

Investment Performance Review
Period Ending December 31, 2020

Retirement Board of Allegheny County



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

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

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

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

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

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

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

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

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



Mike Welker, CFA
CEO

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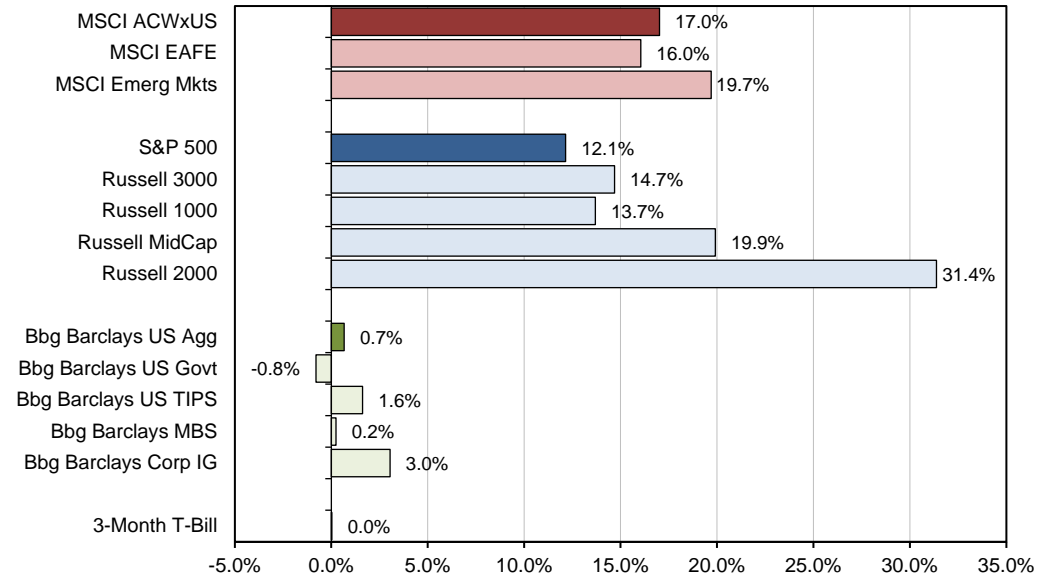


4th Quarter 2020 Market Environment

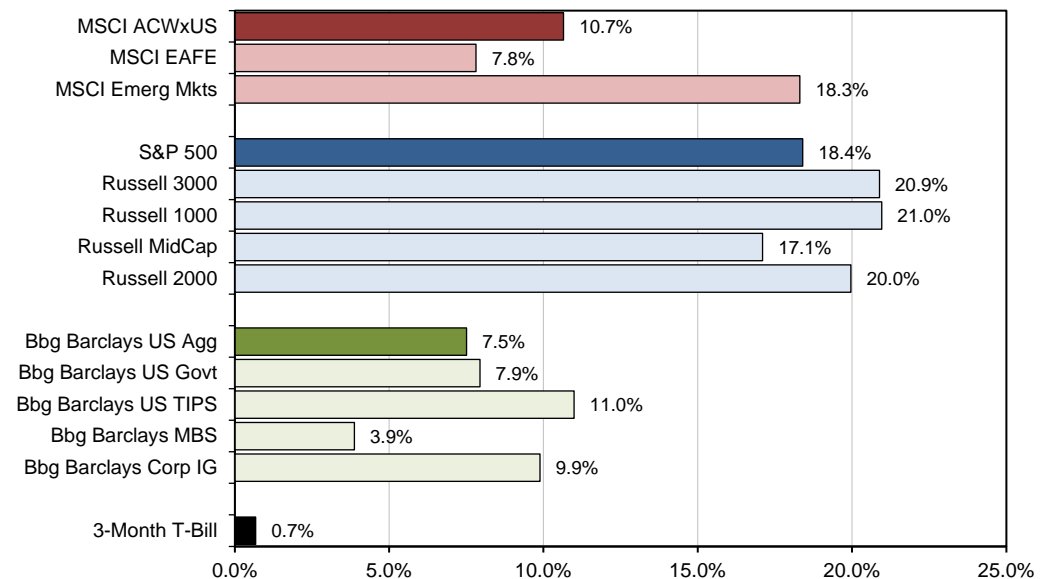


- Investment market index returns were broadly positive during the 4th quarter of 2020 except for the US Government bond benchmark. Performance during the period was largely driven by expectations related to the rollout of vaccines to treat the pandemic, the resolution of the US Presidential election,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

Quarter Performance



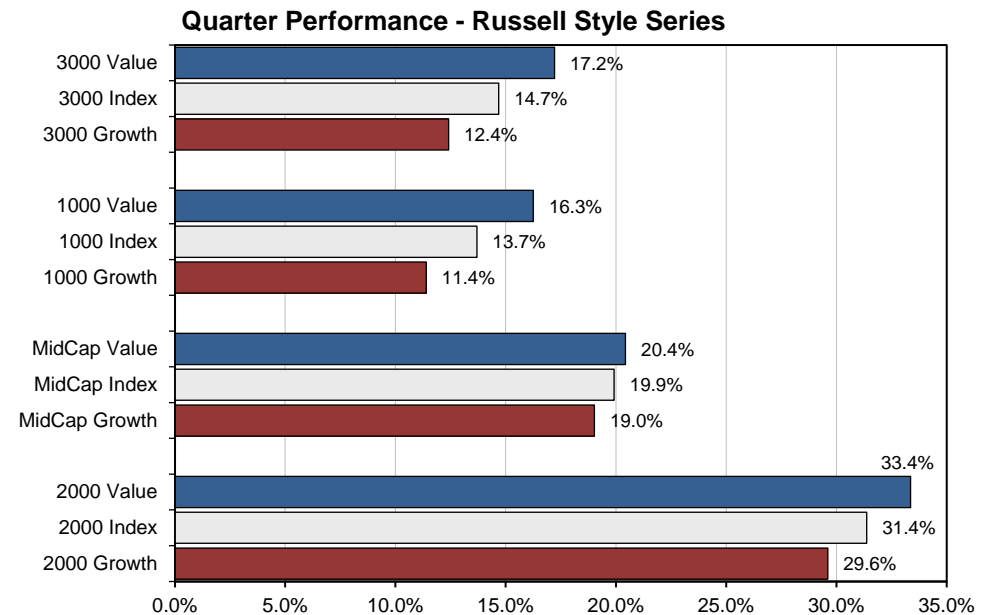
1-Year Performance



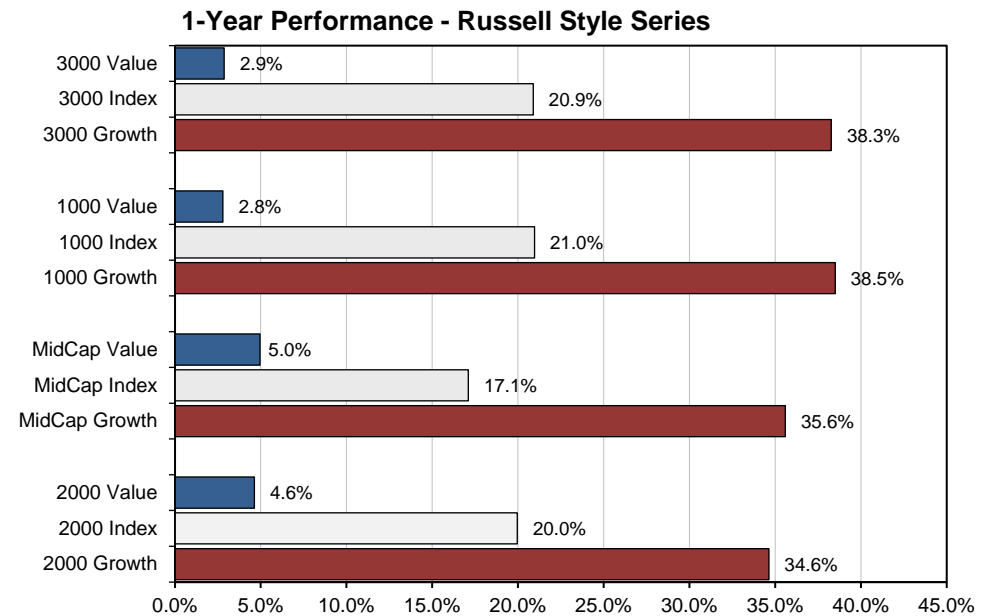
Source: Investment Metrics



- Despite 2020 experiencing one of the most dramatic drawdowns in history, US equities managed to recover all of their losses and closed the year delivering three straight quarters of strong gains across the capitalization and style spectrum. During the 4th quarter, value stocks reversed the recent trend and outperformed growth stocks across the full capitalization spectrum. It is important to note, value indexes contain large exposures to sectors like energy and financials which performed well during the 4th quarter. For the period, the Russell 2000 Value Index was the best performing style index with a return of 33.4% (also a record for the index). This performance was followed by mid and large cap value index returns of 20.4% and 16.3%, respectively. While slightly lower relative to their value counterparts, growth style benchmarks were also strong for the quarter with the small cap growth index returning 29.6% while mid and large cap growth stocks posted returns of 19.0% and 11.4%, respectively.



- Despite the 4th quarter's trend reversal, for the full year, growth-oriented stocks significantly outperformed value stocks across all market capitalizations with each growth benchmark posting returns in excess of 30.0%. The widest performance dispersion between growth and value for the year was in the large cap space with the Russell 1000 Growth Index returning 38.5%, which outpaced the large cap value benchmark by more than 35.0%. A combination of factors drove the performance of growth stocks during the year including investors seeking companies with the ability to growth revenues, structural shifts in the economy related to technologies, and momentum.

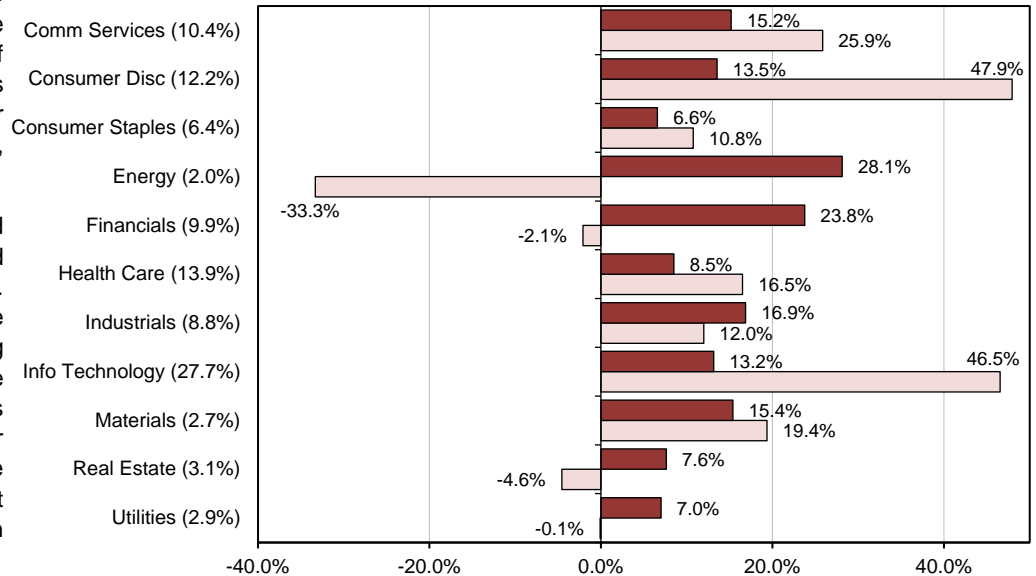


Source: Investment Metrics

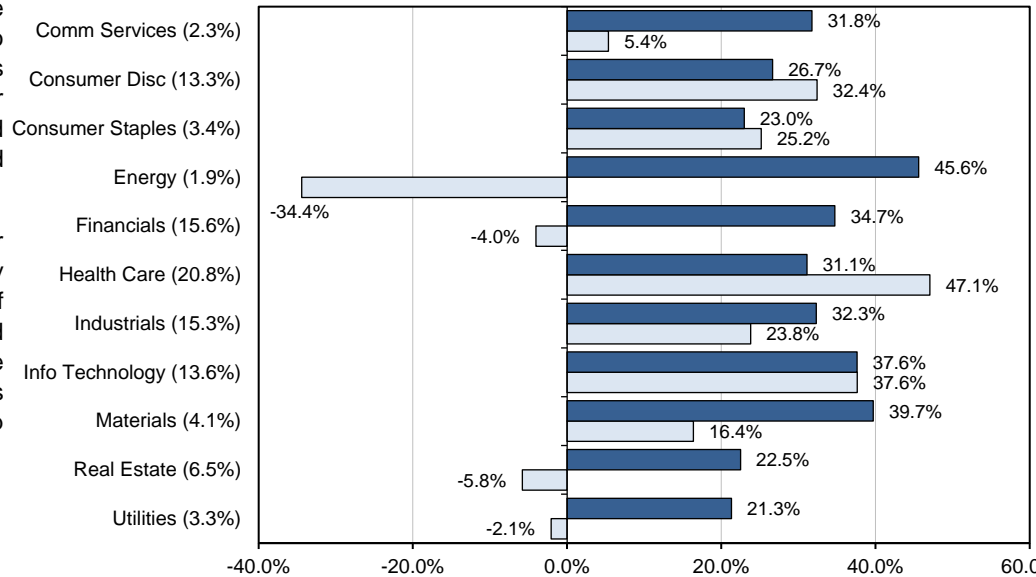


- Sector performance was positive across all eleven large cap economic sectors for the 4th quarter. However, only five sectors outpaced the return of the broader Russell 1000 Index. The positive news surrounding the release of COVID-19 vaccines provided the catalyst for cyclical sectors to rebound as expectations for economic growth improved. The best performing sectors for the quarter were energy, financials, and industrials with returns of 28.1%, 23.8%, and 16.9%, respectively.
- Over the trailing 1-year period, seven of the eleven large cap sectors produced positive results. Performance was led by the consumer discretionary and technology sectors which delivered returns of 47.9% and 46.5%, respectively. In a sign of narrow leadership, only three of the eleven sectors exceeded the return of the broad benchmark over the full year. In contrast to the strong positive performance in some sectors, four sectors that disappointed for the year were energy (-33.3%), real estate (-4.6%), financials (-2.1%), and utilities (-0.1%). The significant drawdown in energy prices earlier in the year combined with declining commercial real estate prices put downward pressure on these sectors. Finally, the staggering dispersion between the best performing (consumer discretionary) and worst-performing (energy) sectors in the large cap benchmark was in excess of 81.0% for the year.
- Quarterly results for small cap sectors were higher than their respective large capitalization counterparts. All eleven sectors posted positive returns for the period with six of eleven outpacing the Russell 2000 Index return. Similar to large caps, economically sensitive sectors such as energy (45.6%), materials (39.7%), technology (37.6%), and financials (34.7%) drove results. Sector performance was largely attributable to rising commodity prices, a continued decline in the US dollar, and expectations that global economic growth would accelerate following the rollout of vaccines.
- Over the trailing 1-year period, despite the strong broad market results, sector returns were more mixed. Negative sector performance was realized in energy (-34.4%), real estate (-5.8%), financials (-4.0%), and utilities (-2.1%). Much of the year's negative results were seen following the drawdown experienced during the 1st quarter in the initial reaction to the pandemic. In contrast, the healthcare sector delivered strong results (47.1%) for the period as investors looked for opportunities to invest in companies with the potential to develop therapeutics and treatments for COVID-19.

Russell 1000 ■ Quarter □ 1-Year



Russell 2000 ■ Quarter □ 1-Year



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 December 31, 2020

Top 10 Weighted Stocks				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
Apple Inc	6.03%	14.8%	82.3%	Information Technology
Microsoft Corp	4.69%	6.0%	42.5%	Information Technology
Amazon.com Inc	3.89%	3.4%	76.3%	Consumer Discretionary
Facebook Inc A	1.85%	4.3%	33.1%	Communication Services
Tesla Inc	1.50%	64.5%	743.4%	Consumer Discretionary
Alphabet Inc A	1.48%	19.6%	30.9%	Communication Services
Alphabet Inc Class C	1.43%	19.2%	31.0%	Communication Services
Berkshire Hathaway Inc Class B	1.23%	8.9%	2.4%	Financials
Johnson & Johnson	1.17%	6.5%	10.9%	Health Care
JPMorgan Chase & Co	1.08%	33.2%	-5.5%	Financials

Top 10 Performing Stocks (by Quarter)				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
Nordstrom Inc	0.01%	161.8%	-22.7%	Consumer Discretionary
Coty Inc Class A	0.01%	160.0%	-36.9%	Consumer Staples
Lemonade Inc Ordinary Shares	0.00%	146.4%	N/A	Financials
Capri Holdings Ltd	0.02%	133.3%	10.1%	Consumer Discretionary
Kohl's Corp	0.02%	119.6%	-16.8%	Consumer Discretionary
Enphase Energy Inc	0.05%	112.5%	571.5%	Information Technology
Spirit AeroSystems Hldgs Inc Class A	0.01%	106.8%	-46.3%	Industrials
Olin Corp	0.01%	100.3%	50.6%	Materials
Tapestry Inc	0.02%	98.8%	17.0%	Consumer Discretionary
Eaton Vance Corp	0.02%	90.9%	60.5%	Financials

Bottom 10 Performing Stocks (by Quarter)				
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector
Zoom Video Communications Inc	0.16%	-28.2%	395.8%	Information Technology
SolarWinds Corp Ordinary Shares	0.00%	-26.5%	-19.4%	Information Technology
Beyond Meat Inc	0.02%	-24.7%	65.3%	Consumer Staples
BigCommerce Hldgs Inc Ord. Series 1	0.00%	-23.0%	N/A	Information Technology
Wayfair Inc Class A	0.04%	-22.4%	149.9%	Consumer Discretionary
Global Blood Therapeutics Inc	0.01%	-21.5%	-45.5%	Health Care
Vroom Inc Ordinary Shares	0.00%	-20.9%	N/A	Consumer Discretionary
Jamf Holding Corp Ordinary Shares	0.00%	-20.4%	N/A	Information Technology
bluebird bio Inc	0.01%	-19.8%	-50.7%	Health Care
Quidel Corp	0.02%	-18.1%	139.4%	Health Care

Top 10 Weighted Stocks				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
Penn National Gaming Inc	0.54%	18.8%	237.9%	Consumer Discretionary
Caesars Entertainment Inc	0.54%	32.5%	24.5%	Consumer Discretionary
Plug Power Inc	0.51%	152.9%	973.1%	Industrials
Sunrun Inc	0.42%	-10.0%	402.4%	Industrials
Mirati Therapeutics Inc	0.38%	32.3%	70.4%	Health Care
Darling Ingredients Inc	0.37%	60.1%	105.4%	Consumer Staples
Ultragenyx Pharmaceutical Inc	0.35%	68.4%	224.1%	Health Care
Deckers Outdoor Corp	0.32%	30.3%	69.8%	Consumer Discretionary
II-VI Inc	0.31%	87.3%	125.6%	Information Technology
Arrowhead Pharmaceuticals Inc	0.31%	78.2%	21.0%	Health Care

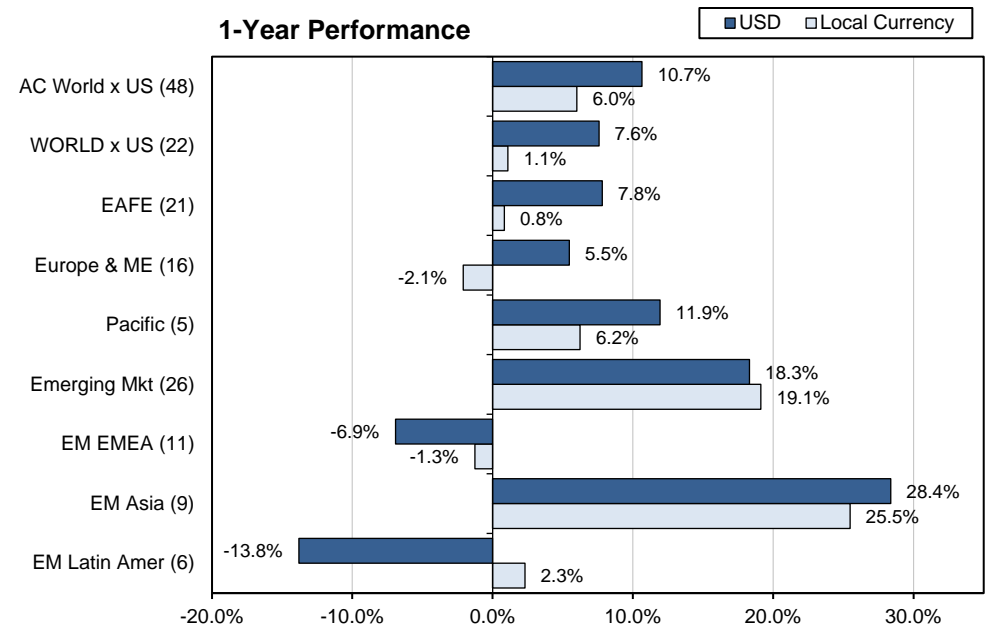
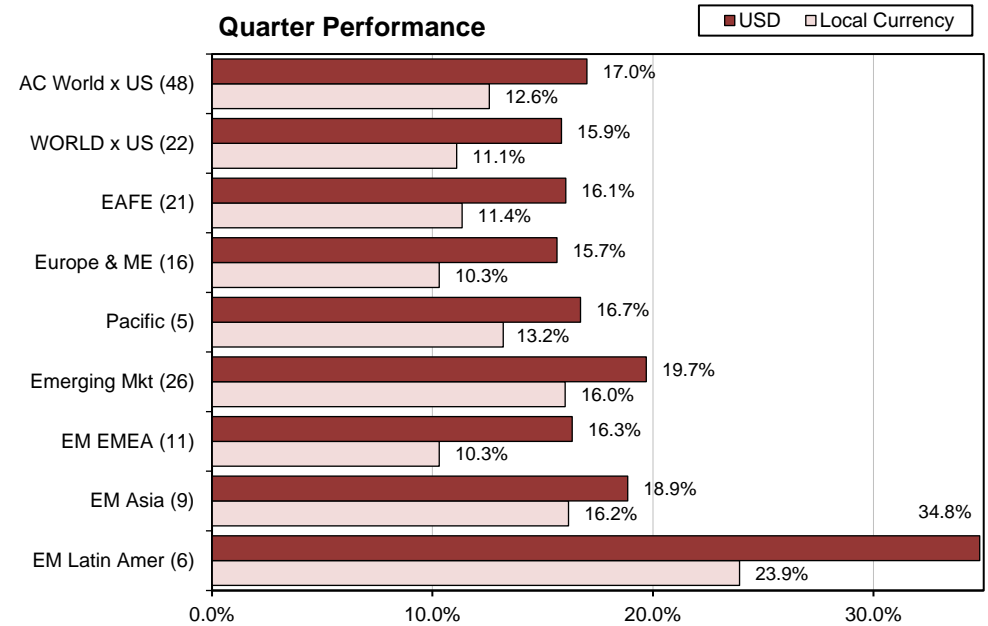
Top 10 Performing Stocks (by Quarter)				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
FuelCell Energy Inc	0.13%	422.0%	345.0%	Industrials
Silvergate Capital Corp Class A	0.05%	416.0%	367.1%	Financials
Magnite Inc	0.13%	342.2%	276.3%	Consumer Discretionary
SM Energy Co	0.03%	287.3%	-44.9%	Energy
Solid Biosciences Inc	0.01%	273.4%	70.3%	Health Care
Five Prime Therapeutics Inc	0.02%	261.9%	270.6%	Health Care
Arvinas Inc	0.12%	259.7%	106.7%	Health Care
Beam Therapeutics Inc	0.13%	231.6%	N/A	Health Care
Veru Inc	0.02%	230.2%	158.2%	Consumer Staples
Clean Energy Fuels Corp	0.04%	216.9%	235.9%	Energy

Bottom 10 Performing Stocks (by Quarter)				
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector
Aprea Therapeutics Inc	0.00%	-79.6%	-89.3%	Health Care
Brainstorm Cell Therapeutics Inc	0.00%	-73.3%	5.7%	Health Care
Catabasis Pharmaceuticals Inc	0.00%	-65.4%	-63.8%	Health Care
Assembly Biosciences Inc	0.01%	-63.2%	-70.4%	Health Care
Ovid Therapeutics Inc	0.00%	-59.8%	-44.3%	Health Care
AMC Entertainment Hldgs Inc Class A	0.01%	-55.0%	-70.5%	Communication Services
Aytu BioScience Inc	0.00%	-49.7%	-38.5%	Health Care
Cyclerion Therapeutics Inc Ord. Shrs.	0.00%	-49.7%	12.5%	Health Care
iBio Inc	0.01%	-48.3%	321.7%	Health Care
Vaxcyte Inc Ordinary Shares	0.02%	-46.2%	N/A	Health Care

Source: Morningstar Direct



- Broad international equity returns were positive in both local currency and USD terms for the 4th quarter. Much like US equity markets, the international markets were positively impacted by the announcement and release of COVID-19 vaccines and benefited from additional monetary stimulus. The US dollar continued its year-to-date decline against most major currencies through the period which acted as a tailwind for US investor returns.
- For the 4th quarter, developed market equities were positive in both USD and local currency terms with the MSCI EAFE Index returning 16.1% and 11.4%, respectively. Despite several European countries reporting rising infection rates, expectations for continued economic growth and continued coordinated central bank policies, drove markets higher. In particular, the European Union approved a 1.8 trillion-euro financial package while the European Central Bank increased its asset purchases from 500 billion euros to 1.85 trillion euros with the goal of providing support to the markets and stimulating growth.
- Relative to developed markets, emerging markets significantly outperformed during the quarter as investors anticipated future economic growth would benefit companies in these markets. The MSCI Emerging Market Index returned 19.7% in USD and 16.0% in local currency terms. The relative outperformance in emerging markets was largely driven by Latin American countries, specifically Colombia, which posted an outsized return of 48.7% during the quarter. The recovery in oil prices also contributed to the region's outperformance as several Latin American countries (Brazil, Mexico, and Columbia) are highly sensitive to commodity price fluctuations.
- The trailing 1-year returns for international developed market equities were broadly positive across regions and currencies. Returns were higher in US dollar terms as the currency weakened against most major developed market currencies on concerns surrounding monetary stimulus, growth in the US debt, and uncertainty regarding the contested US election. For the period, the MSCI EAFE Index returned 7.8% in US dollar terms and 0.8% in local currency terms.
- During the trailing 1-year period, emerging markets posted strong returns in both US dollar and local currency terms. The MSCI Emerging Markets Index rose 18.3% in US dollar and 19.1% in local currency terms. Within the index, Asian countries outperformed as evidenced by the EM Asia component, which rose 28.4% US dollar terms. These countries have excelled in containing the pandemic which has led to faster local recoveries.



Source: MSCI Global Index Monitor (Returns are Net)



The Market Environment
US Dollar International Index Attribution & Country Detail
As of December 31, 2020

MSCI - EAFE	Sector Weight	Quarter Return	1-Year Return
Communication Services	5.2%	16.4%	12.6%
Consumer Discretionary	12.5%	22.4%	15.8%
Consumer Staples	10.9%	6.9%	5.7%
Energy	3.1%	31.2%	-27.5%
Financials	16.3%	25.4%	-3.9%
Health Care	12.9%	4.0%	11.4%
Industrials	15.2%	15.8%	10.9%
Information Technology	8.9%	16.9%	28.4%
Materials	7.9%	20.1%	20.6%
Real Estate	3.1%	14.9%	-6.9%
Utilities	3.9%	13.6%	14.2%
Total	100.0%	16.1%	7.8%

MSCI - ACWixUS	Sector Weight	Quarter Return	1-Year Return
Communication Services	7.1%	13.7%	18.9%
Consumer Discretionary	13.8%	15.9%	22.9%
Consumer Staples	8.9%	8.5%	6.7%
Energy	4.3%	22.5%	-23.5%
Financials	18.0%	24.7%	-4.5%
Health Care	9.6%	6.2%	15.4%
Industrials	11.6%	16.2%	10.8%
Information Technology	12.7%	24.7%	45.4%
Materials	8.1%	20.0%	21.2%
Real Estate	2.6%	12.6%	-9.8%
Utilities	3.3%	14.4%	9.4%
Total	100.0%	17.0%	10.7%

MSCI - Emerging Mkt	Sector Weight	Quarter Return	1-Year Return
Communication Services	11.6%	11.6%	27.5%
Consumer Discretionary	18.3%	7.6%	36.7%
Consumer Staples	5.9%	16.7%	10.7%
Energy	5.0%	14.9%	-15.4%
Financials	18.0%	24.4%	-8.2%
Health Care	4.7%	19.2%	52.8%
Industrials	4.3%	21.3%	5.0%
Information Technology	20.5%	34.2%	60.1%
Materials	7.6%	29.8%	24.8%
Real Estate	2.1%	6.1%	-16.9%
Utilities	2.0%	21.1%	-5.2%
Total	100.0%	19.7%	18.3%

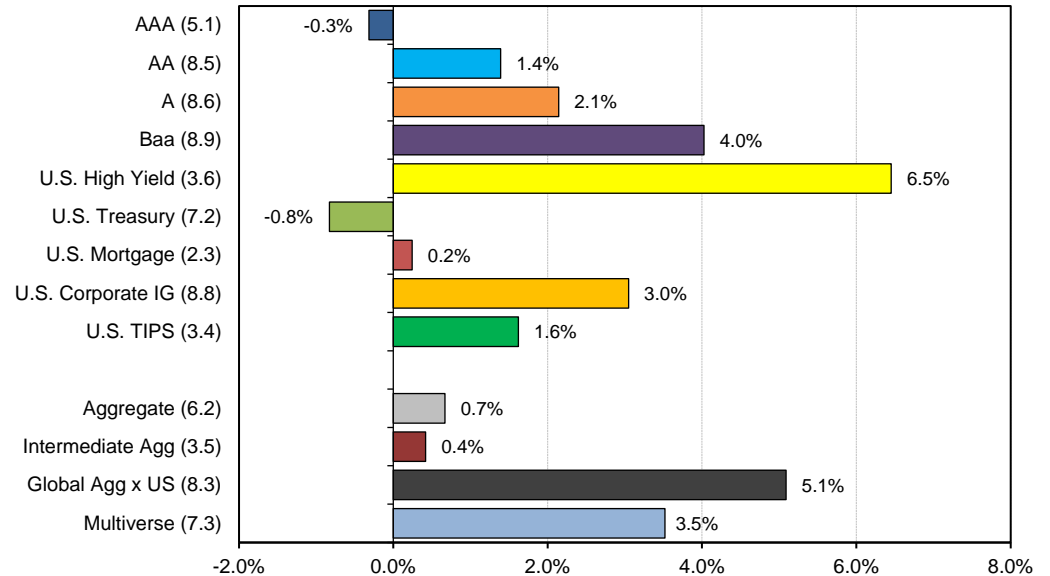
Country	MSCI-EAFE Weight	MSCI-ACWixUS Weight	Quarter Return	1- Year Return
Japan	25.3%	15.8%	15.3%	14.5%
United Kingdom	14.0%	8.8%	16.9%	-10.5%
France	11.1%	6.9%	20.4%	4.1%
Switzerland	9.7%	6.0%	8.2%	11.6%
Germany	9.4%	5.9%	11.5%	11.6%
Australia	7.1%	4.4%	22.9%	8.7%
Netherlands	3.9%	2.4%	18.4%	24.2%
Sweden	3.4%	2.1%	14.4%	23.9%
Hong Kong	3.3%	2.0%	15.5%	5.8%
Denmark	2.5%	1.6%	14.0%	43.7%
Spain	2.4%	1.5%	27.7%	-4.8%
Italy	2.4%	1.5%	22.4%	1.8%
Finland	1.1%	0.7%	10.1%	20.4%
Singapore	1.1%	0.7%	18.8%	-7.5%
Belgium	1.0%	0.6%	18.3%	-8.1%
Ireland	0.7%	0.4%	13.0%	15.1%
Israel	0.6%	0.4%	19.3%	15.0%
Norway	0.6%	0.4%	18.8%	-1.8%
New Zealand	0.3%	0.2%	13.2%	19.9%
Austria	0.2%	0.1%	47.3%	-3.3%
Portugal	0.2%	0.1%	21.6%	14.4%
Total EAFE Countries	100.0%	62.5%	16.1%	7.8%
Canada		6.3%	13.9%	5.3%
Total Developed Countries		68.8%	15.9%	7.6%
China		12.2%	11.2%	29.5%
Korea		4.2%	38.3%	44.6%
Taiwan		4.0%	23.2%	41.0%
India		2.9%	21.0%	15.6%
Brazil		1.6%	37.0%	-19.0%
South Africa		1.1%	22.1%	-4.0%
Russia		0.9%	21.6%	-12.5%
Saudi Arabia		0.8%	6.5%	0.7%
Thailand		0.6%	25.5%	-11.7%
Mexico		0.5%	31.0%	-1.9%
Malaysia		0.5%	10.1%	3.7%
Indonesia		0.4%	31.8%	-8.1%
Philippines		0.2%	22.2%	-3.4%
Qatar		0.2%	2.4%	-2.4%
Poland		0.2%	16.5%	-11.4%
Chile		0.2%	28.5%	-5.6%
United Arab Emirates		0.2%	10.6%	-0.9%
Turkey		0.1%	30.3%	-8.8%
Peru		0.1%	29.9%	-4.7%
Hungary		0.1%	39.2%	-11.7%
Colombia		0.1%	48.7%	-19.0%
Argentina		0.0%	21.2%	12.7%
Czech Republic		0.0%	34.1%	-4.0%
Greece		0.0%	16.4%	-26.9%
Egypt		0.0%	-5.0%	-22.5%
Pakistan		0.0%	7.7%	-17.1%
Total Emerging Countries		31.0%	19.7%	18.3%
Total ACWixUS Countries		100.0%	17.0%	10.7%

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.

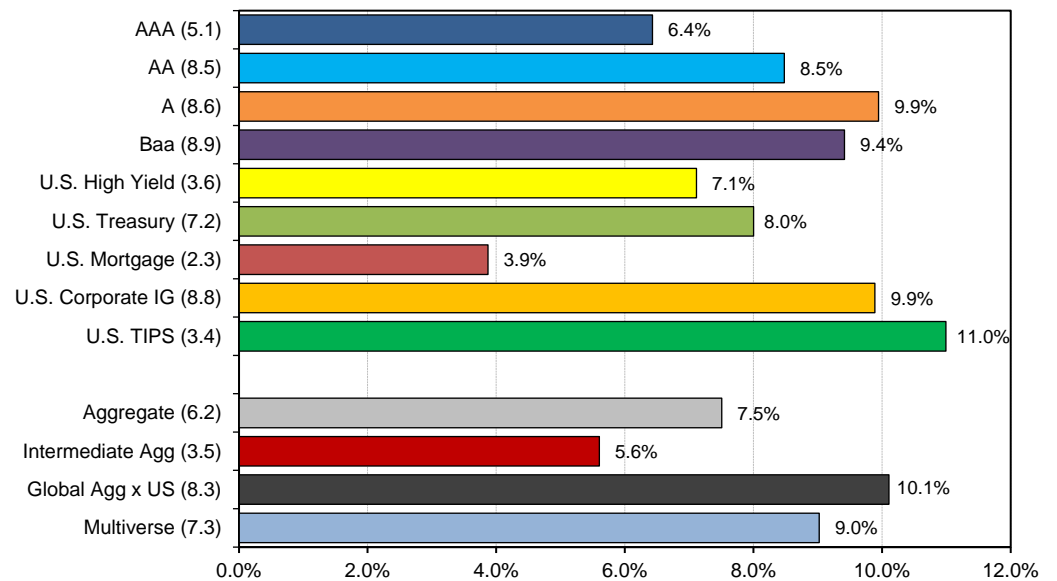


- During the 4th quarter, lower-quality bonds significantly outpaced higher-quality issues as investors continued to search for higher-yielding assets and became more comfortable accepting higher risk. For the quarter, the best performing category was high yield bonds which returned 6.5% and the laggard was US Treasury bonds which declined -0.8%. Returns of both US High Yield and Investment Grade Corporate bonds were driven by rising expectations of future US economic growth. Global bonds delivered a solid quarter returning 5.1% with results primarily attributable to a weakening US dollar. Finally, US TIPS increased 1.6% as inflation expectations rose during the period. During the quarter, the broad Bloomberg Barclays US Aggregate Index returned a slim 0.7%. While the return of the index was positive for the period, the performance of both US Treasury and mortgage bonds were a drag on results. US interest rates also began to rise during the period which acted as a general headwind to bond performance. With the duration of the broad index now over six years, any meaningful rise in interest rates will likely have a negative impact on future performance.
- Similar to stocks, over the trailing 1-year period bond markets experienced strong results despite some indices suffering significant drawdowns during the 1st quarter. Generally, lower-quality bonds outperformed higher-quality issues for the period, US Corporate Investment Grade bonds still delivered an equity-like 9.9% return for the year and US Treasury bonds managed a solid return of 8.0%. While High Yield bonds also delivered positive results, the benchmark lagged higher-quality issues due to the 1st quarter's selloff. For the year, both Investment Grade and High Yield spreads relative to US Treasury bonds narrowed, which provided a boost to non-Treasury results. Finally, US TIPS were the best performing segment of the market rising 11.0% for the year on expectations of future inflation resulting from accelerating economic growth.
- For the year, global bonds also performed well. The Bloomberg Barclays Global Aggregate Bond Index returned 10.1%, outpacing the domestic Bloomberg Barclays US Aggregate Index's return of 7.5%. Some of the relative outperformance of global bonds can be attributed to the decline in the US dollar relative to other currencies. Additionally, US interest rates began to rise later in the year which negatively contributed to performance while global Treasury bond rates remained largely steady.

Quarter Performance



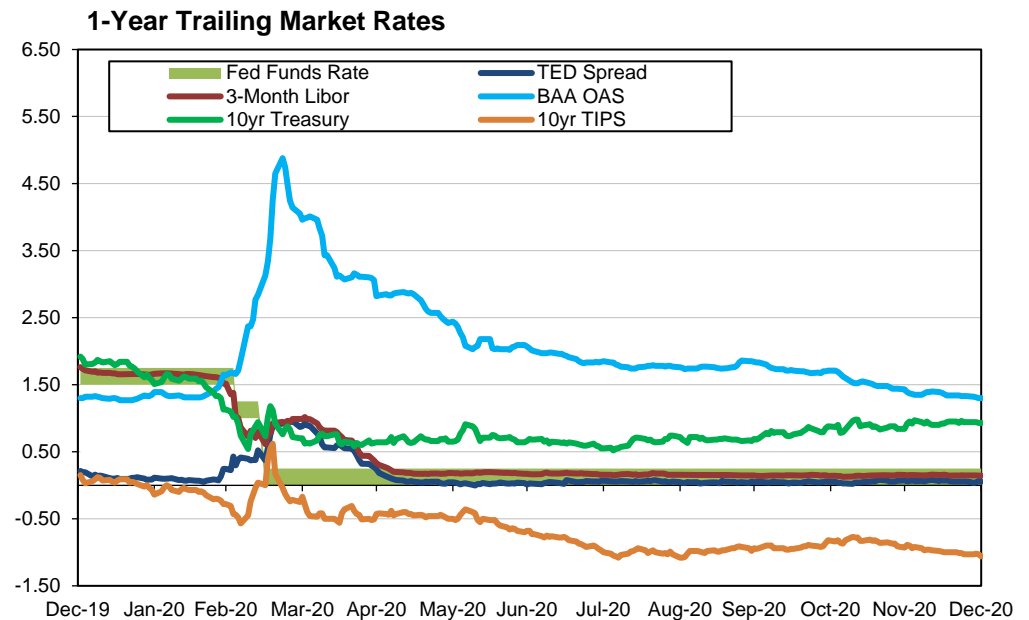
1-Year Performance



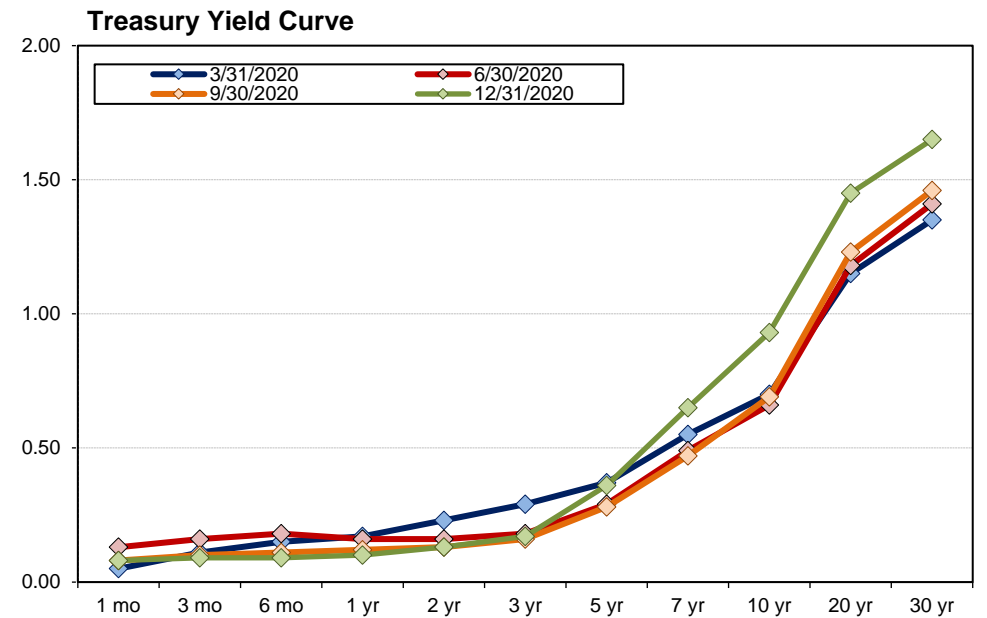
Source: Bloomberg



- Much of the index performance detailed in the bar graphs on the previous page is visible on a time series basis by reviewing the yield graph to the right. The "1-Year Trailing Market Rates" chart illustrates that over the last year, the US 10-year Treasury (green line) fell from yields of greater than 1.5% to a low of roughly 0.5%, before ending the year slightly higher than 0.9%. During the year, US interest rates declined significantly following the onset of the pandemic and the response from the US Federal Reserve Bank (Fed) to lower rates back near zero. During the 4th quarter, US interest rates began to rise in anticipation of higher US economic growth. The blue line illustrates changes in the BAA OAS (Option Adjusted Spread). This measure quantifies the additional yield premium that investors require to purchase and hold non-Treasury investment grade issues. The line illustrates the dramatic increase in credit spreads during the 1st quarter as global economic growth collapsed. Since that time, credit spreads have steadily declined as concerns over potential widespread defaults have subsided. The green band across the graph illustrates the Fed Fund Rate. At the beginning of 2020 the rate range was 1.50%-1.75% however, as a result of the pandemic, the Fed cut the range to 0.00%-0.25%, where it remained at the end of the 4th quarter. The Fed has indicated a willingness to keep US interest rates lower in an effort to supply the market with liquidity and help stimulate growth.



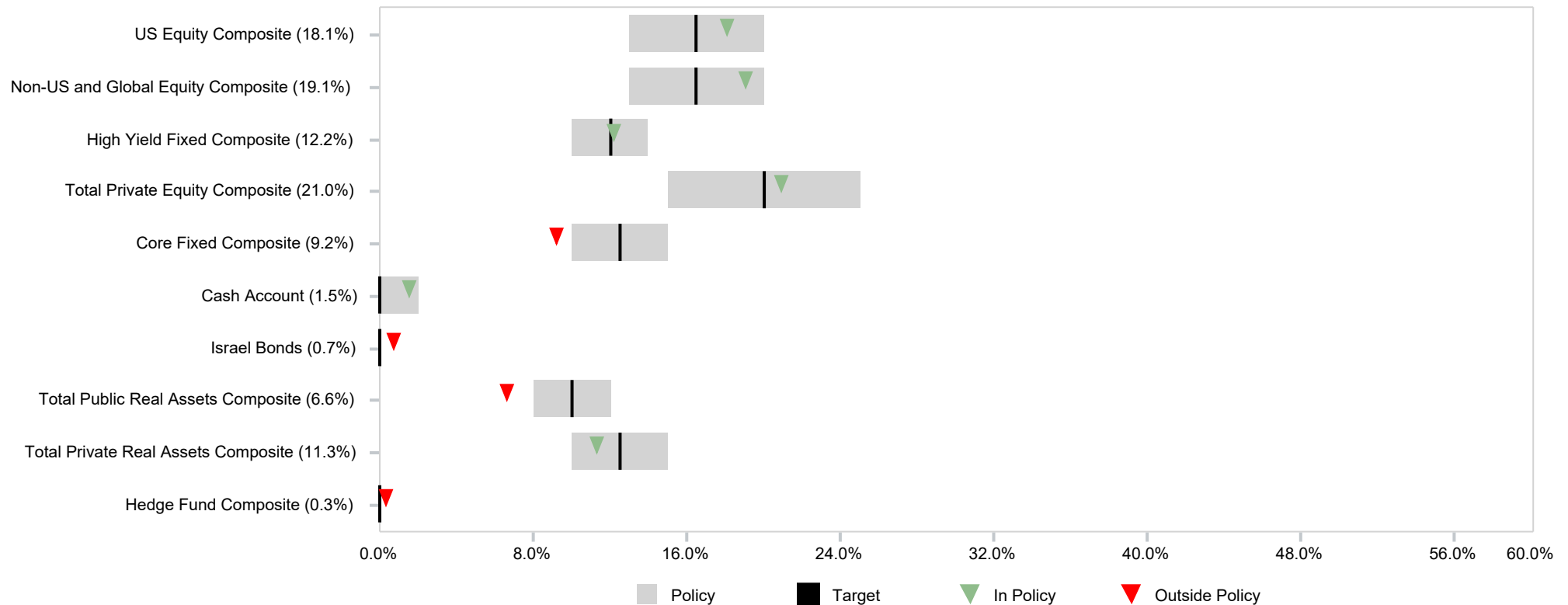
- The lower graph provides a snapshot of the US Treasury yield curve at the end of each of the last four quarters. While short-term US interest rates have remained largely unchanged throughout the year, longer-term interest rates began moving higher during the 4th quarter. The combination of additional fiscal stimulus, increased US Treasury issuance, and expectations for increasing inflation, all contributed to higher long-term rates. Importantly, the Fed has stated that it is comfortable allowing US inflation to exceed its 2% target in the near-term in an effort to achieve a long-term average of 2% inflation. This approach, combined with the need to dramatically increase debt issuance to supply fiscal stimulus, could result in higher US interest rates as markets normalize.



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



Executive Summary



Asset Allocation Compliance

	Asset Allocation \$	Current Allocation (%)	Minimum Allocation (%)	Maximum Allocation (%)	Target Allocation (%)
Total Fund	1,001,478,345	100.0	N/A	N/A	100.0
US Equity Composite	181,142,494	18.1	13.0	20.0	16.5
Non-US and Global Equity Composite	190,999,460	19.1	13.0	20.0	16.5
High Yield Fixed Composite	122,026,649	12.2	10.0	14.0	12.0
Total Private Equity Composite	209,832,950	21.0	15.0	25.0	20.0
Core Fixed Composite	92,049,258	9.2	10.0	15.0	12.5
Cash Account	15,036,468	1.5	0.0	2.0	0.0
Israel Bonds	7,449,854	0.7	0.0	0.0	0.0
Total Public Real Assets Composite	66,401,621	6.6	8.0	12.0	10.0
Total Private Real Assets Composite	113,477,778	11.3	10.0	15.0	12.5
Hedge Fund Composite	3,061,813	0.3	0.0	0.0	0.0

Asset Allocation includes assets of the Emerging, Minority, and Women owned Investment Manager Program. The Investment Policy Statement for the Retirement Board of Allegheny County allows for the Pension's asset allocation to temporarily fall outside of the stated policy ranges due to market fluctuations and the Pension's short-term cash flow needs. Recommendations are provided by the Pension's investment consultant regarding rebalancing of the Pension's asset allocation.



**Historical Asset Allocation
Total Fund**

As of December 31, 2020

Asset Allocation Attributes	Dec-2020		Sep-2020		Jun-2020		Mar-2020	
	(\$)	%	(\$)	%	(\$)	%	(\$)	%
	Total Fund	1,001,478,345	100.00	941,004,689	100.00	914,329,050	100.00	853,214,290
Total Public Equity Composite	372,141,954	37.16	332,086,164	35.29	-	0.00	-	0.00
US Equity Composite	181,142,494	18.09	160,476,974	17.05	152,596,374	16.69	129,689,101	15.20
SSgA S&P 500 Index	98,460,158	9.83	89,758,272	9.54	85,256,129	9.32	72,787,707	8.53
Fragasso Large Core (EMWO)	5,996,108	0.60	5,374,197	0.57	4,908,395	0.54	5,122,069	0.60
Twin Capital Enhanced Equity	33,584,600	3.35	31,142,461	3.31	28,717,384	3.14	24,009,638	2.81
Earnest Small Value	14,500,459	1.45	11,188,602	1.19	11,238,228	1.23	9,781,593	1.15
Emerald Advisors Small Cap	15,151,956	1.51	11,976,361	1.27	12,304,143	1.35	10,053,168	1.18
Emerald Advisors All Cap (EMWO)	5,444,391	0.54	4,631,369	0.49	4,032,609	0.44	2,972,807	0.35
Ethos (EMWO)	1,823,352	0.18	1,523,095	0.16	1,416,830	0.15	1,137,701	0.13
CIM Small Cap (EMWO)	5,447,095	0.54	4,230,724	0.45	4,094,362	0.45	3,328,036	0.39
Cookson Peirce (EMWO)	734,375	0.07	651,892	0.07	628,293	0.07	496,383	0.06
Non US Equity Composite	189,635,847	18.94	170,406,775	18.11	157,712,009	17.25	130,744,345	15.32
SSgA ACWI ex US	36,545,346	3.65	33,176,262	3.53	31,218,398	3.41	26,853,299	3.15
Baillie Gifford Intl Equity	80,665,762	8.05	75,061,570	7.98	68,730,842	7.52	54,742,816	6.42
FIAM Select International Equity	40,473,954	4.04	34,508,081	3.67	32,240,232	3.53	27,071,171	3.17
Segall, Bryant & Hamill	31,950,784	3.19	27,660,862	2.94	25,522,537	2.79	22,077,059	2.59
Global Equity Composite	1,363,614	0.14	1,202,415	0.13	1,121,495	0.12	983,468	0.12
Columbus Macro (EMWO)	1,363,614	0.14	1,202,415	0.13	1,121,495	0.12	983,468	0.12
Core Fixed Composite	92,049,258	9.19	91,611,331	9.74	90,783,112	9.93	87,330,406	10.24
C S McKee	34,682,571	3.46	34,471,981	3.66	34,108,211	3.73	32,615,933	3.82
Federated Core Broad	30,268,451	3.02	29,768,091	3.16	29,339,966	3.21	27,855,261	3.26
CIM Investment Mgmt	13,950,130	1.39	13,899,925	1.48	13,816,745	1.51	13,529,209	1.59
StoneRidge Partners (EMWO)	5,557,249	0.55	6,189,972	0.66	6,421,363	0.70	6,516,965	0.76
Gridiron Capital Fixed Income (EMWO)	4,746,562	0.47	4,457,249	0.47	4,294,677	0.47	4,106,755	0.48
FNB (EMWO)	2,844,296	0.28	2,824,114	0.30	2,802,149	0.31	2,706,283	0.32
High Yield Fixed Composite	122,026,649	12.18	115,189,754	12.24	110,149,769	12.05	100,950,223	11.83
Oaktree High Yield	66,100,725	6.60	62,205,149	6.61	59,454,759	6.50	54,713,257	6.41
Federated High Yield	52,490,844	5.24	49,725,242	5.28	47,580,256	5.20	43,384,803	5.08
Sound Point	3,435,080	0.34	3,259,363	0.35	3,114,755	0.34	2,852,164	0.33
TIPS Fixed Composite	40,538,874	4.05	39,894,926	4.24	38,717,790	4.23	42,021,433	4.93
MCM TIPS	40,538,874	4.05	39,894,926	4.24	38,717,790	4.23	42,021,433	4.93



**Historical Asset Allocation
Total Fund**

As of December 31, 2020

	Dec-2020		Sep-2020		Jun-2020		Mar-2020	
	(\$)	%	(\$)	%	(\$)	%	(\$)	%
ERECT Composite	9,912,474	0.99	9,851,930	1.05	9,718,261	1.06	9,646,257	1.13
ERECT Fund II	9,912,474	0.99	9,851,930	1.05	9,718,261	1.06	9,646,257	1.13
Real Estate Composite	103,565,303	10.34	102,119,746	10.85	100,929,333	11.04	102,738,899	12.04
Morgan Stanley Prime Property Fund	73,097,605	7.30	72,035,433	7.66	71,277,021	7.80	72,624,120	8.51
Oaktree Real Estate	6,955,225	0.69	7,002,697	0.74	7,035,603	0.77	7,179,497	0.84
Washington Alliance (EMWO)	12,824,195	1.28	12,672,926	1.35	11,753,894	1.29	12,070,967	1.41
Washington Alliance II (EMWO)	1,236,379	0.12	836,723	0.09	983,333	0.11	983,333	0.12
Private Equity Composite	185,755,110	18.55	183,395,139	19.49	176,478,580	19.30	181,452,118	21.27
Hedge Fund Composite	3,061,813	0.31	2,762,835	0.29	2,672,965	0.29	3,181,250	0.37
Gridiron Capital Multi-Asset (EMWO)	3,061,645	0.31	2,762,667	0.29	2,630,126	0.29	2,323,160	0.27
Maplewood (EMWO)	168	0.00	168	0.00	42,840	0.00	858,090	0.10
MLP Composite	25,862,747	2.58	25,310,206	2.69	28,197,259	3.08	21,688,538	2.54
Salient MLP Fund	12,767,066	1.27	10,738,297	1.14	12,077,934	1.32	9,559,713	1.12
Harvest MLP Fund	13,095,681	1.31	14,571,910	1.55	16,119,326	1.76	12,128,825	1.42
Life Settlement Composite	24,077,840	2.40	27,514,291	2.92	27,589,153	3.02	28,507,639	3.34
CCA Green	8,850,359	0.88	11,463,856	1.22	11,611,252	1.27	12,080,890	1.42
CCA Blue	2,319,380	0.23	2,381,548	0.25	2,534,176	0.28	2,617,378	0.31
CCA Black	7,980,044	0.80	8,410,096	0.89	8,192,017	0.90	8,404,359	0.99
CCA Longevity Fund VI LP	4,928,057	0.49	5,258,792	0.56	5,251,708	0.57	5,405,011	0.63
Israel Bonds	7,449,854	0.74	7,521,788	0.80	7,359,141	0.80	7,248,454	0.85
Cash Account	15,036,468	1.50	3,746,580	0.40	10,303,809	1.13	7,032,160	0.82



Financial Reconciliation					
	Market Value 10/01/2020	Net Flows	Income	Apprec./ Deprec.	Market Value 12/31/2020
Total Fund	941,004,689	-13,834,659	1,029,205	73,279,110	1,001,478,345
SSgA S&P 500 Index	89,758,272	-2,000,000	-	10,701,886	98,460,158
Fragasso Large Core (EMWO)	5,374,197	-8	3,227	618,692	5,996,108
Twin Capital Enhanced Equity	31,142,461	-1,000,012	20,150	3,422,001	33,584,600
Earnest Small Value	11,188,602	-	11,334	3,300,522	14,500,459
Emerald Advisors Small Cap	11,976,361	-	56,295	3,119,300	15,151,956
Emerald Advisors All Cap (EMWO)	4,631,369	-	-4,151	817,173	5,444,391
Ethos (EMWO)	1,523,095	-	-	300,258	1,823,352
CIM Small Cap (EMWO)	4,230,724	-	4,237	1,212,135	5,447,095
Cookson Peirce (EMWO)	651,892	-	279	82,204	734,375
US Equity Composite	160,476,974	-3,000,020	91,371	23,574,170	181,142,494
SSgA ACWI ex US	33,176,262	-2,000,000	-	5,369,084	36,545,346
Baillie Gifford Intl Equity	75,061,570	-5,000,000	-	10,604,192	80,665,762
FIAM Select International Equity	34,508,081	-	-	5,965,873	40,473,954
Segall, Bryant & Hamill	27,660,862	-41,984	-	4,331,906	31,950,784
Non US Equity Composite	170,406,775	-7,041,984	-	26,271,056	189,635,847
Columbus Macro (EMWO)	1,202,415	-	22	161,176	1,363,614
Global Equity Composite	1,202,415	-	22	161,176	1,363,614
C S McKee	34,471,981	-	229,676	-19,086	34,682,571
Federated Core Broad	29,768,091	-	135,686	364,674	30,268,451
CIM Investment Mgmt	13,899,925	-	80,962	-30,757	13,950,130
StoneRidge Partners (EMWO)	6,189,972	-650,591	34,550	-16,682	5,557,249
Gridiron Capital Fixed Income (EMWO)	4,457,249	-	6,351	282,963	4,746,562
FNB (EMWO)	2,824,114	-	-	20,182	2,844,296
Core Fixed Composite	91,611,331	-650,591	487,225	601,294	92,049,258
Oaktree High Yield	62,205,149	-27,011	-	3,922,587	66,100,725
Federated High Yield	49,725,242	-	-	2,765,602	52,490,844
Sound Point	3,259,363	-	-	175,717	3,435,080
High Yield Fixed Composite	115,189,754	-27,011	-	6,863,906	122,026,649
MCM TIPS	39,894,926	-	-	643,947	40,538,874
TIPS Fixed Composite	39,894,926	-	-	643,947	40,538,874
ERECT Fund II	9,851,930	-	-	60,544	9,912,474
ERECT Composite	9,851,930	-	-	60,544	9,912,474



Financial Reconciliation
Total Fund
1 Quarter Ending December 31, 2020

	Market Value 10/01/2020	Net Flows	Income	Apprec./ Deprec.	Market Value 12/31/2020
Morgan Stanley Prime Property Fund	72,035,433	-	-	1,062,171	73,097,605
Oaktree Real Estate	7,002,697	-61,959	-	14,487	6,955,225
Washington Alliance (EMWO)	12,672,926	-329,268	-	480,537	12,824,195
Washington Alliance II (EMWO)	836,723	399,656	-	-	1,236,379
Siguler Guff Distressed RE	9,571,966	-229,200	-	109,133	9,451,899
Real Estate Composite	102,119,746	-220,771	-	1,666,328	103,565,303
Private Equity Composite	183,395,139	-8,701,578	428,419	10,633,130	185,755,110
Gridiron Capital Multi-Asset (EMWO)	2,762,667	-	5,020	293,958	3,061,645
Maplewood (EMWO)	168	-	-	-	168
Hedge Fund Composite	2,762,835	-	5,020	293,958	3,061,813
Salient MLP Fund	10,738,297	-	18,798	2,009,972	12,767,066
Harvest MLP Fund	14,571,910	-5,000,000	-1,649	3,525,420	13,095,681
MLP Composite	25,310,206	-5,000,000	17,149	5,535,393	25,862,747
CCA Green	11,463,856	-	-	-2,613,497	8,850,359
CCA Blue	2,381,548	-	-	-62,167	2,319,380
CCA Black	8,410,096	-145,508	-	-284,543	7,980,044
CCA Longevity Fund VI LP	5,258,792	-330,735	-	-	4,928,057
Life Settlement Composite	27,514,291	-476,243	-	-2,960,208	24,077,840
Israel Bonds	7,521,788	-	-	-71,933	7,449,854
Cash Account	3,746,580	11,283,539	-	6,349	15,036,468

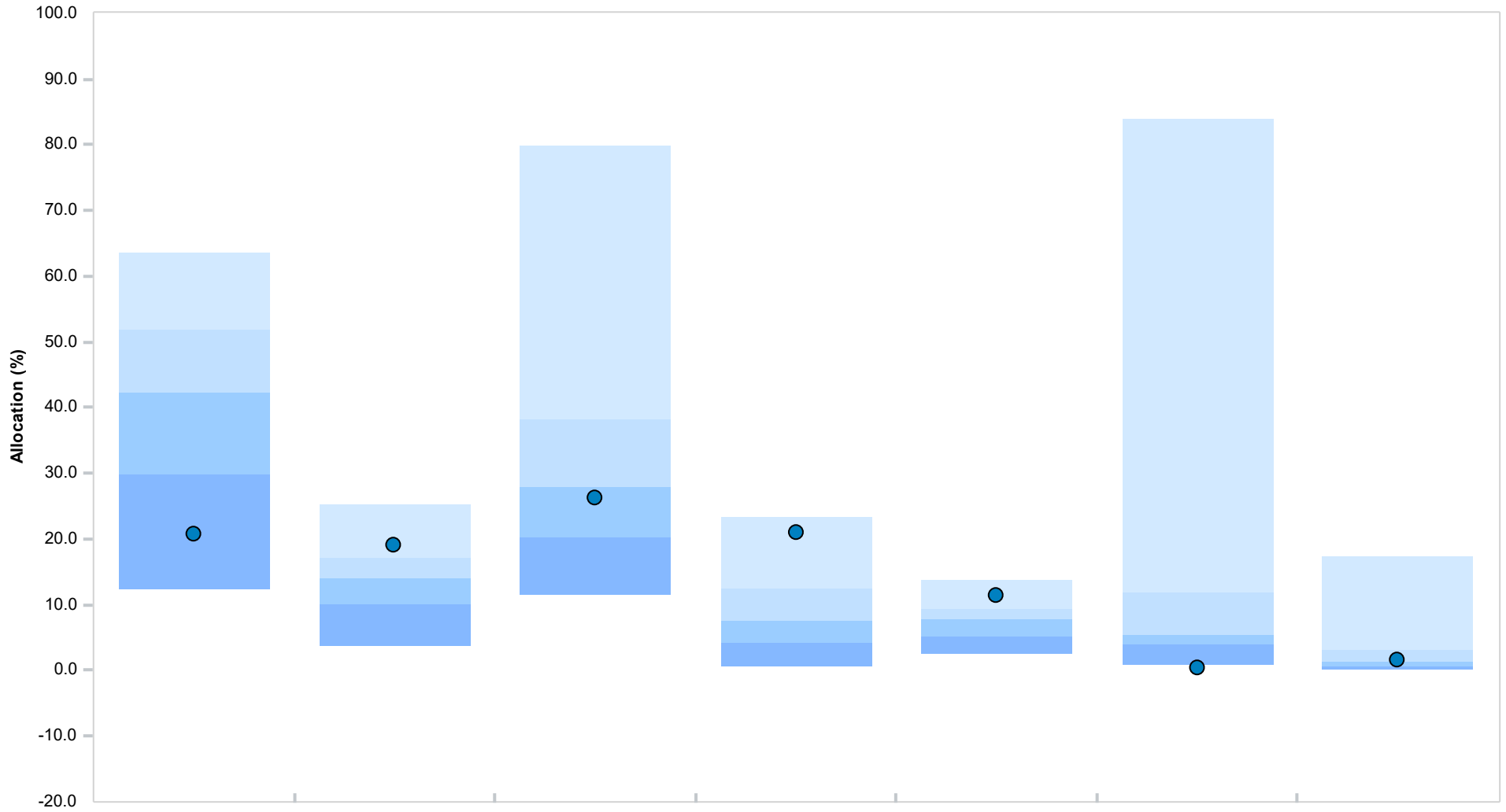


Financial Reconciliation					
	Market Value 01/01/2020	Net Flows	Income	Return On Investment	Market Value 12/31/2020
Total Fund	964,707,696	-44,938,352	1,029,205	87,698,729	1,001,478,345
SSgA S&P 500 Index	94,638,600	-11,500,000	-	15,336,184	98,460,158
Fragasso Large Core (EMWO)	6,387,565	-1,000,018	3,227	634,087	5,996,108
Twin Capital Enhanced Equity	31,050,612	-1,972,210	20,150	4,610,268	33,584,600
Earnest Small Value	14,293,343	-1,500,000	11,334	1,795,874	14,500,459
Emerald Advisors Small Cap	13,839,351	-2,972,446	56,295	4,383,442	15,151,956
Emerald Advisors All Cap (EMWO)	3,593,804	7,495	-4,151	1,866,489	5,444,391
Ethos (EMWO)	1,462,800	-	-	360,552	1,823,352
CIM Small Cap (EMWO)	4,846,748	-6	4,237	600,354	5,447,095
Cookson Peirce (EMWO)	599,730	841	279	136,825	734,375
US Equity Composite	170,712,554	-18,936,346	91,371	29,724,073	181,142,494
SSgA ACWI ex US	34,976,771	-2,000,000	-	3,588,102	36,545,346
Baillie Gifford Intl Equity	70,166,337	-7,000,000	-	17,499,424	80,665,762
FIAM Select International Equity	34,917,214	29,154	-	5,634,856	40,473,954
Segall, Bryant & Hamill	33,332,405	48,750	-	-1,242,895	31,950,784
Non US Equity Composite	173,392,727	-8,922,096	-	25,479,488	189,635,847
Columbus Macro (EMWO)	1,239,192	2,261	22	130,328	1,363,614
Global Equity Composite	1,239,192	2,261	22	130,328	1,363,614
C S McKee	32,132,349	19,942	229,676	2,588,310	34,682,571
Federated Core Broad	27,322,110	-	135,686	2,985,631	30,268,451
CIM Investment Mgmt	13,096,581	-	80,962	913,668	13,950,130
StoneRidge Partners (EMWO)	6,628,893	-1,371,449	34,550	308,103	5,557,249
Gridiron Capital Fixed Income (EMWO)	4,524,657	5,694	6,351	242,631	4,746,562
FNB (EMWO)	2,679,970	-	-	173,816	2,844,296
Core Fixed Composite	86,384,559	-1,345,813	487,225	7,212,159	92,049,258
Oaktree High Yield	62,050,974	-	-	4,076,762	66,100,725
Federated High Yield	49,156,380	-	-	3,368,929	52,490,844
Sound Point	3,272,129	-	-	162,951	3,435,080
High Yield Fixed Composite	114,479,483	-	-	7,608,642	122,026,649
MCM TIPS	49,265,121	-12,995,016	-	4,291,059	40,538,874
TIPS Fixed Composite	49,265,121	-12,995,016	-	4,291,059	40,538,874
ERECT Fund II	9,757,314	-	-	155,161	9,912,474
ERECT Composite	9,757,314	-	-	155,161	9,912,474



	Market Value 01/01/2020	Net Flows	Income	Return On Investment	Market Value 12/31/2020
Morgan Stanley Prime Property Fund	72,187,088	-	-	910,517	73,097,605
Oaktree Real Estate	7,317,123	-75,549	-	-180,593	6,955,225
Washington Alliance (EMWO)	12,070,967	-646,341	-	1,399,569	12,824,195
Washington Alliance II (EMWO)	-	1,236,379	-	-	1,236,379
Siguler Guff Distressed RE	10,206,408	-693,561	-	24,552	9,451,899
Real Estate Composite	101,781,586	-179,072	-	2,154,045	103,565,303
Private Equity Composite	167,976,915	-2,108,676	428,419	24,371,530	185,755,110
Gridiron Capital Multi-Asset (EMWO)	2,791,430	27,769	5,020	308,909	3,061,645
Maplewood (EMWO)	1,036,165	-853,403	-	-182,593	168
Hedge Fund Composite	3,827,594	-825,635	5,020	126,316	3,061,813
Salient MLP Fund	18,013,938	-	18,798	-5,164,991	12,767,066
Harvest MLP Fund	23,787,539	-4,969,116	-1,649	-5,583,672	13,095,681
MLP Composite	41,801,478	-4,969,116	17,149	-10,748,663	25,862,747
CCA Green	12,216,471	-	-	-3,366,113	8,850,359
CCA Blue	2,696,665	-	-	-377,285	2,319,380
CCA Black	8,437,606	-510,542	-	52,981	7,980,044
CCA Longevity Fund VI LP	5,330,409	-816,074	-	474,481	4,928,057
Life Settlement Composite	28,681,151	-1,326,617	-	-3,215,937	24,077,840
Israel Bonds	7,371,197	-106,631	-	185,288	7,449,854
Cash Account	8,036,825	6,774,404	-	225,239	15,036,468

Plan Sponsor TF Asset Allocation vs. All Public DB Plans



	US Equity	Global ex-US Equity	US Fixed	Alternatives	Total Real Estate	Multi-Asset	Cash & Equivalents
● Total Fund	20.67 (89)	19.07 (19)	26.17 (57)	20.95 (6)	11.33 (12)	0.31 (98)	1.50 (48)
5th Percentile	63.69	25.32	79.81	23.29	13.80	83.99	17.47
1st Quartile	51.75	17.04	38.28	12.47	9.39	11.84	3.17
Median	42.20	13.97	27.91	7.48	7.86	5.47	1.38
3rd Quartile	29.81	10.19	20.32	4.24	5.16	3.85	0.52
95th Percentile	12.42	3.82	11.66	0.65	2.42	0.78	0.04



Asset Allocation & Performance	Allocation		Performance(%)							
	Market Value \$	%	MTH	QTR	YTD	1 YR	3 YR	5 YR	Inception	Inception Date
Total Fund	1,001,478,345	100.0	2.52	7.76	8.93	8.93	6.62	8.45	7.50	12/01/1993
Total Fund Policy Index			2.37	8.87	9.82	9.82	7.40	8.64	7.61	
US Equity Composite	181,142,494	18.1	4.67	15.01	19.65	19.65	13.37	14.80	9.42	11/01/1993
Wilshire 5000 Total Market TR Index			4.48	14.47	20.82	20.82	14.46	15.52	10.13	
Non US Equity Composite	189,635,847	18.9	5.76	16.07	15.50	15.50	6.43	10.48	5.77	01/01/2001
Non US Equity Policy Index			5.62	17.22	11.12	11.12	4.83	8.98	4.62	
Global Equity Composite	1,363,614	0.1	4.47	13.22	9.86	9.86	6.10	8.69	6.29	12/01/2014
MSCI AC World Index (Net)			4.64	14.68	16.25	16.25	10.06	12.26	9.19	
Core Fixed Composite	92,049,258	9.2	0.27	1.17	8.16	8.16	5.49	4.54	7.77	10/01/1982
Bmbg. Barc. U.S. Aggregate Index			0.14	0.67	7.51	7.51	5.34	4.44	7.26	
High Yield Fixed Composite	122,026,649	12.2	1.90	5.96	6.65	6.65	5.31	7.53	7.20	04/01/2008
FTSE High Yield Market Capped Index			1.92	6.30	5.60	5.60	5.60	8.17	7.39	
TIPS Fixed Composite	40,538,874	4.0	1.13	1.60	11.02	11.02	5.93	5.32	3.79	04/01/2008
Bloomberg Barclays U.S. TIPS Index			1.15	1.62	10.99	10.99	5.92	5.08	3.74	
ERECT Composite	9,912,474	1.0	0.61	0.61	1.59	1.59	6.87	7.23	6.75	09/01/2010
CPI - All Urban Consumers (SA)			0.24	0.54	1.30	1.30	1.83	1.93	1.78	
Real Estate Composite	103,565,303	10.3	1.61	1.61	1.93	1.93	6.19	7.22	8.47	04/01/2003
NCREIF Fund Index-ODCE (VW) (Net)			1.10	1.10	0.34	0.34	3.99	5.27	6.74	
Private Equity Composite	185,755,110	18.5	0.85	5.26	11.69	11.69	9.75	10.05	6.95	04/01/2003
Private Equity Policy Index			0.85	5.26	11.69	11.69	9.75	10.05	6.95	
Hedge Fund Composite	3,061,813	0.3	2.04	9.77	5.74	5.74	2.91	4.05	2.23	04/01/2003
90 Day T-Bill Index + 3%			0.26	0.77	3.69	3.69	4.65	4.22	4.33	
MLP Composite	25,862,747	2.6	1.58	21.90	-26.19	-26.19	N/A	N/A	-11.75	02/01/2018
Alerian MLP Index			2.51	32.45	-28.69	-28.69	-12.69	-5.95	-14.68	
Life Settlement Composite	24,077,840	2.4	-2.55	-10.94	-11.95	-11.95	-5.44	-6.53	5.73	09/01/2009
Israel Bonds and Cash	22,486,322	2.2	0.09	-0.90	1.50	1.50	2.00	1.66	2.82	03/01/1999



Asset Allocation & Performance

	Allocation		Performance(%)						
	Market Value \$	%	QTR	YTD	1 YR	3 YR	5 YR	Inception	Inception Date
Total Fund	1,001,478,345	100.0	7.76	8.93	8.93	6.62	8.45	7.50	12/01/1993
Total Fund Policy Index			8.87	9.82	9.82	7.40	8.64	7.61	
US Equity Composite	181,142,494	18.1	15.01	19.65	19.65	13.37	14.80	9.42	11/01/1993
Wilshire 5000 Total Market TR Index			14.47	20.82	20.82	14.46	15.52	10.13	
SSgA S&P 500 Index	98,460,158	9.8	12.23	18.53	18.53	14.23	15.27	9.29	11/01/2007
S&P 500 Index			12.15	18.40	18.40	14.18	15.22	9.24	
Fragasso Large Core (EMWO)	5,996,108	0.6	11.57	13.61	13.61	13.13	14.49	13.08	09/01/2012
S&P 500 Index			12.15	18.40	18.40	14.18	15.22	14.83	
Twin Capital Enhanced Equity	33,584,600	3.4	11.26	15.56	15.56	12.09	13.64	9.58	01/01/2006
S&P 500 Index			12.15	18.40	18.40	14.18	15.22	9.88	
Earnest Small Value	14,500,459	1.4	29.60	15.50	15.50	8.01	13.62	14.05	06/01/2009
Russell 2000 Value Index			33.36	4.63	4.63	3.72	9.65	11.75	
Emerald Advisors Small Cap	15,151,956	1.5	26.28	38.53	38.53	16.39	17.17	12.39	11/01/2004
Russell 2000 Growth Index			29.61	34.63	34.63	16.20	16.36	10.95	
Emerald Advisors All Cap (EMWO)	5,444,391	0.5	17.39	51.29	51.29	24.14	21.74	20.62	10/01/2015
Russell 3000 Growth Index			12.41	38.26	38.26	22.50	20.67	21.17	
Ethos (EMWO)	1,823,352	0.2	19.71	24.65	24.65	16.65	N/A	17.41	08/01/2016
S&P 500 Index			12.15	18.40	18.40	14.18	15.22	15.45	
CIM Small Cap (EMWO)	5,447,095	0.5	28.75	13.19	13.19	7.99	10.72	7.40	01/01/2014
Russell 2000 Index			31.37	19.96	19.96	10.25	13.26	9.34	
Cookson Peirce (EMWO)	734,375	0.1	12.52	22.31	22.31	N/A	N/A	20.91	12/01/2018
Russell 3000 Index			14.68	20.89	20.89	14.49	15.43	18.99	
Non US Equity Composite	189,635,847	18.9	16.07	15.50	15.50	6.43	10.48	5.77	01/01/2001
Non US Equity Policy Index			17.22	11.12	11.12	4.83	8.98	4.62	
SSgA ACWI ex US	36,545,346	3.6	17.31	11.27	11.27	5.75	8.70	5.56	05/01/2015
MSCI AC World ex USA (Net)			17.01	10.65	10.65	4.88	8.93	5.17	
Baillie Gifford Intl Equity	80,665,762	8.1	14.94	26.60	26.60	11.78	14.77	10.89	08/01/2009
MSCI AC World ex USA (Net)			17.01	10.65	10.65	4.88	8.93	6.41	



	Allocation		Performance(%)						
	Market Value \$	%	QTR	YTD	1 YR	3 YR	5 YR	Inception	Inception Date
FIAM Select International Equity	40,473,954	4.0	17.20	15.83	15.83	6.39	9.09	5.12	01/01/2001
FIAM Policy Index			17.01	10.65	10.65	4.88	8.93	4.55	
Segall, Bryant & Hamill	31,950,784	3.2	15.33	-4.29	-4.29	-4.43	4.08	3.31	05/01/2015
MSCI EAFE Small Cap (net) Index			17.27	12.34	12.34	4.85	9.40	8.10	
Global Equity Composite	1,363,614	0.1	13.22	9.86	9.86	6.10	8.69	6.29	12/01/2014
MSCI AC World Index (Net)			14.68	16.25	16.25	10.06	12.26	9.19	
Columbus Macro (EMWO)	1,363,614	0.1	13.22	9.86	9.86	6.10	8.69	6.29	12/01/2014
MSCI AC World Index (Net)			14.68	16.25	16.25	10.06	12.26	9.19	
Core Fixed Composite	92,049,258	9.2	1.17	8.16	8.16	5.49	4.54	7.77	10/01/1982
Blmbg. Barc. U.S. Aggregate Index			0.67	7.51	7.51	5.34	4.44	7.26	
C S McKee	34,682,571	3.5	0.55	7.87	7.87	5.71	4.66	7.43	01/01/1983
Blmbg. Barc. U.S. Aggregate Index			0.67	7.51	7.51	5.34	4.44	7.08	
Federated Core Broad	30,268,451	3.0	1.68	10.80	10.80	6.58	5.70	5.32	09/01/2006
Blmbg. Barc. U.S. Aggregate Index			0.67	7.51	7.51	5.34	4.44	4.55	
CIM Investment Mgmt	13,950,130	1.4	0.36	6.52	6.52	4.33	3.07	3.54	11/01/2005
Bloomberg Barclays Intermediate US Govt/Credit Idx			0.48	6.43	6.43	4.67	3.64	3.94	
StoneRidge Partners (EMWO)	5,557,249	0.6	0.33	4.79	4.79	3.50	3.05	2.92	08/01/2015
StoneRidge Policy Index			0.84	6.62	6.62	4.94	4.01	3.67	
Gridiron Capital Fixed Income (EMWO)	4,746,562	0.5	6.38	4.78	4.78	5.31	N/A	4.37	02/01/2017
Blmbg. Barc. U.S. Aggregate Index			0.67	7.51	7.51	5.34	4.44	4.94	
FNB (EMWO)	2,844,296	0.3	0.71	6.13	6.13	4.35	N/A	3.70	07/01/2017
Bloomberg Barclays Intermed Aggregate Index			0.42	5.60	5.60	4.37	3.46	3.93	
High Yield Fixed Composite	122,026,649	12.2	5.94	6.59	6.59	5.15	7.36	6.98	04/01/2008
FTSE High Yield Market Capped Index			6.30	5.60	5.60	5.60	8.17	7.39	
Oaktree High Yield	66,100,725	6.6	6.26	6.53	6.53	4.25	6.75	6.62	04/01/2008
FTSE High Yield Market Capped Index			6.30	5.60	5.60	5.60	8.17	7.39	
Federated High Yield	52,490,844	5.2	5.56	6.78	6.78	6.44	N/A	6.17	07/01/2017
Blmbg. Barc. U.S. High Yield - 2% Issuer Cap			6.44	7.05	7.05	6.21	8.57	6.04	
Sound Point	3,435,080	0.3	5.39	4.98	4.98	3.71	4.73	4.38	08/01/2013
Credit Suisse Leveraged Loan Index			3.63	2.78	2.78	3.99	5.19	4.01	



Asset Allocation & Performance

Total Fund

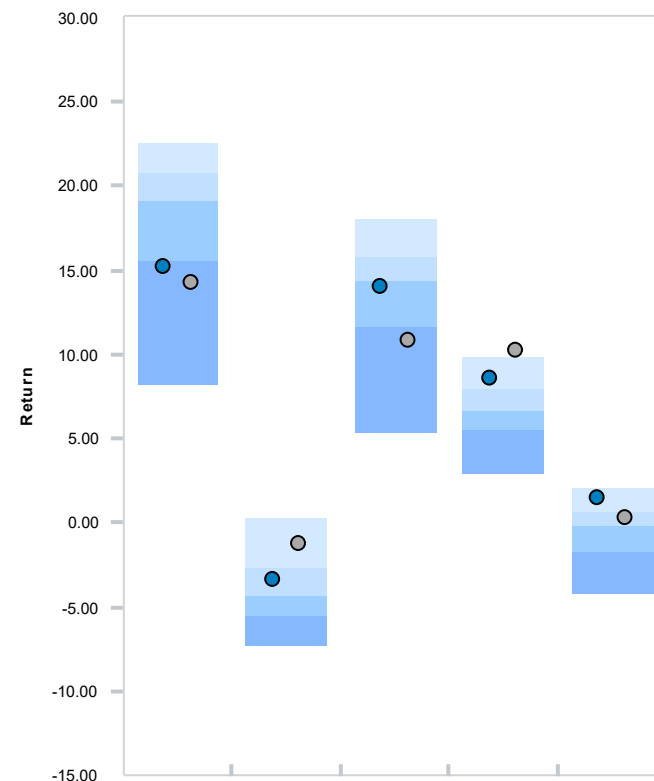
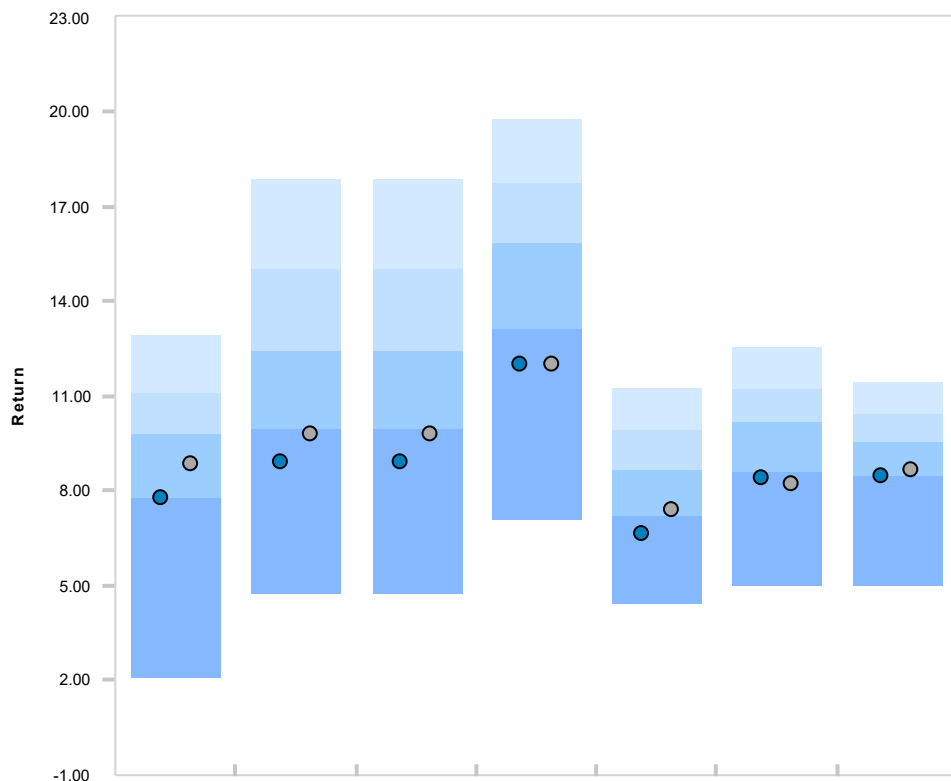
As of December 31, 2020

	Allocation		Performance(%)						
	Market Value \$	%	QTR	YTD	1 YR	3 YR	5 YR	Inception	Inception Date
TIPS Fixed Composite	40,538,874	4.0	1.60	11.02	11.02	5.93	5.32	3.79	04/01/2008
Bloomberg Barclays U.S. TIPS Index			1.62	10.99	10.99	5.92	5.08	3.74	
MCM TIPS	40,538,874	4.0	1.60	11.02	11.02	5.93	N/A	5.30	12/01/2016
Bloomberg Barclays U.S. TIPS Index			1.62	10.99	10.99	5.92	5.08	5.05	
ERECT Composite	9,912,474	1.0	0.61	1.59	1.59	6.87	7.23	6.75	09/01/2010
CPI - All Urban Consumers (SA)			0.54	1.30	1.30	1.83	1.93	1.78	
ERECT Fund II	9,912,474	1.0	0.61	1.59	1.59	6.87	7.23	6.82	06/01/2005
CPI - All Urban Consumers (SA)			0.54	1.30	1.30	1.83	1.93	1.95	
Real Estate Composite	103,565,303	10.3	1.61	1.93	1.93	6.19	7.22	8.47	04/01/2003
NCREIF Fund Index-ODCE (VW) (Net)			1.10	0.34	0.34	3.99	5.27	6.74	
Morgan Stanley Prime Property Fund	73,097,605	7.3	1.47	1.26	1.26	5.09	6.63	8.35	04/01/2003
NCREIF Fund Index-ODCE (VW) (Net)			1.10	0.34	0.34	3.99	5.27	6.74	
Oaktree Real Estate	6,955,225	0.7	-0.13	-3.92	-3.92	2.04	2.82	4.78	08/01/2013
Washington Alliance (EMWO)	12,824,195	1.3	3.79	11.91	11.91	15.25	14.81	13.28	08/01/2013
Washington Alliance II (EMWO)	1,236,379	0.1	0.00	N/A	N/A	N/A	N/A	0.00	03/01/2020
Siguler Guff Distressed RE	9,451,899	0.9	1.14	-0.60	-0.60	7.31	9.21	6.78	03/01/2014
Private Equity Composite	185,755,110	18.5	5.26	11.69	11.69	9.75	10.05	6.95	04/01/2003
Private Equity Policy Index			5.26	11.69	11.69	9.75	10.05	6.95	
Hedge Fund Composite	3,061,813	0.3	9.77	5.74	5.74	2.91	4.05	2.23	04/01/2003
90 Day T-Bill Index + 3%			0.77	3.69	3.69	4.65	4.22	4.33	
Gridiron Capital Multi-Asset (EMWO)	3,061,645	0.3	9.77	8.59	8.59	N/A	N/A	9.59	02/01/2019
HFRI FoF Composite Lagged			8.05	10.82	10.82	4.86	4.55	8.59	
Maplewood (EMWO)	168	0.0	0.00	-18.90	-18.90	N/A	N/A	-9.05	03/01/2019
HFRX Macro Index			4.18	4.29	4.29	1.90	1.03	5.67	
MLP Composite	25,862,747	2.6	21.90	-26.19	-26.19	N/A	N/A	-11.75	02/01/2018
Alerian MLP Index			32.45	-28.69	-28.69	-12.69	-5.95	-14.68	
Salient MLP Fund	12,767,066	1.3	18.89	-29.13	-29.13	-10.80	N/A	-10.80	01/01/2018
Alerian MLP Index			32.45	-28.69	-28.69	-12.69	-5.95	-12.69	



	Allocation		Performance(%)						
	Market Value \$	%	QTR	YTD	1 YR	3 YR	5 YR	Inception	Inception Date
Harvest MLP Fund	13,095,681	1.3	23.42	-24.40	-24.40	N/A	N/A	-11.49	02/01/2018
Alerian MLP Index			32.45	-28.69	-28.69	-12.69	-5.95	-14.68	
Life Settlement Composite	24,077,840	2.4	-10.94	-11.95	-11.95	-5.44	-6.53	5.73	09/01/2009
CCA Green	8,850,359	0.9	-22.80	-27.55	-27.55	-13.52	-13.53	1.97	10/01/2009
CCA Blue	2,319,380	0.2	-2.61	-13.99	-13.99	-9.82	-9.71	-5.75	09/01/2012
CCA Black	7,980,044	0.8	-3.45	0.52	0.52	2.49	4.71	5.46	01/01/2015
CCA Longevity Fund VI LP	4,928,057	0.5	0.00	7.87	7.87	N/A	N/A	6.94	12/01/2018
Israel Bonds	7,449,854	0.7	-0.96	2.56	2.56	2.42	2.13	2.90	01/01/2012
Cash Account	15,036,468	1.5	0.05	0.69	0.69	1.62	1.22	0.75	01/01/2012

Plan Sponsor Peer Group Analysis - All Public DB Plans



	QTR	FYTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Total Fund	7.76 (76)	8.93 (83)	8.93 (83)	12.00 (83)	6.62 (84)	8.41 (78)	8.45 (76)
● Total Fund Policy Index	8.87 (66)	9.82 (77)	9.82 (77)	12.01 (83)	7.40 (73)	8.24 (79)	8.64 (72)
Median	9.81	12.48	12.48	15.85	8.65	10.17	9.53

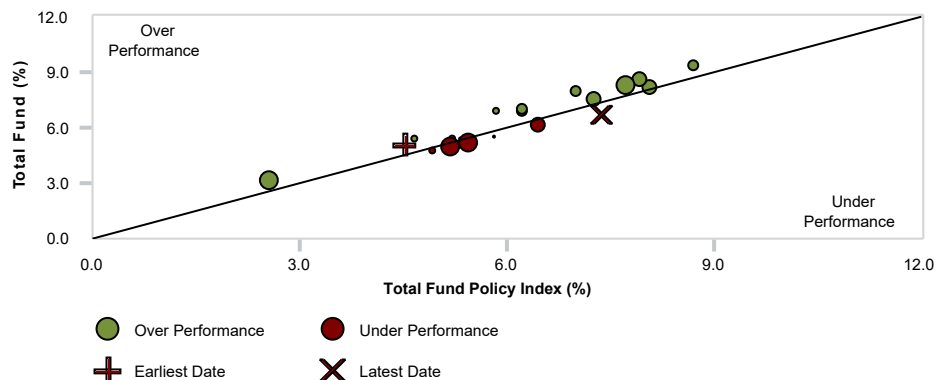
	2019	2018	2017	2016	2015
● Total Fund	15.16 (77)	-3.36 (34)	13.97 (54)	8.60 (15)	1.51 (9)
● Total Fund Policy Index	14.24 (81)	-1.27 (14)	10.82 (79)	10.27 (4)	0.26 (37)
Median	19.09	-4.32	14.32	6.65	-0.24

Comparative Performance

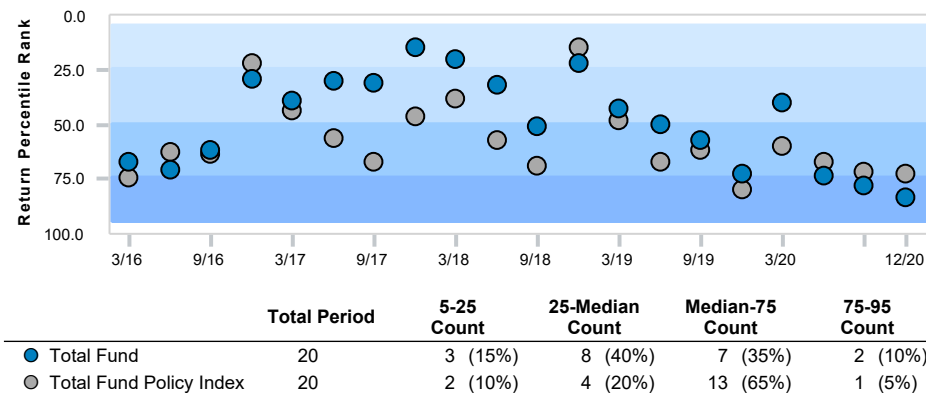
	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020	1 Qtr Ending Mar-2020	1 Qtr Ending Dec-2019	1 Qtr Ending Sep-2019	1 Qtr Ending Jun-2019
Total Fund	4.22	8.29	-10.44	4.38	0.67	2.40
Total Fund Policy Index	3.18	9.67	-10.86	3.83	0.72	2.49



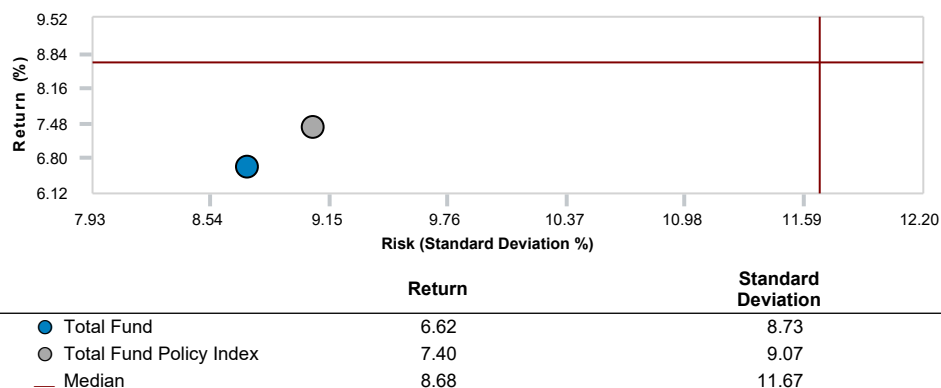
3 Yr Rolling Under/Over Performance - 5 Years



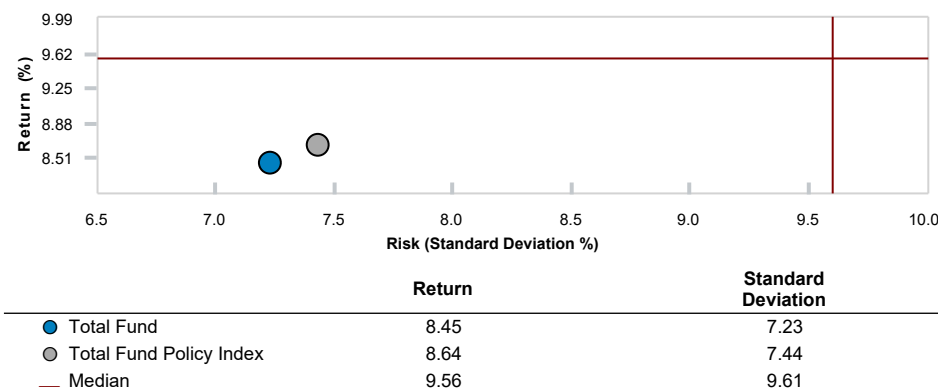
3 Yr Rolling Percentile Ranking - 5 Years



Peer Group Scattergram - 3 Years



Peer Group Scattergram - 5 Years



Historical Statistics - 3 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Fund	1.57	98.41	106.59	-0.36	-0.48	0.59	0.95	5.94
Total Fund Policy Index	0.00	100.00	100.00	0.00	N/A	0.65	1.00	5.86

Historical Statistics - 5 Years

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total Fund	1.52	101.50	107.74	0.22	-0.13	0.99	0.95	4.76
Total Fund Policy Index	0.00	100.00	100.00	0.00	N/A	0.98	1.00	4.65



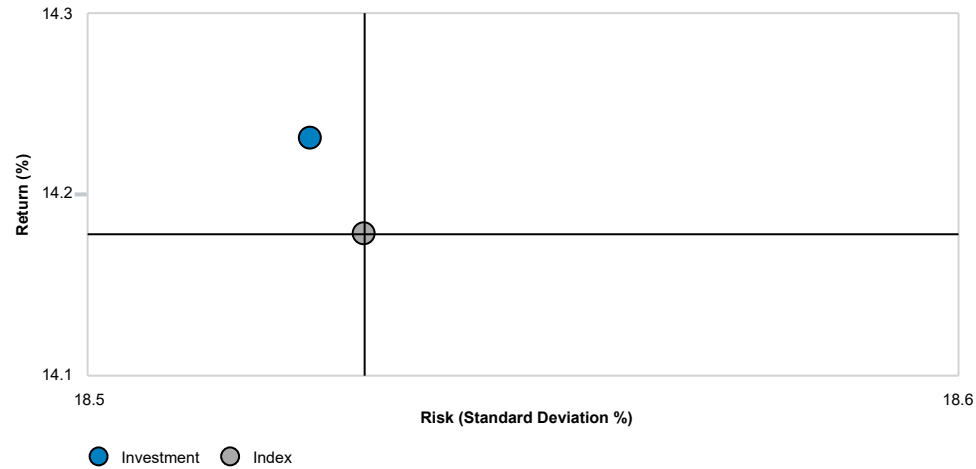
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	14.23	18.53	0.73	100.06	9	99.87	3
Index	14.18	18.53	0.72	100.00	9	100.00	3

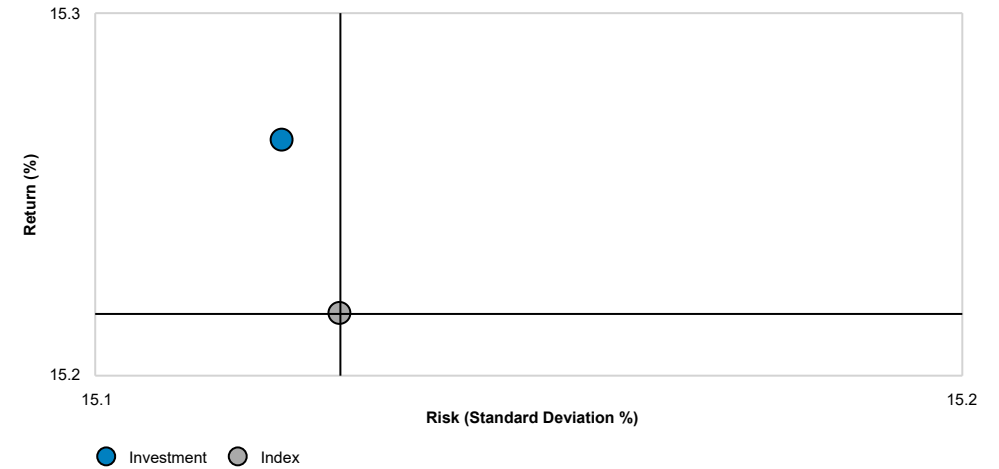
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	15.27	15.12	0.94	100.06	17	99.81	3
Index	15.22	15.13	0.94	100.00	17	100.00	3

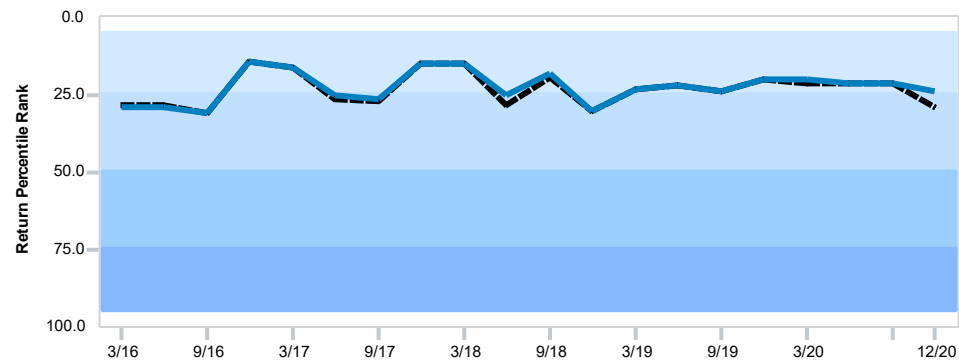
Risk and Return 3 Years



Risk and Return 5 Years

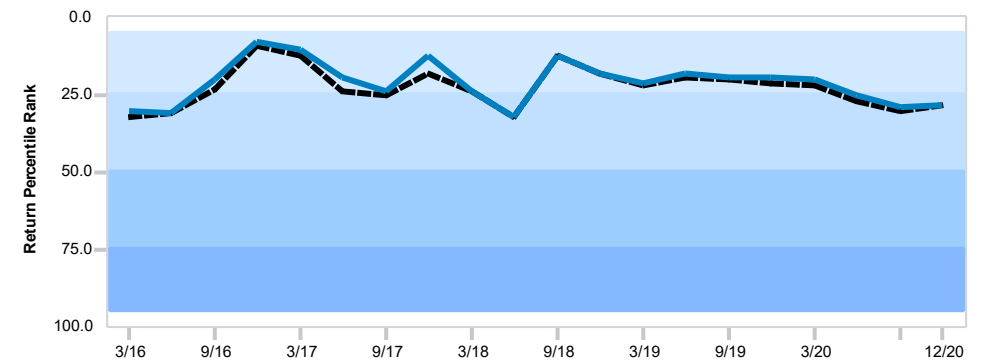


3 Year Rolling Percentile Rank IM U.S. Large Cap Index Equity (SA+CF)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	15 (75%)	5 (25%)	0 (0%)	0 (0%)
Index	20	12 (60%)	8 (40%)	0 (0%)	0 (0%)

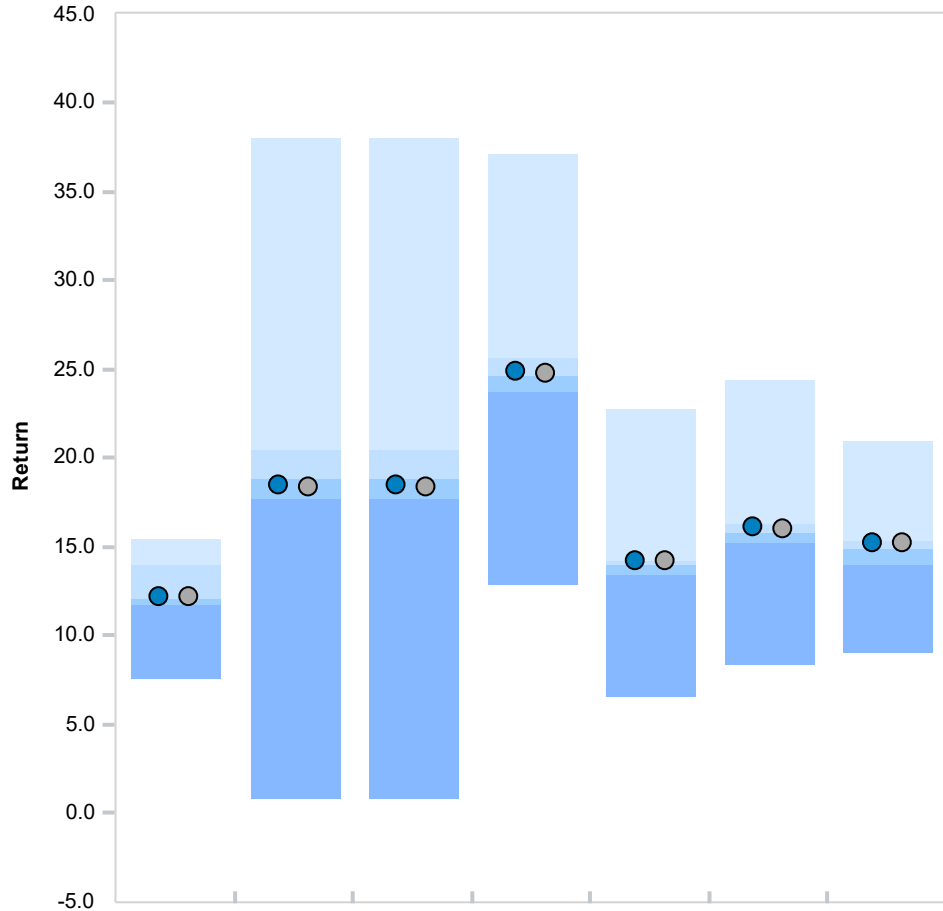
5 Year Rolling Percentile Rank IM U.S. Large Cap Index Equity (SA+CF)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	15 (75%)	5 (25%)	0 (0%)	0 (0%)
Index	20	14 (70%)	6 (30%)	0 (0%)	0 (0%)

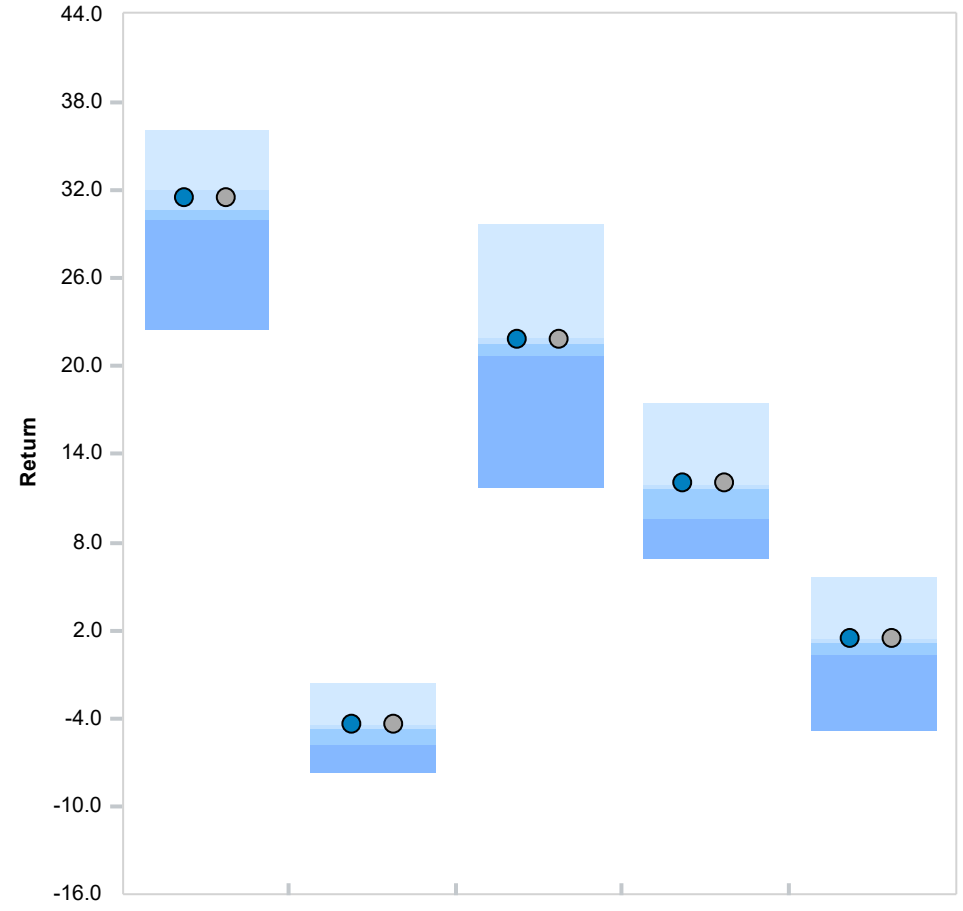


Peer Group Analysis - IM U.S. Large Cap Index Equity (SA+CF)



	QTR	YTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Investment	12.23 (41)	18.53 (53)	18.53 (53)	24.87 (44)	14.23 (24)	16.09 (28)	15.27 (28)
● Index	12.15 (46)	18.40 (54)	18.40 (54)	24.77 (45)	14.18 (29)	16.05 (29)	15.22 (28)
Median	12.12	18.82	18.82	24.68	13.94	15.80	14.90

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



	2019	2018	2017	2016	2015
● Investment	31.54 (29)	-4.40 (25)	21.85 (29)	12.03 (20)	1.43 (25)
● Index	31.49 (29)	-4.38 (24)	21.83 (29)	11.96 (21)	1.38 (29)
Median	30.73	-4.66	21.60	11.65	1.18

Comparative Performance

	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020	1 Qtr Ending Mar-2020	1 Qtr Ending Dec-2019	1 Qtr Ending Sep-2019	1 Qtr Ending Jun-2019
Investment	8.93 (50)	20.57 (61)	-19.59 (21)	9.06 (19)	1.74 (9)	4.31 (32)
Index	8.93 (50)	20.54 (62)	-19.60 (23)	9.07 (13)	1.70 (9)	4.30 (32)
Median	8.92	20.87	-19.74	8.90	1.53	4.24



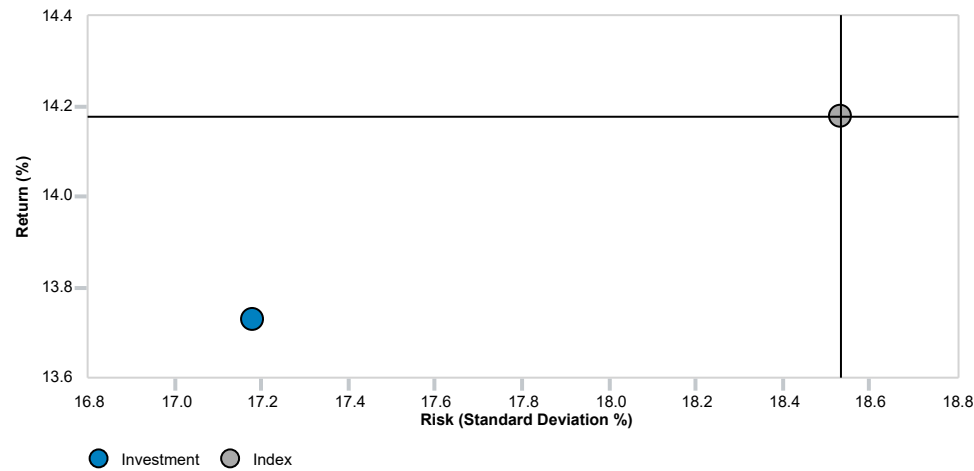
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	13.73	17.18	0.74	93.49	9	91.68	3
Index	14.18	18.53	0.72	100.00	9	100.00	3

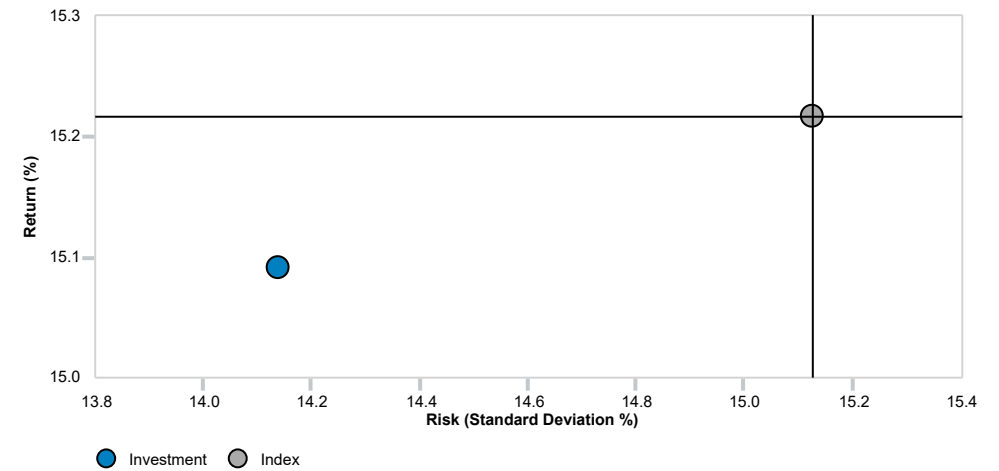
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	15.09	14.14	0.98	94.56	17	89.97	3
Index	15.22	15.13	0.94	100.00	17	100.00	3

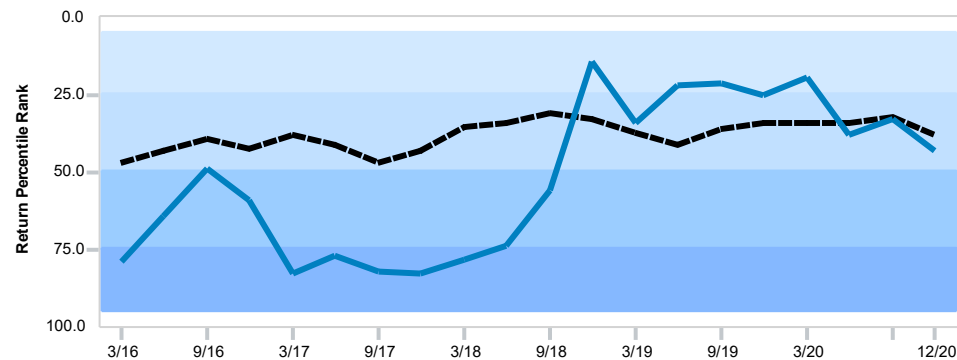
Risk and Return 3 Years



Risk and Return 5 Years

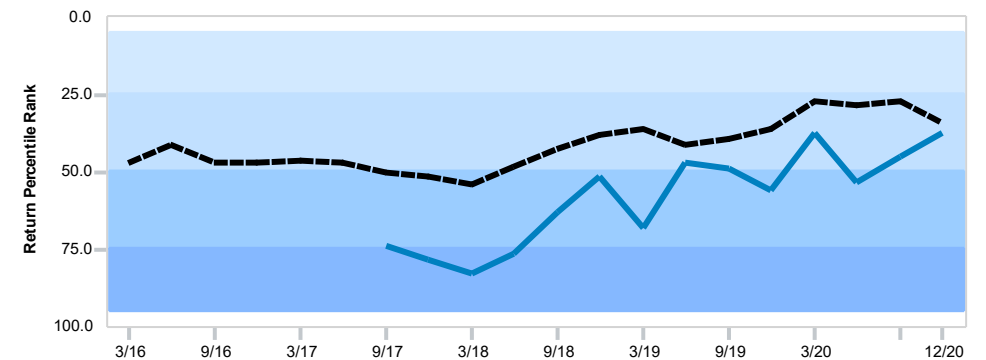


3 Year Rolling Percentile Rank IM U.S. Large Cap Core Equity (SA+CF)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	5 (25%)	5 (25%)	4 (20%)	6 (30%)
Index	20	0 (0%)	20 (100%)	0 (0%)	0 (0%)

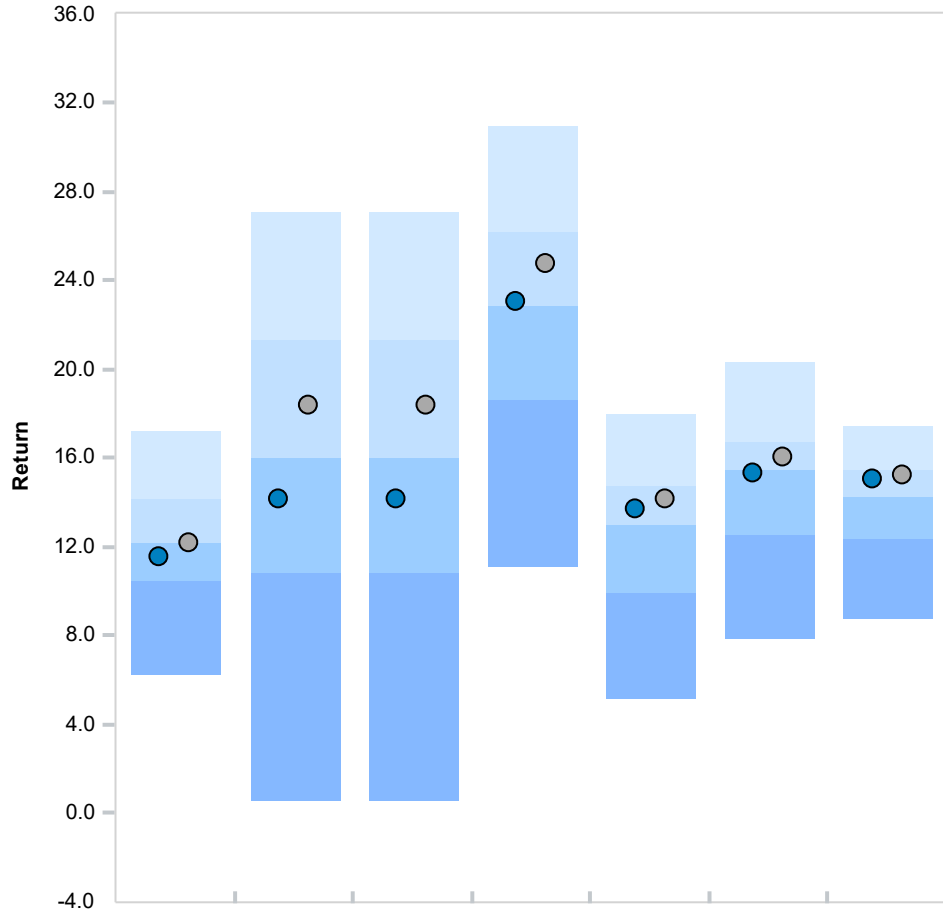
5 Year Rolling Percentile Rank IM U.S. Large Cap Core Equity (SA+CF)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	14	0 (0%)	5 (36%)	6 (43%)	3 (21%)
Index	20	0 (0%)	18 (90%)	2 (10%)	0 (0%)

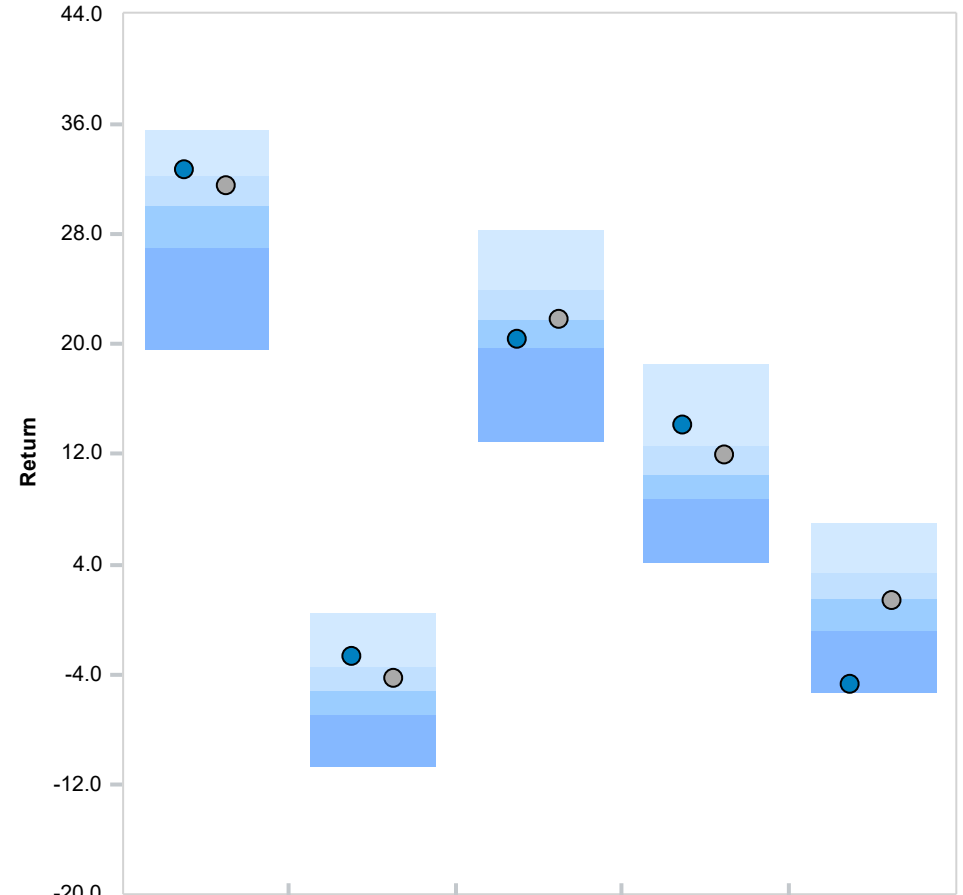


Peer Group Analysis - IM U.S. Large Cap Core Equity (SA+CF)



	QTR	YTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Investment	11.57 (63)	14.12 (60)	14.12 (60)	23.02 (50)	13.73 (43)	15.34 (52)	15.09 (37)
● Index	12.15 (49)	18.40 (41)	18.40 (41)	24.77 (39)	14.18 (38)	16.05 (40)	15.22 (34)
Median	12.15	16.00	16.00	22.91	12.94	15.51	14.26

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



	2019	2018	2017	2016	2015
● Investment	32.61 (20)	-2.80 (16)	20.32 (73)	14.09 (17)	-4.83 (95)
● Index	31.49 (35)	-4.38 (38)	21.83 (51)	11.96 (34)	1.38 (52)
Median	30.00	-5.15	21.84	10.54	1.43

Comparative Performance

	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020	1 Qtr Ending Mar-2020	1 Qtr Ending Dec-2019	1 Qtr Ending Sep-2019	1 Qtr Ending Jun-2019
Investment	9.65 (21)	16.15 (84)	-19.69 (46)	7.87 (61)	2.28 (27)	6.58 (4)
Index	8.93 (37)	20.54 (46)	-19.60 (44)	9.07 (32)	1.70 (42)	4.30 (51)
Median	8.01	20.36	-20.02	8.19	1.52	4.30



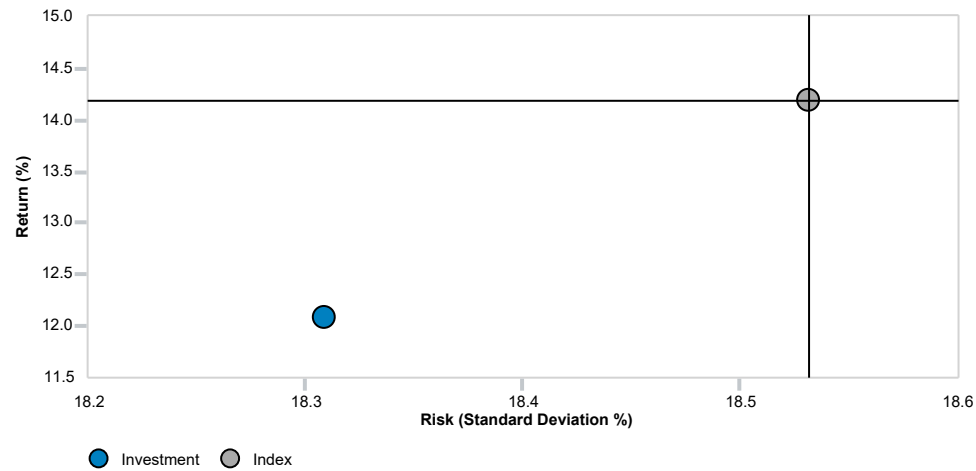
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	12.09	18.31	0.63	95.13	9	101.29	3
Index	14.18	18.53	0.72	100.00	9	100.00	3

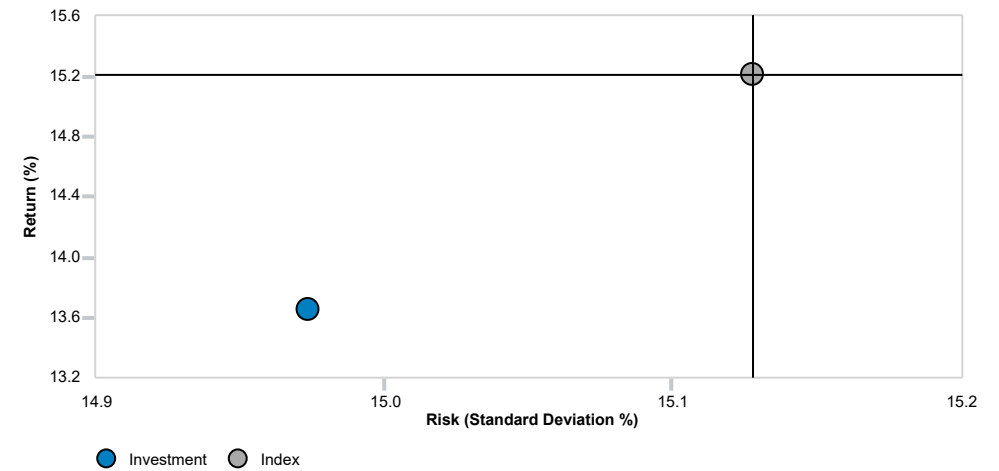
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	13.64	14.97	0.85	95.53	17	101.17	3
Index	15.22	15.13	0.94	100.00	17	100.00	3

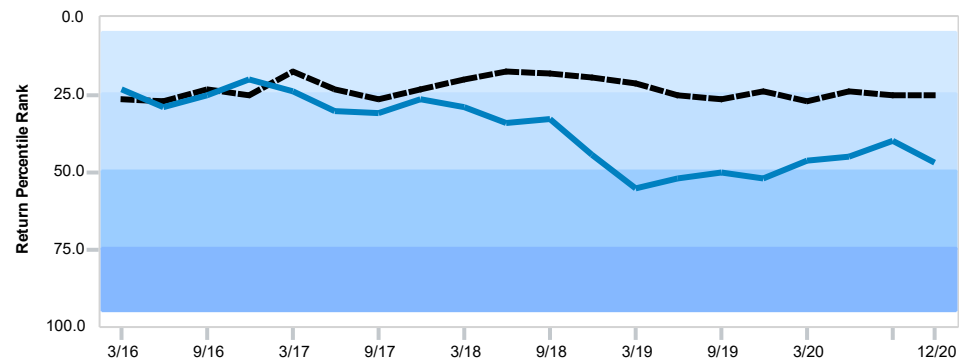
Risk and Return 3 Years



Risk and Return 5 Years

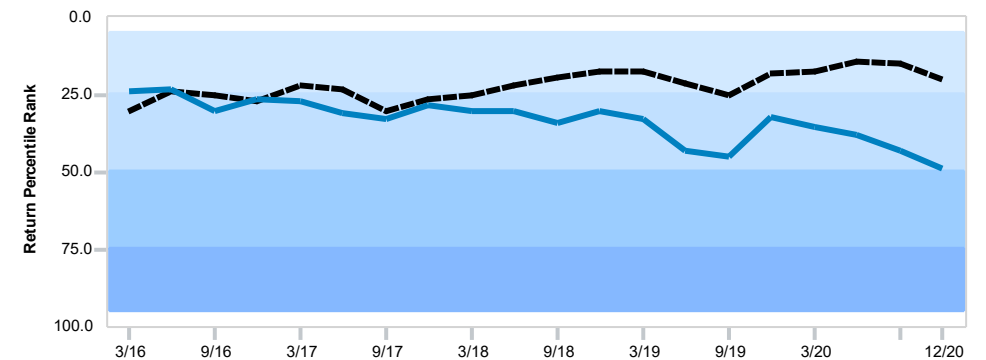


3 Year Rolling Percentile Rank IM U.S. Large Cap Core Equity (SA+CF)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	4 (20%)	13 (65%)	3 (15%)	0 (0%)
Index	20	15 (75%)	5 (25%)	0 (0%)	0 (0%)

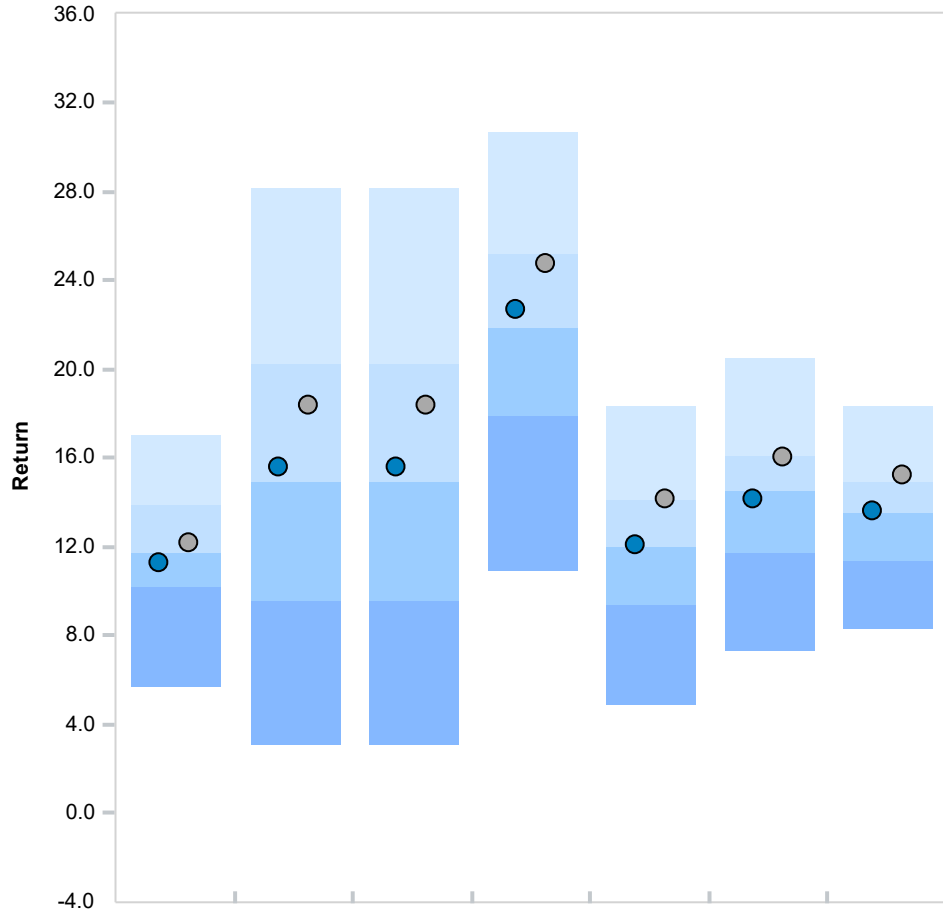
5 Year Rolling Percentile Rank IM U.S. Large Cap Core Equity (SA+CF)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	2 (10%)	18 (90%)	0 (0%)	0 (0%)
Index	20	16 (80%)	4 (20%)	0 (0%)	0 (0%)

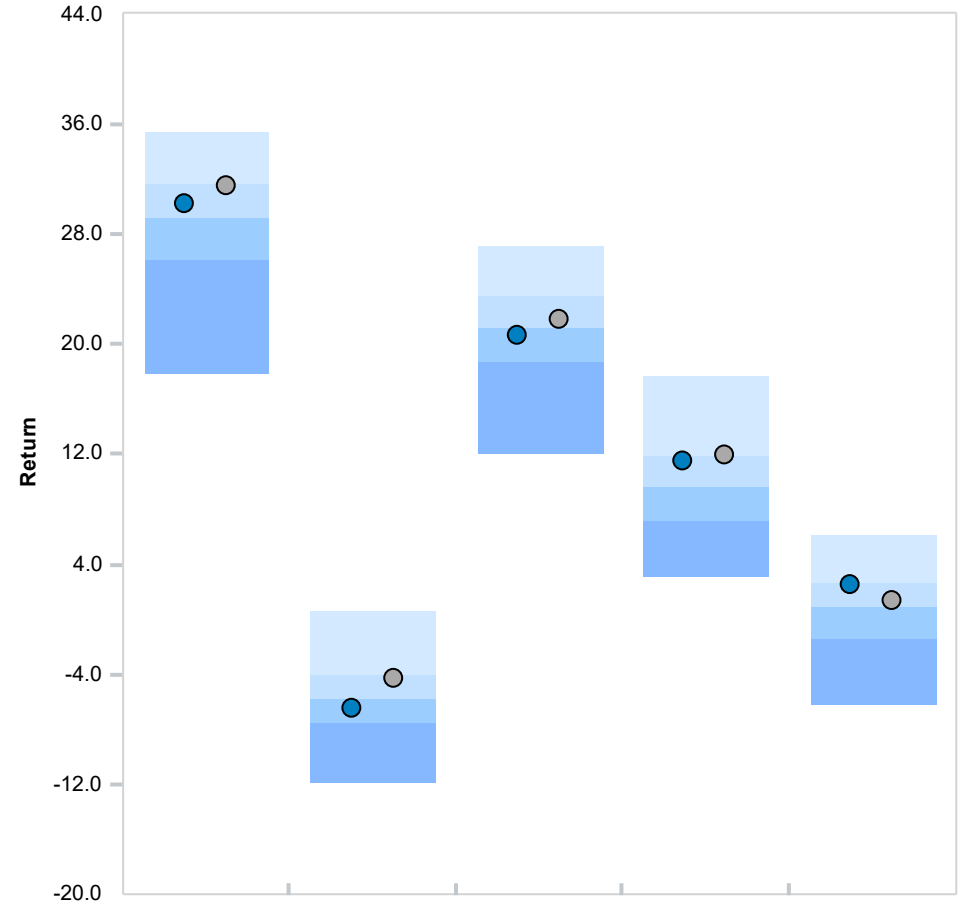


Peer Group Analysis - IM U.S. Large Cap Core Equity (SA+CF)



● Investment	11.26 (59)	15.56 (44)	15.56 (44)	22.68 (39)	12.09 (47)	14.18 (56)	13.64 (49)
● Index	12.15 (44)	18.40 (35)	18.40 (35)	24.77 (30)	14.18 (25)	16.05 (27)	15.22 (20)
Median	11.71	14.92	14.92	21.92	11.99	14.49	13.54

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



● Investment	30.24 (37)	-6.43 (61)	20.67 (57)	11.55 (27)	2.47 (28)
● Index	31.49 (27)	-4.38 (30)	21.83 (43)	11.96 (25)	1.38 (43)
Median	29.18	-5.72	21.27	9.55	0.86

Comparative Performance

	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020	1 Qtr Ending Mar-2020	1 Qtr Ending Dec-2019	1 Qtr Ending Sep-2019	1 Qtr Ending Jun-2019
Investment	8.44 (38)	19.61 (54)	-19.92 (50)	9.37 (19)	1.58 (46)	3.98 (59)
Index	8.93 (32)	20.54 (36)	-19.60 (44)	9.07 (25)	1.70 (43)	4.30 (47)
Median	7.93	19.94	-19.99	7.93	1.50	4.17



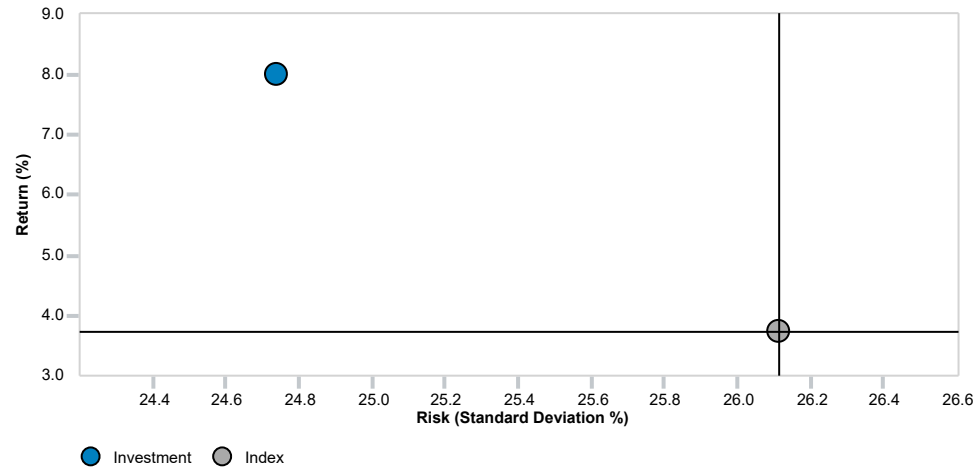
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	8.01	24.74	0.37	102.55	9	91.05	3
Index	3.72	26.12	0.21	100.00	8	100.00	4

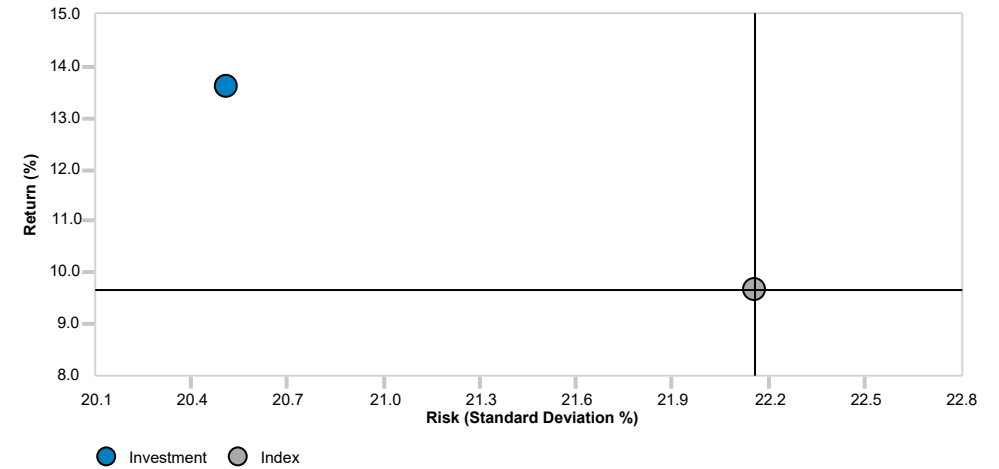
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	13.62	20.51	0.67	98.35	17	82.67	3
Index	9.65	22.16	0.48	100.00	15	100.00	5

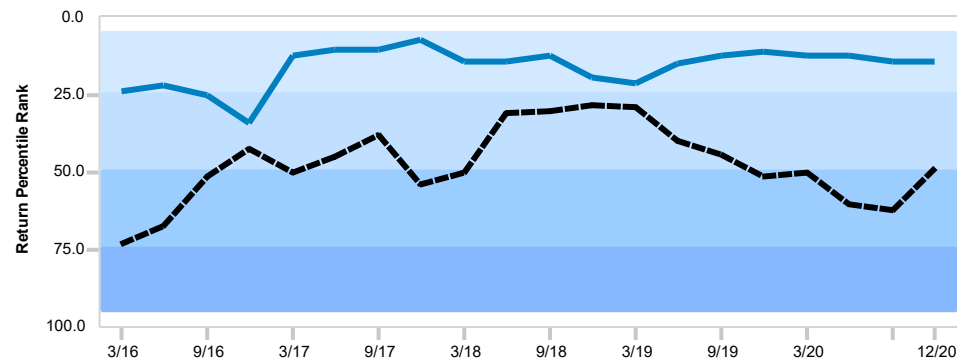
Risk and Return 3 Years



Risk and Return 5 Years

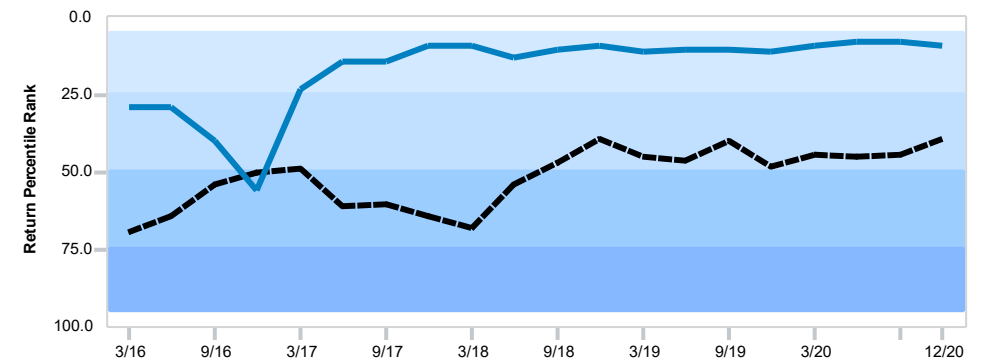


3 Year Rolling Percentile Rank IM U.S. Small Cap Value Equity (SA+CF)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	19 (95%)	1 (5%)	0 (0%)	0 (0%)
Index	20	0 (0%)	13 (65%)	7 (35%)	0 (0%)

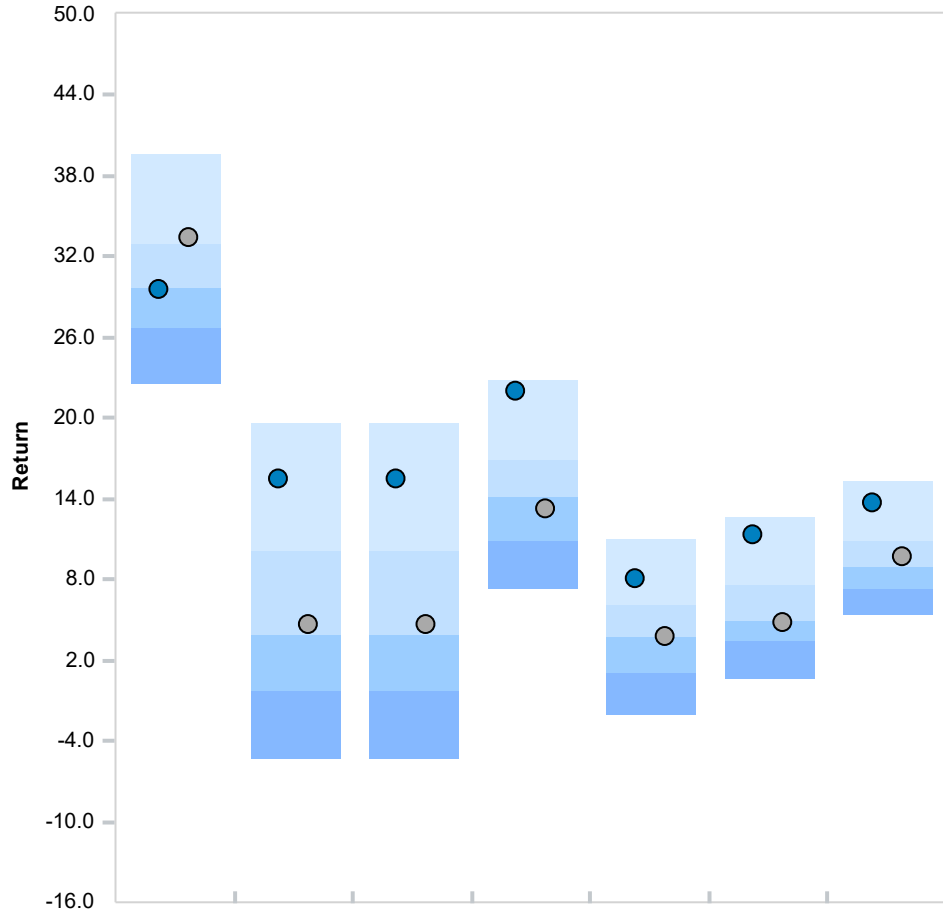
5 Year Rolling Percentile Rank IM U.S. Small Cap Value Equity (SA+CF)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	16 (80%)	3 (15%)	1 (5%)	0 (0%)
Index	20	0 (0%)	12 (60%)	8 (40%)	0 (0%)

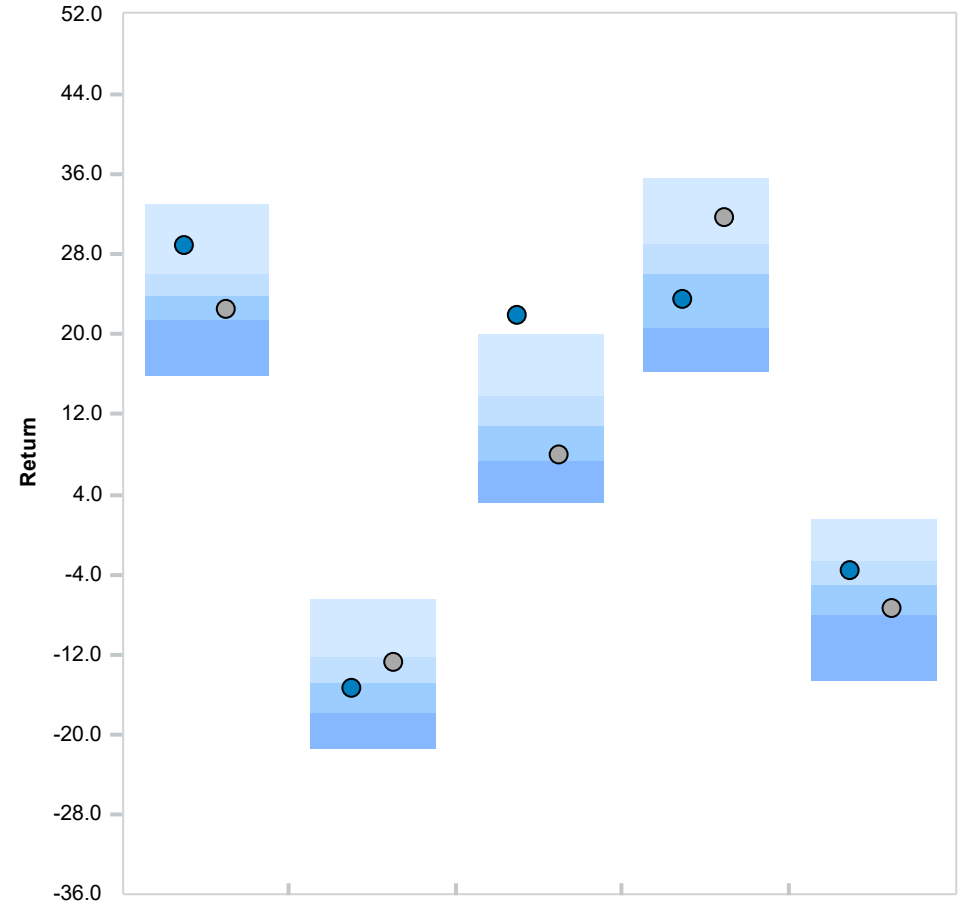


Peer Group Analysis - IM U.S. Small Cap Value Equity (SA+CF)



	QTR	YTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Investment	29.60 (51)	15.50 (12)	15.50 (12)	22.01 (8)	8.01 (14)	11.30 (7)	13.62 (9)
● Index	33.36 (24)	4.63 (48)	4.63 (48)	13.17 (59)	3.72 (49)	4.74 (54)	9.65 (39)
Median	29.64	3.91	3.91	14.13	3.68	4.94	8.90

Peer Group Analysis - IM U.S. Small Cap Value Equity (SA+CF)



	2019	2018	2017	2016	2015
● Investment	28.89 (12)	-15.35 (55)	21.78 (4)	23.40 (64)	-3.59 (36)
● Index	22.39 (64)	-12.86 (32)	7.84 (70)	31.74 (13)	-7.47 (72)
Median	23.95	-14.90	10.89	25.97	-5.03

Comparative Performance

	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020	1 Qtr Ending Mar-2020	1 Qtr Ending Dec-2019	1 Qtr Ending Sep-2019	1 Qtr Ending Jun-2019
Investment	4.13 (34)	20.00 (54)	-28.68 (9)	7.46 (54)	0.82 (26)	5.73 (7)
Index	2.56 (48)	18.91 (68)	-35.66 (57)	8.49 (34)	-0.57 (56)	1.38 (68)
Median	2.19	20.65	-35.14	7.81	-0.37	2.10



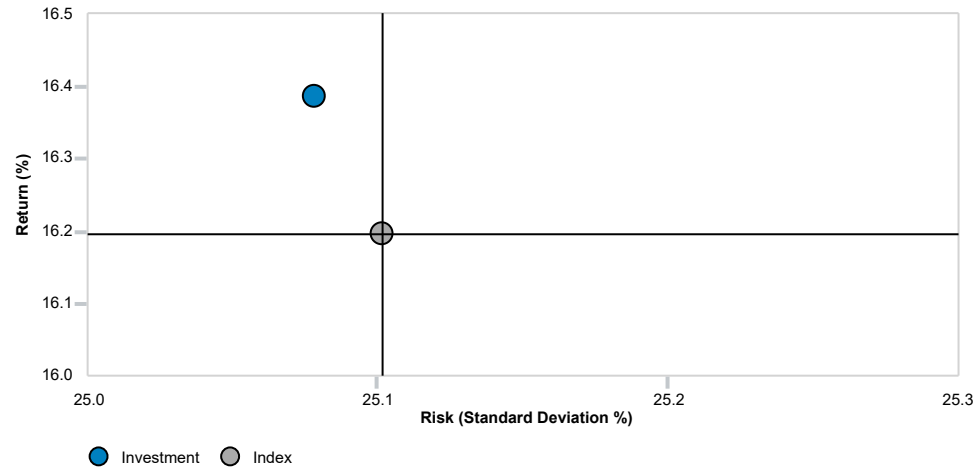
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	16.39	25.08	0.67	99.99	8	99.34	4
Index	16.20	25.10	0.66	100.00	9	100.00	3

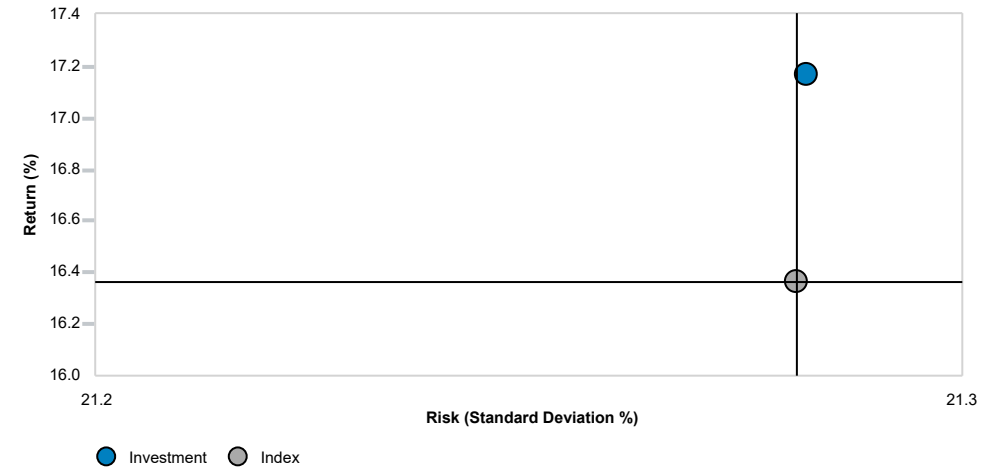
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	17.17	21.28	0.80	99.93	15	96.09	5
Index	16.36	21.28	0.77	100.00	16	100.00	4

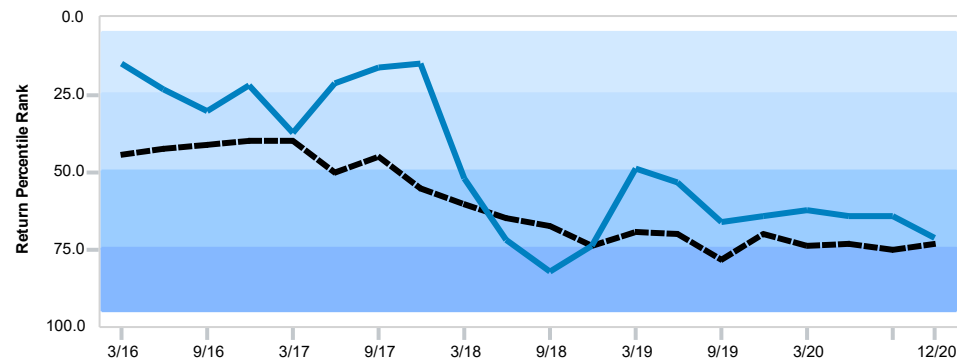
Risk and Return 3 Years



Risk and Return 5 Years

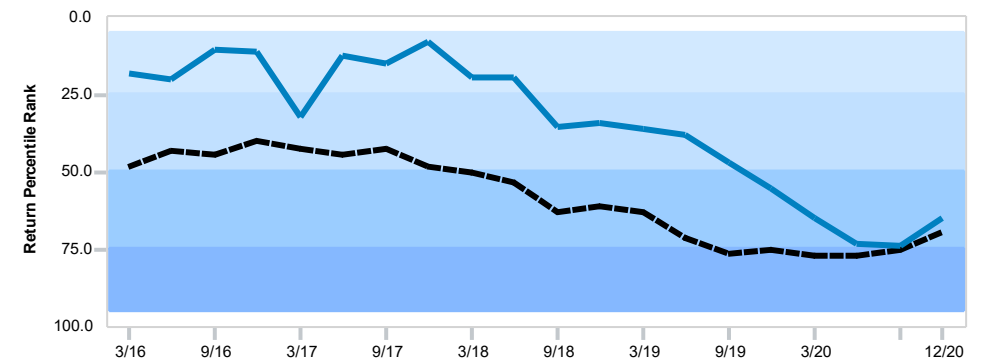


3 Year Rolling Percentile Rank IM U.S. Small Cap Growth Equity (SA+CF)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	6 (30%)	3 (15%)	10 (50%)	1 (5%)
Index	20	0 (0%)	7 (35%)	12 (60%)	1 (5%)

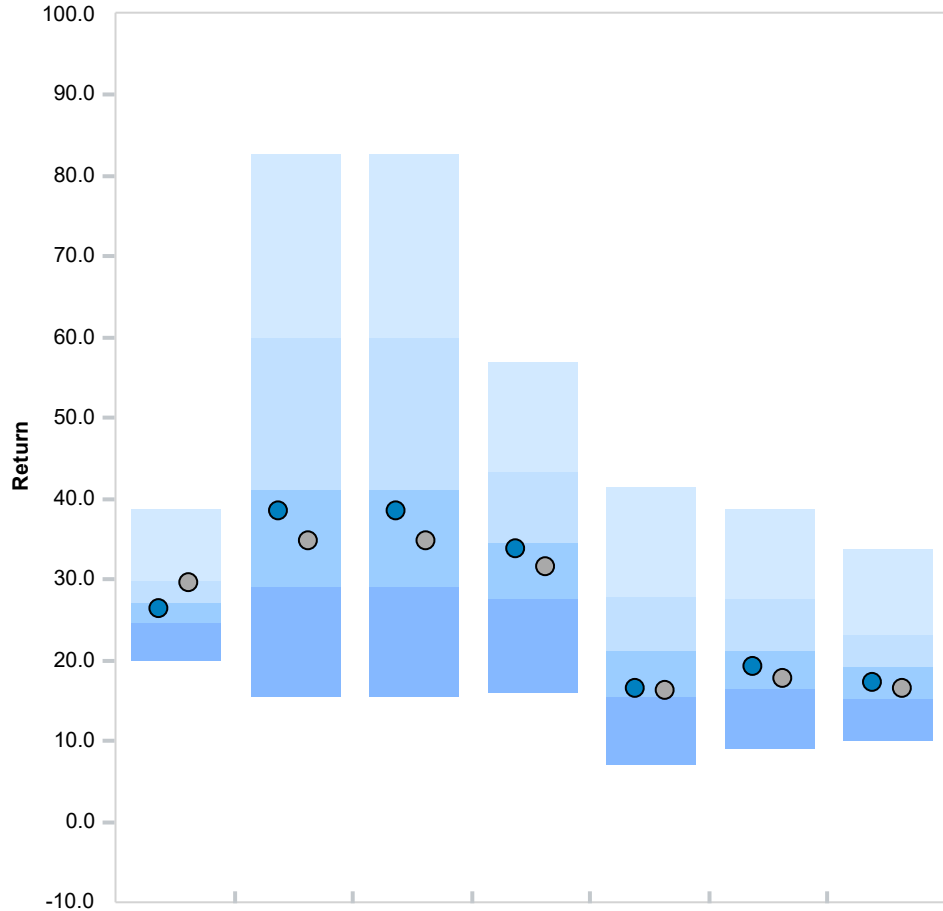
5 Year Rolling Percentile Rank IM U.S. Small Cap Growth Equity (SA+CF)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	9 (45%)	6 (30%)	5 (25%)	0 (0%)
Index	20	0 (0%)	9 (45%)	8 (40%)	3 (15%)

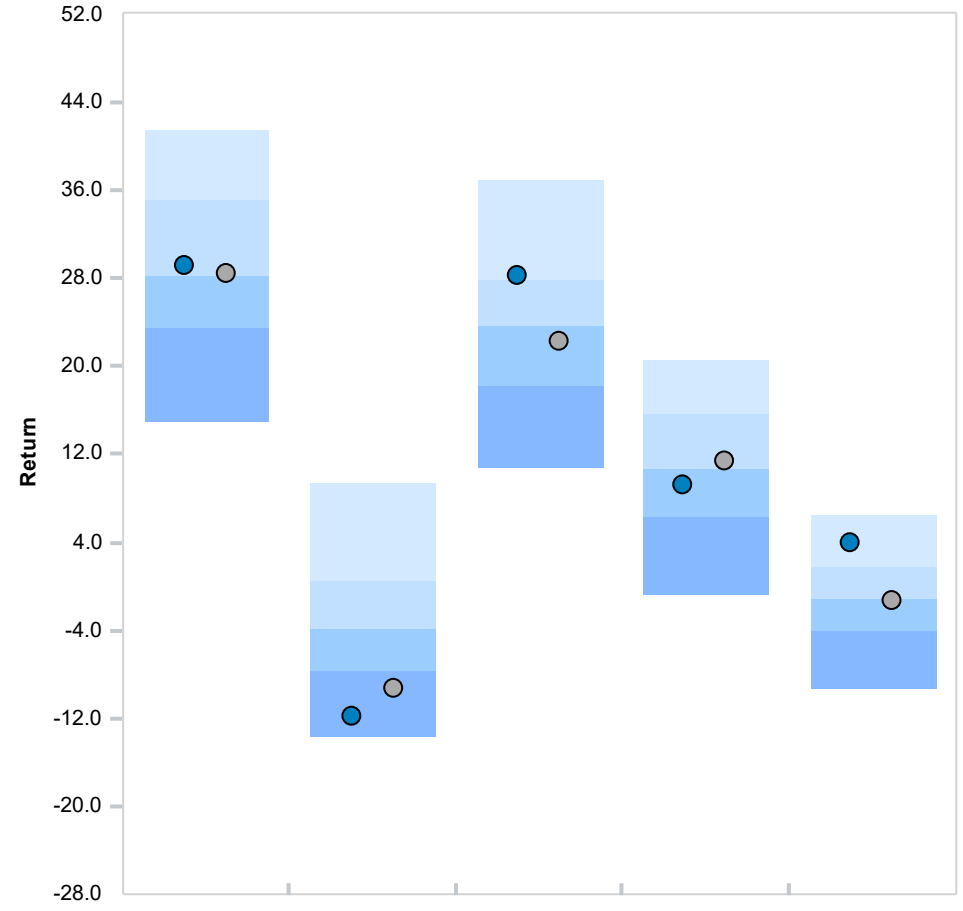


Peer Group Analysis - IM U.S. Small Cap Growth Equity (SA+CF)



	QTR	YTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Investment	26.28 (58)	38.53 (56)	38.53 (56)	33.80 (55)	16.39 (71)	19.26 (62)	17.17 (65)
● Index	29.61 (28)	34.63 (62)	34.63 (62)	31.52 (59)	16.20 (73)	17.66 (69)	16.36 (69)
Median	27.07	41.16	41.16	34.44	21.09	21.13	19.16

Peer Group Analysis - IM U.S. Small Cap Growth Equity (SA+CF)



	2019	2018	2017	2016	2015
● Investment	29.23 (47)	-11.94 (92)	28.31 (24)	9.17 (58)	3.93 (12)
● Index	28.48 (49)	-9.31 (80)	22.17 (56)	11.32 (46)	-1.38 (52)
Median	28.19	-3.95	23.64	10.57	-1.09

Comparative Performance

	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020	1 Qtr Ending Mar-2020	1 Qtr Ending Dec-2019	1 Qtr Ending Sep-2019	1 Qtr Ending Jun-2019
Investment	9.60 (42)	32.38 (56)	-24.39 (60)	11.21 (28)	-7.14 (77)	3.70 (61)
Index	7.16 (68)	30.58 (65)	-25.76 (71)	11.39 (24)	-4.17 (46)	2.75 (76)
Median	8.87	33.55	-23.40	9.45	-4.64	4.61



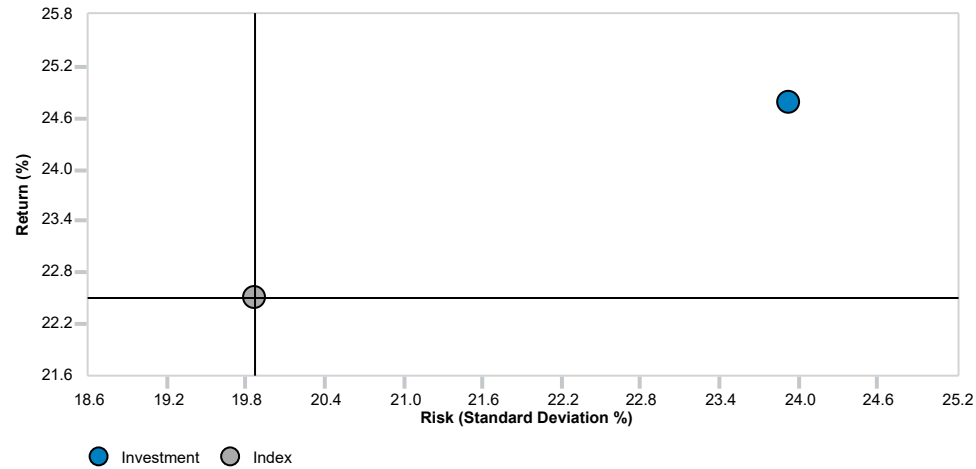
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	24.78	23.93	0.98	113.17	9	114.25	3
Index	22.50	19.87	1.04	100.00	10	100.00	2

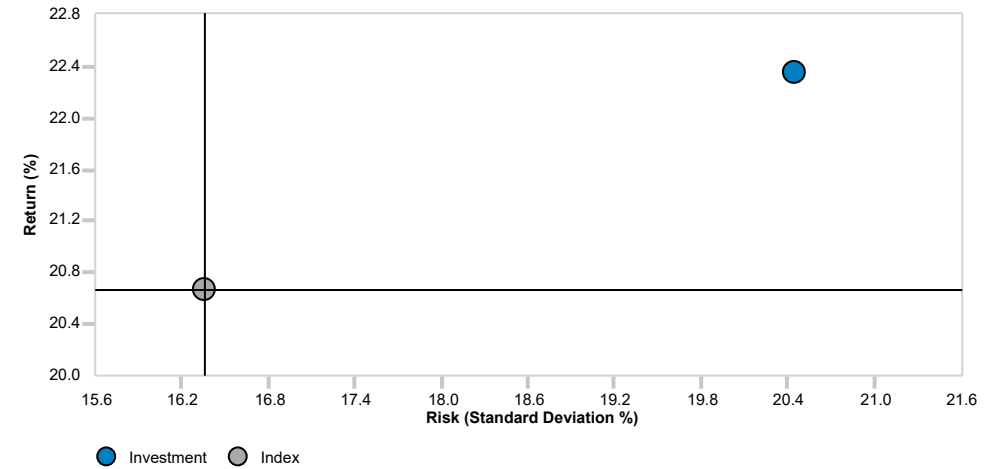
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	22.36	20.46	1.04	117.12	15	127.00	5
Index	20.67	16.37	1.16	100.00	18	100.00	2

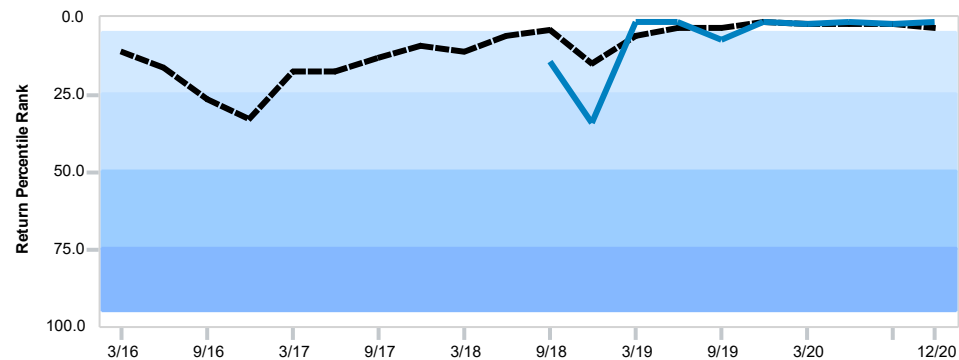
Risk and Return 3 Years



Risk and Return 5 Years

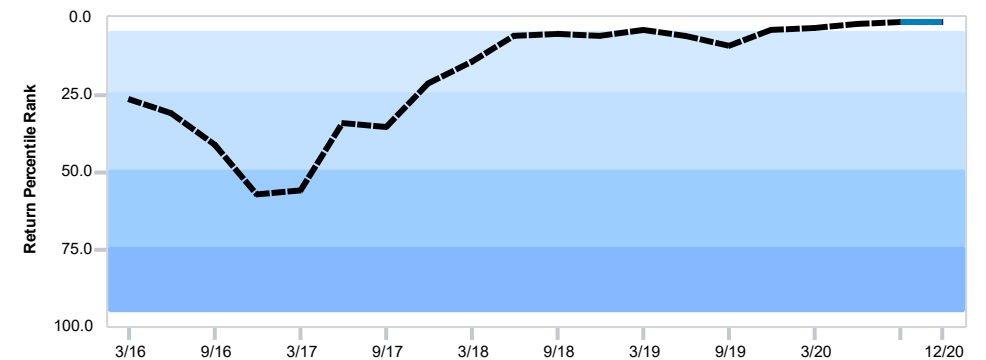


3 Year Rolling Percentile Rank IM U.S. All Cap Core Equity (SA+CF)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	10	9 (90%)	1 (10%)	0 (0%)	0 (0%)
Index	20	18 (90%)	2 (10%)	0 (0%)	0 (0%)

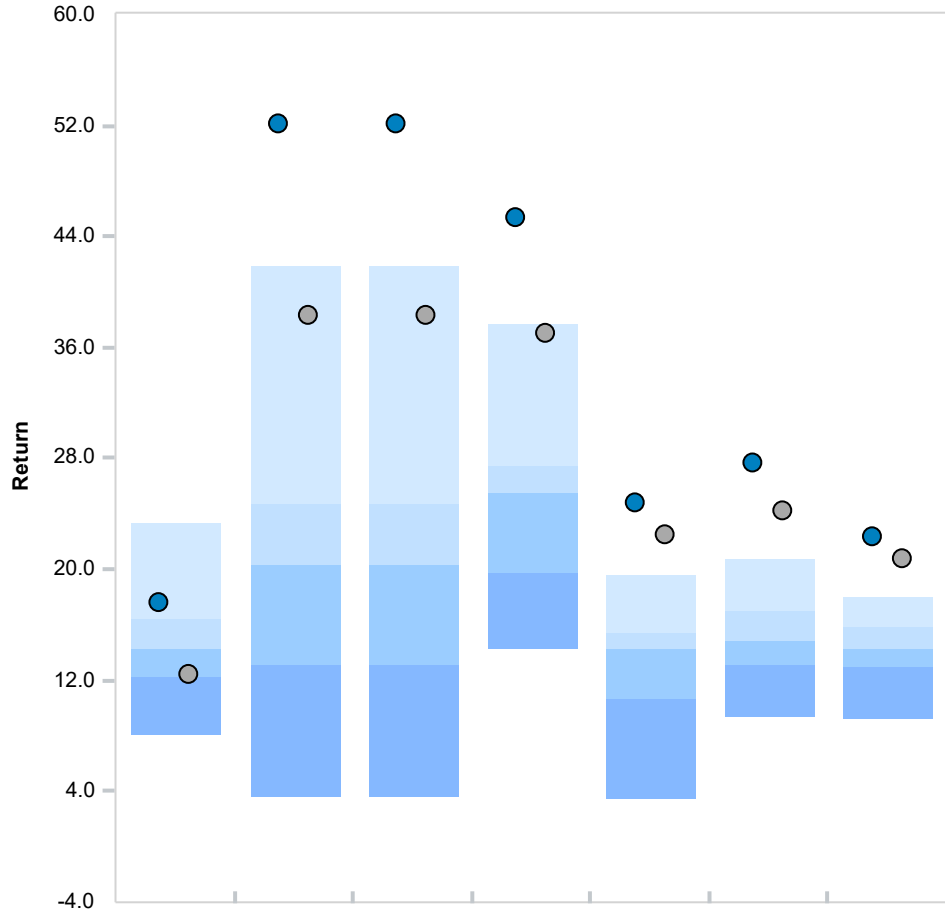
5 Year Rolling Percentile Rank IM U.S. All Cap Core Equity (SA+CF)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	2	2 (100%)	0 (0%)	0 (0%)	0 (0%)
Index	20	13 (65%)	5 (25%)	2 (10%)	0 (0%)

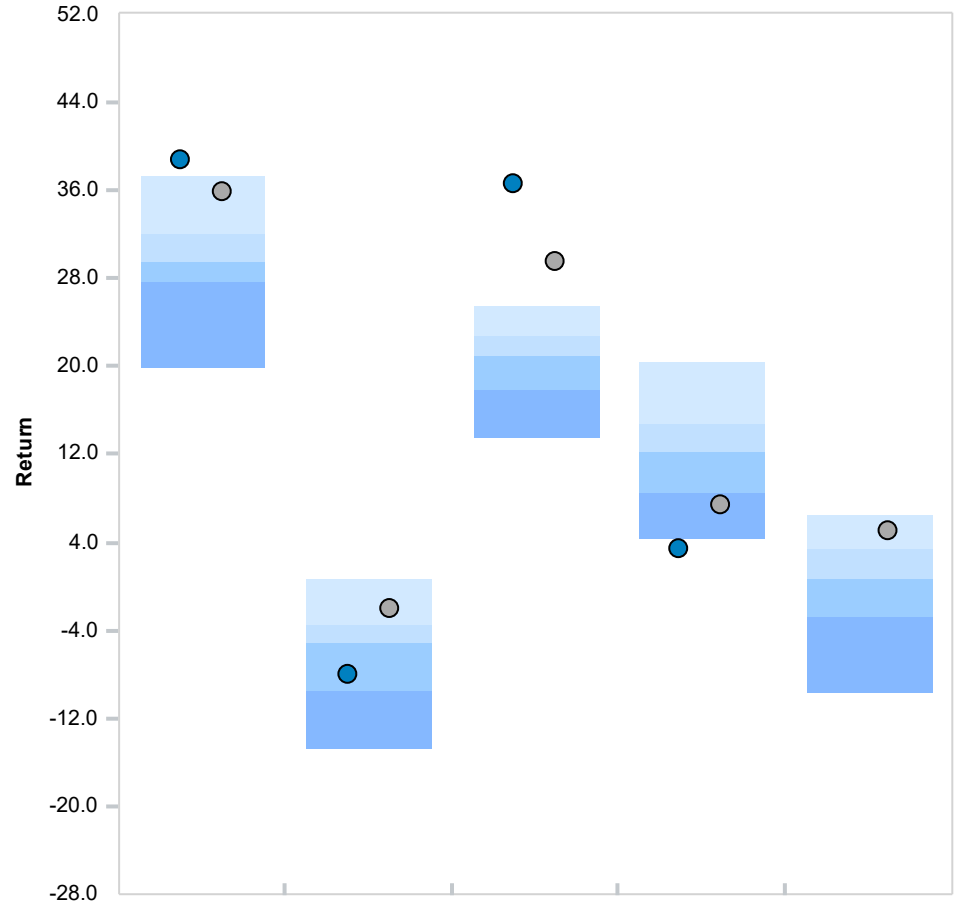


Peer Group Analysis - IM U.S. All Cap Core Equity (SA+CF)



	QTR	YTD	1 YR	2 YR	3 YR	4 YR	5 YR
Investment	17.55 (19)	52.11 (4)	52.11 (4)	45.30 (1)	24.78 (1)	27.63 (1)	22.36 (1)
Index	12.41 (75)	38.26 (8)	38.26 (8)	37.05 (6)	22.50 (3)	24.24 (1)	20.67 (1)
Median	14.27	20.33	20.33	25.48	14.32	14.86	14.21

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



	2019	2018	2017	2016	2015
Investment	38.80 (2)	-7.98 (70)	36.58 (1)	3.36 (96)	N/A
Index	35.85 (9)	-2.12 (20)	29.59 (1)	7.39 (83)	5.09 (16)
Median	29.45	-5.19	20.91	12.22	0.59

Comparative Performance

	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020	1 Qtr Ending Mar-2020	1 Qtr Ending Dec-2019	1 Qtr Ending Sep-2019	1 Qtr Ending Jun-2019
Investment	14.99 (2)	35.83 (1)	-17.16 (15)	14.72 (1)	-3.58 (99)	4.53 (42)
Index	12.86 (4)	27.99 (4)	-14.85 (10)	10.67 (5)	1.10 (59)	4.50 (42)
Median	7.80	21.20	-21.26	7.71	1.50	4.10



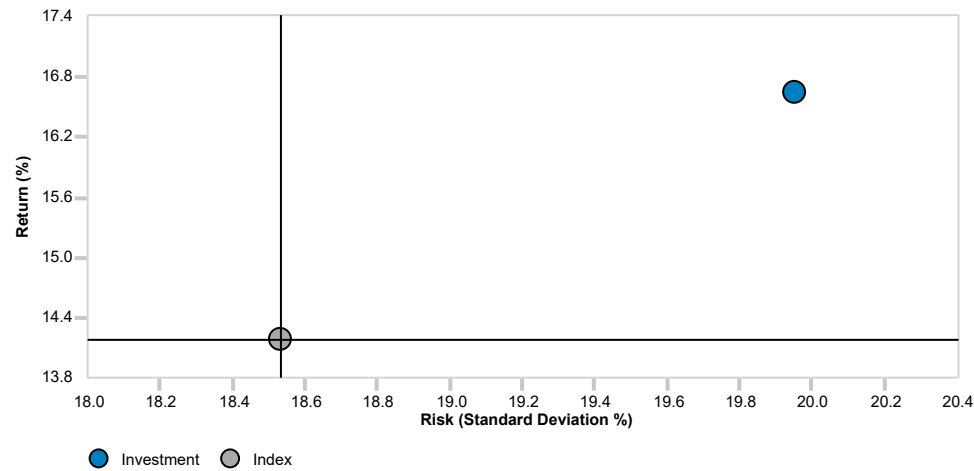
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	16.65	19.95	0.79	104.80	10	95.71	2
Index	14.18	18.53	0.72	100.00	9	100.00	3

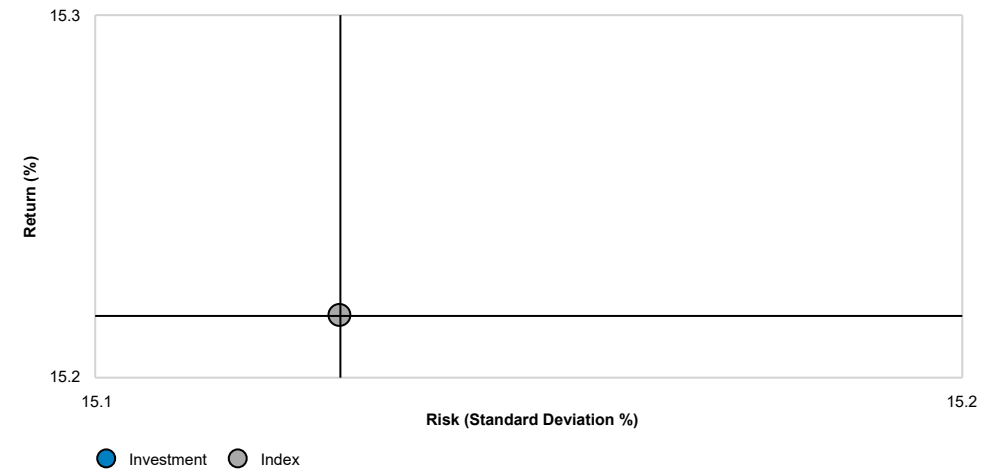
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Index	15.22	15.13	0.94	100.00	17	100.00	3

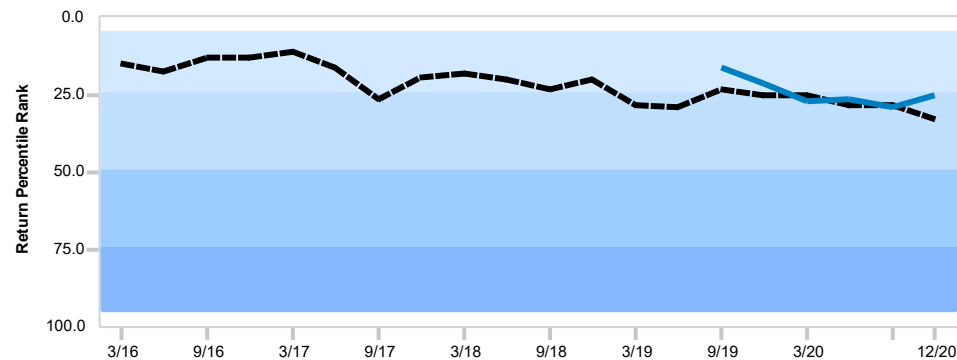
Risk and Return 3 Years



Risk and Return 5 Years

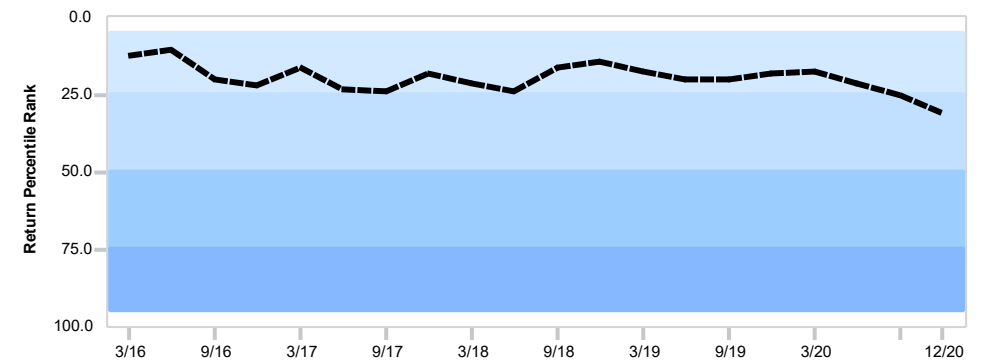


3 Year Rolling Percentile Rank IM U.S. Equity (MF)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	6	3 (50%)	3 (50%)	0 (0%)	0 (0%)
Index	20	14 (70%)	6 (30%)	0 (0%)	0 (0%)

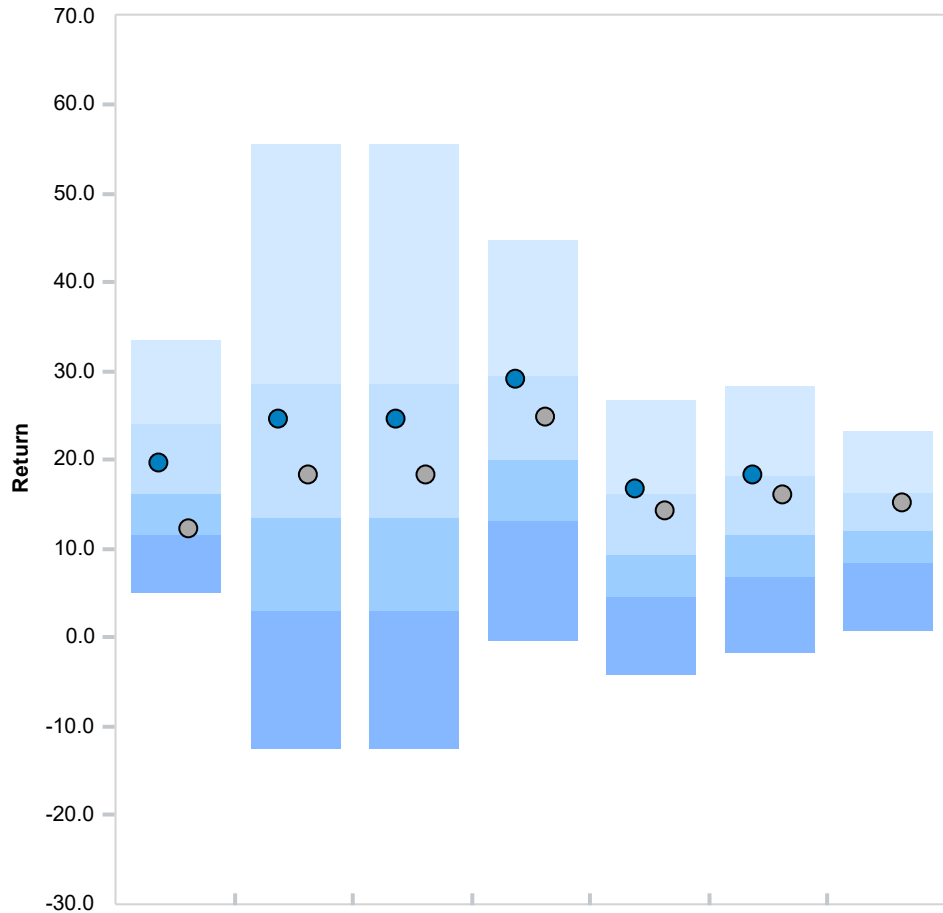
5 Year Rolling Percentile Rank IM U.S. Equity (MF)



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

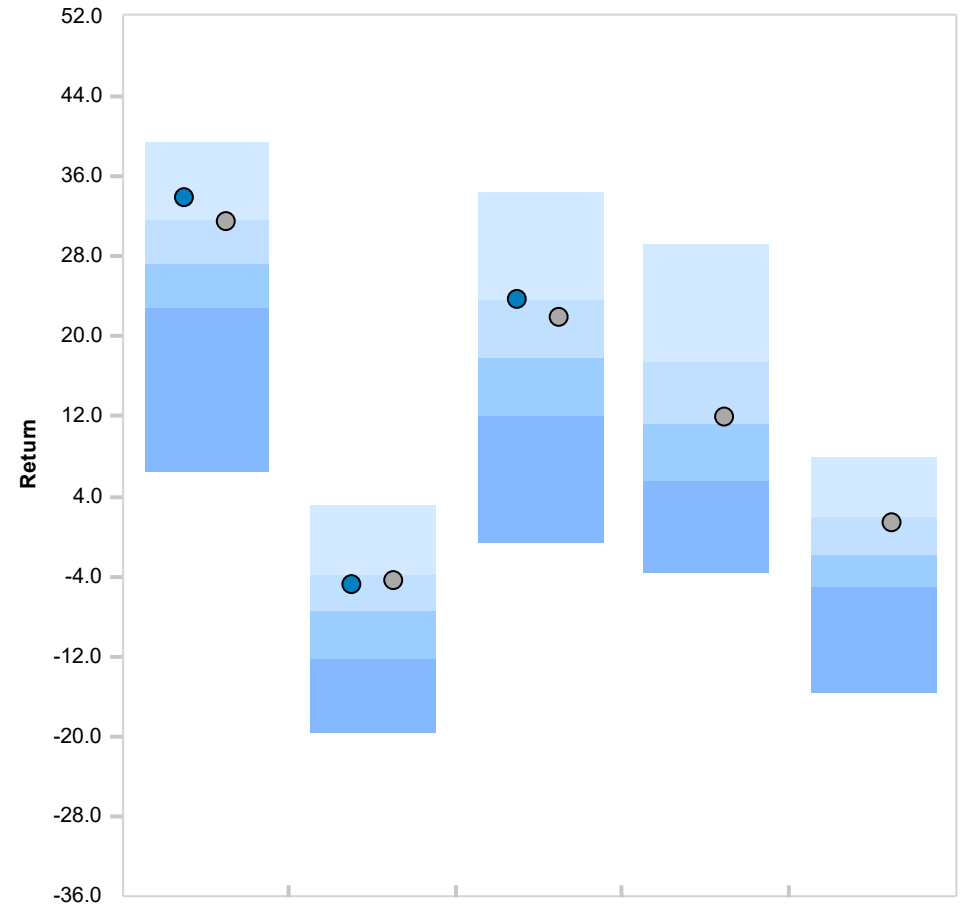


Peer Group Analysis - IM U.S. Equity (MF)



	QTR	YTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Investment	19.71 (38)	24.65 (30)	24.65 (30)	29.19 (26)	16.65 (25)	18.38 (25)	N/A
● Index	12.15 (71)	18.40 (41)	18.40 (41)	24.77 (36)	14.18 (33)	16.05 (32)	15.22 (31)
Median	16.26	13.66	13.66	20.02	9.43	11.51	12.04

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



	2019	2018	2017	2016	2015
● Investment	33.89 (17)	-4.89 (33)	23.74 (26)	N/A	N/A
● Index	31.49 (26)	-4.38 (29)	21.83 (32)	11.96 (47)	1.38 (28)
Median	27.35	-7.49	17.82	11.34	-1.83

Comparative Performance

	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020	1 Qtr Ending Mar-2020	1 Qtr Ending Dec-2019	1 Qtr Ending Sep-2019	1 Qtr Ending Jun-2019
Investment	7.50 (44)	24.53 (37)	-22.22 (47)	8.05 (48)	1.43 (32)	5.42 (19)
Index	8.93 (33)	20.54 (55)	-19.60 (34)	9.07 (32)	1.70 (26)	4.30 (34)
Median	6.65	21.51	-23.16	7.91	0.37	3.52



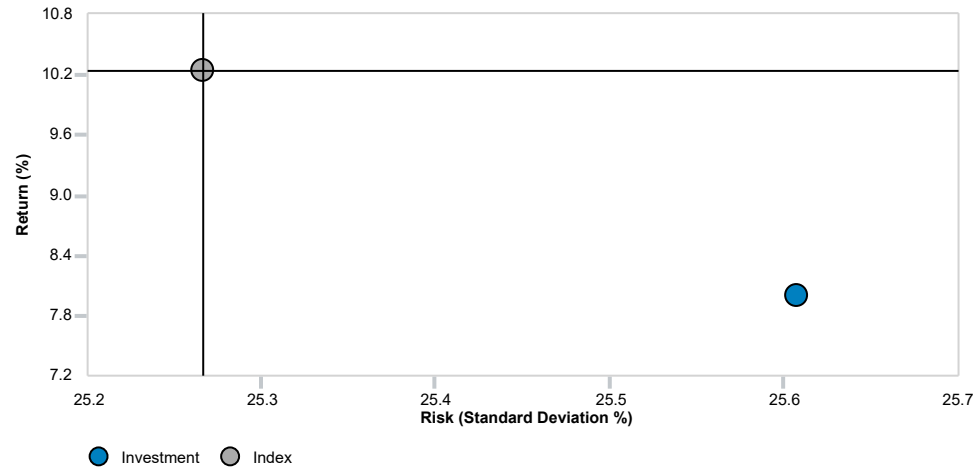
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	7.99	25.61	0.37	98.25	10	104.73	2
Index	10.25	25.27	0.45	100.00	8	100.00	4

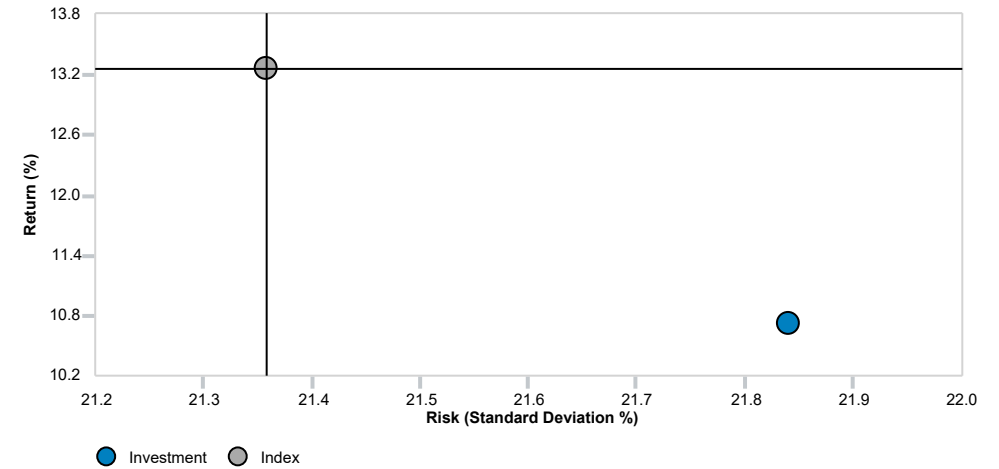
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	10.72	21.84	0.52	97.26	17	106.27	3
Index	13.26	21.36	0.64	100.00	15	100.00	5

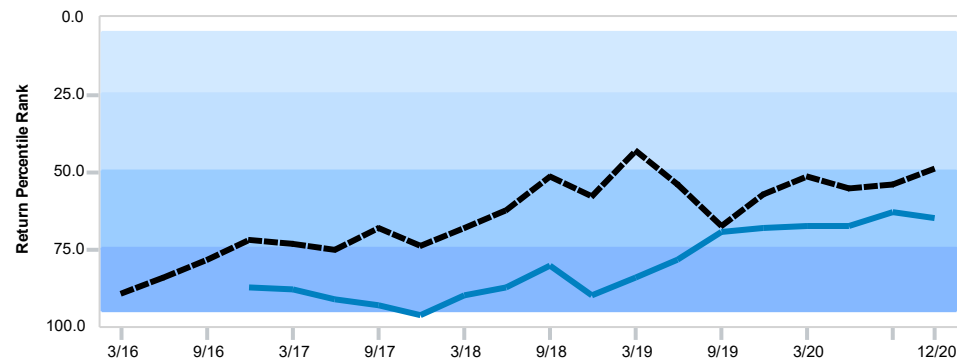
Risk and Return 3 Years



Risk and Return 5 Years

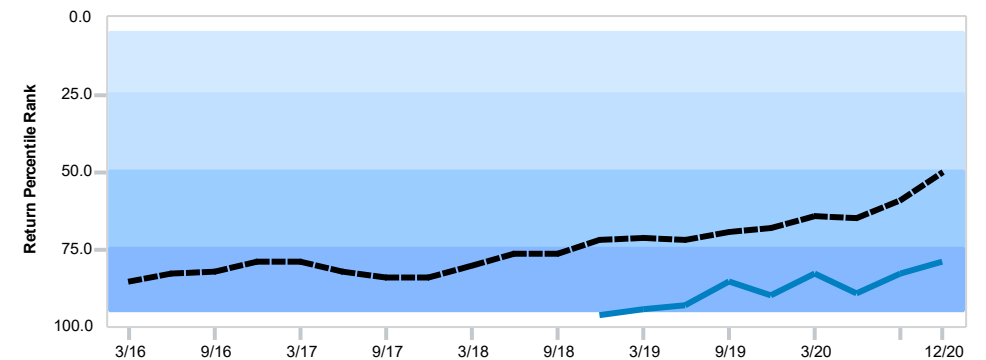


3 Year Rolling Percentile Rank IM U.S. Small Cap Core Equity (SA+CF)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	17	0 (0%)	0 (0%)	6 (35%)	11 (65%)
Index	20	0 (0%)	2 (10%)	15 (75%)	3 (15%)

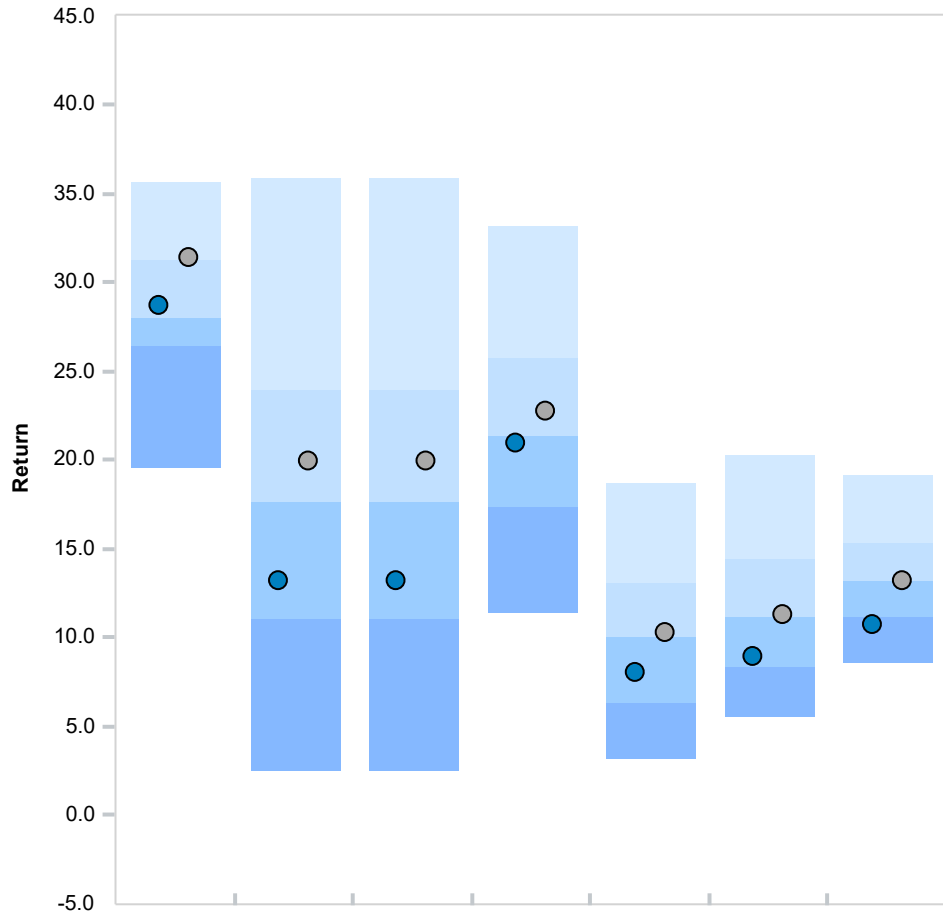
5 Year Rolling Percentile Rank IM U.S. Small Cap Core Equity (SA+CF)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	9	0 (0%)	0 (0%)	0 (0%)	9 (100%)
Index	20	0 (0%)	1 (5%)	8 (40%)	11 (55%)

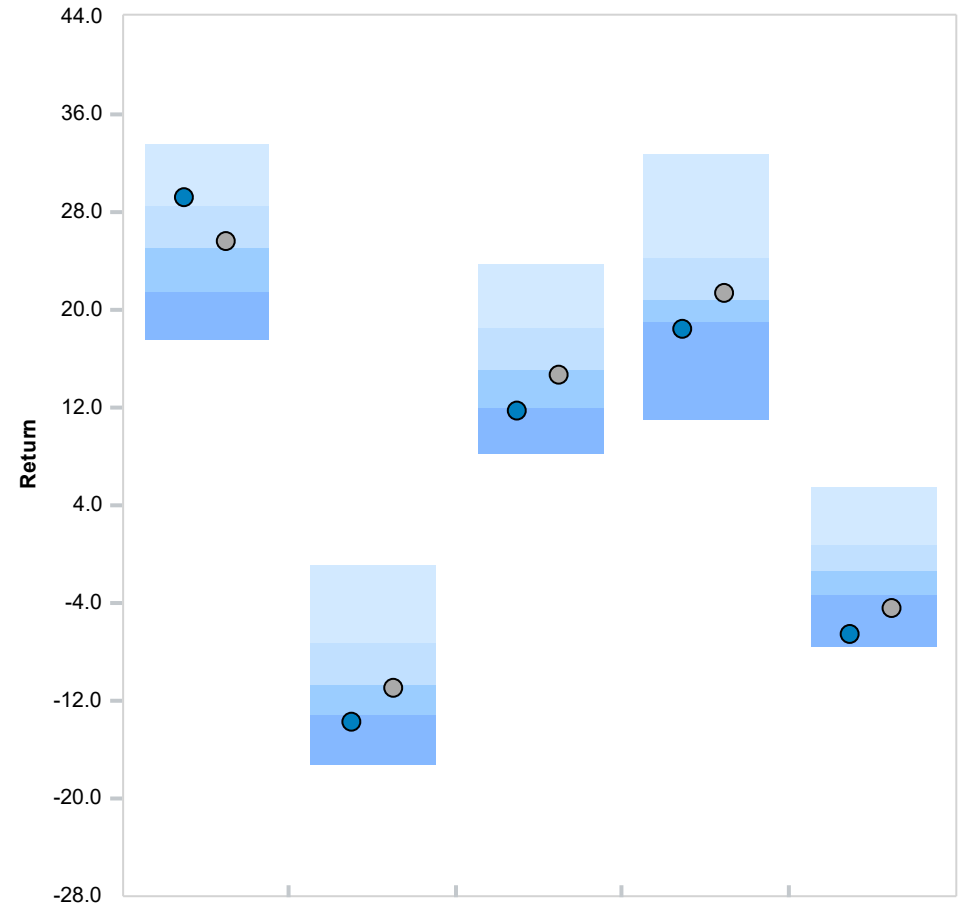


Peer Group Analysis - IM U.S. Small Cap Core Equity (SA+CF)



● Investment	28.75 (44)	13.19 (64)	13.19 (64)	20.92 (53)	7.99 (65)	8.88 (72)	10.72 (79)
● Index	31.37 (22)	19.96 (34)	19.96 (34)	22.71 (45)	10.25 (49)	11.33 (50)	13.26 (50)
Median	28.02	17.66	17.66	21.43	10.02	11.21	13.23

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



● Investment	29.19 (24)	-13.87 (81)	11.60 (79)	18.38 (81)	-6.58 (91)
● Index	25.53 (50)	-11.01 (56)	14.65 (56)	21.31 (47)	-4.41 (81)
Median	25.11	-10.69	15.13	20.77	-1.36

Comparative Performance

	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020	1 Qtr Ending Mar-2020	1 Qtr Ending Dec-2019	1 Qtr Ending Sep-2019	1 Qtr Ending Jun-2019
Investment	4.06 (64)	23.03 (69)	-31.33 (46)	8.94 (43)	0.64 (14)	3.06 (41)
Index	4.93 (49)	25.42 (44)	-30.61 (41)	9.94 (21)	-2.40 (67)	2.10 (61)
Median	4.81	25.05	-31.61	8.66	-1.65	2.74



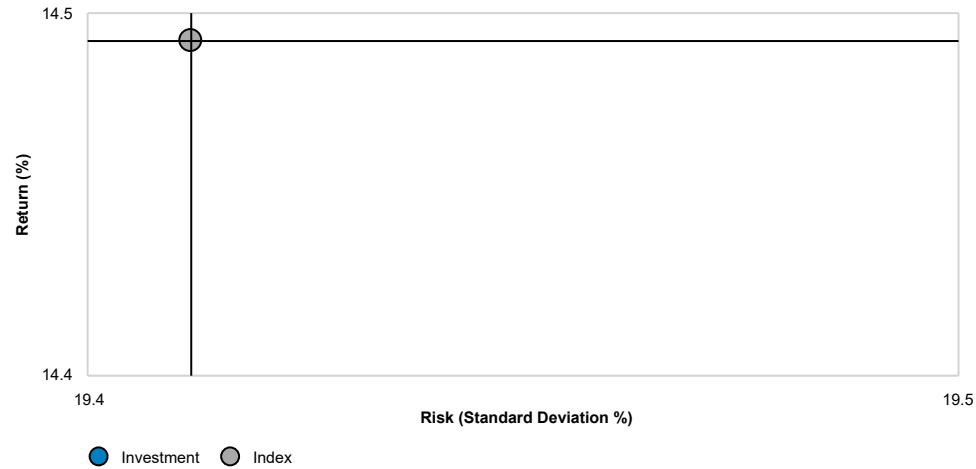
Historical Statistics 3 Years

	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	14.49	19.41	0.71	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	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Index	15.43	15.89	0.91	100.00	17	100.00	3

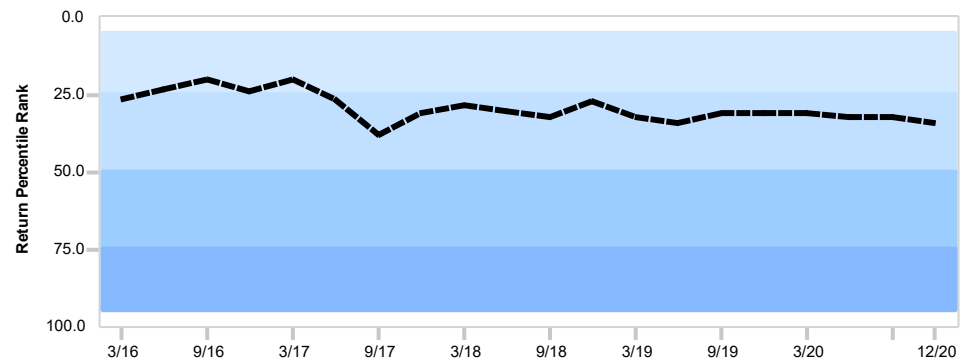
Risk and Return 3 Years



Risk and Return 5 Years

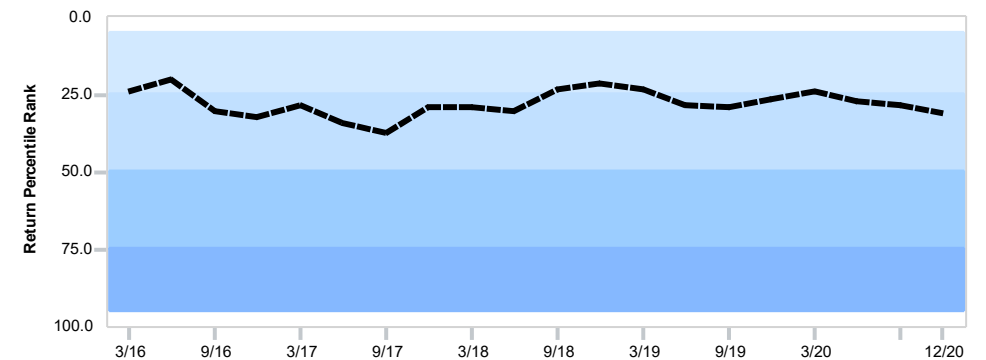


3 Year Rolling Percentile Rank IM U.S. Equity (SA+CF)



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

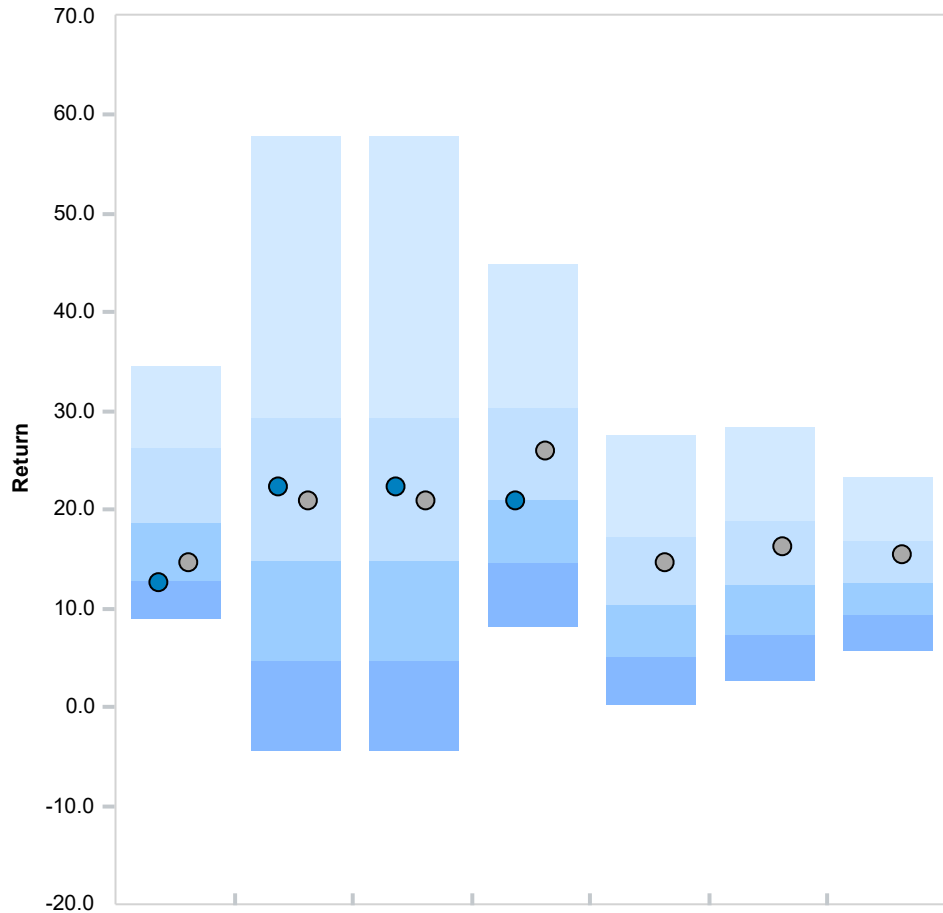
5 Year Rolling Percentile Rank IM U.S. Equity (SA+CF)



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

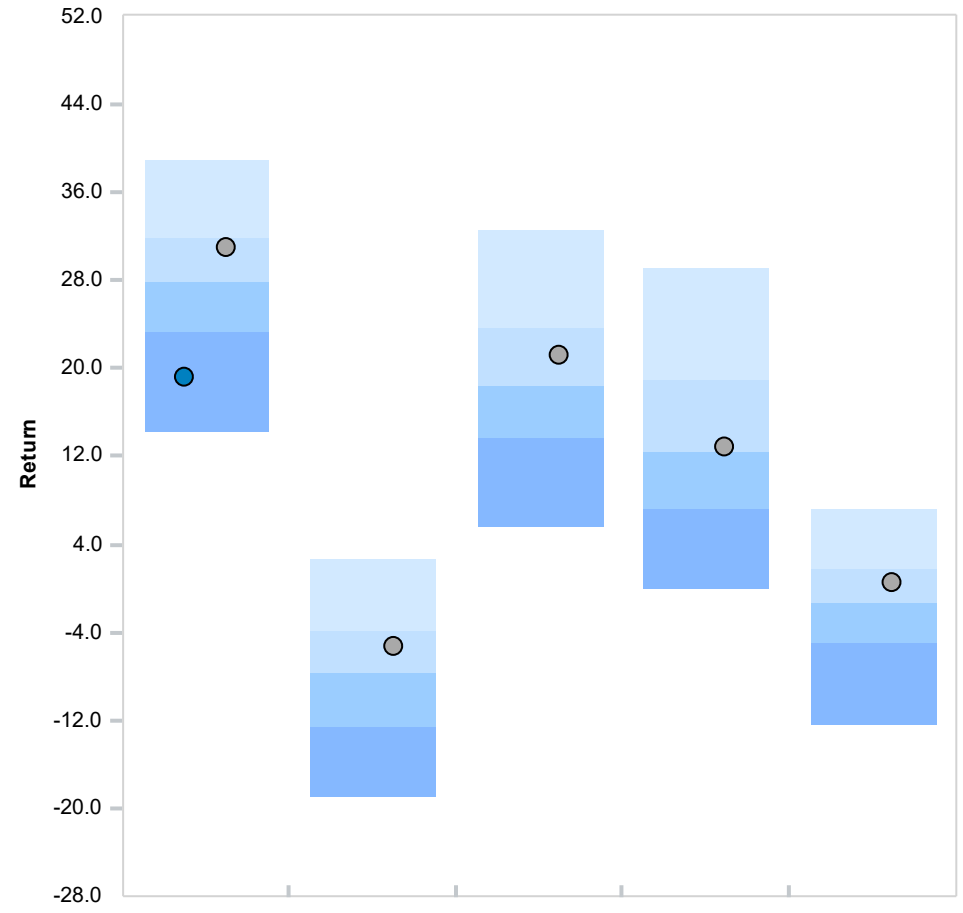


Peer Group Analysis - IM U.S. Equity (SA+CF)



	QTR	YTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Investment	12.52 (77)	22.31 (35)	22.31 (35)	20.77 (52)	N/A	N/A	N/A
● Index	14.68 (66)	20.89 (37)	20.89 (37)	25.85 (35)	14.49 (34)	16.12 (34)	15.43 (31)
Median	18.55	14.79	14.79	21.11	10.43	12.36	12.62

Peer Group Analysis - IM U.S. Equity (SA+CF)



	2019	2018	2017	2016	2015
● Investment	19.24 (89)	N/A	N/A	N/A	N/A
● Index	31.02 (30)	-5.24 (35)	21.13 (38)	12.74 (49)	0.48 (36)
Median	27.91	-7.76	18.49	12.39	-1.39

Comparative Performance

	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020	1 Qtr Ending Mar-2020	1 Qtr Ending Dec-2019	1 Qtr Ending Sep-2019	1 Qtr Ending Jun-2019
Investment	3.76 (79)	26.58 (30)	-17.23 (19)	6.00 (82)	-3.77 (87)	2.20 (76)
Index	9.21 (29)	22.03 (51)	-20.90 (36)	9.10 (31)	1.16 (35)	4.10 (45)
Median	6.79	22.09	-24.68	8.01	0.26	3.84



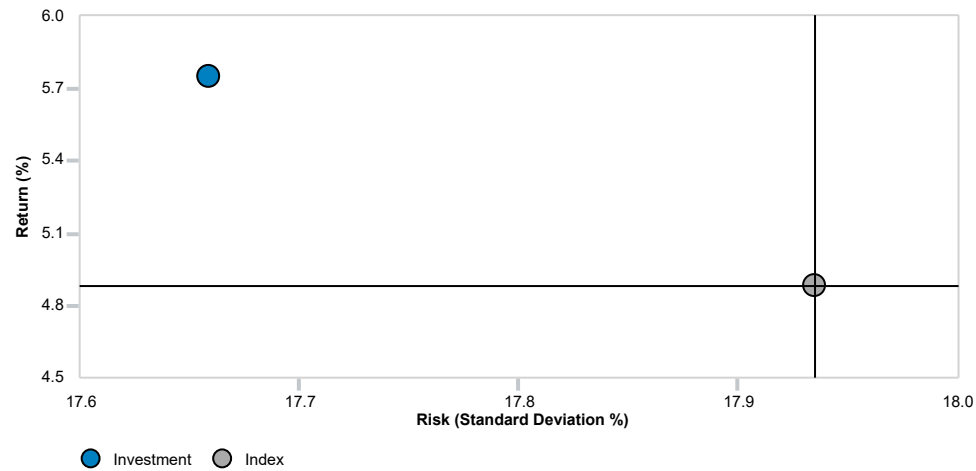
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	5.75	17.66	0.31	99.38	7	95.59	5
Index	4.88	17.94	0.27	100.00	7	100.00	5

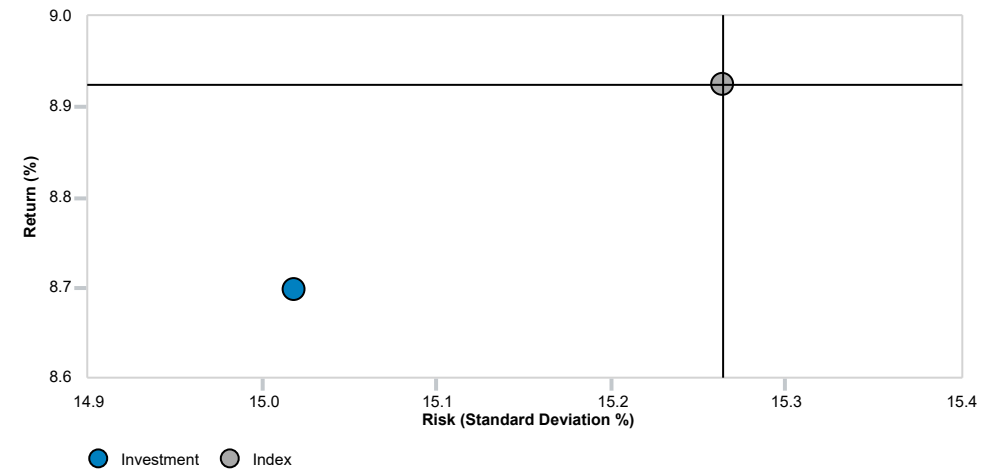
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	8.70	15.02	0.55	97.64	12	97.75	8
Index	8.93	15.26	0.56	100.00	12	100.00	8

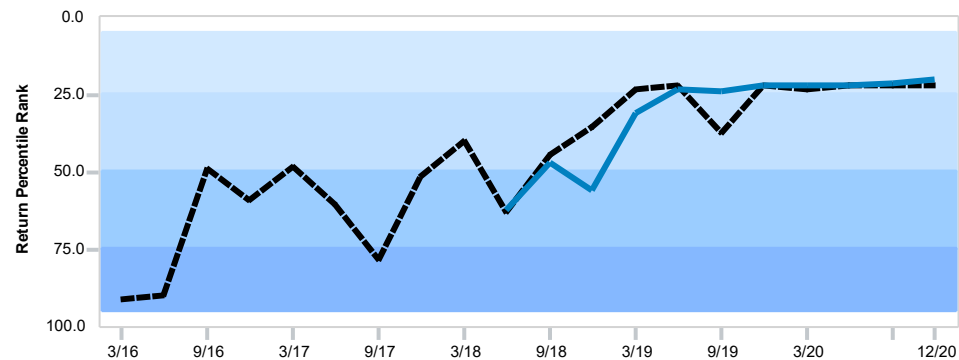
Risk and Return 3 Years



Risk and Return 5 Years

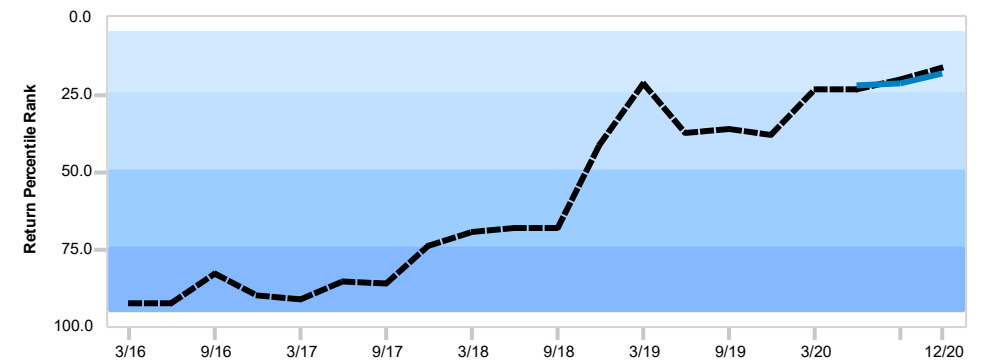


3 Year Rolling Percentile Rank IM Enhanced and Indexed International Equity (SA+CF)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	11	7 (64%)	2 (18%)	2 (18%)	0 (0%)
Index	20	7 (35%)	6 (30%)	4 (20%)	3 (15%)

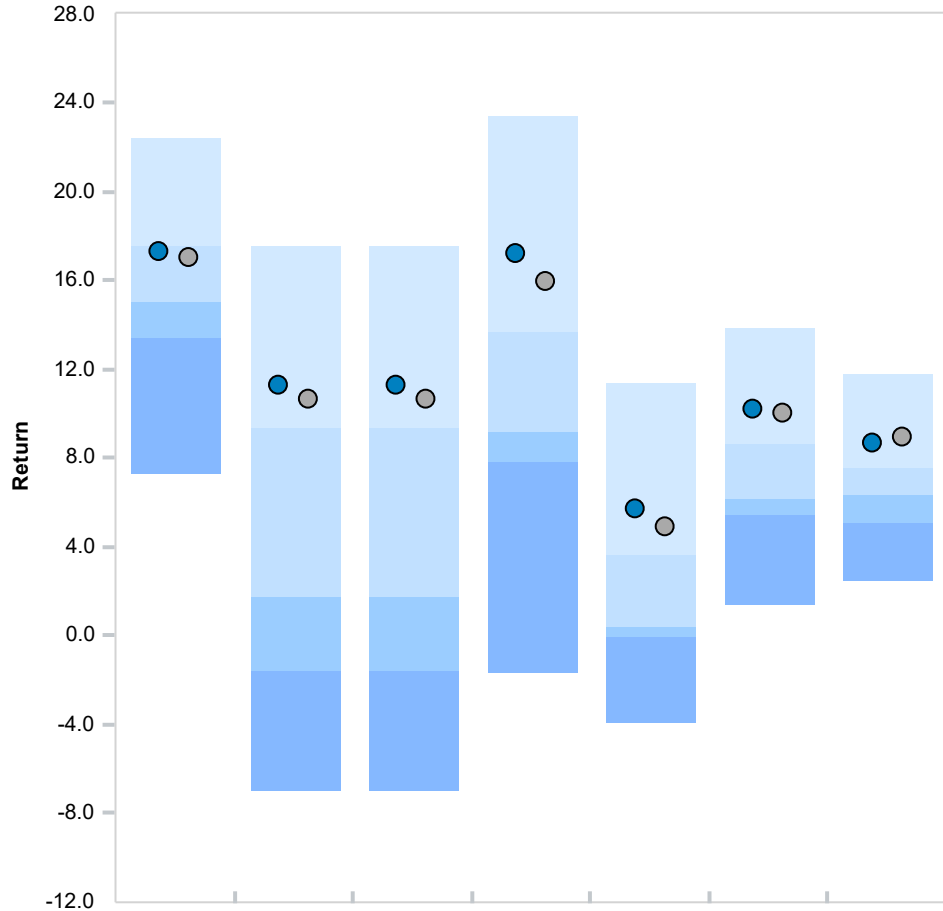
5 Year Rolling Percentile Rank IM Enhanced and Indexed International Equity (SA+CF)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	3	3 (100%)	0 (0%)	0 (0%)	0 (0%)
Index	20	5 (25%)	4 (20%)	4 (20%)	7 (35%)

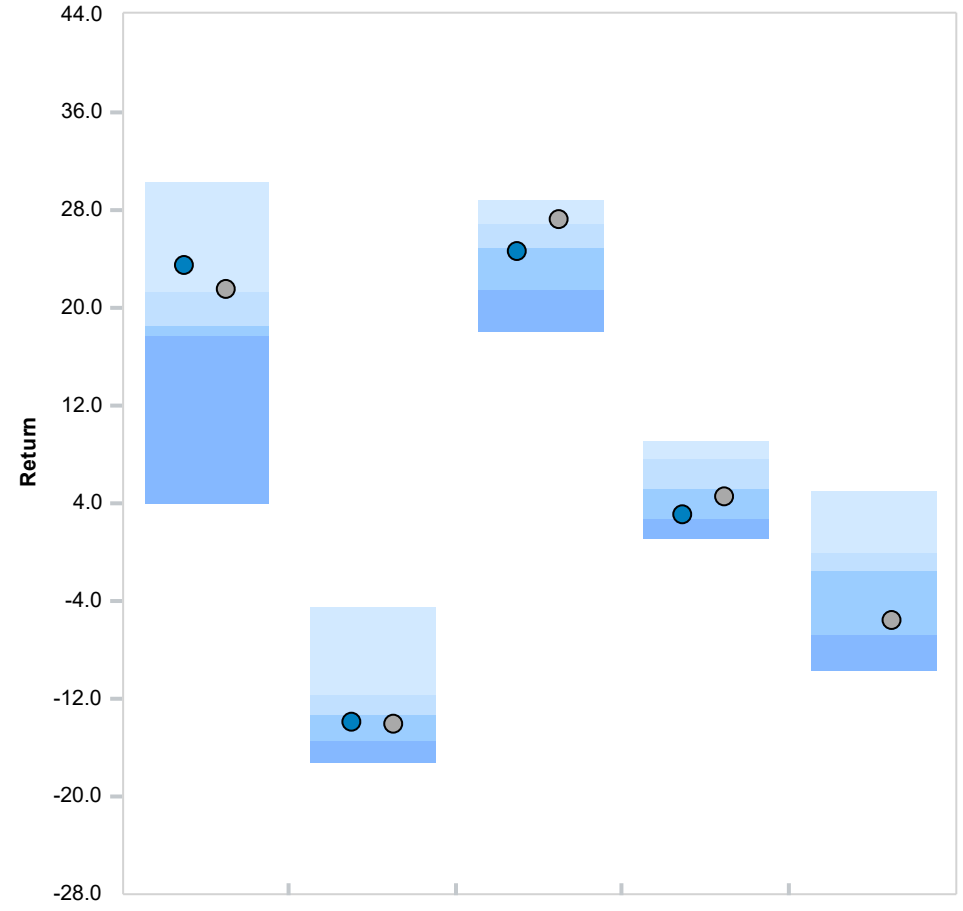


Peer Group Analysis - IM Enhanced and Indexed International Equity (SA+CF)



	QTR	YTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Investment	17.31 (30)	11.27 (16)	11.27 (16)	17.19 (19)	5.75 (20)	10.17 (19)	8.70 (18)
● Index	17.01 (32)	10.65 (21)	10.65 (21)	15.96 (21)	4.88 (22)	10.06 (20)	8.93 (16)
Median	15.02	1.79	1.79	9.21	0.41	6.18	6.30

Peer Group Analysis - IM Enhanced and Indexed International Equity (SA+CF)



	2019	2018	2017	2016	2015
● Investment	23.42 (19)	-13.88 (55)	24.56 (54)	3.01 (68)	N/A
● Index	21.51 (24)	-14.20 (57)	27.19 (20)	4.50 (54)	-5.66 (71)
Median	18.50	-13.30	24.84	5.10	-1.54

Comparative Performance

	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020	1 Qtr Ending Mar-2020	1 Qtr Ending Dec-2019	1 Qtr Ending Sep-2019	1 Qtr Ending Jun-2019
Investment	6.27 (18)	16.26 (21)	-23.23 (32)	8.29 (48)	-0.85 (23)	3.95 (1)
Index	6.25 (18)	16.12 (25)	-23.36 (33)	8.92 (30)	-1.80 (55)	2.98 (30)
Median	3.84	14.90	-25.62	8.19	-1.71	2.06



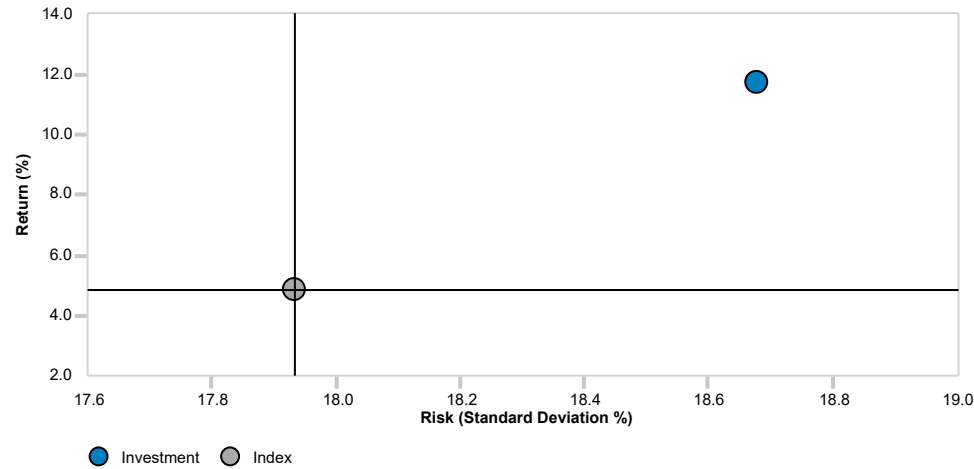
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	11.78	18.68	0.60	115.64	7	89.95	5
Index	4.88	17.94	0.27	100.00	7	100.00	5

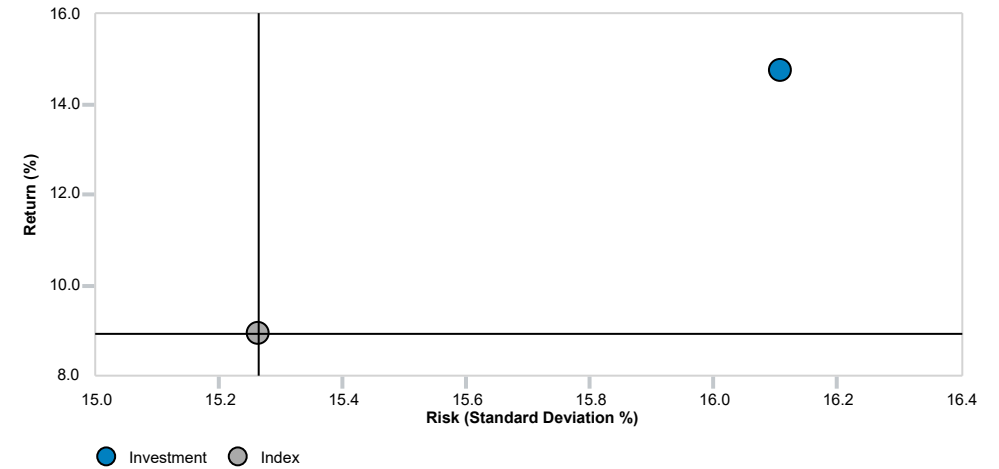
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	14.77	16.11	0.86	115.24	13	90.63	7
Index	8.93	15.26	0.56	100.00	12	100.00	8

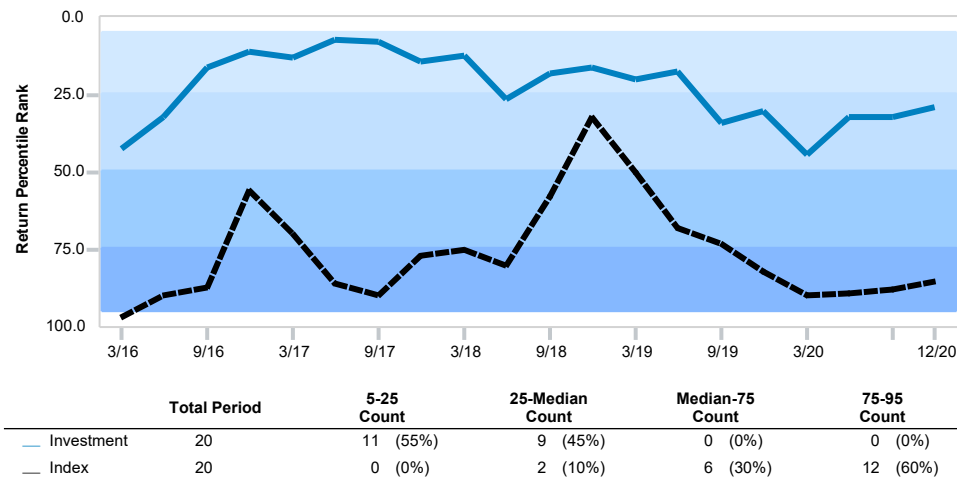
Risk and Return 3 Years



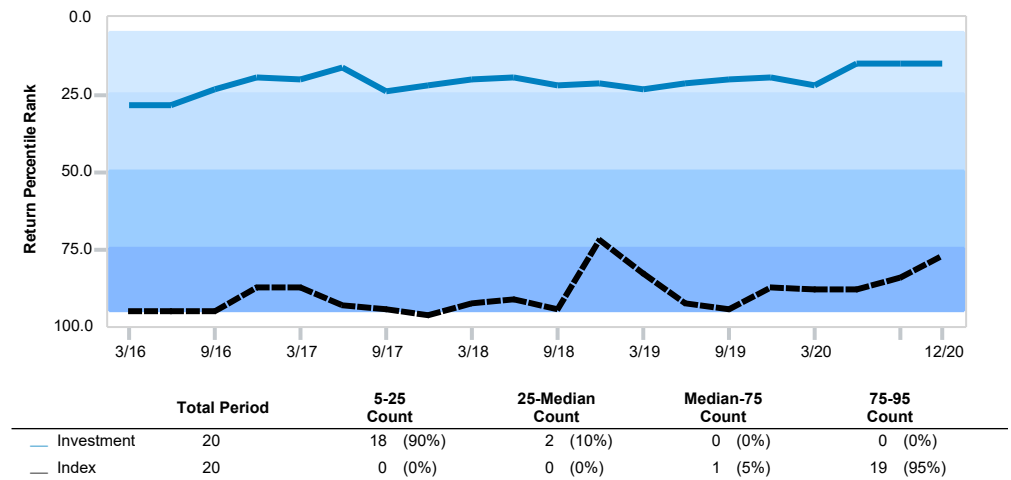
Risk and Return 5 Years



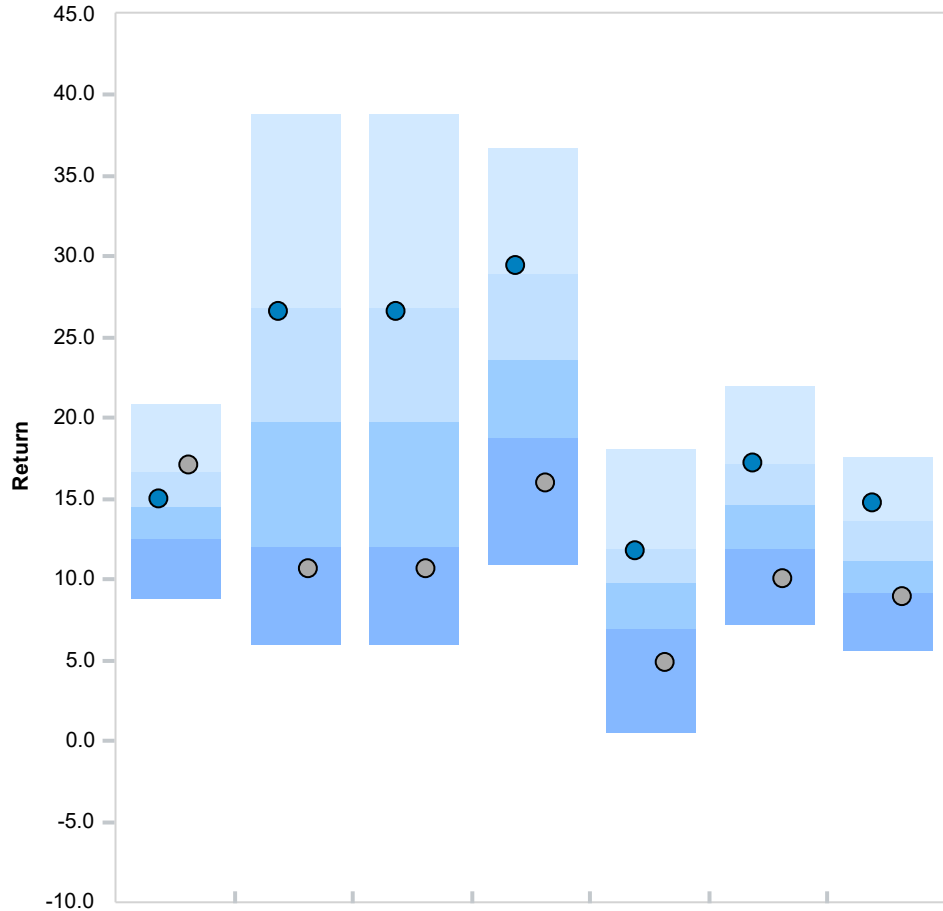
3 Year Rolling Percentile Rank IM International Large Cap Growth Equity (SA+CF)



5 Year Rolling Percentile Rank IM International Large Cap Growth Equity (SA+CF)

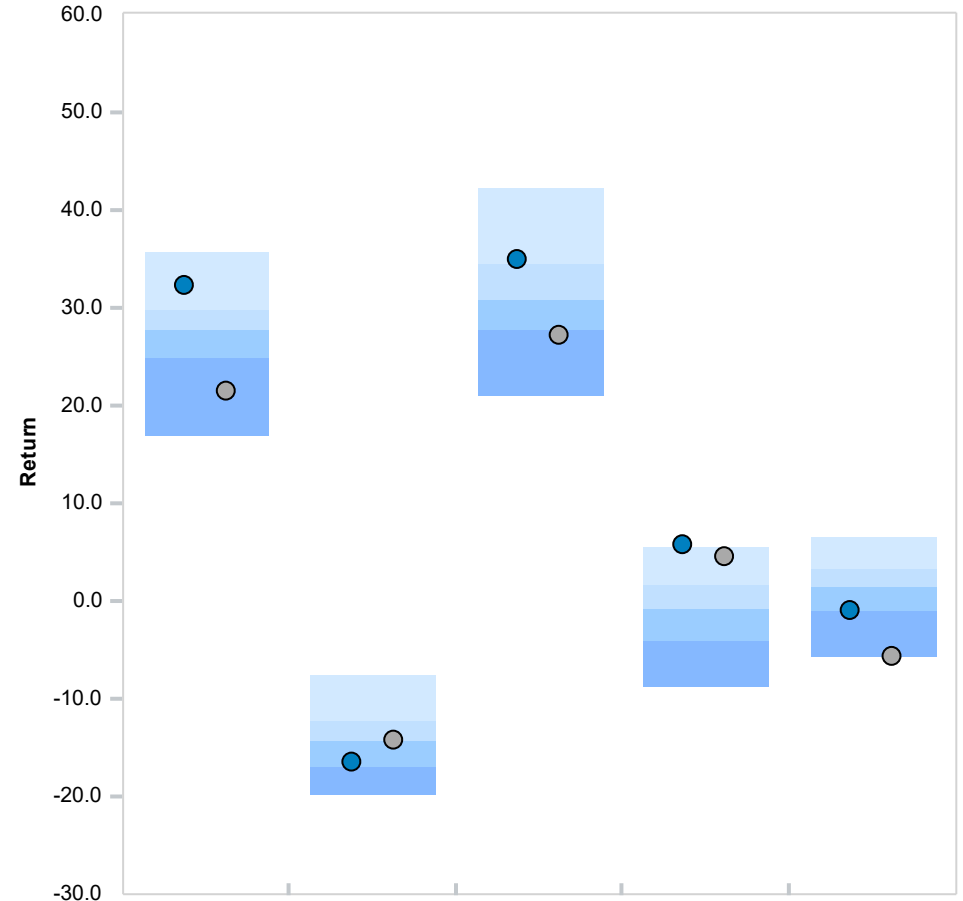


Peer Group Analysis - IM International Large Cap Growth Equity (SA+CF)



	QTR	YTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Investment	14.94 (47)	26.60 (29)	26.60 (29)	29.38 (23)	11.78 (29)	17.14 (25)	14.77 (15)
● Index	17.01 (23)	10.65 (80)	10.65 (80)	15.96 (86)	4.88 (85)	10.06 (84)	8.93 (77)
Median	14.41	19.83	19.83	23.63	9.75	14.55	11.08

Peer Group Analysis - IM International Large Cap Growth Equity (SA+CF)



	2019	2018	2017	2016	2015
● Investment	32.23 (16)	-16.57 (69)	34.83 (24)	5.77 (5)	-1.11 (76)
● Index	21.51 (87)	-14.20 (50)	27.19 (79)	4.50 (7)	-5.66 (95)
Median	27.65	-14.27	30.76	-0.74	1.48

Comparative Performance

	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020	1 Qtr Ending Mar-2020	1 Qtr Ending Dec-2019	1 Qtr Ending Sep-2019	1 Qtr Ending Jun-2019
Investment	10.66 (32)	25.55 (10)	-20.73 (67)	12.15 (10)	-1.82 (61)	5.44 (41)
Index	6.25 (88)	16.12 (78)	-23.36 (90)	8.92 (62)	-1.80 (61)	2.98 (82)
Median	8.89	19.24	-19.47	9.44	-1.60	4.92



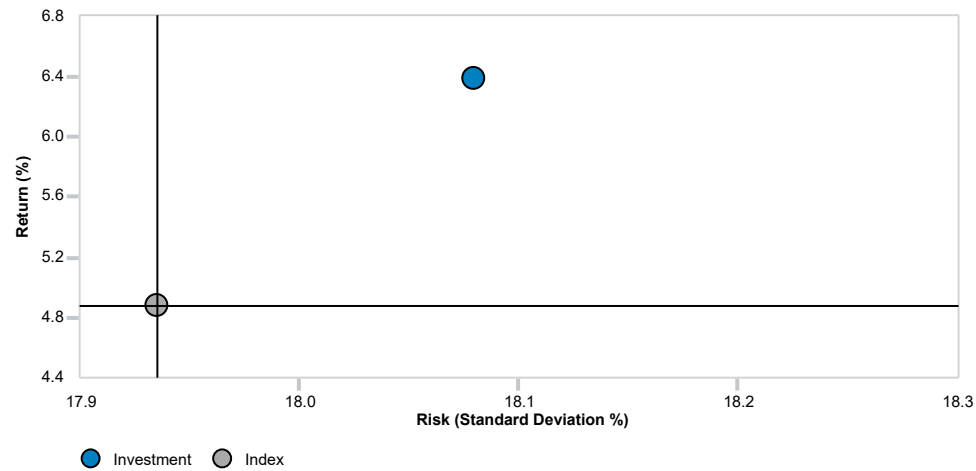
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	6.39	18.08	0.34	102.86	7	96.93	5
Index	4.88	17.94	0.27	100.00	7	100.00	5

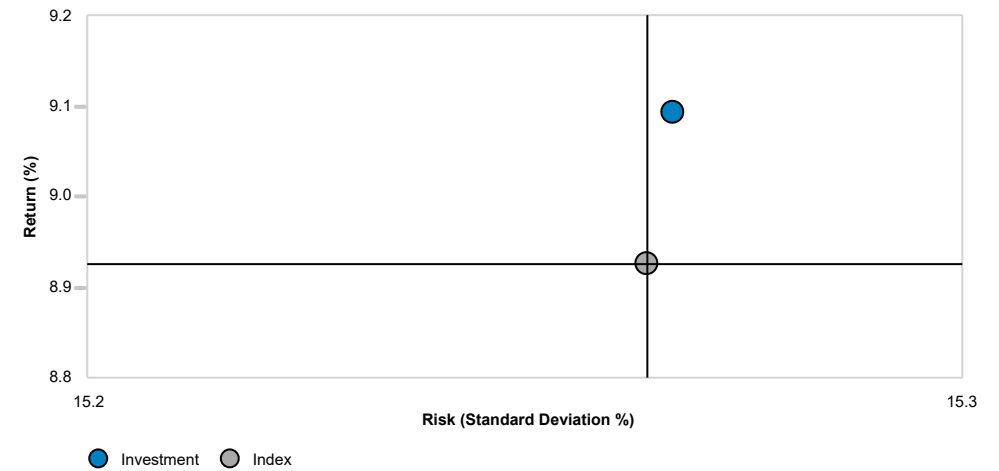
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	9.09	15.27	0.57	99.55	12	98.29	8
Index	8.93	15.26	0.56	100.00	12	100.00	8

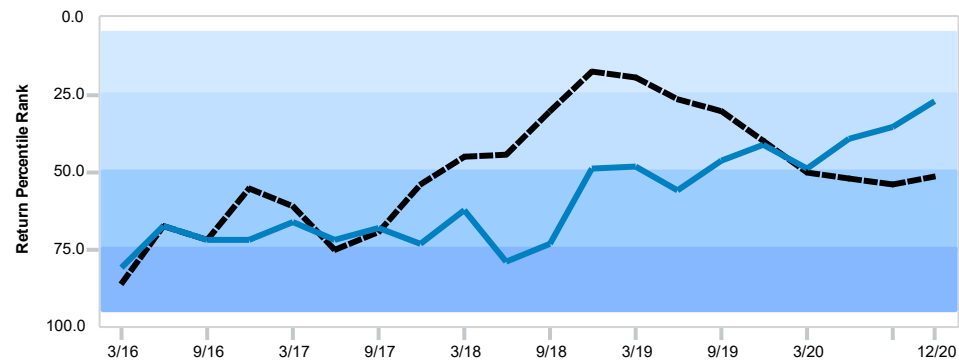
Risk and Return 3 Years



Risk and Return 5 Years

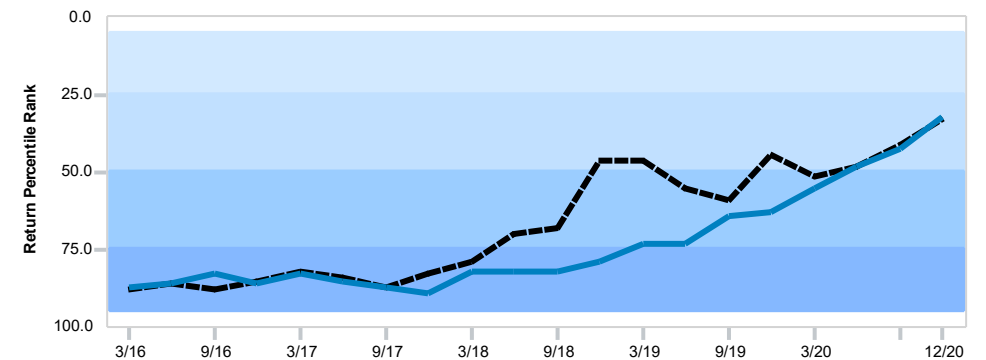


3 Year Rolling Percentile Rank IM International Large Cap Core Equity (SA+CF)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	0 (0%)	8 (40%)	10 (50%)	2 (10%)
Index	20	2 (10%)	7 (35%)	10 (50%)	1 (5%)

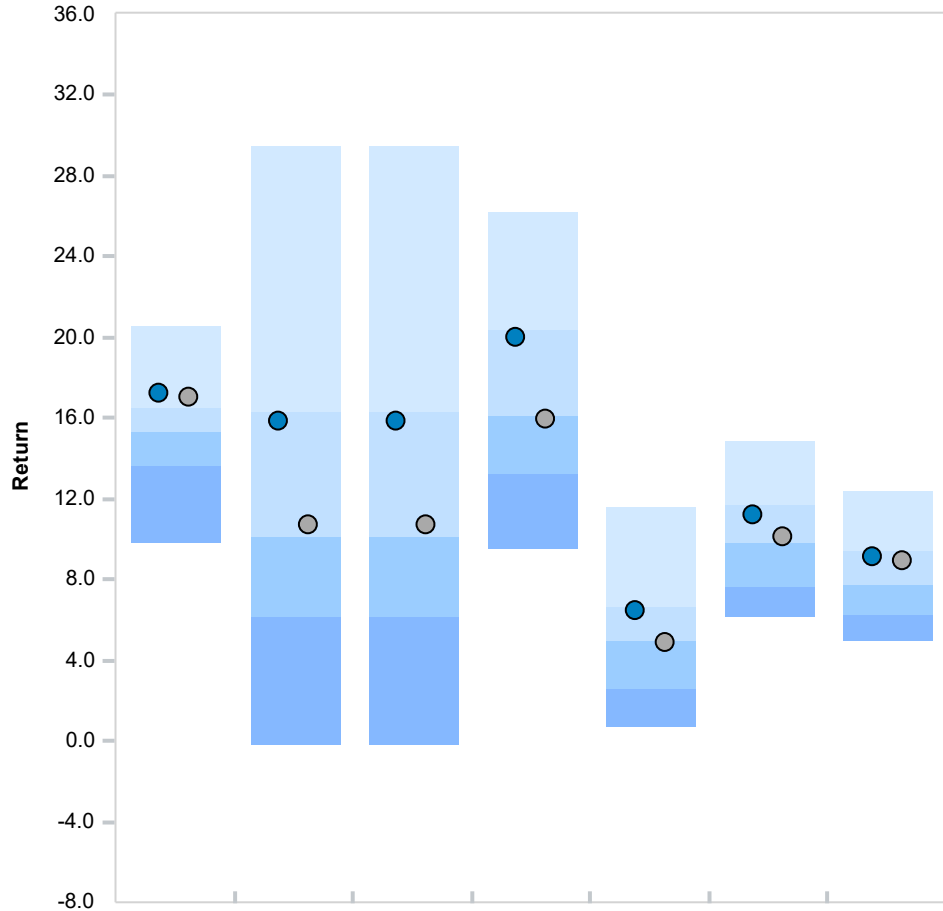
5 Year Rolling Percentile Rank IM International Large Cap Core Equity (SA+CF)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	0 (0%)	3 (15%)	5 (25%)	12 (60%)
Index	20	0 (0%)	6 (30%)	5 (25%)	9 (45%)

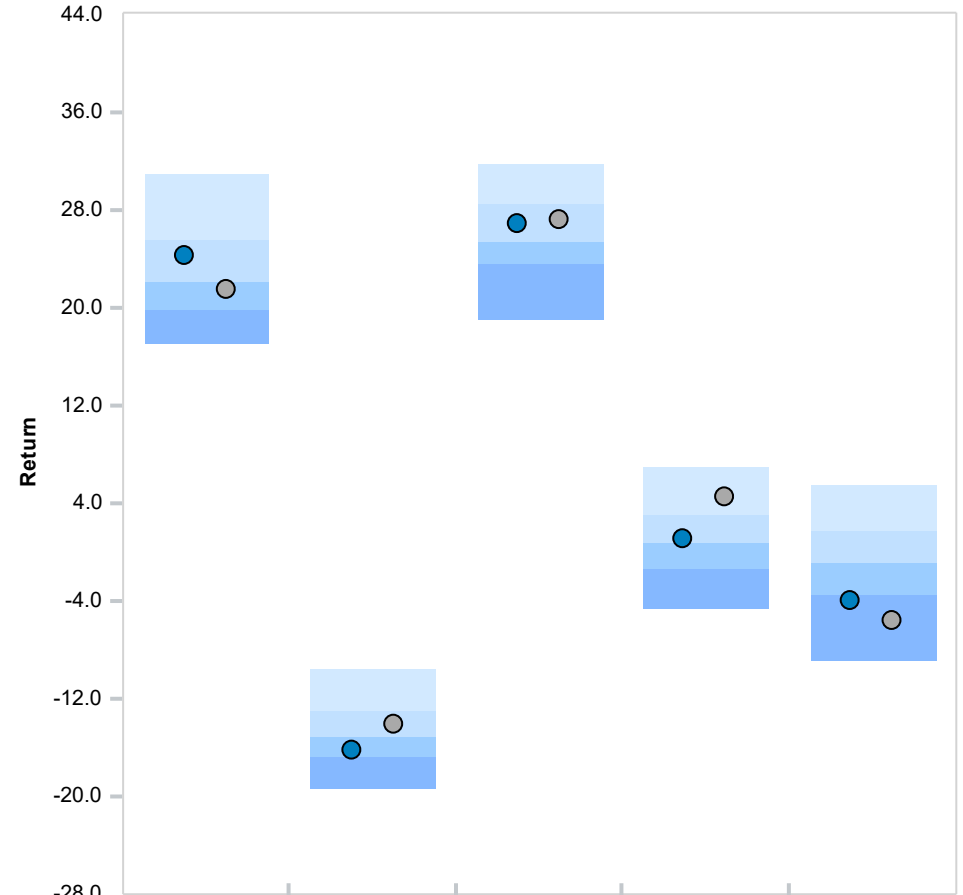


Peer Group Analysis - IM International Large Cap Core Equity (SA+CF)



	QTR	YTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Investment	17.20 (20)	15.83 (26)	15.83 (26)	19.96 (31)	6.39 (27)	11.19 (35)	9.09 (32)
● Index	17.01 (21)	10.65 (47)	10.65 (47)	15.96 (52)	4.88 (51)	10.06 (46)	8.93 (33)
Median	15.34	10.07	10.07	16.16	4.95	9.78	7.71

Peer Group Analysis - IM International Large Cap Core Equity (SA+CF)



	2019	2018	2017	2016	2015
● Investment	24.24 (32)	-16.33 (69)	26.92 (36)	1.10 (47)	-3.99 (79)
● Index	21.51 (58)	-14.20 (43)	27.19 (34)	4.50 (17)	-5.66 (86)
Median	22.11	-15.10	25.42	0.81	-0.86

Comparative Performance

	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020	1 Qtr Ending Mar-2020	1 Qtr Ending Dec-2019	1 Qtr Ending Sep-2019	1 Qtr Ending Jun-2019
Investment	7.03 (44)	19.09 (18)	-22.47 (46)	8.92 (47)	-0.25 (15)	3.08 (63)
Index	6.25 (53)	16.12 (57)	-23.36 (59)	8.92 (47)	-1.80 (56)	2.98 (63)
Median	6.39	16.64	-22.71	8.88	-1.63	3.48



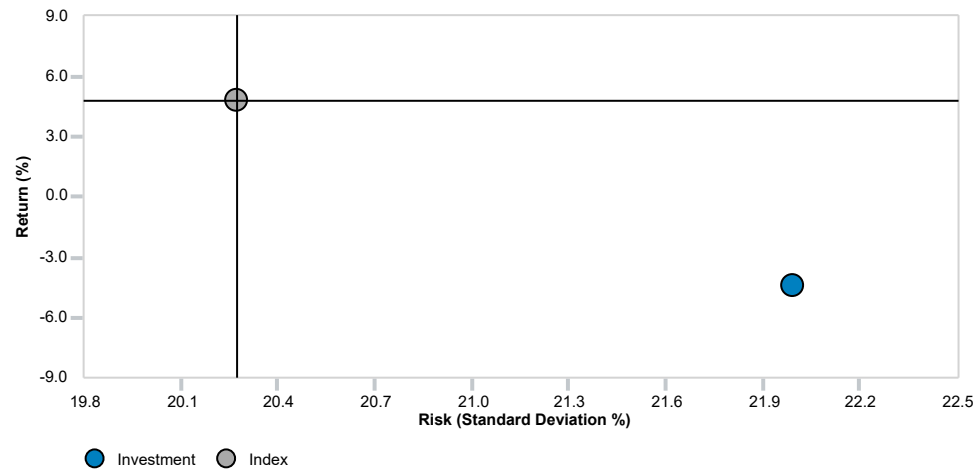
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	-4.43	21.99	-0.16	91.47	5	127.58	7
Index	4.85	20.27	0.26	100.00	7	100.00	5

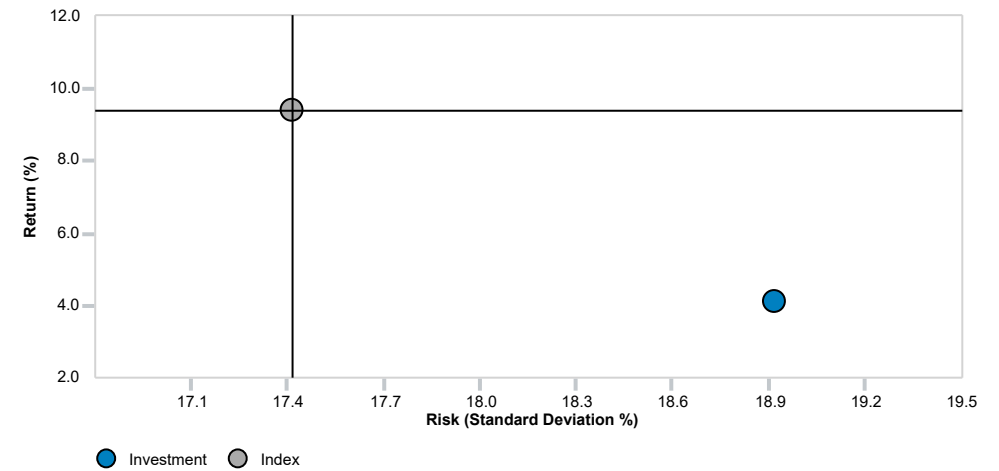
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	4.08	18.92	0.25	94.66	11	118.05	9
Index	9.40	17.41	0.54	100.00	12	100.00	8

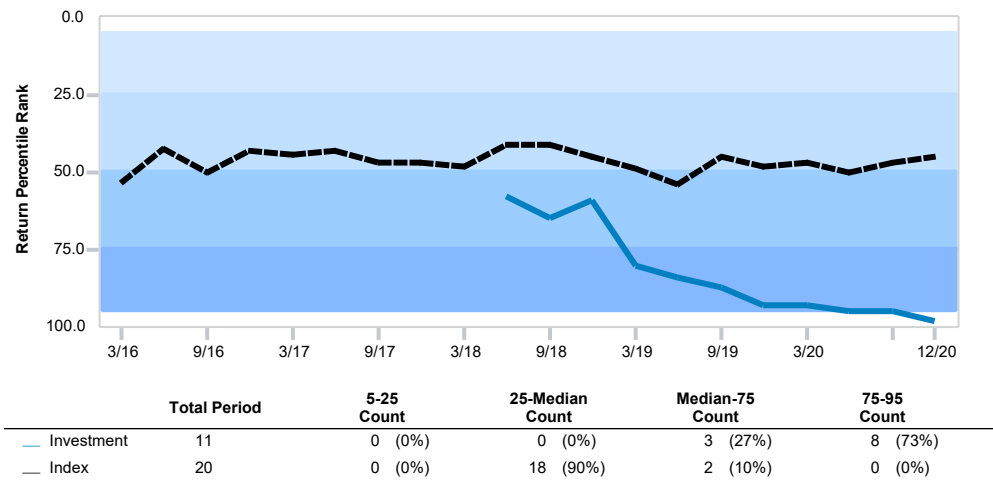
Risk and Return 3 Years



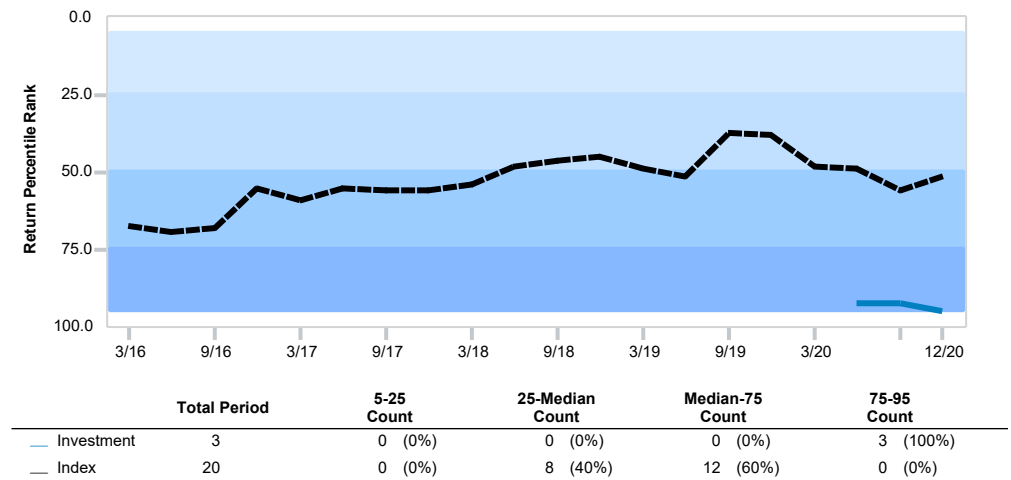
Risk and Return 5 Years



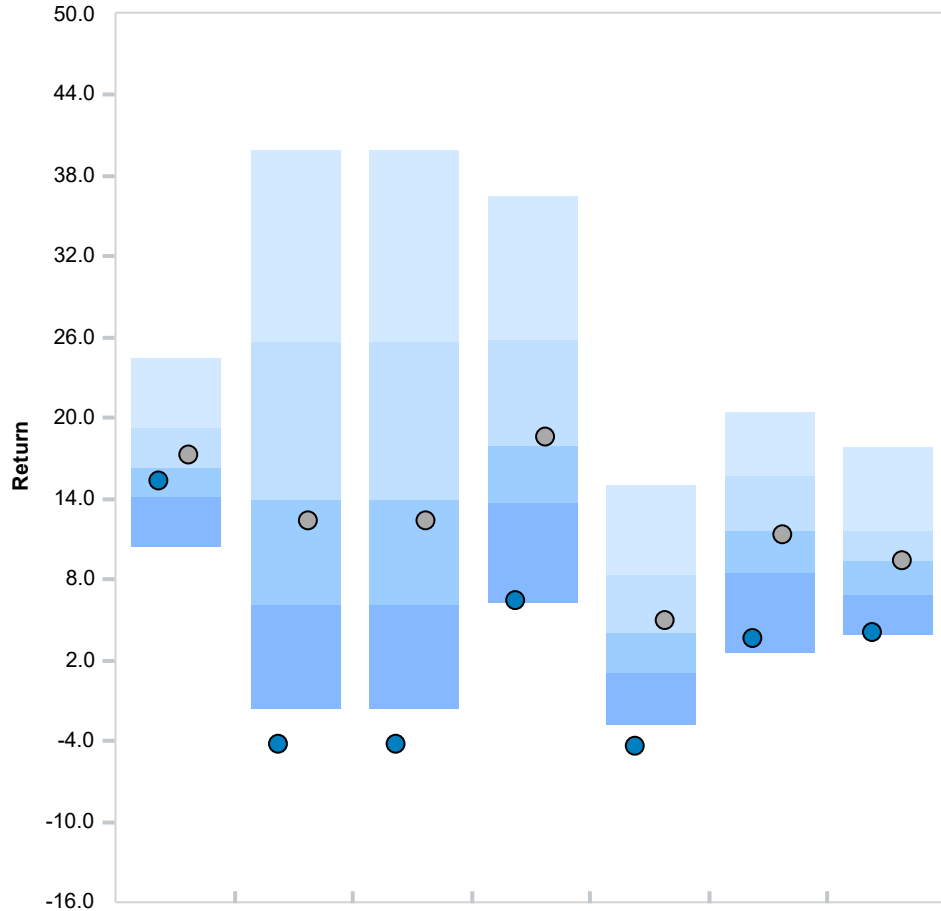
3 Year Rolling Percentile Rank IM International Small Cap Equity (SA+CF)



5 Year Rolling Percentile Rank IM International Small Cap Equity (SA+CF)

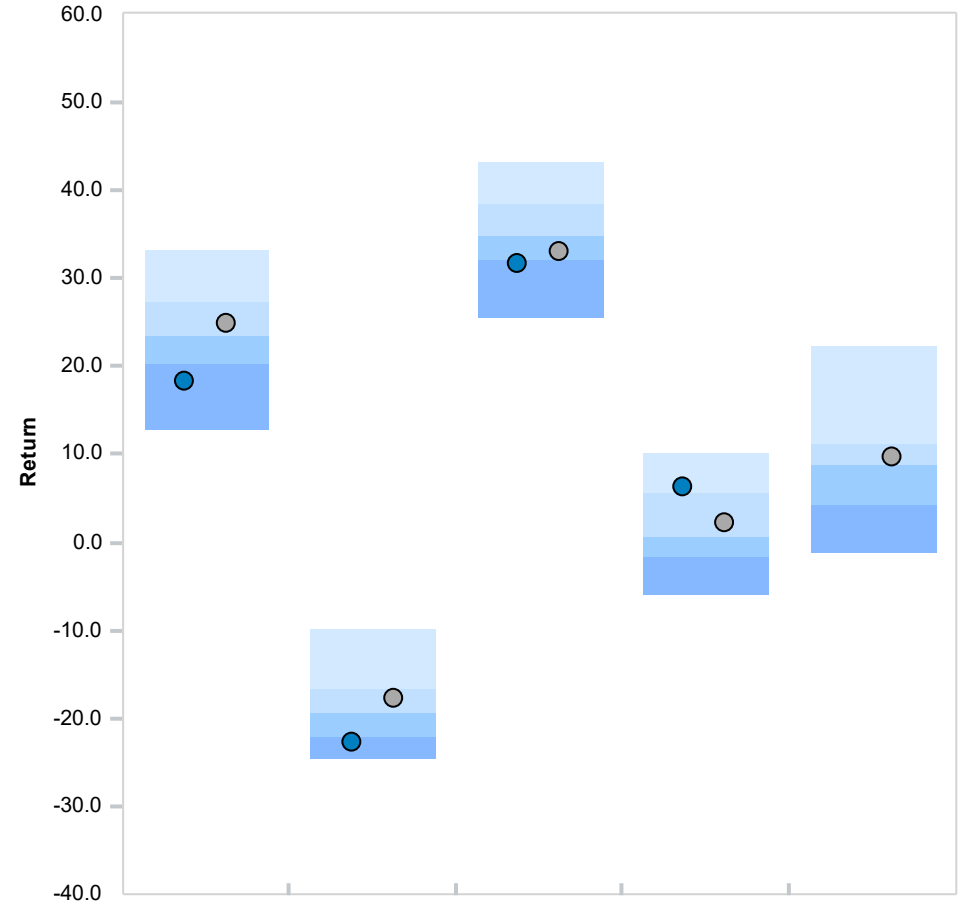


Peer Group Analysis - IM International Small Cap Equity (SA+CF)



	QTR	YTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Investment	15.33 (58)	-4.29 (98)	-4.29 (98)	6.36 (95)	-4.43 (98)	3.55 (94)	4.08 (95)
● Index	17.27 (41)	12.34 (55)	12.34 (55)	18.49 (47)	4.85 (45)	11.28 (51)	9.40 (51)
Median	16.28	13.92	13.92	17.99	4.09	11.55	9.43

Peer Group Analysis - IM International Small Cap Equity (SA+CF)



	2019	2018	2017	2016	2015
● Investment	18.21 (84)	-22.85 (81)	31.71 (78)	6.26 (20)	N/A
● Index	24.96 (40)	-17.89 (34)	33.01 (64)	2.18 (41)	9.59 (43)
Median	23.43	-19.36	34.73	0.69	8.72

Comparative Performance

	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020	1 Qtr Ending Mar-2020	1 Qtr Ending Dec-2019	1 Qtr Ending Sep-2019	1 Qtr Ending Jun-2019
Investment	8.38 (84)	15.61 (95)	-33.77 (91)	11.95 (50)	-1.22 (24)	-1.31 (96)
Index	10.25 (51)	19.88 (67)	-27.52 (52)	11.52 (56)	-0.44 (11)	1.71 (66)
Median	10.26	21.46	-27.14	11.93	-2.10	2.56



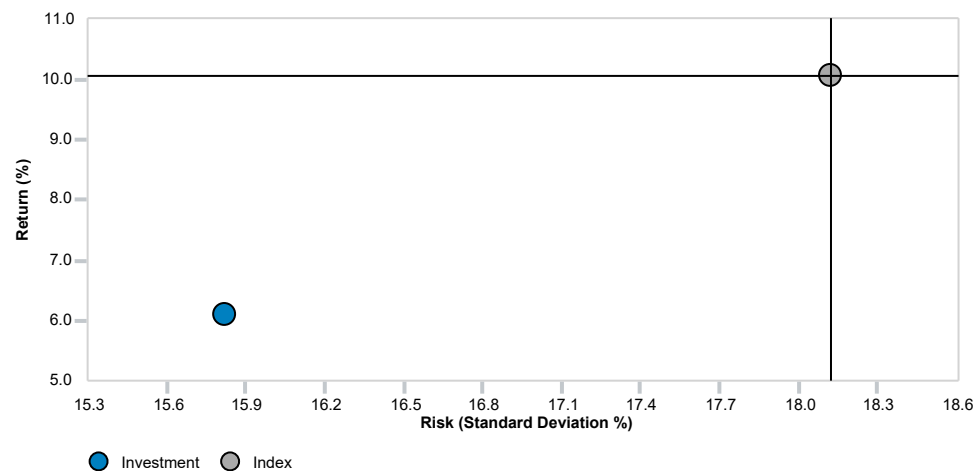
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	6.10	15.82	0.35	81.12	8	91.19	4
Index	10.06	18.13	0.53	100.00	8	100.00	4

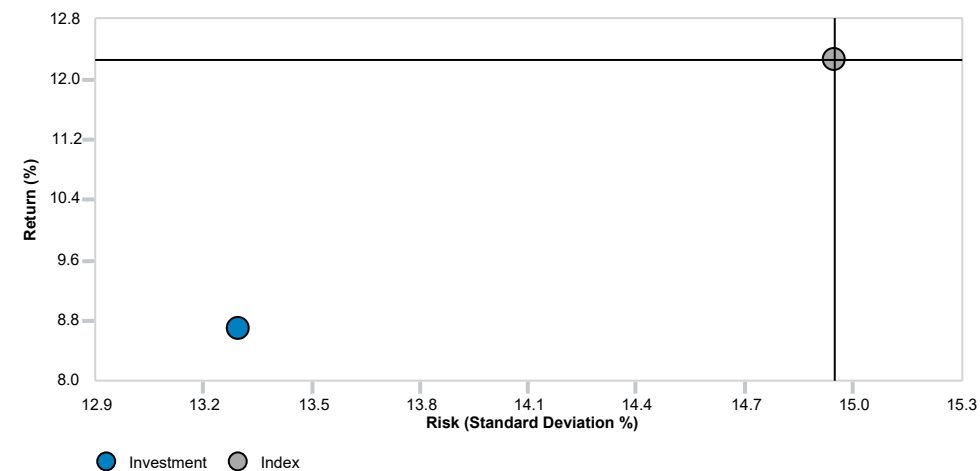
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	8.69	13.30	0.60	81.45	15	89.85	5
Index	12.26	14.95	0.77	100.00	16	100.00	4

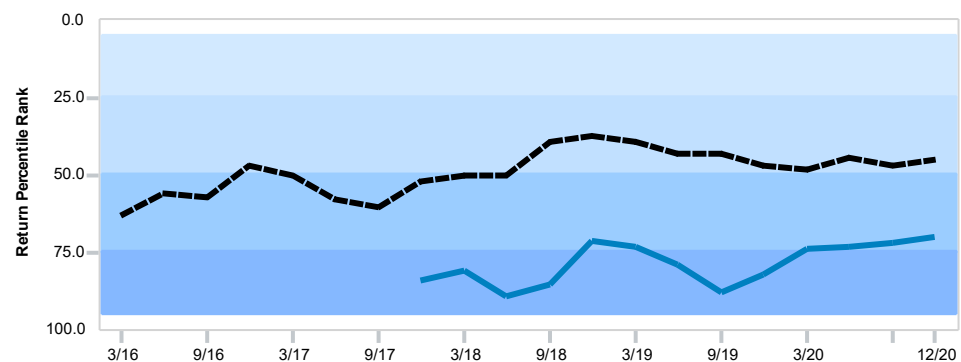
Risk and Return 3 Years



Risk and Return 5 Years

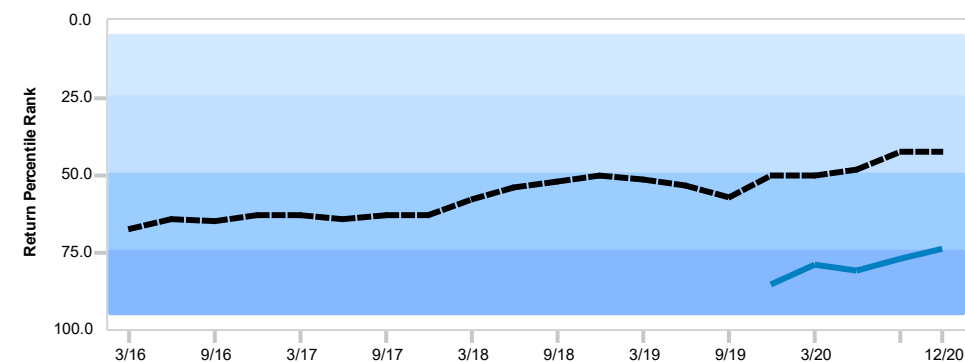


3 Year Rolling Percentile Rank IM Global Equity (SA+CF)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	13	0 (0%)	0 (0%)	6 (46%)	7 (54%)
Index	20	0 (0%)	14 (70%)	6 (30%)	0 (0%)

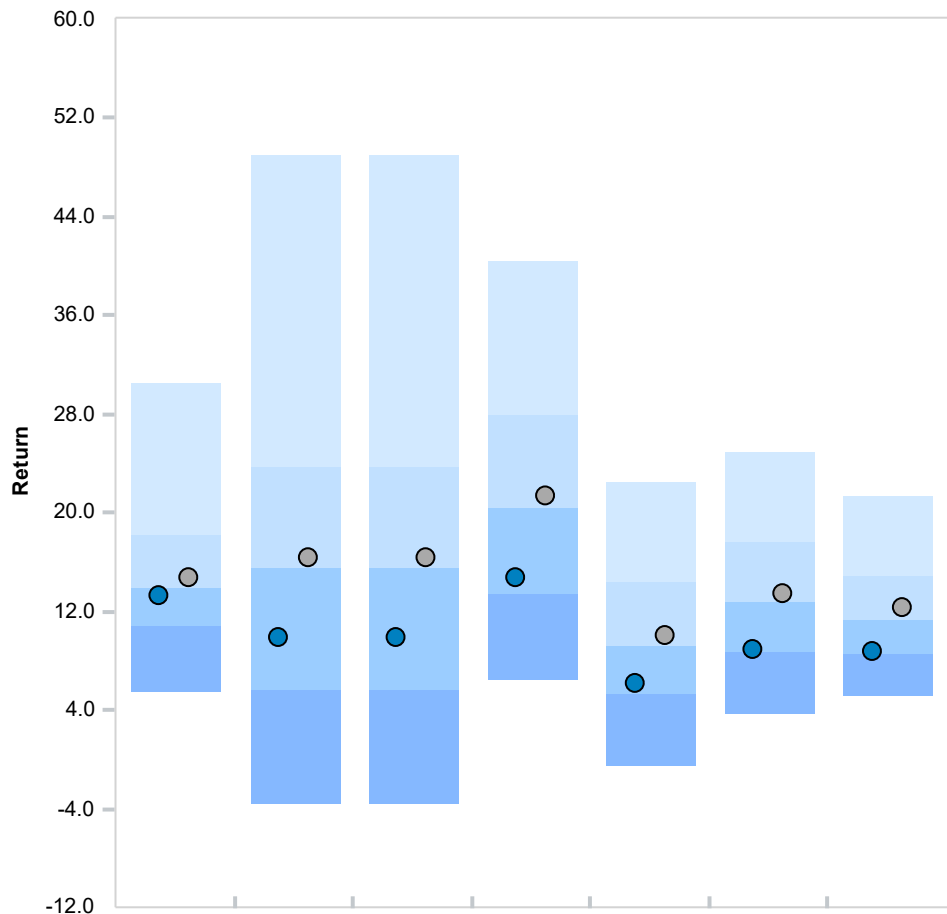
5 Year Rolling Percentile Rank IM Global Equity (SA+CF)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	5	0 (0%)	0 (0%)	1 (20%)	4 (80%)
Index	20	0 (0%)	6 (30%)	14 (70%)	0 (0%)

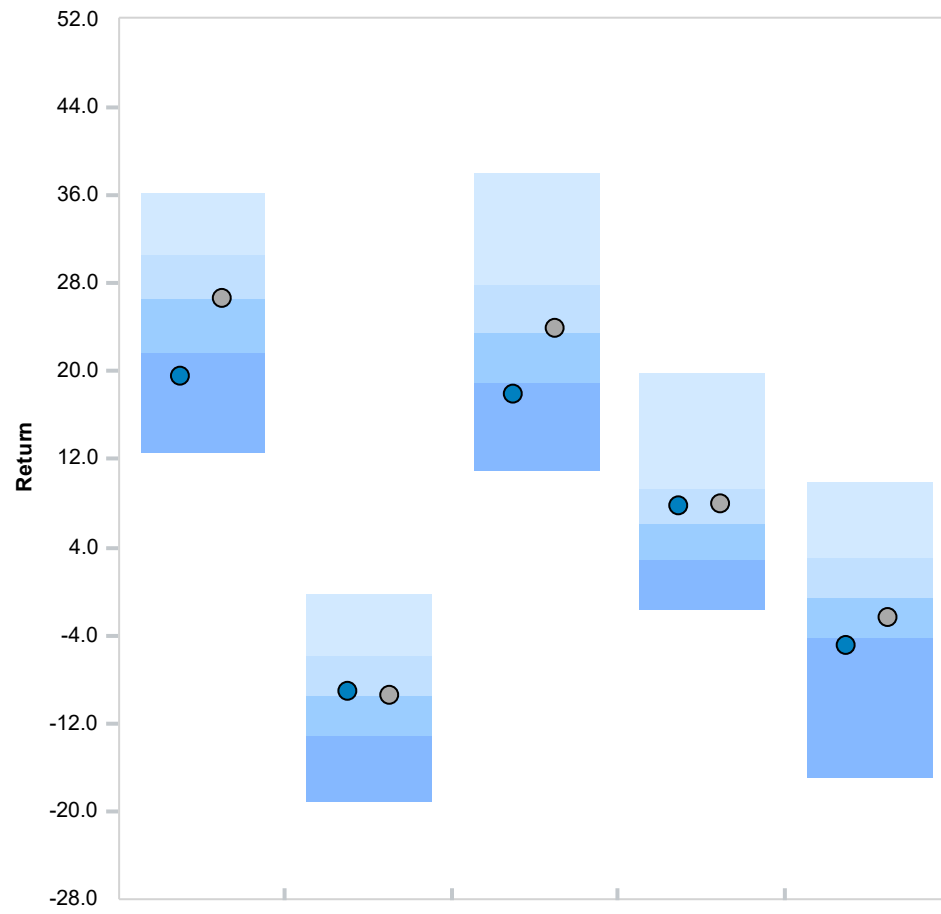


Peer Group Analysis - IM Global Equity (SA+CF)



Investment	13.22 (59)	9.86 (66)	9.86 (66)	14.62 (71)	6.10 (70)	8.94 (75)	8.69 (74)
Index	14.68 (45)	16.25 (48)	16.25 (48)	21.32 (45)	10.06 (45)	13.38 (45)	12.26 (42)
Median	13.93	15.56	15.56	20.28	9.12	12.79	11.27

Peer Group Analysis - IM Global Equity (SA+CF)



Investment	19.58 (83)	-9.09 (48)	17.92 (80)	7.71 (36)	-5.05 (80)
Index	26.60 (50)	-9.42 (50)	23.97 (47)	7.86 (35)	-2.36 (66)
Median	26.58	-9.44	23.48	6.18	-0.60

Comparative Performance

	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020	1 Qtr Ending Mar-2020	1 Qtr Ending Dec-2019	1 Qtr Ending Sep-2019	1 Qtr Ending Jun-2019
Investment	7.22 (59)	14.03 (80)	-20.64 (51)	9.08 (41)	-2.67 (87)	1.40 (85)
Index	8.13 (49)	19.22 (51)	-21.37 (59)	8.95 (43)	-0.03 (44)	3.61 (57)
Median	8.00	19.23	-20.63	8.55	-0.37	3.91



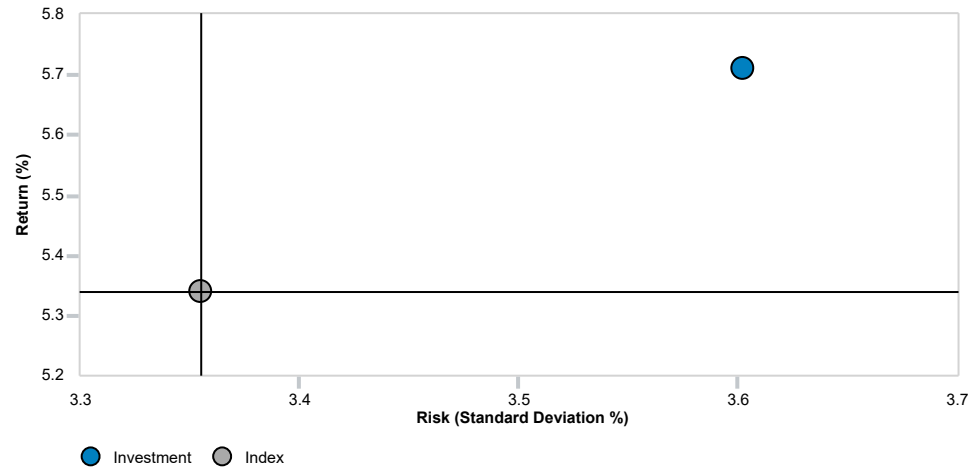
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	5.71	3.60	1.11	106.64	10	106.19	2
Index	5.34	3.36	1.10	100.00	10	100.00	2

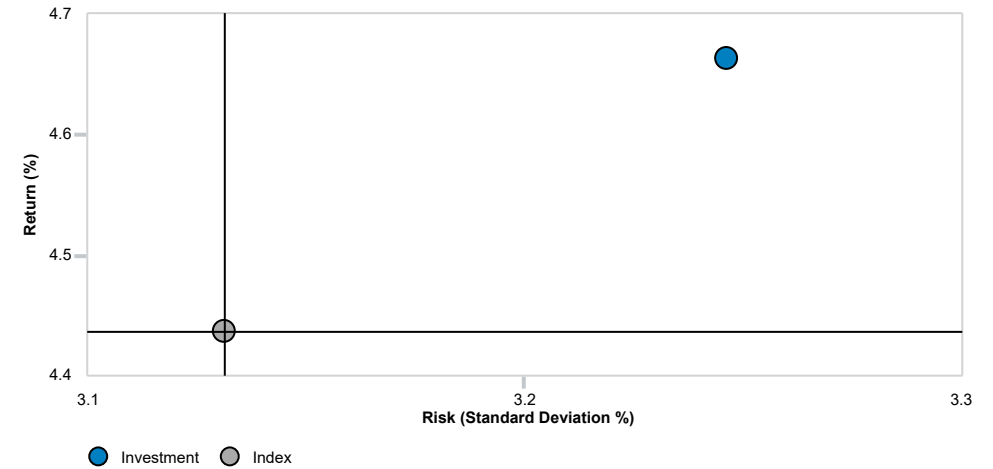
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	4.66	3.25	1.06	103.56	17	100.61	3
Index	4.44	3.13	1.04	100.00	17	100.00	3

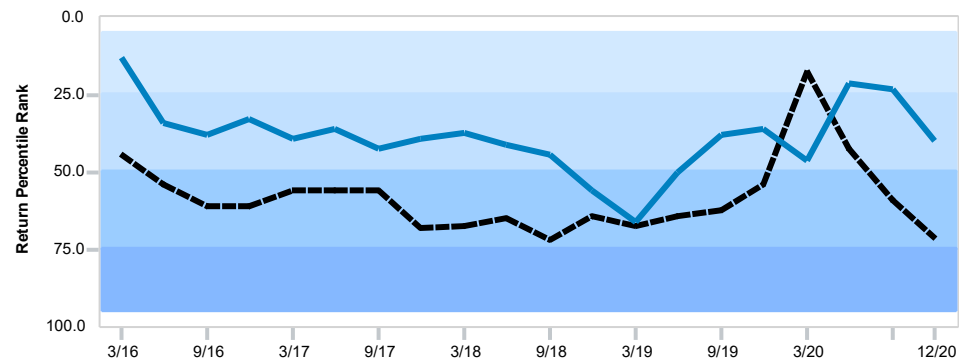
Risk and Return 3 Years



Risk and Return 5 Years

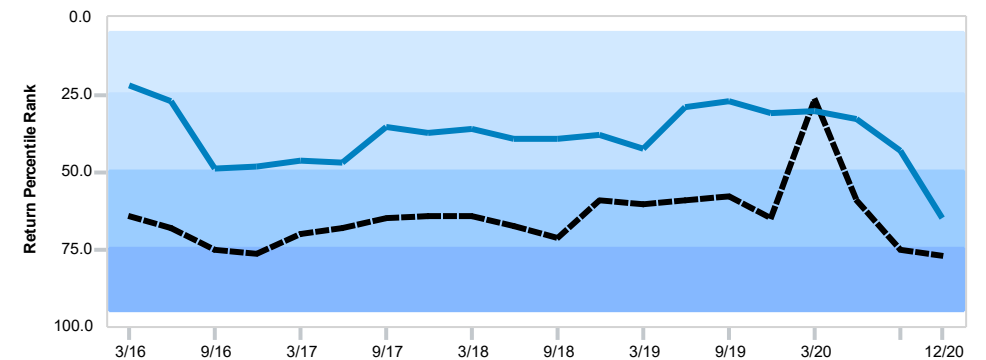


3 Year Rolling Percentile Rank IM U.S. Broad Market Core Fixed Income (SA+CF)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	3 (15%)	15 (75%)	2 (10%)	0 (0%)
Index	20	1 (5%)	2 (10%)	17 (85%)	0 (0%)

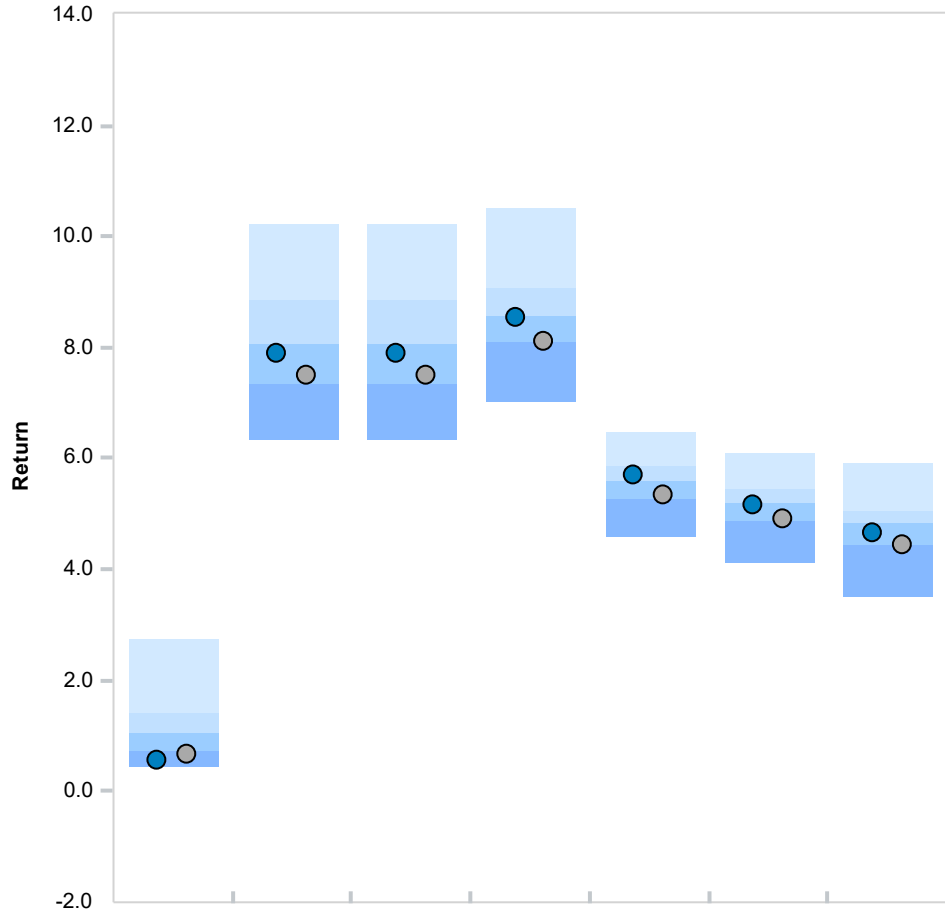
5 Year Rolling Percentile Rank IM U.S. Broad Market Core Fixed Income (SA+CF)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	1 (5%)	18 (90%)	1 (5%)	0 (0%)
Index	20	0 (0%)	1 (5%)	17 (85%)	2 (10%)

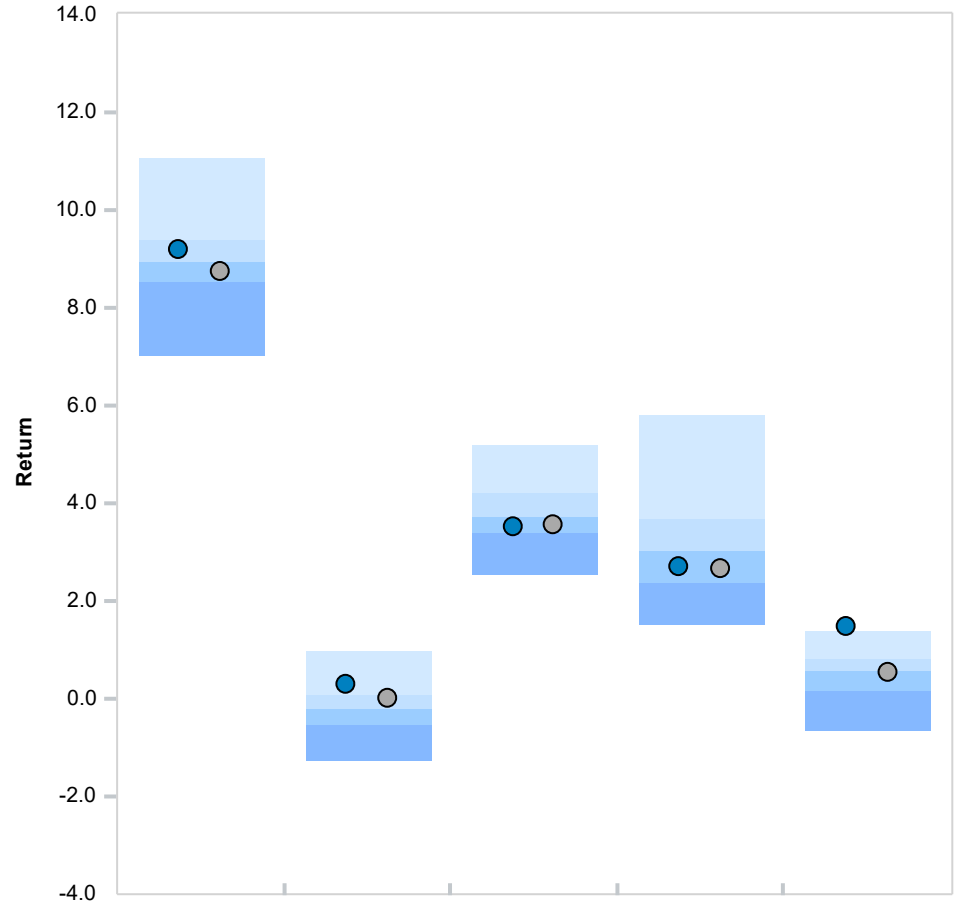


Peer Group Analysis - IM U.S. Broad Market Core Fixed Income (SA+CF)



	QTR	YTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Investment	0.55 (91)	7.87 (57)	7.87 (57)	8.53 (51)	5.71 (40)	5.16 (57)	4.66 (65)
● Index	0.67 (82)	7.51 (70)	7.51 (70)	8.11 (75)	5.34 (71)	4.89 (75)	4.44 (77)
Median	1.05	8.05	8.05	8.56	5.59	5.18	4.81

Peer Group Analysis - IM U.S. Broad Market Core Fixed Income (SA+CF)



	2019	2018	2017	2016	2015
● Investment	9.18 (39)	0.29 (15)	3.52 (66)	2.70 (65)	1.46 (3)
● Index	8.72 (67)	0.01 (30)	3.54 (63)	2.65 (66)	0.55 (52)
Median	8.96	-0.22	3.73	3.03	0.55

Comparative Performance

	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020	1 Qtr Ending Mar-2020	1 Qtr Ending Dec-2019	1 Qtr Ending Sep-2019	1 Qtr Ending Jun-2019
Investment	1.07 (49)	4.58 (45)	1.51 (52)	0.19 (43)	2.52 (8)	3.22 (22)
Index	0.62 (83)	2.90 (83)	3.15 (16)	0.18 (45)	2.27 (51)	3.08 (50)
Median	1.05	4.38	1.55	0.16	2.28	3.08



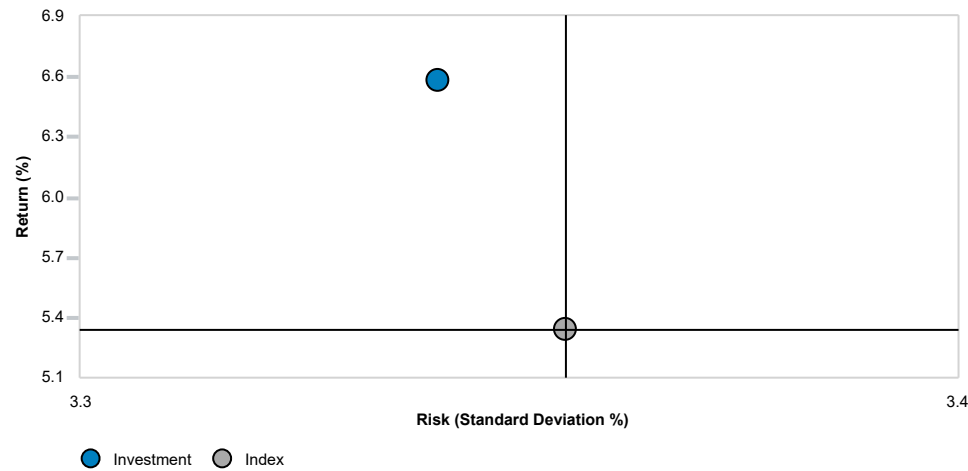
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	6.58	3.34	1.43	108.80	10	78.49	2
Index	5.34	3.36	1.10	100.00	10	100.00	2

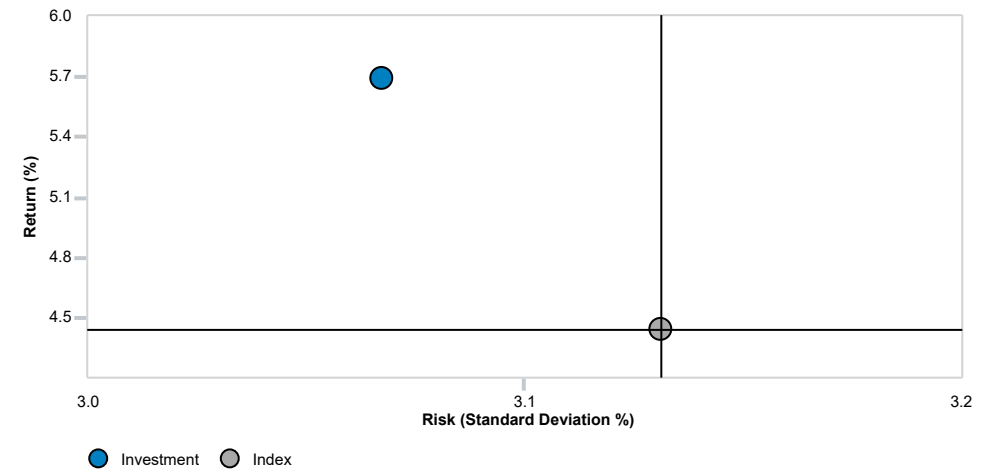
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	5.70	3.07	1.44	109.95	17	75.41	3
Index	4.44	3.13	1.04	100.00	17	100.00	3

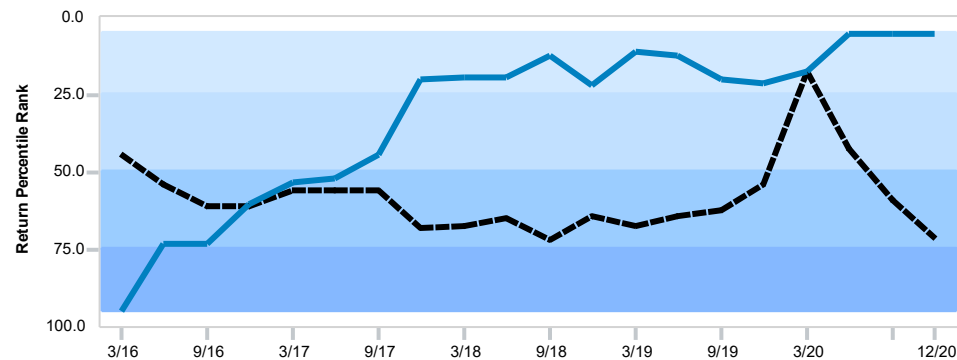
Risk and Return 3 Years



Risk and Return 5 Years

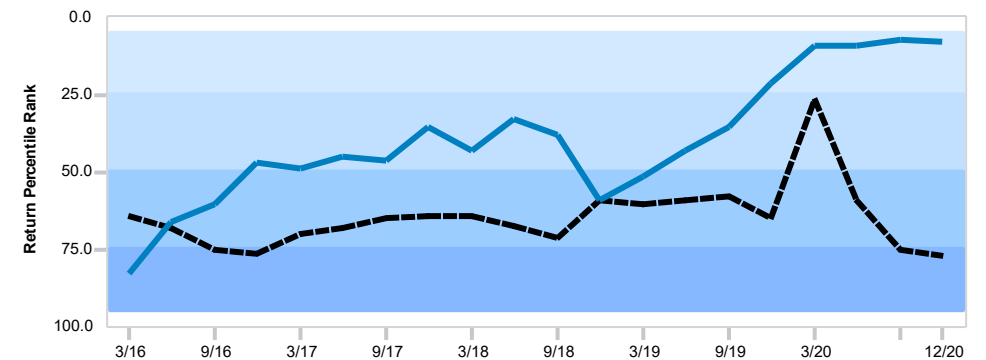


3 Year Rolling Percentile Rank IM U.S. Broad Market Core Fixed Income (SA+CF)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	13 (65%)	1 (5%)	5 (25%)	1 (5%)
Index	20	1 (5%)	2 (10%)	17 (85%)	0 (0%)

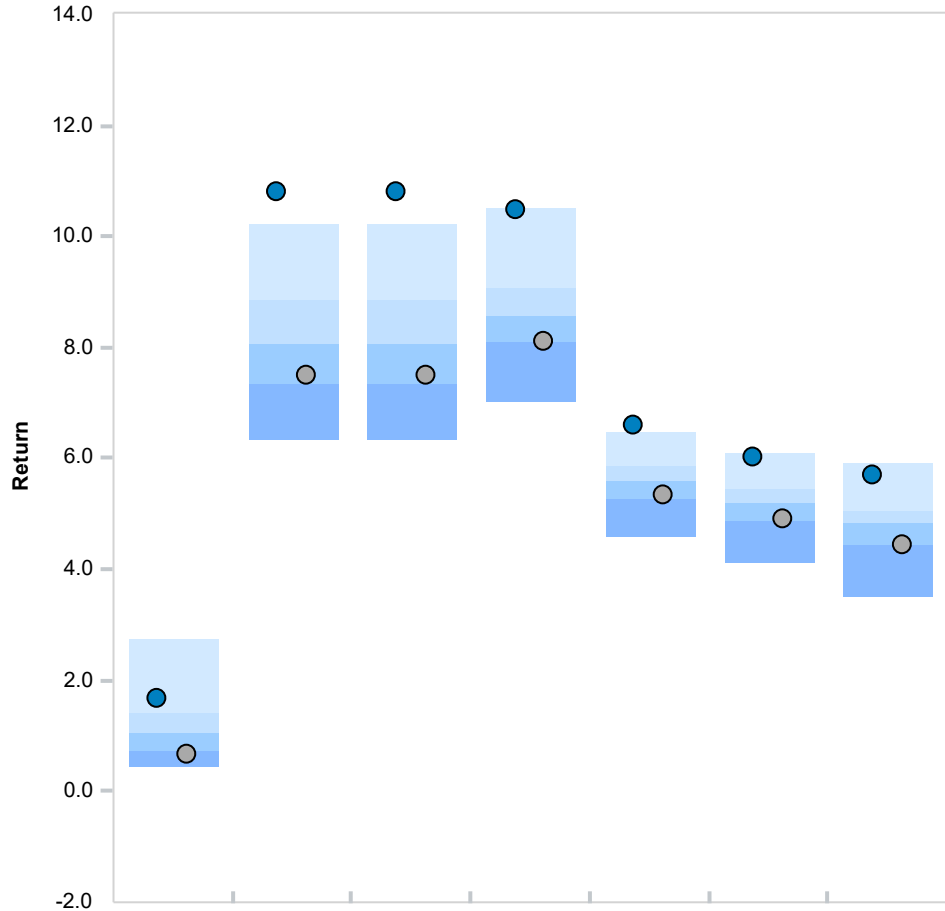
5 Year Rolling Percentile Rank IM U.S. Broad Market Core Fixed Income (SA+CF)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	5 (25%)	10 (50%)	4 (20%)	1 (5%)
Index	20	0 (0%)	1 (5%)	17 (85%)	2 (10%)

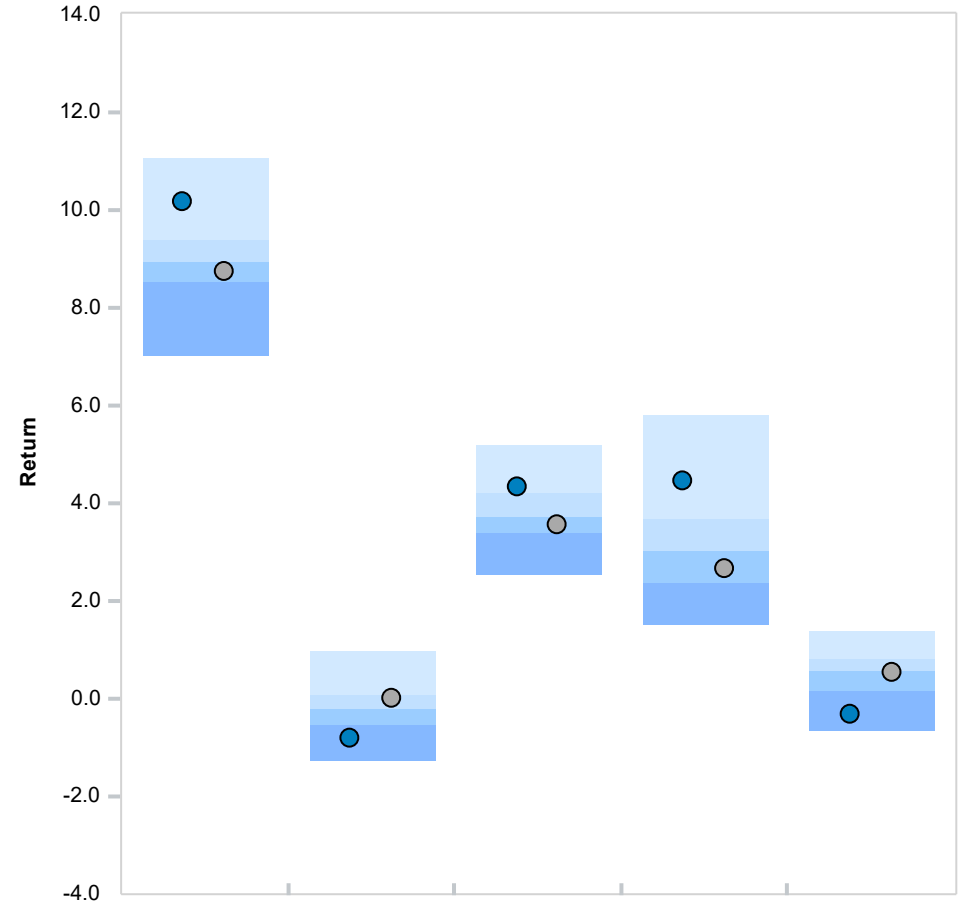


Peer Group Analysis - IM U.S. Broad Market Core Fixed Income (SA+CF)



	QTR	YTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Investment	1.68 (17)	10.80 (4)	10.80 (4)	10.48 (6)	6.58 (5)	6.01 (6)	5.70 (8)
● Index	0.67 (82)	7.51 (70)	7.51 (70)	8.11 (75)	5.34 (71)	4.89 (75)	4.44 (77)
Median	1.05	8.05	8.05	8.56	5.59	5.18	4.81

Peer Group Analysis - IM U.S. Broad Market Core Fixed Income (SA+CF)



	2019	2018	2017	2016	2015
● Investment	10.15 (10)	-0.81 (88)	4.33 (18)	4.45 (11)	-0.33 (88)
● Index	8.72 (67)	0.01 (30)	3.54 (63)	2.65 (66)	0.55 (52)
Median	8.96	-0.22	3.73	3.03	0.55

Comparative Performance

	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020	1 Qtr Ending Mar-2020	1 Qtr Ending Dec-2019	1 Qtr Ending Sep-2019	1 Qtr Ending Jun-2019
Investment	1.36 (29)	5.19 (24)	2.20 (38)	0.48 (15)	2.30 (44)	3.37 (11)
Index	0.62 (83)	2.90 (83)	3.15 (16)	0.18 (45)	2.27 (51)	3.08 (50)
Median	1.05	4.38	1.55	0.16	2.28	3.08



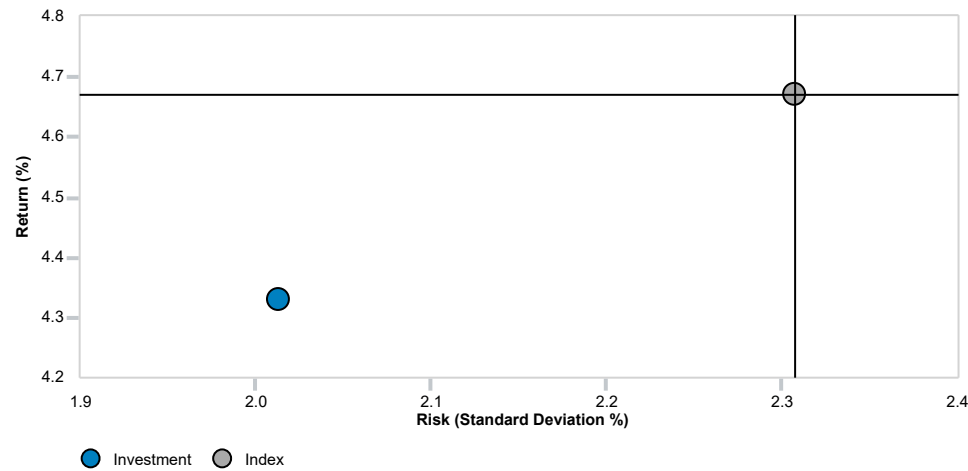
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	4.33	2.01	1.35	87.76	11	69.48	1
Index	4.67	2.31	1.31	100.00	11	100.00	1

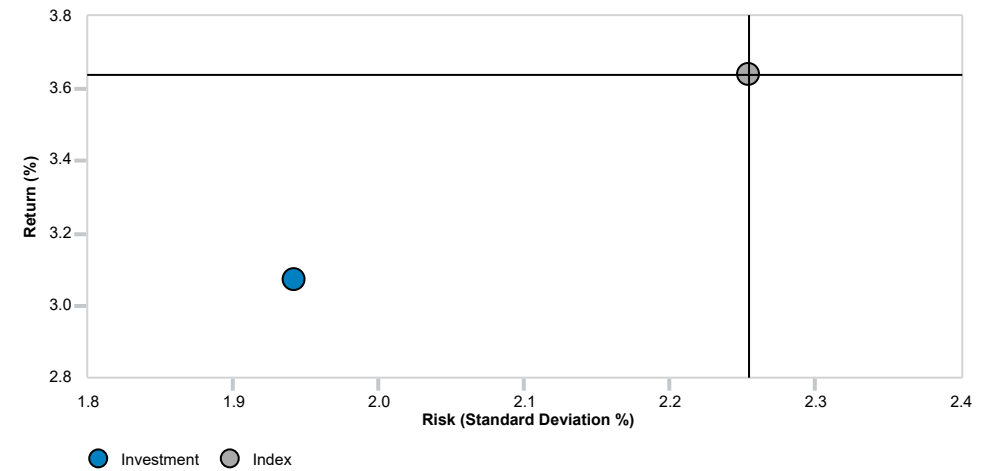
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	3.07	1.94	0.99	82.97	17	79.14	3
Index	3.64	2.25	1.09	100.00	17	100.00	3

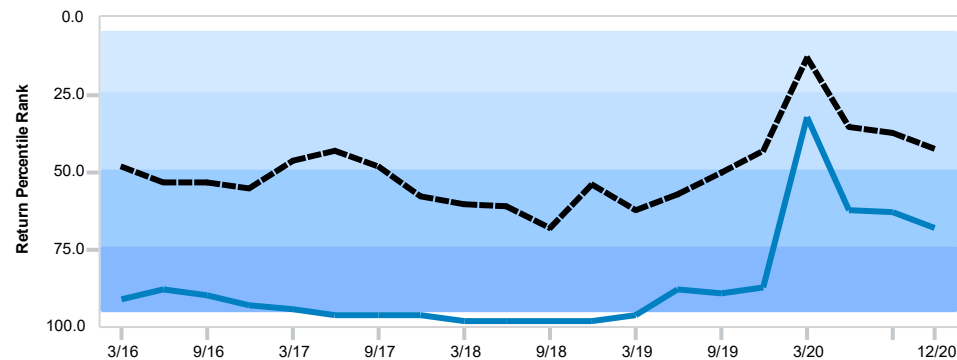
Risk and Return 3 Years



Risk and Return 5 Years

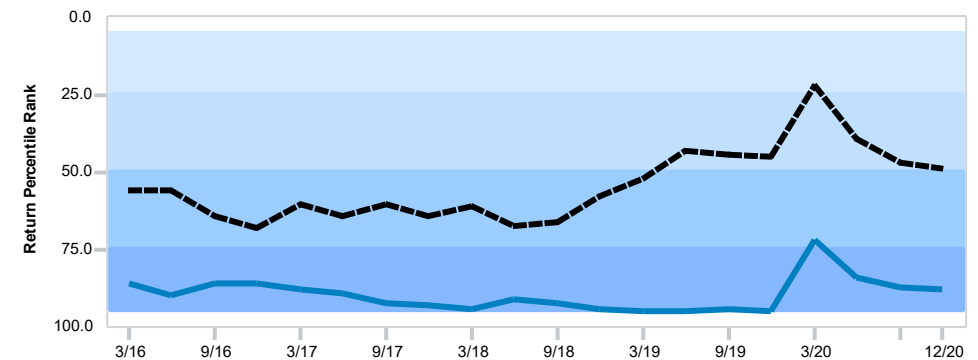


3 Year Rolling Percentile Rank IM U.S. Intermediate Duration (SA+CF)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	0 (0%)	1 (5%)	3 (15%)	16 (80%)
Index	20	1 (5%)	9 (45%)	10 (50%)	0 (0%)

5 Year Rolling Percentile Rank IM U.S. Intermediate Duration (SA+CF)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	0 (0%)	0 (0%)	1 (5%)	19 (95%)
Index	20	1 (5%)	6 (30%)	13 (65%)	0 (0%)

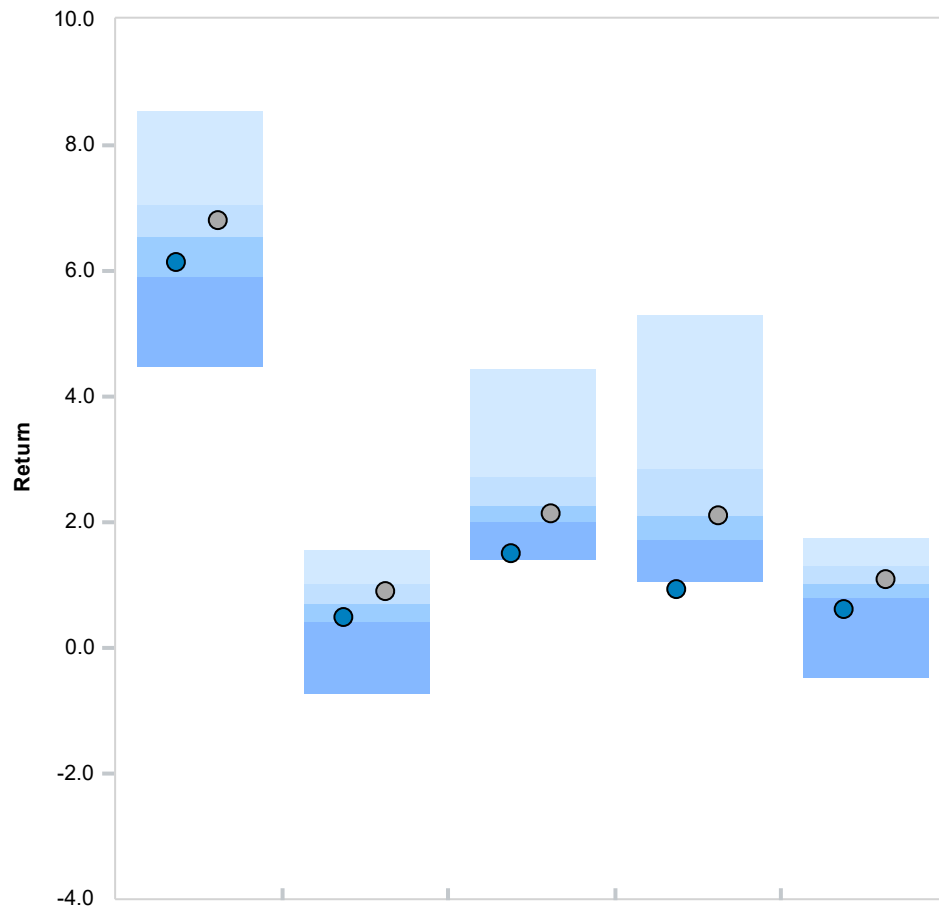


Peer Group Analysis - IM U.S. Intermediate Duration (SA+CF)



	QTR	YTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Investment	0.36 (85)	6.52 (47)	6.52 (47)	6.31 (63)	4.33 (68)	3.61 (78)	3.07 (88)
● Index	0.48 (73)	6.43 (53)	6.43 (53)	6.62 (47)	4.67 (42)	4.03 (51)	3.64 (49)
Median	0.62	6.48	6.48	6.58	4.58	4.04	3.62

Peer Group Analysis - IM U.S. Intermediate Duration (SA+CF)



	2019	2018	2017	2016	2015
● Investment	6.11 (71)	0.47 (67)	1.49 (91)	0.92 (97)	0.62 (79)
● Index	6.80 (39)	0.88 (37)	2.14 (64)	2.08 (51)	1.07 (42)
Median	6.55	0.68	2.24	2.10	1.01

Comparative Performance

	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020	1 Qtr Ending Mar-2020	1 Qtr Ending Dec-2019	1 Qtr Ending Sep-2019	1 Qtr Ending Jun-2019
Investment	0.60 (68)	2.13 (94)	3.30 (6)	0.31 (65)	1.24 (73)	2.40 (50)
Index	0.61 (67)	2.81 (80)	2.40 (20)	0.37 (49)	1.37 (46)	2.59 (22)
Median	0.77	3.67	0.94	0.37	1.35	2.40



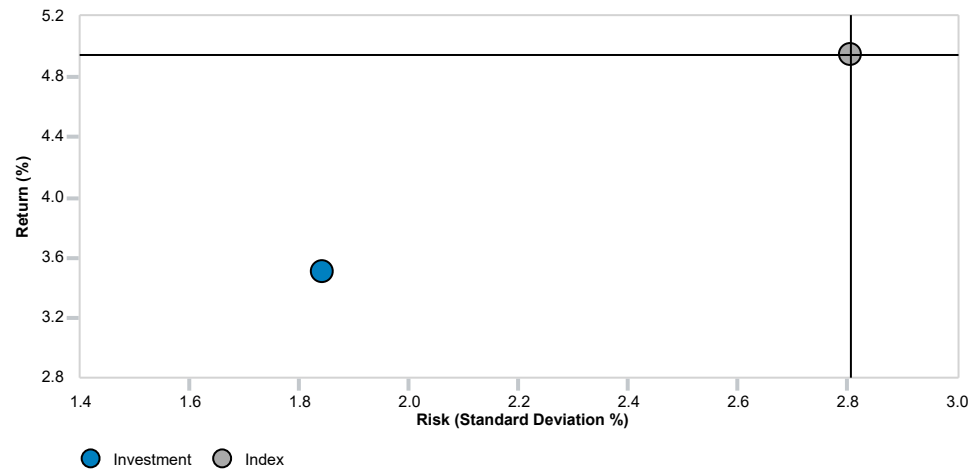
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	3.50	1.84	1.04	66.58	10	54.44	2
Index	4.94	2.81	1.15	100.00	10	100.00	2

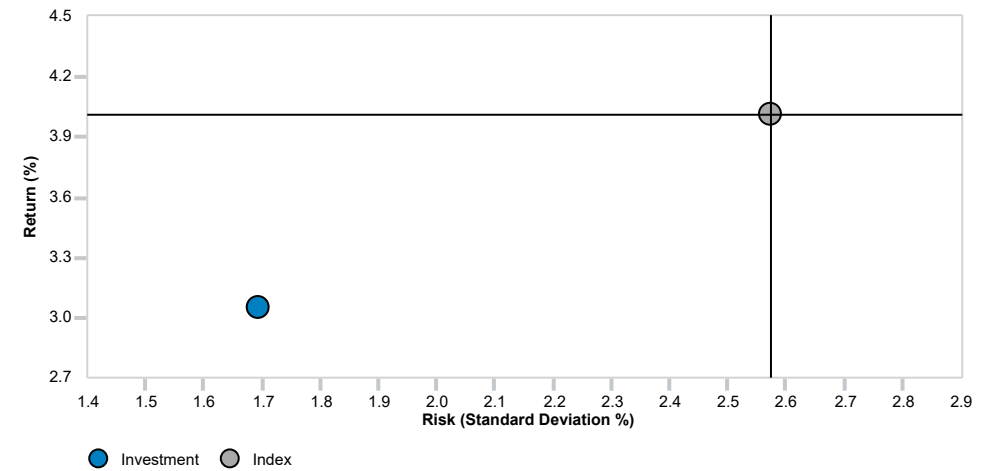
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	3.05	1.70	1.11	69.52	17	54.25	3
Index	4.01	2.57	1.08	100.00	16	100.00	4

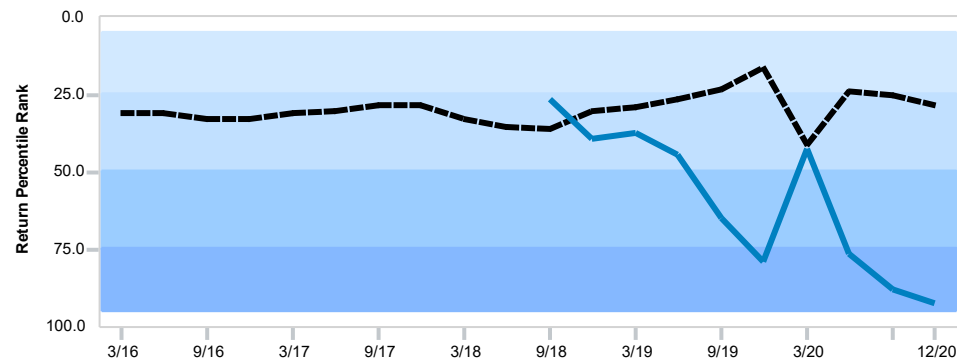
Risk and Return 3 Years



Risk and Return 5 Years

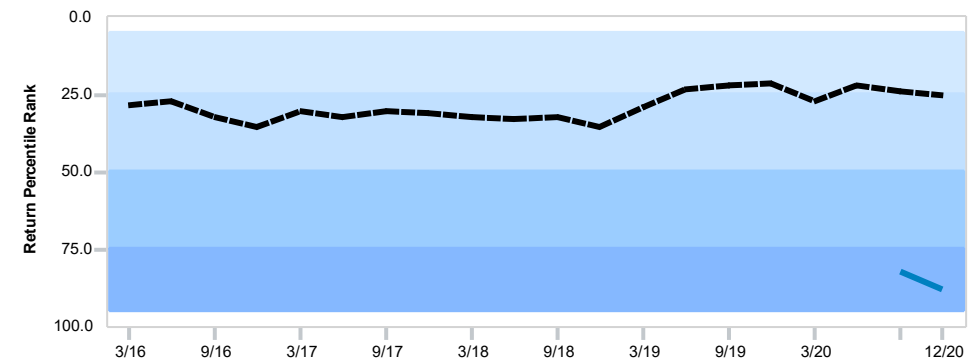


3 Year Rolling Percentile Rank IM U.S. Intermediate Duration (SA+CF)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	10	0 (0%)	5 (50%)	1 (10%)	4 (40%)
Index	20	4 (20%)	16 (80%)	0 (0%)	0 (0%)

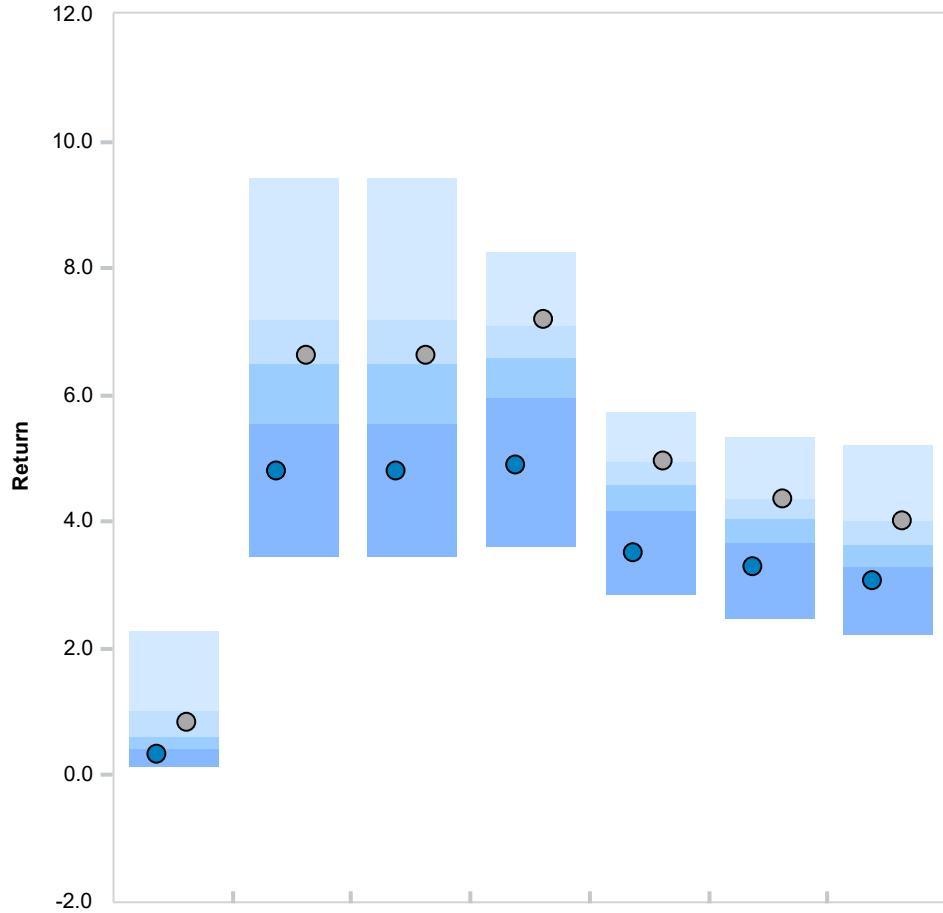
5 Year Rolling Percentile Rank IM U.S. Intermediate Duration (SA+CF)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	2	0 (0%)	0 (0%)	0 (0%)	2 (100%)
Index	20	6 (30%)	14 (70%)	0 (0%)	0 (0%)

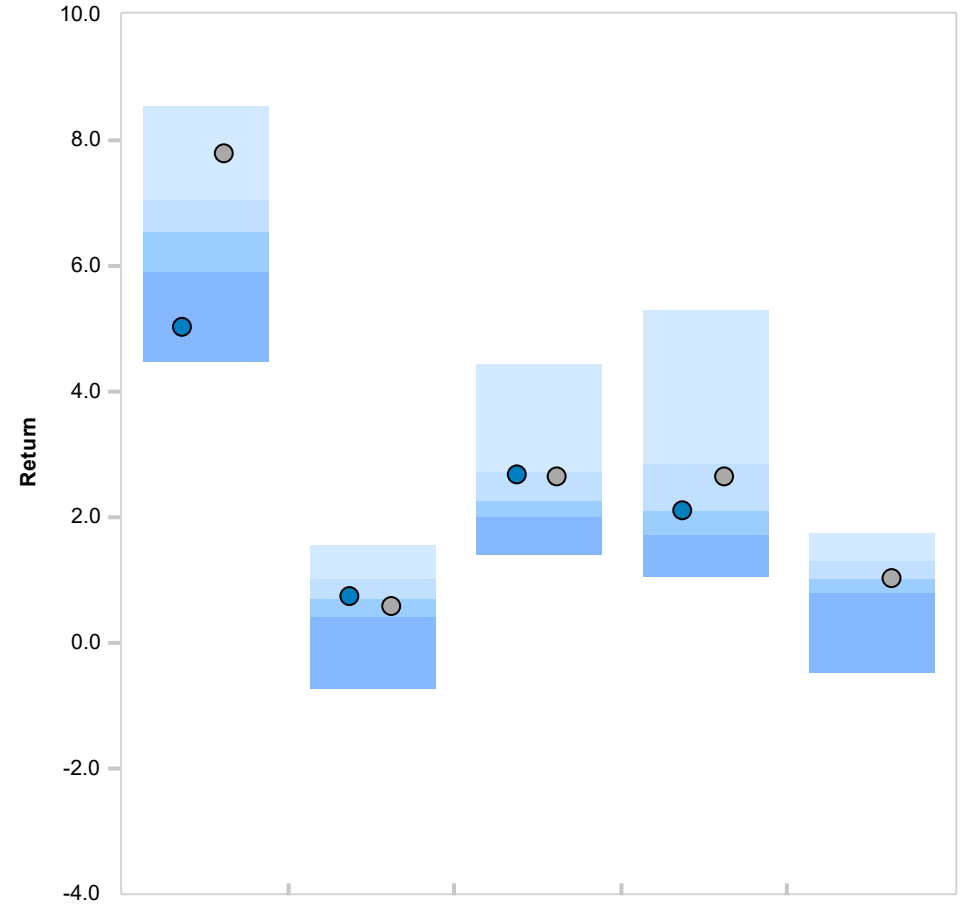


Peer Group Analysis - IM U.S. Intermediate Duration (SA+CF)



	QTR	YTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Investment	0.33 (89)	4.79 (90)	4.79 (90)	4.91 (91)	3.50 (92)	3.29 (86)	3.05 (88)
● Index	0.84 (37)	6.62 (45)	6.62 (45)	7.20 (23)	4.94 (28)	4.37 (25)	4.01 (25)
Median	0.62	6.48	6.48	6.58	4.58	4.04	3.62

Peer Group Analysis - IM U.S. Intermediate Duration (SA+CF)



	2019	2018	2017	2016	2015
● Investment	5.02 (93)	0.74 (48)	2.68 (28)	2.10 (51)	N/A
● Index	7.78 (12)	0.58 (59)	2.65 (28)	2.63 (33)	1.01 (50)
Median	6.55	0.68	2.24	2.10	1.01

Comparative Performance

	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020	1 Qtr Ending Mar-2020	1 Qtr Ending Dec-2019	1 Qtr Ending Sep-2019	1 Qtr Ending Jun-2019
Investment	-0.44 (100)	2.07 (95)	2.77 (11)	0.25 (80)	1.10 (82)	1.88 (86)
Index	0.82 (48)	4.20 (35)	0.65 (55)	0.59 (14)	1.49 (19)	2.73 (10)
Median	0.77	3.67	0.94	0.37	1.35	2.40



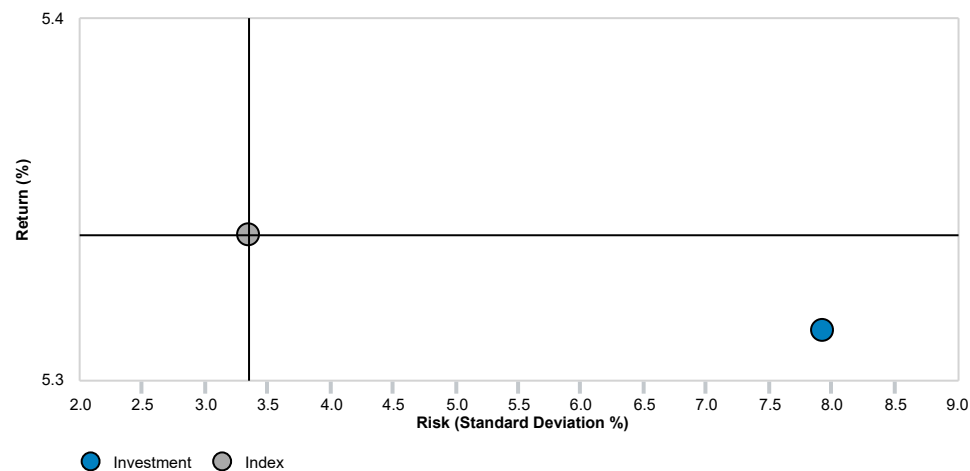
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	5.31	7.94	0.49	119.68	8	153.79	4
Index	5.34	3.36	1.10	100.00	10	100.00	2

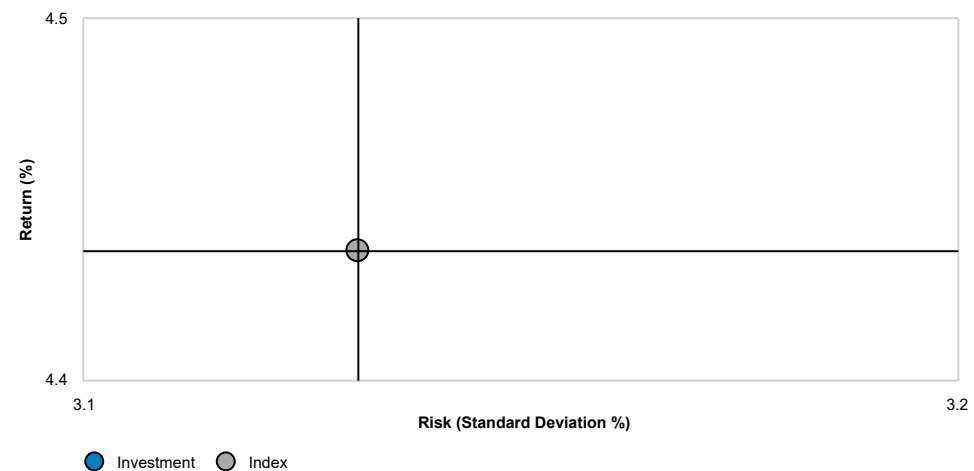
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Index	4.44	3.13	1.04	100.00	17	100.00	3

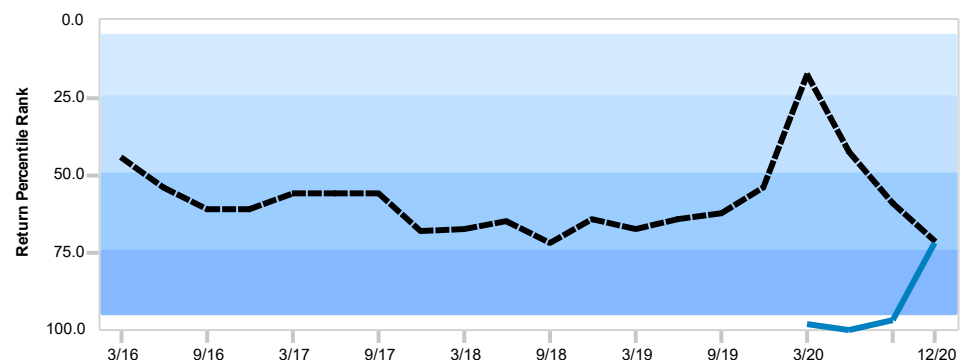
Risk and Return 3 Years



Risk and Return 5 Years

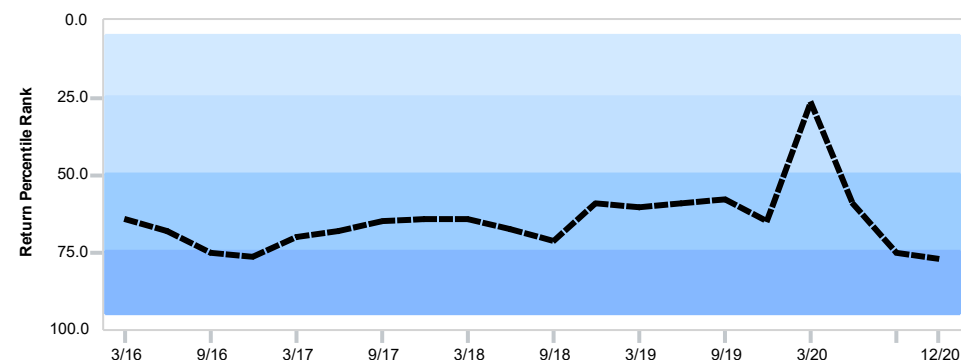


3 Year Rolling Percentile Rank IM U.S. Broad Market Core Fixed Income (SA+CF)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	4	0 (0%)	0 (0%)	1 (25%)	3 (75%)
Index	20	1 (5%)	2 (10%)	17 (85%)	0 (0%)

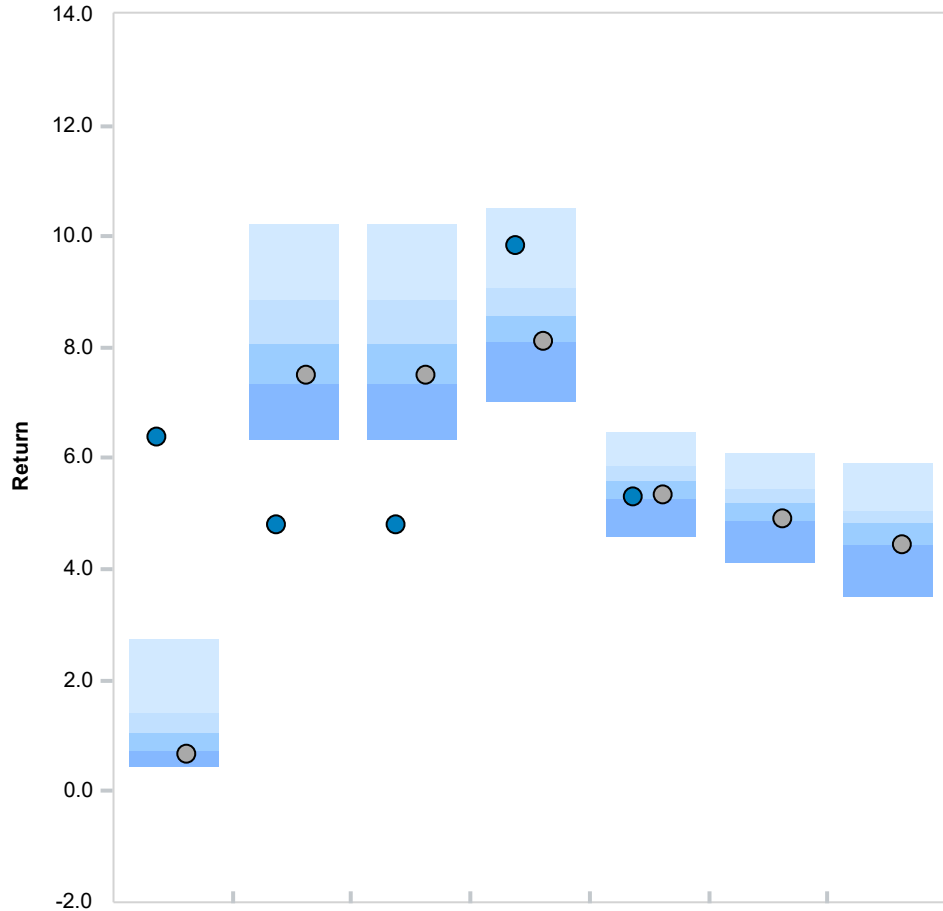
5 Year Rolling Percentile Rank IM U.S. Broad Market Core Fixed Income (SA+CF)



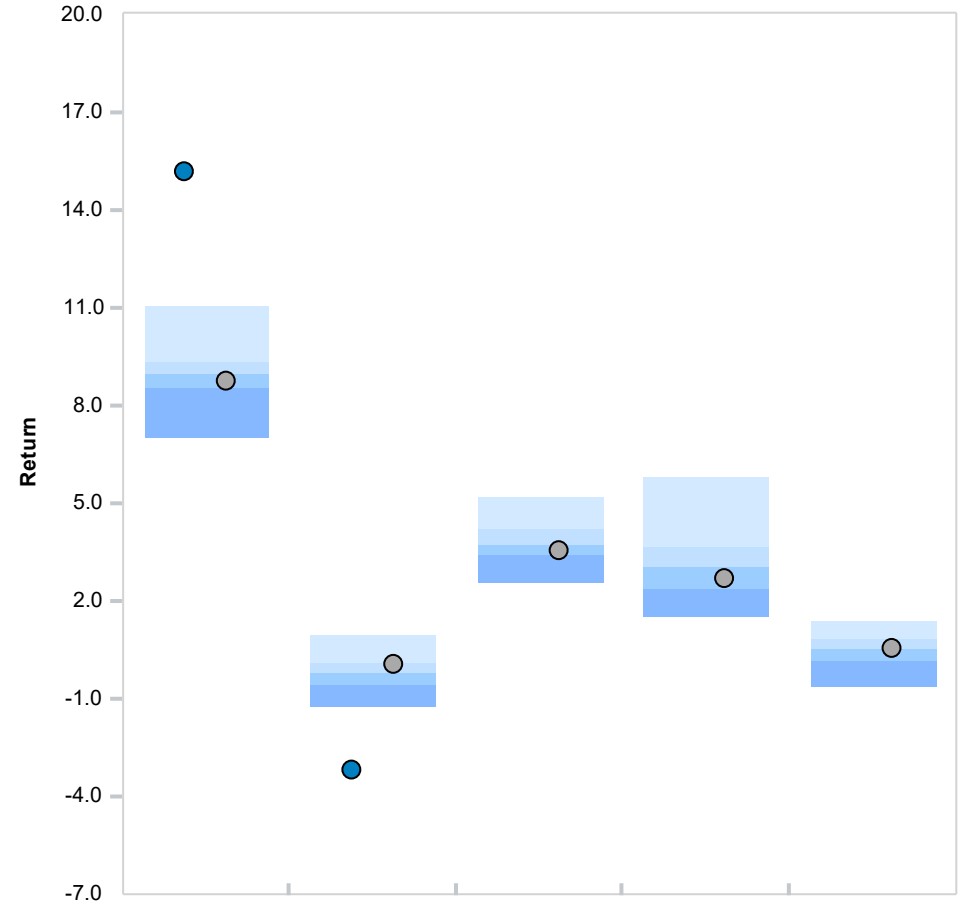
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	0	0	0	0	0
Index	20	0 (0%)	1 (5%)	17 (85%)	2 (10%)



Peer Group Analysis - IM U.S. Broad Market Core Fixed Income (SA+CF)



Peer Group Analysis - IM U.S. Broad Market Core Fixed Income (SA+CF)



	QTR	YTD	1 YR	2 YR	3 YR	4 YR	5 YR
Investment	6.38 (1)	4.78 (98)	4.78 (98)	9.85 (9)	5.31 (72)	N/A	N/A
Index	0.67 (82)	7.51 (70)	7.51 (70)	8.11 (75)	5.34 (71)	4.89 (75)	4.44 (77)
Median	1.05	8.05	8.05	8.56	5.59	5.18	4.81

	2019	2018	2017	2016	2015
Investment	15.16 (2)	-3.20 (100)	N/A	N/A	N/A
Index	8.72 (67)	0.01 (30)	3.54 (63)	2.65 (66)	0.55 (52)
Median	8.96	-0.22	3.73	3.03	0.55

Comparative Performance

	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020	1 Qtr Ending Mar-2020	1 Qtr Ending Dec-2019	1 Qtr Ending Sep-2019	1 Qtr Ending Jun-2019
Investment	3.80 (1)	4.58 (45)	-9.26 (99)	1.53 (4)	2.39 (28)	3.08 (51)
Index	0.62 (83)	2.90 (83)	3.15 (16)	0.18 (45)	2.27 (51)	3.08 (50)
Median	1.05	4.38	1.55	0.16	2.28	3.08



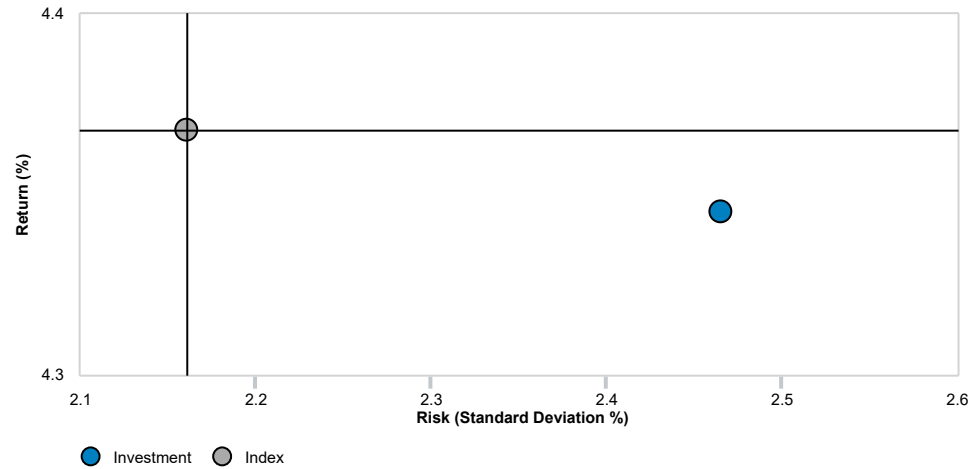
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	4.35	2.47	1.08	103.07	10	115.87	2
Index	4.37	2.16	1.28	100.00	11	100.00	1

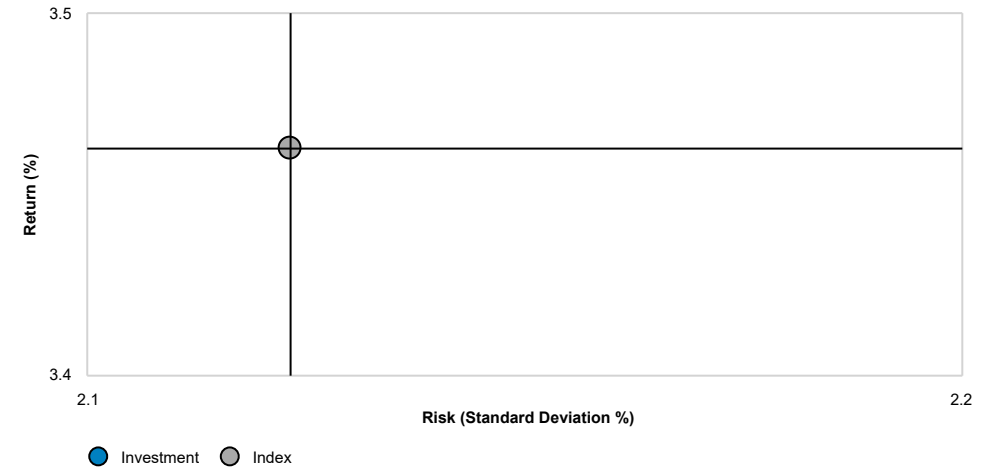
Historical Statistics 5 Years

	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	3.46	2.12	1.08	100.00	17	100.00	3

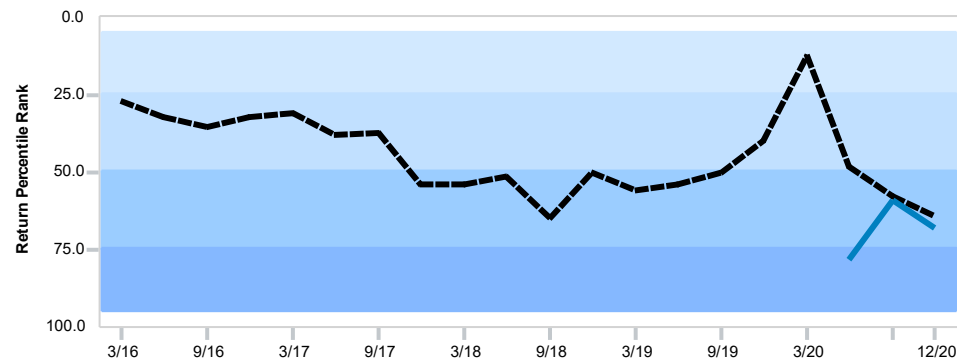
Risk and Return 3 Years



Risk and Return 5 Years

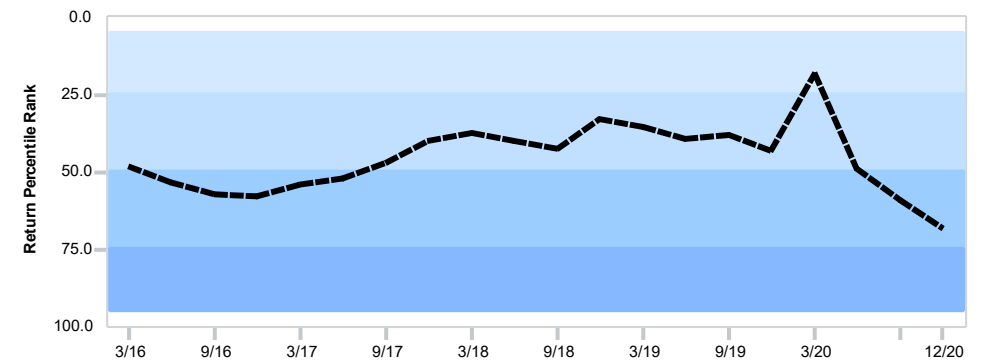


3 Year Rolling Percentile Rank IM U.S. Intermediate Duration (SA+CF)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	3	0 (0%)	0 (0%)	2 (67%)	1 (33%)
Index	20	1 (5%)	11 (55%)	8 (40%)	0 (0%)

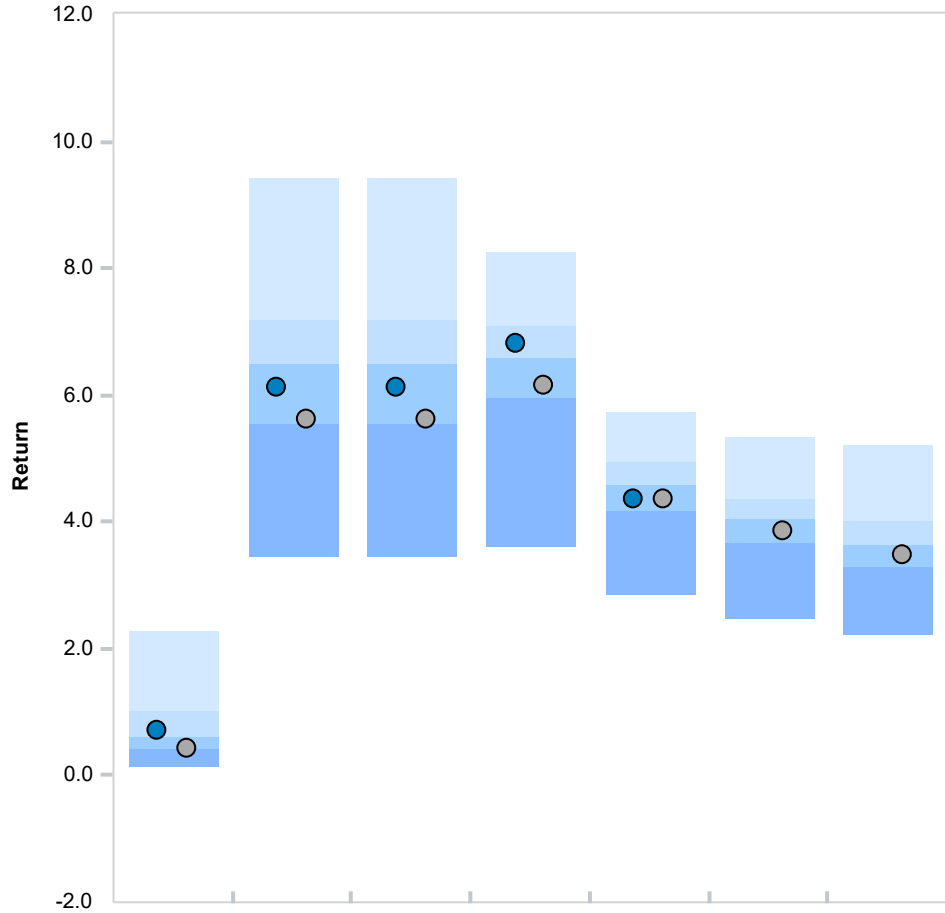
5 Year Rolling Percentile Rank IM U.S. Intermediate Duration (SA+CF)



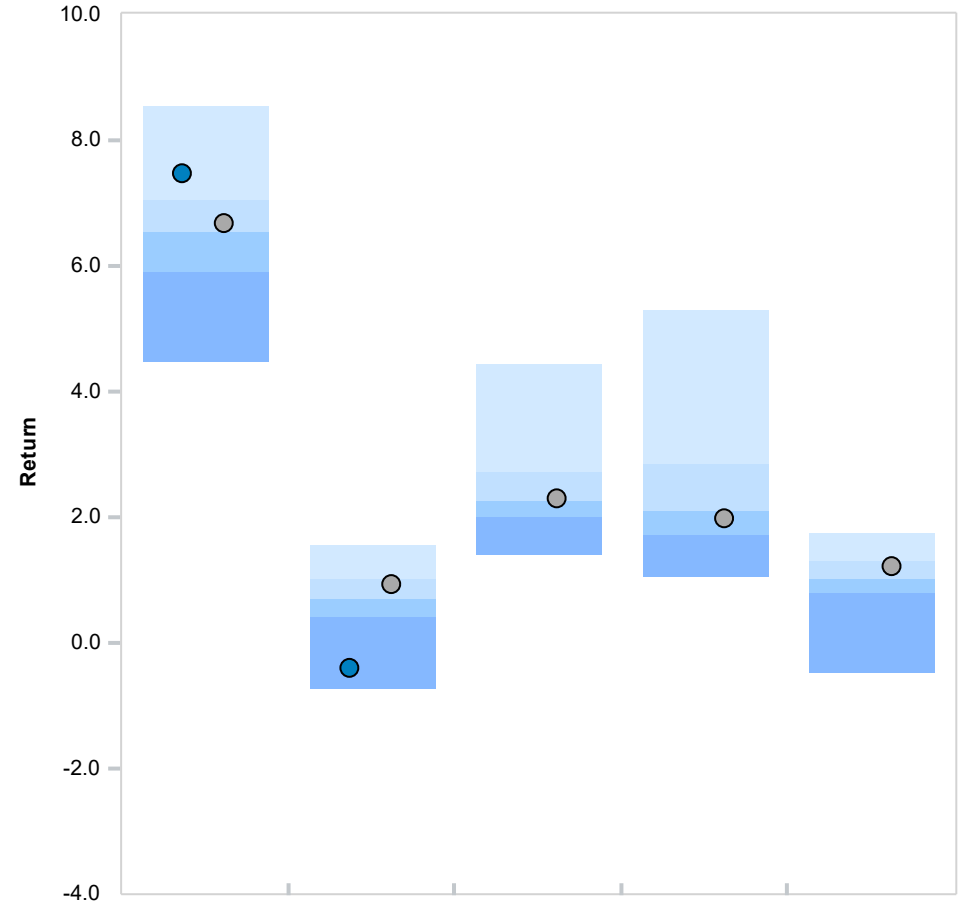
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	0	0	0	0	0
Index	20	1 (5%)	12 (60%)	7 (35%)	0 (0%)



Peer Group Analysis - IM U.S. Intermediate Duration (SA+CF)



Peer Group Analysis - IM U.S. Intermediate Duration (SA+CF)



Comparative Performance

	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020	1 Qtr Ending Mar-2020	1 Qtr Ending Dec-2019	1 Qtr Ending Sep-2019	1 Qtr Ending Jun-2019
Investment	0.78 (49)	3.54 (54)	0.98 (50)	0.24 (81)	1.59 (12)	2.42 (48)
Index	0.48 (82)	2.13 (94)	2.49 (19)	0.47 (33)	1.38 (41)	2.39 (53)
Median	0.77	3.67	0.94	0.37	1.35	2.40



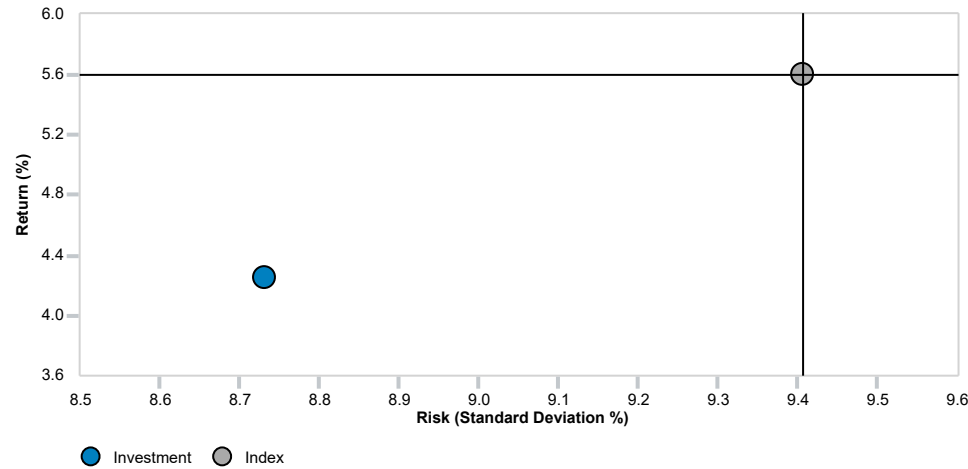
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	4.25	8.73	0.33	88.09	9	97.02	3
Index	5.60	9.41	0.45	100.00	9	100.00	3

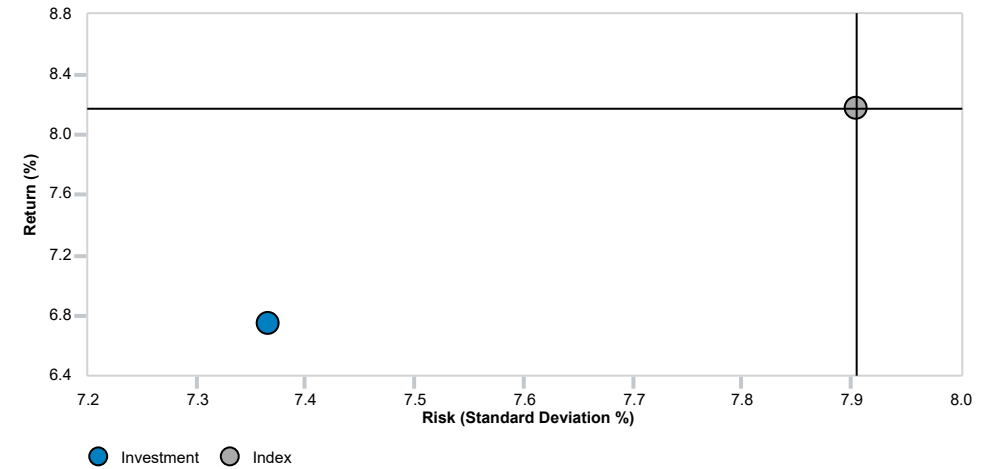
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	6.75	7.37	0.75	89.33	17	99.40	3
Index	8.17	7.90	0.88	100.00	17	100.00	3

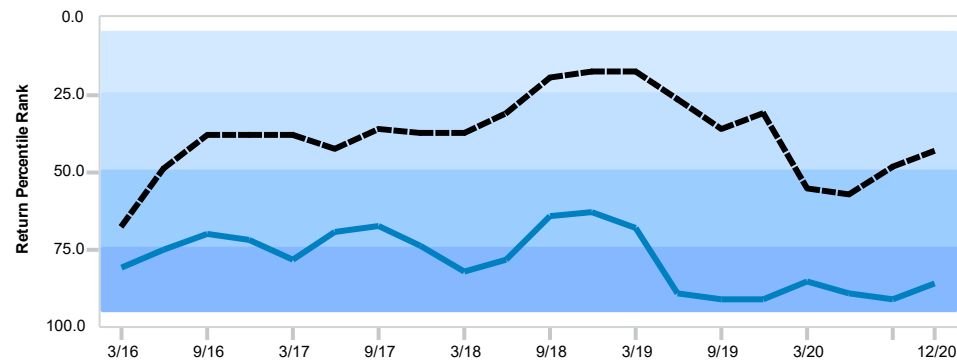
Risk and Return 3 Years



Risk and Return 5 Years

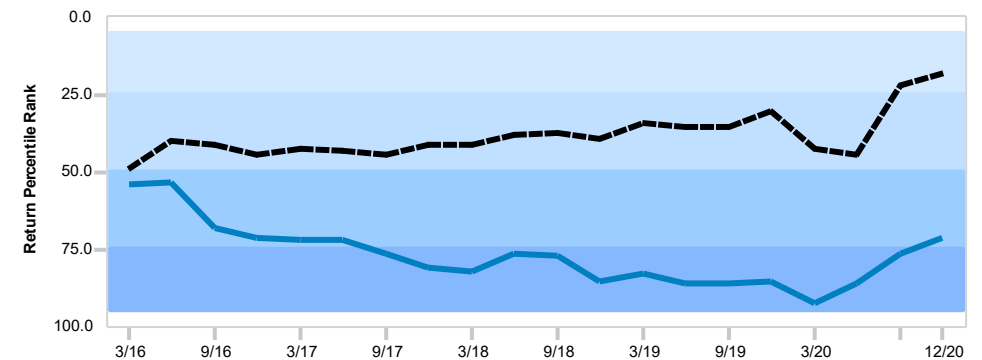


3 Year Rolling Percentile Rank IM U.S. High Yield Bonds (SA+CF)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	0 (0%)	0 (0%)	9 (45%)	11 (55%)
Index	20	3 (15%)	14 (70%)	3 (15%)	0 (0%)

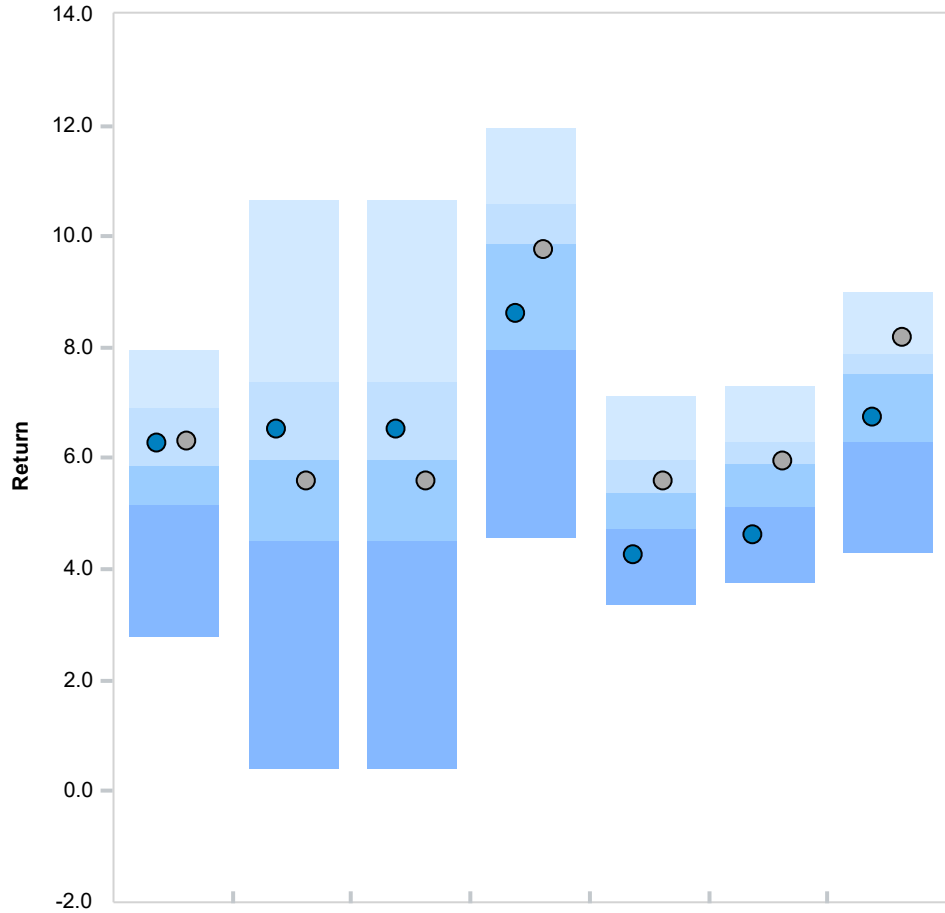
5 Year Rolling Percentile Rank IM U.S. High Yield Bonds (SA+CF)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	0 (0%)	0 (0%)	7 (35%)	13 (65%)
Index	20	2 (10%)	18 (90%)	0 (0%)	0 (0%)

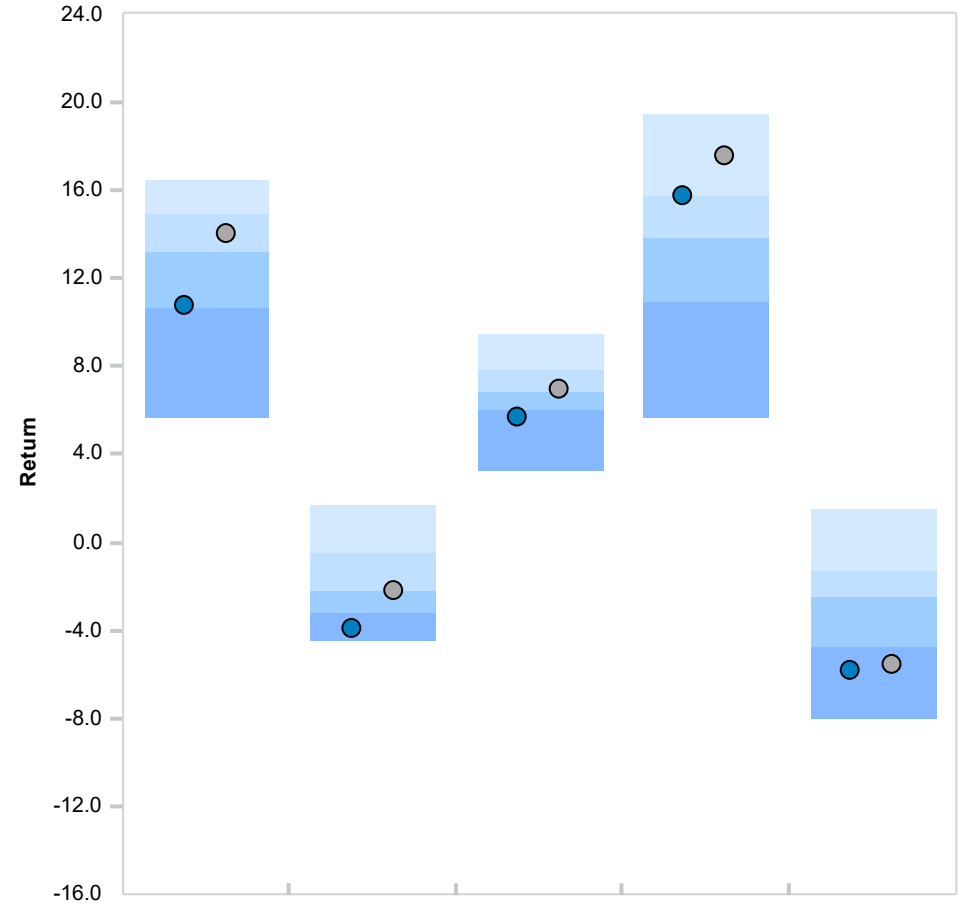


Peer Group Analysis - IM U.S. High Yield Bonds (SA+CF)



	QTR	YTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Investment	6.26 (41)	6.53 (41)	6.53 (41)	8.60 (71)	4.25 (86)	4.60 (83)	6.75 (71)
● Index	6.30 (40)	5.60 (62)	5.60 (62)	9.74 (51)	5.60 (43)	5.94 (48)	8.17 (18)
Median	5.89	5.98	5.98	9.85	5.37	5.91	7.54

Peer Group Analysis - IM U.S. High Yield Bonds (SA+CF)



	2019	2018	2017	2016	2015
● Investment	10.71 (75)	-3.94 (89)	5.69 (81)	15.78 (25)	-5.88 (85)
● Index	14.05 (41)	-2.22 (50)	6.97 (49)	17.56 (8)	-5.54 (83)
Median	13.18	-2.24	6.90	13.82	-2.48

Comparative Performance

	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020	1 Qtr Ending Mar-2020	1 Qtr Ending Dec-2019	1 Qtr Ending Sep-2019	1 Qtr Ending Jun-2019
Investment	4.63 (43)	8.67 (64)	-11.83 (42)	2.19 (65)	1.16 (66)	0.17 (98)
Index	4.92 (26)	9.23 (51)	-13.32 (63)	2.85 (21)	0.92 (77)	2.33 (51)
Median	4.49	9.29	-12.26	2.39	1.30	2.34



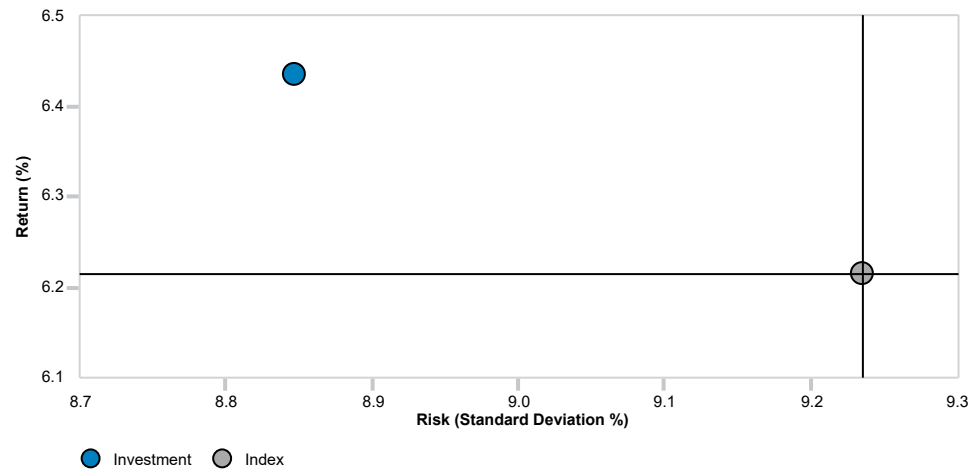
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	6.44	8.85	0.56	99.60	9	96.85	3
Index	6.21	9.24	0.52	100.00	9	100.00	3

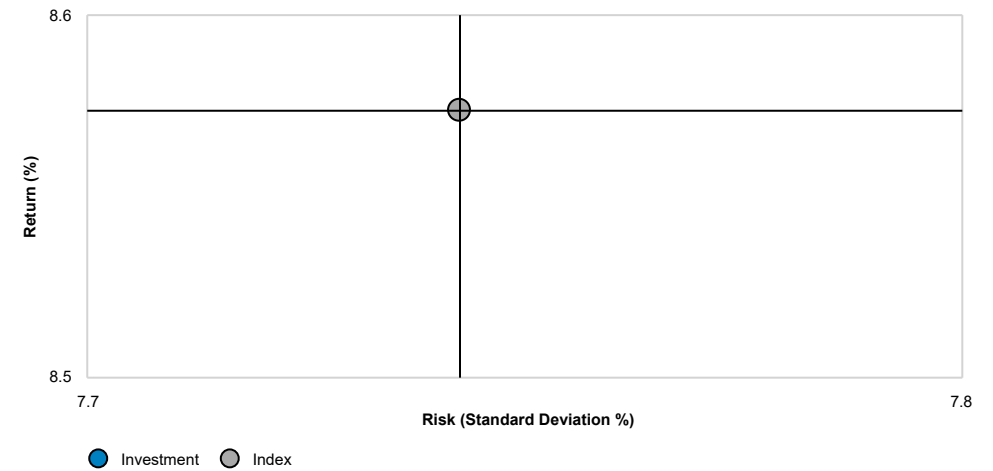
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Index	8.57	7.74	0.94	100.00	17	100.00	3

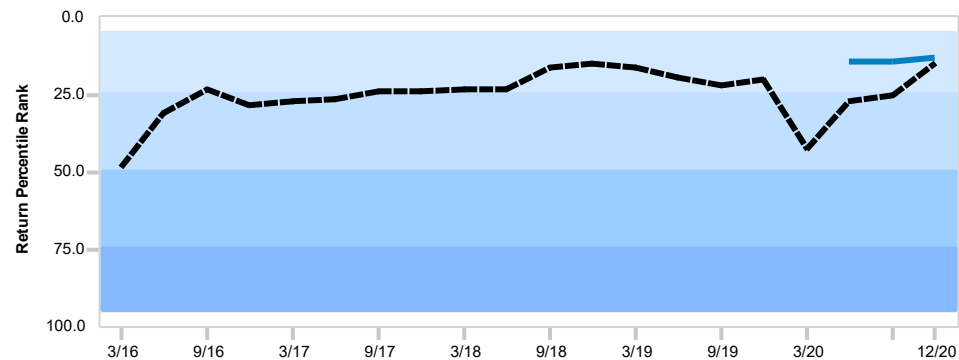
Risk and Return 3 Years



Risk and Return 5 Years

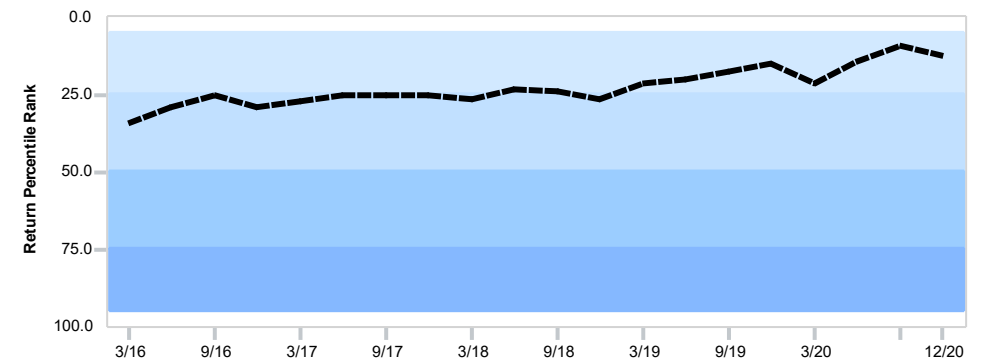


3 Year Rolling Percentile Rank IM U.S. High Yield Bonds (SA+CF)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	3	3 (100%)	0 (0%)	0 (0%)	0 (0%)
Index	20	13 (65%)	7 (35%)	0 (0%)	0 (0%)

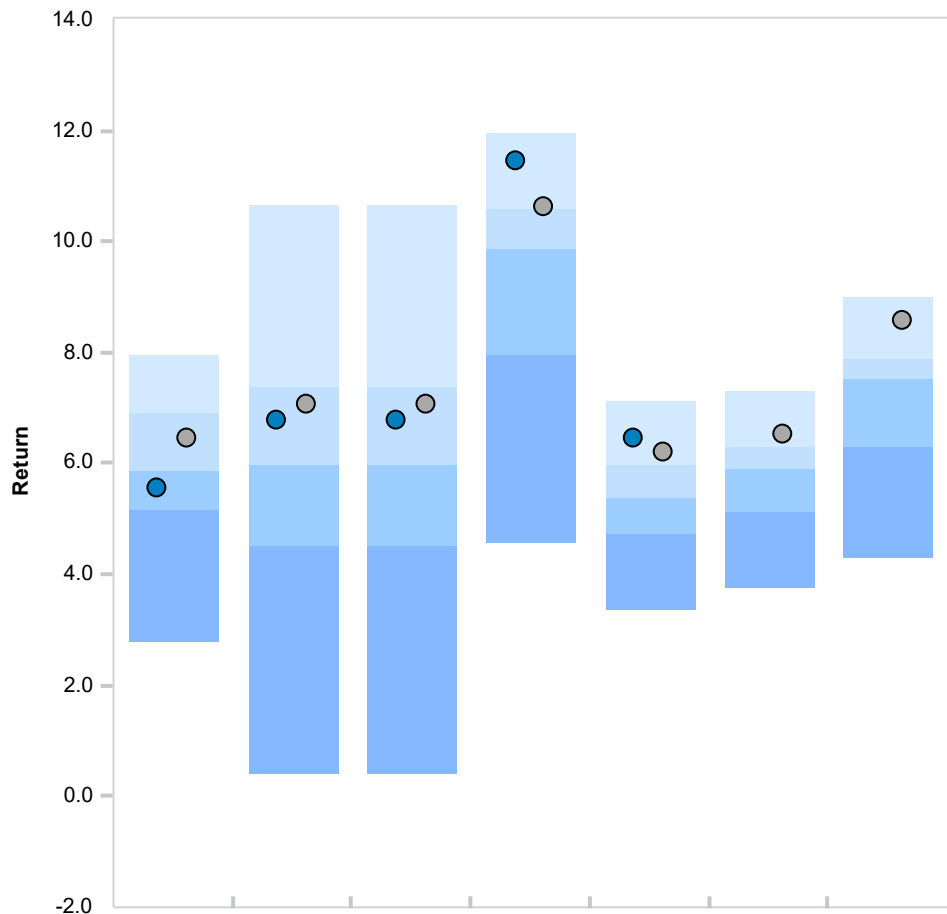
5 Year Rolling Percentile Rank IM U.S. High Yield Bonds (SA+CF)



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

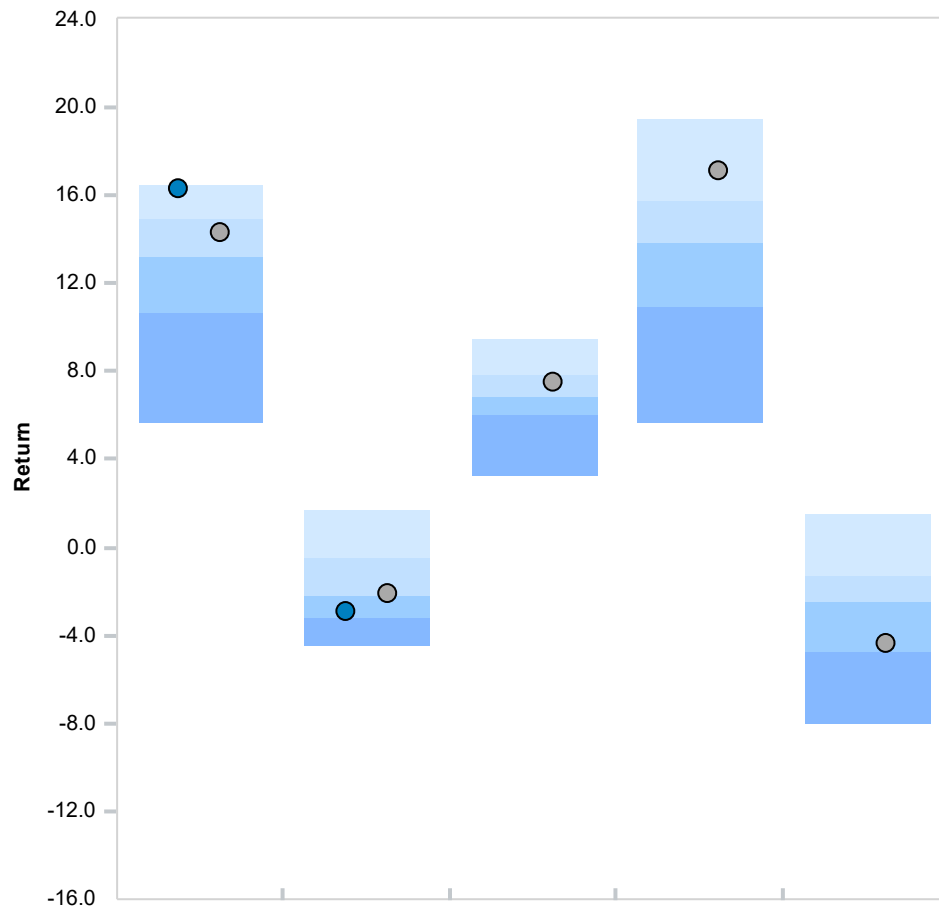


Peer Group Analysis - IM U.S. High Yield Bonds (SA+CF)



	QTR	YTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Investment	5.56 (61)	6.78 (37)	6.78 (37)	11.44 (10)	6.44 (13)	N/A	N/A
● Index	6.44 (35)	7.05 (32)	7.05 (32)	10.62 (21)	6.21 (15)	6.53 (16)	8.57 (12)
Median	5.89	5.98	5.98	9.85	5.37	5.91	7.54

Peer Group Analysis - IM U.S. High Yield Bonds (SA+CF)



	2019	2018	2017	2016	2015
● Investment	16.30 (6)	-2.90 (69)	N/A	N/A	N/A
● Index	14.32 (33)	-2.08 (47)	7.50 (36)	17.13 (13)	-4.43 (72)
Median	13.18	-2.24	6.90	13.82	-2.48

Comparative Performance

	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020	1 Qtr Ending Mar-2020	1 Qtr Ending Dec-2019	1 Qtr Ending Sep-2019	1 Qtr Ending Jun-2019
Investment	4.51 (49)	9.67 (41)	-11.74 (39)	3.49 (4)	1.50 (36)	2.52 (41)
Index	4.58 (46)	10.14 (32)	-12.68 (57)	2.61 (37)	1.33 (46)	2.50 (42)
Median	4.49	9.29	-12.26	2.39	1.30	2.34



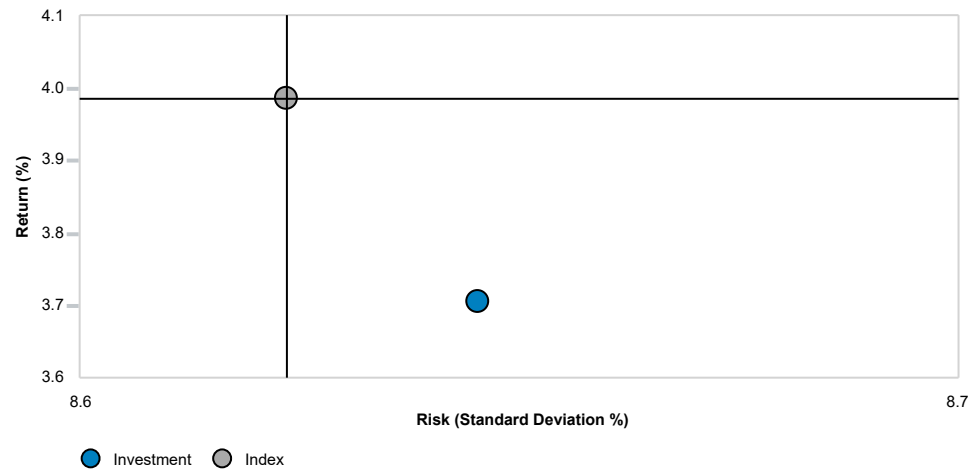
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	3.71	8.65	0.28	95.59	9	96.91	3
Index	3.99	8.62	0.31	100.00	10	100.00	2

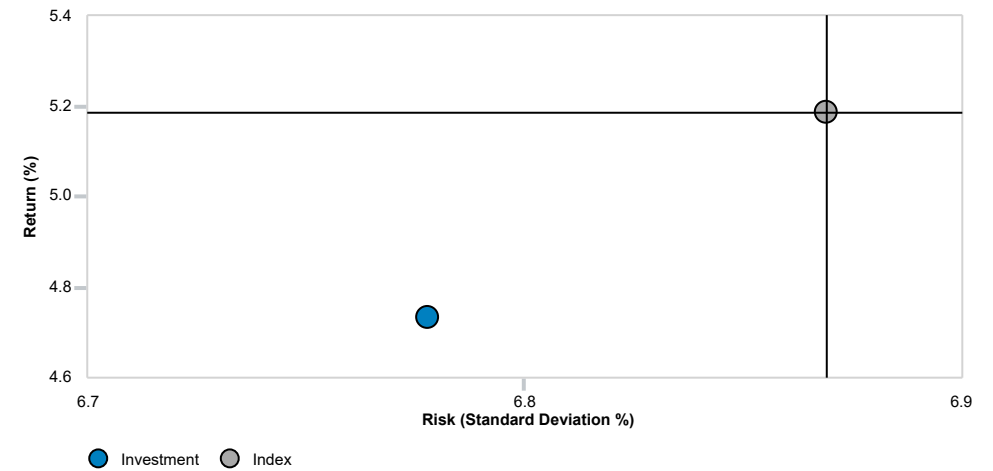
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	4.73	6.78	0.53	91.05	17	90.27	3
Index	5.19	6.87	0.59	100.00	18	100.00	2

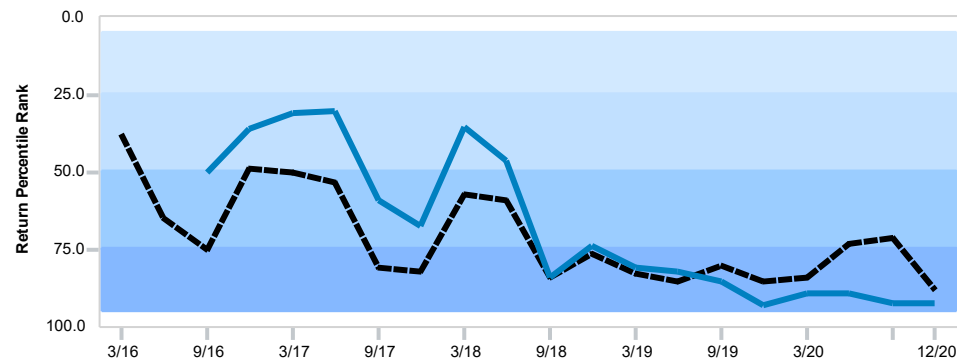
Risk and Return 3 Years



Risk and Return 5 Years

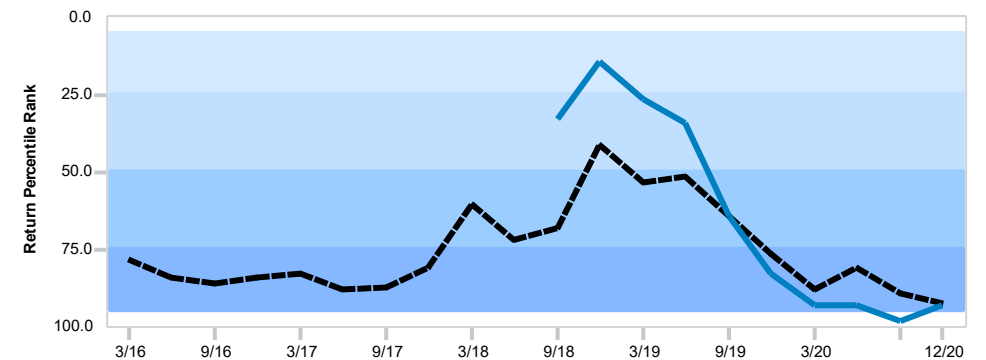


3 Year Rolling Percentile Rank IM U.S. High Yield Bonds (SA+CF)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	18	0 (0%)	6 (33%)	3 (17%)	9 (50%)
Index	20	0 (0%)	3 (15%)	7 (35%)	10 (50%)

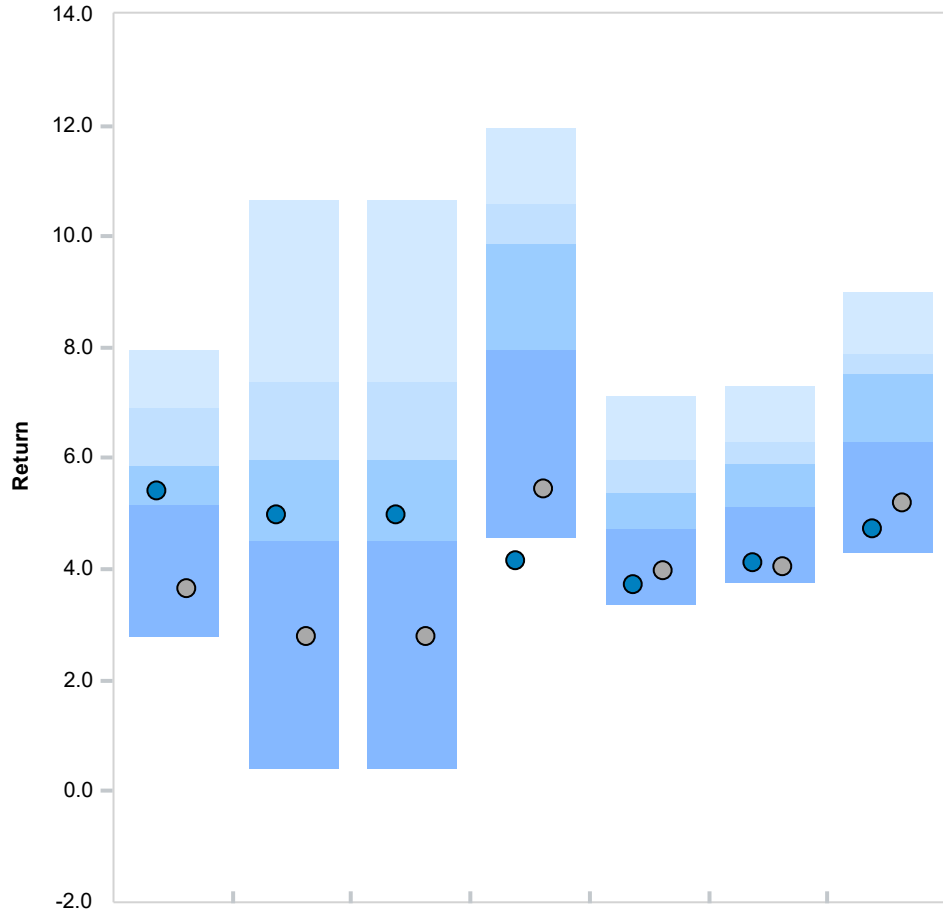
5 Year Rolling Percentile Rank IM U.S. High Yield Bonds (SA+CF)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	10	1 (10%)	3 (30%)	1 (10%)	5 (50%)
Index	20	0 (0%)	1 (5%)	6 (30%)	13 (65%)

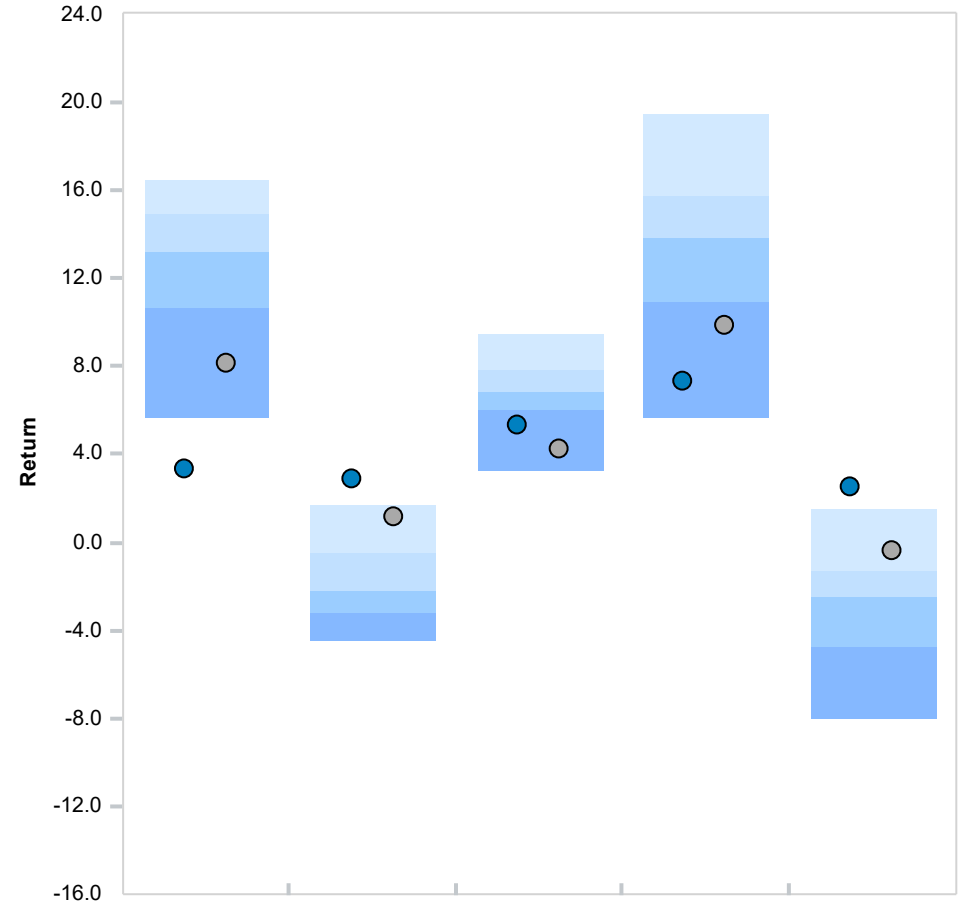


Peer Group Analysis - IM U.S. High Yield Bonds (SA+CF)



	QTR	YTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Investment	5.39 (68)	4.98 (71)	4.98 (71)	4.14 (97)	3.71 (92)	4.10 (91)	4.73 (93)
● Index	3.63 (88)	2.78 (86)	2.78 (86)	5.44 (92)	3.99 (88)	4.05 (91)	5.19 (92)
Median	5.89	5.98	5.98	9.85	5.37	5.91	7.54

Peer Group Analysis - IM U.S. High Yield Bonds (SA+CF)



	2019	2018	2017	2016	2015
● Investment	3.31 (99)	2.84 (2)	5.31 (86)	7.28 (91)	2.49 (1)
● Index	8.16 (85)	1.14 (10)	4.25 (91)	9.87 (81)	-0.41 (16)
Median	13.18	-2.24	6.90	13.82	-2.48

Comparative Performance

	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020	1 Qtr Ending Mar-2020	1 Qtr Ending Dec-2019	1 Qtr Ending Sep-2019	1 Qtr Ending Jun-2019
Investment	4.64 (43)	9.21 (51)	-12.83 (58)	0.32 (100)	-1.15 (96)	0.98 (95)
Index	4.12 (69)	9.71 (39)	-13.18 (62)	1.67 (81)	0.92 (77)	1.58 (81)
Median	4.49	9.29	-12.26	2.39	1.30	2.34



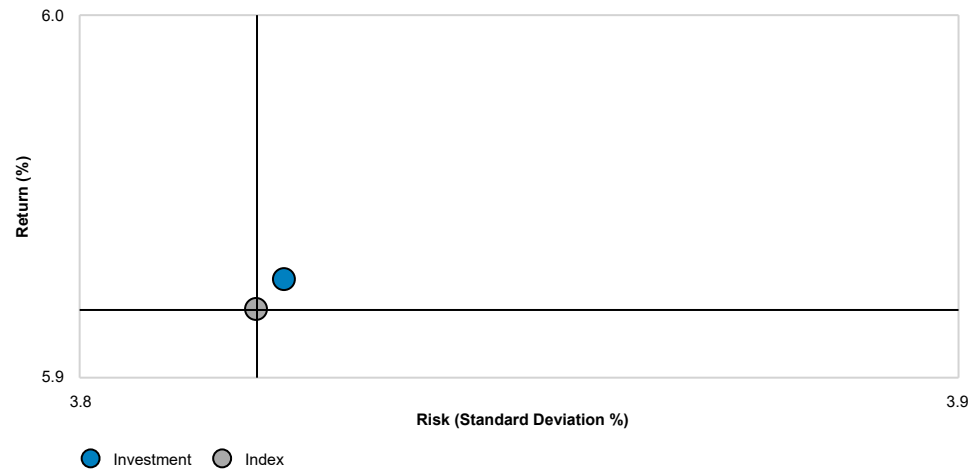
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	5.93	3.82	1.09	100.04	9	99.85	3
Index	5.92	3.82	1.09	100.00	9	100.00	3

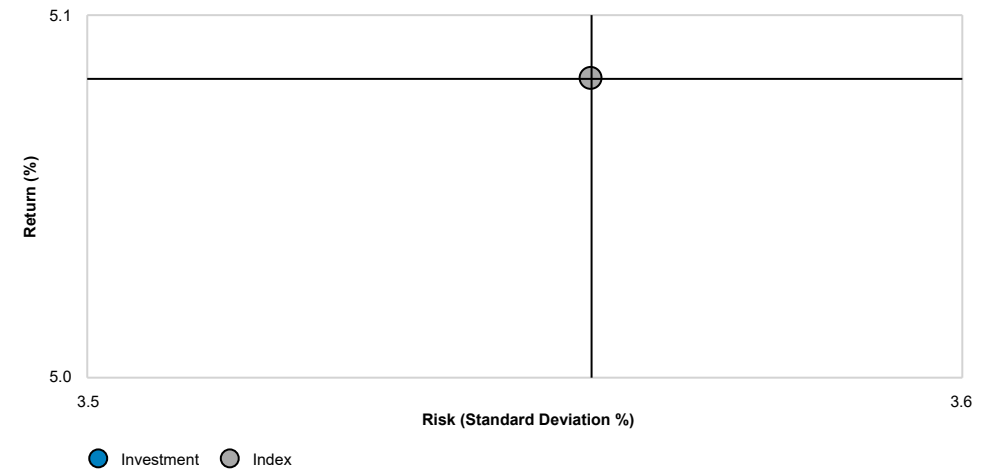
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Index	5.08	3.56	1.07	100.00	15	100.00	5

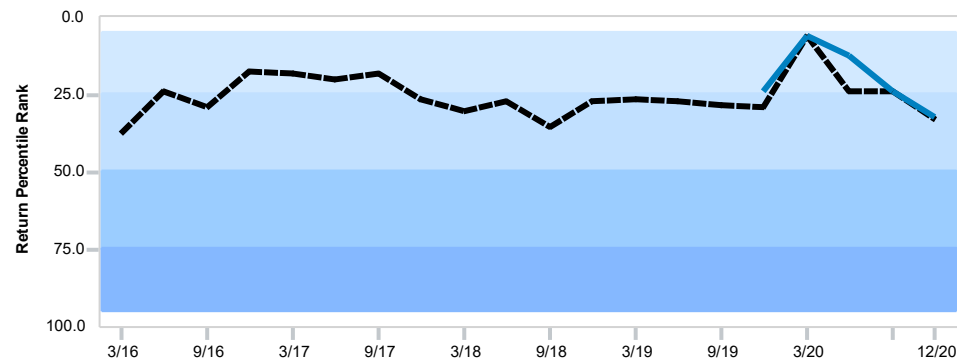
Risk and Return 3 Years



Risk and Return 5 Years

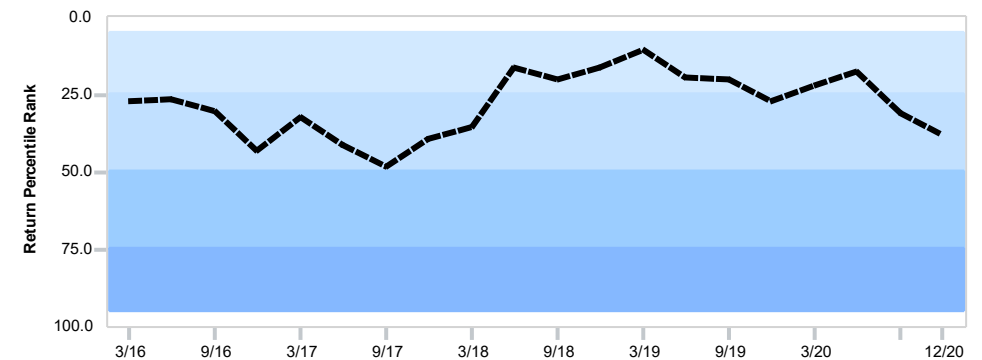


3 Year Rolling Percentile Rank IM U.S. TIPS (SA+CF)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	5	4 (80%)	1 (20%)	0 (0%)	0 (0%)
Index	20	8 (40%)	12 (60%)	0 (0%)	0 (0%)

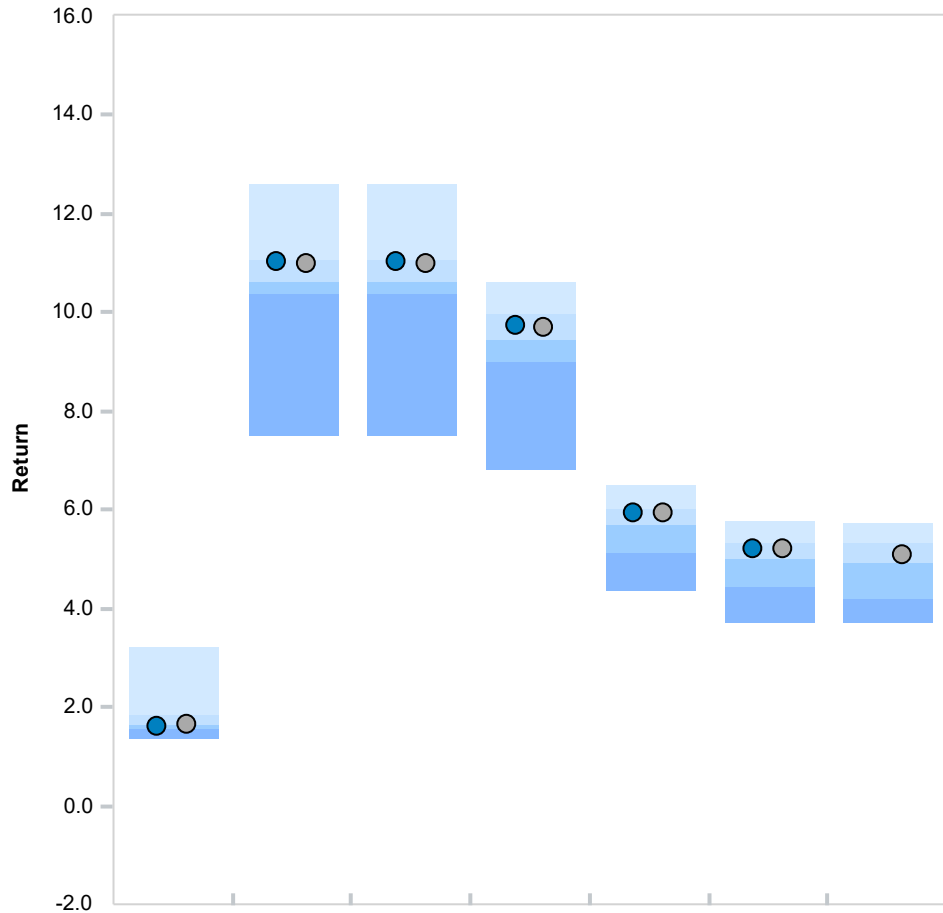
5 Year Rolling Percentile Rank IM U.S. TIPS (SA+CF)



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

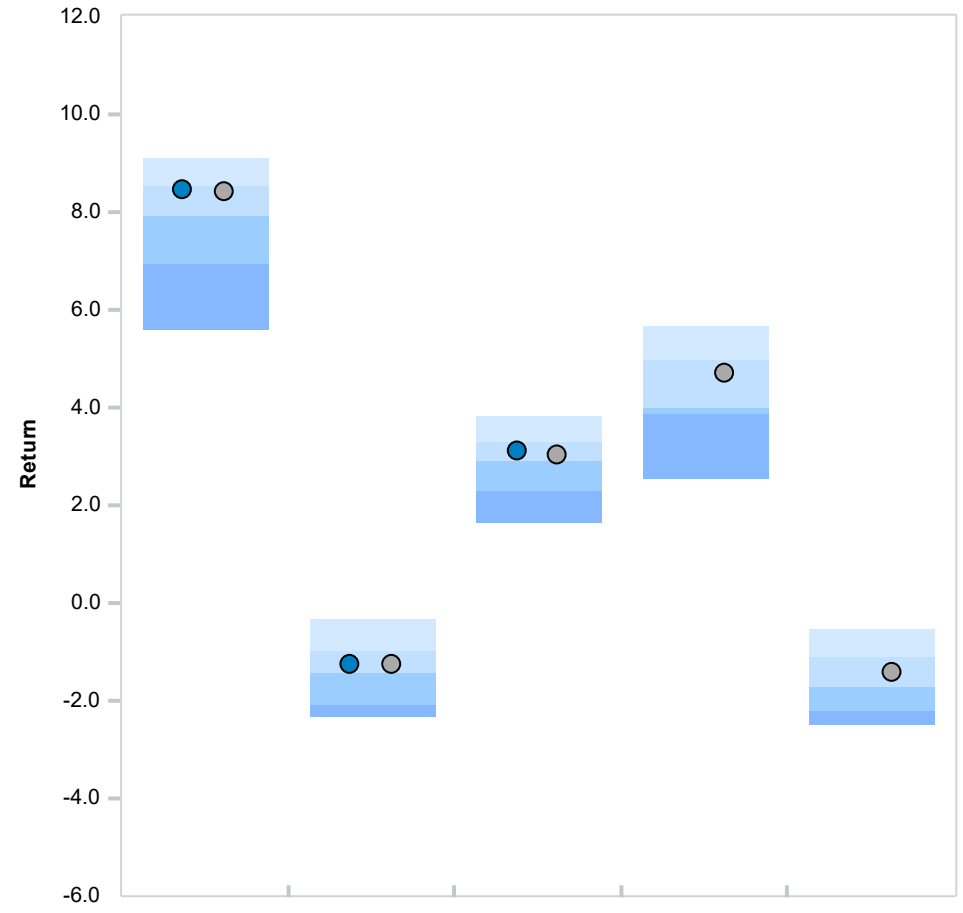


Peer Group Analysis - IM U.S. TIPS (SA+CF)



	QTR	YTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Investment	1.60 (68)	11.02 (32)	11.02 (32)	9.72 (38)	5.93 (32)	5.21 (33)	N/A
● Index	1.62 (54)	10.99 (35)	10.99 (35)	9.70 (39)	5.92 (33)	5.18 (37)	5.08 (38)
Median	1.62	10.61	10.61	9.46	5.70	4.98	4.91

Peer Group Analysis - IM U.S. TIPS (SA+CF)



	2019	2018	2017	2016	2015
● Investment	8.43 (28)	-1.27 (38)	3.10 (40)	N/A	N/A
● Index	8.43 (28)	-1.26 (38)	3.01 (46)	4.68 (40)	-1.44 (33)
Median	7.92	-1.44	2.91	4.02	-1.73

Comparative Performance

	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020	1 Qtr Ending Mar-2020	1 Qtr Ending Dec-2019	1 Qtr Ending Sep-2019	1 Qtr Ending Jun-2019
Investment	3.04 (61)	4.27 (59)	1.70 (14)	0.79 (36)	1.35 (25)	2.86 (25)
Index	3.03 (61)	4.24 (60)	1.69 (14)	0.79 (36)	1.35 (25)	2.86 (25)
Median	3.17	4.52	0.67	0.74	1.16	2.66



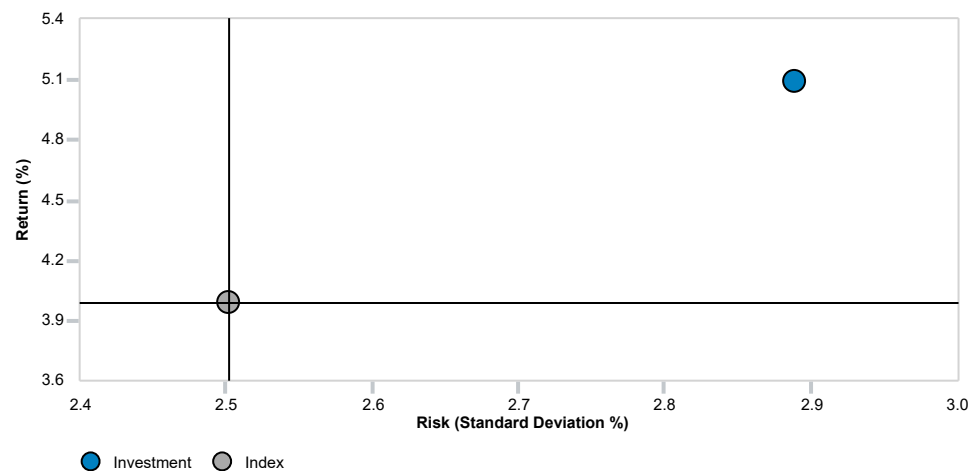
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	5.09	2.89	1.21	124.26	11	105.82	1
Index	3.99	2.50	0.97	100.00	11	100.00	1

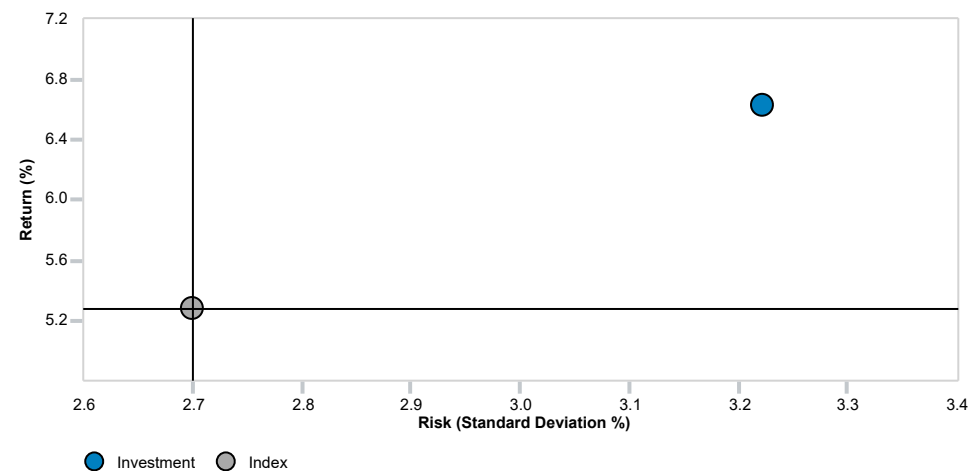
Historical Statistics 5 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	6.63	3.22	1.66	123.96	19	105.82	1
Index	5.27	2.70	1.49	100.00	19	100.00	1

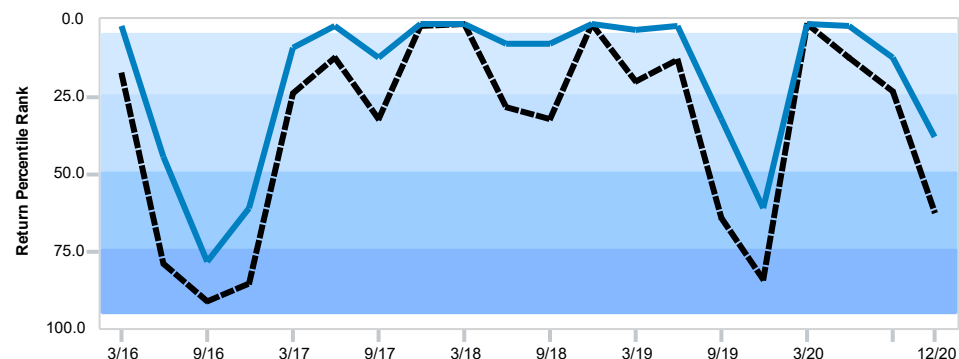
Risk and Return 3 Years



Risk and Return 5 Years

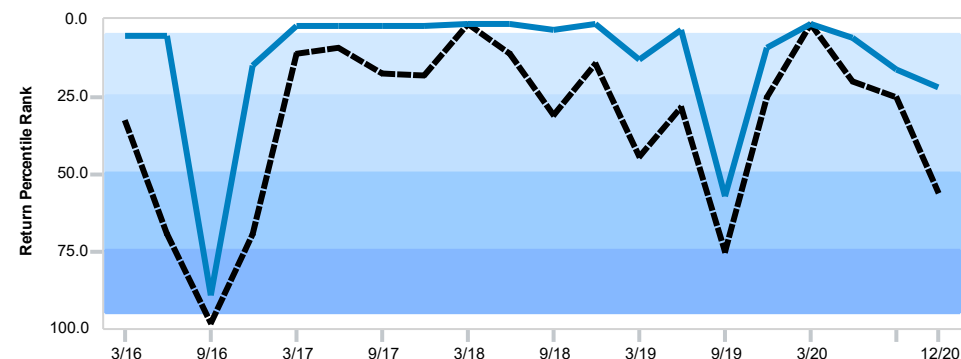


3 Year Rolling Percentile Rank IM U.S. REIT (SA+CF)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	14 (70%)	3 (15%)	2 (10%)	1 (5%)
Index	20	11 (55%)	3 (15%)	2 (10%)	4 (20%)

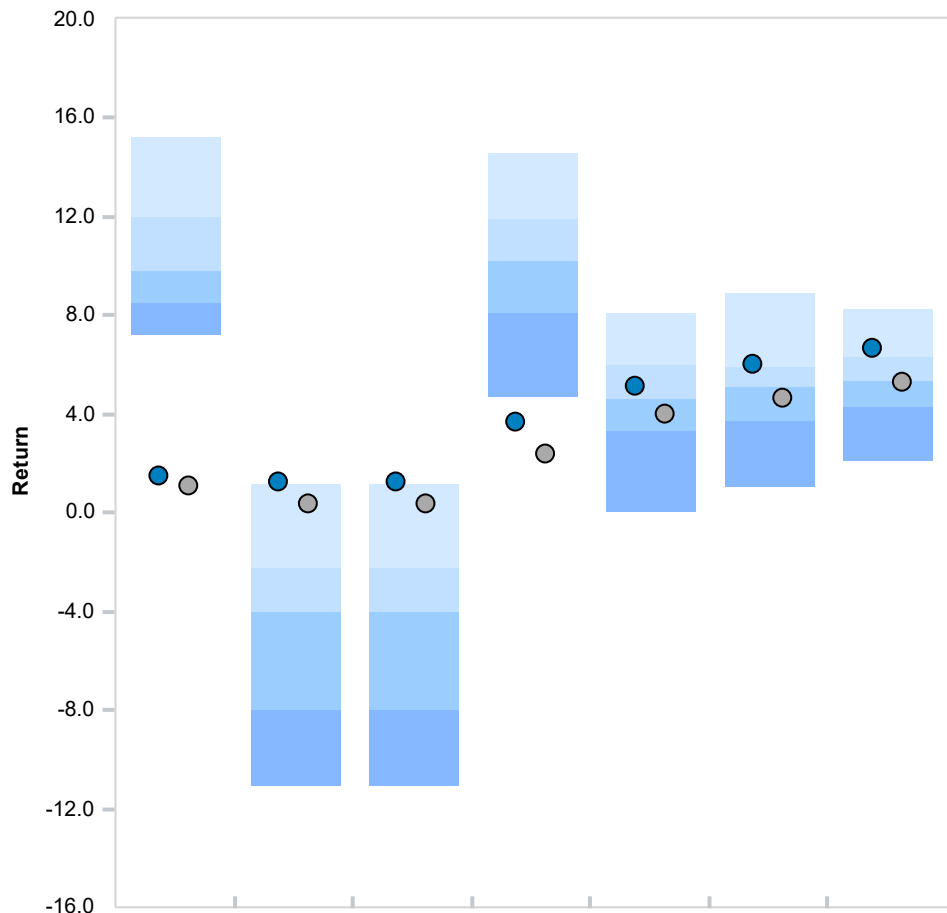
5 Year Rolling Percentile Rank IM U.S. REIT (SA+CF)



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
Investment	20	18 (90%)	0 (0%)	1 (5%)	1 (5%)
Index	20	11 (55%)	4 (20%)	4 (20%)	1 (5%)

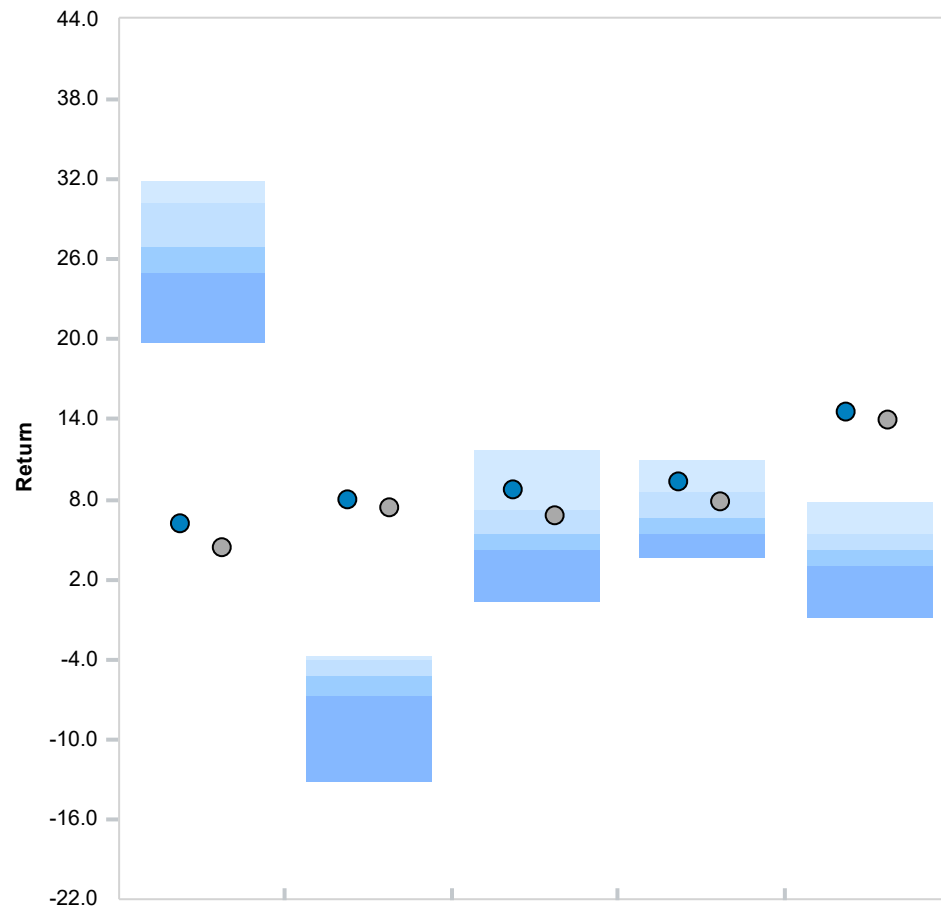


Peer Group Analysis - IM U.S. REIT (SA+CF)



	QTR	YTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Investment	1.47 (100)	1.26 (2)	1.26 (2)	3.68 (97)	5.09 (38)	5.99 (23)	6.63 (22)
● Index	1.10 (100)	0.34 (10)	0.34 (10)	2.35 (98)	3.99 (62)	4.65 (57)	5.27 (56)
Median	9.78	-4.03	-4.03	10.19	4.65	5.08	5.36

Peer Group Analysis - IM U.S. REIT (SA+CF)



	2019	2018	2017	2016	2015
● Investment	6.17 (100)	7.96 (1)	8.75 (13)	9.23 (22)	14.59 (1)
● Index	4.39 (100)	7.36 (1)	6.66 (31)	7.79 (38)	13.95 (1)
Median	26.90	-5.19	5.45	6.55	4.26

Comparative Performance

	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020	1 Qtr Ending Mar-2020	1 Qtr Ending Dec-2019	1 Qtr Ending Sep-2019	1 Qtr Ending Jun-2019
Investment	1.06 (74)	-1.85 (100)	0.61 (1)	1.53 (18)	1.41 (100)	1.82 (63)
Index	0.27 (90)	-1.75 (100)	0.75 (1)	1.27 (22)	1.08 (100)	0.77 (88)
Median	1.62	11.96	-23.91	0.36	7.06	2.00



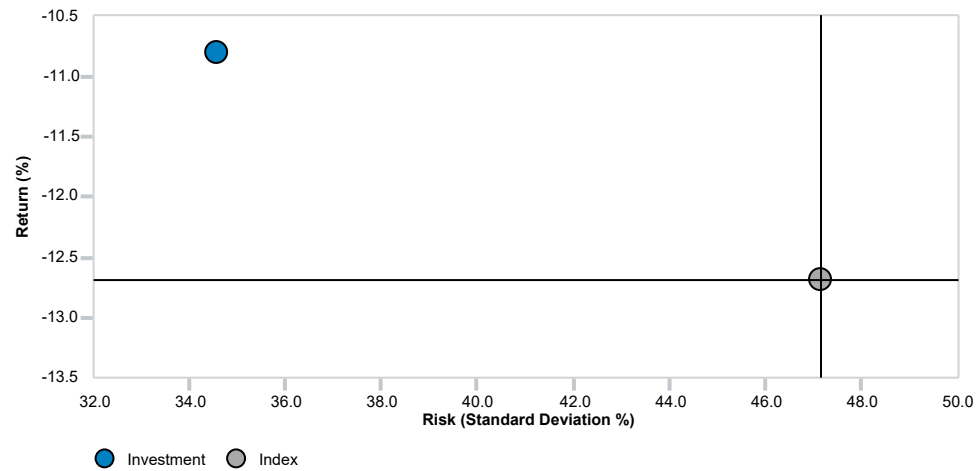
Historical Statistics 3 Years

	Return	Standard Deviation	Sharpe Ratio	Up Market Capture	Up Quarters	Down Market Capture	Down Quarters
Investment	-10.80	34.58	-0.18	74.40	6	81.44	6
Index	-12.69	47.18	-0.07	100.00	6	100.00	6

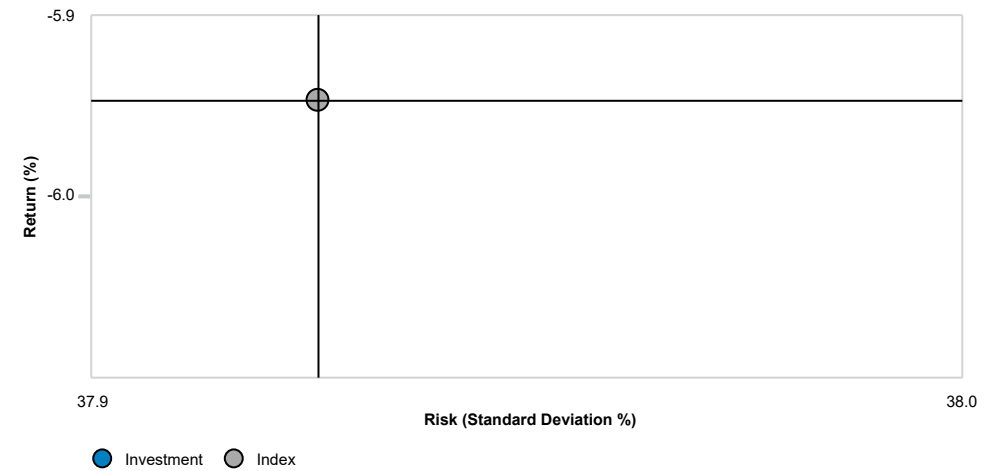
Historical Statistics 5 Years

	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	-5.95	37.93	0.01	100.00	10	100.00	10

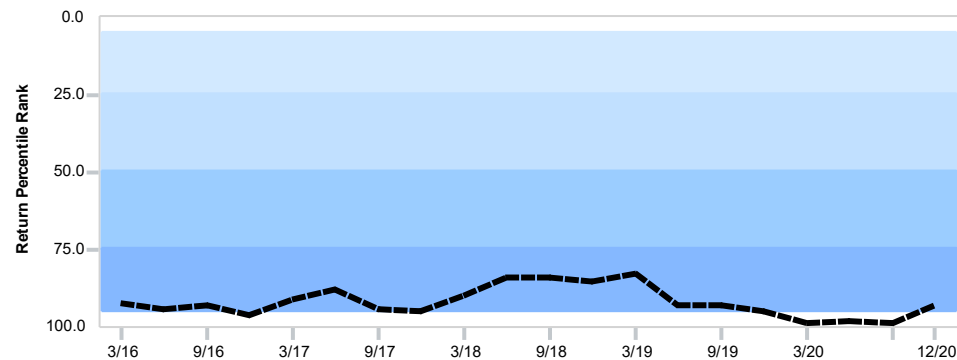
Risk and Return 3 Years



Risk and Return 5 Years

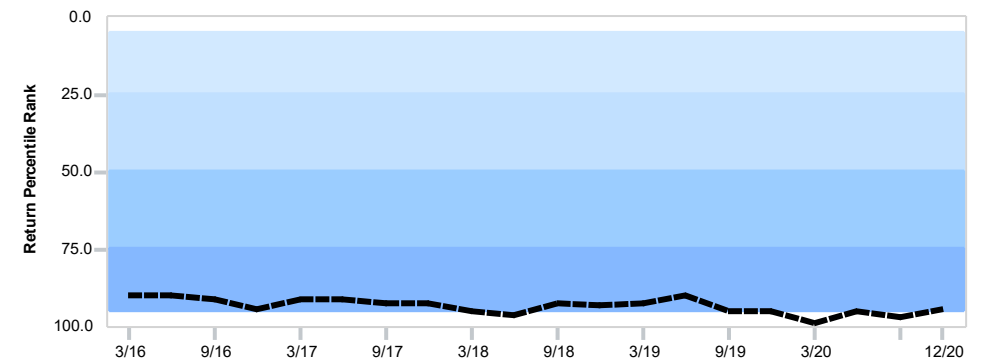


3 Year Rolling Percentile Rank IM U.S. Other Equity (SA+CF)



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

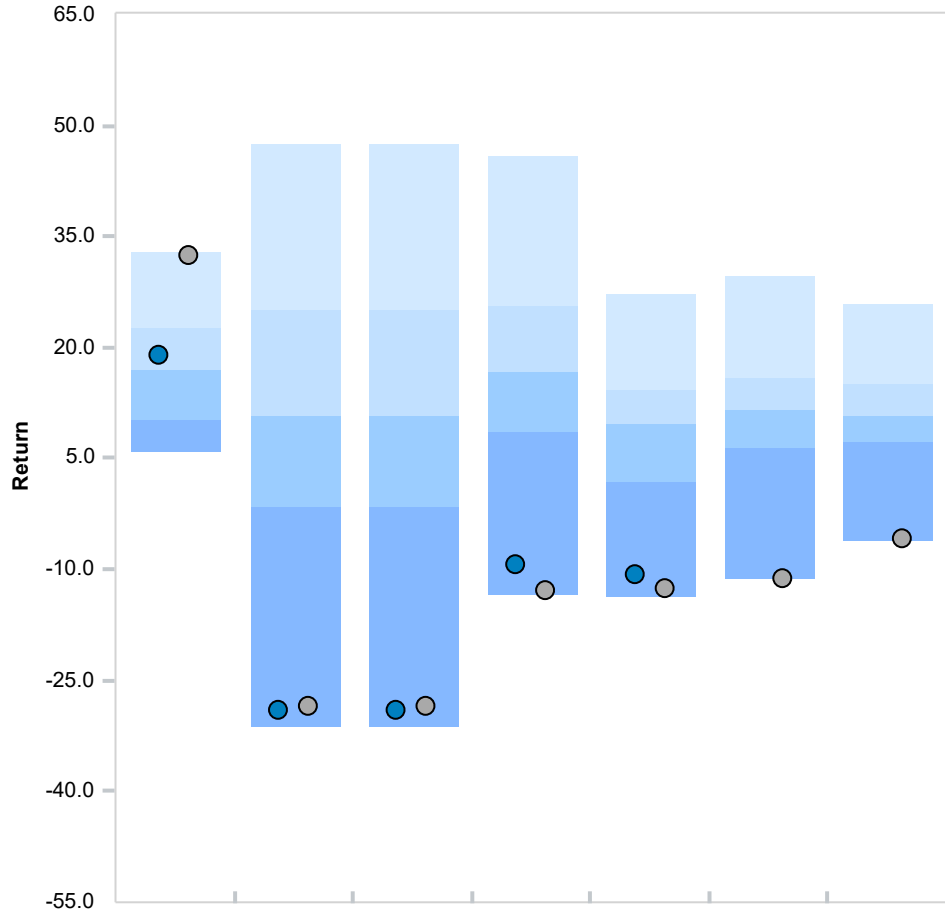
5 Year Rolling Percentile Rank IM U.S. Other Equity (SA+CF)



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

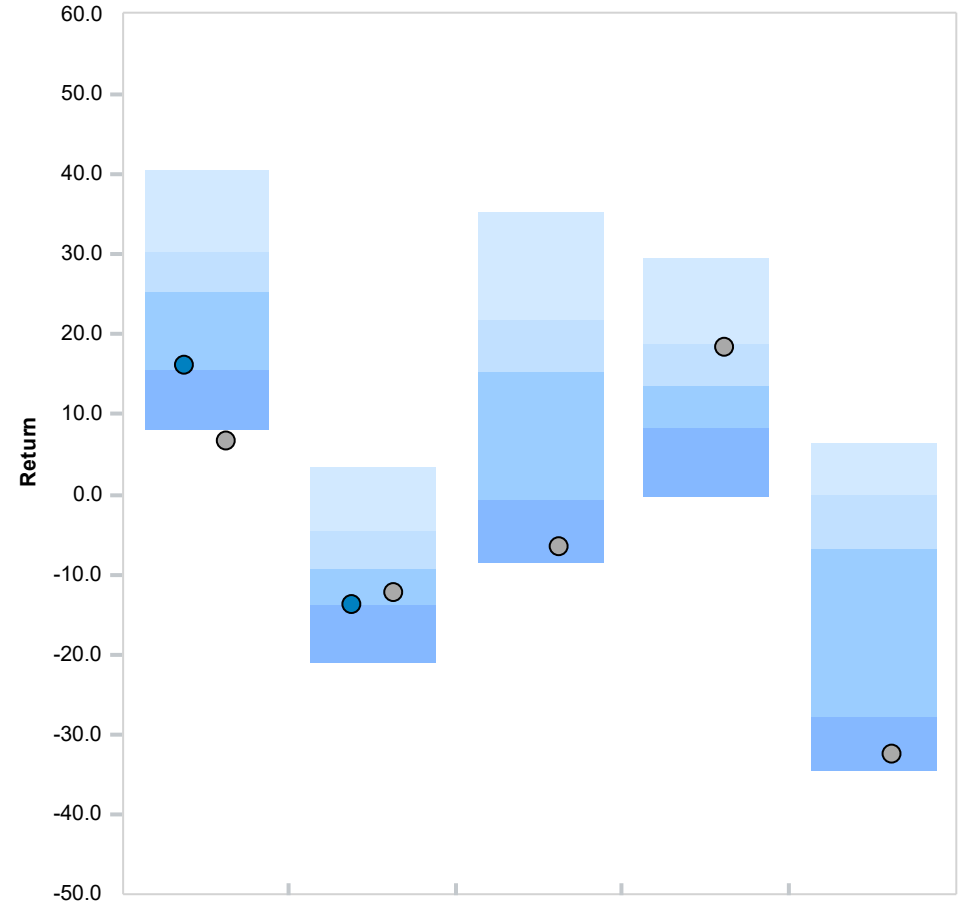


Peer Group Analysis - IM U.S. Other Equity (SA+CF)



	QTR	YTD	1 YR	2 YR	3 YR	4 YR	5 YR
Investment	18.89 (38)	-29.13 (94)	-29.13 (94)	-9.31 (90)	-10.80 (89)	N/A	N/A
Index	32.45 (6)	-28.69 (93)	-28.69 (93)	-12.83 (94)	-12.69 (93)	-11.19 (95)	-5.95 (94)
Median	16.97	10.91	10.91	16.71	9.79	11.62	10.84

Peer Group Analysis - IM U.S. Other Equity (SA+CF)



	2019	2018	2017	2016	2015
Investment	16.05 (73)	-13.72 (76)	N/A	N/A	N/A
Index	6.56 (98)	-12.42 (65)	-6.52 (93)	18.31 (27)	-32.59 (88)
Median	25.44	-9.37	15.28	13.51	-6.82

Comparative Performance

	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020	1 Qtr Ending Mar-2020	1 Qtr Ending Dec-2019	1 Qtr Ending Sep-2019	1 Qtr Ending Jun-2019
Investment	-11.09 (90)	26.34 (39)	-46.93 (85)	1.19 (79)	-3.73 (78)	-0.74 (83)
Index	-16.26 (100)	50.18 (3)	-57.19 (99)	-4.08 (100)	-5.02 (88)	0.12 (73)
Median	5.24	21.82	-23.01	6.62	-0.38	2.76



Historical Statistics 3 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	-12.69	47.18	-0.07	100.00	6	100.00	6

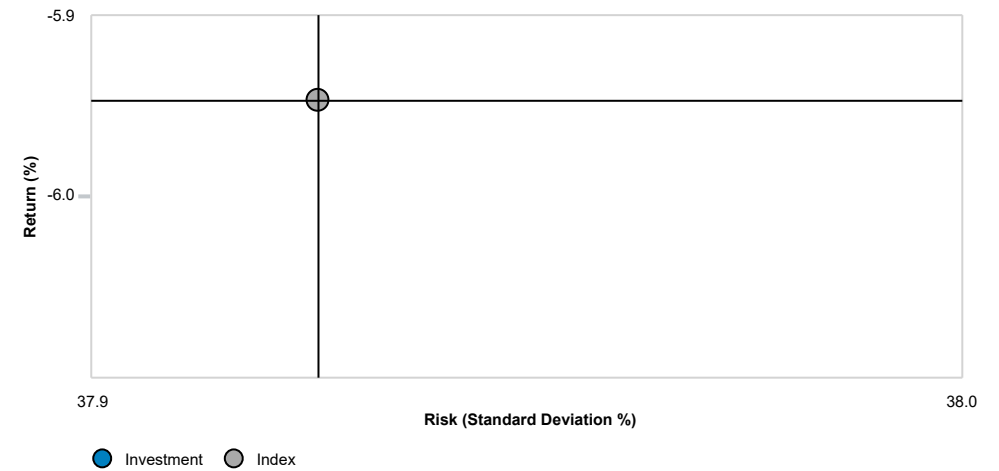
Historical Statistics 5 Years

	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	-5.95	37.93	0.01	100.00	10	100.00	10

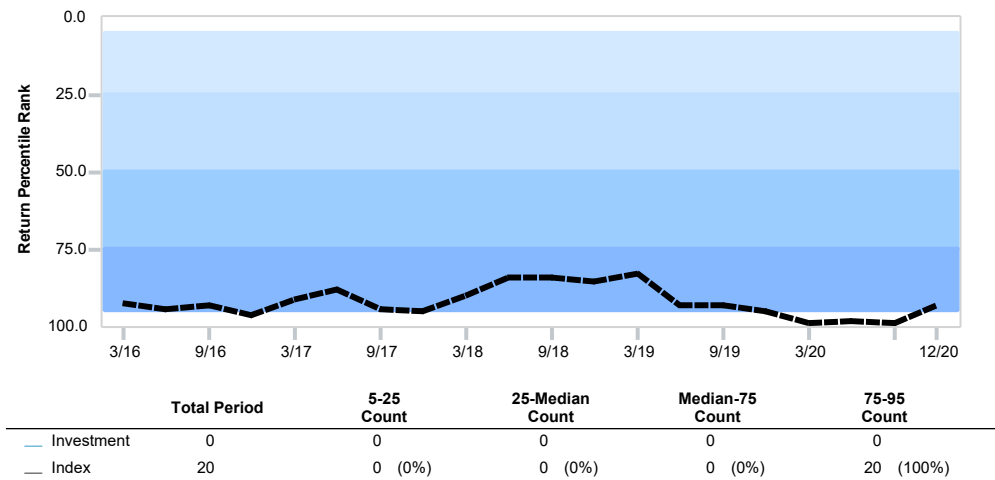
Risk and Return 3 Years



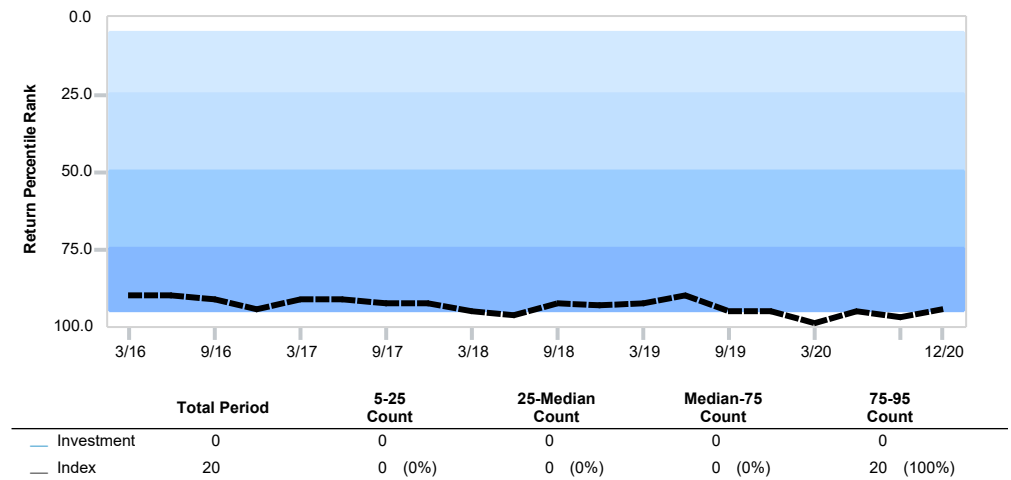
Risk and Return 5 Years



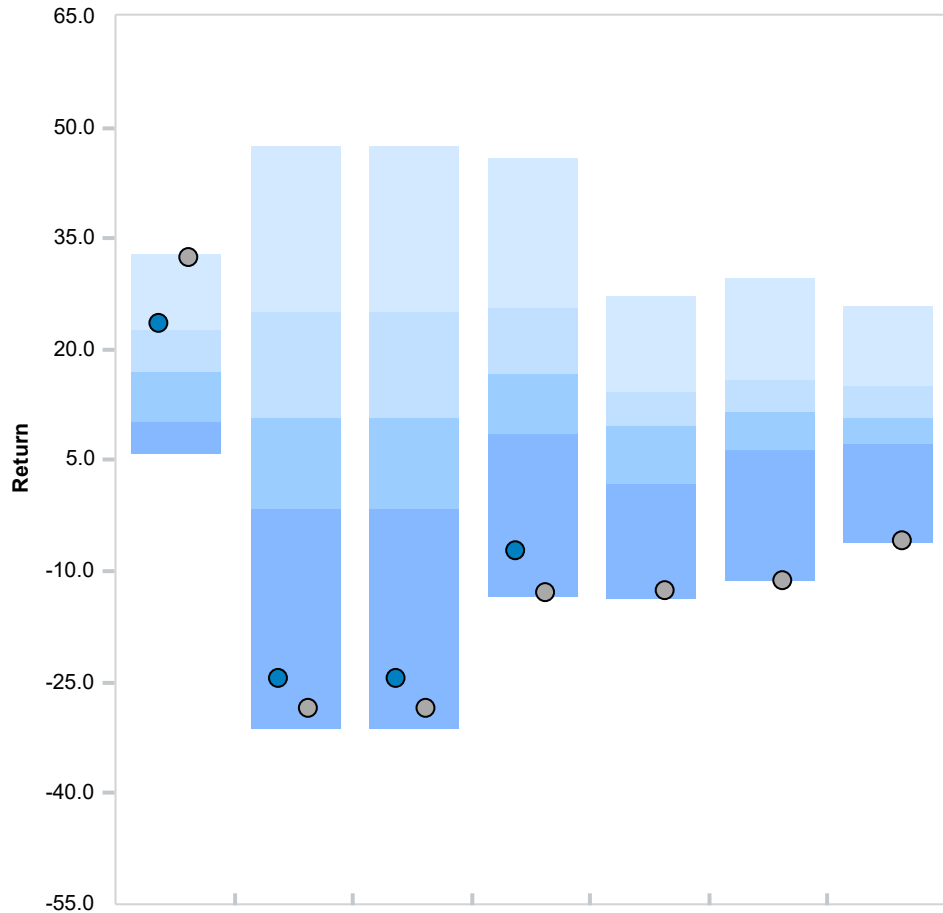
3 Year Rolling Percentile Rank IM U.S. Other Equity (SA+CF)



5 Year Rolling Percentile Rank IM U.S. Other Equity (SA+CF)

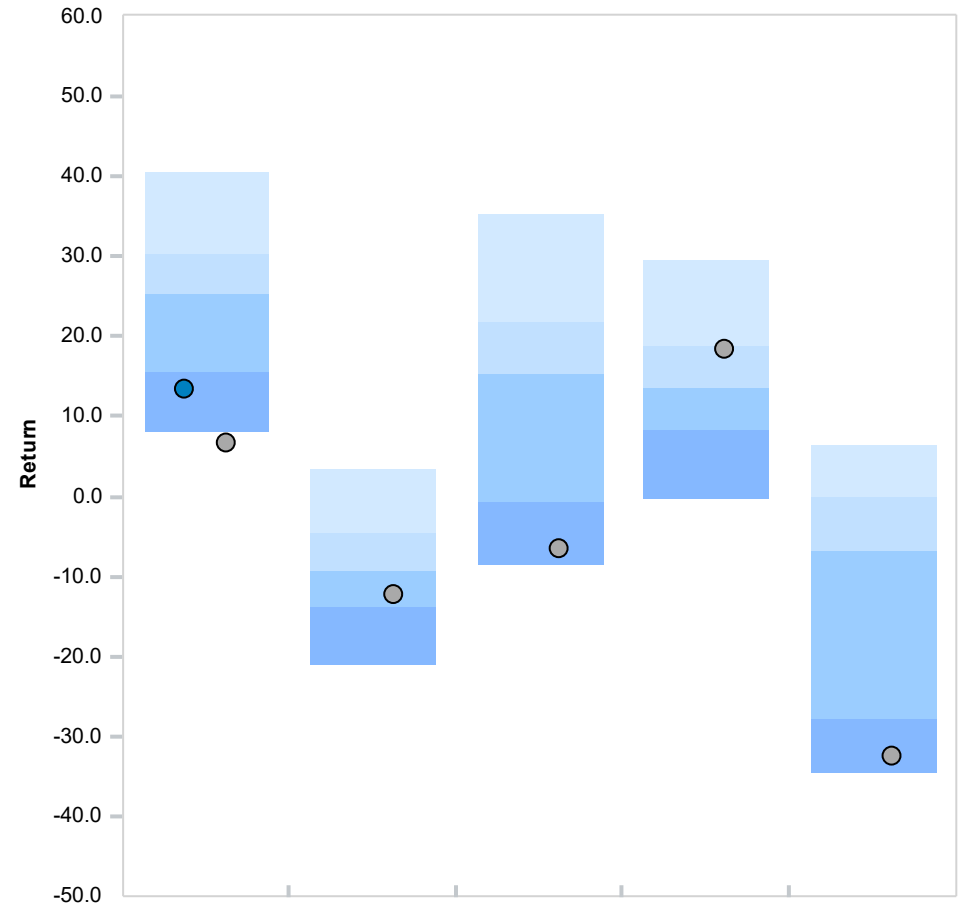


Peer Group Analysis - IM U.S. Other Equity (SA+CF)



	QTR	YTD	1 YR	2 YR	3 YR	4 YR	5 YR
● Investment	23.42 (24)	-24.40 (87)	-24.40 (87)	-7.40 (87)	N/A	N/A	N/A
● Index	32.45 (6)	-28.69 (93)	-28.69 (93)	-12.83 (94)	-12.69 (93)	-11.19 (95)	-5.95 (94)
Median	16.97	10.91	10.91	16.71	9.79	11.62	10.84

Peer Group Analysis - IM U.S. Other Equity (SA+CF)



	2019	2018	2017	2016	2015
● Investment	13.42 (78)	N/A	N/A	N/A	N/A
● Index	6.56 (98)	-12.42 (65)	-6.52 (93)	18.31 (27)	-32.59 (88)
Median	25.44	-9.37	15.28	13.51	-6.82

Comparative Performance

	1 Qtr Ending Sep-2020	1 Qtr Ending Jun-2020	1 Qtr Ending Mar-2020	1 Qtr Ending Dec-2019	1 Qtr Ending Sep-2019	1 Qtr Ending Jun-2019
Investment	-9.60 (87)	32.90 (17)	-49.01 (88)	-0.95 (88)	-5.05 (88)	-0.26 (77)
Index	-16.26 (100)	50.18 (3)	-57.19 (99)	-4.08 (100)	-5.02 (88)	0.12 (73)
Median	5.24	21.82	-23.01	6.62	-0.38	2.76



Private Equity Summary of Partnership

Partnerships	Vintage Year	Capital Commitment \$	Market Value \$
Total Private Equity Composite		326,632,224	209,832,950
Accolade Partners V	2015	3,000,000	4,685,561
Accolade Partners VI	2018	3,000,000	2,141,304
Adams Street 2003 U.S Fund	2003	13,733,000	1,315,576
Adams Street 2008 Global	2008	10,000,000	5,652,161
Adams Street 2009 Global	2009	5,000,000	3,546,181
Auldbrass Spec Opps II	2018	4,000,000	1,728,888
Birchmere Ventures IV	2012	525,000	150,992
BlackRock Multi-Alternative Opps	2016	3,000,000	1,078,743
Blackstone Tac Op I	2012	2,000,000	693,213
Blackstone Tac Op II	2015	3,000,000	1,565,117
Blackstone Tac Op III	2019	5,000,000	2,618,665
CCA Black	2015	7,500,000	7,980,044
CCA Blue	2013	3,800,000	2,319,380
CCA Green	2009	15,000,000	8,850,359
CCA Longevity Fund VI LP	2019	5,000,000	4,928,057
Commonfund Venture Partners XII	2018	3,000,000	1,803,751
Constitution Ironsides Direct Investment Fund IV	2016	3,000,000	2,318,613
Constitution Ironsides Opportunities Fund	2018	4,000,000	3,142,538
Constitution Ironsides Partnership Fund II	2011	6,000,000	20,388
Constitution Ironsides Partnership Fund III	2014	8,000,000	5,590,116
Crestline Opportunity Fund III	2016	4,000,000	3,672,195
Crestline Recovery II	2011	3,000,000	349,583
DCM Fund IV	2015	3,000,000	3,028,304
Draper Triangle II	2005	10,000,000	250,417
Draper Triangle III	2013	13,500,000	11,101,785
Emerald Advisors Fin Srv I	2018	2,000,000	702,653
Entrust Special Opportunities Fund III	2015	3,000,000	1,293,491
Entrust Special Opportunities Fund IV	2018	3,000,000	2,858,294
Farol Fund II	2020	4,000,000	3,689,900
Five Points III	2017	3,000,000	2,638,195
Glouston Private Equity Opportunities IV	2011	3,000,000	490,067
Goldman Sachs Private Equity Partners 2004	2005	10,000,000	396,452
Greenspring Early Stage I LP	2018	4,000,000	2,982,361
Greenspring Opportunities II-A	2013	3,000,000	1,692,183
Greenspring Opportunities III	2014	3,000,000	4,176,381
Greenspring Opportunities IV	2015	3,000,000	4,375,695
Greenspring Opportunities V	2018	3,000,000	3,297,682
Greenspring Secondaries I	2014	1,000,000	2,292,255
Greenspring Secondaries II	2016	2,000,000	2,900,768

Data Sources:
Market Values - BNY Mellon and Investment Managers
Commitments - Asset Strategies



**Private Equity Summary of Partnership
Total Private Equity Composite
As of December 31, 2020**

Partnerships	Vintage Year	Capital Commitment \$	Market Value \$
iNetworks INOF II	2013	2,349,140	5,923,333
iNetworks Opportunity Fund	2013	11,000,000	13,651,849
iNetworks Opportunity Fund II	2020	12,500,000	3,230,892
JMI Equity Fund IX-A	2019	3,000,000	1,826,557
Mellon PAM Fund V	2005	10,000,000	3,408,264
Mesirow Partners Fund IV	2006	17,000,000	5,804,304
North Haven Capital Partners VI	2015	3,000,000	2,010,734
North Haven Senior Loan Fund	2018	4,000,000	1,770,617
Pharos Capital Partners III	2013	3,000,000	3,854,240
PLSG Accelerator Fund	2011	250,000	216,156
ValStone Partners IV	2008	20,000,000	1
ValStone Partners V	2013	20,000,000	22,642,643
ValStone Partners VI	2017	20,000,000	17,776,725
Valstone Senior Living	2018	12,475,084	13,398,328



Historical Hybrid Composition
Total Fund Policy Index
As of December 31, 2020

Historical Hybrid Composition			
Allocation Mandate	Weight (%)	Allocation Mandate	Weight (%)
Jan-1979		Jun-2010	
Russell 3000 Index	65.00	Wilshire 5000 Total Market TR Index	20.00
Blmbg. Barc. U.S. Aggregate Index	35.00	MSCI AC World ex USA (Net)	25.00
Mar-2007		Blmbg. Barc. U.S. Aggregate Index	14.00
Wilshire 5000 Total Market TR Index	45.00	FTSE High Yield Market Capped Index	10.00
MSCI EAFE (Net) Index	10.00	Bloomberg Barclays U.S. TIPS Index	6.00
Blmbg. Barc. U.S. Aggregate Index	25.00	Bloomberg Commodity Index Total Return	5.00
Bloomberg Commodity Index Total Return	5.00	NCREIF Fund Index-Open End Diversified Core Equity (VW) (Net) Monthly	10.00
NCREIF Fund Index-Open End Diversified Core Equity (VW) (Net) Monthly	5.00	Private Equity Composite	10.00
Private Equity Composite	5.00	Mar-2013	
90 Day U.S. Treasury Bill	5.00	Wilshire 5000 Total Market TR Index	16.10
Sep-2008		MSCI AC World ex USA (Net)	18.90
Wilshire 5000 Total Market TR Index	45.00	Blmbg. Barc. U.S. Aggregate Index	10.00
MSCI AC World ex USA (Net)	10.00	FTSE High Yield Market Capped Index	12.00
Blmbg. Barc. U.S. Aggregate Index	25.00	Bloomberg Barclays U.S. TIPS Index	5.00
Bloomberg Commodity Index Total Return	5.00	Bloomberg Commodity Index Total Return	8.00
NCREIF Fund Index-Open End Diversified Core Equity (VW) (Net) Monthly	5.00	NCREIF Fund Index-Open End Diversified Core Equity (VW) (Net) Monthly	10.00
Private Equity Composite	5.00	Private Equity Composite	20.00
90 Day U.S. Treasury Bill	5.00	Apr-2016	
Dec-2008		Wilshire 5000 Total Market TR Index	15.00
Wilshire 5000 Total Market TR Index	35.00	MSCI AC World ex USA (Net)	15.00
MSCI AC World ex USA (Net)	15.00	Blmbg. Barc. U.S. Aggregate Index	10.00
Blmbg. Barc. U.S. Aggregate Index	20.00	FTSE High Yield Market Capped Index	12.00
FTSE High Yield Market Capped Index	5.00	Bloomberg Barclays U.S. TIPS Index	8.00
Bloomberg Barclays U.S. TIPS Index	5.00	Bloomberg Commodity Index Total Return	2.50
Bloomberg Commodity Index Total Return	5.00	NCREIF Fund Index-Open End Diversified Core Equity (VW) (Net) Monthly	10.00
NCREIF Fund Index-Open End Diversified Core Equity (VW) (Net) Monthly	7.50	Private Equity Composite	22.50
Private Equity Composite	5.00	Alerian MLP Index	5.00
90 Day U.S. Treasury Bill	2.50	Jan-2019	
Sep-2009		Wilshire 5000 Total Market TR Index	16.50
Wilshire 5000 Total Market TR Index	30.00	MSCI AC World ex USA (Net)	16.50
MSCI AC World ex USA (Net)	20.00	Blmbg. Barc. U.S. Aggregate Index	12.50
Blmbg. Barc. U.S. Aggregate Index	15.00	FTSE High Yield Market Capped Index	12.00
FTSE High Yield Market Capped Index	10.00	Bloomberg Barclays U.S. TIPS Index	5.00
Bloomberg Barclays U.S. TIPS Index	7.50	NCREIF Fund Index-Open End Diversified Core Equity (VW) (Net) Monthly	12.50
Bloomberg Commodity Index Total Return	2.50	Private Equity Composite	20.00
NCREIF Fund Index-Open End Diversified Core Equity (VW) (Net) Monthly	10.00	Alerian MLP Index	5.00
Private Equity Composite	5.00		



	Estimated Annual Fee (%)	Market Value (\$)	Estimated Annual Fee (\$)	Fee Schedule
SSgA S&P 500 Index	0.03	98,460,158	24,692	0.03 % of First \$50 M 0.02 % Thereafter Minimum Fee: \$10,000
Fragasso Large Core (EMWO)	0.62	5,996,108	37,106	1.00 % of First \$0 M 0.95 % of Next \$0 M 0.75 % of Next \$1 M 0.65 % of Next \$2 M 0.55 % of Next \$3 M 0.50 % of Next \$3 M 0.25 % of Next \$3 M 0.20 % Thereafter
Twin Capital Enhanced Equity	0.35	33,584,600	117,546	0.35 % of Assets
Earnest Small Value	0.92	14,500,459	133,753	1.00 % of First \$10 M 0.75 % of Next \$15 M 0.60 % of Next \$25 M 0.50 % Thereafter
Emerald Advisors Small Cap	0.73	15,151,956	110,912	1.00 % of First \$2 M 0.75 % of Next \$8 M 0.60 % Thereafter
Emerald Advisors All Cap (EMWO)	0.60	5,444,391	32,666	0.60 % of Assets
Ethos (EMWO)	0.47	1,823,352	8,570	0.47 % of Assets
CIM Small Cap (EMWO)	0.72	5,447,095	39,288	0.75 % of First \$5 M 0.40 % of Next \$10 M 0.25 % Thereafter
Cookson Peirce (EMWO)	0.50	734,375	3,672	0.50 % of Assets
SSgA ACWI ex US	0.08	36,545,346	29,236	0.08 % of Assets
Baillie Gifford Intl Equity	0.61	80,665,762	492,061	0.61 % of Assets
FIAM Select International Equity	0.31	40,473,954	126,780	0.34 % of First \$25 M 0.27 % of Next \$25 M 0.24 % of Next \$150 M 0.20 % Thereafter
Segall, Bryant & Hamill	0.64	31,950,784	205,729	0.75 % of First \$15 M 0.55 % of Next \$20 M 0.45 % of Next \$30 M 0.35 % Thereafter
Columbus Macro (EMWO)	0.70	1,363,614	9,545	0.70 % of Assets
C S McKee	0.25	34,682,571	86,706	0.25 % of Assets
Federated Core Broad	0.29	30,268,451	88,171	0.30 % of First \$25 M 0.25 % of Next \$25 M 0.20 % Thereafter
CIM Investment Mgmt	0.25	13,950,130	34,875	0.25 % of Assets

Fee schedules shown are for the open ended strategies listed. Closed end funds are not yet listed in this report.



	Estimated Annual Fee (%)	Market Value (\$)	Estimated Annual Fee (\$)	Fee Schedule
StoneRidge Partners (EMWO)	0.30	5,557,249	16,672	0.30 % of Assets
Gridiron Capital Fixed Income (EMWO)	0.65	4,746,562	30,853	0.65 % of Assets
FNB (EMWO)	0.35	2,844,296	9,955	0.35 % of First \$5 M 0.30 % of Next \$5 M 0.25 % of Next \$10 M 0.20 % Thereafter
Oaktree High Yield	0.50	66,100,725	330,504	0.50 % of Assets
Federated High Yield	0.45	52,490,844	236,209	0.45 % of Assets
Sound Point	1.00	3,435,080	34,351	1.00 % of Assets
MCM TIPS	0.06	40,538,874	25,000	0.05 % of First \$50 M 0.03 % of Next \$50 M 0.02 % Thereafter Minimum Fee: \$25,000
Morgan Stanley Prime Property Fund	0.84	73,097,605	614,020	0.84 % of Assets
Gridiron Capital Multi-Asset (EMWO)	0.75	3,061,645	22,962	Performance Based 0.75 and 10.00
Israel Bonds	0.20	7,449,854	14,900	0.20 % of Assets

Fee schedules shown are for the open ended strategies listed. Closed end funds are not yet listed in this report.



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.



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

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

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