

Investment Performance Review  
Period Ending September 30, 2021

## **Butler County Employees Retirement Plan**

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## **3rd Quarter 2021 Market Environment**



### **The Economy**

- Growth in the US likely slowed during the 3<sup>rd</sup> quarter as the recovery continues to mature.
- Inflation remains well above the Federal Reserve Bank's (the Fed) average target of 2.0%. The annual rate of inflation dropped slightly to 5.3% in August, down from 5.4% in July.
- The demand for labor in the US remains strong as evidenced by the drop in the unemployment rate in September to 4.8%, down from 5.2% in August. Unemployment benefits granted under the March 2020 CARES Act expired in early September. Wage growth remains strong as employers remain challenged to fill job openings.
- Despite leaving interest rates unchanged at their most recent meeting, the Fed stated that it would begin tapering its asset purchases and being the process of evaluating when interest rates would start to rise.

### **Equity (Domestic and International)**

- Volatility increased in during the 3<sup>rd</sup> quarter as US markets climbed to new all-time highs in early September only to pull back towards the end of the period. A variety of factors contributed to the increase in volatility including concerns related to the Delta variant, supply chain shortages, higher US interest rates, rising inflation, and fiscal policies in Washington. Despite these concerns, growth led value in both large and mid-cap companies and large companies outperformed relative to smaller peers.
- Developed international equity markets outperformed their domestic counterparts during the 3<sup>rd</sup> quarter. Emerging markets dropped sharply on concerns related to increased regulatory oversight in China and the potential default of Evergrande, the largest Chinese property developer.

### **Fixed Income**

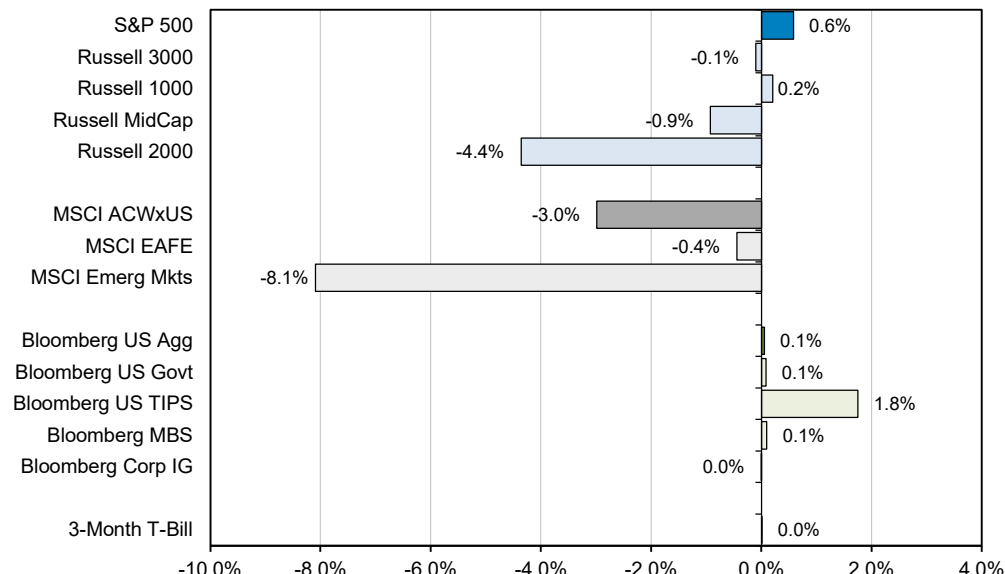
- Despite the continued concerns related to rising inflation and potential changes in Fed policies, US interest rates were essentially unchanged during the quarter. The US 10-Year Treasury bond rose only 2 basis points (0.02%) for the quarter to close at a yield of 1.48%.
- Performance across most US bond market sectors was muted during the quarter and was driven largely by the Fed's messaging concerning the potential for beginning the process of raising interest rates in late-2022.
- Lower quality corporate bonds outperformed higher quality sectors during the quarter. The combination of larger relative coupons and shorter maturity profiles acted as tailwinds for lower quality during the period.

### **Market Themes**

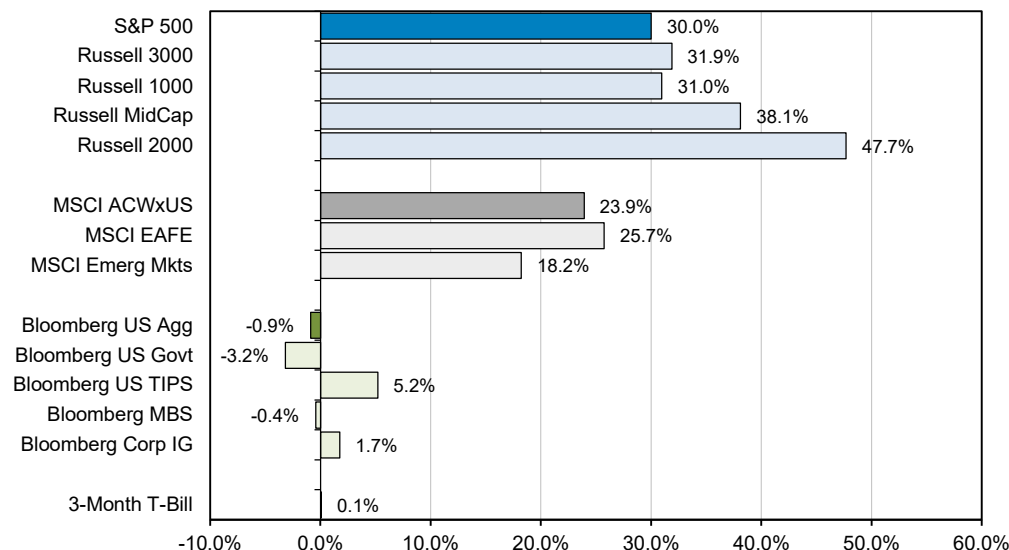
- While global central bank monetary policy remains accommodative, both the Fed and the Bank of England hinted that rate increases would most likely be warranted in the near future. Historically, rising interest rates have served as a headwind to equity markets, particularly for expansion-oriented growth companies.
- The combination of supply chain disruptions and labor shortages is creating increased pressure on corporate margins. While earnings were generally better than expected during the period, the longer these challenges persist, the higher the likelihood that earnings will be negatively affected moving forward.
- Measures of inflation in both the US and Europe remain well above their respective targets. Persistent increases in food and energy prices have the potential to act as a headwind to consumers in coming periods as wages have not kept pace with rising prices.

- US equity markets experienced disparate returns during the 3rd quarter of 2021. The primary factors that drove the market performance during the period were concerns related to rising inflation and potential changes in the Fed's monetary policy. Despite rising US interest rates, growth-oriented companies maintained their market leadership relative to value. For the period, large cap companies returned 0.6%, compared to -0.9% for mid-caps and -4.4% for small company stocks.
- Similar to domestic markets, broad international equity markets also posted disappointing returns for the 3rd quarter. While concerns related to the spread of COVID began to wane, the key drivers of performance were rising inflation, rising interest rates, and the potential default of Evergrande in China. During the period, the MSCI EAFE Index posted a return of -0.4% while the MSCI Emerging Markets Index returned a weak -8.1%.
- For the quarter, bond market returns were muted as interest rates across the yield curve remained largely unchanged. While the Bloomberg (BB) US Aggregate Index returned 0.1%, the outlier was US TIPS which returned 1.8% on concerns about potential rising inflation.
- Returns over the trailing 1-year were strong across all broad US equity markets. The continuation of supportive monetary policy from the Fed and the reopening of local economies as the pandemic receded were the primary performance drivers during the period. Domestic small cap stocks posted highest return for the trailing 1-year period, returning 47.7%. US large cap performance was also stellar with a return of 30.0% over the trailing 1-year period.
- International markets also performed well but lagged relative to their domestic counterparts. Over the trailing 1-year period, the MSCI EAFE Index returned 25.7% while the MSCI Emerging Markets Index returned a lower 18.2%. The combination of rising inflation and developed market interest rates were the primary headwinds during the period.
- Bond market returns over the trailing 1-year period were muted with the Bloomberg US Aggregate Index returning -0.9%. US TIPS continued to lead the way as investors remain concerned about the potential for rising inflation. The TIPS Index returned 5.2% for the period while investment grade corporate bonds returned 1.7%.

### Quarter Performance



### 1-Year Performance

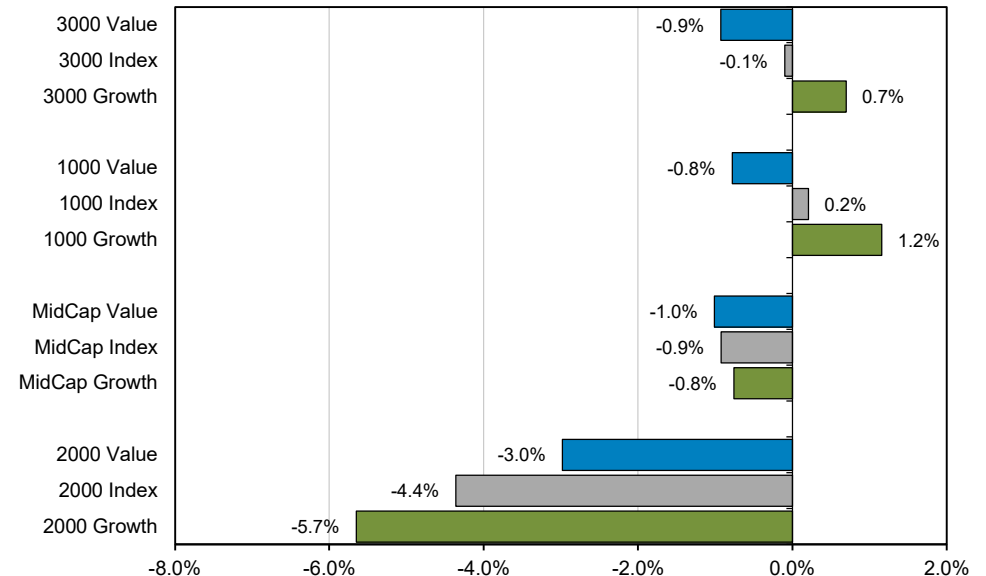


Source: Investment Metrics

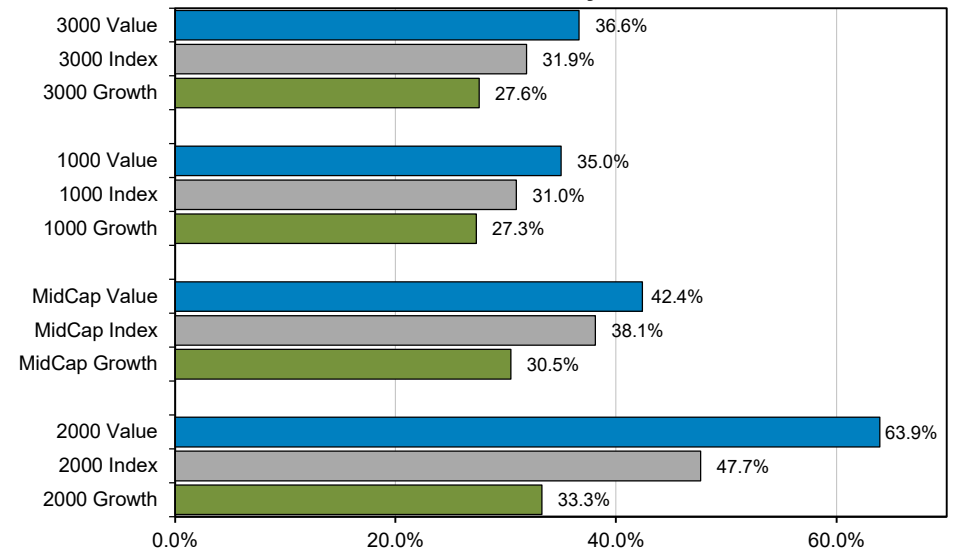


- The market's upward momentum waned during the quarter as most US equity benchmarks posted their first losing quarter since the drawdown at the onset of the pandemic. Large cap stocks continued to lead the equity markets, followed by mid and small cap issues. The Russell 1000 Index returned 0.2% versus returns of -0.9% for the Russell Mid Cap Index and -4.4% for the Russell 2000 Index.
- Except for small cap benchmarks, Growth continued to outpace value for the second consecutive quarter. The Russell 1000 Growth Index was the best performing style index for the quarter, posting a return of 1.2% and Mid cap growth performance was negative, returning -0.8%. However, in small cap stocks, value outpaced growth for the second consecutive quarter with the Russell 2000 Value Index returning -3.0% versus a weaker -5.7% for the Russell 2000 Growth Index.
- Performance across all market capitalizations and styles was very strong over the trailing 1-year period led by higher beta small cap stocks.
- Despite the recent relative outperformance by growth, value stocks outperformed across all market capitalizations over the trailing 1-year period. As the strong economic recovery continued, small cap value stocks posted outsized performance with the Russell 2000 Value Index returning 63.9%. The dispersion between value and growth was also most pronounced for small cap benchmarks (30.6%).

**Quarter Performance - Russell Style Series**



**1-Year Performance - Russell Style Series**

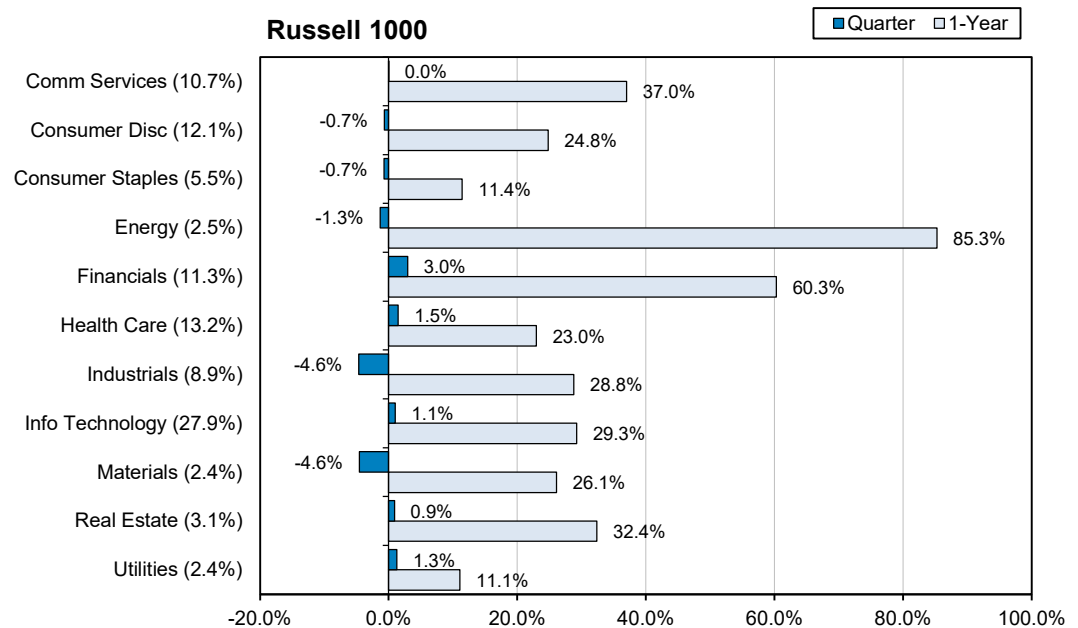


Source: Investment Metrics



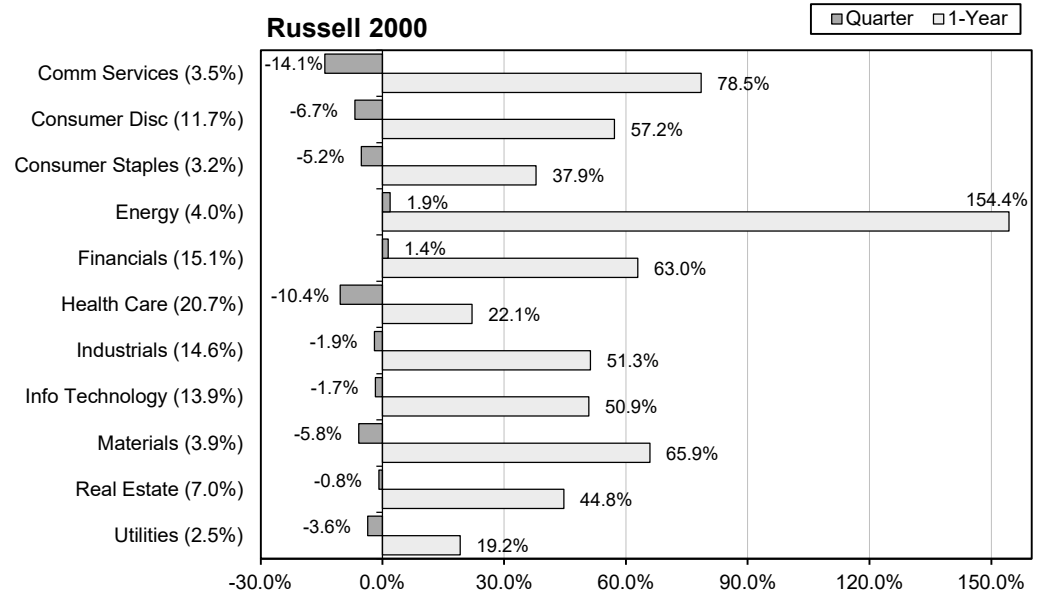
- Sector performance was mixed and muted during the 3rd quarter with only five of the eleven large cap economic sectors realizing positive returns. Five sectors outpaced the return of the broad index during the period.
- Financials were the best performing sector during the quarter returning 3.0%. Rising interest rates and a steepening yield curve should boost banks' profits in the coming quarters. Health Care also performed well, led by the companies developing treatments for COVID-19. The Industrials and Materials sectors were negative during the period, with both sectors returning -4.6%. Supply chain disruptions and concerns about shrinking corporate margins acted as headwinds for performance in these sectors.
- For the full year, all eleven sectors produced positive returns. Sector performance for the period was led by Energy which jumped 85.3% as oil prices recovered from their pandemic lows. Four of the eleven sectors outperformed the broad large cap benchmark: Energy (85.3%), Financials (60.3%), Communication Services (37.0%), and Real Estate (32.4%). Although they still produced double-digit returns, the weakest economic sectors in the Russell 1000 for the trailing year were Utilities (11.1%) and Consumer Staples (11.4%).

**Russell 1000**



- Small cap sector performance had a more challenging quarter with only two of the eleven small cap sectors posted positive performance. Energy (1.9%) and Financials (1.4%) benefited from rising energy prices and higher interest rates. Six of the Russell 2000 Index sectors managed to outpace the core benchmark for the quarter. Dispersion between the benchmark's sectors was wide during the period with Energy (1.9%) and Communication Services (-14.1%) defining the broad 16.0% band.
- For full 1-year period, seven of the eleven sectors outperformed the broad benchmark: Energy (154.4%), Communication Services (78.5%), Materials (65.9%), Financials (63.0%), Consumer Discretionary (57.2%), Industrials (51.3%), and Info Technology (50.9%). The combination of continued economic growth, accommodative monetary policies, rising energy prices, and increased inflationary pressures were the primary catalysts for the exceptional trailing 1-year performance.

**Russell 2000**



Source: Morningstar Direct

As a result of the GICS classification changes on 9/28/2018 and certain associated reporting limitations, sector performance represents backward looking performance for the prior year of each sector's current constituency, post creation of the Communication Services sector.



**The Market Environment**  
**Top 10 Index Weights & Quarterly Performance for the Russell 1000 & 2000**  
As of September 30, 2021

Top 10 Weighted Stocks				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
Apple Inc	5.40%	3.5%	23.0%	Information Technology
Microsoft Corp	5.17%	4.3%	35.3%	Information Technology
Amazon.com Inc	3.47%	-4.5%	4.3%	Consumer Discretionary
Facebook Inc Class A	1.98%	-2.4%	29.6%	Communication Services
Alphabet Inc Class A	1.96%	9.5%	82.4%	Communication Services
Alphabet Inc Class C	1.82%	6.3%	81.4%	Communication Services
Tesla Inc	1.50%	14.1%	80.8%	Consumer Discretionary
Berkshire Hathaway Inc Class B	1.23%	-1.8%	28.2%	Financials
NVIDIA Corp	1.21%	3.6%	53.3%	Information Technology
JPMorgan Chase & Co	1.18%	5.8%	74.8%	Financials

Top 10 Performing Stocks (by Quarter)				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
Upstart Holdings Inc Ordinary Shares	0.03%	153.4%	N/A	Financials
Moderna Inc	0.32%	63.8%	444.0%	Health Care
Albertsons Companies Inc Class A	0.01%	59.1%	129.8%	Consumer Staples
Atlassian Corporation PLC A	0.13%	52.4%	115.3%	Information Technology
Paylocity Holding Corp	0.03%	47.0%	73.7%	Information Technology
Bill.com Holdings Inc Ordinary Shares	0.05%	45.7%	166.1%	Information Technology
Repligen Corp	0.04%	44.8%	95.9%	Health Care
Accelaron Pharma Inc	0.02%	37.1%	52.9%	Health Care
Paycom Software Inc	0.06%	36.4%	59.3%	Information Technology
Datadog Inc Class A	0.08%	35.8%	38.4%	Information Technology

Bottom 10 Performing Stocks (by Quarter)				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
GoHealth Inc Ordinary Shares - Class A	0.00%	-55.1%	-61.4%	Financials
Skillz Inc Ordinary Shares - Class A	0.01%	-54.8%	N/A	Communication Services
Boston Beer Co Inc Class A	0.01%	-50.1%	-42.3%	Consumer Staples
StoneCo Ltd Class A	0.02%	-48.2%	-34.4%	Information Technology
TuSimple Hldgs Inc Ord Shrs - Class A	0.00%	-47.9%	N/A	Industrials
NovoCure Ltd	0.03%	-47.6%	4.4%	Health Care
Vroom Inc Ordinary Shares	0.01%	-47.3%	-57.4%	Consumer Discretionary
Virgin Galactic Holdings Inc Shs A	0.01%	-45.0%	31.6%	Industrials
ChargePoint Hldgs Inc Ord Shrs - A	0.01%	-42.5%	N/A	Industrials
Signify Health Inc Ord Shrs - Class A	0.00%	-41.3%	N/A	Health Care

Top 10 Weighted Stocks				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
AMC Entmt Holdings Inc Class A	0.67%	-32.9%	708.1%	Communication Services
Intellia Therapeutics Inc	0.32%	-17.1%	574.8%	Health Care
Crocs Inc	0.30%	23.1%	235.8%	Consumer Discretionary
Lattice Semiconductor Corp	0.30%	15.1%	123.2%	Information Technology
Ovintiv Inc	0.29%	4.6%	310.2%	Energy
Tetra Tech Inc	0.27%	22.6%	57.3%	Industrials
Scientific Games Corp Ordinary Shares	0.27%	7.3%	138.0%	Consumer Discretionary
Rexnord Corp	0.27%	28.7%	117.1%	Industrials
Biohaven Pharm. Holding Co Ltd	0.26%	43.1%	113.7%	Health Care
Asana Inc Ordinary Shares - Class A	0.26%	67.4%	260.6%	Information Technology

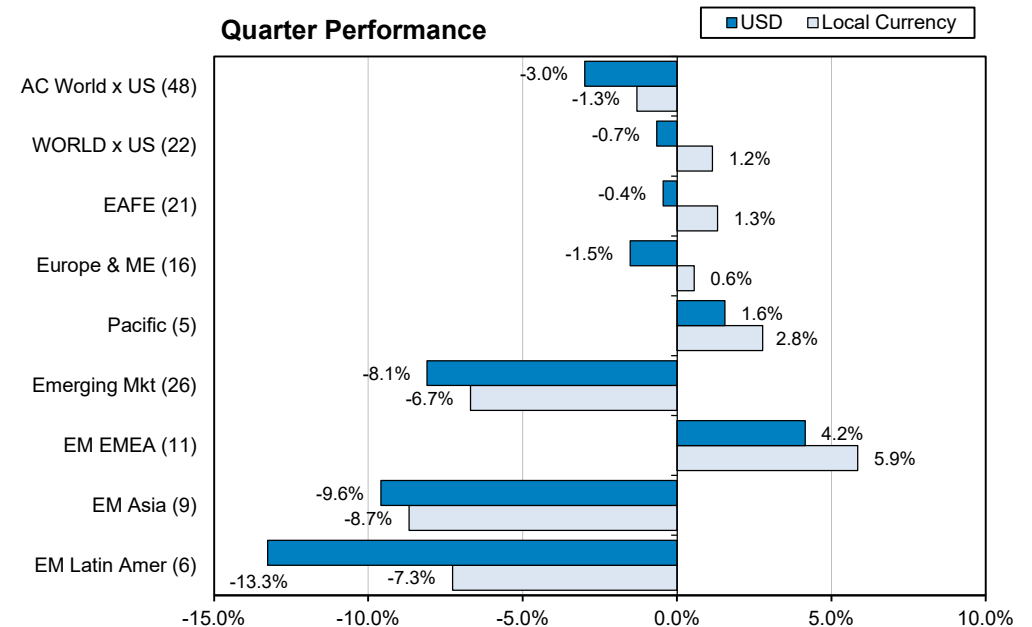
Top 10 Performing Stocks (by Quarter)				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
State Auto Financial Corp	0.03%	198.2%	276.9%	Financials
Fulcrum Therapeutics Inc	0.03%	169.2%	255.7%	Health Care
IVERIC bio Inc	0.06%	157.4%	187.9%	Health Care
Kadmon Holdings Inc	0.05%	125.1%	122.2%	Health Care
GreenSky Inc Class A	0.03%	101.4%	151.8%	Information Technology
Dynavax Technologies Corp	0.07%	95.0%	344.7%	Health Care
Grid Dynamics Hldgs Inc Ord Shrs A	0.04%	94.4%	278.0%	Information Technology
Peabody Energy Corp	0.04%	86.5%	543.0%	Energy
Trillium Therapeutics Inc	0.06%	81.2%	24.2%	Health Care
Cytokinetics Inc	0.10%	80.6%	65.1%	Health Care

Bottom 10 Performing Stocks (by Quarter)				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
GT Biopharma Inc	0.00%	-100.0%	N/A	Health Care
Forte Biosciences Inc Ordinary Shares	0.00%	-91.2%	-93.9%	Health Care
Eargo Inc Ordinary Shares	0.00%	-83.1%	N/A	Health Care
Sesen Bio Inc	0.01%	-82.8%	-43.3%	Health Care
Ardelyx Inc	0.00%	-82.6%	-74.9%	Health Care
MedAvail Holdings Inc Ordinary Shares	0.00%	-76.2%	N/A	Consumer Staples
Seres Therapeutics Inc	0.02%	-70.8%	-75.4%	Health Care
Ontrak Inc	0.00%	-69.1%	-83.3%	Health Care
InnovAge Holding Corp	0.00%	-69.0%	N/A	Health Care
Ashford Hospitality Trust Inc	0.01%	-67.7%	-10.8%	Real Estate

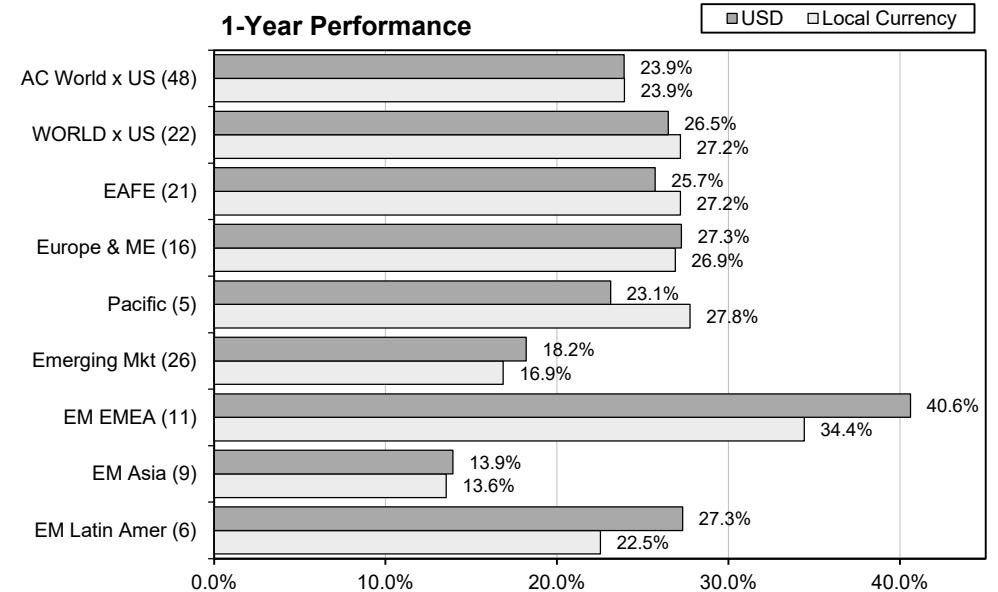
Source: Morningstar Direct



- Although some regional benchmarks posted positive performance for the quarter, the US dollar (USD) performance for the broad international equity benchmarks were negative. For the period, developed markets outperformed emerging markets in both USD and local currency. The MSCI EAFE Index returned -0.4% in USD and 1.3% in local currency terms for the period while the MSCI Emerging Markets Index posted a weak -8.1% return in USD and -6.7% in local currency terms.



- The trailing 1-year results for international developed and emerging markets were positive across all regions and currencies. The MSCI EAFE Index returned 25.7% in USD and 27.2% in local currency terms, while the MSCI Emerging Markets Index returned 18.2% in USD and 16.9% in local currency terms. Performance within the emerging markets regions was led by the EMEA region which returned 40.6% in USD and 34.4% in local terms.



Source: MSCI Global Index Monitor (Returns are Net)





**The Market Environment**  
**US Dollar International Index Attribution & Country Detail**  
As of September 30, 2021

MSCI - EAFE	Sector Weight	Quarter Return	1-Year Return
Communication Services	4.8%	-4.1%	16.2%
Consumer Discretionary	12.7%	-3.6%	31.7%
Consumer Staples	10.2%	-3.4%	9.0%
Energy	3.5%	8.7%	62.1%
Financials	17.2%	1.8%	44.5%
Health Care	12.7%	0.5%	9.7%
Industrials	15.8%	1.3%	28.1%
Information Technology	9.6%	5.0%	36.2%
Materials	7.3%	-5.7%	25.2%
Real Estate	2.9%	-3.1%	20.2%
Utilities	3.3%	-4.6%	4.4%
<b>Total</b>	<b>100.0%</b>	<b>-0.4%</b>	<b>25.7%</b>

MSCI - ACWixUS	Sector Weight	Quarter Return	1-Year Return
Communication Services	6.3%	-9.9%	9.0%
Consumer Discretionary	12.7%	-11.5%	9.9%
Consumer Staples	8.5%	-3.4%	10.0%
Energy	4.9%	6.7%	55.0%
Financials	19.3%	1.1%	42.5%
Health Care	9.5%	-1.9%	10.1%
Industrials	12.2%	0.2%	27.9%
Information Technology	13.2%	-1.0%	36.7%
Materials	8.0%	-5.5%	27.1%
Real Estate	2.5%	-5.7%	12.7%
Utilities	3.0%	-1.9%	10.5%
<b>Total</b>	<b>100.0%</b>	<b>-3.0%</b>	<b>23.9%</b>

MSCI - Emerging Mkt	Sector Weight	Quarter Return	1-Year Return
Communication Services	10.3%	-15.1%	1.9%
Consumer Discretionary	14.7%	-22.9%	-16.9%
Consumer Staples	5.9%	-4.4%	13.4%
Energy	5.9%	9.1%	44.5%
Financials	19.5%	1.0%	35.0%
Health Care	5.0%	-13.0%	12.9%
Industrials	4.9%	-6.5%	31.9%
Information Technology	20.9%	-5.9%	37.3%
Materials	8.7%	-4.8%	46.1%
Real Estate	2.1%	-14.2%	-9.4%
Utilities	2.3%	7.4%	35.2%
<b>Total</b>	<b>100.0%</b>	<b>-8.1%</b>	<b>18.2%</b>

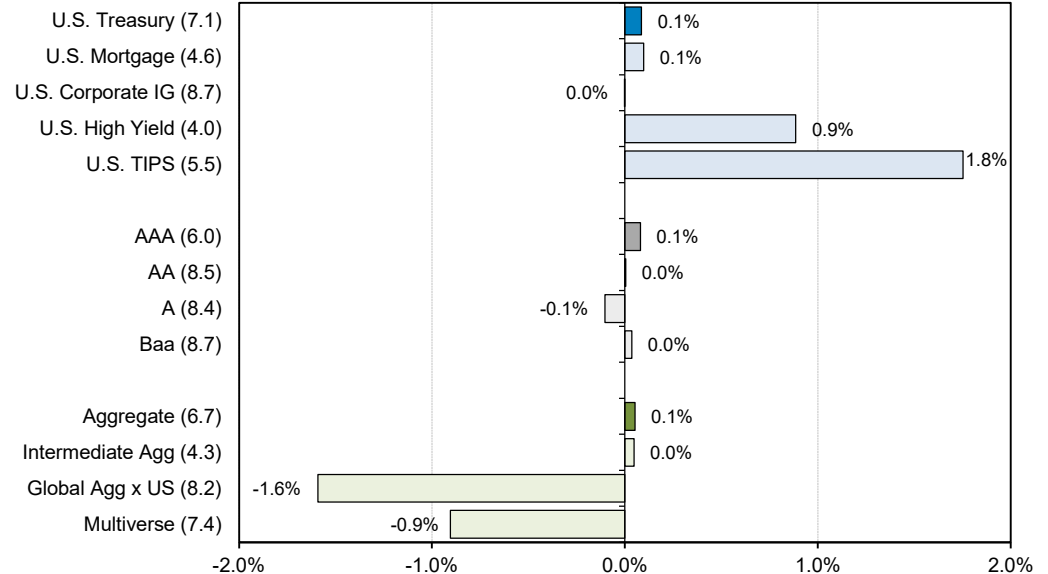
Country	MSCI-EAFE Weight	MSCI-ACWixUS Weight	Quarter Return	1- Year Return
Japan	24.2%	15.3%	4.6%	22.1%
United Kingdom	14.4%	9.1%	-0.3%	31.2%
France	11.2%	7.1%	-2.0%	34.3%
Switzerland	9.5%	6.0%	-3.3%	14.5%
Germany	9.1%	5.8%	-4.3%	16.5%
Australia	6.9%	4.4%	-3.0%	31.7%
Netherlands	4.8%	3.1%	3.4%	46.0%
Sweden	3.7%	2.3%	-2.2%	31.4%
Hong Kong	3.0%	1.9%	-9.4%	15.0%
Denmark	2.6%	1.7%	2.6%	28.3%
Italy	2.5%	1.6%	-1.1%	33.4%
Spain	2.4%	1.5%	-3.3%	31.4%
Singapore	1.2%	0.7%	0.0%	30.0%
Finland	1.0%	0.7%	-3.1%	16.6%
Belgium	0.9%	0.6%	-5.6%	18.8%
Ireland	0.7%	0.5%	0.0%	21.8%
Norway	0.7%	0.4%	5.2%	45.4%
Israel	0.6%	0.4%	2.8%	28.4%
New Zealand	0.2%	0.2%	1.8%	-2.3%
Austria	0.2%	0.1%	10.4%	98.2%
Portugal	0.2%	0.1%	3.6%	19.5%
<b>Total EAFE Countries</b>	<b>100.0%</b>	<b>63.3%</b>	<b>-0.4%</b>	<b>25.7%</b>
Canada		7.1%	-2.5%	33.9%
<b>Total Developed Countries</b>		<b>70.4%</b>	<b>-0.7%</b>	<b>26.5%</b>
China		10.1%	-18.2%	-7.3%
Taiwan		4.4%	-2.1%	43.3%
Korea		3.7%	-13.2%	27.8%
India		3.6%	12.6%	53.1%
Brazil		1.3%	-20.2%	21.0%
Russia		1.2%	9.5%	59.4%
Saudi Arabia		1.0%	8.2%	47.7%
South Africa		0.9%	-5.8%	27.2%
Mexico		0.6%	1.4%	51.1%
Thailand		0.5%	-3.6%	20.1%
Indonesia		0.4%	9.4%	26.4%
Malaysia		0.4%	0.2%	1.4%
United Arab Emirates		0.2%	6.4%	50.6%
Poland		0.2%	1.2%	29.5%
Qatar		0.2%	7.3%	15.0%
Philippines		0.2%	-3.6%	13.3%
Kuwait		0.2%	9.0%	27.8%
Chile		0.1%	-7.8%	18.7%
Hungary		0.1%	7.7%	72.8%
Turkey		0.1%	1.9%	5.2%
Argentina		0.1%	22.1%	47.2%
Colombia		0.1%	10.2%	31.7%
Peru		0.1%	-11.0%	-5.8%
Greece		0.1%	2.0%	30.4%
Czech Republic		0.0%	14.2%	85.2%
Egypt		0.0%	4.3%	-13.7%
<b>Total Emerging Countries</b>		<b>29.5%</b>	<b>-8.1%</b>	<b>18.2%</b>
<b>Total ACWixUS Countries</b>		<b>100.0%</b>	<b>-3.0%</b>	<b>23.9%</b>

Source: Morningstar Direct, MSCI Global Index Monitor (Returns are Net in USD)  
As a result of the GICS classification changes on 9/28/2018 and certain associated reporting limitations, sector performance represents backward looking performance for the prior year of each sector's current constituency, post creation of the Communication Services sector.

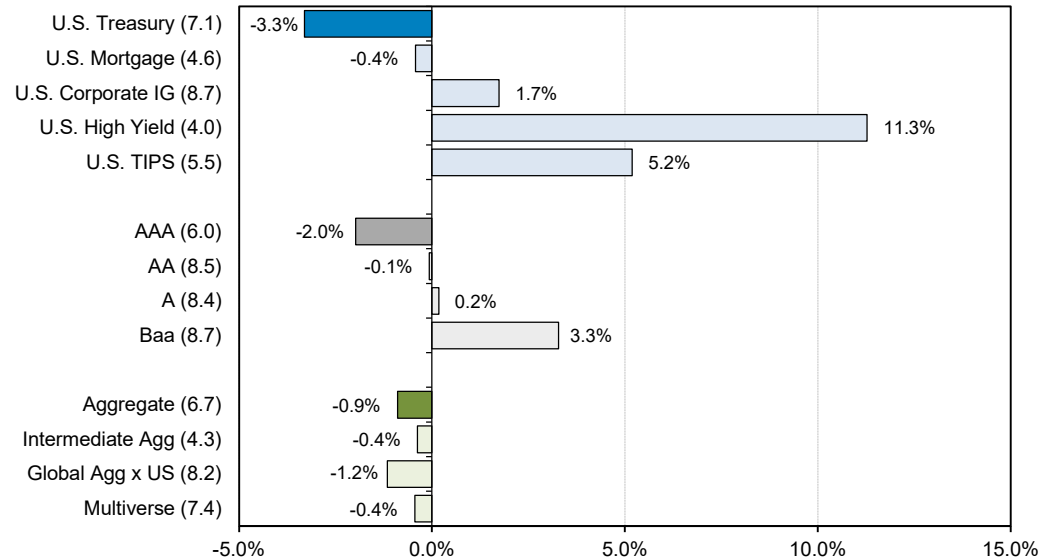


- Fixed income market yields were broadly unchanged during the 3rd quarter. The Bloomberg US Aggregate Bond Index returned a muted 0.1% for the period.
- Digging deeper into bond market sectors, while the US Corporate Investment Grade Index return was largely unchanged (0.0%), lower quality High Yield benchmark delivered positive a positive return of 0.9%. High yield issues benefited from the asset category's overall shorter maturity profile and higher coupon rate.
- The outlier during the quarter was US TIPS issues, which returned 1.8%. Expectations for inflation to persist above the Fed's stated average target of 2.0% was the catalyst for the solid performance.
- Outside of domestic markets, the Bloomberg Global Aggregate ex US Index posted a -1.6% return for the quarter. A significant contributor to the global bond's index performance was UK issues. Interest rates in the UK moved higher during the period as the Bank of England began to message the potential for rate increases in the near future.
- Over the trailing 1-year period, returns of higher quality government and mortgage-backed bonds were disappointing. US Treasury bonds declined by -3.3% and the mortgage-backed benchmark returned a less negative -0.4%.
- In contrast, corporate bonds delivered solid performance, led by lower quality high yield bonds. The Bloomberg US Corporate IG Index returned 1.7% while the Blomberg US High Yield Bond Index returned a strong 11.3%.
- US TIPS continued to perform well for the trailing 1-year period with the index returning 5.2%. Persistent concerns about rising inflation acted as a tailwind for TIPS issues.

#### Quarter Performance



#### 1-Year Performance

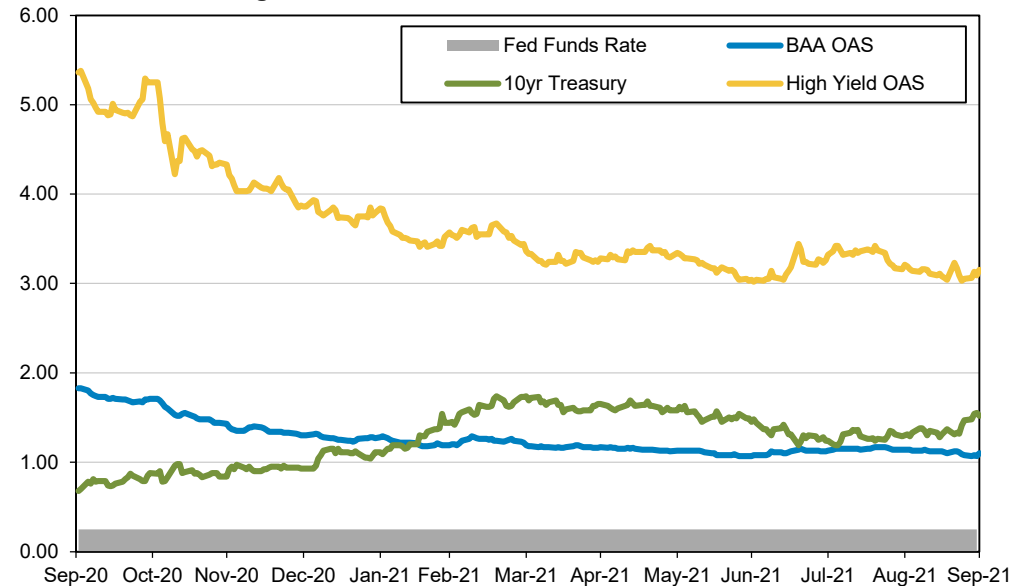


Source: Bloomberg

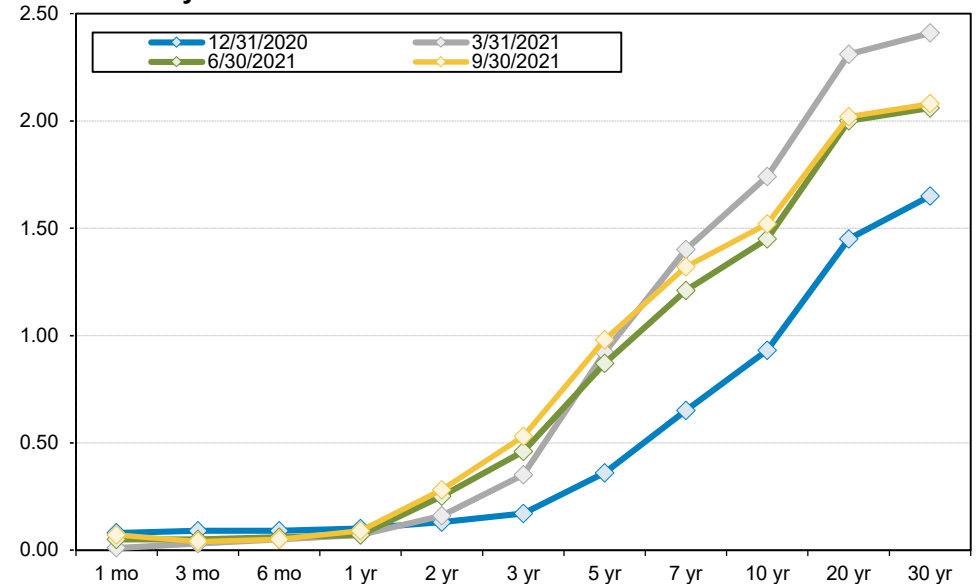


- The gray band across the graph represents the range of the Fed Funds Rate. Over the past year, the Fed's target rate range has remained unchanged at 0.00% to 0.25%. During its September meeting, the Federal Open Market Committee (FOMC) reiterated its commitment to keeping interest rates near zero while signaling that it would begin tapering its asset purchase program. Importantly, the Fed also indicated it would begin considering raising US interest rates in the near future.
- The yield on the US 10-year Treasury (green line) continued to rise during the year as the economy recovered. After reaching a high of 1.74% during the 1st quarter of 2021, interest rates have largely moved in a range-bound, sideways pattern.
- The blue line illustrates changes in the BAA OAS (Option Adjusted Spread). This measure quantifies the additional yield premium investors require to purchase and hold non-Treasury investment grade issues. As the pace of the economic recovery quickened, spreads narrowed, indicating that investors remain comfortable owning credit as the probability of corporate defaults remains low. While nearly triple the BAA OAS, the High Yield OAS shows a similar willingness by investors to hold non-Treasury debt.
- The lower graph provides a snapshot of the US Treasury yield curve at the end of each of the last four quarters. Beginning in the 4th quarter of 2020, longer-term interest rates began to move higher as investors anticipated improving economic conditions. Interest rates peaked in the 1st quarter as economic growth surprised to the upside. Since then, longer-term US interest rates have remained relatively steady.

**1-Year Trailing Market Rates**



**Treasury Yield Curve**



Source: US Department of Treasury, FRED (Federal Reserve of St. Louis)

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

# Comparative Performance

## Total Fund

As of September 30, 2021

### Comparative Performance Trailing Returns

	QTR		FYTD		1 YR		2 YR		3 YR		5 YR		10 YR		15 YR		Inception	Inception Date	
Total Fund Performance	-0.74	(85)	8.55	(47)	20.05	(50)	11.89	(91)	9.48	(89)	9.13	(87)	10.05	(49)	7.33	(50)	6.75	(28)	01/01/2001
Total Fund Policy	-0.48	(69)	8.65	(43)	20.64	(44)	12.89	(83)	9.94	(84)	9.47	(86)	10.22	(40)	7.56	(27)	6.87	(26)	
Allocation Index	-0.73	(85)	8.68	(42)	20.21	(49)	12.00	(91)	9.33	(90)	9.26	(87)	N/A		N/A		N/A		
All Public Plans-Total Fund Median	-0.36		8.49		20.03		14.95		11.14		10.75		10.04		7.32		6.49		
All Public Plan Sponsor Universes with 50% or Less Equities																			
Total Fund Performance	-0.74	(91)	8.55	(20)	20.05	(12)	11.89	(46)	9.48	(47)	9.13	(45)	10.05	(22)	7.33	(N/A)	6.75	(N/A)	01/01/2001
Total Fund Policy	-0.48	(88)	8.65	(19)	20.64	(11)	12.89	(38)	9.94	(43)	9.47	(41)	10.22	(19)	7.56	(N/A)	6.87	(N/A)	
All Public Plans =< 50% Equities Median	-0.08		6.26		13.89		11.06		9.10		8.85		9.29		N/A		N/A		
All Public Plan Sponsor Universes with 60% or More Equities																			
Total Fund Performance	-0.74	(86)	8.55	(63)	20.05	(63)	11.89	(98)	9.48	(97)	9.13	(96)	10.05	(52)	7.33	(51)	6.75	(24)	01/01/2001
Total Fund Policy	-0.48	(68)	8.65	(58)	20.64	(56)	12.89	(96)	9.94	(95)	9.47	(96)	10.22	(45)	7.56	(26)	6.87	(22)	
All Public Plans >=60% Equities Median	-0.38		9.00		20.80		15.29		11.40		11.13		10.08		7.33		6.26		

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



# Comparative Performance

## Total Fund

As of September 30, 2021

	QTR		FYTD		1 YR		2 YR		3 YR		5 YR		10 YR		15 YR		Inception	Inception Date
Domestic Equity																		
Total Fund Domestic Equity	-0.73		15.90		35.19		19.84		13.58		14.74		N/A		N/A		12.00	07/01/2014
Twin Capital Enhanced Index	-0.04	(55)	15.12	(78)	27.87	(88)	20.29	(55)	13.99	(50)	15.22	(60)	N/A		N/A		13.52 (70)	06/01/2013
S&P 500 Index	0.58	(21)	15.92	(55)	30.00	(63)	22.35	(32)	15.99	(36)	16.90	(35)	16.63	(44)	10.37	(51)	14.60 (35)	
IM U.S. Large Cap Enhanced Index Equity (SA+CF) Median	0.26		16.41		30.51		20.94		13.88		15.70		16.43		10.37		14.12	
Vanguard Inst'l Index Fund (VINIX)	0.57	(17)	15.89	(11)	N/A		N/A		N/A		N/A		N/A		N/A		N/A	11/01/2020
S&P 500 Index	0.58	(1)	15.92	(2)	30.00	(2)	22.35	(4)	15.99	(4)	16.90	(3)	16.63	(2)	10.37	(3)	33.56 (5)	
IM S&P 500 Index (MF) Median	0.51		15.61		29.57		21.94		15.62		16.50		16.11		9.90		33.13	
Vanguard Growth Index (VIGIX)	1.38	(18)	14.93	(24)	28.09	(23)	33.08	(22)	22.78	(19)	22.17	(36)	19.31	(28)	N/A		16.83 (24)	05/01/2010
Vanguard Growth Index Hybrid	1.39	(17)	14.96	(23)	28.13	(22)	33.12	(21)	22.82	(19)	22.20	(36)	19.38	(26)	13.15	(28)	16.90 (22)	
Russell 1000 Growth Index	1.16	(24)	14.30	(33)	27.32	(33)	32.33	(29)	22.00	(25)	22.84	(24)	19.68	(20)	13.33	(23)	17.28 (14)	
IM U.S. Large Cap Growth Equity (MF) Median	0.46		13.03		26.04		30.51		20.59		21.20		18.52		12.38		15.81	
Vanguard Value Index (VIVIX)	-0.94	(59)	15.71	(61)	32.51	(68)	13.20	(61)	9.88	(46)	12.16	(25)	14.07	(15)	N/A		13.48 (15)	07/01/2009
Vanguard Value Index Hybrid	-0.94	(60)	15.72	(61)	32.53	(68)	13.18	(61)	9.88	(46)	12.16	(25)	14.11	(14)	8.04	(27)	13.53 (15)	
Russell 1000 Value Index	-0.78	(54)	16.14	(57)	35.01	(53)	13.24	(60)	10.07	(41)	10.94	(59)	13.51	(29)	7.52	(44)	13.04 (22)	
IM U.S. Large Cap Value Equity (MF) Median	-0.68		16.87		35.64		13.73		9.75		11.29		12.91		7.34		12.25	
Vanguard Mid-Cap 400 Index Fund I (VSPMX)	-1.78	(75)	15.47	(55)	43.60	(20)	18.49	(35)	N/A		N/A		N/A		N/A		14.48 (50)	12/01/2018
S&P MidCap 400 Index	-1.76	(75)	15.52	(54)	43.68	(20)	18.57	(34)	11.08	(51)	12.97	(31)	14.72	(21)	10.38	(5)	14.55 (49)	
IM U.S. Mid Cap Core Equity (MF) Median	-0.85		15.80		38.21		16.35		11.10		11.69		13.24		8.64		14.39	
Vanguard Small-Cap 600 Index I (VSMSX)	-2.86	(63)	20.01	(31)	57.59	(25)	20.31	(36)	N/A		N/A		N/A		N/A		13.83 (43)	12/01/2018
S&P SmallCap 600 Index	-2.84	(63)	20.05	(30)	57.64	(25)	20.24	(38)	9.44	(46)	13.57	(21)	15.69	(7)	10.30	(6)	13.80 (43)	
IM U.S. Small Cap Core Equity (MF) Median	-2.28		17.33		49.87		19.06		9.14		11.82		13.47		8.60		13.25	

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



# Comparative Performance

## Total Fund

As of September 30, 2021

	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>-3.40</b>	<b>6.26</b>	<b>24.43</b>	<b>13.17</b>	<b>8.24</b>	<b>8.79</b>	<b>N/A</b>	<b>N/A</b>	<b>4.90</b>	<b>07/01/2014</b>
Vanguard FTSE AW ex-US SC Index (VFSNX)	-1.37 (61)	10.47 (87)	30.13 (68)	N/A	N/A	N/A	N/A	N/A	45.69 (24)	04/01/2020
FTSE Global ex U.S. Small Cap Index (Net)	-0.80 (44)	11.18 (81)	31.07 (59)	17.33 (34)	8.74 (35)	8.89 (51)	N/A	N/A	45.83 (21)	
IM International SMID Cap Core Equity (MF) Median	-1.10	11.98	31.99	16.74	7.36	8.92	8.99	6.07	44.02	
Vanguard Developed Markets Index (VTMNX)	-1.56 (48)	8.20 (38)	26.59 (33)	13.70 (47)	8.19 (47)	9.21 (38)	8.67 (40)	N/A	7.91 (46)	07/01/2009
Vanguard Spliced Developed ex U.S. Index (Net)	-1.06 (39)	8.80 (31)	27.38 (28)	14.02 (44)	8.31 (45)	9.33 (36)	8.57 (43)	4.40 (49)	7.92 (45)	
MSCI EAFE (Net) Index	-0.45 (24)	8.35 (36)	25.73 (40)	12.41 (60)	7.62 (54)	8.81 (47)	8.10 (55)	4.10 (56)	7.54 (55)	
IM International Multi-Cap Equity (MF) Median	-1.66	7.51	24.50	13.36	7.99	8.68	8.26	4.36	7.69	
Vanguard Emerging Markets Index (VEMIX)	-6.97 (43)	1.33 (41)	18.42 (56)	14.03 (55)	9.62 (49)	8.71 (52)	6.29 (49)	N/A	3.60 (58)	10/01/2010
FTSE Emerging Mkts All Cap China A Inclusion Index	-6.31 (36)	2.21 (38)	20.14 (46)	14.86 (47)	10.22 (42)	9.30 (42)	6.56 (44)	6.34 (33)	4.22 (46)	
MSCI Emerging Markets (Net) Index	-8.09 (58)	-1.25 (58)	18.20 (58)	14.31 (52)	8.58 (60)	9.23 (43)	6.09 (51)	5.68 (46)	3.84 (54)	
IM Emerging Markets Equity (MF) Median	-7.51	-0.31	19.16	14.49	9.45	8.81	6.22	5.44	4.05	
<b>Fixed Income</b>										
<b>Total Fund Performance - Fixed Income</b>	<b>0.35</b>	<b>-0.02</b>	<b>1.86</b>	<b>3.76</b>	<b>5.35</b>	<b>3.60</b>	<b>N/A</b>	<b>N/A</b>	<b>3.25</b>	<b>07/01/2014</b>
Vanguard Short Term Bond Index (VBITX)	0.00 (78)	-0.30 (95)	-0.01 (94)	2.35 (35)	3.55 (12)	2.11 (41)	N/A	N/A	1.82 (29)	04/01/2013
Bloomberg 1-5 Year Gov/Credit Idx	0.05 (59)	-0.25 (93)	0.08 (90)	2.45 (31)	3.62 (10)	2.19 (37)	1.89 (41)	2.90 (14)	1.88 (25)	
IM U.S. Short Term Investment Grade (MF) Median	0.08	0.36	0.98	1.89	2.65	1.97	1.77	2.24	1.56	
Vanguard Total Bond Index (VBTIX)	0.11 (29)	-1.57 (72)	-0.91 (83)	2.99 (73)	N/A	N/A	N/A	N/A	2.58 (73)	09/01/2019
Blmbg. U.S. Aggregate Index	0.05 (44)	-1.56 (71)	-0.90 (83)	2.97 (74)	5.35 (63)	2.94 (66)	3.01 (66)	4.17 (50)	2.58 (73)	
IM U.S. Broad Market Core Fixed Income (MF) Median	0.03	-1.17	0.18	3.58	5.58	3.17	3.26	4.15	3.15	
Vanguard High Yield Bond Fund (VWEAX)	0.88 (22)	3.24 (76)	8.02 (84)	5.61 (63)	6.44 (27)	5.74 (40)	N/A	N/A	5.44 (19)	12/01/2014
Blmbg. U.S. Corp High Yield	0.89 (22)	4.53 (40)	11.28 (36)	7.19 (19)	6.91 (16)	6.52 (13)	7.42 (8)	7.31 (4)	5.97 (8)	
IM U.S. High Yield Bonds (MF) Median	0.67	4.16	10.49	5.97	5.87	5.50	6.39	6.03	4.78	
Vanguard International Bond (VTIFX)	0.03 (11)	-1.99 (32)	-0.99 (74)	0.59 (80)	4.06 (32)	2.71 (23)	N/A	N/A	3.31 (9)	05/01/2015
Blmbg. Global Agg ex-USD Flt Adj RIC Cpd (H)	-0.01 (13)	-1.98 (31)	-0.92 (73)	0.69 (79)	4.16 (24)	2.84 (14)	N/A	N/A	3.30 (9)	
IM International Fixed Income (MF) Median	-1.57	-4.80	-0.06	1.67	3.09	1.32	1.57	3.93	1.49	
<b>REIT</b>										
Vanguard Real Estate Index Fund (VGSNX)	0.67 (64)	22.19 (41)	33.48 (44)	8.27 (45)	12.02 (41)	7.56 (43)	11.55 (29)	N/A	10.59 (26)	10/01/2010
Vanguard Spliced REIT Index	0.70 (61)	22.29 (39)	33.64 (40)	8.39 (43)	12.11 (39)	7.65 (42)	11.64 (27)	6.84 (29)	10.66 (25)	
IM Real Estate Sector (MF) Median	1.07	21.66	32.59	8.05	11.46	7.19	10.93	5.97	9.91	

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





# Comparative Performance

## Total Fund

As of September 30, 2021

	QTR	FYTD	1 YR	2 YR	3 YR	5 YR	10 YR	15 YR	Inception	Inception Date
<b>Total Fund - Domestic Equity</b>	<b>-0.73</b>	<b>15.90</b>	<b>35.19</b>	<b>19.84</b>	<b>13.58</b>	<b>14.74</b>	<b>N/A</b>	<b>N/A</b>	<b>12.00</b>	<b>07/01/2014</b>
Total Domestic Large Cap Equity	0.13	14.83	27.73	18.94	14.28	15.31	N/A	N/A	12.74	06/01/2014
S&P 500 Index	0.58	15.92	30.00	22.35	15.99	16.90	16.63	10.37	13.82	
Large Cap Growth	1.38	14.93	29.38	33.75	23.14	22.39	N/A	N/A	17.66	06/01/2014
Vanguard Growth Index Hybrid	1.39	14.96	28.13	33.12	22.82	22.20	19.38	13.15	17.52	
Russell 1000 Growth Index	1.16	14.30	27.32	32.33	22.00	22.84	19.68	13.33	18.14	
Large Cap Core	0.08	14.52	25.72	15.81	12.61	13.85	N/A	N/A	11.67	06/01/2014
S&P 500 Index	0.58	15.92	30.00	22.35	15.99	16.90	16.63	10.37	13.82	
Large Cap Value	-0.94	15.71	32.51	13.20	9.85	12.14	N/A	N/A	10.40	06/01/2014
Vanguard Value Index Hybrid	-0.94	15.72	32.53	13.18	9.88	12.16	14.11	8.04	10.35	
Russell 1000 Value Index	-0.78	16.14	35.01	13.24	10.07	10.94	13.51	7.52	9.23	
Mid Cap Equity	-1.78	15.47	43.60	18.49	11.33	12.54	N/A	N/A	10.69	06/01/2014
Mid Cap Hybrid Index	-1.76	15.52	43.68	18.57	11.29	12.52	14.53	N/A	10.69	
Small Cap Equity	-2.86	20.01	57.59	20.31	9.81	12.65	N/A	N/A	10.40	06/01/2014
Small Cap Hybrid Index	-2.84	20.05	57.64	20.24	9.84	12.65	14.65	N/A	10.39	
<b>Total Fund - International Equity</b>	<b>-3.40</b>	<b>6.26</b>	<b>24.43</b>	<b>13.17</b>	<b>8.24</b>	<b>8.79</b>	<b>N/A</b>	<b>N/A</b>	<b>4.90</b>	<b>07/01/2014</b>
Small Cap - International Equity	-1.37	10.47	30.13	N/A	N/A	N/A	N/A	N/A	45.69	04/01/2020
FTSE Global ex U.S. Small Cap Index (Net)	-0.80	11.18	31.07	17.33	8.74	8.89	N/A	N/A	45.83	
Developed Markets - International Equity	-1.56	8.20	26.59	13.70	8.19	9.21	N/A	N/A	5.33	06/01/2014
Vanguard Spliced Developed ex U.S. Index (Net)	-1.06	8.80	27.38	14.02	8.31	9.33	8.57	4.40	5.44	
Emerging Markets - International Equity	-6.97	1.33	18.42	14.03	9.62	8.71	N/A	N/A	5.10	06/01/2014
FTSE Emerging Mkts All Cap China A Inclusion Index	-6.31	2.21	20.14	14.86	10.22	9.30	6.56	6.34	5.92	
MSCI Emerging Markets (Net) Index	-8.09	-1.25	18.20	14.31	8.58	9.23	6.09	5.68	5.22	

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



# Comparative Performance

## Total Fund

As of September 30, 2021

	QTR	FYTD	1 YR	2 YR	3 YR	5 YR	10 YR	15 YR	Inception	Inception Date
<b>Total Fund - Fixed Income</b>	<b>0.35</b>	<b>-0.02</b>	<b>1.86</b>	<b>3.76</b>	<b>5.35</b>	<b>3.60</b>	<b>N/A</b>	<b>N/A</b>	<b>3.25</b>	<b>07/01/2014</b>
Short - Term Fixed Income	0.00	-0.30	-0.01	2.28	3.51	2.09	N/A	N/A	1.94	06/01/2014
Bloomberg 1-5 Year Gov/Credit Idx	0.05	-0.25	0.08	2.45	3.62	2.19	1.89	2.90	2.02	
High Yield - Fixed Income	0.88	3.24	8.02	5.61	6.44	5.64	N/A	N/A	5.39	11/01/2014
Blmbg. U.S. Corp High Yield	0.89	4.53	11.28	7.19	6.91	6.52	7.42	7.31	5.78	
Non-US Fixed Income	0.03	-1.99	-0.99	0.59	4.06	2.71	N/A	N/A	3.39	05/01/2015
Blmbg. Global Agg ex-USD Flt Adj RIC Cpd (H)	-0.01	-1.98	-0.92	0.69	4.16	2.84	N/A	N/A	3.30	
<b>Real Estate</b>	<b>0.67</b>	<b>22.19</b>	<b>33.48</b>	<b>8.27</b>	<b>12.02</b>	<b>7.56</b>	<b>N/A</b>	<b>N/A</b>	<b>8.55</b>	<b>06/01/2014</b>
Vanguard Spliced REIT Index	0.70	22.29	33.64	8.39	12.11	7.65	11.64	6.84	8.82	

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



Comparative Performance Trailing Returns										
	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
<b>Total Fund Performance</b>	<b>9.84</b>	<b>20.21</b>	<b>-5.76</b>	<b>13.91</b>	<b>8.58</b>	<b>-0.72</b>	<b>8.24</b>	<b>18.07</b>	<b>13.88</b>	<b>1.26</b>
Total Fund Policy	11.44	19.49	-4.94	13.67	8.48	-0.69	8.15	16.99	14.31	2.15
Allocation Index	9.90	19.76	-5.32	14.25	7.44	-0.62	N/A	N/A	N/A	N/A
<b>Domestic Equity</b>										
<b>Total Fund Domestic Equity</b>	<b>13.96</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>
Twin Capital Low Volatility	5.51 (91)	29.24 (59)	-5.37 (54)	19.16 (79)	16.03 (10)	-1.31 (79)	12.91 (59)	N/A	N/A	N/A
S&P 500 Index	18.40 (43)	31.49 (35)	-4.38 (37)	21.83 (51)	11.96 (35)	1.38 (52)	13.69 (44)	32.39 (59)	16.00 (46)	2.11 (50)
IM U.S. Large Cap Core Equity (SA+CF) Median	17.25	30.00	-5.20	21.84	10.63	1.43	13.43	32.98	15.64	2.02
Twin Capital Enhanced Index	15.07 (54)	29.73 (55)	-6.43 (66)	20.37 (78)	11.66 (60)	2.42 (23)	13.42 (63)	N/A	N/A	N/A
S&P 500 Index	18.40 (41)	31.49 (32)	-4.38 (23)	21.83 (64)	11.96 (59)	1.38 (42)	13.69 (58)	32.39 (69)	16.00 (63)	2.11 (63)
IM U.S. Large Cap Enhanced Index Equity (SA+CF) Median	16.16	29.91	-5.35	22.45	12.45	1.02	14.03	33.34	16.65	2.85
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	18.40 (9)	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)
IM S&P 500 Index (MF) Median	18.05	31.06	-4.66	21.35	11.54	0.95	13.16	31.76	15.43	1.63
Vanguard Growth Index (VIGIX)	40.20 (30)	37.25 (13)	-3.32 (77)	27.82 (66)	6.11 (17)	3.23 (77)	13.70 (15)	32.44 (66)	16.99 (32)	1.80 (16)
Vanguard Growth Index Hybrid	40.27 (30)	37.31 (13)	-3.34 (78)	27.86 (65)	6.16 (16)	3.38 (76)	13.69 (15)	32.51 (65)	17.14 (29)	1.95 (15)
Russell 1000 Growth Index	38.49 (36)	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)
IM U.S. Large Cap Growth Equity (MF) Median	36.17	33.38	-0.85	29.46	2.19	6.00	10.47	33.94	14.81	-1.76
Vanguard Value Index (VIVIX)	2.30 (56)	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)
Vanguard Value Index Hybrid	2.26 (57)	25.85 (54)	-5.40 (13)	17.16 (36)	16.93 (22)	-0.86 (11)	13.29 (11)	33.20 (40)	15.22 (59)	1.26 (21)
Russell 1000 Value Index	2.80 (48)	26.54 (45)	-8.27 (36)	13.66 (76)	17.34 (19)	-3.83 (58)	13.45 (9)	32.53 (48)	17.51 (28)	0.39 (28)
IM U.S. Large Cap Value Equity (MF) Median	2.62	26.07	-9.06	16.29	13.82	-3.53	10.82	32.30	15.85	-2.20
Vanguard Mid-Cap 400 Index Fund I (VSPMX)	13.58 (34)	26.13 (71)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S&P MidCap 400 Index	13.66 (34)	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)
IM U.S. Mid Cap Core Equity (MF) Median	9.97	28.07	-11.52	15.44	14.23	-3.40	8.91	35.08	15.84	-3.38
Vanguard Small-Cap 600 Index I (VSMX)	11.46 (43)	22.74 (62)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S&P SmallCap 600 Index	11.29 (44)	22.78 (62)	-8.48 (10)	13.23 (40)	26.56 (14)	-1.97 (24)	5.76 (34)	41.31 (18)	16.33 (33)	1.02 (8)
IM U.S. Small Cap Core Equity (MF) Median	10.36	23.89	-12.66	12.38	21.34	-4.34	4.65	36.97	14.57	-3.78

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



# Comparative Performance

## Total Fund

As of September 30, 2021

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
<b>International Equity</b>										
<b>Total Fund Performance - International Equity</b>	<b>10.24</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>
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)	11.40 (22)	21.55 (32)	-18.91 (48)	29.78 (65)	3.93 (34)	-0.61 (85)	-4.34 (24)	N/A	N/A	N/A
IM International SMID Cap Core Equity (MF) Median	8.92	20.74	-19.09	32.40	-0.71	5.09	-6.28	24.95	20.35	-17.32
Vanguard Developed Markets Index (VTMNX)	10.27 (48)	22.14 (47)	-14.49 (36)	26.46 (47)	2.46 (30)	-0.19 (45)	-5.62 (55)	22.07 (37)	18.92 (30)	-12.54 (41)
Vanguard Spliced Developed ex U.S. Index (Net)	10.00 (49)	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 (35)
MSCI EAFE (Net) Index	7.82 (61)	22.01 (49)	-13.79 (25)	25.03 (65)	1.00 (47)	-0.81 (53)	-4.90 (46)	22.78 (29)	17.32 (58)	-12.14 (35)
IM International Multi-Cap Equity (MF) Median	9.53	21.85	-15.72	25.99	0.66	-0.69	-5.28	20.57	17.79	-13.46
Vanguard Emerging Markets Index (VEMIX)	15.26 (63)	20.37 (49)	-14.54 (30)	31.43 (70)	11.76 (26)	-15.39 (68)	0.72 (18)	-5.06 (79)	18.06 (57)	-18.73 (40)
FTSE Emerging Mkts All Cap China A Inclusion Index	15.84 (60)	20.81 (47)	-14.49 (30)	31.46 (70)	10.66 (34)	-13.28 (47)	2.96 (10)	-2.82 (60)	18.48 (54)	-19.81 (52)
MSCI Emerging Markets (Net) Index	18.31 (45)	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)
IM Emerging Markets Equity (MF) Median	17.46	20.09	-16.39	35.37	8.35	-13.66	-2.93	-1.38	18.78	-19.54
<b>Fixed Income</b>										
<b>Total Fund Performance - Fixed Income</b>	<b>6.75</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>
Vanguard Short Term Bond Index (VBITX)	4.71 (11)	4.84 (24)	1.37 (42)	1.19 (72)	1.51 (60)	0.98 (9)	1.32 (12)	N/A	N/A	N/A
Bloomberg 1-5 Year Gov/Credit Idx	4.71 (11)	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)
IM U.S. Short Term Investment Grade (MF) Median	3.03	4.11	1.25	1.47	1.69	0.28	0.67	0.48	3.12	1.08
Vanguard Total Bond Index (VBTIX)	7.73 (65)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Blmbg. U.S. Aggregate Index	7.51 (72)	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)
IM U.S. Broad Market Core Fixed Income (MF) Median	8.19	8.76	-0.63	3.59	2.86	0.09	5.55	-1.98	5.99	6.66
Vanguard High Yield Bond Fund (VWEAX)	5.38 (47)	15.90 (8)	-2.87 (49)	7.13 (35)	11.27 (80)	-1.31 (17)	N/A	N/A	N/A	N/A
Blmbg. U.S. Corp High Yield	7.11 (19)	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)
IM U.S. High Yield Bonds (MF) Median	5.28	13.51	-2.91	6.65	13.52	-3.85	1.49	6.61	14.72	3.32
Vanguard International Bond (VTIFX)	4.59 (76)	7.89 (24)	3.00 (2)	2.43 (86)	4.69 (35)	N/A	N/A	N/A	N/A	N/A
Blmbg. Global Agg ex-USD Flt Adj RIC Cpd (H)	4.75 (72)	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
IM International Fixed Income (MF) Median	6.92	6.60	-2.68	9.80	3.34	-5.82	0.63	-3.74	7.43	2.56
<b>REIT</b>										
Vanguard Real Estate Index Fund (VGSNX)	-4.67 (56)	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)
Vanguard Spliced REIT Index	-4.55 (54)	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)
IM Real Estate Sector (MF) Median	-4.24	27.44	-5.74	5.21	6.28	2.92	29.42	1.66	16.90	7.86

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



# Comparative Performance

## Total Fund

As of September 30, 2021

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
<b>Total Fund - Domestic Equity</b>	<b>13.96</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>
Total Domestic Large Cap Equity	14.02	30.31	-5.16	20.67	13.09	1.00	N/A	N/A	N/A	N/A
S&P 500 Index	18.40	31.49	-4.38	21.83	11.96	1.38	13.69	32.39	16.00	2.11
Large Cap Growth	41.61	37.36	-3.51	27.82	5.87	3.78	N/A	N/A	N/A	N/A
Vanguard Growth Index Hybrid	40.27	37.31	-3.34	27.86	6.16	3.38	13.69	32.51	17.14	1.95
Russell 1000 Growth Index	38.49	36.39	-1.51	30.21	7.08	5.67	13.05	33.48	15.26	2.64
Large Cap Core	9.03	29.41	-5.71	19.57	14.29	0.18	N/A	N/A	N/A	N/A
S&P 500 Index	18.40	31.49	-4.38	21.83	11.96	1.38	13.69	32.39	16.00	2.11
Large Cap Value	2.30	25.83	-5.50	17.14	16.87	-0.27	N/A	N/A	N/A	N/A
Vanguard Value Index Hybrid	2.26	25.85	-5.40	17.16	16.93	-0.86	13.29	33.20	15.22	1.26
Russell 1000 Value Index	2.80	26.54	-8.27	13.66	17.34	-3.83	13.45	32.53	17.51	0.39
Mid Cap Equity	13.58	26.13	-10.44	19.29	11.23	-1.31	N/A	N/A	N/A	N/A
Mid Cap Hybrid Index	13.66	26.20	-10.67	19.30	11.25	-1.28	13.83	35.21	16.04	-1.91
Small Cap Equity	11.46	22.74	-10.45	16.25	18.32	-3.63	N/A	N/A	N/A	N/A
Small Cap Hybrid Index	11.29	22.78	-10.32	16.24	18.26	-3.68	7.54	37.77	18.20	-2.75
<b>Total Fund - International Equity</b>	<b>10.24</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>
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)	11.40	21.55	-18.91	29.78	3.93	-0.61	-4.34	N/A	N/A	N/A
Developed Markets - International Equity	10.27	22.14	-14.49	26.46	2.46	-0.41	N/A	N/A	N/A	N/A
Vanguard Spliced Developed ex U.S. Index (Net)	10.00	22.34	-14.79	26.31	2.29	-0.28	-4.85	22.71	17.32	-12.14
Emerging Markets - International Equity	15.26	20.37	-14.54	31.43	11.76	-15.80	N/A	N/A	N/A	N/A
FTSE Emerging Mkts All Cap China A Inclusion Index	15.84	20.81	-14.49	31.46	10.66	-13.28	2.96	-2.82	18.48	-19.81
MSCI Emerging Markets (Net) Index	18.31	18.44	-14.58	37.28	11.19	-14.92	-2.19	-2.60	18.23	-18.42

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



# Comparative Performance

## Total Fund

As of September 30, 2021

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
<b>Total Fund - Fixed Income</b>	<b>6.75</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>
Short - Term Fixed Income	4.71	4.71	1.37	1.19	1.51	0.98	N/A	N/A	N/A	N/A
Bloomberg 1-5 Year Gov/Credit Idx	4.71	5.01	1.38	1.27	1.56	0.97	1.42	0.28	2.24	3.14
High Yield - Fixed Income	5.38	15.90	-2.87	6.65	10.89	-1.28	N/A	N/A	N/A	N/A
Blmbg. U.S. Corp High Yield	7.11	14.32	-2.08	7.50	17.13	-4.47	2.45	7.44	15.81	4.98
Non-US Fixed Income	4.59	7.89	3.00	2.43	4.69	N/A	N/A	N/A	N/A	N/A
Blmbg. Global Agg ex-USD Flt Adj RIC Cpd (H)	4.75	8.06	3.16	2.57	4.90	1.34	9.14	1.26	N/A	N/A
<b>Real Estate</b>	<b>-4.67</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>
Vanguard Spliced REIT Index	-4.55	29.03	-5.86	5.07	8.60	2.52	30.38	2.47	17.77	8.69

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



**Multi Timeperiod Statistics**  
**Butler County Employees Retirement Plan**  
As of September 30, 2021

**Multi Timeperiod Statistics**

	3 YR Return		3 YR Standard Deviation		3 YR Sharpe Ratio		5 YR Return		5 YR Standard Deviation		5 YR Sharpe Ratio	
Total Fund Performance	9.48		12.59		0.69		9.13		10.10		0.80	
Total Fund Policy	9.94		12.30		0.73		9.47		9.85		0.85	
Twin Capital Enhanced Index	14.40	(49)	18.46	(76)	0.76	(49)	15.62	(53)	14.97	(80)	0.97	(54)
S&P 500 Index	15.99		18.55		0.83		16.90		15.07		1.04	
IM U.S. Large Cap Enhanced Index Equity (SA+CF) Median	13.88		18.67		0.73		15.70		15.25		0.98	
Vanguard Instl Indx;Inst (VINIX) *	15.97	(7)	18.55	(40)	0.83	(8)	16.87	(7)	15.07	(40)	1.03	(7)
S&P 500 Index	15.99		18.55		0.83		16.90		15.07		1.04	
IM S&P 500 Index (MF) Median	15.62		18.54		0.81		16.50		15.07		1.01	
Vanguard Growth Index (VIGIX)	22.78	(19)	20.08	(34)	1.07	(18)	22.17	(36)	16.36	(40)	1.24	(36)
Vanguard Growth Index Hybrid	22.82		20.09		1.07		22.20		16.37		1.24	
IM U.S. Large Cap Growth Equity (MF) Median	20.59		19.65		0.99		21.20		16.19		1.21	
Vanguard Value Index (VIVIX)	9.88	(46)	18.87	(80)	0.53	(40)	12.16	(25)	15.48	(79)	0.74	(18)
Vanguard Value Index Hybrid	9.88		18.87		0.53		12.16		15.48		0.74	
IM U.S. Large Cap Value Equity (MF) Median	9.75		19.85		0.50		11.29		16.21		0.66	
Vanguard S&P MC400;Inst (VSPMX) *	11.01	(54)	23.56	(25)	0.51	(62)	12.89	(32)	19.05	(26)	0.67	(43)
S&P MidCap 400 Index	11.08		23.56		0.52		12.97		19.05		0.68	
IM U.S. Mid Cap Core Equity (MF) Median	11.10		22.00		0.55		11.69		17.82		0.65	
Vanguard S&P SC600;Inst (VSMSX) *	9.47	(45)	25.58	(42)	0.44	(45)	13.60	(20)	21.46	(35)	0.65	(25)
S&P SmallCap 600 Index	9.44		25.57		0.44		13.57		21.47		0.65	
IM U.S. Small Cap Core Equity (MF) Median	9.14		25.34		0.43		11.82		20.93		0.59	

\* 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 September 30, 2021

	3 YR Return		3 YR Standard Deviation		3 YR Sharpe Ratio		5 YR Return		5 YR Standard Deviation		5 YR Sharpe Ratio	
Vanguard FTSEExUSSC;Ins (VFSNX) *	8.79	(63)	21.23	(26)	0.45	(69)	9.01	(76)	17.22	(38)	0.52	(77)
FTSE Global ex U.S. Small Cap Index (Net)	8.74		21.23		0.45		8.89		17.20		0.52	
IM International SMID Cap Growth Equity (MF) Median	9.97		20.54		0.52		10.64		17.08		0.63	
Vanguard Developed Markets Index (VTMNX)	8.19	(47)	18.36	(47)	0.46	(49)	9.21	(38)	15.07	(52)	0.58	(39)
Vanguard Spliced Developed ex U.S. Index (Net)	8.31		18.24		0.46		9.33		14.97		0.59	
IM International Multi-Cap Equity (MF) Median	7.99		18.20		0.45		8.68		15.12		0.55	
Vanguard Emerging Markets Index (VEMIX)	9.62	(49)	18.63	(84)	0.52	(43)	8.71	(52)	16.16	(81)	0.53	(45)
FTSE Emerging Mkts All Cap China A Inclusion Index	10.22		18.58		0.55		9.30		16.08		0.56	
IM Emerging Markets Equity (MF) Median	9.45		19.81		0.50		8.81		17.13		0.52	
Vanguard Short Term Bond Index (VBITX)	3.55	(12)	1.40	(79)	1.81	(1)	2.11	(41)	1.40	(71)	0.73	(11)
Bloomberg 1-5 Year Gov/Credit Idx	3.62		1.43		1.82		2.19		1.42		0.77	
IM U.S. Short Term Investment Grade (MF) Median	2.65		2.16		0.55		1.98		1.79		0.44	
Vanguard Tot Bd;Inst (VBTIX) *	5.42	(58)	3.66	(76)	1.17	(33)	2.95	(65)	3.42	(66)	0.54	(59)
Blmbg. U.S. Aggregate Index	5.35		3.49		1.21		2.94		3.28		0.56	
IM U.S. Broad Market Core Fixed Income (MF) Median	5.58		4.02		1.09		3.17		3.60		0.56	
Vanguard High Yield Bond Fund (VWEAX)	6.44	(27)	8.22	(79)	0.65	(15)	5.74	(40)	6.56	(78)	0.70	(22)
Vanguard High Yield Corporate Composite Index	7.28		8.14		0.75		6.21		6.46		0.78	
IM U.S. High Yield Bonds (MF) Median	5.87		9.21		0.54		5.50		7.30		0.61	
Vanguard Tot Intl BI;Inst (VTIFX) *	4.18	(23)	3.47	(96)	0.87	(5)	2.78	(17)	3.06	(88)	0.54	(7)
Blmbg. Global Agg ex-USD Flt Adj RIC Cpd (H)	4.16		3.45		0.87		2.84		3.04		0.57	
IM International Fixed Income (MF) Median	3.09		6.46		0.31		1.32		6.86		0.07	
Vanguard Real Estate Index Fund (VGSNX)	12.02	(41)	18.63	(32)	0.64	(45)	7.56	(43)	15.99	(27)	0.47	(49)
Vanguard Spliced REIT Index	12.11		18.62		0.65		7.65		15.98		0.47	
IM Real Estate Sector (MF) Median	11.46		18.17		0.63		7.19		15.42		0.46	

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All performance is reported net of fees.





**Multi Timeperiod Statistics**  
**Butler County Employees Retirement Plan**  
As of September 30, 2021

**Multi Timeperiod Statistics**

	10 YR Return		10 YR Standard Deviation		10 YR Sharpe Ratio		15 YR Return		15 YR Standard Deviation		15 YR Sharpe Ratio	
Total Fund Performance	10.05		9.85		0.96		7.33		11.19		0.60	
Total Fund Policy	10.21		9.67		0.99		7.56		11.25		0.62	
Twin Capital Enhanced Index	N/A		N/A		N/A		N/A		N/A		N/A	
S&P 500 Index	16.63		13.78		1.15		10.37		16.61		0.62	
IM U.S. Large Cap Enhanced Index Equity (SA+CF) Median	16.43		14.38		1.11		10.37		16.96		0.61	
Vanguard Instl Indx;Inst (VINIX) *	16.61	(5)	13.78	(11)	1.15	(4)	10.36	(3)	16.60	(12)	0.62	(4)
S&P 500 Index	16.63		13.78		1.15		10.37		16.61		0.62	
IM S&P 500 Index (MF) Median	16.11		13.75		1.12		9.90		16.58		0.60	
Vanguard Growth Index (VIGIX)	19.31	(28)	15.36	(60)	1.20	(21)	N/A		N/A		N/A	
Vanguard Growth Index Hybrid	19.38		15.38		1.20		13.15		17.68		0.74	
IM U.S. Large Cap Growth Equity (MF) Median	18.52		15.49		1.14		12.38		18.18		0.69	
Vanguard Value Index (VIVIX)	14.07	(15)	13.94	(84)	0.98	(6)	N/A		N/A		N/A	
Vanguard Value Index Hybrid	14.11		13.94		0.98		8.04		17.04		0.49	
IM U.S. Large Cap Value Equity (MF) Median	12.91		15.11		0.84		7.34		17.84		0.44	
Vanguard S&P MC400;Inst (VSPMX)	14.65	(22)	18.30	(69)	0.82	(14)	N/A		N/A		N/A	
S&P MidCap 400 Index	14.72		18.30		0.82		10.38		20.47		0.54	
IM U.S. SMID Cap Core Equity (MF) Median	13.67		18.79		0.75		9.26		20.60		0.48	
Vanguard S&P SC600;Inst (VSMSX)	15.67	(8)	20.60	(49)	0.79	(9)	N/A		N/A		N/A	
S&P SmallCap 600 Index	15.69		20.60		0.79		10.30		22.04		0.52	
IM U.S. Small Cap Core Equity (MF) Median	13.47		20.59		0.70		8.60		22.28		0.45	

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.

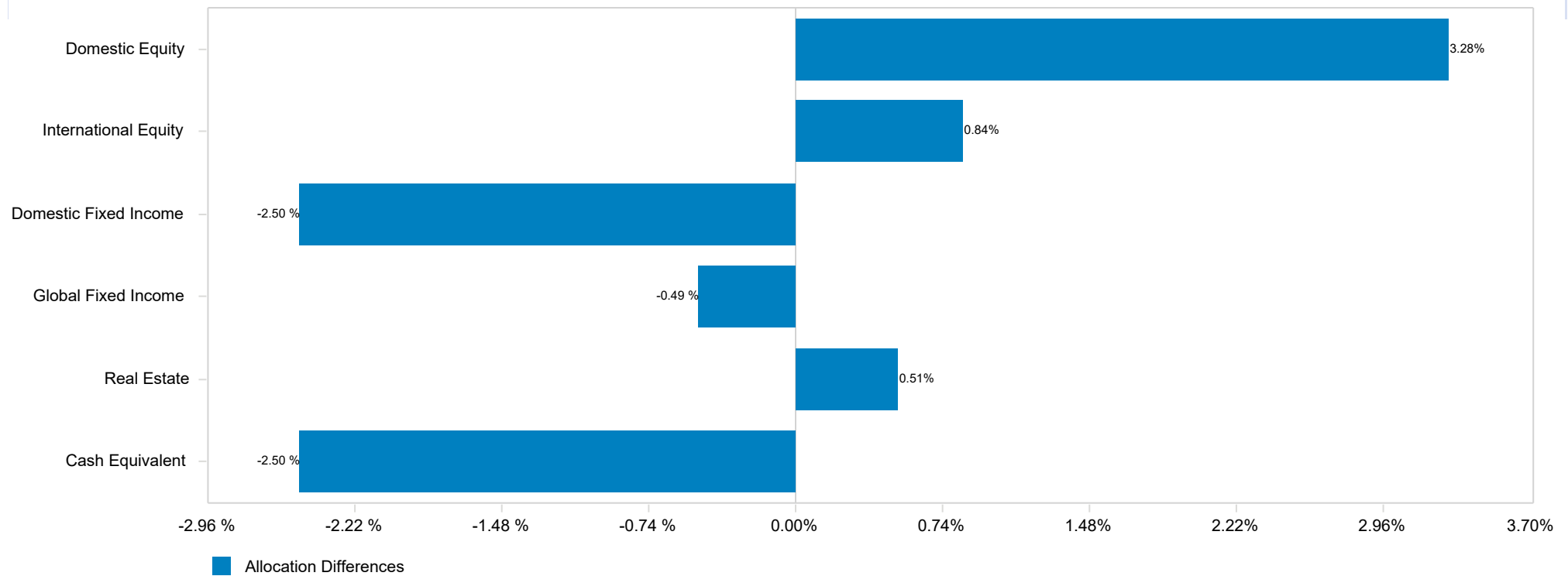


**Multi Timeperiod Statistics**  
**Butler County Employees Retirement Plan**  
As of September 30, 2021

	10 YR Return		10 YR Standard Deviation		10 YR Sharpe Ratio		15 YR Return		15 YR Standard Deviation		15 YR Sharpe Ratio	
Vanguard FTSEExUSSC;Ins (VFSNX) *	8.50	(95)	18.01	(41)	0.51	(93)	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	10.50		17.90		0.64		6.96		22.20		0.38	
Vanguard Developed Markets Index (VTMNX)	8.67	(40)	15.12	(62)	0.59	(37)	N/A		N/A		N/A	
Vanguard Spliced Developed ex U.S. Index (Net)	8.57		14.98		0.59		4.40		19.17		0.27	
IM International Multi-Cap Equity (MF) Median	8.26		15.41		0.56		4.36		19.60		0.27	
Vanguard EM St I;Inst (VEMIX)	6.09	(51)	17.22	(83)	0.40	(49)	5.53	(48)	23.00	(66)	0.31	(47)
Vanguard Spliced Emerging Markets Index (Net)	6.01		17.02		0.40		5.63		22.85		0.32	
IM Emerging Markets Equity (MF) Median	6.22		18.11		0.39		5.44		23.32		0.31	
Vanguard Sh-Tm B;Inst (VBITX)	1.82	(45)	1.44	(67)	0.92	(15)	N/A		N/A		N/A	
Bloomberg 1-5 Year Gov/Credit Idx	1.89		1.42		0.98		2.90		1.92		1.08	
IM U.S. Short Term Investment Grade (MF) Median	1.77		1.61		0.66		2.24		2.38		0.51	
Vanguard Tot Bd;Inst (VBTIX)	2.98	(68)	3.25	(65)	0.75	(65)	4.18	(49)	3.40	(71)	0.95	(21)
Blmbg. U.S. Aggregate Index	3.01		3.13		0.79		4.17		3.31		0.97	
IM U.S. Broad Market Core Fixed Income (MF) Median	3.26		3.34		0.80		4.15		3.81		0.82	
Vanguard HY Corp;Adm (VWEAX)	6.73	(31)	6.35	(92)	0.95	(6)	6.39	(30)	8.46	(92)	0.65	(5)
Blmbg. U.S. Corp High Yield	7.42		7.54		0.90		7.31		11.14		0.60	
IM U.S. High Yield Bonds (MF) Median	6.39		7.55		0.77		6.03		10.30		0.53	
Vanguard Tot Intl BI;Inst (VTIFX)	N/A		N/A		N/A		N/A		N/A		N/A	
Blmbg. 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	1.57		7.26		0.16		3.93		8.43		0.36	
Vanguard RE Idx;Inst (VGSNX)	11.55	(29)	15.24	(23)	0.76	(37)	6.84	(29)	23.15	(33)	0.37	(29)
Vanguard Spliced REIT Index	11.64		15.24		0.77		6.84		23.15		0.37	
IM Real Estate Sector (MF) Median	10.93		14.75		0.74		5.97		22.76		0.34	

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 Allocation (%)	Target Allocation (%)	Minimum Allocation (%)	Maximum Allocation (%)
Domestic Equity	43.28	40.00	15.00	65.00
International Equity	15.84	15.00	5.00	25.00
Domestic Fixed Income	30.00	32.50	15.00	50.00
Global Fixed Income	4.51	5.00	0.00	10.00
Real Estate	5.51	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:

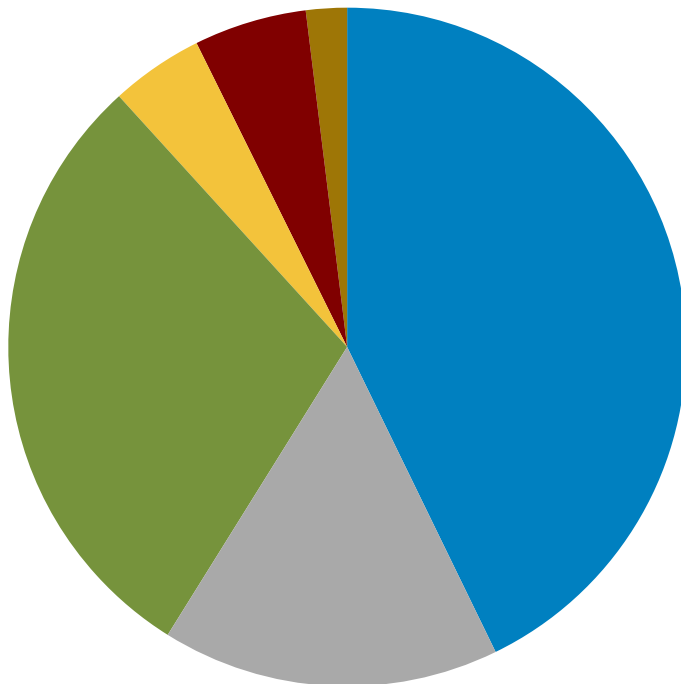
- Vanguard Institutional Index Fund.
- Vanguard Growth Index Fund.
- Vanguard Value Index Fund.
- Vanguard S&P 400 Mid Cap Index Fund.
- Vanguard S&P 600 Small Cap Index Fund.
- Vanguard Developed Markets Index Fund.
- Vanguard Small Cap International Index Fund.
- Vanguard Emerging Markets Index Fund.
- Vanguard Total Bond Index Fund.
- Vanguard Short-Term Bond Index Fund.
- Vanguard Total International Bond Index Fund.
- Vanguard Real Estate Index Fund.

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

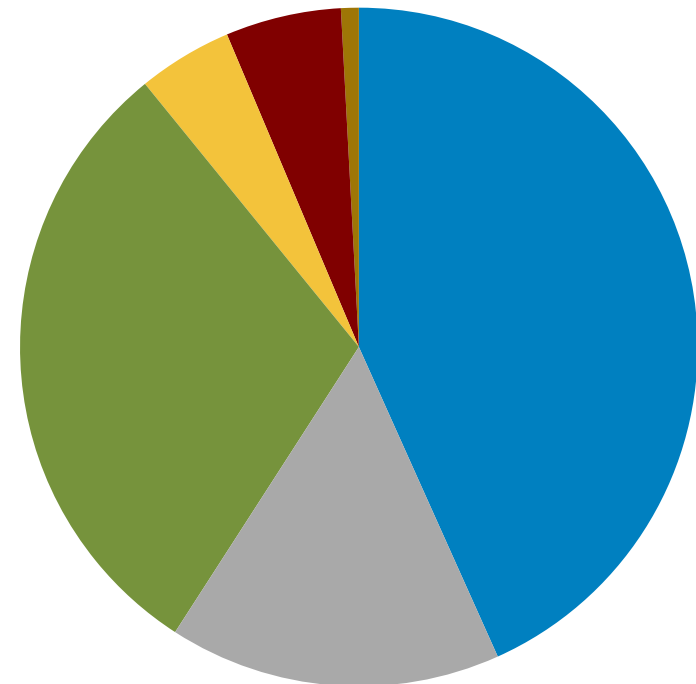
- Twin Capital Enhanced Index.
- Vanguard High Yield Bond Fund. The Vanguard High Yield Bond Fund is an actively managed high yield bond fund that invests in higher-rated bonds to minimize default risk and principal loss.

3. Twin Capital Management – Low Volatility was terminated in the third quarter 2021, the proceeds were moved to the Vanguard Institutional Index Fund.

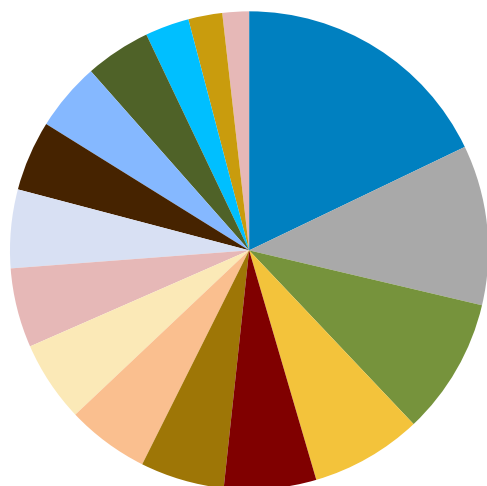
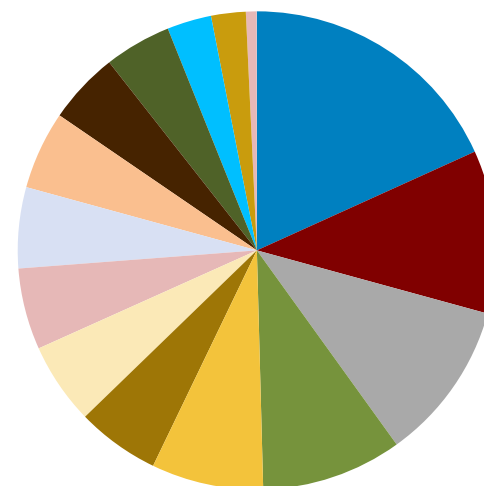
Asset Allocation By Segment as of  
June 30, 2021 : \$270,478,105



Asset Allocation By Segment as of  
September 30, 2021 : \$265,594,253



Allocation			Allocation		
Segments	Market Value	Allocation	Segments	Market Value	Allocation
Domestic Equity	115,715,018	42.8	Domestic Equity	114,957,898	43.3
International Equity	43,547,857	16.1	International Equity	42,068,791	15.8
Domestic Fixed Income	79,408,393	29.4	Domestic Fixed Income	79,684,161	30.0
Global Fixed Income	11,968,870	4.4	Global Fixed Income	11,973,123	4.5
Real Estate	14,546,365	5.4	Real Estate	14,643,869	5.5
Cash	5,291,602	2.0	Cash	2,266,411	0.9

Asset Allocation By Manager as of  
June 30, 2021 : \$270,478,105Asset Allocation By Manager as of  
September 30, 2021 : \$265,594,253

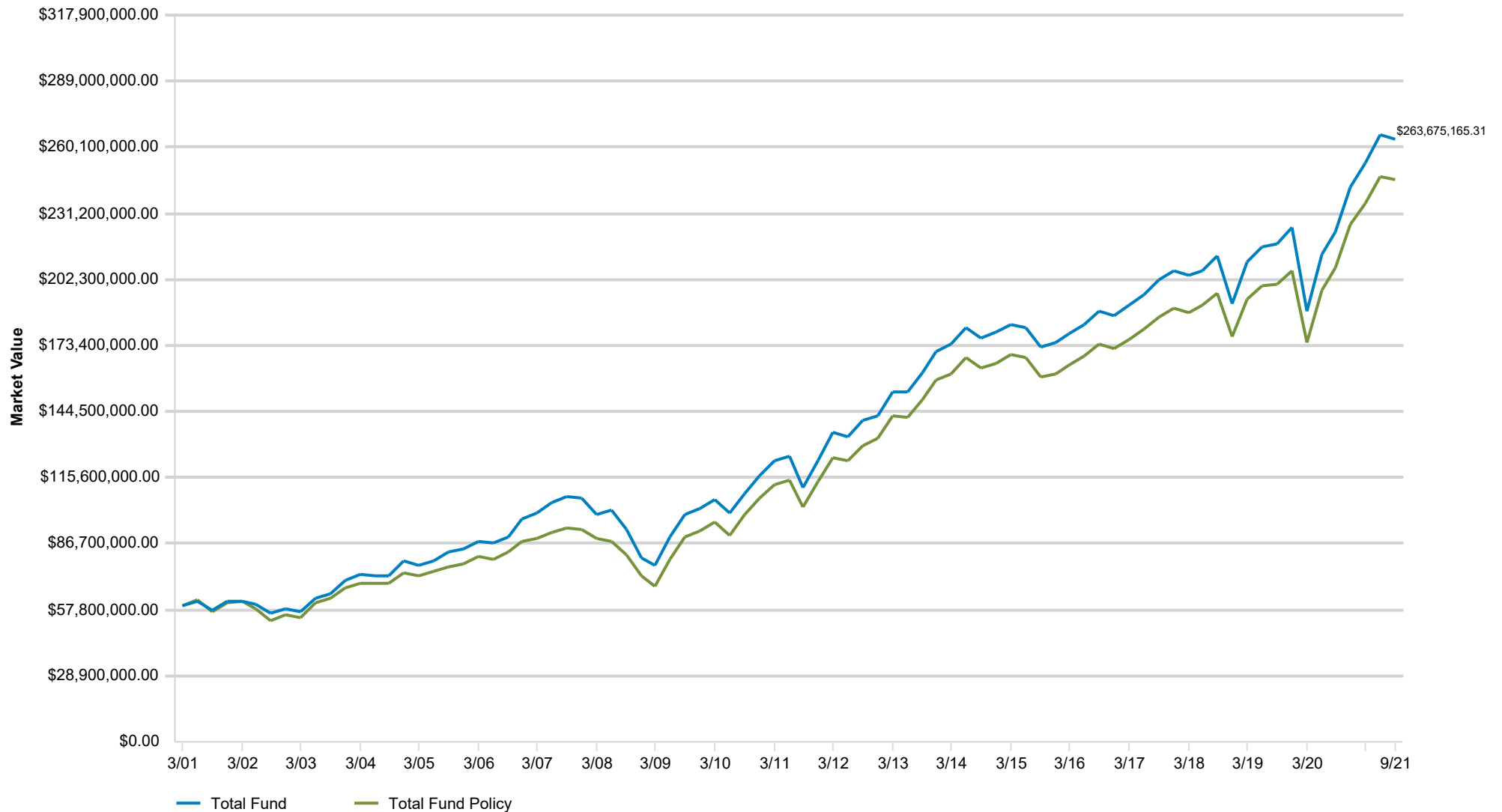
Allocation			Allocation		
	Market Value	Allocation		Market Value	Allocation
Vanguard Total Bond Index (VBTIX)	48,329,498	17.9	Vanguard Total Bond Index (VBTIX)	48,383,263	18.2
Vanguard Mid-Cap 400 Index Fund I (VSPMX)	29,254,116	10.8	Vanguard Inst'l Index Fund (VINIX)	29,322,266	11.0
Vanguard High Yield Bond Fund (VWEAX)	25,032,452	9.3	Vanguard Mid-Cap 400 Index Fund I (VSPMX)	28,732,175	10.8
Vanguard Developed Markets Index (VTMNX)	20,392,575	7.5	Vanguard High Yield Bond Fund (VWEAX)	25,253,871	9.5
Vanguard Inst'l Index Fund (VINIX)	16,823,853	6.2	Vanguard Developed Markets Index (VTMNX)	20,075,213	7.6
Vanguard Small-Cap 600 Index I (VSMSX)	15,360,900	5.7	Vanguard Small-Cap 600 Index I (VSMSX)	14,921,406	5.6
Vanguard Emerging Markets Index (VEMIX)	15,087,754	5.6	Vanguard Value Index (VIVIX)	14,657,397	5.5
Vanguard Value Index (VIVIX)	14,795,782	5.5	Vanguard Real Estate Index Fund (VGSNX)	14,643,869	5.5
Vanguard Real Estate Index Fund (VGSNX)	14,546,365	5.4	Vanguard Growth Index (VIGIX)	14,545,356	5.5
Vanguard Growth Index (VIGIX)	14,347,342	5.3	Vanguard Emerging Markets Index (VEMIX)	14,036,415	5.3
Twin Capital Enhanced Index	12,888,934	4.8	Twin Capital Enhanced Index	12,894,819	4.9
Twin Capital Low Volatility	12,499,720	4.6	Vanguard International Bond (VTIFX)	11,980,934	4.5
Vanguard International Bond (VTIFX)	11,977,679	4.4	Vanguard FTSE AW ex-US SC Index (VFSNX)	7,957,163	3.0
Vanguard FTSE AW ex-US SC Index (VFSNX)	8,067,527	3.0	Vanguard Short Term Bond Index (VBITX)	6,213,844	2.3
Vanguard Short Term Bond Index (VBITX)	6,213,948	2.3	NMA	1,919,088	0.7
NMA	4,854,827	1.8	Twin Capital Low Volatility	52,340	0.0
Cash	4,833	0.0	Cash	4,833	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)	29,322	100.0	-	-	-	-	-	-	-	-	-	-	29,322	11.0
Vanguard Value Index (VIVIX)	14,657	100.0	-	-	-	-	-	-	-	-	-	-	14,657	5.5
Vanguard Small-Cap 600 Index I (VSM SX)	14,921	100.0	-	-	-	-	-	-	-	-	-	-	14,921	5.6
Vanguard Mid-Cap 400 Index Fund I (VSPMX)	28,732	100.0	-	-	-	-	-	-	-	-	-	-	28,732	10.8
Vanguard Growth Index (VIGIX)	14,545	100.0	-	-	-	-	-	-	-	-	-	-	14,545	5.5
Twin Capital Low Volatility	-	-	-	-	-	-	-	-	-	-	52	100.0	52	0.0
Twin Capital Enhanced Index	12,779	99.1	-	-	-	-	-	-	-	-	116	0.9	12,895	4.9
Vanguard FTSE AW ex-US SC Index (VFSNX)	-	-	7,957	100.0	-	-	-	-	-	-	-	-	7,957	3.0
Vanguard Developed Markets Index (VTMNX)	-	-	20,075	100.0	-	-	-	-	-	-	-	-	20,075	7.6
Vanguard Emerging Markets Index (VEMIX)	-	-	14,036	100.0	-	-	-	-	-	-	-	-	14,036	5.3
Vanguard High Yield Bond Fund (VWEAX)	-	-	-	-	25,166	99.7	-	-	-	-	88	0.3	25,254	9.5
Vanguard Short Term Bond Index (VBITX)	-	-	-	-	6,208	99.9	-	-	-	-	6	0.1	6,214	2.3
Vanguard Total Bond Index (VBTIX)	-	-	-	-	48,310	99.8	-	-	-	-	74	0.2	48,383	18.2
Vanguard International Bond (VTIFX)	-	-	-	-	-	-	11,973	99.9	-	-	8	0.1	11,981	4.5
Vanguard Real Estate Index Fund (VGSNX)	-	-	-	-	-	-	-	-	14,644	100.0	-	-	14,644	5.5
Cash	-	-	-	-	-	-	-	-	-	-	5	100.0	5	0.0
NMA	-	-	-	-	-	-	-	-	-	-	1,919	100.0	1,919	0.7
<b>Total Fund</b>	<b>114,958</b>	<b>43.3</b>	<b>42,069</b>	<b>15.8</b>	<b>79,684</b>	<b>30.0</b>	<b>11,973</b>	<b>4.5</b>	<b>14,644</b>	<b>5.5</b>	<b>2,266</b>	<b>0.9</b>	<b>265,594</b>	<b>100.0</b>



**Schedule of Investable Assets**



**Schedule of Investable Assets**

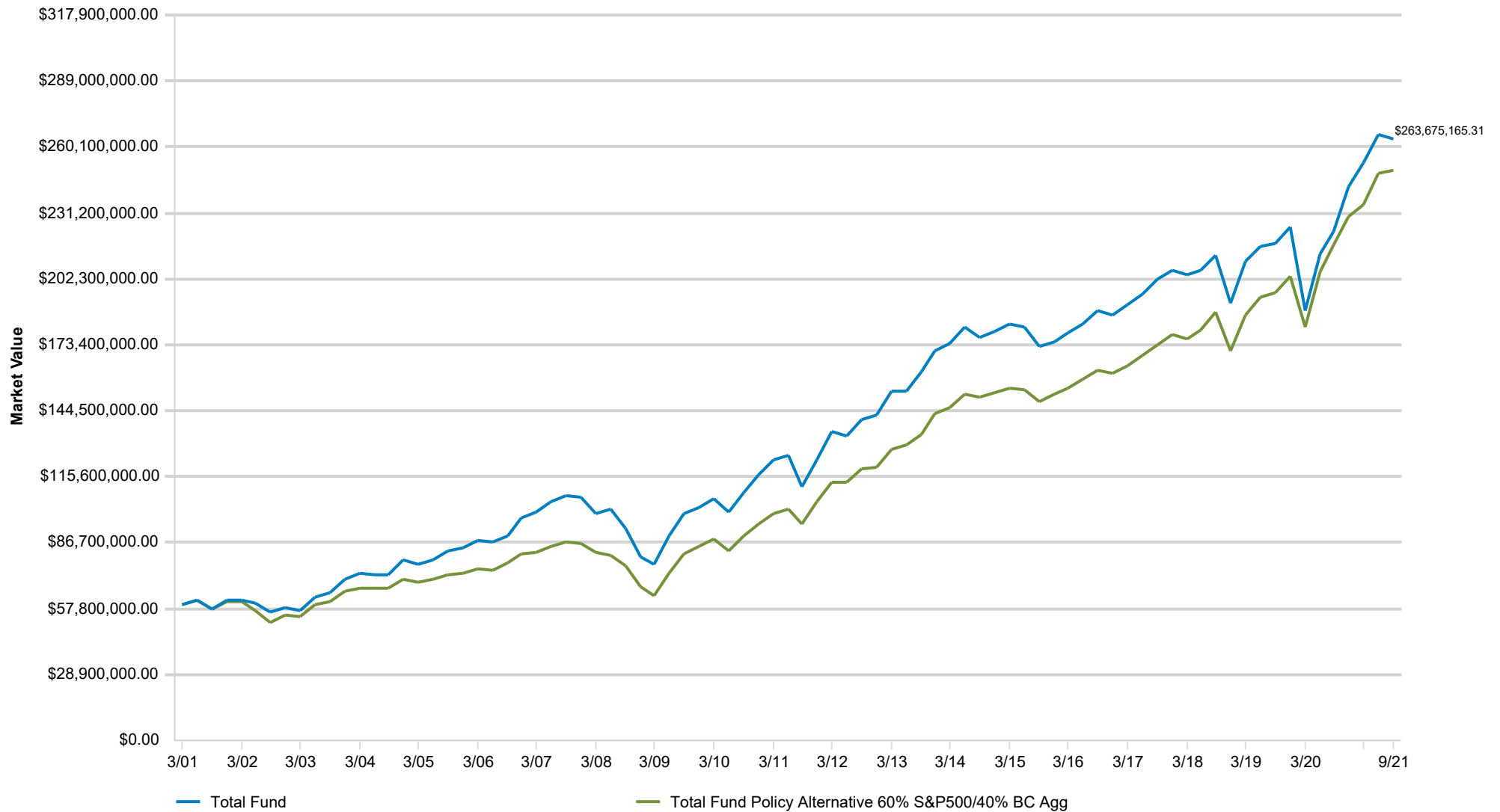
Periods Ending	Beginning Market Value \$	Net Cash Flow \$	Gain/Loss \$	Ending Market Value \$	%Return
Jan-2001 To Sep-2021	59,528,253	-14,561,855	218,708,768	263,675,165	304.92

Does not include Non-Measured Assets (NMA).





**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 Sep-2021	59,528,253	-14,561,855	218,708,768	263,675,165	304.92

Does not include Non-Measured Assets (NMA).



**Fee Analysis**  
**Total Fund**  
**As of September 30, 2021**

	Estimated Annual Fee (%)	Market Value (\$)	Estimated Annual Fee (\$)	Fee Schedule
Twin Capital Enhanced Index	0.35	12,894,819	45,132	0.35 % of Assets
Twin Capital Low Volatility	0.35	52,340	183	0.35 % of Assets
Vanguard Inst'l Index Fund (VINIX)	0.03	29,322,266	8,797	0.03 % of Assets
Vanguard Growth Index (VIGIX)	0.04	14,545,356	5,818	0.04 % of Assets
Vanguard Value Index (VIVIX)	0.04	14,657,397	5,863	0.04 % of Assets
Vanguard Mid-Cap 400 Index Fund I (VSPMX)	0.08	28,732,175	22,986	0.08 % of Assets
Vanguard Small-Cap 600 Index I (VSMSX)	0.08	14,921,406	11,937	0.08 % of Assets
Vanguard FTSE AW ex-US SC Index (VFSNX)	0.11	7,957,163	8,753	0.11 % of Assets
Vanguard Developed Markets Index (VTMNX)	0.05	20,075,213	10,038	0.05 % of Assets
Vanguard Emerging Markets Index (VEMIX)	0.10	14,036,415	14,036	0.10 % of Assets
Vanguard Short Term Bond Index (VBITX)	0.05	6,213,844	3,107	0.05 % of Assets
Vanguard Total Bond Index (VBTIX)	0.03	48,383,263	14,515	0.03 % of Assets
Vanguard High Yield Bond Fund (VWEAX)	0.13	25,253,871	32,830	0.13 % of Assets
Vanguard International Bond (VTIFX)	0.07	11,980,934	8,387	0.07 % of Assets
Vanguard Real Estate Index Fund (VGSNX)	0.10	14,643,869	14,644	0.10 % of Assets
<b>Total Fund Performance</b>	<b>0.08</b>	<b>263,675,165</b>	<b>207,025</b>	

Does not include Non-Measured Assets (NMA).



**Financial Reconciliation**  
**Total Fund**  
as of September 30, 2021

Quarter To Date	Market Value 07/01/2021	Management Fees	Net Flows	Return On Investment	Market Value 09/30/2021
<b>Domestic Equity</b>					
Vanguard Inst'l Index Fund (VINIX)	16,823,853	-	12,824,975	-326,561	29,322,266
Vanguard Value Index (VIVIX)	14,795,782	-	-	-138,385	14,657,397
Vanguard Small-Cap 600 Index I (VSMSX)	15,360,900	-	-	-439,493	14,921,406
Vanguard Mid-Cap 400 Index Fund I (VSPMX)	29,254,116	-	-	-521,941	28,732,175
Vanguard Growth Index (VIGIX)	14,347,342	-	-	198,014	14,545,356
Twin Capital Low Volatility	12,499,720	-9,691	-12,824,975	377,595	52,340
Twin Capital Enhanced Index	12,888,934	-11,551	-	5,886	12,894,819
<b>International Equity</b>					
Vanguard FTSE AW ex-US SC Index (VFSNX)	8,067,527	-	-	-110,364	7,957,163
Vanguard Developed Markets Index (VTMNX)	20,392,575	-	-	-317,363	20,075,213
Vanguard Emerging Markets Index (VEMIX)	15,087,754	-	-	-1,051,338	14,036,415
<b>Fixed Income</b>					
Vanguard Short Term Bond Index (VBITX)	6,213,948	-	-	-104	6,213,844
Vanguard Total Bond Index (VBTIX)	48,329,498	-	-	53,765	48,383,263
Vanguard High Yield Bond Fund (VWEAX)	25,032,452	-	-	221,419	25,253,871
Vanguard International Bond (VTIFX)	11,977,679	-	-	3,256	11,980,934
<b>REIT</b>					
Vanguard Real Estate Index Fund (VGSNX)	14,546,365	-	-	97,504	14,643,869
Cash	4,833	-	-	-	4,833
<b>Total Fund Performance</b>	<b>265,623,278</b>	<b>-21,242</b>	<b>-</b>	<b>-1,948,113</b>	<b>263,675,165</b>
NMA	4,854,827	-	-2,935,739	-	1,919,088
<b>Total Fund</b>	<b>270,478,105</b>	<b>-21,242</b>	<b>-2,935,739</b>	<b>-1,948,113</b>	<b>265,594,253</b>



**Financial Reconciliation**  
**Total Fund**  
as of September 30, 2021

Year To Date					
	Market Value 01/01/2021	Management Fees	Net Flows	Return On Investment	Market Value 09/30/2021
<b>Domestic Equity</b>					
Vanguard Inst'l Index Fund (VINIX)	5,309,898	-	22,824,975	1,187,393	29,322,266
Vanguard Value Index (VIVIX)	12,667,306	-	-	1,990,091	14,657,397
Vanguard Small-Cap 600 Index I (VSMSX)	12,864,797	-	-500,000	2,556,610	14,921,406
Vanguard Mid-Cap 400 Index Fund I (VSPMX)	27,167,230	-	-2,500,000	4,064,945	28,732,175
Vanguard Growth Index (VIGIX)	12,655,755	-	-	1,889,601	14,545,356
Twin Capital Low Volatility	20,482,872	-37,319	-22,824,975	2,394,443	52,340
Twin Capital Enhanced Index	13,564,631	-33,397	-2,500,000	1,830,189	12,894,819
<b>International Equity</b>					
Vanguard FTSE AW ex-US SC Index (VFSNX)	7,203,069	-	-	754,094	7,957,163
Vanguard Developed Markets Index (VTMNX)	19,518,334	-	-1,000,000	1,556,879	20,075,213
Vanguard Emerging Markets Index (VEMIX)	13,852,708	-	-	183,707	14,036,415
<b>Fixed Income</b>					
Vanguard Short Term Bond Index (VBITX)	5,481,538	-	750,000	-17,693	6,213,844
Vanguard Total Bond Index (VBTIX)	45,116,341	-	4,000,000	-733,078	48,383,263
Vanguard High Yield Bond Fund (VWEAX)	23,966,294	-	500,000	787,577	25,253,871
Vanguard International Bond (VTIFX)	11,468,394	-	750,000	-237,460	11,980,934
<b>REIT</b>					
Vanguard Real Estate Index Fund (VGSNX)	11,509,558	-	500,000	2,634,311	14,643,869
Cash	4,829	-	-	4	4,833
<b>Total Fund Performance</b>	<b>242,833,553</b>	<b>-70,716</b>	<b>-</b>	<b>20,841,613</b>	<b>263,675,165</b>
NMA	2,124,655	-	-205,567	-	1,919,088
<b>Total Fund</b>	<b>244,958,207</b>	<b>-70,716</b>	<b>-205,567</b>	<b>20,841,613</b>	<b>265,594,253</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.



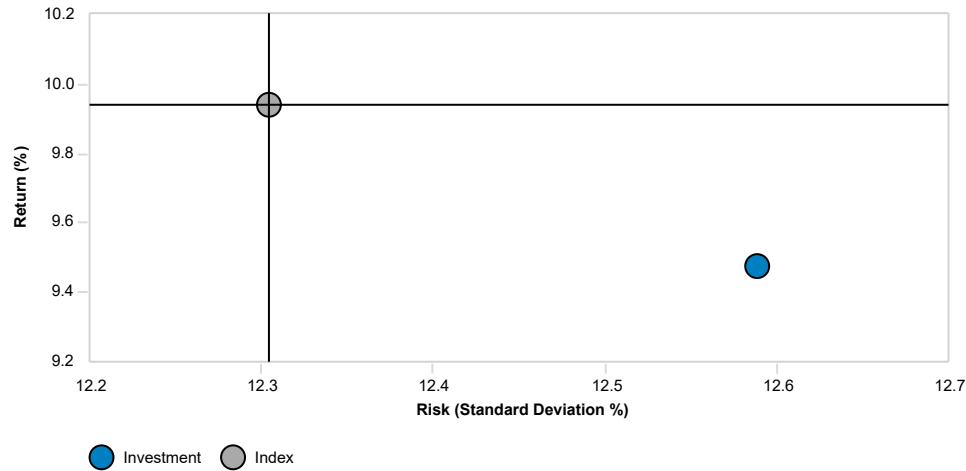
### Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	9.48	12.59	0.69	100.47	9	104.22	3
Index	9.94	12.30	0.73	100.00	9	100.00	3

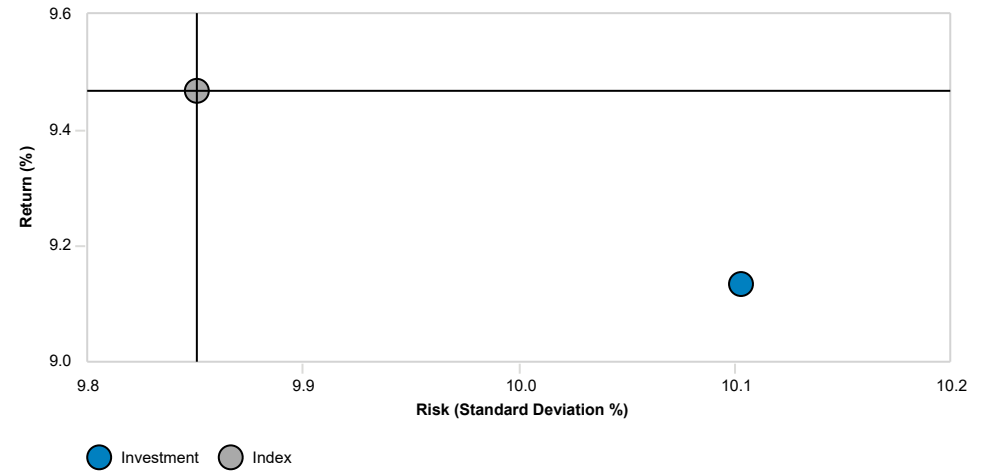
### Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	9.13	10.10	0.80	100.53	16	104.66	4
Index	9.47	9.85	0.85	100.00	16	100.00	4

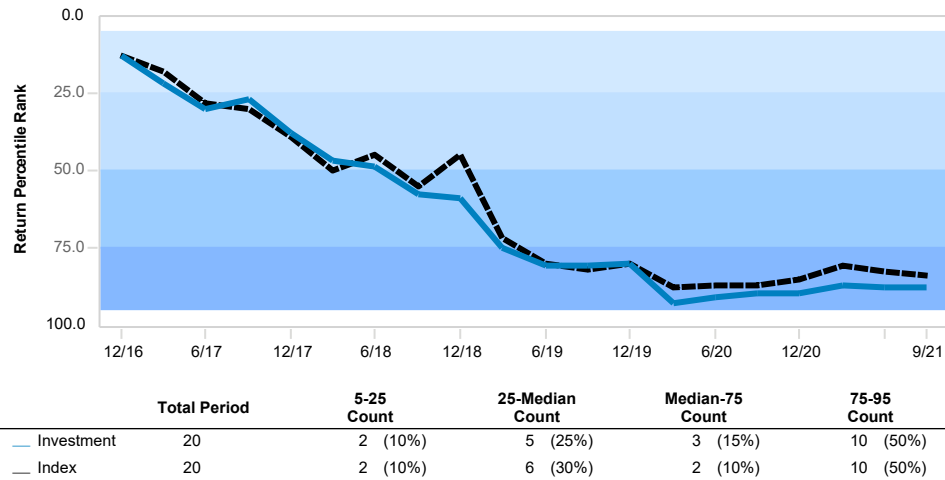
### Risk and Return 3 Years



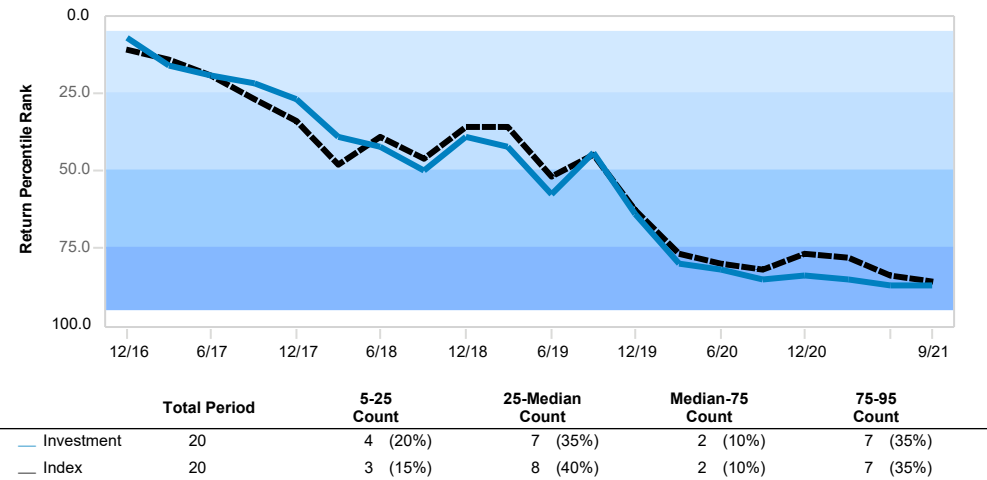
### Risk and Return 5 Years



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



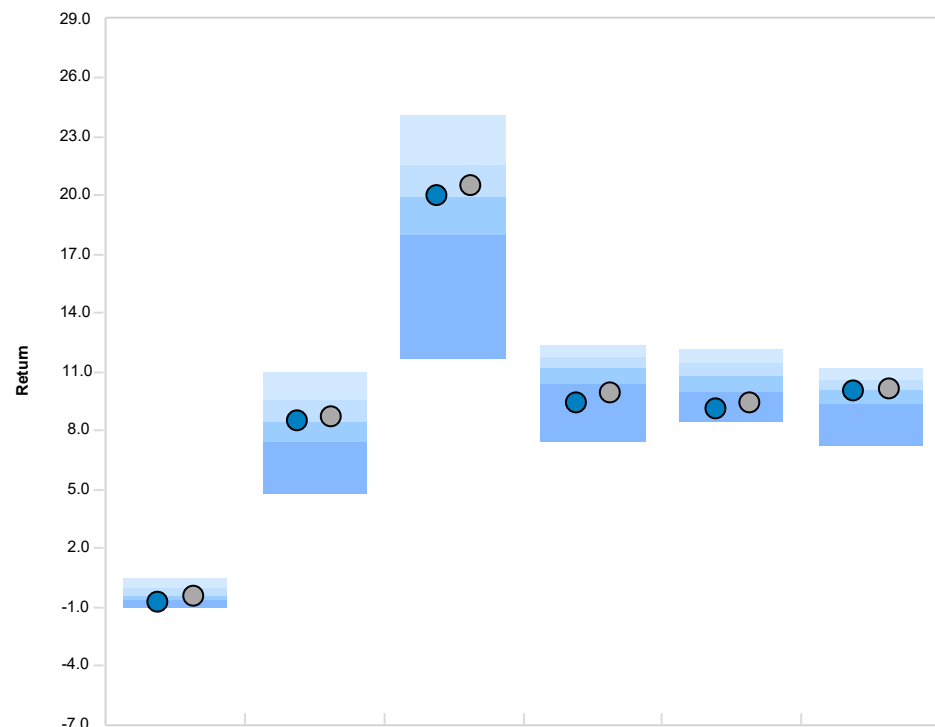
### 5 Year Rolling Percentile Rank All Public Plans-Total Fund



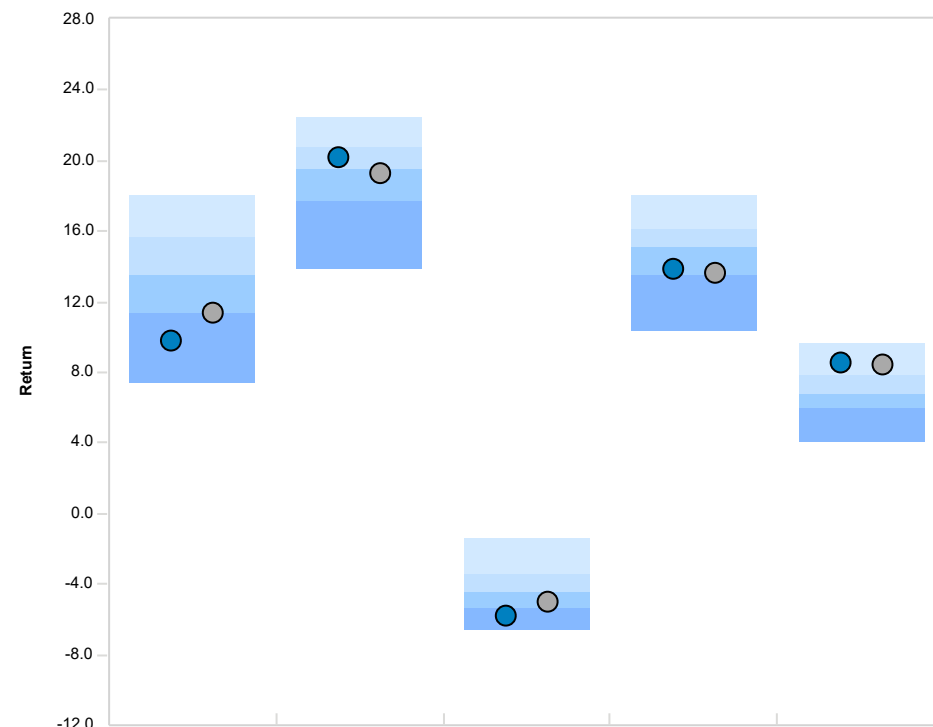
Does not include Non-Measured Assets (NMA).



### 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 September 30, 2021

	Market Value 04/01/2001	Net Flows	Return On Investment	Market Value 09/30/2021
Investment	59,528,253	-15,400,443	219,547,356	263,675,165

### Comparative Performance

	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020	1 Qtr Ending Mar-2020
Investment	4.84	4.32	10.59	4.83	12.92	-16.09
Index	4.86	4.12	11.04	4.76	13.88	-15.37

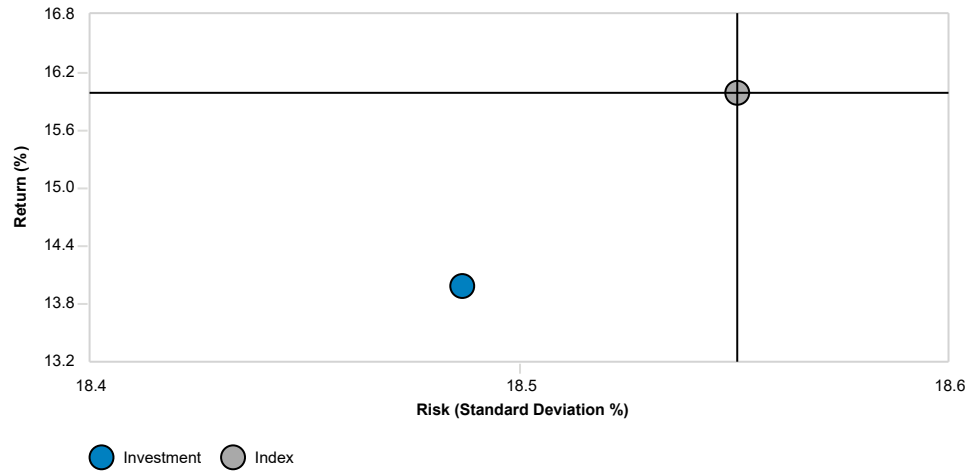
### Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	13.99	18.49	0.74	96.00	9	101.85	3
Index	15.99	18.55	0.83	100.00	10	100.00	2

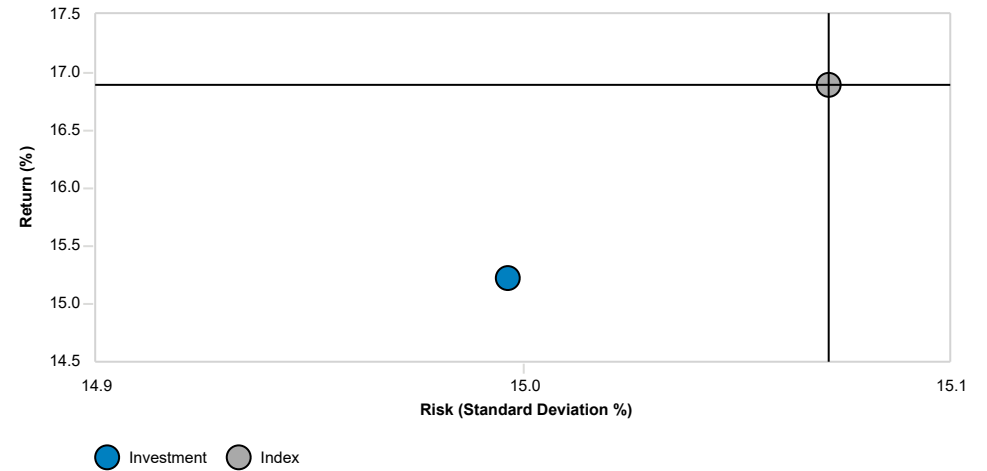
### Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	15.22	15.00	0.94	95.52	16	101.06	4
Index	16.90	15.07	1.04	100.00	17	100.00	3

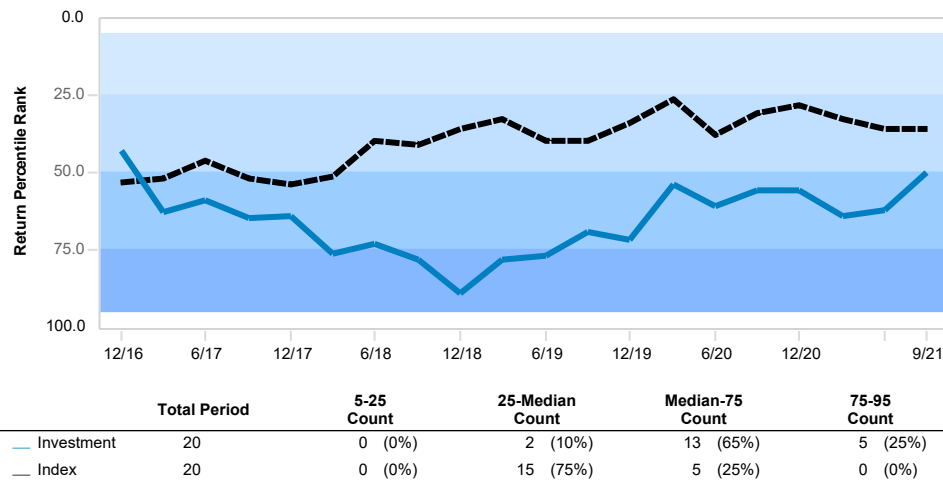
### Risk and Return 3 Years



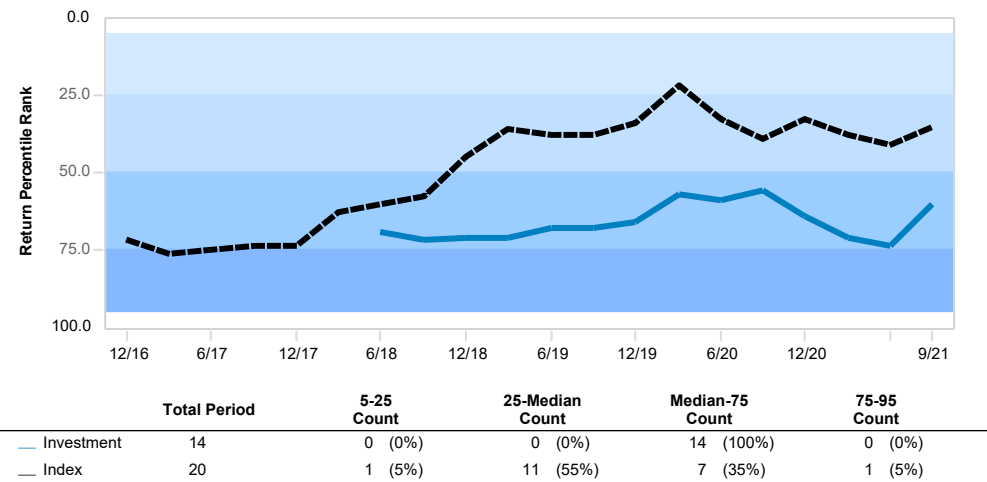
### Risk and Return 5 Years



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

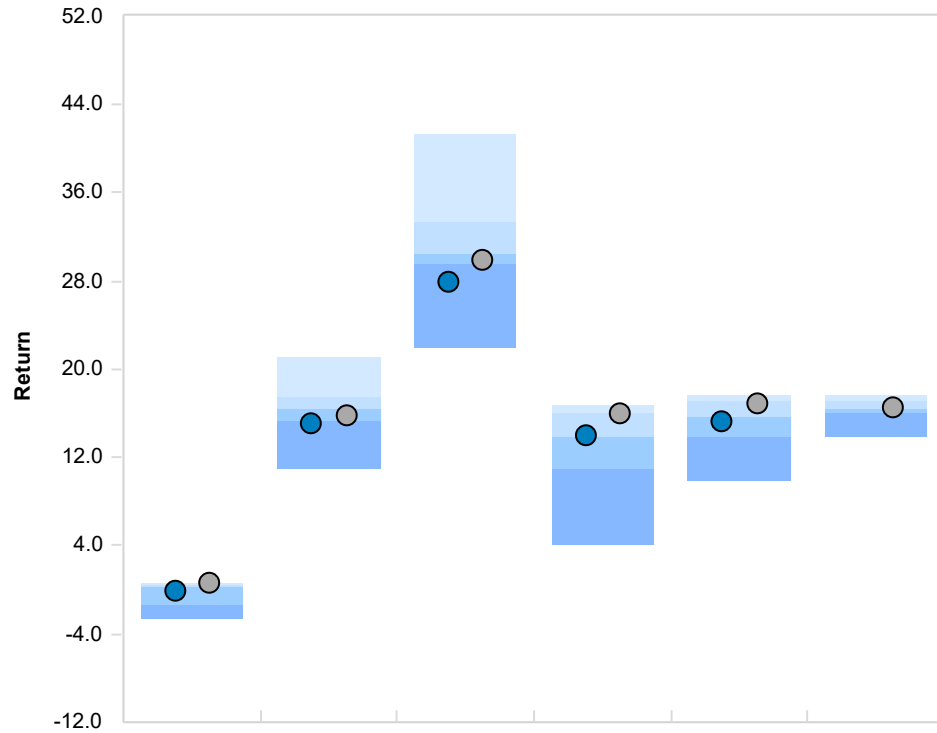


### 5 Year Rolling Percentile Rank IM U.S. Large Cap Enhanced Index Equity (SA+CF)

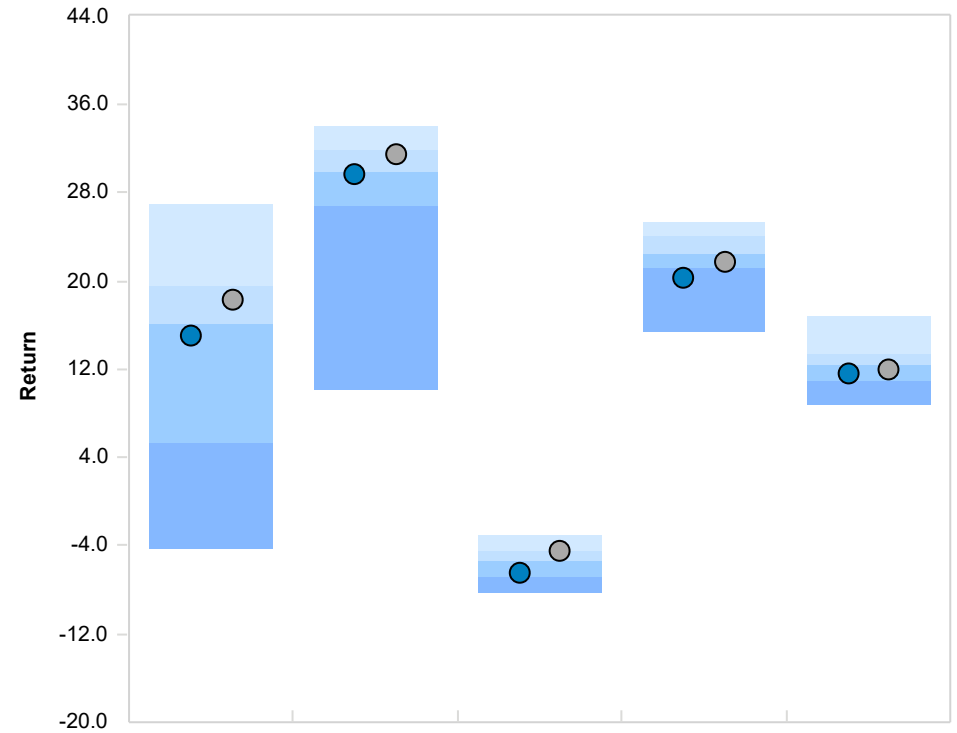




**Peer Group Analysis - IM U.S. Large Cap Enhanced Index Equity (SA+CF)**



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



**Financial Reconciliation Since Inception Ending September 30, 2021**

	Market Value 06/01/2013	Net Flows	Return On Investment	Market Value 09/30/2021
Investment	7,598,363	-6,570,135	11,866,590	12,894,819

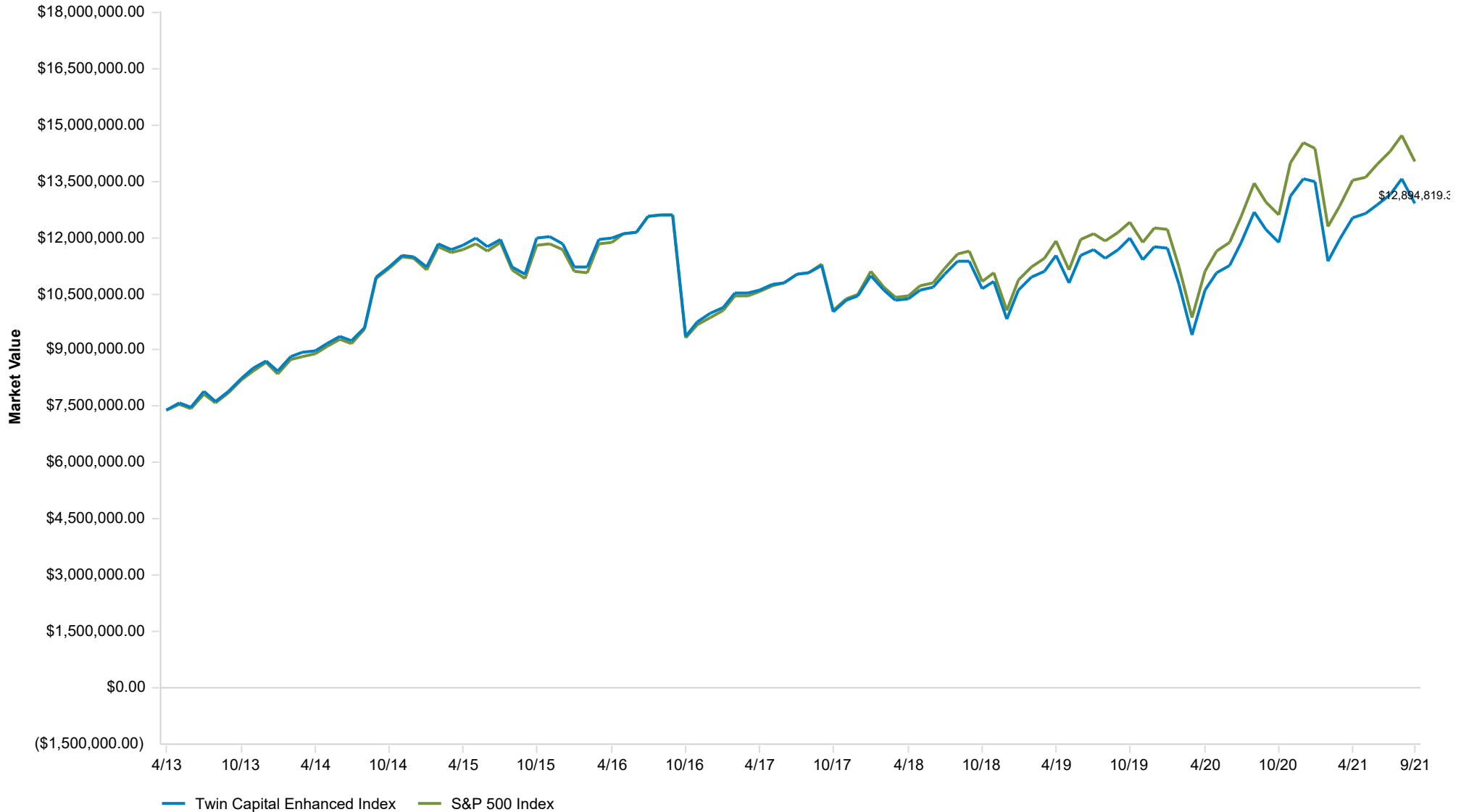
**Comparative Performance**

	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020	1 Qtr Ending Mar-2020
Investment	7.81	6.83	11.07	8.47	19.42	-20.02
Index	8.55	6.17	12.15	8.93	20.54	-19.60



**Schedule of Investable Assets**  
**Twin Capital Enhanced Index**  
Since Inception Ending September 30, 2021

**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	-6,266,163	11,780,067	12,894,819	187.78	287.8



Portfolio Characteristics (Benchmark: S&P 500 Index)		
	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$)	553,694,284,724	553,978,873,706
Median Mkt. Cap (\$)	47,695,972,800	30,680,083,840
Price/Earnings ratio	21.89	24.75
Price/Book ratio	3.93	4.50
5 Yr. EPS Growth Rate (%)	21.27	20.07
Current Yield (%)	1.40	1.42
Beta (5 Years, Monthly)	0.99	1.00
Number of Stocks	189	505

Top Ten Equity Holdings (Benchmark: S&P 500 Index)				
	Portfolio Wt	Benchmark Wt	Active Wt	Qtr Rtrn
Apple Inc	6.13	6.08	0.05	3.47
Microsoft Corp	5.78	5.80	-0.02	4.27
Amazon.com Inc	4.11	3.92	0.19	-4.51
Alphabet Inc	2.51	2.20	0.31	9.49
Facebook Inc	2.07	2.21	-0.14	-2.39
JPMorgan Chase & Co	1.90	1.34	0.56	5.85
Alphabet Inc	1.88	2.06	-0.18	6.34
Berkshire Hathaway Inc	1.75	1.38	0.37	-1.79
NVIDIA Corporation	1.49	1.41	0.08	3.59
Johnson & Johnson	1.47	1.16	0.31	-1.38

Ten Best Performers (Benchmark: S&P 500 Index)				
	Portfolio Wt	Benchmark Wt	Active Wt	Quarterly Rtrn
Moderna Inc	0.18	0.37	-0.19	63.78
Catalent Inc	0.26	0.06	0.20	23.08
Fortinet Inc	0.46	0.11	0.35	22.61
West Pharmaceutical Services Inc.	0.23	0.09	0.14	18.28
Zions Bancorporation NA	0.34	0.03	0.31	17.88
Netflix Inc	0.33	0.74	-0.41	15.55
Tesla Inc	1.15	1.72	-0.57	14.09
Costco Wholesale Corp	0.35	0.54	-0.19	13.78
Danaher Corp	0.50	0.53	-0.03	13.52
Thermo Fisher Scientific Inc	0.54	0.62	-0.08	13.31

Ten Worst Performers (Benchmark: S&P 500 Index)				
	Portfolio Wt	Benchmark Wt	Active Wt	Quarterly Rtrn
FedEx Corp.	0.43	0.15	0.28	-26.29
Western Digital Corp	0.18	0.05	0.13	-20.70
Activision Blizzard Inc	0.30	0.16	0.14	-18.91
Newell Brands Inc	0.24	0.02	0.22	-18.67
Biogen Inc	0.18	0.12	0.06	-18.27
Micron Technology Inc.	0.33	0.22	0.11	-16.36
PulteGroup Inc	0.37	0.03	0.34	-15.61
Cigna Corp	0.25	0.19	0.06	-15.18
A. O. Smith Corp	0.19	0.02	0.17	-14.94
Centene Corp	0.22	0.10	0.12	-14.56

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	12.0	11.3	0.77	1.55	-0.09	0.01	-0.09	Greater than 25000M	85.81
Consumer Discretionary	11.9	12.1	-2.19	-0.05	-0.25	-0.01	-0.26	16000M To 25000M	7.71
Consumer Staples	5.9	5.8	-0.71	-0.32	-0.03	0.00	-0.03	12000M To 16000M	3.05
Energy	2.2	2.6	1.47	-1.74	0.08	0.01	0.09	8000M To 12000M	2.95
Financials	11.0	11.1	2.99	2.76	0.03	-0.01	0.01	5000M To 8000M	0.47
Health Care	13.1	13.3	0.68	1.21	-0.07	0.00	-0.07		
Industrials	8.4	8.4	-5.14	-4.23	-0.08	0.00	-0.08		
Information Technology	27.3	27.7	1.47	1.34	0.03	-0.01	0.02		
Materials	2.3	2.6	-5.76	-3.51	-0.05	0.01	-0.04		
Real Estate	2.9	2.6	2.70	0.87	0.05	0.00	0.05		
Utilities	2.9	2.5	2.44	1.74	0.02	0.00	0.02		
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>0.18</b>	<b>0.54</b>	<b>-0.36</b>	<b>0.00</b>	<b>-0.36</b>		



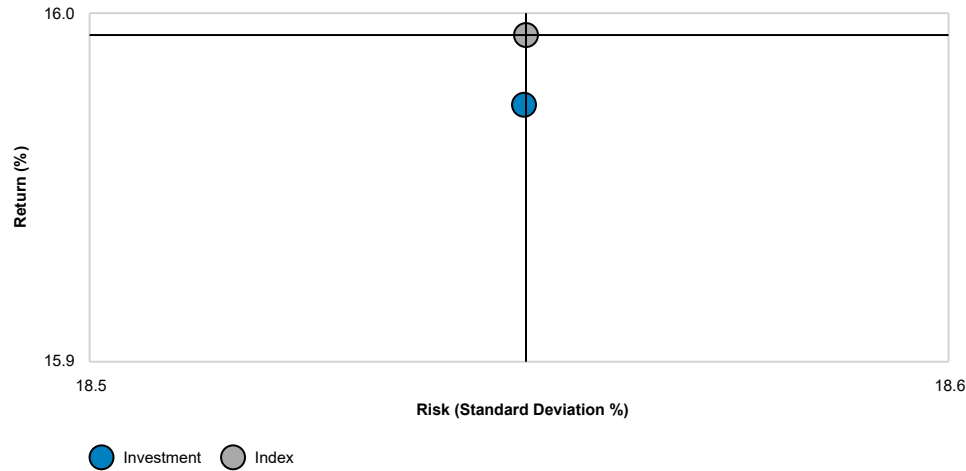
### Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	15.97	18.55	0.83	99.97	10	100.03	2
Index	15.99	18.55	0.83	100.00	10	100.00	2

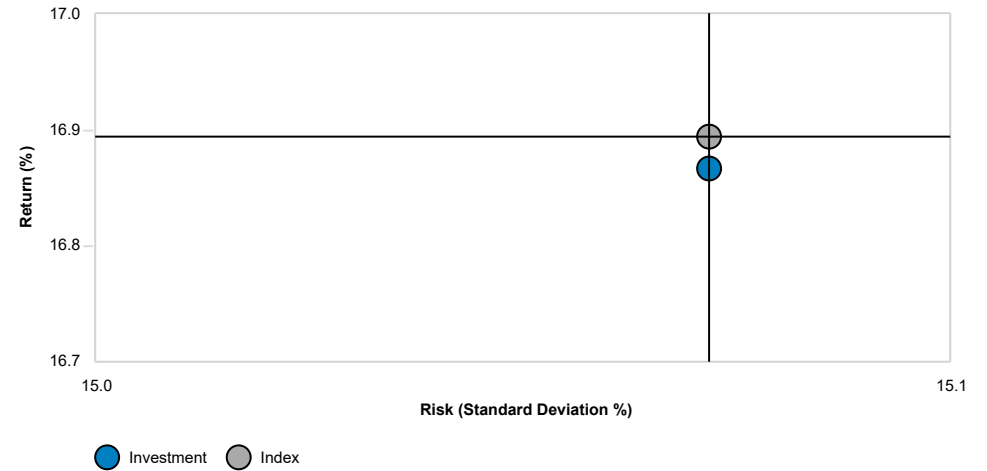
### Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	16.87	15.07	1.03	99.93	17	100.04	3
Index	16.90	15.07	1.04	100.00	17	100.00	3

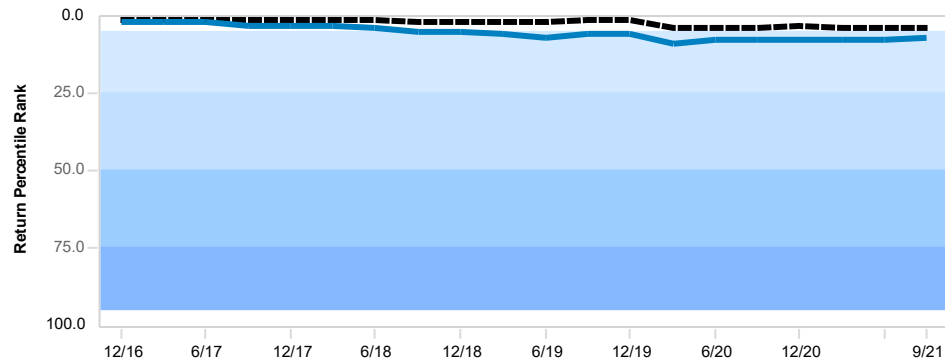
### Risk and Return 3 Years



### Risk and Return 5 Years

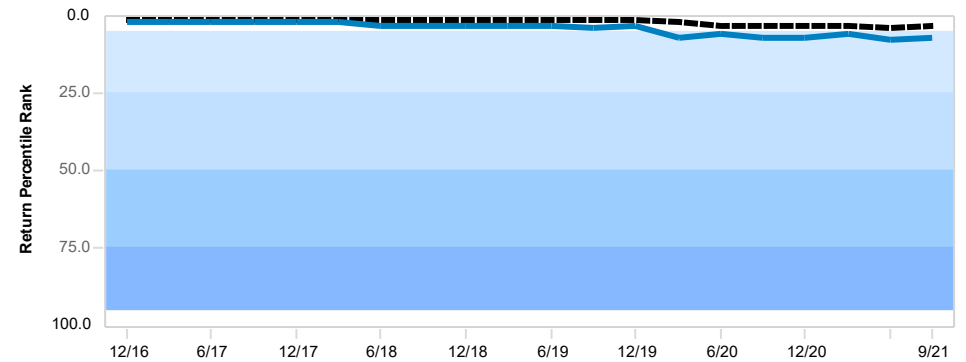


### 3 Year Rolling Percentile Rank IM S&P 500 Index (MF)



	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%)

### 5 Year Rolling Percentile Rank IM S&P 500 Index (MF)

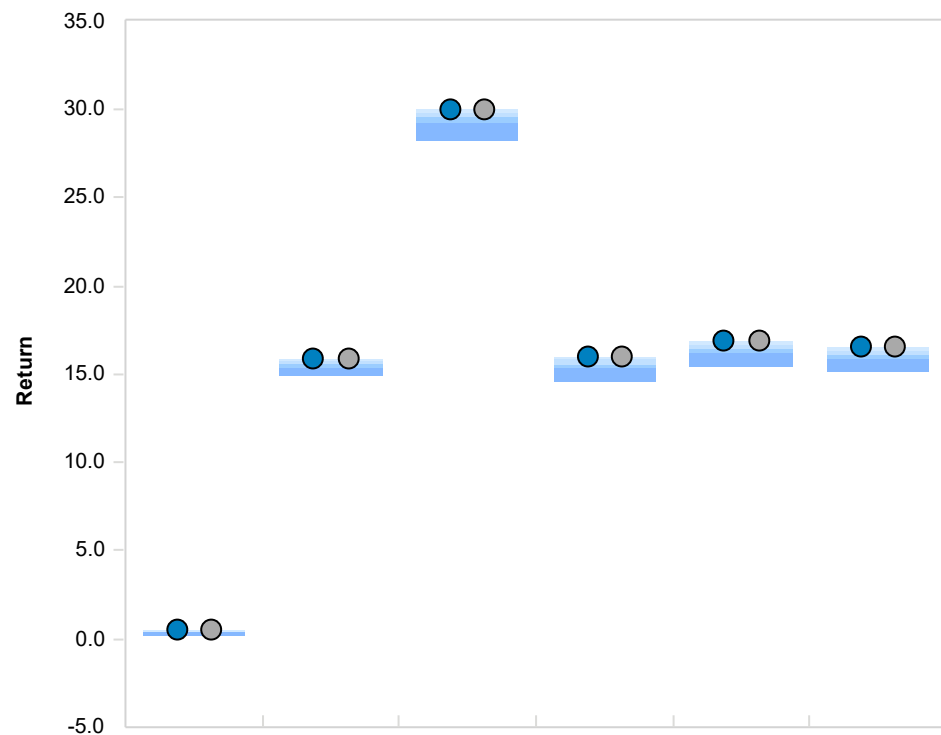


	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	20 (100%)	0 (0%)	0 (0%)	0 (0%)
Index	20	20 (100%)	0 (0%)	0 (0%)	0 (0%)

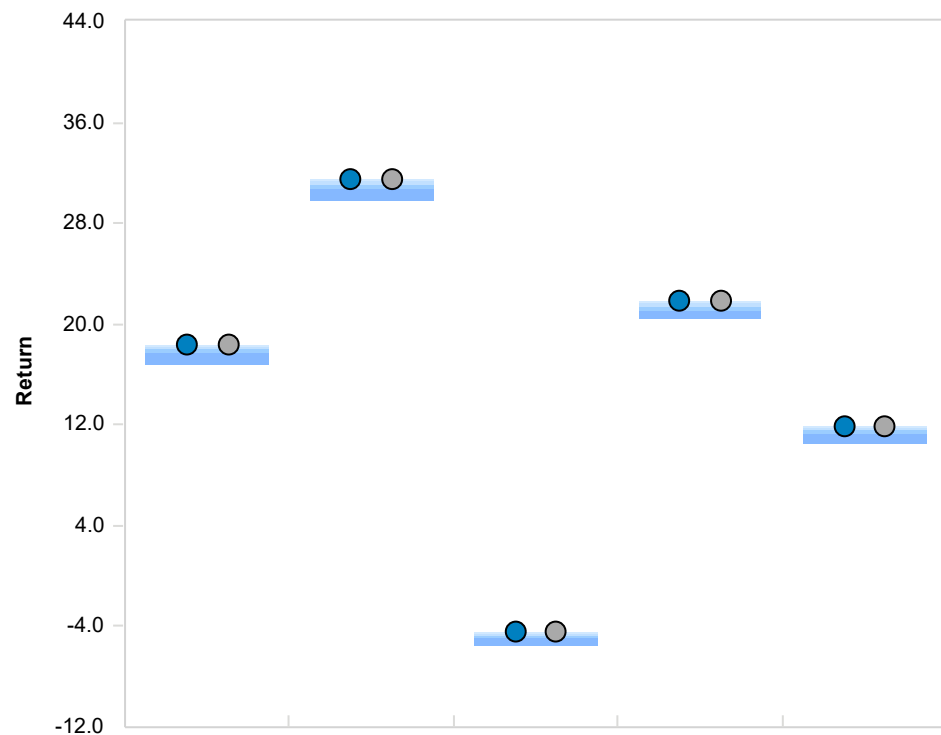
Inception date for VINIX is 12/2020. Manager returns for VINIX have been used for this report.



#### Peer Group Analysis - IM S&P 500 Index (MF)



#### Peer Group Analysis - IM S&P 500 Index (MF)



#### Financial Reconciliation Since Inception Ending September 30, 2021

No data found.

#### Comparative Performance

	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020	1 Qtr Ending Mar-2020
Investment	8.54 (12)	6.18 (9)	12.15 (10)	8.92 (12)	20.55 (11)	-19.60 (24)
Index	8.55 (3)	6.17 (10)	12.15 (9)	8.93 (6)	20.54 (12)	-19.60 (24)
Median	8.46	6.08	12.05	8.85	20.45	-19.65

Inception date for VINIX is 12/2020. Manager returns for VINIX have been used for this report.



### Fund Information

Fund Name :	Vanguard Institutional Index Fund: Vanguard Institutional Index Fund; Institutional Shares	Portfolio Assets :	\$282,631 Million
Fund Family :	Vanguard Group Inc	Portfolio Manager :	Butler/Louie
Ticker :	VINIX	PM Tenure :	2000--2017
Inception Date :	07/31/1990	Fund Style :	IM S&P 500 Index (MF)
Fund Assets :	\$126,548 Million	Style Benchmark :	S&P 500 Index
Portfolio Turnover :	4%		

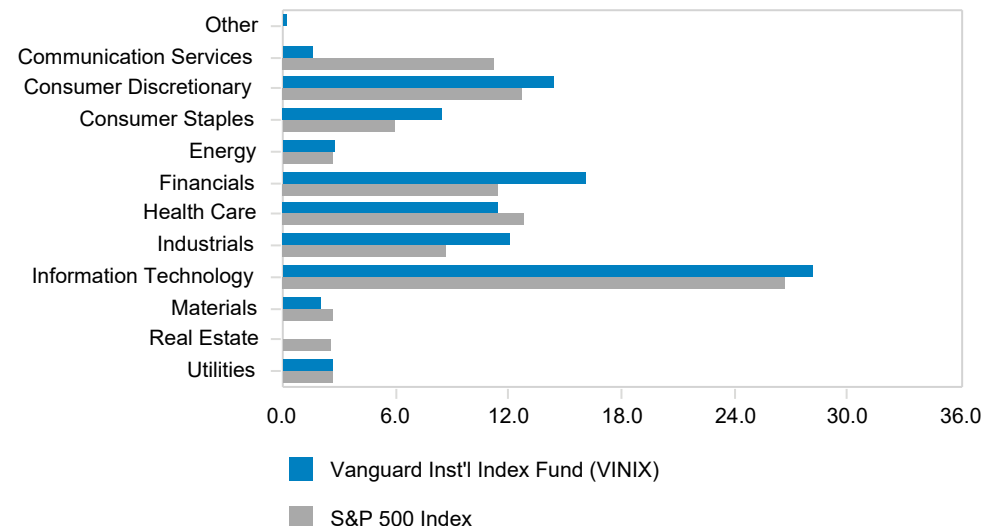
### Portfolio Characteristics As of 04/30/2021

	Portfolio	Benchmark
Total Securities	508	505
Avg. Market Cap (\$)	496,447,814,988	30,626,723,600
Price/Earnings (P/E)	35.45	28.09
Price/Book (P/B)	10.38	4.56
Dividend Yield	1.82	1.41
Annual EPS	8.82	8.84
5 Yr EPS	16.78	19.41
3 Yr EPS Growth	15.78	N/A
Beta	N/A	1.00

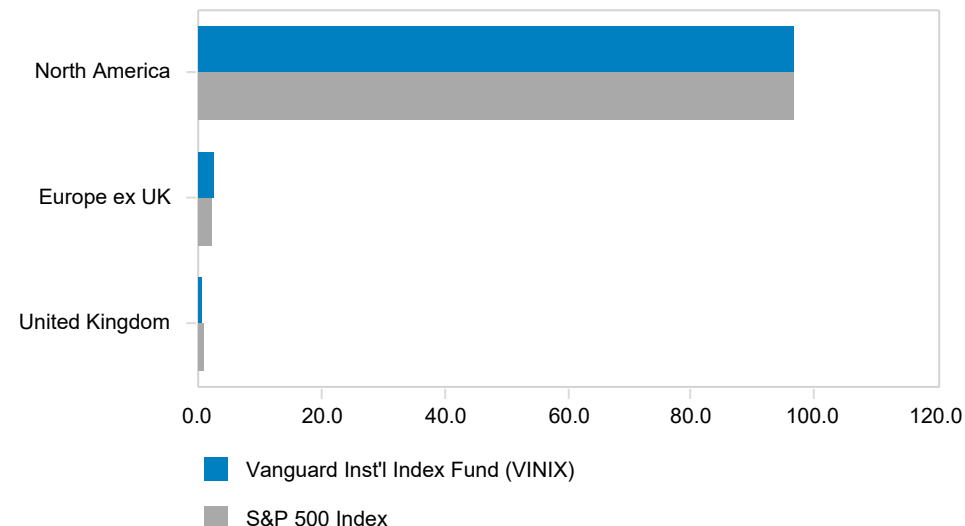
### Top Ten Securities As of 04/30/2021

Apple Inc ORD	5.9 %
Microsoft Corp ORD	5.4 %
Amazon.com Inc ORD	4.2 %
Facebook Inc ORD	2.2 %
Alphabet Inc ORD 1	2.0 %
Alphabet Inc ORD 2	2.0 %
Tesla Inc ORD	1.5 %
Berkshire Hathaway Inc ORD	1.5 %
JPMorgan Chase & Co ORD	1.3 %
Johnson & Johnson ORD	1.2 %

### Sector Weights As of 04/30/2021



### Region Weights As of 04/30/2021



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	22.78	20.08	1.07	99.92	10	100.03	2
Index	22.82	20.09	1.07	100.00	10	100.00	2

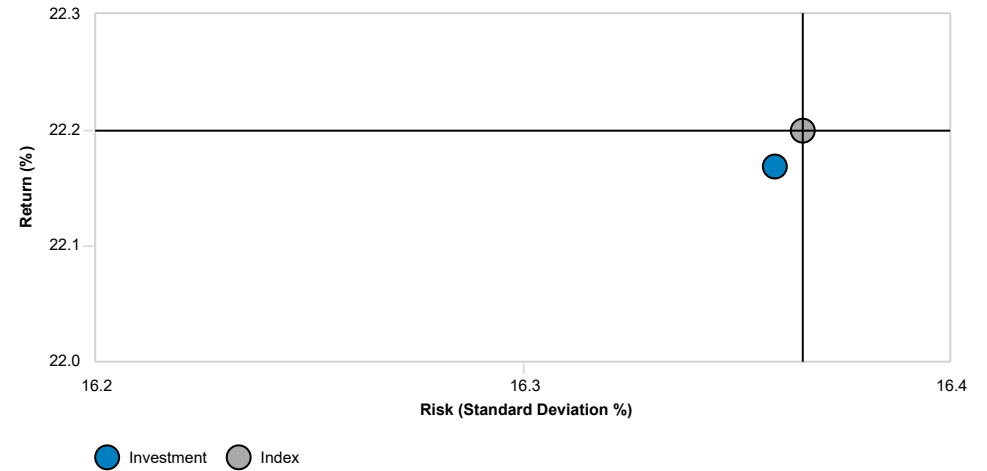
### Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	22.17	16.36	1.24	99.94	17	100.03	3
Index	22.20	16.37	1.24	100.00	17	100.00	3

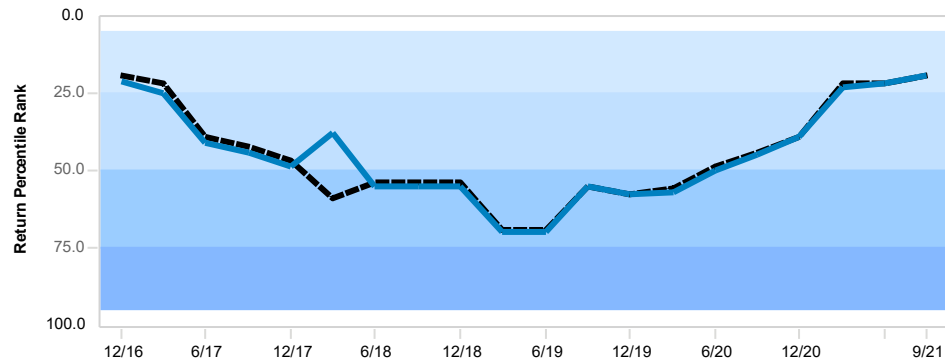
### Risk and Return 3 Years



### Risk and Return 5 Years

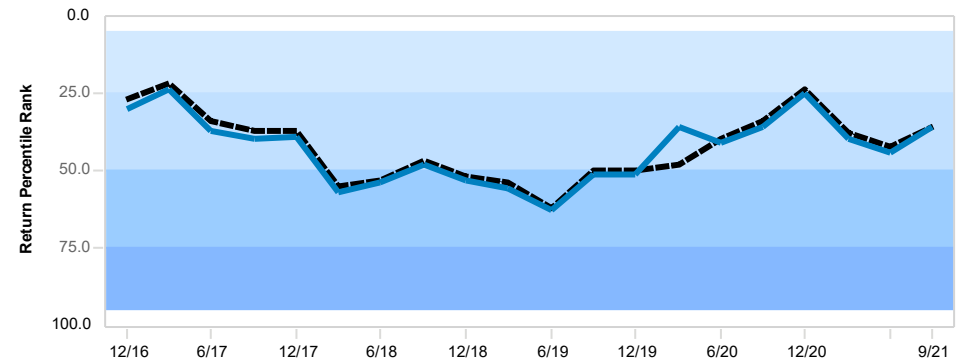


### 3 Year Rolling Percentile Rank IM U.S. Large Cap Growth Equity (MF)



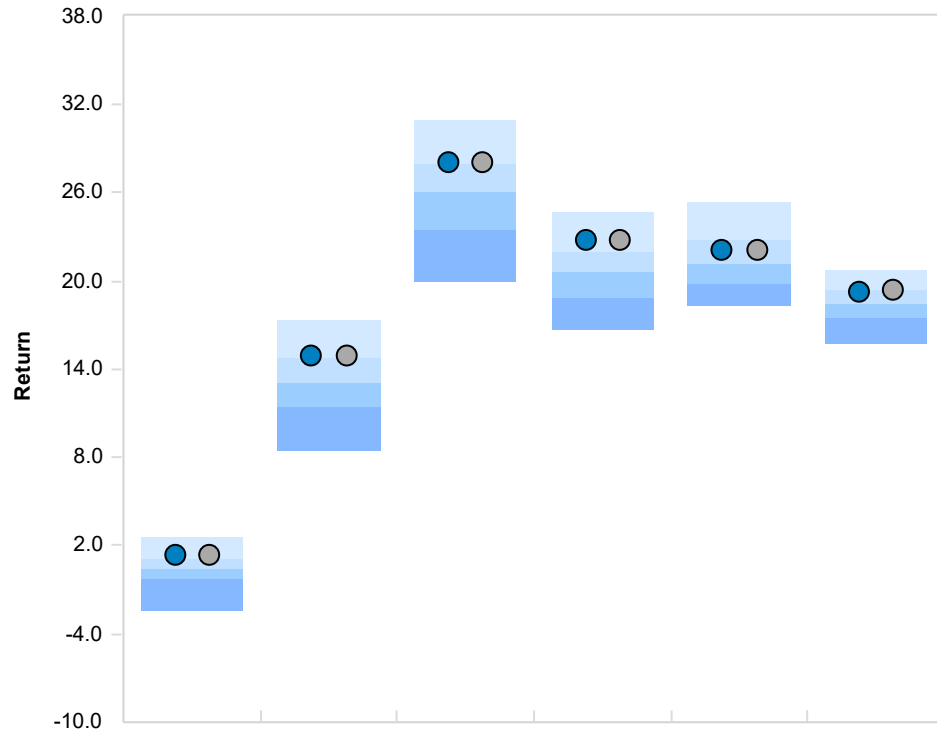
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	5 (25%)	7 (35%)	8 (40%)	0 (0%)
Index	20	5 (25%)	6 (30%)	9 (45%)	0 (0%)

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

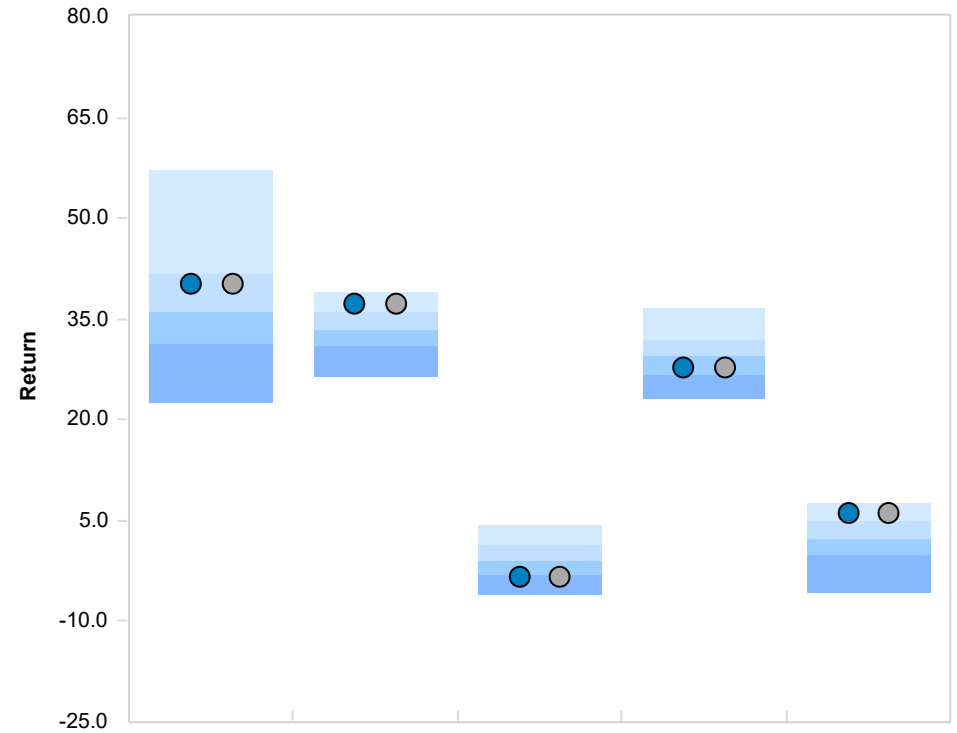


	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	2 (10%)	11 (55%)	7 (35%)	0 (0%)
Index	20	2 (10%)	13 (65%)	5 (25%)	0 (0%)

**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 September 30, 2021**

	Market Value 05/01/2010	Net Flows	Return On Investment	Market Value 09/30/2021
Investment	16,642,537	-26,144,975	24,047,794	14,545,356

**Comparative Performance**

	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020	1 Qtr Ending Mar-2020
Investment	11.70	1.49	11.45	13.00	29.04	-13.73
Index	11.71	1.50	11.46	13.02	29.06	-13.72





### 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 : \$23,708 Million  
Portfolio Turnover : 6%

Portfolio Assets : \$159,607 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

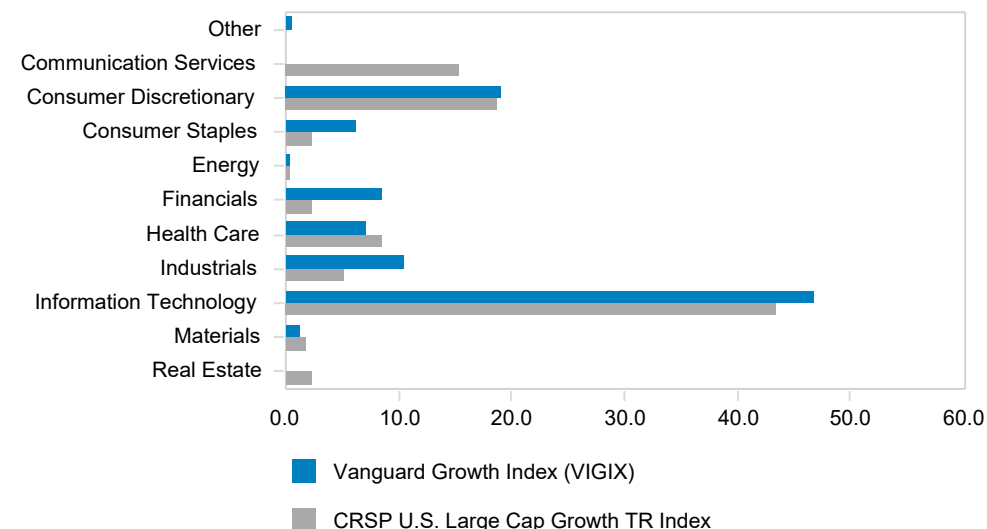
### Portfolio Characteristics As of 04/30/2021

	Portfolio	Benchmark
Total Securities	279	276
Avg. Market Cap (\$)	740,724,317,731	31,204,454,130
Price/Earnings (P/E)	43.23	40.42
Price/Book (P/B)	15.02	9.86
Dividend Yield	0.98	0.57
Annual EPS	21.14	11.44
5 Yr EPS	26.64	28.30
3 Yr EPS Growth	24.98	N/A
Beta (5 Years, Monthly)	1.00	1.00

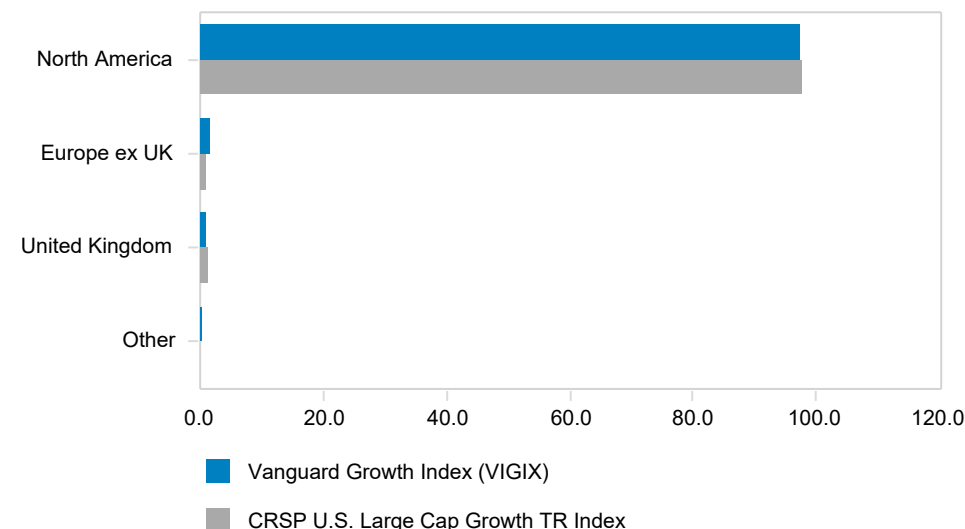
### Top Ten Securities As of 04/30/2021

Apple Inc ORD	9.8 %
Microsoft Corp ORD	9.4 %
Amazon.com Inc ORD	7.3 %
Facebook Inc ORD	3.9 %
Alphabet Inc ORD 1	3.5 %
Alphabet Inc ORD 2	3.3 %
Tesla Inc ORD	2.7 %
Visa Inc ORD	1.9 %
NVIDIA Corp ORD	1.7 %
Home Depot Inc ORD	1.7 %

### Sector Weights As of 04/30/2021



### Region Weights As of 04/30/2021



Statistics provided by Lipper. Most recent available data shown.



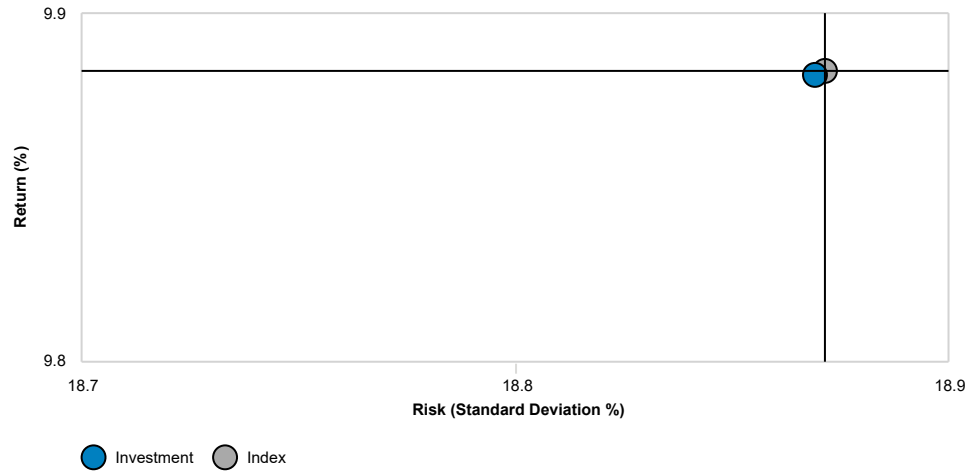
### Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	9.88	18.87	0.53	100.01	9	100.03	3
Index	9.88	18.87	0.53	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	12.16	15.48	0.74	100.02	16	100.04	4
Index	12.16	15.48	0.74	100.00	16	100.00	4

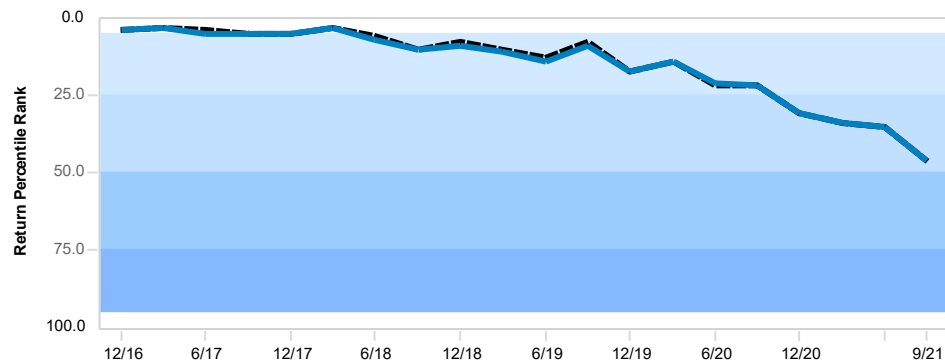
### Risk and Return 3 Years



### Risk and Return 5 Years

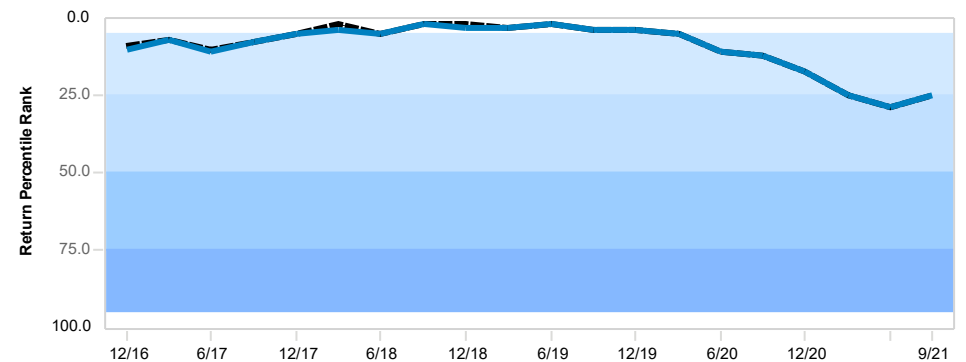


### 3 Year Rolling Percentile Rank IM U.S. Large Cap Value Equity (MF)



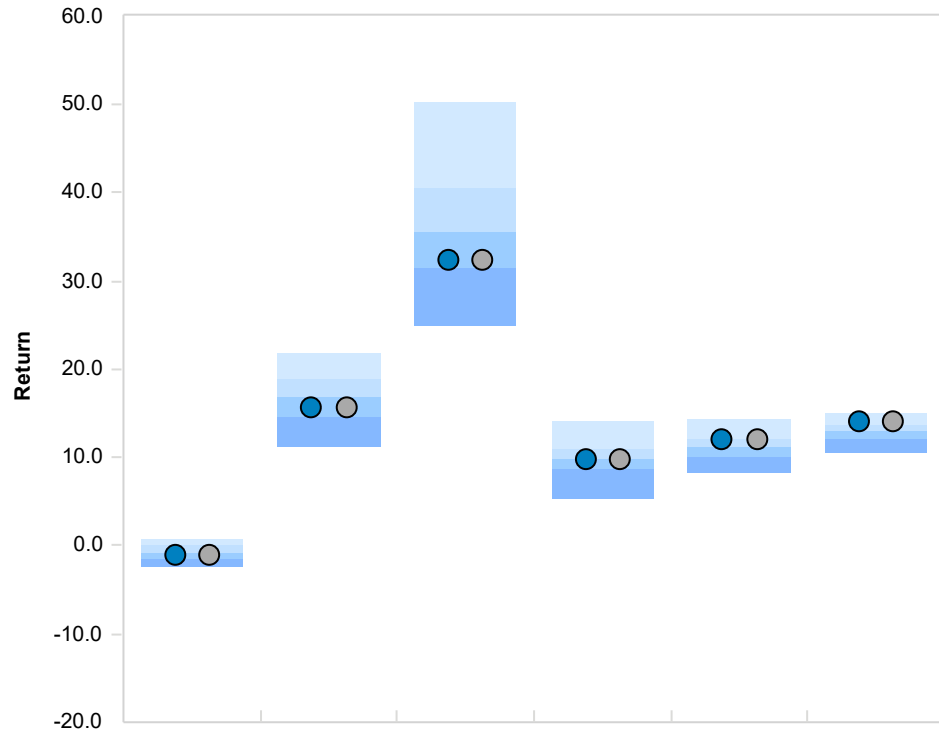
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	16 (80%)	4 (20%)	0 (0%)	0 (0%)
Index	20	16 (80%)	4 (20%)	0 (0%)	0 (0%)

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

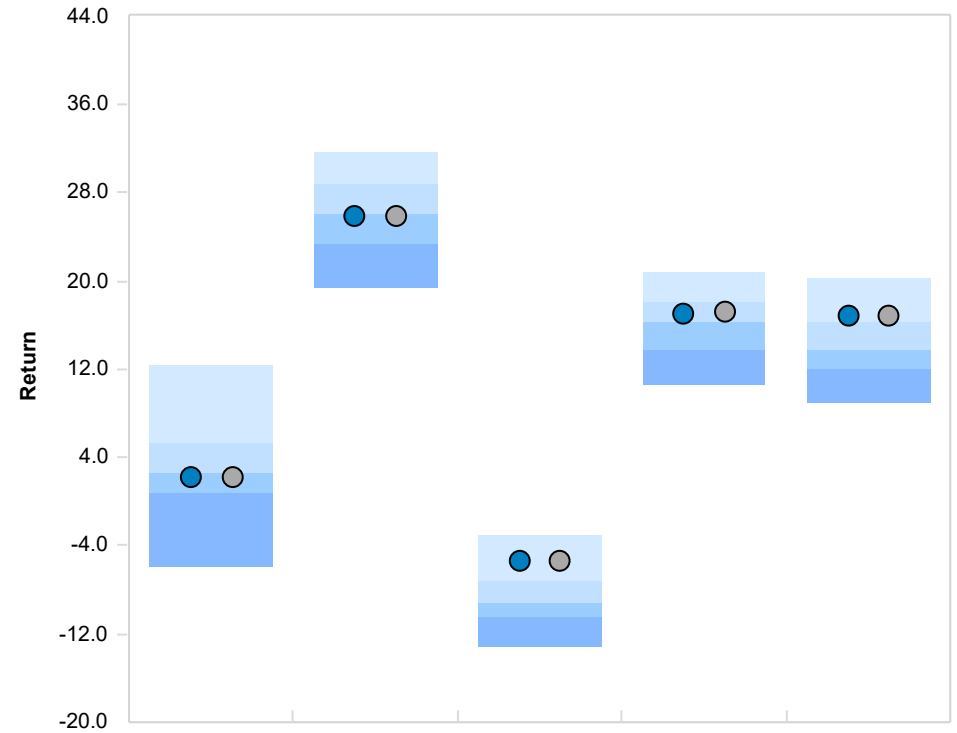


	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	19 (95%)	1 (5%)	0 (0%)	0 (0%)
Index	20	19 (95%)	1 (5%)	0 (0%)	0 (0%)

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



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



**Financial Reconciliation Since Inception Ending September 30, 2021**

	Market Value 07/01/2009	Net Flows	Return On Investment	Market Value 09/30/2021
Investment	1,021,656	536,436	13,099,305	14,657,397

**Comparative Performance**

	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020	1 Qtr Ending Mar-2020
Investment	5.24	10.99	14.52	5.62	12.76	-24.99
Index	5.25	10.99	14.53	5.62	12.73	-25.01



### 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 : \$14,067 Million  
Portfolio Turnover : 10%

Portfolio Assets : \$126,377 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

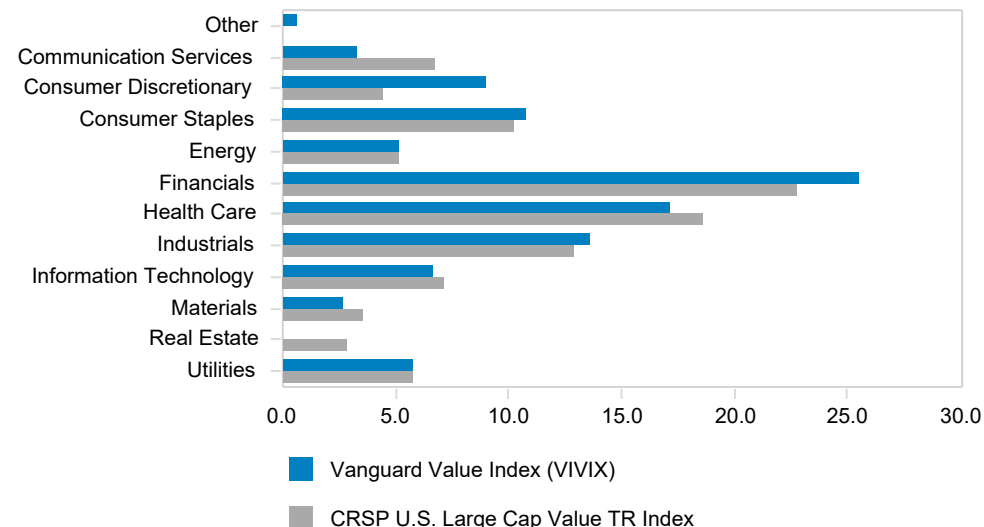
### Portfolio Characteristics As of 04/30/2021

	Portfolio	Benchmark
Total Securities	339	335
Avg. Market Cap (\$)	146,749,174,360	29,028,843,650
Price/Earnings (P/E)	26.24	20.31
Price/Book (P/B)	5.49	2.83
Dividend Yield	2.46	2.32
Annual EPS	-6.71	244.84
5 Yr EPS	5.56	9.54
3 Yr EPS Growth	4.27	N/A
Beta (5 Years, Monthly)	1.00	1.00

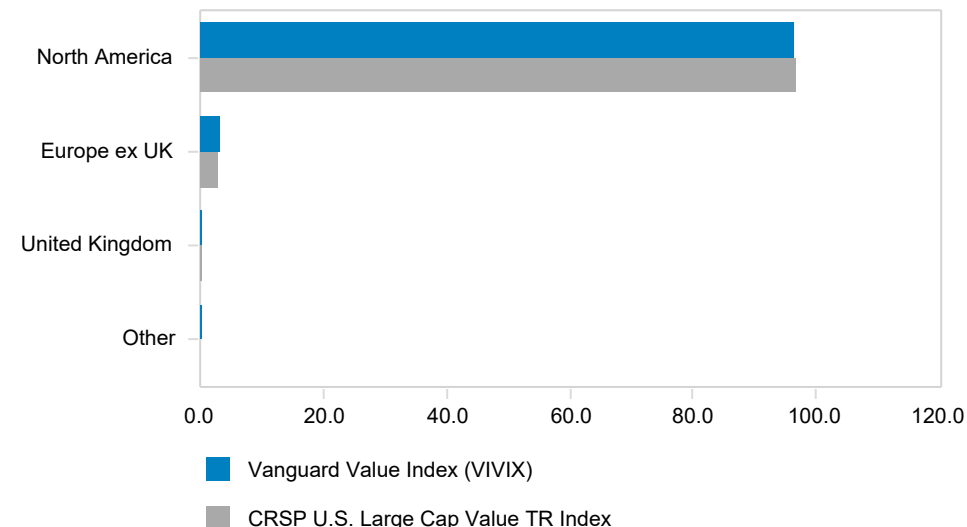
### Top Ten Securities As of 04/30/2021

Berkshire Hathaway Inc ORD	3.1 %
JPMorgan Chase & Co ORD	2.9 %
Johnson & Johnson ORD	2.6 %
UnitedHealth Group Inc ORD	2.3 %
Procter & Gamble Co ORD	2.0 %
Bank of America Corp ORD	1.9 %
Comcast Corp ORD	1.6 %
Exxon Mobil Corp ORD	1.5 %
Intel Corp ORD	1.4 %
Verizon Communications Inc ORD	1.4 %

### Sector Weights As of 04/30/2021



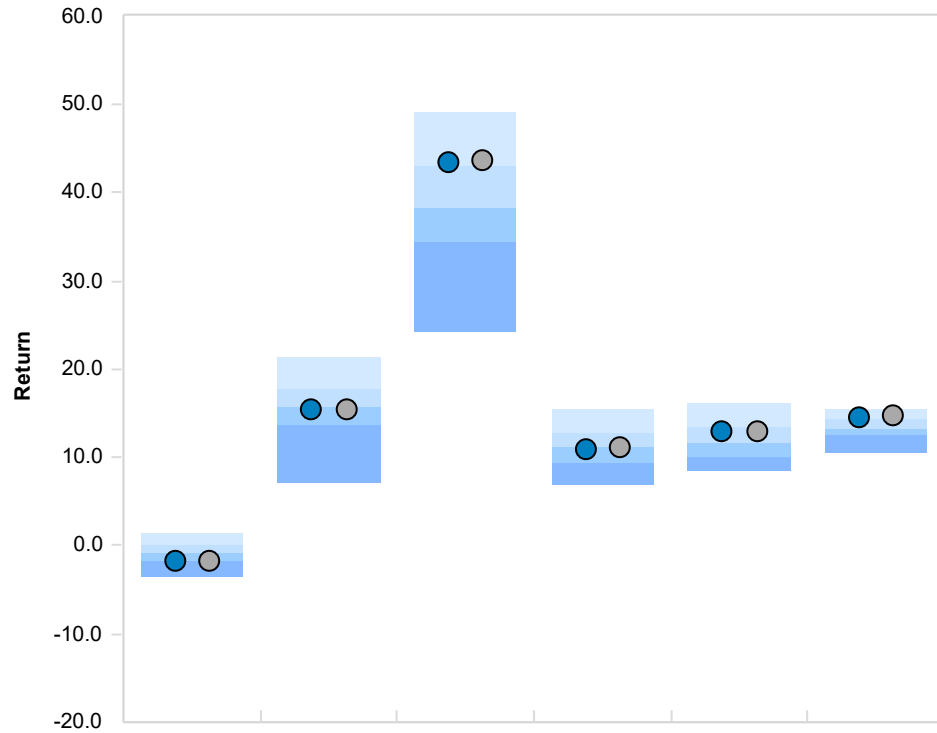
### Region Weights As of 04/30/2021



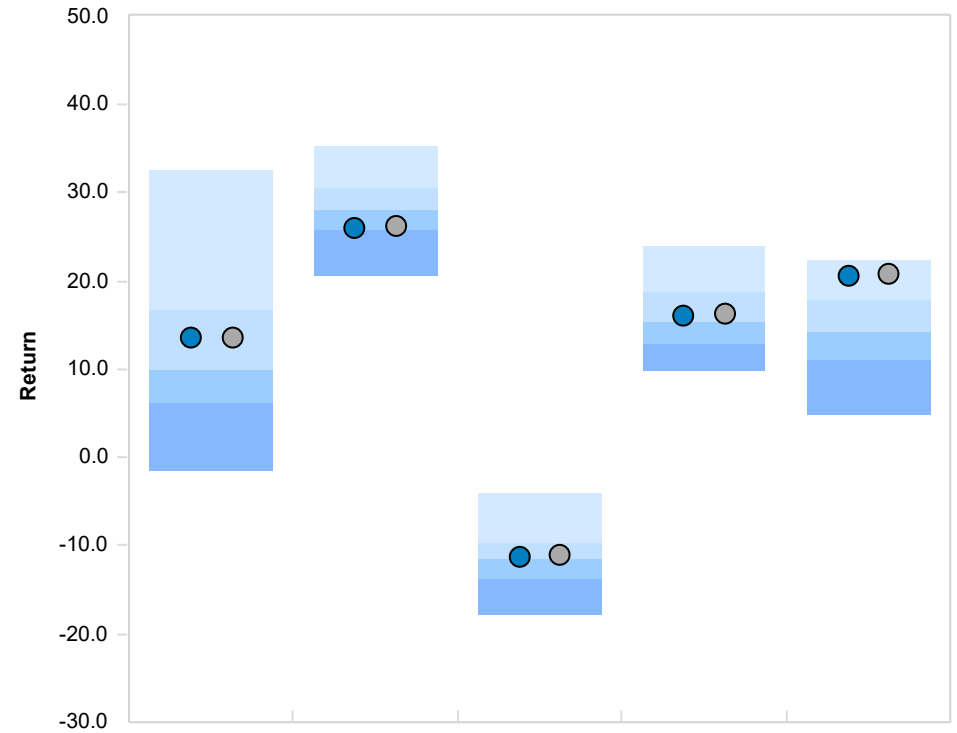
Statistics provided by Lipper. Most recent available data shown.



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



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



#### Financial Reconciliation Since Inception Ending September 30, 2021

No data found.

#### Comparative Performance

	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020	1 Qtr Ending Mar-2020
Investment	3.62 (84)	13.45 (23)	24.36 (11)	4.74 (76)	24.04 (30)	-29.71 (71)
Index	3.64 (84)	13.47 (23)	24.37 (11)	4.77 (75)	24.07 (30)	-29.70 (70)
Median	5.21	10.41	19.40	5.84	20.87	-28.20

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 : \$1,518 Million  
Portfolio Turnover : 17%

Portfolio Assets : \$2,957 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

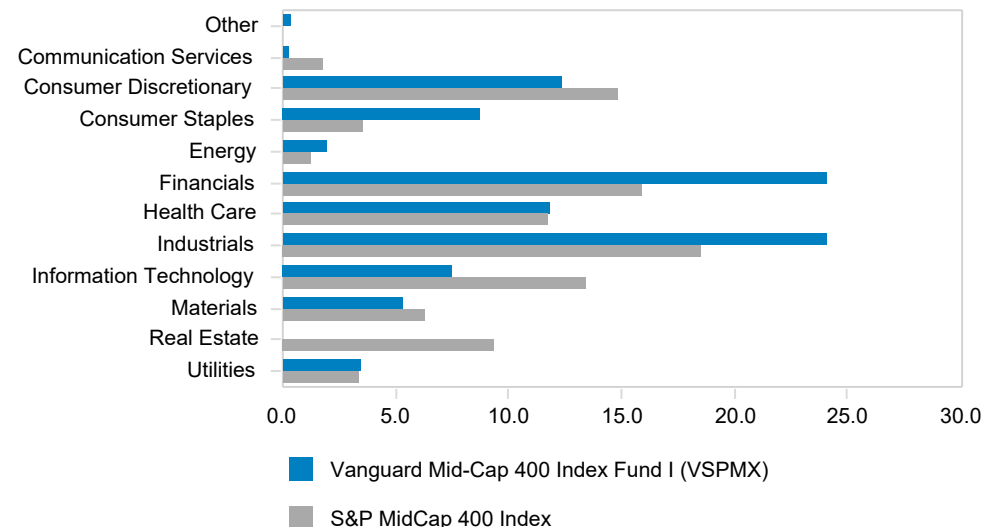
### Portfolio Characteristics As of 04/30/2021

	Portfolio	Benchmark
Total Securities	401	400
Avg. Market Cap (\$)	7,745,031,980	5,638,471,700
Price/Earnings (P/E)	34.73	24.63
Price/Book (P/B)	5.61	3.02
Dividend Yield	1.78	1.20
Annual EPS	0.73	2.72
5 Yr EPS	9.01	12.33
3 Yr EPS Growth	8.59	N/A
Beta	N/A	1.00

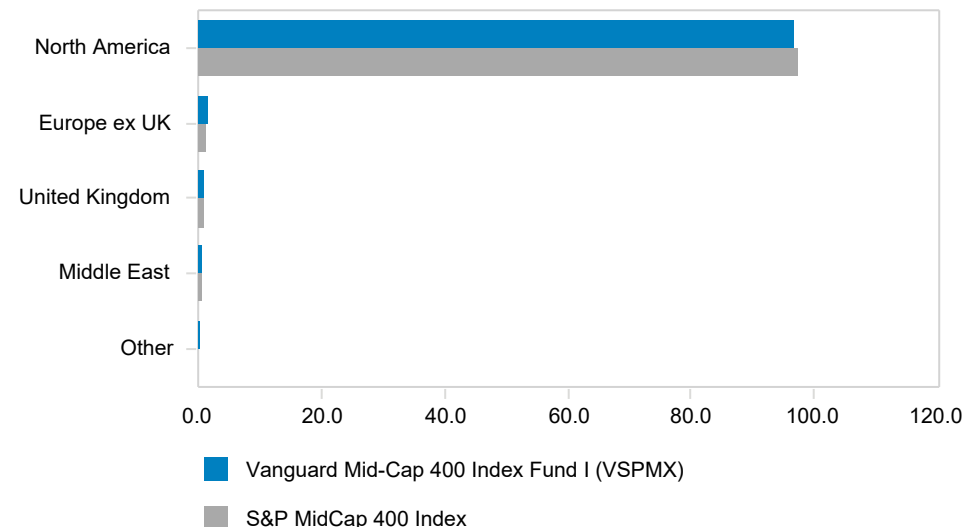
### Top Ten Securities As of 04/30/2021

Bio-Techne Corp ORD	0.7 %
Charles River Laboratories International	0.7 %
Fair Isaac Corp ORD	0.6 %
Cognex Corp ORD	0.6 %
Molina Healthcare Inc ORD	0.6 %
Signature Bank ORD	0.6 %
XPO Logistics Inc ORD	0.6 %
Solaredge Technologies Inc ORD	0.6 %
Williams-Sonoma Inc ORD	0.6 %
Graco Inc ORD	0.6 %

### Sector Weights As of 04/30/2021



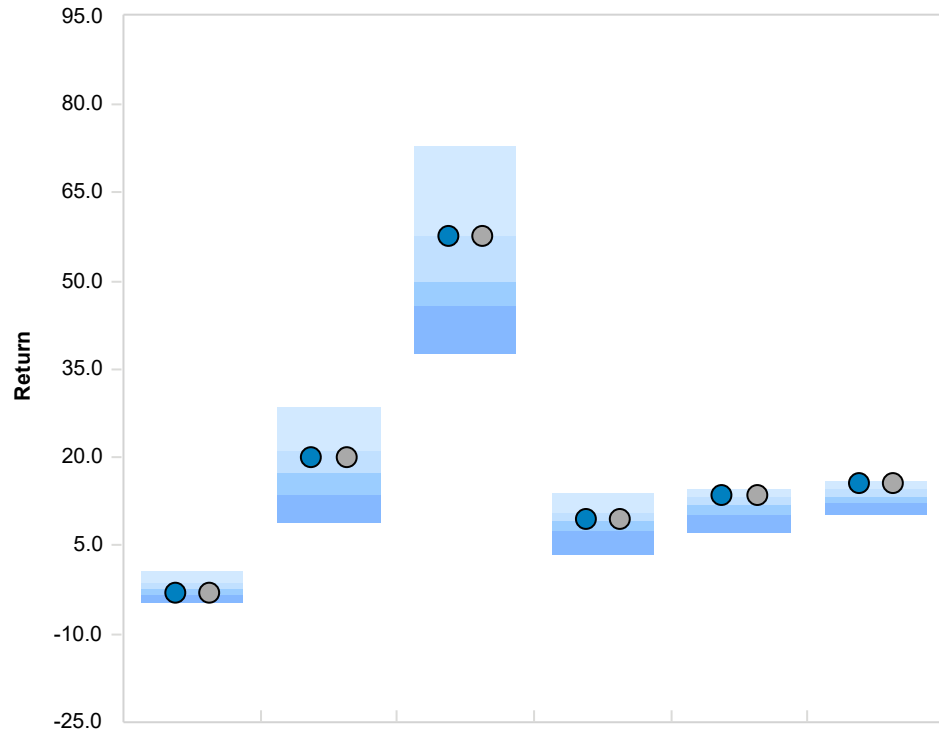
### Region Weights As of 04/30/2021



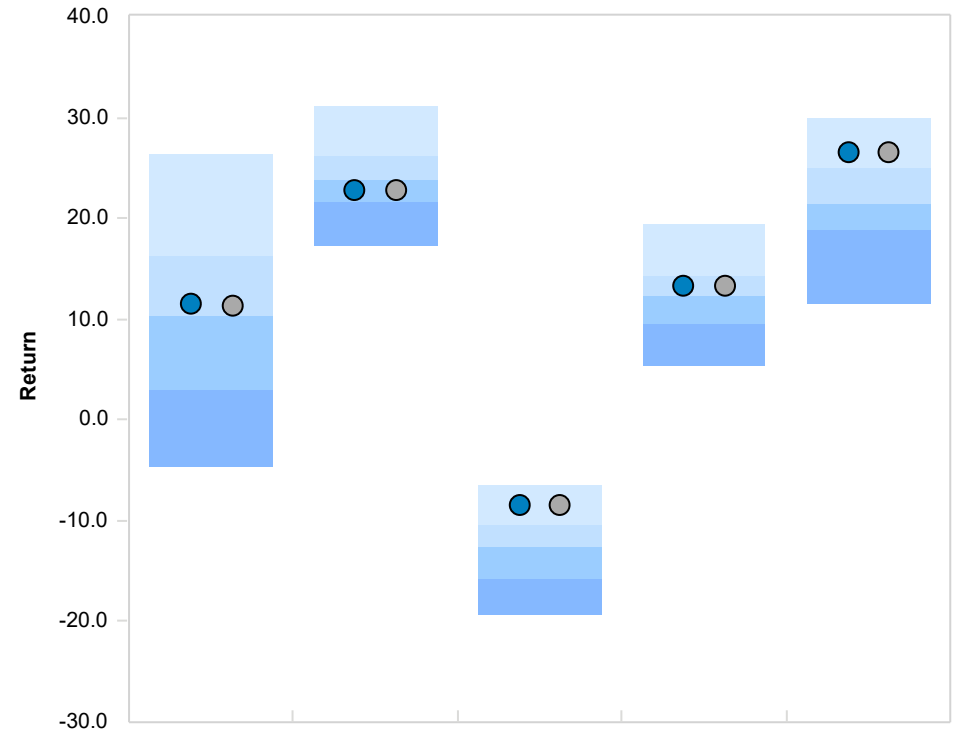
Statistics provided by Lipper. Most recent available data shown.



**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 September 30, 2021**

No data found.

**Comparative Performance**

	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020	1 Qtr Ending Mar-2020
Investment	4.49 (36)	18.24 (27)	31.31 (27)	3.18 (52)	22.08 (53)	-32.62 (48)
Index	4.51 (35)	18.24 (27)	31.31 (27)	3.17 (52)	21.94 (56)	-32.64 (49)
Median	4.00	15.25	28.43	3.45	22.42	-32.67

Inception date for VSMSX is 12/1/2018. Manager Returns for VSMSX 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 :	\$3,434 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 :	\$1,755 Million	Style Benchmark :	S&P SmallCap 600 Index
Portfolio Turnover :	15%		

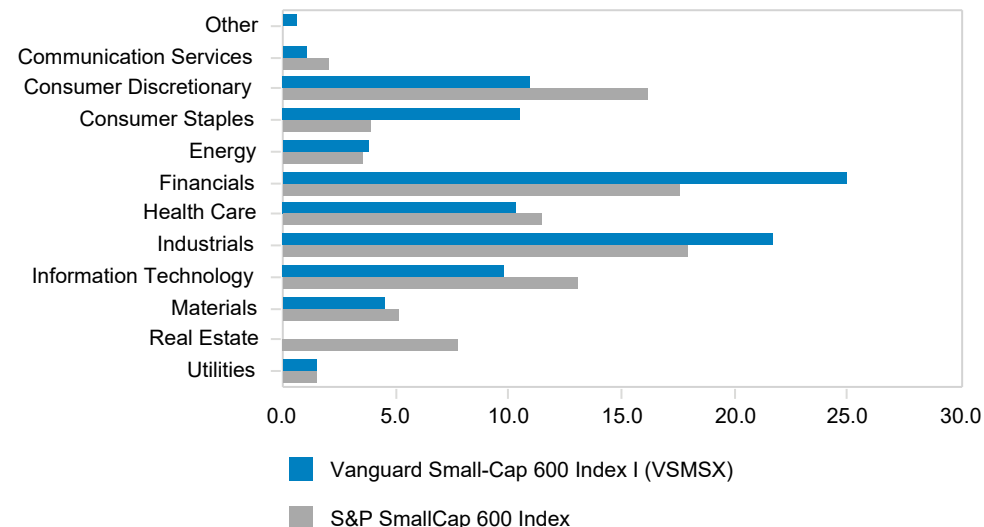
### Portfolio Characteristics As of 04/30/2021

	Portfolio	Benchmark
Total Securities	605	601
Avg. Market Cap (\$)	2,719,866,291	1,603,590,000
Price/Earnings (P/E)	33.60	21.33
Price/Book (P/B)	4.27	2.52
Dividend Yield	2.00	1.13
Annual EPS	1.34	0.79
5 Yr EPS	7.93	9.01
3 Yr EPS Growth	10.40	N/A
Beta	N/A	1.00

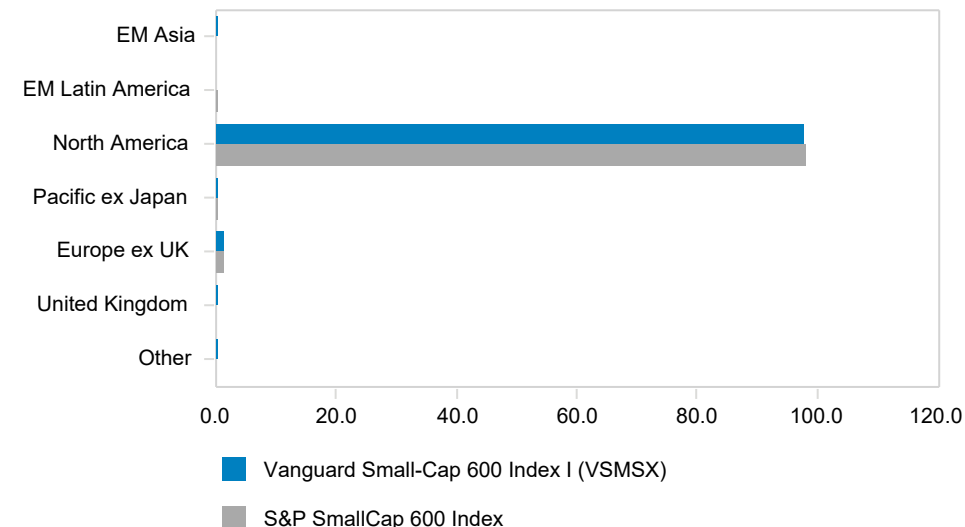
### Top Ten Securities As of 04/30/2021

GameStop Corp ORD	0.9 %
Crocs Inc ORD	0.6 %
Omniceil Inc ORD	0.6 %
Saia Inc ORD	0.6 %
Neogenomics Inc ORD	0.6 %
Chart Industries Inc ORD	0.6 %
Macy's Inc ORD	0.5 %
Ufp Industries Inc ORD	0.5 %
MicroStrategy Inc ORD	0.5 %
Exponent Inc ORD	0.5 %

### Sector Weights As of 04/30/2021



### Region Weights As of 04/30/2021



Statistics provided by Lipper. Most recent available data shown.





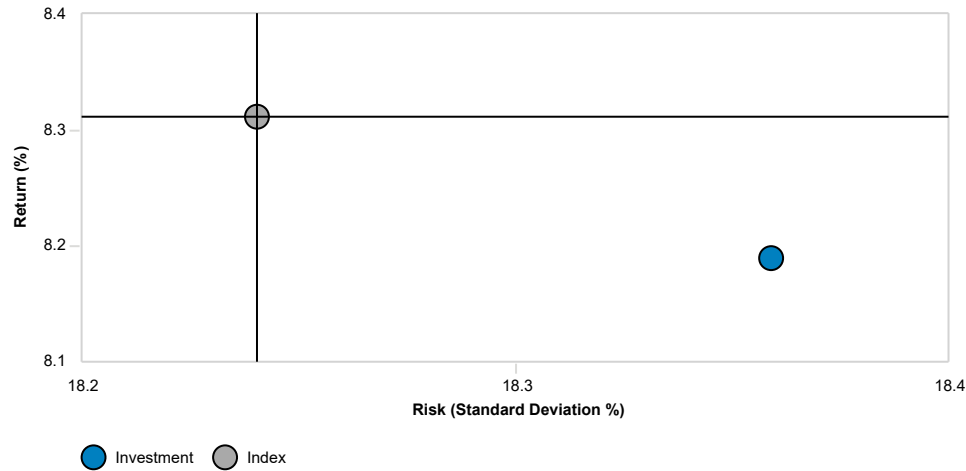
### Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	8.19	18.36	0.46	101.19	8	102.20	4
Index	8.31	18.24	0.46	100.00	8	100.00	4

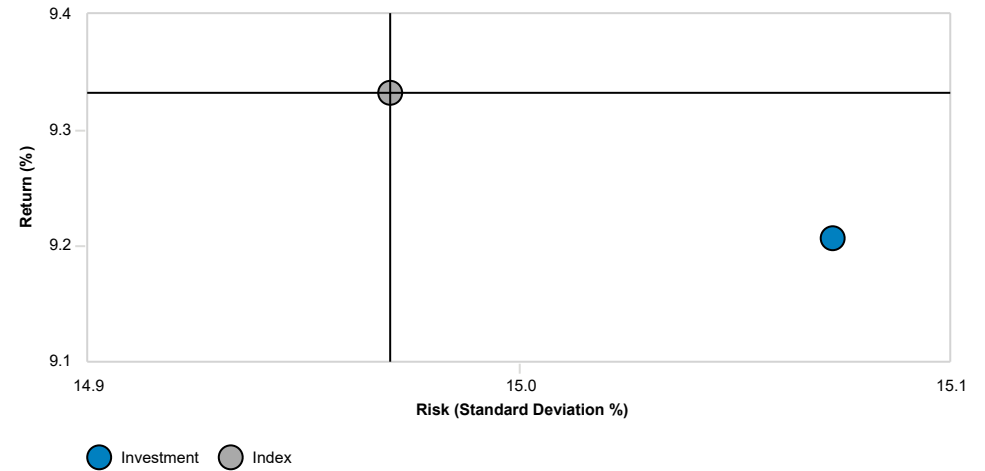
### Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	9.21	15.07	0.58	100.23	13	101.02	7
Index	9.33	14.97	0.59	100.00	13	100.00	7

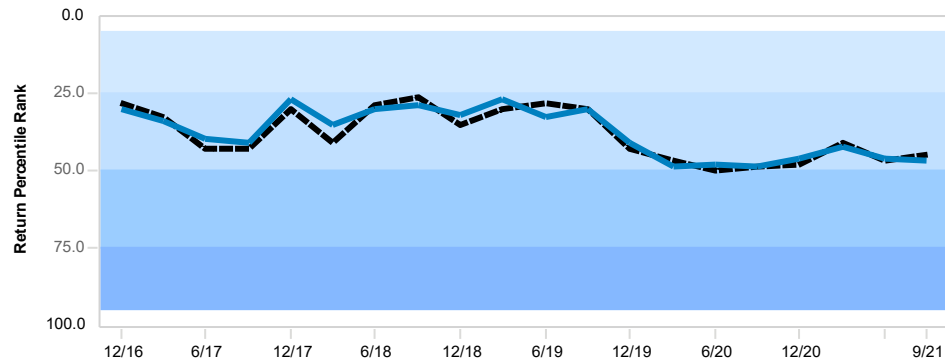
### Risk and Return 3 Years



### Risk and Return 5 Years

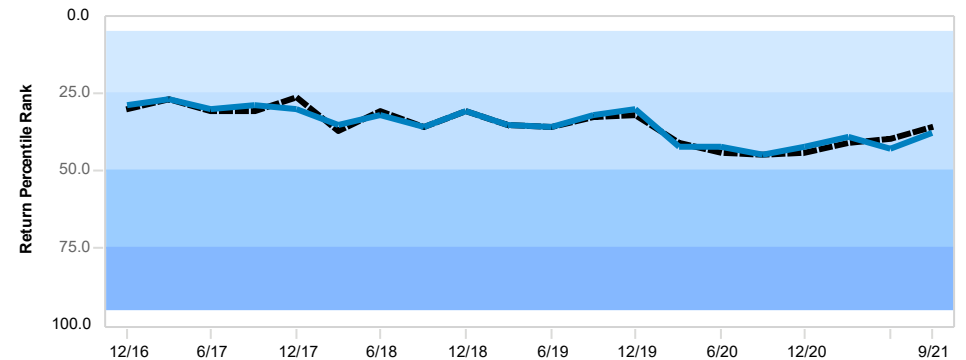


### 3 Year Rolling Percentile Rank IM International Multi-Cap Equity (MF)



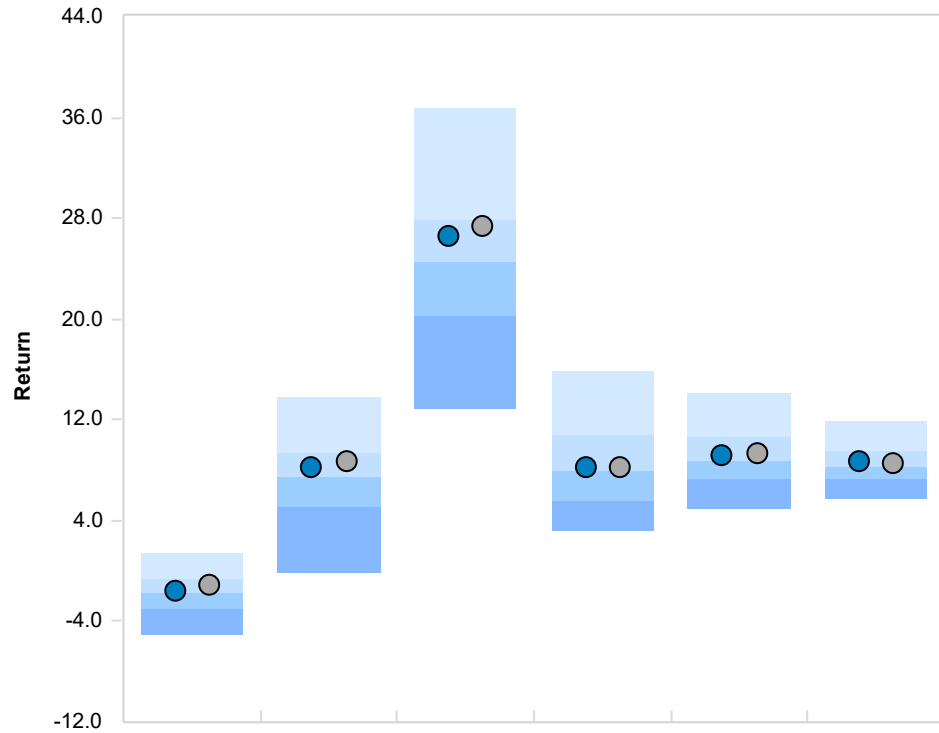
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	0 (0%)	20 (100%)	0 (0%)	0 (0%)
Index	20	0 (0%)	20 (100%)	0 (0%)	0 (0%)

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

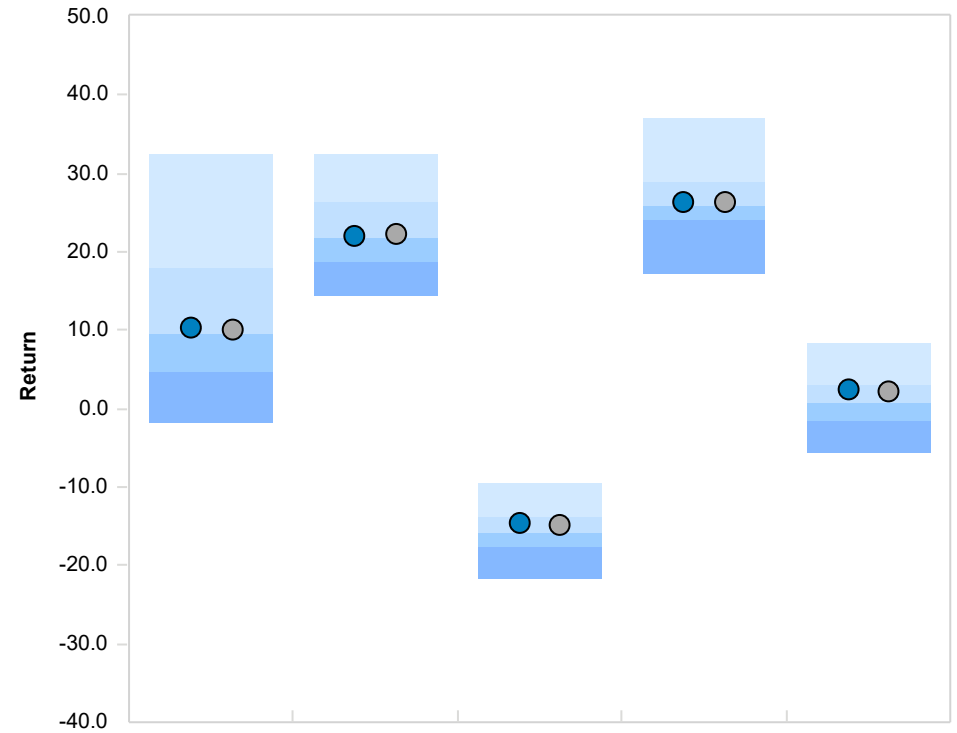


	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	0 (0%)	20 (100%)	0 (0%)	0 (0%)
Index	20	0 (0%)	20 (100%)	0 (0%)	0 (0%)

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



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



**Financial Reconciliation Since Inception Ending September 30, 2021**

	Market Value 07/01/2009	Net Flows	Return On Investment	Market Value 09/30/2021
Investment	253,831	10,045,927	9,775,454	20,075,213

**Comparative Performance**

	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020	1 Qtr Ending Mar-2020
Investment	5.66	4.03	17.00	5.59	17.49	-24.03
Index	5.69	4.05	17.08	5.96	16.40	-23.82

### 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 : \$15,246 Million  
Portfolio Turnover : 3%

Portfolio Assets : \$156,689 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)

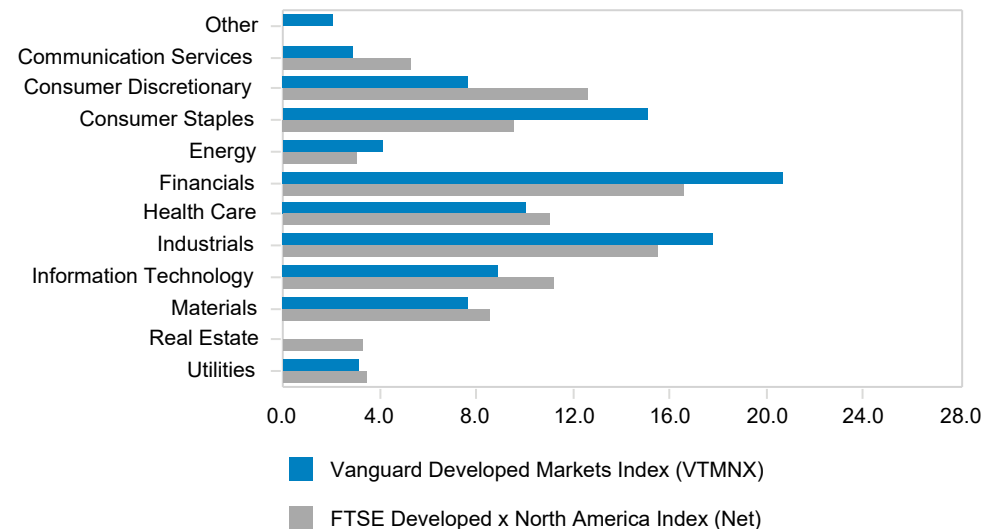
### Portfolio Characteristics As of 04/30/2021

	Portfolio	Benchmark
Total Securities	4,023	1
Avg. Market Cap (\$)	68,440,719,531	-
Price/Earnings (P/E)	29.92	N/A
Price/Book (P/B)	4.18	N/A
Dividend Yield	2.50	N/A
Annual EPS	-1.75	N/A
5 Yr EPS	5.74	N/A
3 Yr EPS Growth	1.17	N/A
Beta (5 Years, Monthly)	1.02	1.00

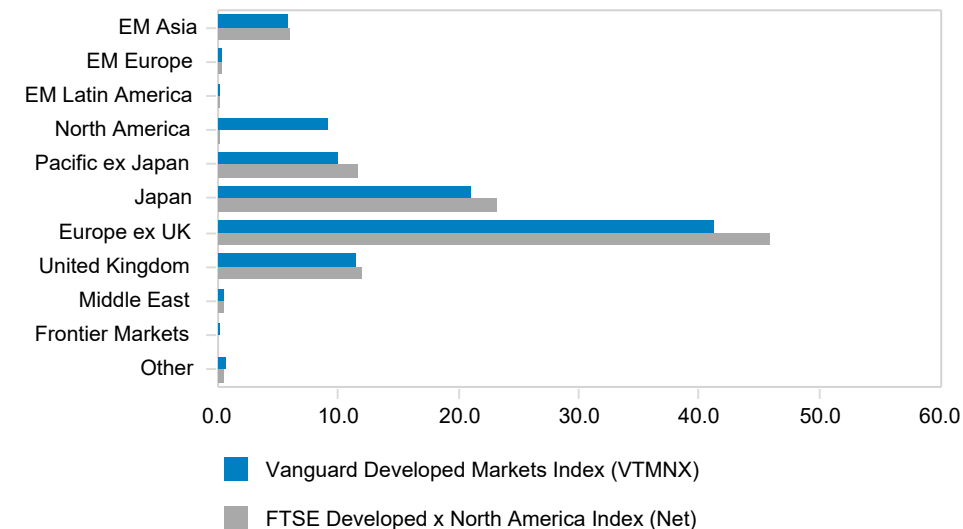
### Top Ten Securities As of 04/30/2021

Samsung Electronics Co Ltd ORD	1.5 %
Nestle SA ORD	1.5 %
ASML Holding NV ORD	1.1 %
Roche Holding AG	1.0 %
LVMH Moet Hennessy Louis Vuitton	0.8 %
Toyota Motor Corp ORD	0.8 %
Novartis AG ORD	0.8 %
SAP SE ORD	0.7 %
AIA Group Ltd ORD	0.7 %
Unilever PLC ORD	0.7 %

### Sector Weights As of 04/30/2021



### Region Weights As of 04/30/2021



Statistics provided by Lipper. Most recent available data shown.

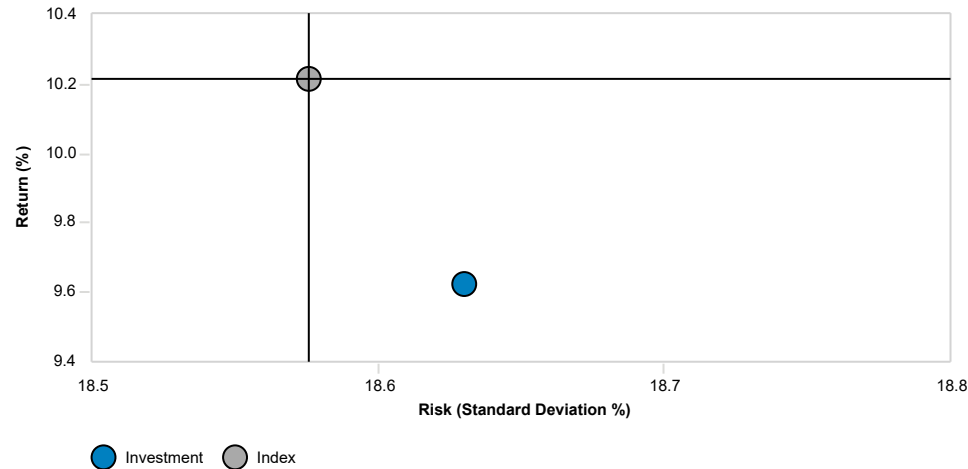
### Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	9.62	18.63	0.52	98.72	8	100.60	4
Index	10.22	18.58	0.55	100.00	8	100.00	4

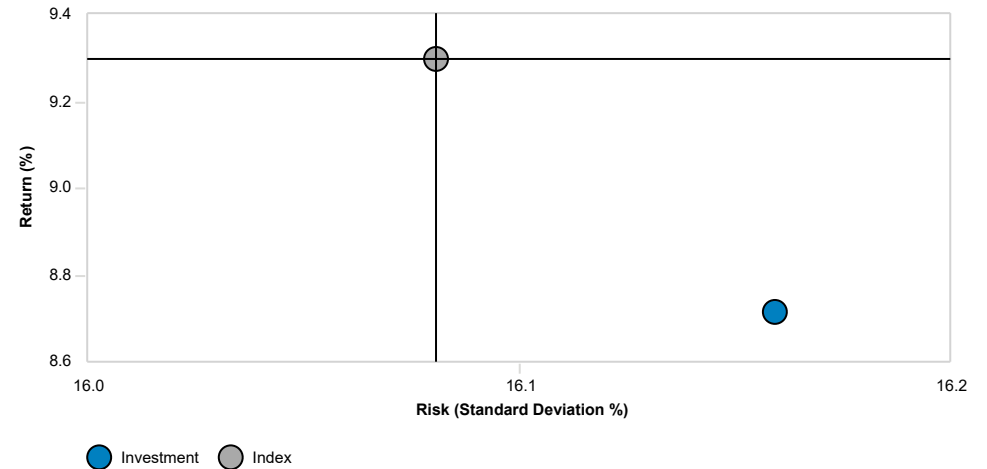
### Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	8.71	16.16	0.53	98.60	13	100.83	7
Index	9.30	16.08	0.56	100.00	13	100.00	7

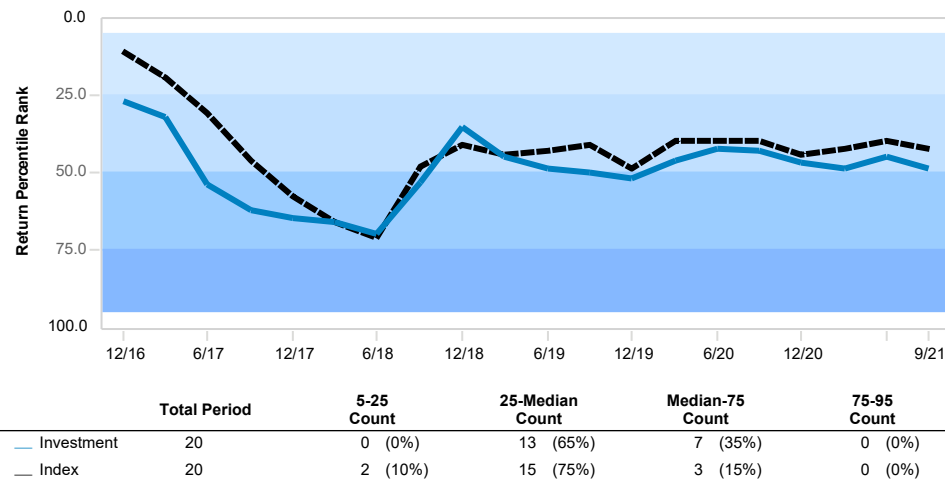
### Risk and Return 3 Years



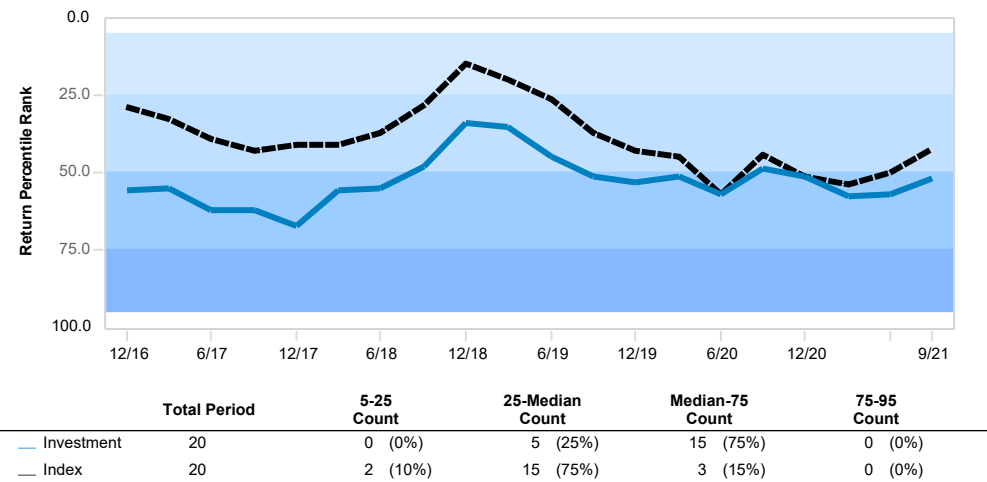
### Risk and Return 5 Years



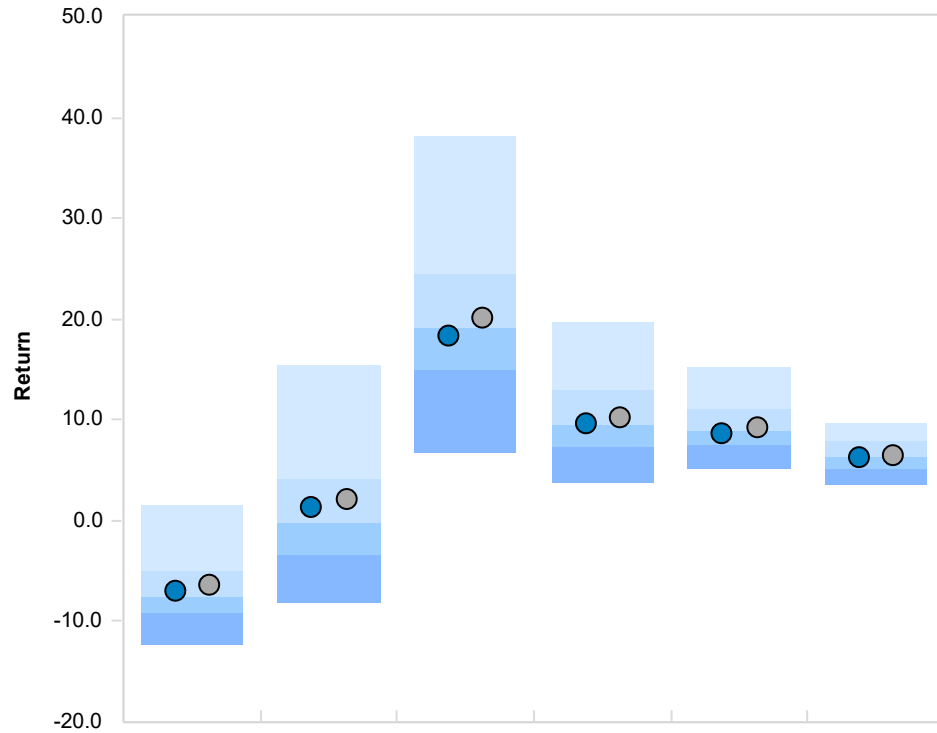
### 3 Year Rolling Percentile Rank IM Emerging Markets Equity (MF)



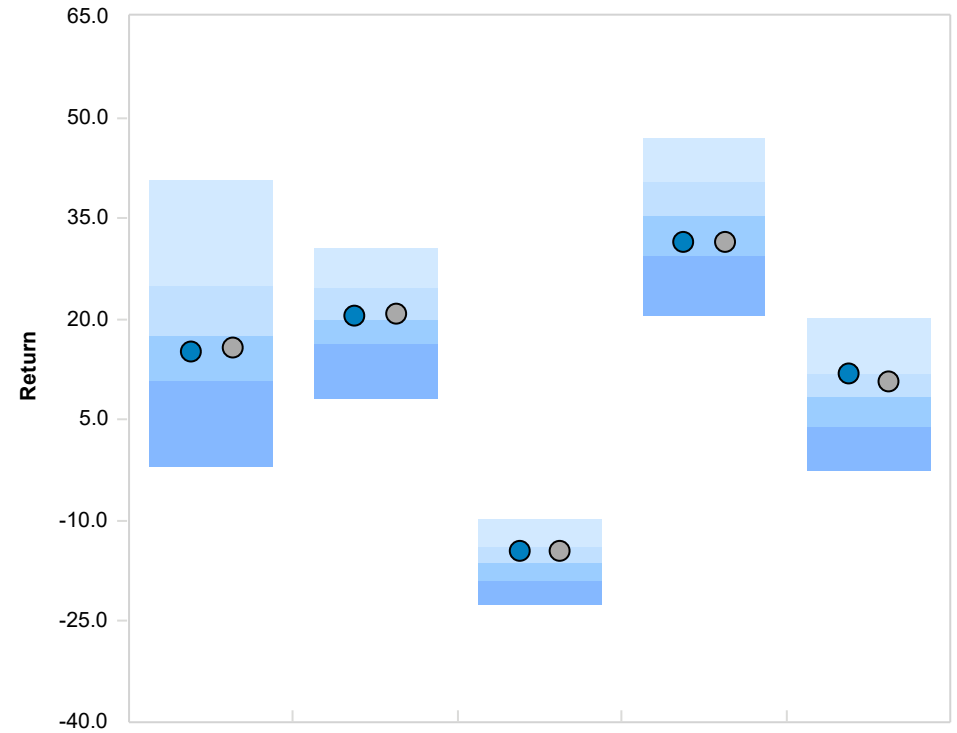
### 5 Year Rolling Percentile Rank IM Emerging Markets Equity (MF)



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



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



#### Financial Reconciliation Since Inception Ending September 30, 2021

	Market Value 10/01/2010	Net Flows	Return On Investment	Market Value 09/30/2021
Investment	5,147,163	4,164,289	4,724,963	14,036,415

#### Comparative Performance

	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020	1 Qtr Ending Mar-2020
Investment	5.16	3.57	16.87	9.05	19.89	-24.56
Index	5.78	3.14	17.53	9.11	19.11	-24.16

### 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 : \$8,168 Million  
Portfolio Turnover : 10%

Portfolio Assets : \$115,226 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

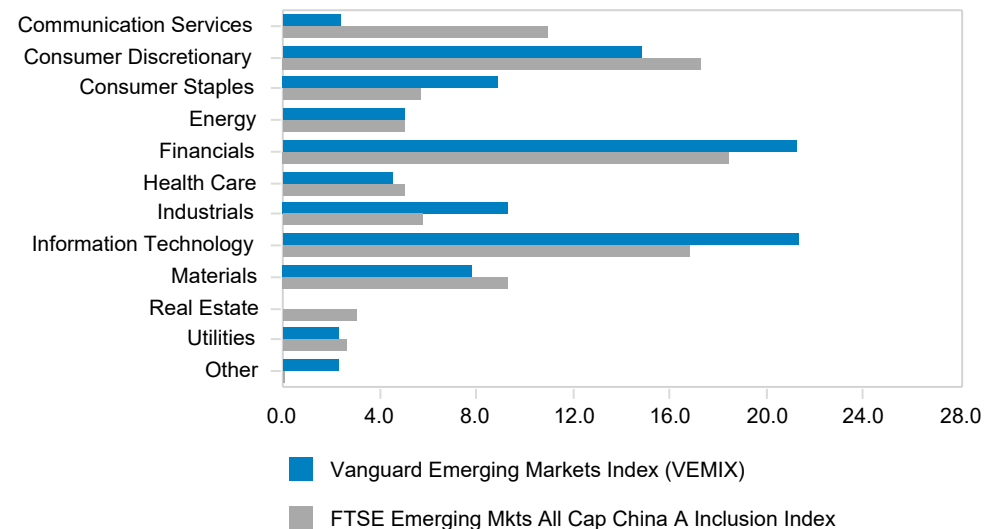
### Portfolio Characteristics As of 04/30/2021

	Portfolio	Benchmark
Total Securities	4,324	1
Avg. Market Cap (\$)	158,764,171,752	-
Price/Earnings (P/E)	28.67	N/A
Price/Book (P/B)	5.24	N/A
Dividend Yield	2.44	N/A
Annual EPS	21.15	N/A
5 Yr EPS	14.60	N/A
3 Yr EPS Growth	14.23	N/A
Beta (5 Years, Monthly)	1.00	1.00

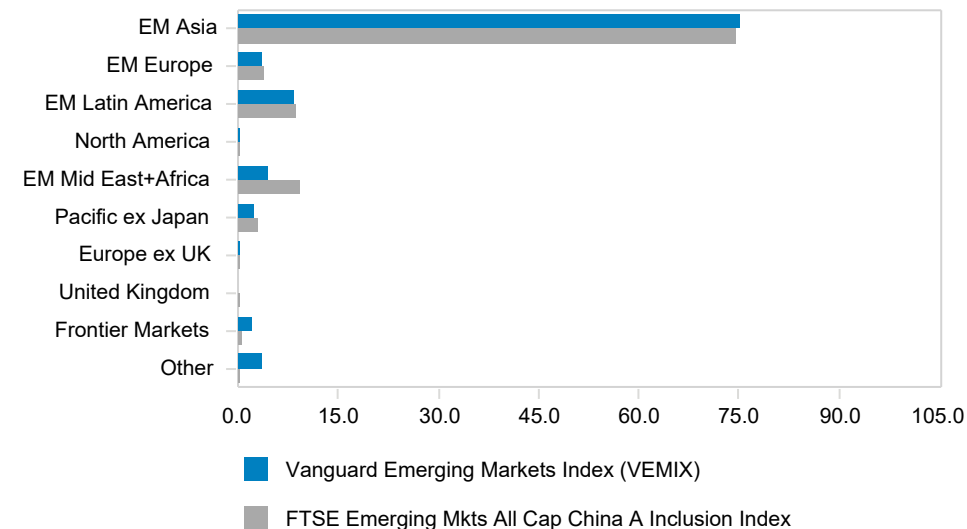
### Top Ten Securities As of 04/30/2021

Tencent Holdings Ltd ORD	5.8 %
Alibaba Group Holding Ltd ORD	5.0 %
Taiwan Semiconductor Manufacturing	4.6 %
Taiwan Semiconductor Manufacturing	1.8 %
Meituan ORD	1.8 %
Naspers Ltd ORD	1.2 %
Reliance Industries Ltd ORD	1.1 %
China Construction Bank Corp ORD	0.9 %
JD.Com Inc DR	0.8 %
Infosys Ltd ORD	0.8 %

### Sector Weights As of 04/30/2021



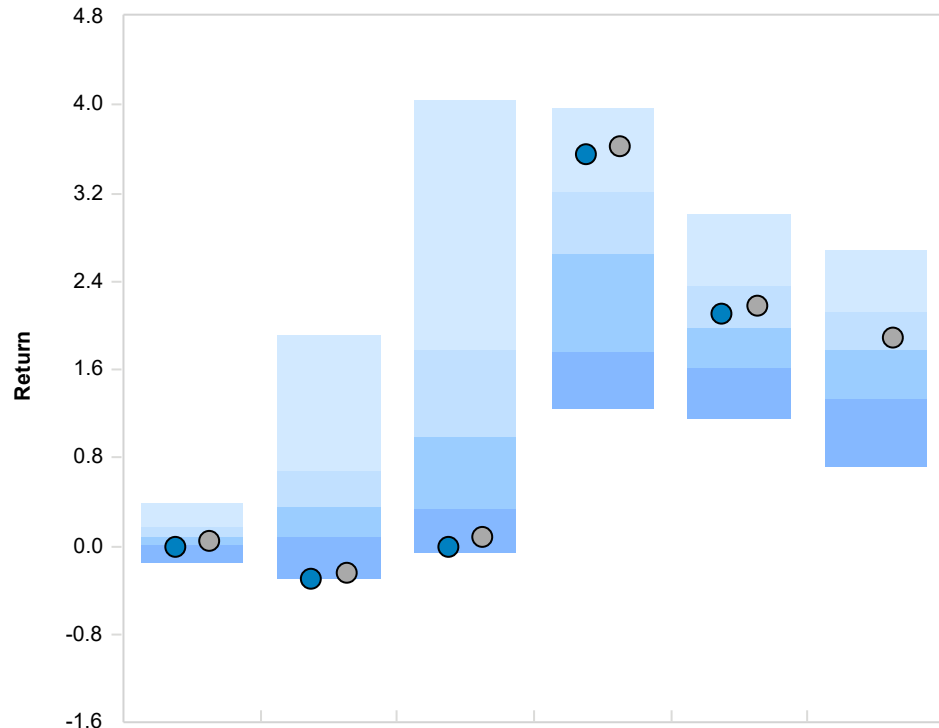
### Region Weights As of 04/30/2021



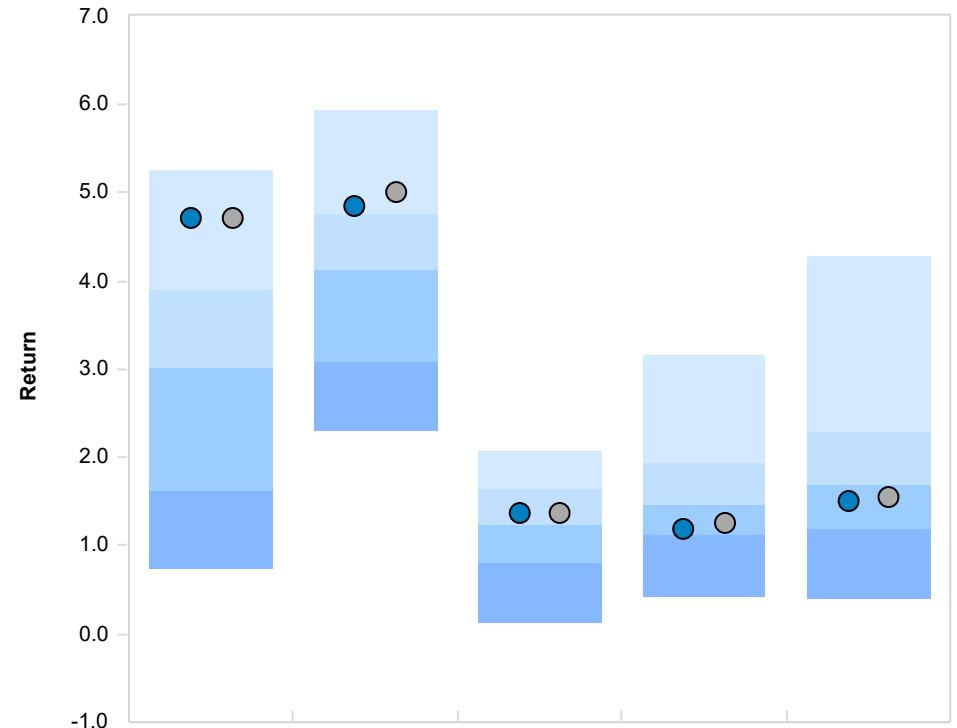
Statistics provided by Lipper. Most recent available data shown.



**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 September 30, 2021**

	Market Value 04/01/2013	Net Flows	Return On Investment	Market Value 09/30/2021
Investment	10,001,804	-5,569,350	1,781,390	6,213,844

**Comparative Performance**

	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020	1 Qtr Ending Mar-2020
Investment	0.30	-0.60	0.28	0.33	1.79	2.24
Index	0.27	-0.57	0.33	0.37	1.77	2.17

### Fund Information

Fund Name :	Vanguard Bond Index Funds: Vanguard Short-Term Bond Index Fund; Institutional Class Shares	Portfolio Assets :	\$71,674 Million
Fund Family :	Vanguard Group Inc	Portfolio Manager :	Joshua C. Barrickman
Ticker :	VBIX	PM Tenure :	2013
Inception Date :	09/27/2011	Fund Style :	IM U.S. Short Term Investment Grade (MF)
Fund Assets :	\$6,495 Million	Style Benchmark :	Bloomberg U.S. Aggregate 1-3 Yrs
Portfolio Turnover :	49%		

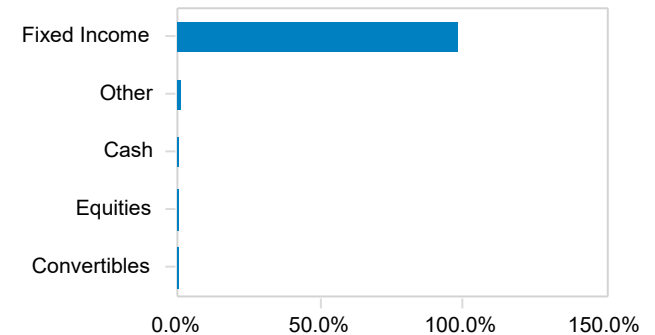
### Fund Characteristics As of 03/31/2021

Avg. Coupon	N/A
Nominal Maturity	N/A
Effective Maturity	N/A
Duration	N/A
SEC 30 Day Yield	N/A
Avg. Credit Quality	AA

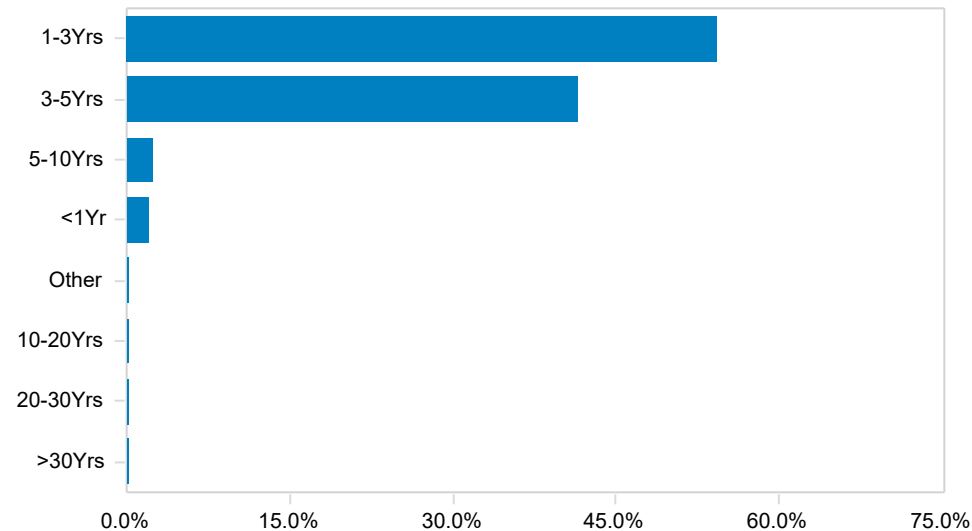
### Top Ten Securities As of 03/31/2021

Government Agency Securities	32.9 %
Treasury Notes/Bonds	32.9 %
Corporate Notes/Bonds	26.3 %
Fgn. Currency Denominated Bonds	6.6 %

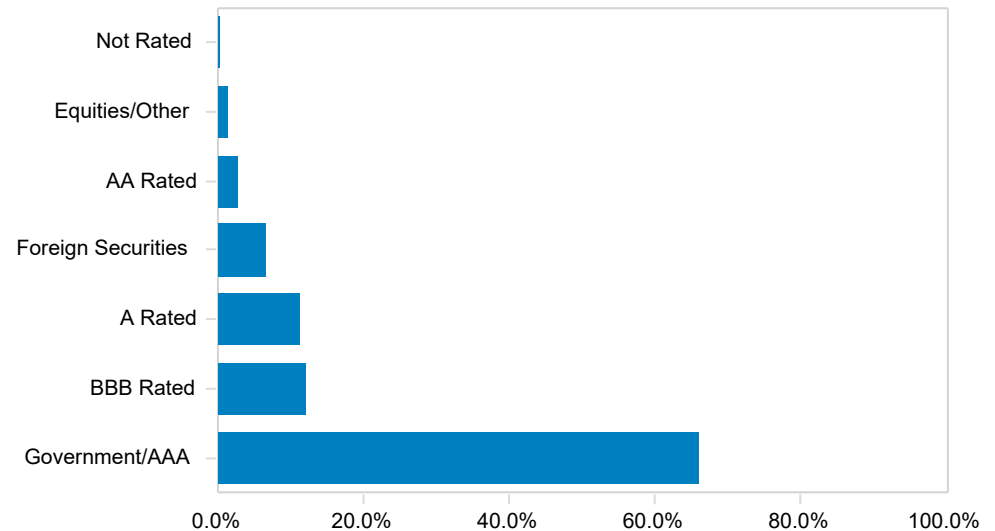
### Asset Allocation As of 03/31/2021



### Maturity Distribution As of 12/31/2020



### Sector/Quality Allocation As of 03/31/2021

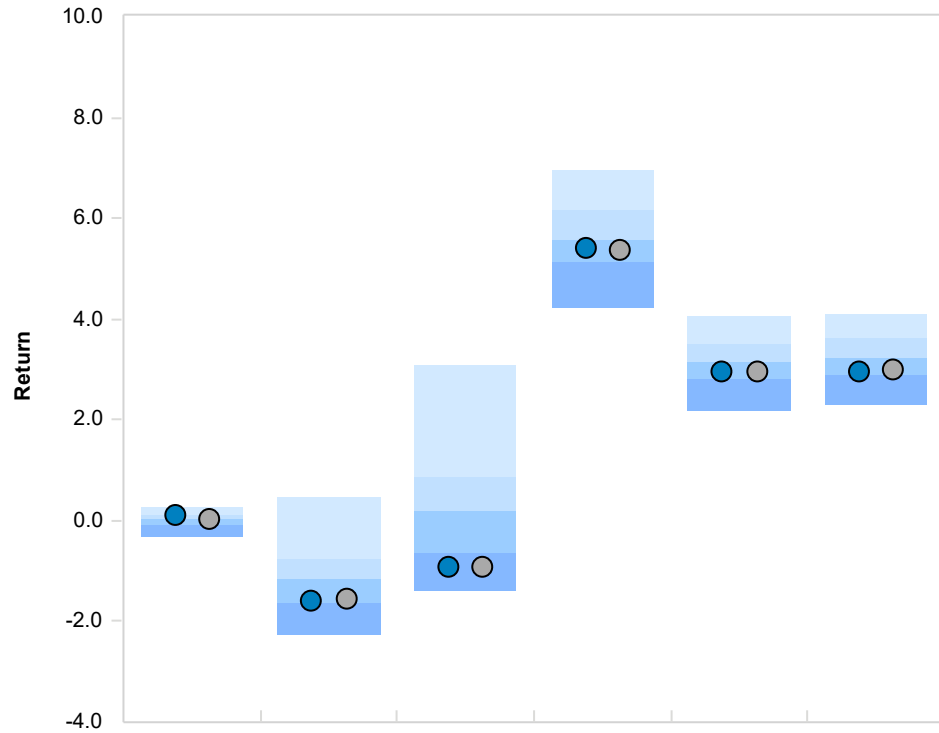


Statistics provided by Lipper. Most recent available data shown.

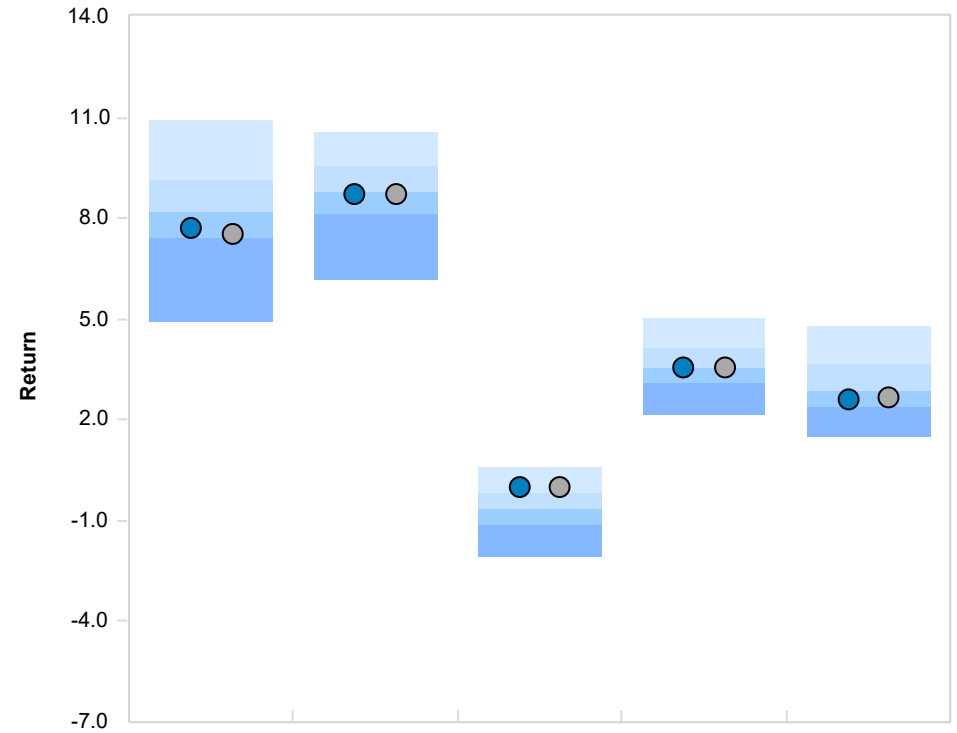




**Peer Group Analysis - IM U.S. Broad Market Core Fixed Income (MF)**



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



**Financial Reconciliation Since Inception Ending September 30, 2021**

No data found.

**Comparative Performance**

	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020	1 Qtr Ending Mar-2020
Investment	2.00 (41)	-3.61 (88)	0.67 (88)	0.62 (88)	2.98 (88)	3.28 (13)
Index	1.83 (62)	-3.38 (74)	0.67 (88)	0.62 (88)	2.90 (91)	3.15 (16)
Median	1.93	-3.04	1.36	1.19	4.94	0.55

Inception Date for VBTIX is 9/2019. Manager returns for VBTIX have been used for this report.



### Fund Information

Fund Name :	Vanguard Bond Index Funds: Vanguard Total Bond Market Index Fund; Institutional Shares	Portfolio Assets :	\$309,349 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 :	\$50,547 Million	Style Benchmark :	Bloomberg U.S. Aggregate
Portfolio Turnover :	79%		

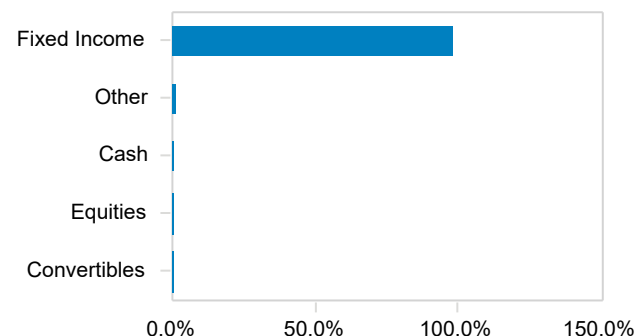
### Fund Characteristics As of 03/31/2021

Avg. Coupon	N/A
Nominal Maturity	N/A
Effective Maturity	N/A
Duration	N/A
SEC 30 Day Yield	2.7
Avg. Credit Quality	AA

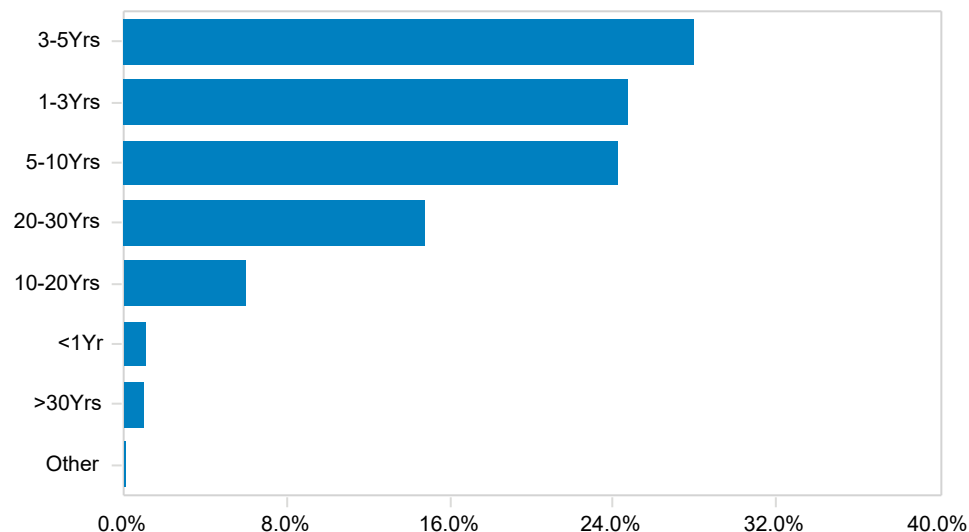
### Top Ten Securities As of 03/31/2021

Corporate Notes/Bonds	32.8 %
GNMA and Other Mtg Backed	23.2 %
Government Agency Securities	21.1 %
Treasury Notes/Bonds	21.1 %
Asset Backed Securities	0.4 %

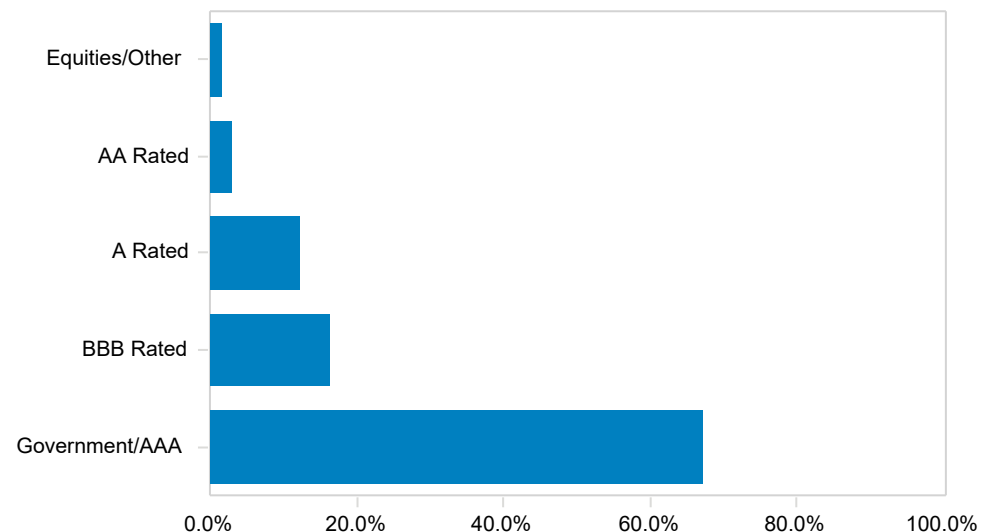
### Asset Allocation As of 03/31/2021



### Maturity Distribution As of 12/31/2020



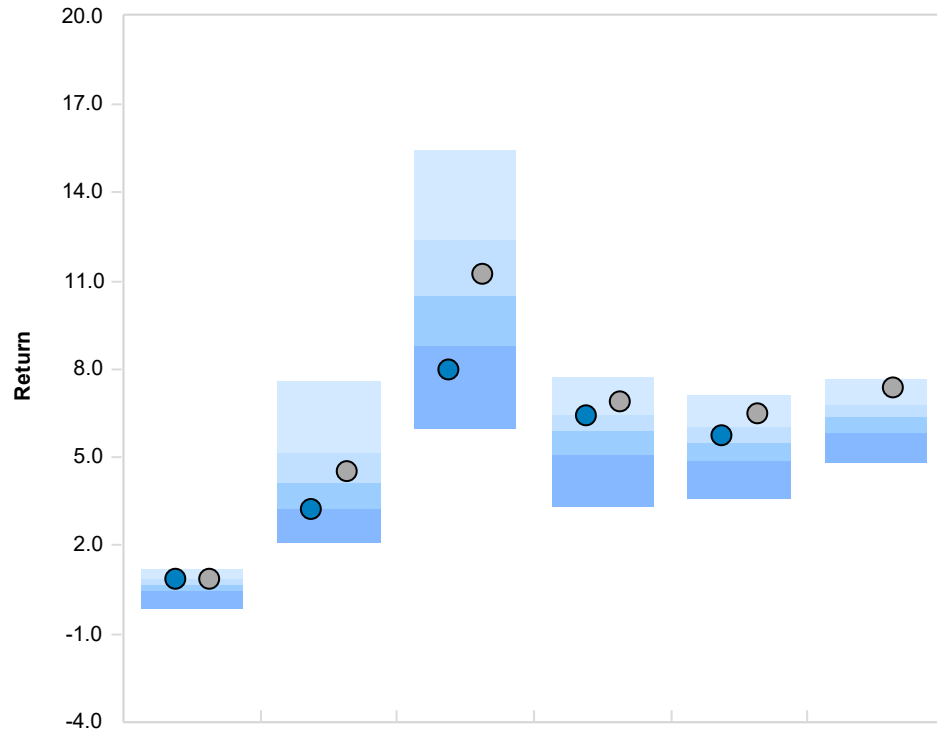
### Sector/Quality Allocation As of 03/31/2021



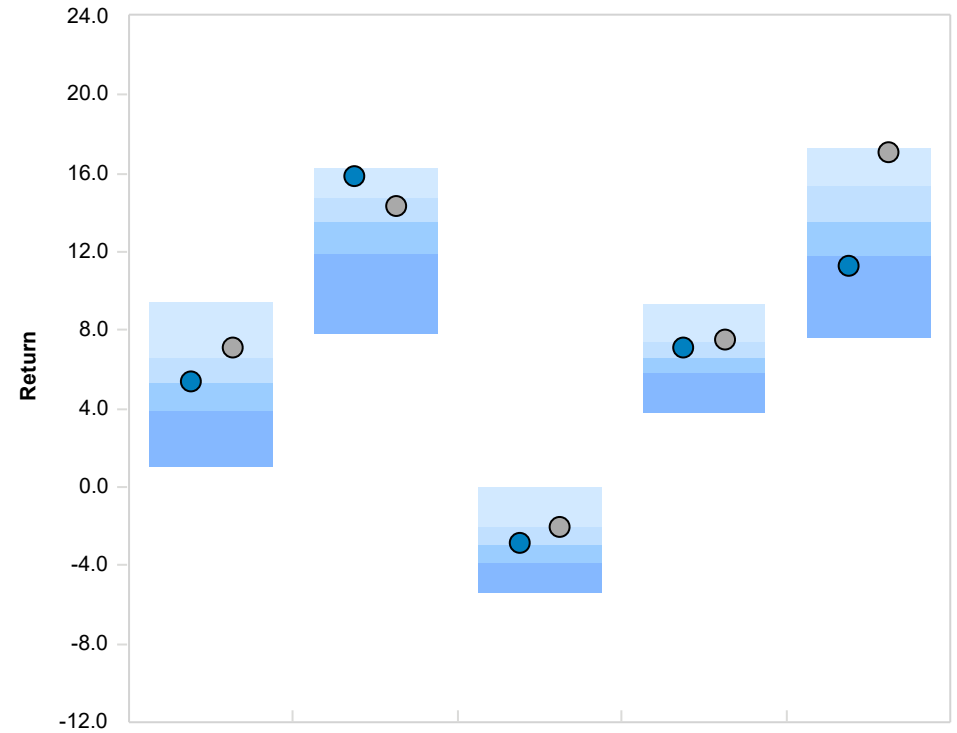
Statistics provided by Lipper. Most recent available data shown.



**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 September 30, 2021**

	Market Value 12/01/2014	Net Flows	Return On Investment	Market Value 09/30/2021
Investment	12,642,764	5,350,000	7,261,107	25,253,871

**Comparative Performance**

	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020	1 Qtr Ending Mar-2020
Investment	2.42	-0.09	4.63	4.27	8.04	-10.59
Index	2.74	0.85	6.45	4.60	10.18	-12.68



### Fund Information

Fund Name :	Vanguard Fixed Income Securities Funds: Vanguard High-Yield Corporate Fund; Admiral Shares	Portfolio Assets :	\$29,021 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 :	\$25,175 Million	Style Benchmark :	FTSE High Yield Market Index
Portfolio Turnover :	38%		

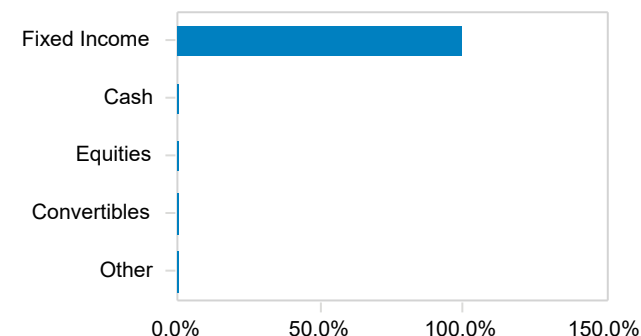
### Fund Characteristics As of 03/31/2021

Avg. Coupon	N/A
Nominal Maturity	N/A
Effective Maturity	N/A
Duration	N/A
SEC 30 Day Yield	6.5
Avg. Credit Quality	BB

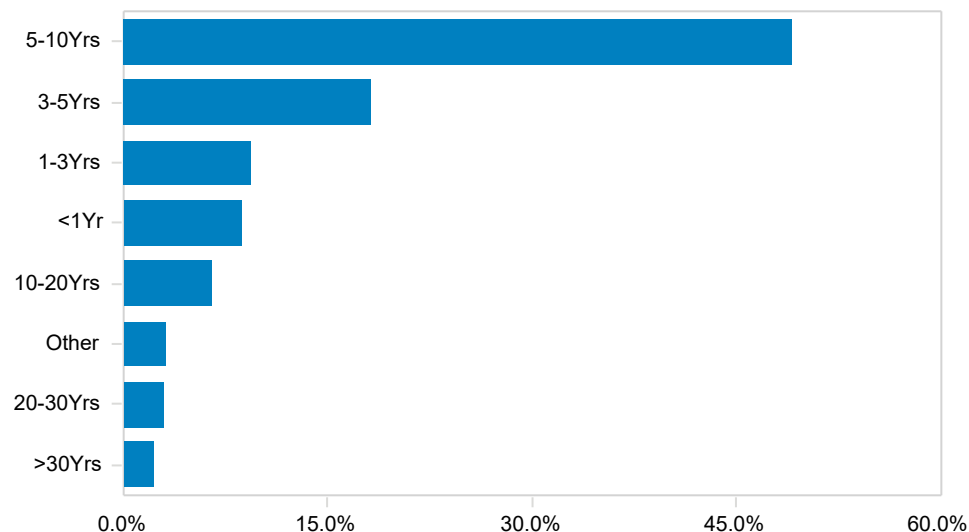
### Top Ten Securities As of 03/31/2021

Corporate Notes/Bonds	93.4 %
Government Agency Securities	3.3 %
Treasury Notes/Bonds	3.3 %

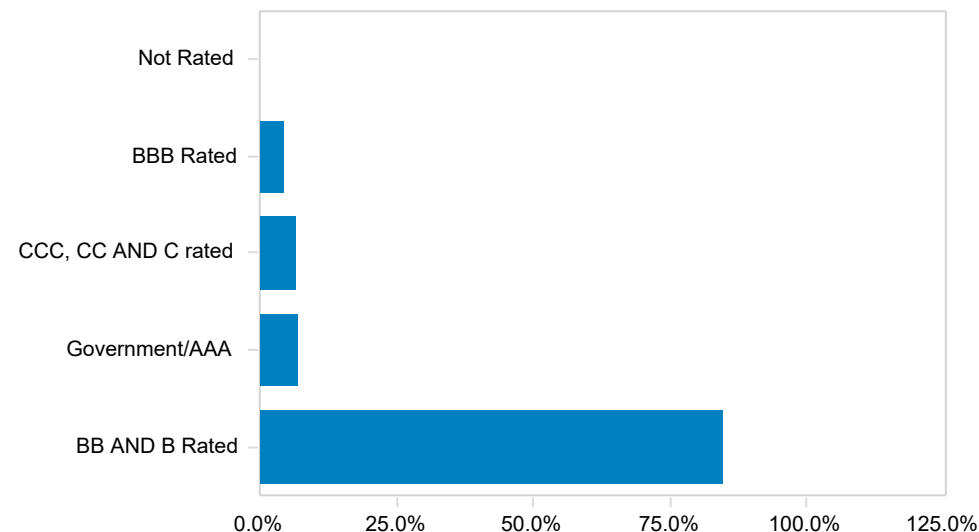
### Asset Allocation As of 03/31/2021



### Maturity Distribution As of 12/31/2020



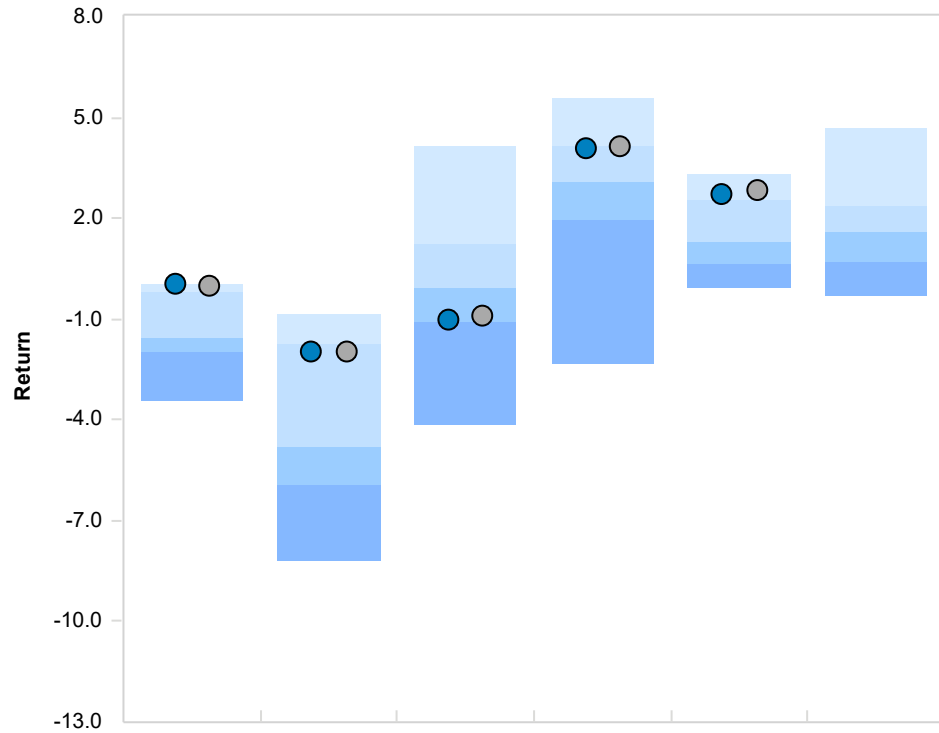
### Sector/Quality Allocation As of 03/31/2021



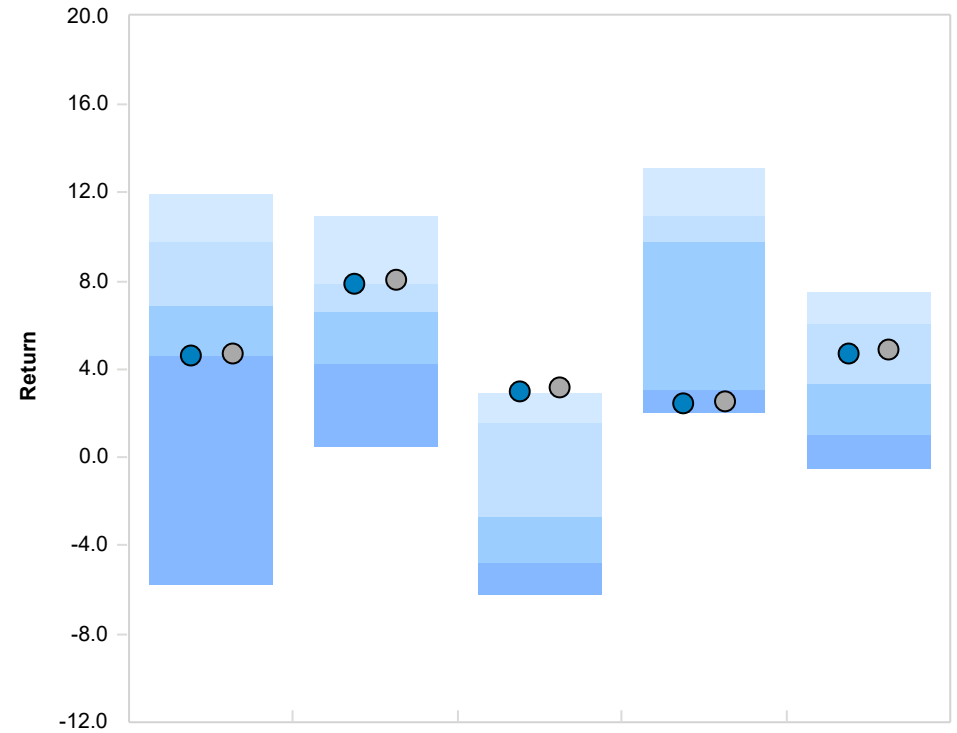
Statistics provided by Lipper. Most recent available data shown.



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



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



**Financial Reconciliation Since Inception Ending September 30, 2021**

	Market Value 06/01/2015	Net Flows	Return On Investment	Market Value 09/30/2021
Investment	9,329,282	575,000	2,076,652	11,980,934

**Comparative Performance**

	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020	1 Qtr Ending Mar-2020
Investment	0.30	-2.32	1.03	1.14	2.20	0.16
Index	0.26	-2.22	1.08	1.07	2.31	0.21
Median	0.26	-2.22	1.08	1.07	2.31	0.21



### Fund Information

Fund Name :	Vanguard Charlotte Funds: Vanguard Total International Bond Index Fund; Institutional Class Shares	Portfolio Assets :	\$136,786 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 :	\$11,621 Million	Style Benchmark :	FTSE Non-U.S. World Government Bond
Portfolio Turnover :	31%		

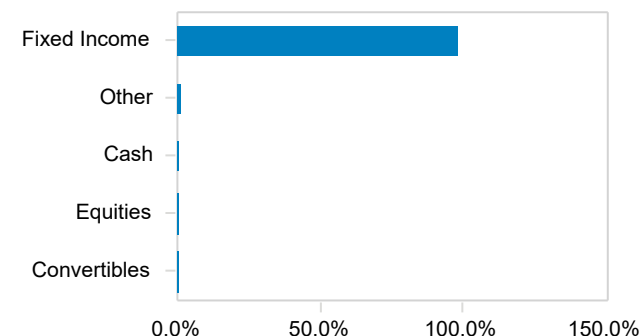
### Fund Characteristics As of 03/31/2021

Avg. Coupon	2.00 %
Nominal Maturity	N/A
Effective Maturity	9.70 Years
Duration	8.30 Years
SEC 30 Day Yield	N/A
Avg. Credit Quality	N/A

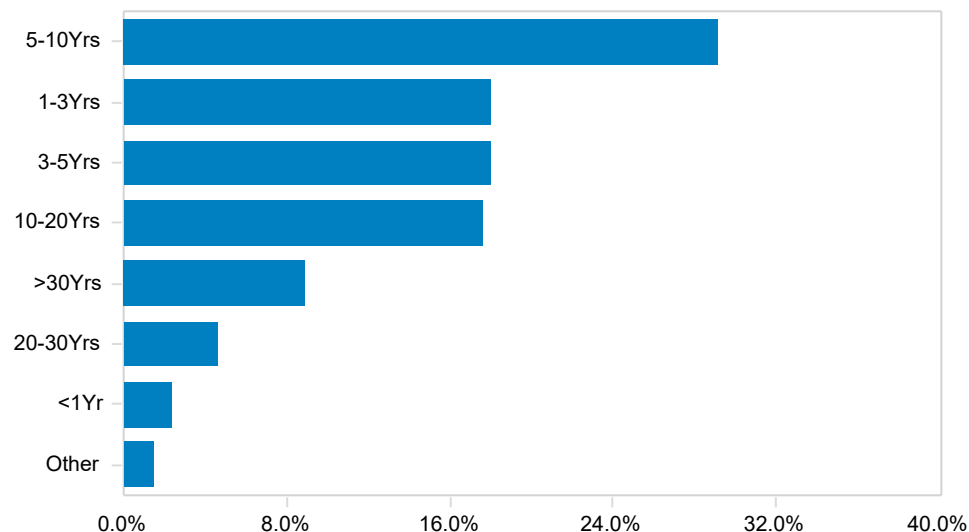
### Top Ten Securities As of 03/31/2021

Fgn. Currency Denominated Bonds	79.8 %
Corporate Notes/Bonds	14.0 %
Asset Backed Securities	4.7 %

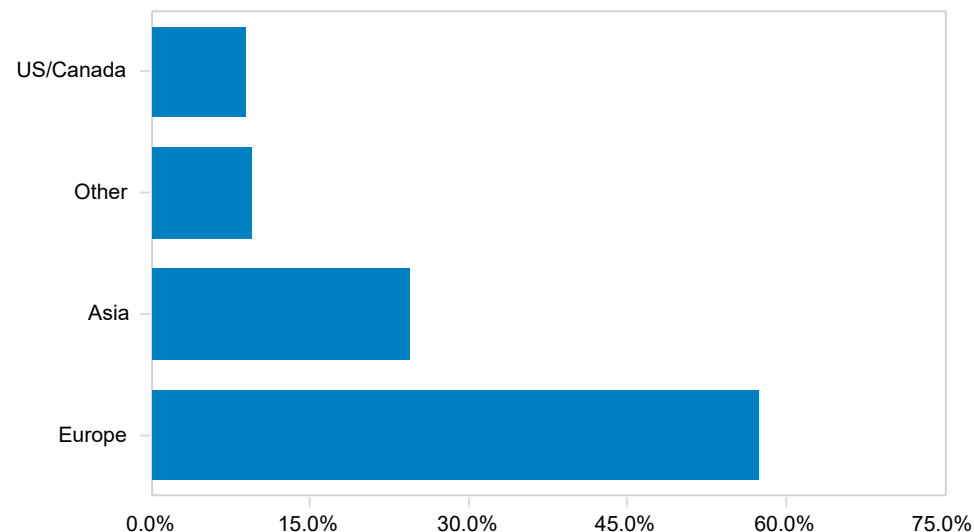
### Asset Allocation As of 03/31/2021



### Maturity Distribution As of 03/31/2021



### Sector/Quality Allocation As of 03/31/2021



Statistics provided by Lipper. Most recent available data shown.



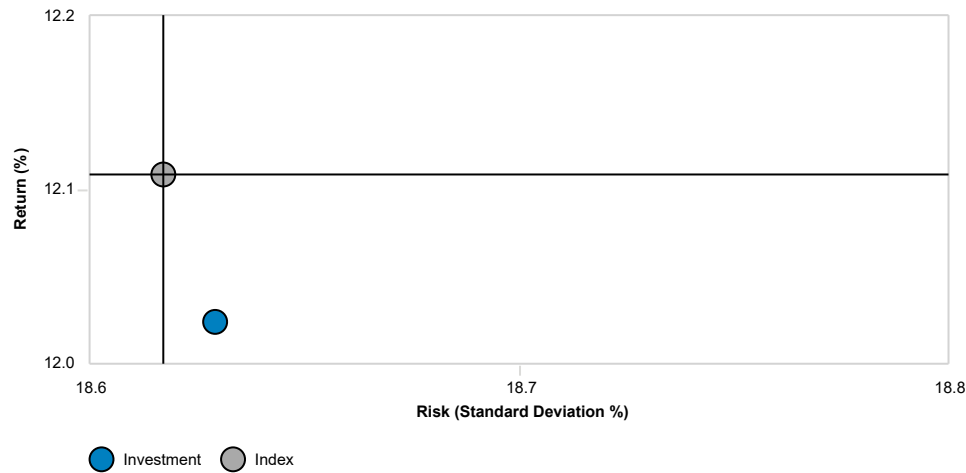
### Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	12.02	18.63	0.64	99.80	10	100.09	2
Index	12.11	18.62	0.65	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	7.56	15.99	0.47	99.89	16	100.33	4
Index	7.65	15.98	0.47	100.00	16	100.00	4

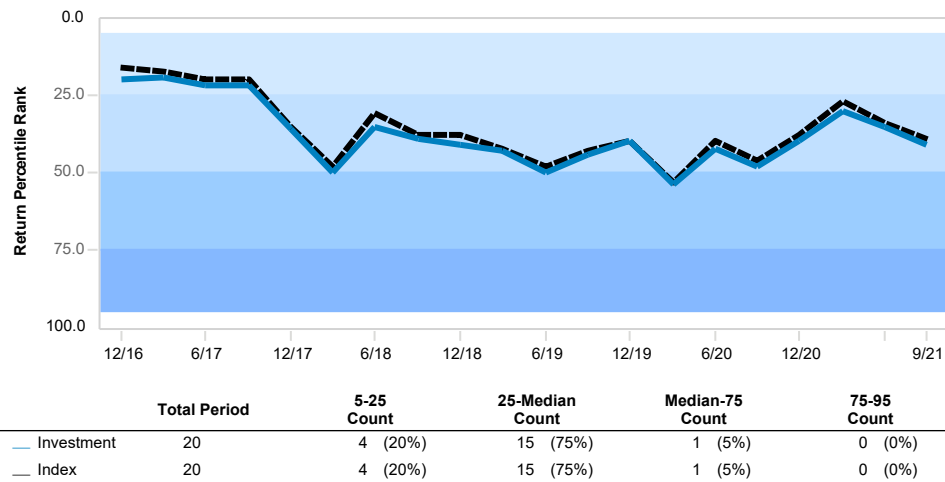
### Risk and Return 3 Years



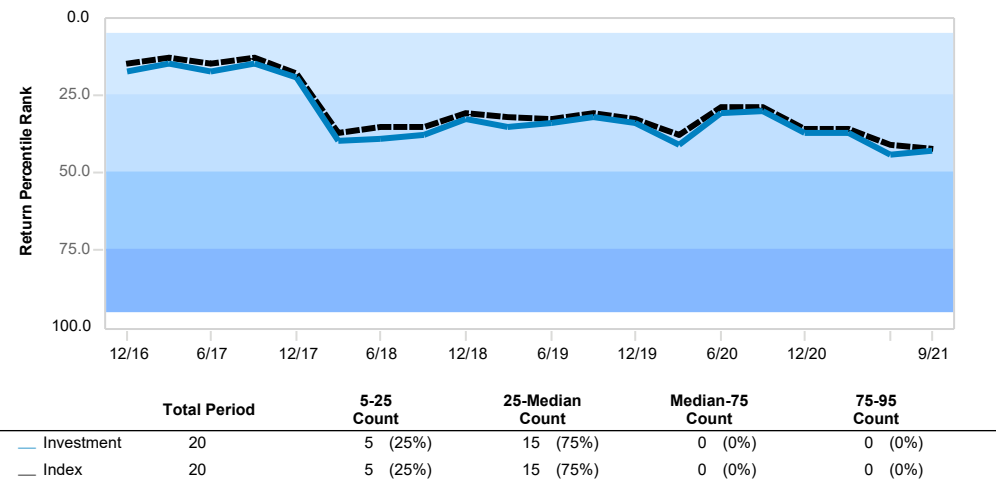
### Risk and Return 5 Years



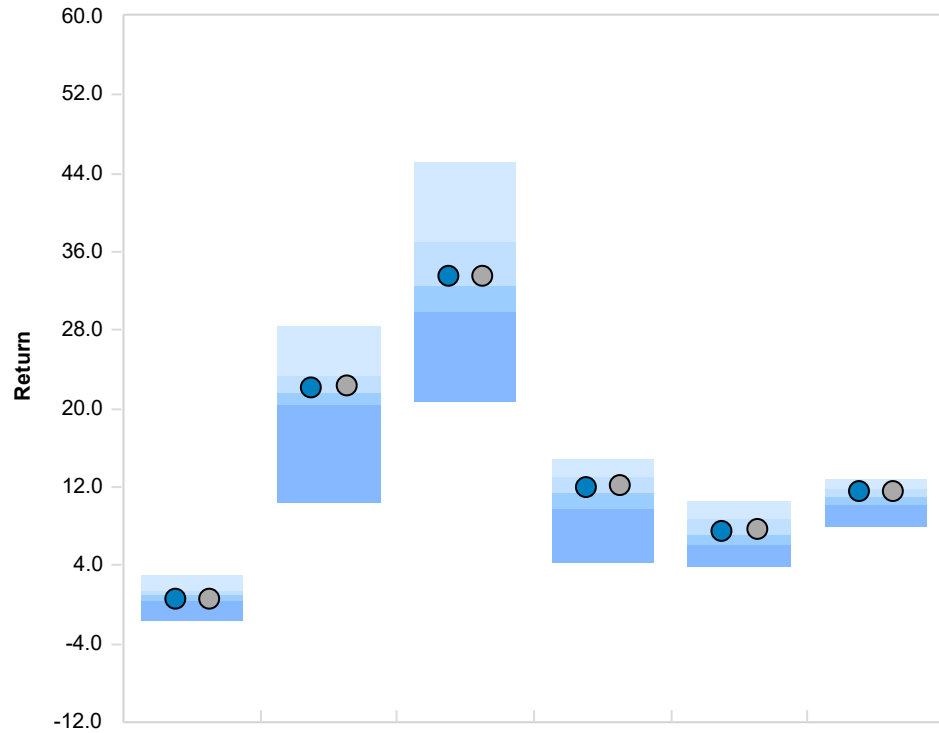
### 3 Year Rolling Percentile Rank IM Real Estate Sector (MF)



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

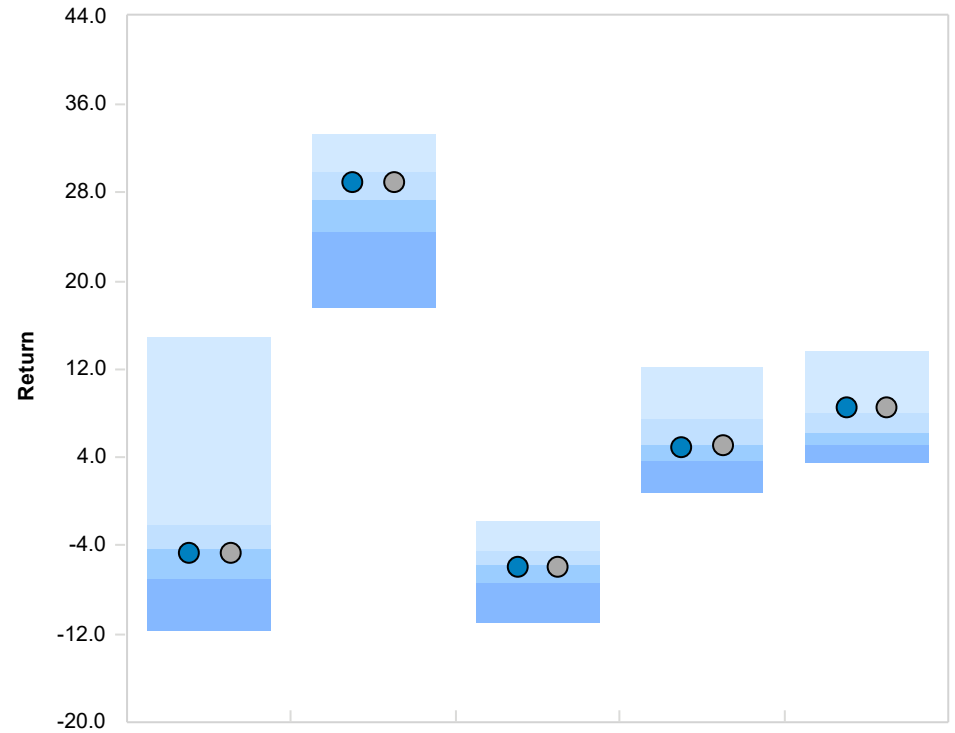


**Peer Group Analysis - IM Real Estate Sector (MF)**



	QTR	YTD	1 YR	3 YR	5 YR	10 YR
Investment	0.67 (64)	22.19 (41)	33.48 (44)	12.02 (41)	7.56 (43)	11.55 (29)
Index	0.70 (61)	22.29 (39)	33.64 (40)	12.11 (39)	7.65 (42)	11.64 (27)
Median	1.07	21.66	32.59	11.46	7.19	10.93

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



	2020	2019	2018	2017	2016
Investment	-4.67 (56)	29.02 (34)	-5.93 (54)	4.93 (56)	8.51 (19)
Index	-4.55 (54)	29.03 (34)	-5.86 (52)	5.07 (52)	8.60 (19)
Median	-4.23	27.38	-5.75	5.20	6.28

**Financial Reconciliation Since Inception Ending September 30, 2021**

	Market Value 10/01/2010	Net Flows	Return On Investment	Market Value 09/30/2021
Investment	4,801,552	-1,776,630	11,618,947	14,643,869

**Comparative Performance**

	1 Qtr Ending Jun-2021	1 Qtr Ending Mar-2021	1 Qtr Ending Dec-2020	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020	1 Qtr Ending Mar-2020
Investment	11.67 (69)	8.69 (29)	9.24 (50)	1.37 (70)	13.44 (25)	-24.10 (59)
Index	11.69 (69)	8.73 (26)	9.28 (48)	1.35 (71)	13.50 (24)	-24.07 (58)
Median	12.06	7.83	9.24	2.11	11.91	-23.38





### Fund Information

Fund Name :	Vanguard Specialized Funds: Vanguard Real Estate Index Fund; Institutional Class Shares	Portfolio Assets :	\$75,996 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 :	\$11,083 Million	Style Benchmark :	Vanguard Spliced REIT Index
Portfolio Turnover :	8%		

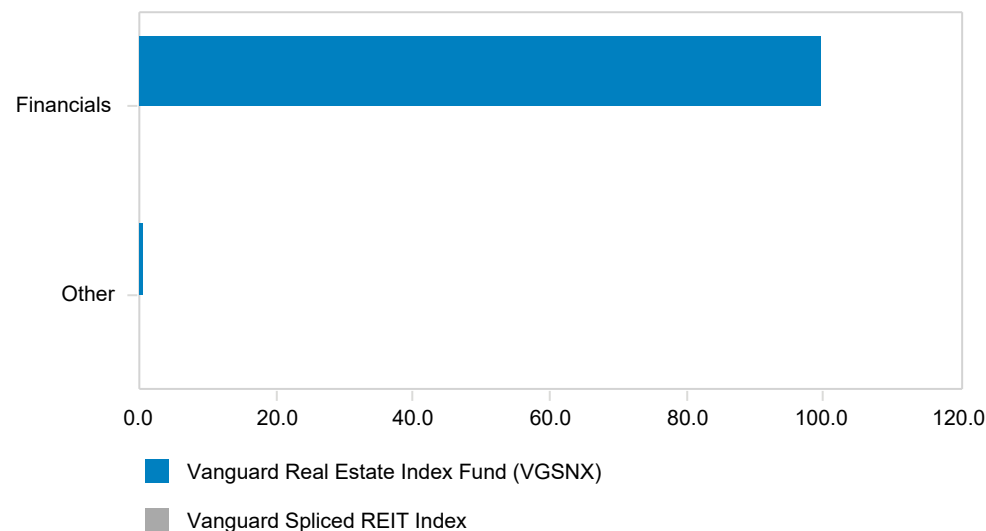
### Portfolio Characteristics As of 04/30/2021

	Portfolio	Benchmark
Total Securities	176	N/A
Avg. Market Cap (\$)	39,779,906,596	-
Price/Earnings (P/E)	54.17	N/A
Price/Book (P/B)	6.63	N/A
Dividend Yield	3.25	N/A
Annual EPS	-7.07	N/A
5 Yr EPS	6.72	N/A
3 Yr EPS Growth	9.80	N/A
Beta (5 Years, Monthly)	1.00	1.00

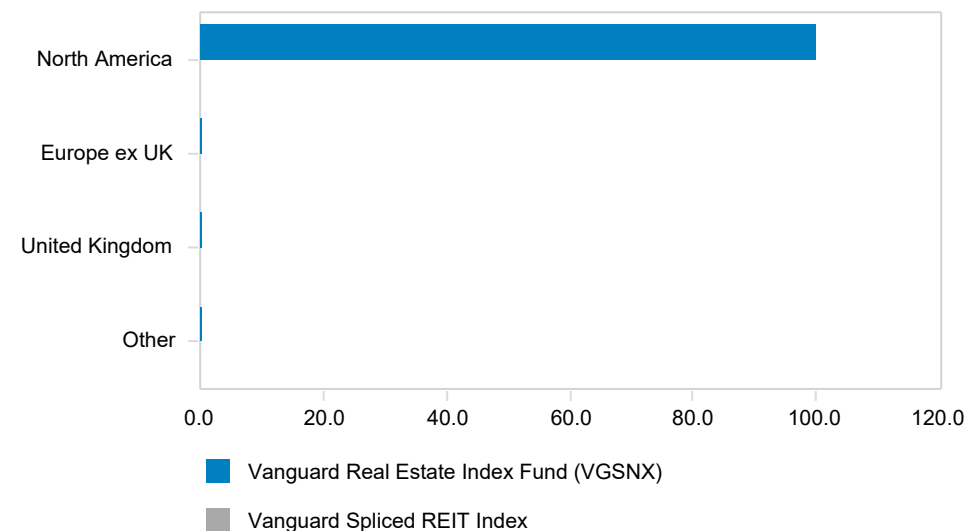
### Top Ten Securities As of 04/30/2021

Vanguard Real Estate II Index Fund;Insti	11.9 %
American Tower Corp ORD	7.1 %
Prologis Inc ORD	5.4 %
Crown Castle International Corp	5.0 %
Equinix Inc ORD	4.0 %
Public Storage ORD	2.8 %
Digital Realty Trust Inc ORD	2.6 %
Simon Property Group Inc ORD	2.4 %
SBA Communications Corp ORD	2.1 %
Welltower Inc ORD	2.0 %

### Sector Weights As of 04/30/2021



### Region Weights As of 04/30/2021



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 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. U.S. Gov/Credit: 5-10 Yr	7.50
Russell 1000 Value Index	15.00	Bloomberg U.S. TIPS Index	7.50
MSCI US Prime Market Growth	15.00	Bloomberg 1-5 Year Gov/Credit Idx	7.50
MSCI US Mid Cap 450 Index	10.00	Bloomberg 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. U.S. Gov/Credit: 5-10 Yr	15.00	<b>Nov-2014</b>	
Bloomberg 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. U.S. Gov/Credit: 5-10 Yr	7.00
Vanguard Spliced Emerging Markets Index (Net)	5.00	Bloomberg U.S. TIPS Index	7.00
Vanguard Spliced Developed ex U.S. Index (Net)	10.00	Bloomberg 1-5 Year Gov/Credit Idx	7.00
Blmbg. U.S. Gov/Credit: 5-10 Yr	7.50	Bloomberg US TIPS 0-5 Year Index	7.00
Bloomberg U.S. TIPS Index	7.50	Vanguard Spliced REIT Index	5.00
Bloomberg 1-5 Year Gov/Credit Idx	7.50	90 Day U.S. Treasury Bill	1.00
Bloomberg US TIPS 0-5 Year Index	7.50	S&P 500 Index	15.00
Vanguard Spliced REIT Index	4.00	Blmbg. U.S. Corp High Yield	7.00
90 Day U.S. Treasury Bill	1.00		

**Benchmark History**  
**Investment Policy Benchmarks**  
As of September 30, 2021

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. U.S. Gov/Credit: 5-10 Yr	7.50
Bloomberg U.S. TIPS Index	5.00
Bloomberg 1-5 Year Gov/Credit Idx	7.50
Bloomberg 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. U.S. Corp High Yield	7.50
Blmbg. 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. U.S. Gov/Credit: 5-10 Yr	7.50
Bloomberg U.S. TIPS Index	5.00
Bloomberg 1-5 Year Gov/Credit Idx	7.50
Bloomberg 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. U.S. Corp High Yield	7.50
Blmbg. 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. U.S. Aggregate Index	20.00
Bloomberg 1-5 Year Gov/Credit Idx	2.50
Blmbg. U.S. Corp High Yield	10.00
Blmbg. 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. U.S. Aggregate Index	20.00
Bloomberg 1-5 Year Gov/Credit Idx	2.50
Blmbg. U.S. Corp High Yield	10.00
Blmbg. 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.

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