1.09                    |      |
| Vanguard Value Index (VIVIX)                           | 6.78           | (31) | 18.67                         | (77) | 0.36                    | (29) | 10.76          | (17) | 15.35                         | (82) | 0.67                    | (14) |
| Vanguard Value Index Hybrid                            | 6.78           |      | 18.67                         |      | 0.36                    |      | 10.77          |      | 15.35                         |      | 0.67                    |      |
| IM U.S. Large Cap Value Equity (MF) Median             | 5.82           |      | 19.66                         |      | 0.31                    |      | 9.28           |      | 16.21                         |      | 0.56                    |      |
| Vanguard S&P MC400;Inst (VSPMX) *                      | 8.38           | (42) | 23.30                         | (23) | 0.40                    | (49) | 12.28          | (25) | 19.19                         | (32) | 0.64                    | (32) |
| S&P MidCap 400 Index                                   | 8.45           |      | 23.31                         |      | 0.40                    |      | 12.35          |      | 19.20                         |      | 0.64                    |      |
| IM U.S. Mid Cap Core Equity (MF) Median                | 7.85           |      | 21.52                         |      | 0.39                    |      | 10.12          |      | 17.89                         |      | 0.56                    |      |
| Vanguard S&P SC600;Inst (VSMSX) *                      | 7.76           | (31) | 25.50                         | (39) | 0.36                    | (33) | 12.41          | (22) | 21.55                         | (37) | 0.60                    | (27) |
| S&P SmallCap 600 Index                                 | 7.74           |      | 25.50                         |      | 0.36                    |      | 12.37          |      | 21.55                         |      | 0.60                    |      |
| IM U.S. Small Cap Core Equity (MF) Median              | 6.28           |      | 25.27                         |      | 0.31                    |      | 10.35          |      | 21.19                         |      | 0.52                    |      |

\* Mutual fund returns were used for this report if 3 & 5 year client specific results were not available.  
The Vanguard Emerging Market Stock Index Fund performance shown may be different than actual performance as the client was invested in the ETF before transferring to the mutual fund.  
All performance is reported net of fees.



**Multi Timeperiod Statistics**  
**Butler County Employees Retirement Plan**  
As of December 31, 2020

|   | 3 YR<br>Return |      | 3 YR<br>Standard<br>Deviation |      | 3 YR<br>Sharpe<br>Ratio |      | 5 YR<br>Return |      | 5 YR<br>Standard<br>Deviation |      | 5 YR<br>Sharpe<br>Ratio |      |
|---|----------------|------|-------------------------------|------|-------------------------|------|----------------|------|-------------------------------|------|-------------------------|------|
| Vanguard FTSEExUSSC;Ins (VFSNX) *                   | 3.59           | (70) | 21.34                         | (22) | 0.20                    | (69) | 8.61           | (70) | 17.73                         | (42) | 0.49                    | (68) |
| FTSE Global ex U.S. Small Cap Index (Net)           | 3.17           |      | 21.35                         |      | 0.18                    |      | 8.17           |      | 17.87                         |      | 0.46                    |      |
| IM International SMID Cap Growth Equity (MF) Median | 5.96           |      | 20.61                         |      | 0.31                    |      | 9.94           |      | 17.45                         |      | 0.58                    |      |
| Vanguard Developed Markets Index (VTMNX)            | 4.82           | (46) | 18.60                         | (46) | 0.26                    | (47) | 8.34           | (42) | 15.58                         | (50) | 0.52                    | (43) |
| Vanguard Spliced Developed ex U.S. Index (Net)      | 4.67           |      | 18.51                         |      | 0.25                    |      | 8.18           |      | 15.70                         |      | 0.50                    |      |
| IM International Multi-Cap Equity (MF) Median       | 4.50           |      | 18.45                         |      | 0.25                    |      | 7.76           |      | 15.57                         |      | 0.49                    |      |
| Vanguard Emerging Markets Index (VEMIX)             | 5.84           | (47) | 19.41                         | (76) | 0.31                    | (47) | 11.74          | (51) | 17.15                         | (71) | 0.66                    | (47) |
| FTSE Emerging Mkts All Cap China A Inclusion Index  | 6.17           |      | 19.25                         |      | 0.32                    |      | 11.72          |      | 17.17                         |      | 0.66                    |      |
| IM Emerging Markets Equity (MF) Median              | 5.56           |      | 20.36                         |      | 0.29                    |      | 11.74          |      | 17.77                         |      | 0.65                    |      |
| Vanguard Short Term Bond Index (VBITX)              | 3.63           | (10) | 1.43                          | (78) | 1.42                    | (1)  | 2.71           | (26) | 1.43                          | (71) | 1.09                    | (4)  |
| Bloomberg Barclays 1-5 Year Gov/Credit Idx          | 3.69           |      | 1.47                          |      | 1.43                    |      | 2.77           |      | 1.44                          |      | 1.12                    |      |
| IM U.S. Short Term Investment Grade (MF) Median     | 2.71           |      | 2.17                          |      | 0.44                    |      | 2.29           |      | 1.85                          |      | 0.58                    |      |
| Vanguard Tot Bd;Inst (VBTIX) *                      | 5.41           | (47) | 3.45                          | (82) | 1.09                    | (23) | 4.47           | (58) | 3.26                          | (74) | 1.01                    | (37) |
| Blmbg. Barc. U.S. Aggregate Index                   | 5.34           |      | 3.36                          |      | 1.10                    |      | 4.44           |      | 3.13                          |      | 1.04                    |      |
| IM U.S. Broad Market Core Fixed Income (MF) Median  | 5.38           |      | 3.93                          |      | 0.95                    |      | 4.56           |      | 3.50                          |      | 0.96                    |      |
| Vanguard High Yield Bond Fund (VWEAX)               | 5.86           | (17) | 8.29                          | (79) | 0.53                    | (11) | 7.18           | (42) | 6.76                          | (82) | 0.88                    | (17) |
| Vanguard High Yield Corporate Composite Index       | 6.60           |      | 8.19                          |      | 0.62                    |      | 7.93           |      | 6.75                          |      | 0.98                    |      |
| IM U.S. High Yield Bonds (MF) Median                | 4.96           |      | 9.24                          |      | 0.40                    |      | 7.04           |      | 7.69                          |      | 0.76                    |      |
| Vanguard Tot Intl BI;Inst (VTIFX) *                 | 5.14           | (17) | 3.06                          | (97) | 1.13                    | (1)  | 4.50           | (46) | 2.93                          | (97) | 1.11                    | (8)  |
| Blmbg. Barc. Global Agg ex-USD Flt Adj RIC Cpd (H)  | 5.30           |      | 3.02                          |      | 1.19                    |      | 4.67           |      | 2.92                          |      | 1.17                    |      |
| IM International Fixed Income (MF) Median           | 3.73           |      | 6.53                          |      | 0.33                    |      | 4.46           |      | 7.21                          |      | 0.44                    |      |
| Vanguard Real Estate Index Fund (VGSNX)             | 4.98           | (40) | 18.65                         | (30) | 0.27                    | (45) | 5.67           | (37) | 16.36                         | (29) | 0.35                    | (38) |
| Vanguard Spliced REIT Index                         | 5.05           |      | 18.63                         |      | 0.28                    |      | 5.76           |      | 16.34                         |      | 0.35                    |      |
| IM Real Estate Sector (MF) Median                   | 4.69           |      | 17.92                         |      | 0.26                    |      | 5.03           |      | 15.75                         |      | 0.32                    |      |

\* Mutual fund returns were used for this report if 3 & 5 year client specific results were not available.  
The Vanguard Emerging Market Stock Index Fund performance shown may be different than actual performance as the client was invested in the ETF before transferring to the mutual fund.  
All performance is reported net of fees.





**Multi Timeperiod Statistics**  
**Butler County Employees Retirement Plan**  
As of December 31, 2020

**Multi Timeperiod Statistics**

|  | 10 YR<br>Return |      | 10 YR<br>Standard<br>Deviation |      | 10 YR<br>Sharpe<br>Ratio |      | 15 YR<br>Return | 15 YR<br>Standard<br>Deviation | 15 YR<br>Sharpe<br>Ratio |
|--|-----------------|------|--------------------------------|------|--------------------------|------|-----------------|--------------------------------|--------------------------|
| Total Fund Performance                                 | 8.46            |      | 10.70                          |      | 0.76                     |      | 7.14            | 11.16                          | 0.57                     |
| Total Fund Policy                                      | 8.62            |      | 10.51                          |      | 0.78                     |      | 7.43            | 11.24                          | 0.59                     |
| Twin Capital Enhanced Index                            | N/A             |      | N/A                            |      | N/A                      |      | N/A             | N/A                            | N/A                      |
| S&P 500 Index  | 13.88           |      | 14.81                          |      | 0.92                     |      | 9.88            | 16.56                          | 0.58                     |
| IM U.S. Large Cap Enhanced Index Equity (SA+CF) Median | 13.98           |      | 15.53                          |      | 0.91                     |      | 10.01           | 17.09                          | 0.58                     |
| Twin Capital Low Volatility                            | N/A             |      | N/A                            |      | N/A                      |      | N/A             | N/A                            | N/A                      |
| S&P 500 Index  | 13.88           |      | 14.81                          |      | 0.92                     |      | 9.88            | 16.56                          | 0.58                     |
| IM U.S. Large Cap Core Equity (SA+CF) Median           | 13.58           |      | 15.29                          |      | 0.89                     |      | 10.00           | 16.73                          | 0.59                     |
| Vanguard Inst'l Index Fund (VINIX)                     | N/A             |      | N/A                            |      | N/A                      |      | N/A             | N/A                            | N/A                      |
| S&P 500 Index  | 13.88           |      | 14.81                          |      | 0.92                     |      | 9.88            | 16.56                          | 0.58                     |
| IM S&P 500 Index (MF) Median                           | 13.37           |      | 14.78                          |      | 0.89                     |      | 9.44            | 16.54                          | 0.56                     |
| Vanguard Growth Index (VIGIX)                          | 16.66           | (28) | 16.18                          | (63) | 1.01                     | (21) | N/A             | N/A                            | N/A                      |
| Vanguard Growth Index Hybrid                           | 16.74           |      | 16.21                          |      | 1.01                     |      | 12.33           | 17.64                          | 0.68                     |
| IM U.S. Large Cap Growth Equity (MF) Median            | 15.75           |      | 16.50                          |      | 0.94                     |      | 11.42           | 18.16                          | 0.63                     |
| Vanguard Value Index (VIVIX)                           | 11.23           | (13) | 14.98                          | (81) | 0.75                     | (8)  | N/A             | N/A                            | N/A                      |
| Vanguard Value Index Hybrid                            | 11.28           |      | 14.98                          |      | 0.76                     |      | 7.90            | 16.91                          | 0.47                     |
| IM U.S. Large Cap Value Equity (MF) Median             | 9.74            |      | 16.09                          |      | 0.62                     |      | 6.87            | 17.67                          | 0.40                     |
| Vanguard S&P MC400;Inst (VSPMX)                        | 11.44           | (18) | 19.56                          | (73) | 0.63                     | (12) | N/A             | N/A                            | N/A                      |
| S&P MidCap 400 Index                                   | 11.51           |      | 19.56                          |      | 0.63                     |      | 9.55            | 20.37                          | 0.50                     |
| IM U.S. SMID Cap Core Equity (MF) Median               | 9.69            |      | 20.05                          |      | 0.55                     |      | 8.45            | 20.75                          | 0.43                     |
| Vanguard S&P SC600;Inst (VSMSX)                        | 11.90           | (6)  | 21.42                          | (58) | 0.61                     | (5)  | N/A             | N/A                            | N/A                      |
| S&P SmallCap 600 Index                                 | 11.92           |      | 21.41                          |      | 0.61                     |      | 9.44            | 21.89                          | 0.47                     |
| IM U.S. Small Cap Core Equity (MF) Median              | 9.52            |      | 21.65                          |      | 0.51                     |      | 7.95            | 22.27                          | 0.41                     |

The Vanguard Emerging Market Stock Index Fund performance shown may be different than actual performance as the client was invested in the ETF before transferring to the mutual fund.  
All performance is reported net of fees.

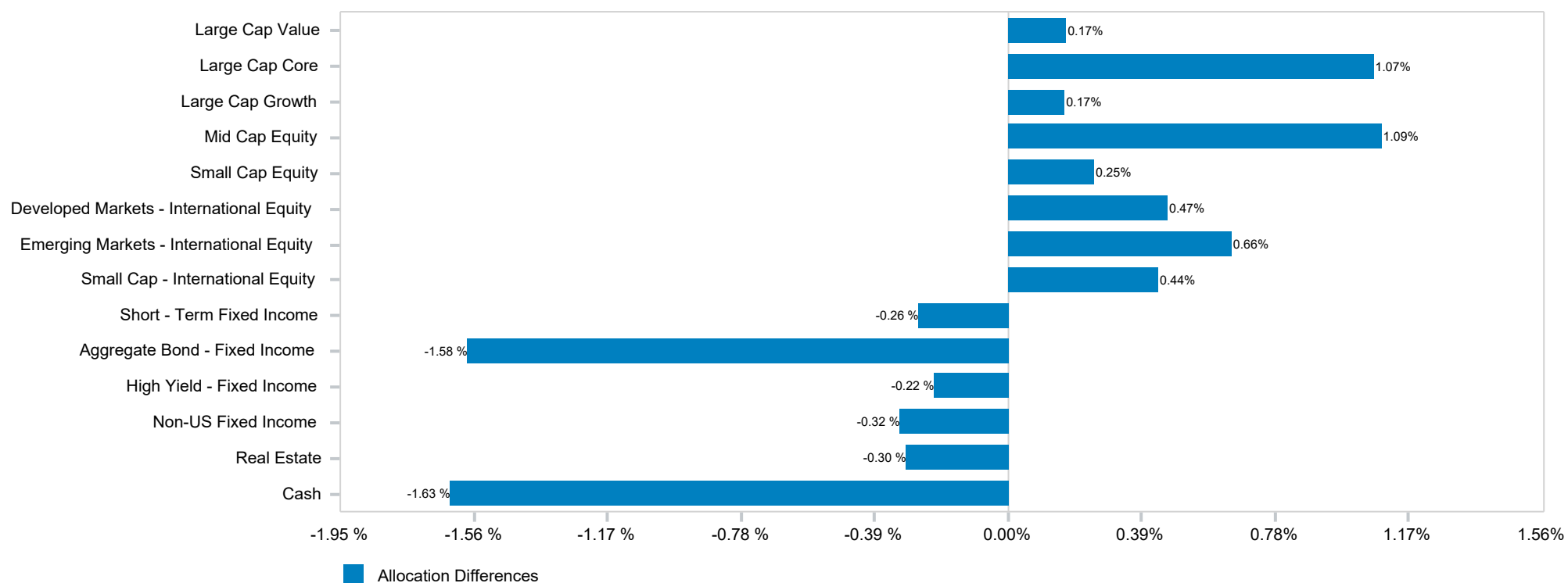


**Multi Timeperiod Statistics**  
**Butler County Employees Retirement Plan**  
As of December 31, 2020

|   | 10 YR<br>Return |      | 10 YR<br>Standard<br>Deviation |      | 10 YR<br>Sharpe<br>Ratio |      | 15 YR<br>Return |      | 15 YR<br>Standard<br>Deviation |      | 15 YR<br>Sharpe<br>Ratio |      |
|---|-----------------|------|--------------------------------|------|--------------------------|------|-----------------|------|--------------------------------|------|--------------------------|------|
| Vanguard FTSExUSSC;Ins (VFSNX) *                    | 5.05            | (97) | 19.48                          | (31) | 0.32                     | (96) | N/A             |      | N/A                            |      | N/A                      |      |
| FTSE Global ex U.S. Small Cap Index (Net)           | N/A             |      | N/A                            |      | N/A                      |      | N/A             |      | N/A                            |      | N/A                      |      |
| IM International SMID Cap Growth Equity (MF) Median | 7.82            |      | 19.20                          |      | 0.48                     |      | 7.11            |      | 22.45                          |      | 0.37                     |      |
| Vanguard Developed Markets Index (VTMNX)            | 5.96            | (39) | 16.59                          | (61) | 0.40                     | (37) | N/A             |      | N/A                            |      | N/A                      |      |
| Vanguard Spliced Developed ex U.S. Index (Net)      | 5.92            |      | 16.32                          |      | 0.40                     |      | 4.76            |      | 19.23                          |      | 0.28                     |      |
| IM International Multi-Cap Equity (MF) Median       | 5.52            |      | 16.87                          |      | 0.37                     |      | 4.62            |      | 19.72                          |      | 0.27                     |      |
| Vanguard EM St I;Inst (VEMIX)                       | 3.16            | (57) | 18.79                          | (75) | 0.23                     | (58) | 6.13            | (53) | 23.05                          | (66) | 0.33                     | (53) |
| Vanguard Spliced Emerging Markets Index (Net)       | 3.22            |      | 18.44                          |      | 0.24                     |      | 6.19            |      | 22.92                          |      | 0.33                     |      |
| IM Emerging Markets Equity (MF) Median              | 3.60            |      | 19.58                          |      | 0.25                     |      | 6.51            |      | 23.38                          |      | 0.33                     |      |
| Vanguard Sh-Tm B;Inst (VBITX)                       | N/A             |      | N/A                            |      | N/A                      |      | N/A             |      | N/A                            |      | N/A                      |      |
| Bloomberg Barclays 1-5 Year Gov/Credit Idx          | 2.19            |      | 1.41                           |      | 1.19                     |      | 3.13            |      | 1.94                           |      | 1.05                     |      |
| IM U.S. Short Term Investment Grade (MF) Median     | 1.80            |      | 1.67                           |      | 0.65                     |      | 2.39            |      | 2.41                           |      | 0.47                     |      |
| Vanguard Tot Bd;Inst (VBTIX)                        | 3.81            | (59) | 3.10                           | (56) | 1.05                     | (48) | 4.49            | (45) | 3.29                           | (77) | 0.99                     | (16) |
| Blmbg. Barc. U.S. Aggregate Index                   | 3.84            |      | 2.99                           |      | 1.09                     |      | 4.49            |      | 3.21                           |      | 1.02                     |      |
| IM U.S. Broad Market Core Fixed Income (MF) Median  | 3.91            |      | 3.12                           |      | 1.04                     |      | 4.41            |      | 3.77                           |      | 0.83                     |      |
| Vanguard HY Corp;Adm (VWEAX)                        | 6.50            | (10) | 6.56                           | (92) | 0.89                     | (4)  | 6.49            | (31) | 8.47                           | (93) | 0.63                     | (5)  |
| Blmbg. Barc. U.S. Corp High Yield                   | 6.80            |      | 7.96                           |      | 0.79                     |      | 7.50            |      | 11.16                          |      | 0.59                     |      |
| IM U.S. High Yield Bonds (MF) Median                | 5.61            |      | 7.95                           |      | 0.65                     |      | 6.16            |      | 10.41                          |      | 0.51                     |      |
| Vanguard Tot Intl BI;Inst (VTIFX)                   | N/A             |      | N/A                            |      | N/A                      |      | N/A             |      | N/A                            |      | N/A                      |      |
| Blmbg. Barc. Global Agg ex-USD Flt Adj RIC Cpd (H)  | N/A             |      | N/A                            |      | N/A                      |      | N/A             |      | N/A                            |      | N/A                      |      |
| IM International Fixed Income (MF) Median           | 2.11            |      | 7.18                           |      | 0.25                     |      | 4.68            |      | 8.27                           |      | 0.43                     |      |
| Vanguard RE Idx;Inst (VGSNX)                        | 8.70            | (27) | 15.86                          | (23) | 0.57                     | (36) | 6.94            | (29) | 23.28                          | (32) | 0.36                     | (30) |
| Vanguard Spliced REIT Index                         | 8.78            |      | 15.87                          |      | 0.58                     |      | 6.93            |      | 23.28                          |      | 0.36                     |      |
| IM Real Estate Sector (MF) Median                   | 7.98            |      | 15.37                          |      | 0.55                     |      | 6.16            |      | 22.85                          |      | 0.33                     |      |

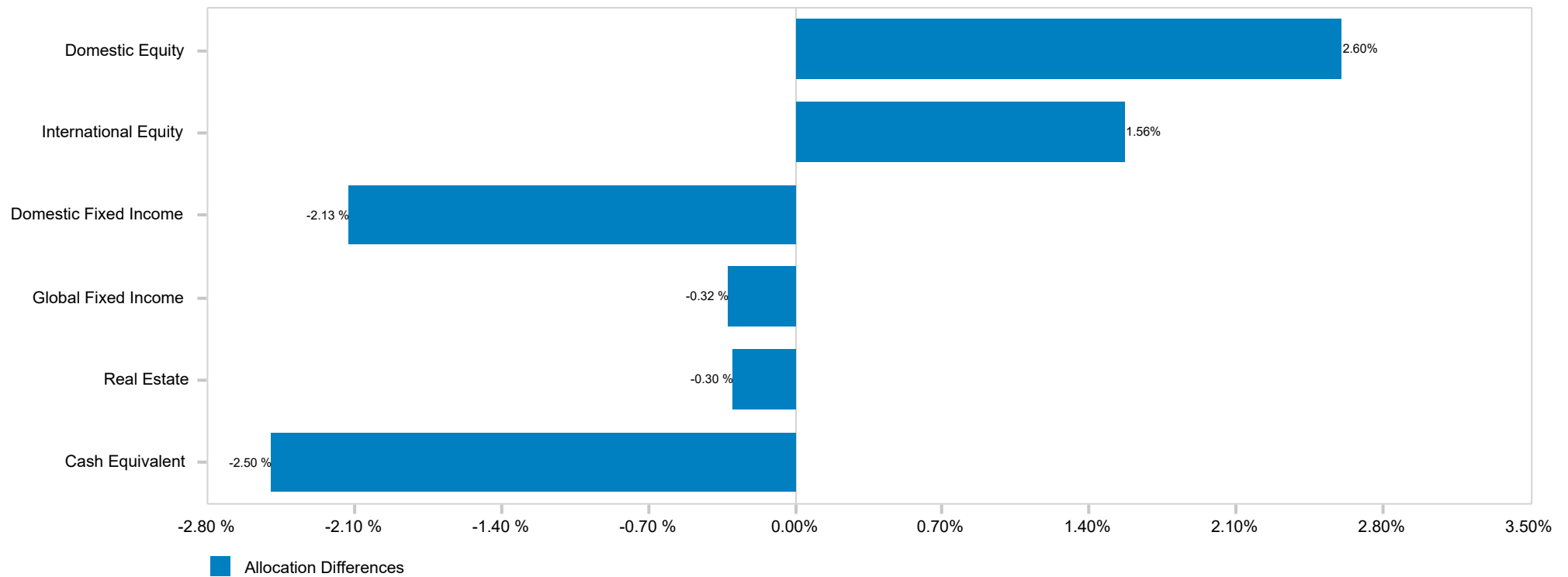
The Vanguard Emerging Market Stock Index Fund performance shown may be different than actual performance as the client was invested in the ETF before transferring to the mutual fund.  
All performance is reported net of fees.





## Asset Allocation Compliance

|  | Current<br>Allocation (%) | Target<br>Allocation (%) | Minimum<br>Allocation (%) | Maximum<br>Allocation (%) |
|--|---------------------------|--------------------------|---------------------------|---------------------------|
| <b>Total Fund</b>                        | <b>100.00</b>             | <b>100.00</b>            | <b>N/A</b>                | <b>N/A</b>                |
| Large Cap Value                          | 5.17                      | 5.00                     | 0.00                      | 10.00                     |
| Large Cap Core                           | 16.07                     | 15.00                    | 10.00                     | 20.00                     |
| Large Cap Growth                         | 5.17                      | 5.00                     | 0.00                      | 10.00                     |
| Mid Cap Equity                           | 11.09                     | 10.00                    | 5.00                      | 15.00                     |
| Small Cap Equity                         | 5.25                      | 5.00                     | 0.00                      | 10.00                     |
| Developed Markets - International Equity | 7.97                      | 7.50                     | 5.00                      | 15.00                     |
| Emerging Markets - International Equity  | 5.66                      | 5.00                     | 0.00                      | 10.00                     |
| Small Cap - International Equity         | 2.94                      | 2.50                     | 0.00                      | 5.00                      |
| Short - Term Fixed Income                | 2.24                      | 2.50                     | 0.00                      | 5.00                      |
| Aggregate Bond - Fixed Income            | 18.42                     | 20.00                    | 10.00                     | 30.00                     |
| High Yield - Fixed Income                | 9.78                      | 10.00                    | 5.00                      | 15.00                     |
| Non-US Fixed Income                      | 4.68                      | 5.00                     | 0.00                      | 10.00                     |
| Real Estate                              | 4.70                      | 5.00                     | 0.00                      | 10.00                     |
| Cash                                     | 0.87                      | 2.50                     | 0.00                      | 5.00                      |



## Asset Allocation Compliance

|                       | Current<br>Allocation (%) | Target<br>Allocation (%) | Minimum<br>Allocation (%) | Maximum<br>Allocation (%) |
|-----------------------|---------------------------|--------------------------|---------------------------|---------------------------|
| Domestic Equity       | 42.60                     | 40.00                    | 15.00                     | 65.00                     |
| International Equity  | 16.56                     | 15.00                    | 5.00                      | 25.00                     |
| Domestic Fixed Income | 30.37                     | 32.50                    | 15.00                     | 50.00                     |
| Global Fixed Income   | 4.68                      | 5.00                     | 0.00                      | 10.00                     |
| Real Estate           | 4.70                      | 5.00                     | 0.00                      | 10.00                     |
| Cash Equivalent       | 0.00                      | 2.50                     | 0.00                      | 5.00                      |
| <b>Total Fund</b>     | <b>100.00</b>             | <b>100.00</b>            | <b>N/A</b>                | <b>N/A</b>                |

1. Over most periods of time, the following investment managers have met performance expectations net of fees:

- Vanguard Growth Index Mutual Fund.
- Vanguard Growth Index ETF.
- Vanguard Value Index Mutual Fund.
- Vanguard Mid Cap Index Mutual Fund.
- Vanguard Small Cap Index Mutual Fund.
- Vanguard Developed Markets Index Mutual Fund.
- Vanguard Emerging Markets Mutual Fund.
- Vanguard Total Return Bond Mutual Fund.
- Vanguard Short-Term Fixed Income Index Mutual Fund.
- Vanguard REIT Index Mutual Fund.

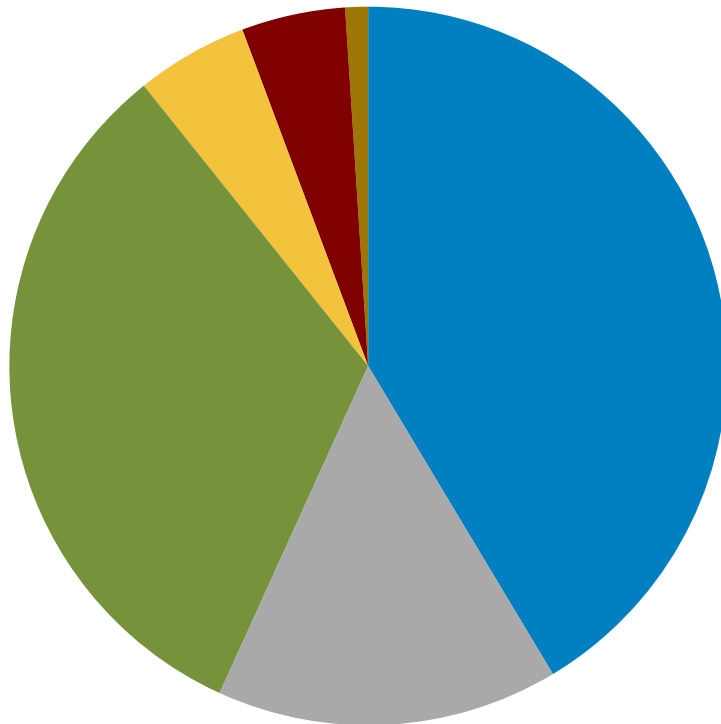
2. Over most periods of time, the following investment managers have trailed performance expectations net of fees:

- Twin Capital Management Enhanced Index.
- Twin Capital Management Low Volatility.

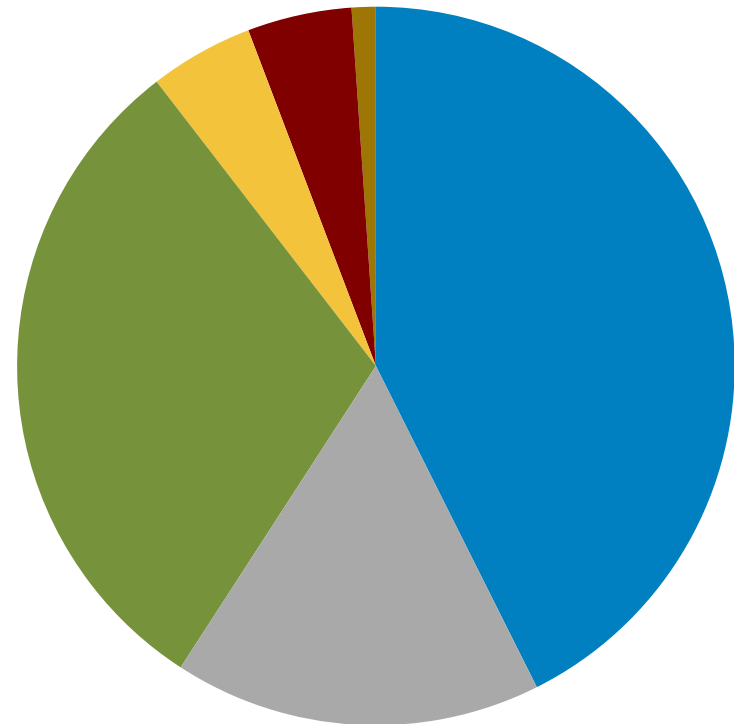
The Board has communicated their expectations with Twin Capital Management. Twin presented to the Board in the second quarter 2020.

3. **All performance in this report is Net of Fees.**

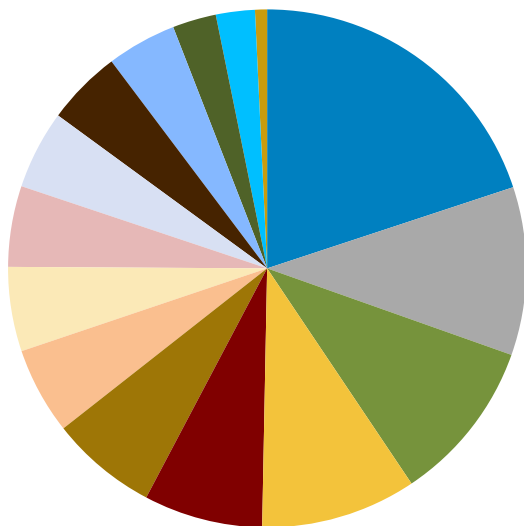
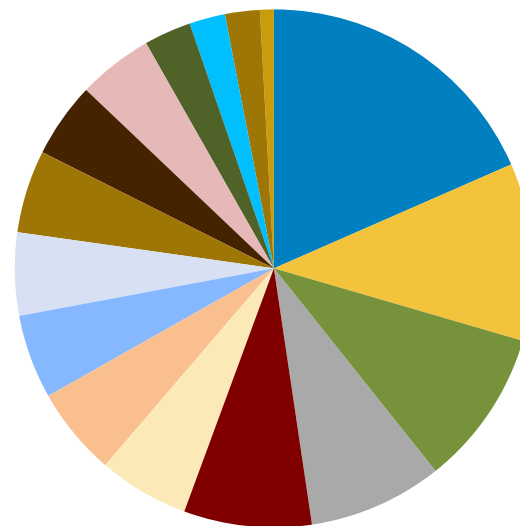
Asset Allocation By Segment as of  
September 30, 2020 : \$224,977,185



Asset Allocation By Segment as of  
December 31, 2020 : \$244,958,207



| Allocation            |              |            | Allocation            |              |            |
|-----------------------|--------------|------------|-----------------------|--------------|------------|
| Segments              | Market Value | Allocation | Segments              | Market Value | Allocation |
| Domestic Equity       | 93,128,034   | 41.4       | Domestic Equity       | 104,347,432  | 42.6       |
| International Equity  | 34,650,612   | 15.4       | International Equity  | 40,574,112   | 16.6       |
| Domestic Fixed Income | 73,016,984   | 32.5       | Domestic Fixed Income | 74,394,628   | 30.4       |
| Global Fixed Income   | 11,342,878   | 5.0        | Global Fixed Income   | 11,468,394   | 4.7        |
| Real Estate           | 10,536,383   | 4.7        | Real Estate           | 11,509,558   | 4.7        |
| Cash                  | 2,302,292    | 1.0        | Cash                  | 2,664,084    | 1.1        |

Asset Allocation By Manager as of  
September 30, 2020 : \$224,977,185Asset Allocation By Manager as of  
December 31, 2020 : \$244,958,207

| Allocation                                |              |            | Allocation                                |              |            |
|---|--------------|------------|---|--------------|------------|
|   | Market Value | Allocation |   | Market Value | Allocation |
| Vanguard Total Bond Index (VBTIX)         | 44,817,438   | 19.9       | Vanguard Total Bond Index (VBTIX)         | 45,116,341   | 18.4       |
| Twin Capital Low Volatility               | 23,622,579   | 10.5       | Vanguard Mid-Cap 400 Index Fund I (VSPMX) | 27,167,230   | 11.1       |
| Vanguard High Yield Bond Fund (VWEAX)     | 22,906,037   | 10.2       | Vanguard High Yield Bond Fund (VWEAX)     | 23,966,294   | 9.8        |
| Vanguard Mid-Cap 400 Index Fund I (VSPMX) | 21,845,050   | 9.7        | Twin Capital Low Volatility               | 20,482,872   | 8.4        |
| Vanguard Developed Markets Index (VTMNX)  | 16,682,874   | 7.4        | Vanguard Developed Markets Index (VTMNX)  | 19,518,334   | 8.0        |
| Vanguard Growth Index (VIGIX)             | 15,017,311   | 6.7        | Vanguard Emerging Markets Index (VEMIX)   | 13,852,708   | 5.7        |
| Twin Capital Enhanced Index               | 12,202,041   | 5.4        | Twin Capital Enhanced Index               | 13,564,631   | 5.5        |
| Vanguard Emerging Markets Index (VEMIX)   | 11,852,984   | 5.3        | Vanguard Small-Cap 600 Index I (VSMSX)    | 12,864,797   | 5.3        |
| Vanguard International Bond (VTIFX)       | 11,351,951   | 5.0        | Vanguard Value Index (VIVIX)              | 12,667,306   | 5.2        |
| Vanguard Value Index (VIVIX)              | 11,061,534   | 4.9        | Vanguard Growth Index (VIGIX)             | 12,655,755   | 5.2        |
| Vanguard Real Estate Index Fund (VGSNX)   | 10,536,383   | 4.7        | Vanguard Real Estate Index Fund (VGSNX)   | 11,509,558   | 4.7        |
| Vanguard Small-Cap 600 Index I (VSMSX)    | 9,797,059    | 4.4        | Vanguard International Bond (VTIFX)       | 11,468,394   | 4.7        |
| Vanguard FTSE AW ex-US SC Index (VFSNX)   | 6,114,755    | 2.7        | Vanguard FTSE AW ex-US SC Index (VFSNX)   | 7,203,069    | 2.9        |
| Vanguard Short Term Bond Index (VBITX)    | 5,466,091    | 2.4        | Vanguard Short Term Bond Index (VBITX)    | 5,481,538    | 2.2        |
| NMA                                       | 1,698,270    | 0.8        | Vanguard Inst'l Index Fund (VINIX)        | 5,309,898    | 2.2        |
| Cash                                      | 4,827        | 0.0        | NMA                                       | 2,124,655    | 0.9        |
| Vanguard Inst'l Index Fund (VINIX)        | -            | 0.0        | Cash                                      | 4,829        | 0.0        |

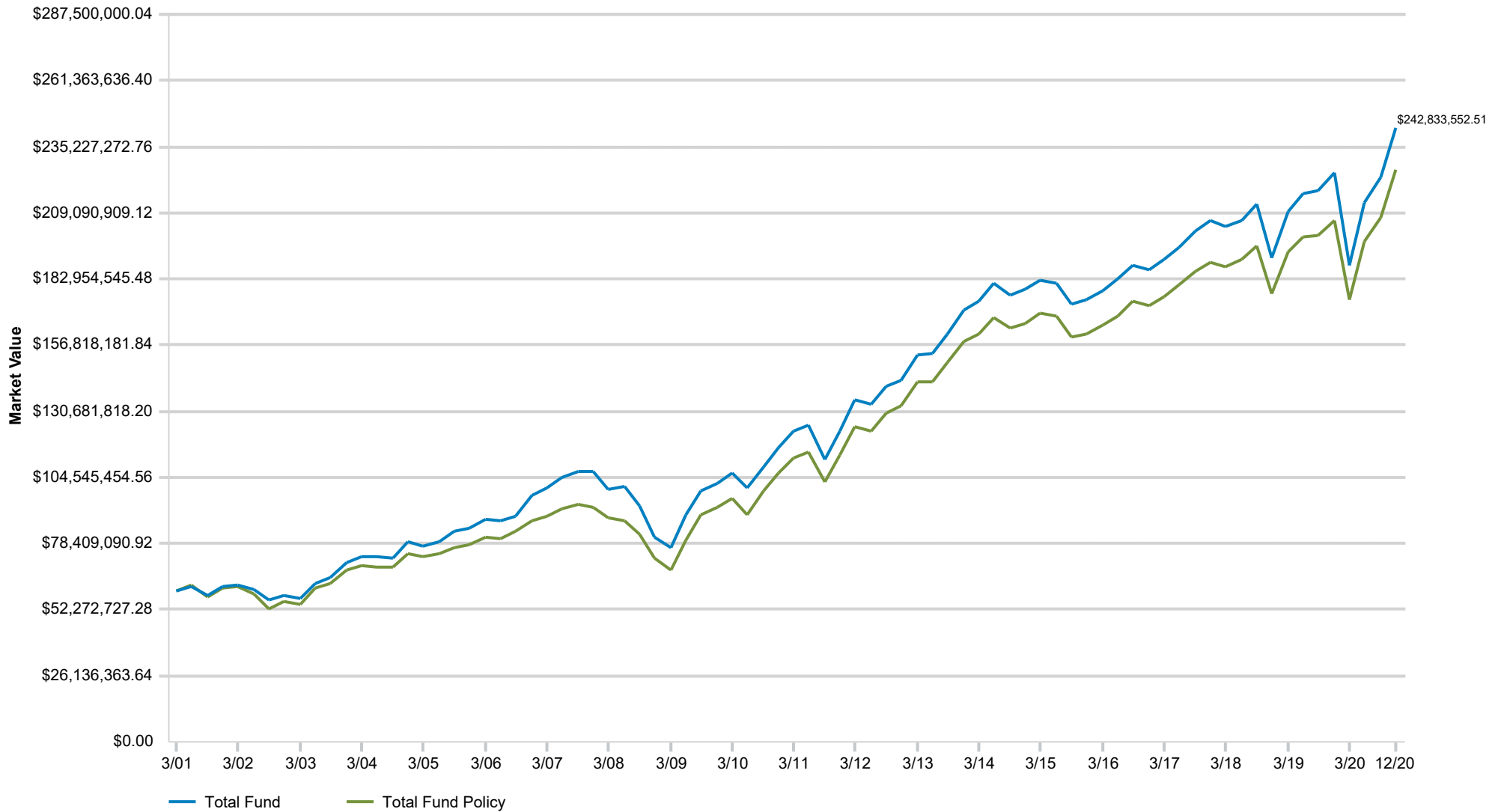
**Asset Allocation Attributes**

|   | Domestic Equity |             | International Equity |             | Domestic Fixed Income |             | Global Fixed Income |            | Real Estate   |            | Cash         |            | Total Fund     |              |
|---|-----------------|-------------|----------------------|-------------|-----------------------|-------------|---------------------|------------|---------------|------------|--------------|------------|----------------|--------------|
|   | (\$)            | %           | (\$)                 | %           | (\$)                  | %           | (\$)                | %          | (\$)          | %          | (\$)         | %          | (\$)           | %            |
| Vanguard Inst'l Index Fund (VINIX)        | 5,310           | 100.0       | -                    | -           | -                     | -           | -                   | -          | -             | -          | -            | -          | 5,310          | 2.2          |
| Vanguard Value Index (VIVIX)              | 12,667          | 100.0       | -                    | -           | -                     | -           | -                   | -          | -             | -          | -            | -          | 12,667         | 5.2          |
| Vanguard Small-Cap 600 Index I (VSM SX)   | 12,865          | 100.0       | -                    | -           | -                     | -           | -                   | -          | -             | -          | -            | -          | 12,865         | 5.3          |
| Vanguard Mid-Cap 400 Index Fund I (VSPMX) | 27,167          | 100.0       | -                    | -           | -                     | -           | -                   | -          | -             | -          | -            | -          | 27,167         | 11.1         |
| Vanguard Growth Index (VIGIX)             | 12,656          | 100.0       | -                    | -           | -                     | -           | -                   | -          | -             | -          | -            | -          | 12,656         | 5.2          |
| Twin Capital Low Volatility               | 20,267          | 98.9        | -                    | -           | -                     | -           | -                   | -          | -             | -          | 216          | 1.1        | 20,483         | 8.4          |
| Twin Capital Enhanced Index               | 13,415          | 98.9        | -                    | -           | -                     | -           | -                   | -          | -             | -          | 150          | 1.1        | 13,565         | 5.5          |
| Vanguard FTSE AW ex-US SC Index (VFSNX)   | -               | -           | 7,203                | 100.0       | -                     | -           | -                   | -          | -             | -          | -            | -          | 7,203          | 2.9          |
| Vanguard Developed Markets Index (VTMNX)  | -               | -           | 19,518               | 100.0       | -                     | -           | -                   | -          | -             | -          | -            | -          | 19,518         | 8.0          |
| Vanguard Emerging Markets Index (VEMIX)   | -               | -           | 13,853               | 100.0       | -                     | -           | -                   | -          | -             | -          | -            | -          | 13,853         | 5.7          |
| Vanguard Short Term Bond Index (VBITX)    | -               | -           | -                    | -           | 5,475                 | 99.9        | -                   | -          | -             | -          | 7            | 0.1        | 5,482          | 2.2          |
| Vanguard Total Bond Index (VBTIX)         | -               | -           | -                    | -           | 45,043                | 99.8        | -                   | -          | -             | -          | 73           | 0.2        | 45,116         | 18.4         |
| Vanguard International Bond (VTIFX)       | -               | -           | -                    | -           | -                     | -           | 11,468              | 100.0      | -             | -          | -            | -          | 11,468         | 4.7          |
| Vanguard Real Estate Index Fund (VGSNX)   | -               | -           | -                    | -           | -                     | -           | -                   | -          | 11,510        | 100.0      | -            | -          | 11,510         | 4.7          |
| Cash                                      | -               | -           | -                    | -           | -                     | -           | -                   | -          | -             | -          | 5            | 100.0      | 5              | 0.0          |
| NMA                                       | -               | -           | -                    | -           | -                     | -           | -                   | -          | -             | -          | 2,125        | 100.0      | 2,125          | 0.9          |
| <b>Total Fund</b>                         | <b>104,347</b>  | <b>42.6</b> | <b>40,574</b>        | <b>16.6</b> | <b>74,395</b>         | <b>30.4</b> | <b>11,468</b>       | <b>4.7</b> | <b>11,510</b> | <b>4.7</b> | <b>2,664</b> | <b>1.1</b> | <b>244,958</b> | <b>100.0</b> |





**Schedule of Investable Assets**



**Schedule of Investable Assets**

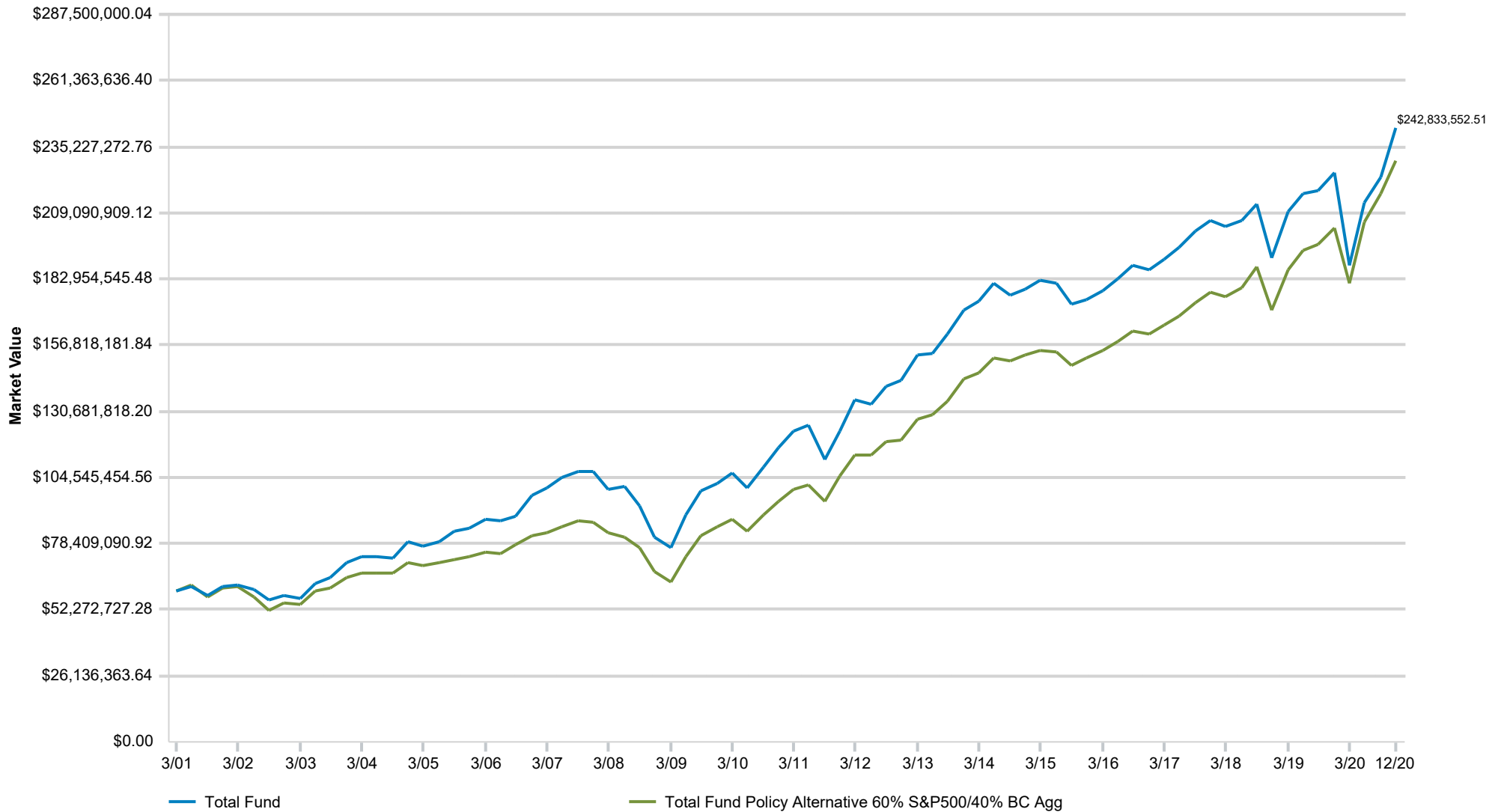
| Periods Ending       | Beginning Market Value \$ | Net Cash Flow \$ | Gain/Loss \$ | Ending Market Value \$ | %Return |
|----------------------|---------------------------|------------------|--------------|------------------------|---------|
| Jan-2001 To Dec-2020 | 59,528,253                | -14,632,572      | 197,937,871  | 242,833,553            | 273.01  |

Does not include Non-Measured Assets (NMA).



**Schedule of Investable Assets**  
**Total Fund**  
January 1, 2001 To December 31, 2020

**Schedule of Investable Assets**



**Schedule of Investable Assets**

| Periods Ending       | Beginning Market Value \$ | Net Cash Flow \$ | Gain/Loss \$ | Ending Market Value \$ | %Return |
|----------------------|---------------------------|------------------|--------------|------------------------|---------|
| Jan-2001 To Dec-2020 | 59,528,253                | -14,632,572      | 197,937,871  | 242,833,553            | 273.01  |

Does not include Non-Measured Assets (NMA).



**Fee Analysis**  
**Total Fund**  
**As of December 31, 2020**

|   | Estimated<br>Annual Fee<br>(%) | Market Value<br>(\$) | Estimated<br>Annual Fee<br>(\$) | Fee Schedule     |
|---|--------------------------------|----------------------|---------------------------------|------------------|
| Twin Capital Enhanced Index               | 0.35                           | 13,564,631           | 47,476                          | 0.35 % of Assets |
| Twin Capital Low Volatility               | 0.35                           | 20,482,872           | 71,690                          | 0.35 % of Assets |
| Vanguard Inst'l Index Fund (VINIX)        | 0.03                           | 5,309,898            | 1,593                           | 0.03 % of Assets |
| Vanguard Growth Index (VIGIX)             | 0.05                           | 12,655,755           | 6,328                           | 0.05 % of Assets |
| Vanguard Value Index (VIVIX)              | 0.05                           | 12,667,306           | 6,334                           | 0.05 % of Assets |
| Vanguard Mid-Cap 400 Index Fund I (VSPMX) | 0.08                           | 27,167,230           | 21,734                          | 0.08 % of Assets |
| Vanguard Small-Cap 600 Index I (VSMSX)    | 0.08                           | 12,864,797           | 10,292                          | 0.08 % of Assets |
| Vanguard FTSE AW ex-US SC Index (VFSNX)   | 0.11                           | 7,203,069            | 7,923                           | 0.11 % of Assets |
| Vanguard Developed Markets Index (VTMNX)  | 0.06                           | 19,518,334           | 11,711                          | 0.06 % of Assets |
| Vanguard Emerging Markets Index (VEMIX)   | 0.11                           | 13,852,708           | 15,238                          | 0.11 % of Assets |
| Vanguard Short Term Bond Index (VBITX)    | 0.05                           | 5,481,538            | 2,741                           | 0.05 % of Assets |
| Vanguard Total Bond Index (VBTIX)         | 0.04                           | 45,116,341           | 18,047                          | 0.04 % of Assets |
| Vanguard High Yield Bond Fund (VWEAX)     | 0.13                           | 23,966,294           | 31,156                          | 0.13 % of Assets |
| Vanguard International Bond (VTIFX)       | 0.07                           | 11,468,394           | 8,028                           | 0.07 % of Assets |
| Vanguard Real Estate Index Fund (VGSNX)   | 0.10                           | 11,509,558           | 11,510                          | 0.10 % of Assets |
| <b>Total Fund Performance</b>             | <b>0.11</b>                    | <b>242,833,553</b>   | <b>271,800</b>                  |                  |

Does not include Non-Measured Assets (NMA).



**Financial Reconciliation**  
**Total Fund**  
as of December 31, 2020

| Quarter To Date                           | Market Value<br>10/01/2020 | Management<br>Fees | Net Flows         | Return On<br>Investment | Market Value<br>12/31/2020 |
|---|----------------------------|--------------------|-------------------|-------------------------|----------------------------|
| <b>Domestic Equity</b>                    |                            |                    |                   |                         |                            |
| Vanguard Inst'l Index Fund (VINIX)        | -                          | -                  | 5,000,000         | 309,898                 | 5,309,898                  |
| Vanguard Value Index (VIVIX)              | 11,061,534                 | -                  | -                 | 1,605,772               | 12,667,306                 |
| Vanguard Small-Cap 600 Index I (VSMX)     | 9,797,059                  | -                  | -                 | 3,067,738               | 12,864,797                 |
| Vanguard Mid-Cap 400 Index Fund I (VSPMX) | 21,845,050                 | -                  | -                 | 5,322,180               | 27,167,230                 |
| Vanguard Growth Index (VIGIX)             | 15,017,311                 | -                  | -3,700,000        | 1,338,444               | 12,655,755                 |
| Twin Capital Low Volatility               | 23,622,579                 | -18,555            | -5,000,000        | 1,860,294               | 20,482,872                 |
| Twin Capital Enhanced Index               | 12,202,041                 | -11,236            | -                 | 1,362,589               | 13,564,631                 |
| <b>International Equity</b>               |                            |                    |                   |                         |                            |
| Vanguard FTSE AW ex-US SC Index (VFSNX)   | 6,114,755                  | -                  | -                 | 1,088,315               | 7,203,069                  |
| Vanguard Developed Markets Index (VTMNX)  | 16,682,874                 | -                  | -                 | 2,835,460               | 19,518,334                 |
| Vanguard Emerging Markets Index (VEMIX)   | 11,852,984                 | -                  | -                 | 1,999,724               | 13,852,708                 |
| <b>Fixed Income</b>                       |                            |                    |                   |                         |                            |
| Vanguard Short Term Bond Index (VBITX)    | 5,466,091                  | -                  | -                 | 15,447                  | 5,481,538                  |
| Vanguard Total Bond Index (VBTIX)         | 44,817,438                 | -                  | -                 | 298,902                 | 45,116,341                 |
| Vanguard High Yield Bond Fund (VWEAX)     | 22,906,037                 | -                  | -                 | 1,060,257               | 23,966,294                 |
| Vanguard International Bond (VTIFX)       | 11,351,951                 | -                  | -                 | 116,443                 | 11,468,394                 |
| <b>REIT</b>                               |                            |                    |                   |                         |                            |
| Vanguard Real Estate Index Fund (VGSNX)   | 10,536,383                 | -                  | -                 | 973,175                 | 11,509,558                 |
| Cash                                      | 4,827                      | -                  | -                 | 2                       | 4,829                      |
| <b>Total Fund Performance</b>             | <b>223,278,914</b>         | <b>-29,791</b>     | <b>-3,700,000</b> | <b>23,254,638</b>       | <b>242,833,553</b>         |
| NMA                                       | 1,698,270                  | -                  | 426,384           | -                       | 2,124,655                  |
| <b>Total Fund</b>                         | <b>224,977,185</b>         | <b>-29,791</b>     | <b>-3,273,616</b> | <b>23,254,638</b>       | <b>244,958,207</b>         |



**Financial Reconciliation**  
**Total Fund**  
as of December 31, 2020

| Year To Date                              |                            |                    |                   |                         |                            |
|---|----------------------------|--------------------|-------------------|-------------------------|----------------------------|
|   | Market Value<br>01/01/2020 | Management<br>Fees | Net Flows         | Return On<br>Investment | Market Value<br>12/31/2020 |
| <b>Domestic Equity</b>                    |                            |                    |                   |                         |                            |
| Vanguard Inst'l Index Fund (VINIX)        | -                          | -                  | 5,000,000         | 309,898                 | 5,309,898                  |
| Vanguard Value Index (VIVIX)              | 12,382,180                 | -                  | -                 | 285,126                 | 12,667,306                 |
| Vanguard Small-Cap 600 Index I (VSMX)     | 11,542,118                 | -                  | -                 | 1,322,679               | 12,864,797                 |
| Vanguard Mid-Cap 400 Index Fund I (VSPMX) | 23,919,895                 | -                  | -                 | 3,247,335               | 27,167,230                 |
| Vanguard Growth Index (VIGIX)             | 11,938,089                 | -                  | -3,700,000        | 4,417,666               | 12,655,755                 |
| Twin Capital Low Volatility               | 24,226,691                 | -76,703            | -5,000,000        | 1,256,182               | 20,482,872                 |
| Twin Capital Enhanced Index               | 11,746,396                 | -40,843            | -                 | 1,818,234               | 13,564,631                 |
| <b>International Equity</b>               |                            |                    |                   |                         |                            |
| Vanguard FTSE AW ex-US SC Index (VFSNX)   | -                          | -                  | 5,750,000         | 1,453,069               | 7,203,069                  |
| Vanguard Developed Markets Index (VTMNX)  | 24,031,462                 | -                  | -5,750,000        | 1,236,872               | 19,518,334                 |
| Vanguard Emerging Markets Index (VEMIX)   | 12,018,280                 | -                  | -                 | 1,834,428               | 13,852,708                 |
| <b>Fixed Income</b>                       |                            |                    |                   |                         |                            |
| Vanguard Short Term Bond Index (VBITX)    | 5,235,103                  | -                  | -                 | 246,435                 | 5,481,538                  |
| Vanguard Total Bond Index (VBTIX)         | 41,879,430                 | -                  | -                 | 3,236,911               | 45,116,341                 |
| Vanguard High Yield Bond Fund (VWEAX)     | 22,741,691                 | -                  | -                 | 1,224,603               | 23,966,294                 |
| Vanguard International Bond (VTIFX)       | 10,964,684                 | -                  | -                 | 503,710                 | 11,468,394                 |
| <b>REIT</b>                               |                            |                    |                   |                         |                            |
| Vanguard Real Estate Index Fund (VGSNX)   | 12,072,800                 | -                  | -                 | -563,242                | 11,509,558                 |
| Cash                                      | 3,986                      | -                  | -                 | 843                     | 4,829                      |
| <b>Total Fund Performance</b>             | <b>224,702,804</b>         | <b>-117,547</b>    | <b>-3,700,000</b> | <b>21,830,749</b>       | <b>242,833,553</b>         |
| NMA                                       | 2,608,862                  | -                  | -484,207          | -                       | 2,124,655                  |
| <b>Total Fund</b>                         | <b>227,311,665</b>         | <b>-117,547</b>    | <b>-4,184,207</b> | <b>21,830,749</b>       | <b>244,958,207</b>         |



### Goals

- Maintain the actuarial soundness of the Plan in order to meet future obligations by preserving the inflation adjusted value of the Plan's assets after all investment expenses, administrative costs, benefit payments and refunds.
- Obtain an average annual rate of investment return equal to or greater than the actuarial assumed rate of 7.5% (net of fees), with an emphasis over a longer term (fifteen year) trailing period.

### Asset Allocation Ranges (Based on IPS Second Addendum)

| Asset Class                     | Minimum | Target | Maximum |
|---------------------------------|---------|--------|---------|
| Large Cap Core                  | 10%     | 15%    | 20%     |
| Large Cap Value                 | 0%      | 5%     | 10%     |
| Large Cap Growth                | 0%      | 5%     | 10%     |
| Mid Cap Core                    | 5%      | 10%    | 15%     |
| Small Cap Core                  | 0%      | 5%     | 10%     |
| International Developed Markets | 5%      | 7.5%   | 15%     |
| International Emerging Markets  | 0%      | 5%     | 10%     |
| All World ex US Small Cap       | 0%      | 2.5%   | 5%      |
| Aggregate Fixed Income          | 10%     | 20%    | 30%     |
| Short-Term Fixed Income         | 0%      | 2.5%   | 5%      |
| High Yield Fixed Income         | 5%      | 10%    | 15%     |
| Non-US Fixed Income             | 0%      | 5%     | 10%     |
| Real Estate                     | 0%      | 5%     | 10%     |
| Cash                            | 0%      | 2.5%   | 5%      |

### Rebalancing Policy

The Investment Consultant will monitor the asset allocation policy and shall recommend any necessary rebalancing on a quarterly basis, or more frequently. At each quarterly Board meeting, the Investment Consultant will provide the Plan's actual and target allocations (including ranges). Upon any Board approval, the Investment Consultant will initiate rebalancing.

### Other Portfolio Guidelines and Restrictions

- Additional investment policies and guidelines are contained in the formal Investment Policy Statement.

### Portfolio Guidelines and Restrictions

#### Equity Guidelines

- Equity investment manager of a separate account should diversify their portfolio in an attempt to minimize the impact of a substantial loss in any specific sector, industry or company.
- No more than 5% of each manager's equity holdings shall be invested in the securities of any one company (valued at market).
- The economic sector weightings shall not exceed the greater of two and half times the appropriate benchmark, valued at market, or 15% of the equity portfolio.
- The market for individual security holdings in the equity portfolio shall be liquid enough to allow for easy monetization.

#### Fixed Income Guidelines

- A fixed income investment manager of a separate account should diversify their portfolio in an attempt to minimize the adverse effects of interest rate fluctuations and default risk.
- No more than 5% of the fixed income portfolio in any one issuer, excluding direct and/or indirect obligations of the US Government.
- The market for individual security holdings in the fixed income shall be liquid enough to allow for easy monetization.
- The minimum quality rating for any fixed income security is an "investment grade" rating as determined by at least one nationally recognized credit ratings agency. Bond held in the fixed income portfolio must be rated investment grade ("Baa/BBB") or better by at least one agency, with the exception of securities held in a high-yield bond fund.
- The duration of the bonds held in the portfolios are at the discretion of the investment manager(s). However, the effective duration of the fixed income security should be within +/-20% of the index.

#### Cash & Equivalents Restrictions

- Commercial paper must be rated A-1 or P-1 by at least one nationally recognized credit rating agency.

#### Permissible Investments

- Permissible investments include those identified in the Plan's Asset Allocation Policy, subject to state statute and local ordinance.

#### Prohibited Investments

- Prohibited investments include those not specifically identified in the Plan's Asset Allocation Policy without prior approval of the Board, upon recommendation of the Investment Consultant.



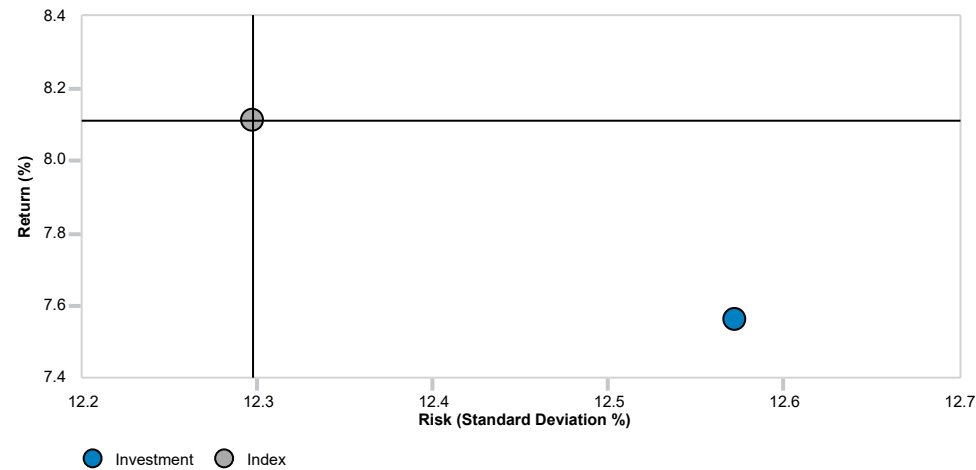
### Historical Statistics 3 Years

|            | Return | Standard Deviation | Sharpe Ratio | Up Market Capture | Up Quarters | Down Market Capture | Down Quarters |
|------------|--------|--------------------|--------------|-------------------|-------------|---------------------|---------------|
| Investment | 7.56   | 12.57              | 0.51         | 99.86             | 9           | 103.76              | 3             |
| Index      | 8.11   | 12.30              | 0.56         | 100.00            | 9           | 100.00              | 3             |

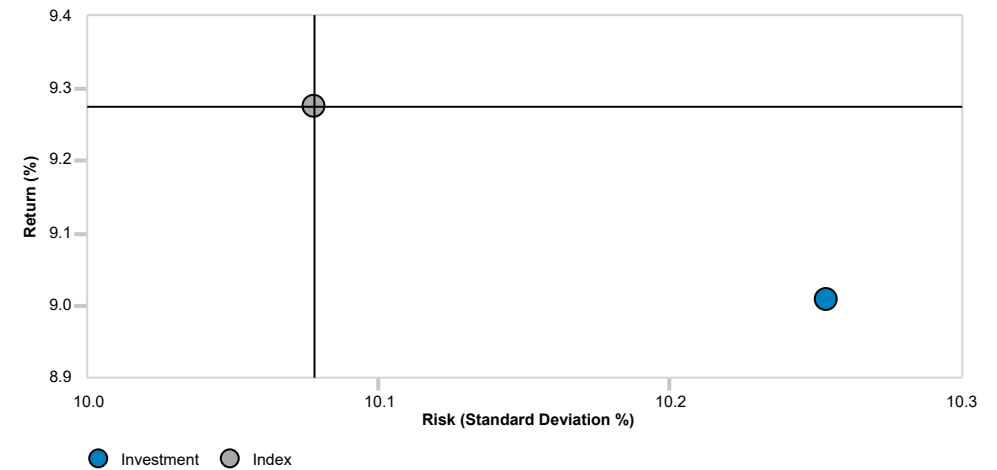
### Historical Statistics 5 Years

|            | Return | Standard Deviation | Sharpe Ratio | Up Market Capture | Up Quarters | Down Market Capture | Down Quarters |
|------------|--------|--------------------|--------------|-------------------|-------------|---------------------|---------------|
| Investment | 9.01   | 10.25              | 0.77         | 100.00            | 17          | 102.82              | 3             |
| Index      | 9.28   | 10.08              | 0.81         | 100.00            | 17          | 100.00              | 3             |

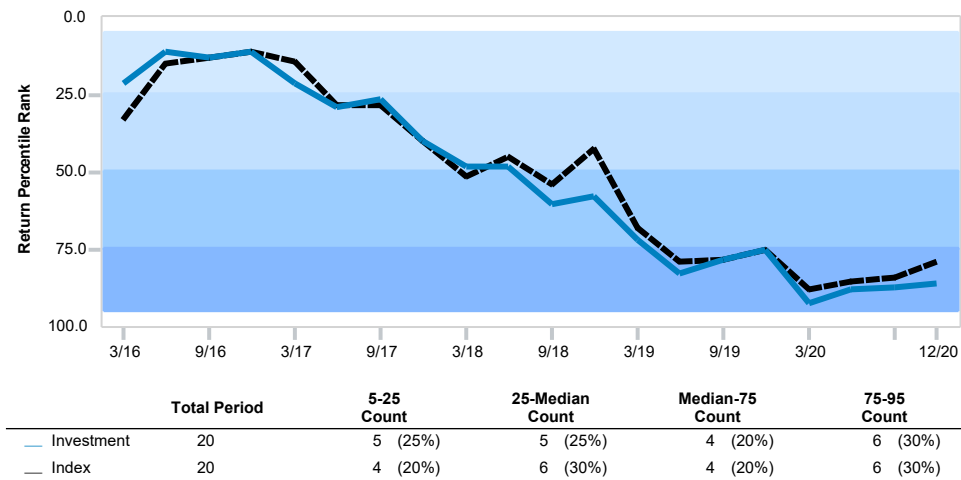
### Risk and Return 3 Years



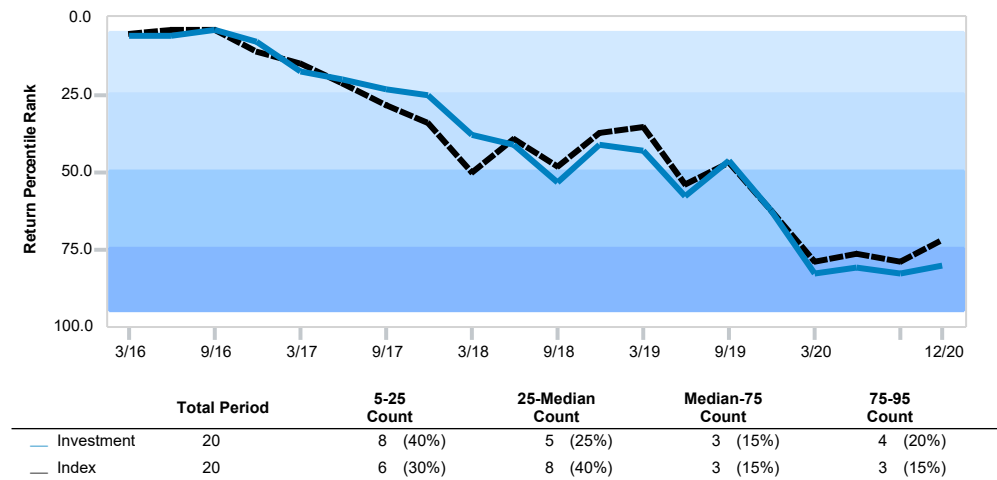
### Risk and Return 5 Years



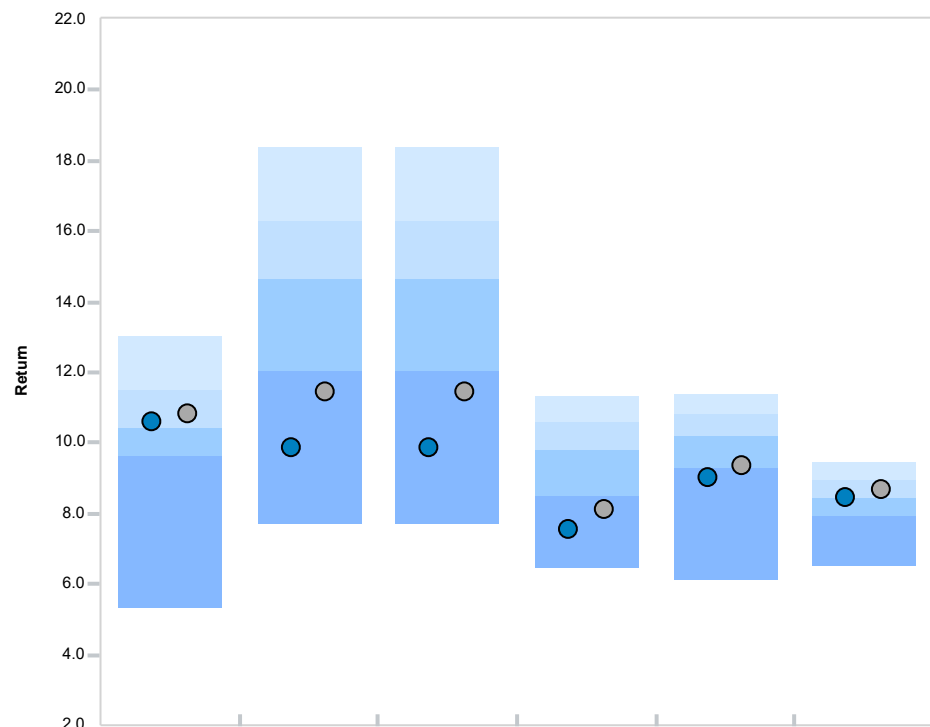
### 3 Year Rolling Percentile Rank All Public Plans-Total Fund



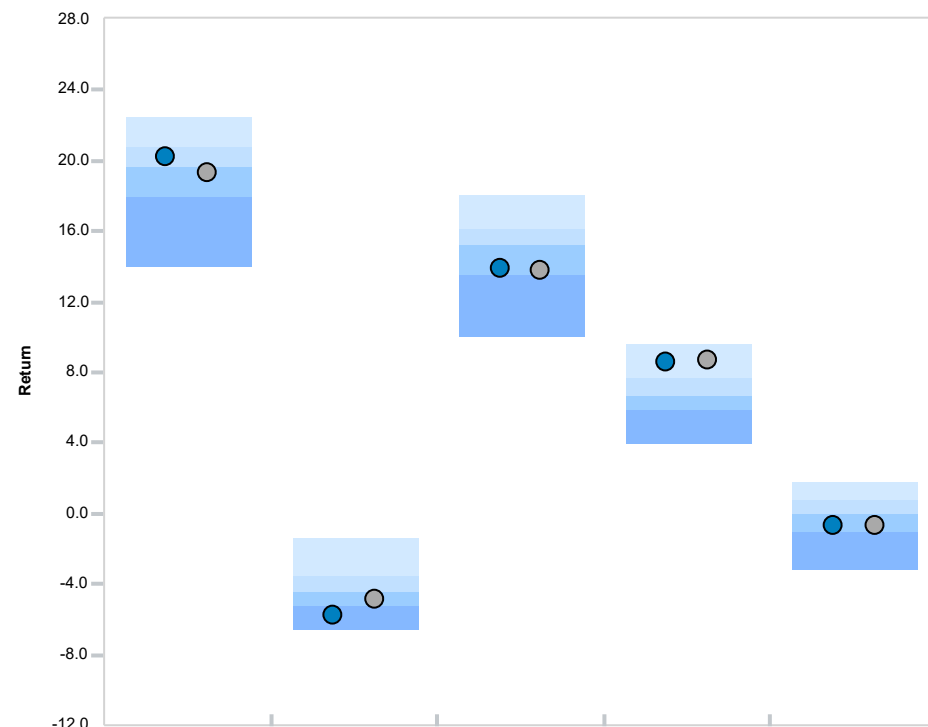
### 5 Year Rolling Percentile Rank All Public Plans-Total Fund



### Plan Sponsor Peer Group Analysis vs. All Public Plans-Total Fund



### Plan Sponsor Peer Group Analysis vs. All Public Plans-Total Fund



### Financial Reconciliation Since Inception Ending December 31, 2020

|            | Market Value<br>04/01/2001 | Net Flows   | Return On<br>Investment | Market Value<br>12/31/2020 |
|------------|----------------------------|-------------|-------------------------|----------------------------|
| Investment | 59,528,253                 | -15,400,443 | 198,705,743             | 242,833,553                |

### Comparative Performance

|            | 1 Qtr<br>Ending<br>Sep-2020 | 1 Qtr<br>Ending<br>Jun-2020 | 1 Qtr<br>Ending<br>Mar-2020 | 1 Qtr<br>Ending<br>Dec-2019 | 1 Qtr<br>Ending<br>Sep-2019 | 1 Qtr<br>Ending<br>Jun-2019 |
|------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| Investment | 4.83                        | 12.92                       | -16.09                      | 4.99                        | 1.37                        | 3.12                        |
| Index      | 4.76                        | 13.88                       | -15.37                      | 5.11                        | 1.06                        | 2.95                        |



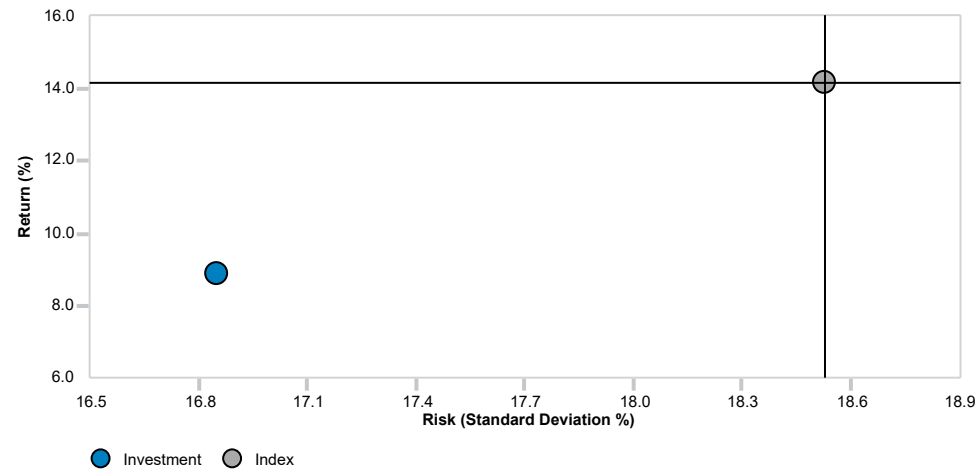
### Historical Statistics 3 Years

|            | Return | Standard Deviation | Sharpe Ratio | Up Market Capture | Up Quarters | Down Market Capture | Down Quarters |
|------------|--------|--------------------|--------------|-------------------|-------------|---------------------|---------------|
| Investment | 8.87   | 16.85              | 0.49         | 80.96             | 9           | 92.60               | 3             |
| Index      | 14.18  | 18.53              | 0.72         | 100.00            | 9           | 100.00              | 3             |

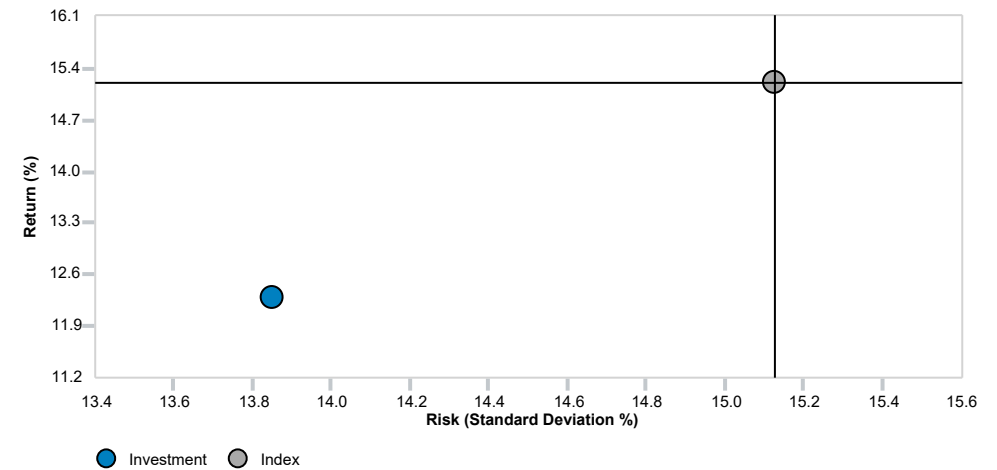
### Historical Statistics 5 Years

|            | Return | Standard Deviation | Sharpe Ratio | Up Market Capture | Up Quarters | Down Market Capture | Down Quarters |
|------------|--------|--------------------|--------------|-------------------|-------------|---------------------|---------------|
| Investment | 12.27  | 13.85              | 0.82         | 85.07             | 17          | 88.89               | 3             |
| Index      | 15.22  | 15.13              | 0.94         | 100.00            | 17          | 100.00              | 3             |

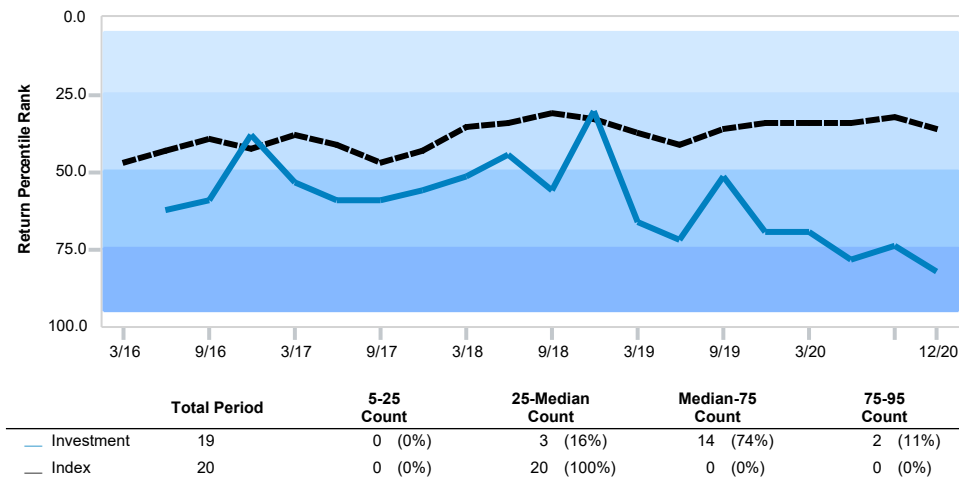
### Risk and Return 3 Years



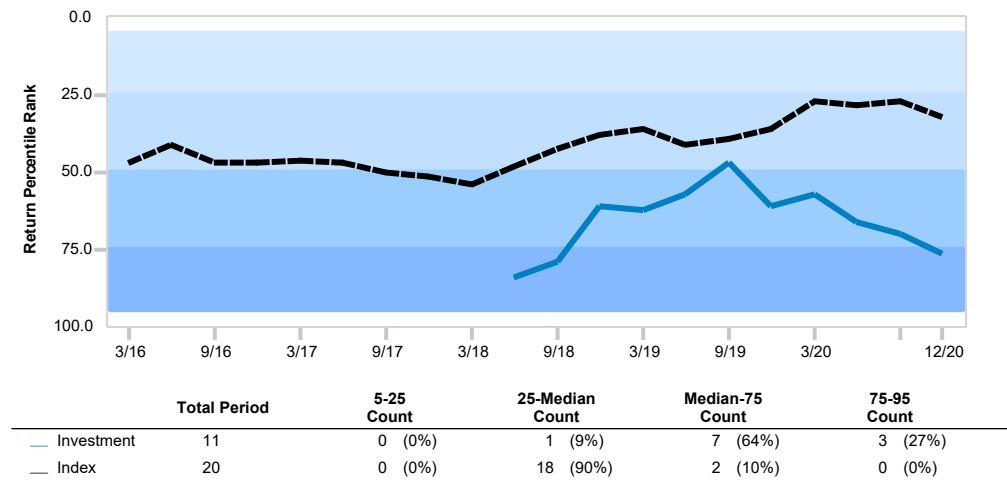
### Risk and Return 5 Years



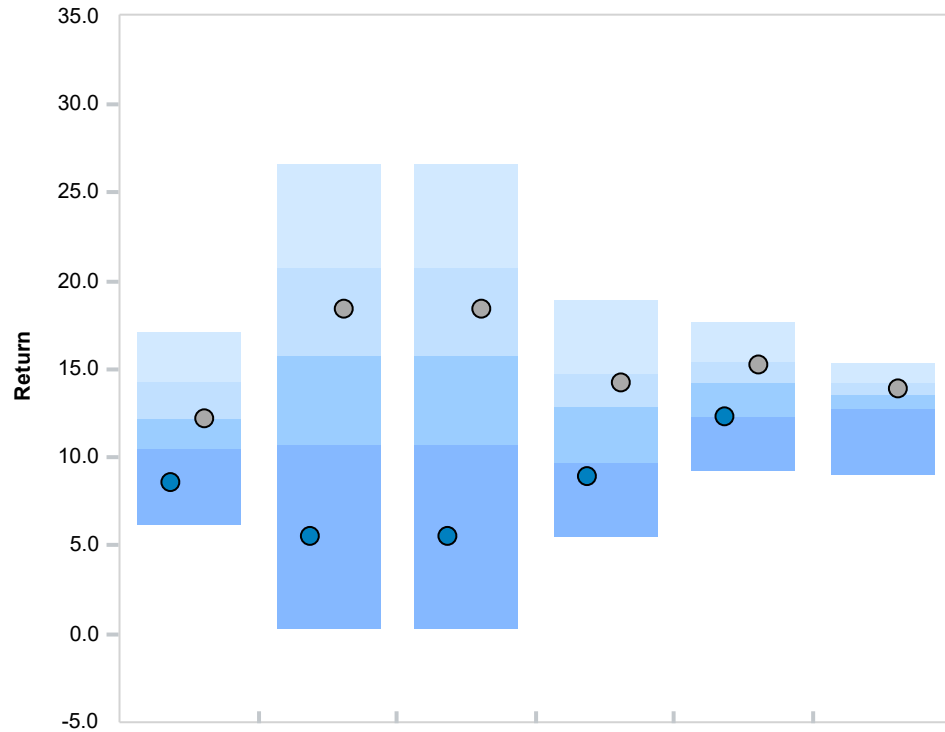
### 3 Year Rolling Percentile Rank IM U.S. Large Cap Core Equity (SA+CF)



### 5 Year Rolling Percentile Rank IM U.S. Large Cap Core Equity (SA+CF)

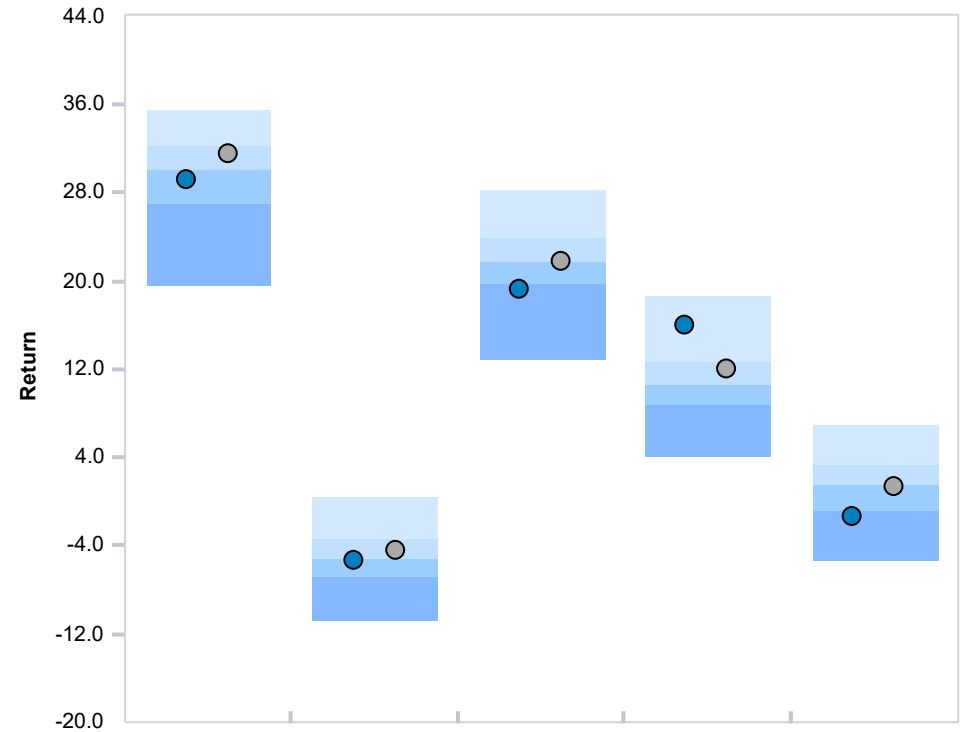


**Peer Group Analysis - IM U.S. Large Cap Core Equity (SA+CF)**



|            | QTR        | YTD        | 1 YR       | 3 YR       | 5 YR       | 10 YR      |
|------------|------------|------------|------------|------------|------------|------------|
| Investment | 8.50 (89)  | 5.51 (88)  | 5.51 (88)  | 8.87 (82)  | 12.27 (76) | N/A        |
| Index      | 12.15 (49) | 18.40 (40) | 18.40 (40) | 14.18 (36) | 15.22 (32) | 13.88 (38) |
| Median     | 12.14      | 15.78      | 15.78      | 12.81      | 14.25      | 13.58      |

**Peer Group Analysis - IM U.S. Large Cap Core Equity (SA+CF)**



|            | 2019       | 2018       | 2017       | 2016       | 2015       |
|------------|------------|------------|------------|------------|------------|
| Investment | 29.24 (59) | -5.37 (55) | 19.16 (79) | 16.03 (10) | -1.31 (79) |
| Index      | 31.49 (35) | -4.38 (38) | 21.83 (51) | 11.96 (34) | 1.38 (52)  |
| Median     | 30.00      | -5.15      | 21.84      | 10.54      | 1.43       |

**Financial Reconciliation Since Inception Ending December 31, 2020**

|            | Market Value<br>06/01/2013 | Net Flows  | Return On<br>Investment | Market Value<br>12/31/2020 |
|------------|----------------------------|------------|-------------------------|----------------------------|
| Investment | 7,513,518                  | -2,297,787 | 15,267,142              | 20,482,872                 |

**Comparative Performance**

|            | 1 Qtr<br>Ending<br>Sep-2020 | 1 Qtr<br>Ending<br>Jun-2020 | 1 Qtr<br>Ending<br>Mar-2020 | 1 Qtr<br>Ending<br>Dec-2019 | 1 Qtr<br>Ending<br>Sep-2019 | 1 Qtr<br>Ending<br>Jun-2019 |
|------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| Investment | 8.56                        | 15.18                       | -22.23                      | 6.58                        | 2.94                        | 4.66                        |
| Index      | 8.93                        | 20.54                       | -19.60                      | 9.07                        | 1.70                        | 4.30                        |

**Schedule of Investable Assets**  
**Twin Capital Low Volatility**  
Since Inception Ending December 31, 2020

**Schedule of Investable Assets**



**Schedule of Investable Assets**

| Periods Ending | Beginning<br>Market Value<br>\$ | Net<br>Cash Flow<br>\$ | Gain/Loss<br>\$ | Ending<br>Market Value<br>\$ | %Return | Unit Value |
|----------------|---------------------------------|------------------------|-----------------|------------------------------|---------|------------|
| Inception      | 7,411,166                       | -1,815,089             | 14,886,796      | 20,482,872                   | 123.41  | 223.4      |



**Portfolio Characteristics (Benchmark: S&P 500 Index)**

|                           | Portfolio       | Benchmark       |
|---------------------------|-----------------|-----------------|
| Wtd. Avg. Mkt. Cap (\$)   | 227,939,323,694 | 483,324,314,475 |
| Median Mkt. Cap (\$)      | 51,343,197,765  | 26,814,727,840  |
| Price/Earnings ratio      | 23.81           | 29.35           |
| Price/Book ratio          | 4.08            | 4.57            |
| 5 Yr. EPS Growth Rate (%) | 10.44           | 18.17           |
| Current Yield (%)         | 2.14            | 1.53            |
| Beta (5 Years, Monthly)   | 0.89            | 1.00            |
| Number of Stocks          | 99              | 505             |

**Top Ten Equity Holdings (Benchmark: S&P 500 Index)**

|                            | Portfolio Wt | Benchmark Wt | Active Wt | Qtr Rtrn |
|----------------------------|--------------|--------------|-----------|----------|
| Microsoft Corp             | 4.99         | 5.31         | -0.32     | 6.03     |
| Procter & Gamble Co (The)  | 3.06         | 1.09         | 1.97      | 0.67     |
| Johnson & Johnson          | 3.03         | 1.31         | 1.72      | 6.45     |
| Mastercard Inc             | 2.73         | 0.99         | 1.74      | 5.67     |
| Verizon Communications Inc | 2.35         | 0.77         | 1.58      | -0.20    |
| JPMorgan Chase & Co        | 2.32         | 1.22         | 1.10      | 33.19    |
| Activision Blizzard Inc    | 2.15         | 0.23         | 1.92      | 14.70    |
| AT&T Inc                   | 2.09         | 0.65         | 1.44      | 2.71     |
| Walmart Inc                | 2.03         | 0.63         | 1.40      | 3.41     |
| Visa Inc                   | 1.94         | 1.17         | 0.77      | 9.55     |

**Ten Best Performers (Benchmark: S&P 500 Index)**

|                             | Portfolio Wt | Benchmark Wt | Active Wt | Quarterly Rtrn |
|-----------------------------|--------------|--------------|-----------|----------------|
| Discover Financial Services | 0.56         | 0.09         | 0.47      | 57.59          |
| Morgan Stanley              | 0.54         | 0.31         | 0.23      | 42.77          |
| PNC Financial Services Inc. | 1.18         | 0.20         | 0.98      | 36.99          |
| Xilinx Inc.                 | 0.45         | 0.11         | 0.34      | 36.40          |
| Microchip Technology Inc    | 1.12         | 0.11         | 1.01      | 34.79          |
| KLA Corp                    | 0.83         | 0.13         | 0.70      | 34.15          |
| Hartford Financial          | 0.74         | 0.06         | 0.68      | 33.86          |
| JPMorgan Chase & Co         | 2.32         | 1.22         | 1.10      | 33.19          |
| QUALCOMM Inc.               | 1.84         | 0.54         | 1.30      | 30.01          |
| Honeywell International Inc | 1.36         | 0.47         | 0.89      | 29.82          |

**Ten Worst Performers (Benchmark: S&P 500 Index)**

|                                 | Portfolio Wt | Benchmark Wt | Active Wt | Quarterly Rtrn |
|---------------------------------|--------------|--------------|-----------|----------------|
| Best Buy Co Inc                 | 1.11         | 0.07         | 1.04      | -9.85          |
| S&P Global Inc                  | 0.81         | 0.25         | 0.56      | -8.65          |
| D.R. Horton Inc.                | 1.05         | 0.07         | 0.98      | -8.62          |
| Air Products and Chemicals Inc. | 0.81         | 0.19         | 0.62      | -7.82          |
| C.H. Robinson Worldwide Inc.    | 0.63         | 0.04         | 0.59      | -7.64          |
| Consolidated Edison Inc.        | 0.53         | 0.08         | 0.45      | -6.21          |
| Kroger Co. (The)                | 0.42         | 0.08         | 0.34      | -5.81          |
| WEC Energy Group Inc            | 1.29         | 0.09         | 1.20      | -4.44          |
| Home Depot Inc. (The)           | 1.38         | 0.90         | 0.48      | -3.82          |
| Clorox Co (The)                 | 0.45         | 0.08         | 0.37      | -3.42          |

**Buy and Hold Sector Attribution (Benchmark: S&P 500 Index)**

|                        |              |              |             |              |              |              |              | Portfolio Comparison        |       |
|------------------------|--------------|--------------|-------------|--------------|--------------|--------------|--------------|-----------------------------|-------|
| Allocation             |              | Performance  |             | Attribution  |              |              |              | Twin Capital Low Volatility |       |
|                        | Portfolio    | Benchmark    | Portfolio   | Benchmark    | Stock        | Sector       | Total        | Market Capitalization (%)   |       |
| Communication Services | 8.9          | 11.0         | 8.15        | 13.81        | -0.51        | -0.02        | -0.53        | Greater than 25000M         | 83.86 |
| Consumer Discretionary | 9.5          | 11.5         | -0.81       | 7.92         | -0.86        | 0.08         | -0.78        | 16000M To 25000M            | 9.21  |
| Consumer Staples       | 12.3         | 6.9          | 3.99        | 6.34         | -0.29        | -0.31        | -0.61        | 12000M To 16000M            | 3.15  |
| Energy                 | 0.4          | 2.1          | 19.03       | 27.76        | -0.03        | -0.26        | -0.29        | 8000M To 12000M             | 2.79  |
| Financials             | 11.1         | 10.0         | 24.25       | 23.11        | 0.11         | 0.12         | 0.22         | 5000M To 8000M              | 1.00  |
| Health Care            | 15.2         | 14.0         | 6.74        | 8.03         | -0.20        | -0.05        | -0.25        |                             |       |
| Industrials            | 10.7         | 8.5          | 9.08        | 15.70        | -0.73        | 0.12         | -0.60        |                             |       |
| Information Technology | 22.1         | 27.7         | 12.83       | 11.81        | 0.20         | 0.02         | 0.22         |                             |       |
| Materials              | 2.7          | 2.7          | 2.50        | 14.47        | -0.30        | -0.01        | -0.31        |                             |       |
| Real Estate            | 0.0          | 2.6          | 0.00        | 4.94         | 0.00         | 0.19         | 0.19         |                             |       |
| Utilities              | 6.7          | 3.0          | 4.32        | 6.54         | -0.15        | -0.21        | -0.35        |                             |       |
| Cash                   | 0.4          | 0.0          | 0.01        | 0.00         | 0.00         | 0.04         | 0.04         |                             |       |
| <b>Total</b>           | <b>100.0</b> | <b>100.0</b> | <b>9.06</b> | <b>12.13</b> | <b>-2.77</b> | <b>-0.30</b> | <b>-3.07</b> |                             |       |



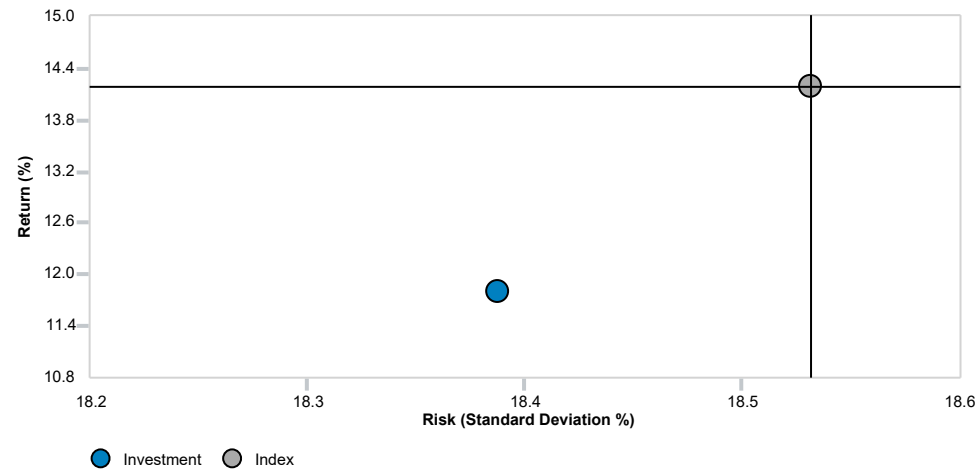
### Historical Statistics 3 Years

|            | Return | Standard Deviation | Sharpe Ratio | Up Market Capture | Up Quarters | Down Market Capture | Down Quarters |
|------------|--------|--------------------|--------------|-------------------|-------------|---------------------|---------------|
| Investment | 11.79  | 18.39              | 0.61         | 94.74             | 9           | 101.93              | 3             |
| Index      | 14.18  | 18.53              | 0.72         | 100.00            | 9           | 100.00              | 3             |

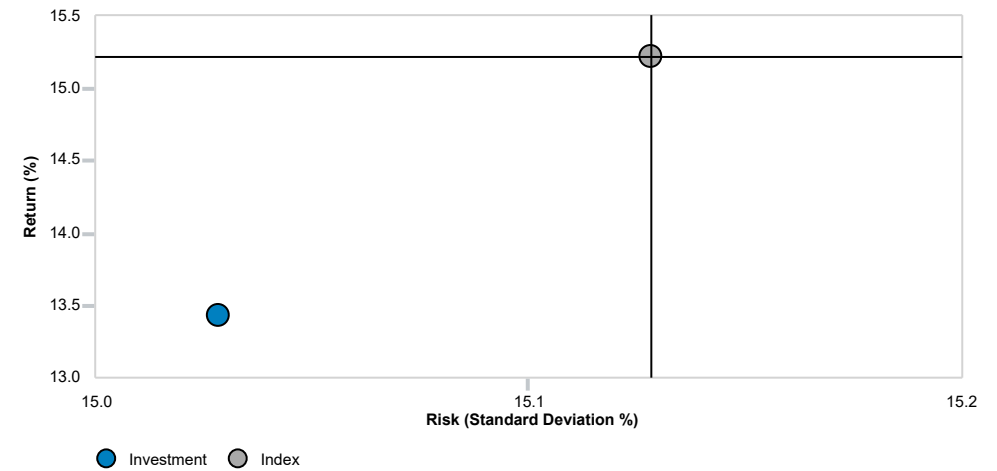
### Historical Statistics 5 Years

|            | Return | Standard Deviation | Sharpe Ratio | Up Market Capture | Up Quarters | Down Market Capture | Down Quarters |
|------------|--------|--------------------|--------------|-------------------|-------------|---------------------|---------------|
| Investment | 13.43  | 15.03              | 0.84         | 95.03             | 17          | 101.52              | 3             |
| Index      | 15.22  | 15.13              | 0.94         | 100.00            | 17          | 100.00              | 3             |

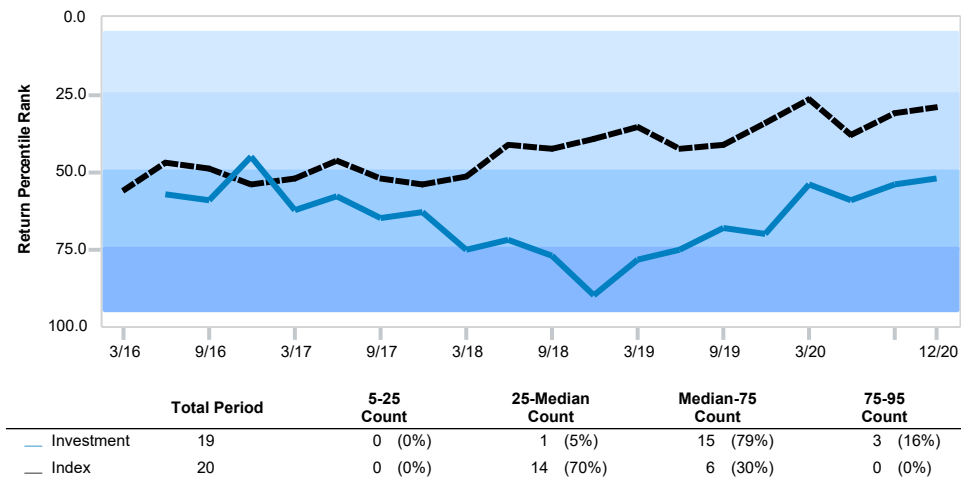
### Risk and Return 3 Years



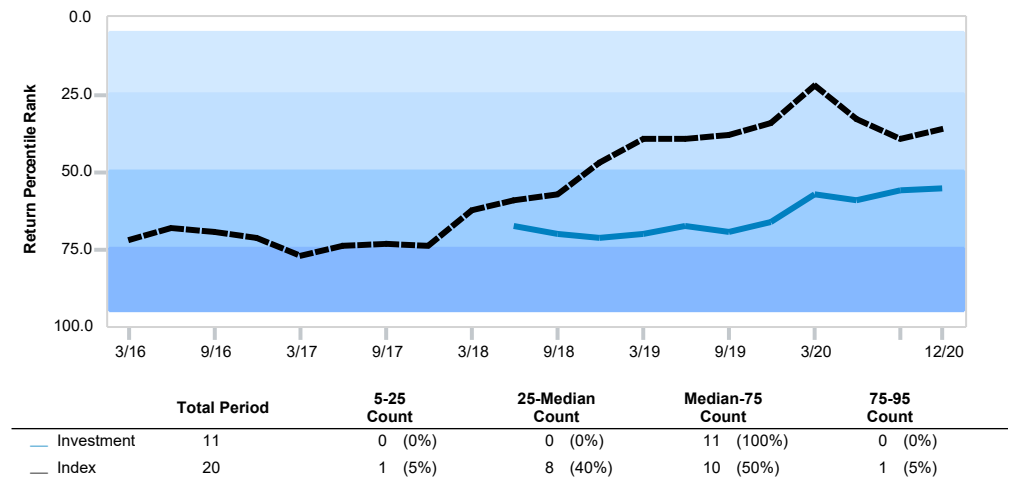
### Risk and Return 5 Years



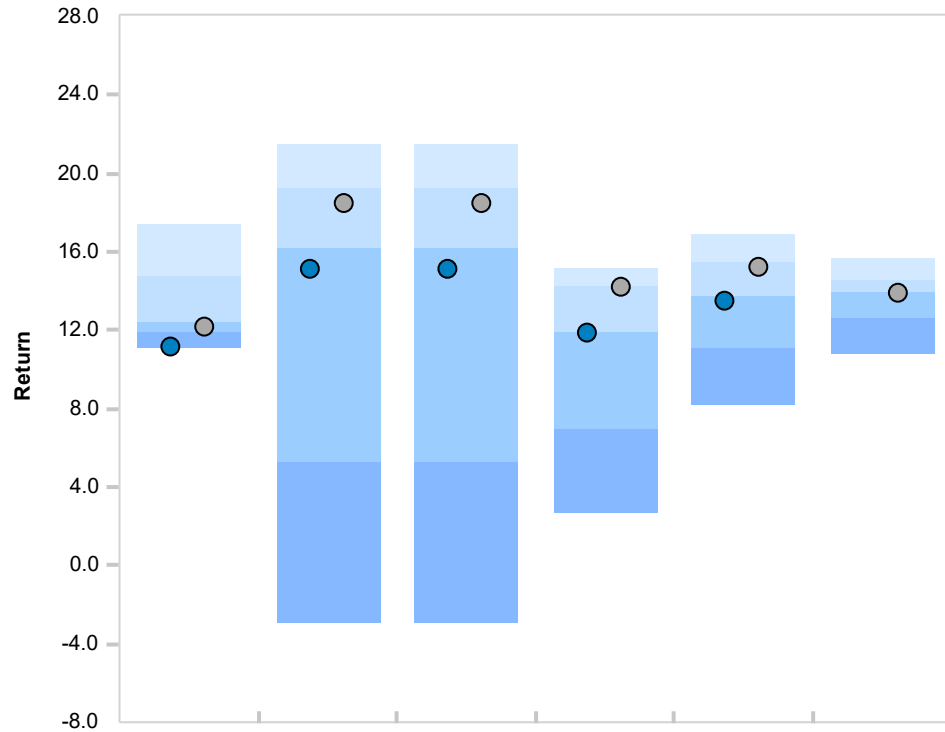
### 3 Year Rolling Percentile Rank IM U.S. Large Cap Enhanced Index Equity (SA+CF)



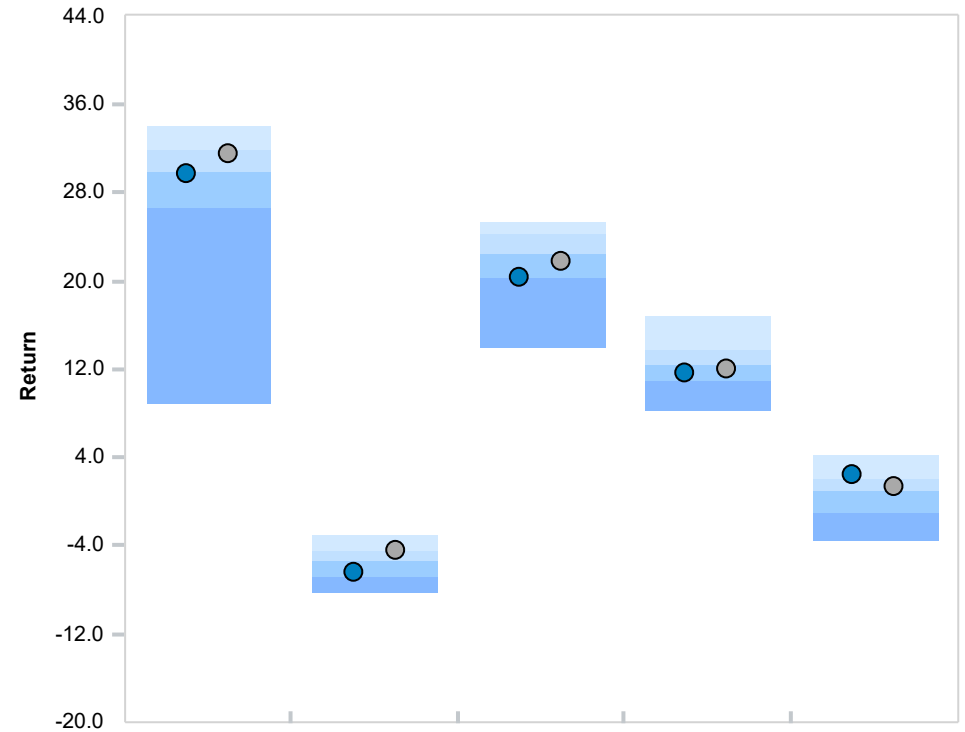
### 5 Year Rolling Percentile Rank IM U.S. Large Cap Enhanced Index Equity (SA+CF)



**Peer Group Analysis - IM U.S. Large Cap Enhanced Index Equity (SA+CF)**



**Peer Group Analysis - IM U.S. Large Cap Enhanced Index Equity (SA+CF)**



**Financial Reconciliation Since Inception Ending December 31, 2020**

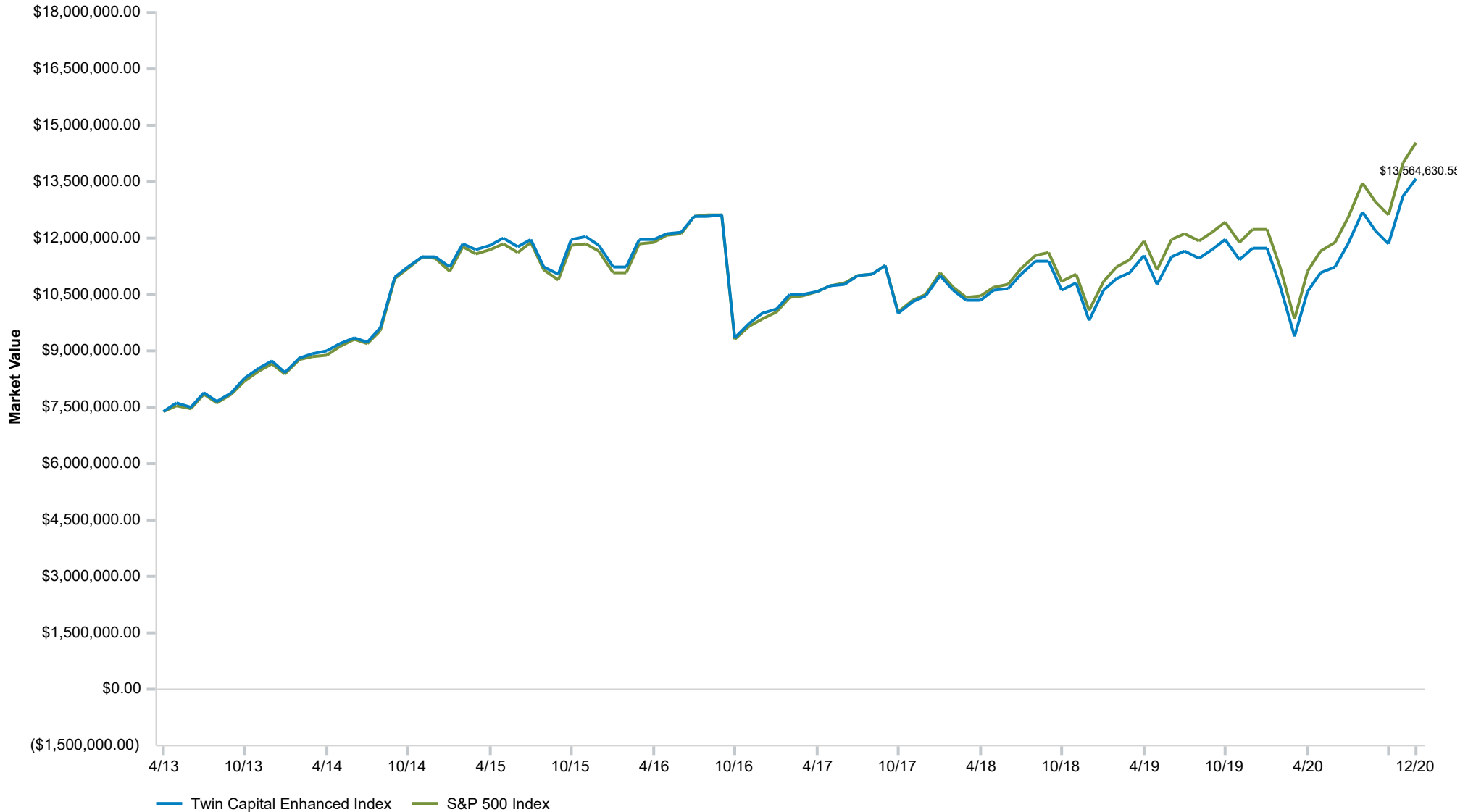
|            | Market Value<br>06/01/2013 | Net Flows  | Return On<br>Investment | Market Value<br>12/31/2020 |
|------------|----------------------------|------------|-------------------------|----------------------------|
| Investment | 7,598,363                  | -4,070,135 | 10,036,402              | 13,564,631                 |

**Comparative Performance**

|            | 1 Qtr<br>Ending<br>Sep-2020 | 1 Qtr<br>Ending<br>Jun-2020 | 1 Qtr<br>Ending<br>Mar-2020 | 1 Qtr<br>Ending<br>Dec-2019 | 1 Qtr<br>Ending<br>Sep-2019 | 1 Qtr<br>Ending<br>Jun-2019 |
|------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| Investment | 8.47                        | 19.42                       | -20.02                      | 9.23                        | 1.40                        | 3.84                        |
| Index      | 8.93                        | 20.54                       | -19.60                      | 9.07                        | 1.70                        | 4.30                        |

**Schedule of Investable Assets**  
**Twin Capital Enhanced Index**  
Since Inception Ending December 31, 2020

**Schedule of Investable Assets**



**Schedule of Investable Assets**

| Periods Ending | Beginning Market Value \$ | Net Cash Flow \$ | Gain/Loss \$ | Ending Market Value \$ | %Return | Unit Value |
|----------------|---------------------------|------------------|--------------|------------------------|---------|------------|
| Inception      | 7,380,915                 | -3,799,560       | 9,983,276    | 13,564,631             | 149.98  | 250.0      |



| Portfolio Characteristics (Benchmark: S&P 500 Index) |                 |                 |
|--|-----------------|-----------------|
|  | Portfolio       | Benchmark       |
| Wtd. Avg. Mkt. Cap (\$)                              | 478,341,005,899 | 483,324,314,475 |
| Median Mkt. Cap (\$)                                 | 48,206,406,470  | 26,814,727,840  |
| Price/Earnings ratio                                 | 27.02           | 29.35           |
| Price/Book ratio                                     | 3.96            | 4.57            |
| 5 Yr. EPS Growth Rate (%)                            | 18.79           | 18.17           |
| Current Yield (%)                                    | 1.53            | 1.53            |
| Beta (5 Years, Monthly)                              | 0.99            | 1.00            |
| Number of Stocks                                     | 187             | 505             |

| Top Ten Equity Holdings (Benchmark: S&P 500 Index) |              |              |           |          |
|--|--------------|--------------|-----------|----------|
|  | Portfolio Wt | Benchmark Wt | Active Wt | Qtr Rtrn |
| Apple Inc  | 6.66         | 6.70         | -0.04     | 14.77    |
| Microsoft Corp                                     | 4.94         | 5.31         | -0.37     | 6.03     |
| Amazon.com Inc                                     | 4.61         | 4.39         | 0.22      | 3.44     |
| Facebook Inc                                       | 2.14         | 2.07         | 0.07      | 4.30     |
| Berkshire Hathaway Inc                             | 2.07         | 1.43         | 0.64      | 8.89     |
| Alphabet Inc                                       | 1.83         | 1.66         | 0.17      | 19.59    |
| JPMorgan Chase & Co                                | 1.70         | 1.22         | 0.48      | 33.19    |
| Johnson & Johnson                                  | 1.47         | 1.31         | 0.16      | 6.45     |
| Procter & Gamble Co (The)                          | 1.45         | 1.09         | 0.36      | 0.67     |
| Alphabet Inc                                       | 1.44         | 1.61         | -0.17     | 19.21    |

| Ten Best Performers (Benchmark: S&P 500 Index) |              |              |           |                |
|--|--------------|--------------|-----------|----------------|
|  | Portfolio Wt | Benchmark Wt | Active Wt | Quarterly Rtrn |
| General Electric Co                            | 0.39         | 0.30         | 0.09      | 73.52          |
| Tesla Inc                                      | 1.05         | 1.69         | -0.64     | 64.49          |
| Discover Financial Services                    | 0.40         | 0.09         | 0.31      | 57.59          |
| NetApp Inc                                     | 0.25         | 0.05         | 0.20      | 52.66          |
| Zions Bancorporation NA                        | 0.28         | 0.02         | 0.26      | 49.96          |
| Walt Disney Co (The)                           | 0.81         | 1.04         | -0.23     | 46.02          |
| Applied Materials Inc.                         | 0.29         | 0.25         | 0.04      | 45.58          |
| Citigroup Inc                                  | 0.76         | 0.41         | 0.35      | 44.79          |
| DXC Technology Co                              | 0.30         | 0.02         | 0.28      | 44.26          |
| F5 Networks Inc                                | 0.20         | 0.03         | 0.17      | 43.31          |

| Ten Worst Performers (Benchmark: S&P 500 Index) |              |              |           |                |
|---|--------------|--------------|-----------|----------------|
|   | Portfolio Wt | Benchmark Wt | Active Wt | Quarterly Rtrn |
| Regeneron Pharma                                | 0.14         | 0.16         | -0.02     | -13.70         |
| Biogen Inc                                      | 0.27         | 0.12         | 0.15      | -13.68         |
| salesforce.com Inc                              | 0.58         | 0.64         | -0.06     | -11.46         |
| DexCom Inc                                      | 0.41         | 0.11         | 0.30      | -10.31         |
| Best Buy Co Inc                                 | 0.45         | 0.07         | 0.38      | -9.85          |
| Domino's Pizza Inc                              | 0.14         | 0.05         | 0.09      | -9.65          |
| Amgen Inc                                       | 0.33         | 0.42         | -0.09     | -8.93          |
| S&P Global Inc                                  | 0.37         | 0.25         | 0.12      | -8.65          |
| Gilead Sciences Inc                             | 0.33         | 0.23         | 0.10      | -6.75          |
| Lockheed Martin Corp                            | 0.26         | 0.28         | -0.02     | -6.72          |

| Buy and Hold Sector Attribution (Benchmark: S&P 500 Index) |              |              |              |              |              |              |              | Portfolio Comparison        |       |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-----------------------------|-------|
|  | Allocation   |              | Performance  |              | Stock        | Attribution  |              | Twin Capital Enhanced Index |       |
|  | Portfolio    | Benchmark    | Portfolio    | Benchmark    |              | Sector       | Total        | Market Capitalization (%)   |       |
| Communication Services                                     | 11.7         | 11.0         | 12.97        | 13.81        | -0.10        | 0.00         | -0.09        | Greater than 25000M         | 85.55 |
| Consumer Discretionary                                     | 11.9         | 11.5         | 6.16         | 7.92         | -0.22        | -0.02        | -0.24        | 16000M To 25000M            | 6.90  |
| Consumer Staples   | 7.1          | 6.9          | 3.97         | 6.34         | -0.17        | -0.01        | -0.19        | 12000M To 16000M            | 3.67  |
| Energy   | 1.8          | 2.1          | 23.28        | 27.76        | -0.08        | -0.06        | -0.14        | 8000M To 12000M             | 2.88  |
| Financials   | 9.8          | 10.0         | 23.31        | 23.11        | 0.03         | -0.03        | 0.00         | 5000M To 8000M              | 0.83  |
| Health Care  | 13.9         | 14.0         | 7.52         | 8.03         | -0.07        | 0.01         | -0.06        | 3000M To 5000M              | 0.17  |
| Industrials  | 8.5          | 8.5          | 14.02        | 15.70        | -0.14        | 0.01         | -0.13        |                             |       |
| Information Technology                                     | 26.2         | 27.7         | 11.39        | 11.81        | -0.11        | 0.01         | -0.10        |                             |       |
| Materials  | 2.8          | 2.7          | 8.27         | 14.47        | -0.17        | 0.00         | -0.17        |                             |       |
| Real Estate  | 2.7          | 2.6          | 1.41         | 4.94         | -0.10        | 0.00         | -0.10        |                             |       |
| Utilities  | 3.4          | 3.0          | 7.21         | 6.54         | 0.03         | -0.03        | 0.00         |                             |       |
| Cash   | 0.3          | 0.0          | 0.01         | 0.00         | 0.00         | 0.03         | 0.03         |                             |       |
| <b>Total</b>   | <b>100.0</b> | <b>100.0</b> | <b>10.94</b> | <b>12.13</b> | <b>-1.10</b> | <b>-0.09</b> | <b>-1.19</b> |                             |       |





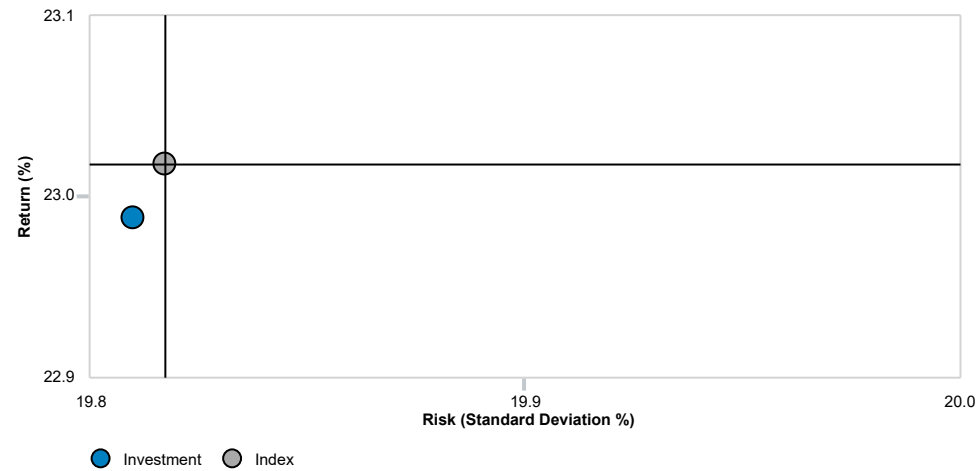
### Historical Statistics 3 Years

|            | Return | Standard Deviation | Sharpe Ratio | Up Market Capture | Up Quarters | Down Market Capture | Down Quarters |
|------------|--------|--------------------|--------------|-------------------|-------------|---------------------|---------------|
| Investment | 22.99  | 19.81              | 1.07         | 99.94             | 10          | 100.01              | 2             |
| Index      | 23.02  | 19.82              | 1.07         | 100.00            | 10          | 100.00              | 2             |

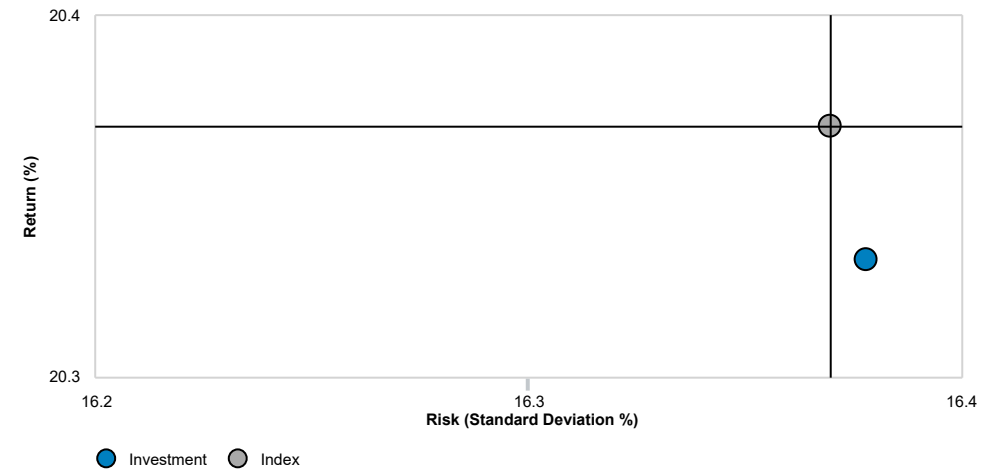
### Historical Statistics 5 Years

|            | Return | Standard Deviation | Sharpe Ratio | Up Market Capture | Up Quarters | Down Market Capture | Down Quarters |
|------------|--------|--------------------|--------------|-------------------|-------------|---------------------|---------------|
| Investment | 20.33  | 16.38              | 1.14         | 99.97             | 17          | 100.16              | 3             |
| Index      | 20.37  | 16.37              | 1.15         | 100.00            | 17          | 100.00              | 3             |

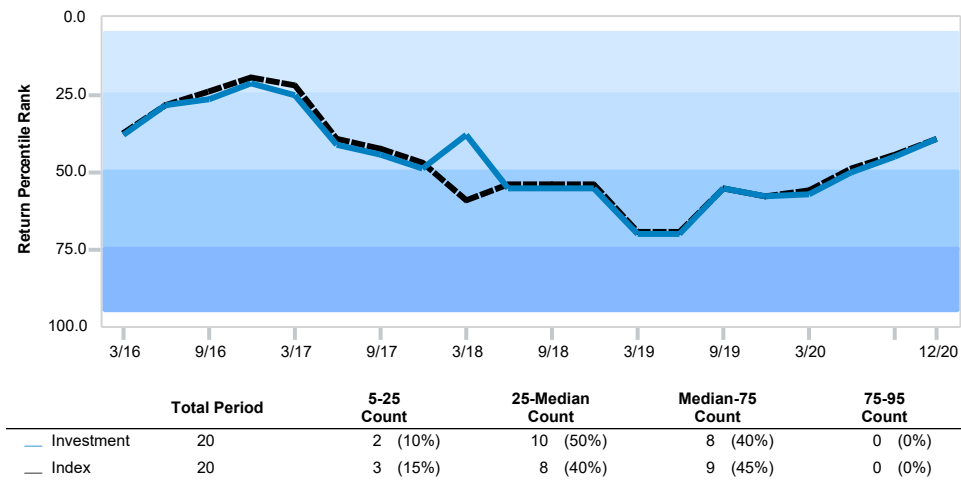
### Risk and Return 3 Years



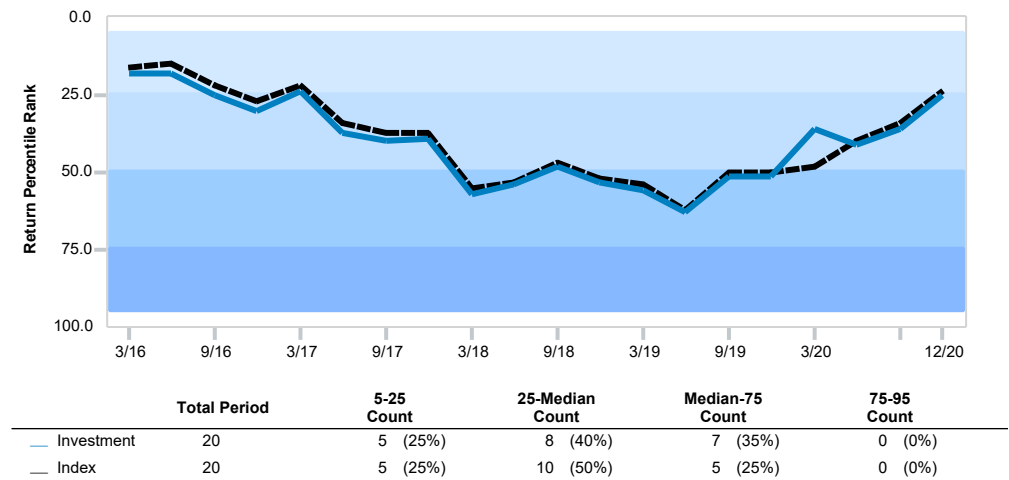
### Risk and Return 5 Years



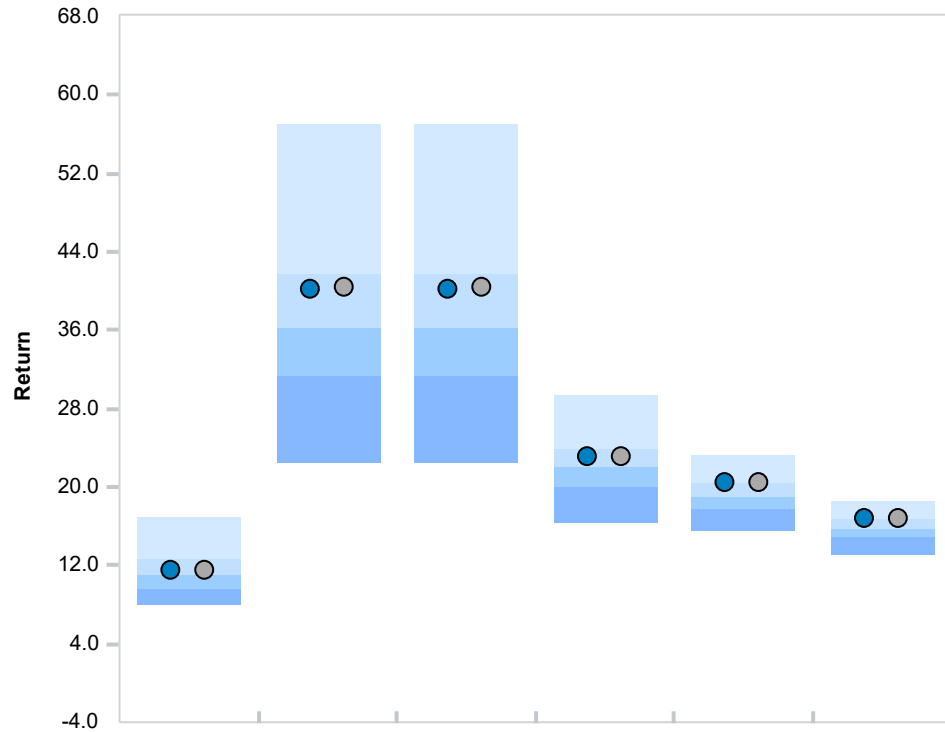
### 3 Year Rolling Percentile Rank IM U.S. Large Cap Growth Equity (MF)



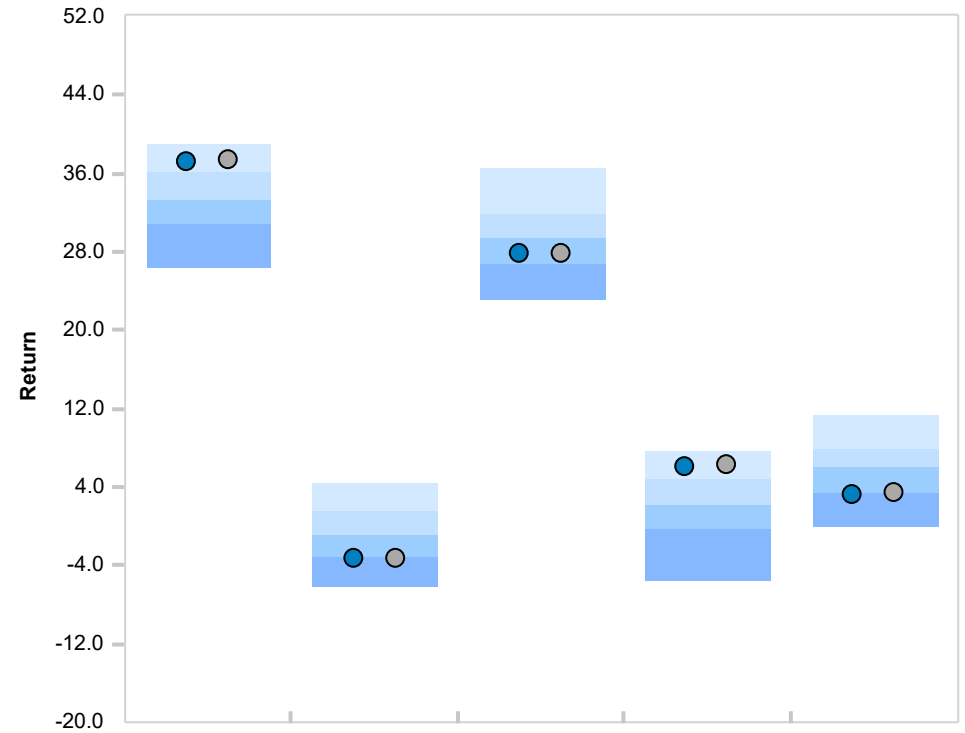
### 5 Year Rolling Percentile Rank IM U.S. Large Cap Growth Equity (MF)



**Peer Group Analysis - IM U.S. Large Cap Growth Equity (MF)**



**Peer Group Analysis - IM U.S. Large Cap Growth Equity (MF)**



**Financial Reconciliation Since Inception Ending December 31, 2020**

|            | Market Value<br>05/01/2010 | Net Flows   | Return On<br>Investment | Market Value<br>12/31/2020 |
|------------|----------------------------|-------------|-------------------------|----------------------------|
| Investment | 16,642,537                 | -26,144,975 | 22,158,193              | 12,655,755                 |

**Comparative Performance**

|            | 1 Qtr<br>Ending<br>Sep-2020 | 1 Qtr<br>Ending<br>Jun-2020 | 1 Qtr<br>Ending<br>Mar-2020 | 1 Qtr<br>Ending<br>Dec-2019 | 1 Qtr<br>Ending<br>Sep-2019 | 1 Qtr<br>Ending<br>Jun-2019 |
|------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| Investment | 13.00                       | 29.04                       | -13.73                      | 9.91                        | 1.99                        | 4.75                        |
| Index      | 13.02                       | 29.06                       | -13.72                      | 9.91                        | 2.01                        | 4.76                        |



December 31, 2020

**Fund Information**

Fund Name : Vanguard Index Funds: Vanguard Growth Index Fund; Institutional Class Shares  
Fund Family : Vanguard Group Inc  
Ticker : VIGIX  
Inception Date : 05/14/1998  
Fund Assets : \$22,024 Million  
Portfolio Turnover : 11%

Portfolio Assets : \$136,699 Million  
Portfolio Manager : O'Reilly/Nejman  
PM Tenure : 2000--2016  
Fund Style : IM U.S. Large Cap Growth Equity (MF)  
Style Benchmark : CRSP U.S. Large Cap Growth TR Index

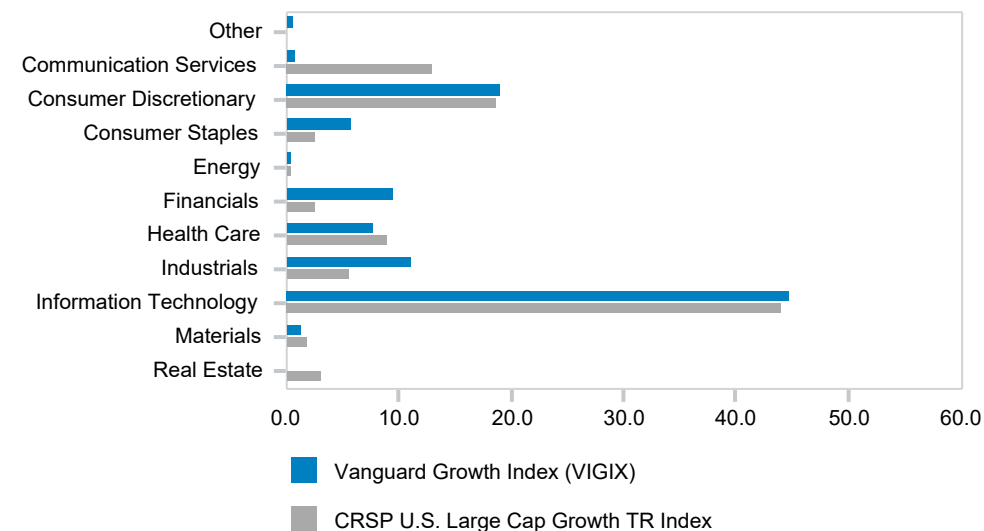
**Portfolio Characteristics As of 09/30/2020**

|                         | Portfolio       | Benchmark      |
|-------------------------|-----------------|----------------|
| Total Securities        | 259             | 254            |
| Avg. Market Cap (\$)    | 652,058,280,558 | 25,622,521,780 |
| Price/Earnings (P/E)    | 43.35           | 42.03          |
| Price/Book (P/B)        | 15.12           | 8.72           |
| Dividend Yield          | 1.15            | 0.69           |
| Annual EPS              | 10.01           | 10.17          |
| 5 Yr EPS                | 20.93           | 19.05          |
| 3 Yr EPS Growth         | 23.92           | N/A            |
| Beta (5 Years, Monthly) | 1.00            | 1.00           |

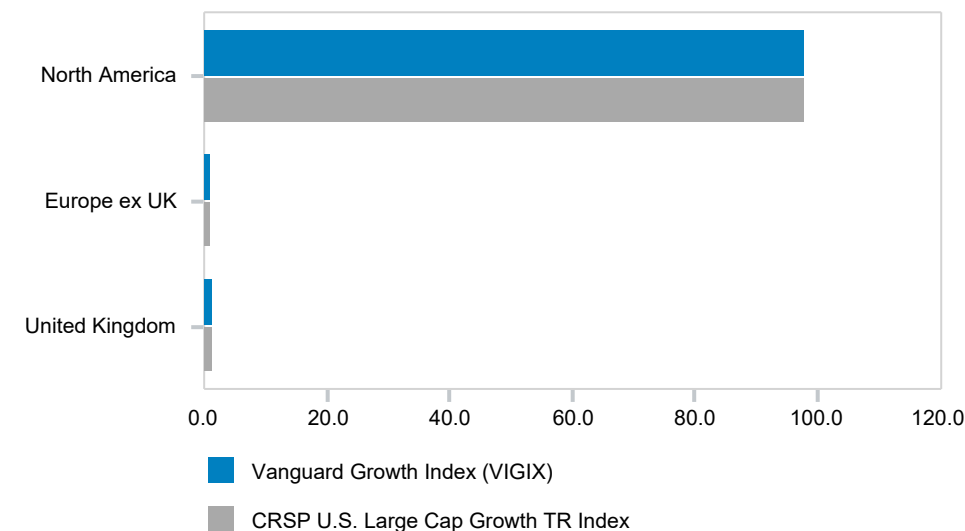
**Top Ten Securities As of 09/30/2020**

|                    |        |
|--------------------|--------|
| Apple Inc ORD      | 10.9 % |
| Microsoft Corp ORD | 9.7 %  |
| Amazon.com Inc ORD | 8.2 %  |
| Facebook Inc ORD   | 3.8 %  |
| Alphabet Inc ORD 1 | 2.7 %  |
| Alphabet Inc ORD 2 | 2.5 %  |
| Visa Inc ORD       | 2.0 %  |
| Tesla Inc ORD      | 2.0 %  |
| NVIDIA Corp ORD    | 1.9 %  |
| Mastercard Inc ORD | 1.8 %  |

**Sector Weights As of 09/30/2020**



**Region Weights As of 09/30/2020**



Statistics provided by Lipper. Most recent available data shown.



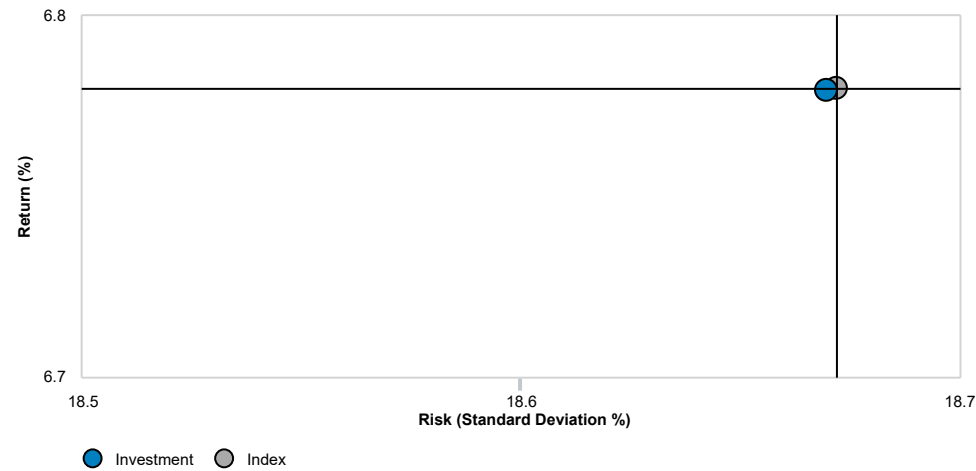
### Historical Statistics 3 Years

|            | Return | Standard Deviation | Sharpe Ratio | Up Market Capture | Up Quarters | Down Market Capture | Down Quarters |
|------------|--------|--------------------|--------------|-------------------|-------------|---------------------|---------------|
| Investment | 6.78   | 18.67              | 0.36         | 100.04            | 9           | 100.06              | 3             |
| Index      | 6.78   | 18.67              | 0.36         | 100.00            | 9           | 100.00              | 3             |

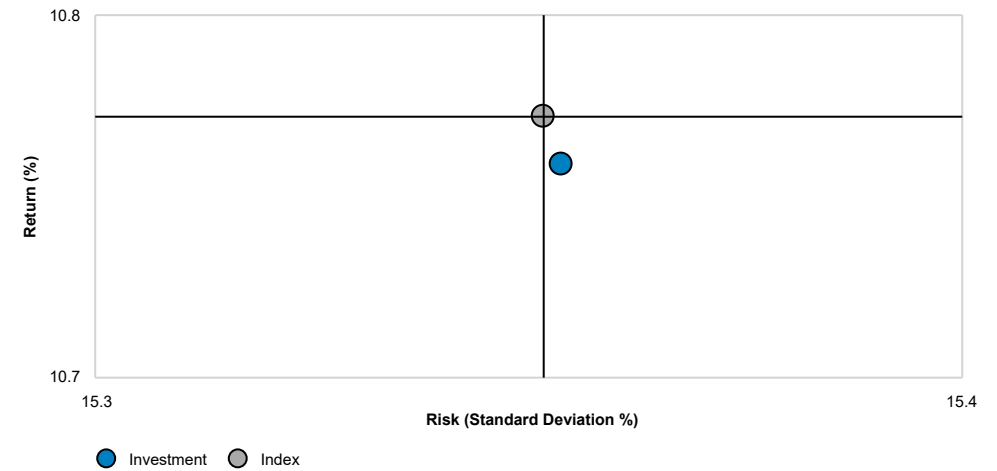
### Historical Statistics 5 Years

|            | Return | Standard Deviation | Sharpe Ratio | Up Market Capture | Up Quarters | Down Market Capture | Down Quarters |
|------------|--------|--------------------|--------------|-------------------|-------------|---------------------|---------------|
| Investment | 10.76  | 15.35              | 0.67         | 100.02            | 17          | 100.12              | 3             |
| Index      | 10.77  | 15.35              | 0.67         | 100.00            | 17          | 100.00              | 3             |

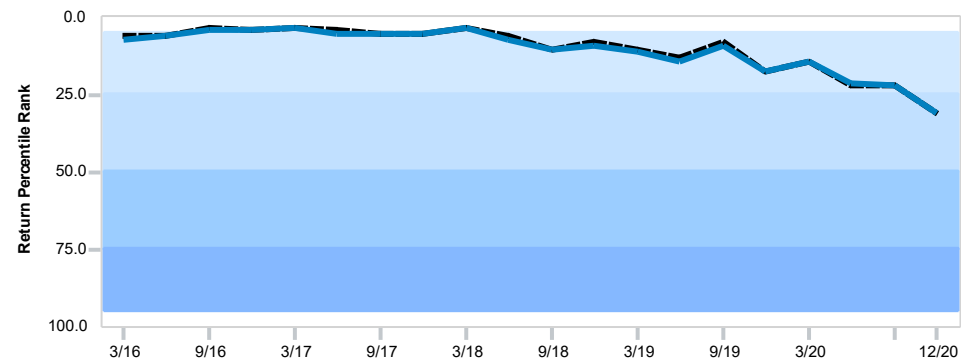
### Risk and Return 3 Years



### Risk and Return 5 Years

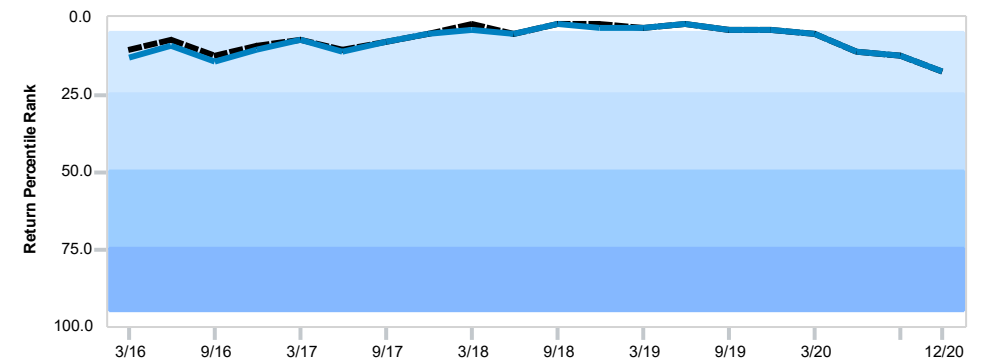


### 3 Year Rolling Percentile Rank IM U.S. Large Cap Value Equity (MF)



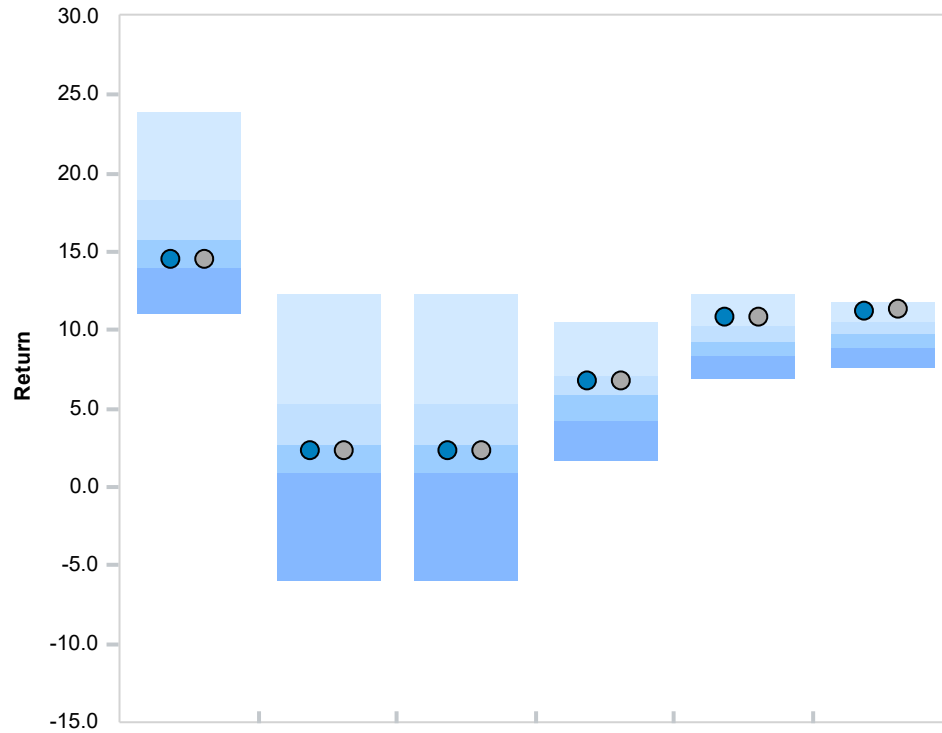
|            | Total Period | 5-25 Count | 25-Median Count | Median-75 Count | 75-95 Count |
|------------|--------------|------------|-----------------|-----------------|-------------|
| Investment | 20           | 19 (95%)   | 1 (5%)          | 0 (0%)          | 0 (0%)      |
| Index      | 20           | 19 (95%)   | 1 (5%)          | 0 (0%)          | 0 (0%)      |

### 5 Year Rolling Percentile Rank IM U.S. Large Cap Value Equity (MF)



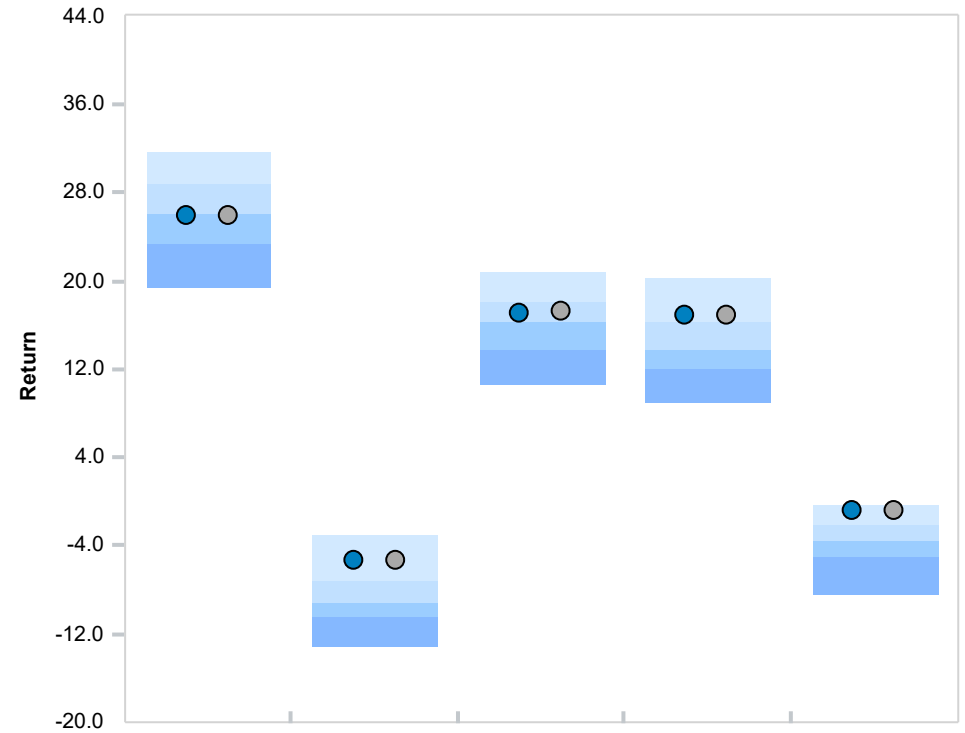
|            | Total Period | 5-25 Count | 25-Median Count | Median-75 Count | 75-95 Count |
|------------|--------------|------------|-----------------|-----------------|-------------|
| Investment | 20           | 20 (100%)  | 0 (0%)          | 0 (0%)          | 0 (0%)      |
| Index      | 20           | 20 (100%)  | 0 (0%)          | 0 (0%)          | 0 (0%)      |

**Peer Group Analysis - IM U.S. Large Cap Value Equity (MF)**



|            | QTR        | YTD       | 1 YR      | 3 YR      | 5 YR       | 10 YR      |
|------------|------------|-----------|-----------|-----------|------------|------------|
| Investment | 14.52 (68) | 2.30 (56) | 2.30 (56) | 6.78 (31) | 10.76 (17) | 11.23 (13) |
| Index      | 14.53 (67) | 2.26 (57) | 2.26 (57) | 6.78 (31) | 10.77 (17) | 11.28 (13) |
| Median     | 15.77      | 2.62      | 2.62      | 5.82      | 9.28       | 9.74       |

**Peer Group Analysis - IM U.S. Large Cap Value Equity (MF)**



|            | 2019       | 2018       | 2017       | 2016       | 2015       |
|------------|------------|------------|------------|------------|------------|
| Investment | 25.83 (54) | -5.42 (13) | 17.14 (37) | 16.87 (22) | -0.81 (11) |
| Index      | 25.85 (54) | -5.40 (13) | 17.16 (36) | 16.93 (21) | -0.86 (11) |
| Median     | 26.07      | -9.08      | 16.29      | 13.82      | -3.54      |

**Financial Reconciliation Since Inception Ending December 31, 2020**

|            | Market Value<br>07/01/2009 | Net Flows | Return On<br>Investment | Market Value<br>12/31/2020 |
|------------|----------------------------|-----------|-------------------------|----------------------------|
| Investment | 1,021,656                  | 536,436   | 11,109,214              | 12,667,306                 |

**Comparative Performance**

|            | 1 Qtr<br>Ending<br>Sep-2020 | 1 Qtr<br>Ending<br>Jun-2020 | 1 Qtr<br>Ending<br>Mar-2020 | 1 Qtr<br>Ending<br>Dec-2019 | 1 Qtr<br>Ending<br>Sep-2019 | 1 Qtr<br>Ending<br>Jun-2019 |
|------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| Investment | 5.62                        | 12.76                       | -24.99                      | 8.26                        | 1.12                        | 3.78                        |
| Index      | 5.62                        | 12.73                       | -25.01                      | 8.25                        | 1.13                        | 3.79                        |



# Fund Information

Fund Name : Vanguard Index Funds: Vanguard Value Index Fund; Institutional Shares  
 Fund Family : Vanguard Group Inc  
 Ticker : VIVIX  
 Inception Date : 07/02/1998  
 Fund Assets : \$11,868 Million  
 Portfolio Turnover : 12%

Portfolio Assets : \$84,859 Million  
 Portfolio Manager : O'Reilly/Nejman  
 PM Tenure : 1998--2016  
 Fund Style : IM U.S. Large Cap Value Equity (MF)  
 Style Benchmark : CRSP U.S. Large Cap Value TR Index

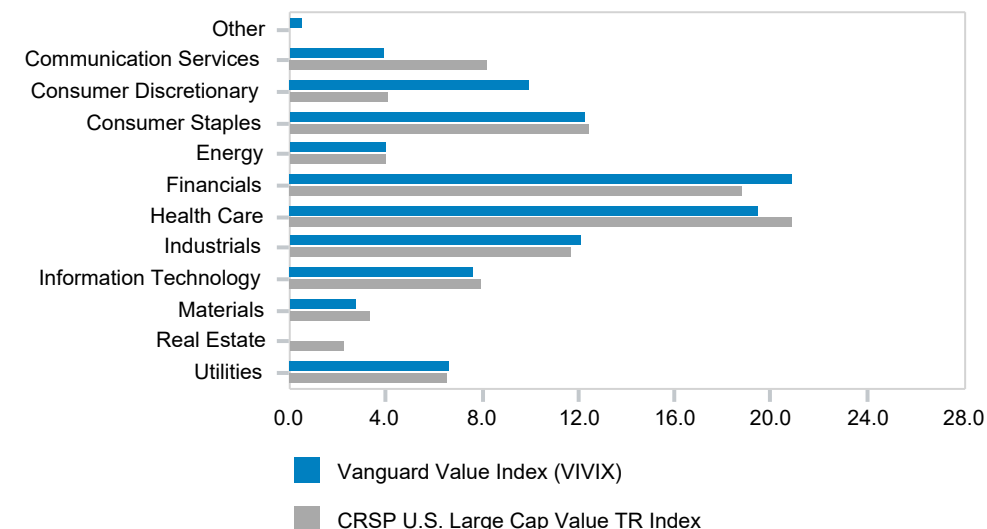
## Portfolio Characteristics As of 09/30/2020

|                         | Portfolio       | Benchmark      |
|-------------------------|-----------------|----------------|
| Total Securities        | 337             | 329            |
| Avg. Market Cap (\$)    | 128,323,672,001 | 20,925,849,360 |
| Price/Earnings (P/E)    | 23.92           | 18.71          |
| Price/Book (P/B)        | 5.15            | 2.80           |
| Dividend Yield          | 3.19            | 2.85           |
| Annual EPS              | 15.30           | 507.95         |
| 5 Yr EPS                | 9.07            | 6.02           |
| 3 Yr EPS Growth         | 12.57           | N/A            |
| Beta (5 Years, Monthly) | 1.00            | 1.00           |

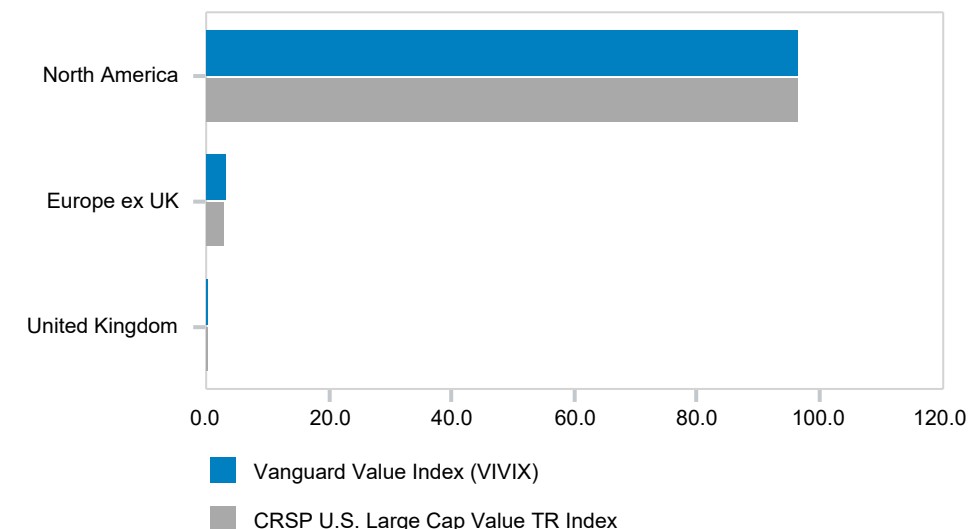
## Top Ten Securities As of 09/30/2020

|                                |       |
|--------------------------------|-------|
| Berkshire Hathaway Inc ORD     | 3.3 % |
| Johnson & Johnson ORD          | 3.1 % |
| Procter & Gamble Co ORD        | 2.8 % |
| UnitedHealth Group Inc ORD     | 2.4 % |
| JPMorgan Chase & Co ORD        | 2.3 % |
| Verizon Communications Inc ORD | 2.0 % |
| Walt Disney Co ORD             | 1.8 % |
| Intel Corp ORD                 | 1.8 % |
| Comcast Corp ORD               | 1.7 % |
| Merck & Co Inc ORD             | 1.7 % |

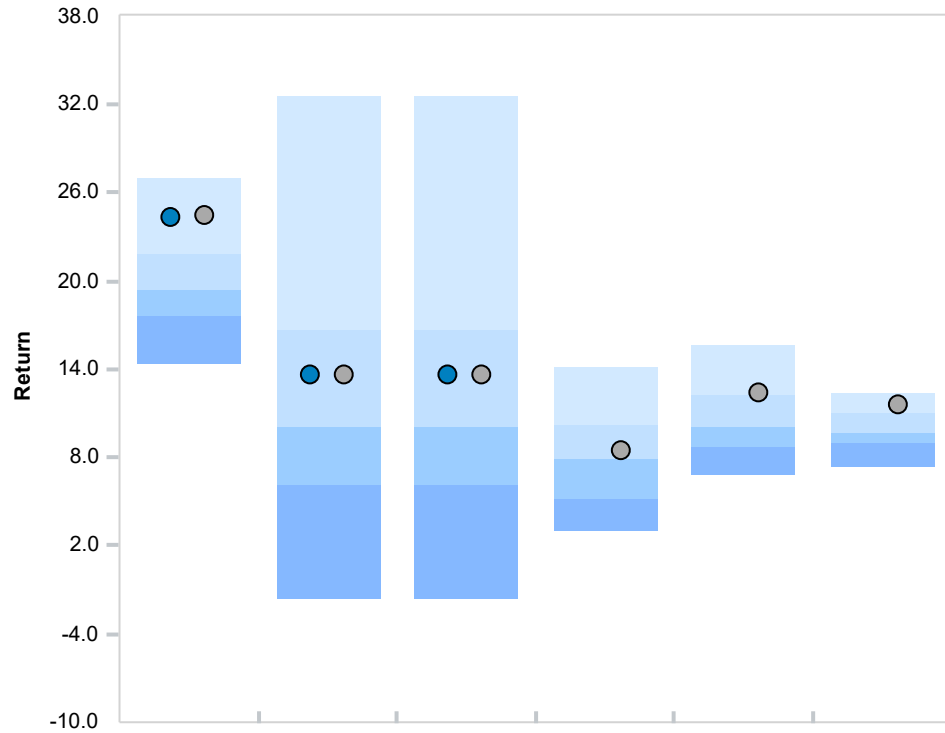
## Sector Weights As of 09/30/2020



## Region Weights As of 09/30/2020

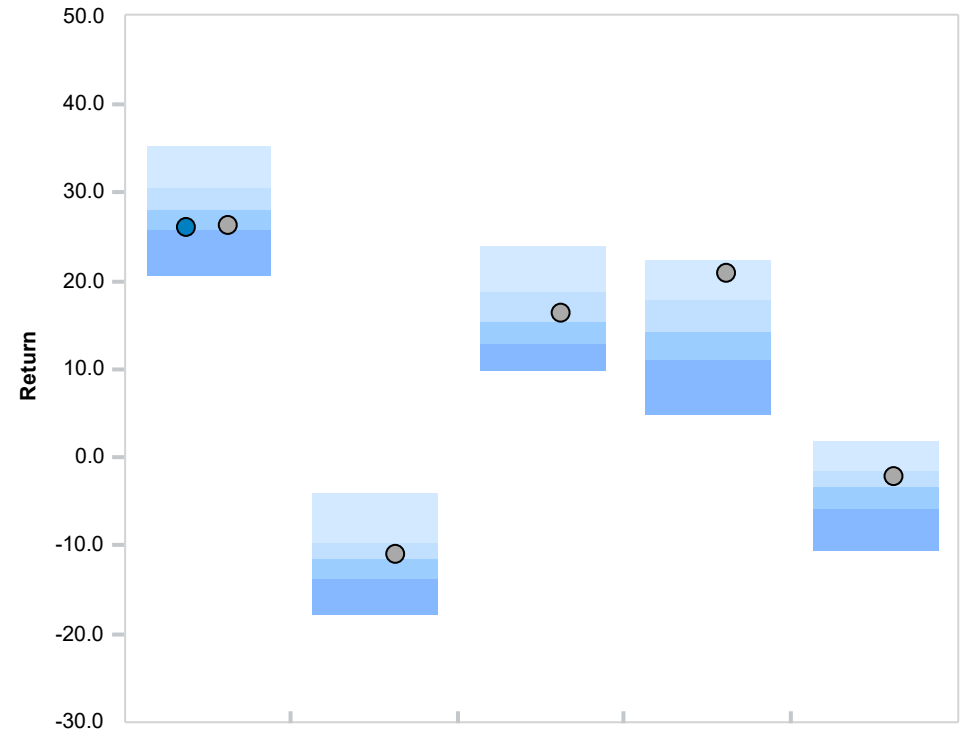


**Peer Group Analysis - IM U.S. Mid Cap Core Equity (MF)**



|            | QTR        | YTD        | 1 YR       | 3 YR      | 5 YR       | 10 YR      |
|------------|------------|------------|------------|-----------|------------|------------|
| Investment | 24.36 (11) | 13.58 (35) | 13.58 (35) | N/A       | N/A        | N/A        |
| Index      | 24.37 (11) | 13.66 (35) | 13.66 (35) | 8.45 (41) | 12.35 (25) | 11.51 (16) |
| Median     | 19.40      | 10.02      | 10.02      | 7.85      | 10.12      | 9.70       |

**Peer Group Analysis - IM U.S. Mid Cap Core Equity (MF)**



|            | 2019       | 2018        | 2017       | 2016       | 2015       |
|------------|------------|-------------|------------|------------|------------|
| Investment | 26.13 (71) | N/A         | N/A        | N/A        | N/A        |
| Index      | 26.20 (70) | -11.08 (42) | 16.24 (42) | 20.74 (10) | -2.18 (31) |
| Median     | 28.08      | -11.52      | 15.44      | 14.23      | -3.40      |

**Financial Reconciliation Since Inception Ending December 31, 2020**

|            | Market Value<br>12/01/2018 | Net Flows | Return On<br>Investment | Market Value<br>12/31/2020 |
|------------|----------------------------|-----------|-------------------------|----------------------------|
| Investment | 21,384,601                 | -         | 5,782,628               | 27,167,230                 |

**Comparative Performance**

|            | 1 Qtr<br>Ending<br>Sep-2020 | 1 Qtr<br>Ending<br>Jun-2020 | 1 Qtr<br>Ending<br>Mar-2020 | 1 Qtr<br>Ending<br>Dec-2019 | 1 Qtr<br>Ending<br>Sep-2019 | 1 Qtr<br>Ending<br>Jun-2019 |
|------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| Investment | 4.74 (76)                   | 24.04 (30)                  | -29.71 (71)                 | 7.05 (42)                   | -0.10 (75)                  | 3.03 (71)                   |
| Index      | 4.77 (75)                   | 24.07 (30)                  | -29.70 (70)                 | 7.06 (42)                   | -0.09 (75)                  | 3.05 (70)                   |
| Median     | 5.84                        | 20.87                       | -28.20                      | 6.84                        | 0.98                        | 4.14                        |

Inception date for VSPMX is 12/1/2018. Manager Returns for VSPMX have been used for this report.



### Fund Information

Fund Name : Vanguard Admiral Funds: Vanguard S&P Mid-Cap 400 Index Fund; Institutional Shares  
Fund Family : Vanguard Group Inc  
Ticker : VSPMX  
Inception Date : 12/15/2010  
Fund Assets : \$1,164 Million  
Portfolio Turnover : 10%

Portfolio Assets : \$2,009 Million  
Portfolio Manager : Coleman/Khan  
PM Tenure : 2015--2017  
Fund Style : IM U.S. SMID Cap Core Equity (MF)  
Style Benchmark : S&P MidCap 400 Index

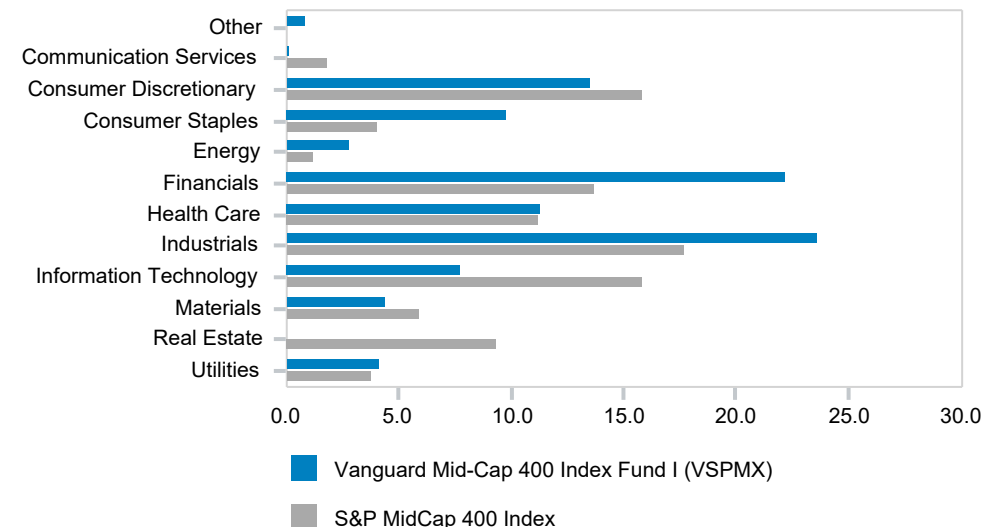
### Portfolio Characteristics As of 09/30/2020

|                      | Portfolio     | Benchmark     |
|----------------------|---------------|---------------|
| Total Securities     | 402           | 400           |
| Avg. Market Cap (\$) | 5,986,896,773 | 3,737,409,960 |
| Price/Earnings (P/E) | 32.44         | 21.72         |
| Price/Book (P/B)     | 5.05          | 2.82          |
| Dividend Yield       | 2.87          | 1.57          |
| Annual EPS           | 10.99         | 3.64          |
| 5 Yr EPS             | 11.66         | 12.09         |
| 3 Yr EPS Growth      | 15.57         | N/A           |
| Beta                 | N/A           | 1.00          |

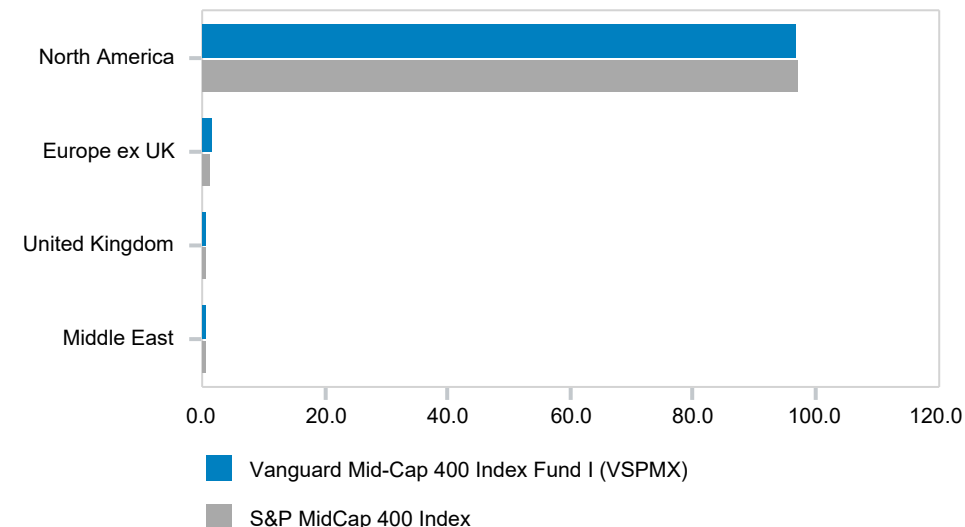
### Top Ten Securities As of 09/30/2020

|  |       |
|--|-------|
| Pool Corp ORD                            | 0.8 % |
| Factset Research Systems Inc ORD         | 0.8 % |
| Fair Isaac Corp ORD                      | 0.8 % |
| Trimble Inc ORD                          | 0.7 % |
| Generac Holdings Inc ORD                 | 0.7 % |
| Solaredge Technologies Inc ORD           | 0.7 % |
| Masimo Corp ORD                          | 0.7 % |
| Monolithic Power Systems Inc ORD         | 0.7 % |
| Cognex Corp ORD                          | 0.7 % |
| Charles River Laboratories International | 0.7 % |

### Sector Weights As of 09/30/2020



### Region Weights As of 09/30/2020

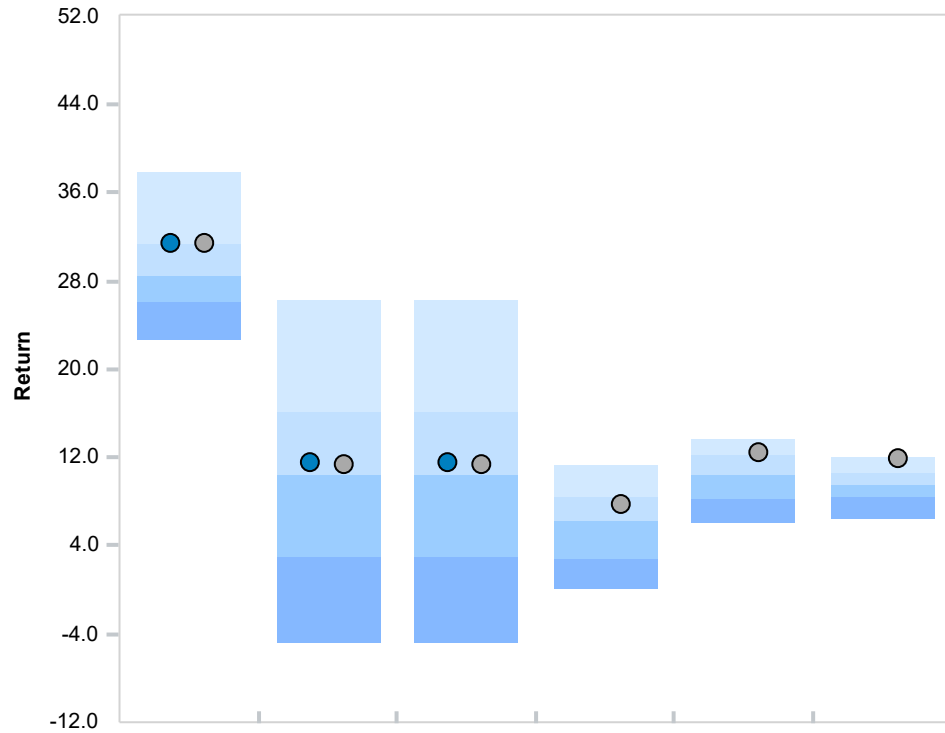


Statistics provided by Lipper. Most recent available data shown.

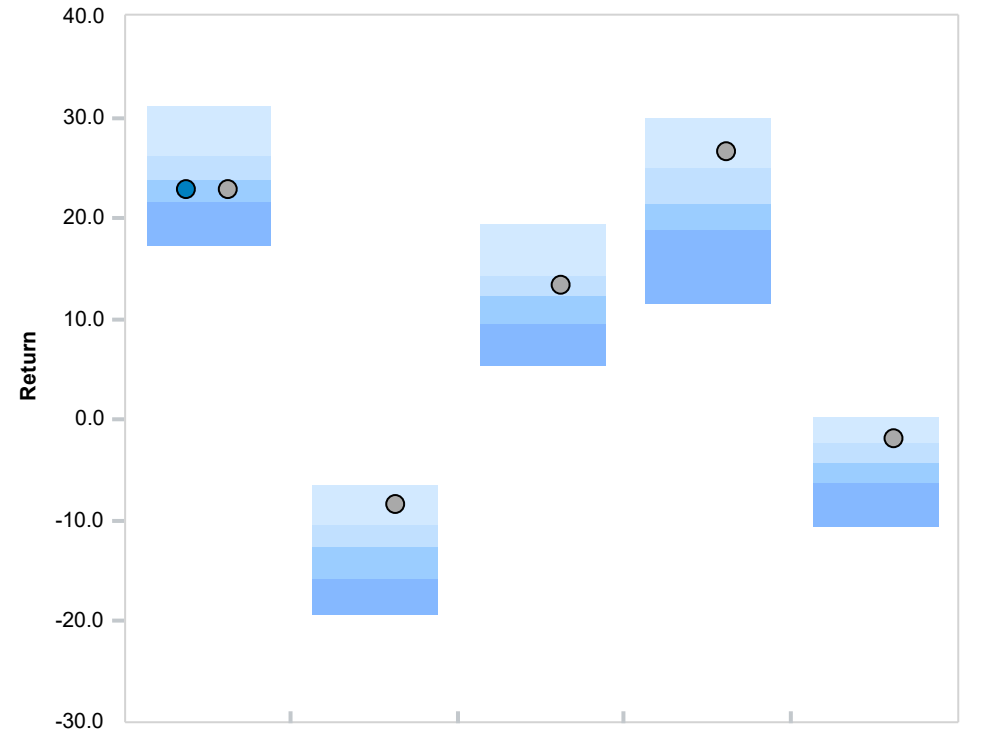




**Peer Group Analysis - IM U.S. Small Cap Core Equity (MF)**



**Peer Group Analysis - IM U.S. Small Cap Core Equity (MF)**



**Financial Reconciliation Since Inception Ending December 31, 2020**

|            | Market Value<br>12/01/2018 | Net Flows | Return On<br>Investment | Market Value<br>12/31/2020 |
|------------|----------------------------|-----------|-------------------------|----------------------------|
| Investment | 10,695,104                 | -         | 2,169,692               | 12,864,797                 |

**Comparative Performance**

|            | 1 Qtr<br>Ending<br>Sep-2020 | 1 Qtr<br>Ending<br>Jun-2020 | 1 Qtr<br>Ending<br>Mar-2020 | 1 Qtr<br>Ending<br>Dec-2019 | 1 Qtr<br>Ending<br>Sep-2019 | 1 Qtr<br>Ending<br>Jun-2019 |
|------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| Investment | 3.18 (52)                   | 22.08 (53)                  | -32.62 (48)                 | 8.20 (47)                   | -0.19 (31)                  | 1.84 (65)                   |
| Index      | 3.17 (52)                   | 21.94 (56)                  | -32.64 (49)                 | 8.21 (47)                   | -0.20 (31)                  | 1.87 (63)                   |
| Median     | 3.45                        | 22.42                       | -32.67                      | 8.12                        | -1.11                       | 2.19                        |

Inception date for VSMX is 12/1/2018. Manager Returns for VSMX have been used for this report.



### Fund Information

|                      |   |                     |                                    |
|----------------------|---|---------------------|------------------------------------|
| Fund Name :          | Vanguard Admiral Funds: Vanguard S&P Small-Cap 600 Index Fund; Institutional Shares | Portfolio Assets :  | \$2,372 Million                    |
| Fund Family :        | Vanguard Group Inc  | Portfolio Manager : | Coleman/Butler                     |
| Ticker :             | VSMX  | PM Tenure :         | 2013--2015                         |
| Inception Date :     | 12/15/2010  | Fund Style :        | IM U.S. Small Cap Core Equity (MF) |
| Fund Assets :        | \$1,377 Million   | Style Benchmark :   | S&P SmallCap 600 Index             |
| Portfolio Turnover : | 9%  |                     |                                    |

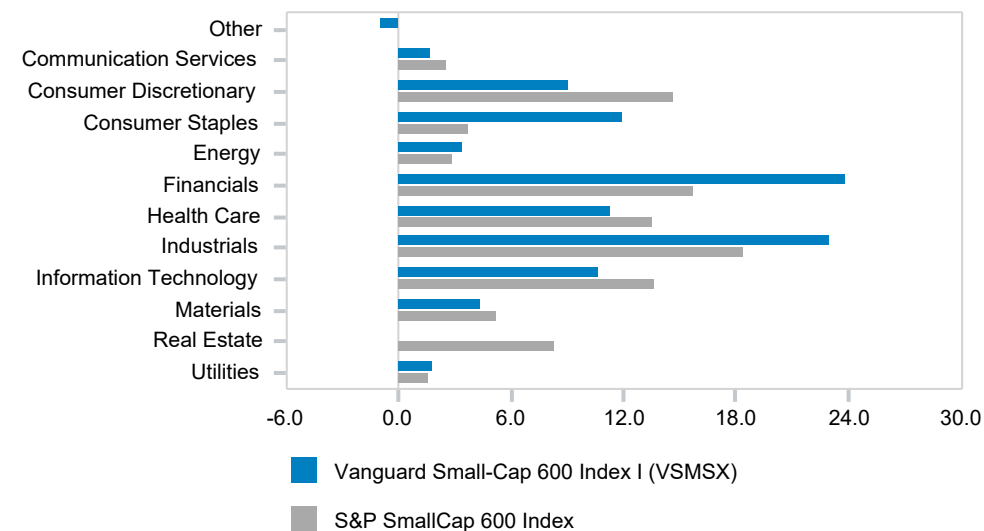
### Portfolio Characteristics As of 09/30/2020

|                      | Portfolio     | Benchmark   |
|----------------------|---------------|-------------|
| Total Securities     | 606           | 601         |
| Avg. Market Cap (\$) | 1,853,333,811 | 990,218,880 |
| Price/Earnings (P/E) | 30.10         | 19.02       |
| Price/Book (P/B)     | 3.46          | 2.34        |
| Dividend Yield       | 3.59          | 1.46        |
| Annual EPS           | 10.14         | 1.56        |
| 5 Yr EPS             | 11.11         | 11.08       |
| 3 Yr EPS Growth      | 12.27         | N/A         |
| Beta                 | N/A           | 1.00        |

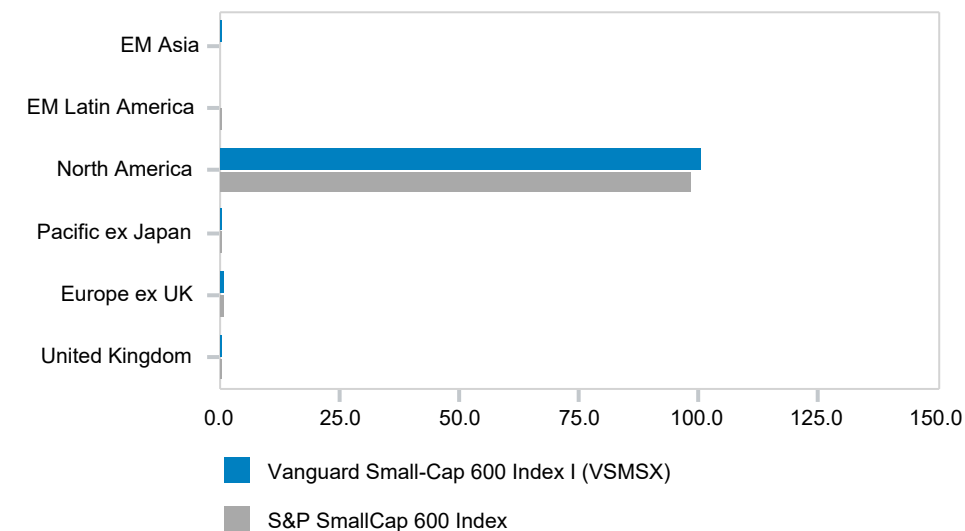
### Top Ten Securities As of 09/30/2020

|                                  |       |
|----------------------------------|-------|
| Momenta Pharmaceuticals Inc ORD  | 1.0 % |
| Stamps.Com Inc ORD               | 0.6 % |
| Simpson Manufacturing Co Inc ORD | 0.6 % |
| Meritage Homes Corp ORD          | 0.6 % |
| Neogen Corp ORD                  | 0.6 % |
| Neogenomics Inc ORD              | 0.6 % |
| Kinsale Capital Group Inc ORD    | 0.6 % |
| Exponent Inc ORD                 | 0.6 % |
| Proto Labs Inc ORD               | 0.5 % |
| Ufp Industries Inc ORD           | 0.5 % |

### Sector Weights As of 09/30/2020



### Region Weights As of 09/30/2020



Statistics provided by Lipper. Most recent available data shown.



As of December 31, 2020

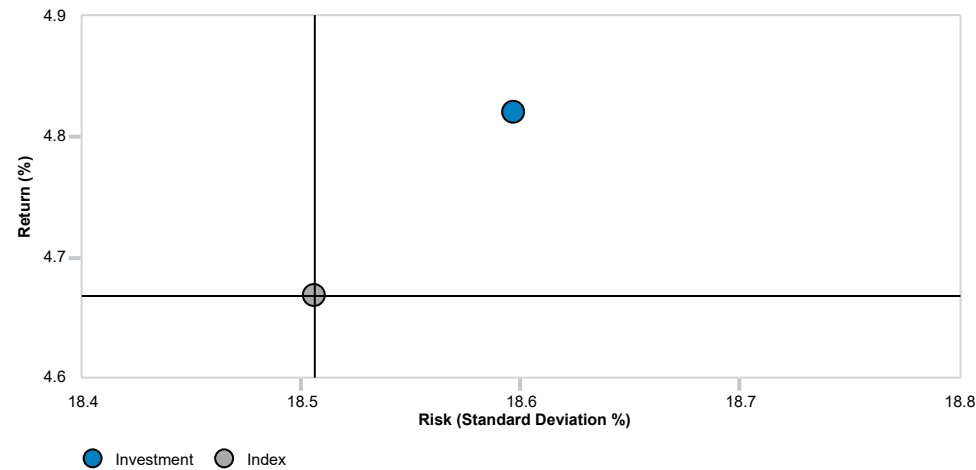
### Historical Statistics 3 Years

|            | Return | Standard Deviation | Sharpe Ratio | Up Market Capture | Up Quarters | Down Market Capture | Down Quarters |
|------------|--------|--------------------|--------------|-------------------|-------------|---------------------|---------------|
| Investment | 4.82   | 18.60              | 0.26         | 100.60            | 7           | 99.98               | 5             |
| Index      | 4.67   | 18.51              | 0.25         | 100.00            | 7           | 100.00              | 5             |

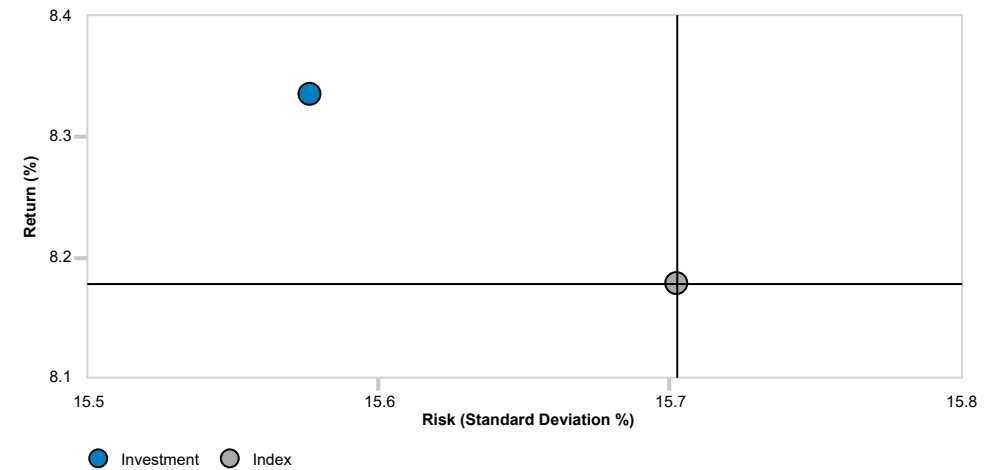
### Historical Statistics 5 Years

|            | Return | Standard Deviation | Sharpe Ratio | Up Market Capture | Up Quarters | Down Market Capture | Down Quarters |
|------------|--------|--------------------|--------------|-------------------|-------------|---------------------|---------------|
| Investment | 8.34   | 15.58              | 0.52         | 99.24             | 12          | 98.02               | 8             |
| Index      | 8.18   | 15.70              | 0.50         | 100.00            | 12          | 100.00              | 8             |

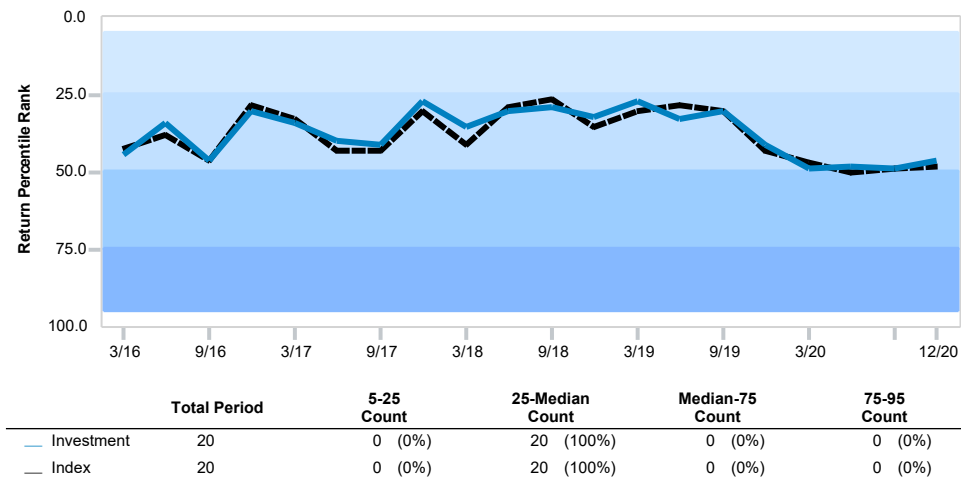
### Risk and Return 3 Years



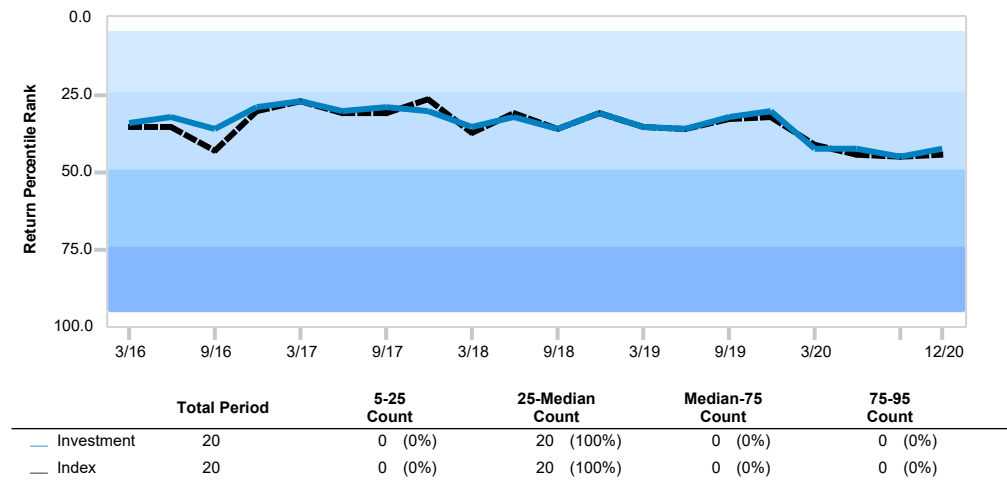
### Risk and Return 5 Years



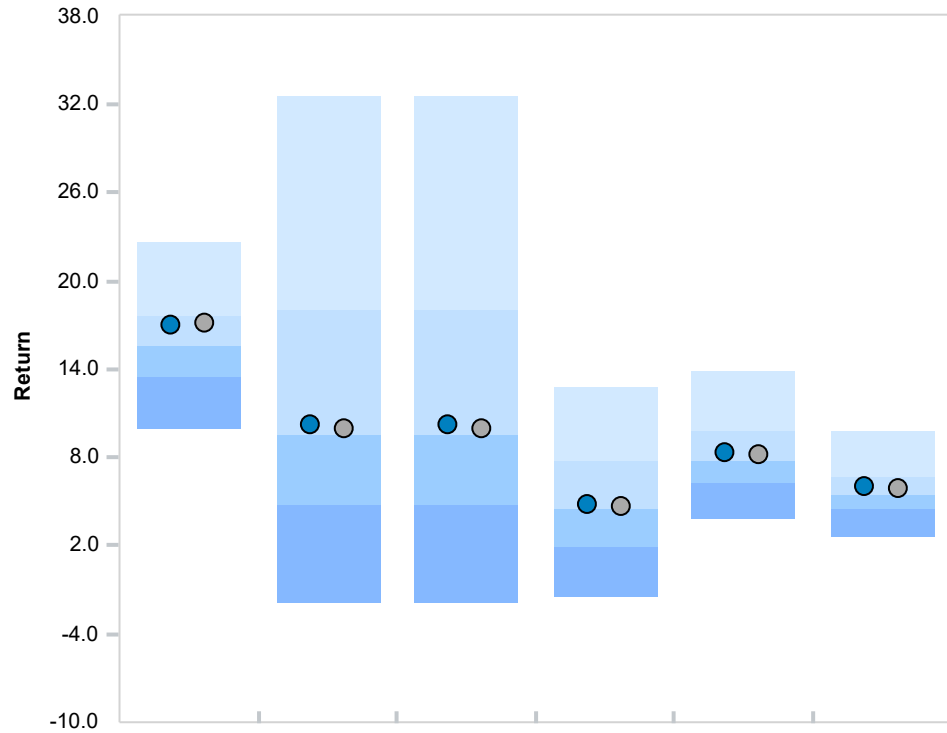
### 3 Year Rolling Percentile Rank IM International Multi-Cap Equity (MF)



### 5 Year Rolling Percentile Rank IM International Multi-Cap Equity (MF)

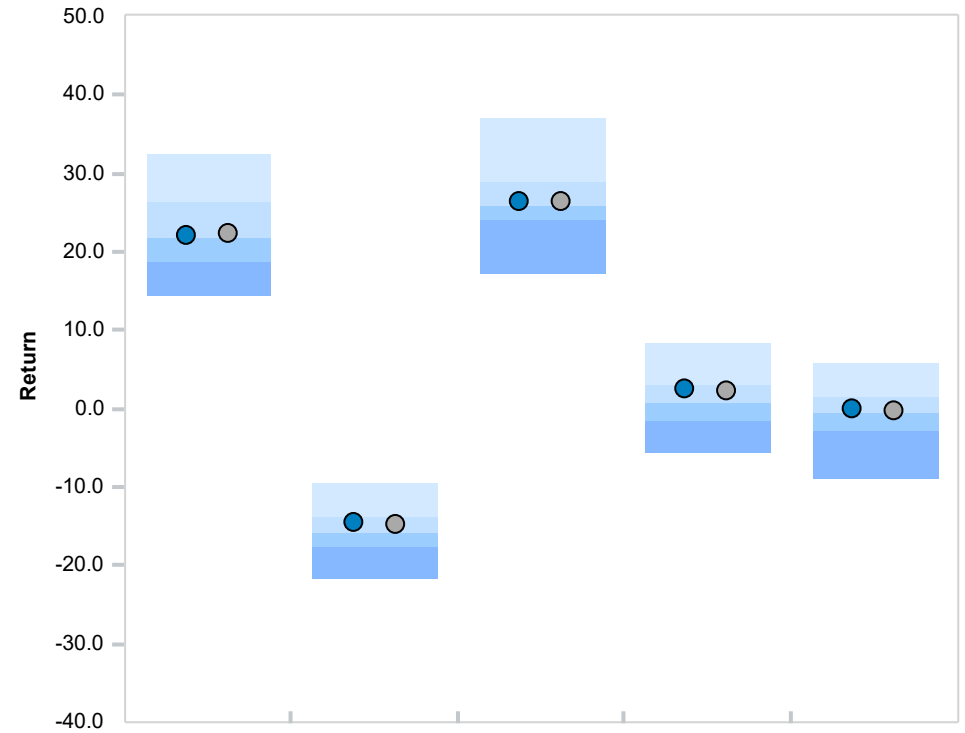


**Peer Group Analysis - IM International Multi-Cap Equity (MF)**



|            | QTR        | YTD        | 1 YR       | 3 YR      | 5 YR      | 10 YR     |
|------------|------------|------------|------------|-----------|-----------|-----------|
| Investment | 17.00 (33) | 10.27 (47) | 10.27 (47) | 4.82 (46) | 8.34 (42) | 5.96 (39) |
| Index      | 17.08 (32) | 10.00 (49) | 10.00 (49) | 4.67 (48) | 8.18 (44) | 5.92 (40) |
| Median     | 15.62      | 9.47       | 9.47       | 4.50      | 7.76      | 5.52      |

**Peer Group Analysis - IM International Multi-Cap Equity (MF)**



|            | 2019       | 2018        | 2017       | 2016      | 2015       |
|------------|------------|-------------|------------|-----------|------------|
| Investment | 22.14 (47) | -14.49 (36) | 26.46 (46) | 2.46 (31) | -0.19 (45) |
| Index      | 22.34 (45) | -14.79 (39) | 26.31 (48) | 2.29 (32) | -0.28 (46) |
| Median     | 21.84      | -15.74      | 25.93      | 0.68      | -0.67      |

**Financial Reconciliation Since Inception Ending December 31, 2020**

|            | Market Value<br>07/01/2009 | Net Flows  | Return On<br>Investment | Market Value<br>12/31/2020 |
|------------|----------------------------|------------|-------------------------|----------------------------|
| Investment | 253,831                    | 11,045,927 | 8,218,575               | 19,518,334                 |

**Comparative Performance**

|            | 1 Qtr<br>Ending<br>Sep-2020 | 1 Qtr<br>Ending<br>Jun-2020 | 1 Qtr<br>Ending<br>Mar-2020 | 1 Qtr<br>Ending<br>Dec-2019 | 1 Qtr<br>Ending<br>Sep-2019 | 1 Qtr<br>Ending<br>Jun-2019 |
|------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| Investment | 5.59                        | 17.49                       | -24.03                      | 8.35                        | -0.98                       | 3.27                        |
| Index      | 5.96                        | 16.40                       | -23.82                      | 8.62                        | -1.07                       | 3.34                        |

### Fund Information

Fund Name : Vanguard Tax-Managed Funds: Vanguard Developed Markets Index Fund; Institutional Shares  
Fund Family : Vanguard Group Inc  
Ticker : VTMNX  
Inception Date : 01/04/2001  
Fund Assets : \$12,503 Million  
Portfolio Turnover : 2%

Portfolio Assets : \$120,219 Million  
Portfolio Manager : Franquin/Perre  
PM Tenure : 2013--2017  
Fund Style : IM International Multi-Cap Core Equity (MF)  
Style Benchmark : FTSE Developed x North America Index (Net)

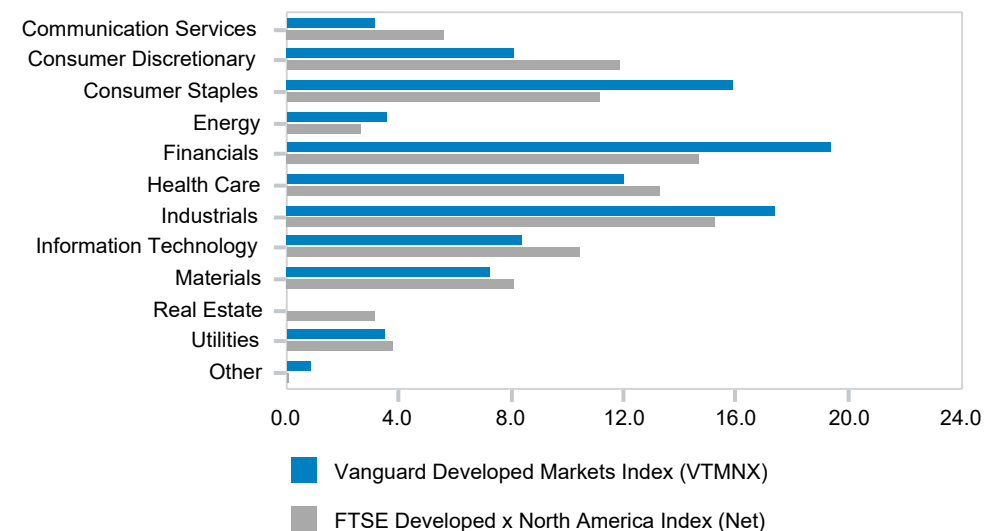
### Portfolio Characteristics As of 09/30/2020

|                         | Portfolio      | Benchmark |
|-------------------------|----------------|-----------|
| Total Securities        | 3,996          | 1         |
| Avg. Market Cap (\$)    | 56,995,062,476 | -         |
| Price/Earnings (P/E)    | 27.98          | N/A       |
| Price/Book (P/B)        | 4.12           | N/A       |
| Dividend Yield          | 2.97           | N/A       |
| Annual EPS              | 1.15           | N/A       |
| 5 Yr EPS                | 6.64           | N/A       |
| 3 Yr EPS Growth         | 9.11           | N/A       |
| Beta (5 Years, Monthly) | 1.00           | 1.00      |

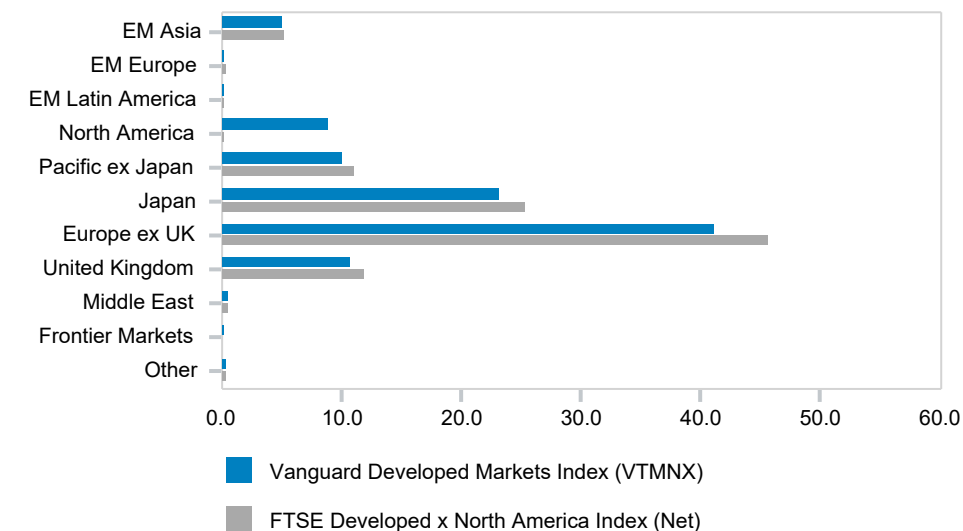
### Top Ten Securities As of 09/30/2020

|                                  |       |
|----------------------------------|-------|
| Nestle SA ORD                    | 1.8 % |
| Roche Holding AG Par             | 1.3 % |
| Samsung Electronics Co Ltd ORD   | 1.2 % |
| Novartis AG ORD                  | 1.0 % |
| SAP SE ORD                       | 1.0 % |
| Toyota Motor Corp ORD            | 0.9 % |
| ASML Holding NV ORD              | 0.8 % |
| AstraZeneca PLC ORD              | 0.8 % |
| AIA Group Ltd ORD                | 0.7 % |
| LVMH Moet Hennessy Louis Vuitton | 0.6 % |

### Sector Weights As of 09/30/2020



### Region Weights As of 09/30/2020



Statistics provided by Lipper. Most recent available data shown.



# Strategy Review

## Vanguard Emerging Markets Index (VEMIX) | FTSE Emerging Mkts All Cap China A Inclusion Index

As of December 31, 2020

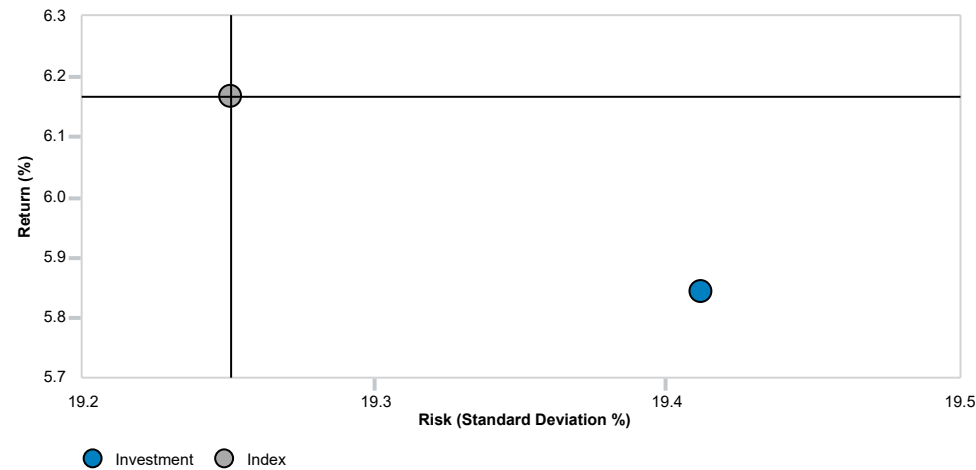
### Historical Statistics 3 Years

|            | Return | Standard Deviation | Sharpe Ratio | Up Market Capture | Up Quarters | Down Market Capture | Down Quarters |
|------------|--------|--------------------|--------------|-------------------|-------------|---------------------|---------------|
| Investment | 5.84   | 19.41              | 0.31         | 100.21            | 7           | 101.43              | 5             |
| Index      | 6.17   | 19.25              | 0.32         | 100.00            | 7           | 100.00              | 5             |

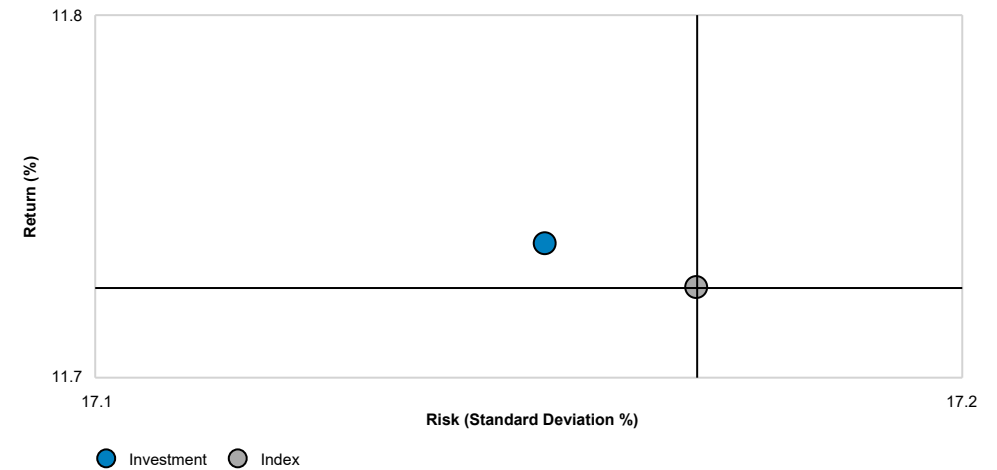
### Historical Statistics 5 Years

|            | Return | Standard Deviation | Sharpe Ratio | Up Market Capture | Up Quarters | Down Market Capture | Down Quarters |
|------------|--------|--------------------|--------------|-------------------|-------------|---------------------|---------------|
| Investment | 11.74  | 17.15              | 0.66         | 99.29             | 14          | 98.70               | 6             |
| Index      | 11.72  | 17.17              | 0.66         | 100.00            | 14          | 100.00              | 6             |

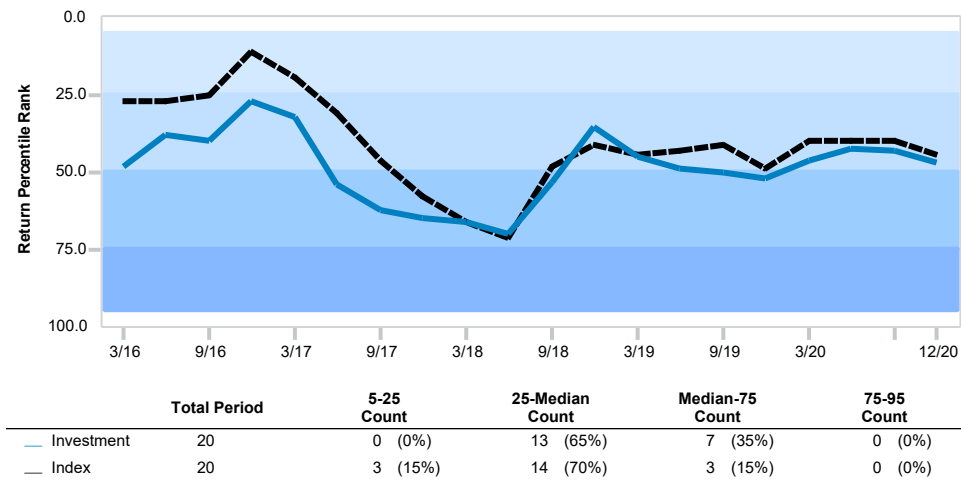
### Risk and Return 3 Years



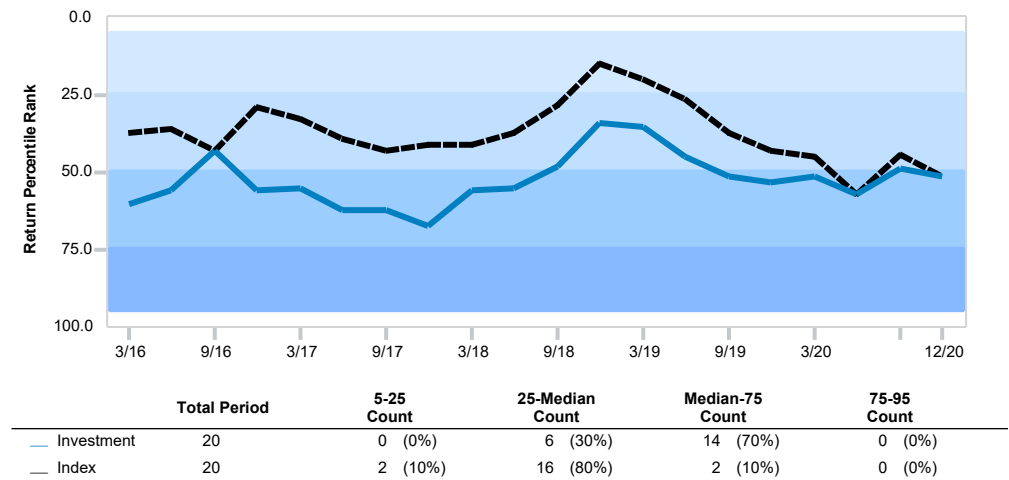
### Risk and Return 5 Years



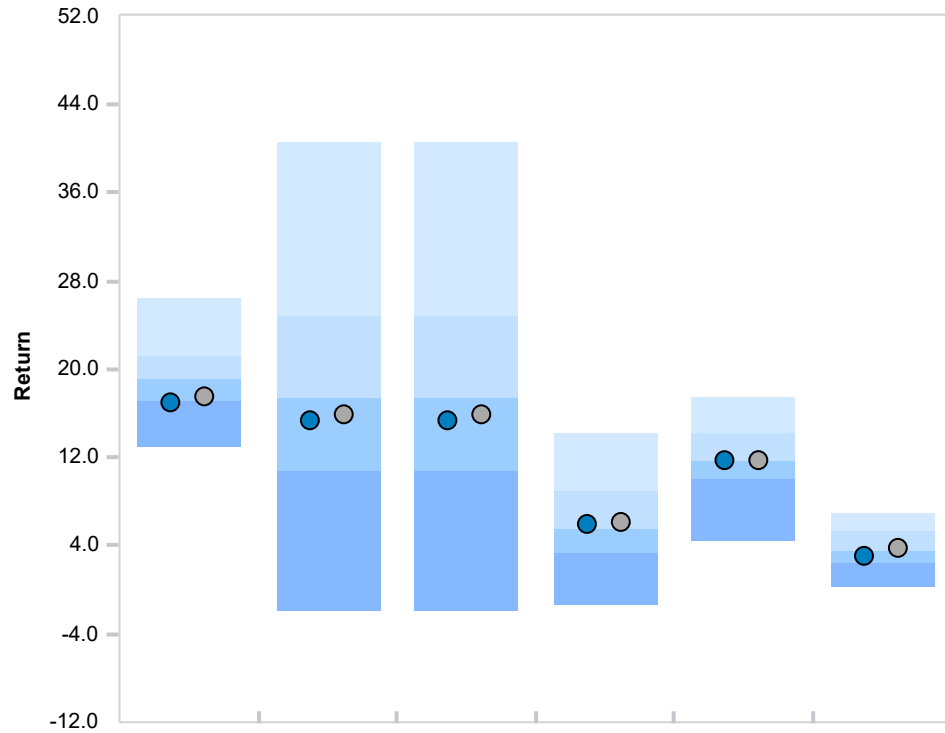
### 3 Year Rolling Percentile Rank IM Emerging Markets Equity (MF)



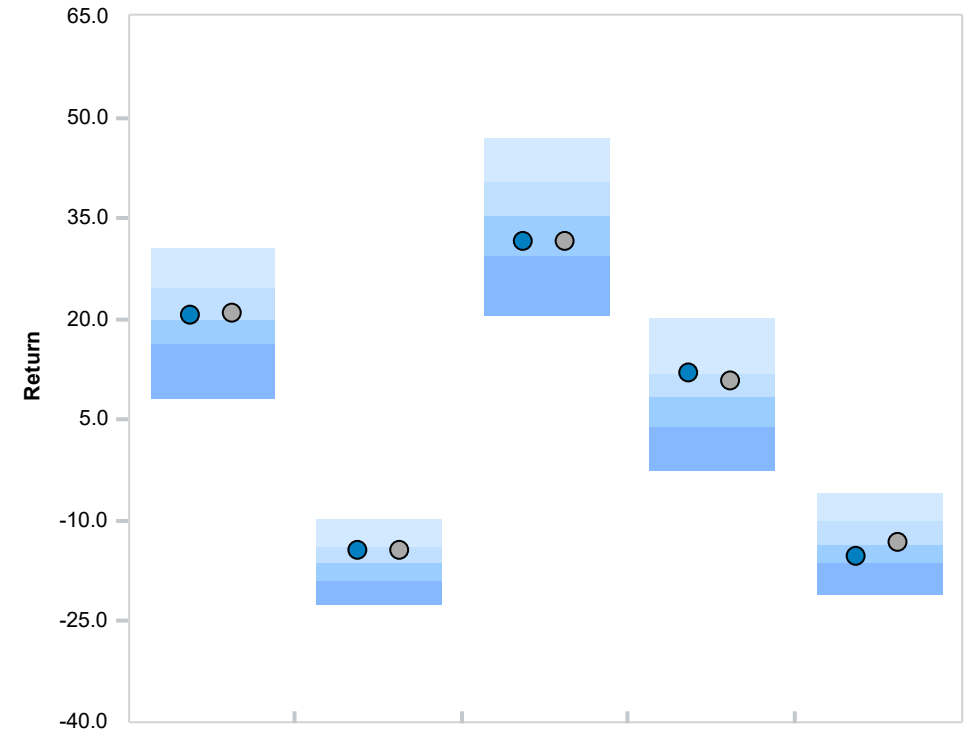
### 5 Year Rolling Percentile Rank IM Emerging Markets Equity (MF)



**Peer Group Analysis - IM Emerging Markets Equity (MF)**



**Peer Group Analysis - IM Emerging Markets Equity (MF)**



**Financial Reconciliation Since Inception Ending December 31, 2020**

|            | Market Value<br>10/01/2010 | Net Flows | Return On<br>Investment | Market Value<br>12/31/2020 |
|------------|----------------------------|-----------|-------------------------|----------------------------|
| Investment | 5,147,163                  | 4,164,289 | 4,541,256               | 13,852,708                 |

**Comparative Performance**

|            | 1 Qtr<br>Ending<br>Sep-2020 | 1 Qtr<br>Ending<br>Jun-2020 | 1 Qtr<br>Ending<br>Mar-2020 | 1 Qtr<br>Ending<br>Dec-2019 | 1 Qtr<br>Ending<br>Sep-2019 | 1 Qtr<br>Ending<br>Jun-2019 |
|------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| Investment | 9.05                        | 19.89                       | -24.56                      | 11.33                       | -3.57                       | 0.73                        |
| Index      | 9.11                        | 19.11                       | -24.16                      | 11.43                       | -3.49                       | 0.95                        |

### Fund Information

Fund Name : Vanguard International Equity Index Funds: Vanguard Emerging Markets Stock Index Fund; Instl Class Shares  
Fund Family : Vanguard Group Inc  
Ticker : VEMIX  
Inception Date : 06/22/2000  
Fund Assets : \$6,581 Million  
Portfolio Turnover : 9%

Portfolio Assets : \$87,099 Million

Portfolio Manager : Perre/Miller  
PM Tenure : 2008--2016  
Fund Style : IM Emerging Markets Equity (MF)  
Style Benchmark : FTSE Emerging Mkts All Cap China A Inclusion Index

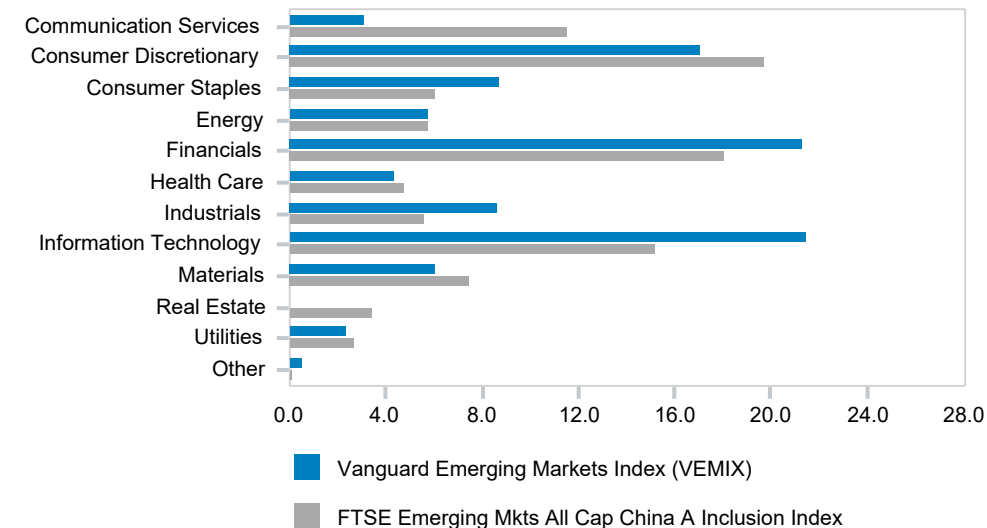
### Portfolio Characteristics As of 09/30/2020

|                         | Portfolio       | Benchmark |
|-------------------------|-----------------|-----------|
| Total Securities        | 4,146           | 1         |
| Avg. Market Cap (\$)    | 166,220,257,814 | -         |
| Price/Earnings (P/E)    | 27.89           | N/A       |
| Price/Book (P/B)        | 4.93            | N/A       |
| Dividend Yield          | 3,601.78        | N/A       |
| Annual EPS              | 20.28           | N/A       |
| 5 Yr EPS                | 15.18           | N/A       |
| 3 Yr EPS Growth         | 18.72           | N/A       |
| Beta (5 Years, Monthly) | 0.99            | 1.00      |

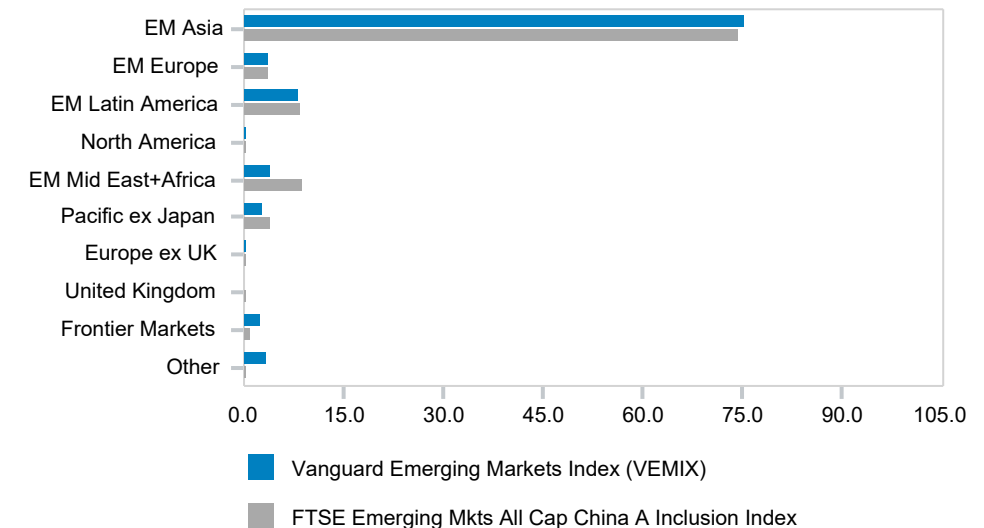
### Top Ten Securities As of 09/30/2020

|                                     |       |
|-------------------------------------|-------|
| Alibaba Group Holding Ltd DR        | 8.0 % |
| Tencent Holdings Ltd ORD            | 6.0 % |
| Taiwan Semiconductor Manufacturing  | 3.8 % |
| Taiwan Semiconductor Manufacturing  | 2.0 % |
| Meituan Dianping ORD                | 1.8 % |
| Reliance Industries Ltd ORD         | 1.5 % |
| Naspers Ltd ORD                     | 1.2 % |
| JD.Com Inc DR                       | 1.0 % |
| China Construction Bank Corp ORD    | 0.9 % |
| Ping An Insurance Group Co of China | 0.9 % |

### Sector Weights As of 09/30/2020



### Region Weights As of 09/30/2020

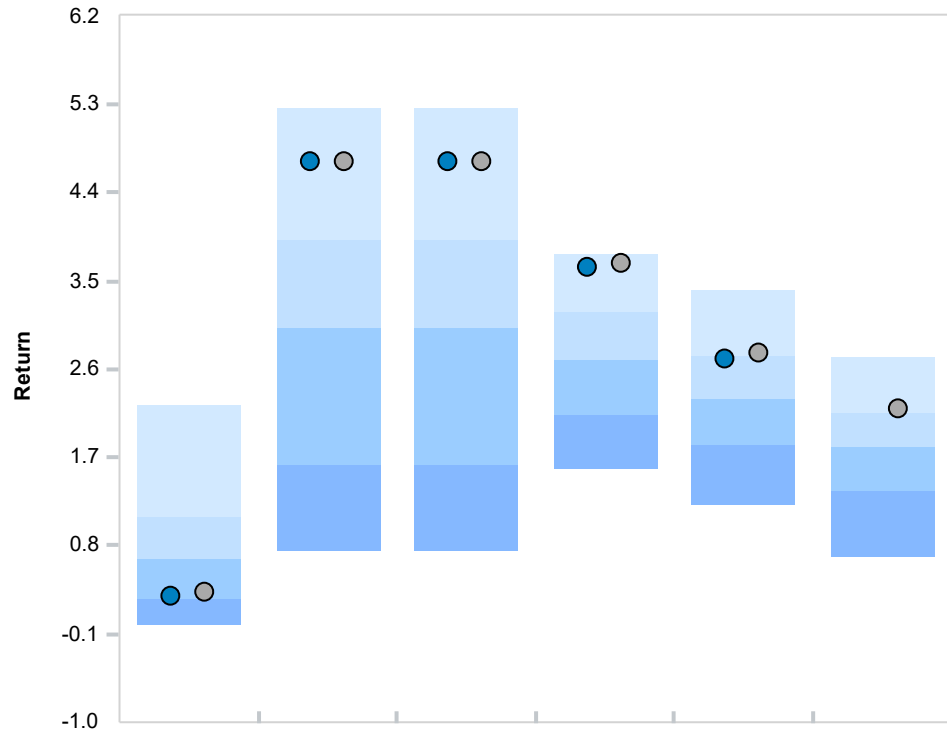


Statistics provided by Lipper. Most recent available data shown.

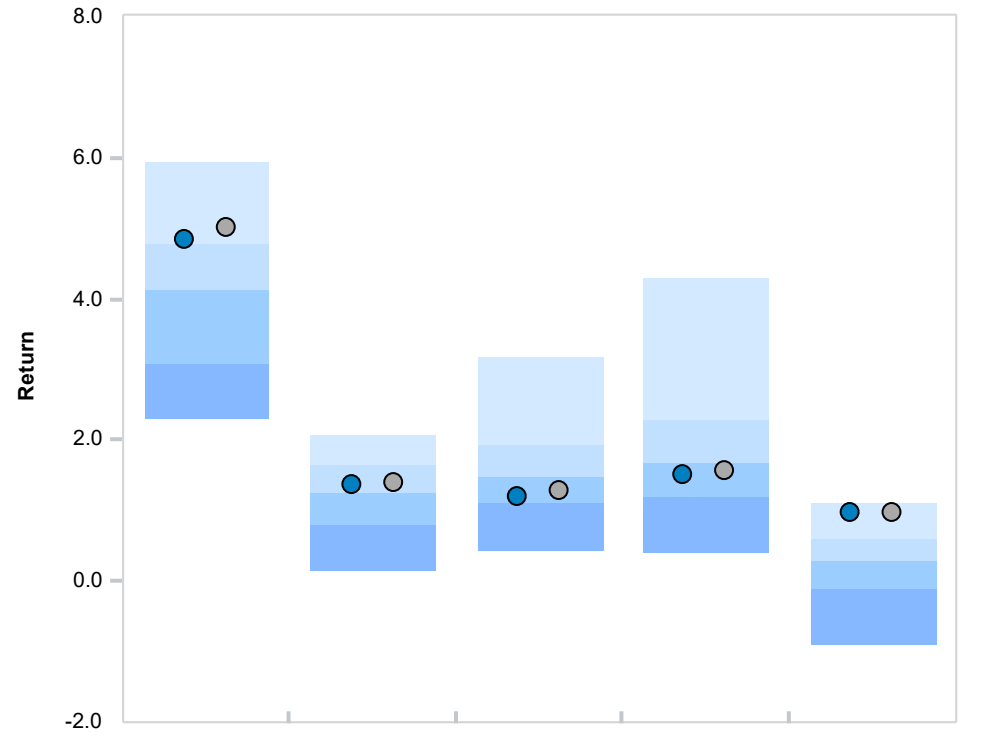




**Peer Group Analysis - IM U.S. Short Term Investment Grade (MF)**



**Peer Group Analysis - IM U.S. Short Term Investment Grade (MF)**



**Financial Reconciliation Since Inception Ending December 31, 2020**

|            | Market Value<br>04/01/2013 | Net Flows  | Return On<br>Investment | Market Value<br>12/31/2020 |
|------------|----------------------------|------------|-------------------------|----------------------------|
| Investment | 10,001,804                 | -6,319,350 | 1,799,084               | 5,481,538                  |

**Comparative Performance**

|            | 1 Qtr<br>Ending<br>Sep-2020 | 1 Qtr<br>Ending<br>Jun-2020 | 1 Qtr<br>Ending<br>Mar-2020 | 1 Qtr<br>Ending<br>Dec-2019 | 1 Qtr<br>Ending<br>Sep-2019 | 1 Qtr<br>Ending<br>Jun-2019 |
|------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| Investment | 0.33                        | 1.79                        | 2.24                        | 0.34                        | 0.95                        | 1.83                        |
| Index      | 0.37                        | 1.77                        | 2.17                        | 0.50                        | 0.89                        | 1.92                        |

### Fund Information

|                      |  |                     |   |
|----------------------|--|---------------------|---|
| Fund Name :          | Vanguard Bond Index Funds: Vanguard Short-Term Bond Index Fund; Institutional Class Shares | Portfolio Assets :  | \$63,191 Million                          |
| Fund Family :        | Vanguard Group Inc   | Portfolio Manager : | Joshua C. Barrickman                      |
| Ticker :             | VBITX  | PM Tenure :         | 2013                                      |
| Inception Date :     | 09/27/2011   | Fund Style :        | IM U.S. Short Term Investment Grade (MF)  |
| Fund Assets :        | \$5,743 Million  | Style Benchmark :   | Bloomberg Barclays U.S. Aggregate 1-3 Yrs |
| Portfolio Turnover : | 44%  |                     |   |

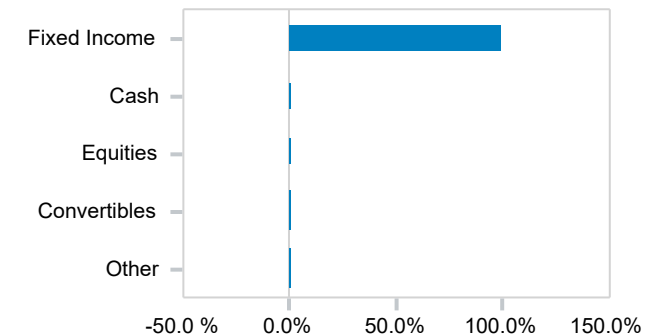
### Fund Characteristics As of 06/30/2020

|                     |            |
|---------------------|------------|
| Avg. Coupon         | 2.28 %     |
| Nominal Maturity    | N/A        |
| Effective Maturity  | 2.87 Years |
| Duration            | 2.75 Years |
| SEC 30 Day Yield    | N/A        |
| Avg. Credit Quality | AA         |

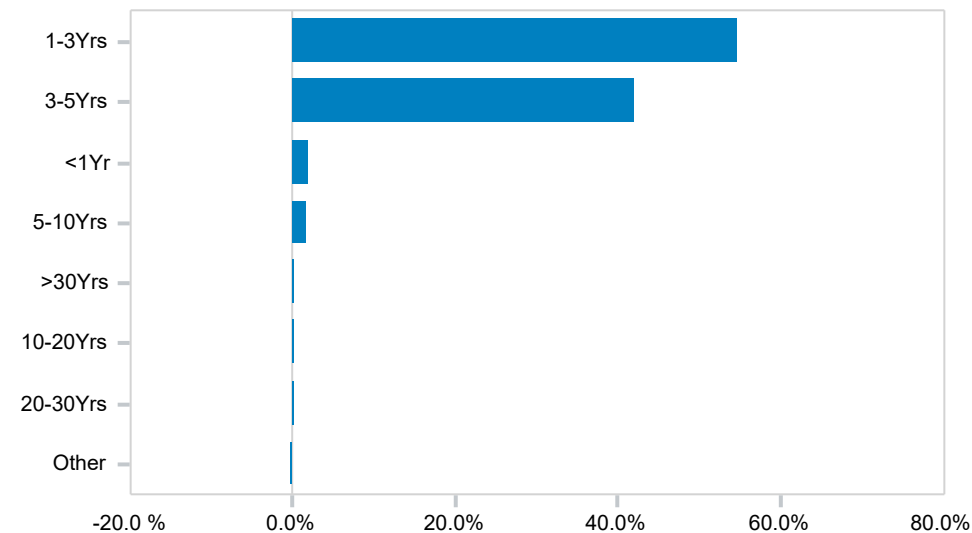
### Top Ten Securities As of 06/30/2020

|                                 |        |
|---------------------------------|--------|
| Treasury Notes/Bonds            | 61.3 % |
| Corporate Notes/Bonds           | 31.8 % |
| Government Agency Securities    | 4.6 %  |
| US\$ Denominated Fgn. Gvt.      | 2.1 %  |
| Fgn. Currency Denominated Bonds | 0.0%   |

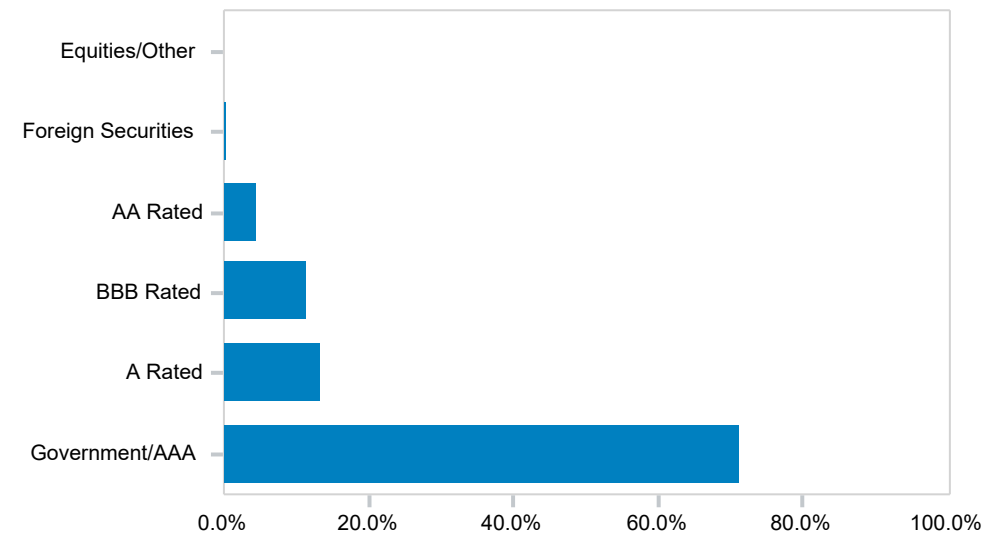
### Asset Allocation As of 06/30/2020



### Maturity Distribution As of 06/30/2020



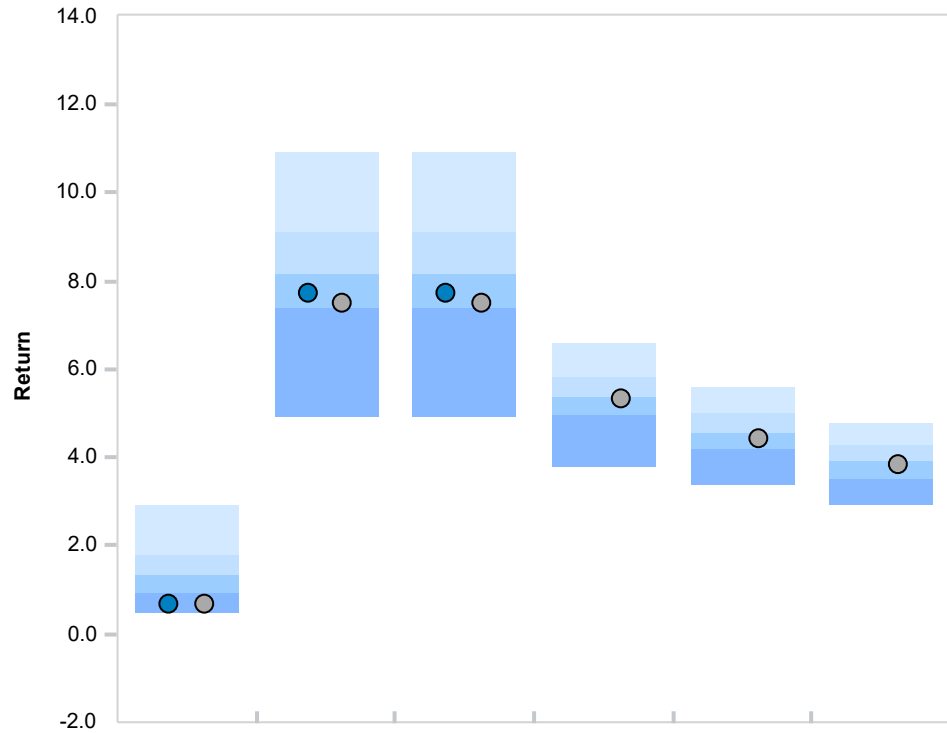
### Sector/Quality Allocation As of 06/30/2020



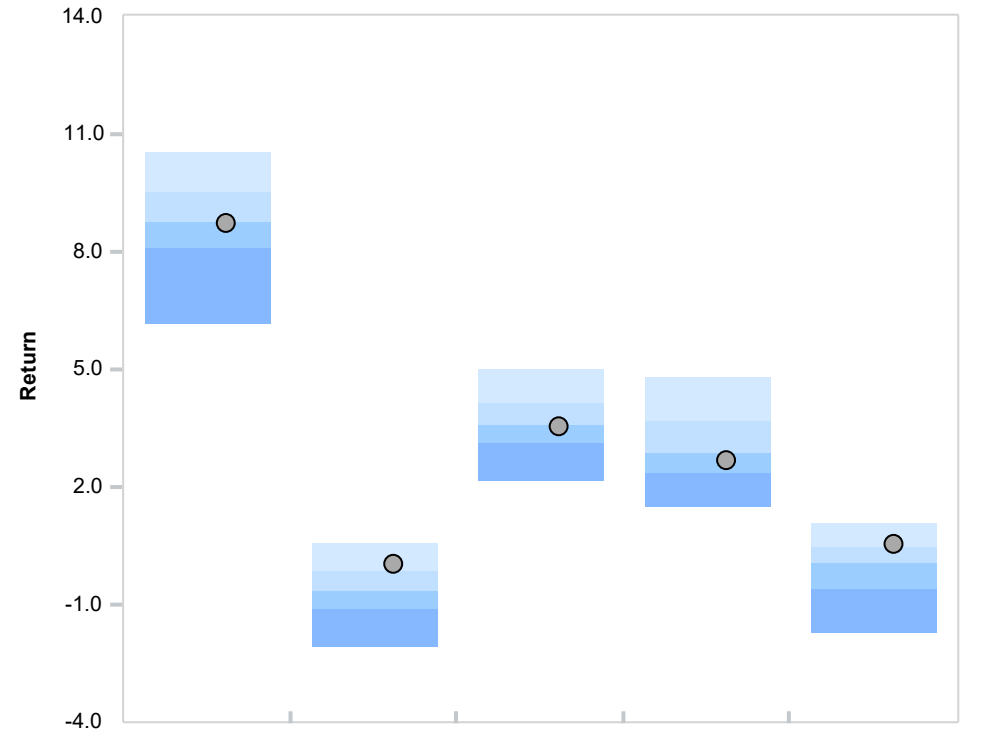
Statistics provided by Lipper. Most recent available data shown.



**Peer Group Analysis - IM U.S. Broad Market Core Fixed Income (MF)**



**Peer Group Analysis - IM U.S. Broad Market Core Fixed Income (MF)**



**Financial Reconciliation Since Inception Ending December 31, 2020**

|            | Market Value<br>09/01/2019 | Net Flows  | Return On<br>Investment | Market Value<br>12/31/2020 |
|------------|----------------------------|------------|-------------------------|----------------------------|
| Investment | 5,041,017                  | 36,803,437 | 3,271,887               | 45,116,341                 |

**Comparative Performance**

|            | 1 Qtr<br>Ending<br>Sep-2020 | 1 Qtr<br>Ending<br>Jun-2020 | 1 Qtr<br>Ending<br>Mar-2020 | 1 Qtr<br>Ending<br>Dec-2019 | 1 Qtr<br>Ending<br>Sep-2019 | 1 Qtr<br>Ending<br>Jun-2019 |
|------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| Investment | 0.62 (88)                   | 2.98 (88)                   | 3.28 (13)                   | 0.02 (71)                   | N/A                         | N/A                         |
| Index      | 0.62 (88)                   | 2.90 (91)                   | 3.15 (16)                   | 0.18 (51)                   | 2.27 (34)                   | 3.08 (42)                   |
| Median     | 1.19                        | 4.94                        | 0.55                        | 0.18                        | 2.16                        | 3.04                        |

### Fund Information

|                      |  |                     |   |
|----------------------|--|---------------------|---|
| Fund Name :          | Vanguard Bond Index Funds: Vanguard Total Bond Market Index Fund; Institutional Shares | Portfolio Assets :  | \$294,665 Million                           |
| Fund Family :        | Vanguard Group Inc   | Portfolio Manager : | Joshua C. Barrickman                        |
| Ticker :             | VBTIX  | PM Tenure :         | 2013  |
| Inception Date :     | 09/18/1995   | Fund Style :        | IM U.S. Broad Market Core Fixed Income (MF) |
| Fund Assets :        | \$52,000 Million   | Style Benchmark :   | Bloomberg Barclays U.S. Aggregate           |
| Portfolio Turnover : | 31%  |                     |   |

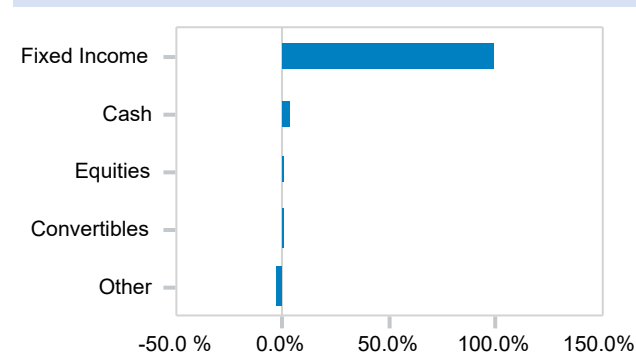
### Fund Characteristics As of 06/30/2020

|                     |            |
|---------------------|------------|
| Avg. Coupon         | 3.14 %     |
| Nominal Maturity    | N/A        |
| Effective Maturity  | 8.28 Years |
| Duration            | 6.23 Years |
| SEC 30 Day Yield    | 2.7        |
| Avg. Credit Quality | AA         |

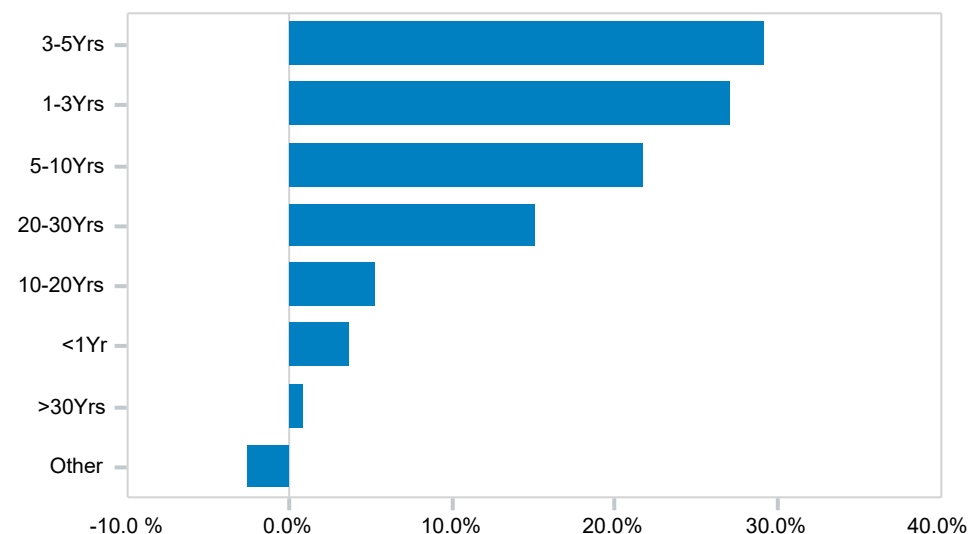
### Top Ten Securities As of 06/30/2020

|                                 |        |
|---------------------------------|--------|
| Treasury Notes/Bonds            | 39.3 % |
| Corporate Notes/Bonds           | 31.9 % |
| GNMA and Other Mtg Backed       | 24.0 % |
| Government Agency Securities    | 2.4 %  |
| US\$ Denominated Fgn. Gvt.      | 1.0 %  |
| Asset Backed Securities         | 0.4 %  |
| Fgn. Currency Denominated Bonds | 0.0 %  |

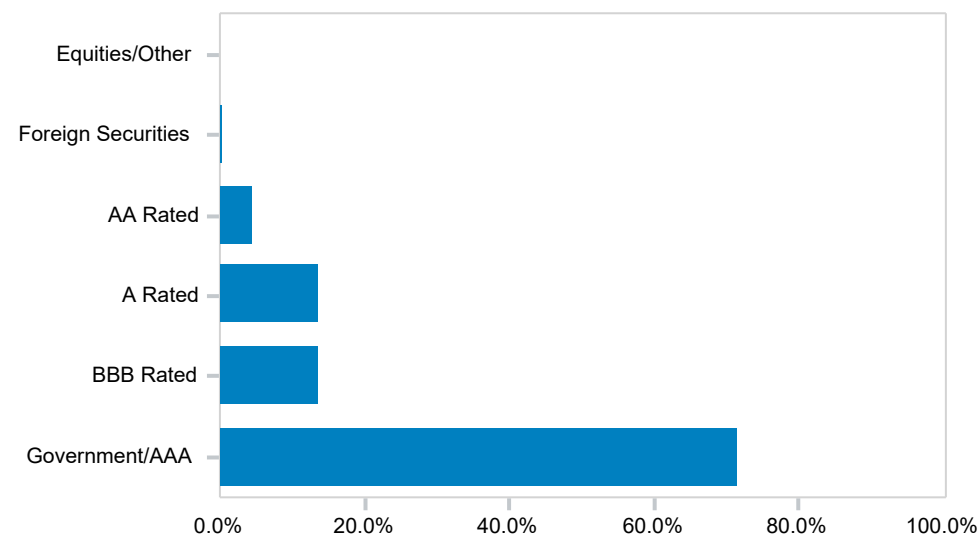
### Asset Allocation As of 06/30/2020



### Maturity Distribution As of 06/30/2020



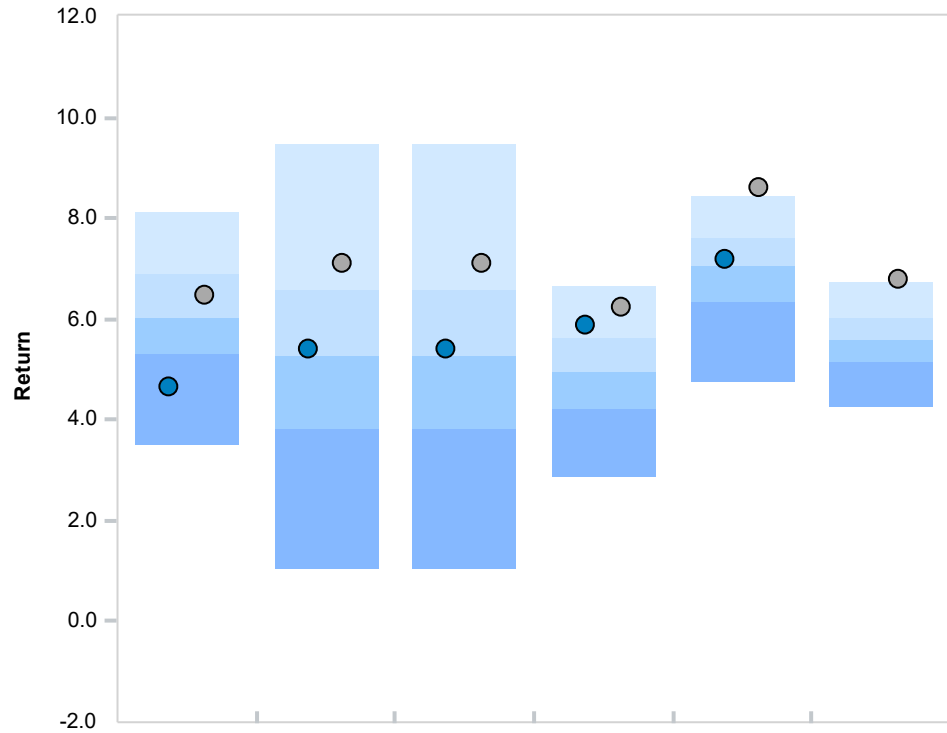
### Sector/Quality Allocation As of 06/30/2020



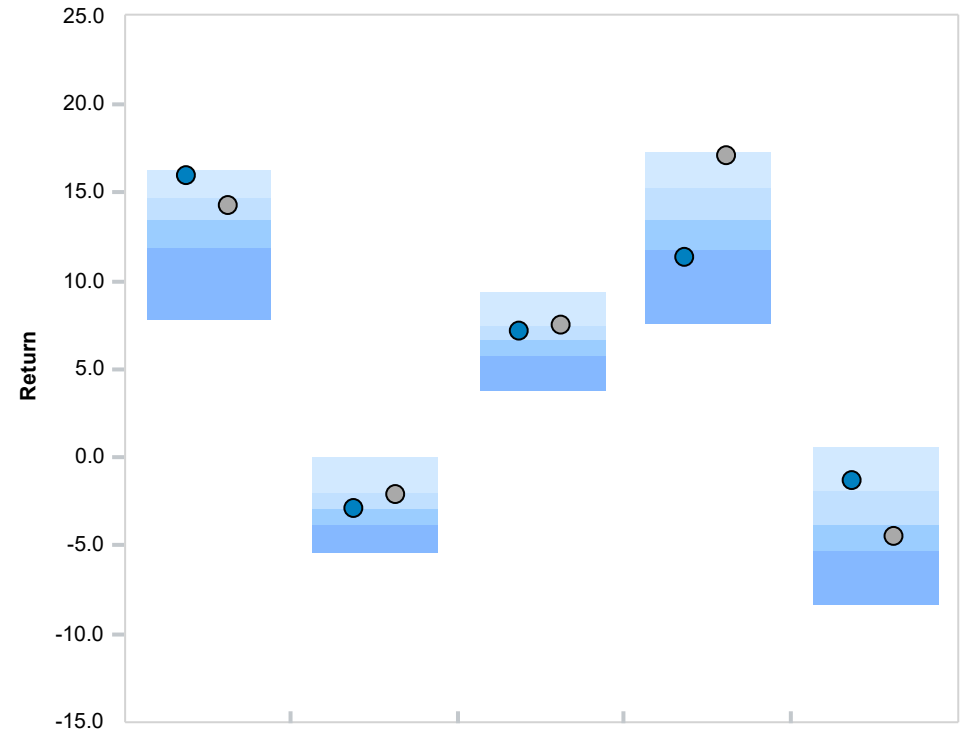
Statistics provided by Lipper. Most recent available data shown.



**Peer Group Analysis - IM U.S. High Yield Bonds (MF)**



**Peer Group Analysis - IM U.S. High Yield Bonds (MF)**



**Financial Reconciliation Since Inception Ending December 31, 2020**

|            | Market Value<br>12/01/2014 | Net Flows | Return On<br>Investment | Market Value<br>12/31/2020 |
|------------|----------------------------|-----------|-------------------------|----------------------------|
| Investment | 12,642,764                 | 4,850,000 | 6,473,530               | 23,966,294                 |

**Comparative Performance**

|            | 1 Qtr<br>Ending<br>Sep-2020 | 1 Qtr<br>Ending<br>Jun-2020 | 1 Qtr<br>Ending<br>Mar-2020 | 1 Qtr<br>Ending<br>Dec-2019 | 1 Qtr<br>Ending<br>Sep-2019 | 1 Qtr<br>Ending<br>Jun-2019 |
|------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| Investment | 4.27                        | 8.04                        | -10.59                      | 2.52                        | 1.86                        | 3.15                        |
| Index      | 4.60                        | 10.18                       | -12.68                      | 2.61                        | 1.33                        | 2.50                        |

### Fund Information

|                      |  |                     |                               |
|----------------------|--|---------------------|-------------------------------|
| Fund Name :          | Vanguard Fixed Income Securities Funds: Vanguard High-Yield Corporate Fund; Admiral Shares | Portfolio Assets :  | \$27,205 Million              |
| Fund Family :        | Vanguard Group Inc   | Portfolio Manager : | Michael L. Hong               |
| Ticker :             | VWEAX  | PM Tenure :         | 2008                          |
| Inception Date :     | 11/12/2001   | Fund Style :        | IM U.S. High Yield Bonds (MF) |
| Fund Assets :        | \$23,325 Million   | Style Benchmark :   | FTSE High Yield Market Index  |
| Portfolio Turnover : | 28%  |                     |                               |

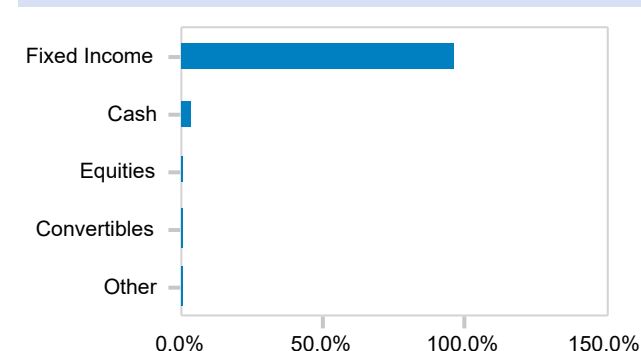
### Fund Characteristics As of 06/30/2020

|                     |            |
|---------------------|------------|
| Avg. Coupon         | 5.04 %     |
| Nominal Maturity    | 6.84 Years |
| Effective Maturity  | 5.61 Years |
| Duration            | 3.89 Years |
| SEC 30 Day Yield    | 6.5        |
| Avg. Credit Quality | BB         |

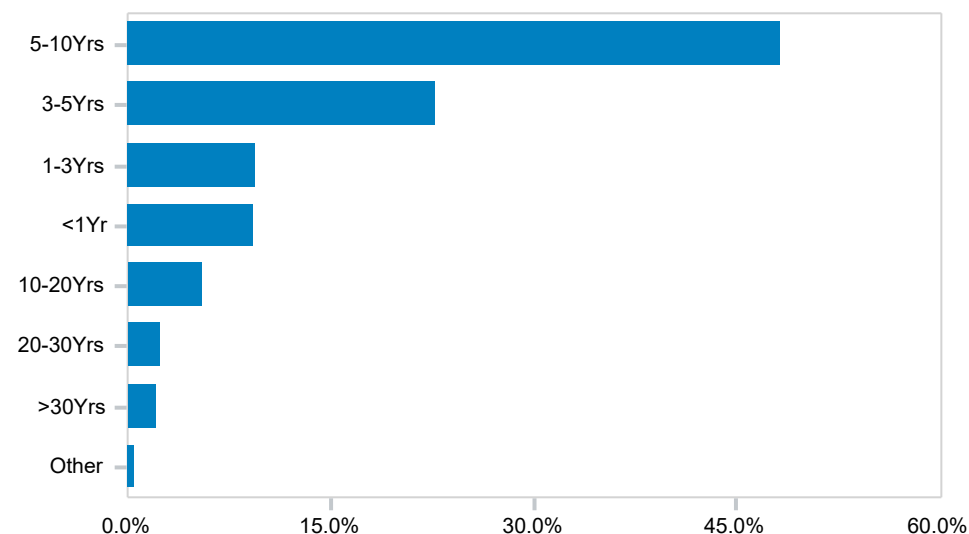
### Top Ten Securities As of 06/30/2020

|                                 |        |
|---------------------------------|--------|
| Corporate Notes/Bonds           | 86.5 % |
| Treasury Notes/Bonds            | 5.0 %  |
| Fgn. Currency Denominated Bonds | 4.3 %  |
| Government Agency Securities    | 0.6 %  |
| Preferred Stock-Non Convertible | 0.4 %  |

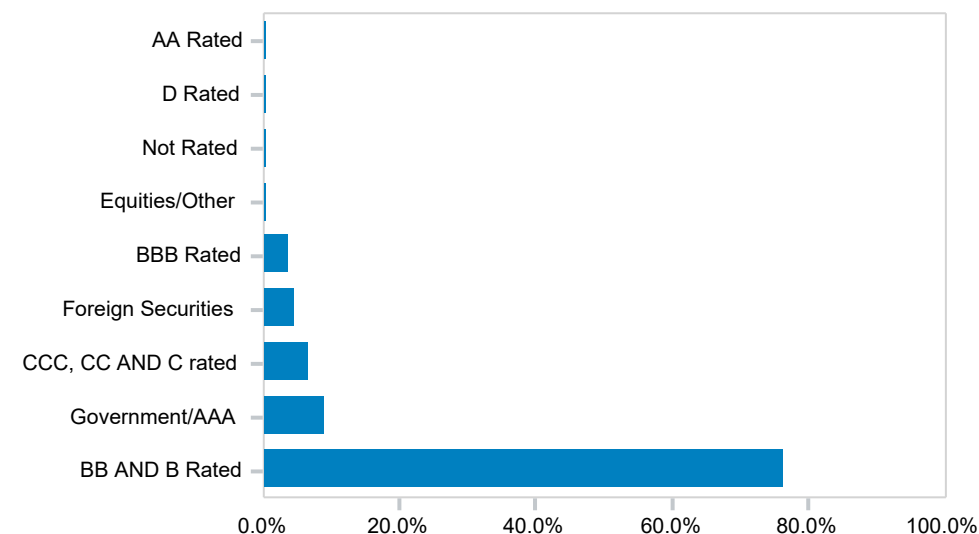
### Asset Allocation As of 06/30/2020



### Maturity Distribution As of 06/30/2020



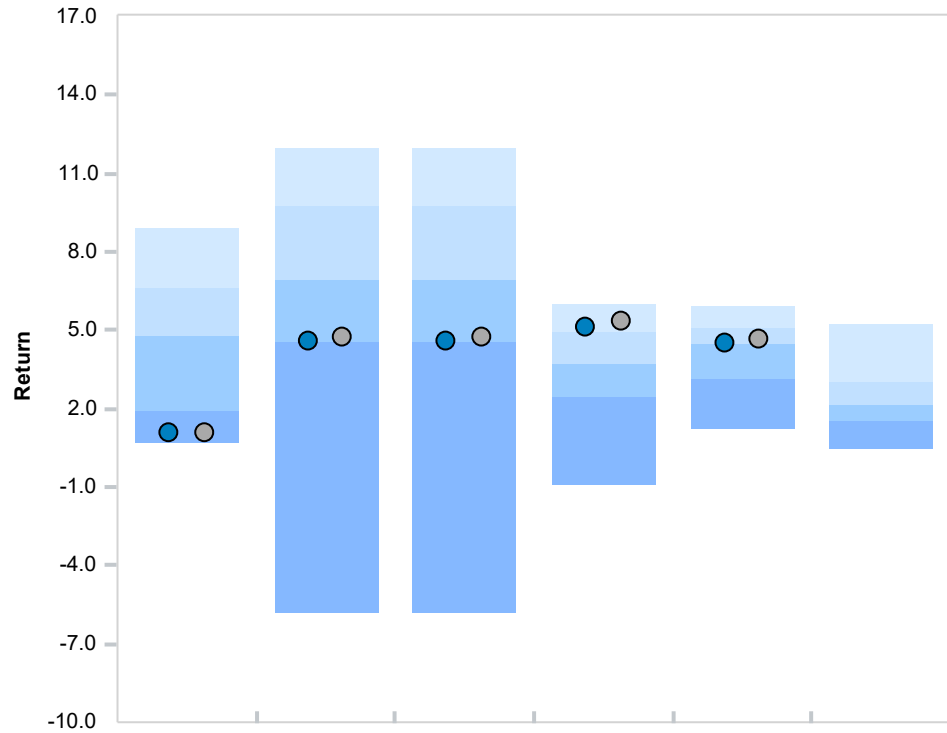
### Sector/Quality Allocation As of 06/30/2020



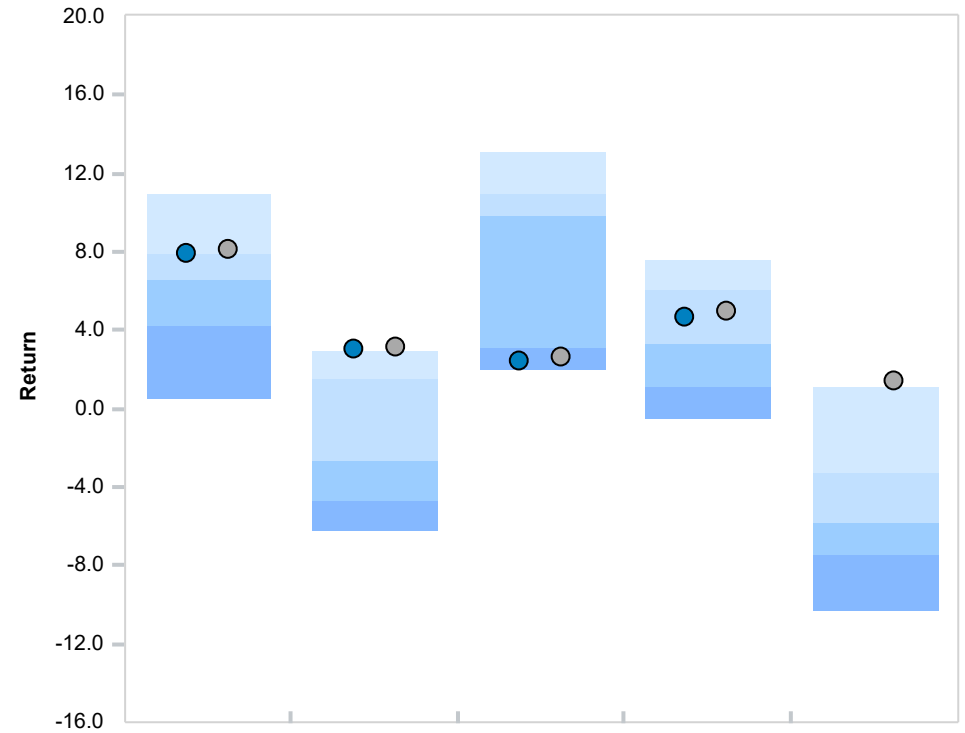
Statistics provided by Lipper. Most recent available data shown.



**Peer Group Analysis - IM International Fixed Income (MF)**



**Peer Group Analysis - IM International Fixed Income (MF)**



**Financial Reconciliation Since Inception Ending December 31, 2020**

|            | Market Value<br>06/01/2015 | Net Flows | Return On<br>Investment | Market Value<br>12/31/2020 |
|------------|----------------------------|-----------|-------------------------|----------------------------|
| Investment | 9,329,282                  | -175,000  | 2,314,112               | 11,468,394                 |

**Comparative Performance**

|            | 1 Qtr<br>Ending<br>Sep-2020 | 1 Qtr<br>Ending<br>Jun-2020 | 1 Qtr<br>Ending<br>Mar-2020 | 1 Qtr<br>Ending<br>Dec-2019 | 1 Qtr<br>Ending<br>Sep-2019 | 1 Qtr<br>Ending<br>Jun-2019 |
|------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| Investment | 1.14                        | 2.20                        | 0.16                        | -1.30                       | 3.02                        | 2.95                        |
| Index      | 1.07                        | 2.31                        | 0.21                        | -1.25                       | 3.05                        | 2.97                        |
| Median     | 1.07                        | 2.31                        | 0.21                        | -1.25                       | 3.05                        | 2.97                        |

December 31, 2020

### Fund Information

|                      |  |                     |                                     |
|----------------------|--|---------------------|-------------------------------------|
| Fund Name :          | Vanguard Charlotte Funds: Vanguard Total International Bond Index Fund; Institutional Class Shares | Portfolio Assets :  | \$156,497 Million                   |
| Fund Family :        | Vanguard Group Inc   | Portfolio Manager : | Joshua C. Barrickman                |
| Ticker :             | VTIFX  | PM Tenure :         | 2013                                |
| Inception Date :     | 05/31/2013   | Fund Style :        | IM International Fixed Income (MF)  |
| Fund Assets :        | \$40,332 Million   | Style Benchmark :   | FTSE Non-U.S. World Government Bond |
| Portfolio Turnover : | 26%  |                     |                                     |

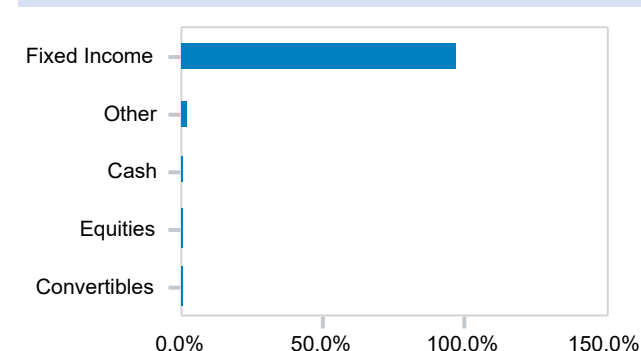
### Fund Characteristics As of 06/30/2020

|                     |            |
|---------------------|------------|
| Avg. Coupon         | 5.30 %     |
| Nominal Maturity    | N/A        |
| Effective Maturity  | 9.78 Years |
| Duration            | 8.36 Years |
| SEC 30 Day Yield    | N/A        |
| Avg. Credit Quality | N/A        |

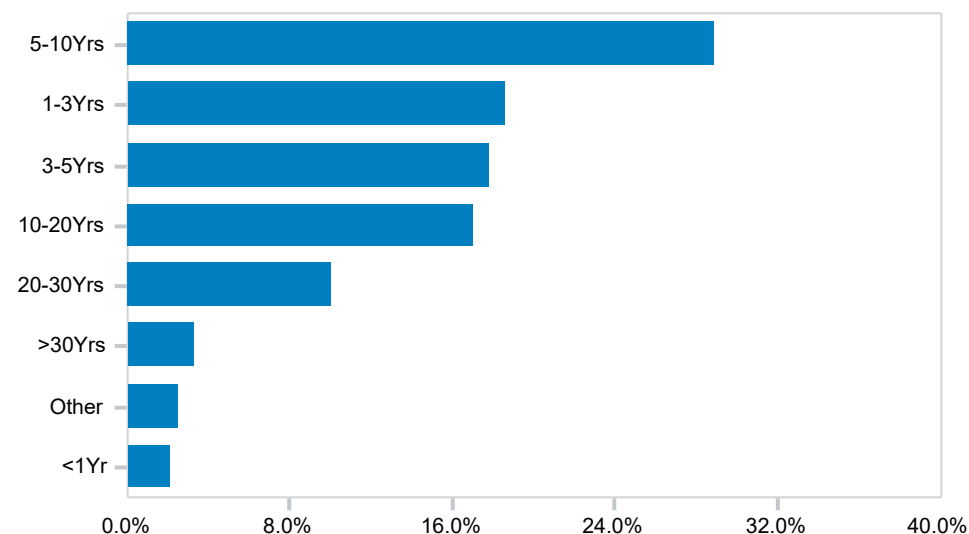
### Top Ten Securities As of 06/30/2020

|                                 |        |
|---------------------------------|--------|
| US\$ Denominated Fgn. Gvt.      | 63.2 % |
| Corporate Notes/Bonds           | 28.6 % |
| Asset Backed Securities         | 5.3 %  |
| Fgn. Currency Denominated Bonds | 0.1 %  |

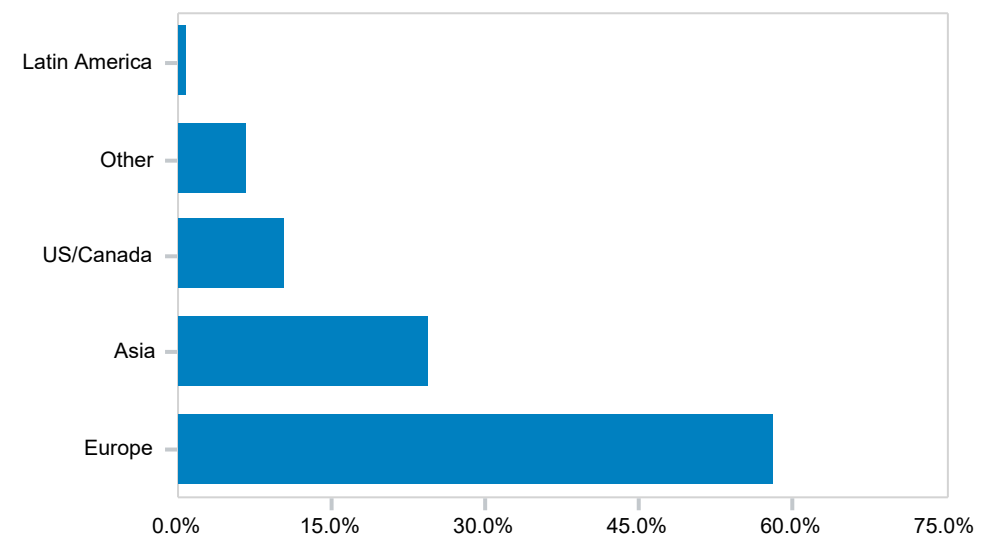
### Asset Allocation As of 06/30/2020



### Maturity Distribution As of 06/30/2020



### Sector/Quality Allocation As of 06/30/2020



Statistics provided by Lipper. Most recent available data shown.





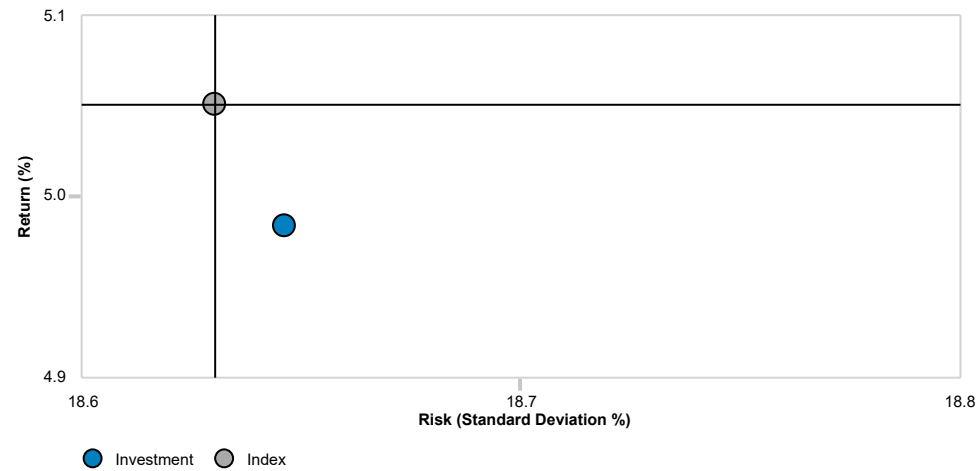
### Historical Statistics 3 Years

|            | Return | Standard Deviation | Sharpe Ratio | Up Market Capture | Up Quarters | Down Market Capture | Down Quarters |
|------------|--------|--------------------|--------------|-------------------|-------------|---------------------|---------------|
| Investment | 4.98   | 18.65              | 0.27         | 99.84             | 9           | 100.11              | 3             |
| Index      | 5.05   | 18.63              | 0.28         | 100.00            | 9           | 100.00              | 3             |

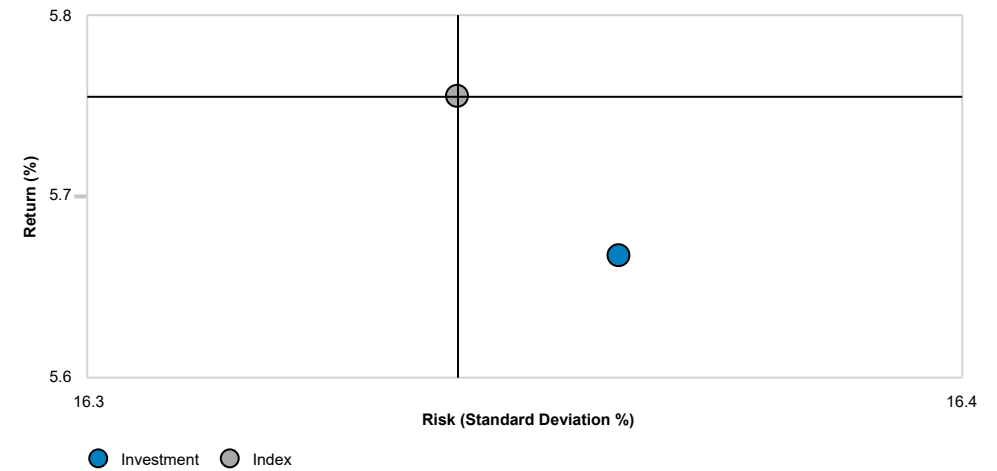
### Historical Statistics 5 Years

|            | Return | Standard Deviation | Sharpe Ratio | Up Market Capture | Up Quarters | Down Market Capture | Down Quarters |
|------------|--------|--------------------|--------------|-------------------|-------------|---------------------|---------------|
| Investment | 5.67   | 16.36              | 0.35         | 99.92             | 15          | 100.38              | 5             |
| Index      | 5.76   | 16.34              | 0.35         | 100.00            | 15          | 100.00              | 5             |

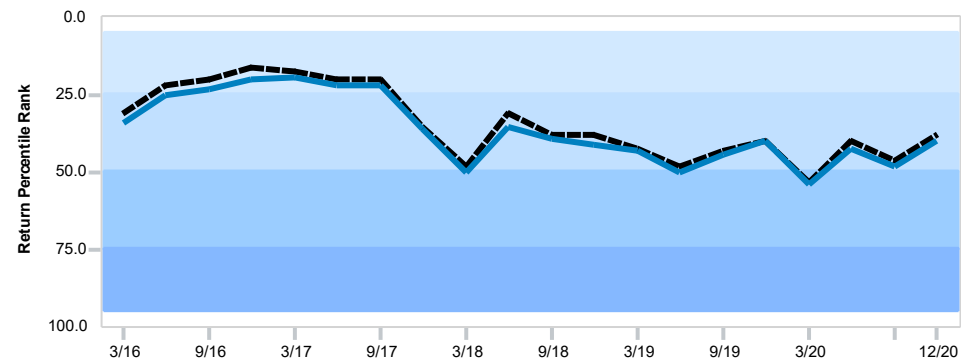
### Risk and Return 3 Years



### Risk and Return 5 Years

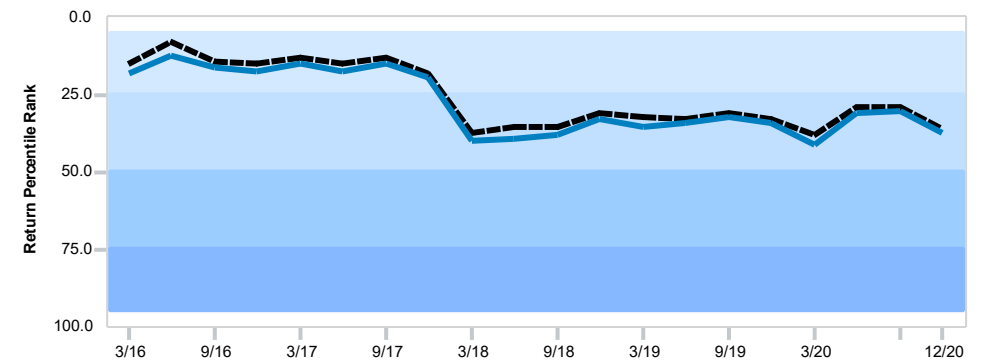


### 3 Year Rolling Percentile Rank IM Real Estate Sector (MF)



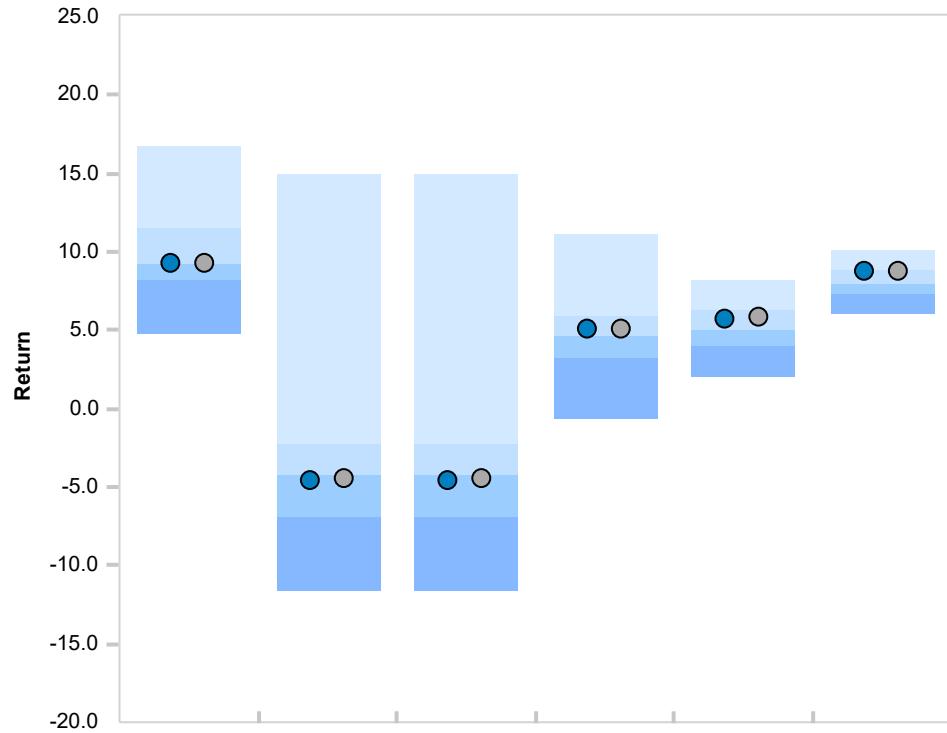
|            | Total Period | 5-25 Count | 25-Median Count | Median-75 Count | 75-95 Count |
|------------|--------------|------------|-----------------|-----------------|-------------|
| Investment | 20           | 6 (30%)    | 13 (65%)        | 1 (5%)          | 0 (0%)      |
| Index      | 20           | 6 (30%)    | 13 (65%)        | 1 (5%)          | 0 (0%)      |

### 5 Year Rolling Percentile Rank IM Real Estate Sector (MF)



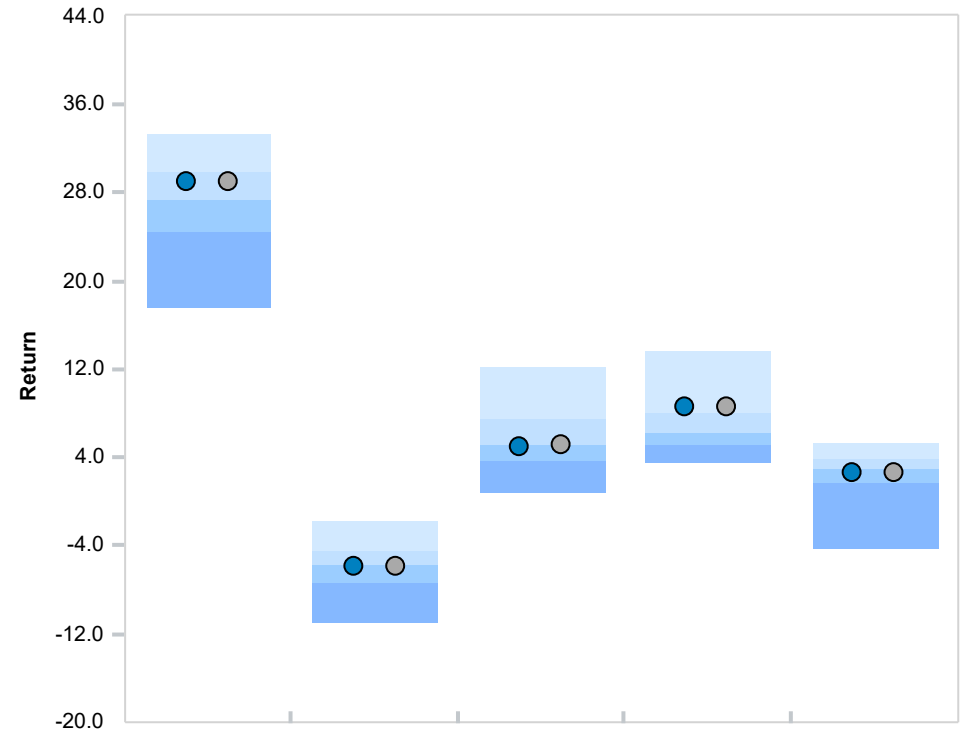
|            | Total Period | 5-25 Count | 25-Median Count | Median-75 Count | 75-95 Count |
|------------|--------------|------------|-----------------|-----------------|-------------|
| Investment | 20           | 8 (40%)    | 12 (60%)        | 0 (0%)          | 0 (0%)      |
| Index      | 20           | 8 (40%)    | 12 (60%)        | 0 (0%)          | 0 (0%)      |

**Peer Group Analysis - IM Real Estate Sector (MF)**



|            | QTR       | YTD        | 1 YR       | 3 YR      | 5 YR      | 10 YR     |
|------------|-----------|------------|------------|-----------|-----------|-----------|
| Investment | 9.24 (50) | -4.67 (56) | -4.67 (56) | 4.98 (40) | 5.67 (37) | 8.71 (27) |
| Index      | 9.28 (48) | -4.55 (54) | -4.55 (54) | 5.05 (38) | 5.76 (36) | 8.78 (26) |
| Median     | 9.24      | -4.23      | -4.23      | 4.69      | 5.03      | 7.98      |

**Peer Group Analysis - IM Real Estate Sector (MF)**



|            | 2019       | 2018       | 2017      | 2016      | 2015      |
|------------|------------|------------|-----------|-----------|-----------|
| Investment | 29.02 (34) | -5.93 (54) | 4.93 (56) | 8.51 (19) | 2.56 (58) |
| Index      | 29.03 (34) | -5.86 (52) | 5.07 (52) | 8.60 (19) | 2.52 (58) |
| Median     | 27.38      | -5.75      | 5.20      | 6.28      | 2.91      |

**Financial Reconciliation Since Inception Ending December 31, 2020**

|            | Market Value<br>10/01/2010 | Net Flows  | Return On<br>Investment | Market Value<br>12/31/2020 |
|------------|----------------------------|------------|-------------------------|----------------------------|
| Investment | 4,801,552                  | -2,276,630 | 8,984,635               | 11,509,558                 |

**Comparative Performance**

|            | 1 Qtr<br>Ending<br>Sep-2020 | 1 Qtr<br>Ending<br>Jun-2020 | 1 Qtr<br>Ending<br>Mar-2020 | 1 Qtr<br>Ending<br>Dec-2019 | 1 Qtr<br>Ending<br>Sep-2019 | 1 Qtr<br>Ending<br>Jun-2019 |
|------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| Investment | 1.37 (70)                   | 13.44 (25)                  | -24.10 (59)                 | 0.63 (29)                   | 7.42 (48)                   | 1.76 (60)                   |
| Index      | 1.35 (71)                   | 13.50 (24)                  | -24.07 (58)                 | 0.65 (28)                   | 7.43 (48)                   | 1.76 (61)                   |
| Median     | 2.11                        | 11.91                       | -23.38                      | 0.14                        | 7.38                        | 2.06                        |



### Fund Information

|                      |   |                     |                             |
|----------------------|---|---------------------|-----------------------------|
| Fund Name :          | Vanguard Specialized Funds: Vanguard Real Estate Index Fund; Institutional Class Shares | Portfolio Assets :  | \$57,595 Million            |
| Fund Family :        | Vanguard Group Inc  | Portfolio Manager : | O'Reilly/Nejman             |
| Ticker :             | VGSNX   | PM Tenure :         | 2003--2016                  |
| Inception Date :     | 12/02/2003  | Fund Style :        | IM Real Estate Sector (MF)  |
| Fund Assets :        | \$9,050 Million   | Style Benchmark :   | Vanguard Spliced REIT Index |
| Portfolio Turnover : | 6%  |                     |                             |

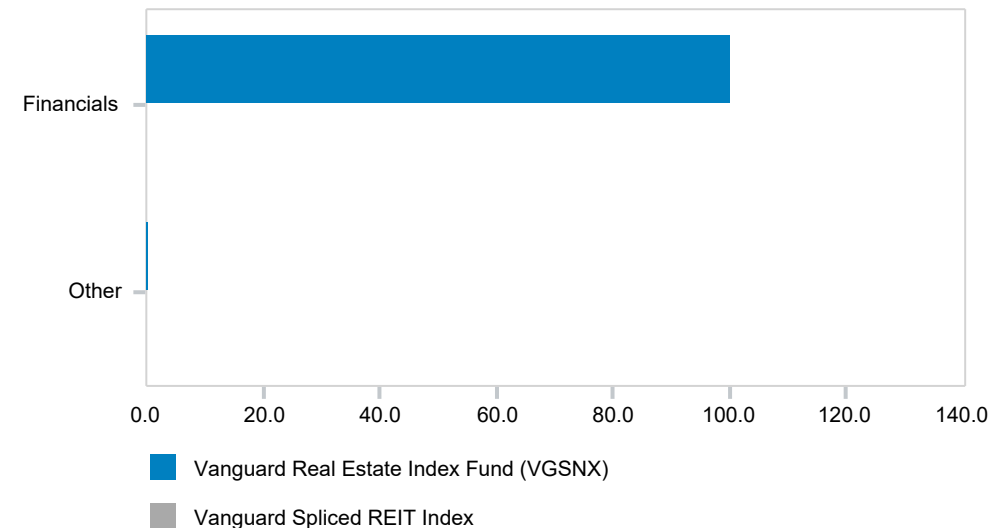
### Portfolio Characteristics As of 09/30/2020

|                         | Portfolio      | Benchmark |
|-------------------------|----------------|-----------|
| Total Securities        | 183            | N/A       |
| Avg. Market Cap (\$)    | 38,301,102,015 | -         |
| Price/Earnings (P/E)    | 47.94          | N/A       |
| Price/Book (P/B)        | 6.32           | N/A       |
| Dividend Yield          | 4.49           | N/A       |
| Annual EPS              | 23.18          | N/A       |
| 5 Yr EPS                | 14.99          | N/A       |
| 3 Yr EPS Growth         | 14.89          | N/A       |
| Beta (5 Years, Monthly) | 1.00           | 1.00      |

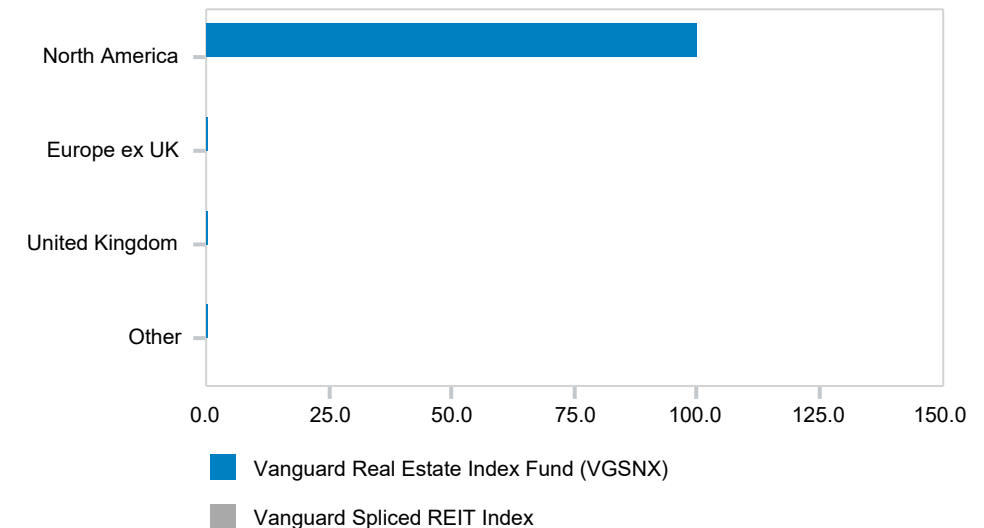
### Top Ten Securities As of 09/30/2020

|  |        |
|--|--------|
| Vanguard Real Estate II Index Fund;Insti | 12.4 % |
| American Tower Corp ORD                  | 8.5 %  |
| Prologis Inc ORD                         | 5.9 %  |
| Crown Castle International Corp          | 5.5 %  |
| Equinix Inc ORD                          | 5.4 %  |
| Digital Realty Trust Inc ORD             | 3.0 %  |
| SBA Communications Corp ORD              | 2.8 %  |
| Public Storage ORD                       | 2.7 %  |
| Welltower Inc ORD                        | 1.8 %  |
| Weyerhaeuser Co ORD                      | 1.7 %  |

### Sector Weights As of 09/30/2020



### Region Weights As of 09/30/2020



Statistics provided by Lipper. Most recent available data shown.



| <b>Total Fund Policy</b>                           |                   |  |                   |
|--|-------------------|--|-------------------|
| <b>Allocation Mandate</b>                          | <b>Weight (%)</b> | <b>Allocation Mandate</b>                      | <b>Weight (%)</b> |
| <b>Jan-1979</b>                                    |                   | <b>Jul-2014</b>                                |                   |
| Russell 1000 Growth Index                          | 20.00             | CRSP U.S. Large Cap Value TR Index             | 8.00              |
| Russell 1000 Value Index                           | 20.00             | CRSP U.S. Large Cap Growth TR Index            | 8.00              |
| MSCI EAFE (Net) Index                              | 10.00             | CRSP U.S. Mid Cap TR Index                     | 10.00             |
| Bloomberg Barclays Intermediate US Govt/Credit Idx | 40.00             | CRSP U.S. Small Cap TR Index                   | 5.00              |
| Russell 2000 Index                                 | 10.00             | Vanguard Spliced Emerging Markets Index (Net)  | 4.00              |
| 90 Day U.S. Treasury Bill                          | 0.00              | Vanguard Spliced Developed ex U.S. Index (Net) | 9.00              |
| <b>Jun-2010</b>                                    |                   | Blmbg. Barc. U.S. Gov/Credit: 5-10 Yr          | 7.50              |
| Russell 1000 Value Index                           | 15.00             | Bloomberg Barclays U.S. TIPS Index             | 7.50              |
| MSCI US Prime Market Growth                        | 15.00             | Bloomberg Barclays 1-5 Year Gov/Credit Idx     | 7.50              |
| MSCI US Mid Cap 450 Index                          | 10.00             | Bloomberg Barclays US TIPS 0-5 Year Index      | 7.50              |
| Russell 2000 Index                                 | 10.00             | Vanguard Spliced REIT Index                    | 10.00             |
| MSCI EAFE (Net) Index                              | 10.00             | 90 Day U.S. Treasury Bill                      | 1.00              |
| MSCI Emerging Markets (Net) Index                  | 5.00              | S&P 500 Index                                  | 15.00             |
| Blmbg. Barc. U.S. Gov/Credit: 5-10 Yr              | 15.00             | <b>Nov-2014</b>                                |                   |
| Bloomberg Barclays U.S. TIPS Index                 | 15.00             | CRSP U.S. Large Cap Value TR Index             | 8.00              |
| Vanguard Spliced REIT Index                        | 5.00              | CRSP U.S. Large Cap Growth TR Index            | 8.00              |
| <b>Jun-2013</b>                                    |                   | CRSP U.S. Mid Cap TR Index                     | 10.00             |
| CRSP U.S. Large Cap Value TR Index                 | 15.00             | CRSP U.S. Small Cap TR Index                   | 5.00              |
| CRSP U.S. Large Cap Growth TR Index                | 15.00             | Vanguard Spliced Emerging Markets Index (Net)  | 4.00              |
| CRSP U.S. Mid Cap TR Index                         | 10.00             | Vanguard Spliced Developed ex U.S. Index (Net) | 9.00              |
| CRSP U.S. Small Cap TR Index                       | 10.00             | Blmbg. Barc. U.S. Gov/Credit: 5-10 Yr          | 7.00              |
| Vanguard Spliced Emerging Markets Index (Net)      | 5.00              | Bloomberg Barclays U.S. TIPS Index             | 7.00              |
| Vanguard Spliced Developed ex U.S. Index (Net)     | 10.00             | Bloomberg Barclays 1-5 Year Gov/Credit Idx     | 7.00              |
| Blmbg. Barc. U.S. Gov/Credit: 5-10 Yr              | 7.50              | Bloomberg Barclays US TIPS 0-5 Year Index      | 7.00              |
| Bloomberg Barclays U.S. TIPS Index                 | 7.50              | Vanguard Spliced REIT Index                    | 5.00              |
| Bloomberg Barclays 1-5 Year Gov/Credit Idx         | 7.50              | 90 Day U.S. Treasury Bill                      | 1.00              |
| Bloomberg Barclays US TIPS 0-5 Year Index          | 7.50              | S&P 500 Index                                  | 15.00             |
| Vanguard Spliced REIT Index                        | 4.00              | Blmbg. Barc. U.S. Corp High Yield              | 7.00              |
| 90 Day U.S. Treasury Bill                          | 1.00              |  |                   |

**Benchmark History**  
**Investment Policy Benchmarks**  
As of December 31, 2020

| Allocation Mandate                                 | Weight (%) |
|--|------------|
| <b>Jun-2015</b>                                    |            |
| CRSP U.S. Large Cap Value TR Index                 | 5.00       |
| CRSP U.S. Large Cap Growth TR Index                | 5.00       |
| CRSP U.S. Mid Cap TR Index                         | 10.00      |
| CRSP U.S. Small Cap TR Index                       | 5.00       |
| Vanguard Spliced Emerging Markets Index (Net)      | 5.00       |
| Vanguard Spliced Developed ex U.S. Index (Net)     | 10.00      |
| Blmbg. Barc. U.S. Gov/Credit: 5-10 Yr              | 7.50       |
| Bloomberg Barclays U.S. TIPS Index                 | 5.00       |
| Bloomberg Barclays 1-5 Year Gov/Credit Idx         | 7.50       |
| Bloomberg Barclays US TIPS 0-5 Year Index          | 5.00       |
| Vanguard Spliced REIT Index                        | 5.00       |
| 90 Day U.S. Treasury Bill                          | 2.50       |
| S&P 500 Index                                      | 15.00      |
| Blmbg. Barc. U.S. Corp High Yield                  | 7.50       |
| Blmbg. Barc. Global Agg ex-USD Flt Adj RIC Cpd (H) | 5.00       |
| <b>Dec-2018</b>                                    |            |
| CRSP U.S. Large Cap Value TR Index                 | 5.00       |
| CRSP U.S. Large Cap Growth TR Index                | 5.00       |
| S&P MidCap 400 Index                               | 10.00      |
| S&P SmallCap 600 Index                             | 5.00       |
| Vanguard Spliced Emerging Markets Index (Net)      | 5.00       |
| Vanguard Spliced Developed ex U.S. Index (Net)     | 10.00      |
| Blmbg. Barc. U.S. Gov/Credit: 5-10 Yr              | 7.50       |
| Bloomberg Barclays U.S. TIPS Index                 | 5.00       |
| Bloomberg Barclays 1-5 Year Gov/Credit Idx         | 7.50       |
| Bloomberg Barclays US TIPS 0-5 Year Index          | 5.00       |
| Vanguard Spliced REIT Index                        | 5.00       |
| 90 Day U.S. Treasury Bill                          | 2.50       |
| S&P 500 Index                                      | 15.00      |
| Blmbg. Barc. U.S. Corp High Yield                  | 7.50       |
| Blmbg. Barc. Global Agg ex-USD Flt Adj RIC Cpd (H) | 5.00       |

| Allocation Mandate                                 | Weight (%) |
|--|------------|
| <b>Oct-2019</b>                                    |            |
| S&P 500 Index                                      | 15.00      |
| CRSP U.S. Large Cap Value TR Index                 | 5.00       |
| CRSP U.S. Large Cap Growth TR Index                | 5.00       |
| S&P MidCap 400 Index                               | 10.00      |
| S&P SmallCap 600 Index                             | 5.00       |
| FTSE Developed All Cap ex-U.S. Index               | 10.00      |
| FTSE Emerging Mkts All Cap China A Inclusion Index | 5.00       |
| Blmbg. Barc. U.S. Aggregate Index                  | 20.00      |
| Bloomberg Barclays 1-5 Year Gov/Credit Idx         | 2.50       |
| Blmbg. Barc. U.S. Corp High Yield                  | 10.00      |
| Blmbg. Barc. Global Agg ex-USD Flt Adj RIC Cpd (H) | 5.00       |
| Vanguard Spliced REIT Index                        | 5.00       |
| 90 Day U.S. Treasury Bill                          | 2.50       |
| <b>Mar-2020</b>                                    |            |
| S&P 500 Index                                      | 15.00      |
| CRSP U.S. Large Cap Value TR Index                 | 5.00       |
| CRSP U.S. Large Cap Growth TR Index                | 5.00       |
| S&P MidCap 400 Index                               | 10.00      |
| S&P SmallCap 600 Index                             | 5.00       |
| FTSE Developed All Cap ex-U.S. Index               | 7.50       |
| FTSE Emerging Mkts All Cap China A Inclusion Index | 5.00       |
| FTSE Global ex U.S. Small Cap Index (Net)          | 2.50       |
| Blmbg. Barc. U.S. Aggregate Index                  | 20.00      |
| Bloomberg Barclays 1-5 Year Gov/Credit Idx         | 2.50       |
| Blmbg. Barc. U.S. Corp High Yield                  | 10.00      |
| Blmbg. Barc. Global Agg ex-USD Flt Adj RIC Cpd (H) | 5.00       |
| Vanguard Spliced REIT Index                        | 5.00       |
| 90 Day U.S. Treasury Bill                          | 2.50       |



| <b>Mid Cap Index Policy</b>    |                   |
|--------------------------------|-------------------|
| <b>Allocation Mandate</b>      | <b>Weight (%)</b> |
| <b>Oct-2010</b>                |                   |
| Vanguard Spliced Mid Cap Index | 100.00            |
| <b>Dec-2018</b>                |                   |
| S&P MidCap 400 Index           | 100.00            |

| <b>Small Cap Index Policy</b>    |                   |
|----------------------------------|-------------------|
| <b>Allocation Mandate</b>        | <b>Weight (%)</b> |
| <b>Jul-2009</b>                  |                   |
| Vanguard Spliced Small Cap Index | 100.00            |
| <b>Dec-2018</b>                  |                   |
| S&P SmallCap 600 Index           | 100.00            |

**Vanguard Spliced REIT Index History**

MSCI US REIT Index adjusted to include a 2% cash position (Lipper Money Market Average) through April 30, 2009

MSCI US REIT Index through February 1, 2018

MSCI US Investable Market Real Estate 25/50 Transition Index through July 24, 2018

MSCI US Investable Market Real Estate 25/50 Index thereafter



|                                       |   |
|---------------------------------------|---|
| <b>Active Return</b>                  | - Arithmetic difference between the manager's performance and the designated benchmark return over a specified time period.   |
| <b>Alpha</b>                          | - A measure of the difference between a portfolio's actual performance and its expected return based on its level of risk as determined by beta. It determines the portfolio's non-systemic return, or its historical performance not explained by movements of the market.   |
| <b>Beta</b>                           | - A measure of the sensitivity of a portfolio to the movements in the market. It is a measure of the portfolio's systematic risk.   |
| <b>Consistency</b>                    | - The percentage of quarters that a product achieved a rate of return higher than that of its benchmark. Higher consistency indicates the manager has contributed more to the product's performance.  |
| <b>Distributed to Paid In (DPI)</b>   | - The ratio of money distributed to Limited Partners by the fund, relative to contributions. It is calculated by dividing cumulative distributions by paid in capital. This multiple shows the investor how much money they got back. It is a good measure for evaluating a fund later in its life because there are more distributions to measure against. |
| <b>Down Market Capture</b>            | - The ratio of average portfolio performance over the designated benchmark during periods of negative returns. A lower value indicates better product performance   |
| <b>Downside Risk</b>                  | - A measure similar to standard deviation that utilizes only the negative movements of the return series. It is calculated by taking the standard deviation of the negative quarterly set of returns. A higher factor is indicative of a riskier product.   |
| <b>Excess Return</b>                  | - Arithmetic difference between the manager's performance and the risk-free return over a specified time period.  |
| <b>Excess Risk</b>                    | - A measure of the standard deviation of a portfolio's performance relative to the risk free return.  |
| <b>Information Ratio</b>              | - This calculates the value-added contribution of the manager and is derived by dividing the active rate of return of the portfolio by the tracking error. The higher the Information Ratio, the more the manager has added value to the portfolio.   |
| <b>Public Market Equivalent (PME)</b> | - Designs a set of analyses used in the Private Equity Industry to evaluate the performance of a Private Equity Fund against a public benchmark or index.   |
| <b>R-Squared</b>                      | - The percentage of a portfolio's performance that can be explained by the behavior of the appropriate benchmark. A high R-Squared means the portfolio's performance has historically moved in the same direction as the appropriate benchmark.   |
| <b>Return</b>                         | - Compounded rate of return for the period.   |
| <b>Sharpe Ratio</b>                   | - Represents the excess rate of return over the risk free return divided by the standard deviation of the excess return. The result is an absolute rate of return per unit of risk. A higher value demonstrates better historical risk-adjusted performance.  |
| <b>Standard Deviation</b>             | - A statistical measure of the range of a portfolio's performance. It represents the variability of returns around the average return over a specified time period.   |
| <b>Total Value to Paid In (TVPI)</b>  | - The ratio of the current value of remaining investments within a fund, plus the total value of all distributions to date, relative to the total amount of capital paid into the fund to date. It is a good measure of performance before the end of a fund's life   |
| <b>Tracking Error</b>                 | - This is a measure of the standard deviation of a portfolio's returns in relation to the performance of its designated market benchmark.   |
| <b>Treynor Ratio</b>                  | - Similar to Sharpe ratio but utilizes beta rather than excess risk as determined by standard deviation. It is calculated by taking the excess rate of return above the risk free rate divided by beta to derive the absolute rate of return per unit of risk. A higher value indicates a product has achieved better historical risk-adjusted performance. |
| <b>Up Market Capture</b>              | - The ratio of average portfolio performance over the designated benchmark during periods of positive returns. A higher value indicates better product performance.   |



AndCo compiled this report for the sole use of the client for which it was prepared. AndCo is responsible for evaluating the performance results of the Total Fund along with the investment advisors by comparing their performance with indices and other related peer universe data that is deemed appropriate. AndCo uses the results from this evaluation to make observations and recommendations to the client.

AndCo uses time-weighted calculations which are founded on standards recommended by the CFA Institute. The calculations and values shown are based on information that is received from custodians. AndCo analyzes transactions as indicated on the custodian statements and reviews the custodial market values of the portfolio. As a result, this provides AndCo with a reasonable basis that the investment information presented is free from material misstatement. This methodology of evaluating and measuring performance provides AndCo with a practical foundation for our observations and recommendations. Nothing came to our attention that would cause AndCo to believe that the information presented is significantly misstated.

This performance report is based on data obtained by the client's custodian(s), investment fund administrator, or other sources believed to be reliable. While these sources are believed to be reliable, the data providers are responsible for the accuracy and completeness of their statements. Clients are encouraged to compare the records of their custodian(s) to ensure this report fairly and accurately reflects their various asset positions.

The strategies listed may not be suitable for all investors. We believe the information provided here is reliable, but do not warrant its accuracy or completeness. Past performance is not an indication of future performance. Any information contained in this report is for informational purposes only and should not be construed to be an offer to buy or sell any securities, investment consulting, or investment management services.

Additional information included in this document may contain data provided by from index databases, public economic sources and the managers themselves.

This document may contain data provided by Bloomberg Barclays. Bloomberg Barclays Index data provided by way of Barclays Live.

This document may contain data provided by Standard and Poor's. Nothing contained within any document, advertisement or presentation from S&P Indices constitutes an offer of services in jurisdictions where S&P Indices does not have the necessary licenses. All information provided by S&P Indices is impersonal and is not tailored to the needs of any person, entity or group of persons. Any returns or performance provided within any document is provided for illustrative purposes only and does not demonstrate actual performance. Past performance is not a guarantee of future investment results.

This document may contain data provided by MSCI, Inc. Copyright MSCI, 2017. Unpublished. All Rights Reserved. This information may only be used for your internal use, may not be reproduced or disseminated in any form and may not be used to create any financial instruments or products or any indices. This information is provided on an "as is" basis and the user of this information assumes the entire risk of any use it may make or permit to be made of this information. Neither MSCI, any of its affiliates or any other person involved in or related to compiling, computing or creating this information makes any express or implied warranties or representations with respect to such information or the results to be obtained by the use thereof, and MSCI, its affiliates and each such other person hereby expressly disclaim all warranties (including, without limitation, all warranties of originality, accuracy, completeness, timeliness, non-infringement, merchantability and fitness for a particular purpose) with respect to this information. Without limiting any of the foregoing, in no event shall MSCI, any of its affiliates or any other person involved in or related to compiling, computing or creating this information have any liability for any direct, indirect, special, incidental, punitive, consequential or any other damages (including, without limitation, lost profits) even if notified of, or if it might otherwise have anticipated, the possibility of such damages.

This document may contain data provided by Russell Investment Group. Russell Investment Group is the source owner of the data contained or reflected in this material and all trademarks and copyrights related thereto. The material may contain confidential information and unauthorized use, disclosure, copying, dissemination or redistribution is strictly prohibited. This is a user presentation of the data. Russell Investment Group is not responsible for the formatting or configuration of this material or for any inaccuracy in presentation thereof.

This document may contain data provided by Morningstar. All rights reserved. Use of this content requires expert knowledge. It is to be used by specialist institutions only. The information contained herein: (1) is proprietary to Morningstar and/or its content providers; (2) may not be copied, adapted or distributed; and (3) is not warranted to be accurate, complete or timely. Neither Morningstar nor its content providers are responsible for any damages or losses arising from any use of this information, except where such damages or losses cannot be limited or excluded by law in your jurisdiction. Past financial performance is not guarantee of future results.





**Clients first.**



CHICAGO | CLEVELAND | DALLAS | DETROIT | ORLANDO | PITTSBURGH | RENO

**AndCo Consulting** | (844) 44-ANDCO | *AndCoConsulting.com*