

4th Quarter 2024 Market Environment

The Economy

- The US Federal Reserve (the Fed) continued to loosen its policy stance during the quarter with two fed funds rate cuts totaling 0.50%, bringing the year-end rate to a range of 4.25%-4.50%. While the Fed conveyed a degree of confidence that the fight against inflation is progressing in its December press release, Fed Chairman Jerome Powell signaled in his post-meeting press conference that the pace and timing of future rate cuts is unclear. The Fed's December "Dot Plot" now projects only two quarter-point rate cuts in 2025, down from four anticipated cuts in September's plot.
- Growth in the US labor market continued during the fourth quarter. US payrolls grew by 256,000 in December, up from the previous month's total of 212,000, and well above the 155,000 projected. If strength in the labor market continues, this data could support a slower pace Fed action in the form of policy rate reductions in 2025.

Equity (Domestic and International)

- US equity results were modestly higher for the quarter. Markets also saw a return to the narrowly focused technology and communication services company exuberance which has dominated domestic performance in recent years. The S&P 500 Index rose 2.4% for the quarter with the small-cap Russell 2000 Index managing just a 0.3% rise. The rotation away from large cap growth stocks during the third quarter seemed to reverse as the Russell 1000 Growth Index once again outpaced the Russell 1000 Value Index by a large margin.
- Large-cap equity benchmarks continue to represent a heavy concentration among a limited number of stocks. As of quarter end, the weight of the top 10 stocks in the S&P 500 Index exceeded 35%.
- Most international stocks faltered during the fourth quarter and US Dollar (USD) denominated results were further exacerbated by a strengthening USD. The USD performance of international stocks fell short of local currency (LCL) returns in most regions for the quarter, albeit to varying degrees.

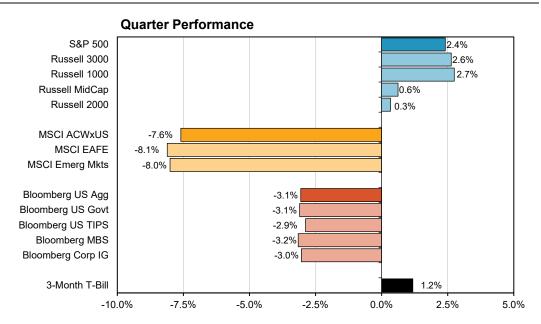
Fixed Income

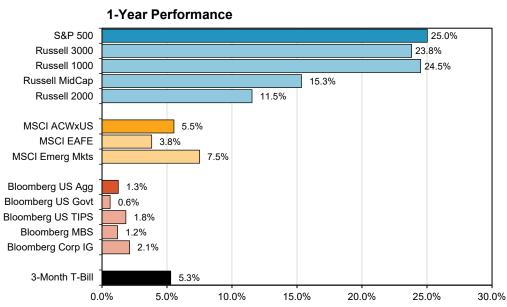
- Fixed-income markets traded lower during the quarter on the back of the Fed's ongoing policy actions. Short term Treasury yields fell while longer term yields rose, leading to a slight steepening in the yield curve. The yield on the bellwether 10-year Treasury advanced by 0.84% during the quarter, closing the year at a yield of 4.58%. The inverse relationship between prices and yields resulted in the Bloomberg US Aggregate Bond Index posting a -3.1% loss for the quarter.
- High-yield bonds outpaced the Bloomberg US Aggregate Bond Index for the quarter, largely due to higher coupons, a shorter duration profile, and a small narrowing of the option-adjusted spread (OAS) for the Bloomberg US High-Yield Index.
- Global bonds fell during the quarter, with the Bloomberg Global Aggregate ex-US returning -6.8% in USD terms. Like international equity results, global bond performance was dragged down by a strengthening USD during the quarter.

Market Themes

- Strength in the US Dollar during the quarter led to relative weakness in international markets. Many of the major currencies depreciated relative to the US Dollar as the year came to a close. Latin America saw the most significant decline during the period while the Pacific region was the only region to post positive LCL returns.
- The AI trade that has taken shape for much of the past two years continued in 2024 with the communication services and information technology sectors each posting gains of more than 35% for the year. This phenomenon contributed to narrow market leadership particularly within the large-cap segment of the market. The concentration in the large-cap indexes helped the S&P 500 post its second straight year of greater than a 20% return, further widening the performance gap between large and smaller capitalization benchmarks.
- Ongoing military conflicts in Ukraine and the Middle East, coupled with global economic uncertainty, continue to act as headwinds for international market results, further complicated by an advancing USD.
- The results of the most recent US presidential election appeared to please domestic equity markets in anticipation of the new administration supporting loosened regulations and pro-growth policies. As we move into the new year, equity markets will need to digest the anticipated effects of proposed tax legislation changes, a new view on foreign policy, and potential trade tariffs by the new administration.

- Domestic equity markets continued to climb higher during the quarter. Large-cap stocks returned to the forefront, outpacing small-cap stocks. The S&P 500 rose 2.4% during the quarter versus a muted gain of 0.3% for the Russell 2000 Index. The broad capitalization Russell 3000 Index, which benefited from strength in mid- and large-cap names, returned 2.6% for the quarter.
- International developed market equities reversed course and soured during the fourth quarter with the USD performance of the broad benchmarks each trading lower than (LCL) currency performance. The broad MSCI ACWI ex US Index delivered a disappointing -7.6% for the quarter but was down less than both the MSCI EAFE and MSCI EM indexes. The broad index was aided by Canada, which is not included in the EAFE or EM indexes. International developed market (DM) equities narrowly fell behind emerging market (EM) equities, returning -8.1% and -8.0%, respectively for the quarter. Negative performance for the international indexes was broad-based and not localized to any specific region.
- Broad market fixed-income benchmarks displayed a poor finish to the year as many of the core indexes succumbed to a steepening of the yield curve and the prospect of fewer rate cuts in 2025. The Bloomberg US Aggregate Index returned -3.1% for the quarter. The TIPS market, which is not part of the Aggregate Index, was also negative, posting a return of -2.9% for the quarter. While the performance differentials were small, the Mortgage-Backed Securities Index lagged other domestic bond market segments with a benchmark return of -3.2% for the quarter.
- Domestic equity indexes finished the year by adding to their already strong returns over the trailing one-year period. The S&P 500 Index gained 25.0% for the year and the Russell 1000 Index returned 24.5%. The weakest performing capitalization range of domestic equities for the year was the small-cap Russell 2000 Index, which still managed a double-digit climb over the last 12 months, returning a solid 11.5%.
- Domestic bond indexes' results were mixed throughout the year but still managed to deliver positive annual results. While the performance spread was narrow, investment-grade corporate bonds led bond index results for the year, returning a muted 2.1%. The government bond index lagged for the year, but was also positive, posting a return of 0.6%.
- International equity markets also delivered positive results for the trailing oneyear period. The MSCI EM Index was the best international performer, returning 7.5%, while the MSCI EAFE and MSCI ACWI ex US indexes posted returns of 3.8% and 5.5%, respectively.



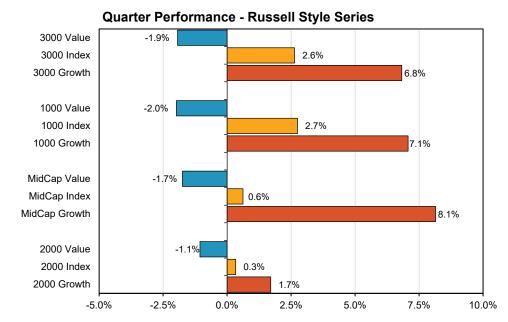


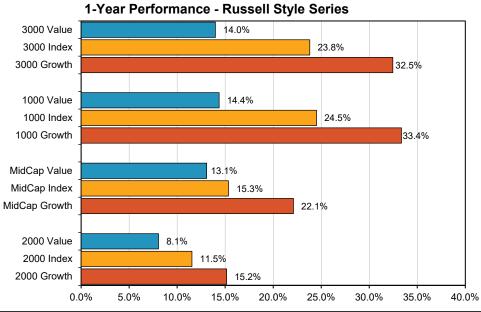
Source: Investment Metrics

As of December 31, 2024

- Domestic equity benchmarks exhibited a return to their long-run trend of growth style companies vastly outperforming value during the fourth quarter. This theme was relatively consistent across the capitalization spectrum with growth benchmarks dominating performance results while value benchmarks each posted negative returns for the quarter.
- The broadest disparity between growth and value was visible in the mid-cap index. The Russell Mid Cap Value Index return of -1.7% trailed the Russell Mid Cap Growth Index return of 8.1%, a performance span of nearly 10%. The Russell Mid Cap Growth Index was also the best performing segment of the equity market during the quarter. Conversely, the worst performing segment of the market was large cap value which returned a disappointing -2.0% during the fourth quarter.

- This quarter's ascension of the growth indexes widened their performance gaps relative to the value indexes for the trailing year. The Russell 1000 Growth Index amassed a staggering 33.4% for the year, leading the way among style and market capitalization index performance. Much of the year's strong performance has been attributable to the emergence of the "Magnificent 7" stocks (Alphabet, Amazon, Apple, Meta, Microsoft, Nvidia, and Tesla) which have dominated the large-cap core and growth indexes and the headlines over the past several years. The 10 largest stocks in the Russell 1000 Index have contributed more than 50% of the index's total performance over the trailing 12-month period. The weakest performing index for the year was the Russell 2000 Value Index, which still climbed 8.1%.
- The strength of growth sectors is also evident in the trailing one-year period with the chart on the right showing growth benchmarks at all capitalization ranges outpacing their value counterparts. The performance gap between the Russell 1000 Growth Index and the Russell 1000 Value Index was nearly 20% and the gaps for mid- and small-cap indexes were narrower, but still wide.

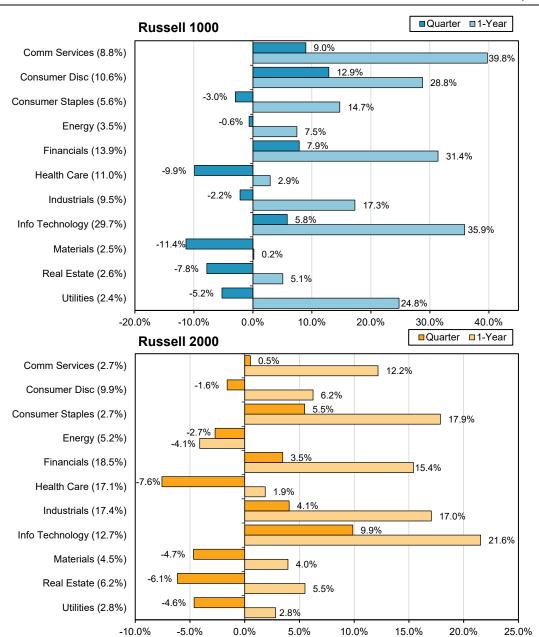




Source: Investment Metrics

As of December 31, 2024

- Economic sector performance delivered mixed results in the fourth quarter as just four of the 11 economic sectors moved higher in the large-cap index. While performance during the year could be characterized by broader participation in the domestic equity markets, this was not the case during the fourth quarter as only the communication services, consumer discretionary, financials, and information technology sectors managed to post positive returns. Within the large cap index, consumer discretionary stocks led the way, collectively returning 12.9% for the quarter while the materials sector struggled, falling -11.4% during the period.
- Full year results during 2024 showcased strong performance across the economic sector classifications. Communication services narrowly outpaced information technology for the year, posting returns of 39.8% and 35.9%, respectively, with financials coming in third with a return of 31.4%. While all sectors posted positive returns for the year, the broad index's strong performance during 2024 was largely driven by three of the five most heavily weighted index sectors.
- Similar to the large cap benchmark, just five of the 11 small-cap economic sectors gained value during the quarter. Communication services, consumer staples, financials, industrials, and information technology led the way with information technology as the best performing sector during the quarter. Health care faltered as the worst-performing sector with a return of -7.6% during the quarter, followed closely by real estate, which finished the quarter with a return of -6.1%.
- Despite their struggles during the most recent quarter, small-cap stocks delivered strong results for the year. Ten small-cap sectors advanced higher during the trailing one-year period, making energy the lone negative performer over the period. The sector's -2.7% return during the fourth quarter pushed the sector's performance to -4.1% for the trailing year. Information technology (up 21.6%) was the only sector to cross the 20% return threshold, but four others also amassed double digit positive returns for the calendar 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, 2024

Top 10 Weighted Stocks						
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector		
Apple Inc	6.6%	7.6%	30.7%	Information Technology		
NVIDIA Corp	5.8%	10.6%	171.2%	Information Technology		
Microsoft Corp	5.8%	-1.8%	12.9%	Information Technology		
Amazon.com Inc	3.8%	17.7%	44.4%	Consumer Discretionary		
Meta Platforms Inc Class A	2.4%	2.4%	66.0%	Communication Services		
Tesla Inc	2.1%	54.4%	62.5%	Consumer Discretionary		
Alphabet Inc Class A	2.1%	14.3%	36.0%	Communication Services		
Broadcom Inc	2.0%	34.7%	110.4%	Information Technology		
Alphabet Inc Class C	1.7%	14.0%	35.6%	Communication Services		
Berkshire Hathaway Inc Class B	1.5%	-1.5%	27.1%	Financials		

Top 10 Weighted Stocks						
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector		
FTAI Aviation Ltd	0.5%	8.6%	214.7%	Industrials		
Sprouts Farmers Market Inc	0.5%	15.1%	164.1%	Consumer Staples		
Insmed Inc	0.4%	-5.4%	122.8%	Health Care		
Vaxcyte Inc Ordinary Shares	0.4%	-28.4%	30.4%	Health Care		
Credo Technology Group Holding Ltd	0.4%	118.2%	245.2%	Information Technology		
Applied Industrial Technologies Inc	0.3%	7.5%	39.7%	Industrials		
Mueller Industries Inc	0.3%	7.4%	70.5%	Industrials		
Rocket Lab USA Inc	0.3%	161.8%	360.6%	Industrials		
Fluor Corp	0.3%	3.4%	25.9%	Industrials		
IonQ Inc Class A	0.3%	377.9%	237.1%	Information Technology		

Top 10 Performing Stocks (by Quarter)						
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector		
Astera Labs Inc	0.0%	152.8%	N/A	Information Technology		
AppLovin Corp Ordinary Shares	0.2%	148.1%	712.6%	Information Technology		
Trump Media & Technology Group	0.0%	112.2%	N/A	Communication Services		
Palantir Technologies Inc Ordinary	0.3%	103.3%	340.5%	Information Technology		
SoFi Technologies Inc Ordinary Shares	0.0%	95.9%	54.8%	Financials		
Amer Sports Inc	0.0%	75.3%	N/A	Consumer Discretionary		
MicroStrategy Inc	0.1%	71.8%	358.5%	Information Technology		
United Airlines Holdings Inc	0.1%	70.2%	135.3%	Industrials		
New Fortress Energy Inc	0.0%	66.3%	-59.3%	Utilities		
Twilio Inc Class A	0.0%	65.7%	42.5%	Information Technology		

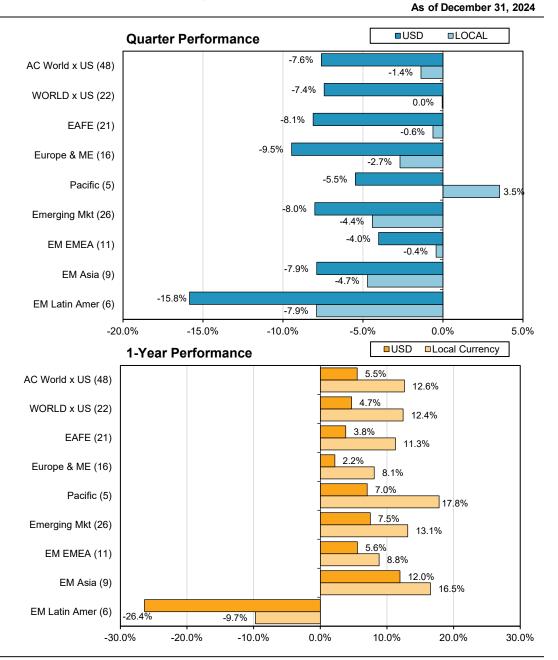
Top 10 Performing Stocks (by Quarter)					
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector	
Rigetti Computing Inc	0.1%	1848.7%	1449.4%	Information Technology	
D-Wave Quantum Inc.	0.0%	754.6%	854.4%	Information Technology	
Scholar Rock Holding Corp	0.1%	439.6%	129.9%	Health Care	
IonQ Inc Class A	0.3%	377.9%	237.1%	Information Technology	
SoundHound Al Inc Ordinary Shares	0.2%	325.8%	835.8%	Information Technology	
Kodiak Sciences Inc	0.0%	281.2%	227.3%	Health Care	
The RealReal Inc	0.0%	248.1%	443.8%	Consumer Discretionary	
SES AI Corp	0.0%	242.3%	19.7%	Industrials	
Poseida Therapeutics Inc Ordinary	0.0%	235.7%	185.7%	Health Care	
Archer Aviation Inc Class A	0.1%	221.8%	58.8%	Industrials	

Bottom 10 Performing Stocks (by Quarter)						
Russell 1000	Weight	1-Qtr Return	1-Year Return	Sector		
Capri Holdings Ltd	0.0%	-50.4%	-58.1%	Consumer Discretionary		
Celanese Corp Class A	0.0%	-48.8%	-54.6%	Materials		
Rocket Companies Inc Ordinary	0.0%	-41.3%	-22.2%	Financials		
Enphase Energy Inc	0.0%	-39.2%	-48.0%	Information Technology		
Moderna Inc	0.0%	-37.8%	-58.2%	Health Care		
Acadia Healthcare Co Inc	0.0%	-37.5%	-49.0%	Health Care		
Viking Therapeutics Inc	0.0%	-36.4%	116.2%	Health Care		
10x Genomics Inc Ordinary	0.0%	-36.4%	-74.3%	Health Care		
Monolithic Power Systems Inc	0.1%	-35.9%	-5.6%	Information Technology		
The AES Corp	0.0%	-35.1%	-30.3%	Utilities		

Bottom 10 Performing Stocks (by Quarter)						
Russell 2000	Weight	1-Qtr Return	1-Year Return	Sector		
Q32 Bio Inc	0.0%	-92.3%	0.0%	Health Care		
Cassava Sciences Inc	0.0%	-92.0%	-89.5%	Health Care		
Applied Therapeutics Inc	0.0%	-89.9%	-74.4%	Health Care		
Perspective Therapeutics Inc	0.0%	-76.1%	-20.6%	Health Care		
Keros Therapeutics Inc	0.0%	-72.7%	-60.2%	Health Care		
Bioage Labs Inc	0.0%	-72.2%	N/A	Health Care		
Inovio Pharmaceuticals Inc	0.0%	-68.3%	-70.1%	Health Care		
PACS Group Inc	0.0%	-67.2%	N/A	Health Care		
Shattuck Labs Inc Ordinary Shares	0.0%	-65.3%	-83.0%	Health Care		
Sunnova Energy International Inc	0.0%	-64.8%	-77.5%	Utilities		

Source: Morningstar Direct

- Results in USD terms among the headline international equity indexes were sharply lower during the quarter. The strengthening USD relative to many major currencies during the quarter was a substantial headwind for the USD performance of non-US regional benchmarks' returns. The developed-market MSCI EAFE Index returned a muted -0.6% in LCL terms but fell -8.1% in USD terms. The MSCI ACWI ex-US Index pulled back -7.6% in USD and -1.4% in LCL terms for the quarter.
- Latin America continued to lag other regions during the quarter in USD terms, posting an outsized loss of -15.8%. Weakening currencies in the region put added pressure on realized performance for US investors. The MSCI Pacific benchmark was the only regional benchmark to deliver positive performance in LCL terms with a return of 3.5%, but USD strength led to a -5.5% decline in USD terms for the quarter. Regional LCL currency performance was disparate for the quarter, with some regional indexes remaining relatively flat over the final three months of the year.
- Full year results by country show Taiwan and Malaysia as the biggest winners during the year in USD terms. These two countries advanced 34.4% and 20.8%, respectively. China was not far behind with the largest economy in the emerging market world climbing 19.4% in USD terms for the year despite declining 7.7% during the fourth quarter. Much of the broad-based MSCI Emerging Market Index's returns are attributable to the health of the dominant Chinese economy, which came under pressure during the year due to troubles in the manufacturing and commercial property sectors.
- Much like domestic markets, trailing one-year results for international developed and emerging markets benchmarks were strongly positive. Higher LCL versus USD returns for most international benchmarks demonstrate the USD's relative strength over the trailing one-year period, which represents a drag on results for US investors.
- Most broad and regional indexes were positive for the trailing 12 months in both USD and LCL terms. The exception to these positive results is the EM Latin America index, where negative LCL performance was exacerbated by the region's currency weakness, which led to a more severe 26.4% return in USD terms. The MSCI Pacific Index led the way with a return of 17.8% in LCL terms for the trailing year, but US investor returns were dampened to just 7.0% in USD terms.



Source: MSCI Global Index Monitor (Returns are Net)

S	ηf	Decem	her	31	2024

MSCI - EAFE	Sector Weight	Quarter Return	1-Year Return
Communication Services	4.8%	-4.7%	11.2%
Consumer Discretionary	11.3%	-4.3%	1.4%
Consumer Staples	8.3%	-12.6%	-7.9%
Energy	3.5%	-8.3%	-10.5%
Financials	21.9%	-2.3%	20.9%
Health Care	12.4%	-14.1%	-1.5%
Industrials	17.8%	-6.4%	9.6%
Information Technology	8.8%	-7.2%	3.8%
Materials	6.1%	-17.8%	-12.9%
Real Estate	2.0%	-13.4%	-3.9%
Utilities	3.2%	-12.8%	-4.1%
Total	100.0%	-8.1%	3.8%

MSCI - ACWIXUS	Sector Weight	Quarter Return	1-Year Return
Communication Services	5.9%	-6.8%	12.4%
Consumer Discretionary	11.2%	-8.1%	4.6%
Consumer Staples	7.0%	-12.4%	-7.8%
Energy	5.0%	-7.9%	-3.5%
Financials	23.7%	-2.8%	17.5%
Health Care	8.8%	-13.9%	-1.4%
Industrials	14.0%	-7.1%	7.5%
Information Technology	13.5%	-1.8%	13.3%
Materials	6.3%	-17.2%	-12.6%
Real Estate	1.8%	-11.5%	-1.7%
Utilities	3.0%	-12.8%	-2.0%
Total	100.0%	-7.6%	5.5%

MSCI - Emerging Mkt	Sector Weight	Quarter Return	1-Year Return
Communication Services	9.4%	-8.1%	15.9%
Consumer Discretionary	13.1%	-14.5%	11.8%
Consumer Staples	4.8%	-13.9%	-11.1%
Energy	4.6%	-14.5%	-5.9%
Financials	23.7%	-5.0%	11.0%
Health Care	3.5%	-11.7%	-0.9%
Industrials	6.6%	-10.9%	0.6%
Information Technology	24.3%	1.1%	20.4%
Materials	5.7%	-18.6%	-19.6%
Real Estate	1.7%	-6.5%	3.8%
Utilities	2.7%	-14.1%	3.3%
Total	100.0%	-8.0%	7.5%

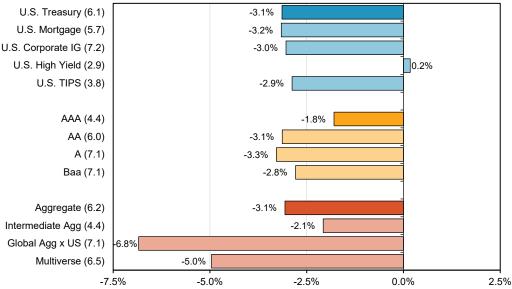
Japan		MSCI-EAFE	MSCI-ACWIXUS	Quarter	1- Year
United Kingdom	Country	Weight	Weight	Return	Return
France 11.1% 6.9% 1-10.3% 5.3% Switzerland 9.8% 6.0% 1-11.3% 2-20% Germany 9.2% 5.8% 5.7% 10.2% Australia 7.4% 4.6% 1-11.4% 1.2% Netherlands 4.6% 2.9% 1-12.4% 1.4% 1.2% Netherlands 4.6% 2.9% 1-12.4% 1.4% 1.2% Sweden 3.6% 2.2% 1-14.0% 3.7% Denmark 2.9% 1.8% 1.7% 6.7% 11.3% 5.21 1.29% 1.24% 1.29% 1.24% 1.29% 1.29% 1.30% 1.2% 9.8% 1.7% 9.2% 9.8% 1.0% 9.2% 9.8% 1.7% 9.2% 9.8% 1.0% 9.2% 9.8% 1.7% 9.2% 9.8% 1.1% 1.2% 9.8% 1.1% 1.2% 9.8% 1.1% 1.2% 9.8% 1.1% 1.2% 9.8% 1.1% 1.2% 9.8% 1.1% 1.2% 9.8% 1.1% 1.2% 9.8% 1.1% 1.2% 9.8% 1.1% 1.2% 9.8% 1.1% 1.0% 1.2% 9.8% 1.1% 1.2% 9.8% 1.1% 1.0% 1.2% 9.8% 1.1% 1.2% 1.2% 1.2% 1.2% 1.2% 1.2% 1.2			-		
Switzerland 9.6% 6.0% -11.3% -2.0% Germany 9.2% 5.8% -5.7% 10.2% Australia 7.4% 4.6% -11.4% 1.2% Netherlands 4.6% 2.9% -12.4% 1.4% Sweden 3.6% 2.2% -14.0% 3.7% Denmark 2.9% 1.8% -21.5% -12.9% Italy 2.8% 1.7% -6.7% 11.3% Spain 2.8% 1.7% -9.2% 9.8% Hong Kong 2.0% 1.2% -9.8% 0.1% Spain 2.8% 1.7% -9.2% 9.8% Hong Kong 2.0% 1.2% -9.8% 0.1% Spain 2.8% 1.7% 1.0% 3.2% 32.3% Spain 1.0% 0.6% -8.3% 8.5% Finland 1.0% 0.6% -8.3% 8.5% Brigation 1.0% 0.6% 1.3.1% -7.3%	Ü				
Germany 9.2% 5.8% -5.7% 10.2% 10.2% 10.2% 10.2% 11.4% 1.2% Nuestralia 7.4% 4.6% -11.4% 1.2% 1.2% 11.4% 1.2% 11.4% 1.2% 11.4% 1.2% 11.4% 1.2% 11.4% 1.2% 11.4% 1.2% 11.4% 1.2% 11.4% 1.2% 11.4% 1.4% 1.2% 11.4% 1.2% 11.4% 1.2% 11.4% 1.2% 11.4% 1.2% 11.4% 1.2% 11.4% 1.2% 11.4% 1.2% 11.4% 1.2% 11.4% 1.2% 11.2% 1.2% 1.2% 1.12.9% 11.3% 11.2% 1.29% 1.8% 1.7% 1.6.7% 11.3% 11.3% 1.2.8% 1.7% 1.0% 1.2.8% 1.7% 1.2.8% 1.2.8% 1.7% 1.2.8% 1.2.8% 1.7% 1.2.8% 1.2.8% 1.2.8% 1.2.5% 1.2.9% 1.3% 1.2.8% 1.2.5% 1.2.5% 1.2.9% 1.3% 1.2.5% 1.					
Australia 7.4% 4.6% -11.4% 1.2% Netherlands 4.6% 2.9% -12.4% 1.4% 1.4% 1.2% Netherlands 4.6% 2.9% -12.4% 1.4% 1.4% 2.9% 2.9% -12.4% 1.4% 2.9% 2.9% 1.1% 2.9% 2.15% 2.15% 2.12.9% 2.15% 2.12.9% 2.12.9% 2.15% 2.12.9% 2.12.9% 2.15% 2.12.9% 2.1					
Netherlands					
Sweden 3.6% 2.2%					
Denmark	Netherlands				
Italy					-
Spain 2.8% 1.7% -9.2% 9.8% 1.0% 1.2% -9.8% 0.1% 1.2% -9.8% 0.1% 1.2% -9.8% 0.1% 1.2% -9.8% 0.1% 1.2% -9.8% 0.1% 1.2% -9.8% 0.1% 3.2% 32.3%	Denmark				
Hong Kong	Italy				
Singapore	Spain	2.8%	1.7%	-9.2%	9.8%
Belgium 1.0% 0.6% -8.3% 8.5% Finland 1.0% 0.6% -13.1% -7.3% Israel 1.0% 0.6% 14.1% 38.3% Norway 0.6% 0.4% -5.4% 4.3% Ireland 0.3% 0.2% -12.6% 14.0% New Zealand 0.2% 0.1% -6.0% -1.5% Austria 0.2% 0.1% -6.0% -1.5% Portugal 0.2% 0.1% -22.7% -25.2% Total EAFE Countries 0.1% -22.7% -25.2% Total Developed Countries 7.4% -7.4% 4.7% China 8.2% 7.7.7% 19.4% Taiwan 5.8% 3.3% 34.4% India 5.8% 3.3% 34.4% India 5.8% -11.3% 11.2% Korea 2.7% 19.2% -23.4% Saudi Arabia 1.2% -1.5% 0.6% Brazil <t< td=""><td>Hong Kong</td><td>2.0%</td><td>1.2%</td><td>-9.8%</td><td>0.1%</td></t<>	Hong Kong	2.0%	1.2%	-9.8%	0.1%
Finland	Singapore	1.7%	1.0%	3.2%	32.3%
Strate 1.0% 0.6% 14.1% 38.3% Norway 0.6% 0.4% 5.4% 4.3% Ireland 0.3% 0.2% 1.12.6% 14.0% New Zealand 0.2% 0.1% 6.0% 1.5% Austria 0.2% 0.1% 1.1% 18.3% Portugal 0.2% 0.1% 2.27% 2.5.2% Total EAFE Countries 100.0% 52.3% 8.1% 3.8% Canada 8.1% 1.8% 11.9% Total Developed Countries 70.4% 7.4% 4.7% China 8.2% 7.7% 19.4% Taiwan 5.8% 3.3% 34.4% India 5.8% 1.1.3% 11.2% Saudi Arabia 1.2% 1.5% 0.6% Brazil 1.2% 1.5% 0.6% Brazil 1.2% 1.9.4% 2.9.8% South Africa 0.9% 1.11% 6.7% Mexico 0.5% 6.9% 20.8% Indonesia 0.4% 1.10% 1.3% United Arab Emirates 0.4% 9.0% 19.6% Qatar 0.2% 1.2% 1.5% 6.7% Kuwait 0.2% 1.1.5% 6.7% Kuwait 0.2% 1.2% 1.5% 6.7% Kuwait 0.2% 1.2% 1.9.6 Formal Arabia 0.4% 1.0.1% 1.3% United Arab Emirates 0.4% 9.0% 19.6% Greece 0.1% 6.2% 8.9% Chille 0.2% 1.2% 1.5% 6.7% Chille 0.1% 6.2% 8.9% Colombia 0.0% 0.9% 4.0% Colombia 0.0% 0.9% 4.0% Colombia 0.0% 0.9% 4.0% Colombia 0.0% 0.9% 4.0% Total Emerging Countries 29.7% 5.80% 7.5%	Belgium	1.0%	0.6%	-8.3%	8.5%
Nonway	Finland	1.0%	0.6%	-13.1%	-7.3%
Ireland	Israel	1.0%	0.6%	14.1%	38.3%
New Zealand	Norway	0.6%	0.4%	-5.4%	-4.3%
Austria 0.2% 0.1% 1.1% 18.3% Portugal 0.2% 0.1% -22.7% -25.2% -25.2% Total EAFE Countries 100.0% 62.3% -8.1% 3.8% Canada 8.1% -1.8% 11.9% Canada 8.2% -7.7% 19.4% Taiwan 5.8% 3.3% 34.4% India 5.8% -11.3% 11.2% 11.2% -1.5% 0.6% Earzilla 1.2% -1.5% 0.6% Earzilla 1.2% -1.5% 0.6% Earzilla 1.2% -1.5% 0.6% Earzilla 0.9% -12.1% 6.7% Mexico 0.5% -10.6% -27.1% Malaysia 0.5% -6.9% 20.8% Indonesia 0.4% -10.1% 1.3% 1.3% United Arab Emirates 0.4% 9.0% 19.6% Garar 0.2% -11.5% -6.7% Earzilla 0.2% -1.5% -6.7% Earzilla 0.2% -1.2% -1.5% -6.7% Earzilla 0.2% -1.2% -1.5% -6.7% Earzilla 0.2% -1.2% -1.3% -0.2% 6.1% -1.2% -1.3% -0.2% 6.1% -1.2% -1.3% -0.2% 6.1% -1.2%	Ireland	0.3%	0.2%	-12.6%	14.0%
Portugal 0.2% 0.1% -22.7% -25.2% Total EAFE Countries 100.0% 62.3% 8.1% 3.8% Canada 8.1% -1.8% 11.9% Total Developed Countries 70.4% -7.4% 4.7% China 8.2% -7.7% 19.4% Taiwan 5.8% 3.3% 34.4% India 5.8% -11.3% 11.2% Korea 2.7% -19.2% -23.4% Saudi Arabia 1.2% -1.5% 0.6% Brazil 1.2% -19.4% -29.8% South Africa 0.9% -12.1% 6.7% Mexico 0.5% -10.6% -27.1% Malaysia 0.5% -10.6% -27.1% Malaysia 0.5% -6.9% 20.8% Indonesia 0.4% -15.6% -13.0% Thailand 0.4% -15.6% -13.0% Quited Arab Emirates 0.4% 9.0% 19.6% Qatar	New Zealand	0.2%	0.1%	-6.0%	-1.5%
Portugal 0.2% 0.1% -22.7% -25.2% Total EAFE Countries 100.0% 62.3% 8.1% 3.8% Canada 8.1% -1.8% 11.9% Total Developed Countries 70.4% -7.4% 4.7% China 8.2% -7.7% 19.4% Taiwan 5.8% 3.3% 34.4% India 5.8% -11.3% 11.2% Korea 2.7% -19.2% -23.4% Saudi Arabia 1.2% -1.5% 0.6% Brazil 1.2% -19.4% -29.8% South Africa 0.9% -12.1% 6.7% Mexico 0.5% -10.6% -27.1% Malaysia 0.5% -10.6% -27.1% Malaysia 0.5% -6.9% 20.8% Indonesia 0.4% -15.6% -13.0% Thailand 0.4% -15.6% -13.0% Quited Arab Emirates 0.4% 9.0% 19.6% Qatar					
Total EAFE Countries 100.0% 62.3% -8.1% 3.8% Canada 8.1% -1.8% 11.9% Total Developed Countries 70.4% -7.4% 4.7% China 8.2% -7.7% 19.4% Taiwan 5.8% 3.3% 34.4% India 5.8% -11.3% 11.2% Korea 2.7% -19.2% -23.4% Saudi Arabia 1.2% -1.5% 0.6% Brazil 1.2% -19.4% -29.8% South Africa 0.9% -12.1% 6.7% Mexico 0.5% -10.6% -27.1% Malaysia 0.5% -10.6% -27.1% Malaysia 0.5% -6.9% 20.8% Indonesia 0.4% -15.6% -13.0% Thailand 0.4% -15.6% -13.0% Thailand 0.4% 9.0% 19.6% Qatar 0.3% -0.2% 6.1% Folam 0.2% -11.5%	Portugal				
Canada 8.1% -1.8% 11.9% Total Developed Countries 70.4% -7.4% 4.7% China 8.2% -7.7% 19.4% Taiwan 5.8% -3.3% 34.4% India 5.8% -11.3% 11.2% Korea 2.7% -19.2% -23.4% Saudi Arabia 1.2% -1.5% 0.6% Brazil 1.2% -1.5% 0.6% Brazil 1.2% -1.94% -29.8% South Africa 0.9% -12.1% 6.7% Mexico 0.5% -10.6% -27.1% Malaysia 0.5% -6.9% 20.8% Indonesia 0.4% -15.6% -13.0% Thailand 0.4% -10.1% 1.3% United Arab Emirates 0.4% 9.0% 19.6% Qatar 0.2% -1.15% -6.7% Kuwait 0.2% -1.15% -6.7% Kuwait 0.2% 1.2% 10.5%					
Total Developed Countries 70.4% -7.4% 4.7% China 8.2% -7.7% 19.4% Taiwan 5.8% 3.3% 34.4% India 5.8% -11.3% 11.2% Korea 2.7% -19.2% -23.4% Saudi Arabia 1.2% -1.5% 0.6% Brazil 1.2% -19.4% -29.8% South Africa 0.9% -12.1% 6.7% Mexico 0.5% -10.6% -27.1% Malaysia 0.5% -6.9% 20.8% Indonesia 0.4% -15.6% -13.0% Thailand 0.4% -10.1% 1.3% United Arab Emirates 0.4% 9.0% 19.6% Qatar 0.2% -11.5% -6.7% Kuwait 0.2% -11.5% -6.7% Kuwait 0.2% 11.5% -6.7% Kuwait 0.2% -13.9% -0.7% Ferece 0.1% -6.2% 8.9%					
Taiwan 5.8% 3.3% 34.4% India 5.8% -11.3% 11.2% Korea 2.7% -19.2% -23.4% Saudi Arabia 1.2% -1.5% 0.6% Brazil 1.2% -19.4% -29.8% South Africa 0.9% -12.1% 6.7% Mexico 0.5% -10.6% -27.1% Malaysia 0.5% -6.9% 20.8% Indonesia 0.4% -15.6% -13.0% Thailand 0.4% -10.1% 1.3% United Arab Emirates 0.4% 9.0% 19.6% Qatar 0.3% -0.2% 6.1% Poland 0.2% -11.5% -6.7% Kuwait 0.2% 1.2% 10.5% Turkey 0.2% -3.2% 17.8% Philippines 0.2% -3.2% 17.8% Philippines 0.2% -13.9% -0.7% Greece 0.1% -6.2% 8.9%	-				
India S.8%	China		8.2%	-7.7%	19.4%
Korea 2.7% -19.2% -23.4% Saudi Arabia 1.2% -1.5% 0.6% Brazil 1.2% -19.4% -29.8% South Africa 0.9% -12.1% 6.7% Mexico 0.5% -10.6% -27.1% Malaysia 0.5% -6.9% 20.8% Indonesia 0.4% -15.6% -13.0% Thailand 0.4% -10.1% 1.3% United Arab Emirates 0.4% 9.0% 19.6% Qatar 0.3% -0.2% 6.1% Poland 0.2% -11.5% -6.7% Kuwait 0.2% 1.2% 10.5% Turkey 0.2% 1.2% 10.5% Felipipines 0.2% -3.2% 17.8% Philippines 0.2% -3.2% 17.8% Ohile 0.1% -6.2% 8.9% Chile 0.1% -6.8% -7.5% Peru 0.1% -2.3% 14.0% <t< td=""><td>Taiwan</td><td></td><td>5.8%</td><td>3.3%</td><td>34.4%</td></t<>	Taiwan		5.8%	3.3%	34.4%
Korea 2.7% -19.2% -23.4% Saudi Arabia 1.2% -1.5% 0.6% Brazil 1.2% -19.4% -29.8% South Africa 0.9% -12.1% 6.7% Mexico 0.5% -10.6% -27.1% Malaysia 0.5% -6.9% 20.8% Indonesia 0.4% -15.6% -13.0% Thailand 0.4% -10.1% 1.3% United Arab Emirates 0.4% 9.0% 19.6% Qatar 0.3% -0.2% 6.1% Poland 0.2% -11.5% -6.7% Kuwait 0.2% 1.2% 10.5% Turkey 0.2% 1.2% 10.5% Felipipines 0.2% -3.2% 17.8% Philippines 0.2% -3.2% 17.8% Ohile 0.1% -6.2% 8.9% Chile 0.1% -6.8% -7.5% Peru 0.1% -2.3% 14.0% <t< td=""><td>India</td><td></td><td>5.8%</td><td>-11.3%</td><td>11.2%</td></t<>	India		5.8%	-11.3%	11.2%
Saudi Arabia 1.2% -1.5% 0.6% Brazil 1.2% -19.4% -29.8% South Africa 0.9% -12.1% 6.7% Mexico 0.5% -10.6% -27.1% Malaysia 0.5% -6.9% 20.8% Indonesia 0.4% -15.6% -13.0% Thailand 0.4% -10.1% 1.3% United Arab Emirates 0.4% 9.0% 19.6% Qatar 0.3% -0.2% 6.1% Poland 0.2% -11.5% -6.7% Kuwait 0.2% 11.2% 10.5% Turkey 0.2% -3.2% 17.8% Philippines 0.2% -13.9% -0.7% Greece 0.1% -6.2% 8.9% Chile 0.1% -6.8% -7.5% Peru 0.1% -9.1% 15.8% Hungary 0.1% -2.3% 14.0% Czech Republic 0.0% 0.9% 4.0%	Korea				
South Africa 0.9% -12.1% 6.7% Mexico 0.5% -10.6% -27.1% Malaysia 0.5% -6.9% 20.8% Indonesia 0.4% -15.6% -13.0% Thailand 0.4% -10.1% 1.3% United Arab Emirates 0.4% 9.0% 19.6% Qatar 0.3% -0.2% 6.1% Poland 0.2% -11.5% -6.7% Kuwait 0.2% 1.2% 10.5% Turkey 0.2% -3.2% 17.8% Philippines 0.2% -13.9% -0.7% Greece 0.1% -6.2% 8.9% Chile 0.1% -6.8% -7.5% Peru 0.1% -9.1% 15.8% Hungary 0.1% -2.3% 14.0% Czech Republic 0.0% 0.9% 4.0% Colombia 0.0% -0.2% 7.9% Egypt 0.0% -9.0% -31.2%	Saudi Arabia				
South Africa 0.9% -12.1% 6.7% Mexico 0.5% -10.6% -27.1% Malaysia 0.5% -6.9% 20.8% Indonesia 0.4% -15.6% -13.0% Thailand 0.4% -10.1% 1.3% United Arab Emirates 0.4% 9.0% 19.6% Qatar 0.3% -0.2% 6.1% Poland 0.2% -11.5% -6.7% Kuwait 0.2% 1.2% 10.5% Turkey 0.2% -3.2% 17.8% Philippines 0.2% -13.9% -0.7% Greece 0.1% -6.2% 8.9% Chile 0.1% -6.8% -7.5% Peru 0.1% -9.1% 15.8% Hungary 0.1% -2.3% 14.0% Czech Republic 0.0% 0.9% 4.0% Colombia 0.0% -0.2% 7.9% Egypt 0.0% -9.0% -31.2%	Brazil		1.2%	-19.4%	-29.8%
Mexico 0.5% -10.6% -27.1% Malaysia 0.5% -6.9% 20.8% Indonesia 0.4% -15.6% -13.0% Thailand 0.4% -10.1% 1.3% United Arab Emirates 0.4% 9.0% 19.6% Qatar 0.3% -0.2% 6.1% Poland 0.2% -11.5% -6.7% Kuwait 0.2% 1.2% 10.5% Turkey 0.2% -3.2% 17.8% Philippines 0.2% -13.9% -0.7% Greece 0.1% -6.2% 8.9% Chile 0.1% -6.8% -7.5% Peru 0.1% -9.1% 15.8% Hungary 0.1% -2.3% 14.0% Czech Republic 0.0% 0.9% 4.0% Colombia 0.0% -0.2% 7.9% Egypt 0.0% -9.0% -31.2% Total Emerging Countries -7.5%	South Africa				
Malaysia 0.5% -6.9% 20.8% Indonesia 0.4% -15.6% -13.0% Thailand 0.4% -10.1% 1.3% United Arab Emirates 0.4% 9.0% 19.6% Qatar 0.3% -0.2% 6.1% Poland 0.2% -11.5% -6.7% Kuwait 0.2% 1.2% 10.5% Turkey 0.2% -3.2% 17.8% Philippines 0.2% -13.9% -0.7% Greece 0.1% -6.2% 8.9% Chile 0.1% -6.8% -7.5% Peru 0.1% -9.1% 15.8% Hungary 0.1% -2.3% 14.0% Czech Republic 0.0% 0.9% 4.0% Colombia 0.0% 0.2% -31.2% Total Emerging Countries 29.7% -8.0% 7.5%					
Indonesia 0.4% -15.6% -13.0% Thailand 0.4% -10.1% 1.3% United Arab Emirates 0.4% 9.0% 19.6% Qatar 0.3% -0.2% 6.1% Poland 0.2% -11.5% -6.7% Kuwait 0.2% 1.2% 10.5% Turkey 0.2% -3.2% 17.8% Philippines 0.2% -13.9% -0.7% Greece 0.1% -6.2% 8.9% Chile 0.1% -6.8% -7.5% Peru 0.1% -9.1% 15.8% Hungary 0.1% -2.3% 14.0% Czech Republic 0.0% 0.9% 4.0% Colombia 0.0% -0.2% 7.9% Egypt 0.0% -9.0% -31.2% Total Emerging Countries 29.7% -8.0% 7.5%					
Thailand 0.4% -10.1% 1.3% United Arab Emirates 0.4% 9.0% 19.6% Qatar 0.3% -0.2% 6.1% Poland 0.2% -11.5% -6.7% Kuwait 0.2% 1.2% 10.5% Turkey 0.2% -3.2% 17.8% Philippines 0.2% -13.9% -0.7% Greece 0.1% -6.2% 8.9% Chile 0.1% -6.8% -7.5% Peru 0.1% -9.1% 15.8% Hungary 0.1% -2.3% 14.0% Czech Republic 0.0% 0.9% 4.0% Colombia 0.0% -0.2% 7.9% Egypt 0.0% -9.0% -31.2% Total Emerging Countries 29.7% -8.0% 7.5%					
United Arab Emirates 0.4% 9.0% 19.6% Qatar 0.3% -0.2% 6.1% Poland 0.2% -11.5% -6.7% Kuwait 0.2% 1.2% 10.5% Turkey 0.2% -3.2% 17.8% Philippines 0.2% -13.9% -0.7% Greece 0.1% -6.2% 8.9% Chile 0.1% -6.8% -7.5% Peru 0.1% -9.1% 15.8% Hungary 0.1% -2.3% 14.0% Czech Republic 0.0% 0.9% 4.0% Colombia 0.0% -0.2% 7.9% Egypt 0.0% -9.0% -31.2% Total Emerging Countries 29.7% -8.0% 7.5%					
Qatar 0.3% -0.2% 6.1% Poland 0.2% -11.5% -6.7% Kuwait 0.2% 1.2% 10.5% Turkey 0.2% -3.2% 17.8% Philippines 0.2% -13.9% -0.7% Greece 0.1% -6.2% 8.9% Chile 0.1% -6.8% -7.5% Peru 0.1% -9.1% 15.8% Hungary 0.1% -2.3% 14.0% Czech Republic 0.0% 0.9% 4.0% Colombia 0.0% -0.2% 7.9% Egypt 0.0% -9.0% -31.2% Total Emerging Countries 29.7% -8.0% 7.5%	United Arab Emirates				
Poland 0.2% -11.5% -6.7% Kuwait 0.2% 1.2% 10.5% Turkey 0.2% -3.2% 17.8% Philippines 0.2% -13.9% -0.7% Greece 0.1% -6.2% 8.9% Chile 0.1% -6.8% -7.5% Peru 0.1% -9.1% 15.8% Hungary 0.1% -2.3% 14.0% Czech Republic 0.0% 0.9% 4.0% Colombia 0.0% -0.2% 7.9% Egypt 0.0% -9.0% -31.2% Total Emerging Countries 29.7% -8.0% 7.5%				-0.2%	
Kuwait 0.2% 1.2% 10.5% Turkey 0.2% -3.2% 17.8% Philippines 0.2% -13.9% -0.7% Greece 0.1% -6.2% 8.9% Chile 0.1% -6.8% -7.5% Peru 0.1% -9.1% 15.8% Hungary 0.1% -2.3% 14.0% Czech Republic 0.0% 0.9% 4.0% Colombia 0.0% -0.2% 7.9% Egypt 0.0% -9.0% -31.2% Total Emerging Countries 29.7% -8.0% 7.5%					
Turkey 0.2% -3.2% 17.8% Philippines 0.2% -13.9% -0.7% Greece 0.1% -6.2% 8.9% Chile 0.1% -6.8% -7.5% Peru 0.1% -9.1% 15.8% Hungary 0.1% -2.3% 14.0% Czech Republic 0.0% 0.9% 4.0% Colombia 0.0% -0.2% 7.9% Egypt 0.0% -9.0% -31.2% Total Emerging Countries 29.7% -8.0% 7.5%					
Philippines 0.2% -13.9% -0.7% Greece 0.1% -6.2% 8.9% Chile 0.1% -6.8% -7.5% Peru 0.1% -9.1% 15.8% Hungary 0.1% -2.3% 14.0% Czech Republic 0.0% 0.9% 4.0% Colombia 0.0% -0.2% 7.9% Egypt 0.0% -9.0% -31.2% Total Emerging Countries 29.7% -8.0% 7.5%					
Greece 0.1% -6.2% 8.9% Chile 0.1% -6.8% -7.5% Peru 0.1% -9.1% 15.8% Hungary 0.1% -2.3% 14.0% Czech Republic 0.0% 0.9% 4.0% Colombia 0.0% -0.2% 7.9% Egypt 0.0% -9.0% -31.2% Total Emerging Countries 29.7% -8.0% 7.5%					
Chile 0.1% -6.8% -7.5% Peru 0.1% -9.1% 15.8% Hungary 0.1% -2.3% 14.0% Czech Republic 0.0% 0.9% 4.0% Colombia 0.0% -0.2% 7.9% Egypt 0.0% -9.0% -31.2% Total Emerging Countries 29.7% -8.0% 7.5%					
Peru 0.1% -9.1% 15.8% Hungary 0.1% -2.3% 14.0% Czech Republic 0.0% 0.9% 4.0% Colombia 0.0% -0.2% 7.9% Egypt 0.0% -9.0% -31.2% Total Emerging Countries 29.7% -8.0% 7.5%					
Hungary 0.1% -2.3% 14.0% Czech Republic 0.0% 0.9% 4.0% Colombia 0.0% -0.2% 7.9% Egypt 0.0% -9.0% -31.2% Total Emerging Countries 29.7% -8.0% 7.5%					
Czech Republic 0.0% 0.9% 4.0% Colombia 0.0% -0.2% 7.9% Egypt 0.0% -9.0% -31.2% Total Emerging Countries 29.7% -8.0% 7.5%					
Colombia 0.0% -0.2% 7.9% Egypt 0.0% -9.0% -31.2% Total Emerging Countries 29.7% -8.0% 7.5%					
Egypt 0.0% -9.0% -31.2% Total Emerging Countries 29.7% -8.0% 7.5%					
Total Emerging Countries 29.7% -8.0% 7.5%					
Total ACWIX IS Countries 100.0% 5.5%	Total ACWIXUS Countries		100.0%	-7.6%	5.5%

Source: Morningstar Direct, MSCI Global Index Monitor (Returns are Net in USD)

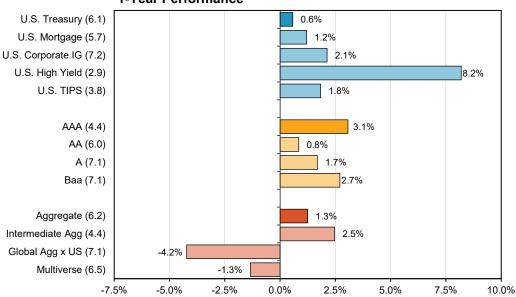
As a result of the GICS classification changes on 9/28/2018 and certain associated reporting limitations, sector performance represents backward looking performance for the prior year of each sector's current constituency, post creation of the Communication Services sector.

- Domestic fixed-income markets declined during the fourth quarter despite two additional 0.25% rate cuts by the Fed. Although the Fed's action moved short-term rates lower, longer-term yields advanced during the quarter, leading to a modest steepening of the Treasury Yield Curve. The Fed's target range is now set at 4.25%-4.50% at year-end, down a full percentage point, including the first 0.50% cut in September of 2024.
- While the Fed's first rate cut in September was initially celebrated by fixed income investors and boosted the levels of the indexes during the third quarter, many of the core indexes fell during the fourth quarter as longer-term yields advanced and worked against the Fed's short-term rate declines. Performance across the investment-grade index's segments declined with the Treasury, Mortgage-Backed and Corporate IG indexes falling in a tight range around -3.0%. Higher quality issues performed better, as BBB issues fell by -2.8%, while AAA issues fell a smaller -1.8% due in large part to their lower duration (4.4 vs. 7.1 years).
- High Yield bonds outperformed investment grade issues as longer-term yields climbed. This was primarily due to the high-yield benchmark's lower duration and higher coupon income. Despite their lower credit quality, below-investment grade issues returned just 0.2% for the quarter, but still outpaced all other broad-based investment-grade fixed income indexes.
- Over the trailing one-year period, the Bloomberg US Aggregate Bond Index posted a return of 1.3%. The benchmark's sub-components also posted positive performance over the trailing 12 months with the Bloomberg US Corporate Investment Grade Index rising 2.1% and the US Mortgage Index returning 1.2%. US TIPS, which are excluded from the Bloomberg US Aggregate Bond Index, returned 1.8% for the trailing year.
- Results were mixed across credit qualities of investment grade issues. The performance of AAA issues was aided by their lower duration and returned 3.1% while AA issues returned only 0.8% for the year. High yield bonds were also the best performing segment of the market for the year, returning an outsized 8.2%, more than double any other segment of the domestic fixed income market. Results in high yield were spurred by stable credit spreads and higher coupon income.
- The Bloomberg Global Aggregate ex-US Index finished both the quarter and the year significantly weaker than its domestic benchmark counterpart. Strength in the USD was a primary driver in the international index's weak -6.8% fourth quarter performance and its -4.2% return for the calendar year.



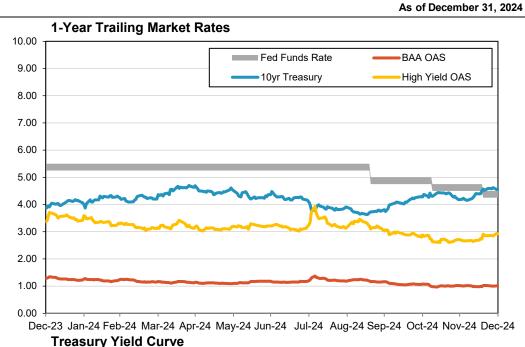


1-Year Performance



Source: Bloomberg

- The gray band across the graph illustrates the fed funds target rate range over the last 12 months. During the fourth quarter, the Federal Open Market Committee (FOMC) cut its policy rates by 0.50% with two successive 0.25% cuts in November and December. The target policy range now stands at 4.25-4.50%, a level not seen since January of 2023. With inflation declining and unemployment remaining largely stable, the Fed has pivoted from its restrictive monetary policy stance. The most recent FOMC press release continued to emphasize economic data-dependent outcomes while placing greater emphasis on the second part of the committee's dual mandate: full employment. The CME FedWatch tool, which forecasts rates based on fed fund futures pricing, showed a greater than 90% probability of no rate decrease at the FOMC January meeting at the time of this writing. Fed officials and market participants continue to express concern that leaving rates at their current elevated levels for an extended period could tip the US economy into a recession.
- The yield on the US 10-year Treasury (blue line of the top chart) rose 0.84% during the quarter. The bellwether benchmark rate opened the quarter at a yield of 3.74% and finished December at a yield of 4.58%, which is its highest level since May 2024.
- The red line in the top chart shows the option-adjusted spread (OAS) for BAA-rated corporate bonds. This measure quantifies the additional yield premium investors require to purchase and hold non-US Treasury issues with the lowest investment grade rating. During the quarter, the yield spread experienced a slight decline, beginning October at 1.13% and finishing December at 1.02%. High-yield OAS spreads (represented by the yellow line in the top chart) also remained relatively stable, despite a sharp spike in early August spurred by an unwinding of the yen carry trade. The high-yield OAS fell by 0.11% over the quarter from 3.03% to 2.92%. The spread measure's relative stability over the trailing year results from steady economic growth, stable monetary policy, and falling inflation readings.
- The lower graph provides a snapshot of the US Treasury yield curve at the end of each of the last four quarters. For the first time since November 2022, the quarter-end yield on the 30-year Treasury was higher than the one-month Treasury. Furthermore, the spread between the two-year yield and the 10-year yield continued to widen during the quarter, growing from 0.15% in October to 0.30% at year end. The yield curve had been inverted for much of the last two years. This 2-10-year yield curve inversion is a common heuristic used to foretell a pending recession.



7.00
6.50
6.50
6.50
6.00
4.50
4.50
3.50
3.50
3.50

2 <u>yr</u>

3 yr

1 yr

3 mo

6 mo

7 <u>yr</u>

5 yr

10 yr

20 yr

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

CME FedWatch Tool - CME Group

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

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

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

U.S. Department of the Treasury

China's Economy Limps Into 2024 – WSJ Support Site - Global Index Lens: Index Returns – MSCI

Federal Reserve issues FOMC statement

The Fed - Meeting calendars and information (federalreserve.gov)

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

Why Chinese banks are now vanishing (economist.com)

Fed rate cut: Here's what changed in the central bank's statement (cnbc.com)

10-Year Treasury Constant Maturity Minus 2-Year Treasury Constant Maturity (T10Y2Y) | FRED | St. Louis Fed (stlouisfed.org)

The Fed's dot plot shows only two rate cuts in 2025, fewer than previously projected

Page Intentionally Left Blank



4Q 2024 EXECUTIVE SUMMARY

Market Summary:

The fourth quarter of 2024 saw a mixed performance across global stock and bond markets. Rising global interest rates, driven by persistent inflationary pressures and concerns about the pace of economic growth, weighed heavily on bond markets (Bloomberg US Aggregate -3.06%). US equities continued their strong run, driven by robust corporate earnings and optimism surrounding the new administration's policies; however, international markets experienced greater volatility. Within the US equity market, large-cap stocks outperformed their smaller-cap counterparts. The S&P 500 Index experienced a modest but positive return (2.41%), driven by strong performances from technology and consumer discretionary sectors. In contrast, the Russell 2000 Index, which tracks small-cap US equities, exhibited more subdued growth, facing challenges from rising interest rates and concerns about slowing economic growth (0.33%). International and emerging markets, particularly those heavily reliant on commodity exports, faced headwinds due to a slowdown in global demand particularly from China (MSCI EAFE -8.11%; MSCI EM -8.01%).

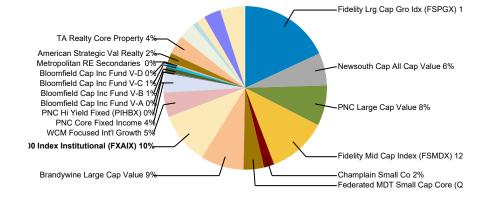
Conclusions/Recommendations:

- 1. The Total Fund gained 1.12% (preliminary return) during the quarter, performing in line with the Policy Index and ranking in the top decile of the public fund universe. The Fund was aided by strong results from the alternative fixed income strategies. (Note: Metropolitan, TerraCap, Abbott, Portfolio Advisors, and Sturbridge have not reported 4Q results in time for this report.)
- 2. The Total Fund returned 14.22% over the past year, trailing the Policy Index by over 2.43% but ranking in the top 2% of the peer group. Longer-term, the Fund has performed well trailing the Policy Index but ranking in the top decile of the universe.
- 3. Champlain out performed the Russell 2000 Index by almost 5% and ranked near the top of the small cap universe. The excess performance is partially attributed to strong stock selection within Technology and Financials. Longer-term, Champlain meets performance expectation.
- 4. Bloomfield V Series A generated strong results quarter; the series is nearing liquidation and returns (in % terms) will be magnified. Bloomfield V is meeting performance expectations.
- 5. TA Realty posted a third consecutive quarter of positive returns and ranked in the top quartile of the core real estate universe. Longer-term, TA exceeds performance expectations.
- 6. At quarter end the Fund was overweight to domestic equity and underweight to international equity, real estate, and private equity; initial PE funding occurred in 2022.
- 7. Mariner recommends no action at this time. (See the Asset / Manager Summary for updated allocations, other comments, and recommendations.)

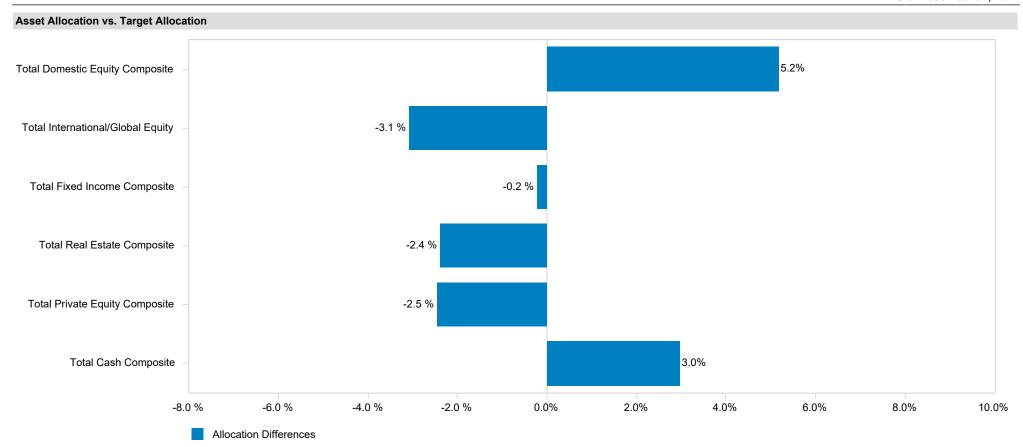
Total Fund Compliance:	Yes	No	N/A
Equity Compliance:	Yes	No	N/A
Fixed Income Compliance:	Yes	No	N/A

Manager Compliance:															
	Yes	No	N/A												

Dec-2024	. \$116	490 521



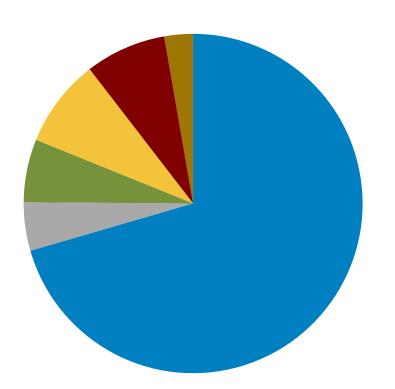
llocation		
	Market Value	Allocation
■ Fidelity Lrg Cap Gro ldx (FSPGX)	26,460,509	18.1
Newsouth Cap All Cap Value	9,452,547	6.5
■ PNC Large Cap Value	11,713,275	8.0
Fidelity Mid Cap Index (FSMDX)	17,186,729	11.7
Champlain Small Co	2,978,075	2.0
Federated MDT Small Cap Core (QISCX)	5,930,083	4.0
Brandywine Large Cap Value	12,490,223	8.5
Fidelity 500 Index Institutional (FXAIX)	15,133,193	10.3
WCM Focused Int'l Growth	7,198,792	4.9
PNC Core Fixed Income	5,612,119	3.8
■ PNC Hi Yield Fixed (PIHBX)	171,655	0.1
■ Bloomfield Cap Inc Fund V-A	162,177	0.1
■ Bloomfield Cap Inc Fund V-B	1,464,003	1.0
Bloomfield Cap Inc Fund V-C	881,507	0.6
■ Bloomfield Cap Inc Fund V-D	171,962	0.1
Metropolitan RE Secondaries	447,620	0.3
American Strategic Val Realty	2,649,452	1.8
TA Realty Core Property	5,538,940	3.8
Abbott Secondary Opportunites II LP	4,713,588	3.2
Sturbridge Diversified III	1,400,007	1.0
Terracap Partners V LP	2,522,977	1.7
Portfolio Advisors Secondary Fund IV	4,941,673	3.4
Cash Account	6,947,310	4.7
Commingled Fund Cash	322,106	0.2

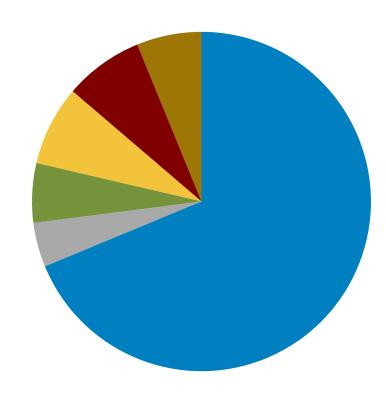


Asset Allocation vs. Target Allocation								
	Market Value\$	Allocation (%)	Target (%)					
Total Domestic Equity Composite	101,344,634	69.2	64.0					
Total International/Global Equity	7,198,792	4.9	8.0					
Total Fixed Income Composite	8,463,422	5.8	6.0					
Total Real Estate Composite	11,158,988	7.6	10.0					
Total Private Equity Composite	11,055,268	7.5	10.0					
Total Cash Composite	7,269,416	5.0	2.0					
Total Fund	146,490,521	100.0	100.0					

Asset Allocation By Segment as of September 30, 2024 : \$144,348,562

Asset Allocation By Segment as of December 31, 2024 : \$146,490,521





ocation			Allocation		
Segments	Market Value	Allocation	Segments	Market Value	Allocation
■ Domestic Equity	101,756,365	70.5	■ Domestic Equity	100,711,712	68.7
■ International Equity	6,667,006	4.6	International Equity	6,198,792	4.2
■ Domestic Fixed Income	8,668,264	6.0	Domestic Fixed Income	8,294,731	5.7
Real Estate	12,160,444	8.4	Real Estate	11,158,988	7.6
■ Private Equity	11,148,904	7.7	Private Equity	11,055,268	7.5
Cash Equivalent	3,947,578	2.7	Cash Equivalent	9,071,029	6.2

									111061 31, 2024
	Market Value 10/01/2024	Net Transfers	Contribution s	Distributions	Management Fees	Other Expenses	Income	Apprec./ Deprec.	Market Value 12/31/2024
Total Domestic Equity Composite	102,327,273	-2,968,123	-	-	-31,877	-11,698	1,017,397	1,011,662	101,344,634
Fidelity Lrg Cap Gro Idx (FSPGX)	24,715,259	-	-	-	-	-	97,596	1,647,654	26,460,509
PNC Large Cap Value	13,782,301	-2,000,000	-	-	-	-11,698	78,456	-135,785	11,713,275
Newsouth Capital All Cap Value	9,513,850	17,838	-	-	-17,838	-	24,718	-86,021	9,452,547
Fidelity Mid Cap Index (FSMDX)	17,080,455	-	-	-	-	-	383,713	-277,439	17,186,729
Brandywine Large Cap Value	12,789,487	14,039	-	-	-14,039	-	84,427	-383,690	12,490,223
Champlain Small Company (CIPNX)	2,831,642	-	-	-	-	-	224,116	-77,683	2,978,075
Federated MDT Small Cap Core (QISCX)	5,887,366	-	-	-	-	-	20,675	22,042	5,930,083
Fidelity 500 Index Institutional (FXAIX)	15,726,913	-1,000,000	-	-	-	-	103,696	302,583	15,133,193
Total International Equity Composite	6,667,006	1,000,000	-	-	-	-	-	-468,215	7,198,792
WCM Focused Int'l Growth Fund LP	6,667,006	1,000,000	-	-	-	-	-	-468,215	7,198,792
Total Fixed Income Composite	8,803,667	-365,462	-	-	-	-	88,129	-62,912	8,463,422
PNC Core Fixed Income	5,694,699	3,783	-	-	-	-	51,155	-137,519	5,612,119
PNC High Yield Fixed Income (PIHBX)	175,826	-3,783	-	-	-	-	3,783	-4,171	171,655
Total Non-Core Fixed Composite	2,933,141	-365,462	-	-	-	-	33,191	78,778	2,679,648
Bloomfield Capital Income Fund V Series - A	203,096	-85,420	-	-	-	-	1,214	43,286	162,177
Bloomfield Capital Income Fund V Series - B	1,755,581	-345,294	-	-	-	-	12,170	41,545	1,464,003
Bloomfield Capital Income Fund V Series - C	974,464	-107,084	-	-	-	-	17,966	-3,839	881,507
Bloomfield Capital Income Fund V Series - D	-	172,335	-	-	-	-	1,841	-2,215	171,962
Total Real Estate Composite	12,160,444	-1,084,395	-	-	-19,792	-	72,507	30,223	11,158,988
Metropolitan Real Estate Partners Secondaries & Co-Investments Fund, L.P.	447,620	-	-	-	-	-	-	-	447,620
American Strategic Value Realty	2,645,360	-	-	-	-8,339	-	8,351	4,079	2,649,452
TA Realty Core Property Fund LP	6,544,488	-1,084,395	-	-	-11,453	-	64,156	26,144	5,538,940
Terracap Partners V LP	2,522,977	-	-	-	-	-	-	-	2,522,977
Total Private Equity Composite	11,148,904	-93,636	-	-	-	-	37,795	-37,795	11,055,268
Abbott Secondary Opportunites II LP	4,713,588	-	-	-	-	-	16,471	-16,471	4,713,588
Portfolio Advisors Secondary Fund IV	5,035,309	-93,636	-	-	-	-	-	-	4,941,673
Sturbridge Diversified III	1,400,007	-	-	-	-	-	21,324	-21,324	1,400,007
Total Cash Composite	3,241,267	3,511,616	4,915,993	-4,424,828	-	-45,141	70,510	-1	7,269,416
Cash Account	2,749,794	3,684,708	4,915,993	-4,424,828	-	-45,141	66,784	-	6,947,310
Cash Account from Commingled Fund	491,473	-173,092	-	-	-	-	3,727	-1	322,106
Total Fund Composite	144,348,562	-	4,915,993	-4,424,828	-51,669	-56,839	1,286,339	472,963	146,490,521

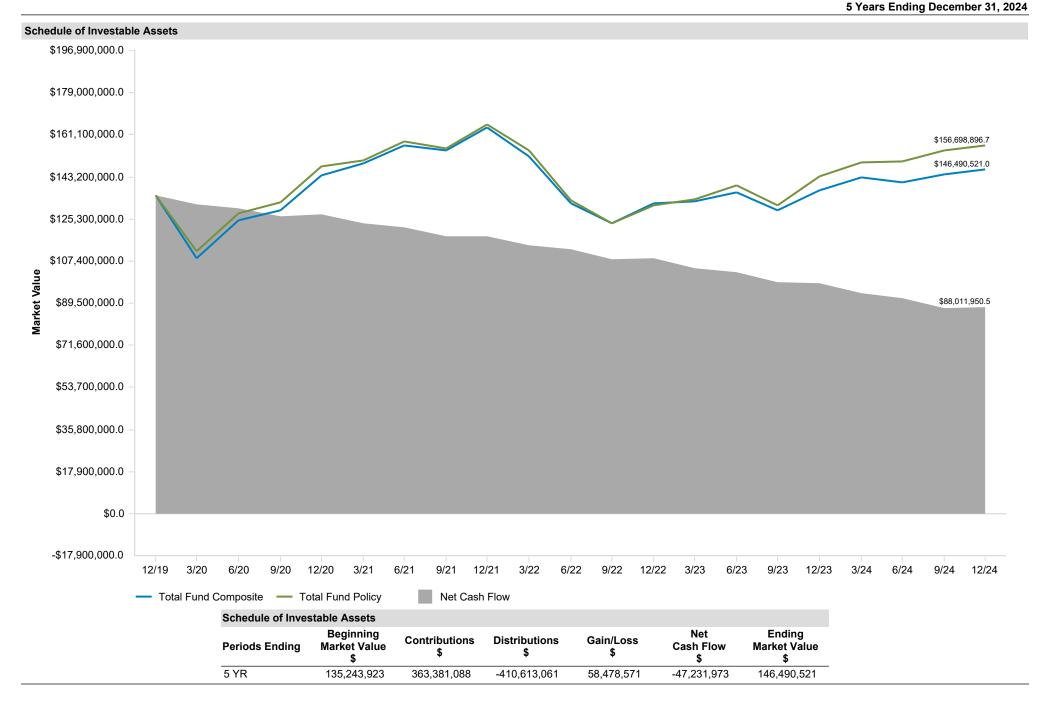
	Q ⁻	ΓR	1 \	r	3 Y	/R	5 Y	′R	7 '	Y R	10	YR	Ince	ption	Inceptior Date
Total Fund Composite (Gross)	1.12	(3)	14.22	(2)	3.41	(35)	8.74	(8)	8.65	(5)	8.87	(2)	8.17	(25)	04/01/2003
Total Fund Policy	1.12	(3)	16.65	(1)	5.41	(4)	10.16	(2)	9.76	(1)	9.47	(1)	9.46	(1)	
Difference	-0.01		-2.43		-2.00		-1.42		-1.11		-0.60		-1.29		
All Public Plans-Total Fund Median	-1.00		10.32		2.95		7.10		7.02		7.18		7.75		
Total Fund Composite (Net)	1.08		14.00		3.10		8.41		8.30		8.45		7.93		04/01/2008
Total Fund Policy	1.12		16.65		5.41		10.16		9.76		9.47		8.45		
Difference	-0.04		-2.65		-2.30		-1.75		-1.46		-1.02		-0.51		
Total Domestic Equity Composite	2.01		20.28		5.42		11.30		10.65		10.42		9.69		04/01/2008
Total Domestic Equity Policy	2.63		23.81		8.01		13.86		12.93		12.34		11.11		
Difference	-0.63		-3.53		-2.58		-2.56		-2.28		-1.92		-1.41		
Total International/Global Equity	-7.02		7.04		-0.87		5.14		5.41		6.20		4.63		04/01/2008
Total International Equity Policy	-7.60		5.53		0.82		4.10		3.53		4.80		3.16		
Difference	0.58		1.51		-1.69		1.04		1.88		1.39		1.47		
Total Fixed Income Composite	0.31		5.35		4.11		4.39		4.59		5.27		5.03		07/01/2014
Total Fixed Income Policy	-1.60		3.00		-0.18		0.86		1.69		1.86		1.85		
Difference	1.91		2.35		4.29		3.54		2.89		3.41		3.17		
Total Real Estate Composite	0.93		-3.74		-2.63		2.81		4.74		6.97		7.51		07/01/2014
Total Real Estate Policy	1.16		-1.43		-2.32		2.87		3.99		5.88		6.24		
Difference	-0.23		-2.31		-0.31		-0.06		0.76		1.09		1.28		

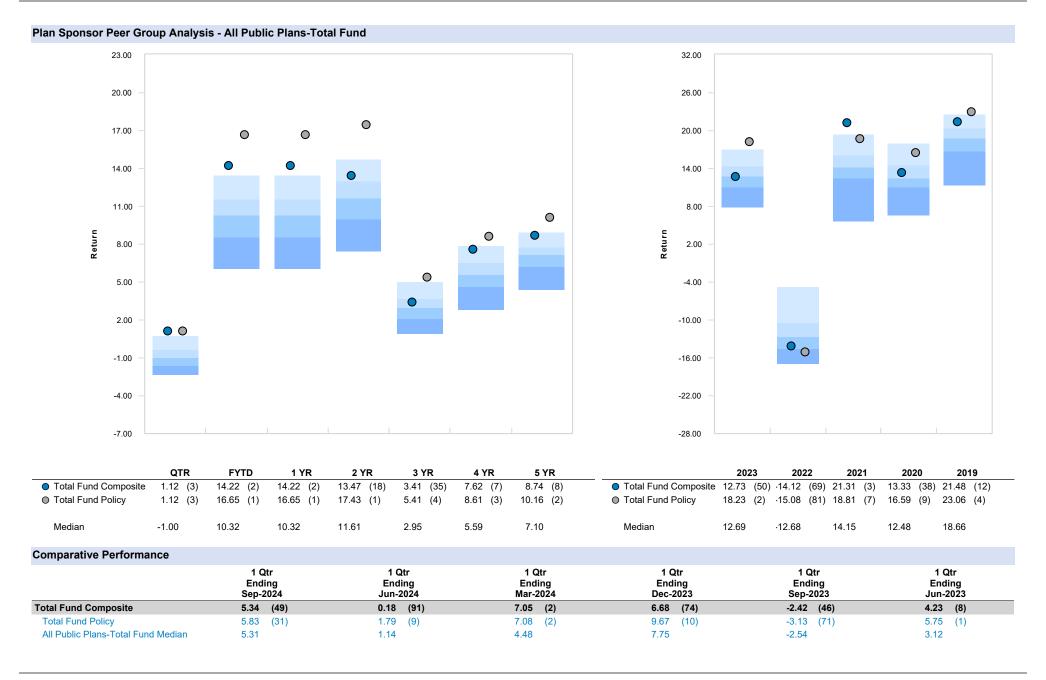
	Q.	TR	1 \	/R	3 \	/R	5 \	r	7 \	/R	10	YR	Ince	ption	Inception Date
Total Domestic Equity Composite	2.01		20.28		5.42		11.30		10.65		10.42		9.69		04/01/2008
Fidelity Lrg Cap Gro Idx (FSPGX)	7.06	(20)	33.26	(27)	N/A		N/A		N/A		N/A		N/A		06/01/2023
Russell 1000 Growth Index	7.07	(20)	33.36	(27)	10.47	(10)	18.96	(10)	18.08	(8)	16.78	(8)	33.26	(23)	
Difference	-0.01		-0.09		N/A		N/A		N/A		N/A		N/A		
Large Growth Median	5.12		29.96		7.58		15.83		15.38		14.51		30.56		
PNC Large Cap Value	-0.81	(40)	15.24	(55)	6.53	(63)	10.15	(65)	8.45	(84)	8.92	(78)	10.31	(71)	06/01/2013
Russell 1000 Value Index	-1.98	(67)	14.37	(58)	5.63	(73)	8.68	(85)	8.41	(84)	8.49	(89)	9.64	(86)	
Difference	1.17		0.87		0.90		1.47		0.04		0.44		0.68		
IM U.S. Large Cap Value Equity (SA+CF) Median	-1.27		15.66		7.52		10.87		10.14		9.90		10.93		
Newsouth Capital All Cap Value	-0.64	(44)	13.71	(48)	2.99	(87)	7.43	(90)	7.98	(74)	7.56	(92)	10.32	(89)	08/01/2012
Russell 3000 Value Index	-1.94	(71)	13.98	(47)	5.41	(61)	8.60	(79)	8.26	(69)	8.40	(79)	10.85	(80)	
Difference	1.29		-0.27		-2.41		-1.17		-0.29		-0.84		-0.53		
IM U.S. Value Equity (SA+CF) Median	-0.96		13.31		6.30		10.42		9.32		9.53		11.89		
Fidelity Mid Cap Index (FSMDX)	0.62	(30)	15.35	(37)	3.80	(72)	N/A		N/A		N/A		5.05	(72)	12/01/2021
Russell Midcap Index	0.62	(30)	15.34	(38)	3.79	(72)	9.92	(76)	9.65	(41)	9.63	(55)	5.04	(72)	
Difference	0.00		0.00		0.01		N/A		N/A		N/A		0.01		
Mid-Cap Blend Median	0.22		13.97		4.88		10.35		9.43		9.67		6.44		
Brandywine Large Cap Value	-2.34	(74)	12.68	(71)	5.10	(81)	10.32	(63)	9.73	(59)	N/A		11.31	(40)	04/01/2017
Russell 1000 Value Index	-1.98	(67)	14.37	(58)	5.63	(73)	8.68	(85)	8.41	(84)	8.49	(89)	8.91	(87)	
Difference	-0.36		-1.69		-0.54		1.63		1.31		N/A		2.40		
IM U.S. Large Cap Value Equity (SA+CF) Median	-1.27		15.66		7.52		10.87		10.14		9.90		10.91		
Champlain Small Company (CIPNX)	5.17	(2)	14.01	(20)	1.12	(70)	7.72	(61)	N/A		N/A		8.43	(66)	11/01/2019
Russell 2000 Index	0.33	(35)	11.54	(40)	1.24	(67)	7.40	(68)	6.91	(62)	7.82	(53)	8.59	(63)	
Difference	4.84		2.47		-0.12		0.32		N/A		N/A		-0.16		
Small Blend Median	-0.02		10.93		2.10		8.21		7.25		7.88		9.17		
Federated MDT Small Cap Core (QISCX)	0.73	(25)	14.82	(16)	2.11	(50)	10.17	(23)	N/A		N/A		10.42	(24)	12/01/2019
Russell 2000 Index	0.33	(35)	11.54	(40)	1.24	(67)	7.40	(68)	6.91	(62)	7.82	(53)	7.88	(66)	
Difference	0.39		3.28		0.87		2.76		N/A		N/A		2.54		
Small Blend Median	-0.02		10.93		2.10		8.21		7.25		7.88		8.65		
Fidelity 500 Index Institutional (FXAIX)	2.41	(39)	25.00	(34)	8.93	(42)	N/A		N/A		N/A		10.23	(43)	12/01/2021
S&P 500 Index	2.41	(39)	25.02	(30)	8.94	(39)	14.53	(40)	13.83	(33)	13.10	(32)	10.24	(39)	
Difference	0.00		-0.02		-0.01		N/A		N/A		N/A		-0.01		
Large Blend Median	2.28		23.84		8.59		14.20		13.39		12.74		9.89		

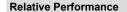
Returns for periods greater than one year are annualized. Returns are expressed as percentages.

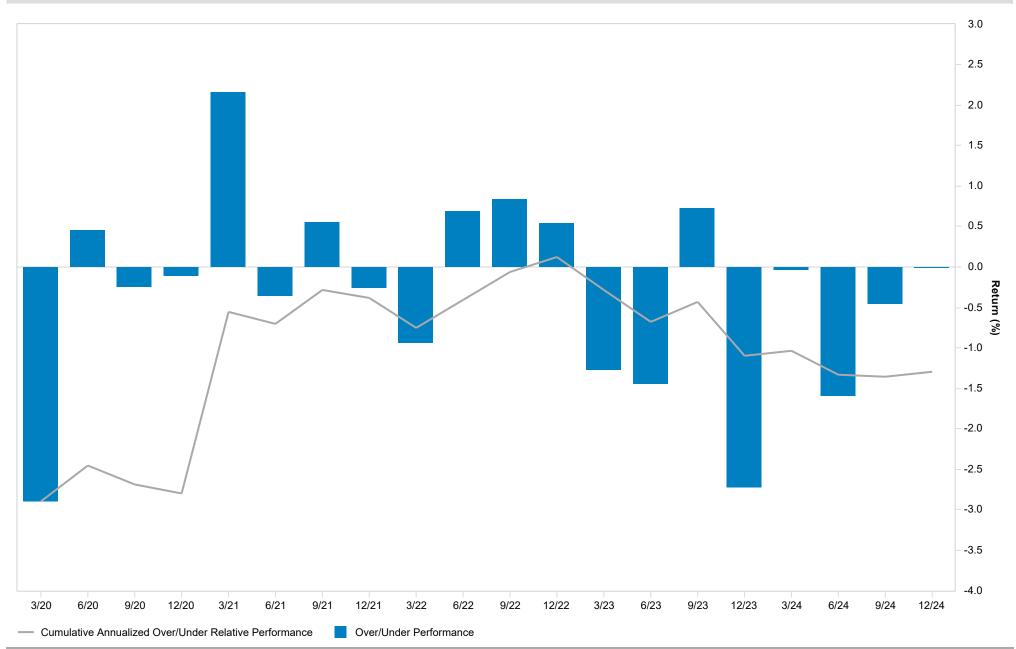
	Q ⁻	ΓR	1 \	/R	3 \	′R	5 \	/R	7 \	Y R	10	YR	Ince	ption	Inceptior Date
Total International/Global Equity	-7.02		7.04		-0.87		5.14		5.41		6.20		4.63		04/01/2008
WCM Focused Int'l Growth Fund LP	-7.02	(28)	7.79	(13)	-3.59	(98)	6.96	(6)	N/A		N/A		8.38	(2)	09/01/2018
MSCI AC World ex USA (Net)	-7.60	(53)	5.53	(33)	0.82	(46)	4.10	(60)	3.53	(60)	4.80	(57)	4.50	(55)	
Difference	0.58		2.25		-4.41		2.86		N/A		N/A		3.88		
MSCI EAFE Growth Index	-9.07	(92)	2.36	(84)	-2.26	(94)	4.34	(51)	4.81	(16)	6.22	(13)	5.14	(24)	
Difference	2.04		5.43		-1.33		2.63		N/A		N/A		3.24		
Foreign Large Blend Median	-7.54		4.30		0.67		4.35		3.72		4.92		4.57		
Total Fixed Income Composite	0.31		5.35		4.11		4.39		4.59		5.27		5.03		07/01/2014
Total PNC Fixed Income Composite	-1.48	(46)	3.76	(39)	0.51	(29)	1.74	(19)	2.40	(14)	2.26	(26)	3.45	(43)	04/01/2003
Bloomberg Intermediate US Govt/Credit Idx	-1.60	(67)	3.00	(78)	-0.18	(81)	0.86	(92)	1.69	(91)	1.71	(92)	2.93	(94)	
Difference	0.12		0.76		0.69		0.88		0.72		0.55		0.52		
IM U.S. Intermediate Duration (SA+CF) Median	-1.52		3.50		0.15		1.28		2.01		2.04		3.39		
Total Real Estate Composite	0.93		-3.74		-2.63		2.81		4.74		6.97		7.51		07/01/2014
American Strategic Value Realty	0.47	(74)	-2.52	(74)	-1.61	(25)	3.74	(18)	5.46	(18)	N/A		6.48	(N/A)	06/01/2016
NCREIF Fund Index-ODCE (VW)	1.16	(45)	-1.43	(58)	-2.32	(51)	2.87	(54)	3.99	(60)	5.88	(61)	4.89	(N/A)	
Difference	-0.69		-1.09		0.71		0.86		1.47		N/A		1.59		
IM U.S. Open End Private Real Estate (SA+CF) Median	0.97		-1.35		-2.28		2.99		4.37		6.17		N/A		
TA Realty Core Property Fund LP	1.65	(24)	1.27	(19)	0.58	(15)	N/A		N/A		N/A		7.25	(N/A)	05/01/2021
NCREIF Fund Index-ODCE (VW)	1.16	(45)	-1.43	(58)	-2.32	(51)	2.87	(54)	3.99	(60)	5.88	(61)	3.02	(N/A)	
Difference	0.49		2.70		2.90		N/A		N/A		N/A		4.24		
IM U.S. Open End Private Real Estate (SA+CF) Median	0.97		-1.35		-2.28		2.99		4.37		6.17		N/A		

Comparative Performance - IRR									
	QTD	1 YR	3 YR	Inception	Inception Date				
Bloomfield Capital Income Fund V Series - A	28.80	18.23	2.51	10.14	12/21/2018				
Bloomfield Capital Income Fund V Series - B	3.29	7.08	8.02	8.07	04/20/2021				
Bloomfield Capital Income Fund V Series - C	1.50	8.75	N/A	8.89	03/31/2023				
Bloomfield Capital Income Fund V Series - D	N/A	N/A	N/A	-0.21	11/06/2024				
Metropolitan Real Estate Partners Secondaries & Co-Investments Fund, L.P.	0.00	-15.56	-11.65	2.88	12/30/2015				
Abbott Secondary Opportunites II LP	0.00	3.80	17.75	17.32	07/23/2021				
Portfolio Advisors Secondary Fund IV	0.00	3.20	1.54	8.75	08/09/2021				
Sturbridge Diversified III	0.00	-3.40	N/A	23.91	12/16/2022				
Terracap Partners V LP	0.00	-14.02	N/A	-14.07	05/03/2022				

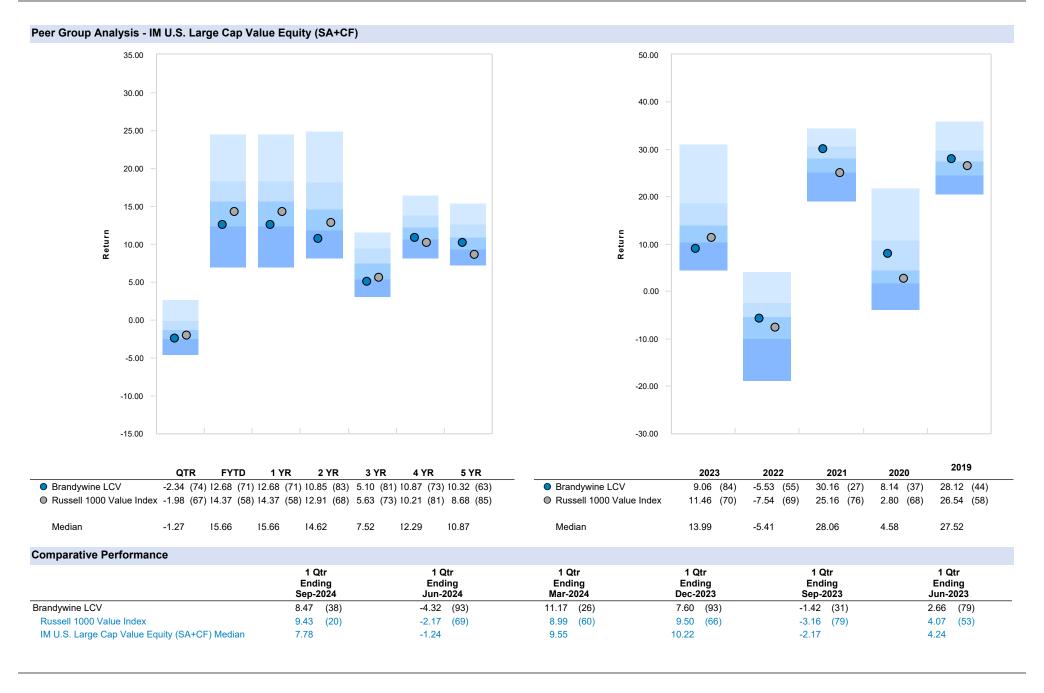


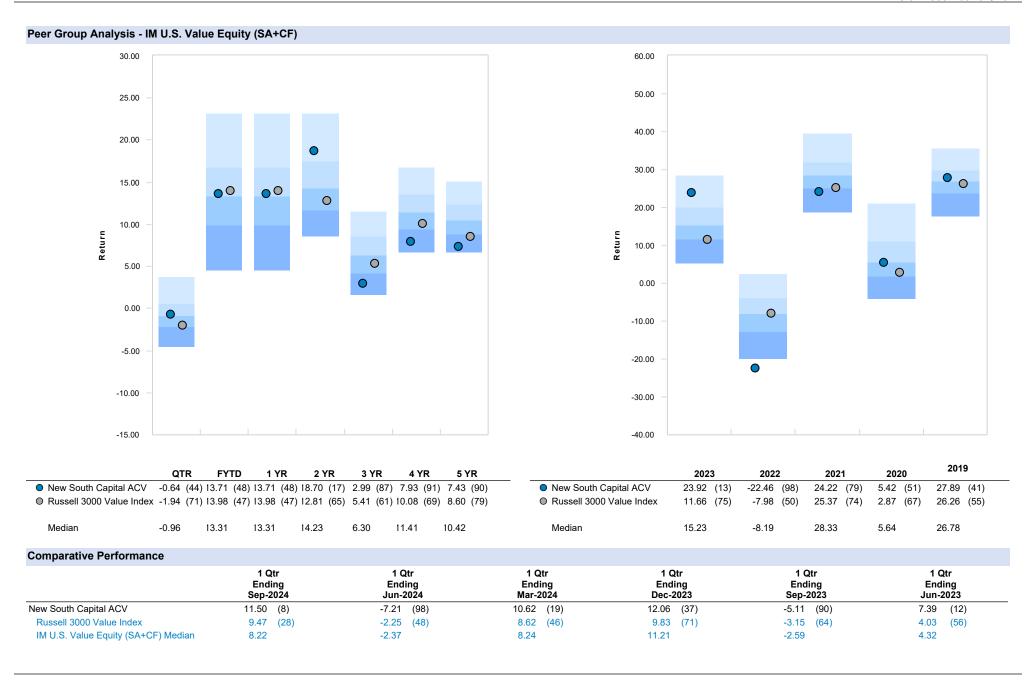






Calculation based on quarterly periodicity. Benchmark: 65% MSCI ACWi / 35% Barclays Global Agg

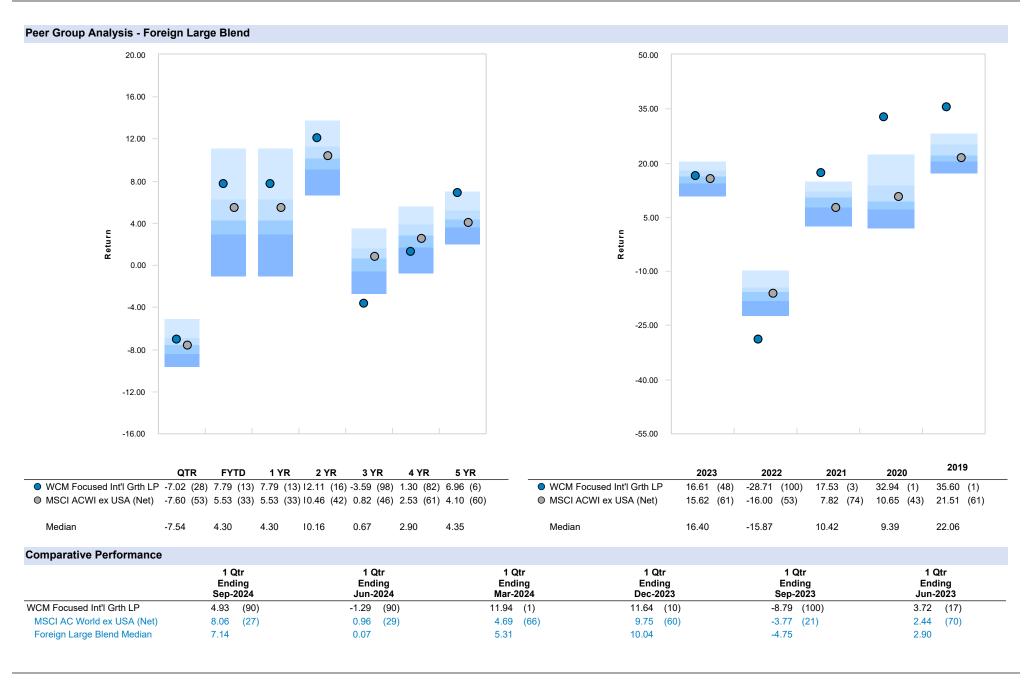


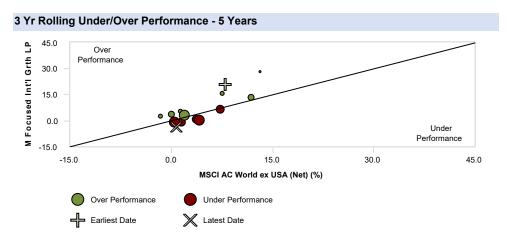












3 Yr Rolling Percentile Ranking - 5 Years 0.0 Return Percentile Rank 25.0 50.0 75.0 100.0 9/22 9/23 3/24 12/24 3/20 9/20 3/21 9/21 3/22 3/23 5-25 25-Median Median-75 75-95 **Total Period** Count Count Count Count WCM Focused Int'l Grth LP

7 (50%)

0 (0%)

1 (7%)

10 (50%)

1 (7%)

10 (50%)

5 (36%)

0 (0%)

14

20

MSCI ACWI ex USA (Net)

Peer Group Scattergram - 3 Years 2.00 % 0.00 -2.00 -4.00 -6.00 16.00 14.00 18.00 20.00 22.00 Risk (Standard Deviation %)

Pee	r Group Sca	ittergram -	5 Years					
	7.84			1				
(9	6.86						1	
<u>း</u>	6.86 - 5.88 - 4.90 -							
etur	4.90 -							
œ	3.92 -	0						
	2.94							
	16.52	17.11	17.70	18.29	18.88	19.47	20.06	20.65
			F	Risk (Standard I	Deviation %)			

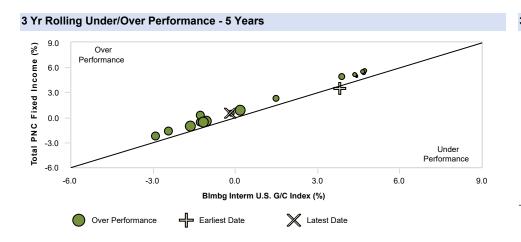
	Return	Standard Deviation
WCM Focused Int'l Grth LP	-3.59	20.45
MSCI ACWI ex USA (Net)	0.82	16.02
Median	0.67	17.17

	Return	Standard Deviation
 WCM Focused Int'l Grth LP 	6.96	19.69
MSCI ACWI ex USA (Net)	4.10	17.14
Median	4.35	18.14

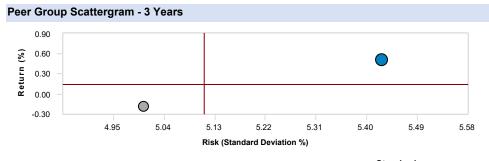
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
WCM Focused Int'l Grth LP	10.34	109.13	127.10	-3.80	-0.35	-0.27	1.11	14.70
MSCI ACWI ex USA (Net)	0.00	100.00	100.00	0.00	N/A	-0.11	1.00	10.76

	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
WCM Focused Int'l Grth LP	9.30	113.00	101.08	3.17	0.34	0.32	1.01	13.04
MSCI ACWI ex USA (Net)	0.00	100.00	100.00	0.00	N/A	0.18	1.00	11.59





3 Yr Rolling Percentile Ranking - 5 Years 0.0 Return Percentile Rank 25.0 50.0 000000 75.0 0000 100.0 9/22 9/23 12/24 9/21 3/22 3/23 3/24 3/20 9/20 3/21 5-25 25-Median Median-75 75-95 **Total Period** Count Count Count Count Total PNC Fixed Income 20 10 (50%) 9 (45%) 1 (5%) 0 (0%)



Pee	er Group Sca	ttergram - 5 Years	3					
Return (%)	2.10 1.80 – 1.50 –		•					
Ret	0.90	0	ı	ı	ı			
	4.00	4.20	4.40	4.60	4.80	5.00		
			Risk (Standard D	Deviation %)				

0 (0%)

1 (5%)

1.00

7 (35%)

12 (60%)

2.79

	Return	Standard Deviation		
 Total PNC Fixed Income 	0.51	5.43		
Blmbg U.S. G/C Index	-0.18	5.00		
Median	0.15	5.11		

100.00

100.00

0.00

	Return	Standard Deviation
 Total PNC Fixed Income 	1.74	4.72
Blmbg U.S. G/C Index	0.86	4.14
Median	1.28	4.30

-0.37

Historical Statistics - 3	Years							
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total PNC Fixed Income	0.78	113.16	103.53	0.72	0.91	-0.61	1.08	3.65
Blmbg U.S. G/C Index	0.00	100.00	100.00	0.00	N/A	-0.81	1.00	3.49
Historical Statistics - 5	Years							
	Tracking Error	Up Market Capture	Down Market Capture	Alpha	Information Ratio	Sharpe Ratio	Beta	Downside Risk
Total PNC Fixed Income	1.28	119.87	106.37	0.81	0.70	-0.13	1.10	3.04

0.00

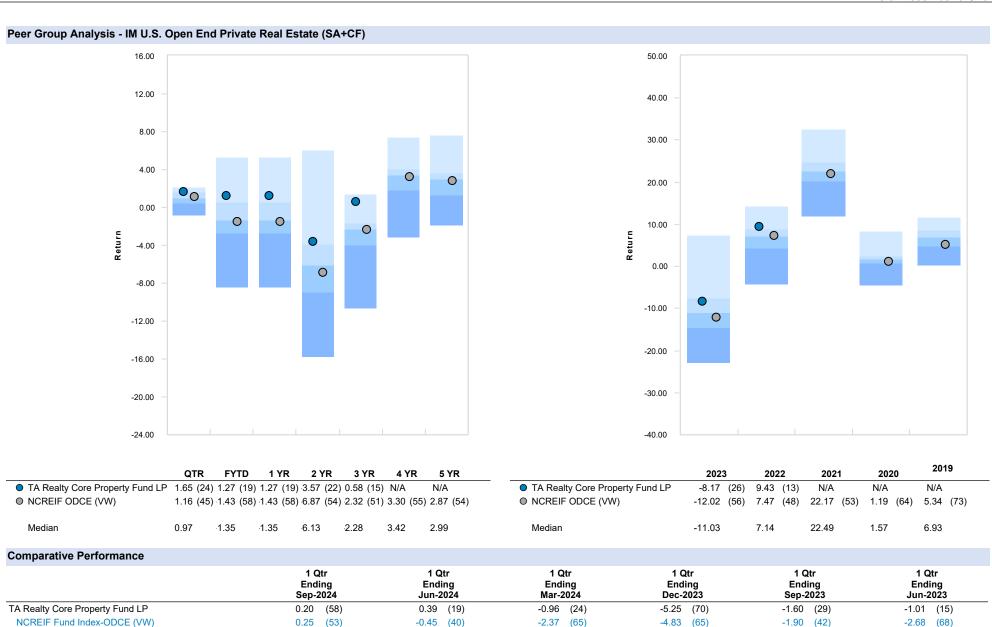
N/A

O Blmbg U.S. G/C Index

20

Blmbg U.S. G/C Index





-2.10

-4.20

-2.37

-2.02

IM U.S. Open End Private Real Estate (SA+CF) Median

0.26

-0.69

Type of Fund:DirectVintage Year:2018Strategy Type:Real Estate - DebtManagement Fee:1.5%Target IRR:8.5% (Series A only)Inception:11/16/2018

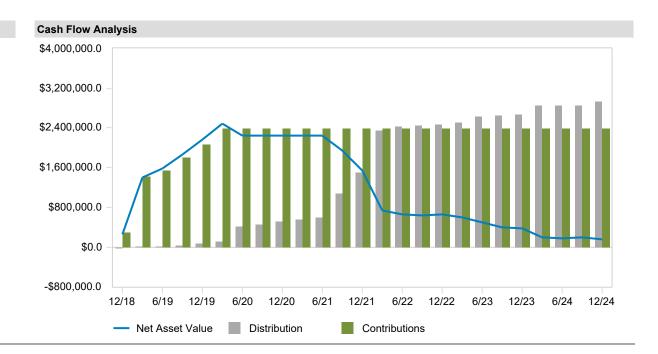
General Partner: Bloomfield Capital Partners V, LLC

Investment Strategy: The

Cash Flow Summary

The investment strategy of each Series of the Fund will have a primary focus on private credit and specialty finance assets (which is expected to include real estate debt and other general debt and debt-related investments) with short to intermediate-term durations and often contractual cash flows. The Managing Member's goal is to preserve invested capital, and generate returns that have a low correlation to traditional public markets (although there can be no assurances that this goal will be realized). The Fund will target middle market opportunities in real estate debt and other general debt and debt-related transactions (including REO properties, and preferred equity, that would include debt-like characteristics). The Fund generally will not invest in traditional leveraged common equity positions in real estate; however, the Fund may acquire REO and similar non-traditional properties and may also take incidental or pledged equity positions in connection with certain loans in order to obtain supplemental collateral to enhance the strength of the primary credit investment, and/or to expedite any requisite foreclosure process with such loan for the benefit of the Fund. The primary focus of private credit and specialty finance assets (including real estate debt and other general debt and debt-related investments) will be to capitalize on gap, transitional, bridge, special situation and opportunistic financings that are time sensitive, complex, and that the Managing Member believes offer attractive risk-adjusted returns. Each Series of the Fund may also variously co-invest in opportunities originated by other investors where the overall investment opportunity is of the same or similar nature as the Series typically invests.

\$3,000,000
\$2,385,367
-
-
-
\$2,385,367
\$865,989
\$2,937,245
\$162,177
12/21/2018
10.1
1.3



Strategy Type:

Target IRR:

Type of Fund:

Direct

Real Estate - Debt

7.5% cumulative but non-compounding annual rate of return on Capital

Contributio

General Partner: Bloomfield Capital Partners V. LLC

Investment Strategy:

Vintage Year: 2021

Management Fee: 1.5% on capital commitments of \$10 million or more; 1.75% on capital

commitments less than \$10 million

04/01/2021

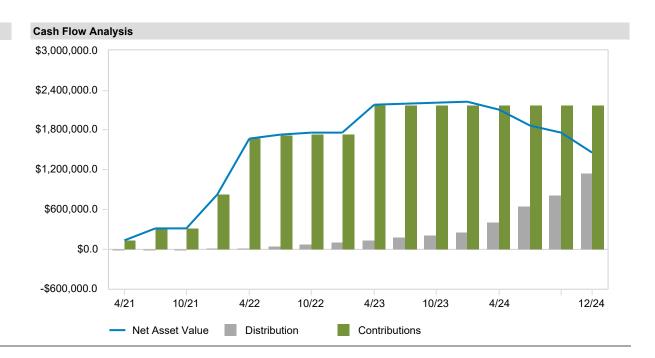
The investment strategy of each Series of the Fund will have a primary focus on private credit and specialty finance assets (which is expected to include real estate debt and other general

debt and debt-related investments) with short to intermediate-term durations and often contractual cash flows. The Managing Member's goal is to preserve invested capital, and generate returns that have a low correlation to traditional public markets (although there can be no assurances that this goal will be realized). The Fund will target middle market opportunities in real estate debt and other general debt and debt-related transactions (including REO properties, and preferred equity, that would include debt-like characteristics). The Fund generally will not invest in traditional leveraged common equity positions in real estate; however, the Fund may acquire REO and similar non-traditional properties and may also take incidental or pledged equity positions in connection with certain loans in order to obtain supplemental collateral to enhance the strength of the primary credit investment, and/or to expedite any requisite foreclosure process with such loan for the benefit of the Fund. The primary focus of private credit and specialty finance assets (including real estate debt and other general debt and debtrelated investments) will be to capitalize on gap, transitional, bridge, special situation and opportunistic financings that are time sensitive, complex, and that the Managing Member believes offer attractive risk-adjusted returns. Each Series of the Fund may also variously co-invest in opportunities originated by other investors where the overall investment opportunity is of the

Inception:

same or similar nature as the Series typically invests.

Cash Flow Summary	
Capital Committed:	\$1,000,000
Capital Invested:	\$2,166,648
Management Fees:	-
Expenses:	-
Interest:	-
Total Contributions:	\$2,166,648
Remaining Capital Commitment:	-\$1,166,648
Total Distributions:	\$1,152,047
Market Value:	\$1,464,003
Inception Date:	04/20/2021
Inception IRR:	8.1
TVPI:	1.2



Strategy Type:

Target IRR:

Type of Fund: Direct

Real Estate - Debt

7.5% cumulative but non-compounding annual rate of return on Capital

Contributio

General Partner: Bloomfield Capital Partners V. LLC

Investment Strategy:

Vintage Year: 2021 Management Fee:

1.5% on capital commitments of \$10 million or more; 1.75% on capital

commitments less than \$10 million

04/01/2021

The investment strategy of each Series of the Fund will have a primary focus on private credit and specialty finance assets (which is expected to include real estate debt and other general debt and debt-related investments) with short to intermediate-term durations and often contractual cash flows. The Managing Member's goal is to preserve invested capital, and generate returns that have a low correlation to traditional public markets (although there can be no assurances that this goal will be realized). The Fund will target middle market opportunities in real estate debt and other general debt and debt-related transactions (including REO properties, and preferred equity, that would include debt-like characteristics). The Fund generally will not invest in traditional leveraged common equity positions in real estate; however, the Fund may acquire REO and similar non-traditional properties and may also take incidental or pledged equity positions in connection with certain loans in order to obtain supplemental collateral to enhance the strength of the primary credit investment, and/or to expedite any requisite

Inception:

foreclosure process with such loan for the benefit of the Fund. The primary focus of private credit and specialty finance assets (including real estate debt and other general debt and debtrelated investments) will be to capitalize on gap, transitional, bridge, special situation and opportunistic financings that are time sensitive, complex, and that the Managing Member believes offer attractive risk-adjusted returns. Each Series of the Fund may also variously co-invest in opportunities originated by other investors where the overall investment opportunity is of the

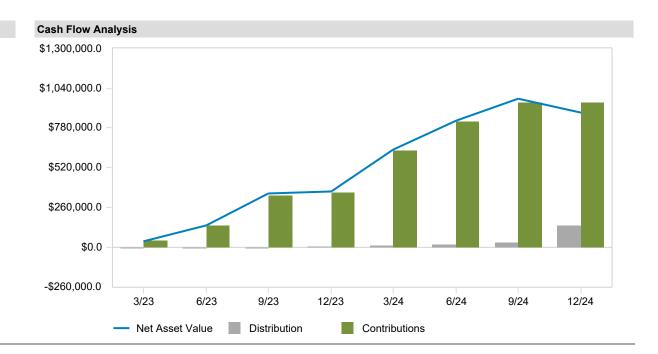
same or similar nature as the Series typically invests.

Cash Flow Summary

Capital Committed: \$1,000,000 Capital Invested: \$949,400 **Management Fees:** Expenses: Interest: **Total Contributions:** \$949,400 Remaining Capital Commitment: \$50,601

Total Distributions: \$141.943 Market Value: \$881.507

Inception Date: 03/31/2023 Inception IRR: 8.9 TVPI: 1.1



Target IRR:

Type of Fund: Value Add

Strategy Type: Debt

2025 Vintage Year:

> Management Fee: 1.75% on unlevered invested capital (commitments under \$10 million)/1.5% on

> > unlevered invested capital (commitments >= \$10 million)

Inception: 01/31/2025

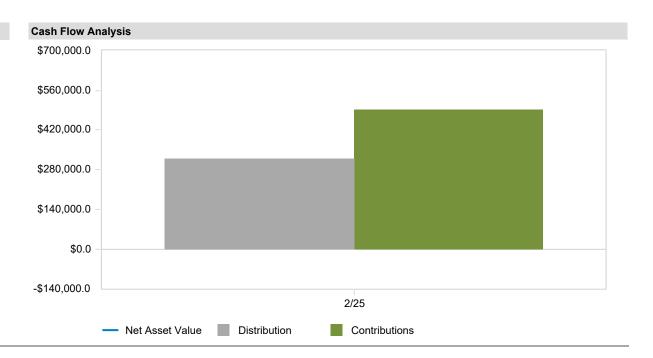
7.5% **General Partner:** Bloomfield Capital Partners V, LLC

Investment Strategy: BCIFV-D will have a primary focus on real estate private credit and specialty finance assets such as notes, loans, bonds, debentures, receivables, judgements, charge-offs, liens (including

tax liens), pledges, lines of credit, and unsecured loans with short to intermediate-term durations and often with contractual cash flows, BCIFV-D will seek to capitalize on opportunities that include i) the origination of real estate debt and other general debt and debt related securities and instruments that are typically characterized as gap, transitional or opportunistic financings requiring acute closing urgency due to discounted loan payoffs or opportunistic acquisitions, oftentimes involving value-add real estate opportunities, real estate owned properties, partnership buyouts, or balance sheet restructuring; ii) acquisitions of loans, notes, mortgages, deeds of trust, municipal bonds, commercial mortgage-backed securities, and other instruments secured by various types of commercial real estate or real estate-related assets; iii) secondary-market acquisitions of mixed private credit and specialty finance instruments such as notes, loans, bonds, debentures, receivables, judgements, charge-offs, liens, pledges, lines of credit, and unsecured loans; iv) other opportunistic and value-oriented real estate

debt and other general debt and debt-like one-off or platform investments that the general partner believes represents discrepancies from, or discounts to, intrinsic value.

Cash Flow Summary	
Capital Committed:	\$4,000,000
Capital Invested:	\$490,715
Management Fees:	-
Expenses:	-
Interest:	-
Total Contributions:	\$490,715
Remaining Capital Commitment:	\$3,509,285
Total Distributions:	\$318,380
Market Value:	\$171,962
Inception Date:	11/06/2024
Inception IRR:	-0.2
TVPI:	1.0



1% of committed capital per annum during investment period. 1% of unreturned

Fund Information

Target IRR:

Type of Fund: Other

Strategy Type: Real Estate

General Partner: MREP SCIF, LLC

8.00% Inception:

Investment Strategy: MREP SCIF is a closed-end commingled partnership focused on the acquisition of secondary interests in value add and opportunistic real estate private equity funds and direct co-

investments into properties. Metropolitan leverages our long standing relationships with underlying fund managers to source opportunities that match our target investment profile. This

Vintage Year:

Management Fee:

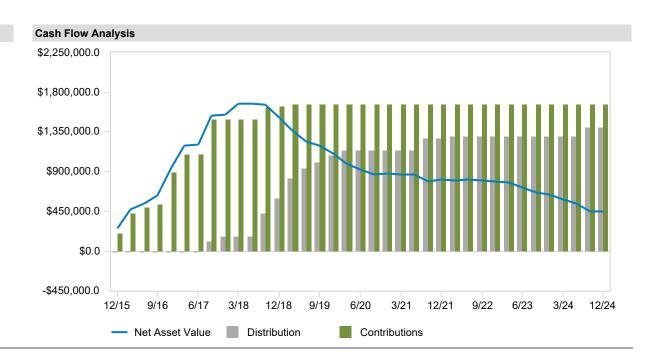
2014

07/30/2014

capital per annum therafter.

fund will predominantly invest in North America, Europe and Asia with the ability to invest a small amount of the committed capital in Latin America as well.

Cash Flow Summary	
Capital Committed:	\$2,000,000
Capital Invested:	\$1,661,691
Management Fees:	\$31,562
Expenses:	-
Interest:	-
Total Contributions:	\$1,661,691
Remaining Capital Commitment:	\$1,255,116
Total Distributions:	\$1,404,459
Market Value:	\$447,620
Inception Date:	12/30/2015
Inception IRR:	2.9
TVPI:	1 1



Type of Fund: Secondary

Vintage Year: 2016

Strategy Type: Secondaries Management Fee: Years 1 - 5 1.00% of Invested Capital Years 6+ 90% of prior years management

Target IRR: Inception: 07/01/2021

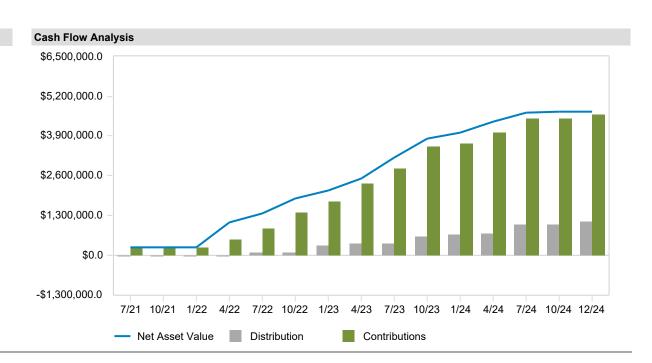
General Partner:

Investment Strategy: ASO II will employ an opportunistic approach at the smaller end of the secondary market. The ttarget fund size is \$250M and the team plans to invest in 15-25 transactions over a four-year

pperiod, equating to approximately 20-40 underlying fund interests and 150-250 companies. The fund will invest in a broad array of investment opportunities with a focus primarily on buyout, growth equity, and venture capital, but it will also consider other investment opportunities, including but not limited to, co-investment opportunities, fund restructurings and direct

secondaries.

Capital Committed:	\$5,000,000
Capital Invested:	\$4,513,233
Management Fees:	\$98,094
Expenses:	-
Interest:	-
Total Contributions:	\$4,611,326
Remaining Capital Commitment:	\$1,413,674
Total Distributions:	\$1,125,000
Market Value:	\$4,713,588
Inception Date:	07/23/2021
Inception IRR:	17.3
TVPI:	1.3



Cash Flow Summary

Type of Fund: Secondary Vintage Year: 2020

Strategy Type: Secondaries Management Fee: Investment Period: 1.25% per annum, based on the value of closed investments

Target IRR: 10%; incentive: 10% on net gains in excess of the 10% preferred return, payble o Inception: 12/31/2019

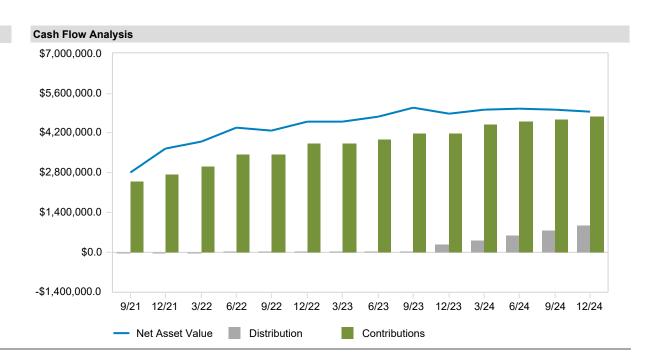
General Partner: PASF IV (GP), LLC

Investment Strategy: PASF IV seeks to create a diversified portfolio of (i) private equity limited partnership interests purchased on the secondary market and (ii) a limited number of direct private equity co-

investments that generate attractive risk adjusted returns. PA, through PASF IV, will leverage its extensive private markets experience, proprietary resources and long-standing industry relationships to source, underwrite and execute attractive secondary investments and co-investments. It is expected that the Fund will be diversified across vintage year, investment

strategy, industry, geography and fund sponsor.

Cash Flow Summary	
Capital Committed:	\$5,000,000
Capital Invested:	\$4,779,755
Management Fees:	-
Expenses:	-
Interest:	-
Total Contributions:	\$4,779,755
Remaining Capital Commitment:	\$744,657
Total Distributions:	\$966,141
Market Value:	\$4,941,673
Inception Date:	08/09/2021
Inception IRR:	8.7
TVPI:	1.2



Cash Flow Summary

Inception Date:

Inception IRR:

TVPI:

Type of Fund:SecondaryVintage Year:2021Strategy Type:SecondariesManagement Fee:1.25%Target IRR:7.00%Inception:12/03/2021

General Partner: SDPE III GP, LP

Investment Strategy: The investment strategy provides investors with attractive risk-adjusted returns through the construction of a highly diversified portfolio of secondary investments by participating in

segments of the secondary market deemed less competitive.

The primary focus is on the purchase of Fund-of-Funds and Secondary Funds ("Pooled Funds"). Each Pooled Fund typically owns diversified portfolios of underlying private equity funds. In addition, they pursue "Tail-End" transactions, which involves the purchase of private equity fund interests toward the end of their fund lives and close to their liquidation point. Pooled Funds and Tail-End transactions together comprise our Niche Fund transactions.

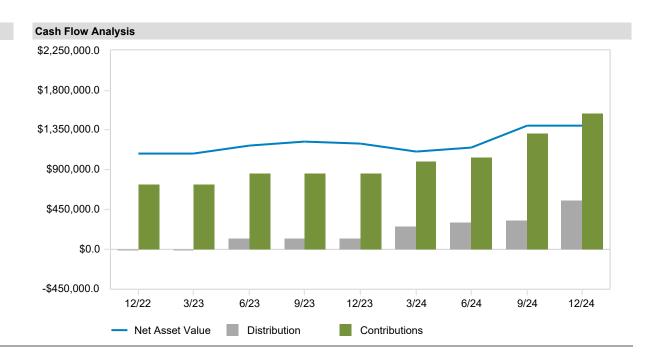
Management seeks to provide investors with a highly diversified private equity portfolio, acquired at a discount to Net Asset Value and expect the portfolio to be diversified across underlying funds, geographies, vintages, strategies, industries, and portfolio companies.

Capital Committed: \$2,000,000 Capital Invested: \$1,515,504 Management Fees: Expenses: \$18,866 Interest: Total Contributions: \$1,534,370 Remaining Capital Commitment: \$702,436 Total Distributions: \$552,590 Market Value: \$1,400,007

12/16/2022

23.9

1.2



Cash Flow Summary

Type of Fund: Partnership

Vintage Year: 2020

Strategy Type: Value-Add Real Estate Management Fee: 1.5% on Committed Capital During the Investment Period; 1.5% on Invested

Capital thereafter

Target IRR: 8.00% Inception: 01/01/2020

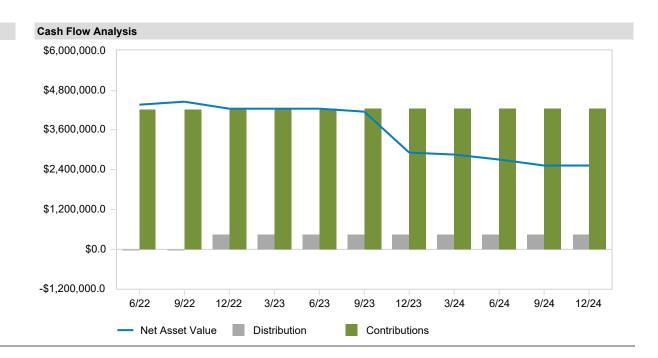
General Partner: TerraCap Partners GP V LLC

Investment Strategy: TerraCap Management, LLC considers thematic factors such as business formation, employment growth and population growth, corporate relocations, GDP growth and in migration on a

market-by-market basis, as most metros and submarkets have different economic-based industries and therefore move through their economic cycles differently. The Investment Manager makes moderate strategic overweighting or underweighting to markets, depending on the specific economic drivers influencing supply and demand. The Investment Manager intends to

invest the Fund's assets so that no economic industry base will be allowed to dominate any property or the portfolio's performance.

Cash Flow Summary	
Capital Committed:	\$4,000,000
Capital Invested:	\$4,000,000
Management Fees:	\$32,400
Expenses:	\$229,751
Interest:	-
Total Contributions:	\$4,262,151
Remaining Capital Commitment:	-\$229,751
Total Distributions:	\$441,216
Market Value:	\$2,522,977
Inception Date:	05/28/2022
Inception IRR:	-14.1
TVDI.	0.7
TVPI:	0.1



Total Fund Policy			
Allocation Mandate	Weight (%)	Allocation Mandate	Weight (%)
Jan-1990		Dec-2016	
S&P 500 Index	38.00	Russell 3000 Index	60.00
Russell 3000 Index	9.00	MSCI AC World ex USA (Net)	12.00
MSCI AC World ex USA	16.00	Blmbg. U.S. Aggregate Index	16.00
Bloomberg Intermediate US Govt/Credit ldx	14.00	NCREIF Fund Index-ODCE (EW) (Net)	10.00
Russell 2000 Index	13.00	90 Day U.S. Treasury Bill	2.00
NCREIF Fund Index-ODCE (VW)	5.00		
HFRI Macro (Total) Index	3.00	Jun-2019	
90 Day U.S. Treasury Bill	2.00	Russell 3000 Index	64.00
		MSCI AC World ex USA (Net)	8.00
Mar-2001		Blmbg. U.S. Aggregate Index	14.00
S&P 500 Index	38.00	NCREIF Fund Index-ODCE (EW) (Net)	12.00
Russell 3000 Index	9.00	90 Day U.S. Treasury Bill	2.00
MSCI AC World ex USA (Net)	16.00	0-4 2024	
Bloomberg Intermediate US Govt/Credit Idx	14.00	Oct-2021	04.00
Russell 2000 Index	13.00	Russell 3000 Index	64.00
NCREIF Fund Index-ODCE (VW)	5.00	MSCI AC World ex USA (Net)	8.00
HFRI Macro (Total) Index	3.00	Bloomberg Intermediate US Govt/Credit Idx	14.00
90 Day U.S. Treasury Bill	2.00	NCREIF Fund Index-ODCE (EW) (Net)	7.00 5.00
11 2042		Russell 2000 Index	
Jul-2013	40.00	90 Day U.S. Treasury Bill	2.00
Russell 1000 Index	42.00	Dec-2022	
MSCI AC World ex USA (Net)	17.00	Russell 3000 Index	64.00
Bloomberg Intermediate US Govt/Credit Idx	12.00	MSCI AC World ex USA (Net)	8.00
Russell 2000 Index	15.00	Bloomberg Intermediate US Govt/Credit Idx	6.00
NCREIF Fund Index-ODCE (EW) (Net)	10.00	NCREIF Fund Index-ODCE (EW) (Net)	10.00
HFRI Macro (Total) Index	2.00	Russell 2000 Index	10.00
90 Day U.S. Treasury Bill	2.00	90 Day U.S. Treasury Bill	2.00
Jan-2015		oo bay o.o. Hoddary biii	2.00
Russell 1000 Index	44.00		
MSCI AC World ex USA (Net)	15.00		
Bloomberg Intermediate US Govt/Credit Idx	12.00		
Russell 2000 Index	15.00		
NCREIF Fund Index-ODCE (EW) (Net)	10.00		
HFRI Macro (Total) Index	2.00		
90 Day U.S. Treasury Bill	2.00		

Total Domestic Equity Policy		
Allocation Mandate	Weight (%)	
Jan-1979		
Russell 3000 Index	100.00	
Jul-2013		
Russell 1000 Index	74.00	
Russell 2000 Index	26.00	
Jan-2015		
Russell 1000 Index	75.00	
Russell 2000 Index	25.00	
Jun-2019		
Russell 3000 Index	100.00	

Total International Equity Policy		
Allocation Mandate	Weight (%)	
Jan-1988 MSCI AC World ex USA	100.00	
Mar-2001 MSCI AC World ex USA (Net)	100.00	

Total Fixed Income Policy	
Allocation Mandate	Weight (%)
Jan-1973	
Bloomberg Intermediate US Govt/Credit Idx	100.00
Dec-2016	
Blmbg. U.S. Aggregate Index	100.00
Jun-2019	
Bloomberg Intermediate US Govt/Credit Idx	100.00

Total Real Estate Policy	
Allocation Mandate	Weight (%)
Jan-1978	
NCREIF Fund Index-ODCE (VW)	100.00

Total Hedge Fund Policy		
Allocation Mandate	Weight (%)	
Jan-1990		
HFRI Macro (Total) Index	100.00	

	Estimated Annual Fee	Market Value (\$)	Estimated Annual Fee	Fee Schedule
Total Domestic Equity Composite	(%) 0.26	101,344,634	(\$) 259,083	
Fidelity Lrg Cap Gro Idx (FSPGX)	0.04	26,460,509	9,261	0.04 % of Assets
PNC Large Cap Value	0.30	11,713,275	35,140	0.30 % of Assets
Newsouth Capital All Cap Value	0.75	9,452,547	70,894	0.75 % of Assets
Fidelity Mid Cap Index (FSMDX)	0.03	17,186,729	4,297	0.03 % of Assets
Brandywine Large Cap Value	0.44	12,490,223	54,961	0.45 % of First \$10 M 0.40 % of Next \$15 M 0.38 % of Next \$25 M 0.35 % of Next \$50 M 0.30 % Thereafter
Champlain Small Company (CIPNX)	0.99	2,978,075	29,483	0.99 % of Assets
Federated MDT Small Cap Core (QISCX)	0.89	5,930,083	52,778	0.89 % of Assets
Fidelity 500 Index Institutional (FXAIX)	0.02	15,133,193	2,270	0.02 % of Assets
Total International/Global Equity	0.85	7,198,792	61,190	
WCM Focused Int'l Growth Fund LP	0.85	7,198,792	61,190	0.85 % of Assets
Total Fixed Income Composite	0.62	8,463,422	52,706	
PNC Core Fixed Income	0.20	5,612,119	11,224	0.20 % of Assets
PNC High Yield Fixed Income (PIHBX)	0.75	171,655	1,287	0.75 % of Assets
Total Real Estate Composite	1.10	11,158,988	122,852	
Metropolitan Real Estate Partners Secondaries & Co-Investments Fund, L.P.	1.00	447,620	4,476	1.00 % of Assets
American Strategic Value Realty	1.10	2,649,452	29,144	1.10 % of First \$25 M 0.95 % of Next \$50 M 0.85 % Thereafter
TA Realty Core Property Fund LP	0.70	5,538,940	38,773	0.70 % of Assets
Terracap Partners V LP	2.00	2,522,977	50,460	2.00 % of First \$10 M 1.75 % of Next \$10 M 1.50 % Thereafter
Bloomfield Capital Income Fund V Series - A	1.50	162,177	2,433	1.50 % of Assets
Bloomfield Capital Income Fund V Series - B	1.50	1,464,003	21,960	1.50 % of Assets
Bloomfield Capital Income Fund V Series - C	1.50	881,507	13,223	1.50 % of Assets
Bloomfield Capital Income Fund V Series - D	1.50	171,962	2,579	1.50 % of Assets

Fee information on this page is an illustrative estimate of management fees based on current reported portfolio values. Fee estimates do not reflect actual calculation methodologies or applicable carried interest.

Taylor Police & Fire Retirement System Fee Analysis As of December 31, 2024

	Estimated Annual Fee (%)	Market Value (\$)	Estimated Annual Fee (\$)	Fee Schedule
Total Private Equity Composite	1.14	11,055,268	126,407	
Abbott Secondary Opportunites II LP	1.00	4,713,588	47,136	1.00 % of Assets
Portfolio Advisors Secondary Fund IV	1.25	4,941,673	61,771	1.25 % of Assets
Sturbridge Diversified III	1.25	1,400,007	17,500	1.25 % of Assets
Total Cash Composite		7,269,416	-	
Cash Account		6,947,310	-	
Cash Account from Commingled Fund		322,106	-	
Total Fund Composite	0.42	146,490,521	622,239	

Fee information on this page is an illustrative estimate of management fees based on current reported portfolio values. Fee estimates do not reflect actual calculation methodologies or applicable carried interest.

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.

Mariner Institutional compiled this report for the sole use of the client for which it was prepared. Mariner Institutional 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. Mariner Institutional uses the results from this evaluation to make observations and recommendations to the client.

Mariner Institutional 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. Mariner Institutional analyzes transactions as indicated on the custodian statements and reviews the custodial market values of the portfolio. As a result, this provides Mariner Institutional with a reasonable basis that the investment information presented is free from material misstatement. This methodology of evaluating and measuring performance provides Mariner Institutional with a practical foundation for our observations and recommendations. Nothing came to our attention that would cause Mariner Institutional to believe that the information presented is significantly misstated.

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

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

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

This document may contain data provided by Bloomberg.

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

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

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

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

*IMPORTANT DISCLOSURE INFORMATION RE GREENWICH QUALITY LEADER AWARD

These ratings are not indicative of Mariner Institutional's future performance. These awards or any other rankings and/or recognition by unaffiliated rating services and/or publications should not be construed as a guarantee that a client will experience a certain level of results or satisfaction if they invest with Mariner Institutional, nor should it be construed as a current or past endorsement by any of our clients. Mariner Institutional did not pay a fee to participate in this award survey.

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

MARINER

Access to a wealth of knowledge and solutions.