
Butler County Employees Retirement Plan

Investment Performance Review
Period Ending June 30, 2024

MARINER

2nd Quarter 2024 Market Environment

The Economy

- The US Federal Reserve (the Fed) continued on its stable trajectory, holding rates steady during the second quarter. Capital markets have struggled to accurately predict the pace and timing of future Fed actions, resulting in an up and down quarter. In its press release for the June meeting, the Fed continued to assert that “In considering any adjustments to the target range for the federal funds rate, the Committee will carefully assess incoming data, the evolving outlook, and the balance of risks.”
- The Fed’s prolonged pause in its rate-hiking cycle and the insertion of the word “any” in its December press release provided capital markets hope that the Fed may pivot in its stance and begin reducing rates to a less restrictive level in 2024. The Fed’s published June “Dot Plot” revised expectations from three quarter-point rate cuts during the year to just one quarter-point rate cut. If this projection were to materialize, it would result in the first rate cut since the COVID pandemic in 2020.
- Growth in the US labor market continued in June, as nonfarm payrolls increased by 206,000 while unemployment rose slightly from 3.8% at the end of the first quarter to 4.1% at the end of the second quarter. Federal Reserve Chair Jerome Powell has maintained that “an unexpected weakening in the labor market could also warrant a policy response,” later defining unexpected weakening as something that would occur outside of their general forecasts.

Equity (Domestic and International)

- US equity results were mixed for the quarter, with large-capitalization (cap) stocks strongly outpacing small-cap stocks. As market participants continue to revise projections of future Fed actions, they sought safety among large-cap stocks due to these companies lessened dependence on external financing. The S&P 500 Index rose a solid 4.3% for the quarter, but ended a two-quarter streak of double-digit gains.
- Large-cap equity benchmarks continue to experience top-heavy concentration among a limited number of stocks. The top 10 stocks in the S&P 500 Index make up nearly 36% of the index’s weight as of June 2024. Year-to-date, these 10 stocks have contributed to more than 60% of the benchmark’s total return.
- International stocks also continued to experience growth during the second quarter, but results were muted by a strengthening US Dollar (USD). USD performance of international stocks lagged local currency (LCL) returns in most regions for the quarter, albeit to varying degrees.

Fixed Income

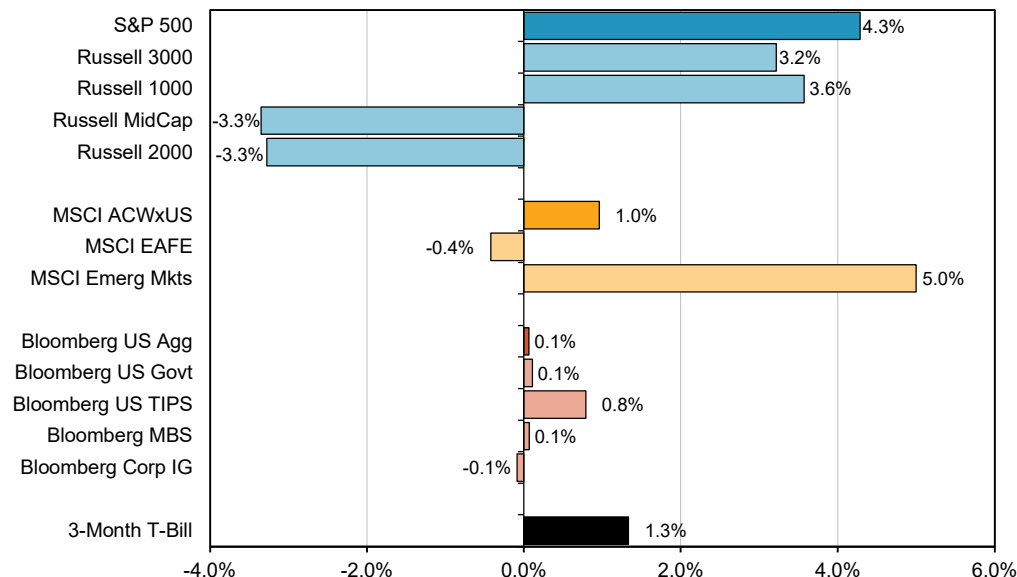
- Fixed-income markets remained largely steady during the quarter. While sticky inflation numbers and a robust job market prompted the Fed to keep the fed funds rate unchanged during the quarter, this lack of action also tempered expectations for the number of potential rate cuts in 2024.
- High-yield bonds outperformed investment-grade issues for the quarter, largely due to higher coupons. The high-yield index edged out the Bloomberg US Aggregate Bond Index, the bellwether bond benchmark, due to relative stability in both the yield curve and economic conditions.
- Global bonds continue to lag the domestic bond market, with the Bloomberg US Aggregate Bond Index outpacing the Global Aggregate ex-US Index by 2.2% for the quarter. The return gap between the two benchmarks continues to widen as the domestic index has outperformed the global index by 3.3% year-to-date.

Market Themes

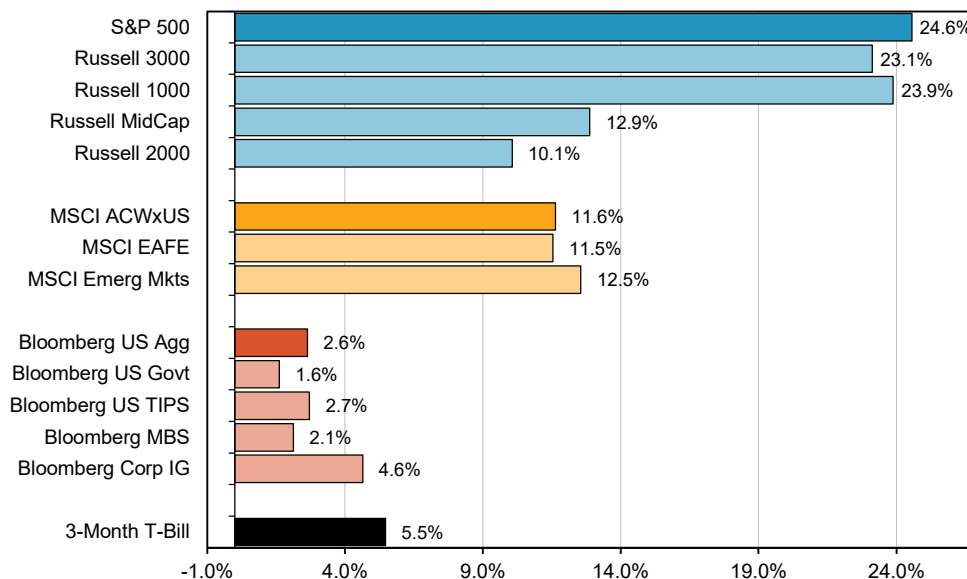
- Domestic and international equity markets posted strong results in the second quarter. Continuing their robust 2023 run, large-cap growth sectors continued to outpace their value counterparts in 2024, and by a wider margin than the prior year. The brief increased breadth markets experienced during of the first quarter did not continue during the second quarter, and so once again, large-cap growth stocks were the best-performing US asset category.
- Central banks remained vigilant in their stances to bring inflation under control. While inflation readings remain stubbornly elevated, signs of stable-to-cooling price pressures have shown up in most regions around the world. Domestically, job growth has slowed from a pace of 300,000+ month-over-month growth to just over 200,000 net new jobs.
- Policy rates were stable across most developed markets as central banks continued their tight monetary stances. Expectations of looser monetary policy have been frustrated by mixed economic data and central banks’ inaction so far this year.
- Ongoing military conflicts coupled with global economic uncertainty continue to act as headwinds to international market results. While global disruptions from the Russia-Ukraine conflict seemed to subside during the quarter, the proxy war in the Middle East has spread to other countries in the region and unsettled shipping channels globally.

- Performance in the domestic equity markets was disparate during the second quarter. After a more encouraging showing last quarter, where markets broadened out in terms of strength, large-cap stocks once again surged ahead while smaller-cap stocks weakened slightly. For the period, the large-cap S&P 500 and Russell 1000 indexes posted returns of 4.3% and 3.6%, respectively. The broad-cap Russell 3000 index lagged slightly, returning a more modest 3.2%. Outside of large-cap issues, the Russell Mid Cap and Russell 2000 indexes both experienced equivalent pullbacks during the quarter, with each benchmark returning -3.3%.
- International developed market equities were muted during the quarter. The MSCI ACWI ex US Index posted a modest 1.0% gain for the quarter, while the MSCI EAFE Index fell slightly, posting a return of -0.4% in USD terms. International emerging market (EM) equities posting a 5.0% return for the quarter, outpacing the performance of their developed market counterparts. Much of the solid performance in the EM region was attributed to a bounce back in China, Taiwan, and Singapore, each posting strong USD results during the quarter.
- Most broad fixed-income indexes rose slightly during the second quarter of 2024. The Bloomberg US Aggregate Index returned 0.1% for the quarter, while investment-grade corporate bonds slid -0.1%. The TIPS market was the best-performing sector during the quarter, outpacing the rest of the domestic fixed-income categories with a return of 0.8%.
- Large-cap US equity indexes have been a performance juggernaut over the trailing 12 months. The S&P 500 Index has gained 24.6% while the Russell 1000 Index was nearly as strong with a return of 23.9%. The weakest performing class of domestic equities for the year was the small-cap Russell 2000 Index, which still posted a double-digit return of 10.1% over the last 12 months.
- International markets also showcased healthy performance for the one-year trailing period. The MSCI EM Index was the best international performer, returning 12.5%, while the MSCI EAFE and MSCI ACWI ex US indexes posted returns of 11.5% and 11.6%, respectively.
- Bond markets posted positive but muted results for the trailing one-year period which substantially lagged equity benchmark results. Investment-grade corporate bonds led the way, up by 4.6% for the year. Meanwhile, Treasuries lagged, returning just 1.6% over the period. The bellwether fixed-income benchmark, the Bloomberg US Aggregate Bond Index, returned a mild 2.6% for the year.

Quarter Performance

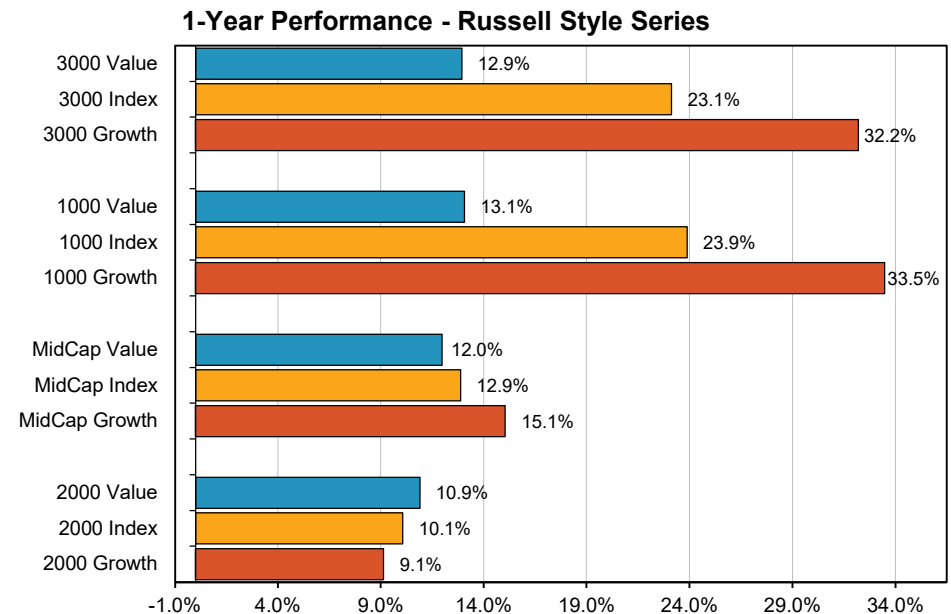
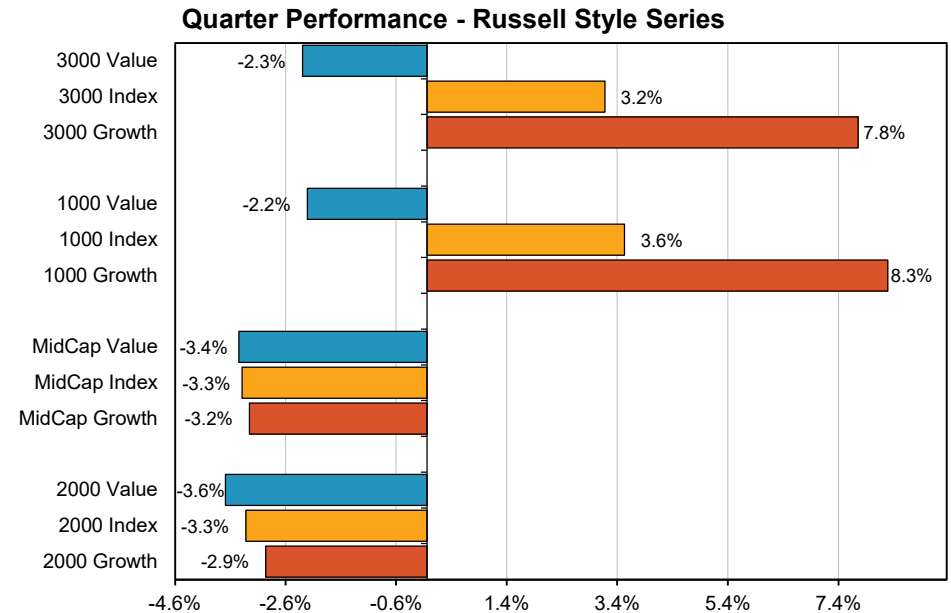


1-Year Performance



Source: Investment Metrics

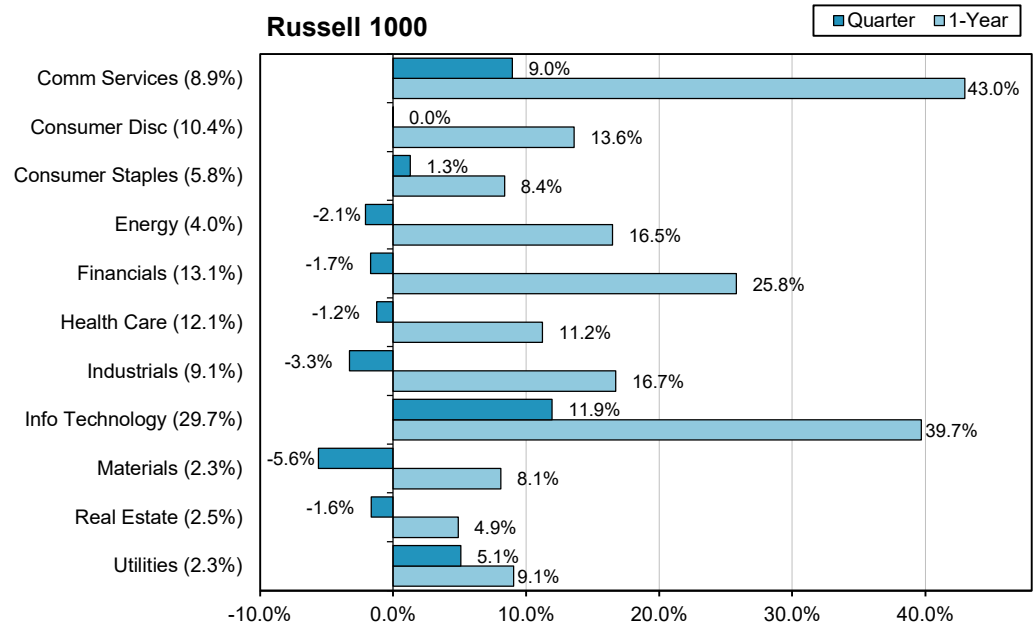
- Domestic equity benchmarks posted mixed absolute results for the second quarter, but growth stocks outpaced their value counterparts at each capitalization level. The best-performing area of the equity market continues to be large-cap growth with the Russell 1000 Growth Index returning 8.3% for the quarter. The worst-performing segment of the domestic equity market for the second consecutive quarter was small-cap value with the Russell 2000 Value index falling -3.6% for the quarter. From a capitalization perspective, large-cap stocks once again led their small-cap counterparts, with the Russell 1000 Index returning 3.2% and the Russell 2000 Index falling by -3.3%.
- The market's growth-led rally continued during the quarter, and this disparity was most visible in large-cap style performance, with the Russell 1000 Growth Index outpacing the Russell 1000 Value Index by double digits (10.1%). While mid-cap and small-cap growth fell in absolute terms for the quarter, the mid- and small-cap growth indexes held up slightly better than their value counterparts. This quarter's results followed the theme of large-cap growth stocks being the best-performing segment of the domestic equity market over the past several years.
- For the year the Russell 1000 Growth Index returned an impressive 33.5%, leading the way among style and market capitalization classifications. Much of this strong performance has been attributable to the emergence of the "Magnificent 7" stocks, which have dominated the large-cap indexes over the past several years. The seven biggest stocks in the Russell 1000 Index contributed more than 70% of the index's total performance in the trailing 12-month period.
- The weakest performing index for the year was the Russell 2000 Growth, which still posted a solid return of 9.1%.
- The dominance of growth sectors is evident in the chart with the broad-cap, large-cap, and mid-cap benchmarks handily outperforming the core and value indexes for the trailing one-year period. The performance gap between the Russell 1000 Growth Index and the Russell 1000 Value Index was a staggering 20.4% for the year while the mid-cap growth index edged past the mid-cap value index by just 3.1%. Small-cap stocks bucked the growth-dominance trend with the Russell 2000 Value Index posting a return of 10.9% versus a return of 9.1% for the Russell 2000 Growth Index.



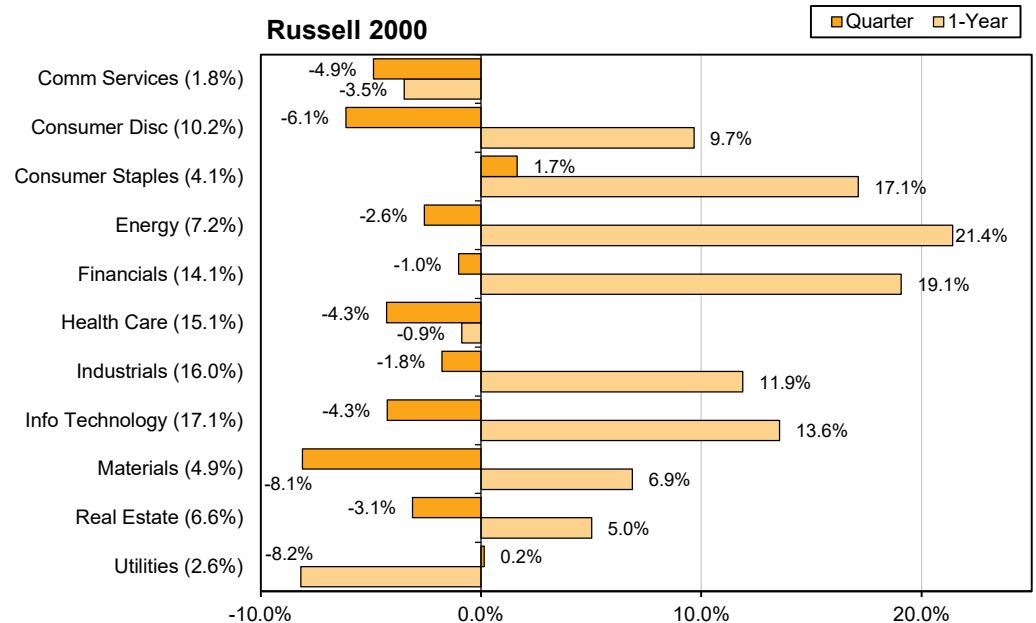
Source: Investment Metrics

- Economic sector performance was choppy during the second quarter. This quarter broke the preceding trend of broader participation in the equity market's rally. Only five of the 11 economic sectors posted positive absolute returns for the quarter, with information technology (11.9%), communication services (9.0%), and utilities (5.1%) leading the way.
- In contrast, full-year results were more consistent as all 11 economic sectors finished the year in positive territory. Of the 11 sectors, three (communication services, up 43.0%; information technology, up 39.7%; and financials, up 25.8%) were up by more than 25.0% for the past year. With their more than 40% combined weight in the benchmark, these three sectors were also the only ones to outpace the Russell 1000 Index's return of 23.9%. Despite solid positive performance, utilities (up 9.1%), consumer staples (8.4%), materials (8.1%), consumer staples (8.4%), and real estate (4.9%) were all relative detractors for the year with their single-digit returns.
- Nine of the 11 small-cap economic sectors lost value during the quarter. Consumer staples (up 1.7%), and utilities (0.2%) were the only two sectors to post gains for the quarter. Materials was the worst-performing sector posting a loss of -8.1% for the quarter. While not always the case, small-cap stocks generally have greater dependence on liquidity and access to capital which can lead to lagging performance relative to large-cap stocks during periods of restrictive monetary policy.
- Similar to large-cap sector performance, eight of the 11 small-cap sectors were positive over the trailing one-year period. Energy posted the strongest sector performance with a return of 21.4%, followed closely by the financials sector return of 19.1%. Consumer staples (up 17.1%), information technology (13.6%), and industrials (11.9%) each produced double-digit results for the period. Three sectors (communication services, health care, and utilities) posted negative results during the period.

Russell 1000



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 June 30, 2024

Top 10 Weighted Stocks				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
Microsoft Corp	6.7%	6.4%	32.3%	Information Technology
Apple Inc	6.2%	23.0%	9.2%	Information Technology
NVIDIA Corp	5.9%	36.7%	192.1%	Information Technology
Amazon.com Inc	3.5%	7.1%	48.2%	Consumer Discretionary
Meta Platforms Inc Class A	2.2%	3.9%	76.1%	Communication Services
Alphabet Inc Class A	2.2%	20.8%	52.3%	Communication Services
Alphabet Inc Class C	1.9%	20.6%	51.8%	Communication Services
Eli Lilly and Co	1.5%	16.6%	94.5%	Health Care
Berkshire Hathaway Inc Class B	1.5%	21.5%	88.4%	Financials
Broadcom Inc	1.4%	-3.3%	19.3%	Information Technology

Top 10 Performing Stocks (by Quarter)				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
GameStop Corp Class A	0.0%	97.2%	1.8%	Consumer Discretionary
Petco Health and Wellness Co	0.0%	65.8%	-57.5%	Consumer Discretionary
Alnylam Pharmaceuticals Inc	0.1%	62.6%	27.9%	Health Care
United Therapeutics Corp	0.0%	38.7%	44.3%	Health Care
Cirrus Logic Inc	0.0%	37.9%	57.6%	Information Technology
NCR Atleos Corp	0.0%	36.8%	N/A	Financials
NVIDIA Corp	5.9%	36.7%	192.1%	Information Technology
AMC Entertainment	0.0%	33.9%	-87.2%	Communication Services
First Solar Inc	0.0%	33.6%	18.6%	Information Technology
Cava Group Inc	0.0%	32.4%	126.5%	Consumer Discretionary

Bottom 10 Performing Stocks (by Quarter)				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
Ginkgo Bioworks Holdings Inc	0.0%	-71.2%	-82.0%	Materials
Hertz Global Holdings Inc	0.0%	-54.9%	-80.8%	Industrials
10x Genomics Inc	0.0%	-48.2%	-65.2%	Health Care
DoubleVerify Holdings Inc	0.0%	-44.6%	-50.0%	Information Technology
UiPath Inc Class A	0.0%	-44.1%	-23.5%	Information Technology
Walgreens Boots Alliance Inc	0.0%	-43.5%	-54.6%	Consumer Staples
Fortrea Holdings Inc	0.0%	-41.9%	-31.4%	Health Care
Five Below Inc	0.0%	-39.9%	-44.6%	Consumer Discretionary
Leggett & Platt Inc	0.0%	-39.9%	-58.8%	Consumer Discretionary
Unity Software Inc Ordinary Shares	0.0%	-39.1%	-62.6%	Information Technology

Top 10 Weighted Stocks				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
Super Micro Computer Inc	1.6%	-18.9%	228.7%	Information Technology
MicroStrategy Inc Class A	0.8%	-19.2%	302.3%	Information Technology
Carvana Co Class A	0.5%	46.4%	396.6%	Consumer Discretionary
e.l.f. Beauty Inc	0.4%	7.5%	84.5%	Consumer Staples
Comfort Systems USA Inc	0.4%	-4.2%	86.0%	Industrials
Onto Innovation Inc	0.4%	21.3%	88.5%	Information Technology
FTAI Aviation Ltd	0.4%	54.0%	234.2%	Industrials
Light & Wonder Inc Ordinary Shares	0.4%	2.7%	52.5%	Consumer Discretionary
Insmmed Inc	0.4%	147.0%	217.5%	Health Care
Fabrinet	0.4%	29.5%	88.5%	Information Technology

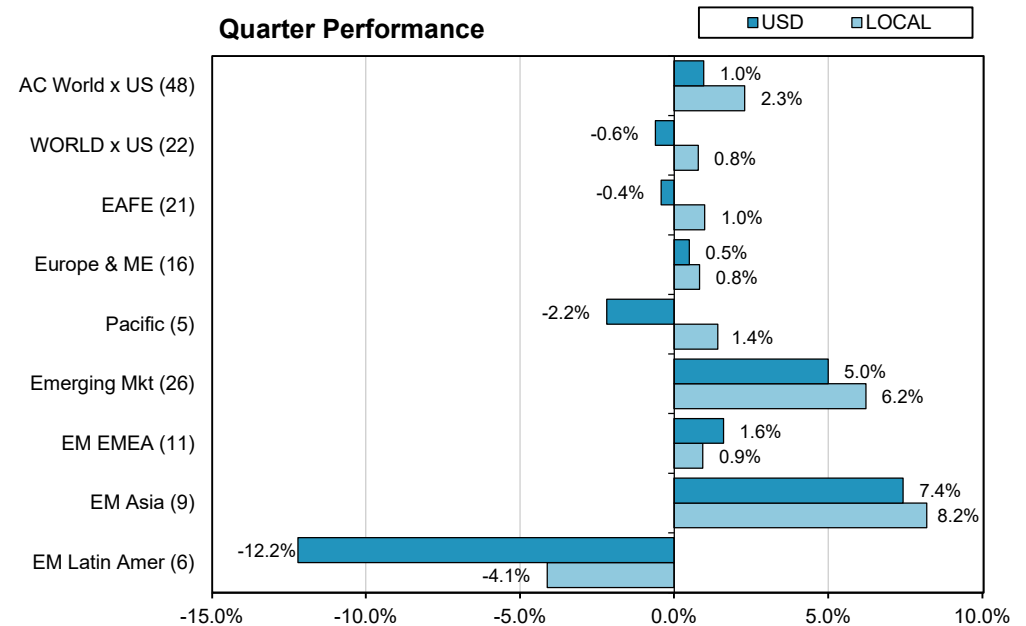
Top 10 Performing Stocks (by Quarter)				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
AST SpaceMobile Inc Ordinary Shares	0.1%	300.3%	147.0%	Communication Services
Emergent BioSolutions Inc	0.0%	169.6%	-7.2%	Health Care
Novavax Inc	0.1%	164.9%	70.4%	Health Care
Rent the Runway Inc Class A	0.0%	154.3%	-55.6%	Consumer Discretionary
Insmmed Inc	0.4%	147.0%	217.5%	Health Care
Innodata Inc	0.0%	124.7%	30.9%	Industrials
NuScale Power Corp Class A	0.0%	120.2%	71.9%	Industrials
TransMedics Group Inc	0.2%	103.7%	79.4%	Health Care
Vital Farms Inc Ordinary Shares	0.1%	101.2%	290.1%	Consumer Staples
Matterport Inc Ordinary Shares	0.0%	97.8%	41.9%	Information Technology

Bottom 10 Performing Stocks (by Quarter)				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
Aerovate Therapeutics Inc	0.0%	-94.4%	-90.3%	Health Care
Marinus Pharmaceuticals Inc	0.0%	-87.1%	-89.2%	Health Care
Cerence Inc Ordinary Shares	0.0%	-82.0%	-90.3%	Information Technology
Velo3D Inc	0.0%	-79.2%	-95.6%	Industrials
Akoustis Technologies Inc	0.0%	-77.7%	-95.9%	Information Technology
Gritstone Bio Inc	0.0%	-76.0%	-68.3%	Health Care
Ovid Therapeutics Inc	0.0%	-74.8%	-76.5%	Health Care
Maxon Solar Technologies Ltd	0.0%	-74.4%	-97.0%	Information Technology
Zentalis Pharmaceuticals Inc	0.0%	-74.0%	-85.5%	Health Care
Nikola Corp	0.0%	-73.8%	-80.2%	Industrials

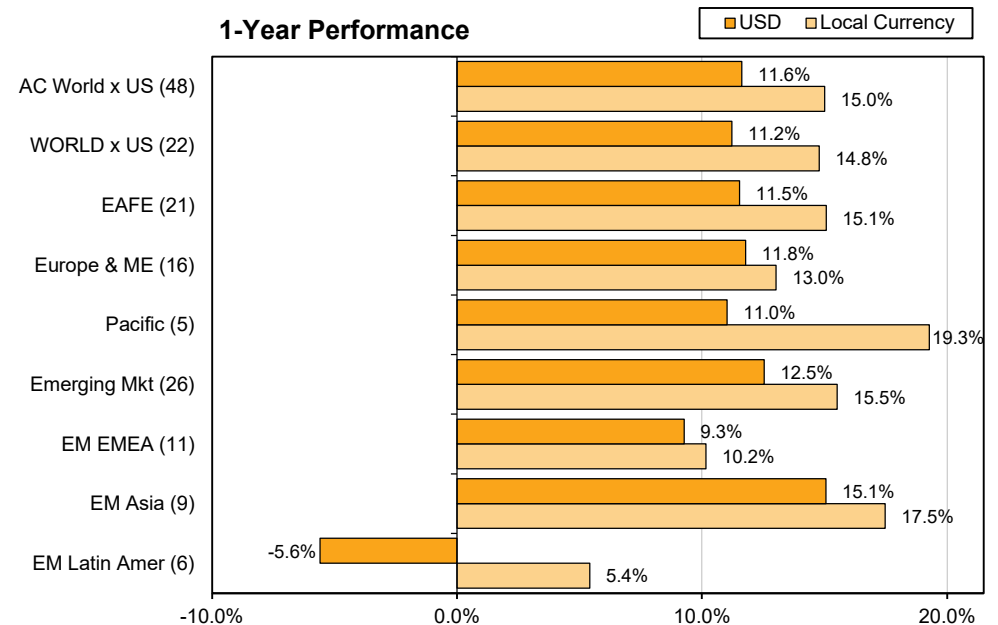
Source: Morningstar Direct

- Results among the broad international equity indexes were mixed during the quarter, echoing the performance of major domestic indexes. The strengthening USD relative to many major currencies during the quarter was a detractor to the USD performance of regional benchmark returns across most regions. The developed-market MSCI EAFE Index returned a muted 1.0% in LCL terms but fell -0.4% in USD terms. The MSCI Emerging Markets Index was the best-performing broad index and rose by 5.0% in USD and 6.2% in LCL terms for the quarter.
- Latin America continued to struggle during the quarter in both USD and LCL terms. The cyclical demand for commodity exports in the region has resulted in greater volatility due to ongoing uncertainty over central bank policies and future global demand.
- The heaviest-weighted country in the emerging market index (China) rebounded 7.1% during the quarter. The Chinese economy grew at a rate of 5.2% in 2023, lower than its pre-pandemic rate of 6.0% and has been a headwind for performance. Troubles in the commercial property and banking sectors have also created challenges for growth in the region. Despite the additive performance in the region, the Chinese banking sector underwent heavy consolidation during the second quarter amid regional bank failures across the country.
- Much like domestic markets, trailing one-year results for international developed and emerging markets benchmarks were strong. Higher LCL versus USD returns for most international benchmarks demonstrate the USD's strength over the trailing one-year period.
- Most broad and regional indexes were positive for the trailing 12 months in both USD and LCL terms. The sole exception was EM Latin America, where USD strength turned the region's positive LCL performance negative in USD terms. In LCL terms, the MSCI Pacific Index led the way with a return of 19.3% for the trailing year. USD returns for the region were still strong but returned a more muted 11.0%. The EM Asia regional index posted the strongest relative USD performance, returning 15.1% over the trailing 12 months.

Quarter Performance



1-Year Performance



Source: MSCI Global Index Monitor (Returns are Net)

The Market Environment
US Dollar International Index Attribution & Country Detail
As of June 30, 2024

MSCI - EAFE	Sector Weight	Quarter Return	1-Year Return
Communication Services	4.1%	0.5%	10.1%
Consumer Discretionary	11.5%	-9.0%	0.1%
Consumer Staples	8.5%	-1.6%	-6.8%
Energy	4.1%	1.3%	15.9%
Financials	20.0%	3.3%	24.2%
Health Care	13.5%	4.7%	11.5%
Industrials	16.9%	-0.8%	15.0%
Information Technology	9.5%	0.2%	24.1%
Materials	6.7%	-3.2%	8.5%
Real Estate	2.0%	-6.7%	7.6%
Utilities	3.1%	0.8%	-0.6%
Total	100.0%	-0.4%	11.5%

MSCI - ACWixUS	Sector Weight	Quarter Return	1-Year Return
Communication Services	5.3%	5.7%	-3.0%
Consumer Discretionary	11.1%	1.9%	8.6%
Consumer Staples	7.2%	-5.9%	-4.6%
Energy	5.5%	18.9%	21.4%
Financials	21.7%	18.7%	21.4%
Health Care	9.5%	10.0%	7.5%
Industrials	13.7%	13.1%	19.8%
Information Technology	14.0%	28.3%	29.4%
Materials	7.1%	5.1%	4.1%
Real Estate	1.8%	4.5%	6.8%
Utilities	3.1%	3.7%	5.2%
Total	100.0%	1.0%	11.6%

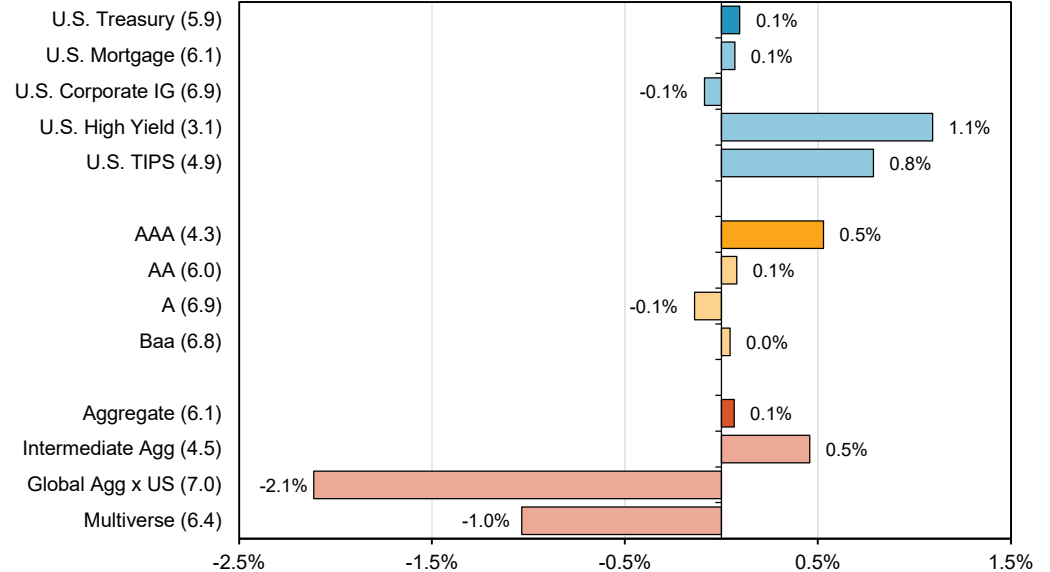
MSCI - Emerging Mkt	Sector Weight	Quarter Return	1-Year Return
Communication Services	8.9%	8.2%	2.7%
Consumer Discretionary	12.3%	5.1%	6.3%
Consumer Staples	5.2%	-3.0%	-5.7%
Energy	5.2%	3.3%	25.2%
Financials	21.9%	3.5%	12.6%
Health Care	3.2%	-4.3%	-2.8%
Industrials	6.9%	4.0%	6.9%
Information Technology	25.1%	11.3%	34.2%
Materials	6.9%	-1.8%	-3.1%
Real Estate	1.5%	2.8%	-4.1%
Utilities	3.0%	6.2%	20.3%
Total	100.0%	5.0%	12.5%

Country	MSCI-EAFE Weight	MSCI-ACWixUS Weight	Quarter Return	1-Year Return
Japan	22.7%	14.4%	-4.3%	13.2%
United Kingdom	14.9%	9.5%	3.7%	12.5%
France	11.2%	7.1%	-7.5%	0.5%
Switzerland	9.7%	6.2%	3.1%	6.1%
Germany	8.7%	5.5%	-1.4%	10.1%
Australia	7.5%	4.8%	1.6%	14.1%
Netherlands	5.4%	3.4%	5.0%	25.6%
Denmark	4.0%	2.5%	7.5%	42.1%
Sweden	3.2%	2.1%	2.2%	18.2%
Italy	2.7%	1.7%	-3.4%	21.3%
Spain	2.7%	1.7%	-1.6%	15.0%
Hong Kong	1.8%	1.1%	1.0%	-18.0%
Singapore	1.4%	0.9%	8.9%	13.5%
Finland	1.0%	0.6%	3.0%	1.7%
Belgium	1.0%	0.6%	0.9%	9.0%
Israel	0.7%	0.5%	-4.2%	23.6%
Norway	0.6%	0.4%	6.6%	14.2%
Ireland	0.3%	0.2%	-0.8%	12.5%
Portugal	0.2%	0.1%	8.5%	-6.4%
Austria	0.2%	0.1%	7.1%	17.9%
New Zealand	0.2%	0.1%	3.2%	3.7%
Total EAFE Countries	100.0%	63.6%	-0.4%	11.5%
Canada	7.4%		-2.1%	8.6%
Total Developed Countries		71.0%	-0.6%	11.2%
China		7.3%	7.1%	-1.6%
Taiwan		5.6%	15.1%	40.7%
India		5.6%	10.2%	34.4%
Korea		3.5%	-1.2%	8.1%
Brazil		1.2%	-12.2%	-7.7%
Saudi Arabia		1.1%	-7.4%	0.9%
South Africa		0.9%	12.3%	12.3%
Mexico		0.6%	-16.1%	-6.5%
Indonesia		0.5%	-12.4%	-11.8%
Malaysia		0.4%	4.4%	17.5%
Thailand		0.4%	-4.8%	-13.3%
United Arab Emirates		0.3%	-2.3%	0.8%
Poland		0.3%	6.1%	32.4%
Turkey		0.2%	21.4%	62.1%
Qatar		0.2%	-0.3%	0.7%
Kuwait		0.2%	-2.8%	2.2%
Philippines		0.1%	-10.7%	-3.1%
Greece		0.1%	-1.2%	9.6%
Chile		0.1%	-1.3%	-9.3%
Peru		0.1%	2.0%	40.0%
Hungary		0.1%	9.2%	29.0%
Czech Republic		0.0%	6.3%	3.5%
Colombia		0.0%	-4.6%	26.7%
Egypt		0.0%	-4.2%	-4.8%
Total Emerging Countries		29.0%	5.0%	12.5%
Total ACWixUS Countries		100.0%	1.0%	11.6%

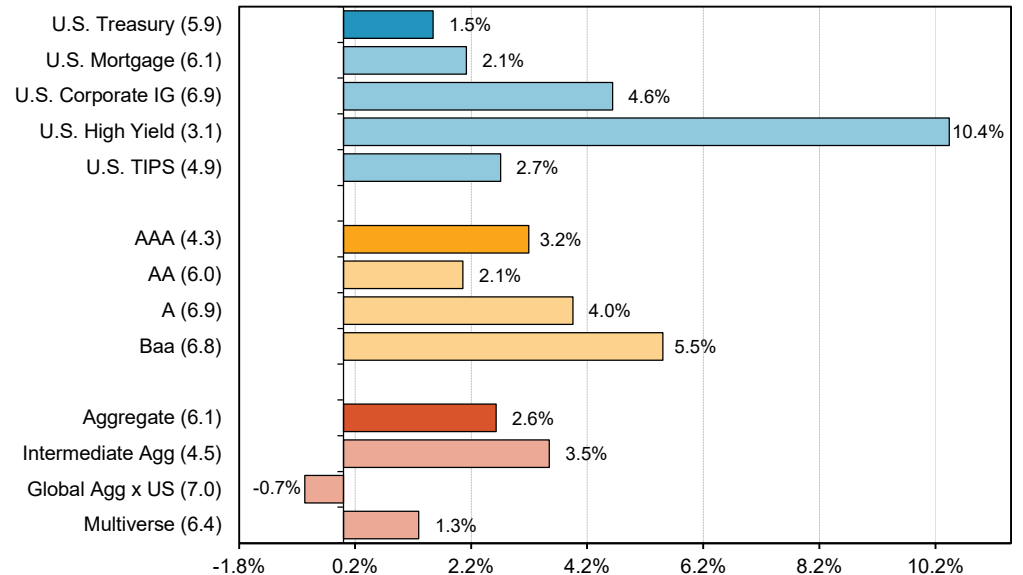
Source: Morningstar Direct, MSCI Global Index Monitor (Returns are Net in USD)
As a result of the GICS classification changes on 9/28/2018 and certain associated reporting limitations, sector performance represents backward looking performance for the prior year of each sector's current constituency,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

- Fixed-income markets fell in a relatively tight range for the quarter with many domestic sectors returning less than 0.5%. Yields remained at elevated levels as the Federal Reserve maintained its restrictive policy stance. If market expectations hold and the Fed begins to cut rates in 2024, to the extent any cuts lower yields across the curve, it will provide a jolt to bondholder performance since bond prices move in the opposite direction of yields.
- The Bloomberg US Aggregate Bond Index had a mixed quarter of performance made up of a large drawdown in April follow by smaller recoveries in May and June that combined for an index return of 0.1%. Performance across the investment-grade index's segments for the quarter was similarly muted with the Bloomberg US Corporate Investment Grade Index returning -0.1% and the US Mortgage Index gaining 0.1%.
- Outside of the Aggregate index's sub-components, high-yield bonds continued to rise, posting a return of 1.1%, boosted by the higher coupon income, and US TIPS climbed 0.8% for the quarter. The Bloomberg Global Aggregate ex-US Index returned -2.1% for the quarter with USD strength exerting downward pressure on performance. This global performance lagged domestic fixed-income indexes as well as the multiverse benchmark's return of -1.0%.
- Over the trailing one-year period, the Bloomberg US Aggregate Bond Index managed a 2.6% return. The benchmark's sub-components also posted positive performance over the trailing 12 months with the Bloomberg US Corporate Investment Grade Index rising 4.6% and the US Mortgage Index posting a more modest 2.1% return. US TIPS and high-yield corporate bonds, which are excluded from the aggregate index, each posted gains in the trailing year with returns of 2.7% and 10.4%, respectively. In addition to their higher coupons, high-yield bonds benefited from generally shorter duration than investment-grade corporate debt. This lower duration acted as a tailwind for high-yield bonds as interest rates rose during the trailing year.
- Among credit qualities, lower-quality bonds (both investment grade and non-investment grade) have outperformed higher-quality bonds due to both their higher yields, which contribute to higher interest payments, and narrowing credit spreads over the last year.
- Performance for non-US bonds was negative for the trailing year with the Bloomberg Global Aggregate ex-US Index falling -0.7%. With foreign central banks largely tracking the Fed's tight monetary stance, the negative performance of global bonds is largely attributable to USD strength over the last year.

Quarter Performance



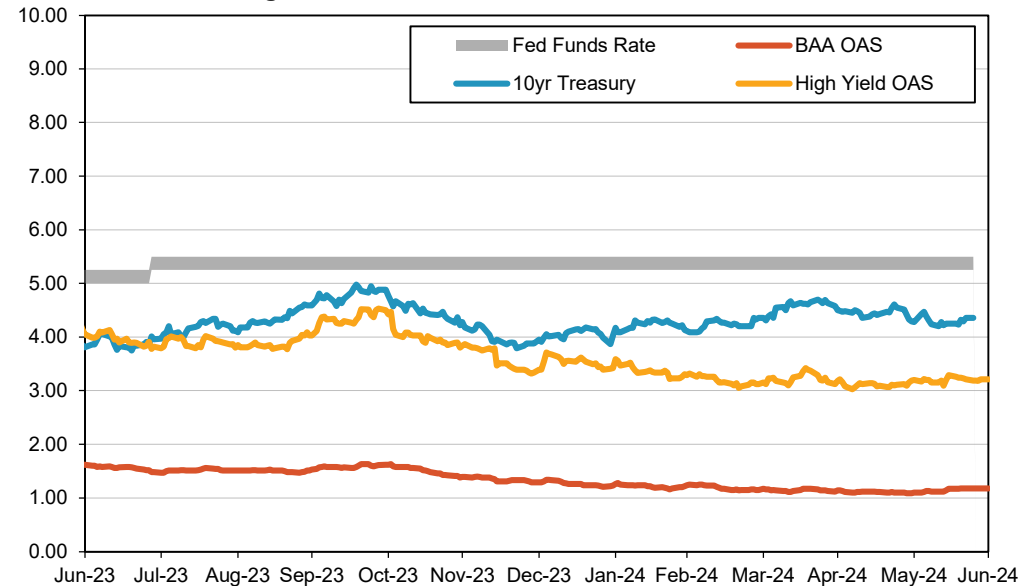
1-Year Performance



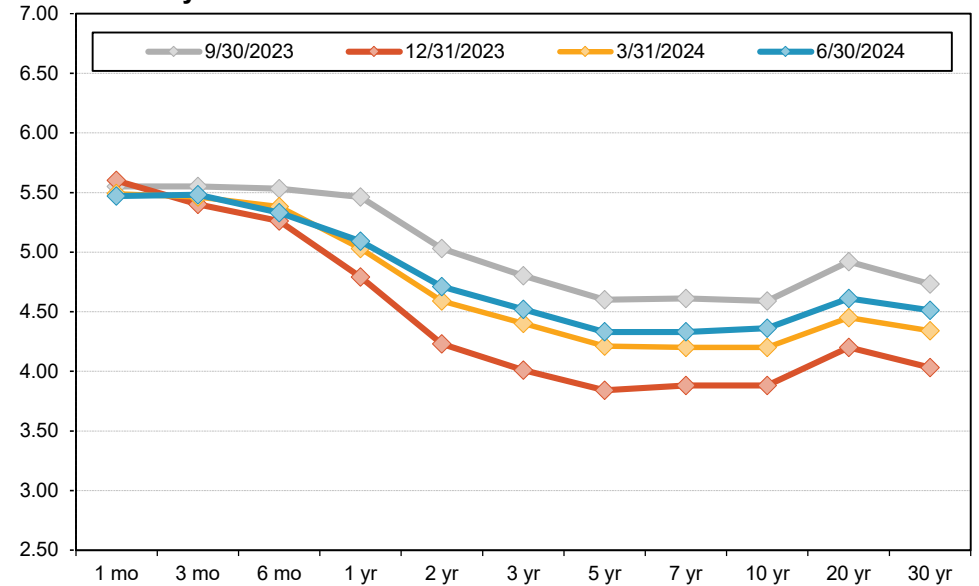
Source: Bloomberg

- The gray band across the graph illustrates the current fed funds target rate range over the last 12 months. During the second quarter, the Federal Open Market Committee (FOMC) continued to hold fed funds rates steady in the 5.25%-5.50% target range. The last rate increase in the current cycle occurred at the FOMC's July 2023 meeting. While the FOMC's press releases have continued to push economic data-dependent outcomes, the language used to describe economic conditions in these releases has also softened, resulting in market expectations that the next rate action by the FOMC will likely be a cut. The CME FedWatch tool, which forecasts rates based on Fed Fund futures pricing, currently shows a greater than 90% probability of a 0.25% rate decrease at the FOMC September meeting. Fed officials and market participants continue to express concern that leaving rates at their current levels for an extended period could tip the US economy into a recession. However, inflation remains above the FOMC's long-term 2.0% target level. Additionally, the FOMC continues to remove liquidity from the market by allowing bonds held on its balance sheet to mature without reinvesting principal payments.
- The yield on the US 10-year Treasury (blue line of the top chart) remained stable, opening the quarter at 4.33% and finishing June at a yield of 4.36%. The stability of the benchmark rate reflects the stability of the Federal Reserve's policy stance and the persistently high level of inflation throughout the economy. The 10-year Treasury benchmark's rate peaked in October 2023, cresting at a yield of just under 5.00% before pulling back in the remainder of the year.
- The red line in the top chart shows the Option Adjusted Spread (OAS) for BAA-rated corporate bonds. This measure quantifies the additional yield premium that investors require to purchase and hold non-US Treasury issues with the lowest investment grade rating. During the quarter, the yield spread was relatively unchanged, beginning the quarter at 1.18% and finishing June at 1.17%. The spread measure narrowed over the trailing 12-month period after concerns about the regional banking sector during March 2023 caused credit spreads to spike. High-yield OAS spreads (represented by the orange line in the top chart) have also remained relatively unchanged, rising by just 0.07%. The spread measures' stability results from steady economic growth, stable monetary policy, and falling inflation readings.
- The lower graph provides a snapshot of the US Treasury yield curve at the end of each of the last four quarters. The yield curve has been inverted for each of the last four quarter-end readings on the graph and for most of last two years. Historically, a persistent yield curve inversion has been a precursor of an economic recession within six to 24 months.

1-Year Trailing Market Rates



Treasury Yield Curve



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

[CME FedWatch Tool - CME Group](#)

[Effective Federal Funds Rate - FEDERAL RESERVE BANK of NEW YORK \(newyorkfed.org\)](#)

[ICE BofA US High Yield Index Option-Adjusted Spread \(BAMLH0A0HYM2\) | FRED | St. Louis Fed \(stlouisfed.org\)](#)

[When will the Federal Reserve start cutting interest rates? | J.P. Morgan Asset Management \(jpmorgan.com\)](#)

[Resource Center | U.S. Department of the Treasury](#)

[China's Economy Limps Into 2024 – WSJ](#)

[Support Site - Global Index Lens: Index Returns – MSCI](#)

[Federal Reserve issues FOMC statement](#)

[CME FedWatch - CME Group](#)

[Transcript of Chair Powell's Press Conference -- June 12, 2024 \(federalreserve.gov\)](#)

[U.S. Treasuries: investors look to inflation data due in week ahead \(cnbc.com\)](#)

[Yen drops to 38-year low, U.S. dollar slumps after weak data \(cnbc.com\)](#)

[Jobs report June 2024: \(cnbc.com\)](#)

[The Fed - June 12, 2024: FOMC Projections materials, accessible version \(federalreserve.gov\)](#)

[The Federal Reserve's latest dot plot, explained – and what it says about interest rates | Bankrate](#)

[Top 25 Stocks in the S&P 500 By Index Weight for July 2024 \(investopedia.com\)](#)

[Will Small-Cap Stocks Ever Catch Up? | Morningstar](#)

[Why Chinese banks are now vanishing \(economist.com\)](#)

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

Comparative Performance

Total Fund

As of June 30, 2024

Comparative Performance Trailing Returns																			
	QTR		FYTD		1 YR		2 YR		3 YR		5 YR		10 YR		15 YR		Inception		Inception Date
Total Fund Performance	0.11	(88)	4.59	(83)	11.32	(55)	10.45	(51)	1.94	(78)	6.25	(84)	6.06	(78)	8.37	(56)	6.23	(37)	01/01/2001
Total Fund Policy	0.30	(84)	4.55	(83)	11.31	(55)	10.31	(55)	2.20	(72)	6.61	(78)	6.28	(68)	8.78	(35)	6.34	(33)	
Allocation Index	0.48	(78)	4.98	(77)	11.74	(47)	10.62	(47)	2.04	(75)	6.30	(83)	6.06	(77)	N/A		N/A		
All Public Plans-Total Fund Median	1.03		6.04		11.58		10.45		2.88		7.38		6.65		8.48		5.94		
All Public Plan Sponsor Universes with 50% or Less Equities																			
Total Fund Performance	0.11	(83)	4.59	(65)	11.32	(36)	10.45	(33)	1.94	(76)	6.25	(71)	6.06	(63)	8.37	(35)	6.23	(26)	01/01/2001
Total Fund Policy	0.30	(78)	4.55	(65)	11.31	(36)	10.31	(37)	2.20	(71)	6.61	(64)	6.28	(53)	8.78	(18)	6.34	(24)	
All Public Plans <= 50% Equities Median	1.03		5.21		10.20		9.39		2.93		7.08		6.30		8.22		5.91		
All Public Plan Sponsor Universes with 60% or More Equities																			
Total Fund Performance	0.11	(90)	4.59	(99)	11.32	(78)	10.45	(73)	1.94	(79)	6.25	(96)	6.06	(90)	8.37	(71)	6.23	(61)	01/01/2001
Total Fund Policy	0.30	(89)	4.55	(99)	11.31	(78)	10.31	(77)	2.20	(72)	6.61	(92)	6.28	(82)	8.78	(51)	6.34	(54)	
All Public Plans >=60% Equities Median	1.09		6.72		12.37		11.05		3.06		7.59		6.94		8.79		6.41		

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

Comparative Performance

Total Fund

As of June 30, 2024

	QTR		FYTD		1 YR		2 YR		3 YR		5 YR		10 YR		15 YR		Inception		Inception Date		
Domestic Equity																					
Total Fund Domestic Equity		-0.37		8.94		17.89		17.81		6.58		12.17		10.74		N/A		10.74		07/01/2014	
Vanguard Inst'l Index Fund (VINIX)		4.28 (10)		15.27 (8)		24.51 (14)		22.01 (11)		9.97 (10)		N/A		N/A		N/A		N/A		11/01/2020	
S&P 500 Index		4.28 (5)		15.29 (1)		24.56 (4)		22.05 (3)		10.01 (1)		15.05 (3)		12.86 (1)		14.82 (1)		16.81 (1)			
IM S&P 500 Index (MF) Median		4.20		15.11		24.22		21.71		9.69		14.71		12.47		14.33		16.46			
Vanguard Growth Index (VIGIX)		8.66 (16)		20.51 (45)		32.79 (48)		30.36 (31)		9.91 (21)		18.79 (11)		15.34 (18)		N/A		15.54 (15)		05/01/2010	
Vanguard Growth Index Hybrid		8.68 (15)		20.54 (45)		32.85 (48)		30.41 (30)		9.95 (21)		18.84 (11)		15.38 (18)		16.78 (12)		15.60 (12)			
Russell 1000 Growth Index		8.33 (20)		20.70 (43)		33.48 (42)		30.26 (33)		11.28 (7)		19.34 (8)		16.33 (5)		17.29 (7)		16.21 (6)			
IM U.S. Large Cap Growth Equity (MF) Median		6.74		20.13		32.48		28.87		7.85		16.11		14.27		15.33		14.25			
Vanguard Value Index (VIVIX)		-0.93 (44)		8.73 (38)		15.85 (51)		13.32 (56)		8.01 (28)		10.51 (42)		9.90 (23)		12.67 (25)		12.67 (25)		07/01/2009	
Vanguard Value Index Hybrid		-0.93 (44)		8.73 (39)		15.77 (52)		13.29 (56)		8.00 (28)		10.50 (42)		9.90 (23)		12.71 (25)		12.71 (25)			
Russell 1000 Value Index		-2.17 (74)		6.62 (70)		13.06 (71)		12.30 (67)		5.52 (78)		9.01 (77)		8.23 (70)		11.78 (47)		11.78 (47)			
IM U.S. Large Cap Value Equity (MF) Median		-1.19		7.98		15.85		14.04		7.01		10.19		8.84		11.65		11.65			
Vanguard Mid-Cap 400 Index Fund I (VSPMX)		-3.46 (33)		6.14 (25)		13.50 (33)		15.51 (13)		4.40 (47)		10.20 (19)		N/A		N/A		9.97 (36)		12/01/2018	
S&P MidCap 400 Index		-3.45 (33)		6.17 (25)		13.57 (31)		15.57 (12)		4.47 (46)		10.27 (17)		9.14 (13)		13.16 (12)		10.03 (35)			
IM U.S. Mid Cap Core Equity (MF) Median		-3.95		4.82		11.93		12.37		4.27		9.20		7.22		11.33		9.26			
Vanguard Small-Cap 600 Index I (VSMSX)		-3.12 (43)		-0.75 (83)		8.60 (69)		9.14 (73)		-0.34 (68)		8.04 (47)		N/A		N/A		7.16 (61)		12/01/2018	
S&P SmallCap 600 Index		-3.11 (42)		-0.72 (82)		8.66 (68)		9.20 (71)		-0.26 (67)		8.06 (46)		8.24 (15)		12.63 (8)		7.18 (61)			
IM U.S. Small Cap Core Equity (MF) Median		-3.30		1.69		10.03		11.14		1.23		7.91		7.02		11.22		7.63			

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

Comparative Performance

Total Fund

As of June 30, 2024

	QTR	FYTD	1 YR	2 YR	3 YR	5 YR	10 YR	15 YR	Inception	Inception Date
International Equity										
Total Fund Performance - International Equity	1.64	5.08	10.04	10.14	-1.68	4.34	3.36	N/A	3.36	07/01/2014
Vanguard Intl Value (VTRIX)	-1.29 (80)	2.68 (73)	6.16 (89)	11.92 (73)	N/A	N/A	N/A	N/A	3.94 (80)	12/01/2021
MSCI AC World ex USA Value	1.55 (5)	5.21 (30)	14.24 (15)	13.63 (53)	4.30 (34)	5.98 (49)	3.40 (44)	6.01 (39)	7.50 (34)	
IM International Multi-Cap Value Equity (MF) Median	-0.28	3.88	11.34	13.75	3.08	5.96	3.29	5.76	6.08	
Vanguard Intl Growth (VWILX)	2.35 (7)	7.77 (26)	9.02 (68)	11.89 (71)	N/A	N/A	N/A	N/A	-6.31 (86)	12/01/2021
MSCI AC World ex USA Growth	0.86 (39)	6.89 (35)	10.21 (48)	11.92 (70)	-2.32 (67)	5.81 (71)	5.09 (70)	7.25 (85)	-1.07 (62)	
IM International Multi-Cap Growth Equity (MF) Median	0.45	5.49	10.07	13.05	-0.47	6.92	5.73	8.22	0.58	
Vanguard FTSE AW ex-US SC Index (VFSNX)	1.05 (31)	2.53 (58)	9.39 (72)	9.71 (93)	-2.17 (80)	N/A	N/A	N/A	12.82 (76)	04/01/2020
FTSE Global ex U.S. Small Cap Index (Net)	1.27 (29)	2.57 (58)	9.96 (70)	9.98 (86)	-2.19 (80)	4.86 (72)	3.14 (81)	N/A	12.68 (77)	
IM International SMID Cap Core Equity (MF) Median	0.00	3.07	11.72	13.69	-0.15	6.62	4.11	N/A	14.18	
Vanguard Developed Markets Index (VTMNX)	-0.75 (76)	4.35 (59)	10.60 (52)	13.53 (46)	1.82 (41)	6.54 (33)	4.52 (33)	6.91 (35)	6.91 (35)	07/01/2009
Vanguard Spliced Developed ex U.S. Index (Net)	-0.75 (76)	4.32 (60)	11.02 (46)	13.75 (43)	1.77 (41)	6.50 (34)	4.51 (34)	6.87 (40)	6.87 (40)	
MSCI EAFE (Net) Index	-0.42 (66)	5.34 (44)	11.54 (37)	15.10 (24)	2.89 (28)	6.46 (36)	4.33 (42)	6.76 (44)	6.76 (44)	
IM International Multi-Cap Equity (MF) Median	0.00	4.92	10.76	13.19	0.94	5.86	4.08	6.64	6.64	
Vanguard Emerging Markets Index (VEMIX)	5.31 (30)	7.35 (50)	11.92 (49)	6.41 (63)	-3.69 (34)	3.79 (42)	3.03 (41)	N/A	2.57 (45)	10/01/2010
FTSE Emerging Mkts All Cap China A Inclusion Index	5.74 (24)	7.95 (44)	13.76 (36)	7.65 (53)	-2.88 (28)	4.48 (33)	3.75 (26)	5.68 (29)	3.19 (30)	
MSCI Emerging Markets (Net) Index	5.00 (37)	7.49 (49)	12.55 (43)	7.01 (60)	-5.07 (43)	3.10 (52)	2.79 (46)	4.90 (49)	2.53 (46)	
IM Emerging Markets Equity (MF) Median	4.24	7.34	11.62	7.95	-5.78	3.23	2.54	4.82	2.29	

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

Comparative Performance

Total Fund

As of June 30, 2024

	QTR	FYTD	1 YR	2 YR	3 YR	5 YR	10 YR	15 YR	Inception	Inception Date
Fixed Income										
Total Fund Performance - Fixed Income	0.98	0.78	5.49	3.81	-1.11	1.09	1.97	N/A	1.97	07/01/2014
Vanguard Short Term Bond Index (VBIRX)	0.83 (96)	1.00 (99)	4.59 (97)	2.38 (97)	-0.23 (97)	0.98 (92)	1.38 (74)	N/A	1.31 (71)	04/01/2013
Bloomberg 1-5 Year Gov/Credit Idx	0.83 (96)	0.97 (99)	4.66 (96)	2.40 (97)	-0.20 (96)	1.02 (90)	1.42 (70)	1.83 (61)	1.36 (68)	
IM U.S. Short Term Investment Grade (MF) Median	1.18	2.25	6.00	4.17	1.31	1.89	1.66	2.03	1.58	
Vanguard Total Bond Index (VBTIX)	0.18 (59)	-0.61 (74)	2.77 (66)	0.93 (63)	-2.99 (39)	N/A	N/A	N/A	-0.81 (63)	09/01/2019
Blmbg. U.S. Aggregate Index	0.07 (80)	-0.71 (82)	2.63 (73)	0.83 (69)	-3.02 (42)	-0.23 (63)	1.35 (50)	2.50 (71)	-0.81 (63)	
IM U.S. Broad Market Core Fixed Income (MF) Median	0.21	-0.34	3.13	1.15	-3.10	-0.08	1.34	2.87	-0.63	
Vanguard High Yield Bond Fund (VWEAX)	1.39 (24)	2.18 (80)	9.41 (66)	8.96 (54)	1.77 (32)	3.49 (44)	N/A	N/A	4.32 (21)	12/01/2014
Blmbg. U.S. Corp High Yield	1.09 (58)	2.58 (55)	10.44 (29)	9.75 (24)	1.64 (36)	3.92 (27)	4.31 (11)	7.44 (8)	4.66 (10)	
IM U.S. High Yield Bonds (MF) Median	1.15	2.67	9.81	9.02	1.28	3.34	3.47	6.45	3.85	
Vanguard International Bond (VTIFX)	-0.55 (37)	-0.49 (37)	4.43 (37)	2.35 (46)	-1.96 (36)	-0.37 (36)	N/A	N/A	1.64 (10)	05/01/2015
Blmbg. Global Agg ex-USD Flt Adj RIC Cpd (H)	-0.39 (35)	-0.31 (35)	4.69 (34)	2.55 (45)	-1.87 (35)	-0.25 (35)	2.12 (9)	N/A	1.67 (10)	
IM International Fixed Income (MF) Median	-0.82	-2.22	2.67	2.30	-3.72	-1.74	-1.21	1.55	-0.53	
Vanguard EM Bond (VEGBX)	0.22 (55)	2.68 (37)	11.13 (18)	11.76 (6)	N/A	N/A	N/A	N/A	1.31 (7)	12/01/2021
Blmbg. Emerging Markets USD Aggregate Index	0.68 (29)	2.22 (55)	7.95 (70)	6.79 (85)	-2.22 (61)	0.47 (52)	2.52 (26)	5.21 (8)	-1.80 (78)	
IM Emerging Markets Debt (MF) Median	0.27	2.29	9.07	8.68	-1.82	0.49	1.91	4.50	-0.76	
REIT										
Vanguard Real Estate Index Fund (VGSNX)	-1.91 (85)	-3.05 (81)	4.79 (70)	0.34 (68)	-2.53 (78)	2.98 (58)	5.33 (46)	N/A	7.73 (35)	10/01/2010
Vanguard Spliced REIT Index	-1.88 (83)	-3.01 (80)	4.88 (68)	0.44 (64)	-2.44 (74)	3.08 (55)	5.41 (44)	11.23 (29)	7.80 (33)	
IM Real Estate Sector (MF) Median	-0.53	-1.64	5.78	1.05	-1.54	3.26	5.27	10.76	7.49	

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

Comparative Performance

Total Fund

As of June 30, 2024

	QTR	FYTD	1 YR	2 YR	3 YR	5 YR	10 YR	15 YR	Inception	Inception Date
Total Fund - Domestic Equity	-0.37	8.94	17.89	17.81	6.58	12.17	10.74	N/A	10.74	07/01/2014
Total Domestic Large Cap Equity	3.88	14.76	24.26	21.78	9.56	13.67	11.99	N/A	12.10	06/01/2014
S&P 500 Index	4.28	15.29	24.56	22.05	10.01	15.05	12.86	14.82	12.97	
Large Cap Growth	8.66	20.51	32.79	30.36	9.91	19.05	15.48	N/A	15.61	06/01/2014
Vanguard Growth Index Hybrid	8.68	20.54	32.85	30.41	9.95	18.84	15.38	16.78	15.52	
Russell 1000 Growth Index	8.33	20.70	33.48	30.26	11.28	19.34	16.33	17.29	16.41	
Large Cap Core	4.28	15.27	24.73	22.07	9.81	12.69	11.33	N/A	11.41	06/01/2014
S&P 500 Index	4.28	15.29	24.56	22.05	10.01	15.05	12.86	14.82	12.97	
Large Cap Value	-0.93	8.73	15.85	13.40	8.06	10.54	9.96	N/A	10.07	06/01/2014
Vanguard Value Index Hybrid	-0.93	8.73	15.77	13.29	8.00	10.50	9.90	12.71	10.02	
Russell 1000 Value Index	-2.17	6.62	13.06	12.30	5.52	9.01	8.23	11.78	8.44	
Mid Cap Equity	-3.46	6.14	13.50	15.59	4.45	10.23	9.03	N/A	9.27	06/01/2014
Mid Cap Hybrid Index	-3.45	6.17	13.57	15.57	4.47	10.27	9.03	N/A	9.27	
Small Cap Equity	-3.12	-0.75	8.60	9.14	-0.34	8.04	7.21	N/A	7.67	06/01/2014
Small Cap Hybrid Index	-3.11	-0.72	8.66	9.20	-0.26	8.06	7.22	12.03	7.68	
Total Fund - International Equity	1.64	5.08	10.04	10.14	-1.68	4.34	3.36	N/A	3.36	07/01/2014
Small Cap - International Equity	1.05	2.53	9.39	9.71	-2.17	N/A	N/A	N/A	6.50	03/01/2020
FTSE Global ex U.S. Small Cap Index (Net)	1.27	2.57	9.96	9.98	-2.19	4.86	3.14	N/A	6.79	
Developed Markets - International Equity	-0.75	4.35	10.60	13.53	1.82	6.54	4.50	N/A	4.57	06/01/2014
Vanguard Spliced Developed ex U.S. Index (Net)	-0.75	4.32	11.02	13.75	1.77	6.50	4.51	6.87	4.58	
Emerging Markets - International Equity	5.31	7.35	11.92	6.41	-3.63	3.82	3.00	N/A	3.29	06/01/2014
FTSE Emerging Mkts All Cap China A Inclusion Index	5.74	7.95	13.76	7.65	-2.88	4.48	3.75	5.68	4.04	
MSCI Emerging Markets (Net) Index	5.00	7.49	12.55	7.01	-5.07	3.10	2.79	4.90	3.04	

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

Comparative Performance

Total Fund

As of June 30, 2024

	QTR	FYTD	1 YR	2 YR	3 YR	5 YR	10 YR	15 YR	Inception	Inception Date
Total Fund - Fixed Income	0.98	0.78	5.49	3.81	-1.11	1.09	1.97	N/A	1.97	07/01/2014
Short - Term Fixed Income	0.83	1.00	4.59	2.38	-0.23	0.96	1.36	N/A	1.34	06/01/2014
Bloomberg 1-5 Year Gov/Credit Idx	0.83	0.97	4.66	2.40	-0.20	1.02	1.42	1.83	1.40	
High Yield - Fixed Income	1.39	2.18	9.41	8.96	1.77	3.49	N/A	N/A	4.30	11/01/2014
Blmbg. U.S. Corp High Yield	1.09	2.58	10.44	9.75	1.64	3.92	4.31	7.44	4.54	
Non-US Fixed Income	-0.55	-0.49	4.43	2.35	-1.96	-0.37	N/A	N/A	1.70	05/01/2015
Blmbg. Global Agg ex-USD Flt Adj RIC Cpd (H)	-0.39	-0.31	4.69	2.55	-1.87	-0.25	2.12	N/A	1.67	
Real Estate	-1.91	-3.05	4.79	0.34	-2.53	2.98	5.20	N/A	5.27	06/01/2014
Vanguard Spliced REIT Index	-1.88	-3.01	4.88	0.44	-2.44	3.08	5.41	11.23	5.49	

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

Comparative Performance

Total Fund

As of June 30, 2024

Comparative Performance Trailing Returns												
	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014		
Total Fund Performance	15.13	-15.61	14.00	9.84	20.21	-5.76	13.91	8.58	-0.72	8.24		
Total Fund Policy	15.02	-14.86	13.81	11.44	19.49	-4.94	13.67	8.48	-0.69	8.15		
Allocation Index	15.09	-15.63	14.11	9.90	19.76	-5.32	14.25	7.44	-0.62	N/A		
Domestic Equity												
Total Fund Domestic Equity	22.57	-16.59	26.91	13.96	29.77	-7.16	20.07	13.45	-0.10	N/A		
Twin Capital Low Volatility	N/A	N/A	N/A	5.51 (90)	29.24 (53)	-5.37 (47)	19.16 (77)	16.03 (8)	-1.31 (79)	12.91 (46)		
S&P 500 Index	26.29 (29)	-18.11 (61)	28.71 (29)	18.40 (40)	31.49 (26)	-4.38 (32)	21.83 (45)	11.96 (24)	1.38 (43)	13.69 (31)		
IM U.S. Large Cap Core Equity (SA+CF) Median	23.76	-16.91	26.87	15.93	29.48	-5.68	21.51	9.88	0.99	12.64		
Twin Capital Enhanced Index	N/A	N/A	N/A	15.07 (58)	29.73 (40)	-6.43 (65)	20.37 (77)	11.66 (57)	2.42 (25)	13.42 (52)		
S&P 500 Index	26.29 (33)	-18.11 (52)	28.71 (49)	18.40 (43)	31.49 (32)	-4.38 (26)	21.83 (57)	11.96 (55)	1.38 (39)	13.69 (44)		
IM U.S. Large Cap Enhanced Index Equity (SA+CF) Median	25.11	-18.07	28.63	16.26	29.40	-5.66	22.11	12.21	0.96	13.59		
Vanguard Inst'l Index Fund (VINIX)	26.24 (15)	-18.14 (12)	28.67 (8)	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
S&P 500 Index	26.29 (5)	-18.11 (3)	28.71 (1)	18.40 (9)	31.49 (3)	-4.38 (7)	21.83 (1)	11.96 (3)	1.38 (2)	13.69 (1)		
IM S&P 500 Index (MF) Median	25.96	-18.36	28.25	18.05	31.08	-4.66	21.37	11.55	0.97	13.18		
Vanguard Growth Index (VIGIX)	46.78 (19)	-33.14 (70)	27.27 (20)	40.20 (28)	37.25 (12)	-3.32 (72)	27.82 (64)	6.11 (19)	3.23 (75)	13.70 (17)		
Vanguard Growth Index Hybrid	46.86 (18)	-33.13 (69)	27.30 (19)	40.27 (28)	37.31 (11)	-3.34 (73)	27.86 (64)	6.16 (18)	3.38 (72)	13.69 (17)		
Russell 1000 Growth Index	42.68 (37)	-29.14 (27)	27.60 (17)	38.49 (34)	36.39 (19)	-1.51 (54)	30.21 (39)	7.08 (10)	5.67 (49)	13.05 (24)		
IM U.S. Large Cap Growth Equity (MF) Median	40.78	-31.30	22.39	35.62	33.26	-1.22	29.28	2.21	5.61	10.49		
Vanguard Value Index (VIVIX)	9.26 (72)	-2.05 (12)	26.48 (44)	2.30 (70)	25.83 (59)	-5.42 (22)	17.14 (47)	16.87 (21)	-0.81 (18)	13.20 (10)		
Vanguard Value Index Hybrid	9.17 (73)	-2.01 (11)	26.51 (43)	2.26 (71)	25.85 (59)	-5.40 (22)	17.16 (46)	16.93 (20)	-0.86 (19)	13.29 (9)		
Russell 1000 Value Index	11.46 (57)	-7.54 (66)	25.16 (63)	2.80 (61)	26.54 (50)	-8.27 (45)	13.66 (82)	17.34 (17)	-3.83 (69)	13.45 (8)		
IM U.S. Large Cap Value Equity (MF) Median	12.63	-6.10	25.96	3.82	26.50	-8.61	16.95	13.85	-3.00	10.82		
Vanguard Mid-Cap 400 Index Fund I (VSPMX)	16.36 (31)	-13.11 (50)	24.67 (59)	13.58 (26)	26.13 (72)	N/A	N/A	N/A	N/A	N/A		
S&P MidCap 400 Index	16.44 (30)	-13.06 (50)	24.76 (59)	13.66 (26)	26.20 (72)	-11.08 (40)	16.24 (38)	20.74 (12)	-2.18 (29)	9.77 (41)		
IM U.S. Mid Cap Core Equity (MF) Median	13.86	-13.21	25.73	8.44	28.59	-11.64	14.94	14.51	-3.74	8.88		
Vanguard Small-Cap 600 Index I (VSMXX)	15.99 (51)	-16.18 (57)	26.74 (37)	11.46 (39)	22.74 (61)	N/A	N/A	N/A	N/A	N/A		
S&P SmallCap 600 Index	16.05 (49)	-16.10 (54)	26.82 (36)	11.29 (41)	22.78 (61)	-8.48 (9)	13.23 (38)	26.56 (16)	-1.97 (21)	5.76 (34)		
IM U.S. Small Cap Core Equity (MF) Median	15.99	-15.77	25.12	9.89	23.94	-12.71	12.09	21.66	-4.35	4.73		

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

Comparative Performance

Total Fund

As of June 30, 2024

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
International Equity										
Total Fund Performance - International Equity	14.07	-18.46	6.98	10.24	21.55	-14.50	28.00	5.26	-5.56	N/A
Vanguard Intl Value (VTRIX)	16.15 (65)	-11.66 (67)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MSCI AC World ex USA Value	18.13 (51)	-7.95 (33)	11.13 (52)	-0.21 (69)	16.45 (64)	-13.45 (14)	23.35 (51)	9.59 (17)	-9.59 (94)	-4.60 (25)
IM International Multi-Cap Value Equity (MF) Median	18.18	-10.16	11.39	2.60	17.47	-16.91	23.48	2.91	-3.08	-6.25
Vanguard Intl Growth (VWILX)	14.81 (59)	-30.79 (83)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MSCI AC World ex USA Growth	14.40 (65)	-22.80 (44)	5.37 (72)	22.56 (33)	27.84 (34)	-14.10 (32)	32.47 (31)	0.50 (37)	-0.91 (69)	-2.29 (18)
IM International Multi-Cap Growth Equity (MF) Median	15.50	-24.22	8.82	19.24	26.40	-15.75	29.11	-0.61	0.16	-5.01
Vanguard FTSE AW ex-US SC Index (VFSNX)	15.19 (58)	-21.25 (85)	12.76 (55)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FTSE Global ex U.S. Small Cap Index (Net)	15.35 (57)	-21.58 (87)	13.02 (53)	11.40 (14)	21.55 (30)	-18.91 (39)	29.78 (50)	3.93 (29)	-0.61 (82)	-4.34 (30)
IM International SMID Cap Core Equity (MF) Median	17.24	-17.04	13.19	5.76	19.58	-19.67	29.44	-0.75	4.70	-6.30
Vanguard Developed Markets Index (VTMNX)	17.84 (40)	-15.34 (47)	11.44 (34)	10.27 (43)	22.14 (43)	-14.49 (35)	26.46 (46)	2.46 (35)	-0.19 (44)	-5.62 (55)
Vanguard Spliced Developed ex U.S. Index (Net)	17.97 (37)	-15.58 (49)	11.57 (33)	10.00 (44)	22.34 (42)	-14.79 (38)	26.31 (47)	2.29 (37)	-0.28 (45)	-4.85 (44)
MSCI EAFE (Net) Index	18.24 (33)	-14.45 (40)	11.26 (37)	7.82 (57)	22.01 (45)	-13.79 (25)	25.03 (62)	1.00 (52)	-0.81 (53)	-4.90 (45)
IM International Multi-Cap Equity (MF) Median	16.81	-15.71	10.28	8.74	21.55	-15.87	25.85	1.12	-0.72	-5.32
Vanguard Emerging Markets Index (VEMIX)	9.18 (65)	-17.74 (21)	0.92 (36)	15.26 (65)	20.37 (50)	-14.54 (29)	31.43 (72)	11.76 (26)	-15.39 (68)	0.72 (18)
FTSE Emerging Mkts All Cap China A Inclusion Index	9.95 (59)	-17.26 (19)	1.76 (32)	15.84 (62)	20.81 (47)	-14.49 (29)	31.46 (72)	10.66 (34)	-13.28 (46)	2.96 (10)
MSCI Emerging Markets (Net) Index	9.83 (60)	-20.09 (32)	-2.54 (58)	18.31 (47)	18.42 (63)	-14.57 (29)	37.28 (43)	11.19 (29)	-14.92 (62)	-2.19 (43)
IM Emerging Markets Equity (MF) Median	10.91	-22.45	-1.60	17.68	20.17	-16.46	35.66	8.25	-13.73	-3.00

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

Comparative Performance

Total Fund

As of June 30, 2024

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Fixed Income										
Total Fund Performance - Fixed Income	7.70	-11.27	0.05	6.75	10.16	-0.71	3.82	4.79	-0.18	N/A
Vanguard Short Term Bond Index (VBIRX)	4.88 (87)	-5.61 (91)	-0.97 (94)	4.71 (11)	4.84 (23)	1.37 (42)	1.19 (71)	1.51 (59)	0.98 (9)	1.32 (13)
Bloomberg 1-5 Year Gov/Credit Idx	4.89 (87)	-5.50 (89)	-0.97 (94)	4.71 (11)	5.01 (18)	1.38 (41)	1.27 (66)	1.56 (56)	0.97 (9)	1.42 (11)
IM U.S. Short Term Investment Grade (MF) Median	5.67	-3.79	0.02	3.02	4.12	1.24	1.45	1.68	0.27	0.67
Vanguard Total Bond Index (VBTIX)	5.72 (54)	-13.15 (27)	-1.65 (64)	7.73 (65)	N/A	N/A	N/A	N/A	N/A	N/A
Blmbg. U.S. Aggregate Index	5.53 (65)	-13.01 (22)	-1.55 (60)	7.51 (73)	8.72 (53)	0.01 (18)	3.54 (54)	2.65 (62)	0.55 (20)	5.97 (27)
IM U.S. Broad Market Core Fixed Income (MF) Median	5.77	-13.66	-1.33	8.16	8.76	-0.62	3.60	2.90	0.04	5.55
Vanguard High Yield Bond Fund (VWEAX)	11.74 (62)	-8.97 (18)	3.78 (80)	5.38 (52)	15.90 (9)	-2.87 (46)	7.13 (31)	11.27 (86)	-1.31 (13)	N/A
Blmbg. U.S. Corp High Yield	13.45 (14)	-11.19 (58)	5.28 (42)	7.11 (20)	14.32 (38)	-2.08 (22)	7.50 (21)	17.13 (8)	-4.47 (58)	2.45 (24)
IM U.S. High Yield Bonds (MF) Median	12.17	-10.97	4.94	5.43	13.83	-2.97	6.63	13.77	-3.98	1.50
Vanguard International Bond (VTIFX)	8.85 (23)	-12.89 (48)	-2.17 (20)	4.59 (75)	7.89 (25)	3.00 (2)	2.43 (86)	4.69 (35)	N/A	N/A
Blmbg. Global Agg ex-USD Flt Adj RIC Cpd (H)	8.75 (31)	-12.72 (44)	-2.10 (19)	4.75 (72)	8.06 (24)	3.16 (1)	2.57 (82)	4.90 (33)	1.34 (3)	9.14 (9)
IM International Fixed Income (MF) Median	7.17	-12.94	-5.39	6.55	6.64	-2.47	9.80	3.34	-5.82	0.63
Vanguard EM Bond (VEGBX)	13.80 (10)	-13.02 (31)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Blmbg. Emerging Markets USD Aggregate Index	9.09 (82)	-15.26 (52)	-1.65 (23)	6.52 (38)	13.11 (61)	-2.46 (8)	8.17 (88)	9.88 (59)	1.29 (12)	4.76 (18)
IM Emerging Markets Debt (MF) Median	11.40	-15.10	-2.96	5.74	13.63	-5.92	10.54	10.43	-2.53	1.32
REIT										
Vanguard Real Estate Index Fund (VGSNX)	11.82 (55)	-26.20 (51)	40.47 (61)	-4.67 (54)	29.02 (33)	-5.93 (54)	4.93 (58)	8.51 (21)	2.56 (58)	30.17 (36)
Vanguard Spliced REIT Index	11.96 (50)	-26.12 (47)	40.56 (60)	-4.55 (53)	29.03 (33)	-5.86 (52)	5.07 (54)	8.60 (20)	2.52 (58)	30.38 (30)
IM Real Estate Sector (MF) Median	11.91	-26.17	41.32	-4.31	27.32	-5.71	5.32	6.34	2.91	29.47

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

Comparative Performance

Total Fund

As of June 30, 2024

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Total Fund - Domestic Equity	22.57	-16.59	26.91	13.96	29.77	-7.16	20.07	13.45	-0.10	N/A
Total Domestic Large Cap Equity	26.14	-17.98	27.04	14.02	30.31	-5.16	20.67	13.09	1.00	N/A
S&P 500 Index	26.29	-18.11	28.71	18.40	31.49	-4.38	21.83	11.96	1.38	13.69
Large Cap Growth	46.78	-33.14	27.27	41.61	37.36	-3.51	27.82	5.87	3.78	N/A
Vanguard Growth Index Hybrid	46.86	-33.13	27.30	40.27	37.31	-3.34	27.86	6.16	3.38	13.69
Russell 1000 Growth Index	42.68	-29.14	27.60	38.49	36.39	-1.51	30.21	7.08	5.67	13.05
Large Cap Core	26.46	-18.20	27.04	9.03	29.41	-5.71	19.57	14.29	0.18	N/A
S&P 500 Index	26.29	-18.11	28.71	18.40	31.49	-4.38	21.83	11.96	1.38	13.69
Large Cap Value	9.42	-2.05	26.48	2.30	25.83	-5.50	17.14	16.87	-0.27	N/A
Vanguard Value Index Hybrid	9.17	-2.01	26.51	2.26	25.85	-5.40	17.16	16.93	-0.86	13.29
Russell 1000 Value Index	11.46	-7.54	25.16	2.80	26.54	-8.27	13.66	17.34	-3.83	13.45
Mid Cap Equity	16.52	-13.11	24.67	13.58	26.13	-10.44	19.29	11.23	-1.31	N/A
Mid Cap Hybrid Index	16.44	-13.06	24.76	13.66	26.20	-10.67	19.30	11.25	-1.28	13.83
Small Cap Equity	15.99	-16.18	26.74	11.46	22.74	-10.45	16.25	18.32	-3.63	N/A
Small Cap Hybrid Index	16.05	-16.10	26.82	11.29	22.78	-10.32	16.24	18.26	-3.68	7.54
Total Fund - International Equity	14.07	-18.46	6.98	10.24	21.55	-14.50	28.00	5.26	-5.56	N/A
Small Cap - International Equity	15.19	-21.25	12.76	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FTSE Global ex U.S. Small Cap Index (Net)	15.35	-21.58	13.02	11.40	21.55	-18.91	29.78	3.93	-0.61	-4.34
Developed Markets - International Equity	17.84	-15.34	11.44	10.27	22.14	-14.49	26.46	2.46	-0.41	N/A
Vanguard Spliced Developed ex U.S. Index (Net)	17.97	-15.58	11.57	10.00	22.34	-14.79	26.31	2.29	-0.28	-4.85
Emerging Markets - International Equity	9.18	-17.74	1.10	15.26	20.37	-14.54	31.43	11.76	-15.80	N/A
FTSE Emerging Mkts All Cap China A Inclusion Index	9.95	-17.26	1.76	15.84	20.81	-14.49	31.46	10.66	-13.28	2.96
MSCI Emerging Markets (Net) Index	9.83	-20.09	-2.54	18.31	18.42	-14.57	37.28	11.19	-14.92	-2.19

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

Comparative Performance

Total Fund

As of June 30, 2024

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Total Fund - Fixed Income	7.70	-11.27	0.05	6.75	10.16	-0.71	3.82	4.79	-0.18	N/A
Short - Term Fixed Income	4.88	-5.61	-0.97	4.71	4.71	1.37	1.19	1.51	0.98	N/A
Bloomberg 1-5 Year Gov/Credit Idx	4.89	-5.50	-0.97	4.71	5.01	1.38	1.27	1.56	0.97	1.42
High Yield - Fixed Income	11.74	-8.97	3.78	5.38	15.90	-2.87	6.65	10.89	-1.28	N/A
Blmbg. U.S. Corp High Yield	13.45	-11.19	5.28	7.11	14.32	-2.08	7.50	17.13	-4.47	2.45
Non-US Fixed Income	8.85	-12.89	-2.17	4.59	7.89	3.00	2.43	4.69	N/A	N/A
Blmbg. Global Agg ex-USD Flt Adj RIC Cpd (H)	8.75	-12.72	-2.10	4.75	8.06	3.16	2.57	4.90	1.34	9.14
Real Estate	11.82	-26.20	40.47	-4.67	29.02	-5.93	4.93	8.51	2.56	N/A
Vanguard Spliced REIT Index	11.96	-26.12	40.56	-4.55	29.03	-5.86	5.07	8.60	2.52	30.38

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

Multi Time Period Statistics
Butler County Employees Retirement Plan
As of June 30, 2024

Multi Time Period 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	1.94		13.16		-0.02		6.25		13.07		0.37	
Total Fund Policy	2.12		12.46		-0.01		6.61		12.62		0.40	
Vanguard Instl Indx;Inst (VINIX) *	9.97		(9)		17.61		(34)		0.46		(10)	
S&P 500 Index	10.01		17.61		0.47		(10)		15.01		(8)	
IM S&P 500 Index (MF) Median	9.69		17.61		0.45		14.71		17.93		(36)	
Vanguard Growth Index (VIGIX)	9.91		(21)		22.22		(28)		0.41		(27)	
Vanguard Growth Index Hybrid	9.95		22.23		0.41		(27)		18.79		(11)	
IM U.S. Large Cap Growth Equity (MF) Median	7.85		21.08		0.33		16.11		21.30		(21)	
Vanguard Value Index (VIVIX)	8.01		(28)		15.53		(63)		0.38		(29)	
Vanguard Value Index Hybrid	8.00		15.52		0.38		(29)		10.51		(42)	
IM U.S. Large Cap Value Equity (MF) Median	7.01		16.05		0.32		10.19		17.22		(70)	
Vanguard S&P MC400;Inst (VSPMX) *	4.40		(47)		20.15		(4)		0.17		(46)	
S&P MidCap 400 Index	4.47		20.16		0.17		(46)		10.20		(19)	
IM U.S. Mid Cap Core Equity (MF) Median	4.27		18.19		0.16		9.20		21.74		(13)	
Vanguard S&P SC600;Inst (VSMSX) *	-0.34		(68)		20.99		(30)		-0.06		(66)	
S&P SmallCap 600 Index	-0.26		20.99		-0.05		(66)		8.04		(47)	
IM U.S. Small Cap Core Equity (MF) Median	1.23		20.43		0.02		7.91		23.30		(46)	

* 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 Time Period Statistics
Butler County Employees Retirement Plan
As of June 30, 2024

	3 YR Return		3 YR Standard Deviation		3 YR Sharpe Ratio		5 YR Return		5 YR Standard Deviation		5 YR Sharpe Ratio	
Vanguard Intl Val;Inv (VTRIX)*	1.14	(69)	16.97	(79)	-0.03	(72)	5.89	(61)	18.99	(19)	0.28	(63)
MSCI EAFE Index	3.43		16.69		0.11		6.98		17.55		0.35	
IM International Large Cap Core Equity (MF) Median	1.87		17.45		0.02		6.33		18.09		0.31	
Vanguard Intl Gro;Adm (VWILX)*	-7.21	(99)	22.71	(6)	-0.35	(98)	8.52	(20)	22.42	(1)	0.38	(30)
MSCI EAFE Growth Index	0.40		18.91		-0.04		6.80		17.83		0.34	
IM International Large Cap Growth Equity (MF) Median	0.20		17.89		-0.09		6.24		18.28		0.31	
Vanguard FTSExUSSC;Ins (VFSNX) *	-2.17	(27)	17.63	(85)	-0.21	(32)	4.96	(39)	20.05	(54)	0.24	(39)
FTSE Global ex U.S. Small Cap Index (Net)	-2.19		17.24		-0.22		4.86		19.89		0.23	
IM International SMID Cap Growth Equity (MF) Median	-3.96		18.95		-0.27		4.37		20.09		0.21	
Vanguard Developed Markets Index (VTMNX)	1.82	(41)	17.84	(33)	0.02	(39)	6.54	(33)	18.54	(45)	0.32	(35)
Vanguard Spliced Developed ex U.S. Index (Net)	1.77		17.07		0.01		6.50		18.08		0.32	
IM International Multi-Cap Equity (MF) Median	0.94		17.47		-0.03		5.86		18.40		0.29	
Vanguard Emerging Markets Index (VEMIX)	-3.69	(34)	16.18	(82)	-0.34	(37)	3.79	(42)	17.61	(91)	0.18	(42)
FTSE Emerging Mkts All Cap China A Inclusion Index	-2.88		15.75		-0.30		4.48		17.41		0.22	
IM Emerging Markets Equity (MF) Median	-5.78		18.03		-0.40		3.23		19.20		0.15	
Vanguard Short Term Bond Index (VBIRX)	-0.23	(97)	3.28	(6)	-1.03	(75)	0.98	(92)	2.71	(43)	-0.43	(88)
Bloomberg 1-5 Year Gov/Credit Idx	-0.20		3.25		-1.03		1.02		2.70		-0.41	
IM U.S. Short Term Investment Grade (MF) Median	1.31		2.32		-0.77		1.89		2.50		-0.09	
Vanguard Tot Bd;Inst (VBTIX) *	-2.99	(39)	7.27	(68)	-0.81	(46)	-0.19	(59)	6.19	(76)	-0.35	(68)
Blmbg. U.S. Aggregate Index	-3.02		7.33		-0.81		-0.23		6.17		-0.36	
IM U.S. Broad Market Core Fixed Income (MF) Median	-3.10		7.38		-0.81		-0.08		6.51		-0.31	
Vanguard High Yield Bond Fund (VWEAX)	1.77	(32)	8.19	(50)	-0.11	(30)	3.49	(44)	8.53	(79)	0.19	(42)
Vanguard High Yield Corporate Composite Index	1.50		7.95		-0.15		3.79		8.51		0.23	
IM U.S. High Yield Bonds (MF) Median	1.28		8.18		-0.17		3.34		9.16		0.17	

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All performance is reported net of fees.

Multi Time Period Statistics
Butler County Employees Retirement Plan
As of June 30, 2024

	3 YR Return		3 YR Standard Deviation		3 YR Sharpe Ratio		5 YR Return		5 YR Standard Deviation		5 YR Sharpe Ratio	
Vanguard Tot Intl BI;Inst (VTIFX) *	-1.97	(37)	6.13	(64)	-0.80	(60)	-0.37	(36)	5.29	(76)	-0.45	(54)
Blmbg. Global Agg ex-USD Flt Adj RIC Cpd (H)	-1.87		5.92		-0.82		-0.25		5.14		-0.44	
IM International Fixed Income (MF) Median	-3.72		9.33		-0.77		-1.74		8.18		-0.44	
Vanguard Em Mkt Bond;Adm (VEGBX)*	0.10	(12)	10.92	(18)	-0.21	(12)	3.74	(5)	11.34	(78)	0.19	(5)
JPM GBI-EM Diversified	-4.83		11.55		-0.64		-2.18		11.62		-0.32	
IM Emerging Markets Debt - LC (MF) Median	-1.20		10.64		-0.34		0.30		12.08		-0.08	
Vanguard Real Estate Index Fund (VGSNX)	-2.53	(78)	21.63	(15)	-0.15	(66)	2.98	(58)	20.82	(26)	0.14	(57)
Vanguard Spliced REIT Index	-2.44		21.63		-0.14		3.08		20.81		0.15	
IM Real Estate Sector (MF) Median	-1.54		21.03		-0.12		3.26		20.29		0.16	

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Multi Time Period Statistics
Butler County Employees Retirement Plan
As of June 30, 2024

Multi Time Period 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		6.06		11.20		0.45		8.37		10.92		0.70	
Total Fund Policy		6.28		10.90		0.48		8.78		10.92		0.74	
Vanguard Instl Indx;Inst (VINIX) *		12.83 (4)		15.47 (13)		0.78 (4)		14.79 (2)		15.32 (10)		0.93 (3)	
S&P 500 Index		12.86		15.47		0.78		14.82		15.32		0.93	
IM S&P 500 Index (MF) Median		12.47		15.44		0.76		14.33		15.30		0.90	
Vanguard Growth Index (VIGIX)		15.34 (18)		18.80 (39)		0.79 (30)		N/A		N/A		N/A	
Vanguard Growth Index Hybrid		15.38		18.82		0.79		16.78		17.82		0.92	
IM U.S. Large Cap Growth Equity (MF) Median		14.27		18.37		0.75		15.33		17.81		0.85	
Vanguard Value Index (VIVIX)		9.90 (23)		14.83 (68)		0.62 (23)		12.67 (25)		15.08 (64)		0.81 (26)	
Vanguard Value Index Hybrid		9.90		14.83		0.62		12.71		15.07		0.81	
IM U.S. Large Cap Value Equity (MF) Median		8.84		15.48		0.53		11.65		15.67		0.73	
Vanguard S&P MC400;Inst (VSPMX)*		9.07 (11)		19.17 (71)		0.48 (10)		N/A		N/A		N/A	
S&P MidCap 400 Index		9.14		19.17		0.48		13.16		18.94		0.70	
IM U.S. SMID Cap Core Equity (MF) Median		7.20		19.58		0.38		11.18		19.40		0.60	
Vanguard S&P SC600;Inst (VSMSX)*		8.22 (16)		21.25 (45)		0.41 (17)		N/A		N/A		N/A	
S&P SmallCap 600 Index		8.24		21.23		0.41		12.63		20.35		0.64	
IM U.S. Small Cap Core Equity (MF) Median		7.02		21.20		0.36		11.22		20.69		0.58	

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Multi Time Period Statistics
Butler County Employees Retirement Plan
As of June 30, 2024

	10 YR Return		10 YR Standard Deviation		10 YR Sharpe Ratio		15 YR Return		15 YR Standard Deviation		15 YR Sharpe Ratio	
Vanguard Intl Val;Inv (VTRIX)*	3.56	(64)	17.34	(44)	0.21	(65)	6.19	(64)	18.10	(28)	0.37	(69)
MSCI EAFE Index	4.84		16.12		0.29		7.26		16.68		0.45	
IM International Large Cap Core Equity (MF) Median	3.85		16.80		0.22		6.50		17.30		0.40	
Vanguard Intl Gro;Adm (VWILX)*	7.64	(5)	21.74	(2)	0.38	(15)	9.57	(7)	21.02	(1)	0.49	(18)
MSCI EAFE Growth Index	5.79		16.75		0.34		8.01		16.85		0.49	
IM International Large Cap Growth Equity (MF) Median	4.69		17.07		0.27		7.13		17.43		0.43	
Vanguard FTSExUSSC;Ins (VFSNX)*	3.35	(71)	18.92	(69)	0.19	(70)	6.89	(78)	19.40	(51)	0.39	(79)
FTSE Global ex U.S. Small Cap Index (Net)	3.14		18.79		0.18		N/A		N/A		N/A	
IM International SMID Cap Growth Equity (MF) Median	3.95		19.39		0.22		7.83		19.40		0.45	
Vanguard Developed Markets Index (VTMNX)	4.52	(33)	16.79	(60)	0.26	(31)	6.91	(35)	17.34	(61)	0.42	(36)
Vanguard Spliced Developed ex U.S. Index (Net)	4.51		16.58		0.26		6.87		17.00		0.42	
IM International Multi-Cap Equity (MF) Median	4.08		17.11		0.24		6.64		17.57		0.40	
Vanguard Emerging Markets Index (VEMIX)	3.03	(41)	17.03	(93)	0.18	(41)	N/A		N/A		N/A	
FTSE Emerging Mkts All Cap China A Inclusion Index	3.75		16.90		0.22		5.68		17.77		0.35	
IM Emerging Markets Equity (MF) Median	2.54		18.75		0.15		4.82		19.18		0.29	
Vanguard Sh-Tm B;Inst (VBITX)*	1.38	(74)	2.38	(44)	-0.04	(71)	N/A		N/A		N/A	
Bloomberg 1-5 Year Gov/Credit Idx	1.42		2.38		-0.03		1.83		2.13		0.39	
IM U.S. Short Term Investment Grade (MF) Median	1.66		2.25		0.08		2.03		2.28		0.48	
Vanguard Tot Bd;Inst (VBTIX)*	1.35	(50)	4.99	(65)	-0.01	(51)	2.48	(72)	4.55	(77)	0.34	(72)
Blmbg. U.S. Aggregate Index	1.35		4.94		-0.01		2.50		4.50		0.34	
IM U.S. Broad Market Core Fixed Income (MF) Median	1.34		5.13		-0.01		2.87		4.78		0.40	
Vanguard HY Corp;Adm (VWEAX)*	4.14	(15)	7.30	(90)	0.39	(10)	6.71	(34)	7.09	(91)	0.81	(7)
Vanguard High Yield Corporate Composite Index	4.18		7.57		0.39		6.72		7.22		0.80	
IM U.S. High Yield Bonds (MF) Median	3.47		8.37		0.28		6.45		8.21		0.67	

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Multi Time Period Statistics

Butler County Employees Retirement Plan

As of June 30, 2024

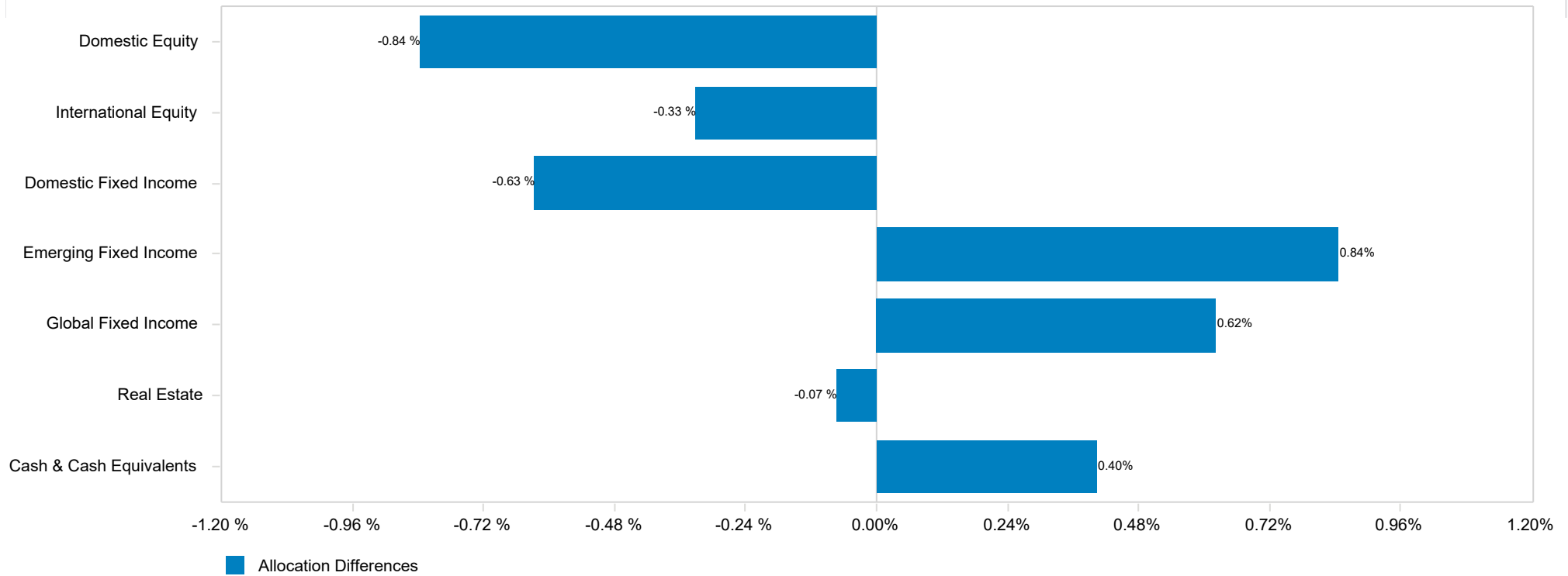
	10 YR Return		10 YR Standard Deviation		10 YR Sharpe Ratio		15 YR Return	15 YR Standard Deviation	15 YR Sharpe Ratio
Vanguard Tot Intl BI;Inst (VTIFX)*	1.97	(9)	4.54	(81)	0.13	(11)	N/A	N/A	N/A
Blmbg. Global Agg ex-USD Flt Adj RIC Cpd (H)	2.12		4.49		0.16		N/A	N/A	N/A
IM International Fixed Income (MF) Median	-1.21		8.33		-0.23		1.55	8.90	0.10
Vanguard Em Mkt Bond;Adm (VEGBX)*	N/A		N/A		N/A		N/A	N/A	N/A
JPM GBI-EM Diversified	-1.68		12.56		-0.19		1.46	12.08	0.10
IM Emerging Markets Debt - LC (MF) Median	-0.81		13.08		-0.12		N/A	N/A	N/A
Vanguard Real Estate Index Fund (VGSNX)	5.33		17.43		0.30		N/A	N/A	N/A
Vanguard Spliced REIT Index	5.41		17.45		0.31		11.23	18.38	0.62

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Total Fund Asset Allocation Analysis

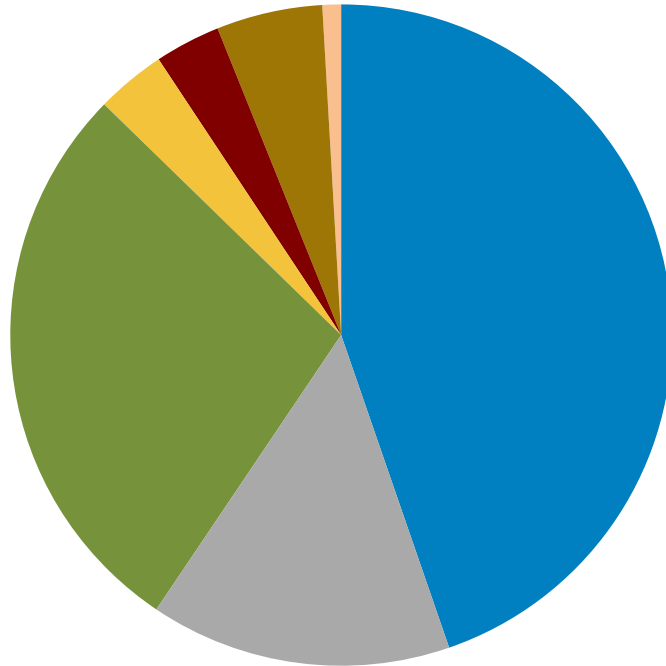
Total Fund

As of June 30, 2024

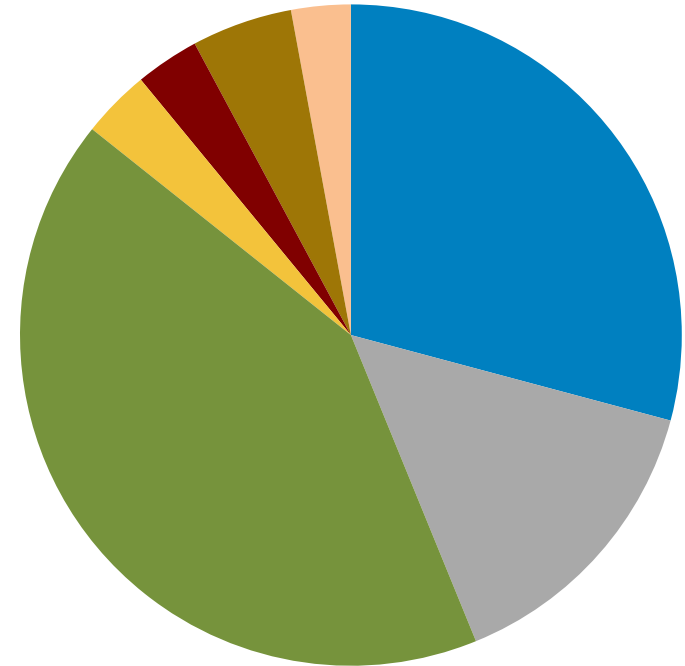


Asset Allocation Compliance				
	Current Allocation (%)	Target Allocation (%)	Minimum Allocation (%)	Maximum Allocation (%)
Domestic Equity	29.16	30.00	5.00	55.00
International Equity	14.67	15.00	5.00	30.00
Domestic Fixed Income	41.87	42.50	15.00	70.00
Emerging Fixed Income	3.34	2.50	0.00	5.00
Global Fixed Income	3.12	2.50	0.00	5.00
Real Estate	4.93	5.00	0.00	10.00
Cash & Cash Equivalents	2.90	2.50	0.00	5.00
Total Fund	100.00	100.00	N/A	N/A

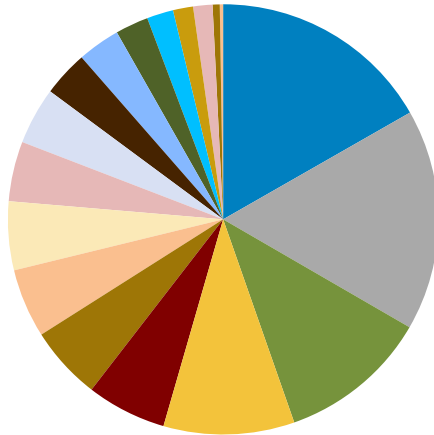
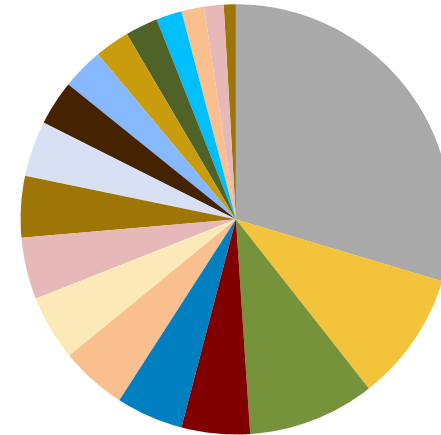
Asset Allocation By Segment as of
March 31, 2024 : \$264,835,927



Asset Allocation By Segment as of
June 30, 2024 : \$270,124,005



Allocation			Allocation		
Segments	Market Value	Allocation	Segments	Market Value	Allocation
Domestic Equity	118,414,080	44.7	Domestic Equity	78,775,863	29.2
International Equity	38,983,944	14.7	International Equity	39,623,762	14.7
Domestic Fixed Income	73,773,734	27.9	Domestic Fixed Income	113,105,711	41.9
Emerging Fixed Income	9,035,157	3.4	Emerging Fixed Income	9,034,320	3.3
Global Fixed Income	8,481,278	3.2	Global Fixed Income	8,434,110	3.1
Real Estate	13,732,032	5.2	Real Estate	13,305,167	4.9
Cash	2,415,704	0.9	Cash	7,845,072	2.9

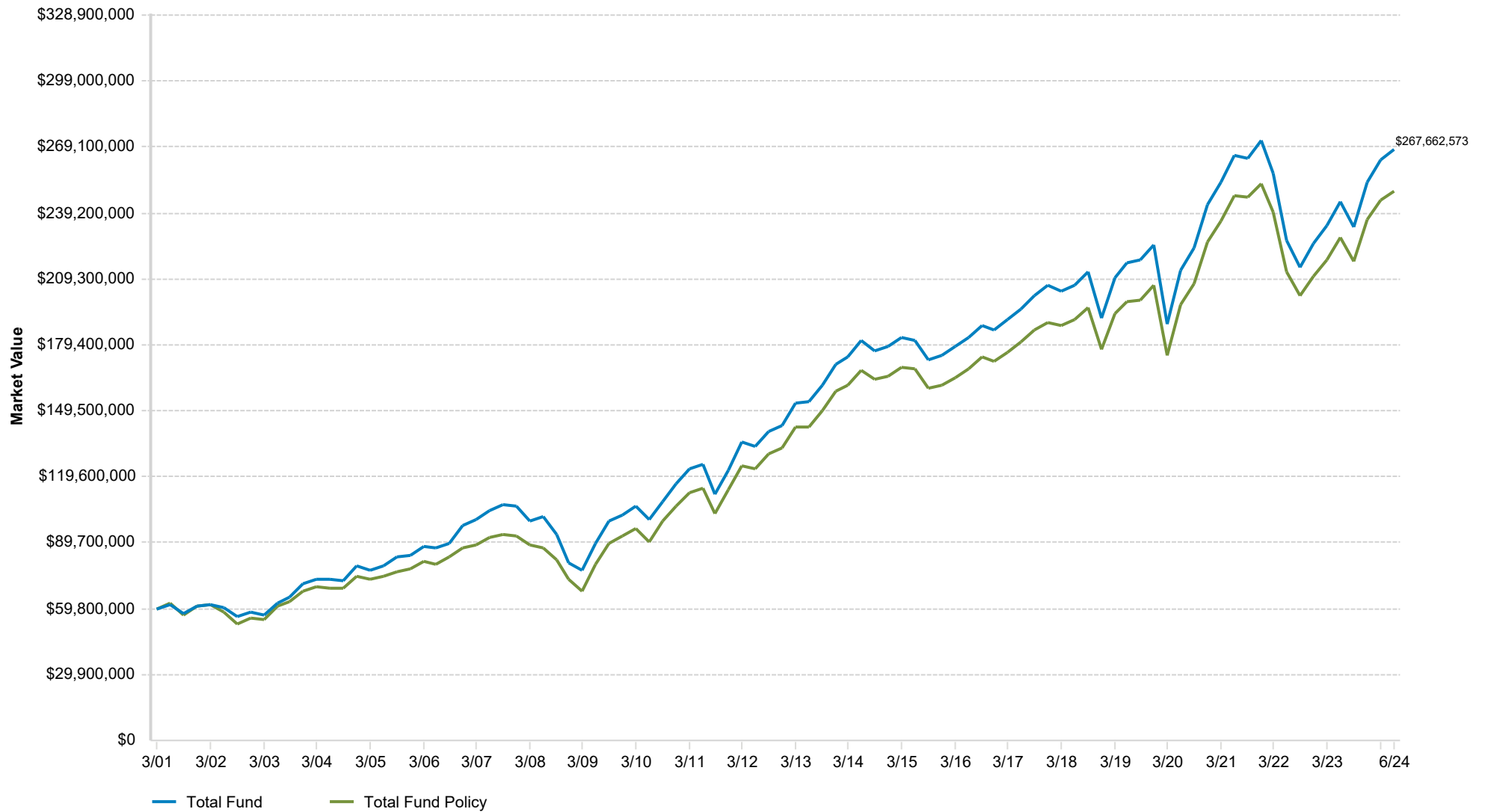
Asset Allocation By Manager as of
Mar-2024 : \$264,835,927Asset Allocation By Manager as of
Jun-2024 : \$270,124,005

Allocation			Allocation		
	Market Value	Allocation		Market Value	Allocation
Vanguard Inst'l Index Fund (VINIX)	44,308,342	16.7	Vanguard Total Bond Index (VBTIX)	80,051,200	29.6
Vanguard Total Bond Index (VBTIX)	44,038,184	16.6	Vanguard High Yield Bond Fund (VWEAX)	26,383,678	9.8
Vanguard Mid-Cap 400 Index Fund I (VSPMX)	29,895,370	11.3	Vanguard Mid-Cap 400 Index Fund I (VSPMX)	25,778,709	9.5
Vanguard High Yield Bond Fund (VWEAX)	26,021,359	9.8	Vanguard Growth Index (VIGIX)	13,851,787	5.1
Vanguard Growth Index (VIGIX)	15,879,263	6.0	Vanguard Inst'l Index Fund (VINIX)	13,587,118	5.0
Vanguard Value Index (VIVIX)	14,663,095	5.5	Vanguard Real Estate Index Fund (VGSNX)	13,469,690	5.0
Vanguard Real Estate Index Fund (VGSNX)	13,732,032	5.2	Vanguard Small-Cap 600 Index I (VSMSX)	13,241,230	4.9
Vanguard Small-Cap 600 Index I (VSMSX)	13,668,010	5.2	Vanguard Emerging Markets Index (VEMIX)	12,550,519	4.6
Vanguard Emerging Markets Index (VEMIX)	11,917,167	4.5	Vanguard Value Index (VIVIX)	12,462,925	4.6
Vanguard Developed Markets Index (VTMNX)	11,367,036	4.3	Vanguard Developed Markets Index (VTMNX)	11,281,806	4.2
Vanguard EM Bond (VEGBX)	9,078,729	3.4	Vanguard EM Bond (VEGBX)	9,098,475	3.4
Vanguard International Bond (VTIFX)	8,497,054	3.2	Vanguard International Bond (VTIFX)	8,450,324	3.1
Vanguard FTSE AW ex-US SC Index (VFSNX)	6,572,722	2.5	Vanguard Short Term Bond Index (VBIRX)	7,071,113	2.6
Vanguard Intl Value (VTRIX)	5,267,043	2.0	Vanguard FTSE AW ex-US SC Index (VFSNX)	6,641,432	2.5
Vanguard Short Term Bond Index (VBIRX)	3,987,393	1.5	Vanguard Intl Value (VTRIX)	5,199,291	1.9
Vanguard Intl Growth (VWILX)	3,859,976	1.5	Disbursement & MF Cash	4,592,562	1.7
NMA	1,420,574	0.5	Vanguard Intl Growth (VWILX)	3,950,714	1.5
Disbursement & MF Cash	662,579	0.3	NMA	2,461,432	0.9

Asset Allocation Attributes

	Domestic Equity		International Equity		Domestic Fixed Income		Emerging Fixed Income		Global Fixed Income		Real Estate		Cash		Total Fund	
	(\$)	%	(\$)	%	(\$)	%	(\$)	%	(\$)	%	(\$)	%	(\$)	%	(\$)	%
Vanguard Inst'l Index Fund (VINIX)	13,539	99.6	-	-	-	-	-	-	-	-	-	-	48	0.4	13,587	5.0
Vanguard Value Index (VIVIX)	12,463	100.0	-	-	-	-	-	-	-	-	-	-	-	-	12,463	4.6
Vanguard Small-Cap 600 Index I (VSM SX)	13,241	100.0	-	-	-	-	-	-	-	-	-	-	-	-	13,241	4.9
Vanguard Mid-Cap 400 Index Fund I (VSPMX)	25,681	99.6	-	-	-	-	-	-	-	-	-	-	98	0.4	25,779	9.5
Vanguard Growth Index (VIGIX)	13,852	100.0	-	-	-	-	-	-	-	-	-	-	-	-	13,852	5.1
Twin Capital Enhanced Index	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0
Vanguard Intl Value (VTRIX)	-	-	5,199	100.0	-	-	-	-	-	-	-	-	-	-	5,199	1.9
Vanguard Intl Growth (VWILX)	-	-	3,951	100.0	-	-	-	-	-	-	-	-	-	-	3,951	1.5
Vanguard FTSE AW ex-US SC Index (VFSNX)	-	-	6,641	100.0	-	-	-	-	-	-	-	-	-	-	6,641	2.5
Vanguard Developed Markets Index (VTMNX)	-	-	11,282	100.0	-	-	-	-	-	-	-	-	-	-	11,282	4.2
Vanguard Emerging Markets Index (VEMIX)	-	-	12,551	100.0	-	-	-	-	-	-	-	-	-	-	12,551	4.6
Vanguard High Yield Bond Fund (VWEAX)	-	-	-	-	26,246	99.5	-	-	-	-	-	-	137	0.5	26,384	9.8
Vanguard Short Term Bond Index (VBIRX)	-	-	-	-	7,051	99.7	-	-	-	-	-	-	20	0.3	7,071	2.6
Vanguard Total Bond Index (VBTIX)	-	-	-	-	79,808	99.7	-	-	-	-	-	-	243	0.3	80,051	29.6
Vanguard International Bond (VTIFX)	-	-	-	-	-	-	-	-	8,434	99.8	-	-	16	0.2	8,450	3.1
Vanguard EM Bond (VEGBX)	-	-	-	-	-	-	9,034	99.3	-	-	-	-	64	0.7	9,098	3.4
Vanguard Real Estate Index Fund (VGSNX)	-	-	-	-	-	-	-	-	-	-	13,305	98.8	165	1.2	13,470	5.0
Disbursement & MF Cash	-	-	-	-	-	-	-	-	-	-	-	-	4,593	100.0	4,593	1.7
NMA	-	-	-	-	-	-	-	-	-	-	-	-	2,461	100.0	2,461	0.9
Total Fund	78,776	29.2	39,624	14.7	113,106	41.9	9,034	3.3	8,434	3.1	13,305	4.9	7,845	2.9	270,124	100.0

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 Jun-2024	59,528,253	-26,721,936	234,856,256	267,662,573	332.12

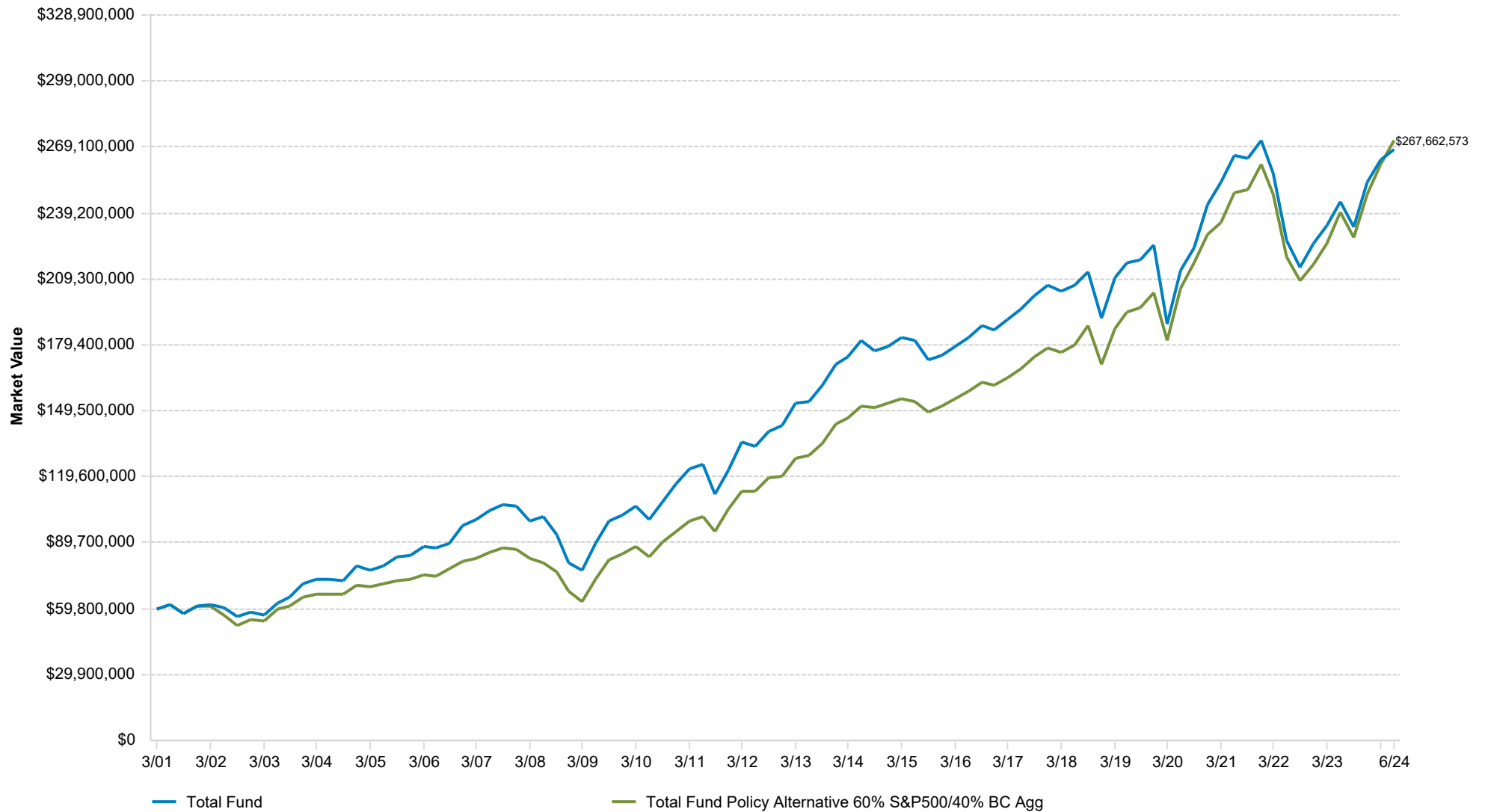
Does not include Non-Measured Assets (NMA).

Schedule of Investable Assets

Total Fund

January 1, 2001 To June 30, 2024

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 Jun-2024	59,528,253	-26,721,936	234,856,256	267,662,573	332.12

Does not include Non-Measured Assets (NMA).

Fee Analysis
Total Fund
As of June 30, 2024

	Estimated Annual Fee (%)	Market Value (\$)	Estimated Annual Fee (\$)	Fee Schedule
Vanguard Inst'l Index Fund (VINIX)	0.03	13,587,118	4,076	0.03 % of Assets
Vanguard Growth Index (VIGIX)	0.04	13,851,787	5,541	0.04 % of Assets
Vanguard Value Index (VIVIX)	0.04	12,462,925	4,985	0.04 % of Assets
Vanguard Mid-Cap 400 Index Fund I (VSPMX)	0.08	25,778,709	20,623	0.08 % of Assets
Vanguard Small-Cap 600 Index I (VSM SX)	0.08	13,241,230	10,593	0.08 % of Assets
Vanguard Intl Value (VTRIX)	0.35	5,199,291	18,198	0.35 % of Assets
Vanguard Intl Growth (VWILX)	0.33	3,950,714	13,037	0.33 % of Assets
Vanguard FTSE AW ex-US SC Index (VFSNX)	0.11	6,641,432	7,306	0.11 % of Assets
Vanguard Developed Markets Index (VTMNX)	0.05	11,281,806	5,641	0.05 % of Assets
Vanguard Emerging Markets Index (VEMIX)	0.10	12,550,519	12,551	0.10 % of Assets
Vanguard Short Term Bond Index (VBIRX)	0.07	7,071,113	4,950	0.07 % of Assets
Vanguard Total Bond Index (VBTIX)	0.03	80,051,200	24,015	0.03 % of Assets
Vanguard High Yield Bond Fund (VWEAX)	0.13	26,383,678	34,299	0.13 % of Assets
Vanguard International Bond (VTIFX)	0.07	8,450,324	5,915	0.07 % of Assets
Vanguard EM Bond (VEGBX)	0.45	9,098,475	40,943	0.45 % of Assets
Vanguard Real Estate Index Fund (VGSNX)	0.10	13,469,690	13,470	0.10 % of Assets
Total Fund Performance	0.08	267,662,573	226,142	

Does not include Non-Measured Assets (NMA).
Fee information on this page is an illustrative estimate of management fees based on current reported portfolio values. Fee estimates do not reflect actual calculation methodologies or applicable carried interest.

Quarter To Date	Market Value 04/01/2024	Management Fees	Net Flows	Return On Investment	Market Value 06/30/2024
Domestic Equity					
Vanguard Inst'l Index Fund (VINIX)	44,308,342	-	-30,000,000	-721,225	13,587,118
Vanguard Value Index (VIVIX)	14,663,095	-	-2,000,000	-200,170	12,462,925
Vanguard Small-Cap 600 Index I (VSMSX)	13,668,010	-	-	-426,780	13,241,230
Vanguard Mid-Cap 400 Index Fund I (VSPMX)	29,895,370	-	-3,000,000	-1,116,660	25,778,709
Vanguard Growth Index (VIGIX)	15,879,263	-	-3,000,000	972,525	13,851,787
International Equity					
Vanguard Intl Value (VTRIX)	5,267,043	-	-	-67,751	5,199,291
Vanguard Intl Growth (VWILX)	3,859,976	-	-	90,738	3,950,714
Vanguard FTSE AW ex-US SC Index (VFSNX)	6,572,722	-	-	68,710	6,641,432
Vanguard Developed Markets Index (VTMNX)	11,367,036	-	-	-85,230	11,281,806
Vanguard Emerging Markets Index (VEMIX)	11,917,167	-	-	633,351	12,550,519
Fixed Income					
Vanguard Short Term Bond Index (VBIRX)	3,987,393	-	3,000,000	83,720	7,071,113
Vanguard Total Bond Index (VBTIX)	44,038,184	-	35,000,000	1,013,015	80,051,200
Vanguard High Yield Bond Fund (VWEAX)	26,021,359	-	-	362,319	26,383,678
Vanguard International Bond (VTIFX)	8,497,054	-	-	-46,730	8,450,324
Vanguard EM Bond (VEGBX)	9,078,729	-	-	19,746	9,098,475
REIT					
Vanguard Real Estate Index Fund (VGSNX)	13,732,032	-	-	-262,341	13,469,690
Disbursement & MF Cash	662,579	-	3,851,241	78,742	4,592,562
Total Fund Performance	263,415,354	-	3,851,241	395,978	267,662,573
NMA	1,420,574	-	1,040,859	-	2,461,432
Total Fund	264,835,927	-	4,892,100	395,978	270,124,005

Financial Reconciliation

Total Fund

as of June 30, 2024

Year To Date					
	Market Value 01/01/2024	Management Fees	Net Flows	Return On Investment	Market Value 06/30/2024
Domestic Equity					
Vanguard Inst'l Index Fund (VINIX)	40,081,751	-	-30,000,000	3,505,367	13,587,118
Vanguard Value Index (VIVIX)	13,359,679	-	-2,000,000	1,103,245	12,462,925
Vanguard Small-Cap 600 Index I (VSM SX)	13,340,645	-	-	-99,415	13,241,230
Vanguard Mid-Cap 400 Index Fund I (VSPMX)	27,191,747	-	-3,000,000	1,586,963	25,778,709
Vanguard Growth Index (VIGIX)	14,317,772	-	-3,000,000	2,534,015	13,851,787
International Equity					
Vanguard Intl Value (VTRIX)	5,063,789	-	-	135,503	5,199,291
Vanguard Intl Growth (VWILX)	3,665,897	-	-	284,817	3,950,714
Vanguard FTSE AW ex-US SC Index (VFSNX)	6,477,533	-	-	163,898	6,641,432
Vanguard Developed Markets Index (VTMNX)	10,811,007	-	-	470,800	11,281,806
Vanguard Emerging Markets Index (VEMIX)	11,690,738	-	-	859,781	12,550,519
Fixed Income					
Vanguard Short Term Bond Index (VBIRX)	3,980,762	-	3,000,000	90,351	7,071,113
Vanguard Total Bond Index (VBTIX)	44,387,626	-	35,000,000	663,573	80,051,200
Vanguard High Yield Bond Fund (VWEAX)	25,821,779	-	-	561,899	26,383,678
Vanguard International Bond (VTIFX)	8,491,754	-	-	-41,431	8,450,324
Vanguard EM Bond (VEGBX)	8,860,878	-	-	237,597	9,098,475
REIT					
Vanguard Real Estate Index Fund (VGSNX)	13,893,100	-	-	-423,410	13,469,690
Disbursement & MF Cash	1,706,370	-	2,782,106	104,085	4,592,562
Total Fund Performance	253,142,827	-	2,782,106	11,737,640	267,662,573
NMA	3,360,184	-	-898,751	-	2,461,432
Total Fund	256,503,010	-	1,883,355	11,737,640	270,124,005

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 Addendum)

Asset Class	Minimum	Target	Maximum
Large Cap Core	0%	5%	10%
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%	30%	50%
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.

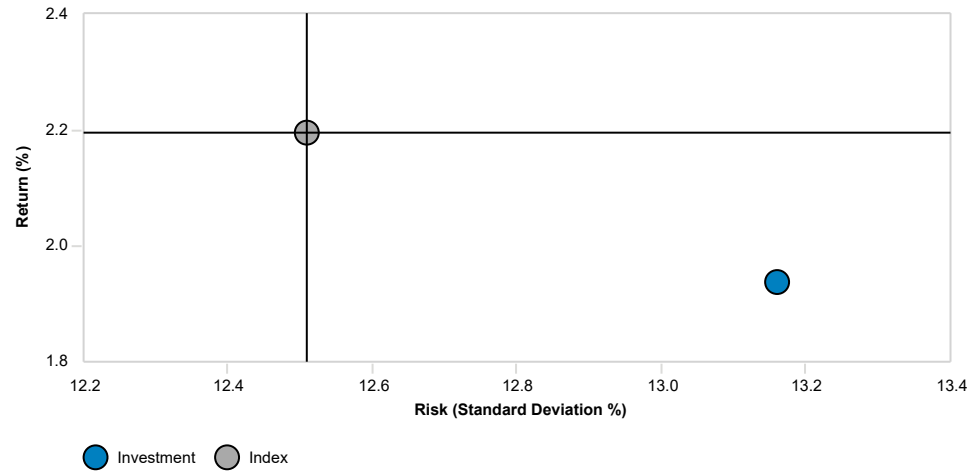
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	1.94	13.16	-0.02	104.84	7	106.70	5
Index	2.20	12.51	0.00	100.00	7	100.00	5

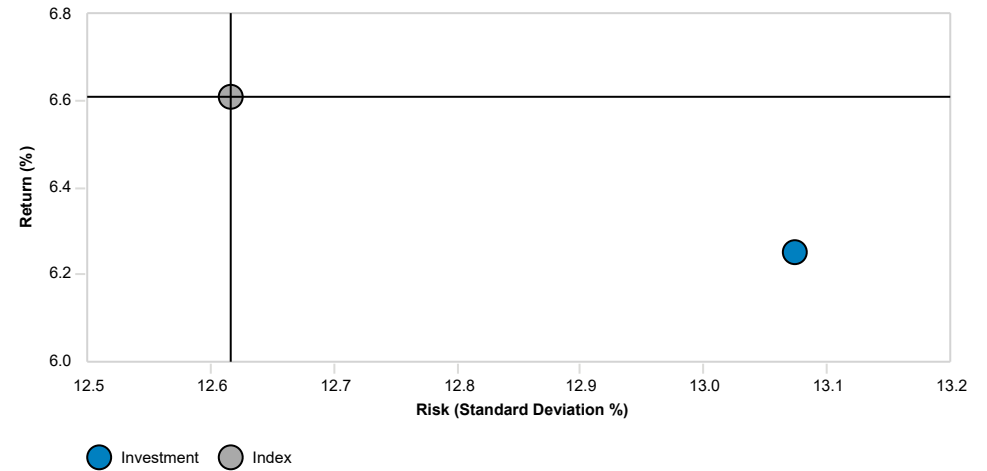
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	6.25	13.07	0.37	102.34	14	105.54	6
Index	6.61	12.62	0.40	100.00	14	100.00	6

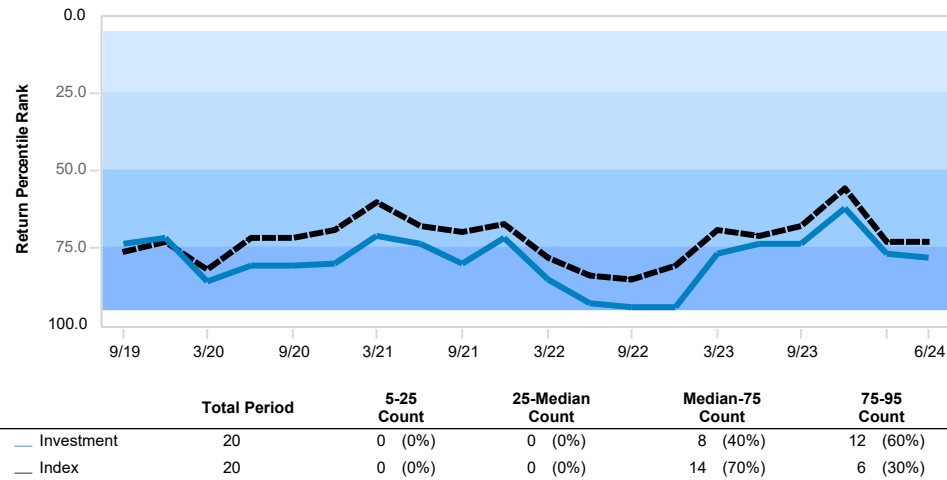
Risk and Return 3 Years



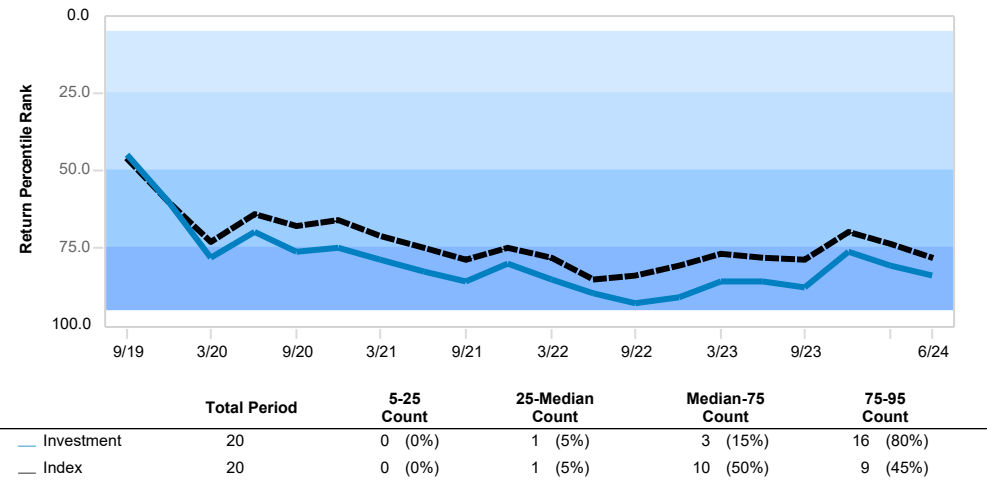
Risk and Return 5 Years



3 Year Rolling Percentile Rank All Public Plans-Total Fund

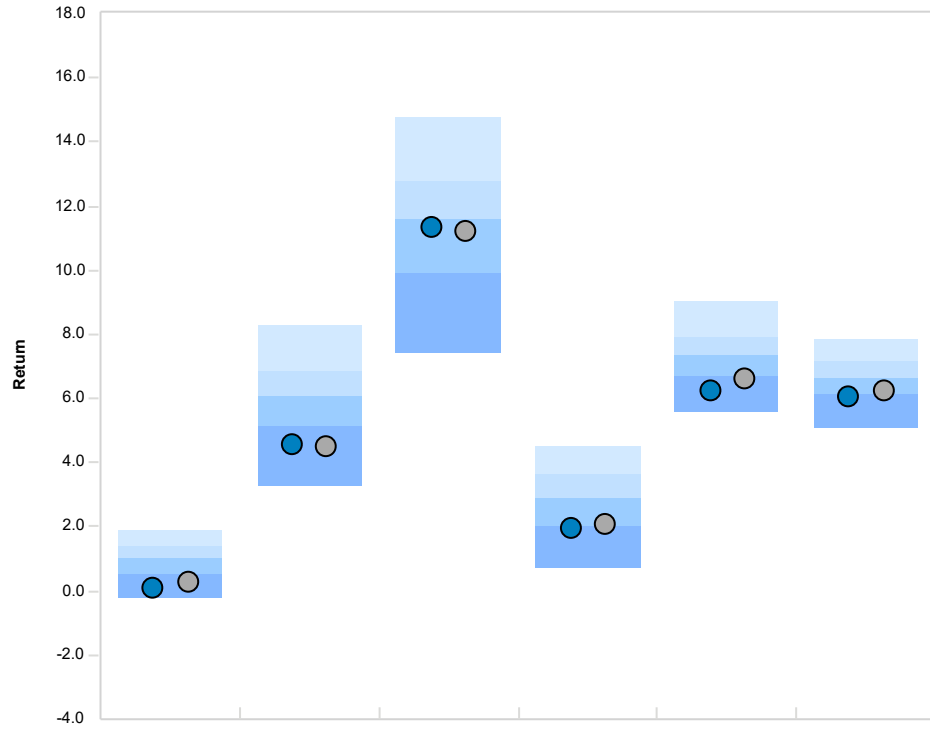


5 Year Rolling Percentile Rank All Public Plans-Total Fund

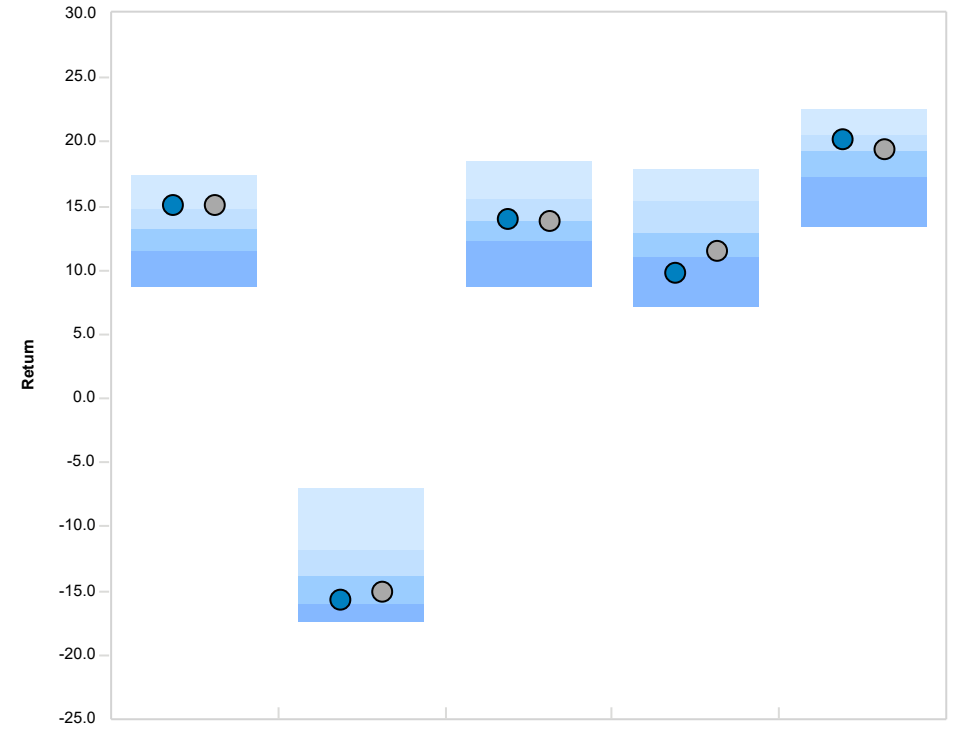


Does not include Non-Measured Assets (NMA).

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 June 30, 2024

	Market Value 04/01/2001	Net Flows	Return On Investment	Market Value 06/30/2024
Investment	59,528,253	-27,567,976	235,702,296	267,662,573

Comparative Performance

	1 Qtr Ending Mar-2024	1 Qtr Ending Dec-2023	1 Qtr Ending Sep-2023	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022
Investment	4.47	10.06	-3.29	3.29	4.72	6.81
Index	4.24	9.69	-2.94	3.29	4.60	6.41

Does not include Non-Measured Assets (NMA).

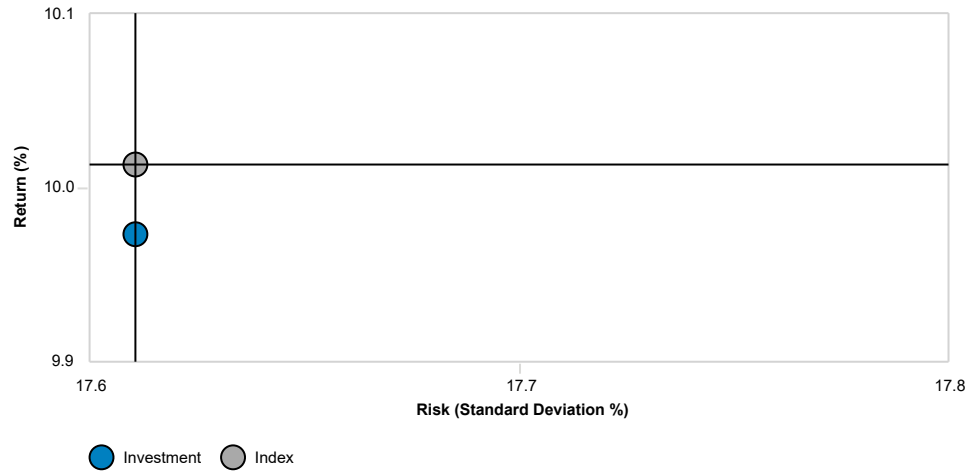
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	9.97	17.61	0.46	99.93	8	100.06	4
Index	10.01	17.61	0.47	100.00	8	100.00	4

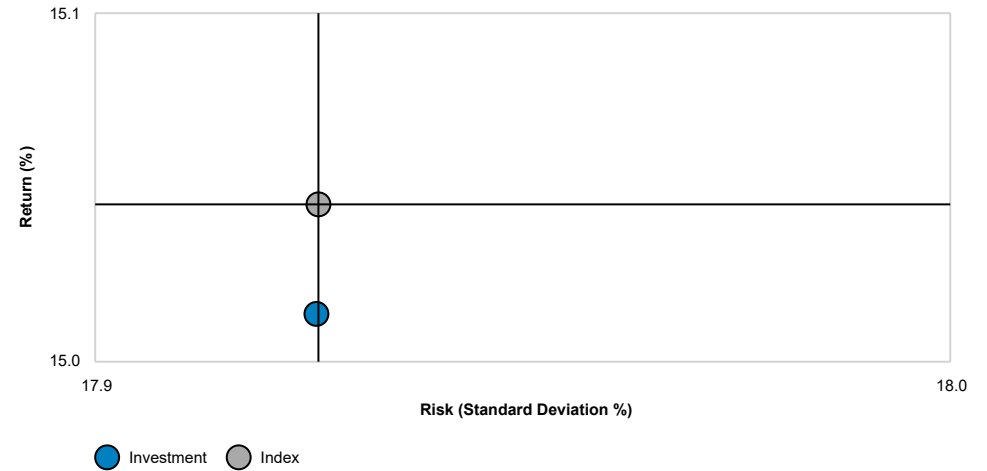
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	15.01	17.93	0.75	99.95	15	100.05	5
Index	15.05	17.93	0.76	100.00	15	100.00	5

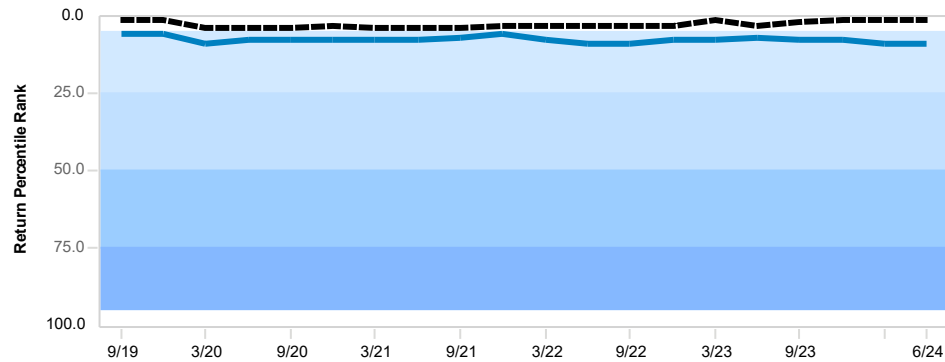
Risk and Return 3 Years



Risk and Return 5 Years

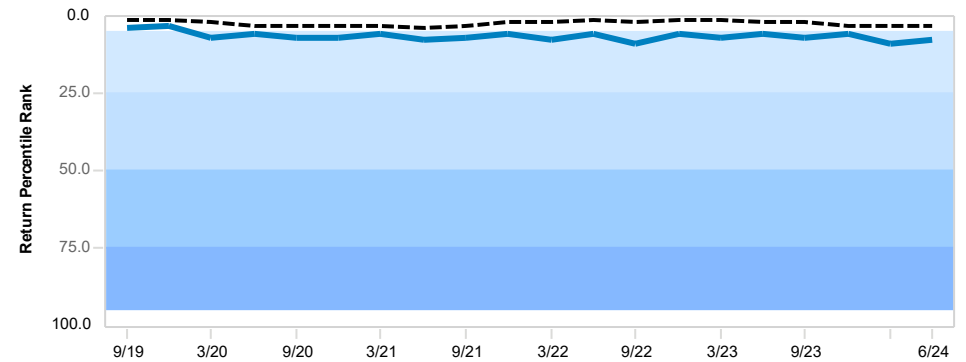


3 Year Rolling Percentile Rank IM S&P 500 Index (MF)



	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%)

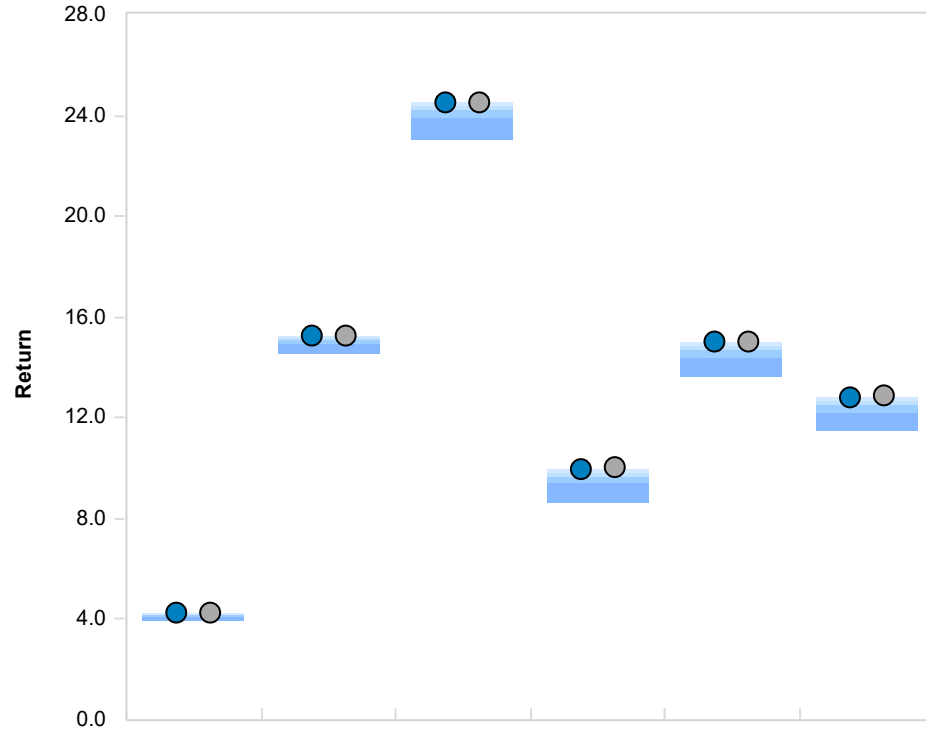
5 Year Rolling Percentile Rank IM S&P 500 Index (MF)



	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%)

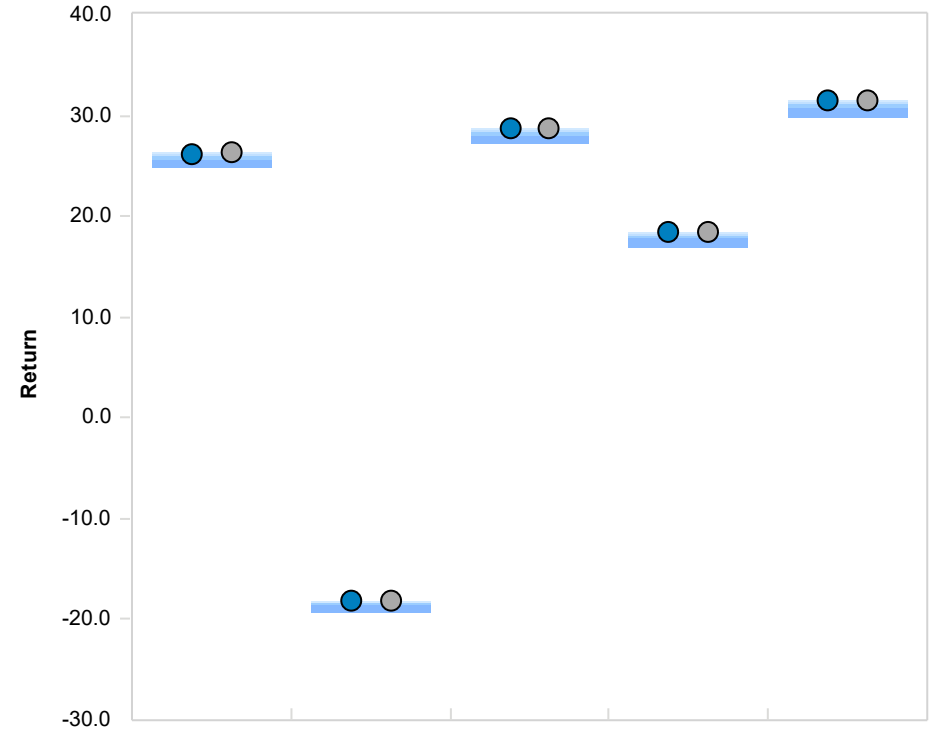
Inception date for VINIX is 12/2020. Manager returns for VINIX have been used for this report.

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



	QTR	YTD	1 YR	3 YR	5 YR	10 YR
Investment	4.28 (10)	15.27 (8)	24.51 (14)	9.97 (9)	15.01 (8)	12.83 (4)
Index	4.28 (5)	15.29 (1)	24.56 (4)	10.01 (1)	15.05 (3)	12.86 (1)
Median	4.20	15.11	24.22	9.69	14.71	12.47

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



	2023	2022	2021	2020	2019
Investment	26.24 (15)	-18.14 (12)	28.67 (7)	18.39 (12)	31.46 (5)
Index	26.29 (5)	-18.11 (3)	28.71 (1)	18.40 (9)	31.49 (3)
Median	25.96	-18.36	28.25	18.05	31.08

Financial Reconciliation Since Inception Ending June 30, 2024

No data found.

Comparative Performance

	1 Qtr Ending Mar-2024	1 Qtr Ending Dec-2023	1 Qtr Ending Sep-2023	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022
Investment	10.54 (9)	11.68 (18)	-3.28 (16)	8.73 (15)	7.49 (13)	7.55 (15)
Index	10.56 (1)	11.69 (8)	-3.27 (12)	8.74 (8)	7.50 (5)	7.56 (8)
Median	10.47	11.61	-3.34	8.66	7.43	7.47

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

Fund Information As of 06/30/2024

Fund Name :	Vanguard Institutional Index Fund: Vanguard Institutional Index Fund; Institutional Shares	Portfolio Assets :	\$289,306 Million
Fund Family :	Vanguard	Portfolio Manager :	Louie/Birkett
Ticker :	VINIX	PM Tenure :	2017--2023
Inception Date :	07/31/1990	Fund Style :	IM S&P 500 Index (MF)
Fund Assets :	\$120,290 Million	Style Benchmark :	S&P 500 Index
Portfolio Turnover :	3%		

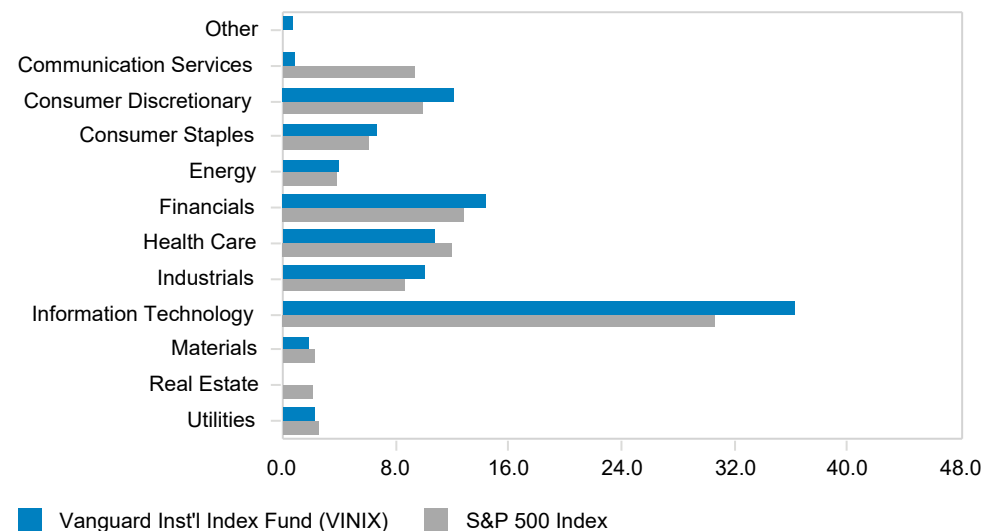
Portfolio Characteristics As of 05/31/2024

	Portfolio	Benchmark
Total Securities	506	503
Avg. Market Cap	845,329,725,092	884,891,506,783
Price/Earnings (P/E)	33.10	26.06
Price/Book (P/B)	10.25	4.73
Dividend Yield	1.66	1.41
Annual EPS	22.15	9.79
5 Yr EPS	16.01	17.03
3 Yr EPS Growth	25.16	N/A
Beta (3 Years, Monthly)	1.00	1.00

Top Ten Securities As of 05/31/2024

Microsoft Corp ORD	7.0 %
Apple Inc ORD	6.3 %
NVIDIA Corp ORD	6.1 %
Amazon.com Inc ORD	3.6 %
Meta Platforms Inc ORD	2.3 %
Alphabet Inc Class A ORD	2.3 %
Alphabet Inc Class C ORD	1.9 %
Berkshire Hathaway Inc ORD	1.7 %
Eli Lilly and Co ORD	1.5 %
JPMorgan Chase & Co ORD	1.3 %

Sector Weights As of 05/31/2024



Region (%) As of 06/30/2024

No data found.

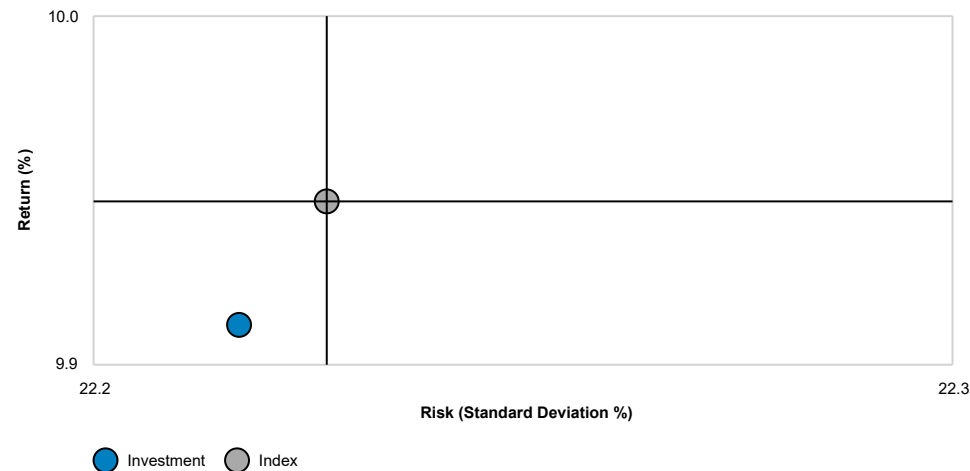
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	9.91	22.22	0.41	99.92	7	100.01	5
Index	9.95	22.23	0.41	100.00	7	100.00	5

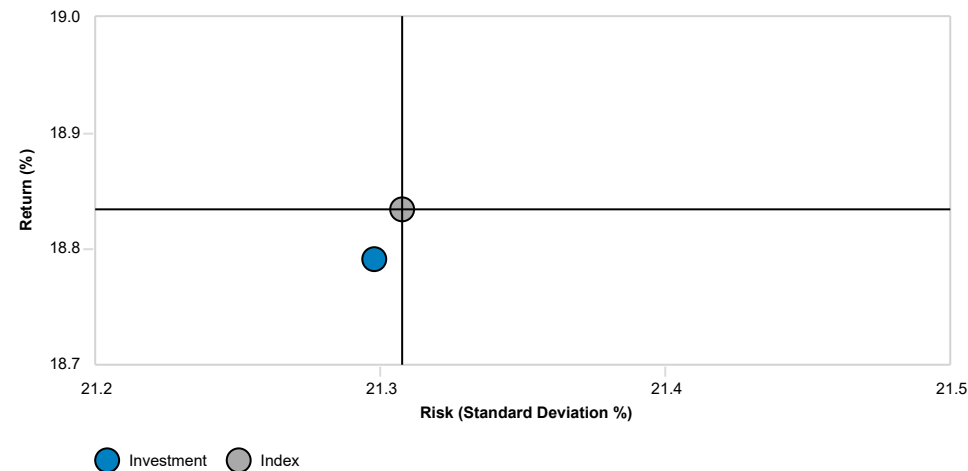
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	18.79	21.30	0.82	99.91	14	100.01	6
Index	18.84	21.31	0.82	100.00	14	100.00	6

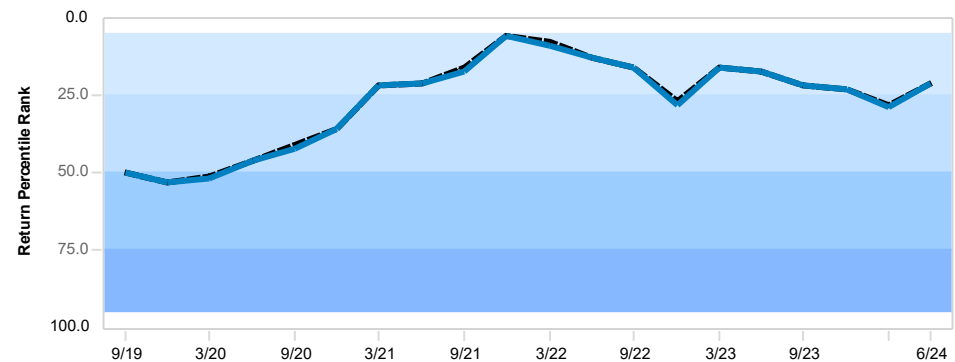
Risk and Return 3 Years



Risk and Return 5 Years

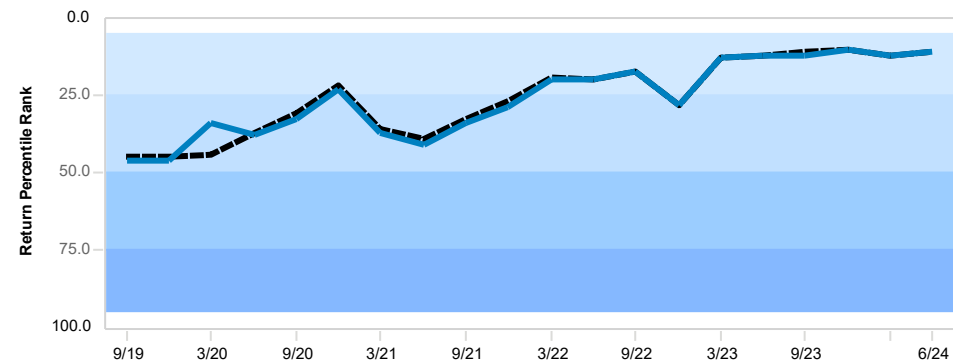


3 Year Rolling Percentile Rank IM U.S. Large Cap Growth Equity (MF)



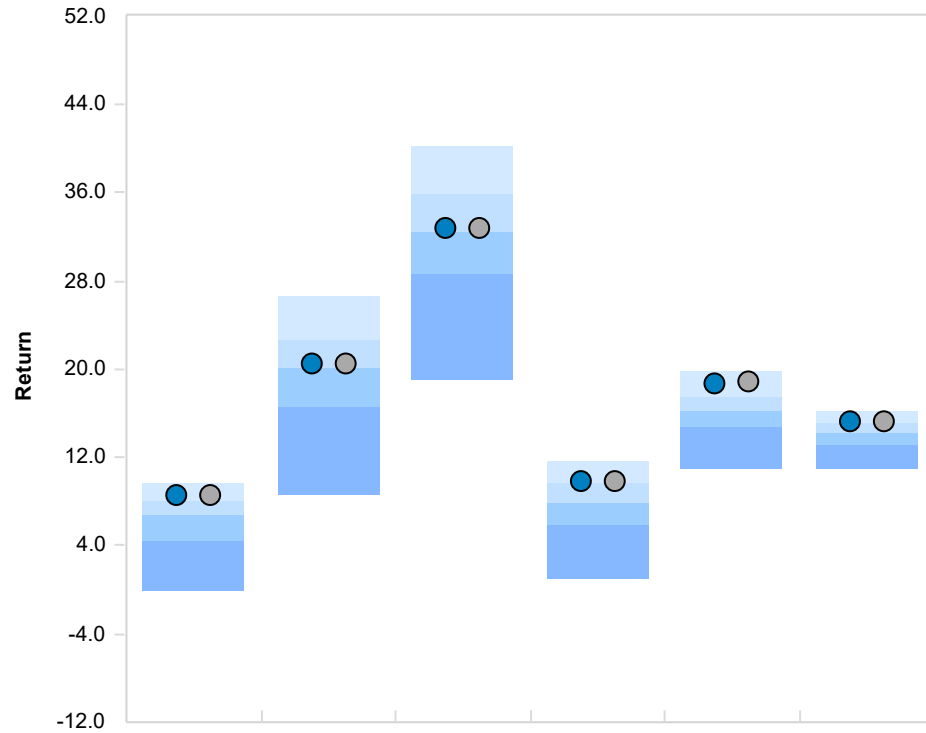
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	12 (60%)	6 (30%)	2 (10%)	0 (0%)
Index	20	12 (60%)	6 (30%)	2 (10%)	0 (0%)

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



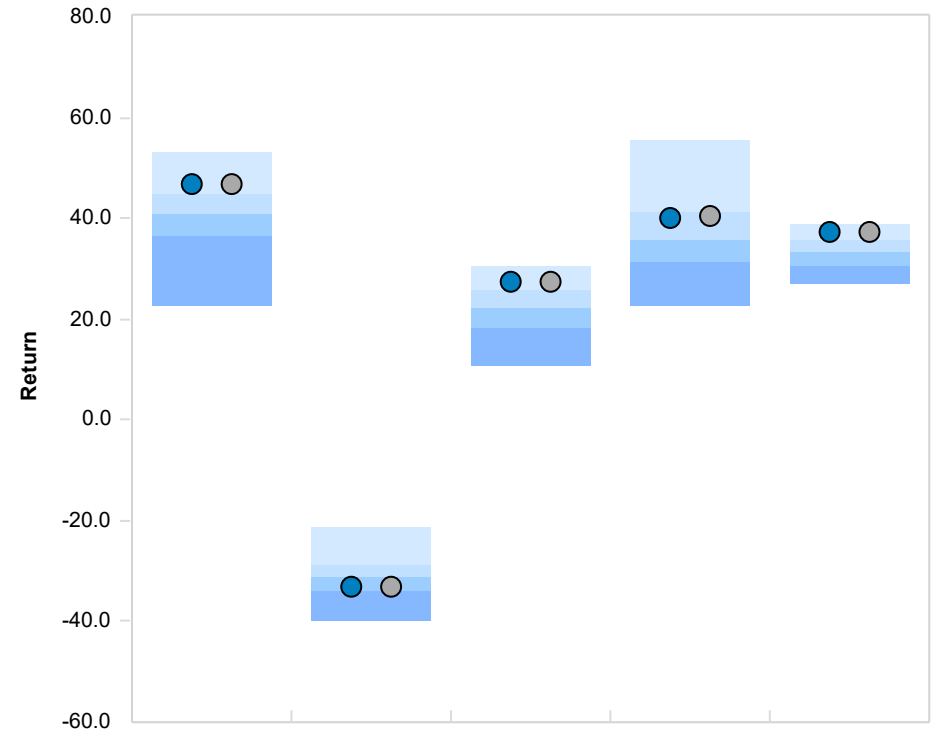
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	10 (50%)	10 (50%)	0 (0%)	0 (0%)
Index	20	10 (50%)	10 (50%)	0 (0%)	0 (0%)

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



	QTR	YTD	1 YR	3 YR	5 YR	10 YR
Investment	8.66 (16)	20.51 (45)	32.79 (48)	9.91 (21)	18.79 (11)	15.34 (18)
Index	8.68 (15)	20.54 (45)	32.85 (48)	9.95 (21)	18.84 (11)	15.38 (18)
Median	6.74	20.13	32.48	7.85	16.11	14.27

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



	2023	2022	2021	2020	2019
Investment	46.78 (19)	-33.14 (70)	27.27 (20)	40.20 (28)	37.25 (12)
Index	46.86 (18)	-33.13 (69)	27.30 (19)	40.27 (28)	37.31 (11)
Median	40.78	-31.30	22.39	35.62	33.26

Financial Reconciliation Since Inception Ending June 30, 2024

	Market Value 05/01/2010	Net Flows	Return On Investment	Market Value 06/30/2024
Investment	16,642,537	-30,644,975	27,854,225	13,851,787

Comparative Performance

	1 Qtr Ending Mar-2024	1 Qtr Ending Dec-2023	1 Qtr Ending Sep-2023	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022
Investment	10.91	14.41	-3.69	13.61	17.25	-0.15
Index	10.91	14.42	-3.68	13.63	17.27	-0.15

June 30, 2024

Fund Information As of 06/30/2024

Fund Name : Vanguard Index Funds: Vanguard Growth Index Fund; Institutional Class Shares
Fund Family : Vanguard
Ticker : VIGIX
Inception Date : 05/14/1998
Fund Assets : \$33,026 Million
Portfolio Turnover : 5%

Portfolio Assets : \$246,457 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

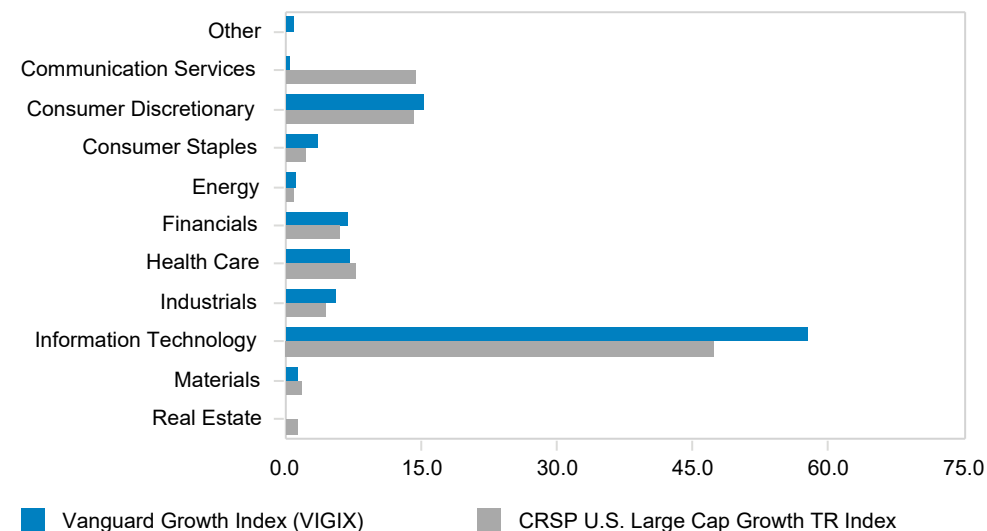
Portfolio Characteristics As of 05/31/2024

	Portfolio	Benchmark
Total Securities	202	198
Avg. Market Cap	-	1,425,507,681,983
Price/Earnings (P/E)	40.12	36.81
Price/Book (P/B)	14.41	10.42
Dividend Yield	0.69	0.56
Annual EPS	33.62	8.91
5 Yr EPS	21.04	24.22
3 Yr EPS Growth	29.16	N/A
Beta (5 Years, Monthly)	1.00	1.00

Top Ten Securities As of 05/31/2024

Microsoft Corp ORD	12.6 %
Apple Inc ORD	11.5 %
NVIDIA Corp ORD	10.6 %
Amazon.com Inc ORD	6.7 %
Meta Platforms Inc ORD	4.2 %
Alphabet Inc Class A ORD	4.1 %
Alphabet Inc Class C ORD	3.4 %
Eli Lilly and Co ORD	2.9 %
Tesla Inc ORD	2.0 %
Visa Inc ORD	1.7 %

Sector Weights As of 05/31/2024



Region (%) As of 06/30/2024

No data found.

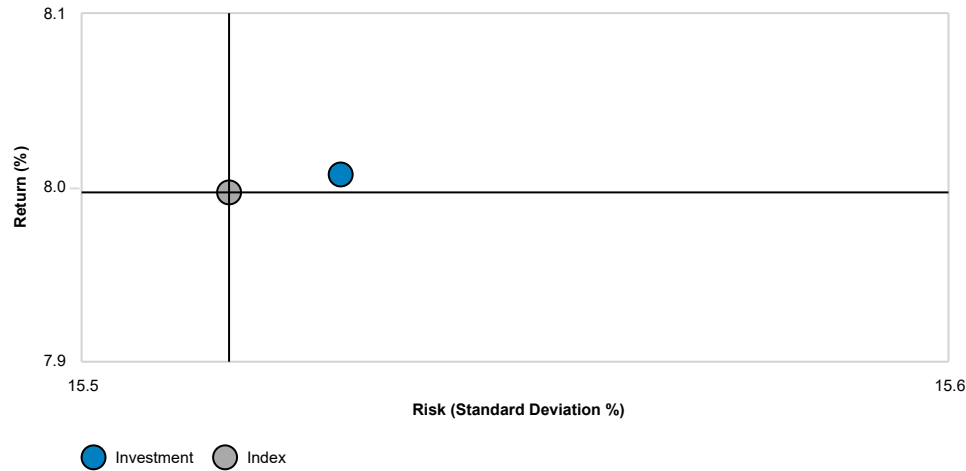
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	8.01	15.53	0.38	100.06	6	100.03	6
Index	8.00	15.52	0.38	100.00	6	100.00	6

Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	10.51	17.22	0.54	100.04	13	100.00	7
Index	10.50	17.21	0.54	100.00	13	100.00	7

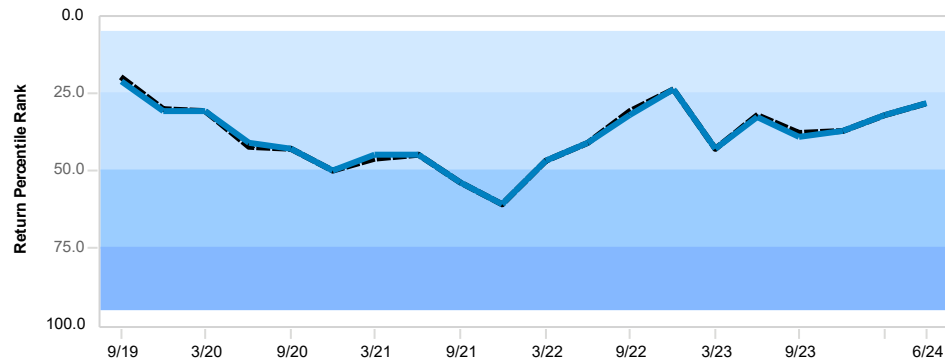
Risk and Return 3 Years



Risk and Return 5 Years

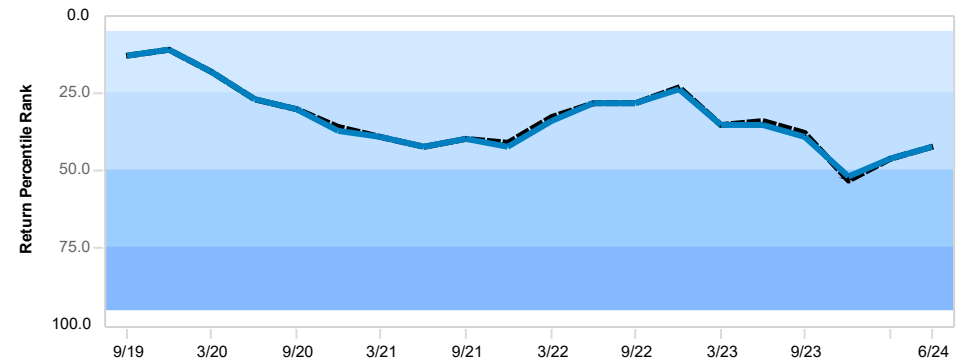


3 Year Rolling Percentile Rank IM U.S. Large Cap Value Equity (MF)



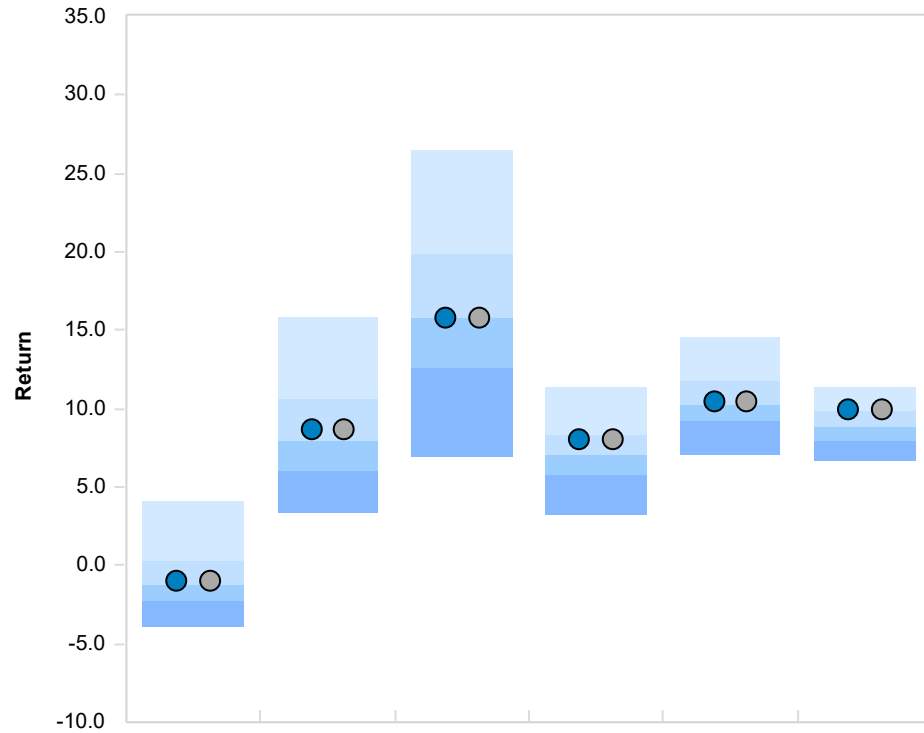
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	2 (10%)	16 (80%)	2 (10%)	0 (0%)
Index	20	2 (10%)	16 (80%)	2 (10%)	0 (0%)

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

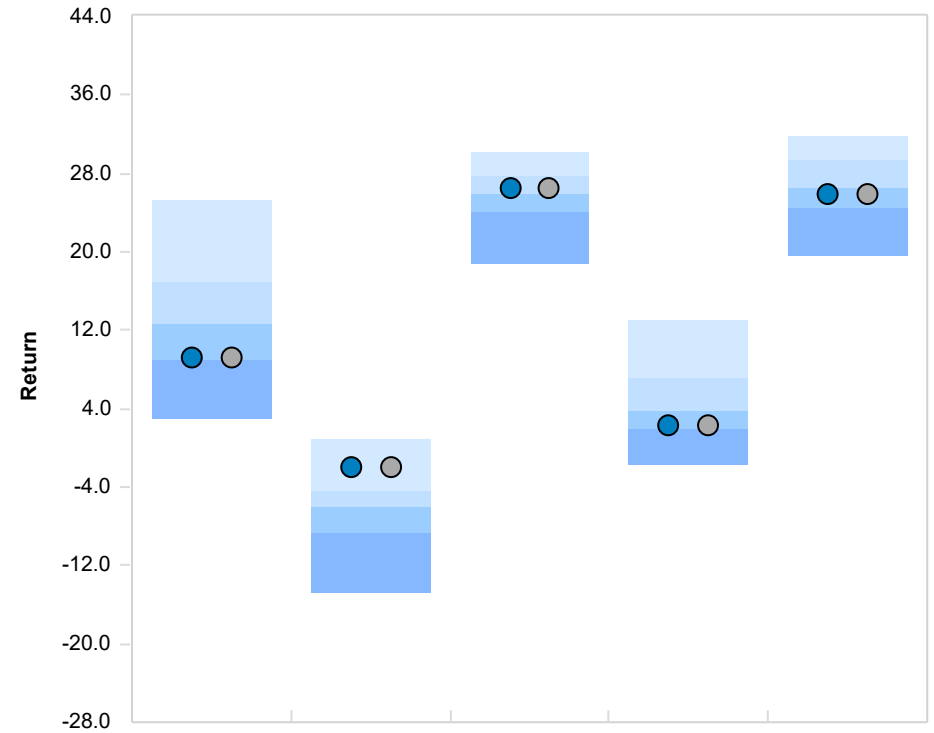


	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	4 (20%)	15 (75%)	1 (5%)	0 (0%)
Index	20	4 (20%)	15 (75%)	1 (5%)	0 (0%)

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 June 30, 2024

	Market Value 07/01/2009	Net Flows	Return On Investment	Market Value 06/30/2024
Investment	1,021,656	-4,963,564	16,404,833	12,462,925

Comparative Performance

	1 Qtr Ending Mar-2024	1 Qtr Ending Dec-2023	1 Qtr Ending Sep-2023	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022
Investment	9.76	9.09	-2.33	3.57	-1.00	14.67
Index	9.75	9.01	-2.33	3.57	-1.00	14.68

Fund Information As of 06/30/2024

Fund Name : Vanguard Index Funds: Vanguard Value Index Fund; Institutional Shares
Fund Family : Vanguard
Ticker : VIVIX
Inception Date : 07/02/1998
Fund Assets : \$16,795 Million
Portfolio Turnover : 10%

Portfolio Assets : \$170,031 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

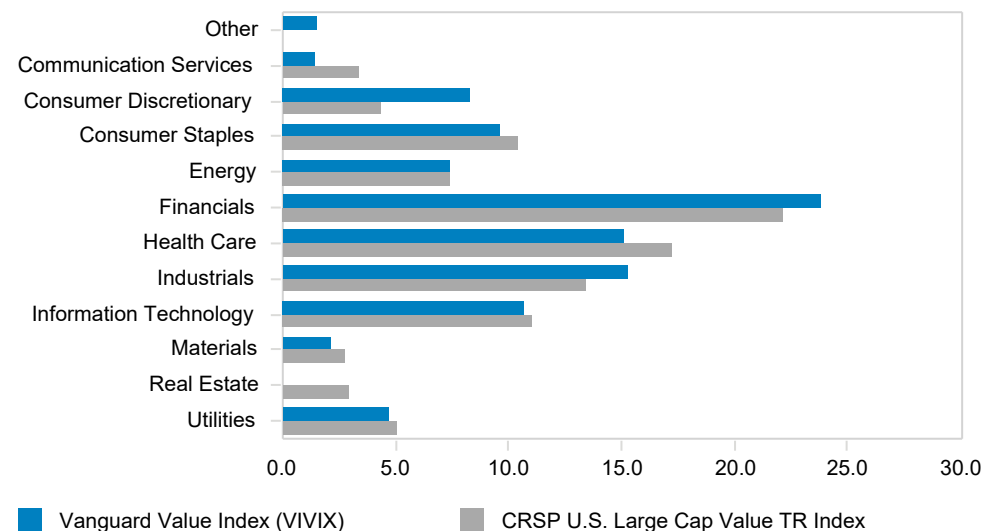
Portfolio Characteristics As of 05/31/2024

	Portfolio	Benchmark
Total Securities	345	339
Avg. Market Cap	194,158,552,216	208,708,460,137
Price/Earnings (P/E)	25.09	19.52
Price/Book (P/B)	5.54	2.91
Dividend Yield	2.48	2.38
Annual EPS	9.91	715.78
5 Yr EPS	10.49	8.74
3 Yr EPS Growth	19.80	N/A
Beta (5 Years, Monthly)	1.00	1.00

Top Ten Securities As of 05/31/2024

Berkshire Hathaway Inc ORD	3.2 %
Broadcom Inc ORD	3.1 %
JPMorgan Chase & Co ORD	2.9 %
Exxon Mobil Corp ORD	2.6 %
Unitedhealth Group Inc ORD	2.3 %
Procter & Gamble Co ORD	1.9 %
Johnson & Johnson ORD	1.7 %
Home Depot Inc ORD	1.7 %
Merck & Co Inc ORD	1.6 %
Walmart Inc ORD	1.4 %

Sector Weights As of 05/31/2024



Region (%) As of 06/30/2024

No data found.

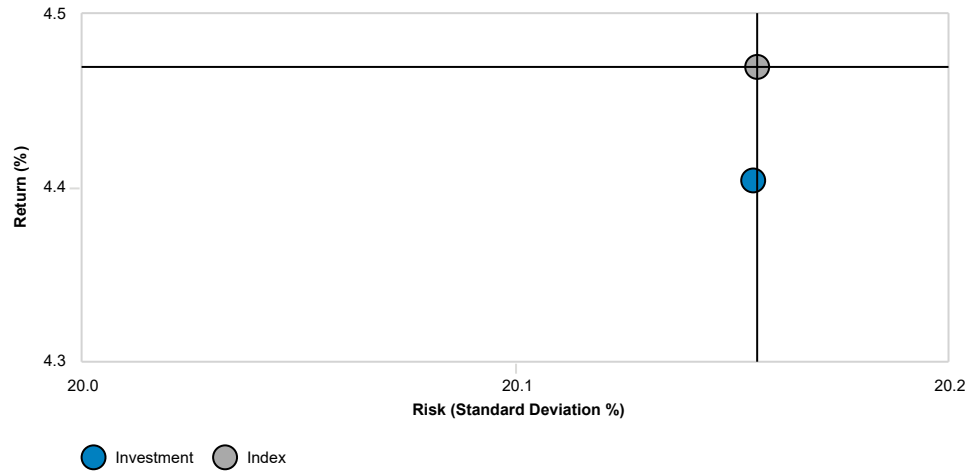
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	4.40	20.15	0.17	99.90	6	100.11	6
Index	4.47	20.16	0.17	100.00	6	100.00	6

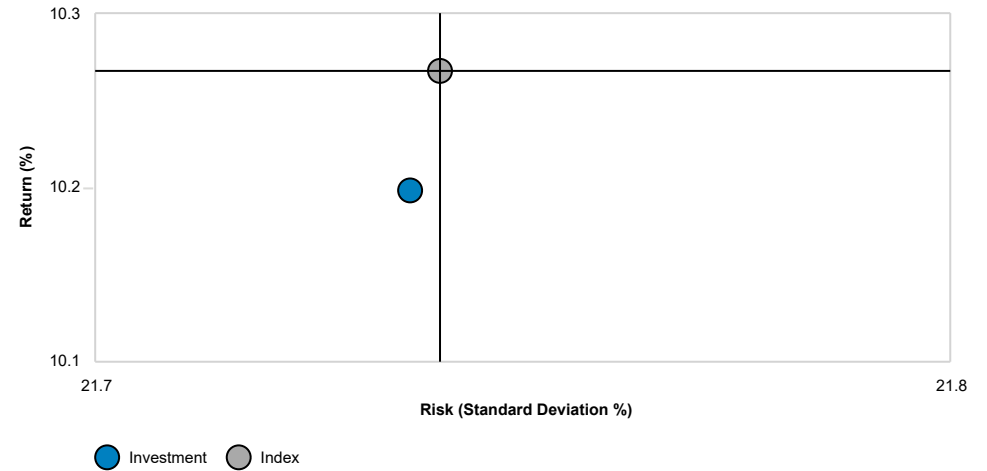
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	10.20	21.74	0.46	99.89	12	100.09	8
Index	10.27	21.74	0.46	100.00	12	100.00	8

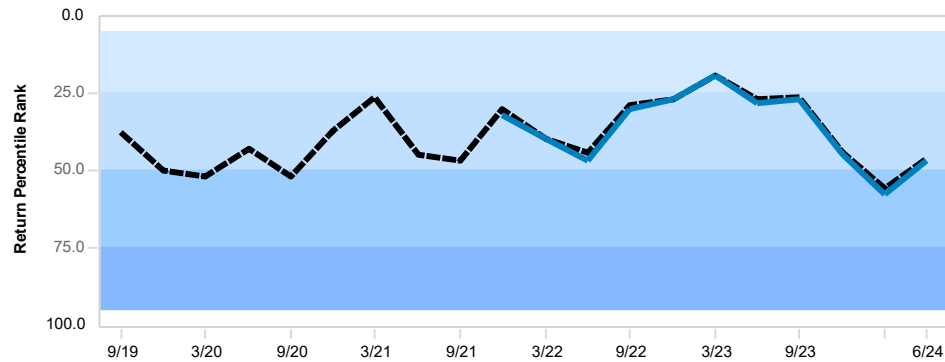
Risk and Return 3 Years



Risk and Return 5 Years

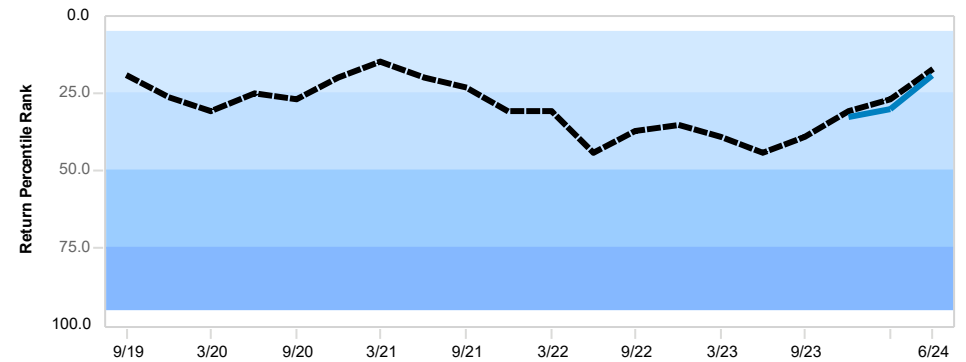


3 Year Rolling Percentile Rank IM U.S. Mid Cap Core Equity (MF)



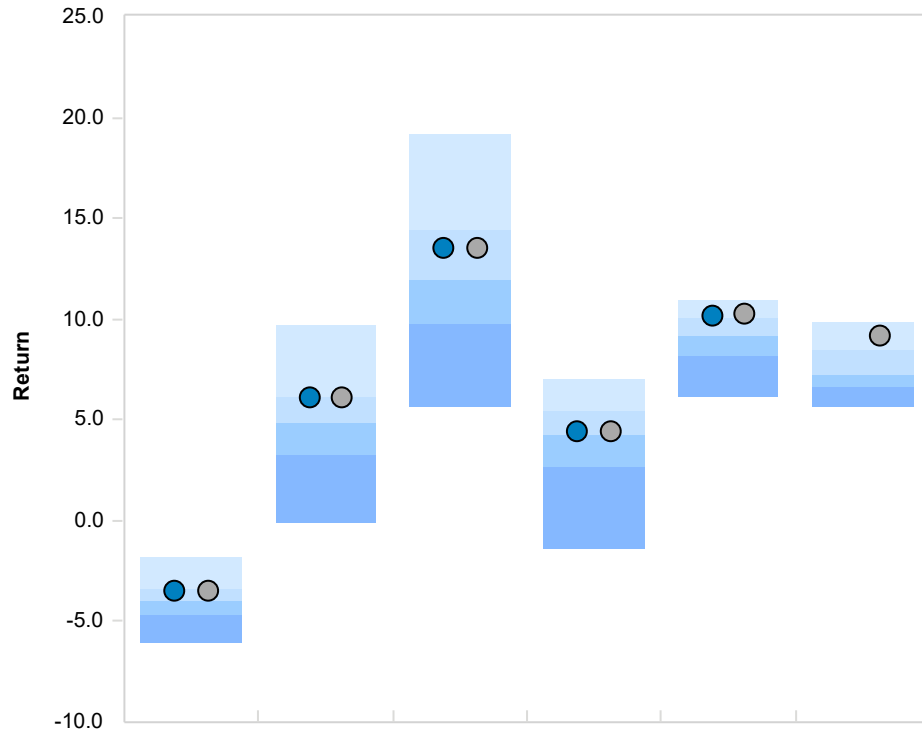
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	11	1 (9%)	9 (82%)	1 (9%)	0 (0%)
Index	20	1 (5%)	16 (80%)	3 (15%)	0 (0%)

5 Year Rolling Percentile Rank IM U.S. Mid Cap Core Equity (MF)



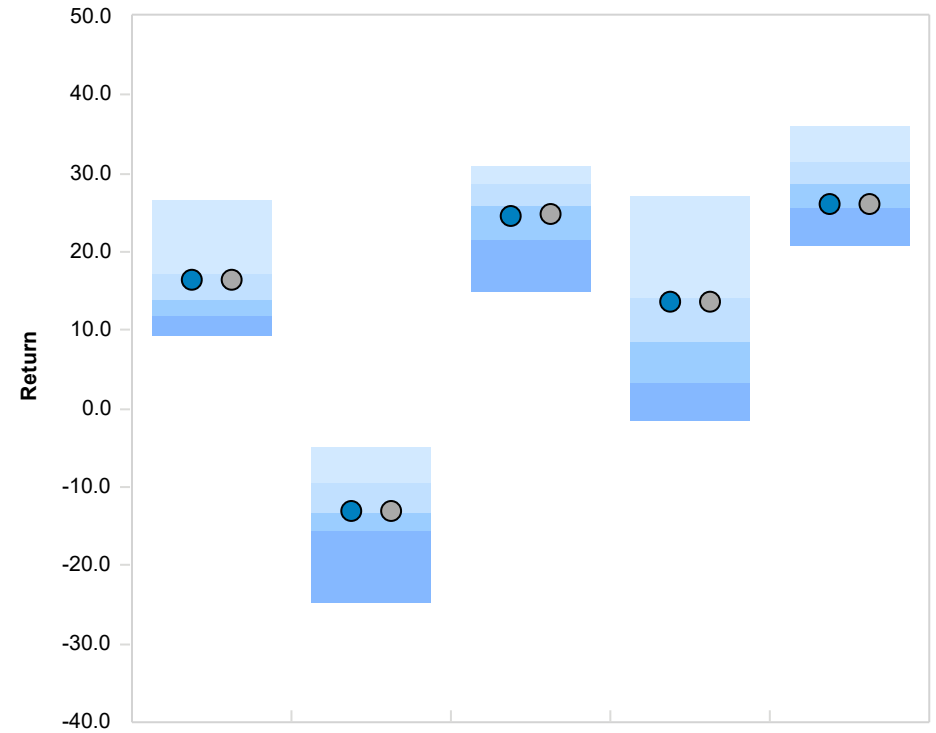
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	3	1 (33%)	2 (67%)	0 (0%)	0 (0%)
Index	20	7 (35%)	13 (65%)	0 (0%)	0 (0%)

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



	QTR	YTD	1 YR	3 YR	5 YR	10 YR
Investment	-3.46 (33)	6.14 (25)	13.50 (33)	4.40 (47)	10.20 (19)	N/A
Index	-3.45 (33)	6.17 (25)	13.57 (31)	4.47 (46)	10.27 (17)	9.14 (13)
Median	-3.95	4.82	11.93	4.27	9.20	7.22

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



	2023	2022	2021	2020	2019
Investment	16.36 (31)	-13.11 (50)	24.67 (59)	13.58 (26)	26.13 (72)
Index	16.44 (30)	-13.06 (50)	24.76 (59)	13.66 (26)	26.20 (72)
Median	13.86	-13.21	25.73	8.44	28.59

Financial Reconciliation Since Inception Ending June 30, 2024

	Market Value 12/01/2018	Net Flows	Return On Investment	Market Value 06/30/2024
Investment	21,384,601	-9,500,000	13,894,108	25,778,709

Comparative Performance

	1 Qtr Ending Mar-2024	1 Qtr Ending Dec-2023	1 Qtr Ending Sep-2023	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022
Investment	9.94 (25)	11.65 (49)	-4.22 (51)	4.83 (39)	3.79 (30)	10.77 (35)
Index	9.95 (25)	11.67 (48)	-4.20 (49)	4.85 (38)	3.81 (30)	10.78 (35)
Median	9.08	11.54	-4.22	4.64	2.27	9.65

Fund Information As of 06/30/2024

Fund Name : Vanguard Admiral Funds: Vanguard S&P Mid-Cap 400 Index Fund; Institutional Shares
Fund Family : Vanguard
Ticker : VSPMX
Inception Date : 12/15/2010
Fund Assets : \$1,427 Million
Portfolio Turnover : 14%

Portfolio Assets : \$3,418 Million
Portfolio Manager : Kenny Narzikul
PM Tenure : 2023
Fund Style : IM S&P Midcap 400 Index Funds (MF)
Style Benchmark : S&P MidCap 400 Index

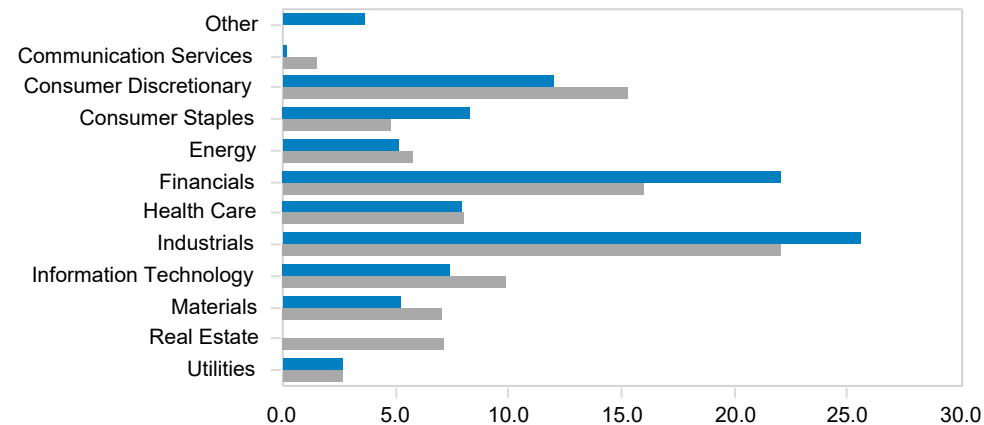
Portfolio Characteristics As of 05/31/2024

	Portfolio	Benchmark
Total Securities	404	401
Avg. Market Cap	9,195,961,093	8,839,016,089
Price/Earnings (P/E)	26.51	18.34
Price/Book (P/B)	5.06	2.70
Dividend Yield	2.23	1.57
Annual EPS	9.60	5.30
5 Yr EPS	12.90	13.77
3 Yr EPS Growth	21.83	N/A
Beta (5 Years, Monthly)	1.00	1.00

Top Ten Securities As of 05/31/2024

Carlisle Companies Inc ORD	0.8 %
GoDaddy Inc ORD	0.7 %
Williams-Sonoma Inc ORD	0.7 %
EMCOR Group Inc ORD	0.7 %
Pure Storage Inc ORD	0.7 %
Reliance Inc ORD	0.7 %
Lennox International Inc ORD	0.6 %
Owens Corning ORD	0.6 %
Burlington Stores Inc ORD	0.6 %
Watsco Inc ORD	0.6 %

Sector Weights As of 05/31/2024



■ Vanguard Mid-Cap 400 Index Fund I (VSPMX)
■ S&P MidCap 400 Index

Region (%) As of 06/30/2024

No data found.

Strategy Review

Vanguard Small-Cap 600 Index I (VSMX) | S&P SmallCap 600 Index

As of June 30, 2024

Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	-0.34	20.99	-0.06	99.89	6	100.13	6
Index	-0.26	20.99	-0.05	100.00	6	100.00	6

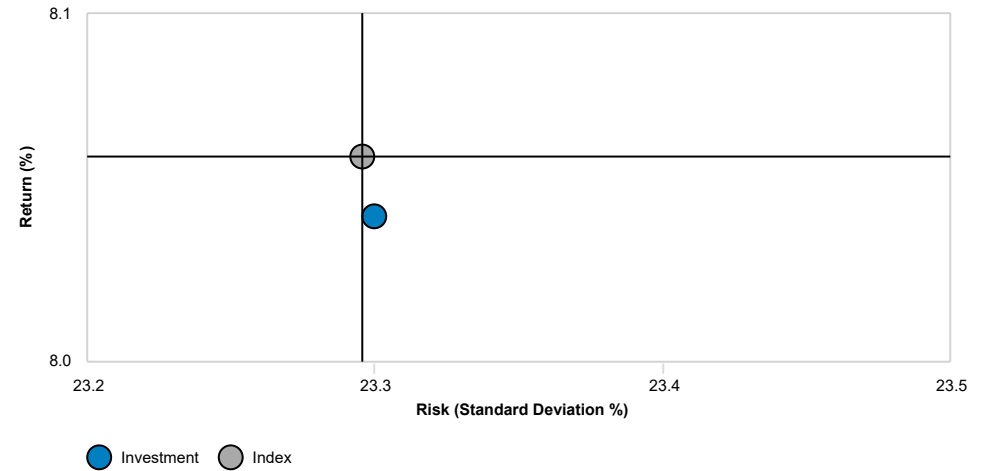
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	8.04	23.30	0.36	100.01	12	100.07	8
Index	8.06	23.30	0.36	100.00	12	100.00	8

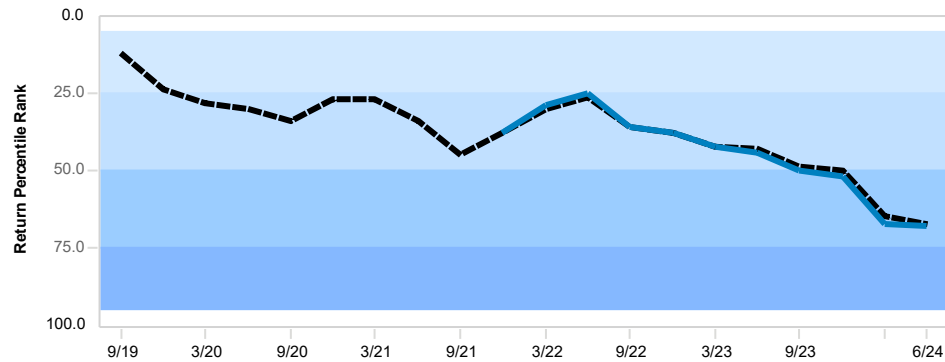
Risk and Return 3 Years



Risk and Return 5 Years

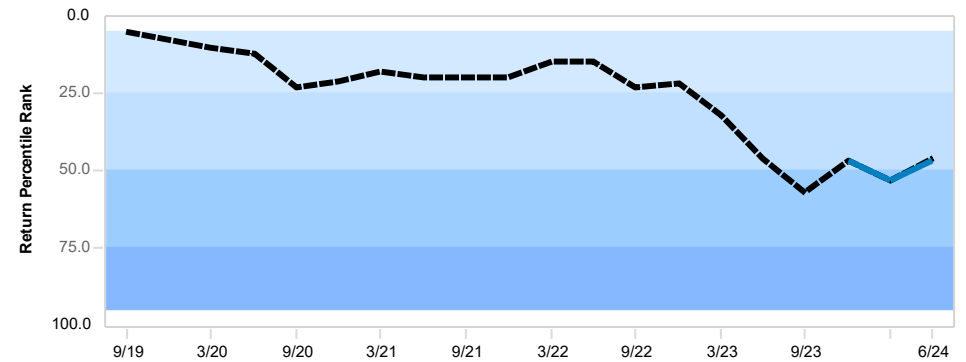


3 Year Rolling Percentile Rank IM U.S. Small Cap Core Equity (MF)



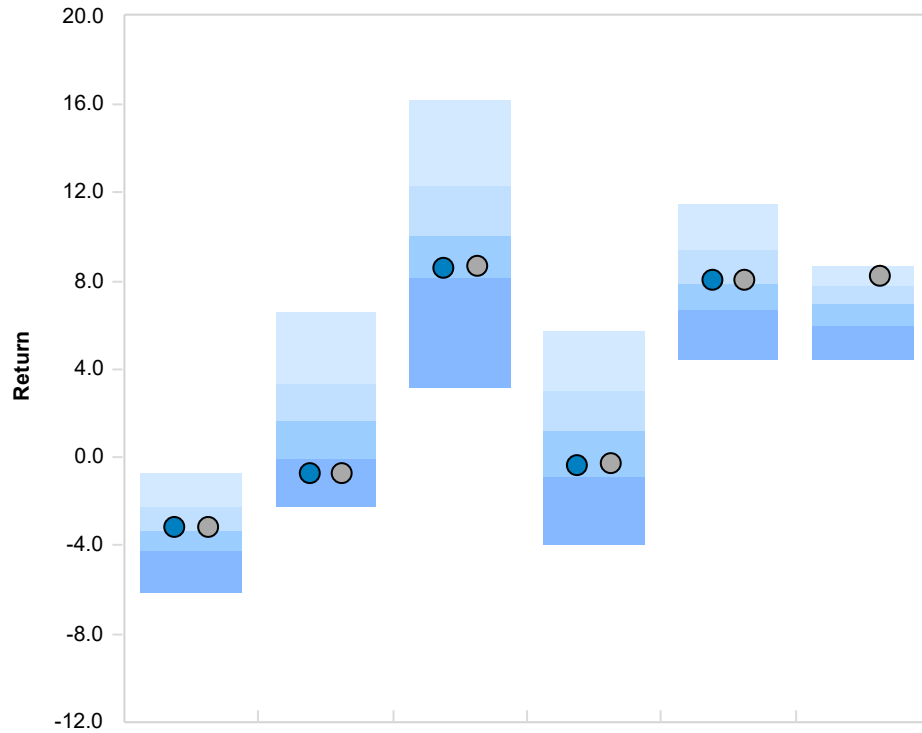
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	11	1 (9%)	7 (64%)	3 (27%)	0 (0%)
Index	20	2 (10%)	16 (80%)	2 (10%)	0 (0%)

5 Year Rolling Percentile Rank IM U.S. Small Cap Core Equity (MF)



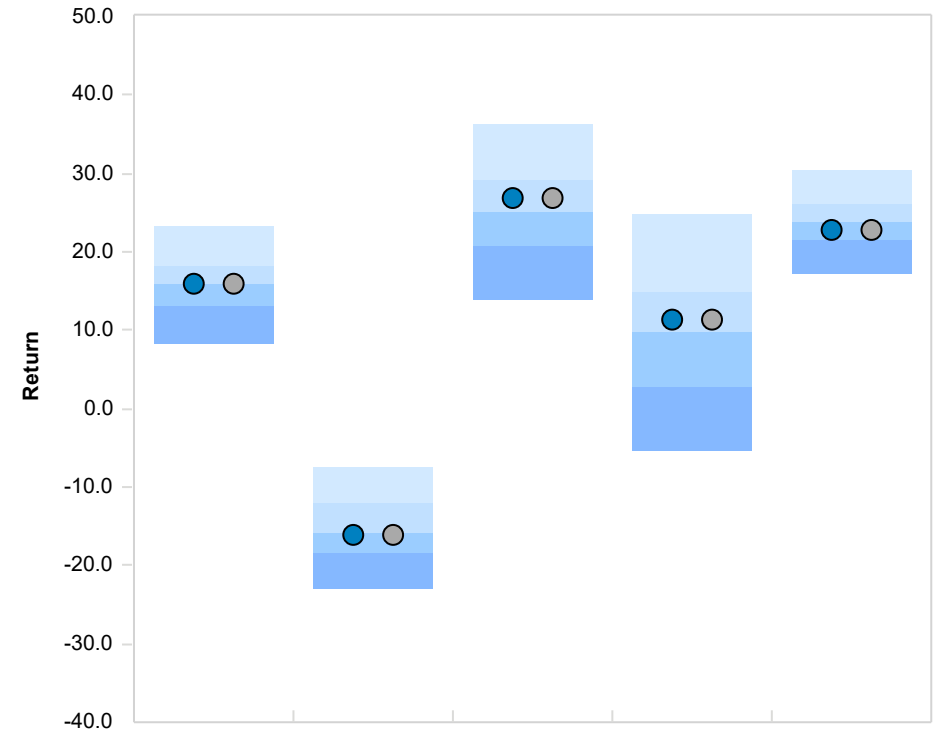
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	3	0 (0%)	2 (67%)	1 (33%)	0 (0%)
Index	20	14 (70%)	4 (20%)	2 (10%)	0 (0%)

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



	QTR	YTD	1 YR	3 YR	5 YR	10 YR
Investment	-3.12 (43)	-0.75 (83)	8.60 (69)	-0.34 (68)	8.04 (47)	N/A
Index	-3.11 (42)	-0.72 (82)	8.66 (68)	-0.26 (67)	8.06 (46)	8.24 (15)
Median	-3.30	1.69	10.03	1.23	7.91	7.02

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



	2023	2022	2021	2020	2019
Investment	15.99 (51)	-16.18 (57)	26.74 (37)	11.46 (39)	22.74 (61)
Index	16.05 (49)	-16.10 (54)	26.82 (36)	11.29 (41)	22.78 (61)
Median	15.99	-15.77	25.12	9.89	23.94

Financial Reconciliation Since Inception Ending June 30, 2024

	Market Value 12/01/2018	Net Flows	Return On Investment	Market Value 06/30/2024
Investment	10,695,104	-2,500,000	5,046,126	13,241,230

Comparative Performance

	1 Qtr Ending Mar-2024	1 Qtr Ending Dec-2023	1 Qtr Ending Sep-2023	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022
Investment	2.45 (91)	15.10 (9)	-4.94 (70)	3.37 (67)	2.55 (54)	9.17 (58)
Index	2.46 (90)	15.12 (8)	-4.93 (69)	3.38 (66)	2.57 (53)	9.19 (57)
Median	5.16	12.88	-4.04	3.95	2.71	9.65

Fund Information As of 06/30/2024

Fund Name :	Vanguard Admiral Funds: Vanguard S&P Small-Cap 600 Index Fund; Institutional Shares	Portfolio Assets :	\$4,465 Million
Fund Family :	Vanguard	Portfolio Manager :	Narzikul/Birkett
Ticker :	VSMX	PM Tenure :	2023--2023
Inception Date :	12/15/2010	Fund Style :	IM U.S. Small Cap Core Equity (MF)
Fund Assets :	\$1,881 Million	Style Benchmark :	S&P SmallCap 600 Index
Portfolio Turnover :	19%		

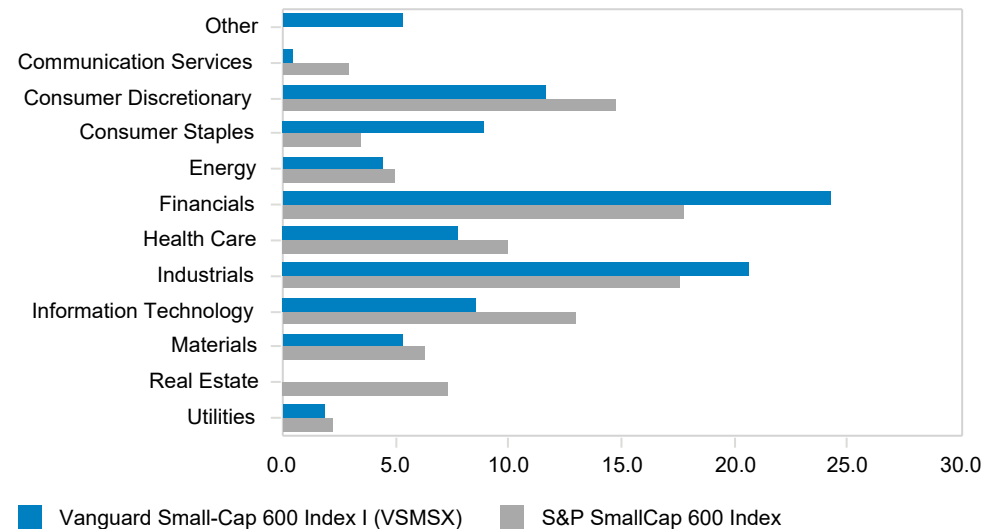
Portfolio Characteristics As of 05/31/2024

	Portfolio	Benchmark
Total Securities	605	602
Avg. Market Cap	3,094,296,080	3,095,668,744
Price/Earnings (P/E)	24.28	15.29
Price/Book (P/B)	3.24	2.24
Dividend Yield	3.00	1.83
Annual EPS	9.53	3.26
5 Yr EPS	9.23	11.27
3 Yr EPS Growth	19.02	N/A
Beta (5 Years, Monthly)	1.00	1.00

Top Ten Securities As of 05/31/2024

Vanguard Market Liquidity Fund	0.9 %
Abercrombie & Fitch Co ORD	0.7 %
Fabrinet ORD	0.7 %
ATI Inc ORD	0.7 %
SPS Commerce Inc ORD	0.6 %
Ensign Group Inc ORD	0.6 %
Mueller Industries Inc ORD	0.6 %
Meritage Homes Corp ORD	0.5 %
SPX Technologies Inc ORD	0.5 %
SM Energy Co ORD	0.5 %

Sector Weights As of 05/31/2024



Region (%) As of 06/30/2024

No data found.

Strategy Review

Vanguard Developed Markets Index (VTMNX) | Vanguard Spliced Developed ex U.S. Index (Net)

As of June 30, 2024

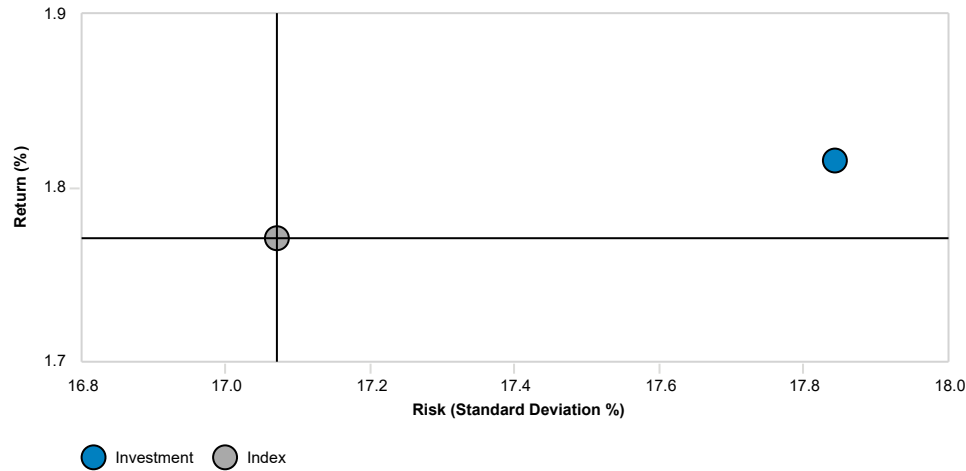
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	1.82	17.84	0.02	106.94	6	107.18	6
Index	1.77	17.07	0.01	100.00	6	100.00	6

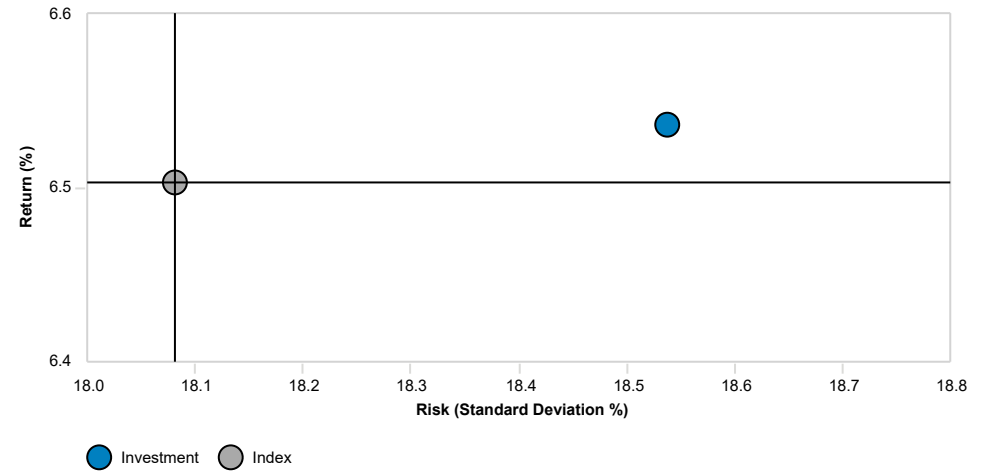
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	6.54	18.54	0.32	104.02	12	104.99	8
Index	6.50	18.08	0.32	100.00	12	100.00	8

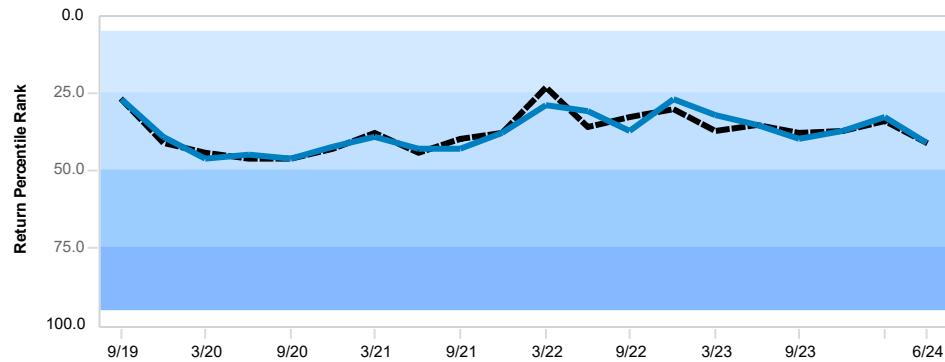
Risk and Return 3 Years



Risk and Return 5 Years

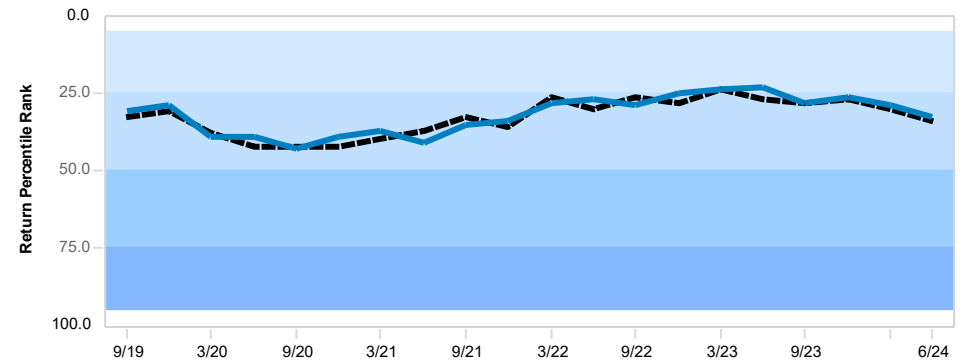


3 Year Rolling Percentile Rank IM International Multi-Cap Equity (MF)



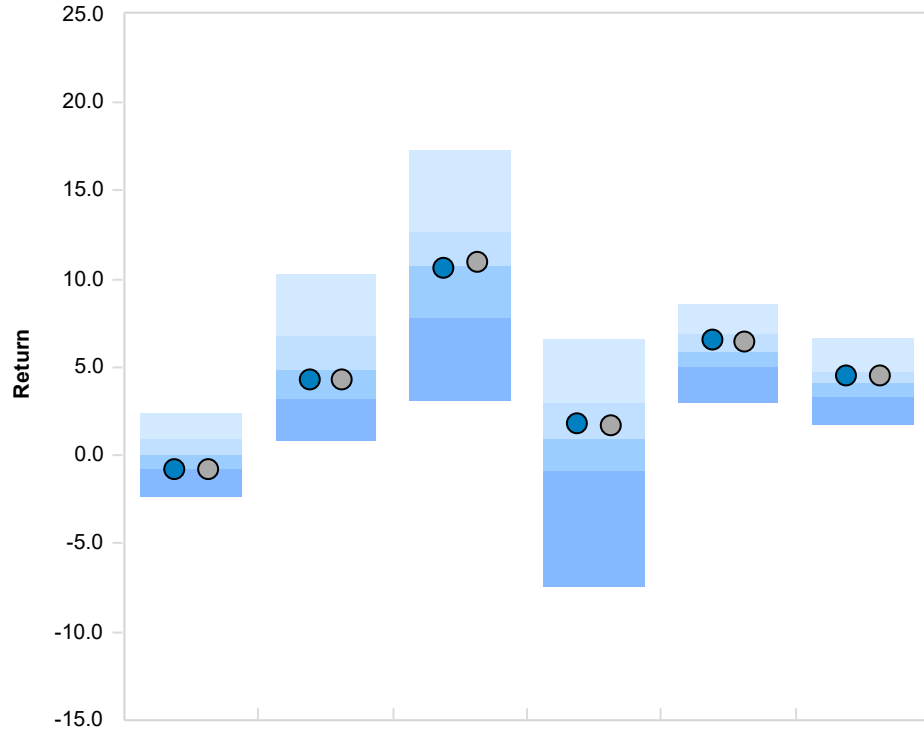
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	0 (0%)	20 (100%)	0 (0%)	0 (0%)
Index	20	1 (5%)	19 (95%)	0 (0%)	0 (0%)

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

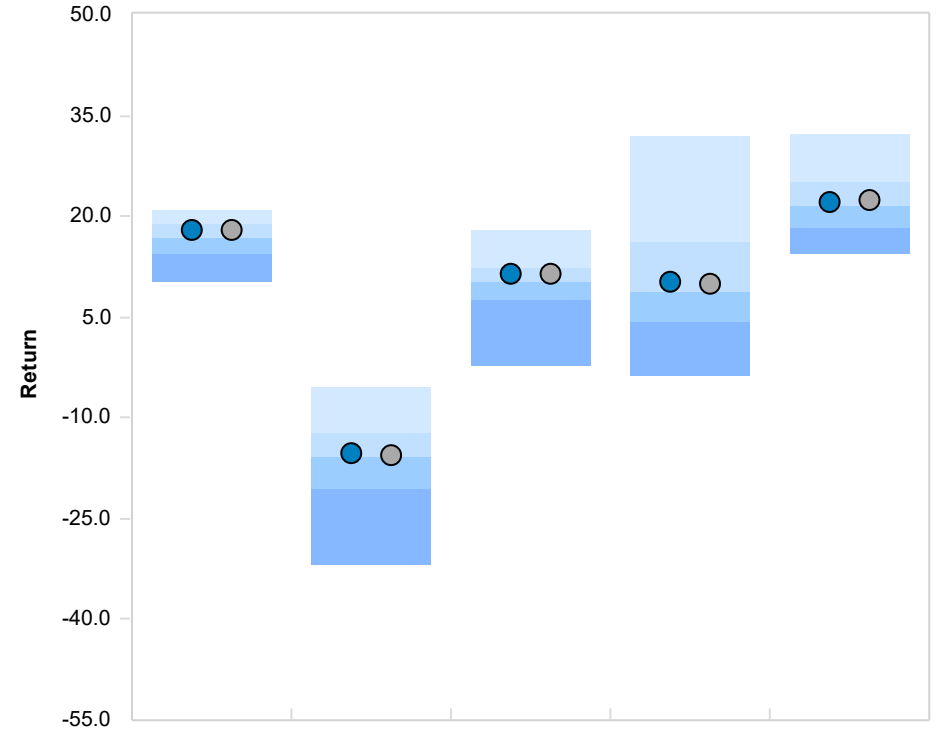


	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	3 (15%)	17 (85%)	0 (0%)	0 (0%)
Index	20	1 (5%)	19 (95%)	0 (0%)	0 (0%)

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



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



Financial Reconciliation Since Inception Ending June 30, 2024

	Market Value 07/01/2009	Net Flows	Return On Investment	Market Value 06/30/2024
Investment	253,831	45,927	10,982,048	11,281,806

Comparative Performance

	1 Qtr Ending Mar-2024	1 Qtr Ending Dec-2023	1 Qtr Ending Sep-2023	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022
Investment	5.14	11.18	-4.67	3.15	7.79	17.10
Index	5.11	10.83	-3.97	3.00	7.62	16.28

Fund Information As of 06/30/2024

Fund Name :	Vanguard Tax-Managed Funds: Vanguard Developed Markets Index Fund; Institutional Shares	Portfolio Assets :	\$192,266 Million
Fund Family :	Vanguard	Portfolio Manager :	Franquin/Perre
Ticker :	VTMNX	PM Tenure :	2013--2017
Inception Date :	01/04/2001	Fund Style :	IM International Multi-Cap Core Equity (MF)
Fund Assets :	\$15,044 Million	Style Benchmark :	FTSE Developed x North America Index (Net)
Portfolio Turnover :	3%		

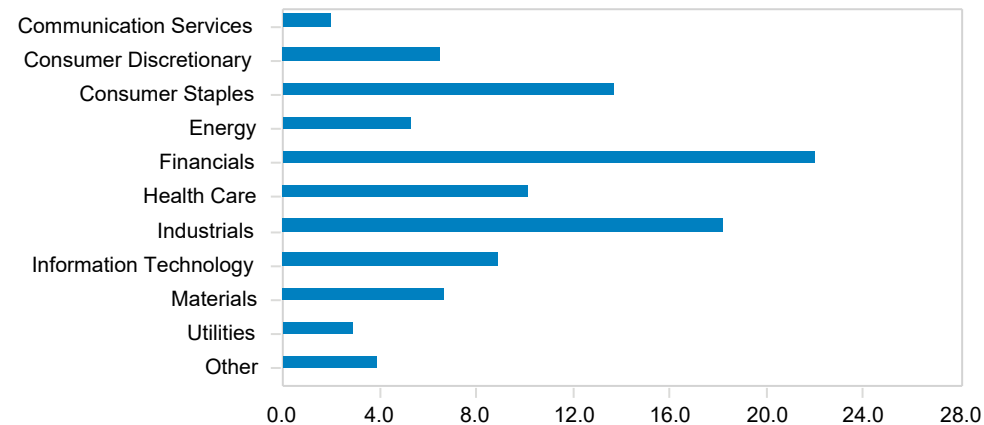
Portfolio Characteristics As of 05/31/2024

	Portfolio	Benchmark
Total Securities	4,022	N/A
Avg. Market Cap	80,419,027,198	-
Price/Earnings (P/E)	24.05	N/A
Price/Book (P/B)	4.12	N/A
Dividend Yield	2.97	N/A
Annual EPS	15.46	N/A
5 Yr EPS	8.39	N/A
3 Yr EPS Growth	20.92	N/A
Beta (5 Years, Monthly)	1.03	1.00

Top Ten Securities As of 05/31/2024

Vanguard Market Liquidity Fund	1.8 %
Novo Nordisk A/S ORD	1.8 %
ASML Holding NV ORD	1.6 %
Nestle SA ORD	1.2 %
Toyota Motor Corp ORD	1.1 %
Samsung Electronics Co Ltd ORD	1.1 %
Shell PLC ORD	1.0 %
AstraZeneca PLC ORD	1.0 %
Novartis AG ORD	0.9 %
SAP SE ORD	0.9 %

Sector Weights As of 05/31/2024



■ Vanguard Developed Markets Index (VTMNX)
■ FTSE Developed x North America Index (Net)

Region (%) As of 06/30/2024

No data found.

Strategy Review

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

As of June 30, 2024

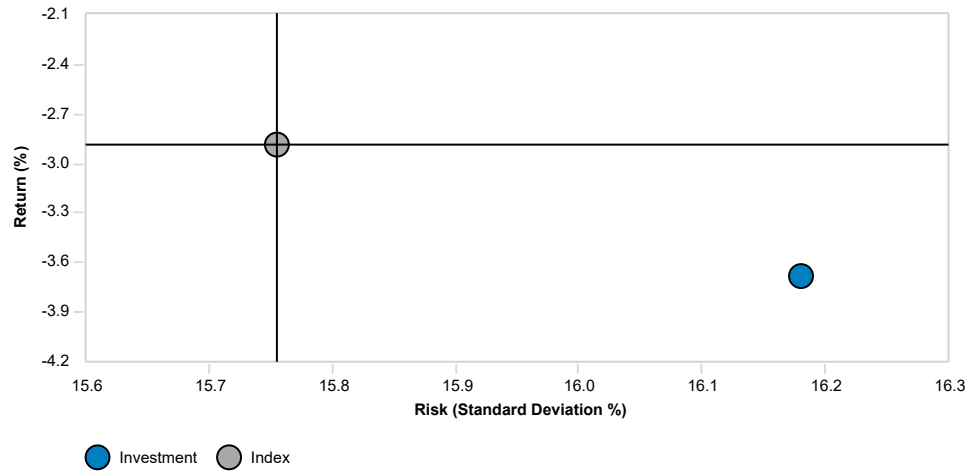
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	-3.69	16.18	-0.34	99.91	6	103.34	6
Index	-2.88	15.75	-0.30	100.00	6	100.00	6

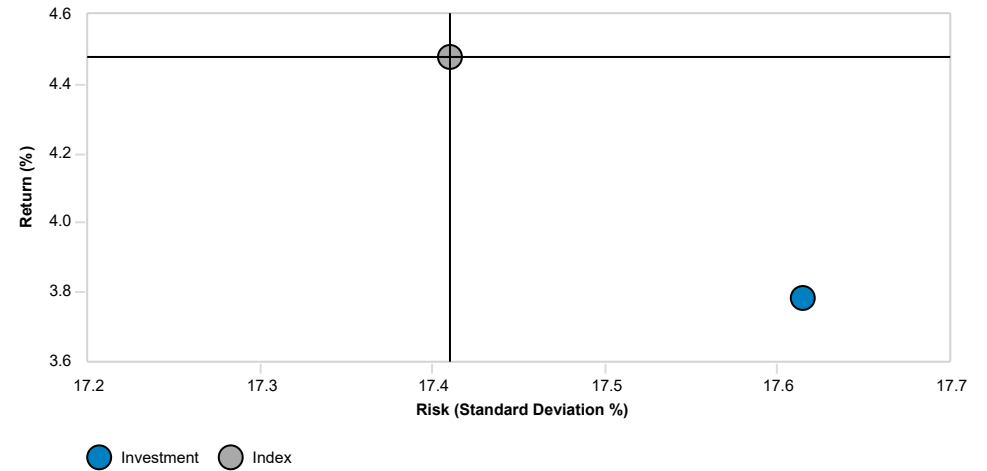
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	3.79	17.61	0.18	99.15	12	102.02	8
Index	4.48	17.41	0.22	100.00	12	100.00	8

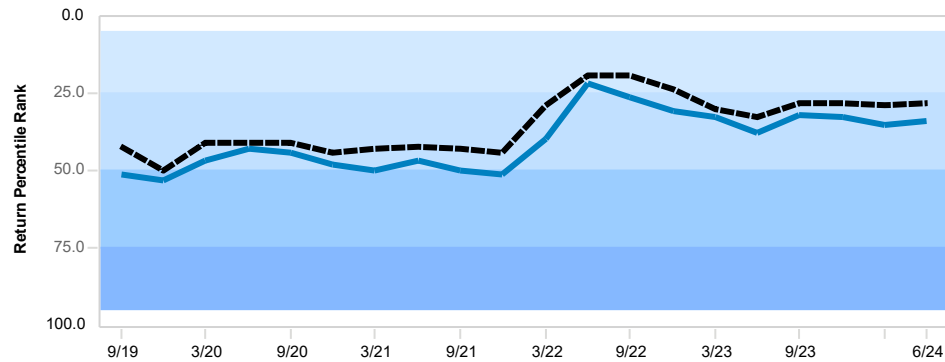
Risk and Return 3 Years



Risk and Return 5 Years

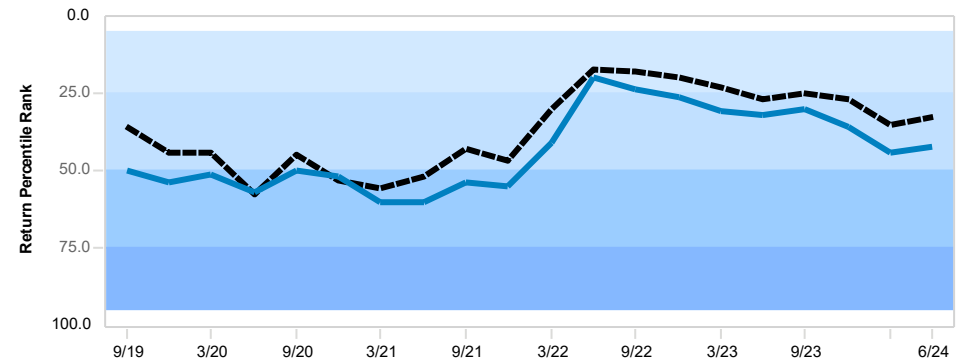


3 Year Rolling Percentile Rank IM Emerging Markets Equity (MF)



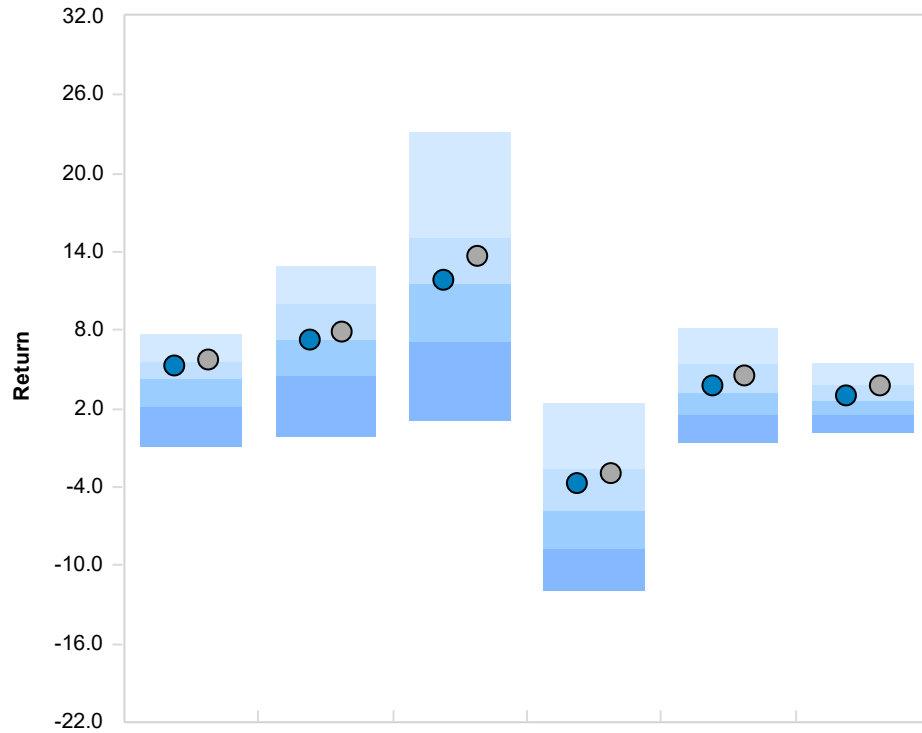
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	1 (5%)	16 (80%)	3 (15%)	0 (0%)
Index	20	3 (15%)	17 (85%)	0 (0%)	0 (0%)

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

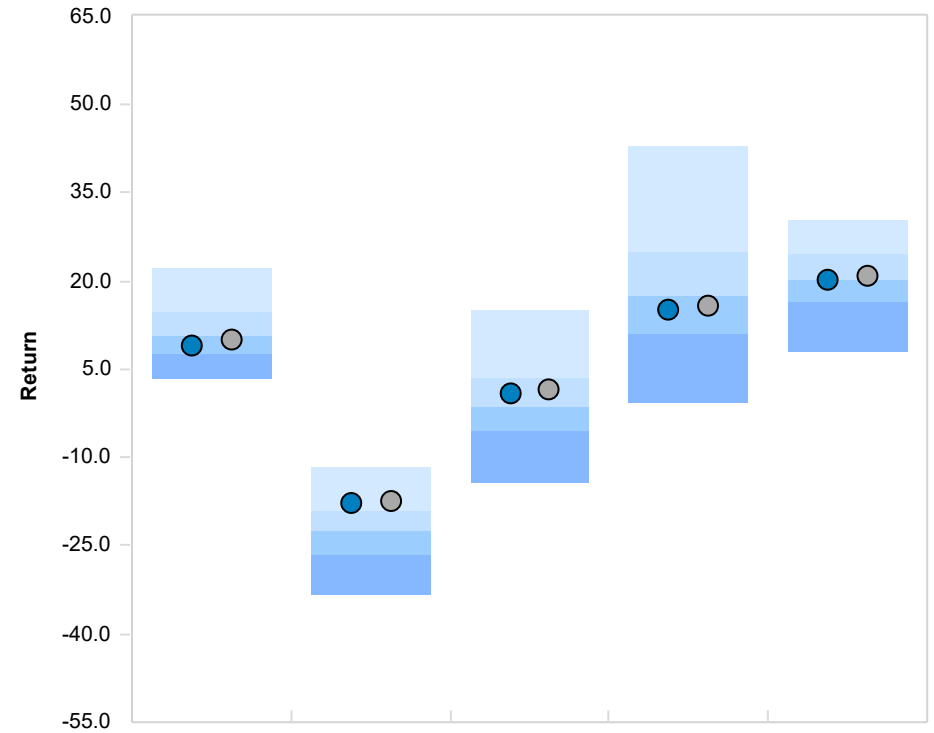


	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	2 (10%)	10 (50%)	8 (40%)	0 (0%)
Index	20	5 (25%)	11 (55%)	4 (20%)	0 (0%)

Peer Group Analysis - IM Emerging Markets Equity (MF)



Peer Group Analysis - IM Emerging Markets Equity (MF)



Financial Reconciliation Since Inception Ending June 30, 2024

	Market Value 10/01/2010	Net Flows	Return On Investment	Market Value 06/30/2024
Investment	5,147,163	3,164,289	4,239,067	12,550,519

Comparative Performance

	1 Qtr Ending Mar-2024	1 Qtr Ending Dec-2023	1 Qtr Ending Sep-2023	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022
Investment	1.94	6.53	-2.14	1.09	3.60	8.22
Index	2.09	6.82	-1.35	1.19	3.11	8.23

Fund Information As of 06/30/2024

Fund Name :	Vanguard International Equity Index Funds: Vanguard Emerging Markets Stock Index Fund; Instl Class Shares	Portfolio Assets :	\$107,852 Million
Fund Family :	Vanguard	Portfolio Manager :	Perre/Miller
Ticker :	VEMIX	PM Tenure :	2008--2016
Inception Date :	06/22/2000	Fund Style :	IM Emerging Markets Equity (MF)
Fund Assets :	\$7,518 Million	Style Benchmark :	FTSE Emerging Mkts All Cap China A Inclusion Index
Portfolio Turnover :	5%		

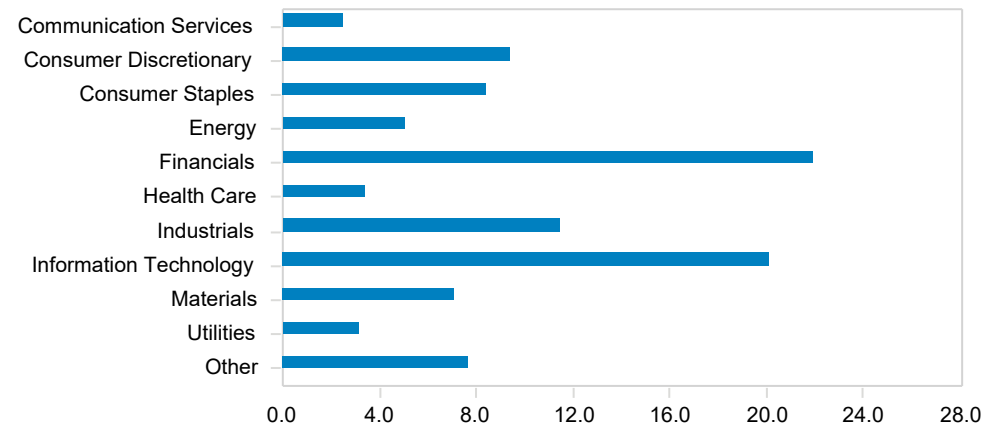
Portfolio Characteristics As of 05/31/2024

	Portfolio	Benchmark
Total Securities	4,866	N/A
Avg. Market Cap	106,502,837,807	-
Price/Earnings (P/E)	23.21	N/A
Price/Book (P/B)	4.03	N/A
Dividend Yield	3.18	N/A
Annual EPS	11.73	N/A
5 Yr EPS	14.53	N/A
3 Yr EPS Growth	19.97	N/A
Beta (5 Years, Monthly)	1.00	1.00

Top Ten Securities As of 05/31/2024

Taiwan Semiconductor Manufacturing	7.5 %
Tencent Holdings Ltd ORD	3.6 %
Vanguard Market Liquidity Fund	2.2 %
Alibaba Group Holding Ltd ORD	2.1 %
Reliance Industries Ltd ORD	1.4 %
HDFC Bank Ltd ORD	1.3 %
PDD HOLDINGS ADS	1.1 %
Meituan ORD	0.9 %
China Construction Bank Corp ORD	0.8 %
Hon Hai Precision Industry Co Ltd	0.8 %

Sector Weights As of 05/31/2024



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

Region (%) As of 06/30/2024

No data found.

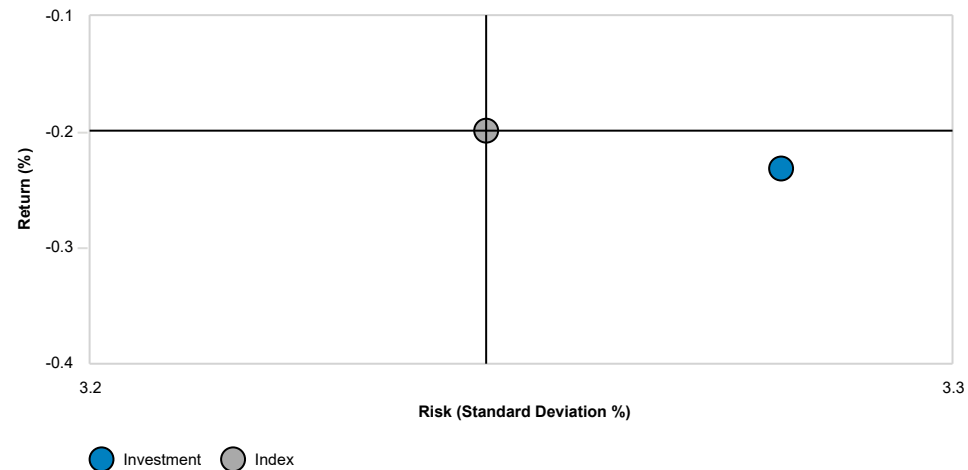
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	-0.23	3.28	-1.03	100.87	6	101.53	6
Index	-0.20	3.25	-1.03	100.00	7	100.00	5

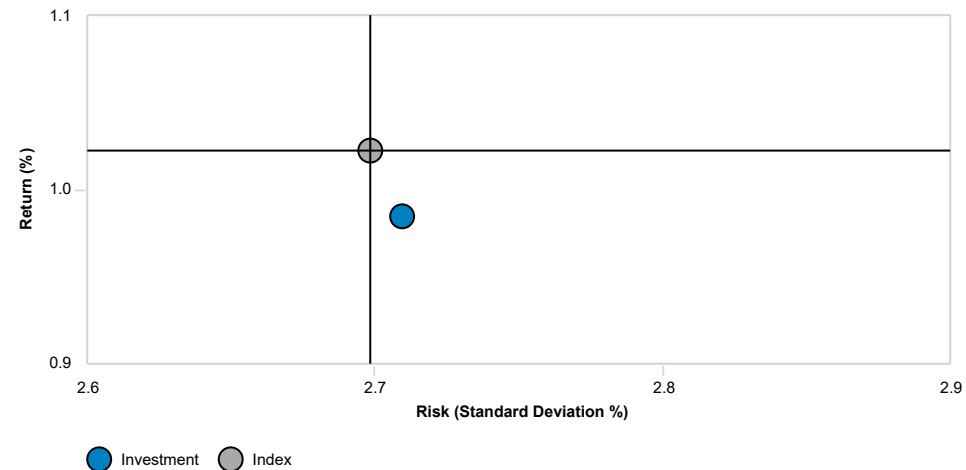
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	0.98	2.71	-0.43	98.68	13	99.46	7
Index	1.02	2.70	-0.41	100.00	14	100.00	6

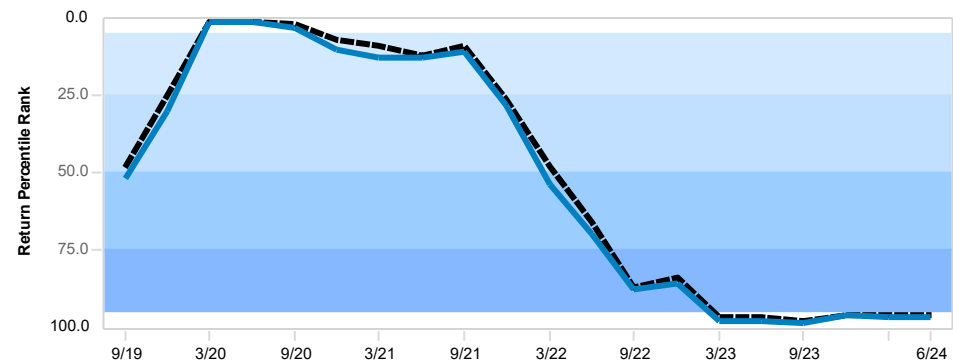
Risk and Return 3 Years



Risk and Return 5 Years

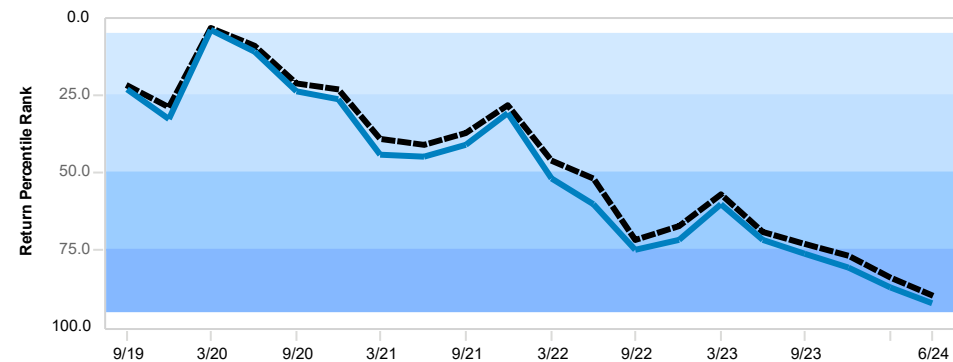


3 Year Rolling Percentile Rank IM U.S. Short Term Investment Grade (MF)



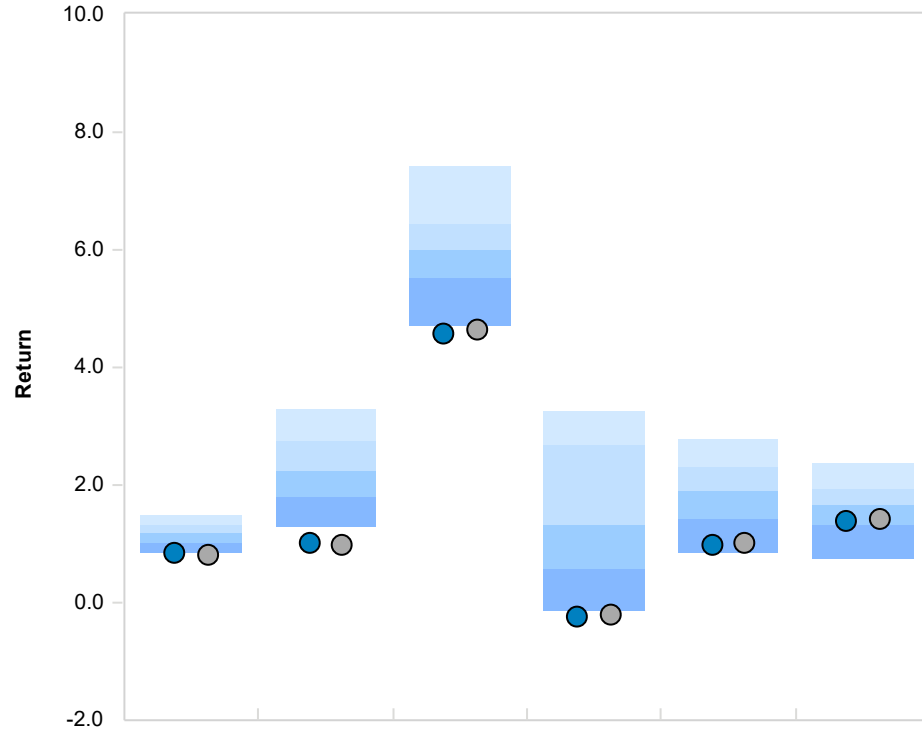
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	7 (35%)	2 (10%)	3 (15%)	8 (40%)
Index	20	8 (40%)	3 (15%)	1 (5%)	8 (40%)

5 Year Rolling Percentile Rank IM U.S. Short Term Investment Grade (MF)

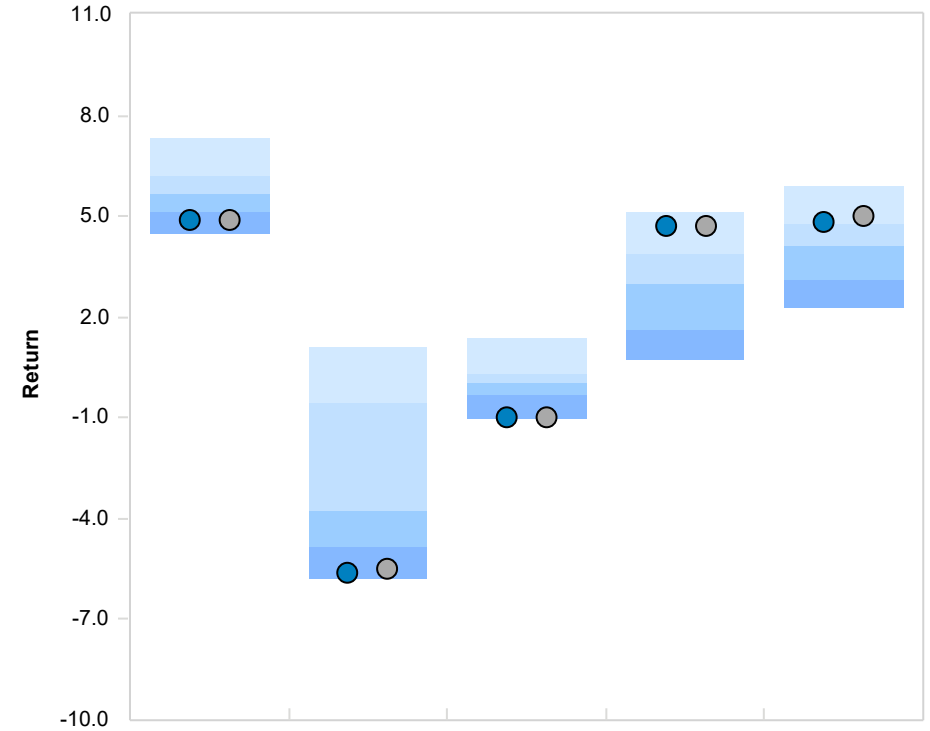


	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	4 (20%)	6 (30%)	6 (30%)	4 (20%)
Index	20	5 (25%)	6 (30%)	6 (30%)	3 (15%)

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 June 30, 2024

	Market Value 04/01/2013	Net Flows	Return On Investment	Market Value 06/30/2024
Investment	10,001,804	-4,569,350	1,638,659	7,071,113

Comparative Performance

	1 Qtr Ending Mar-2024	1 Qtr Ending Dec-2023	1 Qtr Ending Sep-2023	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022
Investment	0.17	3.39	0.15	-0.64	1.93	1.07
Index	0.14	3.44	0.21	-0.62	1.82	1.20

Mutual Fund Holdings Analysis
Vanguard Short Term Bond Index (VBIRX)
June 30, 2024

Fund Information As of 06/30/2024

Fund Name : Vanguard Bond Index Funds: Vanguard Short-Term Bond Index Fund; Admiral Shares	Portfolio Assets : \$62,569 Million
Fund Family : Vanguard	Portfolio Manager : Joshua C. Barrickman
Ticker : VBIRX	PM Tenure : 2013
Inception Date : 11/12/2001	Fund Style : IM U.S. Short Term Investment Grade (MF)
Fund Assets : \$12,555 Million	Style Benchmark : Bloomberg U.S. Aggregate 1-3 Yrs
Portfolio Turnover : 64%	

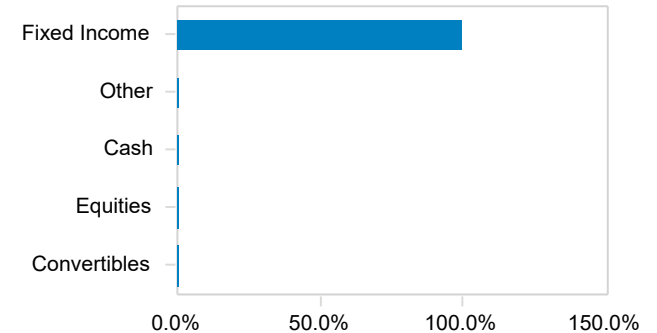
Fund Characteristics As of 03/31/2024

Avg. Coupon	2.90 %
Nominal Maturity	N/A
Effective Maturity	2.90 Years
Duration	2.70 Years
SEC 30 Day Yield	1.0
Avg. Credit Quality	AA

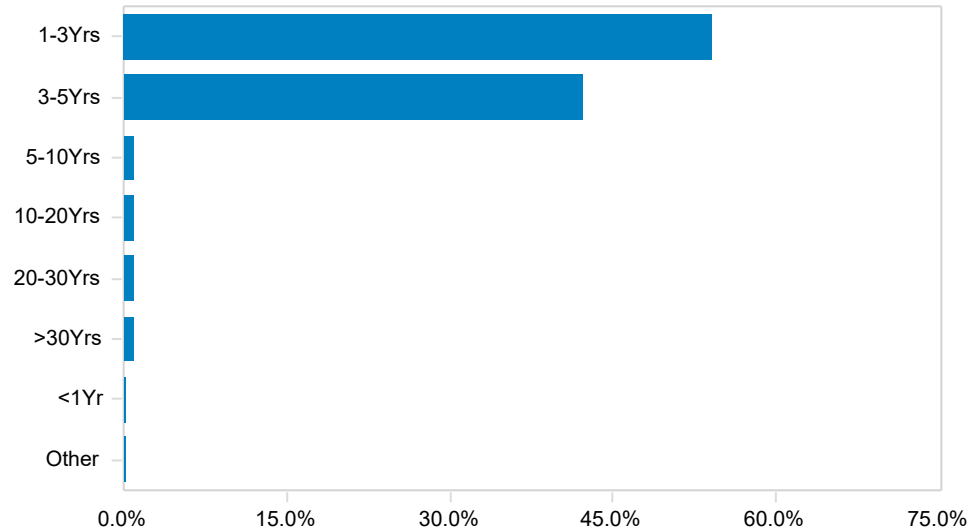
Top Ten Securities As of 03/31/2024

Government Agency Securities	33.9 %
Treasury Notes/Bonds	33.9 %
Corporate Notes/Bonds	26.8 %
Fgn. Currency Denominated Bonds	5.3 %

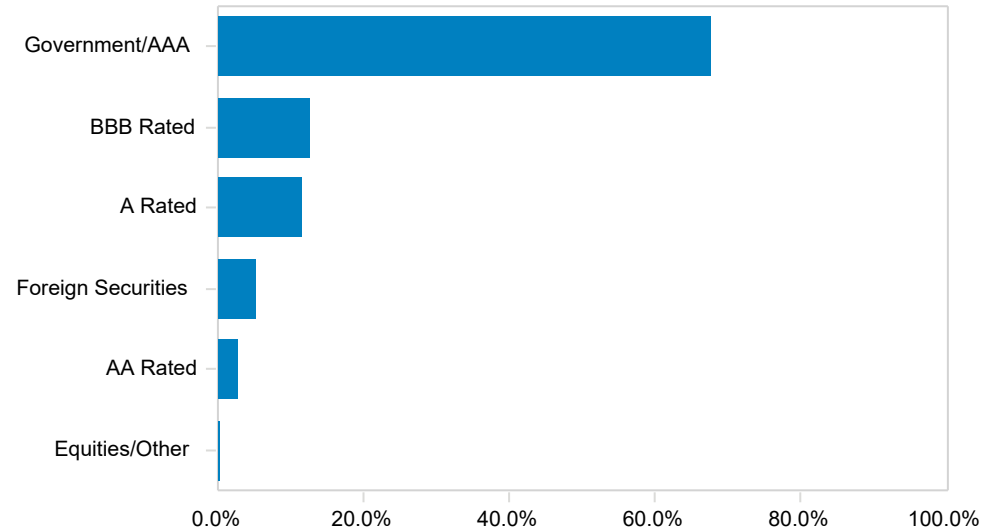
Asset Allocation As of 03/31/2024



Maturity Distribution As of 03/31/2024



Sector/Quality Allocation As of 03/31/2024



Strategy Review
Vanguard Total Bond Index (VBTIX) | Blmbg. U.S. Aggregate Index
As of June 30, 2024

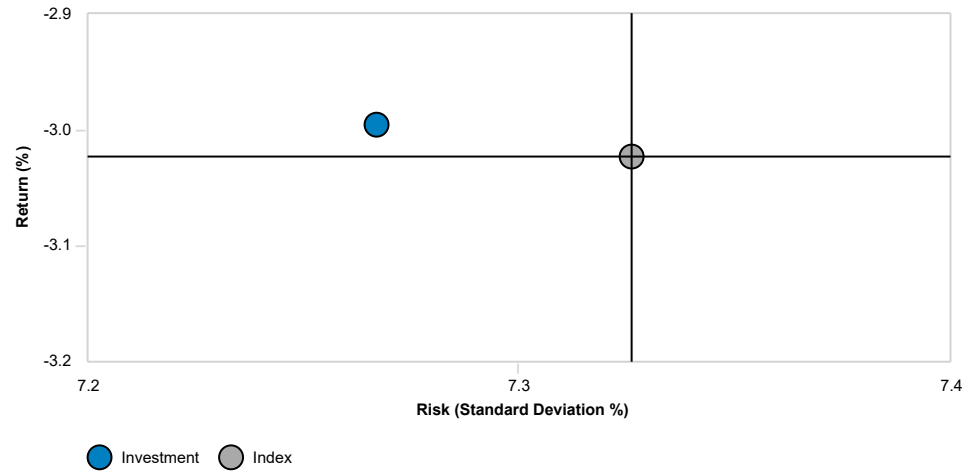
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	-2.99	7.27	-0.81	99.51	5	99.42	7
Index	-3.02	7.33	-0.81	100.00	6	100.00	6

Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Index	-0.23	6.17	-0.36	100.00	13	100.00	7

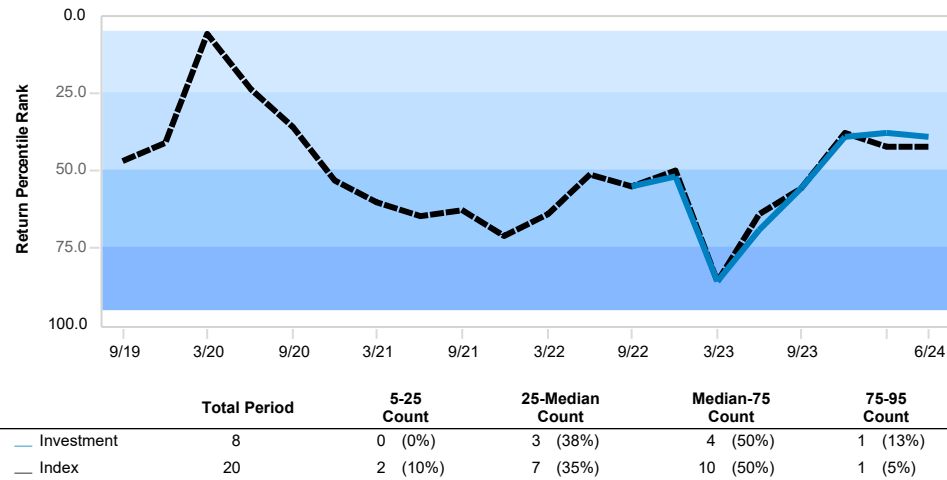
Risk and Return 3 Years



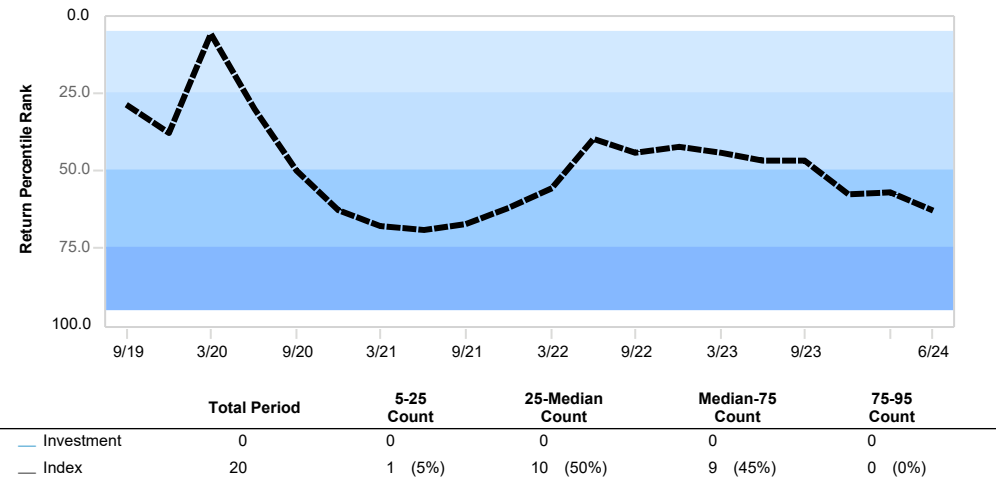
Risk and Return 5 Years



3 Year Rolling Percentile Rank IM U.S. Broad Market Core Fixed Income (MF)

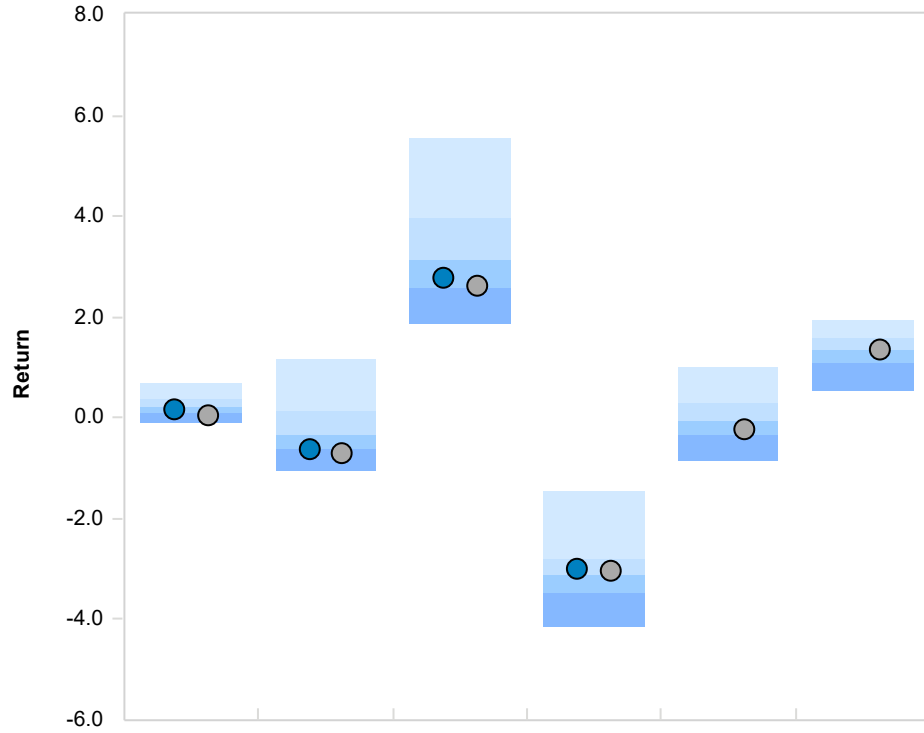


5 Year Rolling Percentile Rank IM U.S. Broad Market Core Fixed Income (MF)



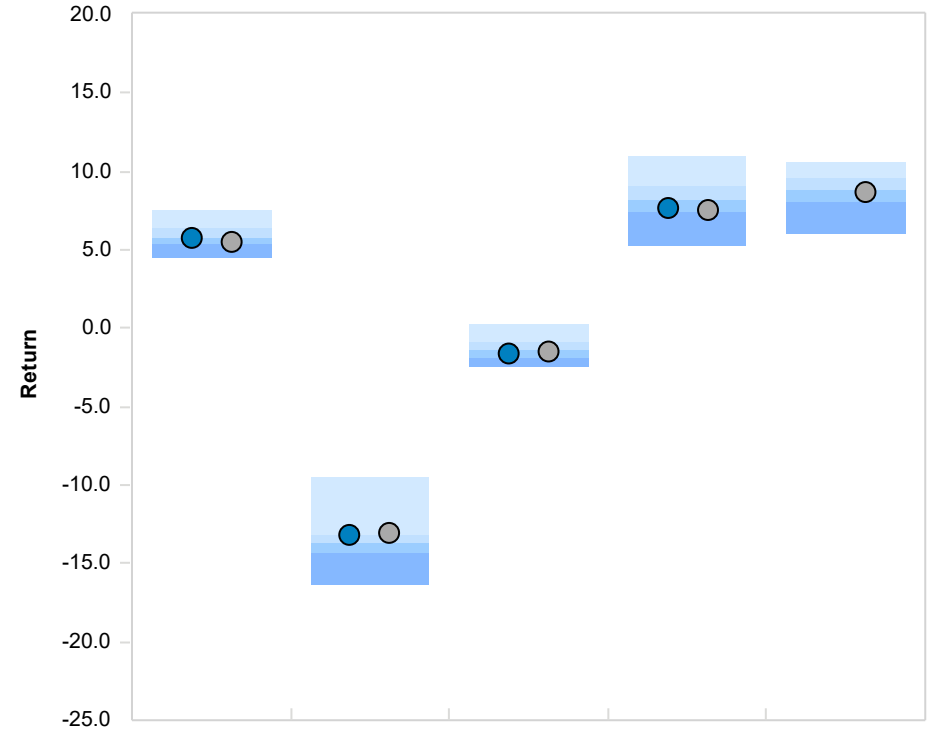
Inception Date for VBTIX is 9/2019. Manager returns for VBTIX have been used for this report.

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



	QTR	YTD	1 YR	3 YR	5 YR	10 YR
Investment	0.18 (59)	-0.61 (74)	2.77 (66)	-2.99 (39)	N/A	N/A
Index	0.07 (80)	-0.71 (82)	2.63 (73)	-3.02 (42)	-0.23 (63)	1.35 (50)
Median	0.21	-0.34	3.13	-3.10	-0.08	1.34

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



	2023	2022	2021	2020	2019
Investment	5.72 (54)	-13.15 (27)	-1.65 (64)	7.73 (65)	N/A
Index	5.53 (65)	-13.01 (22)	-1.55 (60)	7.51 (73)	8.72 (53)
Median	5.77	-13.66	-1.33	8.16	8.76

Financial Reconciliation Since Inception Ending June 30, 2024

	Market Value 09/01/2019	Net Flows	Return On Investment	Market Value 06/30/2024
Investment	5,041,017	75,803,437	-793,254	80,051,200

Comparative Performance

	1 Qtr Ending Mar-2024	1 Qtr Ending Dec-2023	1 Qtr Ending Sep-2023	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022
Investment	-0.79 (81)	6.69 (60)	-3.08 (51)	-0.90 (63)	3.16 (46)	1.67 (56)
Index	-0.78 (80)	6.82 (46)	-3.23 (70)	-0.84 (55)	2.96 (69)	1.87 (35)
Median	-0.53	6.77	-3.08	-0.81	3.14	1.71

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

Fund Information As of 06/30/2024

Fund Name : Vanguard Bond Index Funds: Vanguard Total Bond Market Index Fund; Institutional Shares	Portfolio Assets : \$323,233 Million
Fund Family : Vanguard	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 : \$43,110 Million	Style Benchmark : Bloomberg U.S. Aggregate
Portfolio Turnover : 36%	

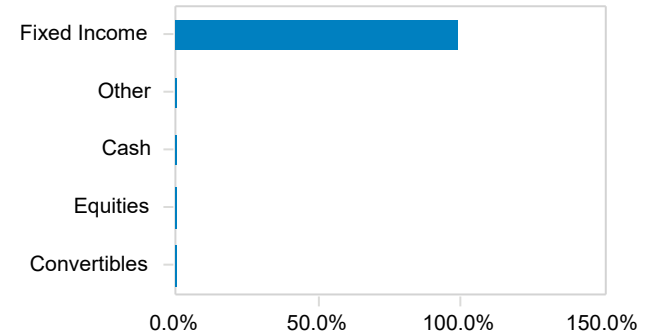
Fund Characteristics As of 03/31/2024

Avg. Coupon	3.30 %
Nominal Maturity	N/A
Effective Maturity	8.50 Years
Duration	6.10 Years
SEC 30 Day Yield	2.7
Avg. Credit Quality	AA

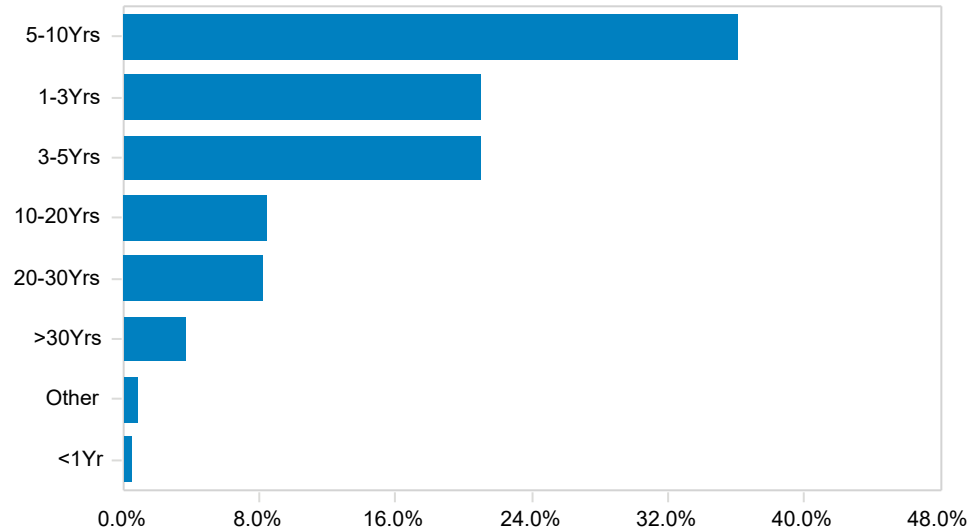
Top Ten Securities As of 03/31/2024

Corporate Notes/Bonds	26.6 %
Government Agency Securities	23.3 %
Treasury Notes/Bonds	23.3 %
GNMA and Other Mtg Backed	21.8 %
Fgn. Currency Denominated Bonds	3.6 %
Asset Backed Securities	0.6 %

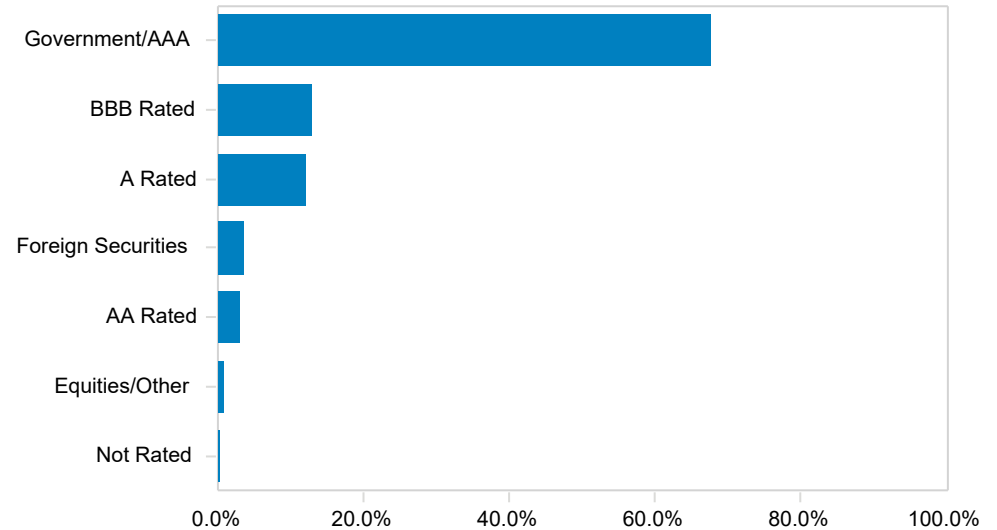
Asset Allocation As of 03/31/2024



Maturity Distribution As of 03/31/2024



Sector/Quality Allocation As of 03/31/2024



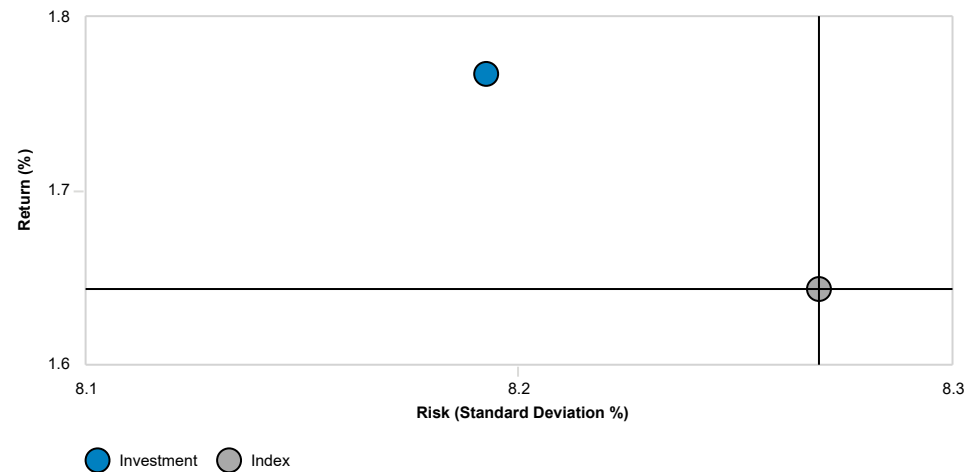
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	1.77	8.19	-0.11	99.81	8	98.57	4
Index	1.64	8.27	-0.13	100.00	9	100.00	3

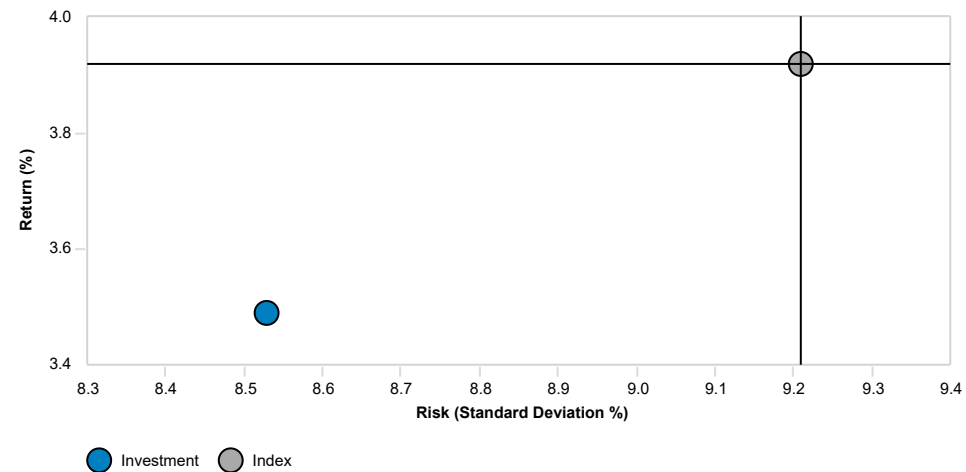
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	3.49	8.53	0.19	91.96	14	93.56	6
Index	3.92	9.21	0.23	100.00	16	100.00	4

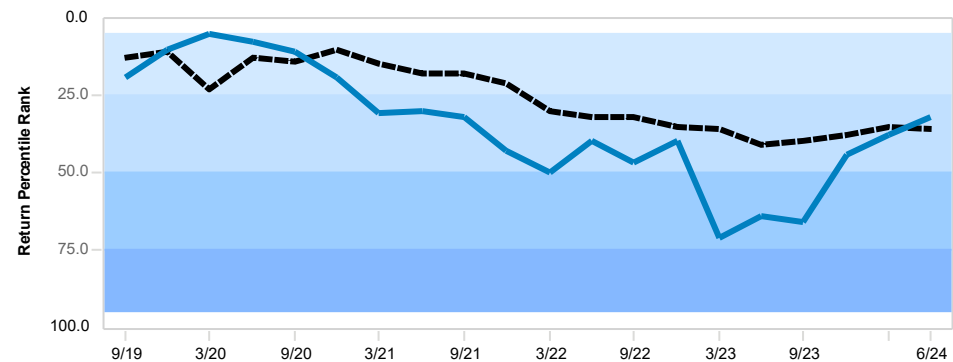
Risk and Return 3 Years



Risk and Return 5 Years

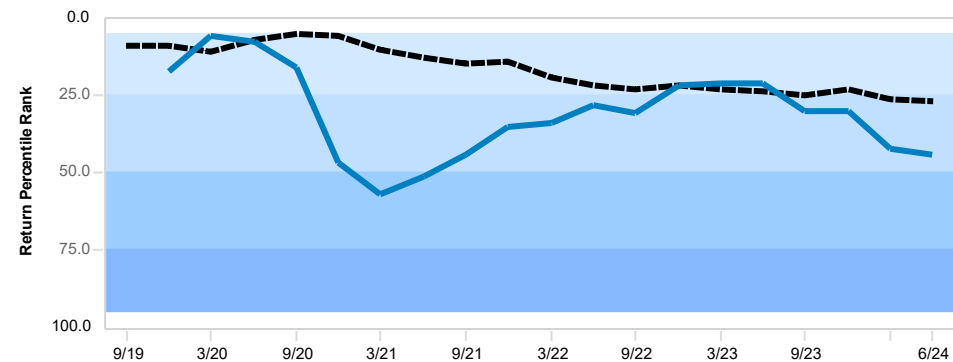


3 Year Rolling Percentile Rank IM U.S. High Yield Bonds (MF)



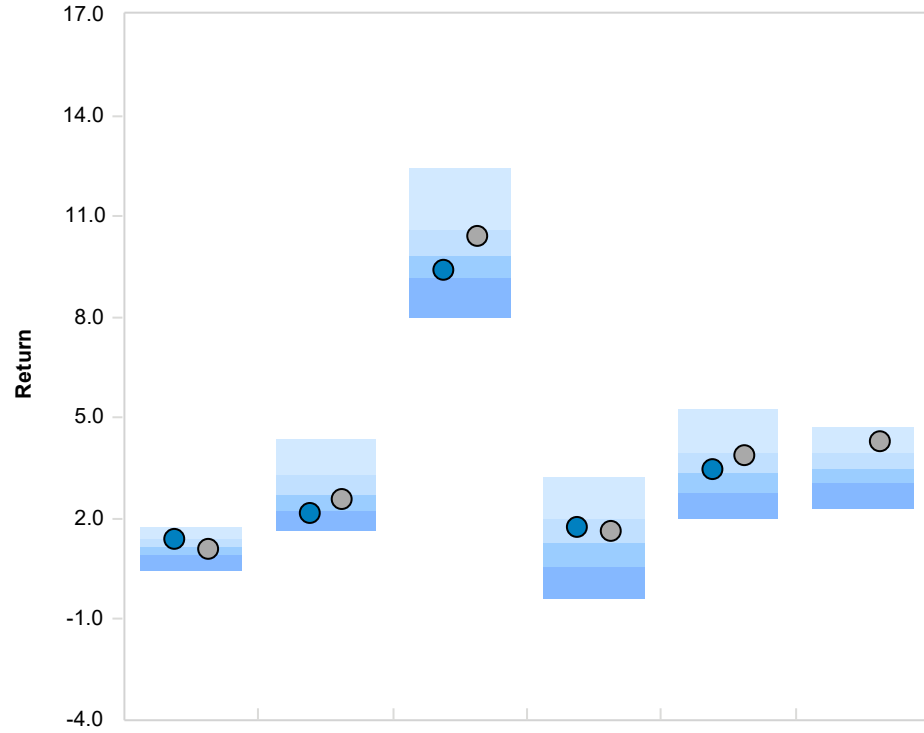
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	6 (30%)	11 (55%)	3 (15%)	0 (0%)
Index	20	10 (50%)	10 (50%)	0 (0%)	0 (0%)

5 Year Rolling Percentile Rank IM U.S. High Yield Bonds (MF)

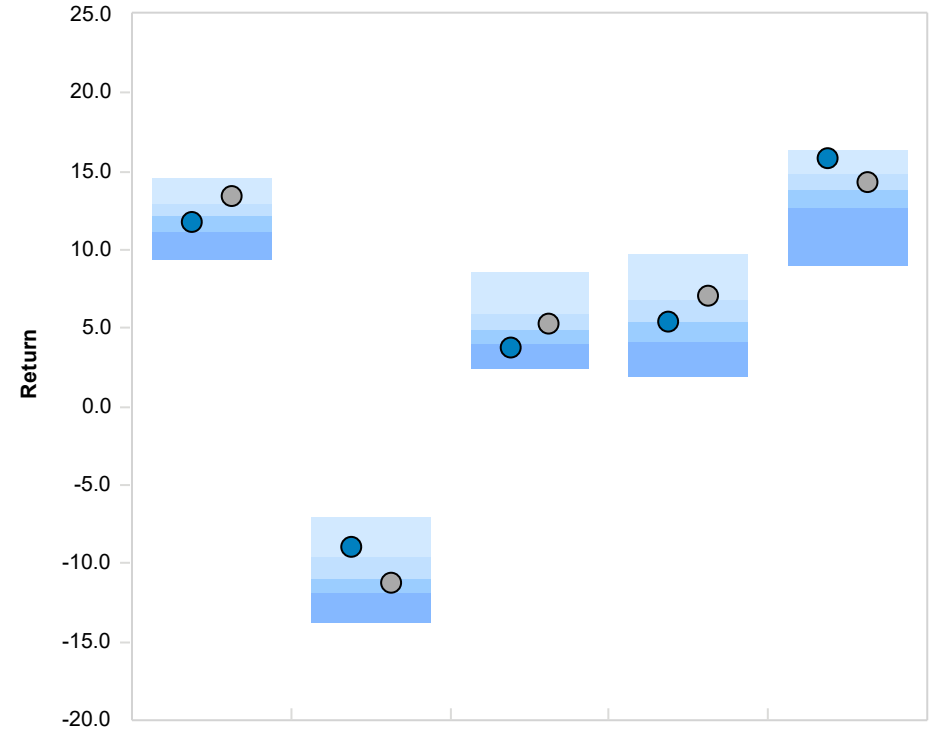


	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	19	7 (37%)	10 (53%)	2 (11%)	0 (0%)
Index	20	18 (90%)	2 (10%)	0 (0%)	0 (0%)

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 June 30, 2024

	Market Value 12/01/2014	Net Flows	Return On Investment	Market Value 06/30/2024
Investment	12,642,764	5,350,000	8,390,914	26,383,678

Comparative Performance

	1 Qtr Ending Mar-2024	1 Qtr Ending Dec-2023	1 Qtr Ending Sep-2023	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022
Investment	0.77	7.30	-0.20	1.12	3.19	4.88
Index	1.47	7.16	0.46	1.75	3.57	4.17

Mutual Fund Holdings Analysis
Vanguard High Yield Bond Fund (VWEAX)
June 30, 2024

Fund Information As of 06/30/2024

Fund Name : Vanguard Fixed Income Securities Funds: Vanguard High-Yield Corporate Fund; Admiral Shares	Portfolio Assets : \$24,004 Million
Fund Family : Vanguard	Portfolio Manager : Shortsleeve/Chang
Ticker : VWEAX	PM Tenure : 2022--2022
Inception Date : 11/12/2001	Fund Style : IM U.S. High Yield Bonds (MF)
Fund Assets : \$21,056 Million	Style Benchmark : FTSE High Yield Market Index
Portfolio Turnover : 36%	

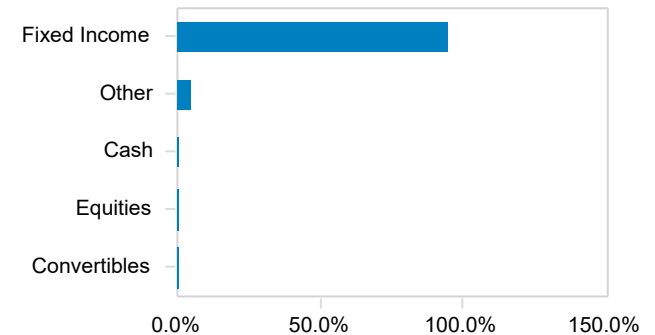
Fund Characteristics As of 03/31/2024

Avg. Coupon	5.50 %
Nominal Maturity	N/A
Effective Maturity	4.20 Years
Duration	3.30 Years
SEC 30 Day Yield	6.5
Avg. Credit Quality	BB

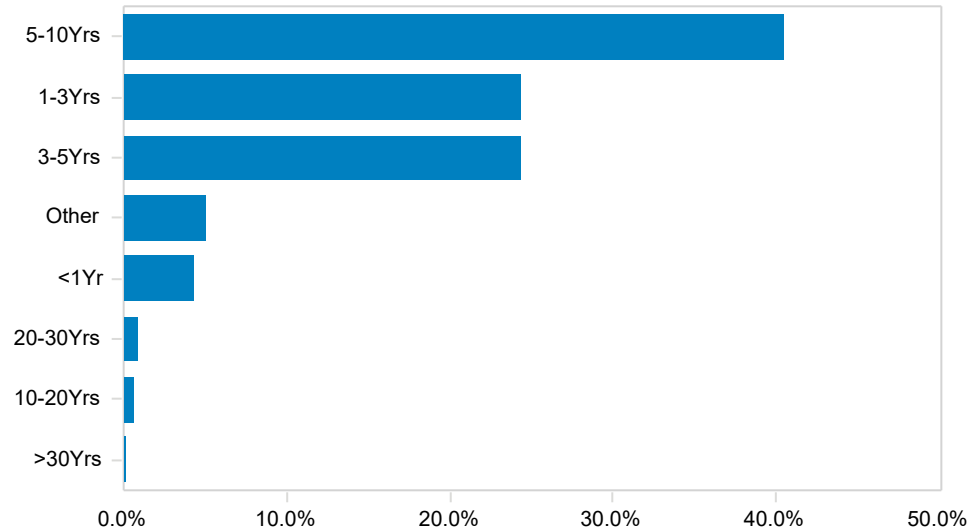
Top Ten Securities As of 03/31/2024

Corporate Notes/Bonds	89.3 %
Government Agency Securities	2.8 %
Treasury Notes/Bonds	2.8 %
Fgn. Currency Denominated Bonds	0.1 %

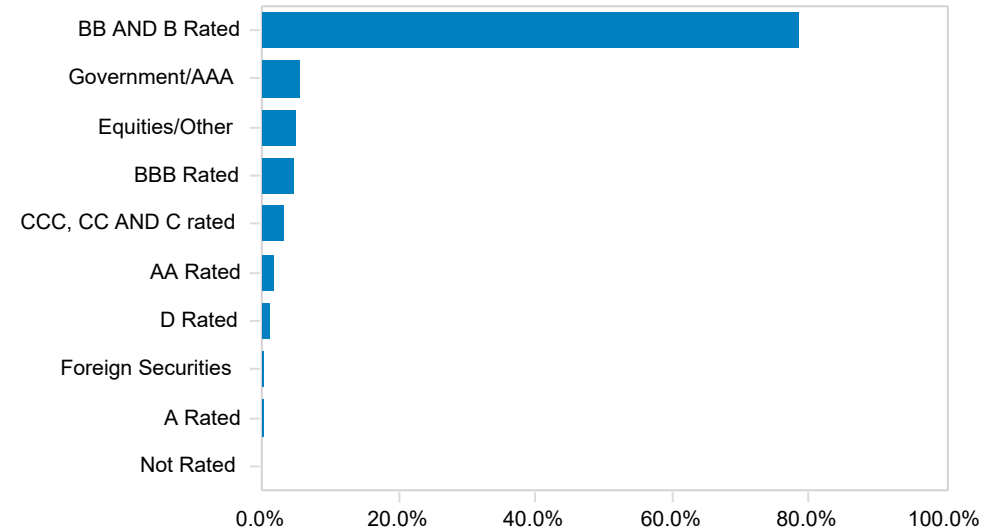
Asset Allocation As of 03/31/2024



Maturity Distribution As of 03/31/2024



Sector/Quality Allocation As of 03/31/2024



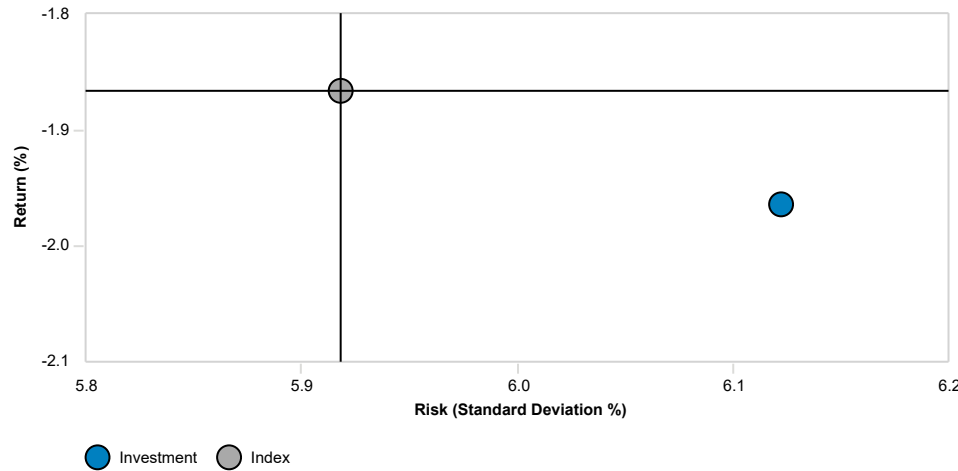
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	-1.96	6.12	-0.80	102.05	5	102.63	7
Index	-1.87	5.92	-0.82	100.00	5	100.00	7

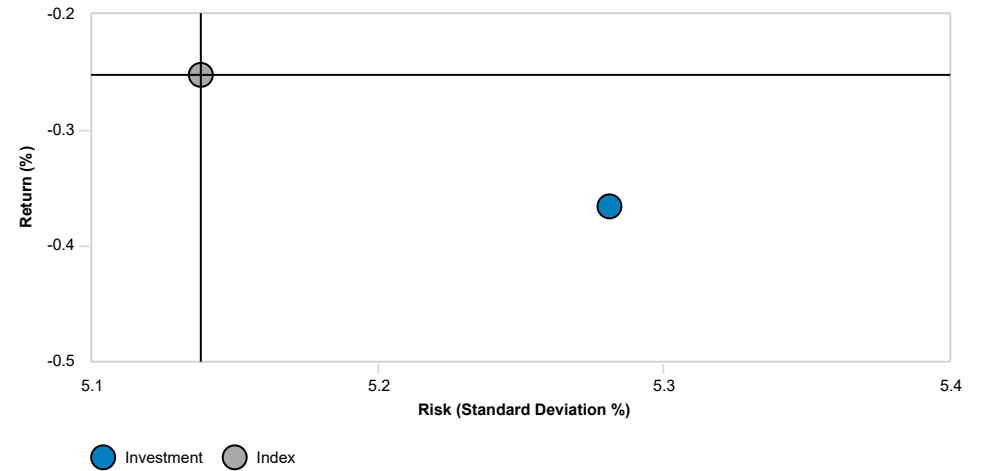
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	-0.37	5.28	-0.45	100.43	11	101.98	9
Index	-0.25	5.14	-0.44	100.00	11	100.00	9

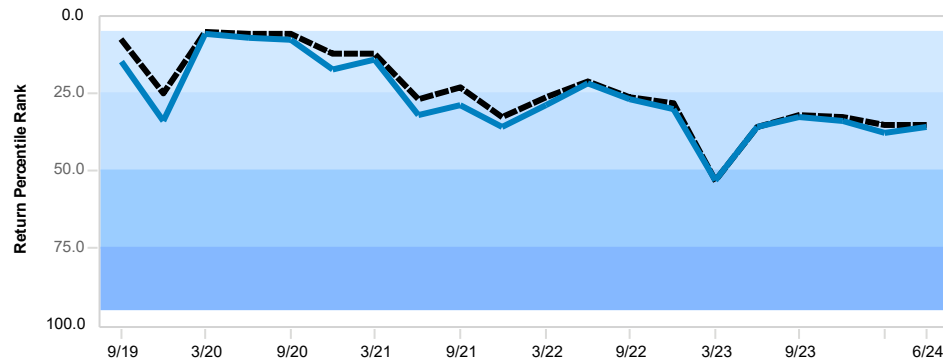
Risk and Return 3 Years



Risk and Return 5 Years

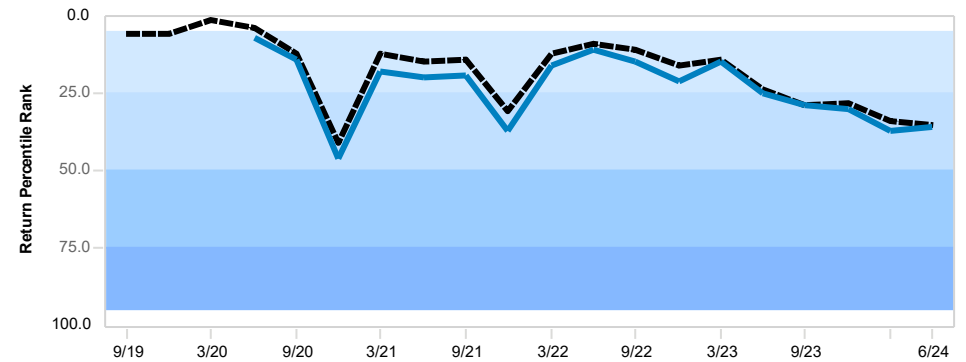


3 Year Rolling Percentile Rank IM International Fixed Income (MF)



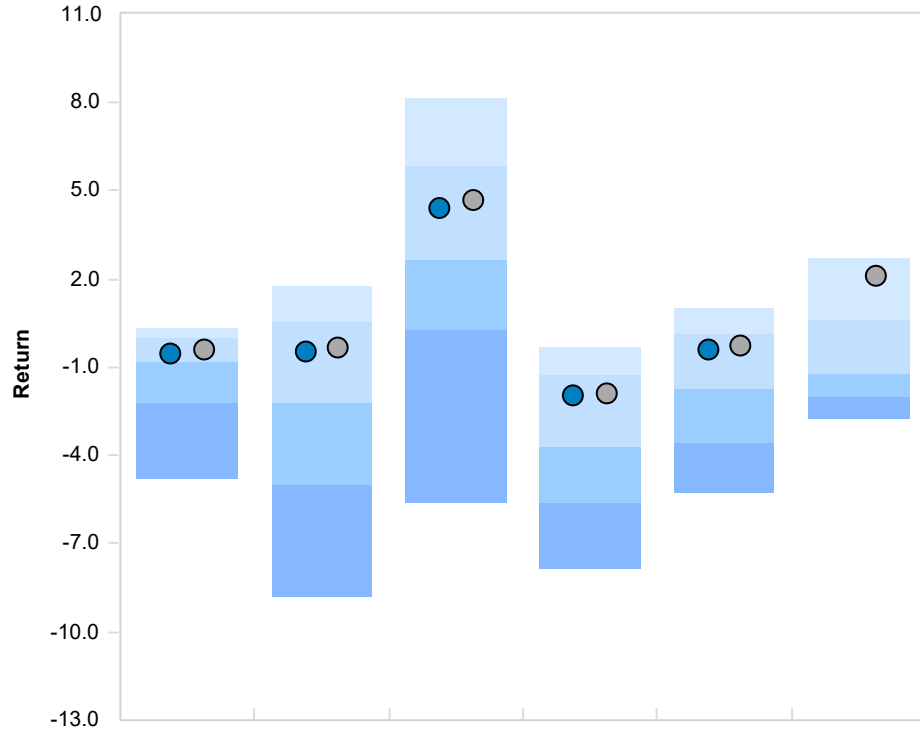
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	7 (35%)	12 (60%)	1 (5%)	0 (0%)
Index	20	9 (45%)	10 (50%)	1 (5%)	0 (0%)

5 Year Rolling Percentile Rank IM International Fixed Income (MF)

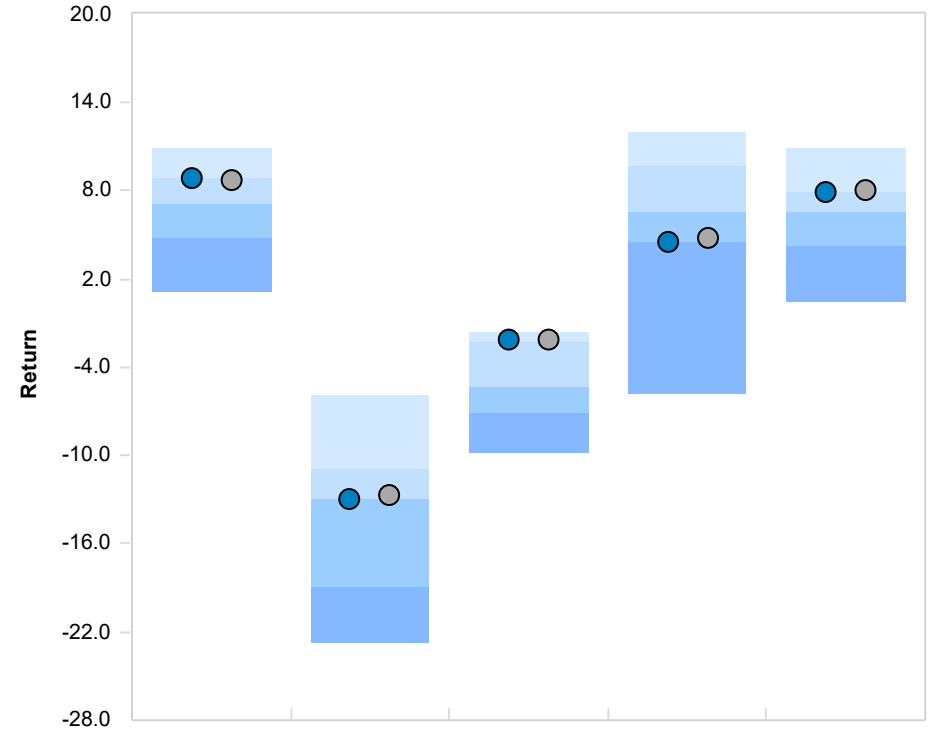


	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	17	11 (65%)	6 (35%)	0 (0%)	0 (0%)
Index	20	14 (70%)	6 (30%)	0 (0%)	0 (0%)

Peer Group Analysis - IM International Fixed Income (MF)



Peer Group Analysis - IM International Fixed Income (MF)



Financial Reconciliation Since Inception Ending June 30, 2024

	Market Value 06/01/2015	Net Flows	Return On Investment	Market Value 06/30/2024
Investment	9,329,282	-2,425,000	1,546,042	8,450,324

Comparative Performance

	1 Qtr Ending Mar-2024	1 Qtr Ending Dec-2023	1 Qtr Ending Sep-2023	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022
Investment	0.06	6.50	-1.46	0.14	3.58	-0.05
Index	0.09	6.38	-1.29	0.37	3.18	0.08
Median	0.09	6.38	-1.29	0.37	3.18	0.08

Mutual Fund Holdings Analysis
Vanguard International Bond (VTIFX)
June 30, 2024

Fund Information As of 06/30/2024

Fund Name :	Vanguard Charlotte Funds: Vanguard Total International Bond Index Fund; Institutional Class Shares	Portfolio Assets :	\$92,396 Million
Fund Family :	Vanguard	Portfolio Manager :	Barrickman/Talone
Ticker :	VTIFX	PM Tenure :	2013--2022
Inception Date :	05/31/2013	Fund Style :	IM International Fixed Income (MF)
Fund Assets :	\$12,829 Million	Style Benchmark :	FTSE Non-U.S. World Government Bond
Portfolio Turnover :	29%		

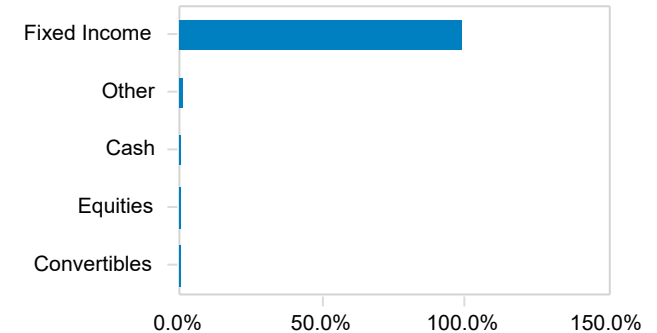
Fund Characteristics As of 03/31/2024

Avg. Coupon	2.40 %
Nominal Maturity	N/A
Effective Maturity	8.90 Years
Duration	7.30 Years
SEC 30 Day Yield	N/A
Avg. Credit Quality	N/A

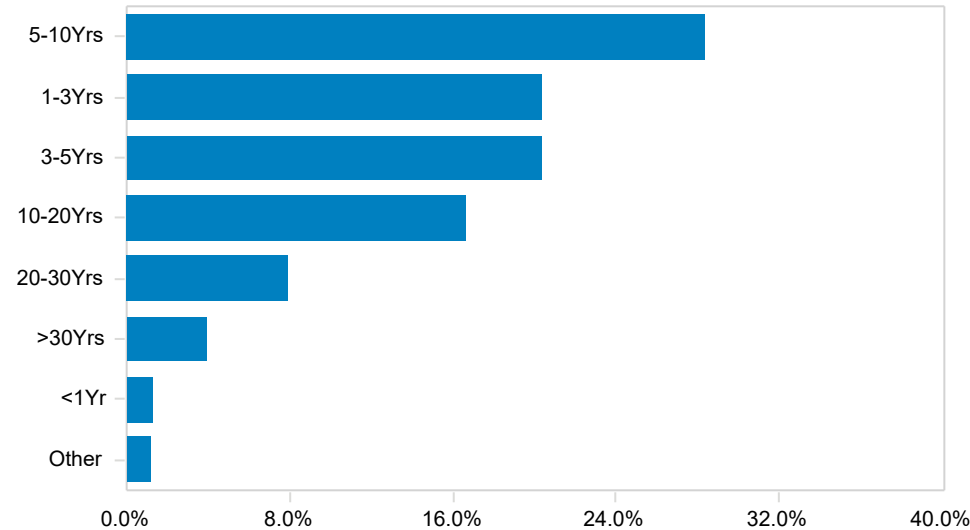
Top Ten Securities As of 03/31/2024

Fgn. Currency Denominated Bonds	78.3 %
Corporate Notes/Bonds	15.1 %
Asset Backed Securities	5.4 %

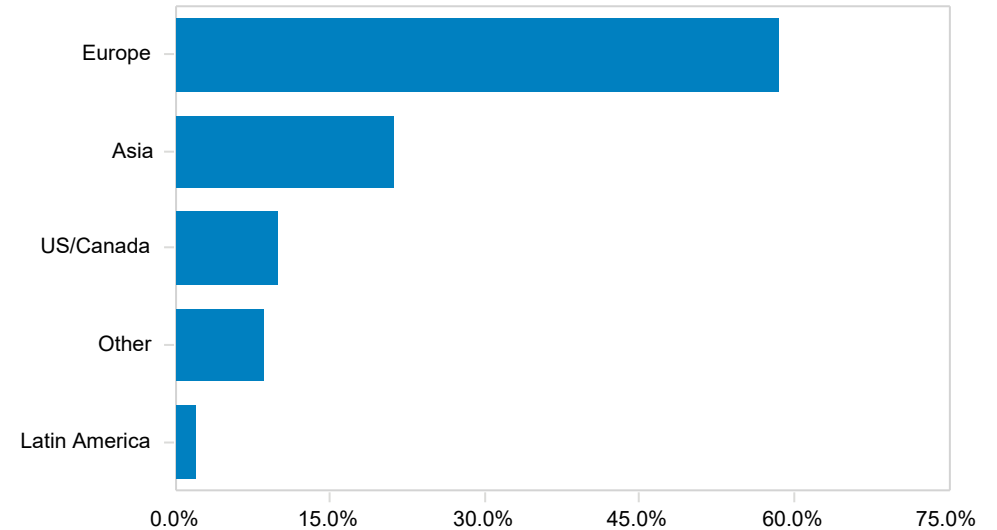
Asset Allocation As of 03/31/2024



Maturity Distribution As of 03/31/2024



Sector/Quality Allocation As of 03/31/2024



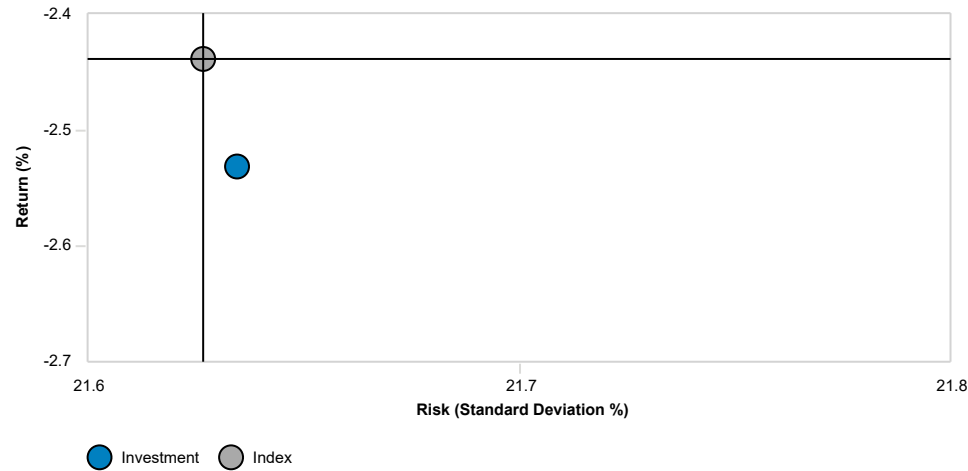
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	-2.53	21.63	-0.15	99.89	6	100.17	6
Index	-2.44	21.63	-0.14	100.00	6	100.00	6

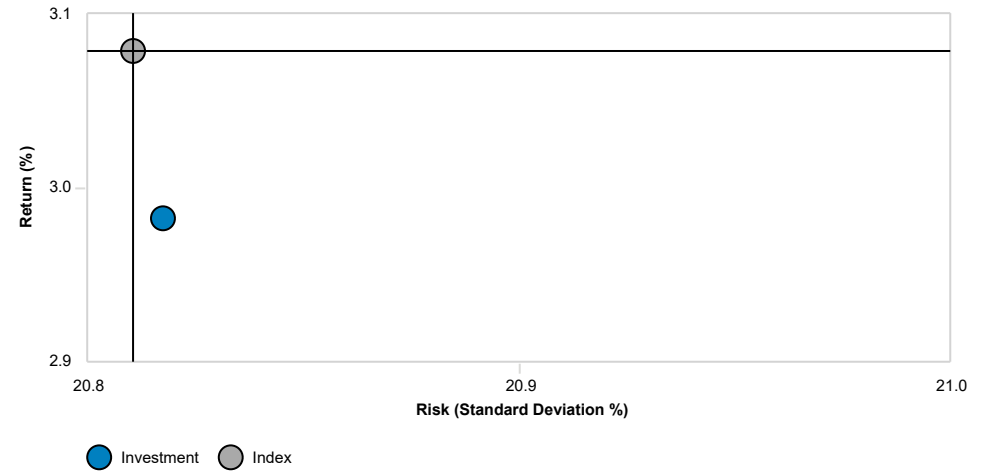
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	2.98	20.82	0.14	99.85	13	100.16	7
Index	3.08	20.81	0.15	100.00	13	100.00	7

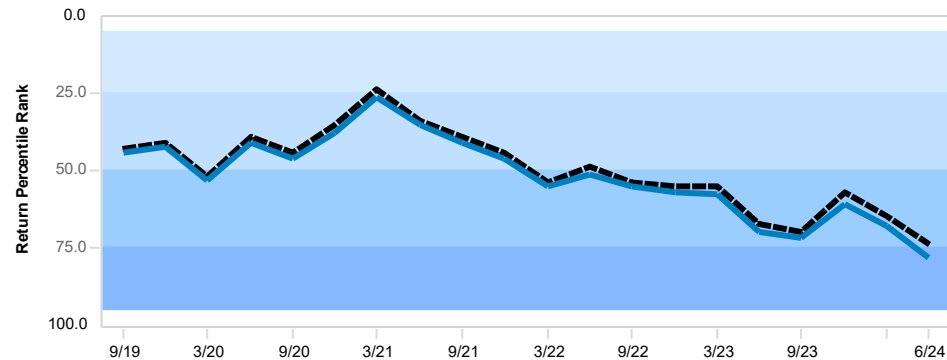
Risk and Return 3 Years



Risk and Return 5 Years

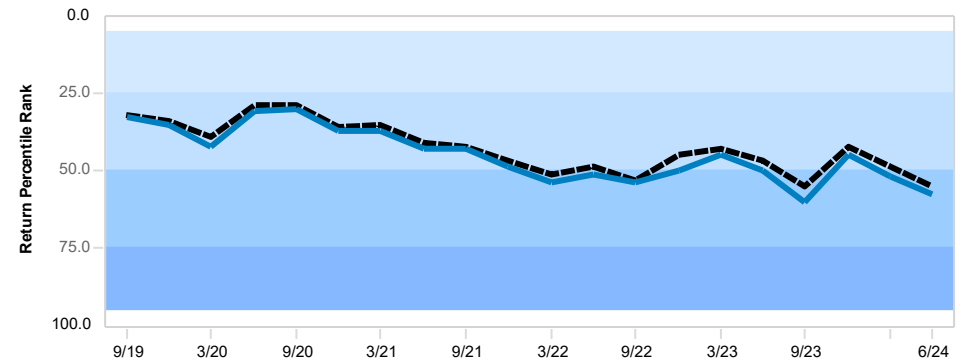


3 Year Rolling Percentile Rank IM Real Estate Sector (MF)



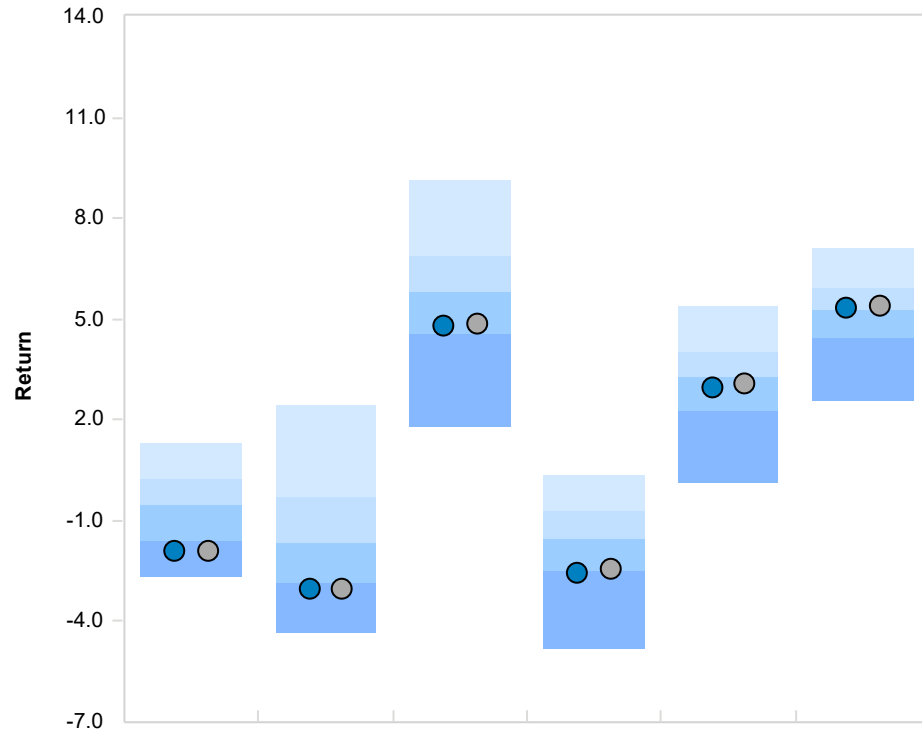
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	0 (0%)	9 (45%)	10 (50%)	1 (5%)
Index	20	1 (5%)	9 (45%)	10 (50%)	0 (0%)

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

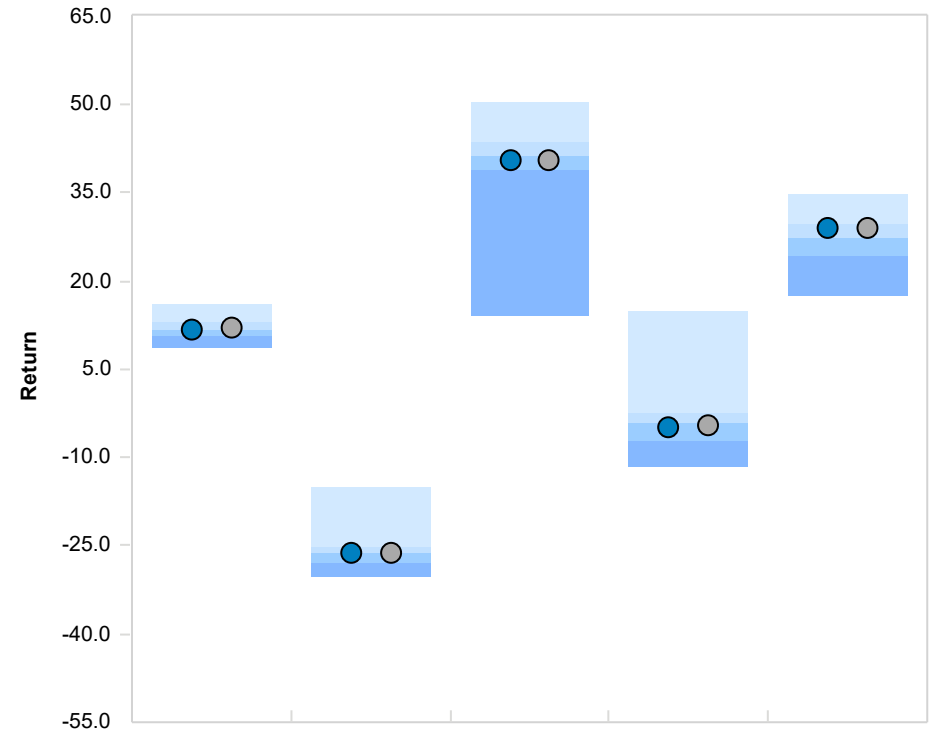


	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	0 (0%)	14 (70%)	6 (30%)	0 (0%)
Index	20	0 (0%)	16 (80%)	4 (20%)	0 (0%)

Peer Group Analysis - IM Real Estate Sector (MF)



Peer Group Analysis - IM Real Estate Sector (MF)



Financial Reconciliation Since Inception Ending June 30, 2024

	Market Value 10/01/2010	Net Flows	Return On Investment	Market Value 06/30/2024
Investment	4,801,552	-1,776,630	10,444,768	13,469,690

Comparative Performance

	1 Qtr Ending Mar-2024	1 Qtr Ending Dec-2023	1 Qtr Ending Sep-2023	1 Qtr Ending Jun-2023	1 Qtr Ending Mar-2023	1 Qtr Ending Dec-2022
Investment	-1.16 (56)	18.13 (11)	-8.50 (79)	1.63 (54)	1.79 (82)	4.36 (25)
Index	-1.15 (56)	18.18 (10)	-8.50 (79)	1.68 (51)	1.83 (81)	4.35 (27)
Median	-1.05	16.27	-7.66	1.70	2.56	3.86

Fund Information As of 06/30/2024

Fund Name :	Vanguard Specialized Funds: Vanguard Real Estate Index Fund; Institutional Class Shares	Portfolio Assets :	\$63,201 Million
Fund Family :	Vanguard	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 :	\$10,043 Million	Style Benchmark :	Vanguard Spliced REIT Index
Portfolio Turnover :	9%		

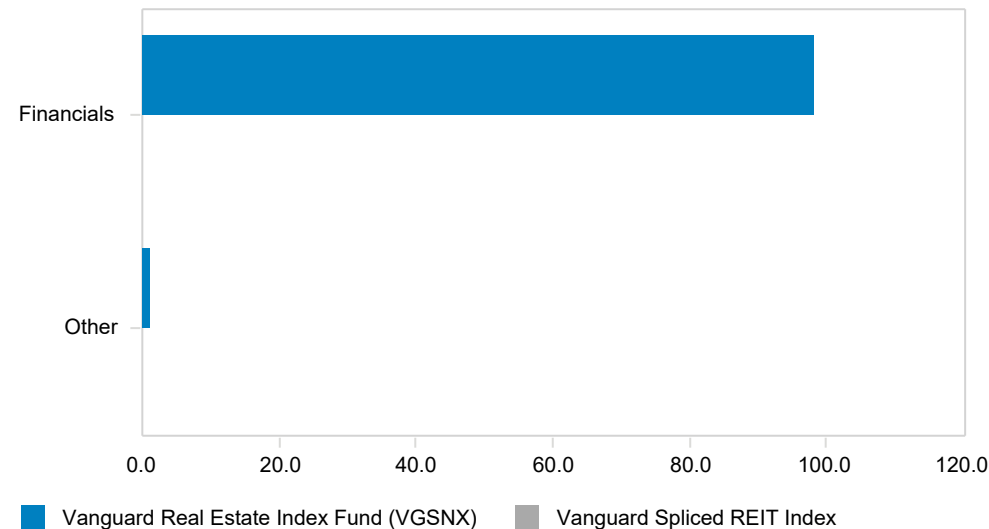
Portfolio Characteristics As of 05/31/2024

	Portfolio	Benchmark
Total Securities	163	N/A
Avg. Market Cap	42,156,443,167	-
Price/Earnings (P/E)	41.91	N/A
Price/Book (P/B)	5.87	N/A
Dividend Yield	4.63	N/A
Annual EPS	4.56	N/A
5 Yr EPS	6.25	N/A
3 Yr EPS Growth	14.02	N/A
Beta (5 Years, Monthly)	1.00	1.00

Top Ten Securities As of 05/31/2024

Vanguard Real Estate II Index Fund;Insti	13.3 %
Prologis Inc ORD	6.7 %
American Tower Corp ORD	6.0 %
Equinix Inc ORD	4.6 %
Welltower Inc ORD	3.8 %
Simon Property Group Inc ORD	3.2 %
Realty Income Corp ORD	3.0 %
Digital Realty Trust Inc ORD	3.0 %
Crown Castle Inc ORD	2.9 %
Public Storage ORD	2.8 %

Sector Weights As of 05/31/2024



Region (%) As of 06/30/2024

No data found.

Total Fund Policy			
Allocation Mandate	Weight (%)	Allocation Mandate	Weight (%)
Jan-1979		Jul-2014	
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
Jun-2010		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	Nov-2014	
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
Jun-2013		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 June 30, 2024

Allocation Mandate	Weight (%)
Jun-2015	
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
Dec-2018	
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 (%)
Oct-2019	
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
Mar-2020	
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

Allocation Mandate	Weight (%)
May-2024	
S&P 500 Index	5.00
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	30.00
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

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

Small Cap Index Policy	
Allocation Mandate	Weight (%)
Jul-2009	
Vanguard Spliced Small Cap Index	100.00
Dec-2018	
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

Active Return	- Arithmetic difference between the manager's performance and the designated benchmark return over a specified time period.
Alpha	- 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.
Beta	- A measure of the sensitivity of a portfolio to the movements in the market. It is a measure of the portfolio's systematic risk.
Consistency	- 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.
Distributed to Paid In (DPI)	- 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.
Down Market Capture	- The ratio of average portfolio performance over the designated benchmark during periods of negative returns. A lower value indicates better product performance
Downside Risk	- 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.
Excess Return	- Arithmetic difference between the manager's performance and the risk-free return over a specified time period.
Excess Risk	- A measure of the standard deviation of a portfolio's performance relative to the risk free return.
Information Ratio	- 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.
Public Market Equivalent (PME)	- 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.
R-Squared	- 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.
Return	- Compounded rate of return for the period.
Sharpe Ratio	- 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.
Standard Deviation	- 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.
Total Value to Paid In (TVPI)	- 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
Tracking Error	- This is a measure of the standard deviation of a portfolio's returns in relation to the performance of its designated market benchmark.
Treynor Ratio	- 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.
Up Market Capture	- The ratio of average portfolio performance over the designated benchmark during periods of positive returns. A higher value indicates better product performance.

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Methodology for this Award: For the 2022 Greenwich Quality Award for Overall U.S. Investment Consulting – Midsize Consultants – Between February and November 2022, Coalition Greenwich conducted interviews with 727 individuals from 590 of the largest tax-exempt funds in the United States. These U.S.-based institutional investors are corporate and union funds, public funds, and endowment and foundation funds, with either pension or investment pool assets greater than \$150 million. Study participants were asked to provide quantitative and qualitative evaluations of their asset management and investment consulting providers, including qualitative assessments of those firms soliciting their business and detailed information on important market trends.

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