

September 30, 2019

Pennsylvania SERS



Investment Measurement Service
Quarterly Review

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The Four Most Dangerous Words

ECONOMY

2 "This time, it's different" has been trotted out near the peak of most cycles as justification for why the expansion can continue, at a time when imbalances typically push measures of economic soundness to their limits. This time, however, it may really be different.

Steady Returns Amid Equities Rebound

INSTITUTIONAL INVESTORS

4 Corporate plans gained the most among plan types over the one-year period ending in the third quarter. Nonprofits trailed all fund types. Over the last 20 years, returns for investor types ranged from 6.2%-6.3%, outpacing the 6.1% return of a stocks-bonds benchmark.

U.S. Stocks Mixed; Global Markets Fall

EQUITY

6 U.S. equity markets posted mixed results amid historic lows for 30-year Treasury yields and a historic factor rotation. Global equity markets turned negative after modest but positive results in the second quarter, buffeted by geopolitical turmoil.

After Two Rate Cuts, Yields Fall Globally

FIXED INCOME

8 The Federal Open Market Committee cut short-term interest rates by 25 basis points twice in the third quarter. Yields fell in the U.S. and abroad given global growth headwinds. U.S. fixed income saw mostly positive returns; non-U.S. returns were mixed.

Real Estate Solid; Real Assets Down

REAL ESTATE/REAL ASSETS

10 U.S. core real estate returns continue to be driven by income, with limited appreciation this late in the cycle. Global REITs gained 4.6% in the third quarter; U.S. REITs advanced 7.8%. Most real assets, with the notable exception of gold, finished the quarter lower.

A Bountiful but Smaller Harvest

PRIVATE EQUITY

12 Most private equity activity measures were down in the third quarter. So far this year, all private equity liquidity measures that Callan tracks moderated. High prices, perceived slowing of global economic growth, and spooky geopolitical events dampened activity so far this year.

Hedge Funds Flat; MACs Struggle

HEDGE FUNDS/MACs

13 Equity market churn, while Treasury yields fell further, had a mixed effect across hedge funds, leaving the broad hedge fund universe flat. Multi-asset class (MAC) performance varied depending on net market exposures, but was mostly flat or down.

Returns Moderate for Callan DC Index

DEFINED CONTRIBUTION

15 The Callan DC Index™ rose 3.3% in the second quarter compared to 9.6% in the first quarter. The Age 45 Target Date Fund gained 3.5%, largely due to its higher equity allocation. The Index's growth in balances returned to a normal level after a big gain in the first quarter.

Broad Market Quarterly Returns

U.S. Equity
Russell 3000



1.2%

Non-U.S. Equity
MSCI ACWI ex USA



-1.8%

U.S. Fixed Income
Bloomberg Barclays Agg



2.3%

Non-U.S. Fixed Income
Bloomberg Barclays Gbl ex US



-0.6%

Sources: Bloomberg Barclays, FTSE Russell, MSCI

The Four Most Dangerous Words (This Time, It's Different...)

ECONOMY | Jay Kloepfer

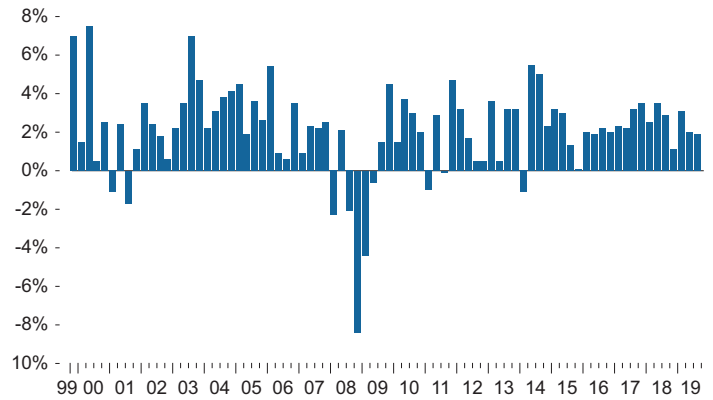
Third quarter U.S. GDP growth surprised on the upside, coming in at 1.9% and extending what is now the longest economic expansion on record to 124 months. While 1.9% sounds modest compared to past cycles, it is positively robust compared to developed economies around the globe. The U.S. economy, and to an extent the entire global economy, has defied fears of an imminent collapse all year. While the current expansion may appear long in the tooth, elapsed time is not an economic variable. This expansion has been far weaker than each of the past 10, whether measured by cumulative GDP growth (at just under 25%, it's about half that of the 1990s), by job creation, or by investment. The overhang of the housing market collapse has weighed heavily on growth since 2009, and the measured pace of growth has in fact enabled the U.S. economy to maintain a slow burn.

Several long-held tenets of fundamental macroeconomics appear to be under serious re-consideration after the extraordinary 10-year period following the Global Financial Crisis: the cause (and the absence) of inflation; the execution of monetary policy; the role of central banks and in particular the pivot by the Federal Reserve at the start of 2019; and the business cycle. The new macroeconomic narrative says that first, the business cycle as we know it has been disrupted; second, the source and volatility of inflation has been altered going forward; third, central banks have added sustaining economic expansion to their official remit, therefore the quantitative easing (QE) genie is out of the bottle and we will not be stuffing it back in anytime soon. All of these changes to the macro world are interrelated, one sustaining the other, and are potentially pointing to a different path for the U.S. and global economy than would be expected, given past accepted relationships between inflation, monetary policy, and the business cycle.

"This time, it's different" has been trotted out near the peak of most cycles to justify why the expansion can continue, at a time when imbalances typically push measures of economic soundness to their limits. This time, however, it may really be different.

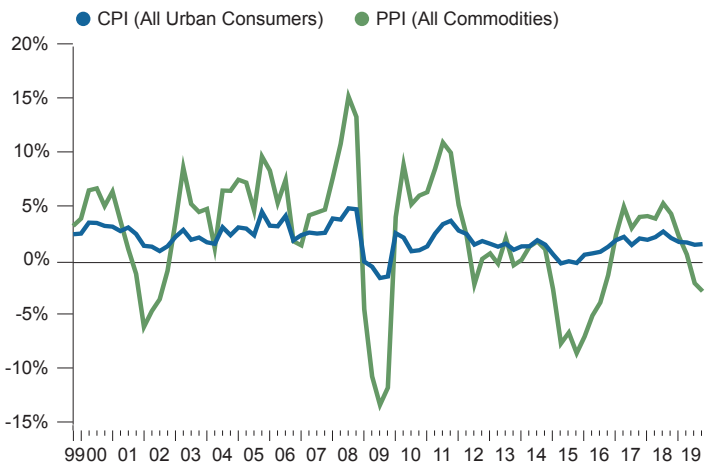
Quarterly Real GDP Growth

(20 Years)



Source: Bureau of Economic Analysis

Inflation Year-Over-Year



Source: Bureau of Labor Statistics

In the words of many analysts, the Fed rate hike in December 2018 may have been the end of an era. The Fed's standard operating procedure until now has been to tighten preemptively before inflation takes off, and following the extraordinary period of zero interest rate policy, the Fed's goal had been to normalize rates while inflation was low. The Fed pivot in January to pause on rate hikes, and then to implement two cuts in the third quarter while the expansion continues, indicates that preemptive tightening and rate normalization are over, and we may not see them again. The macro world as we know it may have changed.

The headlines of impending doom that have dominated 2019 make the coming recession, if it ever materializes, the most anticipated slowdown ever. The economic result so far in 2019 is that the U.S. economy has shrugged off slowing global growth, a prolonged trade war with China, and geopolitical uncertainty in the euro zone due to Brexit—and continued to steam along. The job market remains strong, and the unemployment rate is at a generational low of 3.6%. U.S. economic growth is clearly moderating, but the expected plunge has yet to materialize, in part because of the lack of obvious imbalances, and in part because of the relatively insular nature of the U.S. economy. The trade war with China is top of the news, yet the cumulative impact on GDP growth since 2018 is less than 1%, as estimated by Capital Economics. The rest of the world has clearly slowed, and global GDP growth looks ready to fall to its weakest pace (near 2% next year) since 2012.

The source of inflation has shifted from the goods and commodities sectors to the service sector. Goods and commodities have shown substantial variability, with the attendant impact on the business cycle and on prices. The service sector shows much more subdued cyclical, and as a result both the business cycle and inflation may become irrevocably less volatile, with the boom and bust of past cycles no longer the expectation. Headline inflation came in at a 1.7% annual rate in the third quarter, still well below the Fed's target of 2%, and producer price inflation in particular went negative during 2019, dragged down by commodity and goods prices. The persistence of low inflation in the face of continued expansion and a decade of accommodative monetary policy is one factor giving the Fed cover to cut rates while growth continues.

The Long-Term View

Index	2019 3rd Qtr	Periods ended Dec. 31, 2018			
		Year	5 Yrs	10 Yrs	25 Yrs
U.S. Equity					
Russell 3000	1.2	-5.2	7.9	13.2	9.0
S&P 500	1.7	-4.4	8.5	13.1	9.1
Russell 2000	-2.4	-11.0	4.4	12.0	8.3
Non-U.S. Equity					
MSCI EAFE	-1.1	-13.8	0.5	6.3	4.6
MSCI ACWI ex USA	-1.8	-14.2	0.7	6.6	--
MSCI Emerging Markets	-4.2	-14.6	1.6	8.0	--
MSCI ACWI ex USA Small Cap	-1.2	-18.2	2.0	10.0	--
Fixed Income					
Bloomberg Barclays Agg	2.3	0.0	2.5	3.5	5.1
90-Day T-Bill	0.6	1.9	0.6	0.4	2.5
Bloomberg Barclays Long G/C	6.6	-4.7	5.4	5.9	6.8
Bloomberg Barclays GI Agg ex US	-0.6	-2.1	0.0	1.7	4.4
Real Estate					
NCREIF Property	1.4	6.7	9.3	7.5	9.3
FTSE Nareit Equity	7.8	-4.6	7.9	12.1	9.8
Alternatives					
CS Hedge Fund	0.3	-3.2	1.7	5.1	7.3
Cambridge PE*	4.3	10.6	11.9	13.8	15.2
Bloomberg Commodity	-1.8	-11.2	-8.8	-3.8	2.0
Gold Spot Price	4.2	-2.1	1.3	3.8	4.9
Inflation – CPI-U	0.2	1.9	1.5	1.8	2.2

*Data for most recent period lags by a quarter. Data as of June 30, 2019.
Sources: Bloomberg, Bloomberg Barclays, Bureau of Economic Analysis, Credit Suisse, FTSE Russell, MSCI, NCREIF, Standard & Poor's, Refinitiv/Cambridge

Recent Quarterly Economic Indicators

	3Q19	2Q19	1Q19	4Q18	3Q18	2Q18	1Q18	4Q17
Employment Cost–Total Compensation Growth	2.8%	2.7%	2.8%	2.9%	2.8%	2.8%	2.7%	2.6%
Nonfarm Business–Productivity Growth	-0.1%*	2.3%	3.5%	0.1%	1.2%	1.8%	0.9%	0.9%
GDP Growth	1.9%	2.0%	3.1%	1.1%	2.9%	3.5%	2.5%	3.5%
Manufacturing Capacity Utilization	75.5%	75.5%	76.4%	77.0%	76.9%	76.4%	76.1%	75.8%
Consumer Sentiment Index (1966=100)	93.8	98.4	94.5	98.2	98.1	98.3	98.9	98.4

Sources: Bureau of Economic Analysis, Bureau of Labor Statistics, Federal Reserve, IHS Economics, Reuters/University of Michigan

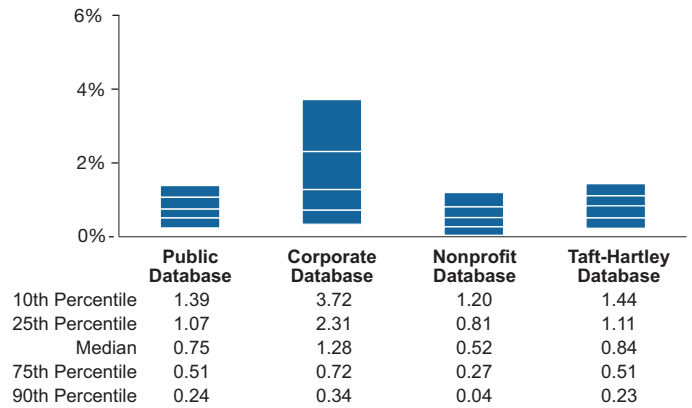
* Estimated figure provided by IHS Markit

Steady Returns Continue Amid Equities Rebound

INSTITUTIONAL INVESTORS

- A quarterly rebalanced 60% S&P 500/40% Bloomberg Barclays Aggregate portfolio returned 7.1% over the one year ended September 30, 2019. All broad institutional investor groups underperformed this benchmark.
- Both U.S. and non-U.S. equity markets continued their rebound in the third quarter after dropping during 2018. Non-U.S. equity underperformed relative to U.S. equity during 2018 and so far this year.
- Corporate plans gained the most among plan types over the one-year period, followed by public defined benefit (DB) plans. Nonprofits trailed all fund types. Over longer periods, Taft-Hartley plans have tended to perform best, but the range of returns for all institutional investor types tended to be in a narrow range; for instance, over the last 10 years, returns for all investor types ranged from 7.9%-8.4%.
- As the expansion continues, investors are discussing how long it can go on, and the fear of missing out is fading the longer the bull market runs. Investors are also addressing how the reversal in Fed policy changes the landscape, as it and other central banks take on the added role of sustaining the expansion. In addition, investors are examining what current yields portend for capital market assumptions.

Quarterly Returns, Callan Database Groups



Source: Callan

- Public DB plans are focused on returns from private markets, but face mounting pressure to control costs. One approach they have adopted is a barbelled pursuit of active management in private markets and alternatives, and all passive in equity, more passive in fixed, and cheaper liquid alternatives with “passive” exposures to betas and factors.

Callan Database Median and Index Returns* for Periods ended September 30, 2019

Database Group	Quarter	Year-to-date	Year	3 Years	5 Years	10 Years
Public Database	0.75	12.03	4.17	7.80	6.39	8.10
Corporate Database	1.28	14.11	6.39	7.78	6.51	8.17
Nonprofit Database	0.52	12.59	3.63	7.88	5.98	7.94
Taft-Hartley Database	0.84	11.92	3.88	8.03	6.91	8.40
All Institutional Investors	0.77	12.62	4.19	7.88	6.39	8.18
Large (>\$1 billion)	0.88	11.86	4.57	8.11	6.63	8.43
Medium (\$100mm - \$1bn)	0.83	12.54	4.25	7.91	6.46	8.17
Small (<\$100 million)	0.70	12.87	4.00	7.72	6.19	7.95

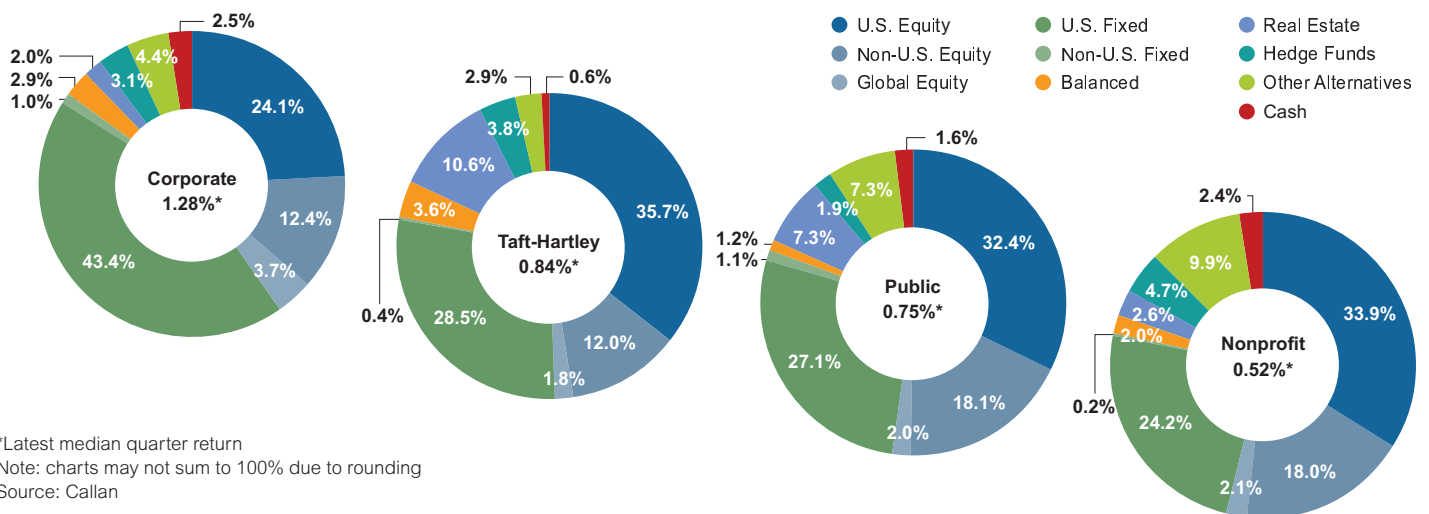
*Returns less than one year are not annualized.

Source: Callan. Callan's database includes the following groups: public defined benefit, corporate defined benefit, nonprofits, and Taft-Hartley plans. Approximately 10% to 15% of the database constituents are Callan's clients. All database group returns presented gross of fees. Past performance is no guarantee of future results. Reference to or inclusion in this report of any product, service, or entity should not be construed as a recommendation, approval, affiliation, or endorsement of such product, service, or entity by Callan.

- All investor types are considering lower equity exposures. They are also reevaluating the purpose and implementation of:
 - Real assets
 - Hedge funds and liquid alternatives
 - Fixed income
 - Equity
- For public DB plans, return enhancement is the most important issue. Alternative assets such as private equity and private real estate continue to draw interest from investors. Some plans appear to be rethinking their approach to passive investments and holding off increasing their allocation to them. Plans continue to express interest in reducing their allocations to U.S. equity.
- Corporate DB plans are most focused on risk control. Many are looking to decrease their equity allocation, with nearly the same number considering increases to fixed income. The percentage of corporate DB plans continuing to implement the process of de-risking has increased significantly over the last four years.
- For DC plans, fees remain top of mind. Retirement income options are also getting attention.
- Enhancing returns is the biggest concern for nonprofits, as they seek to meet spending needs and grow the corpus over

- time. Among all investor types, nonprofits historically have implemented or considered an outsourced chief investment officer (OCIO) at a higher rate than other types of institutional investors, and that trend continued this quarter.
- As part of their efforts to increase returns to meet plan targets, investors are evaluating how to implement private market allocations, and whether it is feasible to create a customized program implementation.
- For instance, public DB plans are expressing interest in multi-asset class (MAC) strategies. However, that interest is not widely shared. Corporate DB plans and nonprofits do not seem to be interested in increasing their exposure to MACs, and in fact corporate DB plans are increasingly expressing a desire to reduce their MAC allocations. Nonprofits showed a similar shift in sentiment.
- Private real estate and private equity have been staples of many investors’ portfolios, and they continue to express interest in increasing their allocations to these asset classes. Investors, most notably nonprofits, are also beginning to indicate growing interest in increasing allocations to private credit.
- Fund liquidity may be a concern that prevents some investors from adding to illiquid investments.
- Despite the interest in alternatives, some plans are terminating their hedge fund exposures.

Average Asset Allocation, Callan Database Groups



Equity

U.S. Equities

U.S. equities posted mixed results amid a market that saw 30-year Treasury yields hit historic lows and the most meaningful, albeit short-lived, factor rotation among stocks since the Global Financial Crisis (GFC). Large cap (+1.4%) and mid cap stocks (+0.5%) posted modest gains for the quarter while small caps declined (Russell 2000: -2.4%). Ongoing U.S.-China trade tension, earnings and interest rate uncertainty, and the global political landscape continued to drive investor uncertainty.

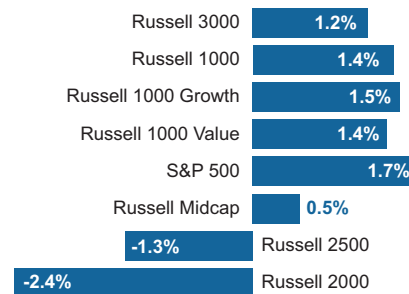
Large Cap ► S&P 500: +1.7% | Russell 1000: +1.4%

- Top sectors were in defensive areas including Utilities (+9.3%), Real Estate (+7.7%), and Consumer Staples (+6.1%) in response to investors' continued flight to quality.
- Energy, hurt by falling oil prices, fell 6.3%; Health Care lagged (-2.2%) amid discussions around price transparency and pricing reform by U.S. presidential candidates.
- Cyclical sector exposure has been volatile given uncertainty around the trade deal (and continued sideways movement of markets) along with slowed global growth.
- Up to September, momentum stocks (which have shifted to include many of the market's least volatile stocks) outperformed as investors shunned the cheapest quintile of value (and more volatile) stocks. This trend sharply reversed in early September as the 10-year Treasury yield rose from 1.46% to 1.73% and momentum stocks fell precipitously while value stocks traded up over the course of two days. The magnitude of the reversal gave a boost to value stocks across market capitalizations for the quarter.

Growth vs. Value ► Russell 1000 Value: +1.4%, Russell 1000 Growth: +1.5% | Russell 2000 Value: -0.6%, Russell 2000 Growth: -4.2%

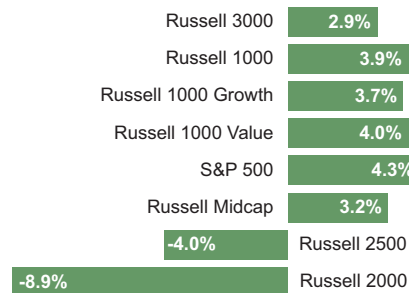
- While value continues to trail growth year-to-date, it gained ground during September's factor reversal, finishing the quarter essentially in line with growth within large caps.

U.S. Equity: Quarterly Returns



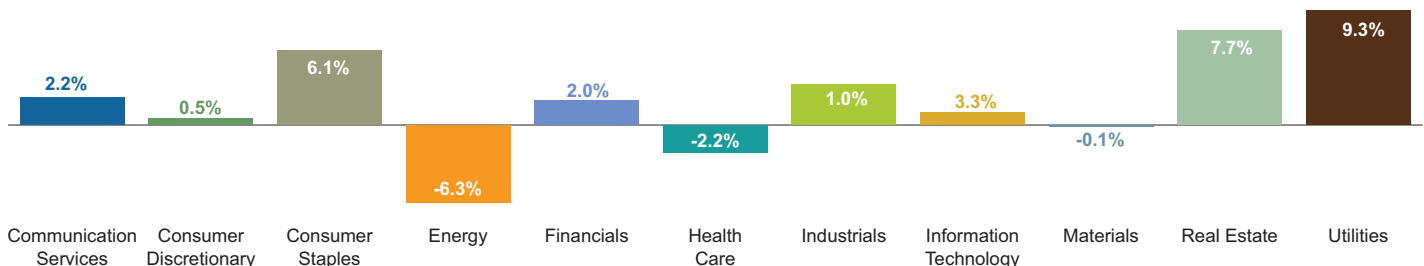
Sources: FTSE Russell and Standard & Poor's

U.S. Equity: One-Year Returns



Sources: FTSE Russell and Standard & Poor's

Quarterly Performance of Industry Sectors



Source: Standard & Poor's

- Within small cap, value benefited as investors favored the cheapest 20% of small caps while the most expensive quintile within the Russell 2000 declined double digits.

Non-U.S./Global Equities

Global equity markets turned negative in the third quarter. After more modest positive results in the second quarter, fears over continued trade war impacts, a no-deal Brexit, and a potential global slowdown impacted investor behavior. Given this backdrop, more defensive areas of the market outperformed.

Developed ► *MSCI EAFE: -1.1% | MSCI World ex USA: -0.9% | MSCI ACWI ex USA: -1.8% | MSCI Hong Kong: -11.9% | MSCI Japan: +3.1%*

- Boris Johnson's attempted suspension of Parliament and no-deal Brexit proclamations weighed on U.K. stocks (-2.5%).
- Germany (-4.0%) experienced recession fears; industrial production dropped 1.5% in June from the prior month, while the estimate was -0.5%.
- Hong Kong protests proved to be a headwind as its market fell 11.9% over the three-month period.
- Japan (+3.1%) was one of the few bright spots within developed markets as low short-term interest rates remain unchanged and a resolution to the Japan/South Korea trade war looked more promising.
- Cyclical sectors trailed as investors were positioned defensively; Energy (-6.5%) had the worst performance.
- For the quarter, factor performance reflected cautious investor behavior as quality and low volatility did well. However, the month of September saw a brief recovery in value across all markets as trade talks improved and central banks eased.

Emerging Markets ► *MSCI Emerging Markets Index: -4.2%*

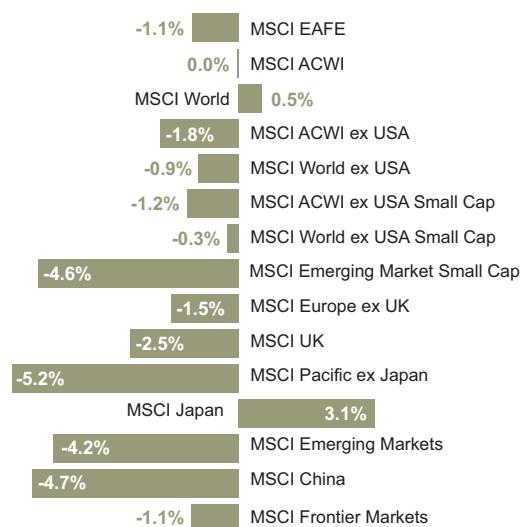
- Emerging markets fared worst among global markets; uncertainty weighed heavily on these volatile countries.
- Though most emerging market countries fell during the quarter, Turkey (+11.7%) had strong results as its central bank cut rates two times in less than two months.
- Factor performance in emerging markets favored quality and price momentum as investors moved toward safe assets.

Non-U.S. Small Cap ► *MSCI World ex USA Small Cap: -0.3% | MSCI EM Small Cap: -4.6%*

- Small cap marginally outperformed large cap, both in developed and all country ex-U.S. markets; despite overall defensive posturing, idiosyncratic businesses pushed past global market issues.
- Japan (+4.0%) helped drive developed returns as small cap companies also benefited from low rates and resolved trade tensions; Hong Kong (-7.6%) detracted as local businesses were hurt by the protests.

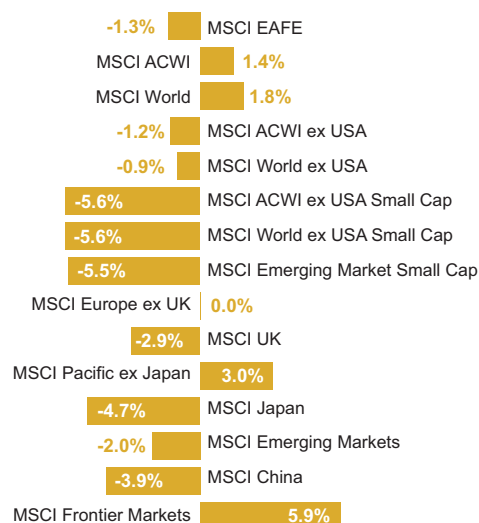
Non-U.S. Equity: Quarterly Returns

(U.S. Dollar)



Non-U.S. Equity: One-Year Returns

(U.S. Dollar)



Source: MSCI

Fixed Income

The Federal Open Market Committee (FOMC) cut short-term interest rates by 25 basis points twice in the third quarter amid an economic backdrop that has been supported by strong consumer spending and a solid labor market, but challenged by weakening manufacturing data and business investment. The Fed chair stated that the FOMC would act as “appropriate to sustain the expansion,” and the European Central Bank and other central banks around the world also moved in the direction of easing monetary policy. Yields fell in the U.S. and abroad given global growth headwinds fueled by mounting trade tensions as well as geopolitical uncertainty.

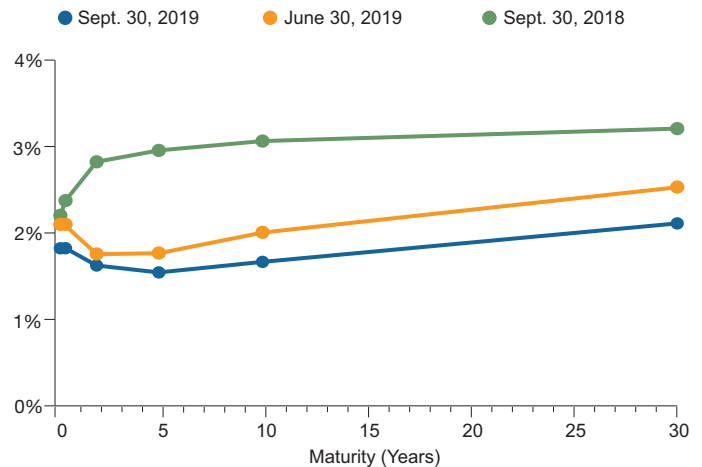
Core Fixed Income ► *Bloomberg Barclays US Agg: +2.3%*

- Treasuries returned 2.4% as rates fell across the yield curve.
- While the widely monitored 2- and 10-year key rates remained positive, the spread between the 3-month and 10-year key rates remained inverted.
- Long Treasuries soared (+7.9%) as 30-year yields fell roughly 40 bps.
- Nominal Treasuries outperformed TIPS as inflation expectations continued to fall; 10-year breakeven spreads were 1.53% as of quarter-end, down from 1.69% as of June 30. The 10-year real yield dipped briefly into negative territory in early September.

Investment-Grade Corporates ► *Bloomberg Barclays Corporate (Inv. Grade): +3.1%*

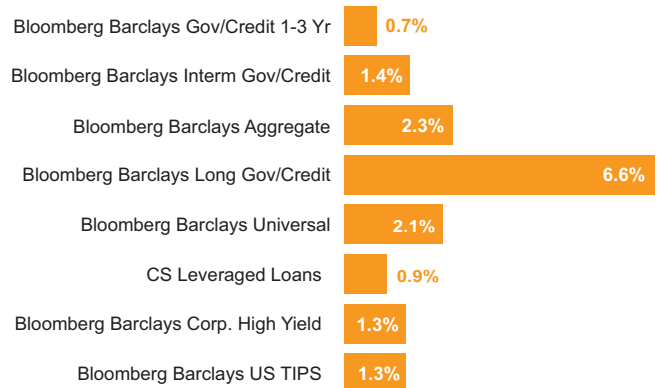
- Investment grade corporate credit spreads were range-bound, but their yield advantage was enough to generate positive excess returns versus like-duration Treasuries.
- Issuance in the corporate bond market was \$320 billion in the quarter, \$50 billion higher than a year ago; demand remained solid. BBB-rated corporates (+3.1%) modestly outperformed A-rated or higher corporates (+3.0%).

U.S. Treasury Yield Curves



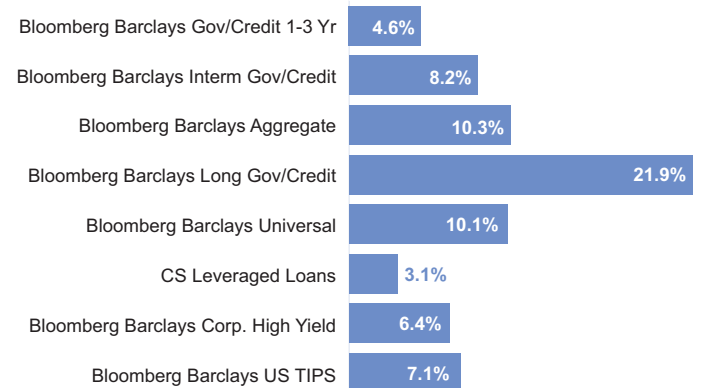
Source: Bloomberg

U.S. Fixed Income: Quarterly Returns



Sources: Bloomberg Barclays and Credit Suisse

U.S. Fixed Income: One-Year Returns



Sources: Bloomberg Barclays and Credit Suisse

FIXED INCOME (Continued)

High Yield ► *Bloomberg Barclays Corporate HY: +1.3%*

- BB-rated corporates (+2.0%) outperformed CCC-rated corporates (-1.8%). BB- and B-rated spreads narrowed slightly, but the rally in rates helped drive outperformance as a result of higher quality bonds' greater sensitivity to interest rate movements.
- CCC-rated bond spreads widened significantly, representing some concern about deteriorating quality at the lower-end of the spectrum.

Leveraged Loans ► *CS Leveraged Loans: +0.9%*

- Bank loans, which have floating rate coupons, underperformed high yield bonds as rates rallied and investors worried about deteriorating credit quality.
- CLO issuance continued to exceed expectations, providing positive technical support to the leveraged loan market.

Non-U.S. Fixed Income

Global Fixed Income ► *Bloomberg Barclays Global Aggregate (unhedged): +0.7% | (hedged): +2.6%*

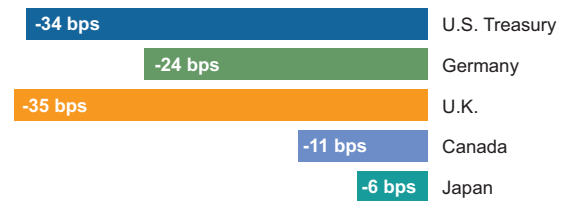
- Developed market sovereign bond yields rallied, pushing European sovereigns further into negative territory as the ECB reduced its deposit rate and announced a new bond purchasing stimulus program.
- Negative yielding debt totals nearly \$17 trillion, a record high.
- The U.S. dollar was up 3.4% versus a basket of trade partner currencies and up 4.3% versus the beleaguered euro.

Emerging Market Debt (\$US) ► *JPM EMBI Global Diversified: +1.5% | (Local currency) ► JPM GBI-EM Global Diversified: -0.8%*

- Broadly, emerging market currencies depreciated versus the U.S. dollar, hampering local currency returns.
- Within the dollar-denominated benchmark, Argentina (-42%) and Venezuela (-51%) were among the few to post negative returns. Conversely, returns in the local debt benchmark were more mixed with Turkey (+19%) and Argentina (-60%) being outliers.

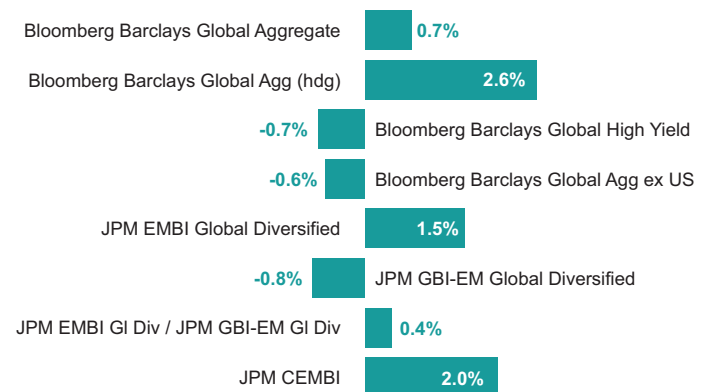
Change in 10-Year Global Government Bond Yields

2Q19 to 3Q19



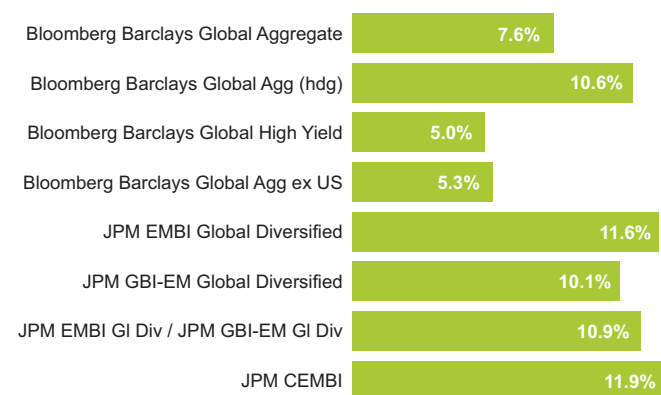
Source: Bloomberg Barclays

Non-U.S. Fixed Income: Quarterly Returns



Sources: Bloomberg Barclays and JPMorgan Chase

Non-U.S. Fixed Income: One-Year Returns



Sources: Bloomberg Barclays and JPMorgan Chase

Real Estate Stays Solid; Real Assets Mostly Down

REAL ESTATE/REAL ASSETS | Munir Iman and Kristin Bradbury

U.S. Real Estate

Real Estate Returns Continue to Moderate

- U.S. core real estate returns continue to be driven by income, with limited appreciation this late in the cycle.
- Returns are coming from net operating income (NOI) growth rather than further cap rate compression.
- Industrial continues to outperform other property types.
- Retail showing signs of depreciation

U.S. Real Estate Fundamentals Remain Healthy

- Steady returns continued, driven by above inflation-level rent growth in many metros.
- Within the NCREIF Property Index, the vacancy rate for U.S. Office was 9.6% in the quarter, the lowest in over 12 years.
- Net operating income (NOI) has been growing annually and is expected to be the primary return driver. Apartment and Industrial NOI growth fell slightly from the second quarter.

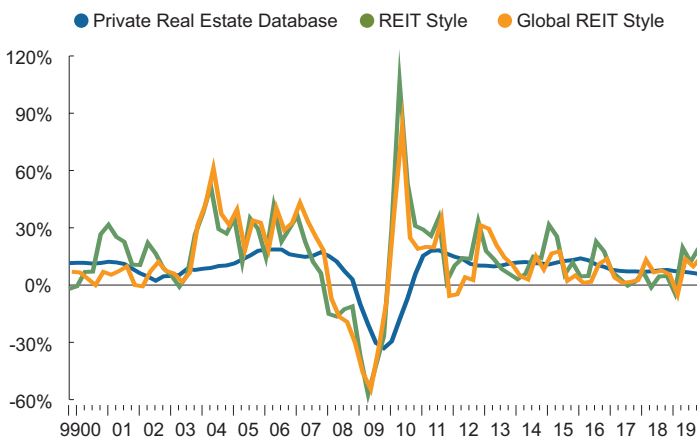
Pricing Remains Expensive in the U.S.

- Transaction volumes increased and remain robust.
- Cap rates rose slightly; market at near full valuations.

REITs Outperformed Global Equities

- U.S. REITs advanced 7.8% in the quarter, outpacing the S&P 500 Index, which rose 1.7%.
- Global REITs gained 4.6% compared to -0.2% for the MSCI ACWI IMI.
- Both U.S. and non-U.S. REITs are trading at net asset value.

Rolling One-Year Returns



Non-U.S. Real Estate

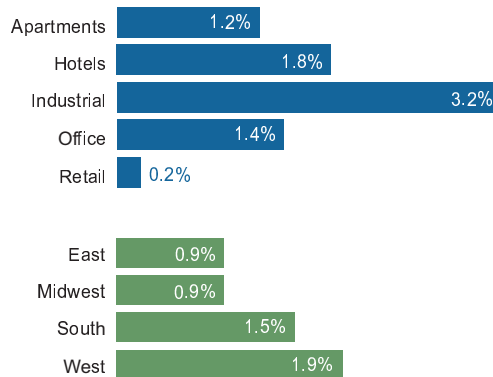
Asia Is Increasingly Important

- U.S.-China trade talks, unrest in Hong Kong, and other areas of political uncertainty have impacted real estate markets in the region. Managers continue to find attractive opportunities in some sectors of the market such as restructuring opportunities, necessity-based retail, and logistics.
- The number of open-end core funds focused on the Asia-Pacific market has increased in recent years and includes both sector-diversified and sector-specific (e.g., logistics) funds, supporting the development of the institutional real estate market in the region.
- During 2019, India had its first successful IPO for a REIT.

Europe Buffeted by Political Uncertainty

- Political uncertainty continues to weigh on overall economic growth throughout Europe, but real estate fundamentals remain strong in key gateway markets given strong demand and the continued lack of new supply. Cap rates for prime real estate remain low, as real estate continues to be an attractive asset class as a result of low interest rates throughout the region.
- Yields between prime and secondary real estate remain wide, providing opportunities for investors targeting transitional assets, as markets across Europe have less modern stock compared to 10 years ago.

Sector Quarterly Returns by Property Type and Region



Source: NCREIF

REAL ESTATE/REAL ASSETS (Continued)

Infrastructure Fundraising Momentum Continues

- Open end funds are raising significant capital, and the universe of investible funds keeps increasing.
- The closed end fund market continues to expand, with additional offerings in infrastructure debt, emerging markets, and sector-specific areas (e.g., communications and renewables).

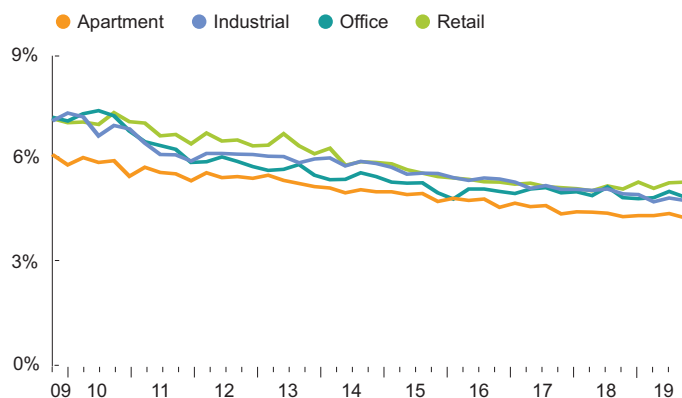
Real Assets

Challenging Quarter as Oil Prices Slide

- While the MLP category generally benefits from declining rate environments, volatile and falling oil prices weighed more heavily on the space in the quarter (Alerian MLP Index: -5.0%; +11.0% YTD).

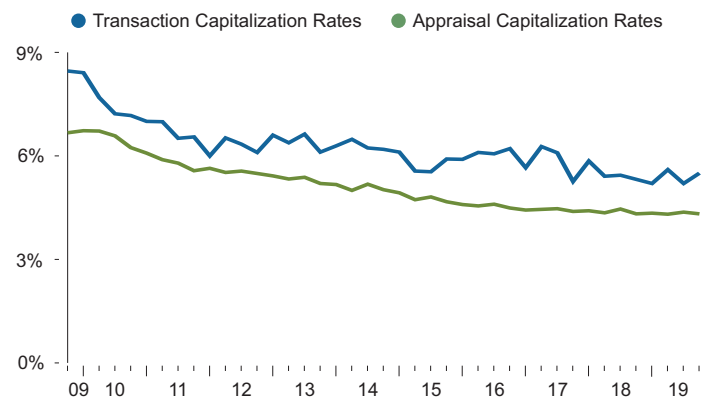
- Oil prices slid from \$58.47 to \$54.07 (WTI) during the quarter, and the energy-heavy Goldman Sachs Commodity Index was off 4.2%, while Gold (S&P Gold spot price: +4.3%; +15.0% YTD) benefited from its safe haven status.
- Looking across the rest of the commodity complex, Agriculture Commodities finished in negative territory (Bloomberg Commodity Agriculture Subindex: -6.2%), weighed down by coffee, corn, and cotton in particular, while nickel (+35.5%) almost single-handedly lifted the Industrial Metals Subindex (+2.4%) into positive territory for the quarter.

NCREIF Capitalization Rates by Property Type



Source: NCREIF. Capitalization rates (net operating income / current market value (or sale price)) are appraisal-based.

NCREIF Transaction and Appraisal Capitalization Rates



Source: NCREIF
Note: Transaction capitalization rate is equal weighted.

Callan Database Median and Index Returns* for Periods ended September 30, 2019

Private Real Assets	Quarter	Year to Date	Year	3 Years	5 Years	10 Years	15 Years
Real Estate ODCE Style	1.5	4.5	5.9	7.1	9.0	9.9	6.8
NFI-ODCE (value wt net)	1.1	3.1	4.6	6.3	8.4	9.8	6.9
NCREIF Property	1.4	4.8	6.2	6.8	8.6	9.8	8.6
NCREIF Farmland	1.0	2.4	5.3	6.1	7.9	11.0	14.2
NCREIF Timberland	0.2	1.3	2.1	3.1	4.4	4.0	7.0
Public Real Estate							
Global Real Estate Style	4.6	22.3	14.7	7.4	8.3	10.2	8.3
FTSE EPRA Nareit Developed	4.6	19.8	13.0	5.6	6.8	8.6	--
Global ex-U.S. Real Estate Style	2.8	17.9	11.7	7.9	7.8	8.1	7.8
FTSE EPRA Nareit Dev ex US	1.5	14.6	8.9	5.9	5.0	6.5	--
U.S. REIT Style	7.7	28.5	19.2	8.4	10.7	13.6	9.7
EPRA Nareit Equity REITs	7.8	27.0	18.4	7.4	10.3	13.0	9.0

*Returns less than one year are not annualized.
Sources: Callan, FTSE Russell, NCREIF

A Bountiful but Smaller Harvest

PRIVATE EQUITY | Gary Robertson

Private equity activity measures were down in the third quarter, except for upticks in dollar volume for fundraising and buyout exits. So far this year, all private equity liquidity measures that Callan tracks moderated. High prices, perceived slowing of global economic growth, and challenging geopolitical events dampened activity so far this year.

Private equity partnerships holding final closes totaled \$188 billion, with 201 new partnerships formed, according to PitchBook. The dollar volume rose 27% from the prior quarter, but the number of funds holding final closes fell 7%. So far this year, 2019 is running 7% behind 2018. No strategy is dominating the market compared to historical commitment ranges, as investors focus on diversification.

New buyout transactions declined, according to PitchBook. Funds closed 1,491 company investments with \$110 billion in disclosed deal value, representing a 14% decline in count and a 16% dip in dollar value from the second quarter.

According to PitchBook, new investments in venture capital companies totaled 4,664 rounds of financing with \$57 billion of announced value. The number of investments was down 13% from the prior quarter, and announced value fell 15%. The median pre-money valuations of Series A through D rounds continued to increase, with only Seed Stage remaining flat.

Funds Closed January 1 to September 30, 2019

Strategy	No. of Funds	Amt (\$mm)	Share
Venture Capital	263	46,702	10%
Growth Equity	50	61,789	13%
Buyouts	158	241,920	51%
Mezzanine Debt	39	60,308	13%
Distressed	8	12,203	3%
Energy	10	14,767	3%
Secondary and Other	39	27,970	6%
Fund-of-funds	20	7,358	2%
Totals	587	473,017	100%

Source: PitchBook (Figures may not total due to rounding.)

There were 404 private M&A exits of private equity-backed companies (excluding venture capital), PitchBook reports, with disclosed values totaling \$122 billion. Private sale count was down 6% from the prior quarter but announced dollar volume rose 12%. The year-to-date exit count declined 35%. There were 16 private-equity backed IPOs in the third quarter raising \$6 billion, a steep decline from 42 totaling \$16 billion previously.

Venture-backed M&A exits totaled 320 transactions with disclosed value of \$12 billion. The number of sales fell 12% and announced dollar volume plunged 52%. The year-to-date exit count declined 13%. There were 47 VC-backed IPOs in the third quarter with a combined float of \$9 billion. For comparison, the second quarter had 59 IPOs and total issuance of \$22 billion. Peloton was the largest third quarter IPO, raising \$1.2 billion.

Private Equity Performance Database (%) (Pooled Horizon IRRs through June 30, 2019*)

Strategy	3 Months	Year	3 Years	5 Years	10 Years	15 Years	20 Years
All Venture	6.25	18.96	15.93	14.95	15.01	11.80	13.06
Growth Equity	4.70	15.37	17.71	13.26	14.77	13.59	13.53
All Buyouts	4.12	10.72	16.06	11.85	15.27	13.72	12.07
Mezzanine	2.37	8.05	11.64	10.28	11.05	10.63	8.73
Credit Opportunities	1.09	3.20	9.37	5.68	13.39	9.61	10.13
Control Distressed	1.95	4.27	10.47	7.62	12.16	10.63	10.58
All Private Equity	4.34	12.31	15.52	11.98	14.79	12.88	12.13
S&P 500	4.30	10.42	14.19	10.71	14.70	8.75	5.90

Note: Private equity returns are net of fees. Sources: Refinitiv/Cambridge and Standard & Poor's
*Most recent data available at time of publication

Note: Transaction count and dollar volume figures across all private equity measures are preliminary figures and are subject to update in subsequent versions of *Capital Market Review* and other Callan publications.

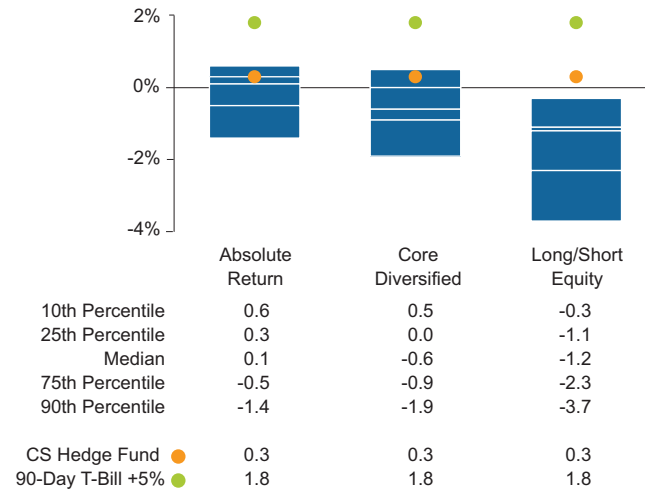
Hedge Funds Flat; MACs Struggle

HEDGE FUNDS/MACs | Jim McKee

Alpha trades flat as markets soften during the quarter

- Equity market churn, while Treasury yields fell further, had a mixed effect across hedge funds, leaving the broad hedge fund universe flat.
- Managed Futures* (+3.5%) and *Global Macro* (+2.1%) were lead performers for the second quarter in a row, benefiting from continuing rate and currency trends.
- Equity Market Neutral* (-1.7%) slipped hard, particularly given September's sudden factor rotation to value while momentum reversed.
- Long/Short Equity* (+0.1%) was unchanged without much equity beta support; the equity factor reversal in September also hurt.
- Distressed* (-3.5%) sank as spreads among weaker credits widened amid a flight-to-quality.
- Hedge fund portfolios with exposure to macro trading fared better while those with emerging market exposure, particularly Argentina, suffered more.

Hedge Fund-of-Funds Style Group Returns



Sources: Callan, Credit Suisse, and Federal Reserve

Callan Database Median and Index Returns* for Periods ended September 30, 2019

Hedge Fund Universe	Quarter	Year	3 Years	5 Years	10 Years	15 Years
Callan Fund-of-Funds Database	-0.63	0.46	3.76	2.35	4.22	4.24
Callan Absolute Return FOF Style	0.07	0.80	3.60	2.32	4.16	3.95
Callan Core Diversified FOF Style	-0.62	0.23	3.37	2.02	3.99	4.12
Callan Long/Short Equity FOF Style	-1.19	0.02	4.57	3.40	4.67	5.37
Credit Suisse Hedge Fund	0.26	2.13	3.83	2.30	4.32	4.97
CS Convertible Arbitrage	-0.41	1.29	2.55	2.28	4.36	3.78
CS Distressed	-3.46	-3.09	3.06	0.79	4.65	5.22
CS Emerging Markets	-4.11	1.81	3.29	3.02	4.28	5.99
CS Equity Market Neutral	-1.74	-4.37	0.27	0.16	1.14	-0.57
CS Event-Driven Multi	-0.80	0.18	3.49	0.16	3.37	5.05
CS Fixed Income Arb	0.28	2.38	4.39	3.23	5.66	3.84
CS Global Macro	2.12	7.66	5.35	3.11	4.89	6.43
CS Long/Short Equity	0.10	-0.36	4.85	3.38	4.88	5.74
CS Managed Futures	3.53	7.81	0.59	2.07	1.57	3.58
CS Multi-Strategy	0.68	1.94	4.23	4.18	6.23	5.95
CS Risk Arbitrage	0.23	1.98	3.18	2.64	2.68	3.81
HFRI Asset Wtd Composite	0.30	2.65	4.39	2.93	4.49	--
90-Day T-Bill + 5%	1.77	7.39	6.54	5.98	5.54	6.39

*Gross of fees. Sources: Bloomberg Barclays, Callan, Credit Suisse, Hedge Fund Research, Societe Generale, and Standard & Poor's

Amid choppy markets, MACs struggle for gains

- Multi-asset class (MAC) performance varied depending on net market exposures, but was mostly flat or down.
- The **HFR Risk Parity Index** targeting 10% volatility was positive (+1.9%), reflecting the modest lift of stocks and bonds.
- Eurekahedge Multi-Factor Risk Premia Index** fell 5.1%, indicating broad headwinds for those seeking diversifying returns outside long-only markets.
- Within risk premia, *equity momentum* was a key detractor in light of September's factor reversal; *rates momentum* was an offsetting contributor given the trend of falling yields.
- Long-Biased* trailed due to exposure to risk-on assets.
- Absolute Return* benefited from exposure to higher-quality assets.

Volatility simmers slightly below average

- Markets are further discounting growth with lower expected rates, long and short.
- If global manufacturing data softens further, thereby overwhelming expectations of central banks easing, hedge funds are positioned reasonably well for an equity downturn.
- However, any economic rebound with tepid inflation will cause most hedge funds to lag.

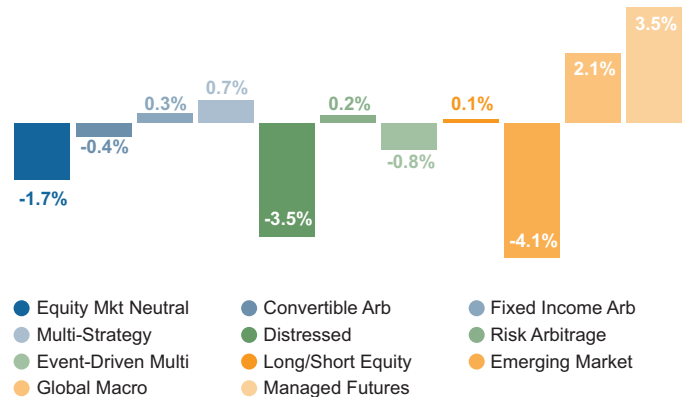
Falling yield curve shrinks the playing field, however level it may be

- Lower long rates factored into stocks and bonds leave less room for traditional assets to run, giving hedged strategies more opportunity to shine.
- However, as short rates also settle to lower levels, dwindling cash returns and short interest rebates take some wind out of hedge fund sails.

Industry outflows shade constructive mood

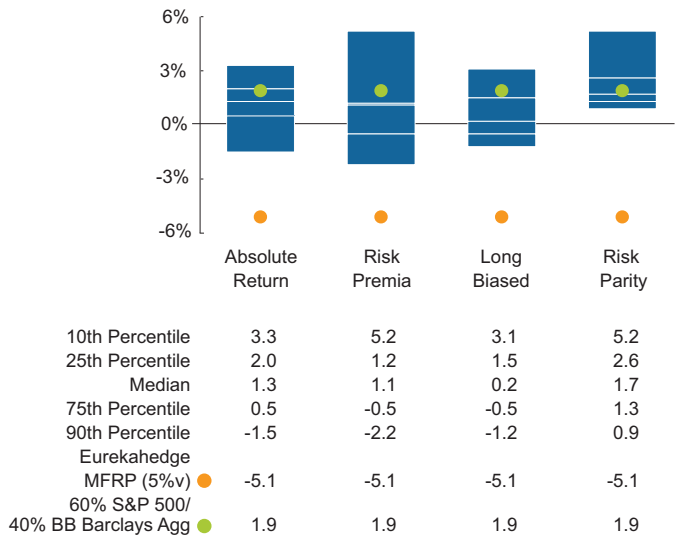
- The third quarter was the sixth consecutive quarter of industry asset outflows, which runs counter to the industry's positive view of an improving opportunity set ahead with increasing volatility tied to growing economic uncertainty.

Credit Suisse Hedge Fund Strategy Returns



Source: Credit Suisse

MAC Style Group Returns



Sources: Bloomberg Barclays, Callan, Eurekahedge, Standard & Poor's

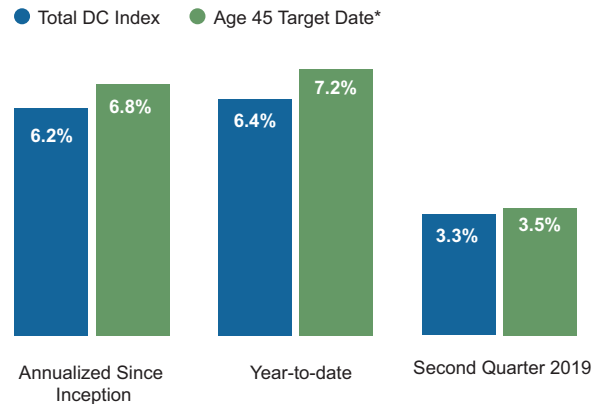
Performance Slows but Remains Solid

DEFINED CONTRIBUTION | Patrick Wisdom

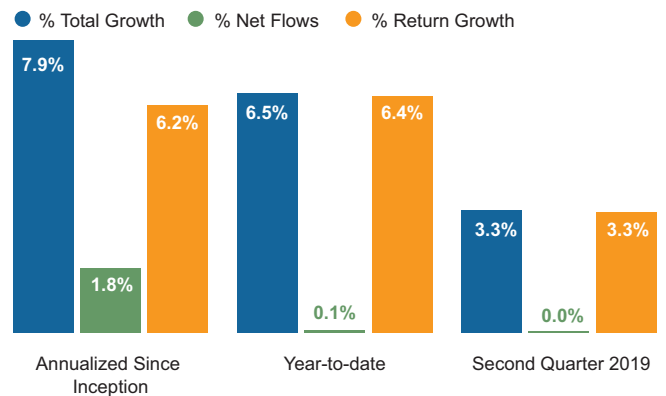
- The Callan DC Index™ gained 3.3% in the second quarter, compared to the first quarter’s jump of 9.6%. The Age 45 Target Date Fund gained 3.5%, largely due to its higher equity allocation.
- The Index’s growth in balances in the second quarter (3.3%) returned to a normal level after a robust gain in the first quarter (9.8%). Net flows were also positive but very small (0.03%).
- Target date funds (TDFs) yet again saw the largest inflows for the quarter. Both large-cap and small/mid-cap U.S. equity experienced large outflows. U.S. fixed income had relatively large inflows, while stable value options had relatively large outflows.
- Second quarter turnover (i.e., net transfer activity levels within DC plans) increased to 0.54% from the previous quarter’s measure of 0.48%. Turnover has risen for three consecutive quarters but still sits below the historical average (0.60%).
- The overall allocation to equity increased to 70.0% from 69.5% in the previous quarter. The current allocation exceeds the Index’s historical average by 2.2 percentage points.
- The percentage of assets allocated to U.S. large-cap equity rose. Gains as a result of strong performance outweighed outflows from the asset class. The current allocation to U.S. large-cap equity (25.2%) is now at its second highest level over the past decade.
- On the other hand, the percentage allocated to stable value decreased, while the allocation to TDFs remained steady.
- Stable value’s prevalence within DC plans rose for the seventh consecutive quarter and is now at 77%. Additionally, more plans are now offering emerging market equity, global equity, and high yield fixed income as investment options.

The Callan DC Index is an equally weighted index tracking the cash flows and performance of nearly 90 plans, representing more than one million DC participants and over \$150 billion in assets. The Index is updated quarterly and is available on Callan’s website, as is the quarterly DC Observer newsletter.

Investment Performance



Growth Sources



Net Cash Flow Analysis (Second Quarter 2019) (Top Two and Bottom Two Asset Gatherers)

Asset Class	Flows as % of Total Net Flows
Target Date Funds	62.56%
U.S. Fixed Income	26.82%
U.S. Smid Cap	-20.40%
U.S. Large Cap	-45.95%
Total Turnover**	0.54%

Data provided here is the most recent available at time of publication.

Source: Callan DC Index

Note: DC Index inception date is January 2006.

* The Age 45 Fund transitioned from the average 2035 TDF to the 2040 TDF in June 2018.

** Total Index “turnover” measures the percentage of total invested assets (transfers only, excluding contributions and withdrawals) that moved between asset classes.

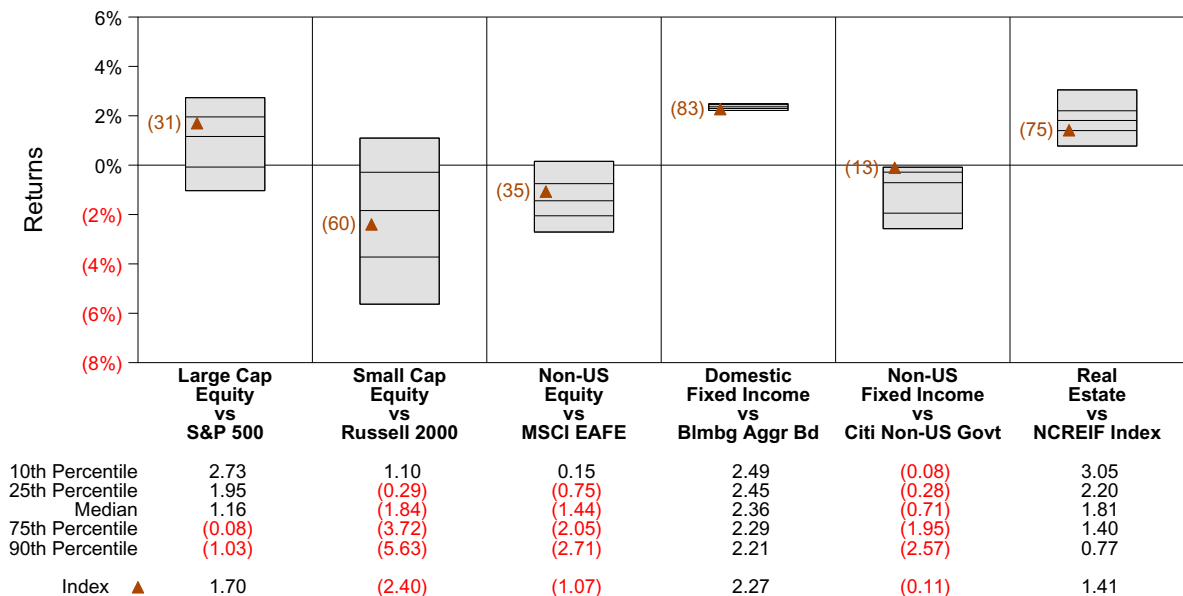
Market Overview

Active Management vs Index Returns

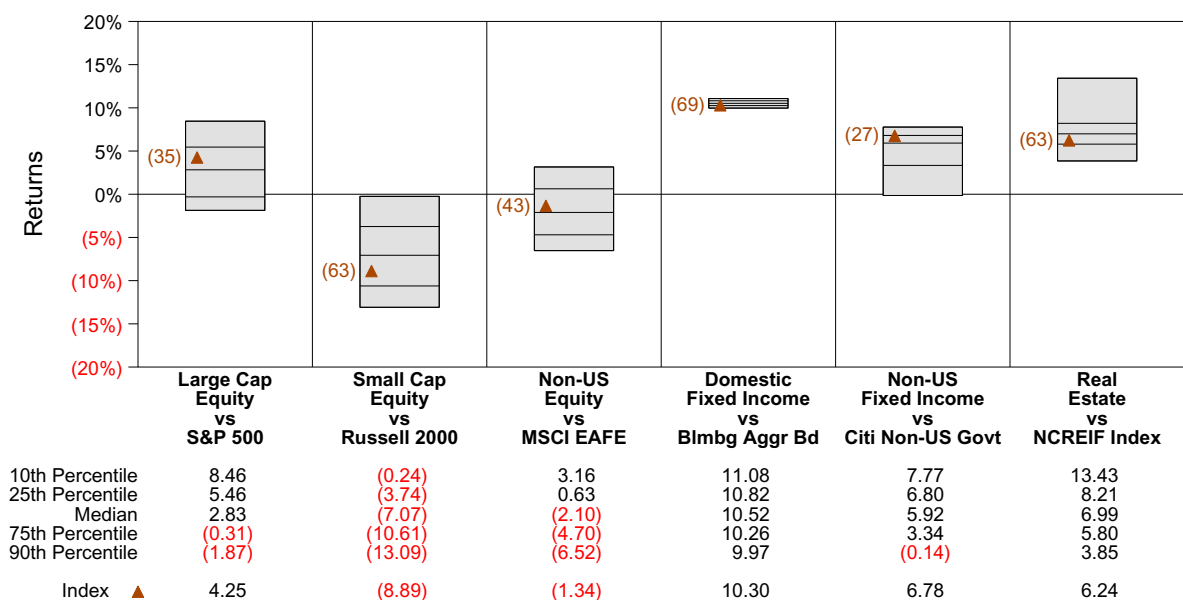
Market Overview

The charts below illustrate the range of returns across managers in Callan's Separate Account database over the most recent one quarter and one year time periods. The database is broken down by asset class to illustrate the difference in returns across those asset classes. An appropriate index is also shown for each asset class for comparison purposes. As an example, the first bar in the upper chart illustrates the range of returns for domestic equity managers over the last quarter. The triangle represents the S&P 500 return. The number next to the triangle represents the ranking of the S&P 500 in the Large Cap Equity manager database.

Range of Separate Account Manager Returns by Asset Class One Quarter Ended September 30, 2019



Range of Separate Account Manager Returns by Asset Class One Year Ended September 30, 2019



ASSET ALLOCATION AND PERFORMANCE

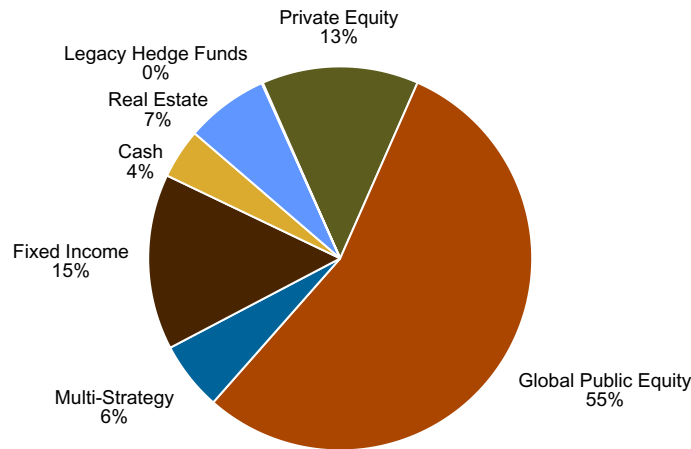
Asset Allocation and Performance

This section begins with an overview of the fund's asset allocation at the broad asset class level. This is followed by a top down performance attribution analysis which analyzes the fund's performance relative to the performance of the fund's policy target asset allocation. The fund's historical performance is then examined relative to funds with similar objectives. Performance of each asset class is then shown relative to the asset class performance of other funds. Finally, a summary is presented of the holdings of the fund's investment managers, and the returns of those managers over various recent periods.

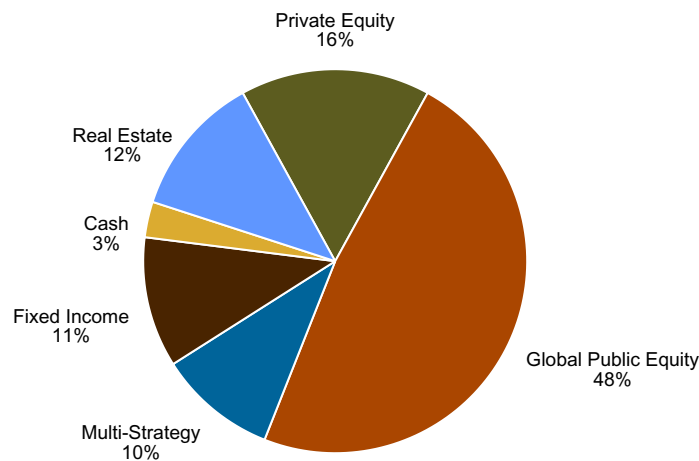
Actual vs Target Asset Allocation As of September 30, 2019

The first chart below shows the Fund's asset allocation as of September 30, 2019. The second chart shows the Fund's target asset allocation as outlined in the investment policy statement.

Actual Asset Allocation



Target Asset Allocation

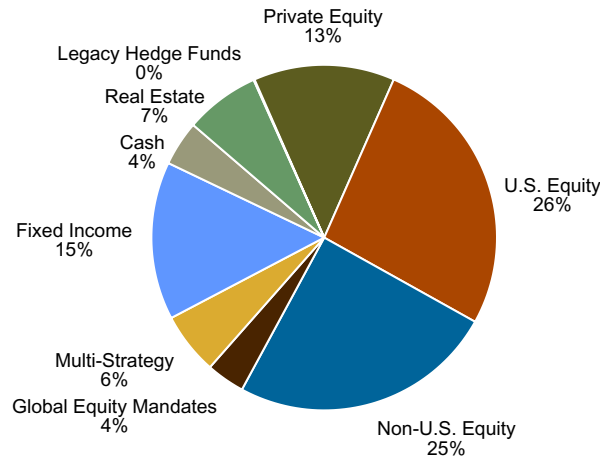


Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
Private Equity	3,909,776	13.3%	16.0%	(2.7%)	(802,412)
Global Public Equity	16,154,037	54.9%	48.0%	6.9%	2,017,474
Multi-Strategy	1,714,470	5.8%	10.0%	(4.2%)	(1,230,648)
Fixed Income	4,350,899	14.8%	11.0%	3.8%	1,111,270
Cash	1,238,962	4.2%	3.0%	1.2%	355,426
Real Estate	2,047,329	7.0%	12.0%	(5.0%)	(1,486,812)
Legacy Hedge Funds	35,702	0.1%	0.0%	0.1%	35,702
Total	29,451,174	100.0%	100.0%		

Actual Asset Allocation As of September 30, 2019

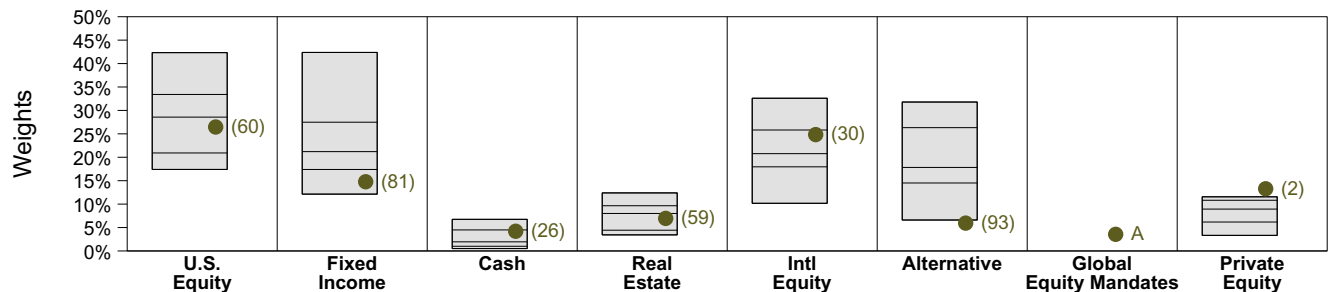
The first chart below shows the Fund's asset allocation as of September 30, 2019. The second chart ranks the fund's asset allocation versus the Callan Public Fund Spons- V Lg DB (>10B).

Actual Asset Allocation



Asset Class	\$000s Actual	Weight Actual
Private Equity	3,909,776	13.3%
U.S. Equity	7,791,715	26.5%
Non-U.S. Equity	7,314,687	24.8%
Global Equity Mandates	1,046,367	3.6%
Multi-Strategy	1,714,470	5.8%
Fixed Income	4,350,899	14.8%
Cash	1,238,962	4.2%
Real Estate	2,047,329	7.0%
Legacy Hedge Funds	35,702	0.1%
Total	29,449,906	100.0%

Asset Class Weights vs Callan Public Fund Spons- V Lg DB (>10B)



10th Percentile	42.33	42.38	6.75	12.39	32.60	31.79	-	11.56
25th Percentile	33.41	27.48	4.49	9.65	25.82	26.32	-	10.82
Median	28.57	21.20	1.95	8.00	20.77	17.83	-	8.93
75th Percentile	20.92	17.40	1.00	4.43	17.96	14.51	-	6.18
90th Percentile	17.40	12.13	0.50	3.43	10.17	6.61	-	3.33
Fund	26.46	14.77	4.21	6.95	24.84	5.94	3.55	13.28

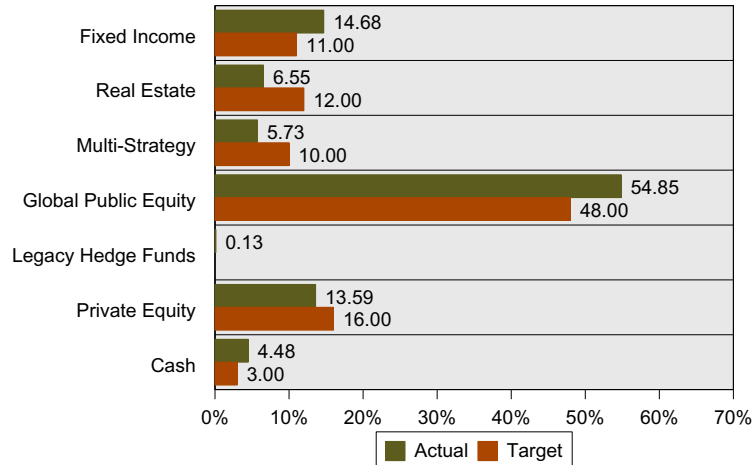
% Group Invested	100.00%	100.00%	80.77%	92.31%	100.00%	65.38%	0.00%	30.77%
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*Excludes transition accounts

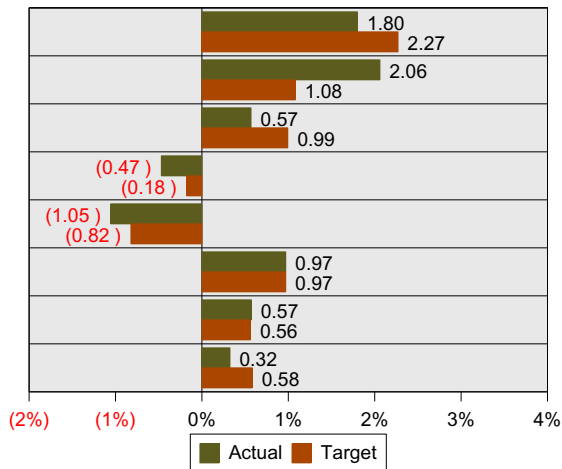
Quarterly Total Fund Absolute Attribution - September 30, 2019

The following analysis approaches Total Fund Attribution from the perspective of Absolute Return Contribution. Absolute return attribution quantifies the contribution of each asset class to total fund absolute performance as well as target performance. Absolute return contribution is a function of both the size of the exposure (\$ weight) to each asset class as well as the actual return of each asset class.

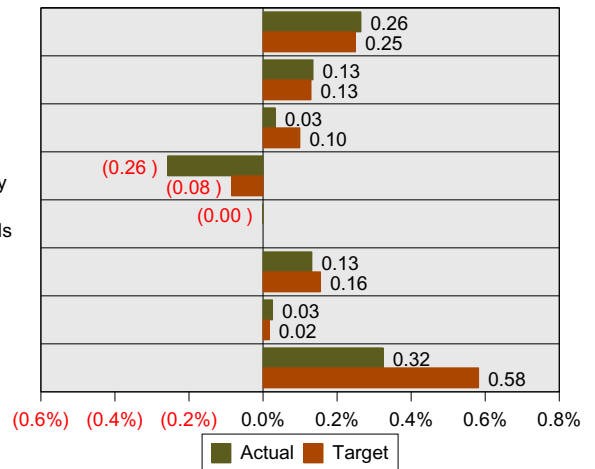
Actual and Target Weights



Actual and Target Returns



Absolute Return Contributions



Absolute Attribution Effects for Quarter ended September 30, 2019

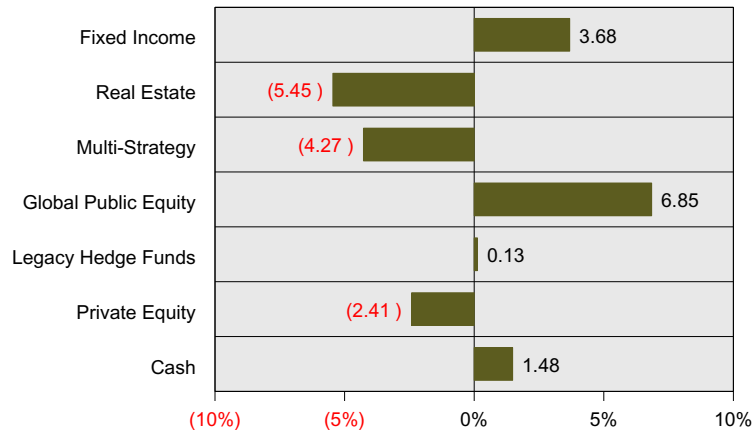
	Effective Actual Weight	Actual Return	Absolute Return Contribution	Effective Target Weight	Target Return	Target Return Contribution	Return Contribution Difference
Fixed Income	15%	1.80%	0.26%	11%	2.27%	0.25%	0.01%
Real Estate	7%	2.06%	0.13%	12%	1.08%	0.13%	0.01%
Multi-Strategy	6%	0.57%	0.03%	10%	0.99%	0.10%	(0.07%)
Global Public Equity	55%	(0.47%)	(0.26%)	48%	(0.18%)	(0.08%)	(0.17%)
Legacy Hedge Funds	0%	(1.05%)	(0.00%)	0%	(0.82%)	0.00%	(0.00%)
Private Equity	14%	0.97%	0.13%	16%	0.97%	0.16%	(0.02%)
Cash	4%	0.57%	0.03%	3%	0.56%	0.02%	0.01%
Total Fund Return			0.32%	Target Return		0.58%	(0.26%)

* Current Quarter Target = 48.0% MSCI ACWI IMI, 16.0% Private Equity, 11.0% Blmbg Aggregate, 10.8% NCREIF NFI-ODCE Eq Wt Net lagged 3 months, 10.0% S&P:LSTA Lev Loan, 3.0% 3-month Treasury Bill, 1.2% FTSE EP/NA US Index lagged 3 months and 0.0% HFRI Fund of Funds Compos.

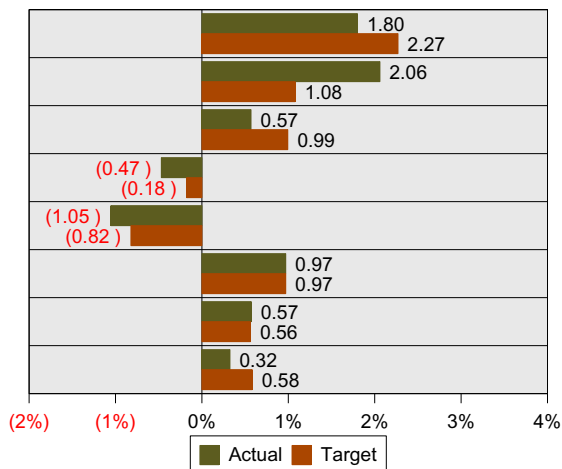
Quarterly Total Fund Relative Attribution - September 30, 2019

The following analysis approaches Total Fund Attribution from the perspective of relative return. Relative return attribution separates and quantifies the sources of total fund excess return relative to its target. This excess return is separated into two relative attribution effects: Asset Allocation Effect and Manager Selection Effect. The Asset Allocation Effect represents the excess return due to the actual total fund asset allocation differing from the target asset allocation. Manager Selection Effect represents the total fund impact of the individual managers excess returns relative to their benchmarks.

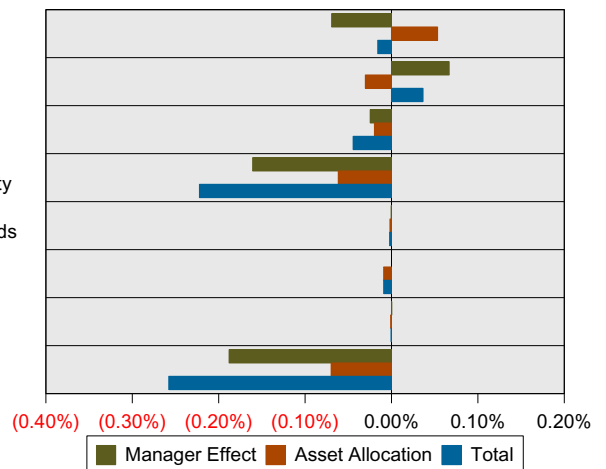
Asset Class Under or Overweighting



Actual vs Target Returns



Relative Attribution by Asset Class



Relative Attribution Effects for Quarter ended September 30, 2019

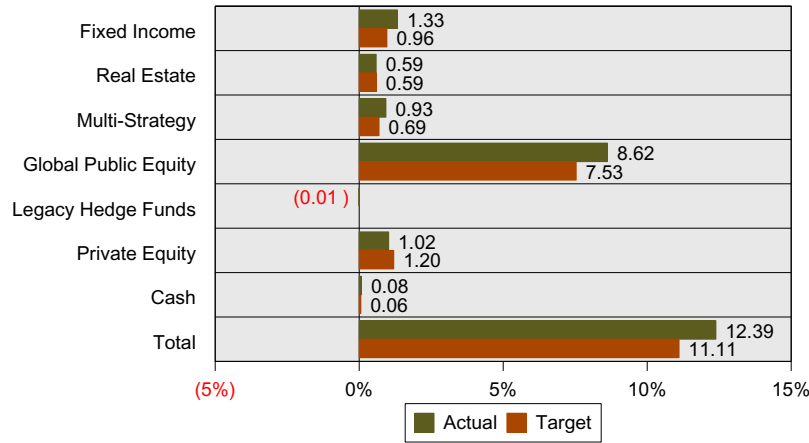
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Fixed Income	15%	11%	1.80%	2.27%	(0.07%)	0.05%	(0.02%)
Real Estate	7%	12%	2.06%	1.08%	0.07%	(0.03%)	0.04%
Multi-Strategy	6%	10%	0.57%	0.99%	(0.02%)	(0.02%)	(0.04%)
Global Public Equity	55%	48%	(0.47%)	(0.18%)	(0.16%)	(0.06%)	(0.22%)
Legacy Hedge Funds	0%	0%	(1.05%)	(0.82%)	(0.00%)	(0.00%)	(0.00%)
Private Equity	14%	16%	0.97%	0.97%	0.00%	(0.01%)	(0.01%)
Cash	4%	3%	0.57%	0.56%	0.00%	(0.00%)	(0.00%)
Total			0.32%	0.58%	(0.19%)	(0.07%)	(0.26%)

* Current Quarter Target = 48.0% MSCI ACWI IMI, 16.0% Private Equity, 11.0% Blmbg Aggregate, 10.8% NCREIF NFI-ODCE Eq Wt Net lagged 3 months, 10.0% S&P:LSTA Lev Loan, 3.0% 3-month Treasury Bill, 1.2% FTSE EP/NA US Index lagged 3 months and 0.0% HFRI Fund of Funds Compos.

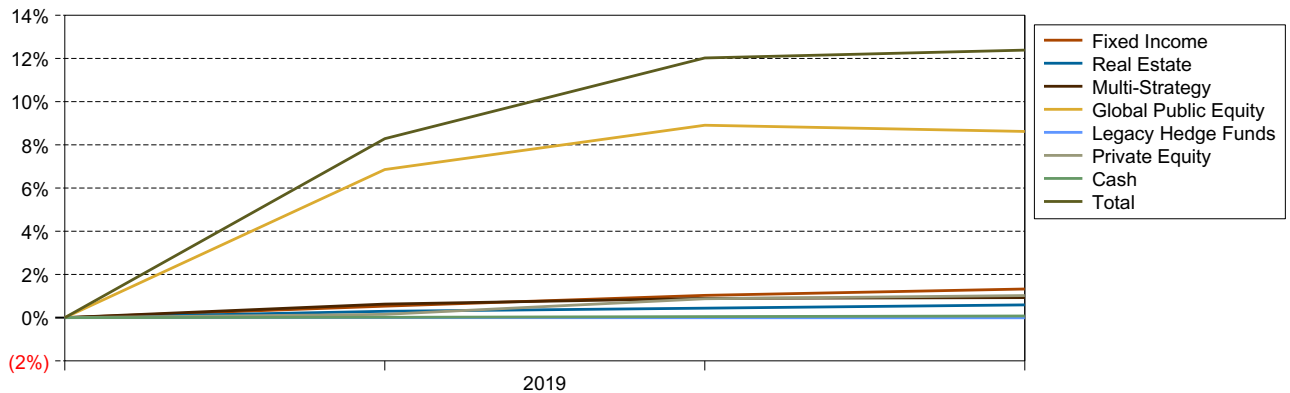
Cumulative Total Fund Absolute Attribution - September 30, 2019

The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of absolute total fund Performance and target performance. These cumulative results quantify the longer-term contribution of each asset class to absolute total fund return as well as the target return.

Three Quarters Absolute Return Contributions



Cumulative Absolute Return Contributions



Three Quarters Absolute Attribution Effects

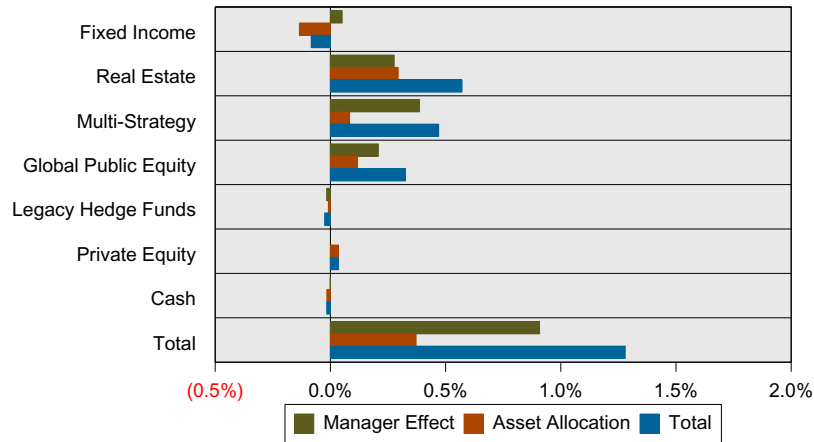
	Effective Actual Weight	Actual Return	Absolute Return Contribution	Effective Target Weight	Target Return	Target Return Contribution	Return Contribution Difference
Fixed Income	15%	8.90%	1.33%	11%	8.52%	0.96%	0.37%
Real Estate	7%	8.76%	0.59%	12%	4.70%	0.59%	(0.00%)
Multi-Strategy	7%	11.70%	0.93%	10%	6.79%	0.69%	0.24%
Global Public Equity	54%	16.27%	8.62%	48%	15.87%	7.53%	1.08%
Legacy Hedge Funds	0%	(4.44%)	(0.01%)	0%	5.29%	0.00%	(0.01%)
Private Equity	14%	7.16%	1.02%	16%	7.16%	1.20%	(0.18%)
Cash	4%	1.82%	0.08%	3%	1.81%	0.06%	0.02%
Total Fund Return			12.39%		Target Return	11.11%	1.28%

* Current Quarter Target = 48.0% MSCI ACWI IMI, 16.0% Private Equity, 11.0% Blmbg Aggregate, 10.8% NCREIF NFI-ODCE Eq Wt Net lagged 3 months, 10.0% S&P:LSTA Lev Loan, 3.0% 3-month Treasury Bill, 1.2% FTSE EP/NA US Index lagged 3 months and 0.0% HFRI Fund of Funds Compos.

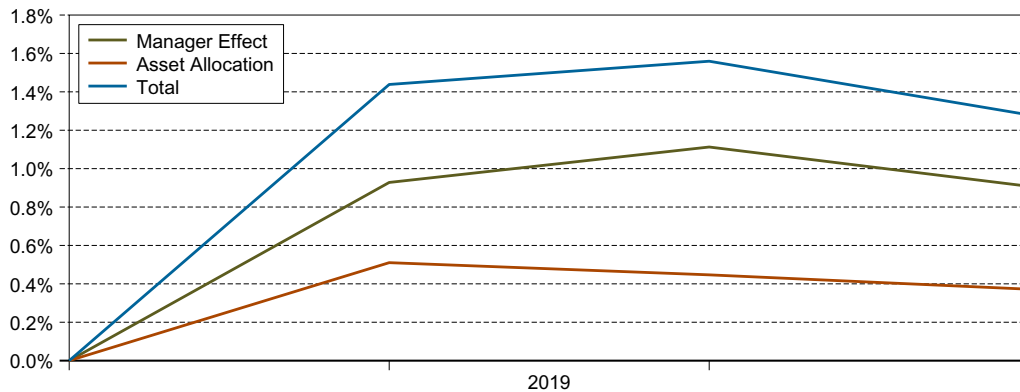
Cumulative Total Fund Relative Attribution - September 30, 2019

The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

Three Quarters Relative Attribution Effects



Cumulative Relative Attribution Effects



Three Quarters Relative Attribution Effects

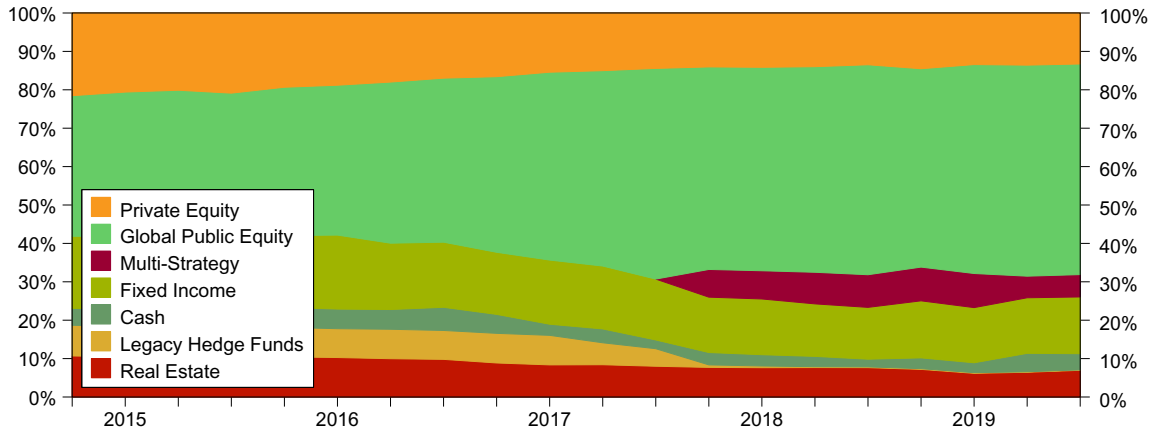
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Fixed Income	15%	11%	8.90%	8.52%	0.05%	(0.13%)	(0.08%)
Real Estate	7%	12%	8.76%	4.70%	0.28%	0.29%	0.57%
Multi-Strategy	7%	10%	11.70%	6.79%	0.39%	0.08%	0.47%
Global Public Equity	54%	48%	16.27%	15.87%	0.21%	0.12%	0.33%
Legacy Hedge Funds	0%	0%	(4.44%)	5.29%	(0.02%)	(0.01%)	(0.03%)
Private Equity	14%	16%	7.16%	7.16%	0.00%	0.04%	0.04%
Cash	4%	3%	1.82%	1.81%	(0.00%)	(0.02%)	(0.02%)
Total			12.39%	11.11%	+ 0.91%	+ 0.37%	1.28%

* Current Quarter Target = 48.0% MSCI ACWI IMI, 16.0% Private Equity, 11.0% Blmbg Aggregate, 10.8% NCREIF NFI-ODCE Eq Wt Net lagged 3 months, 10.0% S&P:LSTA Lev Loan, 3.0% 3-month Treasury Bill, 1.2% FTSE EP/NA US Index lagged 3 months and 0.0% HFRI Fund of Funds Compos.

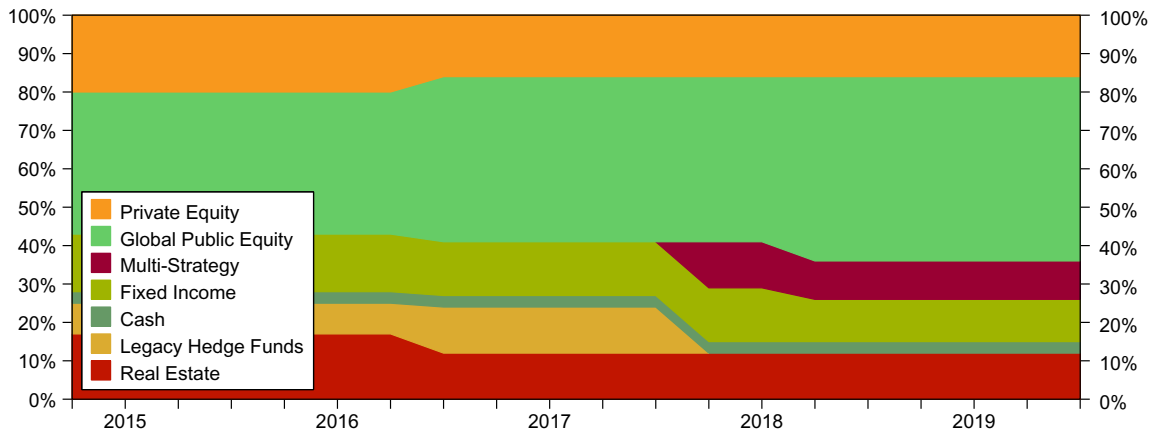
Actual vs Target Historical Asset Allocation

The Historical asset allocation for a fund is by far the largest factor explaining its performance. The charts below show the fund's historical actual asset allocation, the fund's historical target asset allocation, and the historical asset allocation of the average fund in the Callan Public Fund Spons- V Lg DB (>10B).

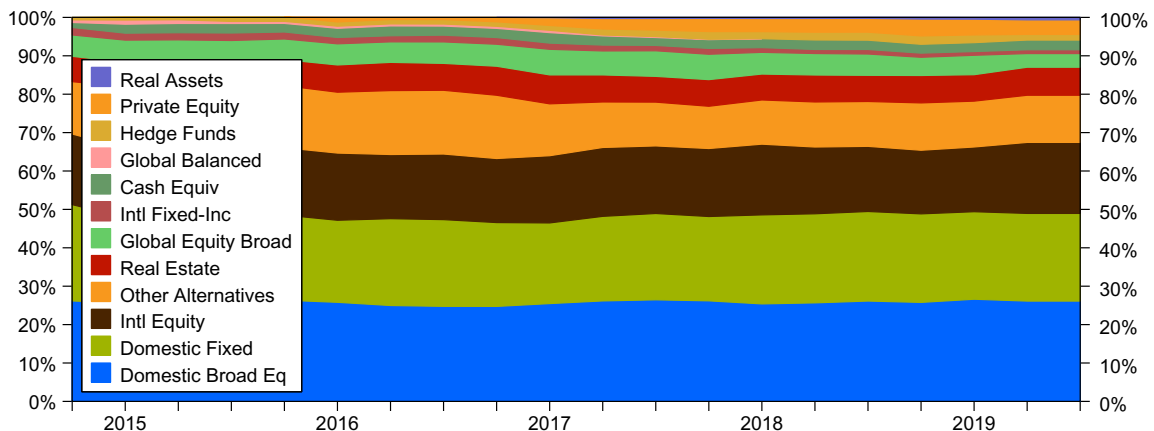
Actual Historical Asset Allocation



Target Historical Asset Allocation



Average Callan Public Fund Spons- V Lg DB (>10B) Historical Asset Allocation



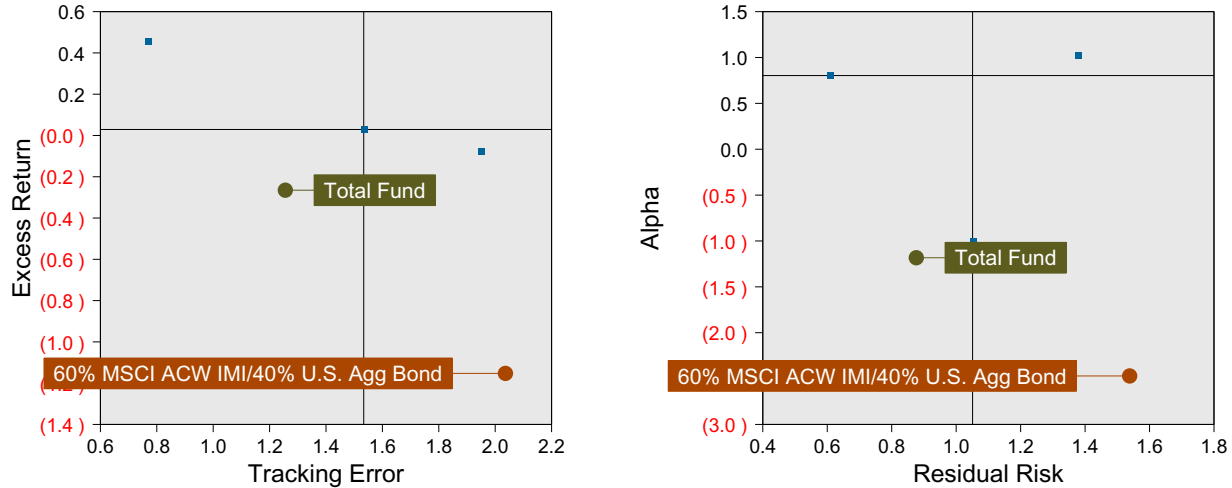
Total Fund

Total Fund vs Target Risk Analysis

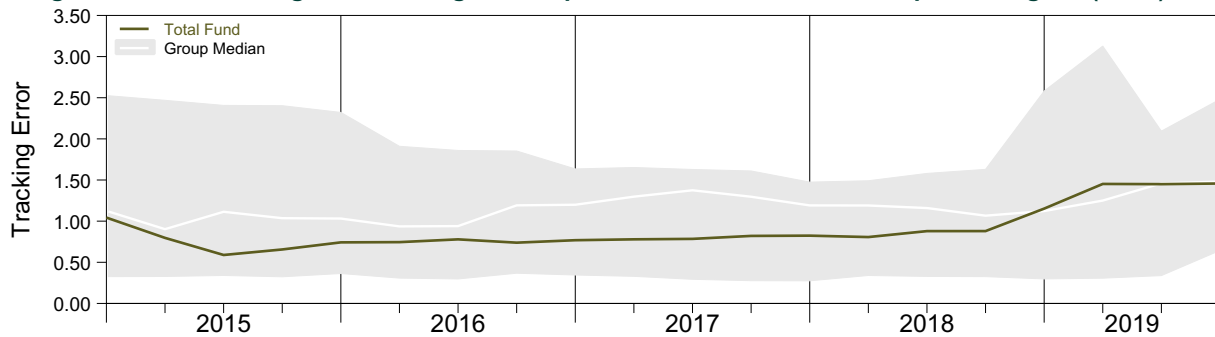
Risk Analysis

The graphs below analyze the performance and risk of the fund relative to the appropriate target mix. This relative performance is compared to a peer group of funds wherein each member fund is measured against its own target mix. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the target. The second scatter chart displays the relationship, sometimes called Information Ratio, between alpha (market-risk or "beta" adjusted return) and residual risk (non-market or "unsystematic" risk). The third chart shows tracking error patterns over time compared to the range of tracking error patterns for the peer group. The last two charts show the ranking of the fund's risk statistics versus the peer group.

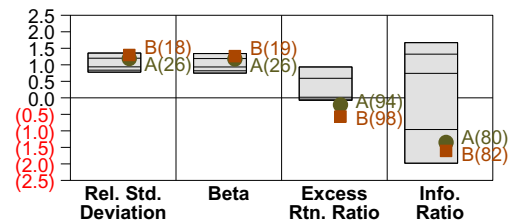
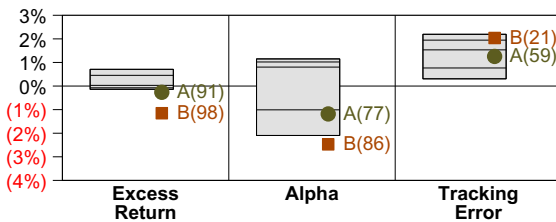
Risk Analysis vs Callan Public Fund Spons- V Lg DB (>10B) Five Years Ended September 30, 2019



Rolling 12 Quarter Tracking Error vs Targets Compared to Callan Public Fund Spons- V Lg DB (>10B)



Risk Statistics Rankings vs Targets Rankings Against Callan Public Fund Spons- V Lg DB (>10B) Five Years Ended September 30, 2019

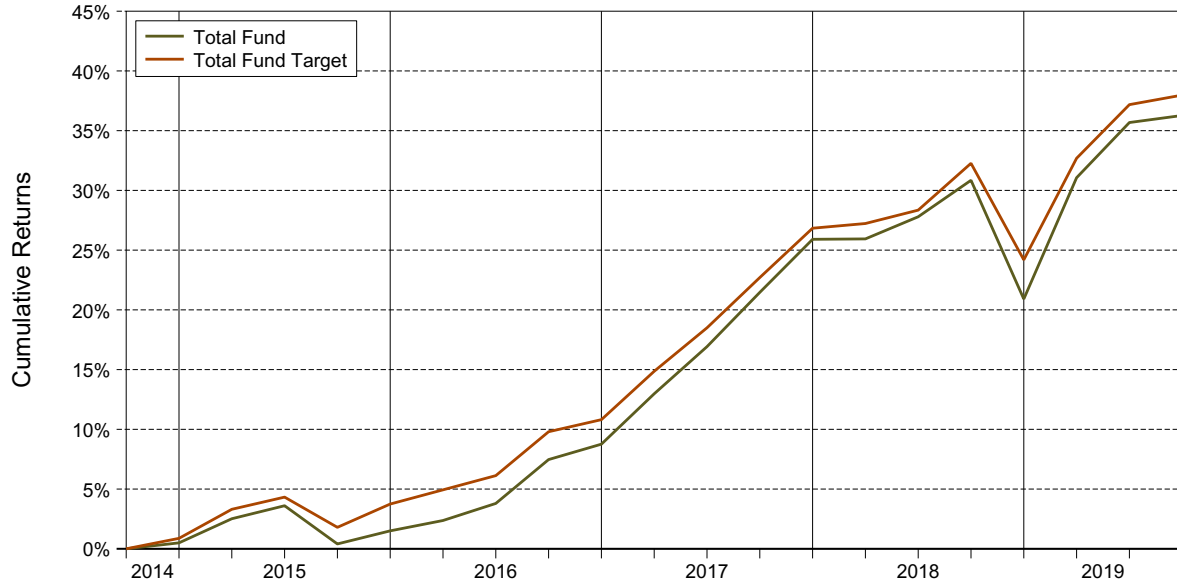


	Excess Return	Alpha	Tracking Error	Rel. Std. Deviation	Beta	Excess Rtn. Ratio	Info. Ratio
10th Percentile	0.71	1.15	2.19	1.36	1.34	0.94	1.67
25th Percentile	0.45	1.02	1.95	1.20	1.19	0.59	1.32
Median	0.03	0.80	1.53	0.94	0.94	0.02	0.74
75th Percentile	(0.08)	(1.01)	0.77	0.84	0.82	(0.04)	(0.96)
90th Percentile	(0.14)	(2.10)	0.31	0.78	0.75	(0.07)	(1.98)
Total Fund	● A (0.27)	(1.18)	1.26	● A 1.19	1.18	(0.21)	(1.35)
60% MSCI ACW IMI/40% U.S. Agg Bond	■ B (1.15)	(2.47)	2.04	■ B 1.30	1.26	(0.57)	(1.61)

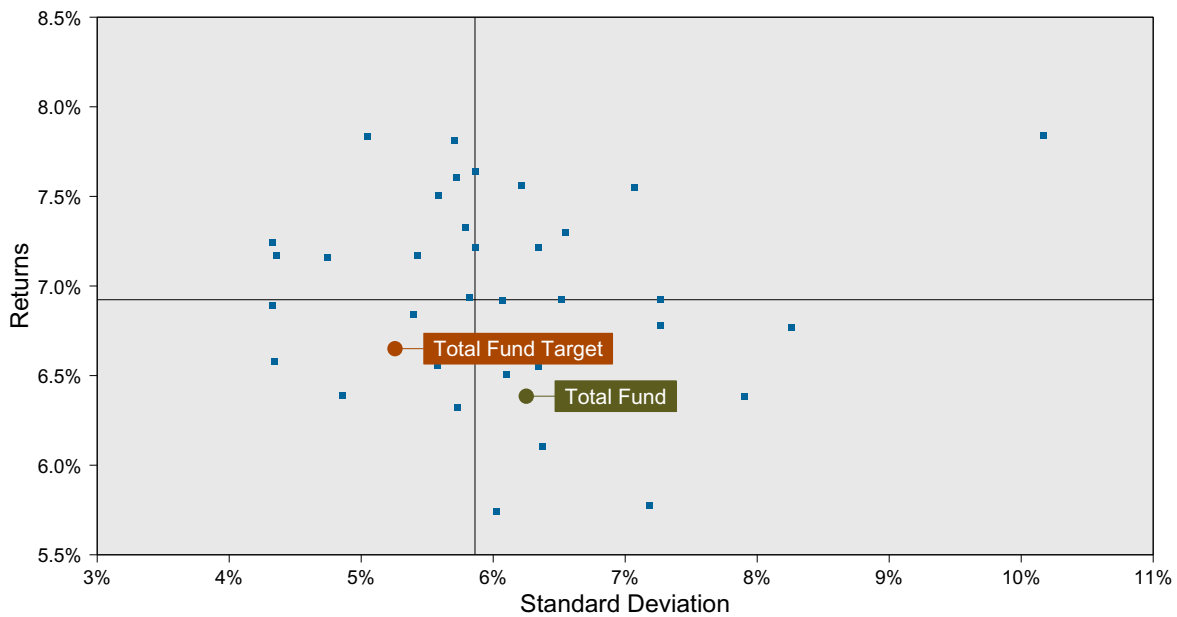
Cumulative Performance Relative to Target

The first chart below illustrates the cumulative performance of the Total Fund relative to the cumulative performance of the Fund's Target Asset Mix. The Target Mix is assumed to be rebalanced each quarter with no transaction costs. The second chart below shows the return and the risk of the Total Fund and the Target Mix, contrasted with the returns and risks of the funds in the Callan Public Fund Spons- V Lg DB (>10B).

Cumulative Returns Actual vs Target



Five Year Annualized Risk vs Return

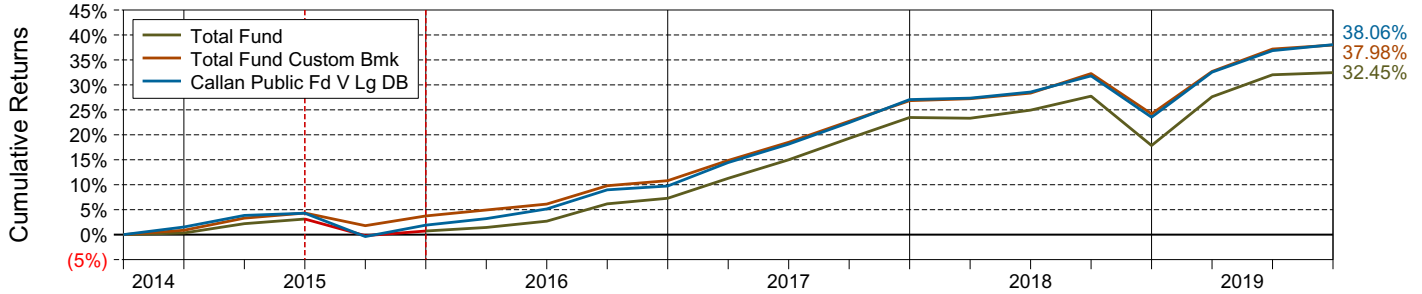


Squares represent membership of the Callan Public Fund Spons- V Lg DB (>10B)

Total Fund Drawdown Analysis for Five Years Ended September 30, 2019

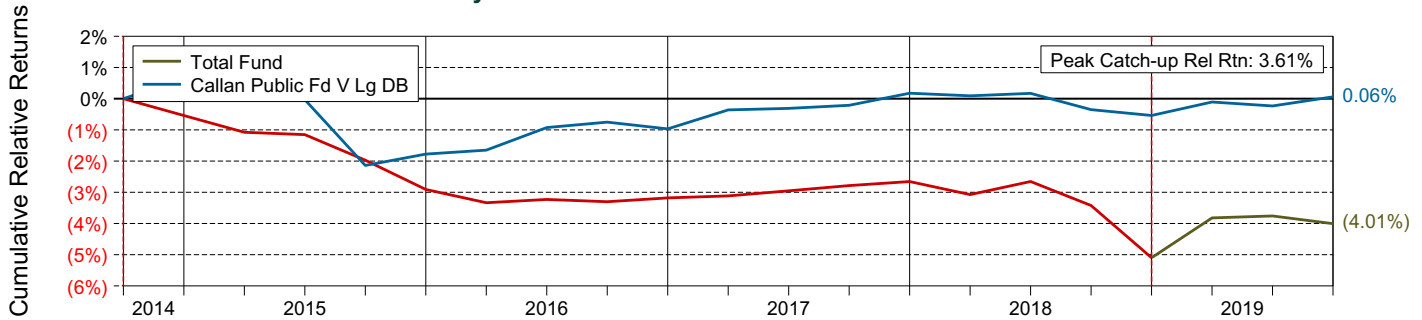
The following analysis focuses on downside risk by looking at cumulative drawdowns experienced from peak-to-trough for the portfolio, index, and peer group. Drawdown is measured from the "high-water mark" of cumulative return to the subsequent "trough". The first chart illustrates the Worst Absolute Drawdown as well as the Current Drawdown (cumulative return from high-water mark to now). The second chart focuses on Relative Drawdown (negative excess return vs. index). The bottom charts highlight the portfolio's peer rankings during drawdown periods.

Absolute Cumulative Drawdown Analysis



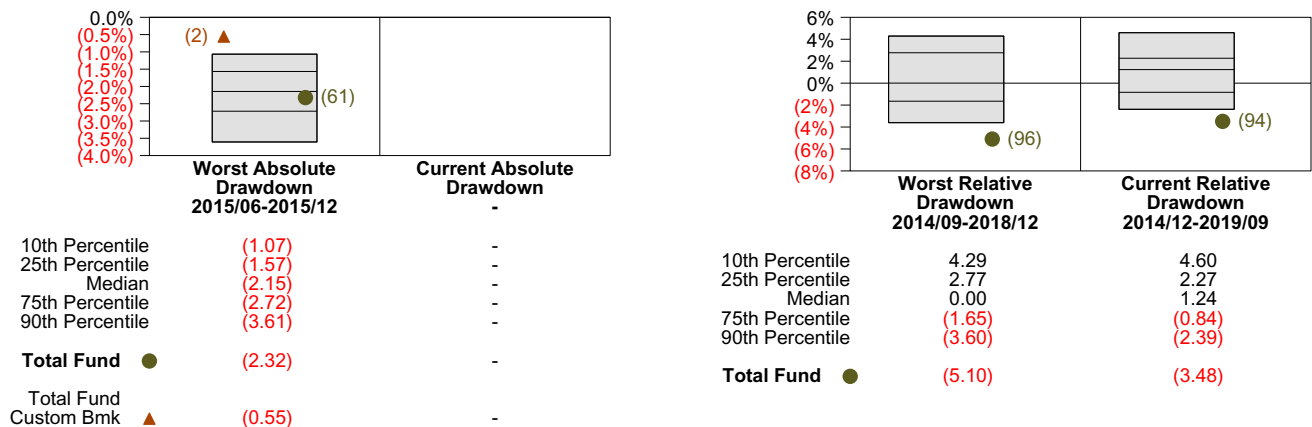
	Worst Absolute Drawdown					Current Absolute Drawdown				
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers
Total Fund	(2.32)%	0.50	2015/06-2015/12	(0.55)%	(2.29)%	-	-	-	-	-
Recovery from Trough	5.40%	0.75	2015/12-2016/09	5.83%	6.94%	-	-	-	-	-
Total Fund Custom Bmk	(6.11)%	0.25	2018/09-2018/12	-	-	-	-	-	-	-
Callan Public Fd V Lg DB	(6.29)%	0.25	2018/09-2018/12	-	-	-	-	-	-	-

Relative Cumulative Drawdown Analysis vs. Total Fund Custom Bmk



	Worst Relative Drawdown				Current Relative Drawdown			
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers
Total Fund	(5.10)%	4.25	2014/09-2018/12	(0.54)%	(3.48)%	4.75	2014/12-2019/09	(0.58)%
Recovery from Trough	1.35%	0.25	2018/12-2019/03	0.43%	1.15%	0.75+	2018/12-2019/09	0.60%
Callan Public Fd V Lg DB	(2.77)%	0.75	2014/12-2015/09	-	(0.58)%	4.75	2014/12-2019/09	-

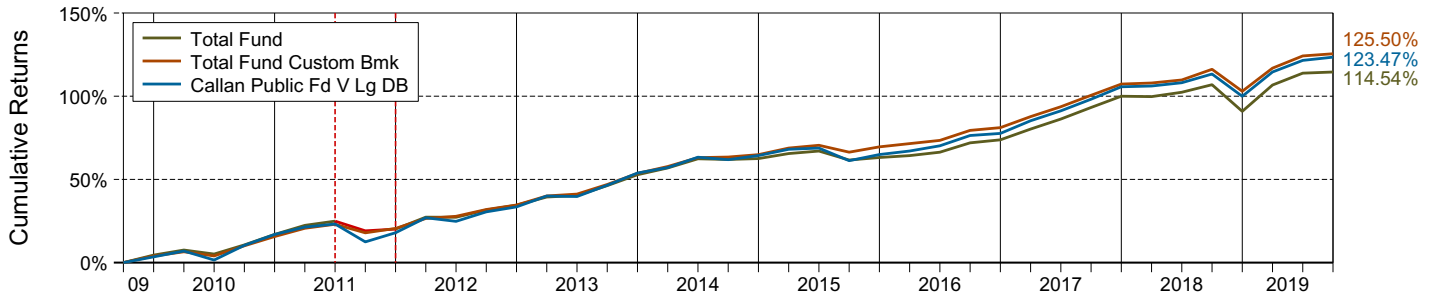
Drawdown Rankings vs. Total Fund Custom Bmk Rankings against Callan Public Fund Spons- V Lg DB (>10B) Five Years Ended September 30, 2019



Total Fund Drawdown Analysis for Ten Years Ended September 30, 2019

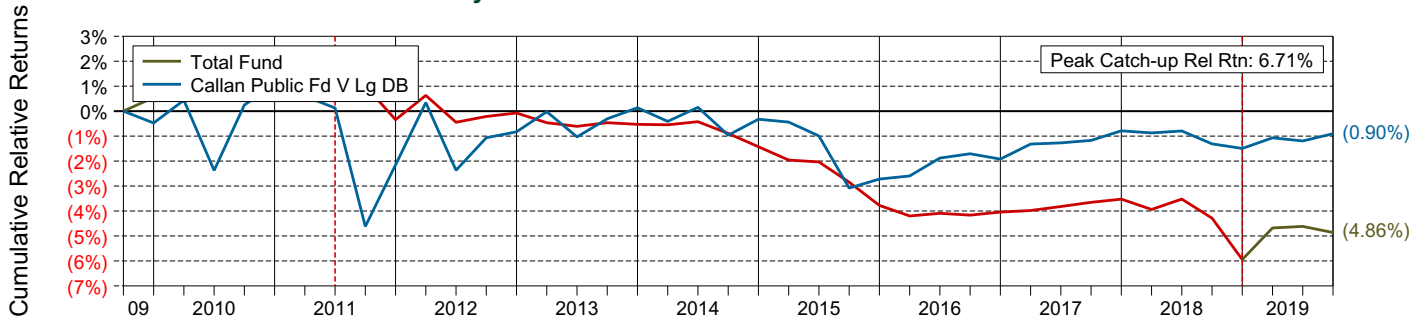
The following analysis focuses on downside risk by looking at cumulative drawdowns experienced from peak-to-trough for the portfolio, index, and peer group. Drawdown is measured from the "high-water mark" of cumulative return to the subsequent "trough". The first chart illustrates the Worst Absolute Drawdown as well as the Current Drawdown (cumulative return from high-water mark to now). The second chart focuses on Relative Drawdown (negative excess return vs. index). The bottom charts highlight the portfolio's peer rankings during drawdown periods.

Absolute Cumulative Drawdown Analysis



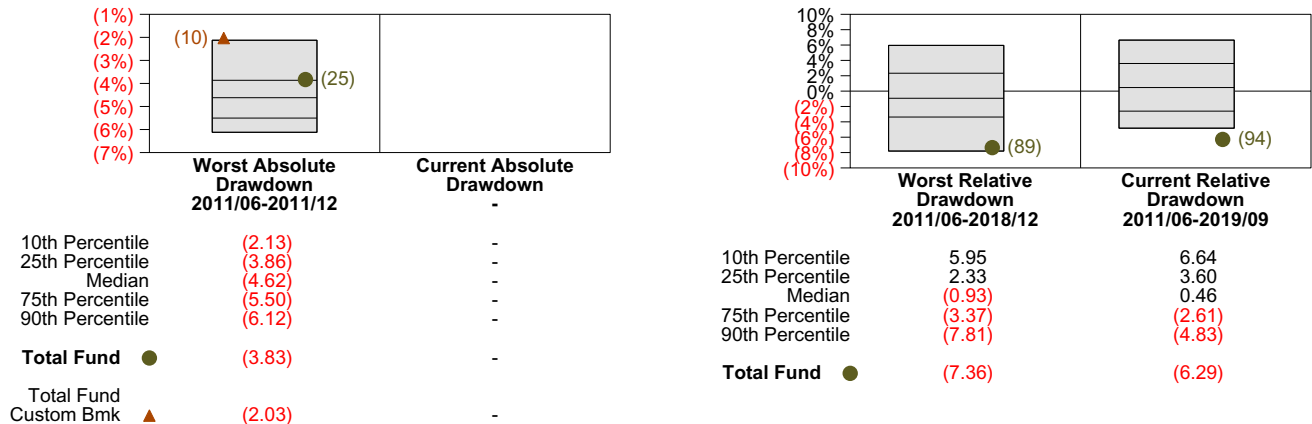
	Worst Absolute Drawdown					Current Absolute Drawdown				
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers
Total Fund	(3.83)%	0.50	2011/06-2011/12	(2.03)%	(4.26)%	-	-	-	-	-
Recovery from Trough	5.98%	0.25	2011/12-2012/03	4.95%	7.63%	-	-	-	-	-
Total Fund Custom Bmk	(6.11)%	0.25	2018/09-2018/12	-	-	-	-	-	-	-
Callan Public Fd V Lg DB	(6.29)%	0.25	2018/09-2018/12	-	-	-	-	-	-	-

Relative Cumulative Drawdown Analysis vs. Total Fund Custom Bmk



	Worst Relative Drawdown				Current Relative Drawdown			
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers
Total Fund	(7.36)%	7.50	2011/06-2018/12	(1.62)%	(6.29)%	8.25	2011/06-2019/09	(1.03)%
Recovery from Trough	1.15%	0.75+	2018/12-2019/09	0.60%	1.15%	0.75+	2018/12-2019/09	0.60%
Callan Public Fd V Lg DB	(5.63)%	0.75	2010/12-2011/09	-	(1.95)%	8.75	2010/12-2019/09	-

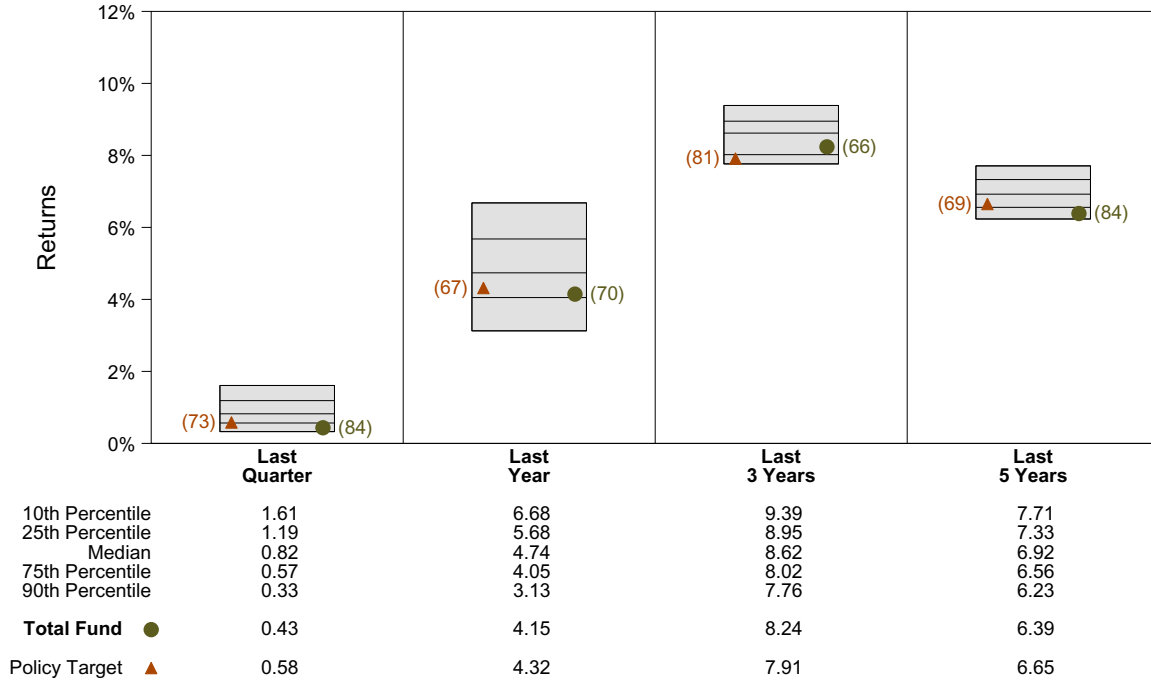
Drawdown Rankings vs. Total Fund Custom Bmk Rankings against Callan Public Fund Spons- V Lg DB (>10B) Ten Years Ended September 30, 2019



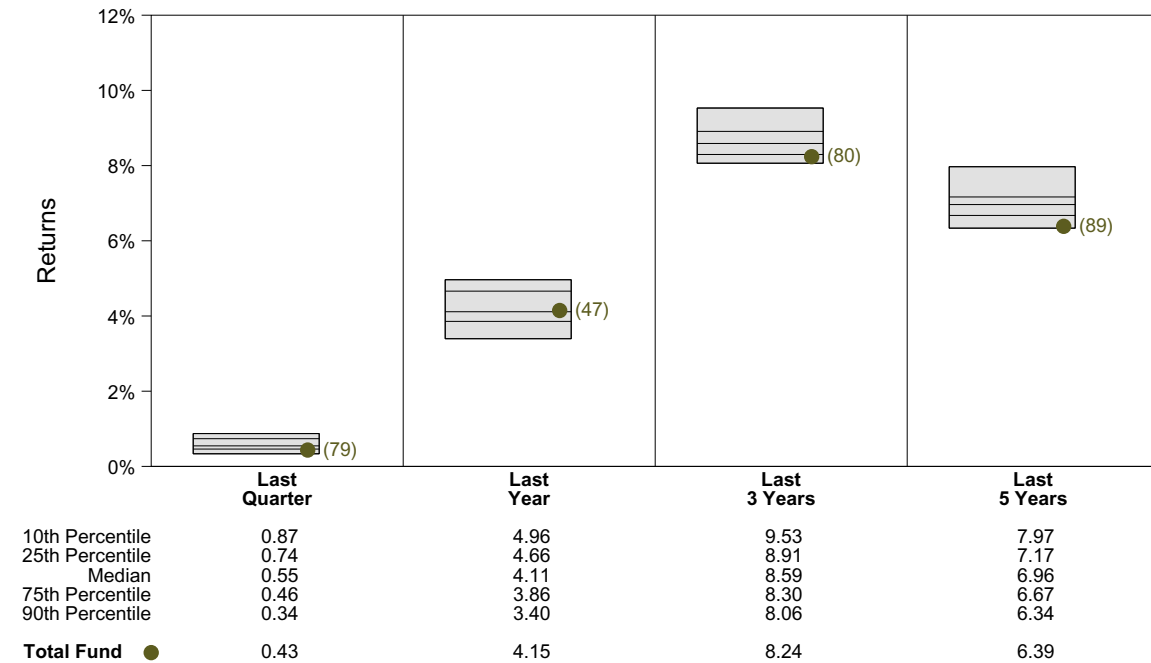
Total Fund Ranking

The first two charts show the ranking of the Total Fund's performance relative to that of the Callan Public Fund Spons- V Lg DB (>10B) for periods ended September 30, 2019. The first chart is a standard unadjusted ranking. In the second chart each fund in the database is adjusted to have the same historical asset allocation as that of the Total Fund.

Callan Public Fund Spons- V Lg DB (>10B)



Asset Allocation Adjusted Ranking



* Current Quarter Target = 48.0% MSCI ACWI IMI, 16.0% Private Equity, 11.0% Blmbg Aggregate, 10.8% NCREIF NFI-ODCE Eq Wt Net lagged 3 months, 10.0% S&P:LSTA Lev Loan, 3.0% 3-month Treasury Bill, 1.2% FTSE EP/NA US Index lagged 3 months and 0.0% HFRI Fund of Funds Compos.

Total Fund Period Ended September 30, 2019

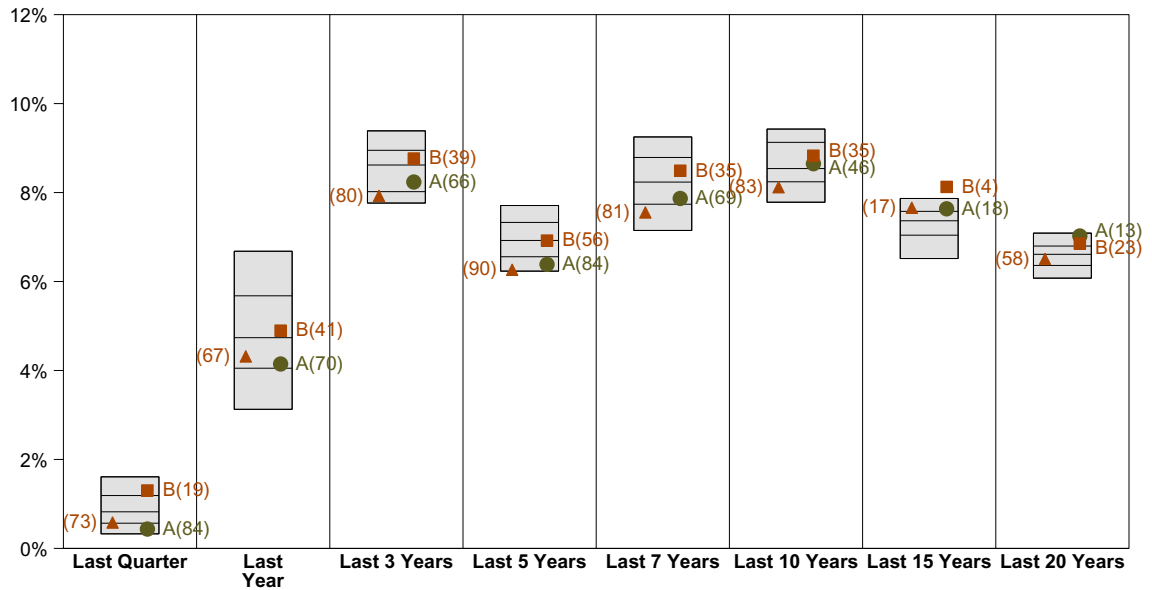
Quarterly Summary and Highlights

- Total Fund's portfolio posted a 0.43% return for the quarter placing it in the 84 percentile of the Callan Public Fund Spons- V Lg DB (>10B) group for the quarter and in the 70 percentile for the last year.
- Total Fund's portfolio underperformed the Total Fund Custom Benchmark by 0.15% for the quarter and underperformed the Total Fund Custom Benchmark for the year by 0.17%.

Quarterly Asset Growth

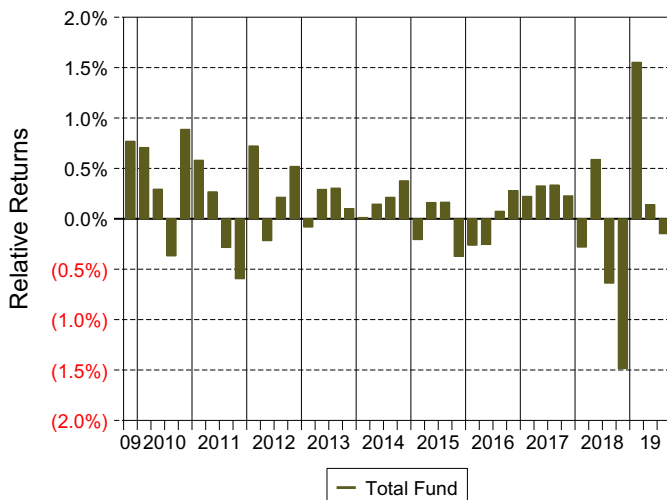
Beginning Market Value	\$29,533,886,712
Net New Investment	\$-188,621,035
Investment Gains/(Losses)	\$105,908,818
Ending Market Value	\$29,451,174,495

Performance vs Callan Public Fund Spons- V Lg DB (>10B) (Gross)

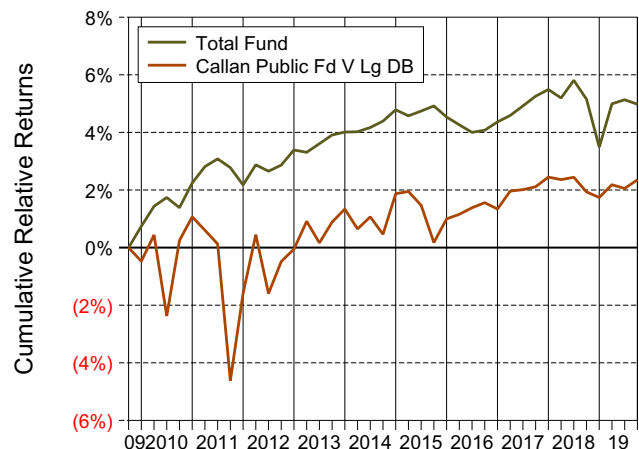


Percentile	Total Fund	Total Fund Public Market Equivalent	Total Fund Custom Benchmark
10th Percentile	0.33	0.57	0.58
25th Percentile	0.57	0.82	0.58
Median	0.82	1.19	0.58
75th Percentile	1.19	1.61	0.58
90th Percentile	1.61	2.15	0.58
Total Fund	0.43	4.15	4.32
Total Fund Public Market Equivalent	1.30	4.89	4.32
Total Fund Custom Benchmark	0.58	4.32	4.32

Relative Returns vs Total Fund Custom Benchmark



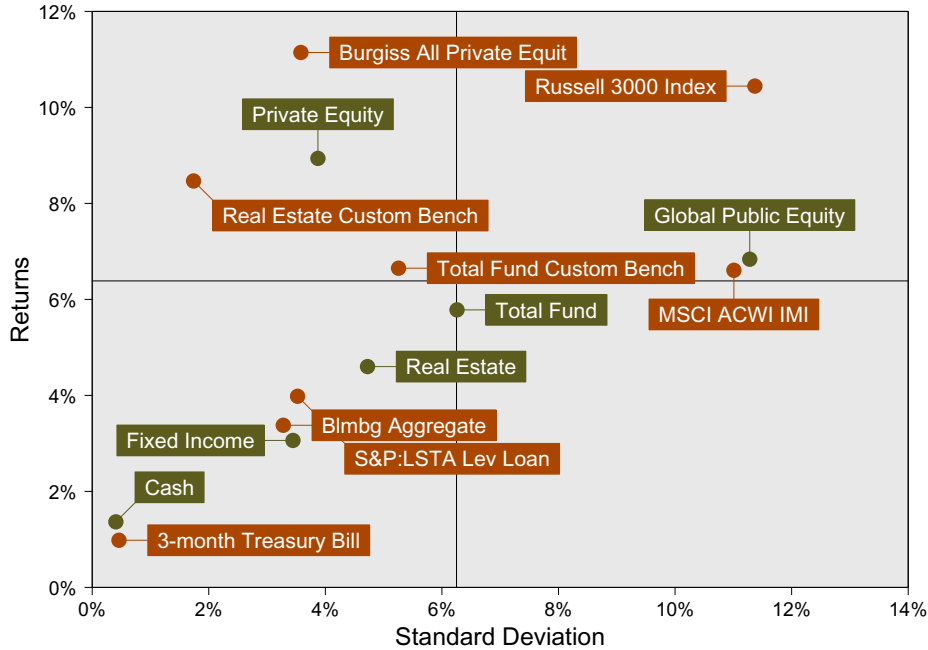
Cumulative Returns vs Total Fund Custom Benchmark



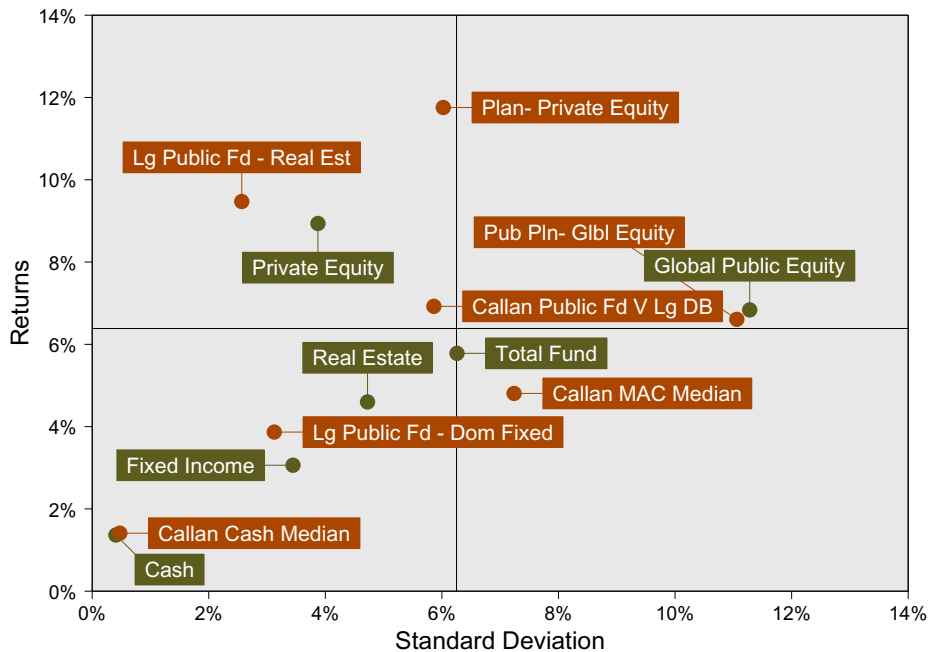
Asset Class Risk and Return

The charts below show the five year annualized risk and return for each asset class component of the Total Fund. The first graph contrasts these values with those of the appropriate index for each asset class. The second chart contrasts them with the risk and return of the median portfolio in each of the appropriate CAI comparative databases. In each case, the crosshairs on the chart represent the return and risk of the Total Fund.

Five Year Annualized Risk vs Return Asset Classes vs Benchmark Indices



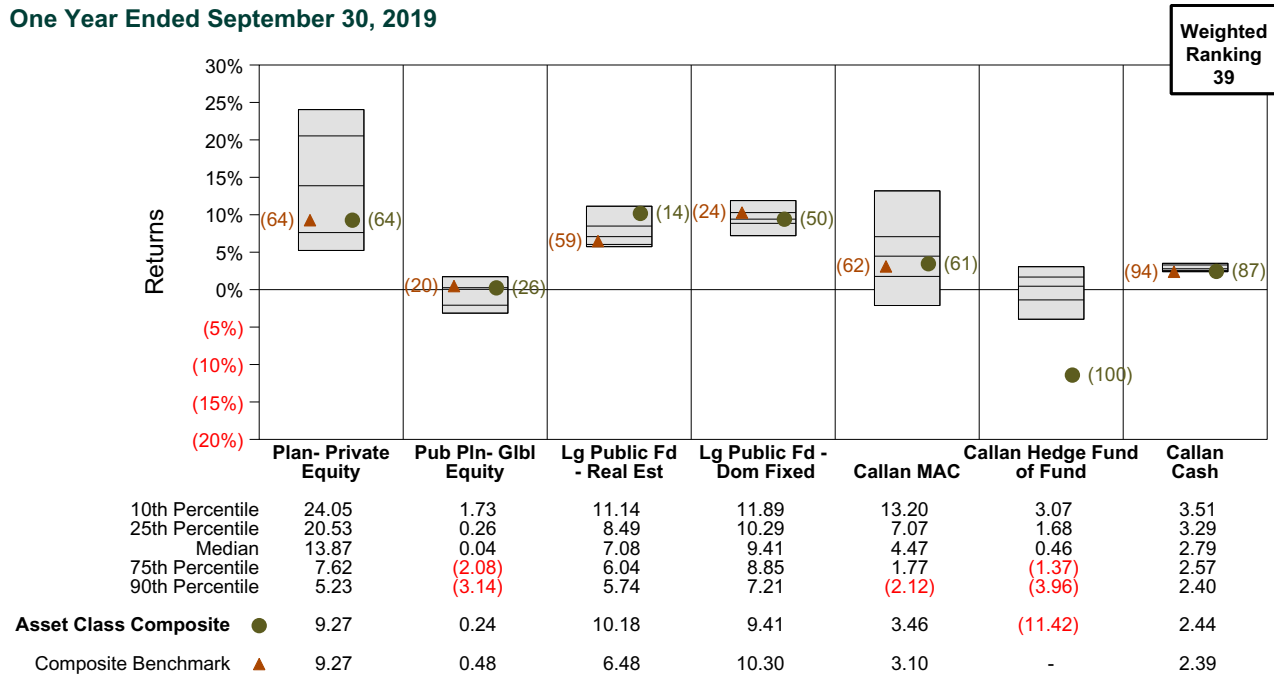
Five Year Annualized Risk vs Return Asset Classes vs Asset Class Median



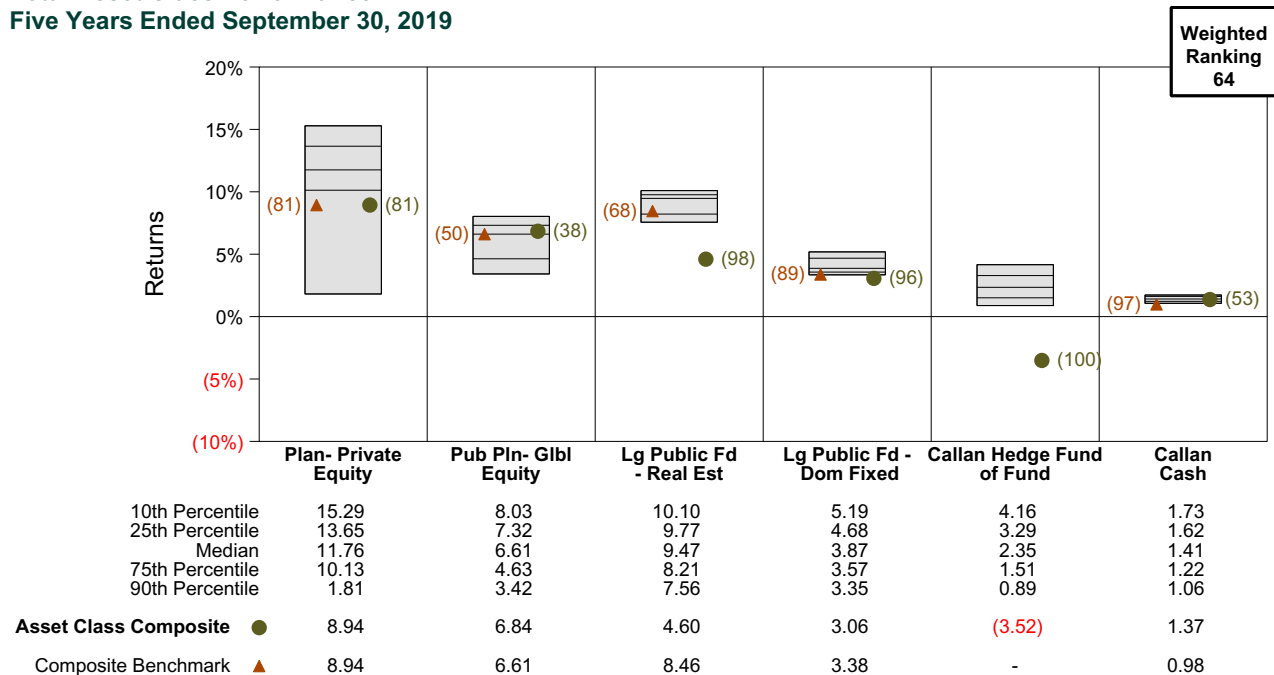
Asset Class Rankings

The charts below show the rankings of each asset class component of the Total Fund relative to appropriate comparative databases. In the upper right corner of each graph is the weighted average of the rankings across the different asset classes. The weights of the fund's actual asset allocation are used to make this calculation. The weighted average ranking can be viewed as a measure of the fund's overall success in picking managers and structuring asset classes.

Total Asset Class Performance One Year Ended September 30, 2019



Total Asset Class Performance Five Years Ended September 30, 2019



* Current Quarter Target = 48.0% MSCI ACWI IMI, 16.0% Private Equity, 11.0% Blmbg Aggregate, 10.8% NCREIF NFI-ODCE Eq Wt Net lagged 3 months, 10.0% S&P:LSTA Lev Loan, 3.0% 3-month Treasury Bill, 1.2% FTSE EP/NA US Index lagged 3 months and 0.0% HFRI Fund of Funds Compos.

Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of September 30, 2019, with the distribution as of June 30, 2019.

Asset Distribution Across Investment Managers

	September 30, 2019					June 30, 2019		
	Market Value	% of Total	(min)	Target	(max)	Market Value	% of Total	Target
	\$(000)	Weight	Weight	\$(000)	Weight	Weight		
Total Equity	\$20,063,811	68.13%	59.00%	64.00%	69.00%	\$20,241,699	68.54%	64.00%
Global Public Equity	\$16,154,037	54.85%	-	-	-	\$16,231,877	54.96%	-
Global Mandates	1,046,367	3.55%				1,040,873	3.52%	
U.S. Equity	7,791,715	26.46%				7,766,309	26.30%	
Non-U.S. Developed Markets Equity	5,515,280	18.73%				5,568,317	18.85%	
Emerging Mkts Equity	1,799,407	6.11%				1,855,115	6.28%	
Private Equity (1)	\$3,909,776	13.28%	-	-	-	\$4,009,894	13.58%	-
Buyouts	1,779,780	6.04%				1,779,557	6.03%	
Special Situations	559,227	1.90%				549,672	1.86%	
Venture Capital	747,225	2.54%				802,499	2.72%	
Keystone Legacy (2)	823,543	2.80%				878,166	2.97%	
Fixed Income	\$4,350,899	14.77%	8.00%	11.00%	14.00%	\$4,273,494	14.47%	11.00%
Core Fixed Income	1,983,351	6.73%				1,940,500	6.57%	
Core-Plus Fixed Income	893,170	3.03%				890,405	3.01%	
Nominal U.S. Treasuries	606,576	2.06%				587,016	1.99%	
Global TIPS	867,802	2.95%				855,574	2.90%	
Multi-Strategy	\$1,714,470	5.82%	7.00%	10.00%	13.00%	\$1,661,163	5.62%	10.00%
Opportunistic Equity & Fixed Income	547,471	1.86%				545,393	1.85%	
Private Credit (1)	233,064	0.79%				189,580	0.64%	
Credit Focused Strategies	933,935	3.17%				926,190	3.14%	
Real Estate (1)	\$2,047,329	6.95%	9.00%	12.00%	15.00%	\$1,902,498	6.44%	12.00%
Core/Core Plus Real Estate Funds	699,855	2.38%				619,316	2.10%	
Value Add/Opp. Real Estate	1,055,731	3.58%				1,012,699	3.43%	
REITS	286,283	0.97%				264,972	0.90%	
Natural Resources/Infrastructure	5,460	0.02%				5,510	0.02%	
Legacy Hedge Funds	\$35,702	0.12%	-	-	-	\$37,978	0.13%	-
Cash	\$1,238,962	4.21%	0.00%	3.00%	6.00%	\$1,416,982	4.80%	3.00%
Total Fund	\$29,451,174	100.0%		100.0%		\$29,533,887	100.0%	100.0%

(1) Private Equity, Real Estate, and Private Debt Market Values have a 1 Qtr lag

(2) As of 7/31/2018, Keystone Legacy SPV consists of 163 non-core funds, prior performance in previous sub-asset classes

Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of September 30, 2019, with the distribution as of June 30, 2019. The change in asset distribution is broken down into the dollar change due to Net New Investment and the dollar change due to Investment Return.

Asset Distribution Across Investment Managers

	September 30, 2019		Net New Inv. \$(000)	Inv. Return \$(000)	June 30, 2019	
	Market Value \$(000)	% of Total Weight			Market Value \$(000)	% of Total Weight
Global Public Equity	\$16,154,037	54.85%	\$(5,382)	\$(72,458)	\$16,231,877	54.96%
Global Mandates	1,046,367	3.55%	(979)	6,473	1,040,873	3.52%
U.S. Equity	\$7,791,715	26.46%	\$(1,420)	\$26,825	\$7,766,309	26.30%
U.S. Large/Mid Cap Equity	6,242,470	21.20%	(623)	86,235	6,156,858	20.85%
U.S. Small Cap Equity	1,549,245	5.26%	(797)	(59,410)	1,609,452	5.45%
Non-U.S. Equity	\$7,314,687	24.84%	\$(2,983)	\$(105,762)	\$7,423,432	25.14%
Non-U.S. Developed Markets Equity	\$5,515,280	18.73%	\$(1,511)	\$(51,525)	\$5,568,317	18.85%
Non-U.S. Dev Large/Mid Cap Equity	4,757,153	16.15%	(1,346)	(42,944)	4,801,443	16.26%
Non-U.S. Dev Small Cap Equity	758,127	2.57%	(165)	(8,581)	766,873	2.60%
Emerging Mkts Equity	\$1,799,407	6.11%	\$(1,472)	\$(54,237)	\$1,855,115	6.28%
Fixed Income	\$4,350,899	14.77%	\$(1,108)	\$78,513	\$4,273,494	14.47%
Core Fixed Income	\$1,983,351	6.73%	\$(77)	\$42,929	\$1,940,500	6.57%
Core-Plus Fixed Income	\$893,170	3.03%	\$(702)	\$3,467	\$890,405	3.01%
Nominal U.S. Treasuries	\$606,576	2.06%	\$(134)	\$19,694	\$587,016	1.99%
Global TIPS	\$867,802	2.95%	\$(195)	\$12,423	\$855,574	2.90%
Multi-Strategy	\$1,714,470	5.82%	\$39,893	\$13,413	\$1,661,163	5.62%
Opportunistic Equity & Fixed Income	547,471	1.86%	(759)	2,837	545,393	1.85%
Private Credit (1)	233,064	0.79%	43,184	300	189,580	0.64%
Credit Focused Strategies	933,935	3.17%	(2,531)	10,277	926,190	3.14%
Private Equity (1)	\$3,909,776	13.28%	\$(138,429)	\$38,310	\$4,009,894	13.58%
Buyouts	1,779,780	6.04%	(38,442)	38,665	1,779,557	6.03%
Special Situations	559,227	1.90%	(11,579)	21,135	549,672	1.86%
Venture Capital	747,225	2.54%	(27,883)	(27,391)	802,499	2.72%
Keystone Legacy (2)	823,543	2.80%	(60,525)	5,901	878,166	2.97%
Real Estate (1)	\$2,047,329	6.95%	\$104,396	\$40,435	\$1,902,498	6.44%
Core/Core Plus Real Estate Funds	699,855	2.38%	90,402	(9,863)	619,316	2.10%
Value Add/Opp. Real Estate	1,055,731	3.58%	14,194	28,838	1,012,699	3.43%
REITS	286,283	0.97%	0	21,310	264,972	0.90%
Natural Resources/Infrastructure	5,460	0.02%	(200)	150	5,510	0.02%
Legacy Hedge Funds	\$35,702	0.12%	\$(1,867)	\$(409)	\$37,978	0.13%
Cash	\$1,238,962	4.21%	\$(186,123)	\$8,103	\$1,416,982	4.80%
Total Fund*	\$29,451,174	100.0%	\$(188,621)	\$105,909	\$29,533,887	100.0%

*Total Fund target allocation is: 48% Global Public Equity, 11% Fixed Income, 10% Multi-Strategy, 16% Private Equity, 12% Real Estate, 3% Cash, 0% Legacy Hedge Funds

*Sub-composite market values may not sum to asset class composites as a result of accounts in liquidation.

(1) Private Equity, Real Estate, and Private Debt Market Values have a 1 Qtr lag

(2) As of 7/31/2018, Keystone Legacy SPV consists of 163 non-core funds, prior performance in previous sub-asset classes

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended September 30, 2019. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended September 30, 2019							
	Market Value \$(mm)	Ending Weight	Last Quarter	Year to Date	Last Year	Last 3 Years	Last 5 Years
Net Performance							
Total Fund	\$29,451	100.00%	0.32%	12.39%	3.69%	7.65%	5.78%
Total Fund Custom Benchmark(1)	-	-	0.58%	11.11%	4.32%	7.93%	6.27%
Public Market Equiv Benchmark(2)	-	-	1.30%	10.82%	4.89%	8.77%	6.92%
60/40 Index(3)	-	-	0.83%	13.12%	4.71%	6.93%	5.50%
Global Public Equity	\$16,154	54.85%	(0.47%)	16.27%	0.24%	9.56%	6.84%
MSCI ACWI IMI	-	-	(0.18%)	15.87%	0.48%	9.36%	6.61%
Fixed Income	\$4,351	14.77%	1.80%	8.90%	9.41%	3.38%	3.06%
Blmbg Aggregate	-	-	2.27%	8.52%	10.30%	2.92%	3.38%
Multi-Strategy	\$1,714	5.82%	0.57%	11.70%	3.46%	-	-
S&P/LSTA Leveraged Loan	-	-	0.99%	6.79%	3.10%	4.53%	3.98%
Russell 3000 Index	-	-	1.16%	20.09%	2.92%	12.83%	10.44%
Real Estate	\$2,047	6.95%	2.06%	8.76%	10.18%	2.04%	4.60%
Real Estate Custom Benchmark	-	-	1.08%	4.70%	6.54%	6.46%	8.47%
CPI +3% (Qtr lag)	-	-	1.49%	3.70%	4.65%	5.05%	4.45%
Private Equity	\$3,910	13.28%	0.97%	7.16%	9.27%	11.87%	8.94%
Burgiss Private Equity Custom Index	-	-	3.33%	6.30%	9.78%	14.17%	11.14%
Russell 3000 +3% (Qtr lag)	-	-	4.94%	4.66%	12.76%	17.35%	13.49%
Cash	\$1,239	4.21%	0.57%	1.82%	2.44%	1.87%	1.37%
3-month Treasury Bill	-	-	0.56%	1.81%	2.39%	1.54%	0.98%

(1) Total Fund Custom Benchmark returns provided by RVK prior to 12/31/2018.

Benchmark consists of: 16% SERS Private Equity Composite, 48% MSCI ACWI IM Index, 12% Real Estate Custom Benchmark, 10% S&P/LSTA Leveraged Loan Index, 11% Bloomberg US Agg Bond Index, 3% ICE BofAML 3 Mo US T-Bill Index

(2) Public Market Equivalent Benchmark returns provided by RVK prior to 12/31/2018.

Benchmark consists of: 16% Russell 3000+3% (Qtr Lag), 48% MSCI ACWI IM Index, 12% CPI+3% (Qtr Lag),

10% S&P/LSTA Leveraged Loan Index, 11% Bloomberg US Agg Bond Index, 3% ICE BofAML 3 Mo US T-Bill Index

(3) Benchmark consists of 60% MSCI ACWI IM Index, 40% Bloomberg U.S. Agg Bond Index

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended September 30, 2019. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended September 30, 2019

	Last 10 Years	Last 15 Years	Last 20 Years	Last 25 Years	Since Inception	
Net Performance						
Total Fund	7.93%	6.84%	6.26%	8.18%	9.46%	(1/81)
Total Fund Custom Benchmark(1)	8.12%	7.66%	6.51%	8.41%	-	
Public Market Equiv Benchmark(2)	8.83%	8.13%	6.85%	8.69%	-	
60/40 Index(3)	6.80%	6.33%	5.51%	6.62%	-	
Global Public Equity	9.06%	6.95%	-	-	6.64%	(1/02)
MSCI ACWI IMI	8.45%	7.25%	5.28%	6.79%	6.96%	(1/02)
Fixed Income	5.21%	5.20%	5.74%	6.41%	8.44%	(1/81)
Blmbg Aggregate	3.75%	4.21%	5.01%	5.57%	7.68%	(1/81)
Multi-Strategy	-	-	-	-	6.94%	(10/17)
S&P/LSTA Leveraged Loan	5.21%	4.72%	4.85%	-	4.14%	(10/17)
Russell 3000 Index	13.08%	9.10%	6.72%	9.81%	10.00%	(10/17)
Real Estate	6.65%	5.93%	6.90%	7.75%	8.39%	(3/84)
Real Estate Custom Benchmark	9.32%	7.36%	7.76%	-	-	
CPI +3% (Qtr lag)	4.73%	5.02%	5.19%	5.22%	5.64%	(3/84)
Private Equity	11.92%	11.58%	9.92%	13.70%	10.92%	(1/86)
Burgiss Private Equity Custom Index	13.71%	13.11%	11.77%	15.15%	16.94%	(1/86)
Russell 3000 +3% (Qtr lag)	18.00%	12.35%	9.80%	13.49%	14.56%	(1/86)
Cash	0.84%	1.68%	2.31%	2.86%	3.64%	(1/87)
3-month Treasury Bill	0.54%	1.39%	1.82%	2.50%	3.28%	(1/87)

(1) Total Fund Custom Benchmark returns provided by RVK prior to 12/31/2018.

Benchmark consists of: 16% SERS Private Equity Composite, 48% MSCI ACW IM Index, 12% Real Estate Custom Benchmark, 10% S&P/LSTA Leveraged Loan Index, 11% Bloomberg US Agg Bond Index, 3% ICE BofAML 3 Mo US T-Bill Index

(2) Public Market Equivalent Benchmark returns provided by RVK. Benchmark consists of: 16% Russell 3000+3% (Qtr Lag), 48% MSCI ACW IM Index, 12% CPI+3% (Qtr Lag), 10% S&P/LSTA Leveraged Loan Index, 11% Bloomberg US Agg Bond Index, 3% ICE BofAML 3 Mo US T-Bill Index

(3) 60% MSCI ACW IMI/ 40% Bloomberg Agg Bond Index

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended September 30, 2019. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended September 30, 2019							
	Market Value \$(mm)	Ending Weight	Last Quarter	Year to Date	Last Year	Last 3 Years	Last 5 Years
Net Performance- Equity							
Global Public Equity	\$16,154	100.00%	(0.47%)	16.27%	0.24%	9.56%	6.84%
MSCI ACWI IMI	-	-	(0.18%)	15.87%	0.48%	9.36%	6.61%
Global Mandates	\$1,046	6.48%	0.53%	20.84%	6.38%	14.52%	10.96%
MSCI World	-	-	0.53%	17.61%	1.83%	10.21%	7.18%
Walter Scott & Prtnrs Gbl Gr Eq	1,046	6.48%	0.53%	20.84%	6.38%	14.52%	10.96%
MSCI World	-	-	0.53%	17.61%	1.83%	10.21%	7.18%
U.S. Equity	\$7,792	48.23%	0.33%	19.39%	0.72%	11.10%	9.20%
Russell 3000 Index(1)	-	-	1.16%	20.09%	2.92%	12.83%	10.44%
U.S. Mid/Large Cap Equity	\$6,242	38.64%	1.38%	20.57%	3.34%	12.44%	9.99%
Russell 1000 Index	-	-	1.42%	20.53%	3.87%	13.19%	10.62%
MCM Russell 1000 Index	5,790	35.84%	1.43%	20.51%	3.91%	13.22%	10.66%
Russell 1000 Index	-	-	1.42%	20.53%	3.87%	13.19%	10.62%
Iridian Asset Mgmt MCV	453	2.80%	1.03%	21.78%	(3.26%)	4.33%	3.70%
Russell MidCap Index	-	-	0.48%	21.93%	3.19%	10.69%	9.10%
Russell MidCap Value Idx	-	-	1.22%	19.47%	1.60%	7.82%	7.55%
U.S. Small Cap Equity	\$1,549	9.59%	(3.75%)	14.77%	(8.76%)	5.46%	5.86%
Russell 2000 Index(1)	-	-	(2.40%)	14.18%	(8.89%)	7.32%	7.26%
S&P 600 Small Cap Index	-	-	(0.20%)	13.46%	(9.34%)	9.33%	9.89%
MCM Russell 2000 Core Index	317	1.96%	(2.39%)	14.13%	(8.88%)	-	-
Russell 2000 Index	-	-	(2.40%)	14.18%	(8.89%)	8.23%	8.19%
MCM Russell 2000 Val Index	573	3.55%	(0.56%)	12.77%	(8.23%)	-	-
Russell 2000 Value Index	-	-	(0.57%)	12.82%	(8.24%)	6.54%	7.17%
Emerald Adv Div Sm Cap Grth	660	4.08%	(6.96%)	16.86%	(9.17%)	-	-
Russell 2000 Growth Index	-	-	(4.17%)	15.34%	(9.63%)	9.79%	9.08%

*Market values may not sum as a result of accounts funded within the quarter or accounts in the process of liquidation. The market values and performance of such accounts are included within their relevant composites.

(1) Benchmark history is a blend of current and past benchmark indices. History prior to 12/31/2018 is provided by RVK.

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended September 30, 2019. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended September 30, 2019

	Last 10 Years	Last 15 Years	Last 20 Years	Last 25 Years	Since Inception
Net Performance- Equity					
Global Public Equity	9.06%	6.95%	-	-	6.64% (1/02)
MSCI ACWI IMI	8.45%	7.25%	5.28%	6.79%	6.96% (1/02)
Global Mandates	11.41%	-	-	-	8.48% (11/06)
MSCI World	9.01%	7.14%	4.89%	7.00%	5.51% (11/06)
Walter Scott & Prtnrs Gbl Gr Eq	11.12%	-	-	-	9.04% (10/06)
MSCI World	9.01%	7.14%	4.89%	7.00%	5.77% (10/06)
U.S. Equity	12.64%	8.12%	6.44%	9.36%	10.55% (1/81)
Russell 3000 Index(1)	13.08%	9.10%	6.72%	9.72%	10.87% (1/81)
U.S. Mid/Large Cap Equity	13.20%	8.74%	6.43%	9.68%	9.45% (1/94)
Russell 1000 Index	13.23%	9.17%	6.63%	9.93%	9.66% (1/94)
MCM Russell 1000 Index	-	-	-	-	14.03% (1/12)
Russell 1000 Index	13.23%	9.17%	6.63%	9.93%	14.06% (1/12)
Iridian Asset Mgmt MCV	12.01%	10.29%	10.05%	-	12.51% (3/95)
Russell MidCap Index	13.07%	9.92%	9.50%	11.05%	11.04% (3/95)
Russell MidCap Value Idx	12.29%	9.29%	9.83%	11.11%	11.11% (3/95)
U.S. Small Cap Equity	10.01%	7.07%	7.53%	9.37%	8.91% (1/94)
Russell 2000 Index(1)	11.54%	8.72%	8.88%	10.39%	10.07% (1/94)
S&P 600 Small Cap Index	13.02%	9.52%	10.01%	10.75%	10.32% (1/94)
MCM Russell 2000 Core Index	-	-	-	-	6.53% (12/16)
Russell 2000 Index	11.19%	8.19%	7.99%	8.86%	6.57% (12/16)
MCM Russell 2000 Val Index	-	-	-	-	3.49% (12/16)
Russell 2000 Value Index	10.06%	7.23%	9.05%	9.66%	3.55% (12/16)
Emerald Adv Div Sm Cap Grth	-	-	-	-	10.51% (12/16)
Russell 2000 Growth Index	12.25%	9.04%	6.53%	7.63%	9.56% (12/16)

*Market values may not sum as a result of accounts funded within the quarter or accounts in the process of liquidation. The market values and performance of such accounts are included within their relevant composites.

(1) Benchmark history is a blend of current and past benchmark indices. History prior to 12/31/2018 is provided by RVK.

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended September 30, 2019. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended September 30, 2019							
	Market Value \$(mm)	Ending Weight	Last Quarter	Year to Date	Last Year	Last 3 Years	Last 5 Years
Net Performance- Equity							
Non-U.S. Equity	\$7,315	36.31%	(1.45%)	12.54%	(1.08%)	7.17%	3.57%
MSCI ACWI ex US IMI(1)	-	-	(1.72%)	11.39%	(1.84%)	6.10%	3.05%
Non-U.S. Developed Markets Equity	\$5,515	27.38%	(0.93%)	14.20%	(0.93%)	7.60%	4.02%
MSCI ACWI ex US IMI	-	-	(1.72%)	11.39%	(1.84%)	6.10%	3.05%
MSCI World ex US	-	-	(0.93%)	13.57%	(0.95%)	6.49%	3.06%
Non-U.S. Dev Mid/Large Cap Equity	\$4,757	23.61%	(0.89%)	13.92%	(0.64%)	8.58%	4.36%
MSCI World ex US	-	-	(0.93%)	13.57%	(0.95%)	6.49%	3.06%
BlackRock MSCI World Ex US Index	4,748	23.57%	(0.89%)	13.96%	(0.62%)	-	-
MSCI World ex US	-	-	(0.93%)	13.57%	(0.95%)	6.49%	3.06%
Non-U.S. Dev Small Cap Equity	\$758	3.76%	(1.15%)	16.01%	(2.82%)	5.33%	4.09%
MSCI World ex US Sm Cap	-	-	(0.27%)	12.58%	(5.62%)	5.54%	5.14%
FIS Group Non-U.S. Small Cap	190	0.95%	(2.24%)	9.21%	(4.98%)	-	-
MSCI ACWI ex US Small Cap	-	-	(1.19%)	10.28%	(5.63%)	4.64%	3.98%
Harris Assoc Int'l SCV	568	2.82%	(0.78%)	18.48%	(2.08%)	5.43%	4.15%
MSCI World ex US Sm Cap	-	-	(0.27%)	12.58%	(5.62%)	5.54%	5.14%
Emerging Mkts Equity	\$1,799	8.93%	(3.00%)	7.75%	(0.91%)	7.11%	3.05%
MSCI EM	-	-	(4.25%)	5.90%	(2.01%)	5.98%	2.33%
BlackRock Emg Mkts Index	660	3.27%	(4.26%)	5.72%	(2.19%)	-	-
MSCI EM	-	-	(4.25%)	5.90%	(2.01%)	5.98%	2.33%
Leading Edge Emg Mkts Fund	212	1.05%	(3.38%)	9.44%	-	-	-
MSCI EM	-	-	(4.25%)	5.90%	(2.01%)	5.98%	2.33%
Macquarie Emg Mkts Equity	409	2.03%	(1.68%)	6.12%	(1.98%)	7.35%	2.34%
MSCI EM	-	-	(4.25%)	5.90%	(2.01%)	5.98%	2.33%
Martin Currie Emg Mkts Equity	431	2.14%	(1.14%)	11.92%	2.47%	9.71%	5.38%
MSCI EM	-	-	(4.25%)	5.90%	(2.01%)	5.98%	2.33%
GlobeFlex Emerging Small Cap	88	0.44%	(7.37%)	4.44%	(7.79%)	4.28%	0.95%
MSCI EM Small Cap	-	-	(4.58%)	1.82%	(5.48%)	1.32%	(0.13%)
Northern Trust Equity Transition	1	0.01%	0.53%	0.69%	(15.28%)	-	-

*Market values may not sum as a result of accounts funded within the quarter or accounts in the process of liquidation. The market values and performance of such accounts are included within their relevant composites.

(1) Benchmark history is a blend of current and past benchmark indices. History prior to 12/31/2018 is provided by RVK.

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended September 30, 2019. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended September 30, 2019

	Last 10 Years	Last 15 Years	Last 20 Years	Last 25 Years	Since Inception
Net Performance- Equity					
Non-U.S. Equity	5.26%	5.31%	4.83%	-	6.10% (11/95)
MSCI ACWI ex US IMI(1)	4.64%	6.03%	4.81%	5.18%	5.45% (11/95)
Non-U.S. Developed Markets Equity	6.06%	5.44%	-	-	6.01% (1/02)
MSCI ACWI ex US IMI	4.66%	5.88%	4.41%	4.85%	6.55% (1/02)
MSCI World ex US	4.78%	5.36%	3.89%	4.94%	5.72% (1/02)
Non-U.S. Dev Mid/Large Cap Equity	6.17%	5.01%	-	-	5.50% (1/02)
MSCI World ex US	4.78%	5.36%	3.89%	4.94%	5.72% (1/02)
BlackRock MSCI World Ex US Index	-	-	-	-	3.62% (6/17)
MSCI World ex US	4.78%	5.36%	3.89%	4.94%	3.15% (6/17)
Non-U.S. Dev Small Cap Equity	6.52%	7.40%	6.59%	6.63%	6.74% (10/93)
MSCI World ex US Sm Cap	6.93%	7.00%	-	-	-
FIS Group Non-U.S. Small Cap	-	-	-	-	(4.98%) (10/18)
MSCI ACWI ex US Small Cap	6.13%	7.30%	6.44%	5.30%	(5.63%) (10/18)
Harris Assoc Int'l SCV	7.08%	8.37%	-	-	10.40% (7/03)
MSCI World ex US Sm Cap	6.93%	7.00%	-	-	8.99% (7/03)
Emerging Mkts Equity	2.89%	5.36%	-	-	6.93% (1/02)
MSCI EM	3.37%	7.82%	-	-	9.30% (1/02)
BlackRock Emg Mkts Index	-	-	-	-	1.94% (7/17)
MSCI EM	3.37%	7.82%	-	-	2.14% (7/17)
Leading Edge Emg Mkts Fund	-	-	-	-	7.97% (11/18)
MSCI EM	3.37%	7.82%	-	-	7.34% (11/18)
Macquarie Emg Mkts Equity	-	-	-	-	3.22% (5/13)
MSCI EM	3.37%	7.82%	-	-	1.91% (5/13)
Martin Currie Emg Mkts Equity	-	-	-	-	4.08% (1/14)
MSCI EM	3.37%	7.82%	-	-	2.45% (1/14)
GlobeFlex Emerging Small Cap	-	-	-	-	2.87% (8/13)
MSCI EM Small Cap	3.21%	8.17%	7.22%	3.35%	1.75% (8/13)

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Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended September 30, 2019. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended September 30, 2019							
	Market Value \$(mm)	Ending Weight	Last Quarter	Year to Date	Last Year	Last 3 Years	Last 5 Years
Net Performance - Fixed Income							
Fixed Income	\$4,351	100.00%	1.80%	8.90%	9.41%	3.38%	3.06%
Blmbg Aggregate	-	-	2.27%	8.52%	10.30%	2.92%	3.38%
Core Fixed Income	\$1,983	45.58%	2.19%	9.05%	10.16%	3.21%	3.54%
Blmbg Aggregate	-	-	2.27%	8.52%	10.30%	2.92%	3.38%
MCM Bond Index	1,117	25.66%	2.22%	8.47%	10.23%	2.88%	3.33%
Blmbg Aggregate(1)	-	-	2.27%	8.52%	10.30%	2.92%	3.38%
PIMCO Core Bond Fund	665	15.29%	1.90%	8.85%	9.64%	3.27%	3.62%
Blmbg Agg ex Treasury	-	-	2.18%	9.03%	10.19%	3.32%	3.65%
Taplin, Canida & Habacht Corp FI	202	4.64%	3.00%	13.02%	11.48%	4.66%	4.24%
Blmbg Credit	-	-	2.98%	12.61%	12.63%	4.33%	4.54%
Core-Plus Fixed Income	\$893	20.53%	0.31%	8.66%	6.73%	4.30%	2.44%
Brandywine Global Opp	196	4.51%	(1.64%)	5.03%	3.68%	1.79%	1.60%
FTSE WGBI	-	-	0.85%	6.27%	8.13%	1.19%	1.80%
Pyramis Gbl Adv HY CMBS	340	7.81%	1.85%	7.80%	8.35%	5.24%	5.15%
Blmbg US Univ CMBS ex Aaa	-	-	2.61%	11.13%	11.75%	5.32%	4.92%
Stone Harbor Gbl HY	193	4.44%	0.85%	11.69%	6.27%	5.32%	4.21%
FTSE US High Yield	-	-	0.96%	10.95%	5.72%	5.81%	4.99%
Stone Harbor EMD	164	3.77%	(1.07%)	11.40%	7.38%	3.07%	4.41%
JPM EMBI Global	-	-	1.34%	12.08%	10.74%	3.84%	5.10%
Global TIPS	\$868	19.95%	1.42%	7.69%	7.13%	2.19%	2.49%
Blmbg US TIPS	-	-	1.35%	7.58%	7.13%	2.21%	2.45%
Brown Brothers TIPS	230	5.29%	1.50%	7.74%	7.30%	2.23%	2.58%
Blmbg US TIPS	-	-	1.35%	7.58%	7.13%	2.21%	2.45%
NISA Inv Adv TIPS	517	11.88%	1.28%	7.48%	6.98%	2.16%	2.44%
Blmbg US TIPS(1)	-	-	1.35%	7.58%	7.13%	2.21%	2.45%
New Century Global TIPS	121	2.77%	1.95%	8.59%	7.57%	2.27%	2.55%
Blmbg Wld Gov I-L Undhdg	-	-	1.77%	8.19%	7.31%	2.17%	2.29%
Nominal U.S. Treasuries	\$607	13.94%	3.33%	10.53%	14.53%	2.13%	3.68%
Blmbg US Treas Bell 10Y	-	-	3.19%	10.86%	15.15%	1.81%	3.39%
PIMCO US Treasuries	607	13.94%	3.33%	10.53%	14.53%	2.42%	3.94%
Blmbg US Treas Bell 10Y	-	-	3.19%	10.86%	15.15%	1.81%	3.39%

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Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended September 30, 2019. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended September 30, 2019

	Last 10 Years	Last 15 Years	Last 20 Years	Last 25 Years	Since Inception
Net Performance - Fixed Income					
Fixed Income	5.21%	5.20%	5.74%	6.41%	8.44% (1/81)
Blmbg Aggregate	3.75%	4.21%	5.01%	5.57%	7.68% (1/81)
Core Fixed Income	4.54%	4.60%	-	-	4.90% (1/02)
Blmbg Aggregate	3.75%	4.21%	5.01%	5.57%	4.54% (1/02)
MCM Bond Index	3.63%	4.09%	4.99%	5.69%	7.17% (4/84)
Blmbg Aggregate(1)	3.75%	4.21%	5.10%	5.76%	7.45% (4/84)
PIMCO Core Bond Fund	-	-	-	-	2.86% (1/13)
Blmbg Agg ex Treasury	4.10%	-	-	-	3.14% (1/13)
Taplin, Canida & Habacht Corp FI	5.53%	5.22%	-	-	5.91% (11/00)
Blmbg Credit	5.32%	5.12%	5.92%	6.39%	5.95% (11/00)
Core-Plus Fixed Income	-	-	-	-	4.44% (10/12)
Brandywine Global Opp	-	-	-	-	3.65% (2/11)
FTSE WGBI	1.69%	3.31%	4.16%	4.69%	1.59% (2/11)
Pyramis Gbl Adv HY CMBS	12.01%	6.86%	8.45%	-	8.65% (4/97)
Blmbg US Univ CMBS ex Aaa	9.20%	0.98%	-	-	-
Stone Harbor Gbl HY	6.89%	6.62%	-	-	7.54% (7/00)
FTSE US High Yield	7.61%	6.97%	6.88%	7.37%	7.14% (7/00)
Stone Harbor EMD	6.49%	-	-	-	7.40% (4/05)
JPM EMBI Global	6.51%	7.27%	8.99%	9.50%	7.28% (4/05)
Global TIPS	2.67%	3.27%	-	-	3.27% (2/03)
Blmbg US TIPS	3.46%	3.90%	5.47%	-	4.31% (2/03)
Brown Brothers TIPS	-	-	-	-	1.66% (2/12)
Blmbg US TIPS	3.46%	3.90%	5.47%	-	1.47% (2/12)
NISA Inv Adv TIPS	2.45%	-	-	-	3.15% (4/07)
Blmbg US TIPS(1)	2.45%	3.18%	4.92%	-	3.15% (4/07)
New Century Global TIPS	-	-	-	-	2.28% (2/12)
Blmbg Wld Gov I-L Undhdg	3.22%	4.05%	5.46%	-	1.88% (2/12)
Nominal U.S. Treasuries	-	-	-	-	2.88% (9/11)
Blmbg US Treas Bell 10Y	4.00%	4.35%	5.03%	5.60%	2.92% (9/11)
PIMCO US Treasuries	-	-	-	-	3.09% (9/11)
Blmbg US Treas Bell 10Y	4.00%	4.35%	5.03%	5.60%	2.92% (9/11)

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Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended September 30, 2019. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended September 30, 2019							
	Market Value \$(mm)	Ending Weight	Last Quarter	Year to Date	Last Year	Last 3 Years	Last 5 Years
Net Performance - Multi-Strategy							
Multi-Strategy	\$1,714	100.00%	0.57%	11.70%	3.46%	-	-
S&P/LSTA Leveraged Loan	-	-	0.99%	6.79%	3.10%	4.53%	3.98%
Russell 3000 Index	-	-	1.16%	20.09%	2.92%	12.83%	10.44%
Credit Focused Strategies	\$934	54.47%	0.83%	7.07%	2.94%	-	-
Blackstone Keystone(1)	934	54.47%	0.83%	7.07%	2.94%	5.78%	4.22%
HFRI Fund of Funds Compos	-	-	(0.90%)	5.21%	0.01%	3.15%	1.95%
Opp. Equity & Fixed Income	\$547	31.93%	0.26%	15.44%	4.11%	-	-
SEI Str. Credit: HY Bank Loans(2)	343	20.02%	(1.22%)	2.66%	2.26%	9.02%	6.76%
FTSE US High Yield	-	-	0.96%	10.95%	5.72%	5.81%	4.99%
Eaton Vance GMARA	204	11.92%	2.86%	7.90%	5.39%	-	-
3 month LIBOR + 6%	-	-	2.00%	6.30%	8.56%	7.90%	7.31%
Private Credit(3)	\$233	13.59%	0.14%	5.89%	7.38%	-	-

(1) Blackstone Keystone since inception returns are included in the Legacy Hedge Fund composite through 9/30/2017.

(2) SEI HY Bank Loans since inception returns are included in the Fixed Income composite through 9/30/2017.

(3) Private Credit performance has a 1 Qtr lag.

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended September 30, 2019. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended September 30, 2019					
	Last 10 Years	Last 15 Years	Last 20 Years	Last 25 Years	Since Inception
Net Performance - Multi-Strategy					
Multi-Strategy	-	-	-	-	6.94% ^(10/17)
S&P/LSTA Leveraged Loan	5.21%	4.72%	4.85%	-	4.14% ^(10/17)
Russell 3000 Index	13.08%	9.10%	6.72%	9.81%	10.00% ^(10/17)
Credit Focused Strategies	-	-	-	-	4.03% ^(10/17)
Blackstone Keystone(1)	-	-	-	-	7.31% ^(7/12)
HFRI Fund of Funds Compos	2.67%	2.93%	3.91%	4.87%	3.41% ^(7/12)
Opp. Equity & Fixed Income	-	-	-	-	9.18% ^(10/17)
SEI Str. Credit: HY Bank Loans(2)	14.99%	-	-	-	12.27% ^(5/08)
FTSE US High Yield	7.61%	6.97%	6.88%	7.37%	7.26% ^(5/08)
Eaton Vance GMARA	-	-	-	-	1.60% ^(6/18)
3 month LIBOR + 6%	6.82%	7.79%	8.13%	8.83%	8.52% ^(6/18)
Private Credit(3)	-	-	-	-	7.82% ^(12/17)

(1) Blackstone Keystone since inception returns are included in the Legacy Hedge Fund composite through 9/30/2017.

(2) SEI HY Bank Loans since inception returns are included in the Fixed Income composite through 9/30/2017.

(3) Private Credit performance has a 1 Qtr lag.

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended September 30, 2019. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended September 30, 2019							
	Market Value \$(mm)	Ending Weight	Last Quarter	Year to Date	Last Year	Last 3 Years	Last 5 Years
Net Performance - Real Estate							
Real Estate	\$2,047	100.00%	2.06%	8.76%	10.18%	2.04%	4.60%
Real Estate Custom Benchmark	-	-	1.08%	4.70%	6.54%	6.46%	8.47%
CPI +3% (Qtr lag)	-	-	1.49%	3.70%	4.65%	5.05%	4.45%
Core/Core Plus Real Estate Funds	\$700	34.18%	(1.48%)	0.51%	3.53%	5.68%	8.01%
NCREIF ODCE Index (Qtr lag)	-	-	1.12%	4.04%	5.99%	6.97%	9.12%
Value Add/Opp. Real Estate	\$1,056	51.57%	2.83%	9.53%	11.74%	0.98%	4.10%
NCREIF ODCE Index (Qtr lag)	-	-	1.12%	4.04%	5.99%	6.97%	9.12%
Real Estate Separate Accounts	616	30.09%	3.26%	12.66%	15.21%	(1.85%)	2.56%
NCREIF ODCE Index (Qtr lag)	-	-	1.12%	4.04%	5.99%	6.97%	9.12%
Non-Core Closed End Funds	440	21.48%	2.20%	4.81%	6.21%	7.67%	7.80%
NCREIF ODCE Index (Qtr lag)	-	-	1.12%	4.04%	5.99%	6.97%	9.12%
Natural Resources/Infrastructure	\$5	0.27%	2.77%	0.51%	0.55%	(4.11%)	(2.24%)
CPI +3% (Qtr lag)	-	-	1.49%	3.70%	4.65%	5.05%	4.45%
REITS	\$286	13.98%	8.04%	28.00%	19.77%	5.74%	5.99%
FTSE NAREIT US Index (Qtr lag)	-	-	0.70%	9.70%	10.34%	3.72%	7.42%

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Investment Manager Returns

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Returns for Periods Ended September 30, 2019					
	Last 10 Years	Last 15 Years	Last 20 Years	Last 25 Years	Since Inception
Net Performance - Real Estate					
Real Estate	6.65%	5.93%	6.90%	7.75%	8.39% (3/84)
Real Estate Custom Benchmark	9.32%	7.36%	7.76%	-	-
CPI +3% (Qtr lag)	4.73%	5.02%	5.19%	5.22%	5.64% (3/84)
Core/Core Plus Real Estate Funds	9.42%	7.52%	7.71%	8.83%	7.04% (9/86)
NCREIF ODCE Index (Qtr lag)	8.80%	6.87%	7.16%	7.83%	6.01% (9/86)
Value Add/Opp. Real Estate	5.85%	5.23%	6.28%	7.26%	6.70% (3/84)
NCREIF ODCE Index (Qtr lag)	8.80%	6.87%	7.16%	7.83%	6.28% (3/84)
Real Estate Separate Accounts	3.78%	4.08%	5.15%	6.13%	5.13% (6/88)
NCREIF ODCE Index (Qtr lag)	8.80%	6.87%	7.16%	7.83%	6.06% (6/88)
Non-Core Closed End Funds	9.66%	6.90%	7.84%	8.86%	7.88% (3/84)
NCREIF ODCE Index (Qtr lag)	8.80%	6.87%	7.16%	7.83%	6.28% (3/84)
Natural Resources/Infrastructure	(1.79%)	1.89%	2.85%	3.82%	4.11% (3/93)
CPI +3% (Qtr lag)	4.73%	5.02%	5.19%	5.22%	5.24% (3/93)
REITS	12.15%	8.95%	10.11%	-	10.15% (4/96)
FTSE NAREIT US Index (Qtr lag)	15.24%	8.75%	10.07%	10.77%	10.52% (4/96)

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Returns for Periods Ended September 30, 2019							
	Market Value \$(mm)	Ending Weight	Last Quarter	Year to Date	Last Year	Last 3 Years	Last 5 Years
Net Performance - Private Equity							
Private Equity	\$3,910	100.00%	0.97%	7.16%	9.27%	11.87%	8.94%
Burgiss Private Eqty Idx (Qtr Lag)	-	-	3.33%	6.30%	9.78%	14.17%	11.14%
Russell 3000 + 3% (Qtr Lag)	-	-	4.94%	4.66%	12.76%	17.35%	13.49%
Buyouts	\$1,780	45.52%	2.20%	5.96%	9.03%	12.88%	10.43%
Burgiss Buyout Index (Qtr Lag)	-	-	2.76%	4.59%	7.65%	14.38%	11.00%
Special Situations	\$559	14.30%	3.89%	11.70%	15.50%	12.57%	8.24%
Burgiss Special Sits Idx (Qtr Lag)	-	-	1.22%	2.03%	3.83%	8.24%	6.29%
Venture Capital	\$747	19.11%	(3.48%)	16.58%	26.98%	15.88%	9.79%
Burgiss Venture Cap Idx (Qtr Lag)	-	-	5.27%	13.27%	19.70%	17.06%	14.92%
Keystone Legacy (Qtr Lag) (1)	\$824	21.06%	0.70%	1.05%	(2.49%)	-	-

(1) As of 7/31/2018, Keystone Legacy SPV consists of 163 non-core funds, prior performance in previous sub-asset classes

Investment Manager Returns

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Returns for Periods Ended September 30, 2019

	Last 10 Years	Last 15 Years	Last 20 Years	Last 25 Years	Since Inception	
Net Performance - Private Equity						
Private Equity	11.92%	11.58%	9.92%	13.70%	10.92%	(1/86)
Burgiss Private Eqty Idx (Qtr Lag)	13.71%	13.11%	11.77%	15.15%	16.94%	(1/86)
Russell 3000 + 3% (Qtr Lag)	18.00%	12.35%	9.80%	13.49%	14.56%	(1/86)
Buyouts	13.96%	14.12%	11.85%	16.54%	13.13%	(4/86)
Burgiss Buyout Index (Qtr Lag)	13.88%	13.97%	11.94%	13.58%	19.63%	(4/86)
Special Situations	12.32%	11.98%	12.00%	-	12.31%	(1/95)
Burgiss Special Sits Idx (Qtr Lag)	10.48%	9.01%	10.00%	-	10.51%	(1/95)
Venture Capital	9.96%	6.94%	3.88%	8.00%	7.00%	(1/86)
Burgiss Venture Cap Idx (Qtr Lag)	15.06%	11.78%	9.19%	16.02%	13.70%	(1/86)
Keystone Legacy (Qtr Lag) (1)	-	-	-	-	(2.00%)	(7/18)

(1) As of 7/31/2018, Keystone Legacy SPV consists of 163 non-core funds, prior performance in previous sub-asset classes

Investment Manager Returns

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Returns for Periods Ended September 30, 2019							
	Market Value \$(mm)	Ending Weight	Last Quarter	Year to Date	Last Year	Last 3 Years	Last 5 Years
Gross Performance							
Total Fund	\$29,451	100.00%	0.43%	12.71%	4.15%	8.24%	6.39%
Total Fund Custom Benchmark(1)	-	-	0.58%	11.11%	4.32%	7.93%	6.27%
Public Market Equiv Benchmark(2)	-	-	1.30%	10.82%	4.89%	8.77%	6.92%
60/40 Index(3)	-	-	0.83%	13.12%	4.71%	6.93%	5.50%
Global Public Equity	\$16,154	54.85%	(0.44%)	16.36%	0.36%	9.73%	7.04%
MSCI ACWI IMI	-	-	(0.18%)	15.87%	0.48%	9.36%	6.61%
Fixed Income	\$4,351	14.77%	1.83%	9.04%	9.59%	3.60%	3.32%
Blmbg Aggregate	-	-	2.27%	8.52%	10.30%	2.92%	3.38%
Multi-Strategy	\$1,714	5.82%	0.81%	12.06%	3.82%	-	-
S&P/LSTA Leveraged Loan	-	-	0.99%	6.79%	3.10%	4.53%	3.98%
Russell 3000 Index	-	-	1.16%	20.09%	2.92%	12.83%	10.44%
Real Estate(4)	\$2,047	6.95%	2.06%	8.76%	10.18%	2.04%	4.63%
Real Estate Custom Benchmark	-	-	1.08%	4.70%	6.54%	6.46%	8.47%
CPI +3% (Qtr lag)	-	-	1.49%	3.70%	4.65%	5.05%	4.45%
Private Equity(4)	\$3,910	13.28%	0.97%	7.16%	9.27%	11.87%	8.94%
Burgiss Private Equity Custom Index	-	-	3.33%	6.30%	9.78%	14.17%	11.14%
Russell 3000 +3% (Qtr lag)	-	-	4.94%	4.66%	12.76%	17.35%	13.49%
Cash	\$1,239	4.21%	0.57%	1.82%	2.44%	1.87%	1.37%
3-month Treasury Bill	-	-	0.56%	1.81%	2.39%	1.54%	0.98%

(1) Total Fund Custom Benchmark returns provided by RVK. Benchmark consists of: 16% SERS Private Equity Composite, 48% MSCI ACWI IM Index, 12% Real Estate Custom Benchmark, 10% S&P/LSTA Leveraged Loan Index, 11% Bloomberg US Agg Bond Index, 3% ICE BofAML 3 Mo US T-Bill Index

(2) Public Market Equivalent Benchmark returns provided by RVK. Benchmark consists of: 16% Russell 3000+3% (Qtr Lag), 48% MSCI ACWI IM Index, 12% CPI+3% (Qtr Lag), 10% S&P/LSTA Leveraged Loan Index, 11% Bloomberg US Agg Bond Index, 3% ICE BofAML 3 Mo US T-Bill Index.

(3) Benchmark consists of 60% MSCI ACWI IMI, 40% Bloomberg Agg Bond Index.

(4) Private Equity, Real Estate, and Private Credit (within Multi-Strategy) performance are shown Net of Fees.

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended September 30, 2019. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended September 30, 2019

	Last 10 Years	Last 15 Years	Last 20 Years	Last 25 Years	Since Inception
Gross Performance					
Total Fund	8.65%	7.63%	7.02%	-	8.34% ^(1/96)
Total Fund Custom Benchmark(1)	8.12%	7.66%	6.51%	8.41%	7.82% ^(1/96)
Public Market Equiv Benchmark(2)	8.83%	8.13%	6.85%	8.69%	8.12% ^(1/96)
60/40 Index(3)	6.80%	6.33%	5.51%	6.62%	6.28% ^(1/96)
Global Public Equity	9.30%	7.20%	-	-	6.89% ^(1/02)
MSCI ACWI IMI	8.45%	7.25%	5.28%	6.79%	6.96% ^(1/02)
Fixed Income	5.44%	5.45%	5.99%	6.64%	7.72% ^(1/85)
Blmbg Aggregate	3.75%	4.21%	5.01%	5.57%	6.85% ^(1/85)
Multi-Strategy					
S&P/LSTA Leveraged Loan	5.21%	4.72%	4.85%	-	-
Russell 3000 Index	13.08%	9.10%	6.72%	9.81%	11.08% ^(1/85)
Real Estate(4)	6.67%	5.94%	6.91%	7.76%	8.39% ^(3/84)
Real Estate Custom Benchmark	9.32%	7.36%	7.76%	-	-
CPI +3% (Qtr lag)	4.73%	5.02%	5.19%	5.22%	5.64% ^(3/84)
Private Equity(4)	11.92%	11.58%	9.92%	13.70%	10.92% ^(1/86)
Burgiss Private Equity Custom Index	13.71%	13.11%	11.77%	15.15%	16.94% ^(1/86)
Russell 3000 +3% (Qtr lag)	18.00%	12.35%	9.80%	13.49%	14.56% ^(1/86)
Cash	0.84%	1.73%	2.17%	2.86%	4.05% ^(1/87)
3-month Treasury Bill	0.54%	1.39%	1.82%	2.50%	3.28% ^(1/87)

(1) Total Fund Custom Benchmark returns provided by RVK. Benchmark consists of: 16% SERS Private Equity Composite, 48% MSCI ACW IM Index, 12% Real Estate Custom Benchmark, 10% S&P/LSTA Leveraged Loan Index, 11% Bloomberg US Agg Bond Index, 3% ICE BofAML 3 Mo US T-Bill Index.

(2) Public Market Equivalent Benchmark returns provided by RVK. Benchmark consists of: 16% Russell 3000+3% (Qtr Lag), 48% MSCI ACW IM Index, 12% CPI+3% (Qtr Lag), 10% S&P/LSTA Leveraged Loan Index, 11% Bloomberg US Agg Bond Index, 3% ICE BofAML 3 Mo US T-Bill Index.

(3) Benchmark consists of 60% MSCI ACW IMI, 40% Bloomberg Agg Bond Index.

(4) Private Equity, Real Estate, and Private Credit (within Multi-Strategy) performance are shown Net of Fees.

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended September 30, 2019. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended September 30, 2019

	Market Value \$(mm)	Ending Weight	Last Quarter	Year to Date	Last Year	Last 3 Years	Last 5 Years
Gross Performance- Equity							
Global Public Equity	\$16,154	100.00%	(0.44%)	16.36%	0.36%	9.73%	7.04%
MSCI ACWI IMI	-	-	(0.18%)	15.87%	0.48%	9.36%	6.61%
Global Mandates	\$1,046	6.48%	0.62%	21.18%	6.89%	14.96%	11.39%
MSCI World	-	-	0.53%	17.61%	1.83%	10.21%	7.18%
Walter Scott & Prtnrs Gbl Gr Eq	1,046	6.48%	0.62%	21.18%	6.89%	14.96%	11.39%
MSCI World	-	-	0.53%	17.61%	1.83%	10.21%	7.18%
U.S. Equity	\$7,792	48.23%	0.34%	19.44%	0.79%	11.22%	9.34%
Russell 3000 Index(1)	-	-	1.16%	20.09%	2.92%	12.83%	10.44%
U.S. Large/Mid Cap Equity	\$6,242	38.64%	1.39%	20.60%	3.39%	12.54%	10.10%
Russell 1000 Index	-	-	1.42%	20.53%	3.87%	13.19%	10.62%
MCM Russell 1000 Index	5,790	35.84%	1.43%	20.52%	3.93%	13.23%	10.67%
Russell 1000 Index	-	-	1.42%	20.53%	3.87%	13.19%	10.62%
Iridian Asset Mgmt MCV	453	2.80%	1.14%	22.05%	(2.77%)	4.83%	4.18%
Russell MidCap Index	-	-	0.48%	21.93%	3.19%	10.69%	9.10%
Russell MidCap Value Idx	-	-	1.22%	19.47%	1.60%	7.82%	7.55%
U.S. Small Cap Equity	\$1,549	9.59%	(3.69%)	14.96%	(8.55%)	5.70%	6.14%
Russell 2000 Index(1)	-	-	(2.40%)	14.18%	(8.89%)	7.32%	7.26%
S&P 600 Small Cap Index	-	-	(0.20%)	13.46%	(9.34%)	9.33%	9.89%
MCM Russell 2000 Core Index	317	1.96%	(2.38%)	14.16%	(8.85%)	-	-
Russell 2000 Index	-	-	(2.40%)	14.18%	(8.89%)	8.23%	8.19%
MCM Russell 2000 Val Index	573	3.55%	(0.56%)	12.80%	(8.20%)	-	-
Russell 2000 Value Index	-	-	(0.57%)	12.82%	(8.24%)	6.54%	7.17%
Emerald Adv Div Sm Cap Grth	660	4.08%	(6.86%)	17.24%	(8.75%)	-	-
Russell 2000 Growth Index	-	-	(4.17%)	15.34%	(9.63%)	9.79%	9.08%
Non-U.S. Equity	\$7,315	45.28%	(1.43%)	12.62%	(0.96%)	7.39%	3.83%
MSCI ACWI ex US IMI(1)	-	-	(1.72%)	11.39%	(1.84%)	6.10%	3.05%
Non-U.S. Developed Markets Equity	\$5,515	34.14%	(0.92%)	14.21%	(0.89%)	7.76%	4.22%
MSCI ACWI ex US IMI	-	-	(1.72%)	11.39%	(1.84%)	6.10%	3.05%
MSCI World ex US	-	-	(0.93%)	13.57%	(0.95%)	6.49%	3.06%
Non-U.S. Dev Large/Mid Cap Equity	\$4,757	29.45%	(0.89%)	13.94%	(0.61%)	8.65%	4.48%
MSCI World ex US	-	-	(0.93%)	13.57%	(0.95%)	6.49%	3.06%
BlackRock MSCI World Ex US Index	4,748	29.39%	(0.89%)	13.96%	(0.61%)	-	-
MSCI World ex US	-	-	(0.93%)	13.57%	(0.95%)	6.49%	3.06%
Non-U.S. Dev Small Cap Equity	\$758	4.69%	(1.13%)	16.03%	(2.66%)	5.89%	4.68%
MSCI ACWI ex US Small Cap	-	-	(1.19%)	10.28%	(5.63%)	4.64%	3.98%
FIS Group Non-U.S. Small Cap	190	1.18%	(2.15%)	9.31%	(4.89%)	-	-
MSCI ACWI ex US Small Cap	-	-	(1.19%)	10.28%	(5.63%)	4.64%	3.98%
Harris Assoc Int'l SCV	568	3.51%	(0.78%)	18.48%	(1.89%)	6.03%	4.76%
MSCI World ex US Sm Cap	-	-	(0.27%)	12.58%	(5.62%)	5.54%	5.14%
Emerging Mkts Equity	\$1,799	11.14%	(2.93%)	8.01%	(0.58%)	7.68%	3.61%
MSCI EM	-	-	(4.25%)	5.90%	(2.01%)	5.98%	2.33%
BlackRock Emg Mkts Index	660	4.08%	(4.26%)	5.79%	(2.11%)	-	-
MSCI EM	-	-	(4.25%)	5.90%	(2.01%)	5.98%	2.33%
Leading Edge Emg Mkts Fund	212	1.31%	(3.26%)	9.58%	-	-	-
MSCI EM	-	-	(4.25%)	5.90%	(2.01%)	5.98%	2.33%
Macquarie Emg Mkts Equity	409	2.53%	(1.66%)	6.50%	(1.38%)	8.06%	3.13%
MSCI EM	-	-	(4.25%)	5.90%	(2.01%)	5.98%	2.33%
Martin Currie Emg Mkts Equity	431	2.67%	(0.92%)	12.38%	3.01%	10.48%	6.00%
MSCI EM	-	-	(4.25%)	5.90%	(2.01%)	5.98%	2.33%
GlobeFlex Emerging Small Cap	88	0.54%	(7.21%)	4.94%	(7.18%)	5.00%	1.58%
MSCI EM Small Cap	-	-	(4.58%)	1.82%	(5.48%)	1.32%	(0.13%)
Northern Trust Equity Transition	1	0.01%	0.53%	0.69%	(15.28%)	-	-

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The market values and performance of such accounts are included within their relevant composites.

(1) Benchmark history is a blend of current and past benchmark indices. History prior to 12/31/2018 is provided by RVK.

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended September 30, 2019. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended September 30, 2019

	Last 10 Years	Last 15 Years	Last 20 Years	Last 25 Years	Since Inception
Gross Performance- Equity					
Global Public Equity	9.30%	7.20%	-	-	6.89% (1/02)
MSCI ACWI IMI	8.45%	7.25%	5.28%	6.79%	6.96% (1/02)
Global Mandates	11.89%	-	-	-	8.96% (11/06)
MSCI World	9.01%	7.14%	4.89%	7.00%	5.51% (11/06)
Walter Scott & Prtnrs Gbl Gr Eq	11.57%	-	-	-	9.48% (10/06)
MSCI World	9.01%	7.14%	4.89%	7.00%	5.77% (10/06)
U.S. Equity	12.79%	8.27%	6.57%	9.47%	10.62% (1/81)
Russell 3000 Index(1)	13.08%	9.10%	6.72%	9.72%	10.87% (1/81)
U.S. Large/Mid Cap Equity	13.31%	8.84%	6.53%	9.78%	9.47% (1/94)
Russell 1000 Index	13.23%	9.17%	6.63%	9.93%	9.66% (1/94)
MCM Russell 1000 Index	-	-	-	-	14.04% (1/12)
Russell 1000 Index	13.23%	9.17%	6.63%	9.93%	14.06% (1/12)
Iridian Asset Mgmt MCV	12.56%	10.87%	10.62%	-	13.08% (3/95)
Russell MidCap Index	13.07%	9.92%	9.50%	11.05%	11.04% (3/95)
Russell MidCap Value Idx	12.29%	9.29%	9.83%	11.11%	11.11% (3/95)
U.S. Small Cap Equity	10.36%	7.48%	7.96%	9.77%	9.31% (1/94)
Russell 2000 Index(1)	11.54%	8.72%	8.88%	10.39%	10.07% (1/94)
S&P 600 Small Cap Index	13.02%	9.52%	10.01%	10.75%	10.32% (1/94)
MCM Russell 2000 Core Index	-	-	-	-	6.56% (12/16)
Russell 2000 Index	11.19%	8.19%	7.99%	8.86%	6.57% (12/16)
MCM Russell 2000 Val Index	-	-	-	-	3.52% (12/16)
Russell 2000 Value Index	10.06%	7.23%	9.05%	9.66%	3.55% (12/16)
Emerald Adv Div Sm Cap Grth	-	-	-	-	10.98% (12/16)
Russell 2000 Growth Index	12.25%	9.04%	6.53%	7.63%	9.56% (12/16)
Non-U.S. Equity	5.55%	5.63%	5.15%	-	6.42% (11/95)
MSCI ACWI ex US IMI(1)	4.64%	6.03%	4.81%	5.18%	5.45% (11/95)
Non-U.S. Developed Markets Equity	6.32%	5.75%	-	-	6.32% (1/02)
MSCI ACWI ex US IMI	4.66%	5.88%	4.41%	4.85%	6.55% (1/02)
MSCI World ex US	4.78%	5.36%	3.89%	4.94%	5.72% (1/02)
Non-U.S. Dev Large/Mid Cap Equity	6.36%	5.25%	-	-	5.76% (1/02)
MSCI World ex US	4.78%	5.36%	3.89%	4.94%	5.72% (1/02)
BlackRock MSCI World Ex US Index	-	-	-	-	3.63% (6/17)
MSCI World ex US	4.78%	5.36%	3.89%	4.94%	3.15% (6/17)
Non-U.S. Dev Small Cap Equity	7.16%	8.07%	7.18%	7.16%	7.27% (10/93)
MSCI ACWI ex US Small Cap	6.13%	7.30%	6.44%	5.30%	-
FIS Group Non-U.S. Small Cap	-	-	-	-	(4.89%) (10/18)
MSCI ACWI ex US Small Cap	6.13%	7.30%	6.44%	5.30%	(5.63%) (10/18)
Harris Assoc Int'l SCV	7.76%	9.09%	-	-	11.14% (7/03)
MSCI World ex US Sm Cap	6.93%	7.00%	-	-	8.99% (7/03)
Emerging Mkts Equity	3.31%	5.76%	-	-	7.28% (1/02)
MSCI EM	3.37%	7.82%	-	-	9.30% (1/02)
BlackRock Emg Mkts Index	-	-	-	-	1.99% (7/17)
MSCI EM	3.37%	7.82%	-	-	2.14% (7/17)
Leading Edge Emg Mkts Fund	-	-	-	-	8.11% (11/18)
MSCI EM	3.37%	7.82%	-	-	7.34% (11/18)
Macquarie Emg Mkts Equity	-	-	-	-	3.91% (5/13)
MSCI EM	3.37%	7.82%	-	-	1.91% (5/13)
Martin Currie Emg Mkts Equity	-	-	-	-	4.65% (1/14)
MSCI EM	3.37%	7.82%	-	-	2.45% (1/14)
GlobeFlex Emerging Small Cap	-	-	-	-	3.46% (8/13)
MSCI EM Small Cap	3.21%	8.17%	7.22%	3.35%	1.75% (8/13)

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Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended September 30, 2019. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended September 30, 2019							
	Market Value \$(mm)	Ending Weight	Last Quarter	Year to Date	Last Year	Last 3 Years	Last 5 Years
Gross Performance - Fixed Income							
Fixed Income	\$4,351	100.00%	1.83%	9.04%	9.59%	3.60%	3.32%
Blmbg Aggregate	-	-	2.27%	8.52%	10.30%	2.92%	3.38%
Core Fixed Income	\$1,983	45.58%	2.21%	9.12%	10.28%	3.32%	3.66%
Blmbg Aggregate	-	-	2.27%	8.52%	10.30%	2.92%	3.38%
MCM Bond Index	1,117	25.66%	2.22%	8.50%	10.26%	2.90%	3.35%
Blmbg Aggregate(1)	-	-	2.27%	8.52%	10.30%	2.92%	3.38%
PIMCO Core Bond Fund	665	15.29%	1.94%	8.98%	9.86%	3.45%	3.81%
Blmbg Agg ex Treasury	-	-	2.18%	9.03%	10.19%	3.32%	3.65%
Taplin, Canida & Habacht Corp FI	202	4.64%	3.06%	13.20%	11.72%	4.91%	4.50%
Blmbg Credit	-	-	2.98%	12.61%	12.63%	4.33%	4.54%
Core-Plus Fixed Income	\$893	20.53%	0.39%	9.03%	7.16%	4.86%	3.05%
Brandywine Global Opp	196	4.51%	(1.55%)	5.33%	4.08%	2.18%	2.00%
FTSE WGBI	-	-	0.85%	6.27%	8.13%	1.19%	1.80%
Pyramis Gbl Adv HY CMBS	340	7.81%	2.01%	8.46%	9.02%	5.90%	5.82%
Blmbg US Univ CMBS ex Aaa	-	-	2.61%	11.13%	11.75%	5.32%	4.92%
Stone Harbor Gbl HY	193	4.44%	0.85%	11.79%	6.48%	5.71%	4.59%
FTSE US High Yield	-	-	0.96%	10.95%	5.72%	5.81%	4.99%
Stone Harbor EMD	164	3.77%	(1.07%)	11.52%	7.61%	3.45%	4.80%
JPM EMBI Global	-	-	1.34%	12.08%	10.74%	3.84%	5.10%
Global TIPS	\$868	19.95%	1.45%	7.81%	7.27%	2.32%	2.62%
Blmbg US TIPS	-	-	1.35%	7.58%	7.13%	2.21%	2.45%
Brown Brothers TIPS	230	5.29%	1.50%	7.81%	7.40%	2.35%	2.71%
Blmbg US TIPS	-	-	1.35%	7.58%	7.13%	2.21%	2.45%
NISA Inv Adv TIPS	517	11.88%	1.31%	7.60%	7.10%	2.27%	2.54%
Blmbg US TIPS(1)	-	-	1.35%	7.58%	7.13%	2.21%	2.45%
New Century Global TIPS	121	2.77%	2.01%	8.78%	7.82%	2.53%	2.80%
Blmbg Wld Gov I-L Undhdg	-	-	1.77%	8.19%	7.31%	2.17%	2.29%
Nominal U.S. Treasuries	\$607	13.94%	3.35%	10.60%	14.67%	2.23%	3.78%
Blmbg:Treas Bellwethr 10Y	-	-	3.19%	10.86%	15.15%	1.81%	3.39%
PIMCO US Treasuries	607	13.94%	3.35%	10.60%	14.67%	2.51%	4.04%
Blmbg:Treas Bellwethr 10Y	-	-	3.19%	10.86%	15.15%	1.81%	3.39%

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(1) Benchmark history is a blend of current and past benchmark indices. History prior to 12/31/2018 is provided by RVK.

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended September 30, 2019. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended September 30, 2019

	Last 10 Years	Last 15 Years	Last 20 Years	Last 25 Years	Since Inception
Gross Performance - Fixed Income					
Fixed Income	5.44%	5.45%	5.99%	6.64%	7.72% (1/85)
Blmbg Aggregate	3.75%	4.21%	5.01%	5.57%	6.85% (1/85)
Core Fixed Income	4.71%	4.78%	-	-	5.07% (1/02)
Blmbg Aggregate	3.75%	4.21%	5.01%	5.57%	4.54% (1/02)
MCM Bond Index	3.67%	4.14%	5.03%	5.73%	5.28% (9/93)
Blmbg Aggregate(1)	3.75%	4.21%	5.10%	5.76%	5.32% (9/93)
PIMCO Core Bond Fund	-	-	-	-	3.03% (1/13)
Blmbg Agg ex Treasury	4.10%	-	-	-	3.14% (1/13)
Taplin, Canida & Habacht Corp FI	5.79%	5.48%	-	-	6.20% (12/00)
Blmbg Credit	5.32%	5.12%	5.92%	6.39%	5.90% (12/00)
Core-Plus Fixed Income	-	-	-	-	5.09% (10/12)
Brandywine Global Opp	-	-	-	-	4.04% (2/11)
FTSE WGBI	1.69%	3.31%	4.16%	4.69%	1.59% (2/11)
Pyramis Gbl Adv HY CMBS	12.73%	7.56%	9.14%	-	9.33% (4/97)
Blmbg US Univ CMBS ex Aaa	9.20%	0.98%	-	-	-
Stone Harbor Gbl HY	7.33%	7.05%	-	-	7.71% (7/00)
FTSE US High Yield	7.61%	6.97%	6.88%	7.37%	7.14% (7/00)
Stone Harbor EMD	6.91%	-	-	-	7.84% (4/05)
JPM EMBI Global	6.51%	7.27%	8.99%	9.50%	7.28% (4/05)
Global TIPS	2.80%	3.40%	-	-	3.40% (2/03)
Blmbg US TIPS	3.46%	3.90%	5.47%	-	4.31% (2/03)
Brown Brothers TIPS	-	-	-	-	1.78% (2/12)
Blmbg US TIPS	3.46%	3.90%	5.47%	-	1.47% (2/12)
NISA Inv Adv TIPS	2.55%	-	-	-	3.25% (4/07)
Blmbg US TIPS(1)	2.45%	3.18%	4.92%	-	3.15% (4/07)
New Century Global TIPS	-	-	-	-	2.52% (2/12)
Blmbg Wld Gov I-L Undhdg	3.22%	4.05%	5.46%	-	1.88% (2/12)
Nominal U.S. Treasuries	-	-	-	-	2.97% (9/11)
Blmbg US Treas Bell 10Y	4.00%	4.35%	5.03%	5.60%	2.92% (9/11)
PIMCO US Treasuries	-	-	-	-	3.18% (9/11)
Blmbg US Treas Bell 10Y	4.00%	4.35%	5.03%	5.60%	2.92% (9/11)

*Market values may not sum as a result of accounts funded within the quarter or accounts in the process of liquidation. The market values and performance of such accounts are included within their relevant composites.

(1) Benchmark history is a blend of current and past benchmark indices. History prior to 12/31/2018 is provided by RVK.

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended September 30, 2019. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended September 30, 2019							
	Market Value \$(mm)	Ending Weight	Last Quarter	Year to Date	Last Year	Last 3 Years	Last 5 Years
Gross Performance - Multi-Strategy							
Multi-Strategy	\$1,714	100.00%	0.81%	12.06%	3.82%	-	-
S&P/LSTA Leveraged Loan	-	-	0.99%	6.79%	3.10%	4.53%	3.98%
Russell 3000 Index	-	-	1.16%	20.09%	2.92%	12.83%	10.44%
Credit Focused Strategies	\$934	54.47%	1.11%	7.36%	3.21%	-	-
Blackstone Keystone(1)(5)	934	54.47%	1.11%	7.36%	3.21%	5.87%	4.28%
HFRI Fund of Funds Compos	-	-	(0.90%)	5.21%	0.01%	3.15%	1.95%
Opp. Equity & Fixed Income	\$547	31.93%	0.53%	15.97%	4.65%	-	-
SEI Str. Credit: HY Bank Loans(2)	343	20.02%	(1.00%)	3.33%	3.15%	9.96%	7.71%
FTSE US High Yield	-	-	0.96%	10.95%	5.72%	5.81%	4.99%
Eaton Vance GMARA	204	11.92%	3.18%	8.24%	5.72%	-	-
3 month LIBOR + 6%	-	-	2.00%	6.30%	8.56%	7.90%	7.31%
Private Credit(4)	\$233	13.59%	0.14%	5.89%	7.38%	-	-

(1) Blackstone Keystone since inception returns are included in the Legacy Hedge Fund composite through 9/30/2017.

(2) SEI HY Bank Loans since inception returns are included in the Fixed Income composite through 9/30/2017.

(3) Russell 3000 Index since inception returns are included in the Global Public Equity composite through 9/30/2017.

(4) Private Credit performance is shown Net of Fees with a 1 Qtr lag.

(5) Blackstone Keystone performance is shown Net of Fees.

Investment Manager Returns

The table below details the rates of return for the Fund's investment managers over various time periods ended September 30, 2019. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

Returns for Periods Ended September 30, 2019

	Last 10 Years	Last 15 Years	Last 20 Years	Last 25 Years	Since Inception
Gross Performance - Multi-Strategy					
Multi-Strategy	-	-	-	-	7.21% (10/17)
S&P/LSTA Leveraged Loan	5.21%	4.72%	4.85%	-	4.14% (10/17)
Russell 3000 Index	13.08%	9.10%	6.72%	9.81%	10.00% (10/17)
Credit Focused Strategies	-	-	-	-	4.17% (10/17)
Blackstone Keystone(1)(5)	-	-	-	-	7.35% (7/12)
HFRI Fund of Funds Compos	2.67%	2.93%	3.91%	4.87%	3.41% (7/12)
Opp. Equity & Fixed Income	-	-	-	-	9.60% (10/17)
SEI Str. Credit: HY Bank Loans(2)	16.03%	-	-	-	13.30% (5/08)
FTSE US High Yield	7.61%	6.97%	6.88%	7.37%	7.26% (5/08)
Eaton Vance GMARA	-	-	-	-	1.84% (6/18)
3 month LIBOR + 6%	6.82%	7.79%	8.13%	8.83%	8.52% (6/18)
Private Credit(4)	-	-	-	-	7.82% (12/17)

(1) Blackstone Keystone since inception returns are included in the Legacy Hedge Fund composite through 9/30/2017.

(2) SEI HY Bank Loans since inception returns are included in the Fixed Income composite through 9/30/2017.

(3) Russell 3000 Index since inception returns are included in the Global Public Equity composite through 9/30/2017.

(4) Private Credit performance is shown Net of Fees with a 1 Qtr lag.

(5) Blackstone Keystone performance is shown Net of Fees.

Global Public Equity Period Ended September 30, 2019

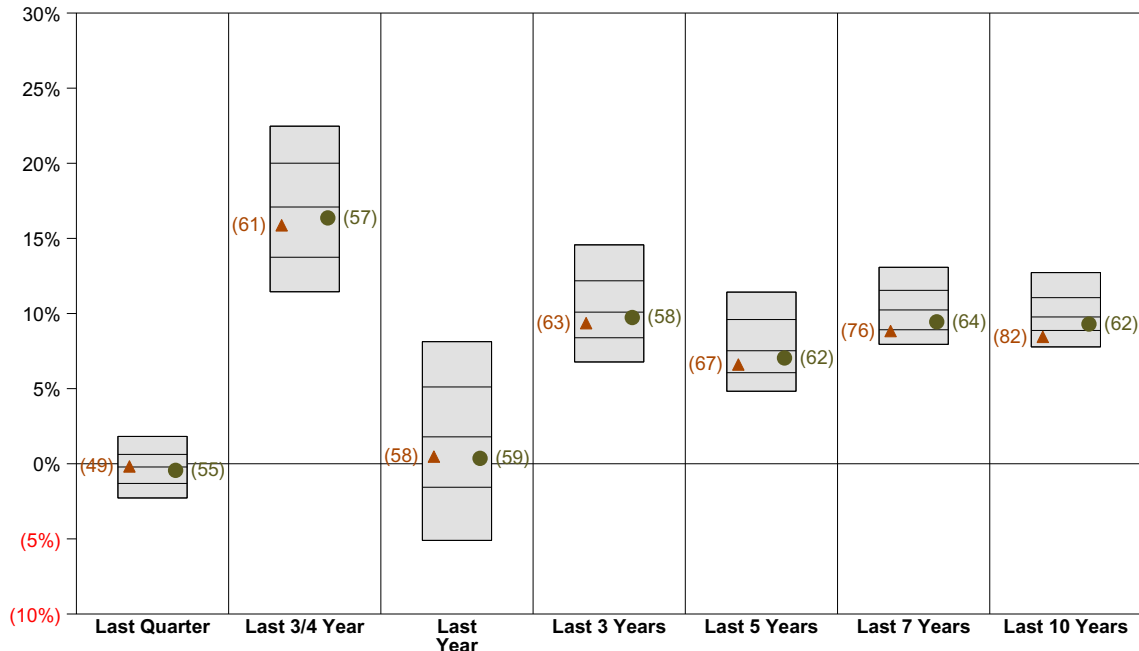
Quarterly Summary and Highlights

- Global Public Equity's portfolio posted a (0.44)% return for the quarter placing it in the 55 percentile of the Callan Global Equity group for the quarter and in the 59 percentile for the last year.
- Global Public Equity's portfolio underperformed the MSCI ACWI IMI by 0.26% for the quarter and underperformed the MSCI ACWI IMI for the year by 0.12%.

Quarterly Asset Growth

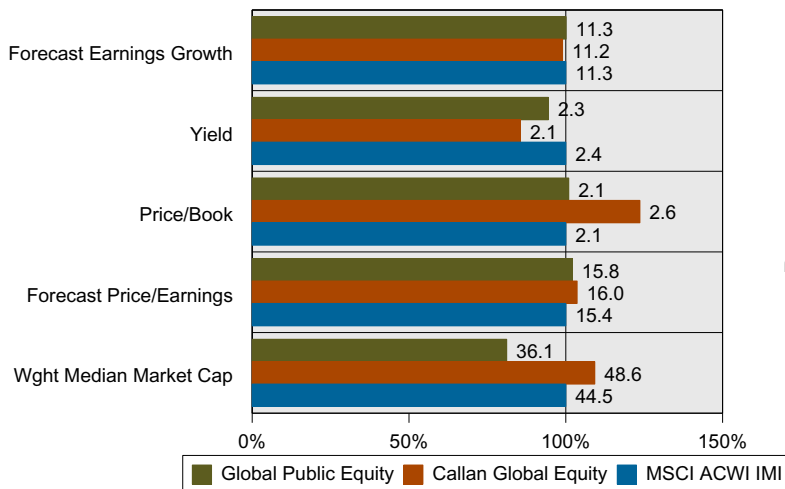
Beginning Market Value	\$16,231,877,274
Net New Investment	\$-5,382,423
Investment Gains/(Losses)	\$-72,457,573
Ending Market Value	\$16,154,037,277

Performance vs Callan Global Equity (Gross)

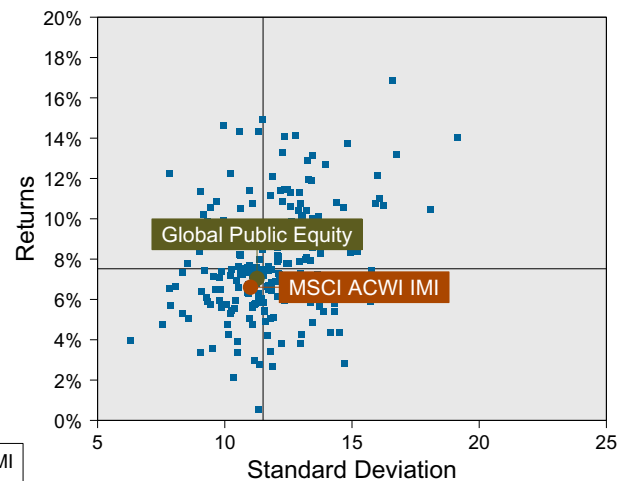


10th Percentile	1.82	22.47	8.13	14.57	11.43	13.08	12.72
25th Percentile	0.62	20.01	5.11	12.18	9.60	11.54	11.06
Median	(0.21)	17.09	1.79	10.09	7.52	10.24	9.77
75th Percentile	(1.31)	13.74	(1.56)	8.39	6.06	8.92	8.87
90th Percentile	(2.28)	11.45	(5.10)	6.78	4.83	7.95	7.78
Global Public Equity	● (0.44)	16.36	0.36	9.73	7.04	9.45	9.30
MSCI ACWI IMI	▲ (0.18)	15.87	0.48	9.36	6.61	8.83	8.45

Portfolio Characteristics as a Percentage of the MSCI ACWI IMI



Callan Global Equity (Gross) Annualized Five Year Risk vs Return

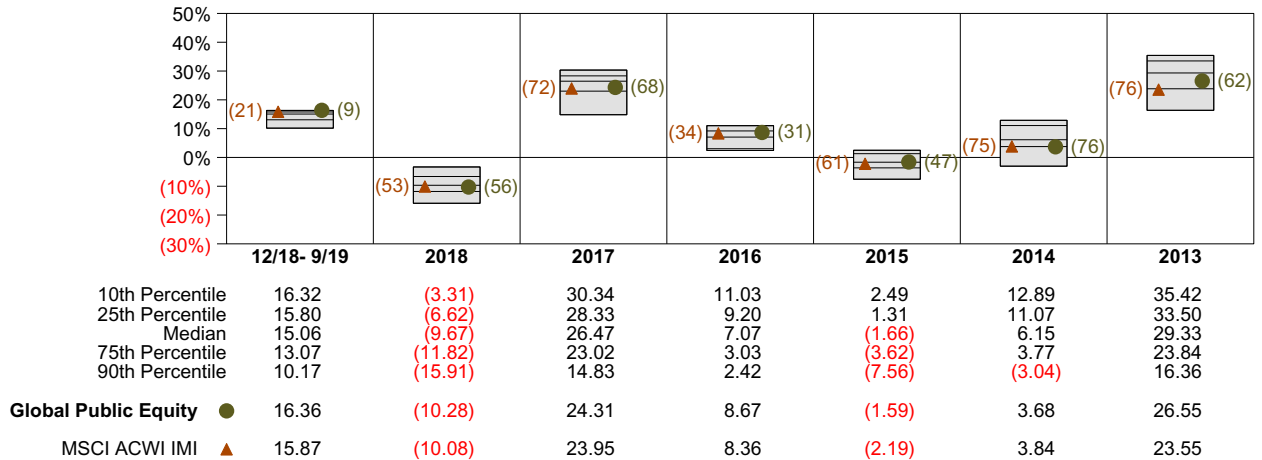


Global Public Equity Return Analysis Summary

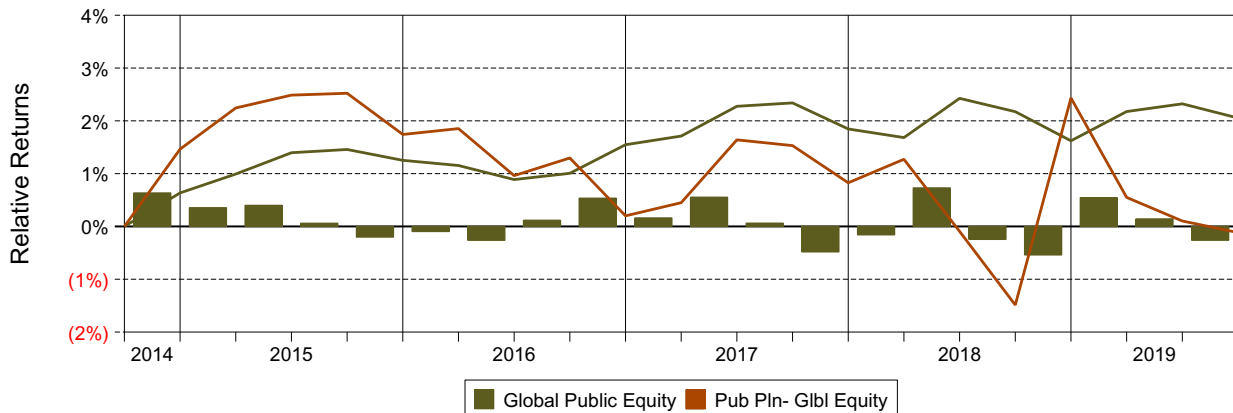
Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

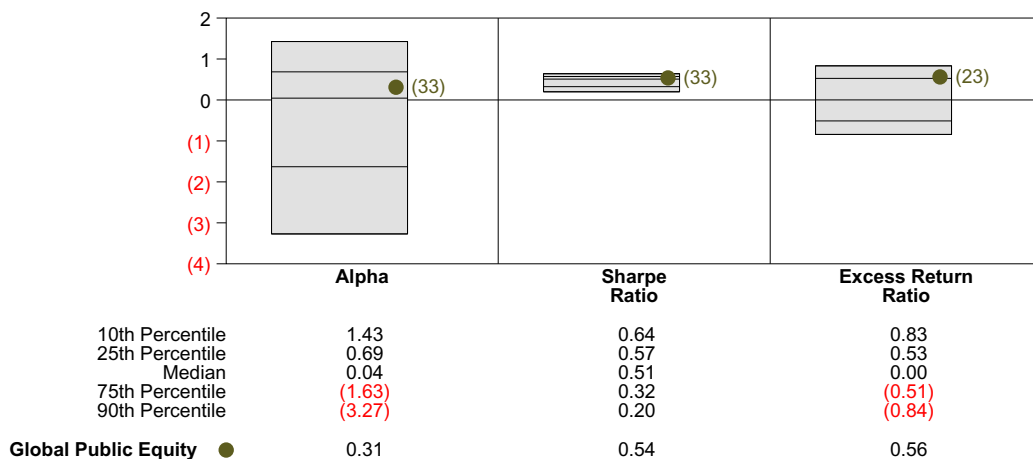
Performance vs Public Fund - Global Equity (Gross)



Cumulative and Quarterly Relative Return vs MSCI ACWI IMI



Risk Adjusted Return Measures vs MSCI ACWI IMI Rankings Against Public Fund - Global Equity (Gross) Five Years Ended September 30, 2019

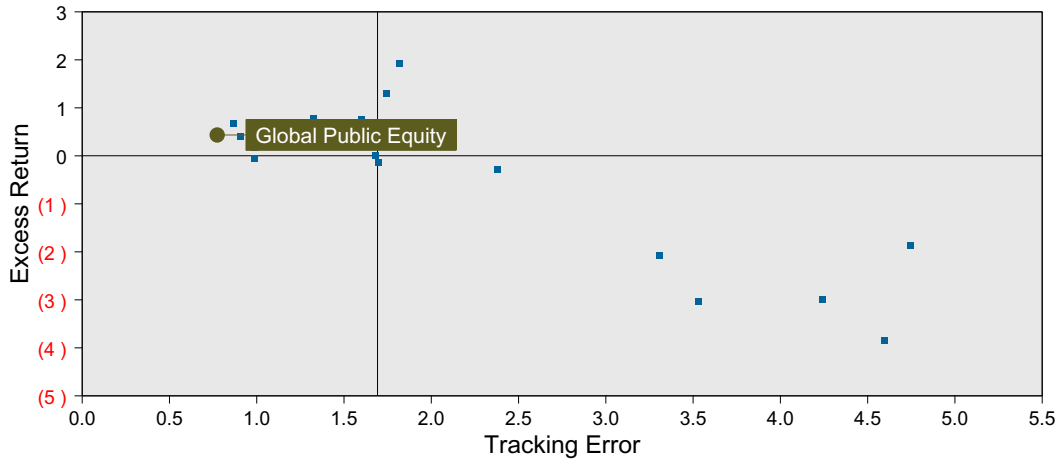


Global Public Equity Risk Analysis Summary

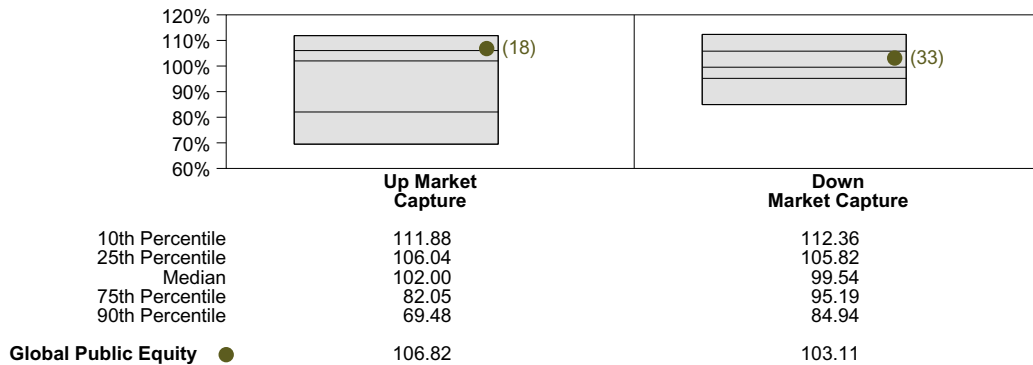
Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows Up and Down Market Capture. The last two charts show the ranking of the manager's risk statistics versus the peer group.

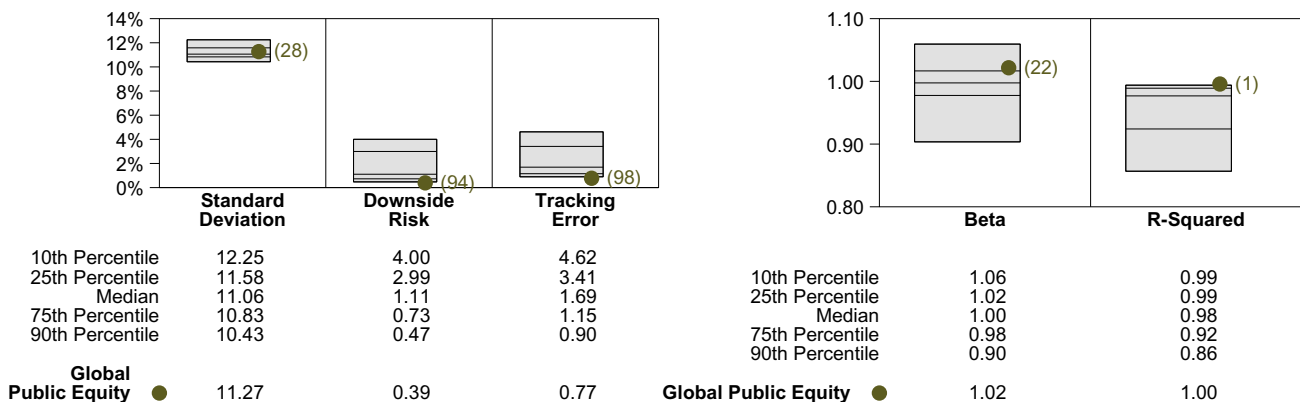
Risk Analysis vs Public Fund - Global Equity (Gross) Five Years Ended September 30, 2019



Market Capture vs MSCI ACWI IMI Index (USD Net Div) Rankings Against Public Fund - Global Equity (Gross) Five Years Ended September 30, 2019



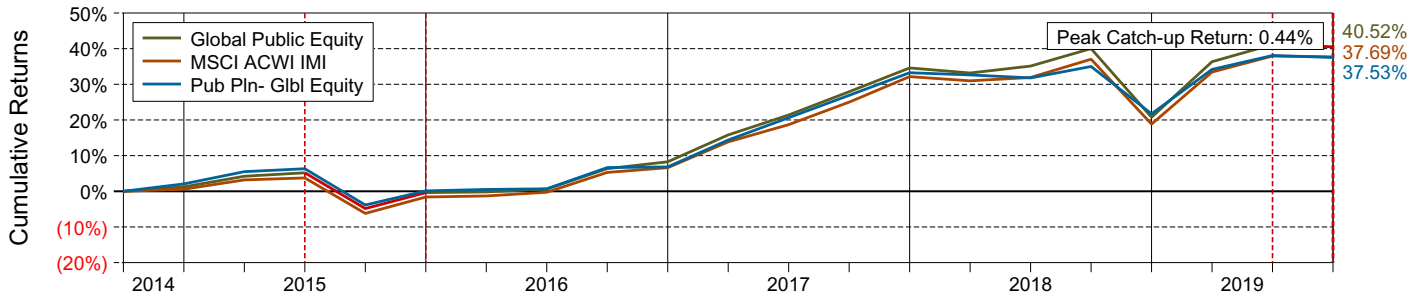
Risk Statistics Rankings vs MSCI ACWI IMI Index (USD Net Div) Rankings Against Public Fund - Global Equity (Gross) Five Years Ended September 30, 2019



Global Public Equity Drawdown Analysis for Five Years Ended September 30, 2019

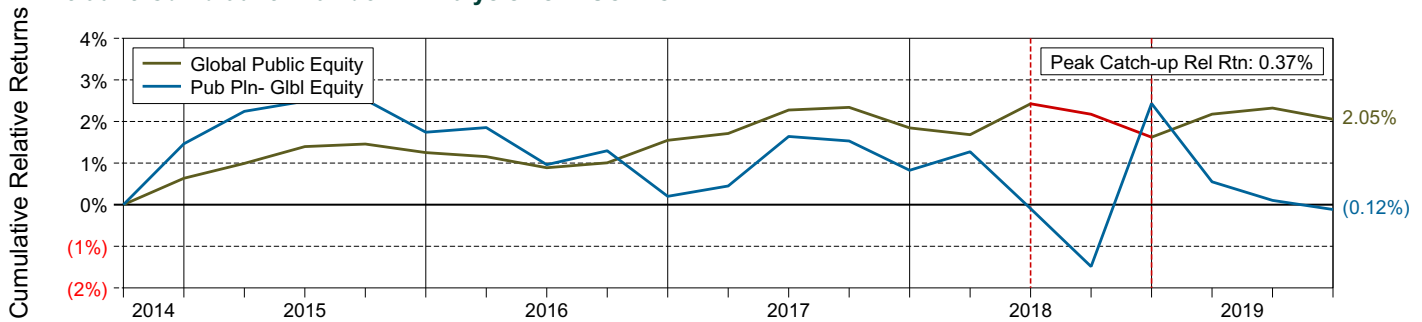
The following analysis focuses on downside risk by looking at cumulative drawdowns experienced from peak-to-trough for the portfolio, index, and peer group. Drawdown is measured from the "high-water mark" of cumulative return to the subsequent "trough". The first chart illustrates the Worst Absolute Drawdown as well as the Current Drawdown (cumulative return from high-water mark to now). The second chart focuses on Relative Drawdown (negative excess return vs. index). The bottom charts highlight the portfolio's peer rankings during drawdown periods.

Absolute Cumulative Drawdown Analysis



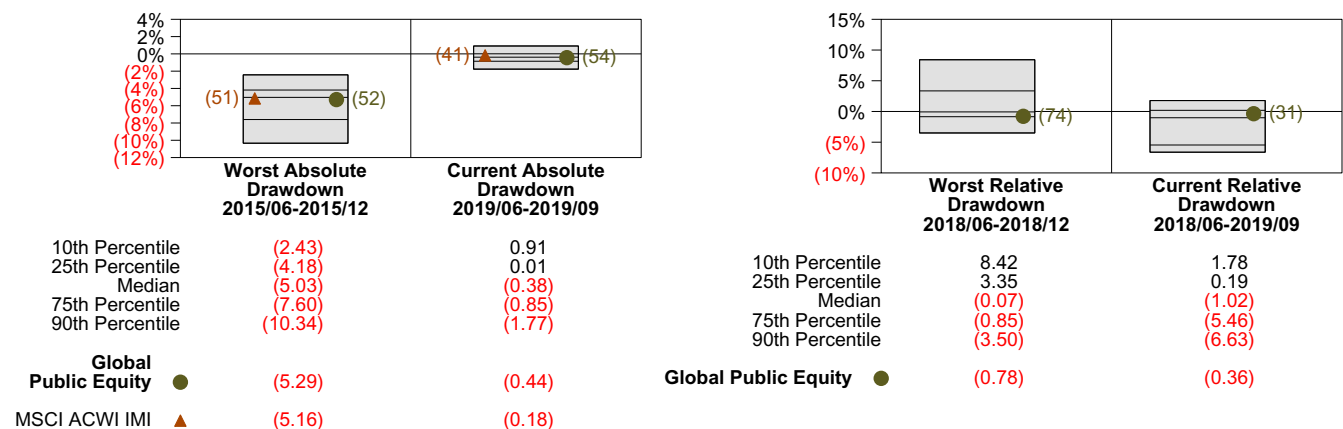
	Worst Absolute Drawdown					Current Absolute Drawdown				
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers
Global Public Equity	(5.29)%	0.50	2015/06-2015/12	(5.16)%	(5.85)%	(0.44)%	0.25	2019/06-2019/09	(0.18)%	(0.40)%
Recovery from Trough	6.74%	0.75	2015/12-2016/09	7.00%	6.53%	-	-	-	-	-
MSCI ACWI IMI	(5.16)%	0.50	2015/06-2015/12	-	-	(0.18)%	0.25	2019/06-2019/09	-	-
Pub Pln- Gbl Equity	(5.85)%	0.50	2015/06-2015/12	-	-	(0.40)%	0.25	2019/06-2019/09	-	-

Relative Cumulative Drawdown Analysis vs. MSCI ACWI IMI



	Worst Relative Drawdown				Current Relative Drawdown			
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers
Global Public Equity	(0.78)%	0.50	2018/06-2018/12	2.53%	(0.36)%	1.25	2018/06-2019/09	(0.02)%
Recovery from Trough	0.42%	0.75+	2018/12-2019/09	(2.49)%	0.42%	0.75+	2018/12-2019/09	(2.49)%
Pub Pln- Gbl Equity	(3.91)%	3.00	2015/09-2018/09	-	(2.57)%	4.00	2015/09-2019/09	-

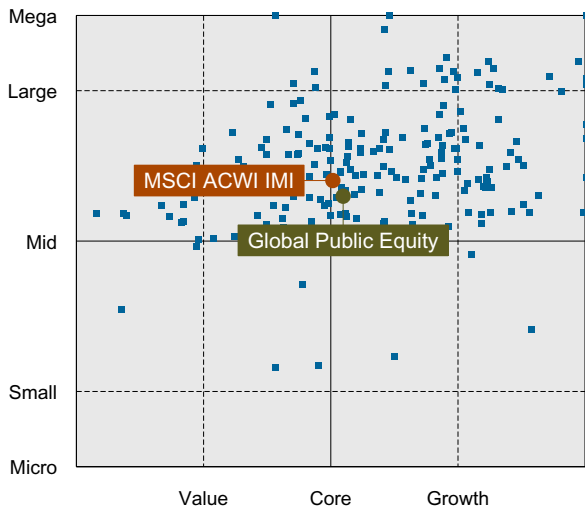
Drawdown Rankings vs. MSCI ACWI IMI Rankings against Public Fund - Global Equity Five Years Ended September 30, 2019



Current Holdings Based Style Analysis Global Public Equity As of September 30, 2019

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various market capitalization and style segments of the domestic equity market. The market is segmented quarterly by capitalization and style. The capitalization segments are dictated by capitalization decile breakpoints. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the current portfolio and index weights and stock counts (in parentheses) in each capitalization/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

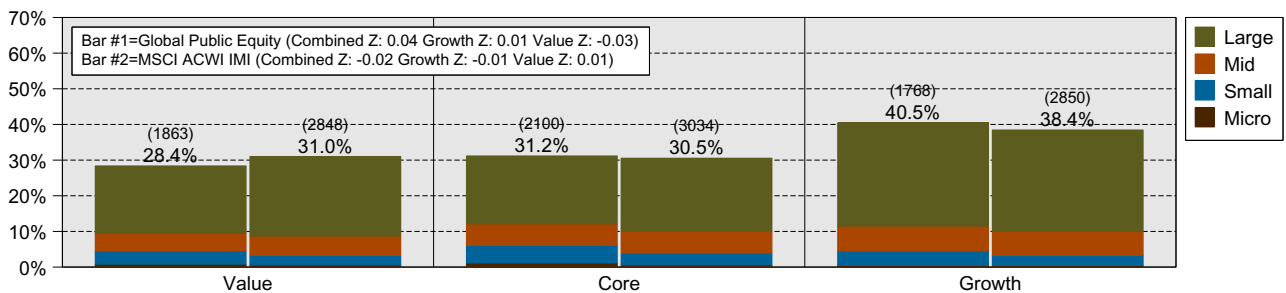
Style Map vs Callan Global Equity Holdings as of September 30, 2019



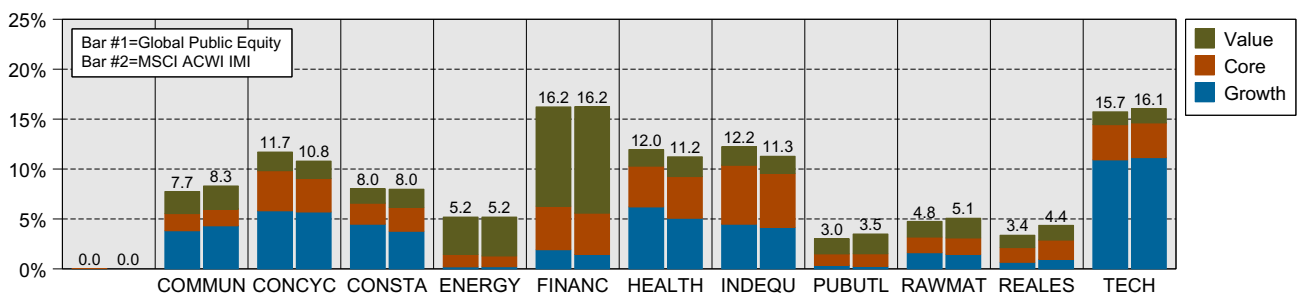
Style Exposure Matrix Holdings as of September 30, 2019

	Value	Core	Growth	Total
Large	18.9% (283)	19.1% (273)	28.9% (312)	66.9% (868)
	22.3% (282)	20.5% (276)	28.4% (315)	71.2% (873)
Mid	4.9% (480)	6.0% (547)	7.0% (576)	17.9% (1603)
	5.4% (512)	6.1% (575)	6.8% (659)	18.3% (1746)
Small	3.7% (633)	4.9% (698)	4.0% (560)	12.7% (1891)
	2.8% (1084)	3.3% (1285)	2.9% (1125)	8.9% (3494)
Micro	0.8% (467)	1.2% (582)	0.5% (320)	2.5% (1369)
	0.6% (970)	0.6% (898)	0.4% (751)	1.6% (2619)
Total	28.4% (1863)	31.2% (2100)	40.5% (1768)	100.0% (5731)
	31.0% (2848)	30.5% (3034)	38.4% (2850)	100.0% (8732)

Combined Z-Score Style Distribution Holdings as of September 30, 2019



Sector Weights Distribution Holdings as of September 30, 2019

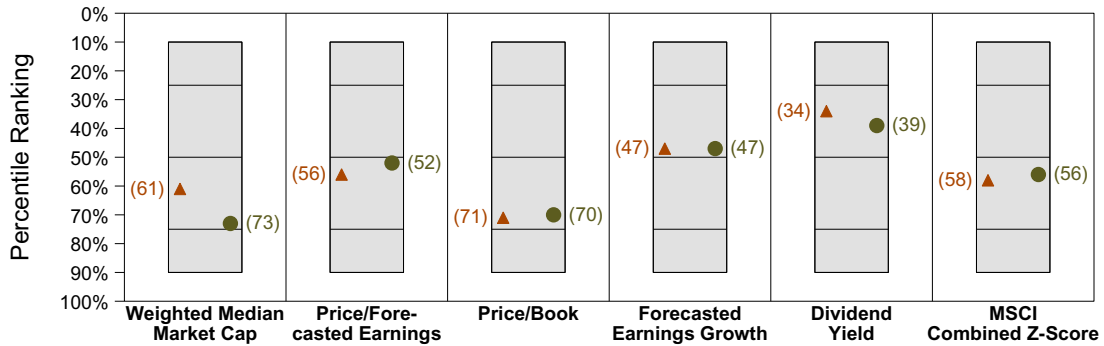


Global Public Equity Equity Characteristics Analysis Summary

Portfolio Characteristics

This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

Portfolio Characteristics Percentile Rankings Rankings Against Callan Global Equity as of September 30, 2019

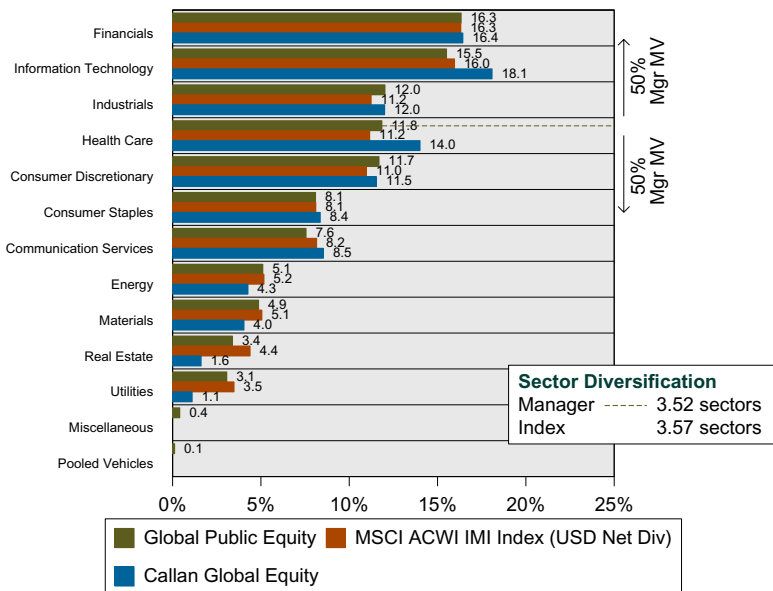


	Weighted Median Market Cap	Price/Forecasted Earnings	Price/Book	Forecasted Earnings Growth	Dividend Yield	MSCI Combined Z-Score
10th Percentile	99.91	23.18	4.91	16.86	3.36	1.01
25th Percentile	66.62	20.55	3.75	13.72	2.71	0.70
Median	48.61	16.00	2.60	11.15	2.09	0.13
75th Percentile	34.11	13.73	1.97	8.92	1.49	(0.29)
90th Percentile	21.28	11.69	1.49	7.26	1.06	(0.72)
Global Public Equity ●	36.11	15.77	2.12	11.28	2.31	0.04
MSCI ACWI IMI Index (USD Net Div) ▲	44.50	15.44	2.10	11.27	2.45	(0.02)

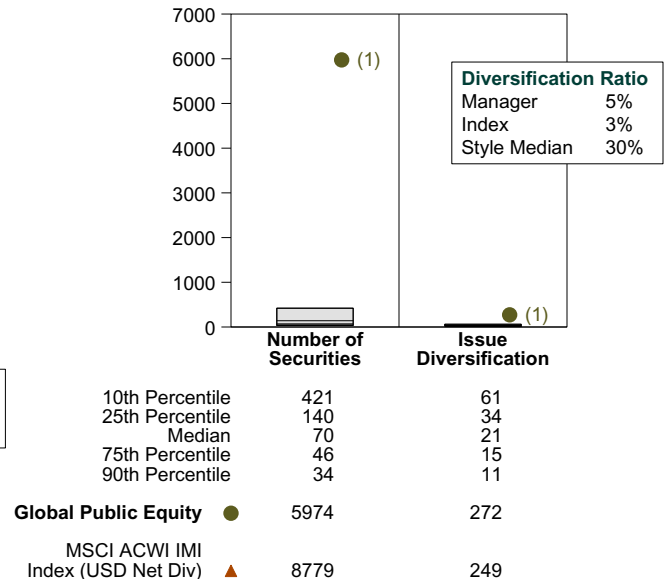
Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. Diversification by number and concentration of holdings are also compared to the benchmark and peer group. Issue Diversification represents by count, and Diversification Ratio by percent, the number of holdings that account for half of the portfolio's market value.

Sector Allocation September 30, 2019



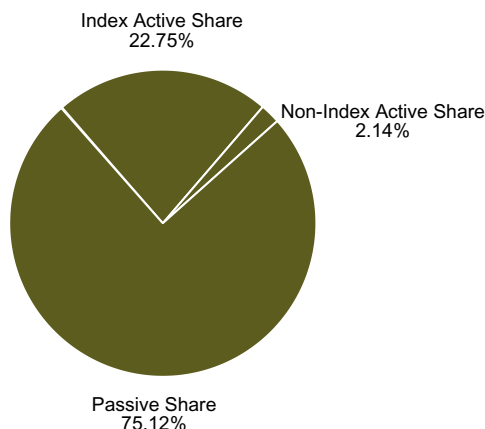
Diversification September 30, 2019



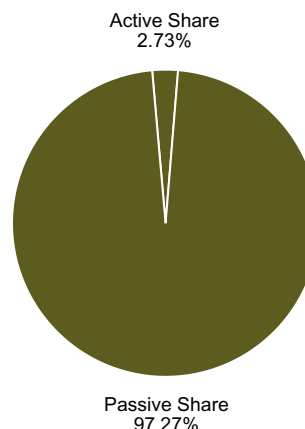
Global Public Equity Active Share Analysis as of September 30, 2019 vs. MSCI ACWI IMI Index (USD Net Div)

Active Share analysis compares the holdings of a portfolio to an index to measure how aggressively it differs from the index. Active share is measured at the individual stock level ("holdings-level active share") and using sector weights ("sector exposure active share"). Holdings-level active share comes from: 1) Index Active Share - over/under weighting of stocks in the index, and 2) Non-Index Active Share - positions in stocks not in the index. This analysis displays active share by sector and compares the portfolio to a relevant peer group.

Holdings-Level Active Share



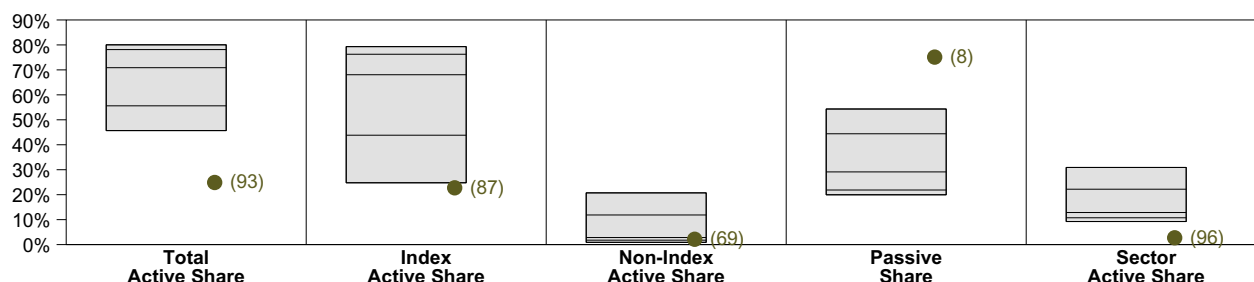
Sector Exposure Active Share



Total Active Share: 24.88%

	Index Active Share Within Sector	Non-Index Active Share Within Sector	Total Active Share Within Sector	Index Weight	Manager Weight	Contribution to Total Portfolio Active Share
Communication Services	19.04%	1.57%	20.61%	8.15%	7.56%	1.73%
Consumer Discretionary	26.41%	1.87%	28.29%	10.97%	11.69%	3.09%
Consumer Staples	23.07%	3.02%	26.09%	8.11%	8.09%	2.11%
Energy	18.70%	1.95%	20.65%	5.17%	5.11%	1.06%
Financials	20.29%	2.58%	22.87%	16.32%	16.34%	3.73%
Health Care	24.23%	1.21%	25.44%	11.16%	11.85%	2.85%
Industrials	28.14%	1.65%	29.79%	11.24%	12.02%	3.37%
Information Technology	20.08%	1.04%	21.11%	15.96%	15.51%	3.37%
Materials	25.94%	2.81%	28.76%	5.06%	4.87%	1.40%
Miscellaneous	0.00%	100.00%	100.00%	-	0.41%	0.18%
Pooled Vehicles	0.00%	100.00%	100.00%	-	0.11%	0.06%
Real Estate	24.36%	1.97%	26.33%	4.39%	3.39%	1.13%
Utilities	21.00%	2.25%	23.25%	3.48%	3.07%	0.79%
Total	22.75%	2.14%	24.88%	100.00%	100.00%	24.86%

Active Share vs. Pub Pln- Gbl Equity



	Total Active Share	Index Active Share	Non-Index Active Share	Passive Share	Sector Active Share
10th Percentile	45.67	24.77	0.91	19.96	9.24
25th Percentile	55.60	43.83	1.78	21.87	10.75
Median	70.88	68.05	2.83	29.12	12.86
75th Percentile	78.13	76.27	11.87	44.40	22.19
90th Percentile	80.04	79.31	20.72	54.33	30.90
Global Public Equity	24.88	22.75	2.14	75.12	2.73

Walter Scott & Prtnrs Gbl Gr Eq Period Ended September 30, 2019

Investment Philosophy

Walter Scott believes that the objective for all long term investors is to maintain and enhance the real after inflation purchasing power of their assets. This is most likely to be achieved by investing in companies with high rates of internal wealth generation which in time translates into total return for the investor. Thus, the firm's research efforts are directed towards identifying companies that meet its investment criteria. Their research process combines historic and forecasted financial analysis with business and management analysis at the company level.

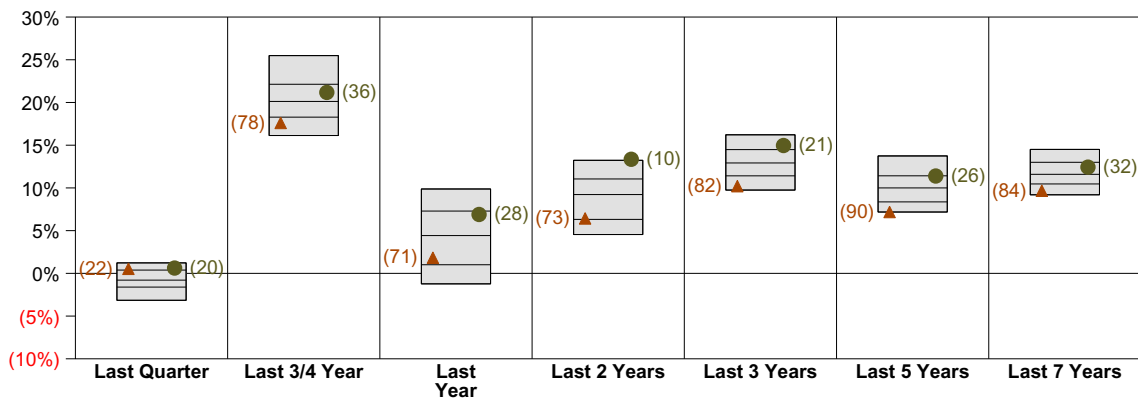
Quarterly Summary and Highlights

- Walter Scott & Prtnrs Gbl Gr Eq's portfolio posted a 0.62% return for the quarter placing it in the 20 percentile of the Callan Global Broad Growth Equity group for the quarter and in the 28 percentile for the last year.
- Walter Scott & Prtnrs Gbl Gr Eq's portfolio outperformed the MSCI World by 0.09% for the quarter and outperformed the MSCI World for the year by 5.07%.

Quarterly Asset Growth

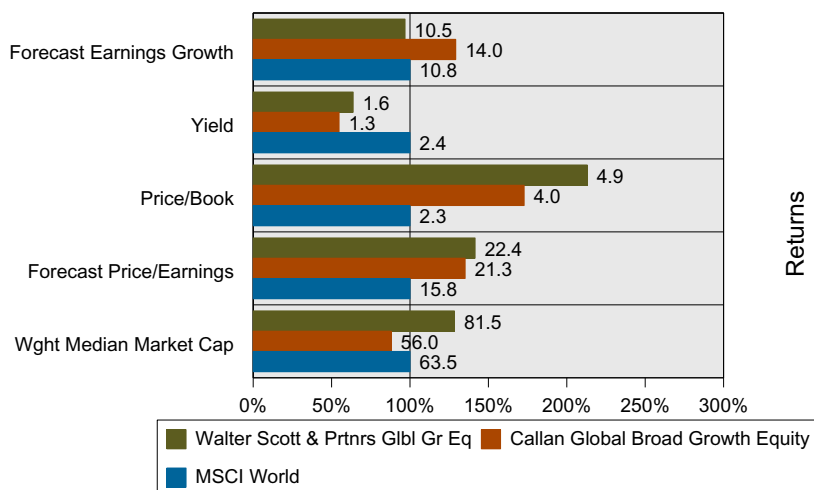
Beginning Market Value	\$1,040,873,444
Net New Investment	\$-979,243
Investment Gains/(Losses)	\$6,472,694
Ending Market Value	\$1,046,366,894

Performance vs Callan Global Broad Growth Equity (Gross)

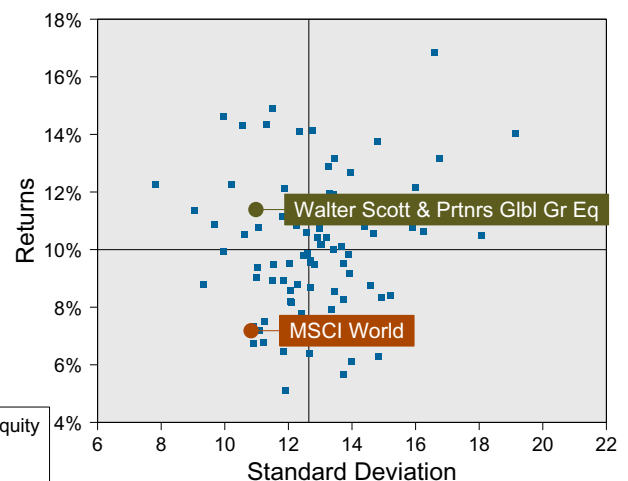


10th Percentile	1.23	25.49	9.87	13.23	16.22	13.74	14.51
25th Percentile	0.38	22.13	7.29	11.05	14.48	11.42	13.00
Median	(0.79)	20.12	4.42	9.22	12.92	10.00	11.59
75th Percentile	(1.61)	18.28	1.01	6.32	11.41	8.37	10.46
90th Percentile	(3.15)	16.13	(1.23)	4.54	9.75	7.18	9.20
Walter Scott & Prtnrs Gbl Gr Eq	● 0.62	21.18	6.89	13.35	14.96	11.39	12.43
MSCI World	▲ 0.53	17.61	1.83	6.43	10.21	7.18	9.67

Portfolio Characteristics as a Percentage of the MSCI World



Callan Global Broad Growth Equity (Gross) Annualized Five Year Risk vs Return

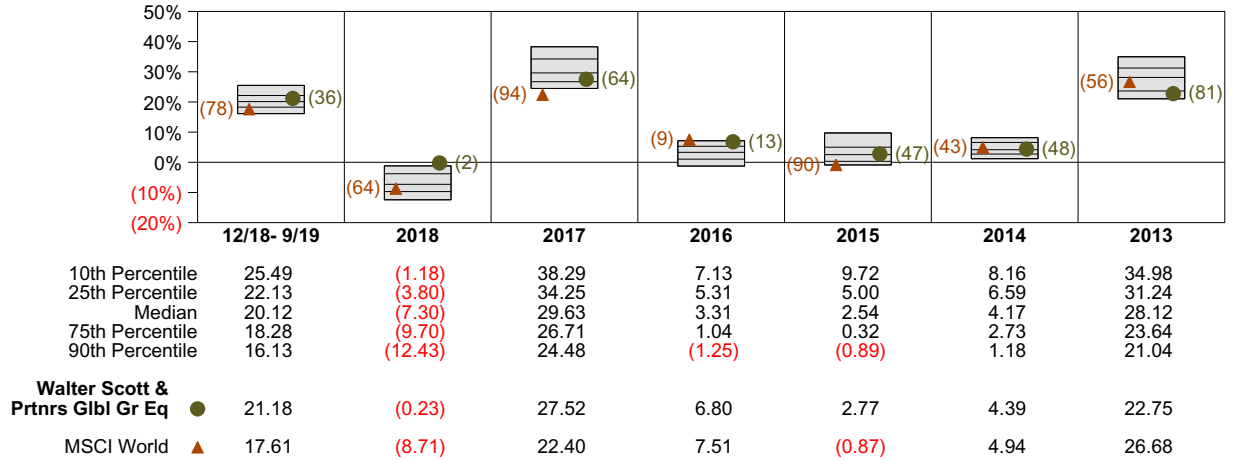


Walter Scott & Prtnrs Gbl Gr Eq Return Analysis Summary

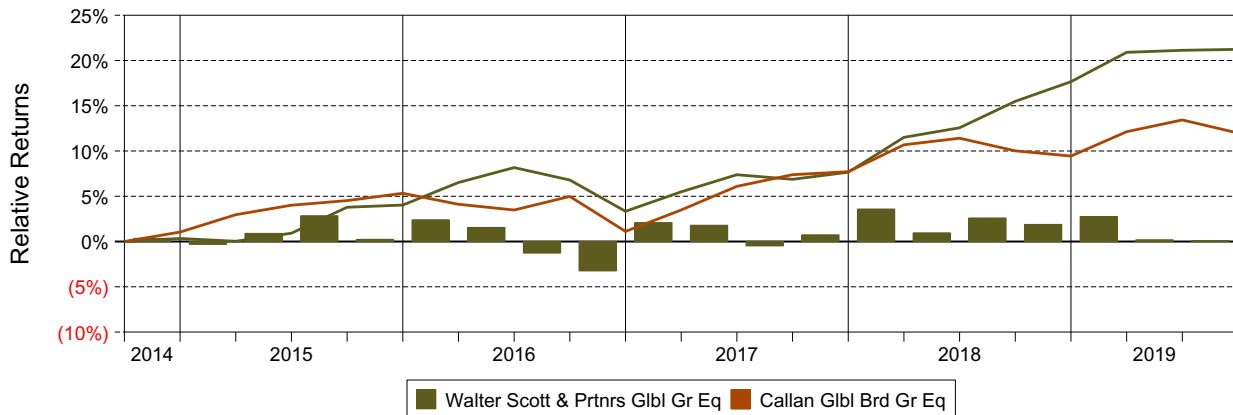
Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

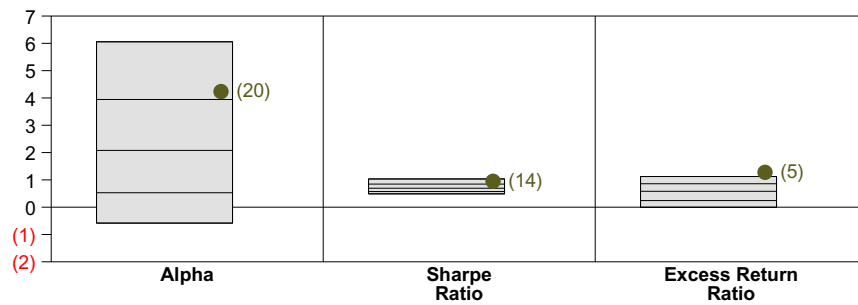
Performance vs Callan Global Broad Growth Equity (Gross)



Cumulative and Quarterly Relative Return vs MSCI World



Risk Adjusted Return Measures vs MSCI World Rankings Against Callan Global Broad Growth Equity (Gross) Five Years Ended September 30, 2019

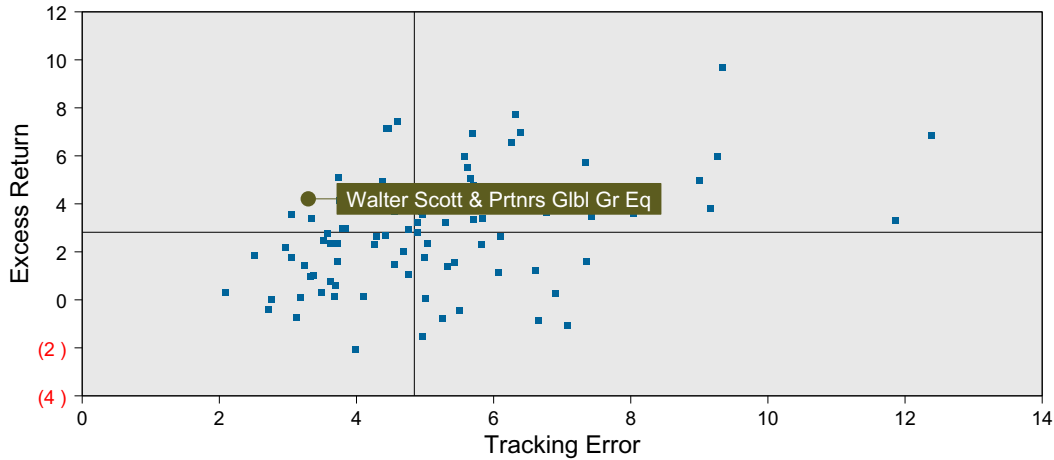


Walter Scott & Prtnrs Gbl Gr Eq Risk Analysis Summary

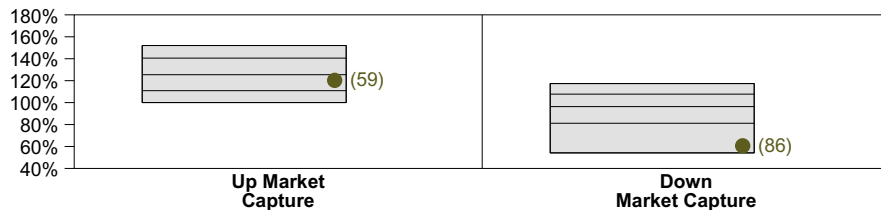
Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows Up and Down Market Capture. The last two charts show the ranking of the manager's risk statistics versus the peer group.

Risk Analysis vs Callan Global Broad Growth Equity (Gross) Five Years Ended September 30, 2019



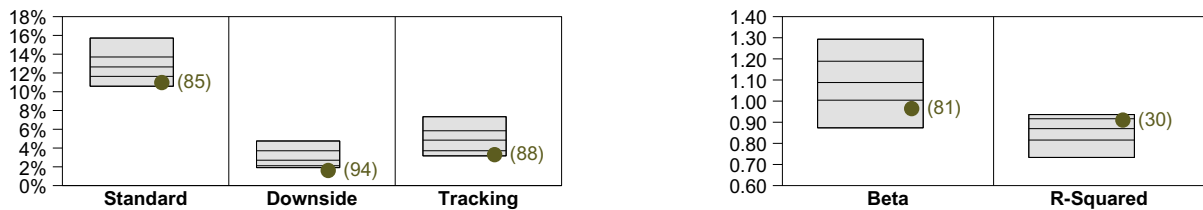
Market Capture vs MSCI World Index (USD Net Div) Rankings Against Callan Global Broad Growth Equity (Gross) Five Years Ended September 30, 2019



	Up Market Capture	Down Market Capture
10th Percentile	152.03	117.38
25th Percentile	140.56	107.71
Median	125.43	96.37
75th Percentile	110.88	81.16
90th Percentile	100.03	54.17

Walter Scott & Prtnrs Gbl Gr Eq ● 120.27 60.61

Risk Statistics Rankings vs MSCI World Index (USD Net Div) Rankings Against Callan Global Broad Growth Equity (Gross) Five Years Ended September 30, 2019



	Standard Deviation	Downside Risk	Tracking Error	Beta	R-Squared
10th Percentile	15.72	4.75	7.34	1.29	0.94
25th Percentile	13.70	3.71	5.84	1.19	0.92
Median	12.64	2.70	4.84	1.09	0.87
75th Percentile	11.64	2.12	3.71	1.00	0.82
90th Percentile	10.59	1.92	3.17	0.87	0.73

Walter Scott & Prtnrs Gbl Gr Eq ● 10.98 1.61 3.30 ● 0.96 0.91

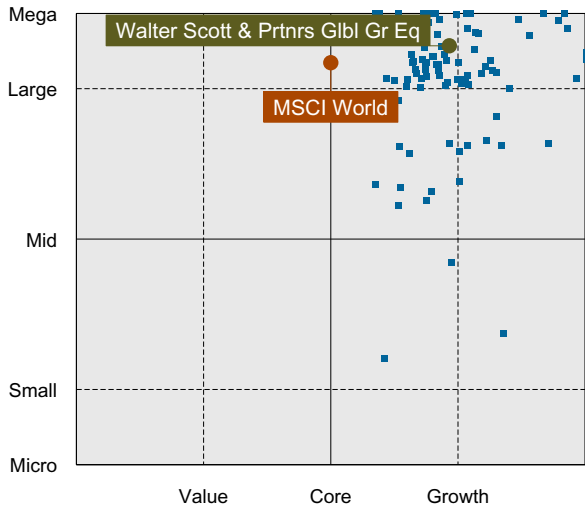
Current Holdings Based Style Analysis

Walter Scott & Prtnrs Gbl Gr Eq

As of September 30, 2019

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various regional and style segments of the international/global equity market. The market is segmented quarterly by region and style. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left chart illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the current portfolio and index weights and stock counts (in parentheses) in each region/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

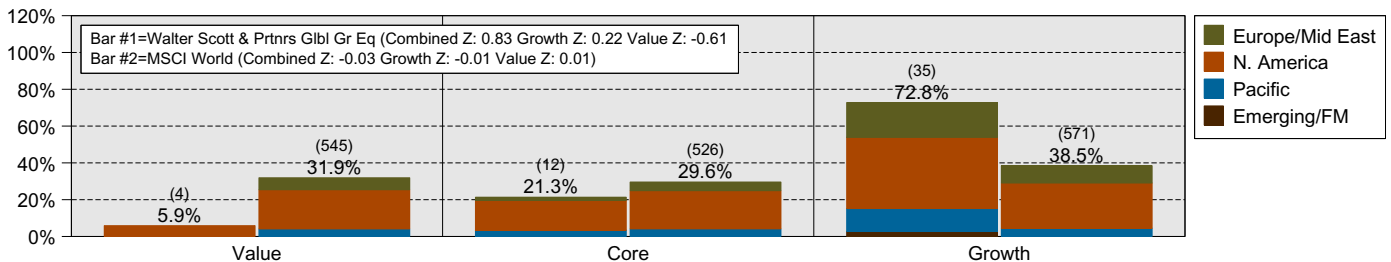
Style Map vs Callan Gbl Brd Gr Eq Holdings as of September 30, 2019



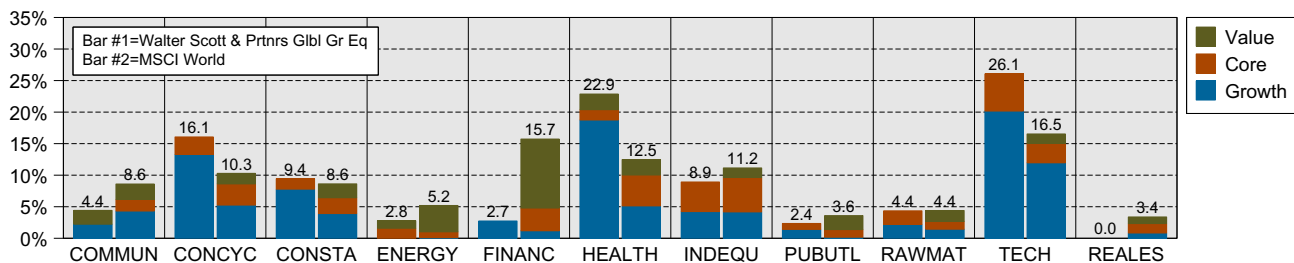
Style Exposure Matrix Holdings as of September 30, 2019

	Value	Core	Growth	Total
Europe/Mid East	0.0% (0)	1.6% (1)	18.9% (11)	20.6% (12)
N. America	6.5% (148)	4.7% (117)	9.4% (186)	20.6% (451)
Pacific	5.9% (4)	16.3% (8)	38.7% (17)	60.9% (29)
Emerging/FM	21.3% (246)	20.8% (258)	24.5% (216)	66.6% (720)
	0.0% (0)	3.4% (3)	12.5% (6)	15.9% (9)
	4.1% (151)	4.1% (151)	4.4% (168)	12.7% (470)
	0.0% (0)	0.0% (0)	2.7% (1)	2.7% (1)
	0.0% (0)	0.0% (0)	0.1% (1)	0.1% (1)
Total	5.9% (4)	21.3% (12)	72.8% (35)	100.0% (51)
	31.9% (545)	29.6% (526)	38.5% (571)	100.0% (1642)

Combined Z-Score Style Distribution Holdings as of September 30, 2019



Sector Weights Distribution Holdings as of September 30, 2019

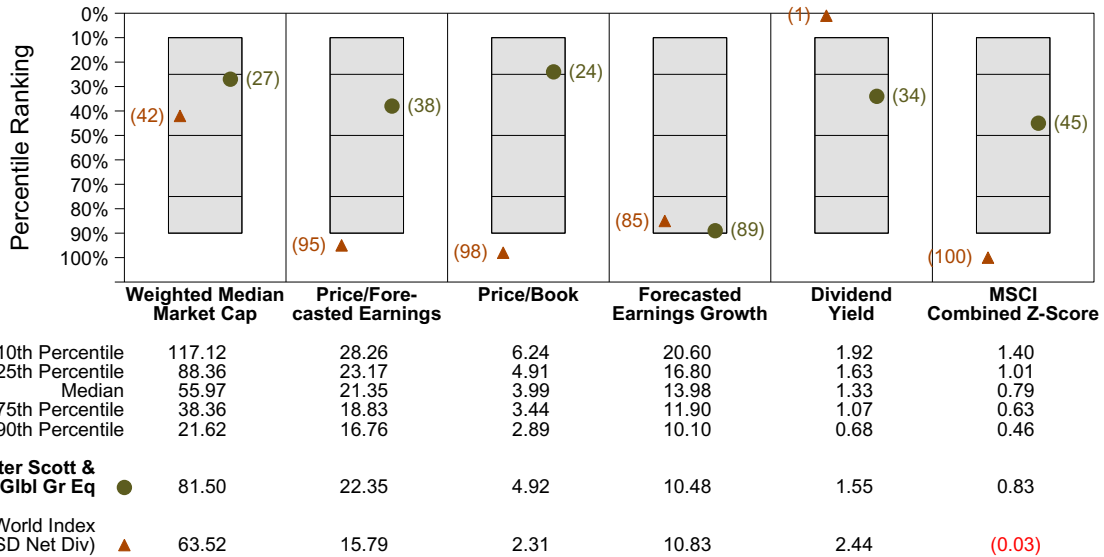


Walter Scott & Prtnrs Gbl Gr Eq Equity Characteristics Analysis Summary

Portfolio Characteristics

This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

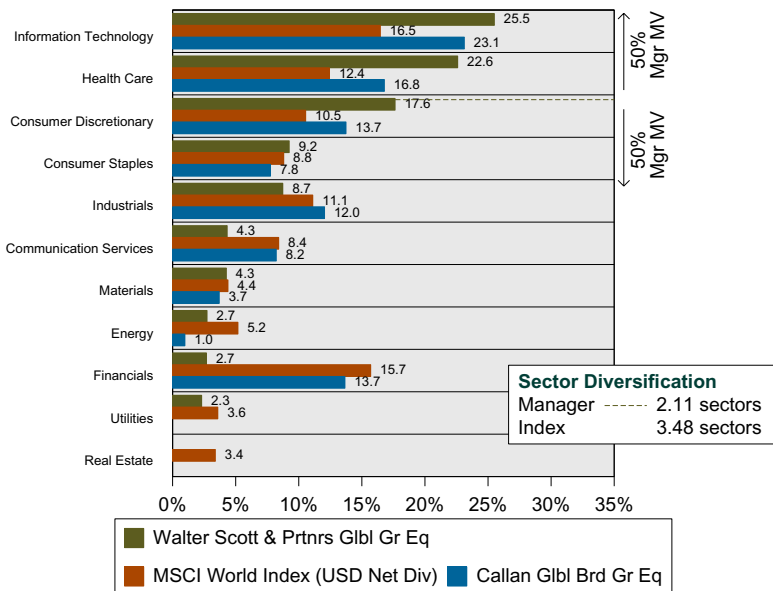
Portfolio Characteristics Percentile Rankings Rankings Against Callan Global Broad Growth Equity as of September 30, 2019



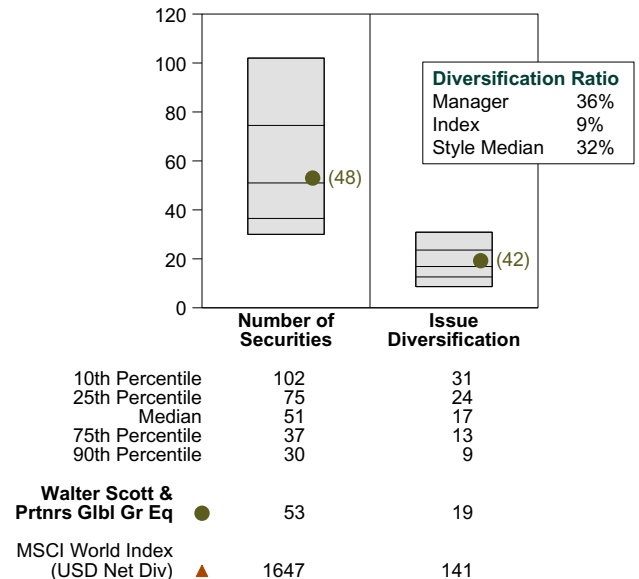
Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. Diversification by number and concentration of holdings are also compared to the benchmark and peer group. Issue Diversification represents by count, and Diversification Ratio by percent, the number of holdings that account for half of the portfolio's market value.

Sector Allocation September 30, 2019



Diversification September 30, 2019

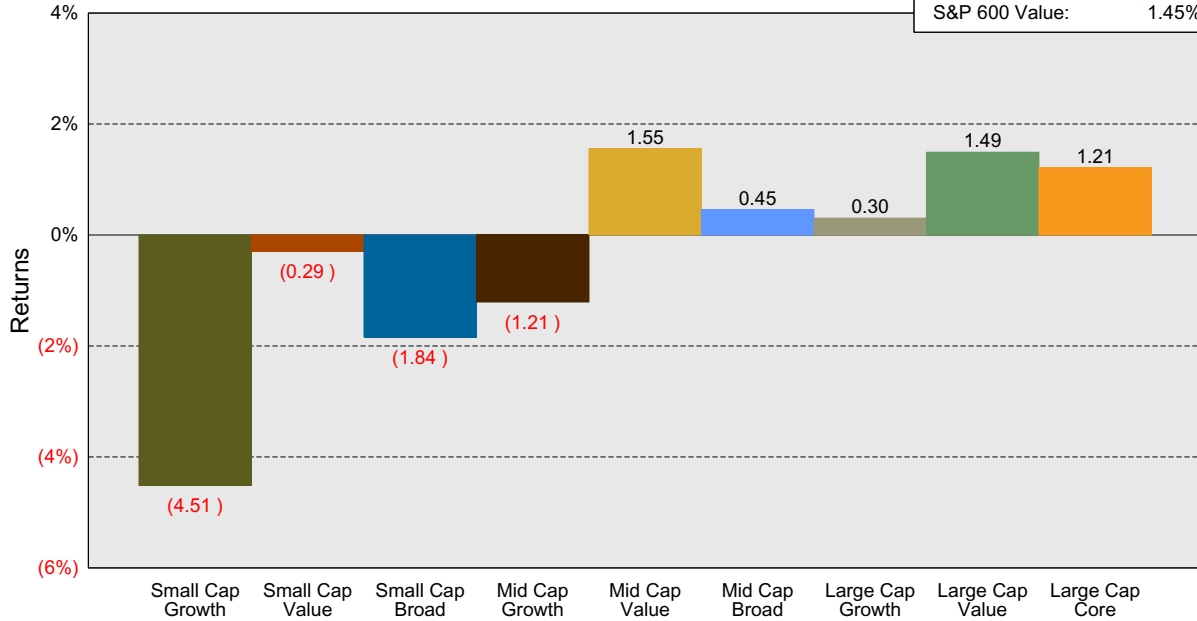


Domestic Equity Active Management Overview

The S&P 500 Index returned 1.7% in the third quarter, bringing its YTD result to an impressive 20.6%. Third quarter returns were mixed across sectors. The winners were Real Estate (+7.7%) and Utilities (+9.3%), both benefiting from lower interest rates. Returns for both sectors are approaching 30% on a YTD basis. Energy, hurt by falling oil prices, lost 6.3% and is up only 6.0% for the year. Health Care was another poor performer, down 2.2% and up 5.6% YTD. From a style perspective, value mounted a comeback late in the quarter, but over the full quarter returns across styles were similar (R1000: 1.4%; R1000G: 1.5%; R1000V: 1.4%). Small caps underperformed (R2000: -2.4% vs R1000: +1.4%) and, notably, small cap value outperformed small cap growth by a significant margin (R2000V: -0.6% vs R2000G: -4.2%).

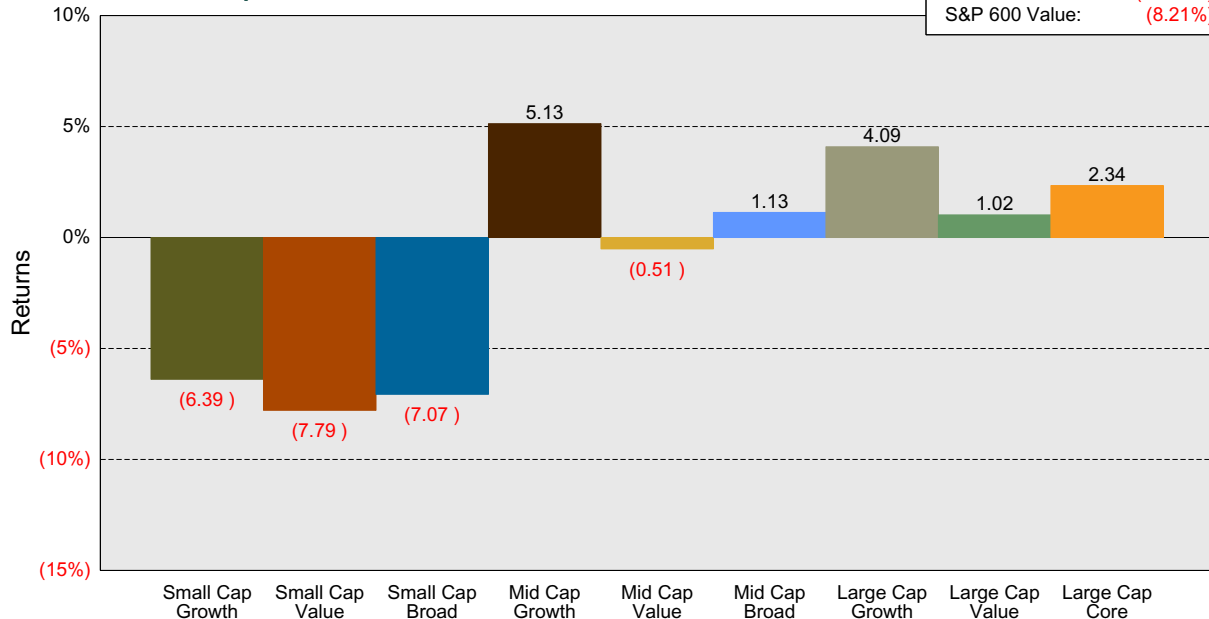
S&P 500:	1.70%
S&P 500 Growth:	0.72%
S&P 500 Value:	2.83%
S&P Mid Cap:	(0.09%)
S&P 600:	(0.20%)
S&P 600 Growth:	(1.86%)
S&P 600 Value:	1.45%

Separate Account Style Group Median Returns for Quarter Ended September 30, 2019



S&P 500:	4.25%
S&P 500 Growth:	3.25%
S&P 500 Value:	5.56%
S&P Mid Cap:	(2.49%)
S&P 600:	(9.34%)
S&P 600 Growth:	(10.40%)
S&P 600 Value:	(8.21%)

Separate Account Style Group Median Returns for One Year Ended September 30, 2019



U.S. Equity Period Ended September 30, 2019

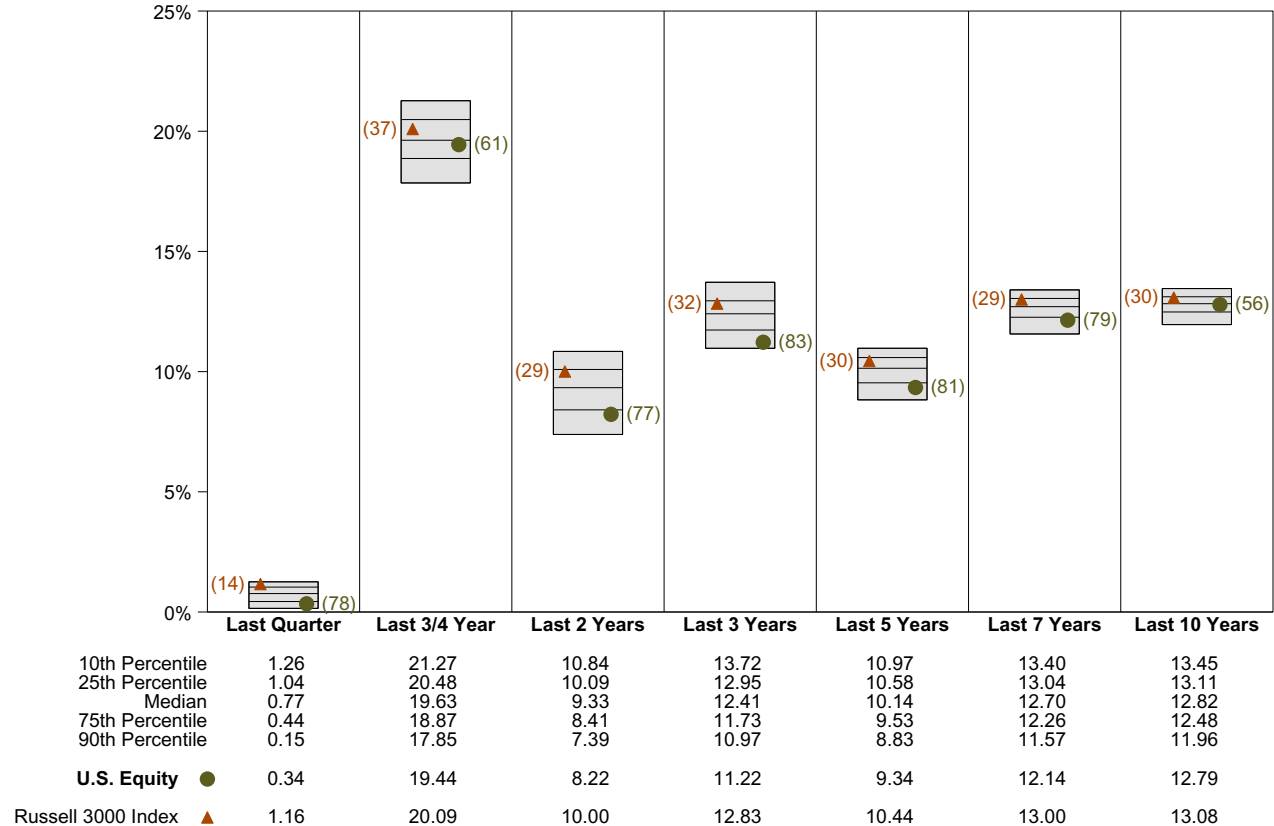
Quarterly Summary and Highlights

- U.S. Equity's portfolio posted a 0.34% return for the quarter placing it in the 78 percentile of the Public Fund - Domestic Equity group for the quarter and in the 76 percentile for the last year.
- U.S. Equity's portfolio underperformed the Russell 3000 Index by 0.82% for the quarter and underperformed the Russell 3000 Index for the year by 2.13%.

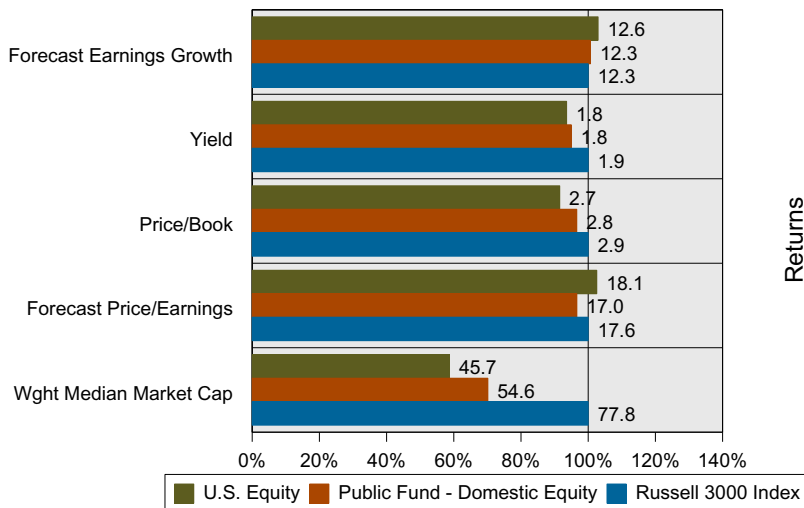
Quarterly Asset Growth

Beginning Market Value	\$7,766,309,477
Net New Investment	\$-1,419,677
Investment Gains/(Losses)	\$26,824,926
Ending Market Value	\$7,791,714,727

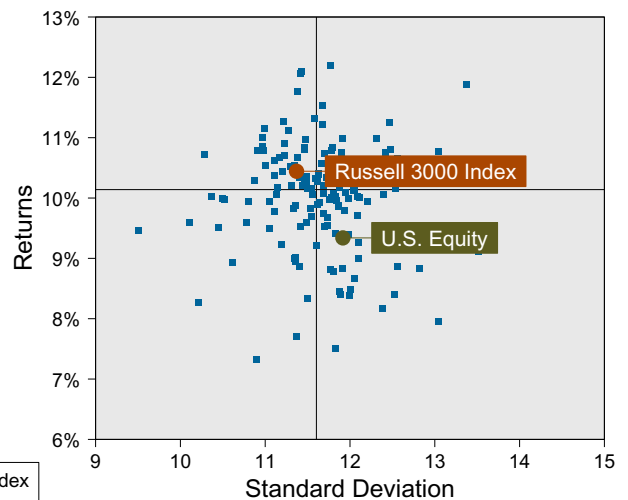
Performance vs Public Fund - Domestic Equity (Gross)



Portfolio Characteristics as a Percentage of the Russell 3000 Index



Public Fund - Domestic Equity (Gross) Annualized Five Year Risk vs Return

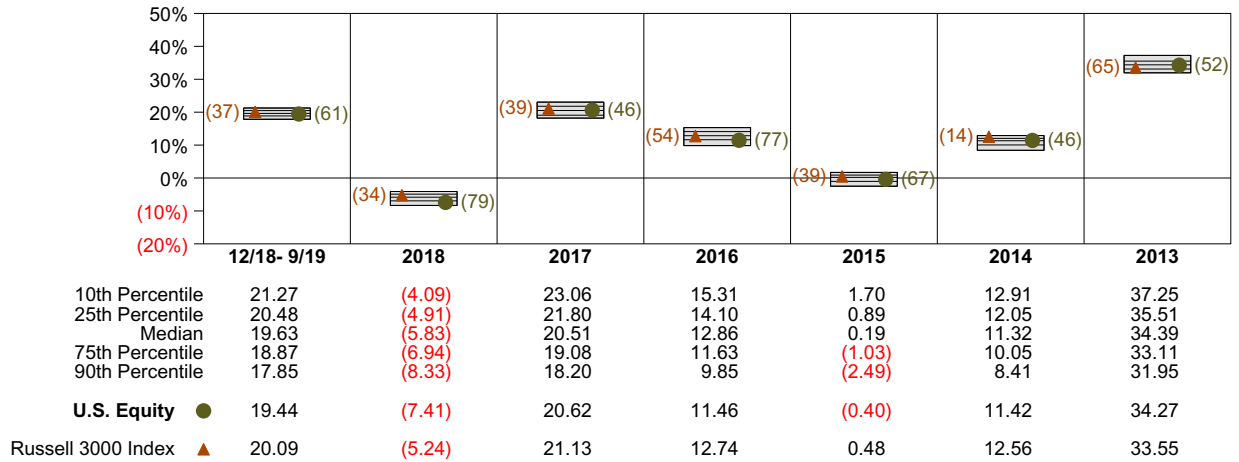


U.S. Equity Return Analysis Summary

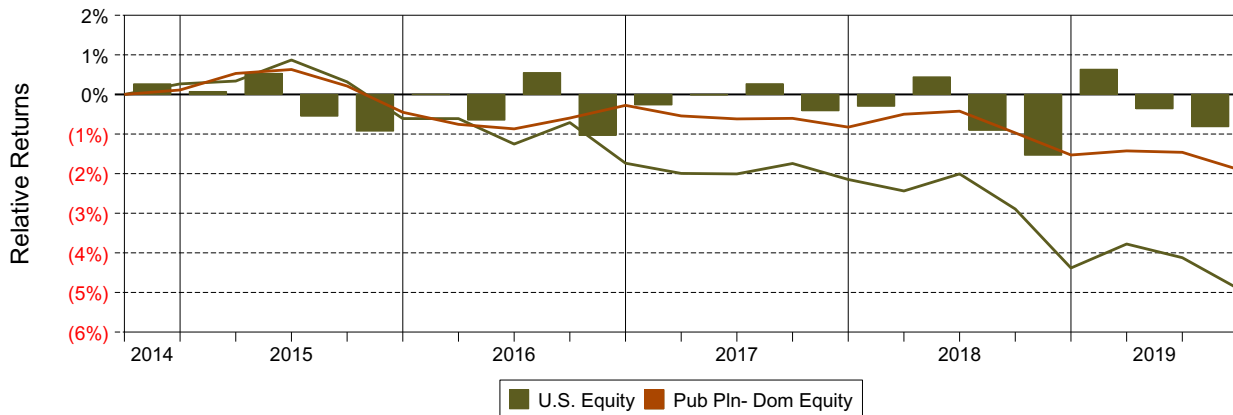
Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

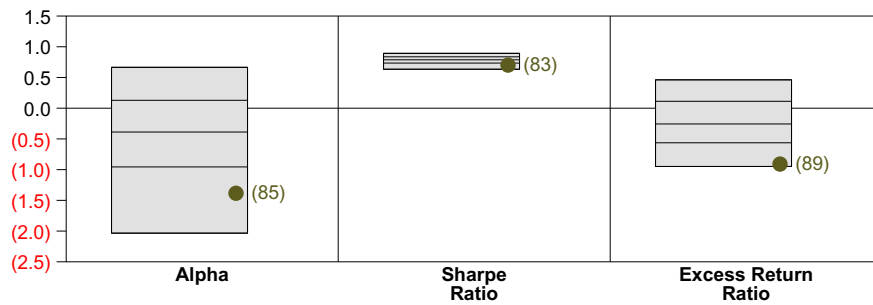
Performance vs Public Fund - Domestic Equity (Gross)



Cumulative and Quarterly Relative Return vs Russell 3000 Index



Risk Adjusted Return Measures vs Russell 3000 Index Rankings Against Public Fund - Domestic Equity (Gross) Five Years Ended September 30, 2019



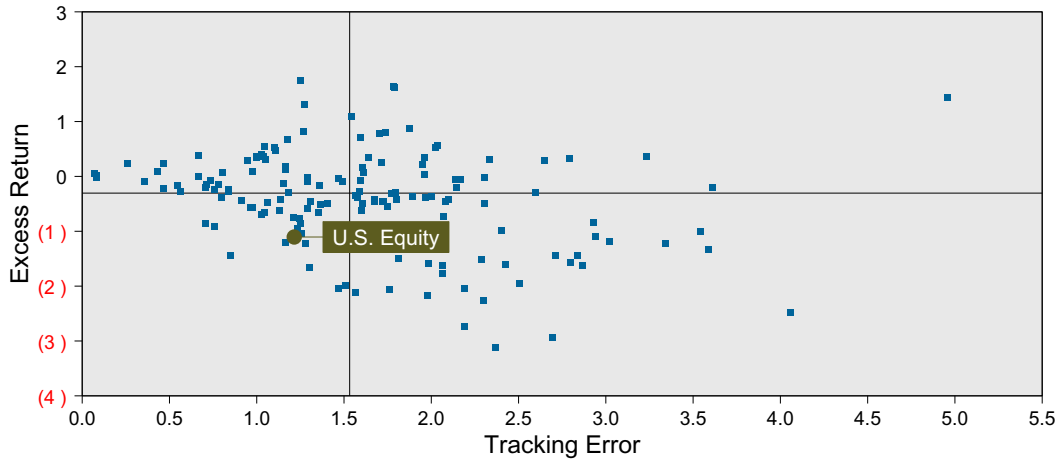
	Alpha	Sharpe Ratio	Excess Return Ratio
10th Percentile	0.67	0.89	0.46
25th Percentile	0.13	0.84	0.11
Median	(0.39)	0.79	(0.26)
75th Percentile	(0.96)	0.73	(0.56)
90th Percentile	(2.03)	0.63	(0.95)
U.S. Equity ●	(1.38)	0.70	(0.91)

U.S. Equity Risk Analysis Summary

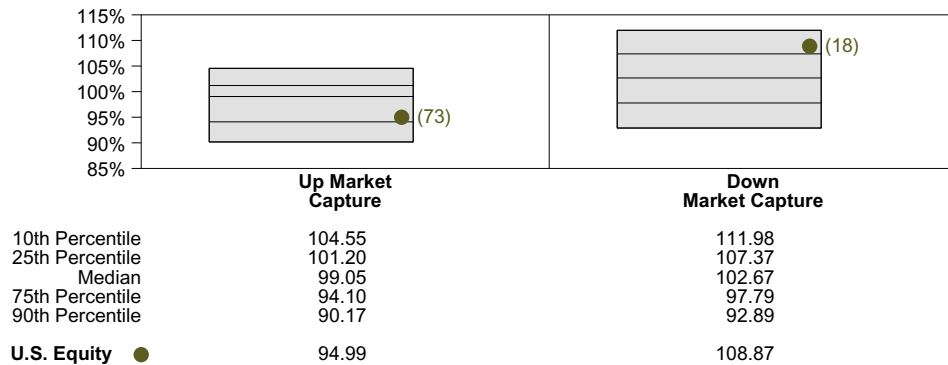
Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows Up and Down Market Capture. The last two charts show the ranking of the manager's risk statistics versus the peer group.

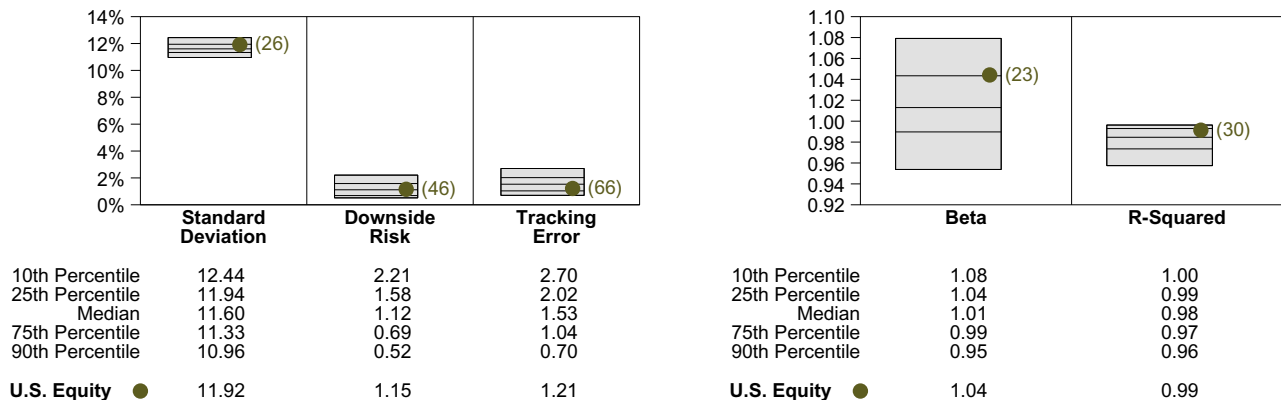
Risk Analysis vs Public Fund - Domestic Equity (Gross) Five Years Ended September 30, 2019



Market Capture vs Russell 3000 Index Rankings Against Public Fund - Domestic Equity (Gross) Five Years Ended September 30, 2019



Risk Statistics Rankings vs Russell 3000 Index Rankings Against Public Fund - Domestic Equity (Gross) Five Years Ended September 30, 2019



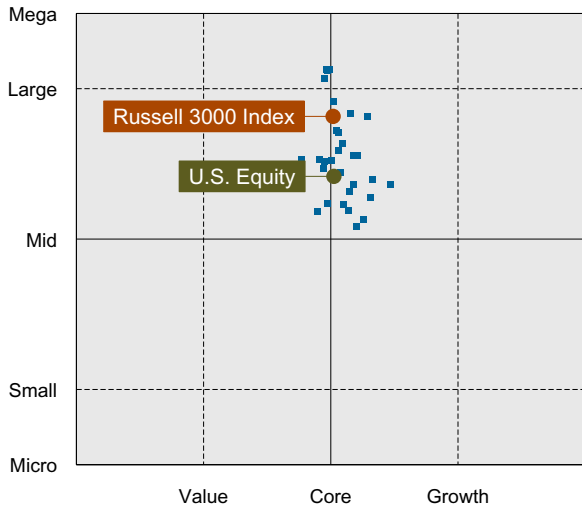
Current Holdings Based Style Analysis

U.S. Equity

As of September 30, 2019

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various market capitalization and style segments of the domestic equity market. The market is segmented quarterly by capitalization and style. The capitalization segments are dictated by capitalization decile breakpoints. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the current portfolio and index weights and stock counts (in parentheses) in each capitalization/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

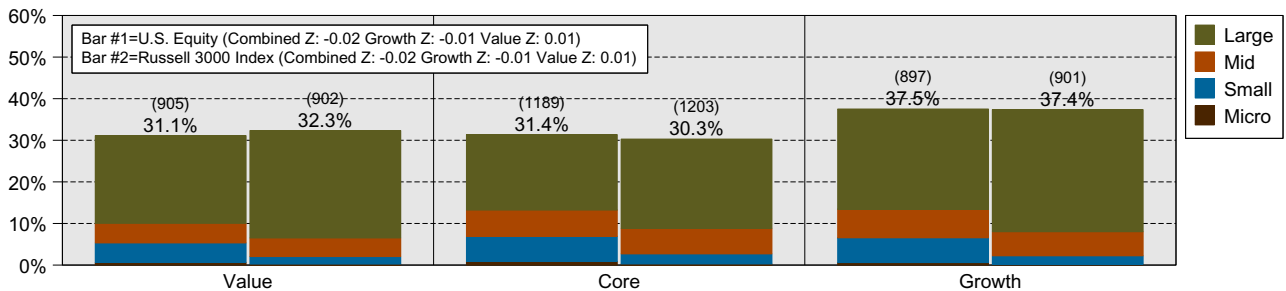
Style Map vs Pub Pln- Dom Equity Holdings as of September 30, 2019



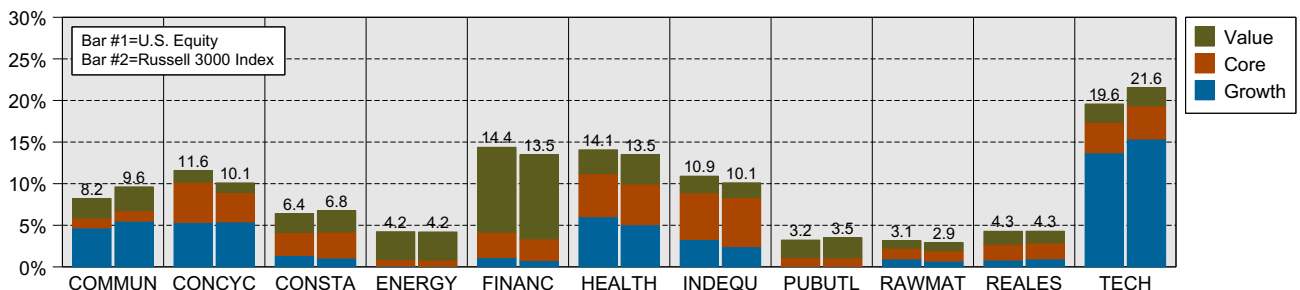
Style Exposure Matrix Holdings as of September 30, 2019

	Value	Core	Growth	Total
Large	21.1% (106)	18.1% (103)	24.1% (91)	63.4% (300)
Mid	25.8% (106)	21.4% (103)	29.4% (91)	76.6% (300)
Small	4.7% (171)	6.3% (224)	6.8% (209)	17.9% (604)
Micro	4.5% (168)	6.2% (224)	5.8% (209)	16.4% (601)
Total	4.6% (332)	6.0% (486)	6.0% (385)	16.6% (1203)
	1.8% (333)	2.4% (486)	2.1% (384)	6.3% (1203)
	0.7% (296)	0.9% (376)	0.6% (212)	2.2% (884)
	0.2% (295)	0.3% (390)	0.2% (217)	0.7% (902)
Total	31.1% (905)	31.4% (1189)	37.5% (897)	100.0% (2991)
	32.3% (902)	30.3% (1203)	37.4% (901)	100.0% (3006)

Combined Z-Score Style Distribution Holdings as of September 30, 2019



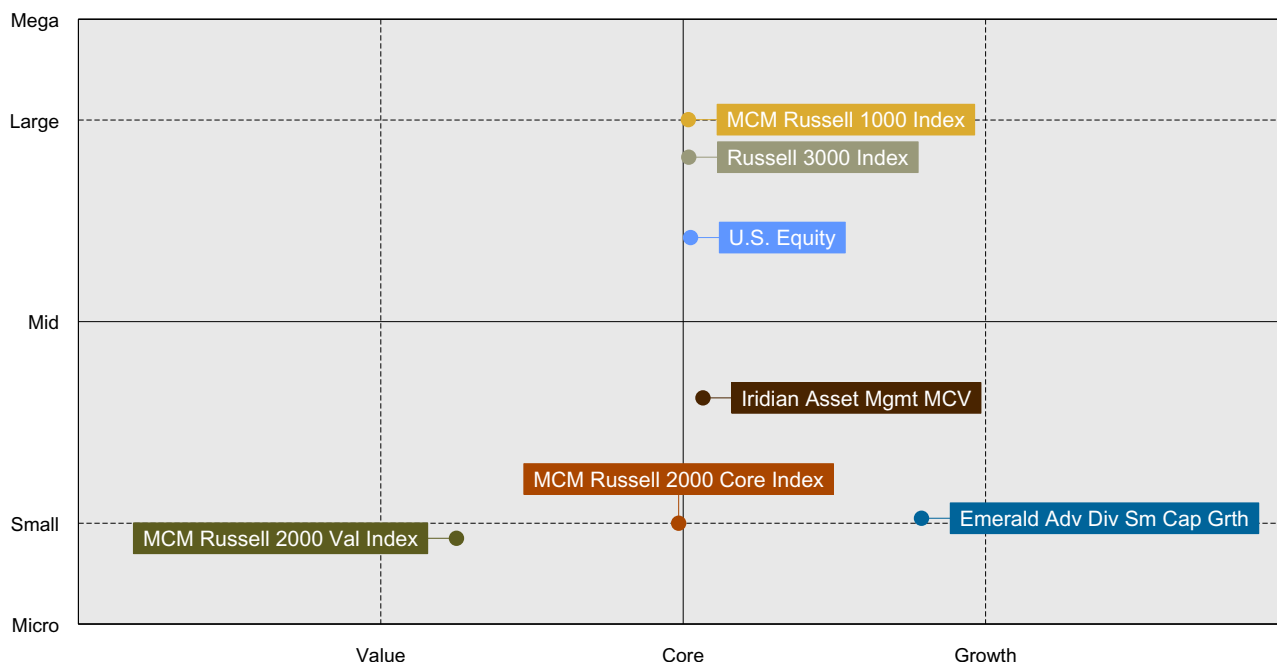
Sector Weights Distribution Holdings as of September 30, 2019



Holdings Based Style Analysis For One Quarter Ended September 30, 2019

This page analyzes and compares the investment styles of multiple portfolios using a detailed holdings-based style analysis methodology. The size component of style is measured by the weighted median market capitalization of the holdings. The value/core/growth style dimension is captured by the "Combined Z-Score" of the portfolio. This score is based on eight fundamental factors used in the MSCI stock style scoring system. The table below gives a more detailed breakdown of several relevant style metrics on the portfolios.

Style Map Holdings for One Quarter Ended September 30, 2019



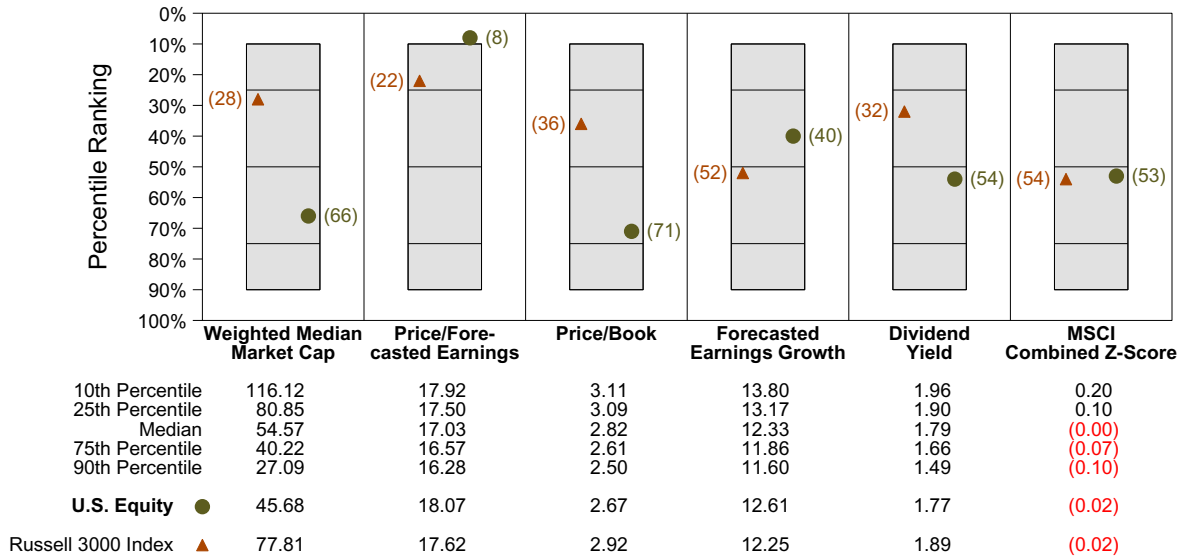
	Weight %	Wtd Median Mkt Cap	Combined Z-Score	Growth Z-Score	Value Z-Score	Number of Securities	Security Diversification
MCM Russell 2000 Val Index	7.35%	1.79	(0.62)	(0.17)	0.45	1384	200.72
MCM Russell 2000 Core Index	4.06%	2.02	(0.05)	(0.06)	(0.01)	2003	336.89
Emerald Adv Div Sm Cap Grth	8.47%	2.27	0.59	0.12	(0.48)	121	30.26
Iridian Asset Mgmt MCV	5.81%	8.27	0.02	0.00	(0.01)	43	14.59
MCM Russell 1000 Index	74.30%	93.02	(0.02)	(0.00)	0.02	1001	62.75
U.S. Equity	100.00%	45.68	(0.02)	(0.01)	0.01	3012	123.77
Russell 3000 Index	-	77.81	(0.02)	(0.01)	0.01	3032	74.98

U.S. Equity Equity Characteristics Analysis Summary

Portfolio Characteristics

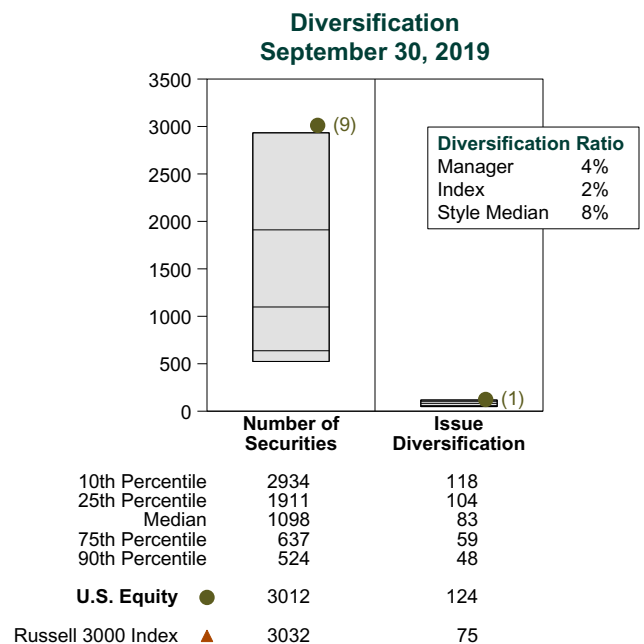
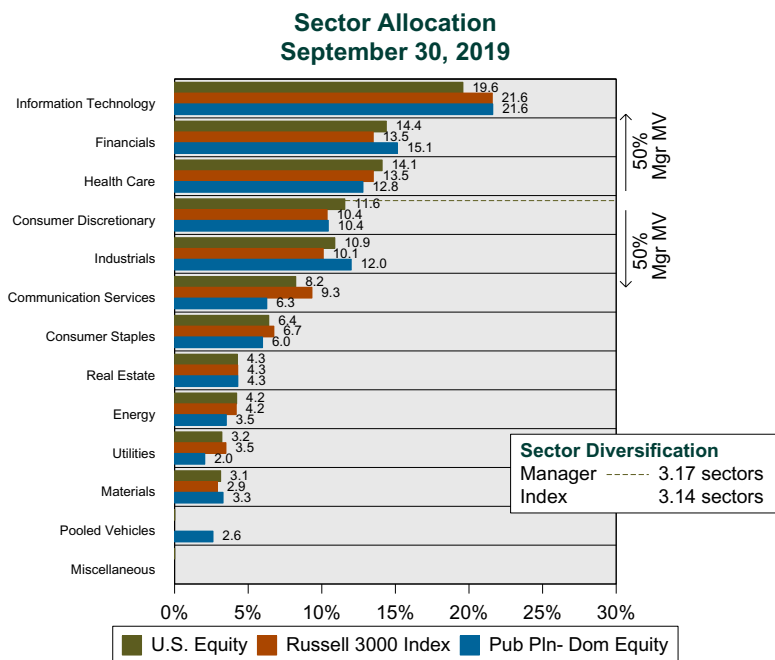
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

Portfolio Characteristics Percentile Rankings Rankings Against Public Fund - Domestic Equity as of September 30, 2019



Sector Weights

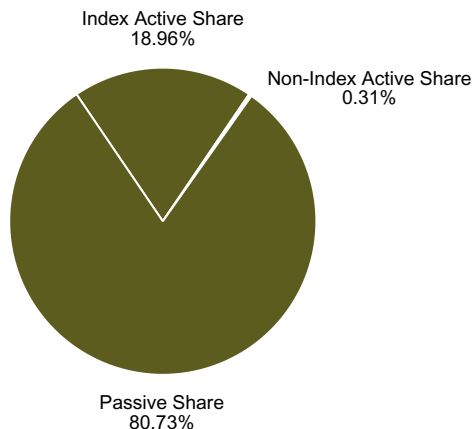
The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. Diversification by number and concentration of holdings are also compared to the benchmark and peer group. Issue Diversification represents by count, and Diversification Ratio by percent, the number of holdings that account for half of the portfolio's market value.



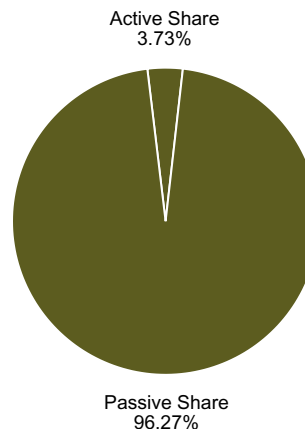
U.S. Equity Active Share Analysis as of September 30, 2019 vs. Russell 3000 Index

Active Share analysis compares the holdings of a portfolio to an index to measure how aggressively it differs from the index. Active share is measured at the individual stock level ("holdings-level active share") and using sector weights ("sector exposure active share"). Holdings-level active share comes from: 1) Index Active Share - over/under weighting of stocks in the index, and 2) Non-Index Active Share - positions in stocks not in the index. This analysis displays active share by sector and compares the portfolio to a relevant peer group.

Holdings-Level Active Share



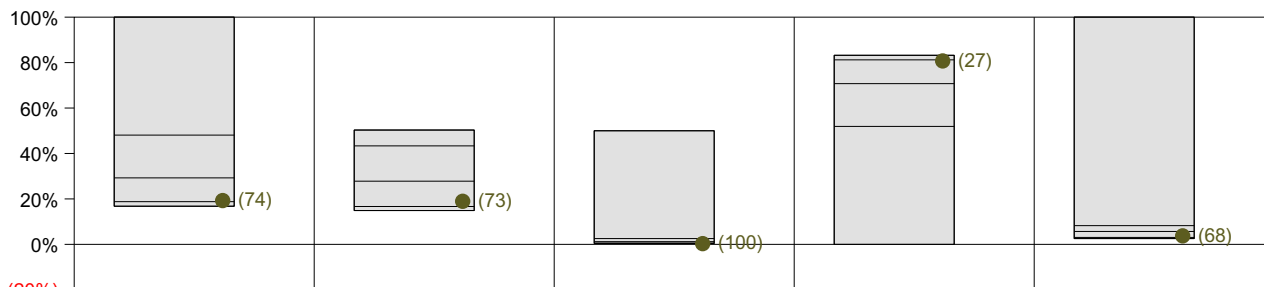
Sector Exposure Active Share



Total Active Share: 19.27%

	Index Active Share Within Sector	Non-Index Active Share Within Sector	Total Active Share Within Sector	Index Weight	Manager Weight	Contribution to Total Portfolio Active Share
Communication Services	6.87%	0.00%	6.87%	9.33%	8.23%	1.23%
Consumer Discretionary	27.93%	0.00%	27.93%	10.36%	11.57%	2.62%
Consumer Staples	15.27%	0.00%	15.27%	6.75%	6.40%	1.13%
Energy	18.00%	1.23%	19.23%	4.19%	4.22%	0.80%
Financials	21.47%	0.47%	21.94%	13.50%	14.39%	2.82%
Health Care	22.68%	0.44%	23.12%	13.50%	14.10%	2.99%
Industrials	24.43%	0.00%	24.43%	10.10%	10.89%	2.32%
Information Technology	11.96%	0.65%	12.61%	21.58%	19.59%	3.41%
Materials	21.68%	0.00%	21.68%	2.91%	3.13%	0.60%
Pooled Vehicles	0.00%	100.00%	100.00%	-	0.01%	0.00%
Real Estate	18.75%	0.00%	18.75%	4.29%	4.27%	0.81%
Utilities	12.62%	0.00%	12.62%	3.49%	3.21%	0.52%
Total	18.96%	0.31%	19.27%	100.00%	100.00%	19.27%

Active Share vs. Pub Pln- Dom Equity



	Total Active Share	Index Active Share	Non-Index Active Share	Passive Share	Sector Active Share
10th Percentile	100.00	50.32	50.00	83.22	100.00
25th Percentile	48.09	43.35	2.55	81.21	8.24
Median	29.26	27.80	1.19	70.74	5.69
75th Percentile	18.79	16.67	0.55	51.91	3.06
90th Percentile	16.78	14.89	0.43	0.00	2.55
U.S. Equity	19.27	18.96	0.31	80.73	3.73

MCM Russell 1000 Index Period Ended September 30, 2019

Investment Philosophy

The Russell 1000 Stock Index Fund attempts to replicate the performance and portfolio characteristics of the Russell 1000 Index.

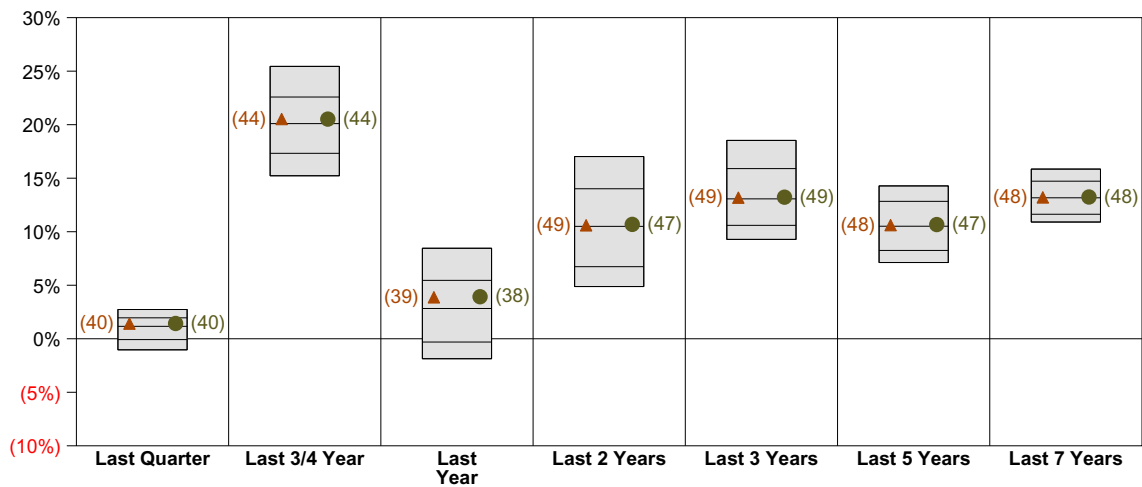
Quarterly Summary and Highlights

- MCM Russell 1000 Index's portfolio posted a 1.43% return for the quarter placing it in the 40 percentile of the Callan Large Capitalization group for the quarter and in the 38 percentile for the last year.
- MCM Russell 1000 Index's portfolio outperformed the Russell 1000 Index by 0.01% for the quarter and outperformed the Russell 1000 Index for the year by 0.05%.

Quarterly Asset Growth

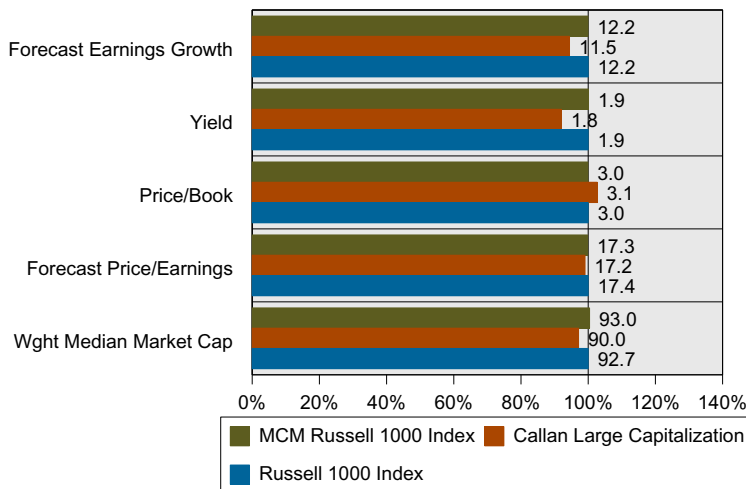
Beginning Market Value	\$5,708,581,047
Net New Investment	\$-94,753
Investment Gains/(Losses)	\$81,091,792
Ending Market Value	\$5,789,578,086

Performance vs Callan Large Capitalization (Gross)

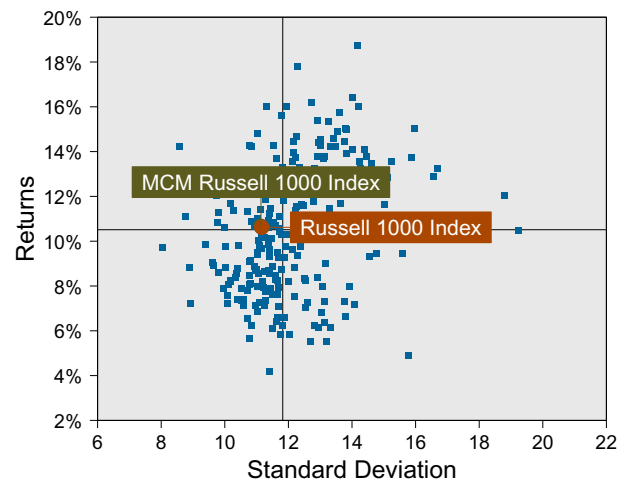


10th Percentile	2.73	25.45	8.46	17.02	18.53	14.28	15.85	
25th Percentile	1.95	22.58	5.46	14.01	15.90	12.84	14.72	
Median	1.16	20.10	2.83	10.50	13.07	10.51	13.17	
75th Percentile	(0.08)	17.33	(0.31)	6.73	10.59	8.25	11.63	
90th Percentile	(1.03)	15.23	(1.87)	4.88	9.28	7.12	10.91	
MCM Russell 1000 Index	●	1.43	20.52	3.93	10.68	13.23	10.67	13.24
Russell 1000 Index	▲	1.42	20.53	3.87	10.60	13.19	10.62	13.21

Portfolio Characteristics as a Percentage of the Russell 1000 Index



Callan Large Capitalization (Gross) Annualized Five Year Risk vs Return

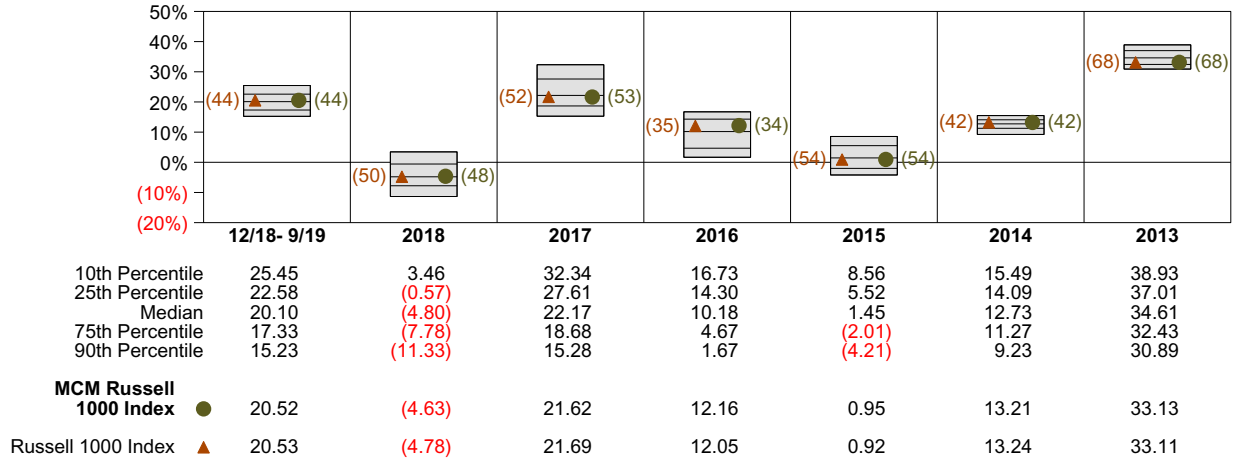


MCM Russell 1000 Index Return Analysis Summary

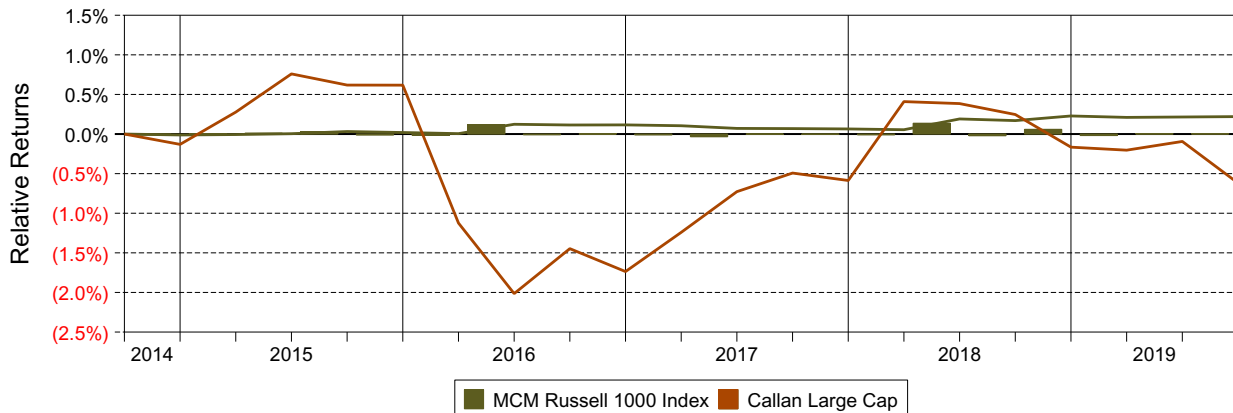
Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

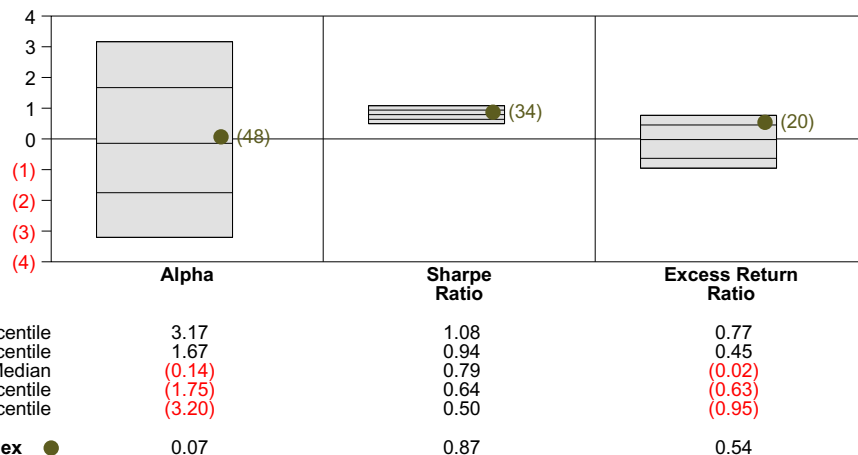
Performance vs Callan Large Capitalization (Gross)



Cumulative and Quarterly Relative Return vs Russell 1000 Index



Risk Adjusted Return Measures vs Russell 1000 Index Rankings Against Callan Large Capitalization (Gross) Five Years Ended September 30, 2019

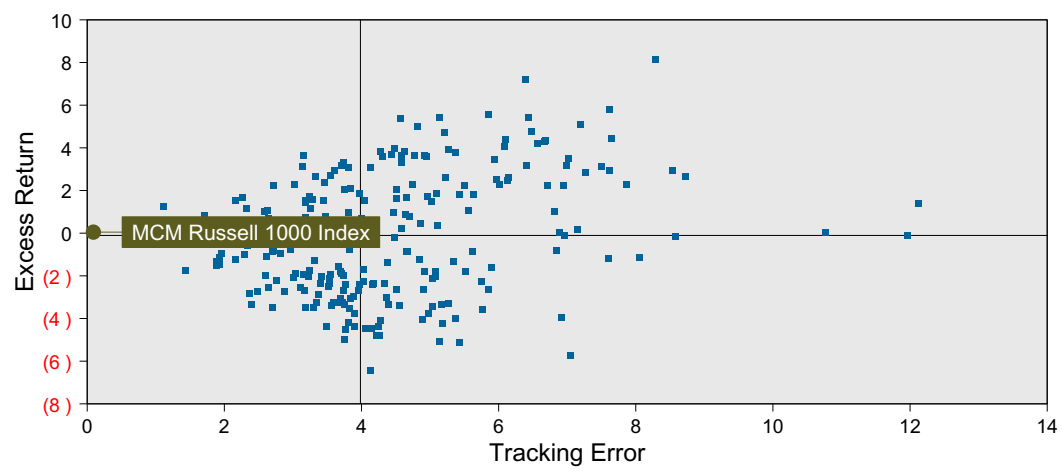


MCM Russell 1000 Index Risk Analysis Summary

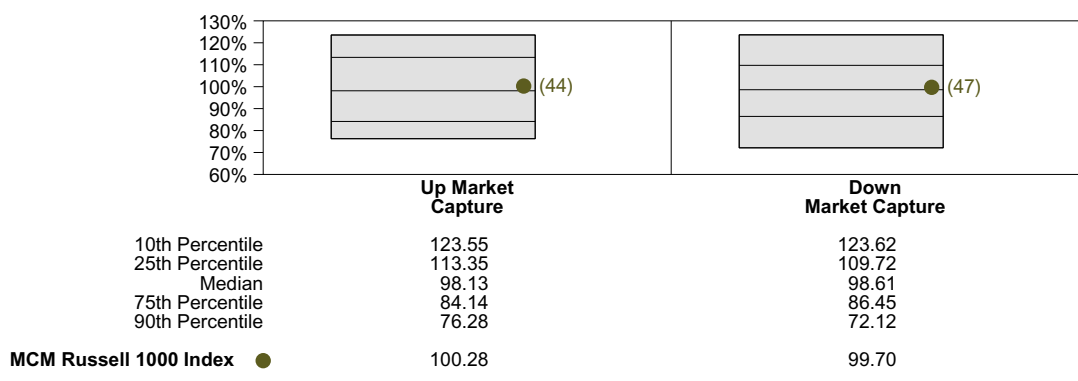
Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows Up and Down Market Capture. The last two charts show the ranking of the manager's risk statistics versus the peer group.

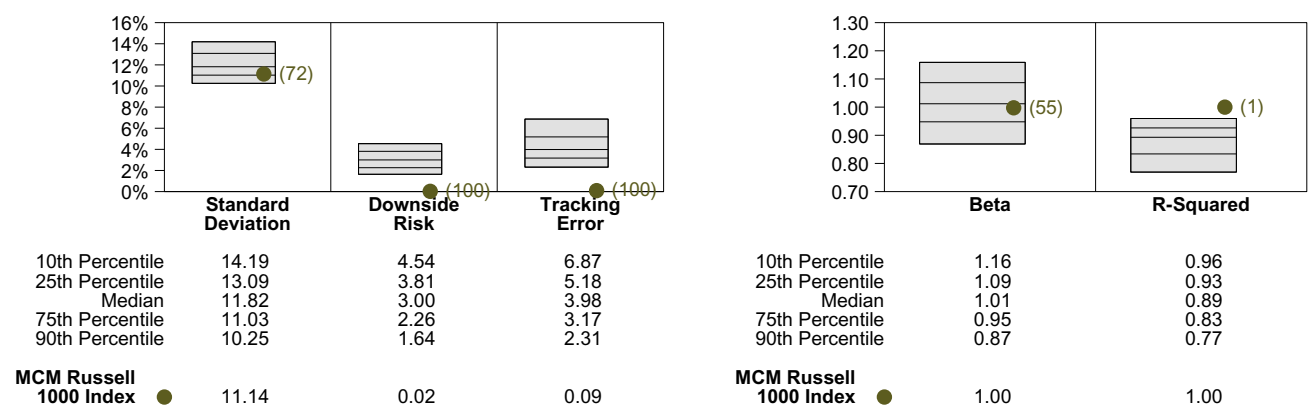
**Risk Analysis vs Callan Large Capitalization (Gross)
Five Years Ended September 30, 2019**



**Market Capture vs Russell 1000 Index
Rankings Against Callan Large Capitalization (Gross)
Five Years Ended September 30, 2019**



**Risk Statistics Rankings vs Russell 1000 Index
Rankings Against Callan Large Capitalization (Gross)
Five Years Ended September 30, 2019**



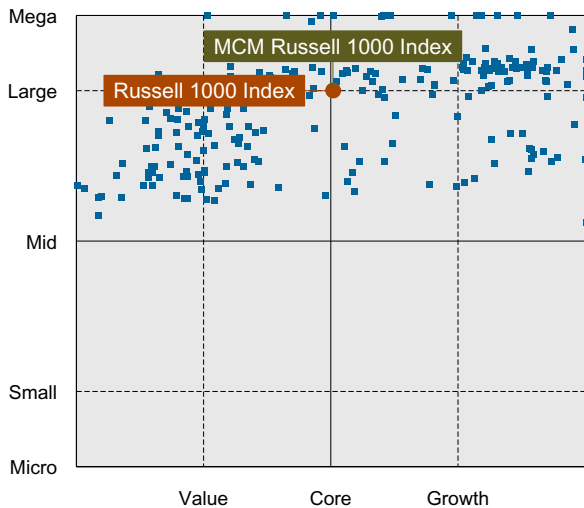
Current Holdings Based Style Analysis

MCM Russell 1000 Index

As of September 30, 2019

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various market capitalization and style segments of the domestic equity market. The market is segmented quarterly by capitalization and style. The capitalization segments are dictated by capitalization decile breakpoints. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the current portfolio and index weights and stock counts (in parentheses) in each capitalization/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

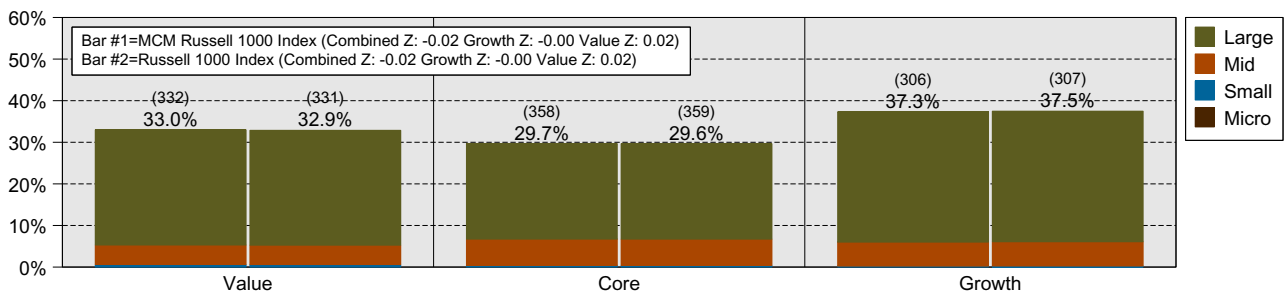
Style Map vs Callan Large Cap Holdings as of September 30, 2019



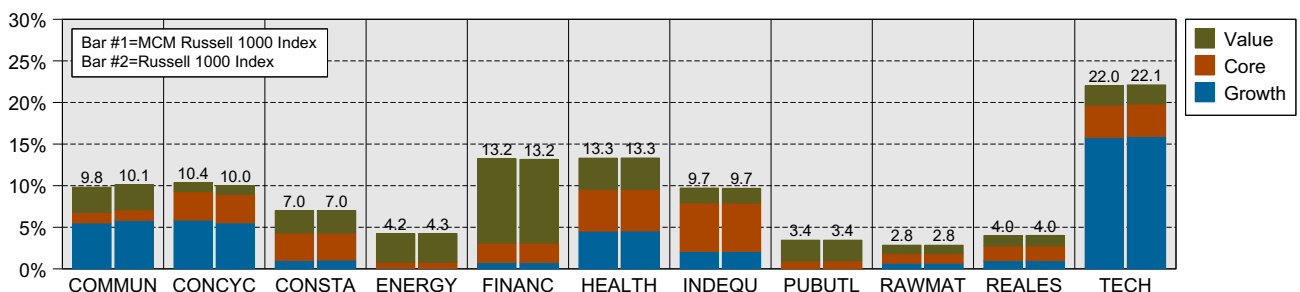
Style Exposure Matrix Holdings as of September 30, 2019

	Value	Core	Growth	Total
Large	27.7% (106)	23.0% (103)	31.3% (90)	82.0% (299)
Mid	4.7% (161)	6.3% (205)	5.8% (188)	16.8% (554)
Small	0.6% (65)	0.4% (50)	0.2% (28)	1.3% (143)
Micro	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Total	33.0% (332)	29.7% (358)	37.3% (306)	100.0% (996)
	32.9% (331)	29.6% (359)	37.5% (307)	100.0% (997)

Combined Z-Score Style Distribution Holdings as of September 30, 2019



Sector Weights Distribution Holdings as of September 30, 2019

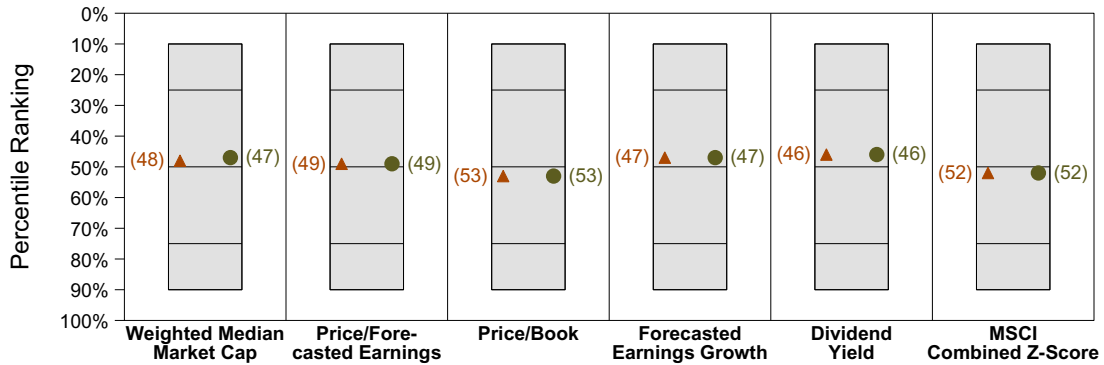


MCM Russell 1000 Index Equity Characteristics Analysis Summary

Portfolio Characteristics

This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

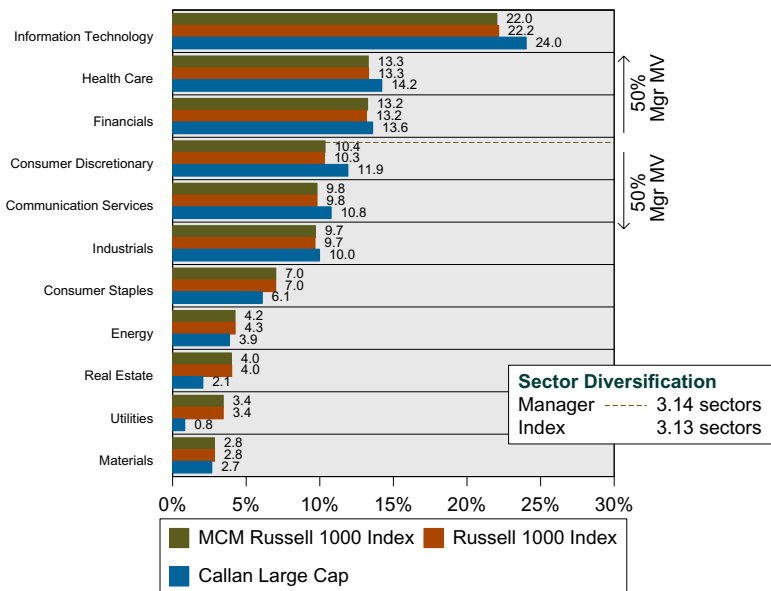
Portfolio Characteristics Percentile Rankings Rankings Against Callan Large Capitalization as of September 30, 2019



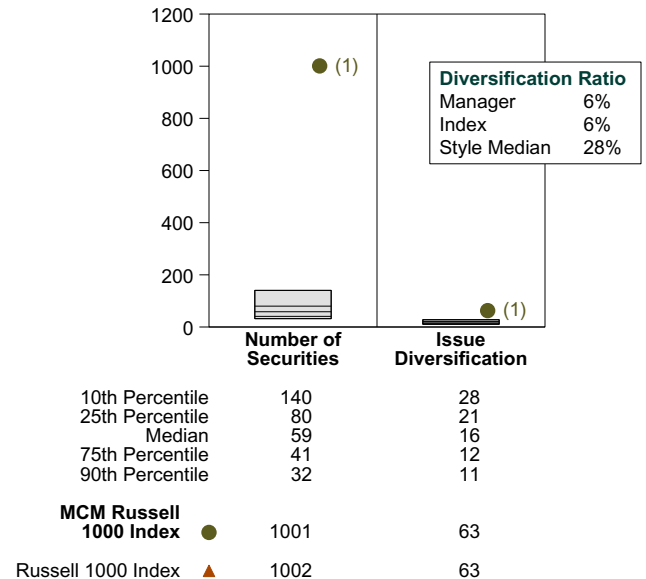
Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. Diversification by number and concentration of holdings are also compared to the benchmark and peer group. Issue Diversification represents by count, and Diversification Ratio by percent, the number of holdings that account for half of the portfolio's market value.

Sector Allocation September 30, 2019



Diversification September 30, 2019



Iridian Asset Mgmt MCV Period Ended September 30, 2019

Investment Philosophy

Iridian believes the market is efficient in processing information, but does not recognize the more profound implications of corporate change. They believe this change creates inefficiencies which lead to investment opportunities.

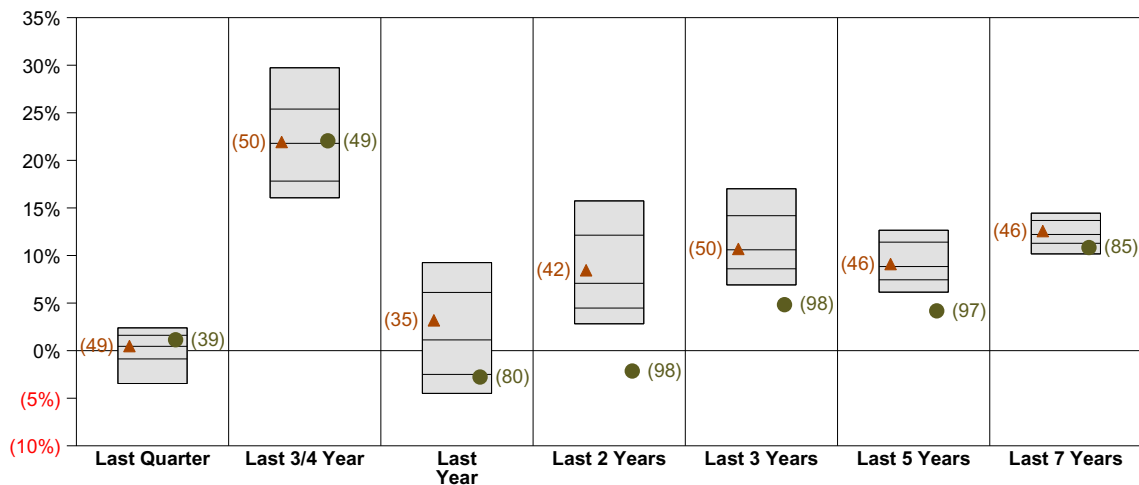
Quarterly Summary and Highlights

- Iridian Asset Mgmt MCV's portfolio posted a 1.14% return for the quarter placing it in the 39 percentile of the Callan Mid Capitalization group for the quarter and in the 80 percentile for the last year.
- Iridian Asset Mgmt MCV's portfolio outperformed the Russell MidCap Index by 0.66% for the quarter and underperformed the Russell MidCap Index for the year by 5.96%.

Quarterly Asset Growth

Beginning Market Value	\$448,276,428
Net New Investment	\$-527,895
Investment Gains/(Losses)	\$5,141,625
Ending Market Value	\$452,890,157

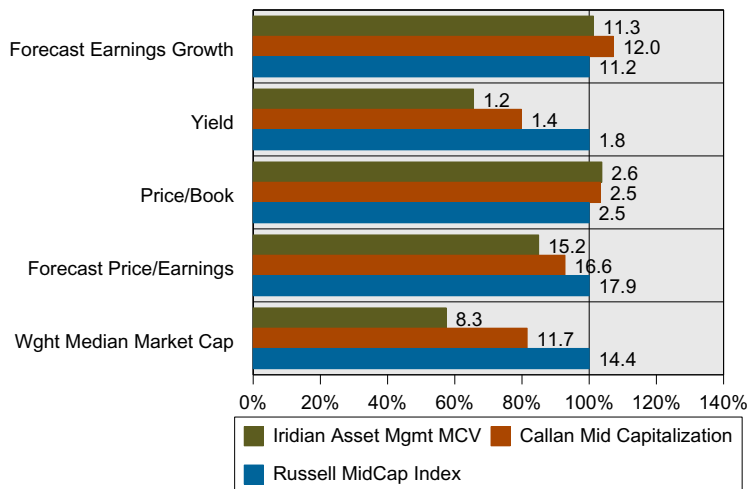
Performance vs Callan Mid Capitalization (Gross)



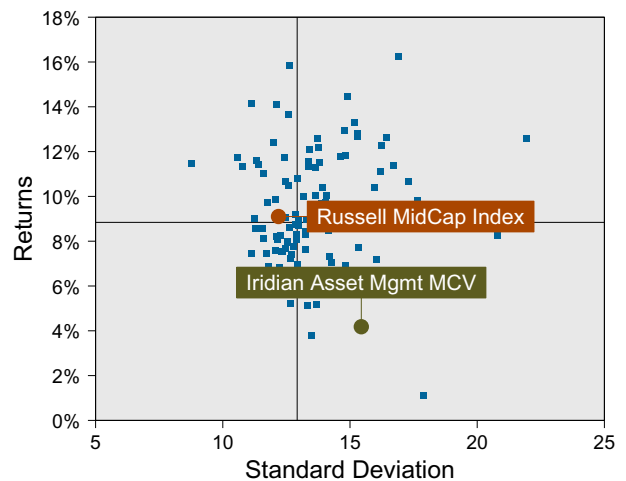
10th Percentile	2.40	29.73	9.25	15.74	17.02	12.65	14.45
25th Percentile	1.61	25.39	6.12	12.13	14.18	11.40	13.68
Median	0.45	21.79	1.13	7.08	10.60	8.84	12.21
75th Percentile	(0.87)	17.82	(2.50)	4.48	8.61	7.45	11.28
90th Percentile	(3.45)	16.06	(4.49)	2.82	6.91	6.15	10.17

Iridian Asset Mgmt MCV ●	1.14	22.05	(2.77)	(2.14)	4.83	4.18	10.84
Russell MidCap Index ▲	0.48	21.93	3.19	8.45	10.69	9.10	12.57

Portfolio Characteristics as a Percentage of the Russell MidCap Index



Callan Mid Capitalization (Gross) Annualized Five Year Risk vs Return

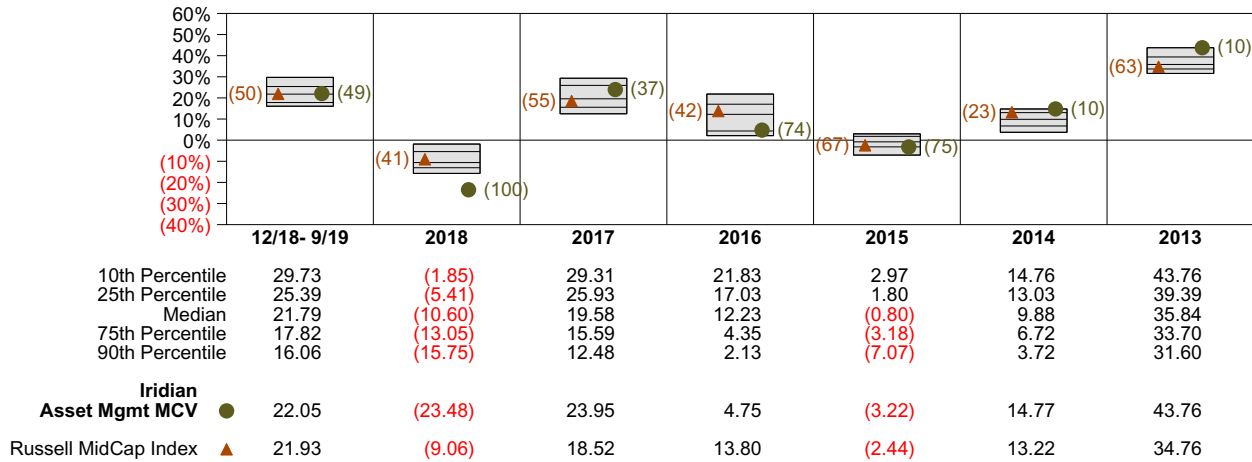


Iridian Asset Mgmt MCV Return Analysis Summary

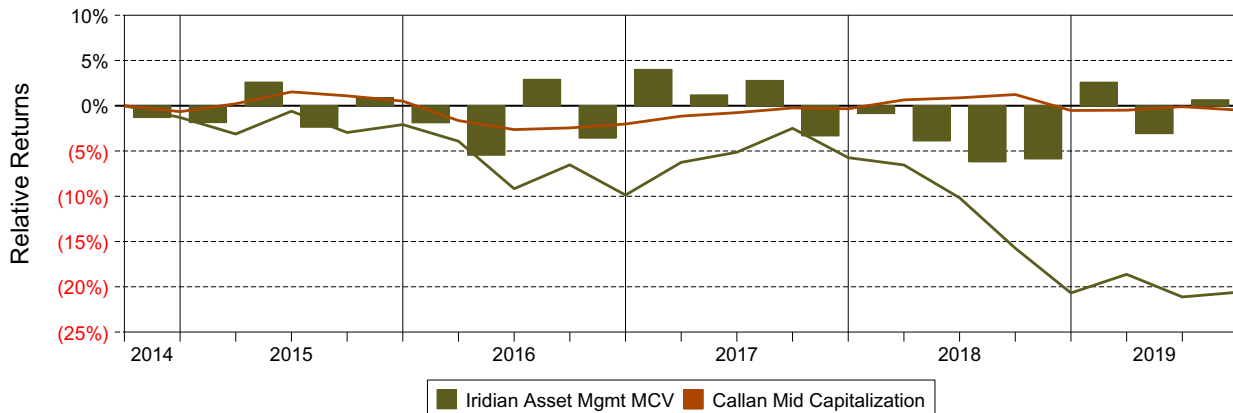
Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

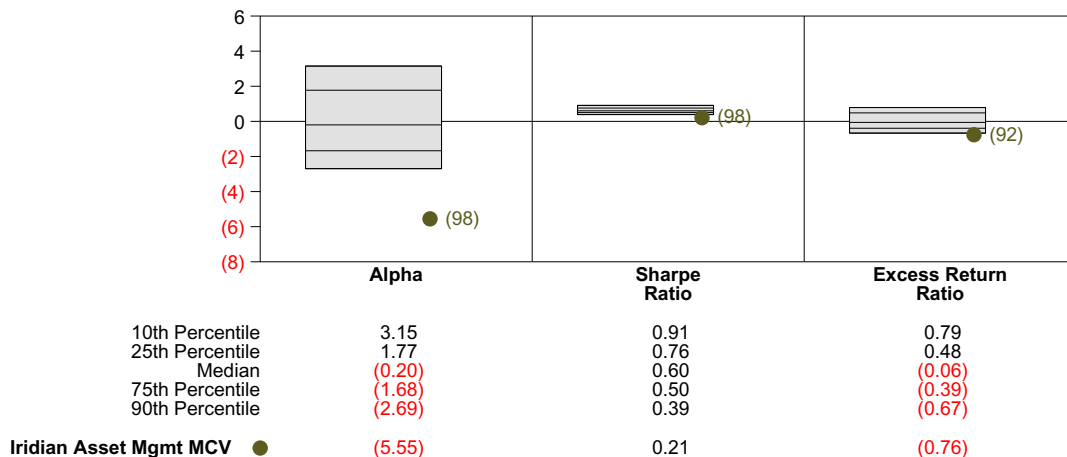
Performance vs Callan Mid Capitalization (Gross)



Cumulative and Quarterly Relative Return vs Russell MidCap Index



Risk Adjusted Return Measures vs Russell MidCap Index Rankings Against Callan Mid Capitalization (Gross) Five Years Ended September 30, 2019

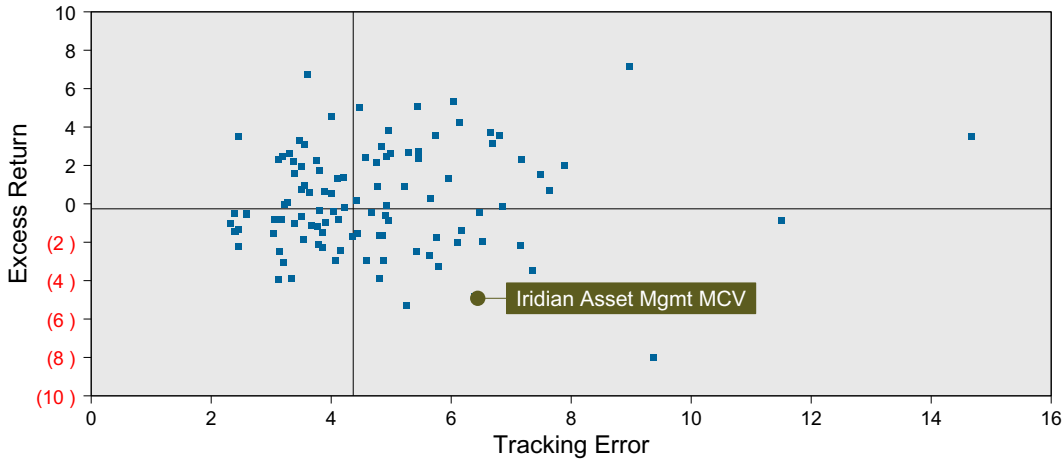


Iridian Asset Mgmt MCV Risk Analysis Summary

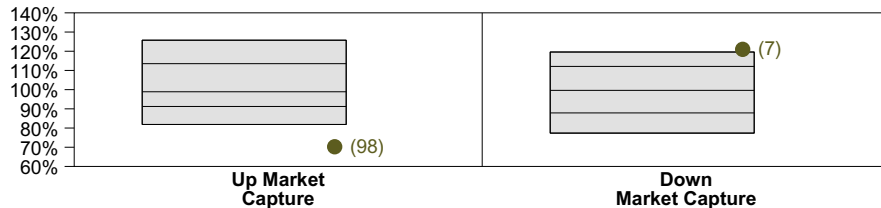
Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows Up and Down Market Capture. The last two charts show the ranking of the manager's risk statistics versus the peer group.

Risk Analysis vs Callan Mid Capitalization (Gross) Five Years Ended September 30, 2019



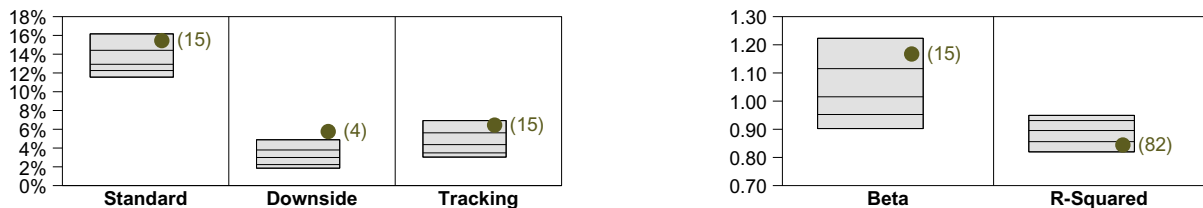
Market Capture vs Russell Mid-Cap Index Rankings Against Callan Mid Capitalization (Gross) Five Years Ended September 30, 2019



	Up Market Capture	Down Market Capture
10th Percentile	125.76	119.60
25th Percentile	113.52	112.10
Median	98.89	99.63
75th Percentile	91.24	87.88
90th Percentile	81.86	77.36

Iridian Asset Mgmt MCV ● 70.24 120.98

Risk Statistics Rankings vs Russell Mid-Cap Index Rankings Against Callan Mid Capitalization (Gross) Five Years Ended September 30, 2019



	Standard Deviation	Downside Risk	Tracking Error	Beta	R-Squared
10th Percentile	16.16	4.88	6.92	1.22	0.95
25th Percentile	14.41	3.79	5.62	1.12	0.93
Median	12.92	3.00	4.37	1.02	0.90
75th Percentile	12.26	2.24	3.49	0.95	0.86
90th Percentile	11.55	1.85	3.03	0.90	0.82

Iridian Asset Mgmt MCV ● 15.44 5.76 6.44 1.17 0.84

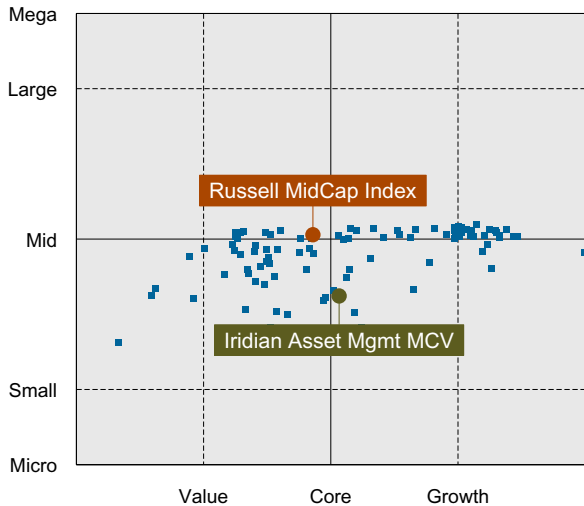
Current Holdings Based Style Analysis

Iridian Asset Mgmt MCV

As of September 30, 2019

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various market capitalization and style segments of the domestic equity market. The market is segmented quarterly by capitalization and style. The capitalization segments are dictated by capitalization decile breakpoints. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the current portfolio and index weights and stock counts (in parentheses) in each capitalization/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

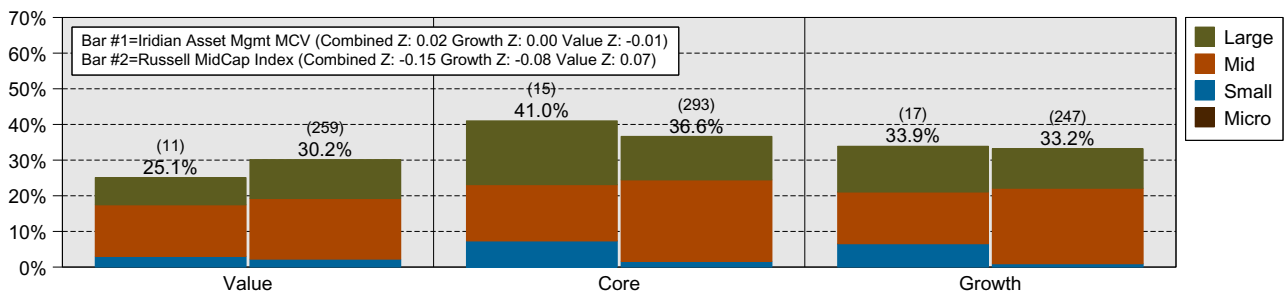
Style Map vs Callan Mid Capitalization Holdings as of September 30, 2019



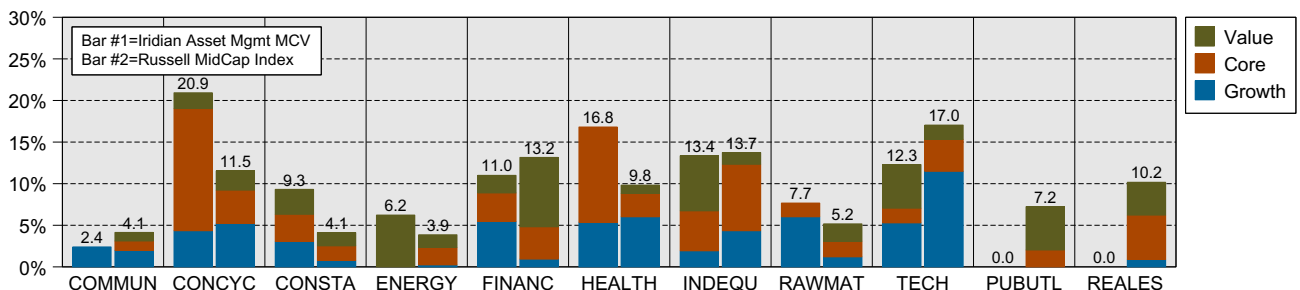
Style Exposure Matrix Holdings as of September 30, 2019

	Value	Core	Growth	Total
Large	7.6% (2)	17.9% (6)	12.8% (6)	38.4% (14)
	10.9% (34)	12.2% (39)	11.1% (32)	34.2% (105)
Mid	14.4% (6)	15.8% (6)	14.5% (7)	44.7% (19)
	17.0% (160)	22.9% (204)	21.2% (187)	61.0% (551)
Small	3.0% (3)	7.3% (3)	6.5% (4)	16.9% (10)
	2.2% (65)	1.6% (50)	0.9% (28)	4.7% (143)
Micro	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Total	25.1% (11)	41.0% (15)	33.9% (17)	100.0% (43)
	30.2% (259)	36.6% (293)	33.2% (247)	100.0% (799)

Combined Z-Score Style Distribution Holdings as of September 30, 2019



Sector Weights Distribution Holdings as of September 30, 2019

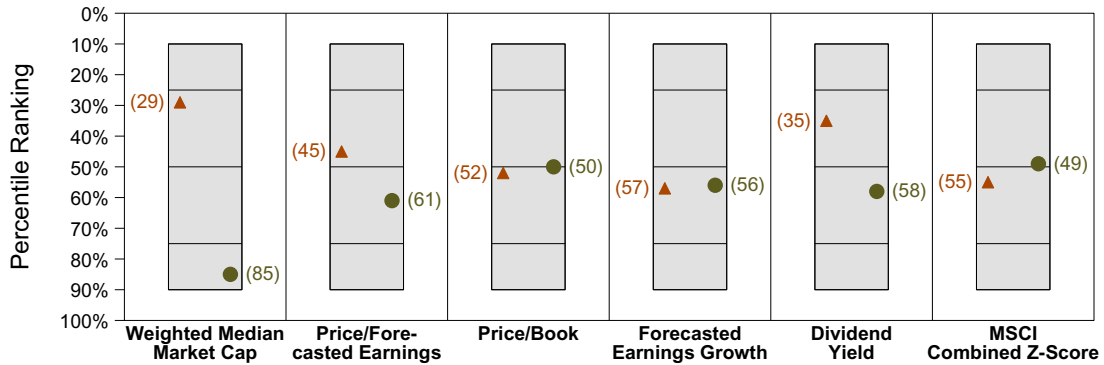


Iridian Asset Mgmt MCV Equity Characteristics Analysis Summary

Portfolio Characteristics

This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

Portfolio Characteristics Percentile Rankings Rankings Against Callan Mid Capitalization as of September 30, 2019

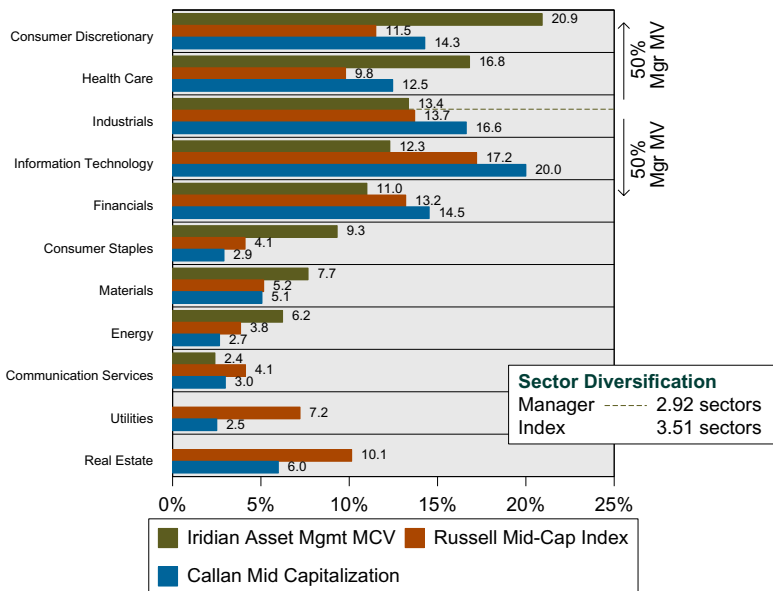


	Weighted Median Market Cap	Price/Forecasted Earnings	Price/Book	Forecasted Earnings Growth	Dividend Yield	MSCI Combined Z-Score
10th Percentile	17.30	27.47	5.09	18.01	2.22	0.96
25th Percentile	14.74	23.58	4.36	15.39	1.95	0.75
Median	11.74	16.59	2.54	12.00	1.41	(0.01)
75th Percentile	9.82	14.43	2.06	9.28	0.65	(0.44)
90th Percentile	7.20	13.06	1.75	7.32	0.50	(0.63)
Iridian Asset Mgmt MCV ●	8.27	15.19	2.55	11.33	1.16	0.02
Russell Mid-Cap Index ▲	14.39	17.88	2.46	11.19	1.77	(0.15)

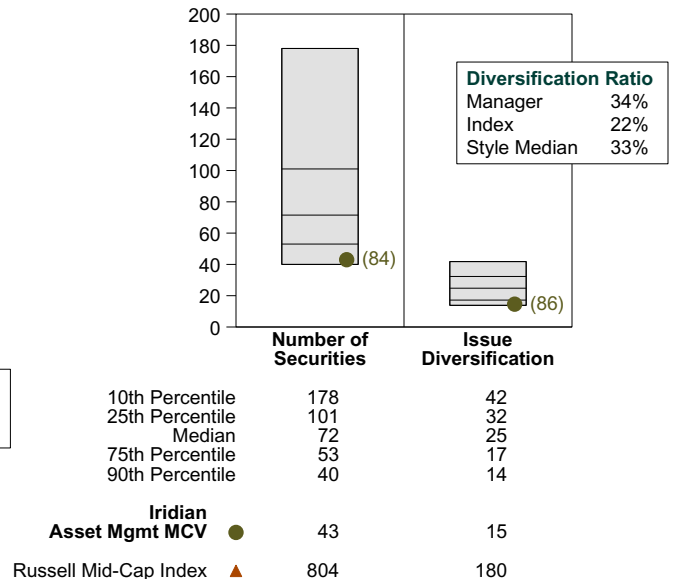
Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. Diversification by number and concentration of holdings are also compared to the benchmark and peer group. Issue Diversification represents by count, and Diversification Ratio by percent, the number of holdings that account for half of the portfolio's market value.

Sector Allocation September 30, 2019



Diversification September 30, 2019



MCM Russell 2000 Core Index Period Ended September 30, 2019

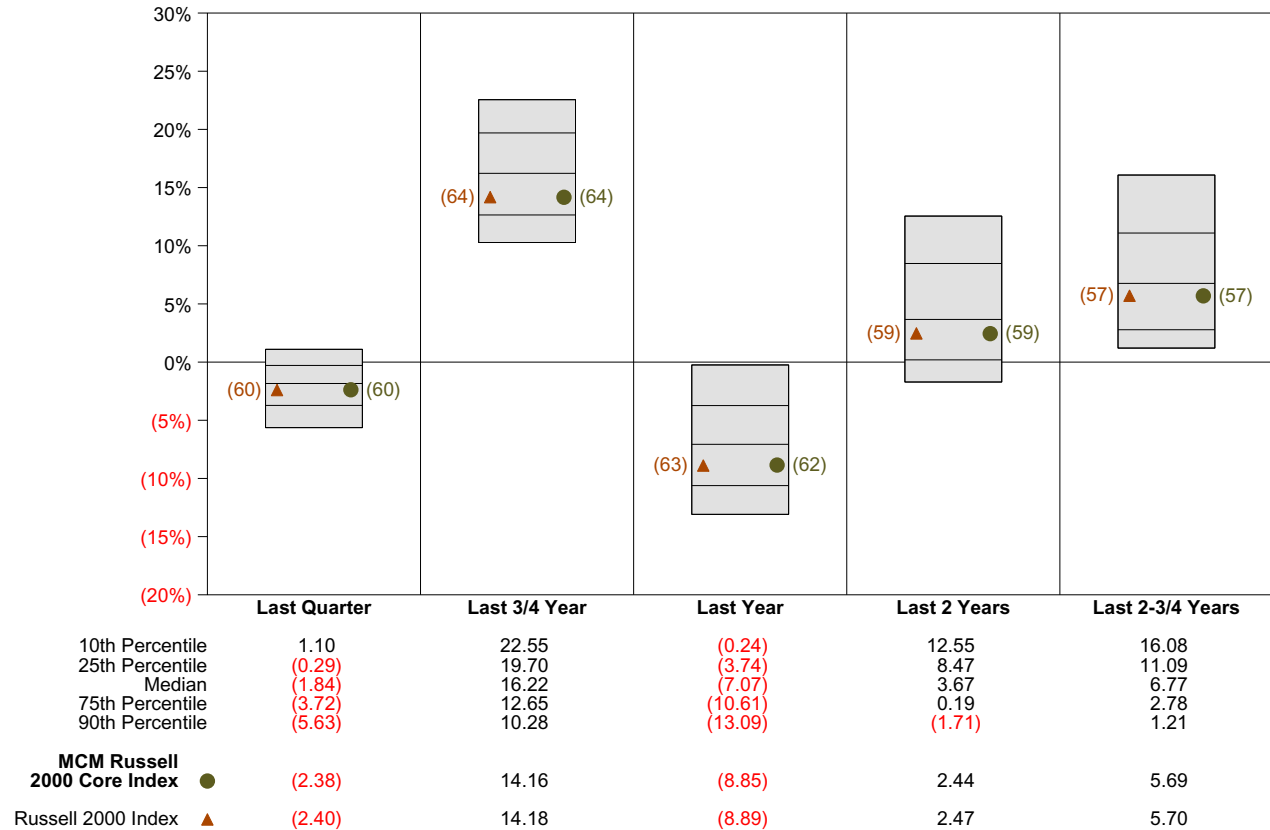
Quarterly Summary and Highlights

- MCM Russell 2000 Core Index's portfolio posted a (2.38)% return for the quarter placing it in the 60 percentile of the Callan Small Capitalization group for the quarter and in the 62 percentile for the last year.
- MCM Russell 2000 Core Index's portfolio outperformed the Russell 2000 Index by 0.02% for the quarter and outperformed the Russell 2000 Index for the year by 0.04%.

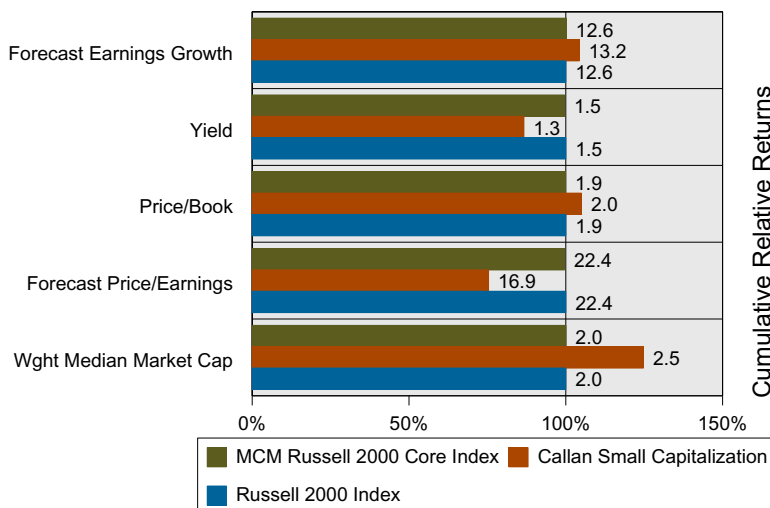
Quarterly Asset Growth

Beginning Market Value	\$324,356,479
Net New Investment	\$21,764
Investment Gains/(Losses)	\$-7,735,278
Ending Market Value	\$316,642,965

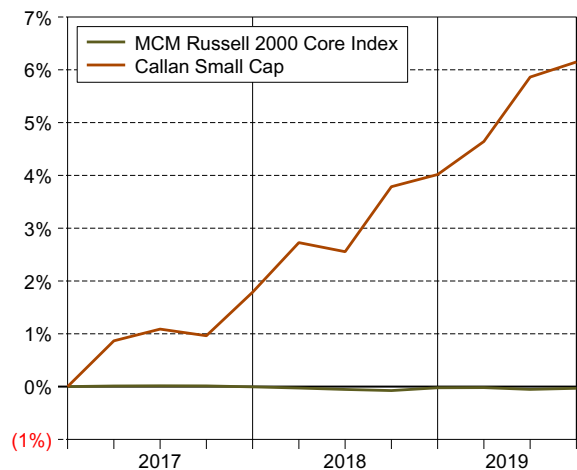
Performance vs Callan Small Capitalization (Gross)



Portfolio Characteristics as a Percentage of the Russell 2000 Index



Cumulative Returns vs Russell 2000 Index



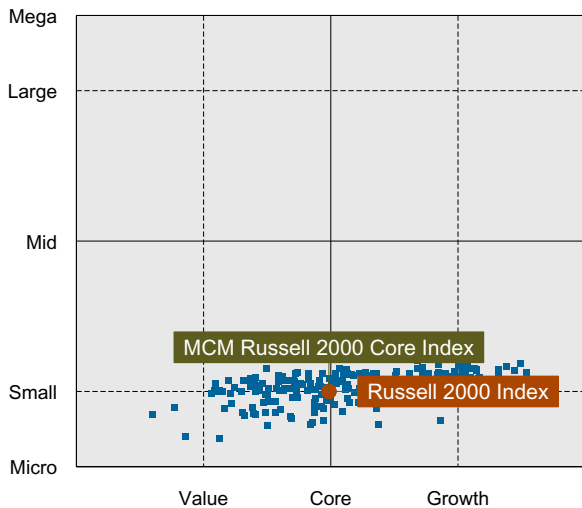
Current Holdings Based Style Analysis

MCM Russell 2000 Core Index

As of September 30, 2019

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various market capitalization and style segments of the domestic equity market. The market is segmented quarterly by capitalization and style. The capitalization segments are dictated by capitalization decile breakpoints. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the current portfolio and index weights and stock counts (in parentheses) in each capitalization/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

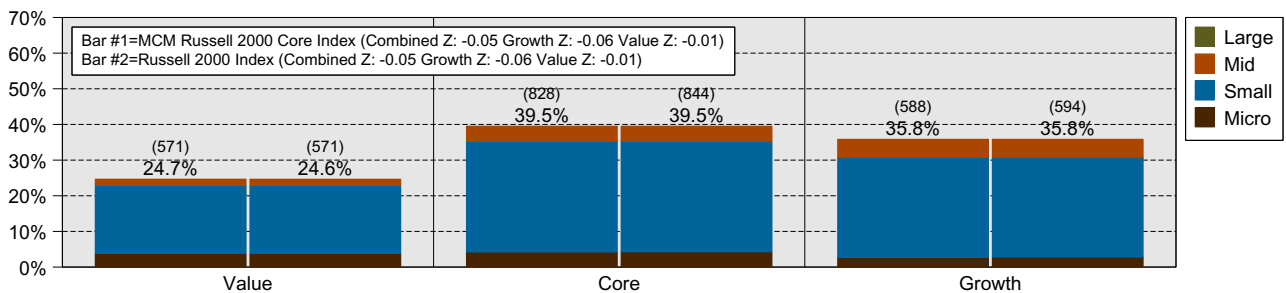
Style Map vs Callan Small Cap Holdings as of September 30, 2019



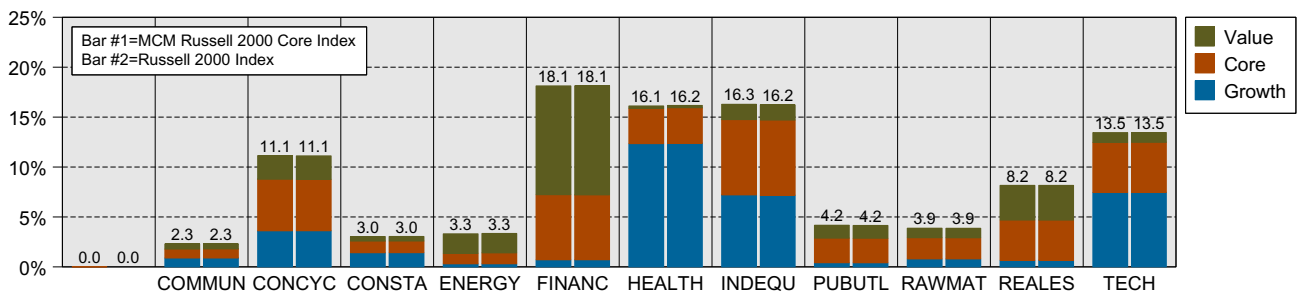
Style Exposure Matrix Holdings as of September 30, 2019

	Value	Core	Growth	Total
Large	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Mid	1.7% (8)	4.3% (19)	5.0% (21)	11.0% (48)
Small	19.1% (267)	31.0% (434)	28.1% (356)	78.2% (1057)
Micro	3.8% (296)	4.2% (375)	2.7% (211)	10.8% (882)
Total	24.7% (571)	39.5% (828)	35.8% (588)	100.0% (1987)

Combined Z-Score Style Distribution Holdings as of September 30, 2019



Sector Weights Distribution Holdings as of September 30, 2019

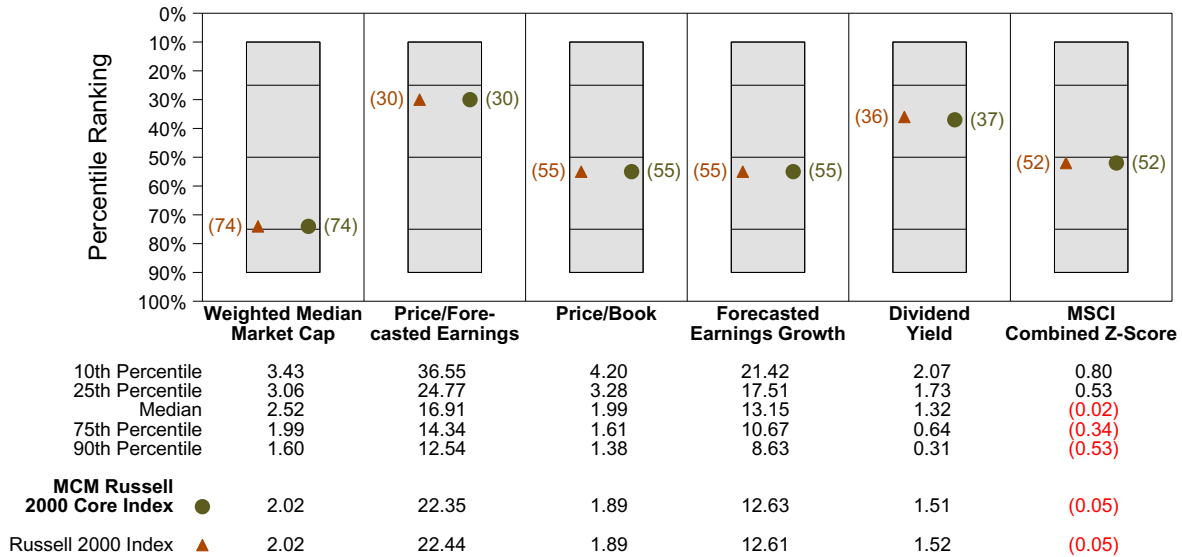


MCM Russell 2000 Core Index Equity Characteristics Analysis Summary

Portfolio Characteristics

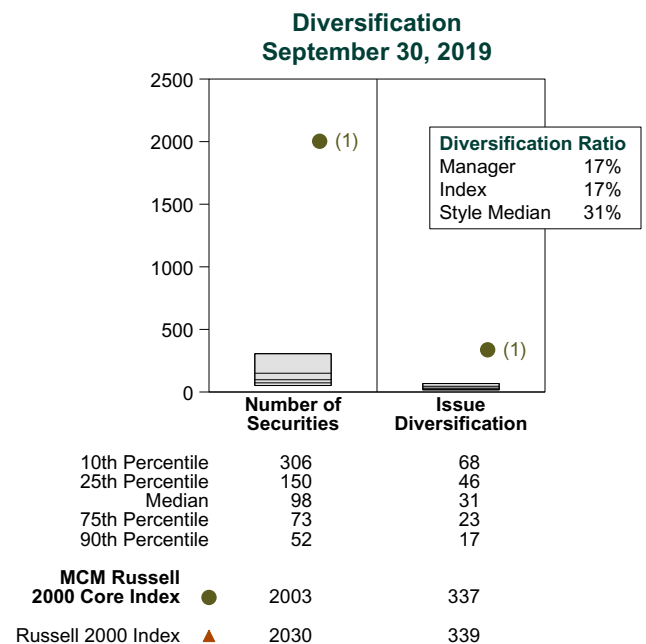
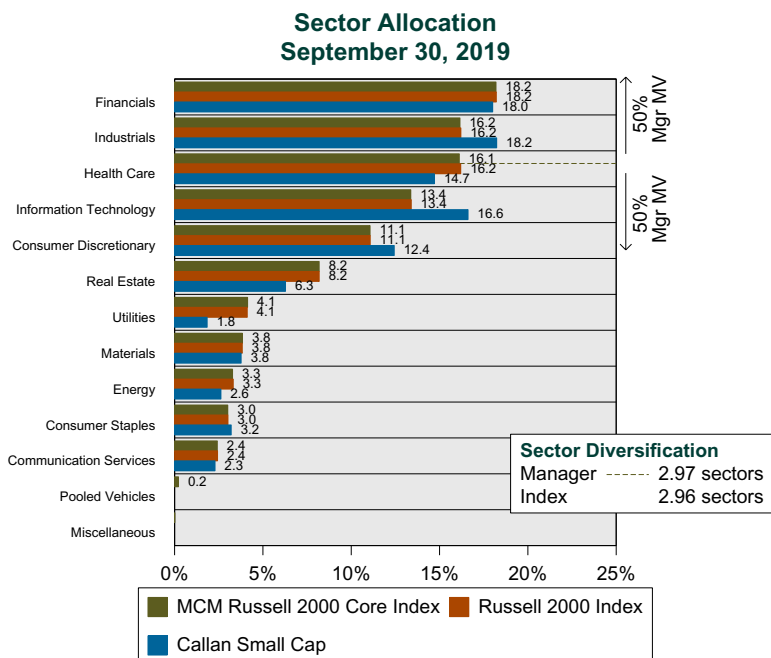
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

Portfolio Characteristics Percentile Rankings Rankings Against Callan Small Capitalization as of September 30, 2019



Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. Diversification by number and concentration of holdings are also compared to the benchmark and peer group. Issue Diversification represents by count, and Diversification Ratio by percent, the number of holdings that account for half of the portfolio's market value.



MCM Russell 2000 Val Index Period Ended September 30, 2019

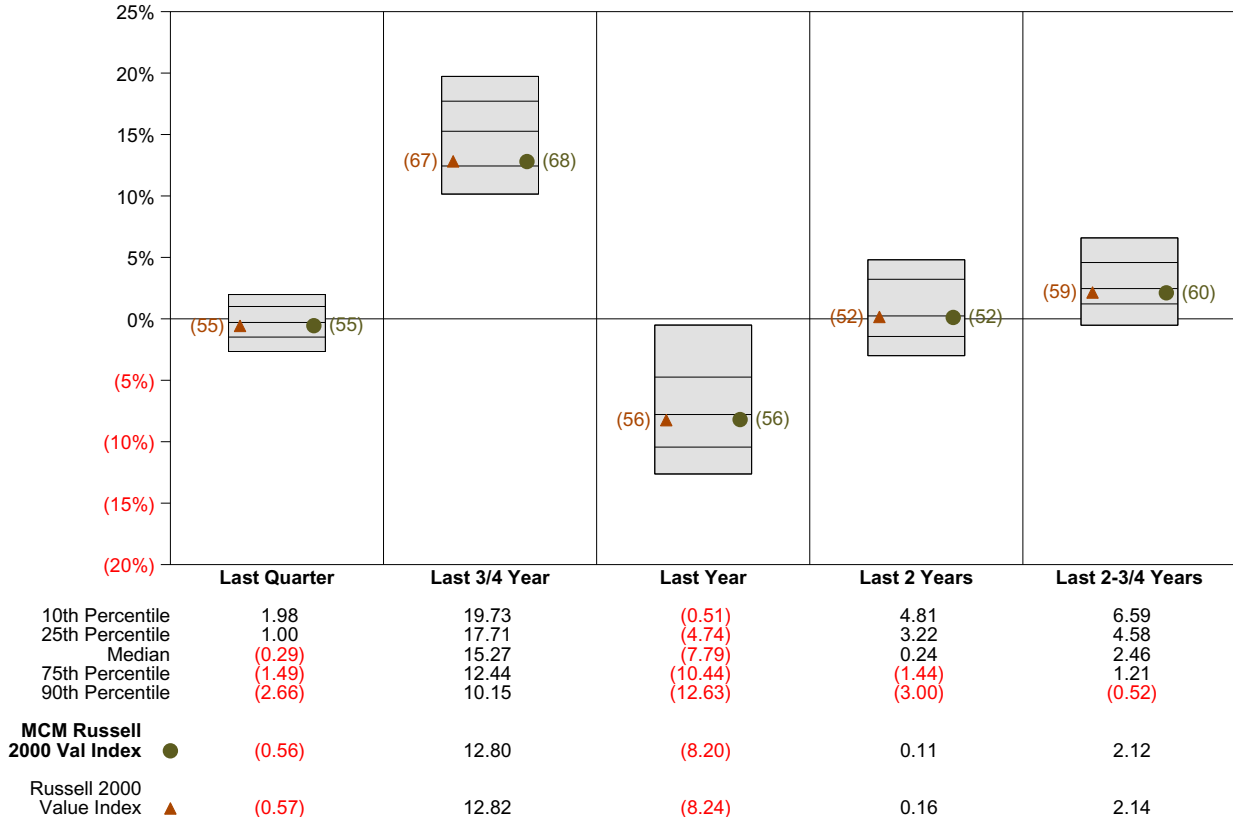
Quarterly Summary and Highlights

- MCM Russell 2000 Val Index's portfolio posted a (0.56)% return for the quarter placing it in the 55 percentile of the Callan Small Cap Value group for the quarter and in the 56 percentile for the last year.
- MCM Russell 2000 Val Index's portfolio outperformed the Russell 2000 Value Index by 0.02% for the quarter and outperformed the Russell 2000 Value Index for the year by 0.05%.

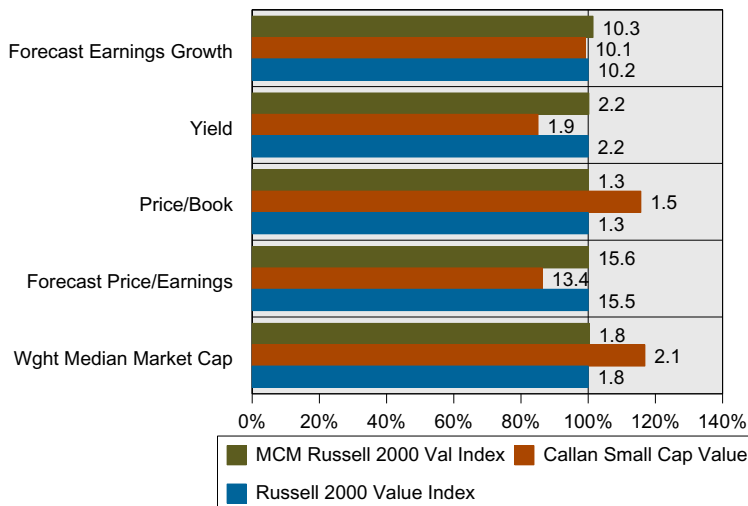
Quarterly Asset Growth

Beginning Market Value	\$576,156,873
Net New Investment	\$-17,822
Investment Gains/(Losses)	\$-3,159,604
Ending Market Value	\$572,979,447

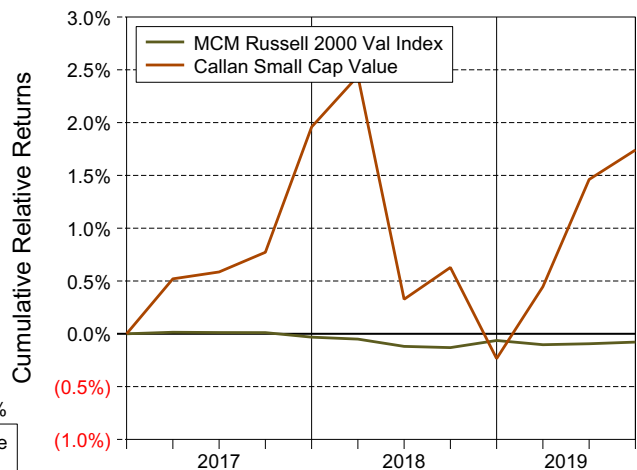
Performance vs Callan Small Cap Value (Gross)



Portfolio Characteristics as a Percentage of the Russell 2000 Value Index



Cumulative Returns vs Russell 2000 Value Index



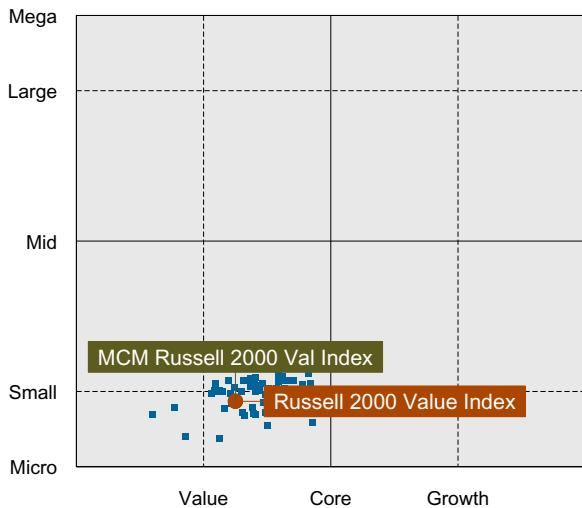
Current Holdings Based Style Analysis

MCM Russell 2000 Val Index

As of September 30, 2019

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various market capitalization and style segments of the domestic equity market. The market is segmented quarterly by capitalization and style. The capitalization segments are dictated by capitalization decile breakpoints. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the current portfolio and index weights and stock counts (in parentheses) in each capitalization/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

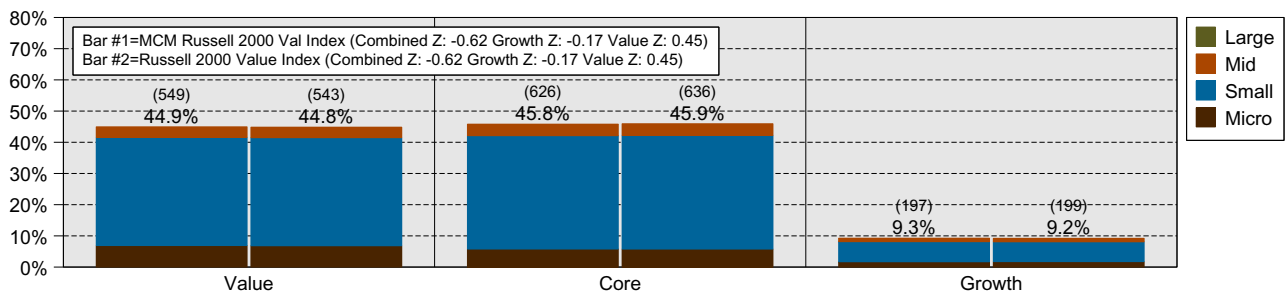
Style Map vs Callan Small Cap Value Holdings as of September 30, 2019



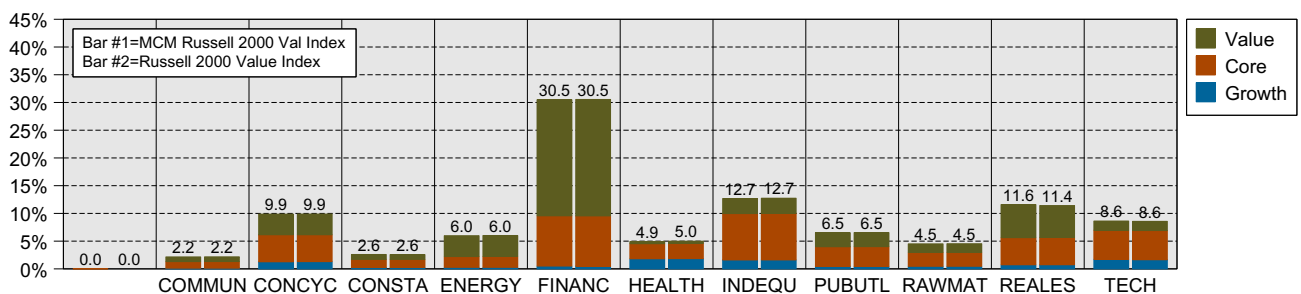
Style Exposure Matrix Holdings as of September 30, 2019

	Value	Core	Growth	Total
Large	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Mid	3.3% (8)	3.7% (9)	1.1% (4)	8.1% (21)
Small	34.7% (256)	36.3% (345)	6.4% (92)	77.5% (693)
Micro	6.9% (285)	5.8% (272)	1.7% (101)	14.4% (658)
Total	44.9% (549)	45.8% (626)	9.3% (197)	100.0% (1372)

Combined Z-Score Style Distribution Holdings as of September 30, 2019



Sector Weights Distribution Holdings as of September 30, 2019

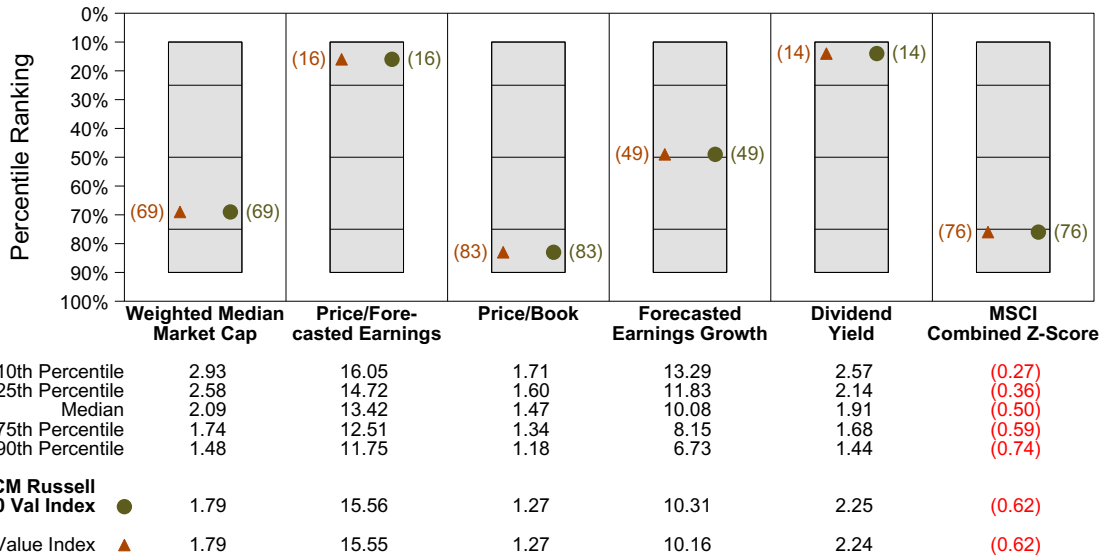


MCM Russell 2000 Val Index Equity Characteristics Analysis Summary

Portfolio Characteristics

This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

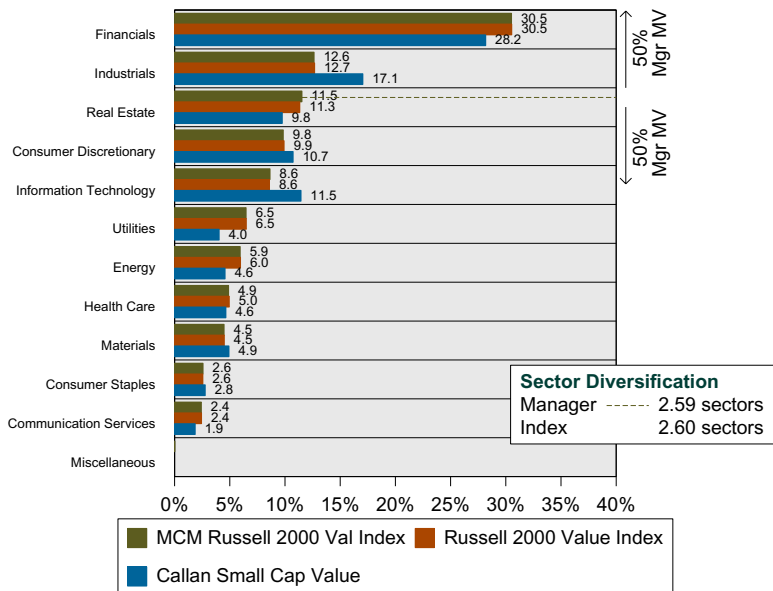
Portfolio Characteristics Percentile Rankings Rankings Against Callan Small Cap Value as of September 30, 2019



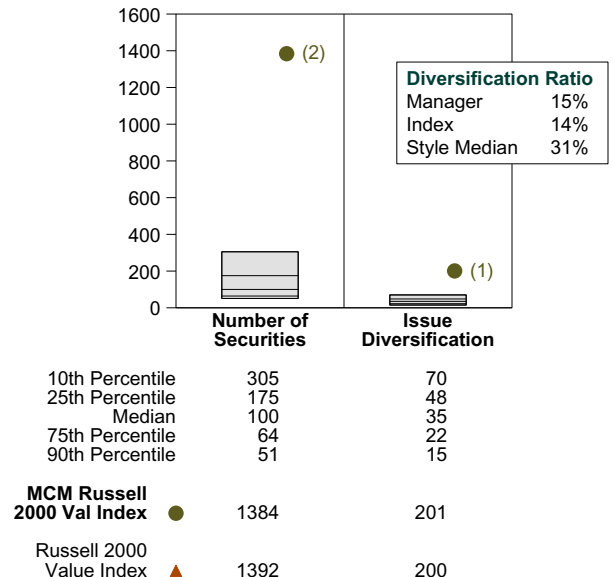
Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. Diversification by number and concentration of holdings are also compared to the benchmark and peer group. Issue Diversification represents by count, and Diversification Ratio by percent, the number of holdings that account for half of the portfolio's market value.

Sector Allocation September 30, 2019



Diversification September 30, 2019



Emerald Adv Div Sm Cap Grth Period Ended September 30, 2019

Investment Philosophy

Emerald is dedicated to fundamental, bottom-up research designed to identify unrecognized, under-researched and undervalued growth companies.

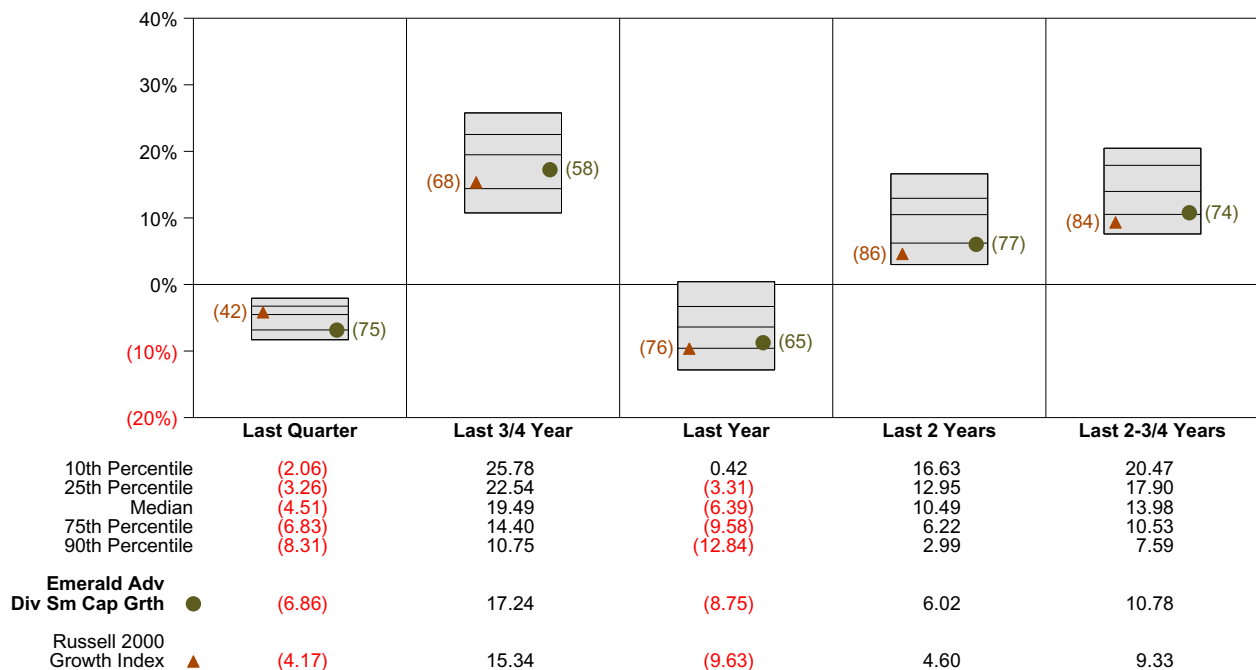
Quarterly Summary and Highlights

- Emerald Adv Div Sm Cap Grth's portfolio posted a (6.86)% return for the quarter placing it in the 75 percentile of the Callan Small Cap Growth group for the quarter and in the 65 percentile for the last year.
- Emerald Adv Div Sm Cap Grth's portfolio underperformed the Russell 2000 Growth Index by 2.68% for the quarter and outperformed the Russell 2000 Growth Index for the year by 0.88%.

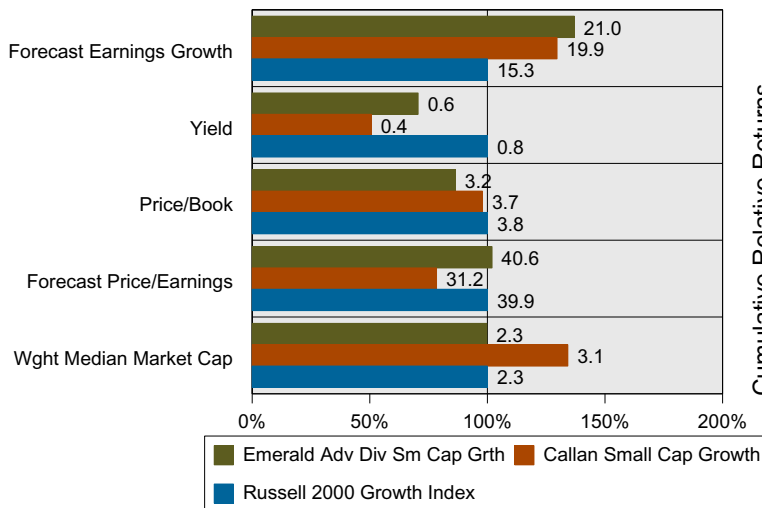
Quarterly Asset Growth

Beginning Market Value	\$708,917,723
Net New Investment	\$-800,664
Investment Gains/(Losses)	\$-48,514,981
Ending Market Value	\$659,602,079

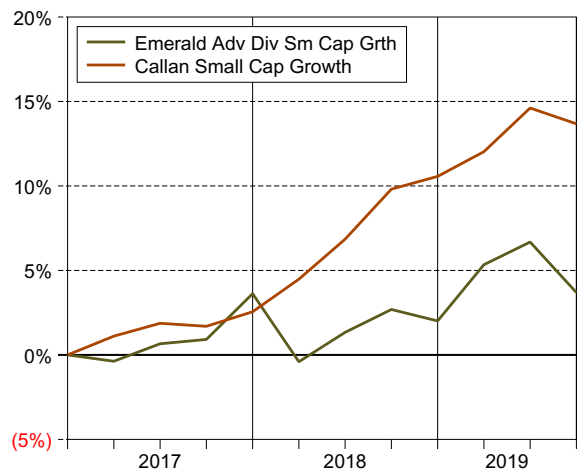
Performance vs Callan Small Cap Growth (Gross)



Portfolio Characteristics as a Percentage of the Russell 2000 Growth Index



Cumulative Returns vs Russell 2000 Growth Index



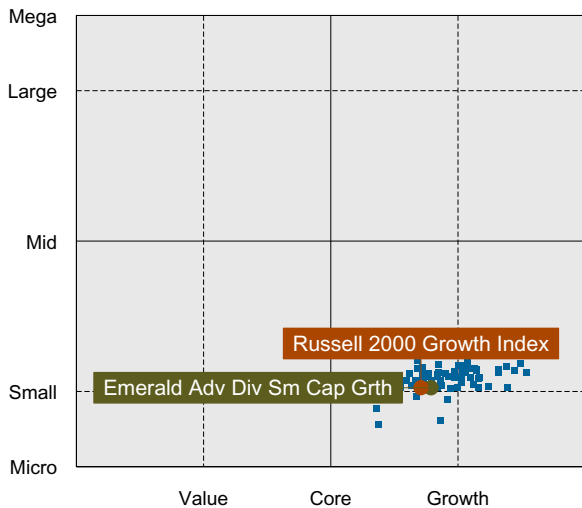
Current Holdings Based Style Analysis

Emerald Adv Div Sm Cap Grth

As of September 30, 2019

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various market capitalization and style segments of the domestic equity market. The market is segmented quarterly by capitalization and style. The capitalization segments are dictated by capitalization decile breakpoints. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the current portfolio and index weights and stock counts (in parentheses) in each capitalization/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

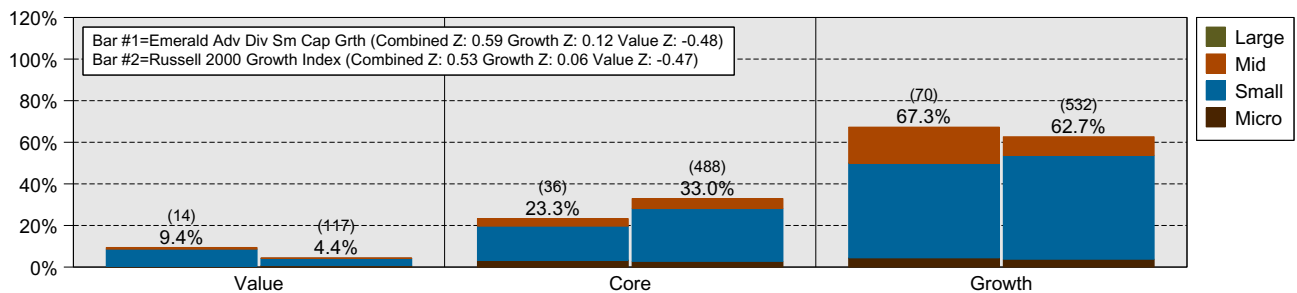
Style Map vs Callan Small Cap Growth Holdings as of September 30, 2019



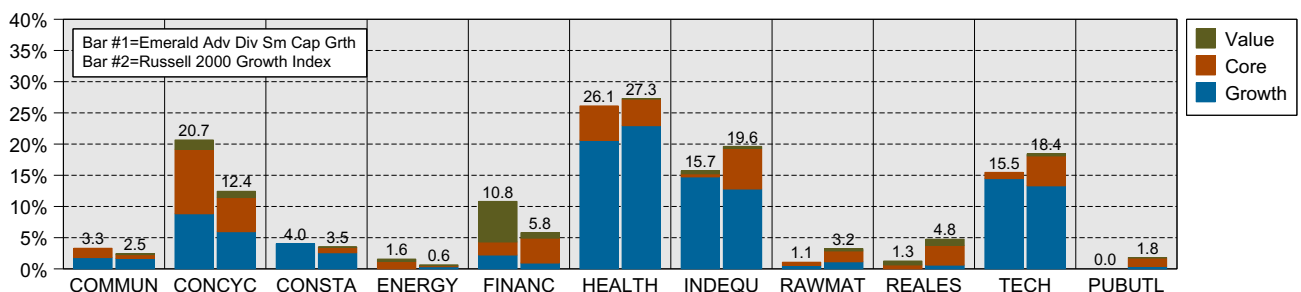
Style Exposure Matrix Holdings as of September 30, 2019

	Value	Core	Growth	Total
Large	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Mid	0.8% (1)	3.6% (3)	17.3% (11)	21.7% (15)
Small	8.3% (11)	16.4% (27)	45.5% (47)	70.2% (85)
Micro	0.3% (2)	3.3% (6)	4.4% (12)	8.0% (20)
Total	9.4% (14)	23.3% (36)	67.3% (70)	100.0% (120)

Combined Z-Score Style Distribution Holdings as of September 30, 2019



Sector Weights Distribution Holdings as of September 30, 2019

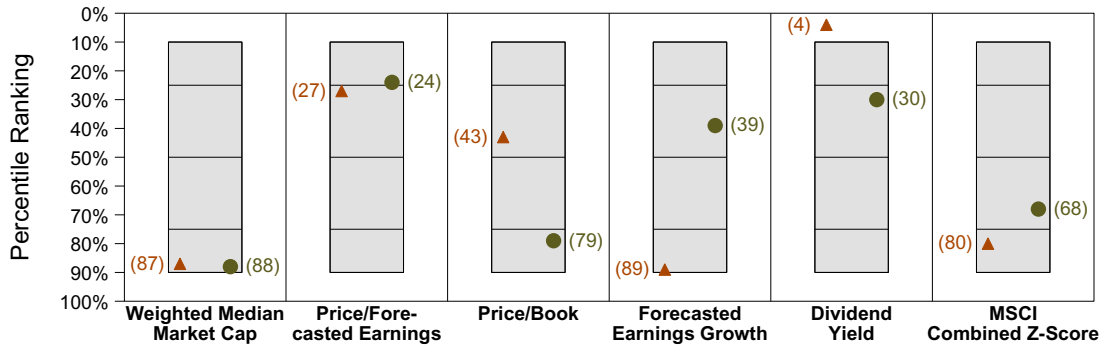


Emerald Adv Div Sm Cap Grth Equity Characteristics Analysis Summary

Portfolio Characteristics

This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

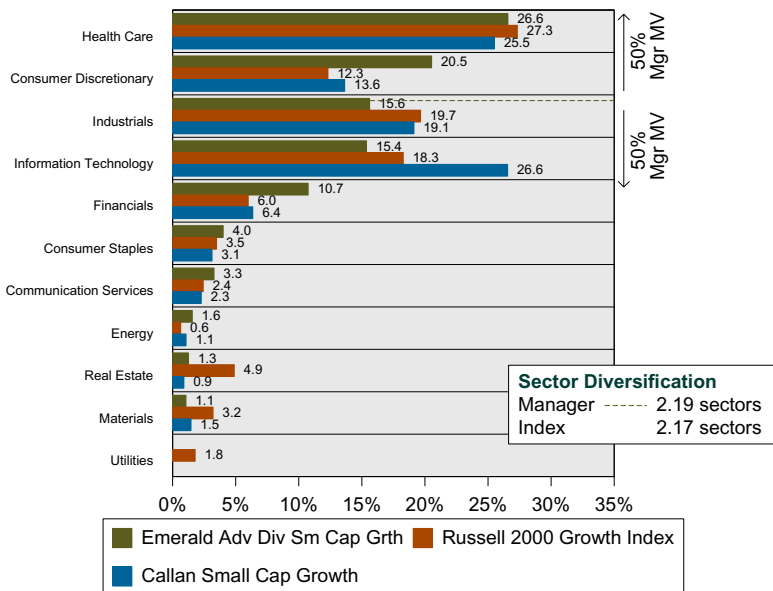
Portfolio Characteristics Percentile Rankings Rankings Against Callan Small Cap Growth as of September 30, 2019



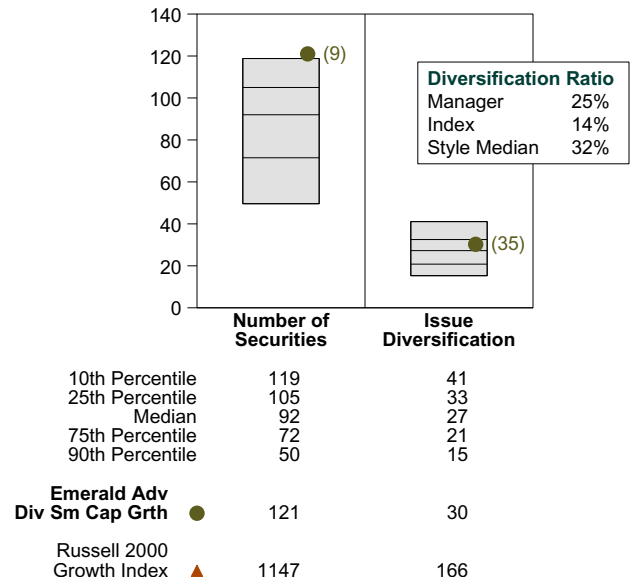
Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. Diversification by number and concentration of holdings are also compared to the benchmark and peer group. Issue Diversification represents by count, and Diversification Ratio by percent, the number of holdings that account for half of the portfolio's market value.

Sector Allocation September 30, 2019



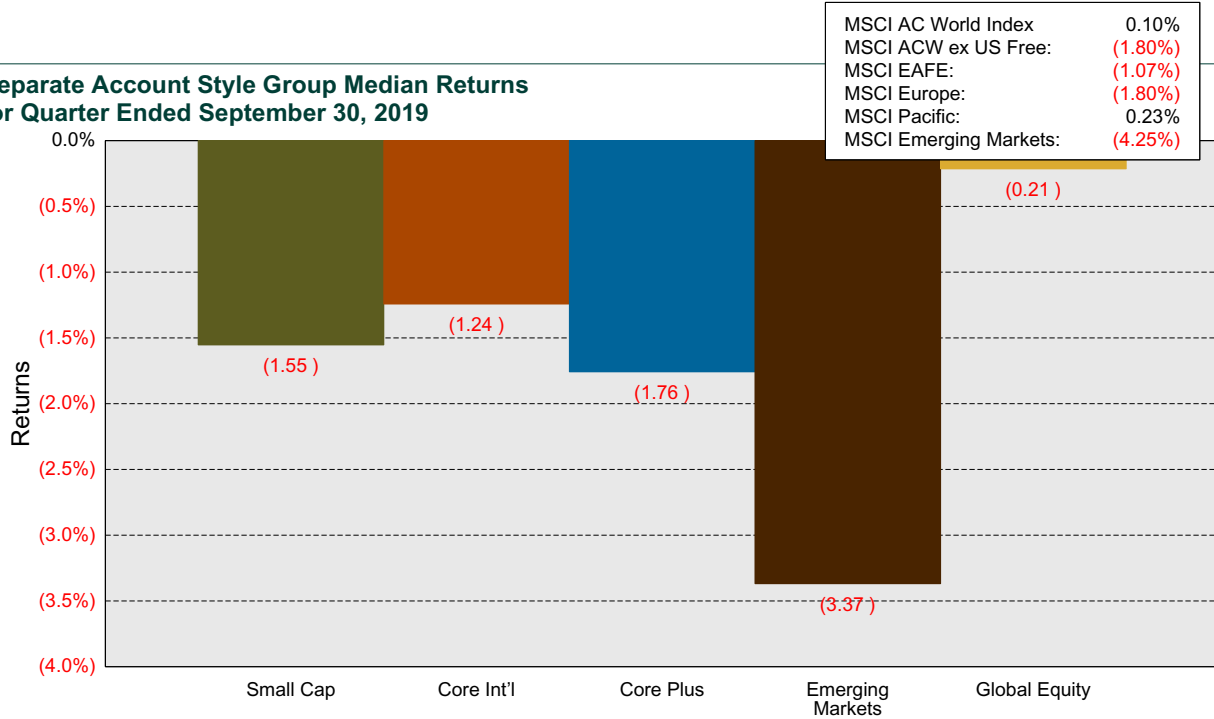
Diversification September 30, 2019



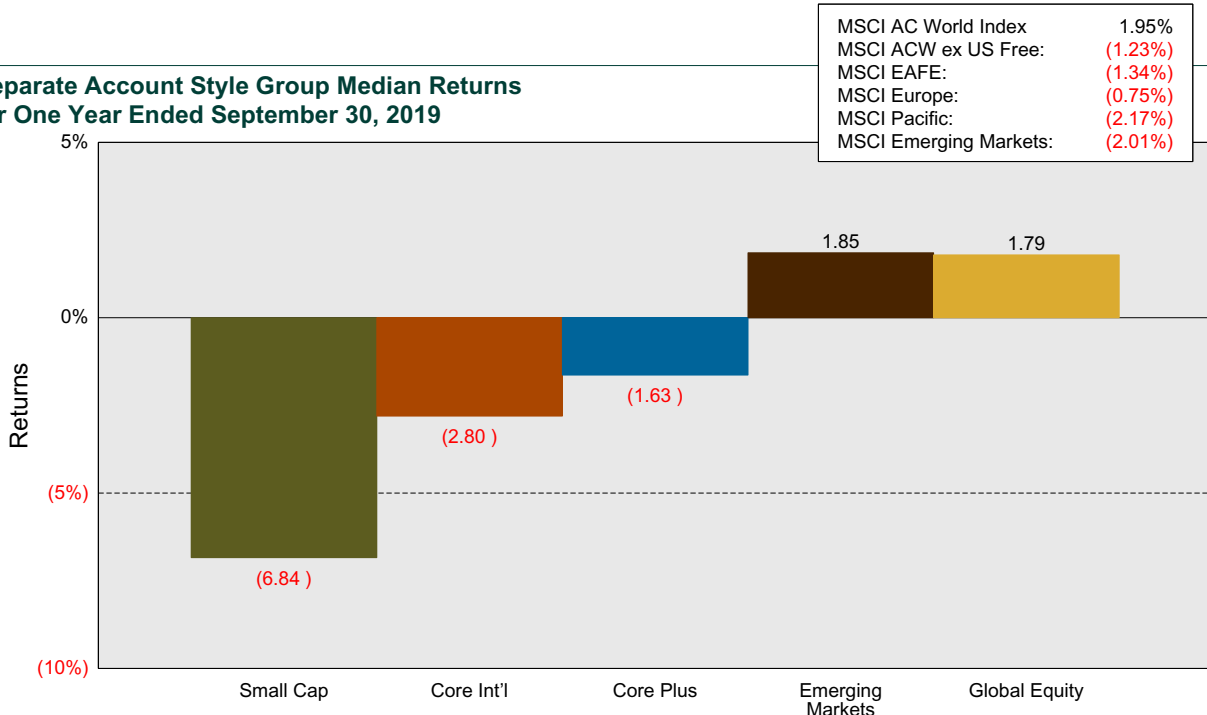
International Equity Active Management Overview

International markets lagged the U.S. on the back of broad-based strength in the U.S. dollar. The MSCI ACWI ex USA Index fell 1.8%, with emerging markets (MSCI EM: -4.2%) underperforming developed (MSCI EAFE: -1.1%). The U.K. sank 2.5% due solely to performance of its currency, which lost just over 3% versus the U.S. dollar on Brexit-related woes. Japan (+3.1%) was one of the few countries to post a positive return, and the yen was also essentially flat vs the U.S. dollar. Brazil, India, and China were off roughly 5%, and Russia posted a more modest 1.4% loss. Political uncertainty in Argentina caused its market to lose half its value in August (-47%); that said, Argentina just entered the EM Index in May 2019 and accounts for a very small slice (less than 1%). Value underperformed growth in both developed and emerging markets and remains far behind on a YTD basis. From a sector standpoint, Technology (MSCI ACWI ex USA Technology: +2.2%) was up the most while Materials (-6.5%) and Energy (-4.6%) performed the worst.

Separate Account Style Group Median Returns for Quarter Ended September 30, 2019



Separate Account Style Group Median Returns for One Year Ended September 30, 2019



Non-U.S. Developed Markets Equity Period Ended September 30, 2019

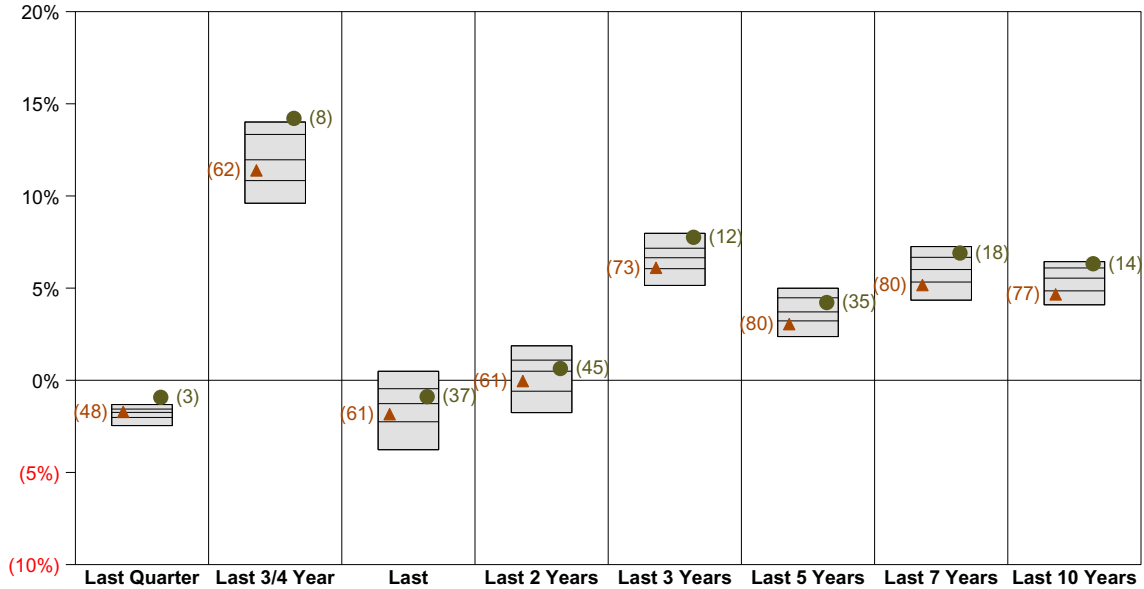
Quarterly Summary and Highlights

- Non-U.S. Developed Markets Equity's portfolio posted a (0.92)% return for the quarter placing it in the 3 percentile of the Public Fund - International Equity group for the quarter and in the 37 percentile for the last year.
- Non-U.S. Developed Markets Equity's portfolio outperformed the MSCI ACWI ex US IMI by 0.79% for the quarter and outperformed the MSCI ACWI ex US IMI for the year by 0.95%.

Quarterly Asset Growth

Beginning Market Value	\$5,568,316,603
Net New Investment	\$-1,511,206
Investment Gains/(Losses)	\$-51,525,130
Ending Market Value	\$5,515,280,266

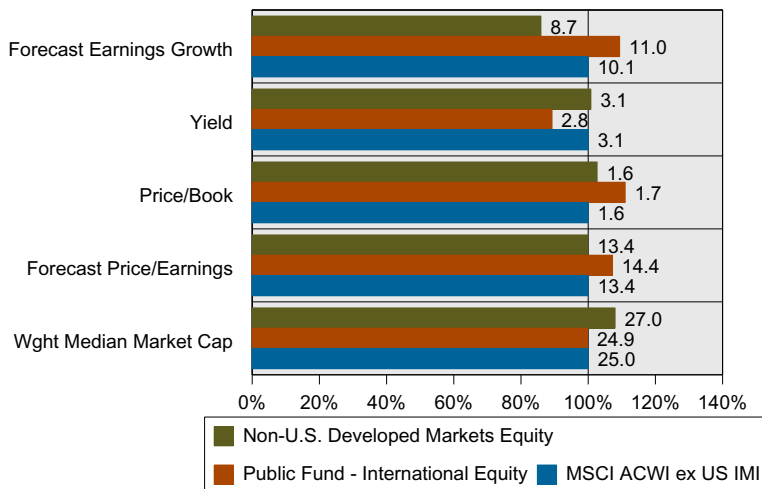
Performance vs Public Fund - International Equity (Gross)



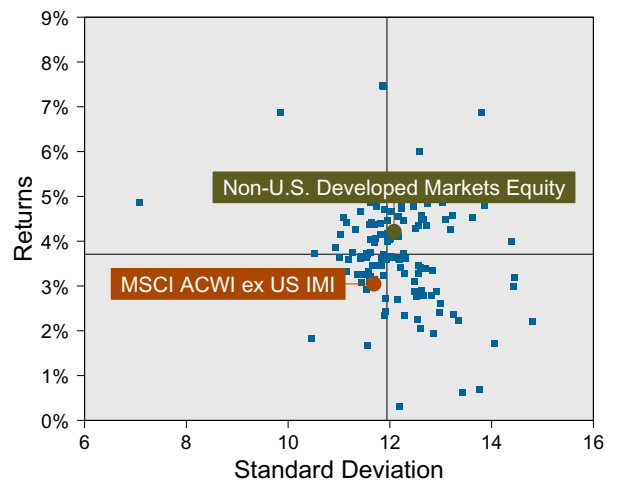
10th Percentile	(1.32)	14.01	0.49	1.87	7.97	4.99	7.25	6.44
25th Percentile	(1.56)	13.34	(0.46)	1.09	7.16	4.47	6.67	6.09
Median	(1.74)	11.96	(1.27)	0.49	6.65	3.71	6.01	5.54
75th Percentile	(2.02)	10.83	(2.25)	(0.59)	6.06	3.22	5.33	4.85
90th Percentile	(2.46)	9.60	(3.77)	(1.75)	5.15	2.37	4.35	4.09

Non-U.S. Developed Markets Equity	● (0.92)	14.21	(0.89)	0.64	7.76	4.22	6.90	6.32
MSCI ACWI ex US IMI	▲ (1.72)	11.39	(1.84)	(0.04)	6.10	3.05	5.17	4.66

Portfolio Characteristics as a Percentage of the MSCI ACWI ex US IMI



Public Fund - International Equity (Gross) Annualized Five Year Risk vs Return

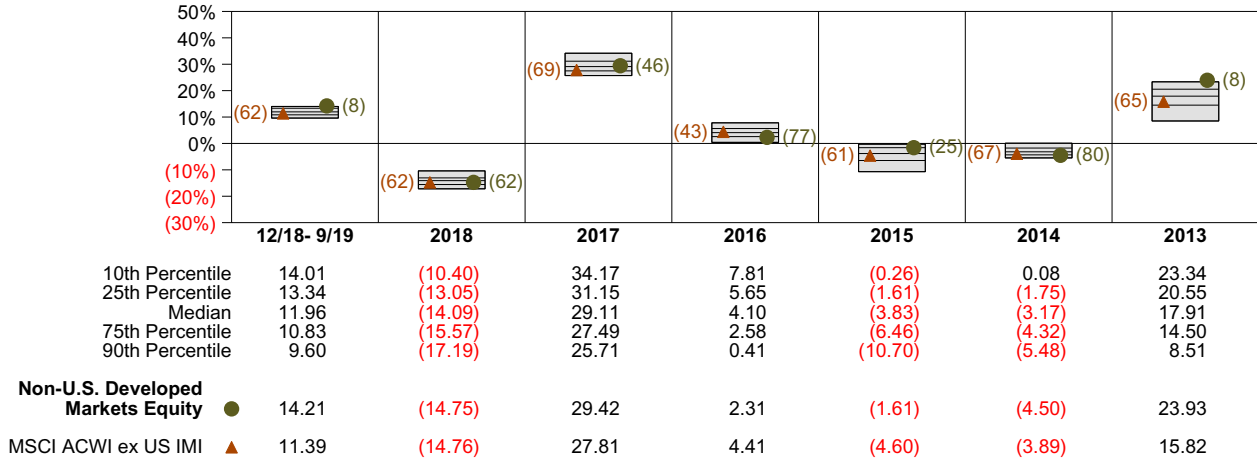


Non-U.S. Developed Markets Equity Return Analysis Summary

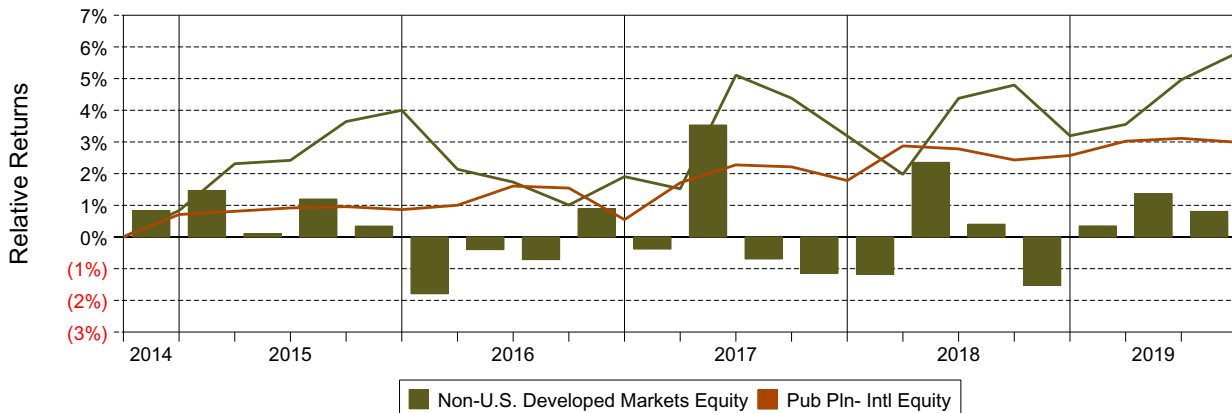
Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

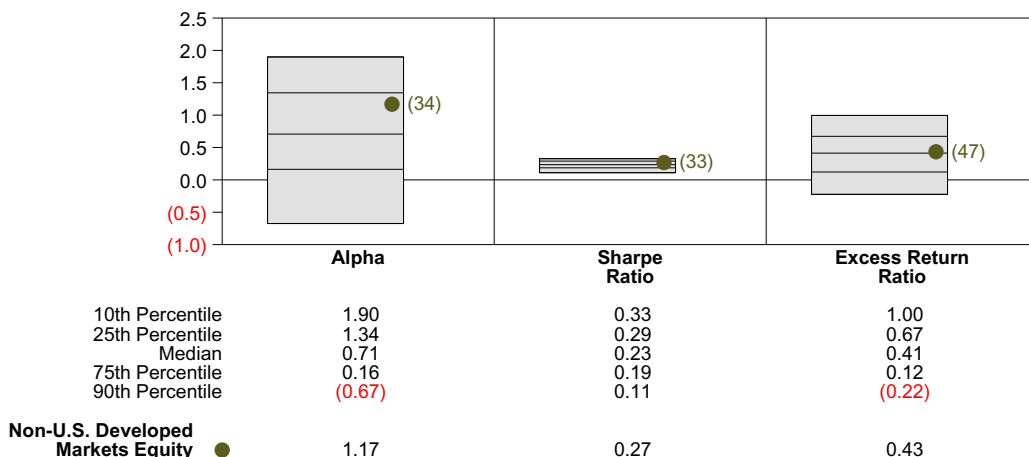
Performance vs Public Fund - International Equity (Gross)



Cumulative and Quarterly Relative Return vs MSCI ACWI ex US IMI



Risk Adjusted Return Measures vs MSCI ACWI ex US IMI Rankings Against Public Fund - International Equity (Gross) Five Years Ended September 30, 2019

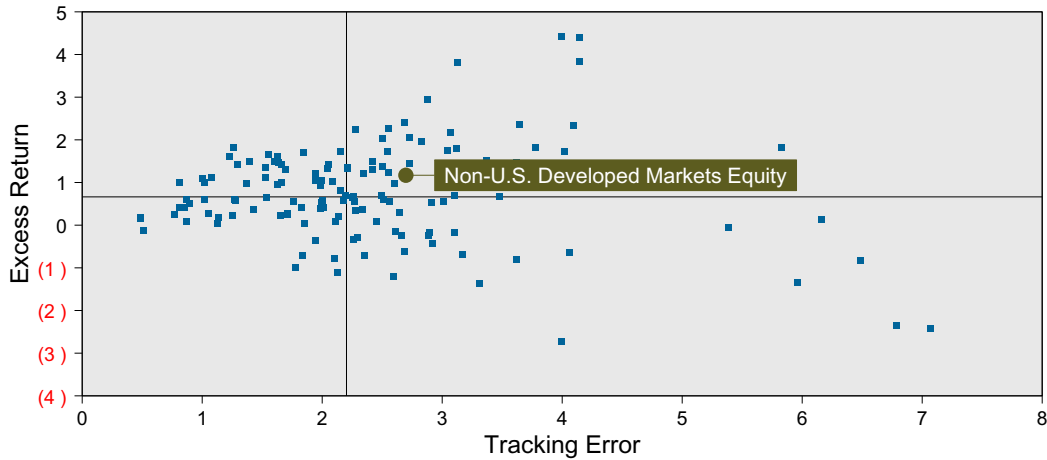


Non-U.S. Developed Markets Equity Risk Analysis Summary

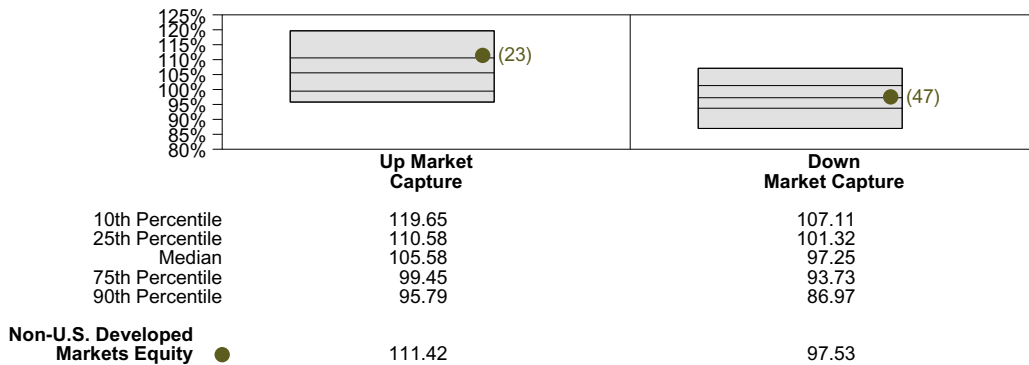
Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows Up and Down Market Capture. The last two charts show the ranking of the manager's risk statistics versus the peer group.

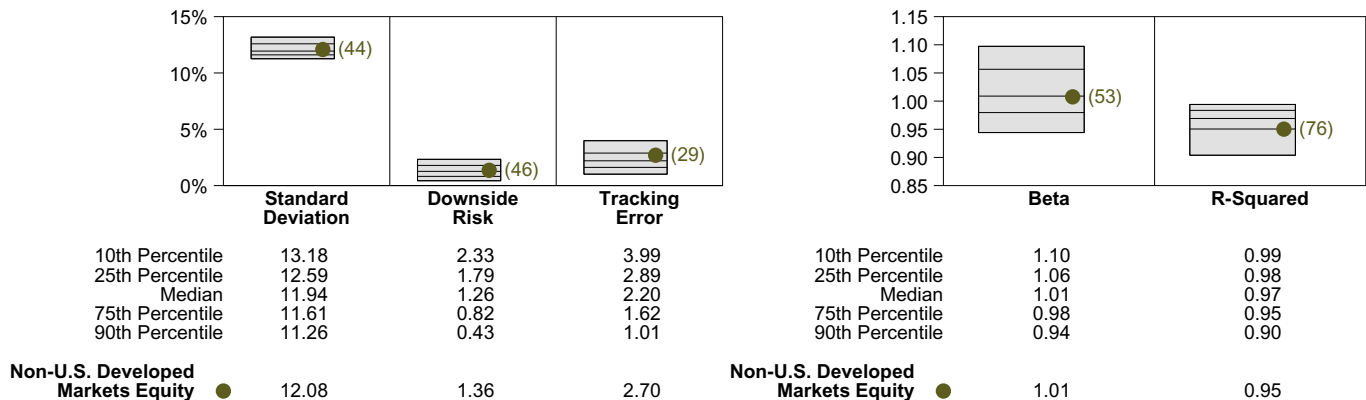
Risk Analysis vs Public Fund - International Equity (Gross) Five Years Ended September 30, 2019



Market Capture vs MSCI ACWI ex US IMI Index (USD Net Div) Rankings Against Public Fund - International Equity (Gross) Five Years Ended September 30, 2019



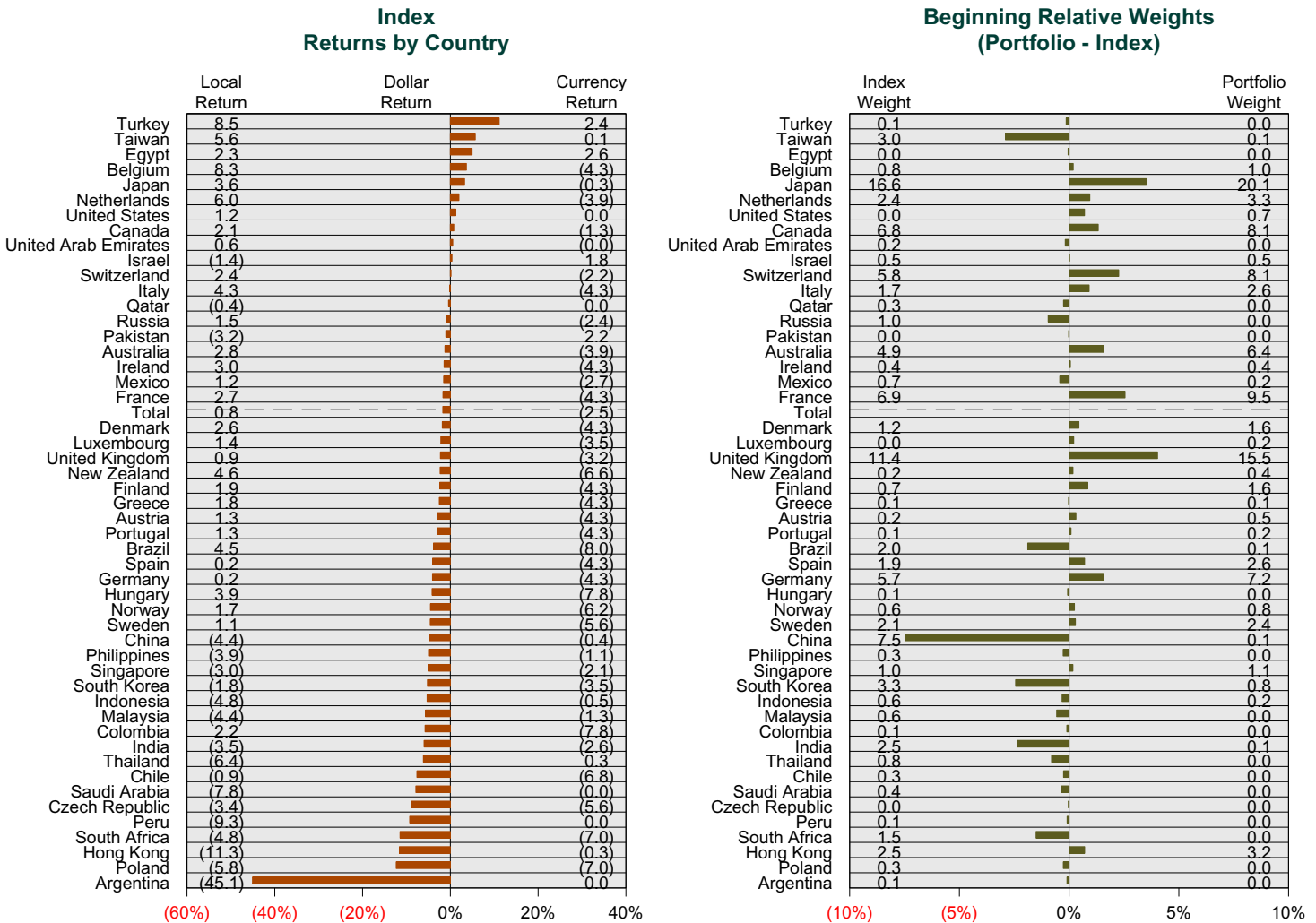
Risk Statistics Rankings vs MSCI ACWI ex US IMI Index (USD Net Div) Rankings Against Public Fund - International Equity (Gross) Five Years Ended September 30, 2019



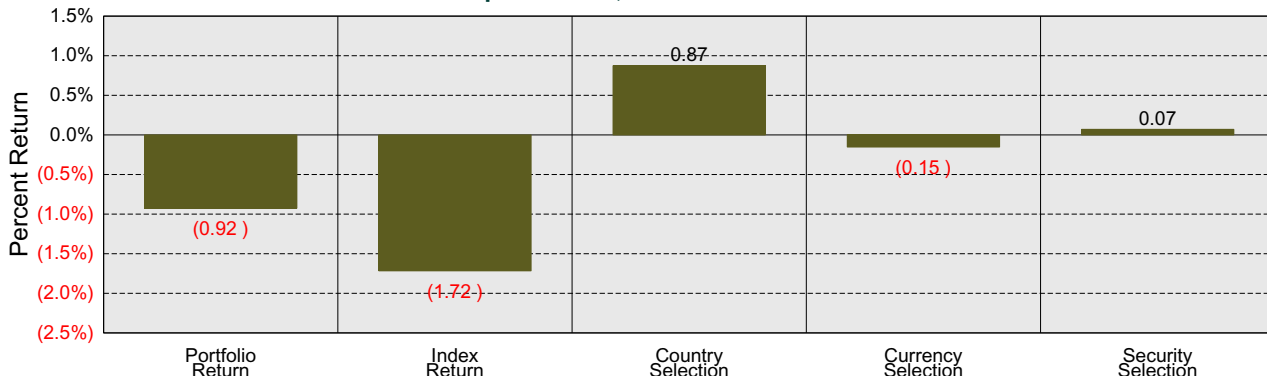
Non-U.S. Developed Markets Equity vs MSCI ACWI ex US IMI Attribution for Quarter Ended September 30, 2019

International Attribution

The first chart below illustrates the return for each country in the index sorted from high to low. The total return for the index is highlighted with a dotted line. The second chart (countries presented in the same order) illustrates the manager's country allocation decisions relative to the index. To the extent that the manager over-weighted a country that had a higher return than the total return for the index (above the dotted line) it contributes positively to the manager's country (or currency) selection effect. The last chart details the manager return, the index return, and the attribution factors for the quarter.



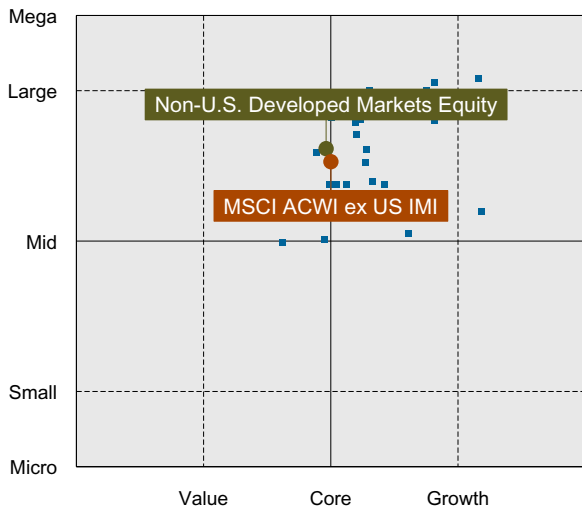
Attribution Factors for Quarter Ended September 30, 2019



Current Holdings Based Style Analysis Non-U.S. Developed Markets Equity As of September 30, 2019

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various regional and style segments of the international/global equity market. The market is segmented quarterly by region and style. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left chart illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right chart displays the current portfolio and index weights and stock counts (in parentheses) in each region/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

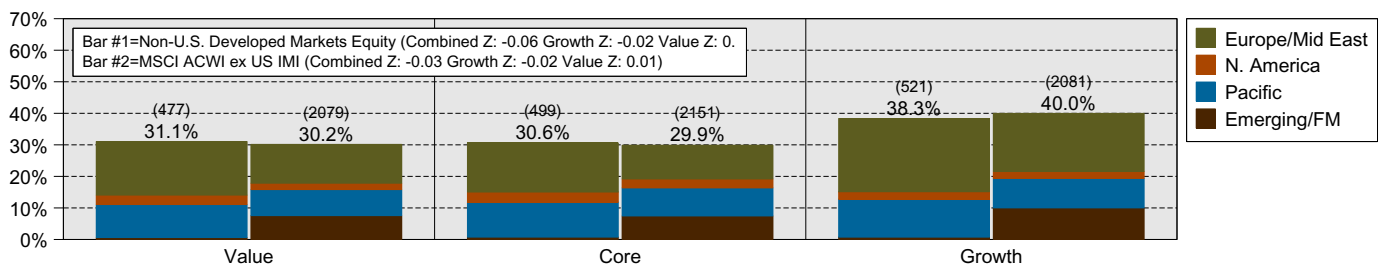
Style Map vs Pub Pln- Intl Equity Holdings as of September 30, 2019



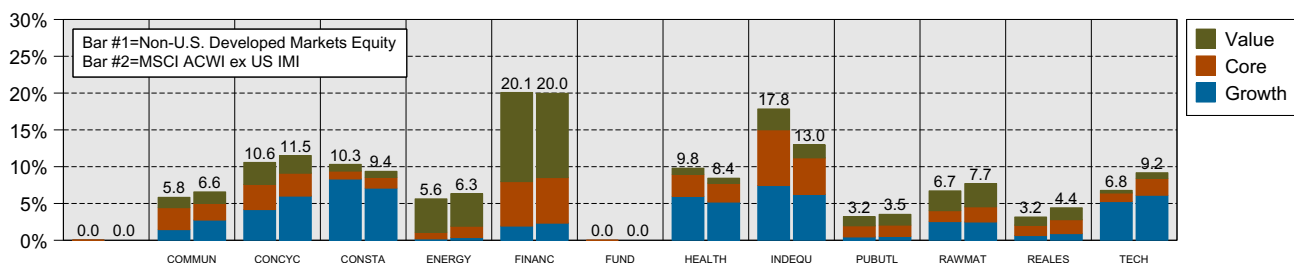
Style Exposure Matrix Holdings as of September 30, 2019

	Value	Core	Growth	Total
Europe/ Mid East	17.0% (203)	15.5% (190)	23.2% (216)	55.7% (609)
N. America	12.3% (460)	10.7% (515)	18.4% (511)	41.4% (1486)
Pacific	3.0% (38)	3.2% (37)	2.4% (33)	8.7% (108)
Emerging/ FM	2.0% (103)	2.8% (104)	2.2% (93)	7.1% (300)
Total	31.1% (477)	30.6% (499)	38.3% (521)	100.0% (1497)
	30.2% (2079)	29.9% (2151)	40.0% (2081)	100.0% (6311)

Combined Z-Score Style Distribution Holdings as of September 30, 2019



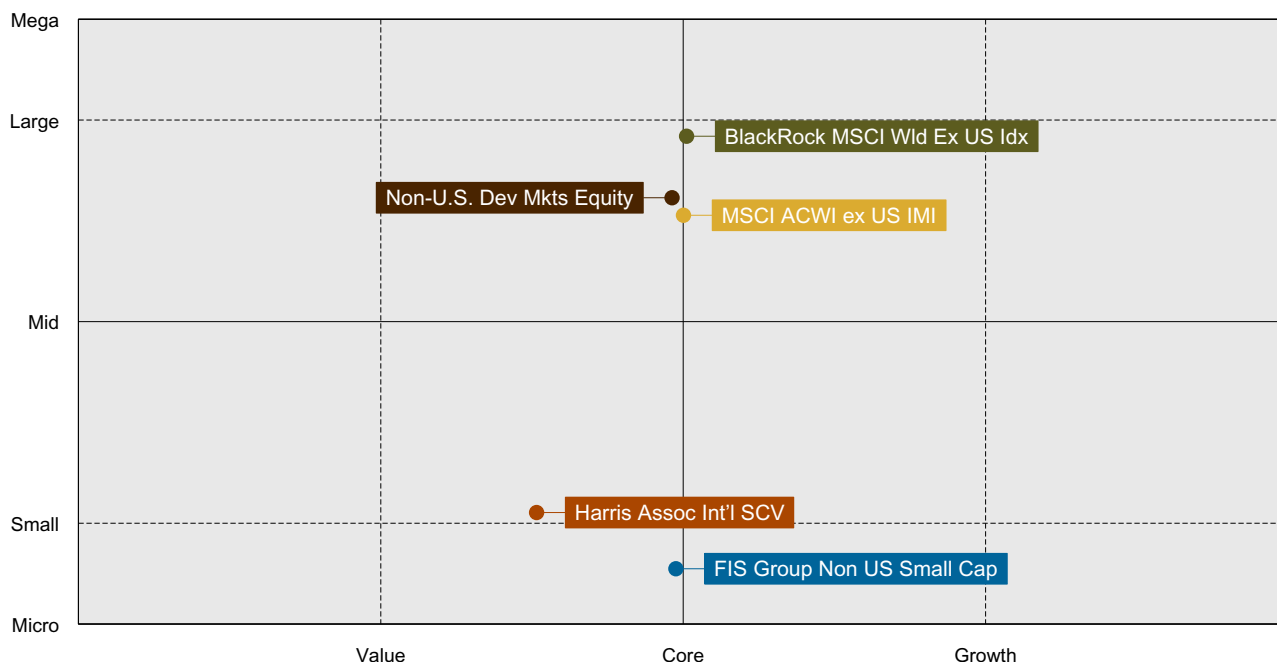
Sector Weights Distribution Holdings as of September 30, 2019



International Holdings Based Style Analysis For One Quarter Ended September 30, 2019

This page analyzes and compares the investment styles of multiple portfolios using a detailed holdings-based style analysis methodology. The size component of style is measured by the weighted median market capitalization of the holdings. The value/core/growth style dimension is captured by the "Combined Z-Score" of the portfolio. This score is based on eight fundamental factors used in the MSCI stock style scoring system. The table below gives a more detailed breakdown of several relevant style metrics on the portfolios.

Style Map Holdings for One Quarter Ended September 30, 2019



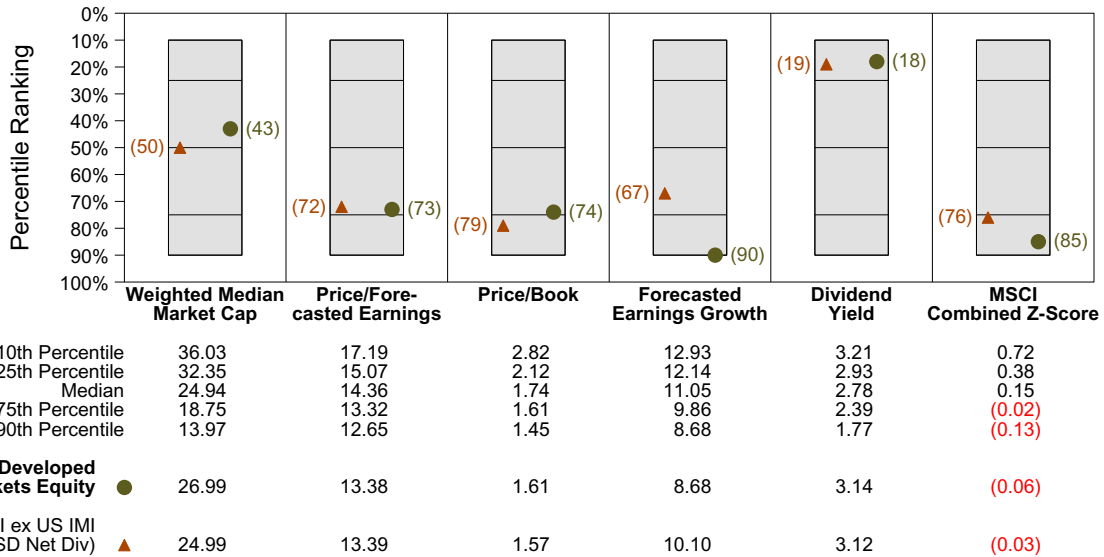
	Weight %	Wtd Median Mkt Cap	Combined Z-Score	Growth Z-Score	Value Z-Score	Number of Securities	Security Diversification
BlackRock MSCI Wld Ex US Idx	86.10%	34.02	(0.02)	(0.01)	0.00	1016	121.19
Harris Assoc Int'l SCV	10.29%	2.71	(0.51)	(0.18)	0.33	59	16.97
FIS Group Non US Small Cap	3.45%	1.66	(0.05)	0.12	0.17	514	98.36
Non-U.S. Dev Mkts Equity	100.00%	26.99	(0.06)	(0.02)	0.04	1558	146.48
MSCI ACWI ex US IMI	-	24.99	(0.03)	(0.02)	0.01	6352	250.10

Non-U.S. Developed Markets Equity Equity Characteristics Analysis Summary

Portfolio Characteristics

This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

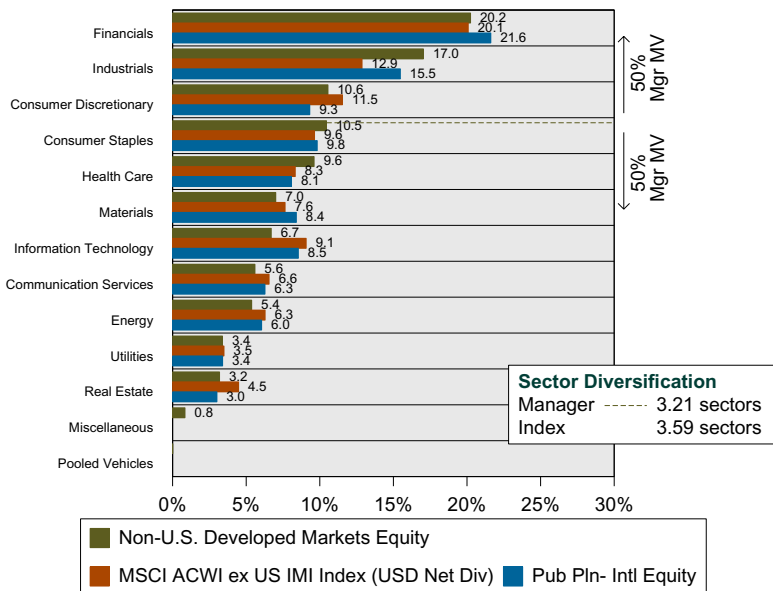
Portfolio Characteristics Percentile Rankings Rankings Against Public Fund - International Equity as of September 30, 2019



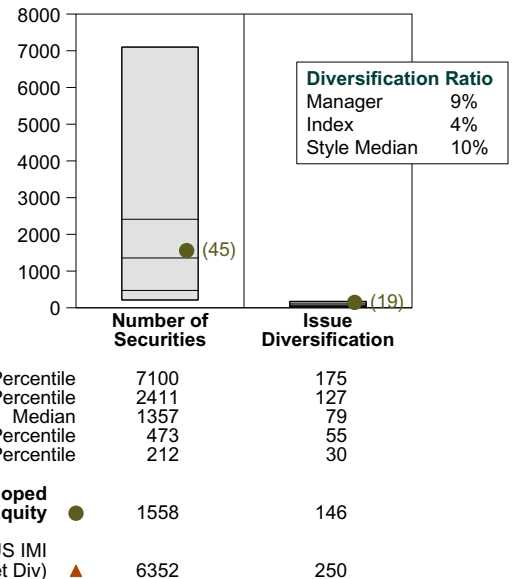
Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. Diversification by number and concentration of holdings are also compared to the benchmark and peer group. Issue Diversification represents by count, and Diversification Ratio by percent, the number of holdings that account for half of the portfolio's market value.

Sector Allocation September 30, 2019



Diversification September 30, 2019



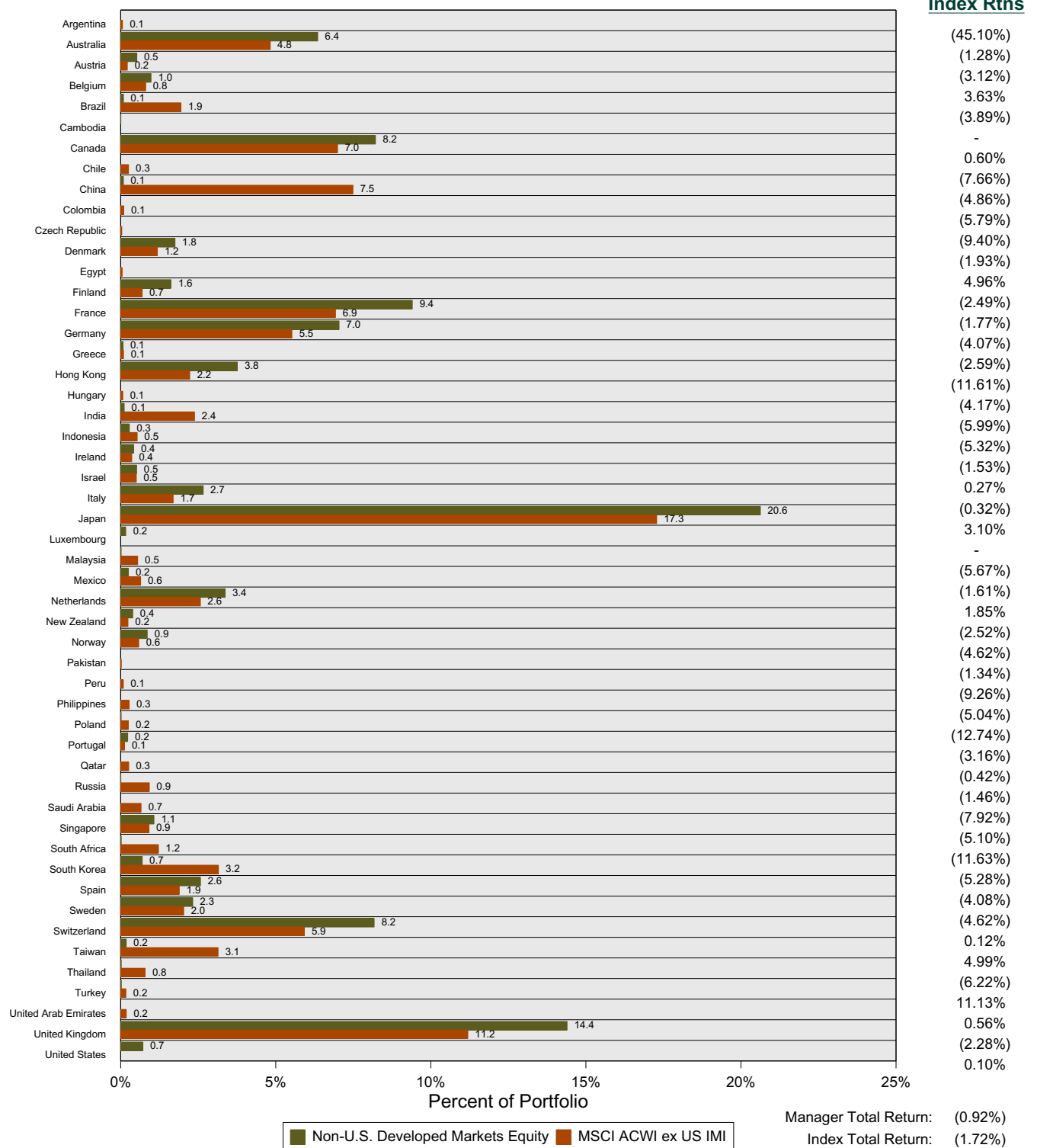
Country Allocation

Non-U.S. Developed Markets Equity VS MSCI ACWI ex US IMI Index (USD Net Div)

Country Allocation

The chart below contrasts the portfolio's country allocation with that of the index as of September 30, 2019. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent quarter. To the extent that the portfolio allocation is similar to the index, the portfolio should experience more "index-like" performance. In order to illustrate the performance effect on the portfolio and index of these country allocations, the individual index country returns are also shown.

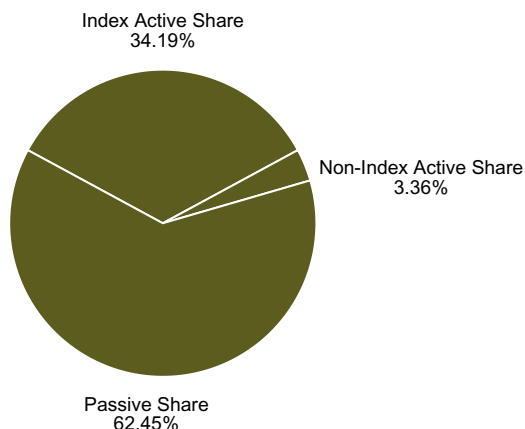
Country Weights as of September 30, 2019



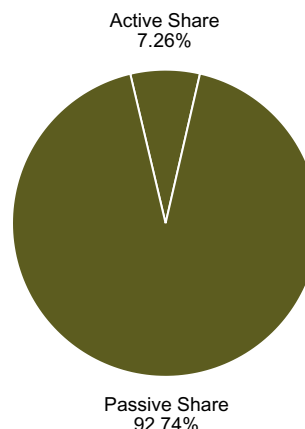
Non-U.S. Developed Markets Equity Active Share Analysis as of September 30, 2019 vs. MSCI ACWI ex US IMI Index (USD Net Div)

Active Share analysis compares the holdings of a portfolio to an index to measure how aggressively it differs from the index. Active share is measured at the individual stock level ("holdings-level active share") and using sector weights ("sector exposure active share"). Holdings-level active share comes from: 1) Index Active Share - over/under weighting of stocks in the index, and 2) Non-Index Active Share - positions in stocks not in the index. This analysis displays active share by sector and compares the portfolio to a relevant peer group.

Holdings-Level Active Share



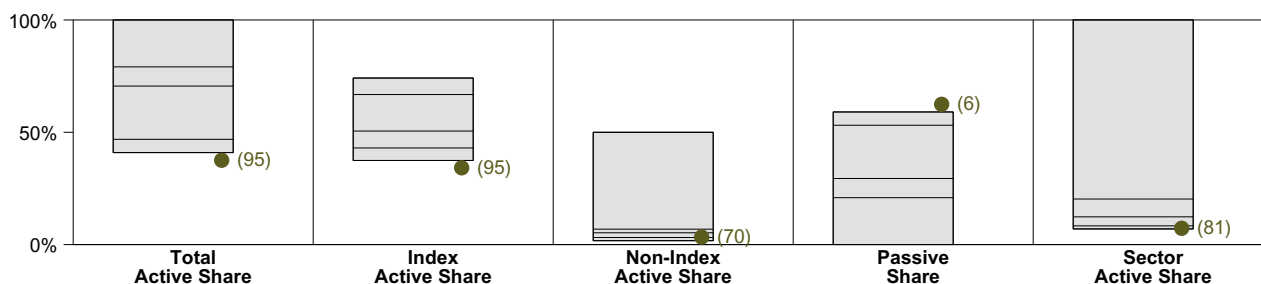
Sector Exposure Active Share



Total Active Share: 37.55%

	Index Active Share Within Sector	Non-Index Active Share Within Sector	Total Active Share Within Sector	Index Weight	Manager Weight	Contribution to Total Portfolio Active Share
Communication Services	46.03%	2.60%	48.62%	6.55%	5.59%	2.70%
Consumer Discretionary	37.55%	3.44%	40.99%	11.54%	10.55%	4.24%
Consumer Staples	26.86%	5.41%	32.27%	9.64%	10.45%	3.50%
Energy	37.37%	0.00%	37.37%	6.28%	5.37%	1.88%
Financials	33.35%	2.57%	35.92%	20.09%	20.24%	7.26%
Health Care	18.29%	1.58%	19.87%	8.33%	9.61%	2.29%
Industrials	25.61%	2.23%	27.83%	12.87%	17.04%	5.72%
Information Technology	49.37%	2.31%	51.68%	9.07%	6.70%	3.51%
Materials	38.77%	4.78%	43.55%	7.64%	7.01%	3.01%
Miscellaneous	0.00%	100.00%	100.00%	-	0.84%	0.40%
Pooled Vehicles	0.00%	100.00%	100.00%	-	0.01%	0.00%
Real Estate	49.79%	4.43%	54.22%	4.48%	3.19%	1.79%
Utilities	31.37%	5.49%	36.86%	3.49%	3.39%	1.23%
Total	34.19%	3.36%	37.55%	100.00%	100.00%	37.53%

Active Share vs. Pub Pln- Intl Equity



	Total Active Share	Index Active Share	Non-Index Active Share	Passive Share	Sector Active Share
10th Percentile	99.98	74.14	50.00	59.04	100.00
25th Percentile	79.12	66.80	6.88	53.13	20.29
Median	70.57	50.54	5.25	29.43	12.36
75th Percentile	46.87	43.01	3.16	20.88	8.35
90th Percentile	40.96	37.45	1.74	0.02	6.97
Non-U.S. Developed Markets Equity	37.55	34.19	3.36	62.45	7.26

Comparative Manager Matrix

This page allows for detailed comparisons of multiple managers against each other, as well as versus market indices and peer groups. The holding overlap matrices illustrate the degree of individual stock overlap between various portfolios' holdings. The number in parentheses in the lower left corner of each box is the number of stocks that a given portfolio pair hold in common. The number in the upper left corner is the total weight of these overlapping holdings in the y-axis (vertical) portfolio. The number in the lower right corner is the total weight of those same stocks in the x-axis (horizontal) portfolio.

Holding Overlap for Period Ended September 30, 2019

FIS Group Non US Small Cap	3% (12)	0%	3% (10)	13%	
Harris Assoc Int'l SCV	24% (11)	0%			13% (10)
BlackRock MSCI World Ex US Index			0% (11)	24%	0% (12)
	BlackRock MSCI World Ex US Index		Harris Assoc Int'l SCV		FIS Group Non US Small Cap

BlackRock MSCI World Ex US Index Period Ended September 30, 2019

Investment Philosophy

The objective of the World ex-U.S. Index Fund is to track the performance of the MSCI World ex-U.S. Index. The Fund fully replicates the index, holding every stock in the index in its market capitalization weight to ensure close tracking and minimize transaction costs.

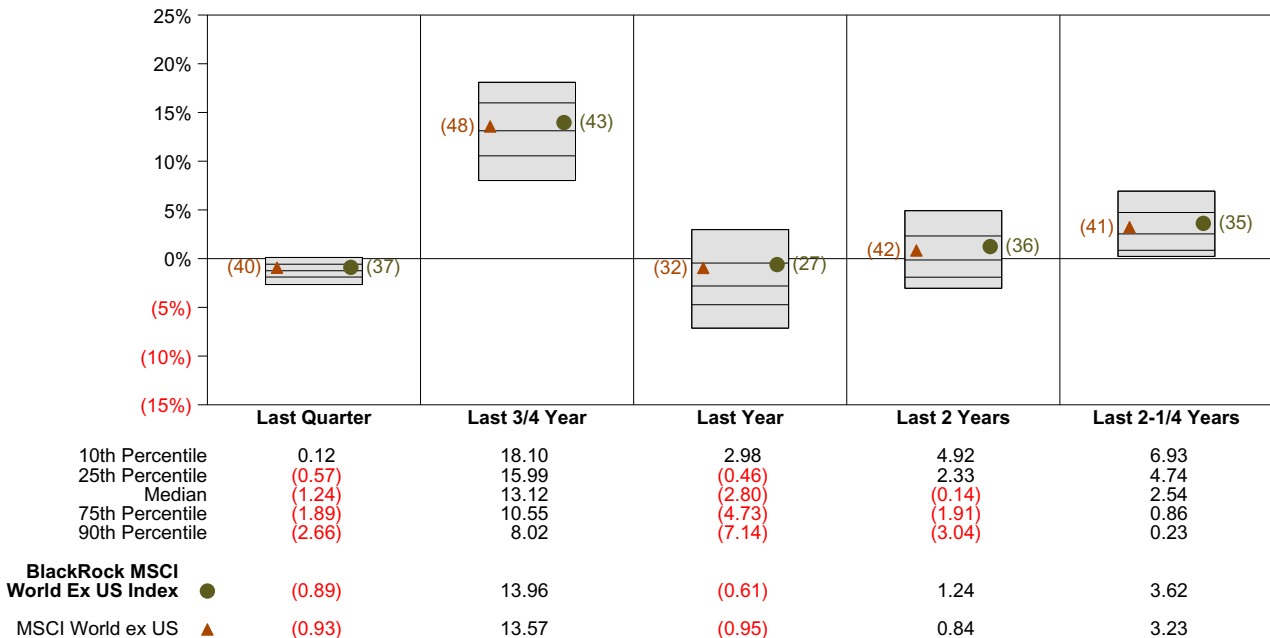
Quarterly Summary and Highlights

- BlackRock MSCI World Ex US Index's portfolio posted a (0.89)% return for the quarter placing it in the 37 percentile of the Callan Non-US Developed Broad Equity group for the quarter and in the 27 percentile for the last year.
- BlackRock MSCI World Ex US Index's portfolio outperformed the MSCI World ex US by 0.04% for the quarter and outperformed the MSCI World ex US for the year by 0.34%.

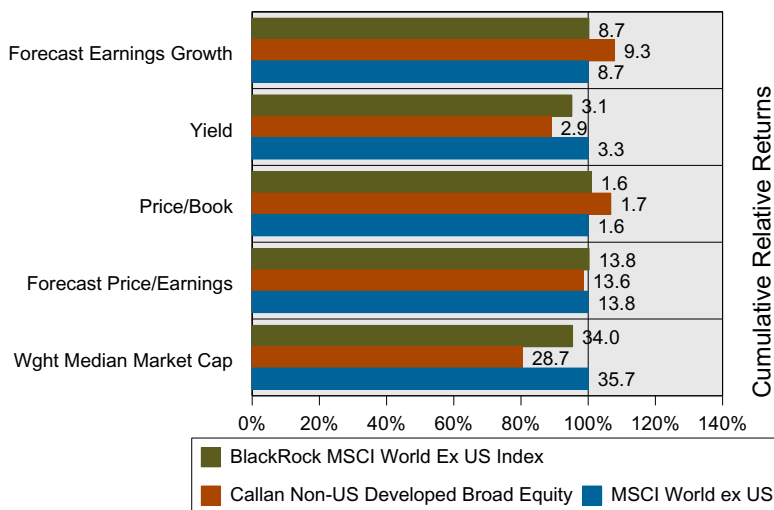
Quarterly Asset Growth

Beginning Market Value	\$4,791,086,622
Net New Investment	\$0
Investment Gains/(Losses)	\$-42,632,440
Ending Market Value	\$4,748,454,182

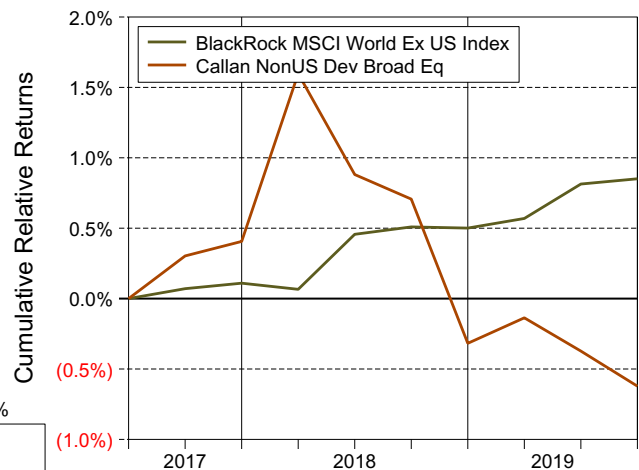
Performance vs Callan Non-US Developed Broad Equity (Gross)



Portfolio Characteristics as a Percentage of the MSCI World ex US



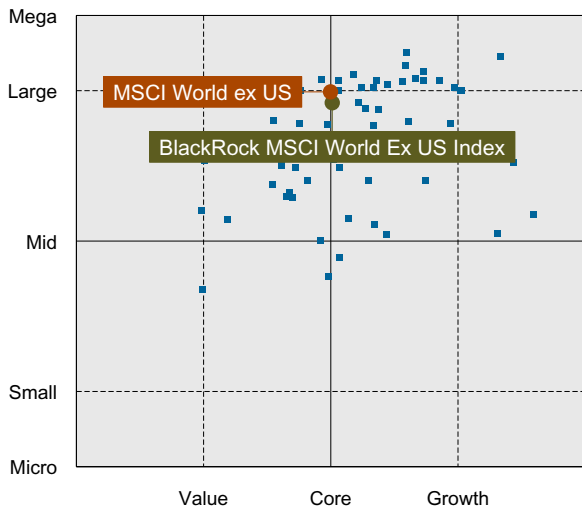
Cumulative Returns vs MSCI World ex US



Current Holdings Based Style Analysis BlackRock MSCI World Ex US Index As of September 30, 2019

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various regional and style segments of the international/global equity market. The market is segmented quarterly by region and style. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left chart illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the current portfolio and index weights and stock counts (in parentheses) in each region/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

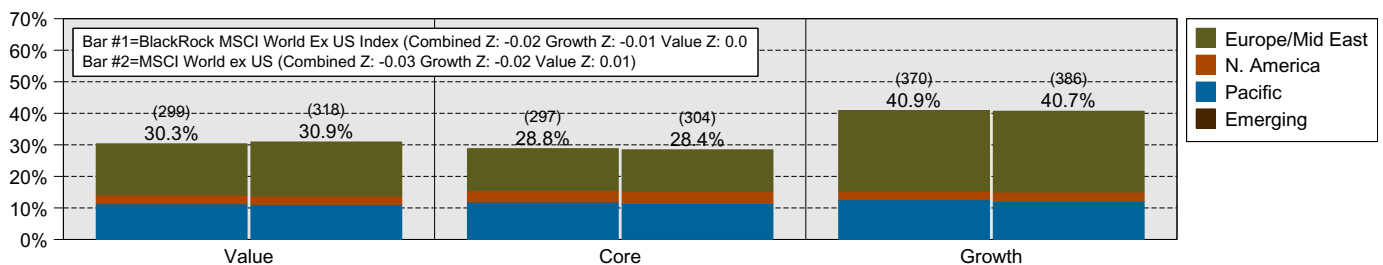
Style Map vs Callan NonUS Dev Broad Eq Holdings as of September 30, 2019



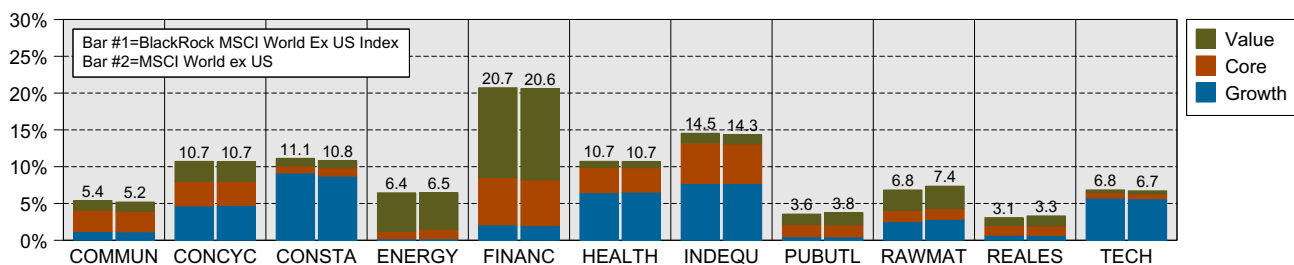
Style Exposure Matrix Holdings as of September 30, 2019

	Value	Core	Growth	Total
Europe/ Mid East	16.2% (129)	13.3% (115)	25.5% (171)	54.9% (415)
N. America	17.1% (144)	13.2% (120)	25.6% (184)	55.9% (448)
Pacific	2.8% (27)	3.7% (26)	2.8% (31)	9.3% (84)
Emerging	2.8% (29)	3.8% (27)	2.9% (34)	9.5% (90)
Total	30.3% (299)	28.8% (297)	40.9% (370)	100.0% (966)
	30.9% (318)	28.4% (304)	40.7% (386)	100.0% (1008)

Combined Z-Score Style Distribution Holdings as of September 30, 2019



Sector Weights Distribution Holdings as of September 30, 2019

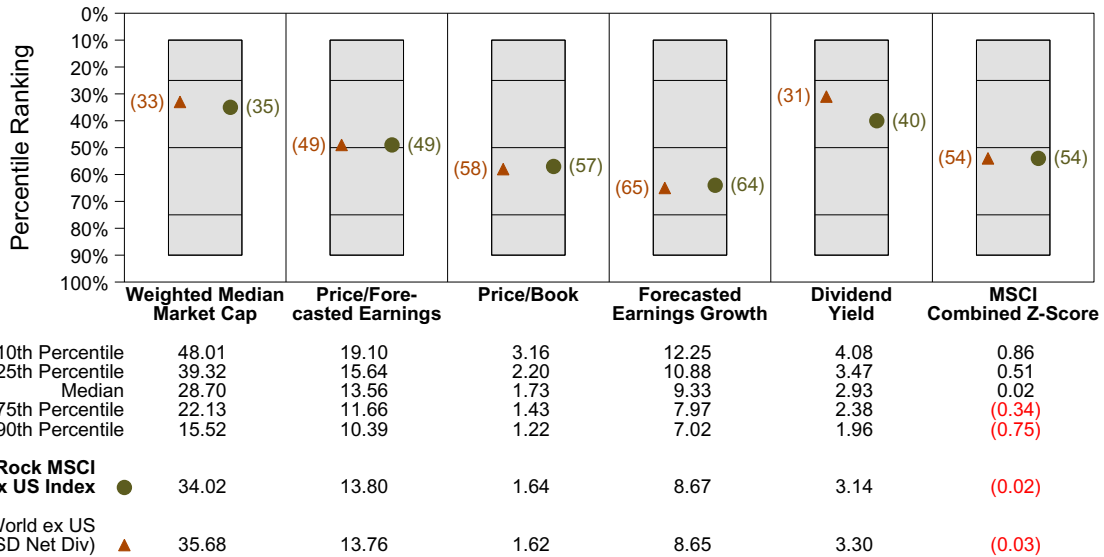


BlackRock MSCI World Ex US Index Equity Characteristics Analysis Summary

Portfolio Characteristics

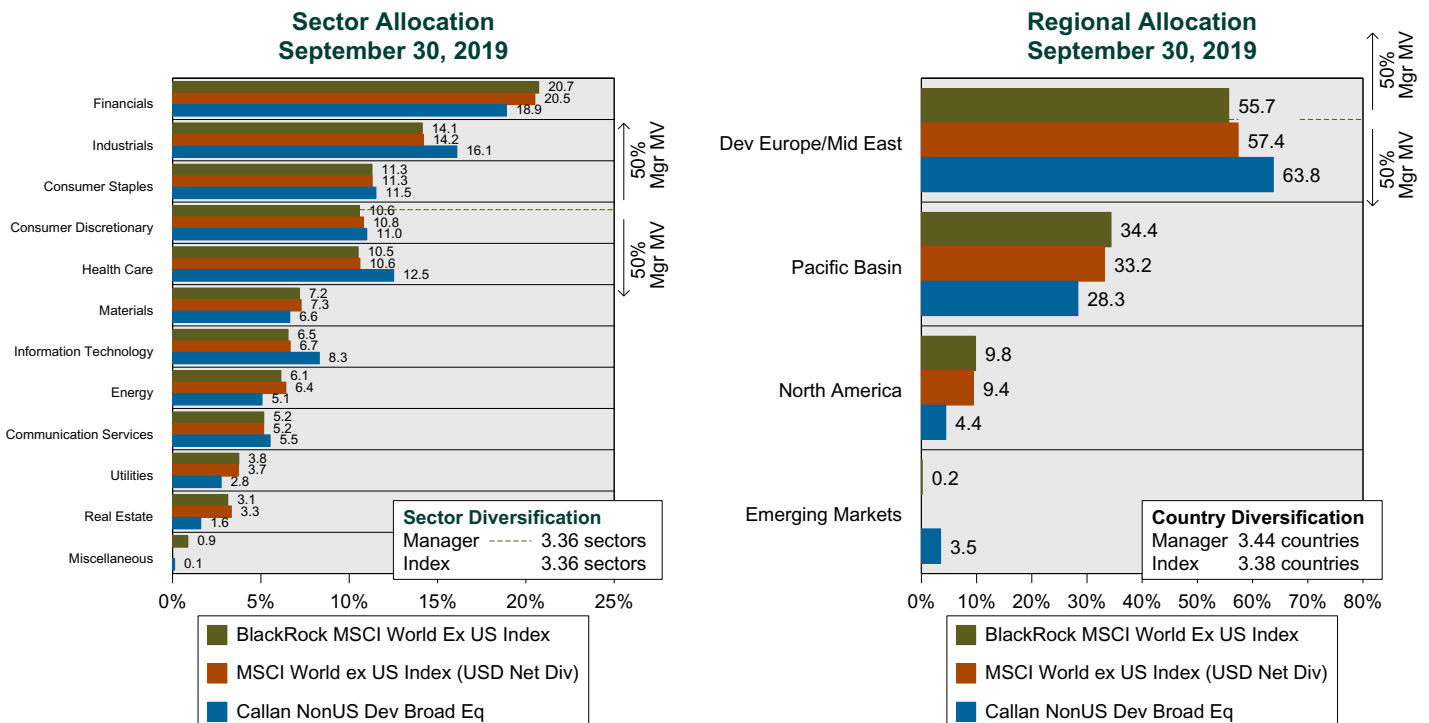
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

Portfolio Characteristics Percentile Rankings Rankings Against Callan Non-US Developed Broad Equity as of September 30, 2019



Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. The regional allocation chart compares the manager's geographical region weights with those of the benchmark as well as the median region weights of the peer group.



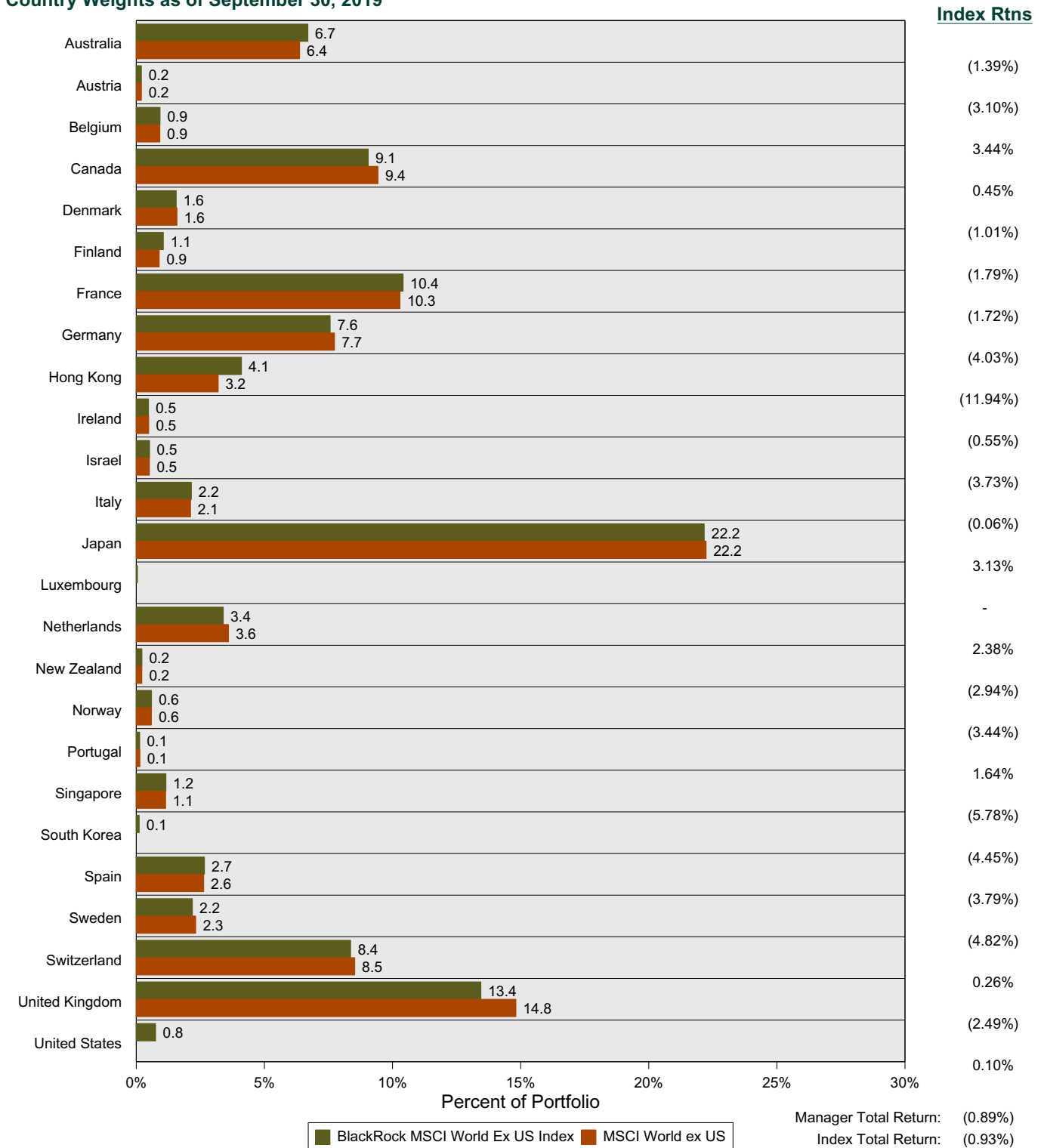
Country Allocation

BlackRock MSCI World Ex US Index VS MSCI World ex US Index (USD Net Div)

Country Allocation

The chart below contrasts the portfolio's country allocation with that of the index as of September 30, 2019. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent quarter. To the extent that the portfolio allocation is similar to the index, the portfolio should experience more "index-like" performance. In order to illustrate the performance effect on the portfolio and index of these country allocations, the individual index country returns are also shown.

Country Weights as of September 30, 2019



FIS Group Non-U.S. Small Cap Period Ended September 30, 2019

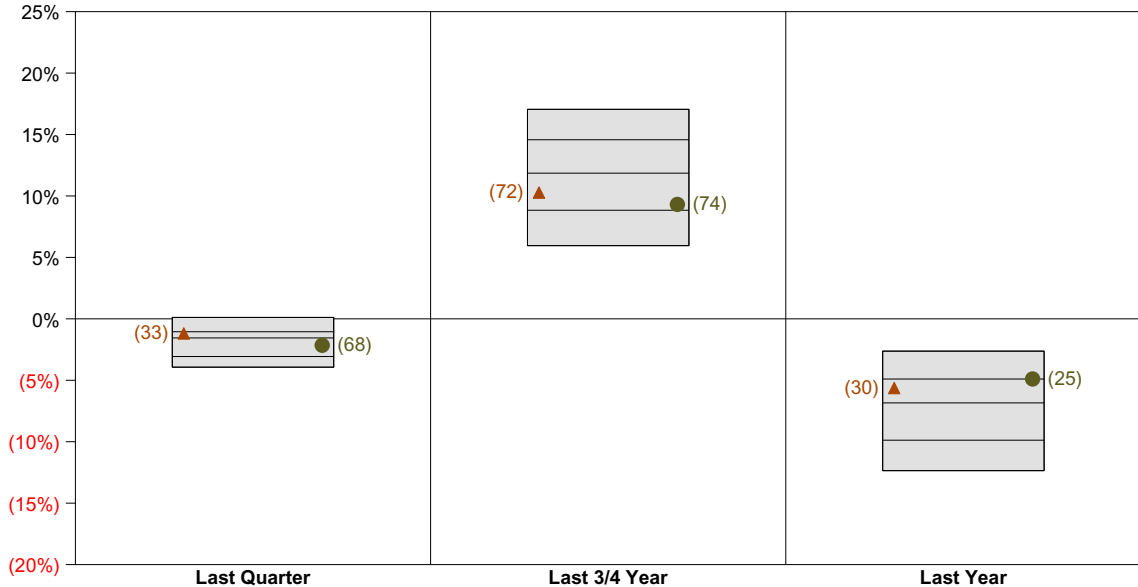
Quarterly Summary and Highlights

- FIS Group Non-U.S. Small Cap's portfolio posted a (2.15)% return for the quarter placing it in the 68 percentile of the Callan International Small Cap group for the quarter and in the 74 percentile for the last three-quarter year.
- FIS Group Non-U.S. Small Cap's portfolio underperformed the MSCI ACWI ex US Small Cap by 0.96% for the quarter and underperformed the MSCI ACWI ex US Small Cap for the three-quarter year by 0.97%.

Quarterly Asset Growth

Beginning Market Value	\$194,788,000
Net New Investment	\$-165,365
Investment Gains/(Losses)	\$-4,194,635
Ending Market Value	\$190,428,000

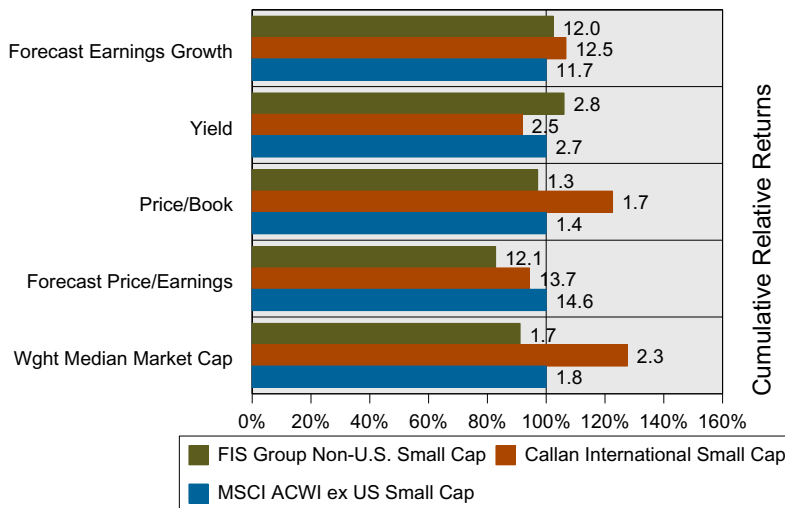
Performance vs Callan International Small Cap (Gross)



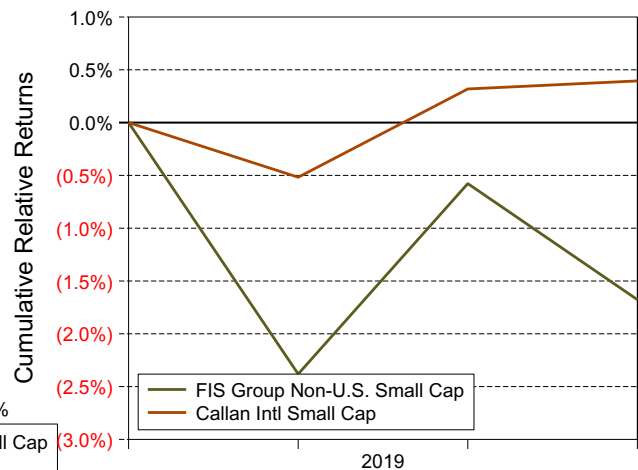
	Last Quarter	Last 3/4 Year	Last Year
10th Percentile	0.12	17.05	(2.63)
25th Percentile	(1.05)	14.57	(4.90)
Median	(1.55)	11.86	(6.84)
75th Percentile	(3.07)	8.84	(9.88)
90th Percentile	(3.93)	5.96	(12.35)

	Last Quarter	Last 3/4 Year	Last Year
FIS Group Non-U.S. Small Cap	(2.15)	9.31	(4.89)
MSCI ACWI ex US Small Cap	(1.19)	10.28	(5.63)

Portfolio Characteristics as a Percentage of the MSCI ACWI ex US Small Cap



Cumulative Returns vs MSCI ACWI ex US Small Cap



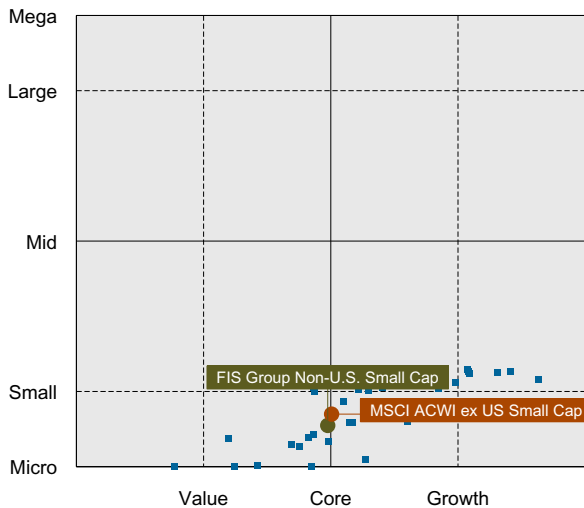
Current Holdings Based Style Analysis

FIS Group Non-U.S. Small Cap

As of September 30, 2019

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various regional and style segments of the international/global equity market. The market is segmented quarterly by region and style. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the current portfolio and index weights and stock counts (in parentheses) in each region/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

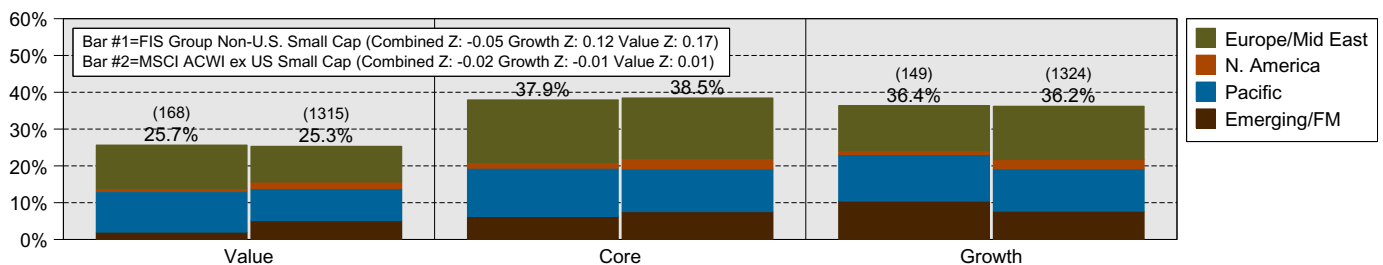
Style Map vs Callan Intl Small Cap Holdings as of September 30, 2019



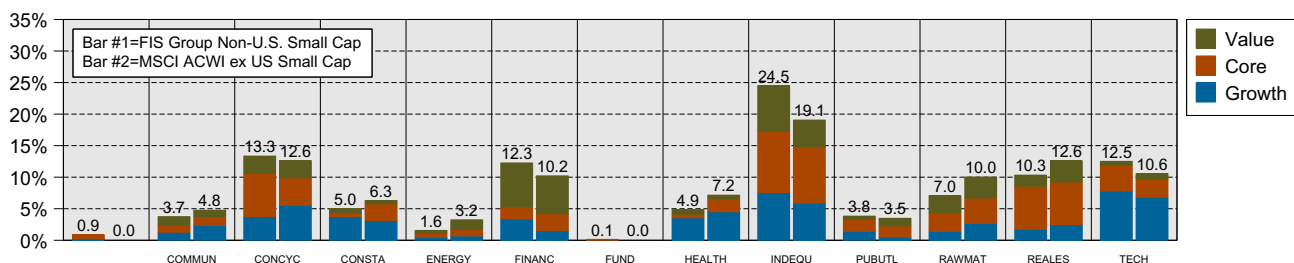
Style Exposure Matrix Holdings as of September 30, 2019

	Value	Core	Growth	Total
Europe/ Mid East	11.8% (68) 9.7% (316)	17.0% (61) 16.4% (395)	12.2% (44) 14.5% (327)	41.0% (173) 40.6% (1038)
N. America	0.9% (8) 1.8% (74)	1.6% (11) 2.9% (77)	1.1% (2) 2.5% (59)	3.5% (21) 7.1% (210)
Pacific	11.0% (72) 8.7% (438)	13.1% (68) 11.6% (433)	12.7% (36) 11.5% (413)	36.7% (176) 31.9% (1284)
Emerging/ FM	2.0% (20) 5.1% (487)	6.3% (48) 7.6% (584)	10.4% (67) 7.7% (525)	18.7% (135) 20.3% (1596)
Total	25.7% (168) 25.3% (1315)	37.9% (188) 38.5% (1489)	36.4% (149) 36.2% (1324)	100.0% (505) 100.0% (4128)

Combined Z-Score Style Distribution Holdings as of September 30, 2019



Sector Weights Distribution Holdings as of September 30, 2019



FIS Group Non-U.S. Small Cap Equity Characteristics Analysis Summary

Portfolio Characteristics

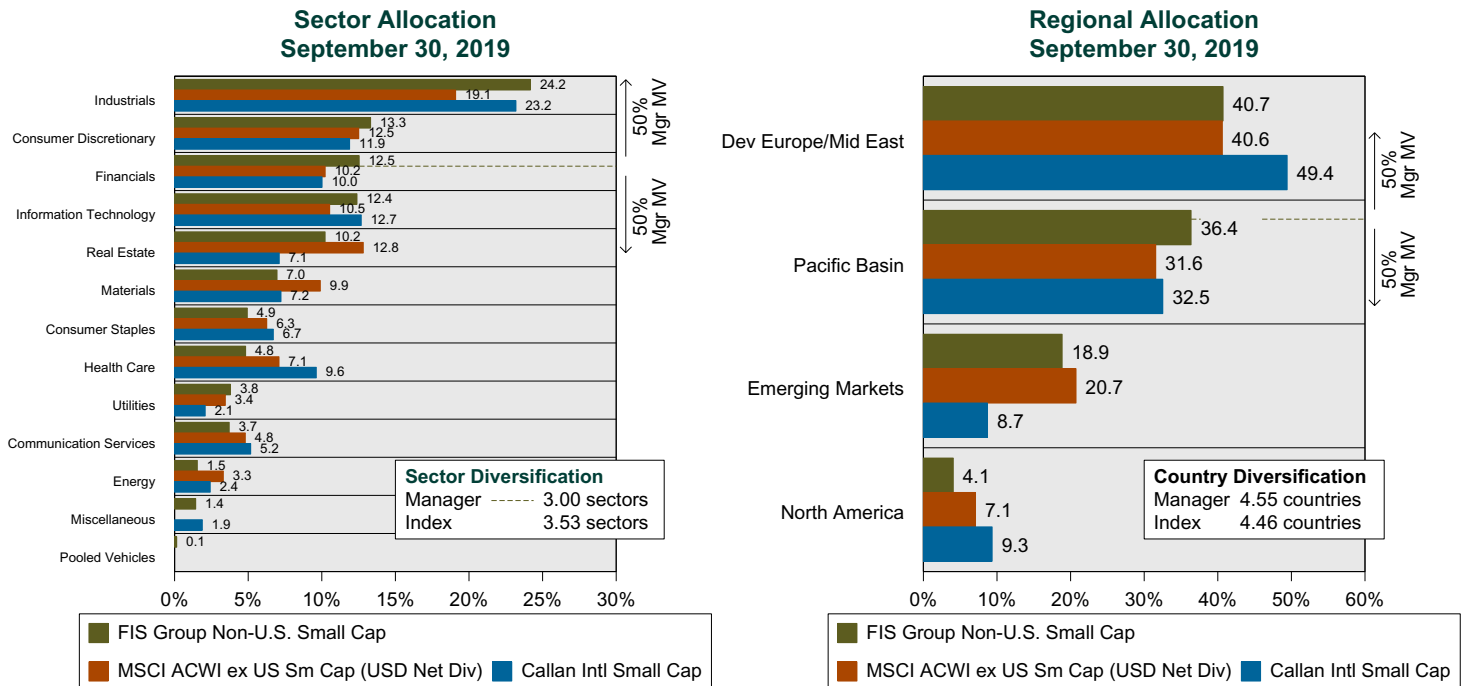
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

Portfolio Characteristics Percentile Rankings Rankings Against Callan International Small Cap as of September 30, 2019



Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. The regional allocation chart compares the manager's geographical region weights with those of the benchmark as well as the median region weights of the peer group.



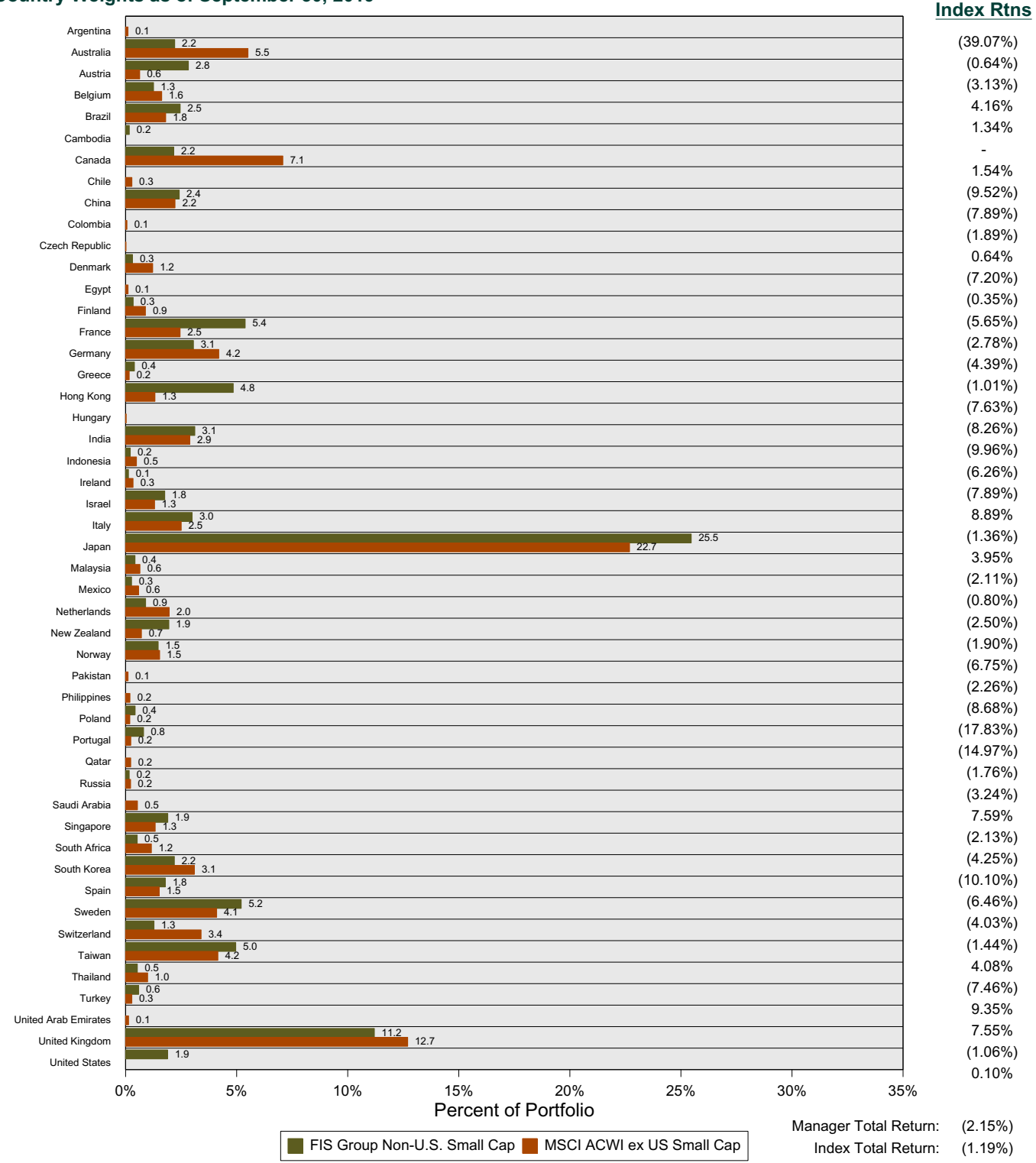
Country Allocation

FIS Group Non-U.S. Small Cap VS MSCI ACWI ex US Sm Cap (USD Net Div)

Country Allocation

The chart below contrasts the portfolio's country allocation with that of the index as of September 30, 2019. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent quarter. To the extent that the portfolio allocation is similar to the index, the portfolio should experience more "index-like" performance. In order to illustrate the performance effect on the portfolio and index of these country allocations, the individual index country returns are also shown.

Country Weights as of September 30, 2019



Harris Assoc Int'l SCV Period Ended September 30, 2019

Investment Philosophy

The team seeks to invest in companies that trade at a substantial discount to their underlying business values and are run by managers who think and act as owners. Portfolio managers believe that purchasing a quality business at a discount to its underlying value minimizes risk while providing substantial profit potential.

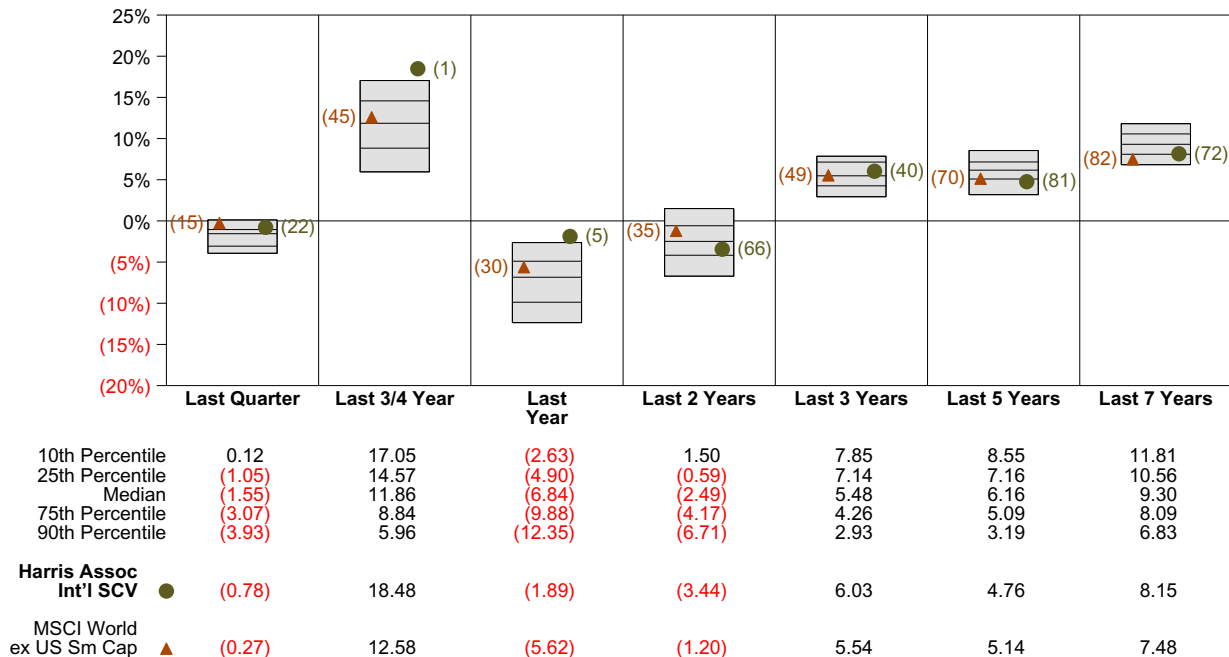
Quarterly Summary and Highlights

- Harris Assoc Int'l SCV's portfolio posted a (0.78)% return for the quarter placing it in the 22 percentile of the Callan International Small Cap group for the quarter and in the 5 percentile for the last year.
- Harris Assoc Int'l SCV's portfolio underperformed the MSCI World ex US Sm Cap by 0.51% for the quarter and outperformed the MSCI World ex US Sm Cap for the year by 3.73%.

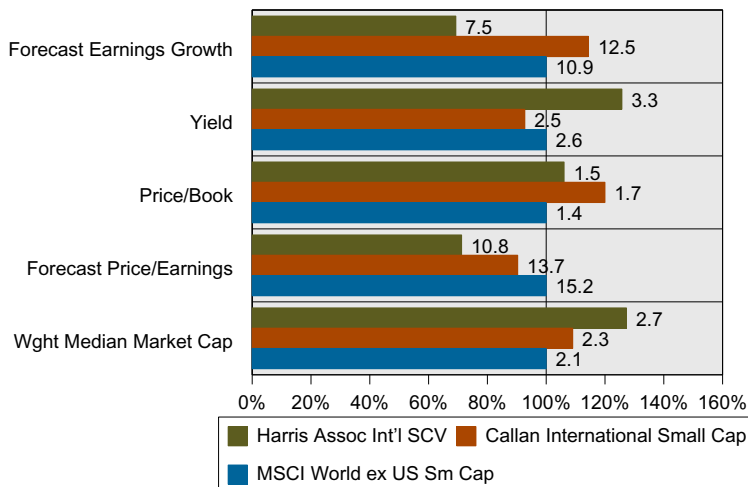
Quarterly Asset Growth

Beginning Market Value	\$572,085,456
Net New Investment	\$0
Investment Gains/(Losses)	\$-4,386,599
Ending Market Value	\$567,698,857

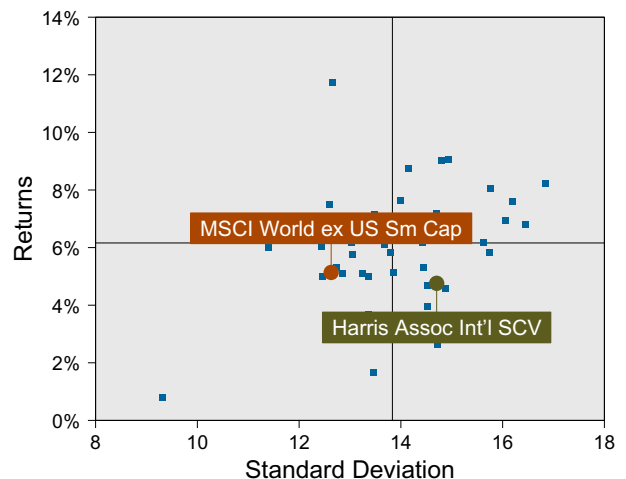
Performance vs Callan International Small Cap (Gross)



Portfolio Characteristics as a Percentage of the MSCI World ex US Sm Cap



Callan International Small Cap (Gross) Annualized Five Year Risk vs Return

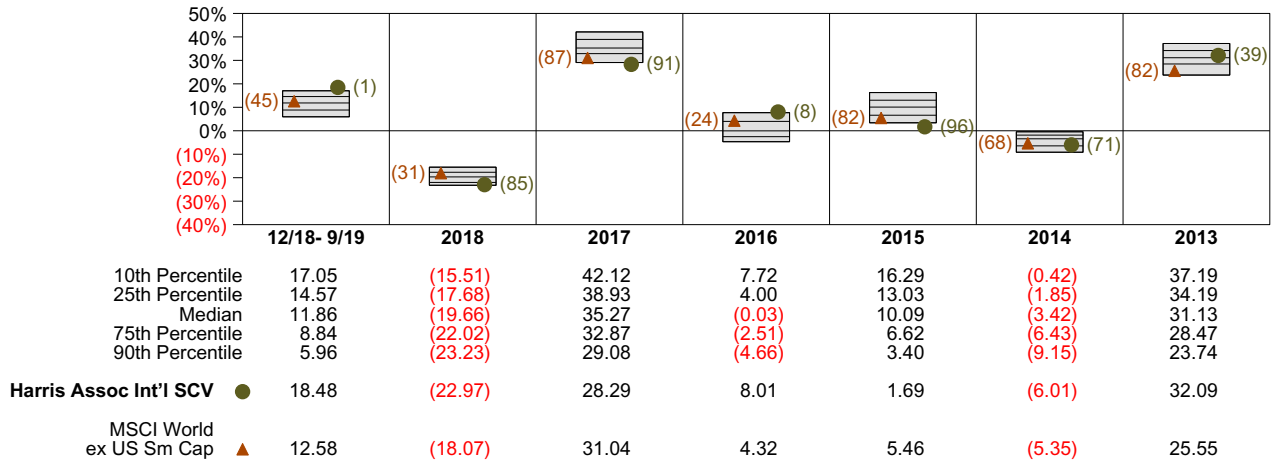


Harris Assoc Int'l SCV Return Analysis Summary

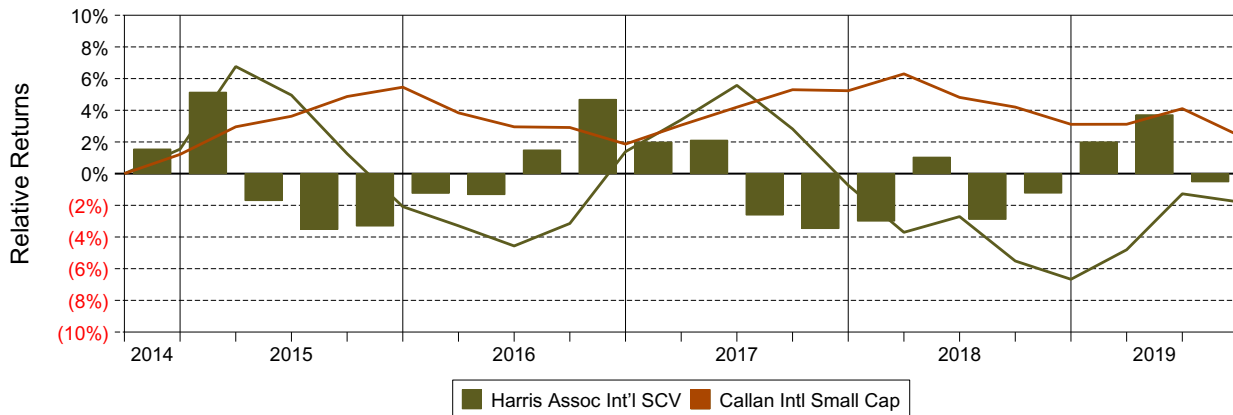
Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

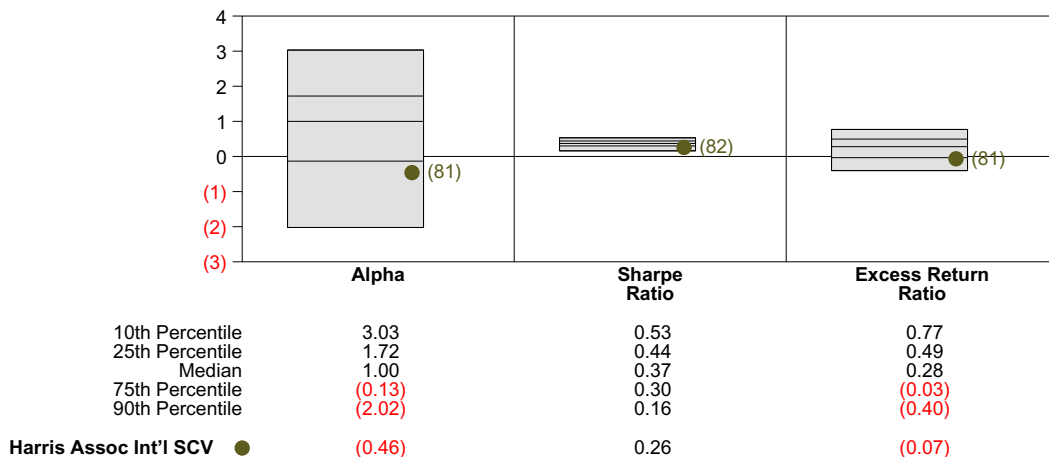
Performance vs Callan International Small Cap (Gross)



Cumulative and Quarterly Relative Return vs MSCI World ex US Sm Cap



Risk Adjusted Return Measures vs MSCI World ex US Sm Cap Rankings Against Callan International Small Cap (Gross) Five Years Ended September 30, 2019



Harris Assoc Int'l SCV Risk Analysis Summary

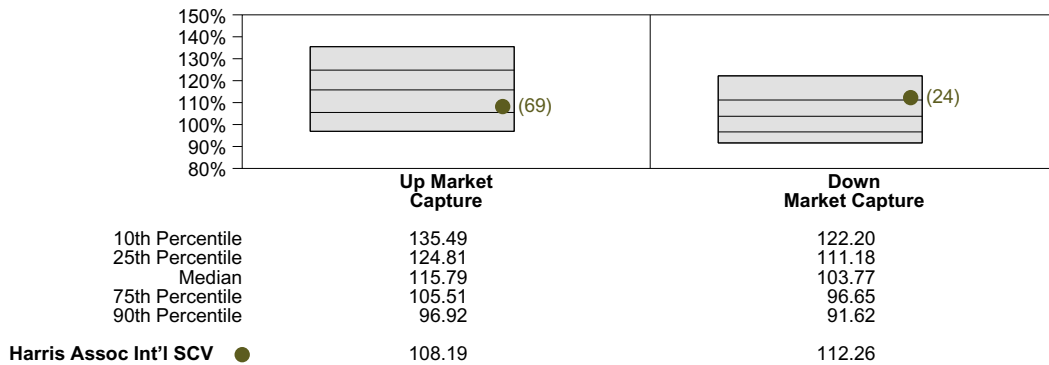
Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows Up and Down Market Capture. The last two charts show the ranking of the manager's risk statistics versus the peer group.

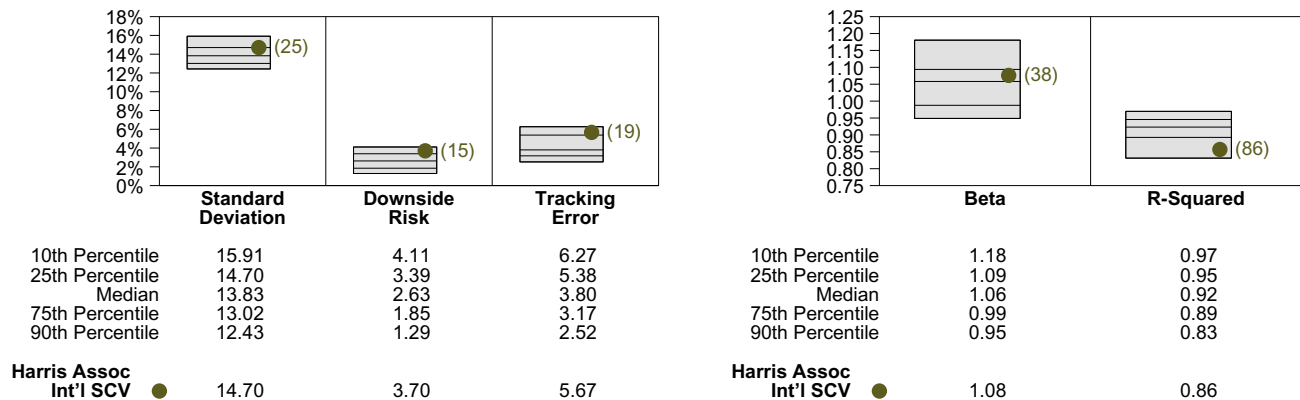
Risk Analysis vs Callan International Small Cap (Gross) Five Years Ended September 30, 2019



Market Capture vs MSCI World ex US Small Cap (USD Net Div) Rankings Against Callan International Small Cap (Gross) Five Years Ended September 30, 2019



Risk Statistics Rankings vs MSCI World ex US Small Cap (USD Net Div) Rankings Against Callan International Small Cap (Gross) Five Years Ended September 30, 2019



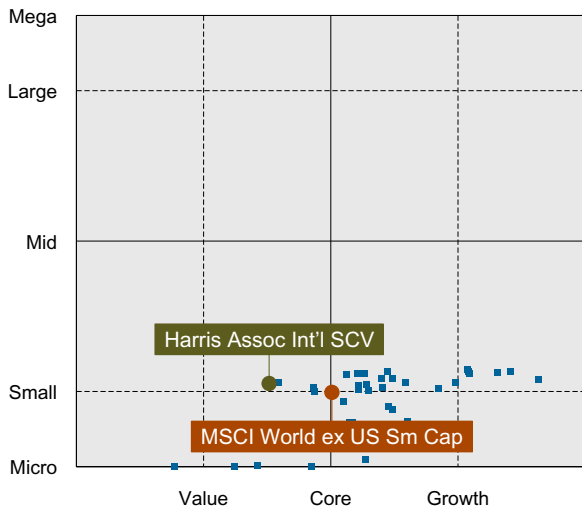
Current Holdings Based Style Analysis

Harris Assoc Int'l SCV

As of September 30, 2019

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various regional and style segments of the international/global equity market. The market is segmented quarterly by region and style. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the current portfolio and index weights and stock counts (in parentheses) in each region/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

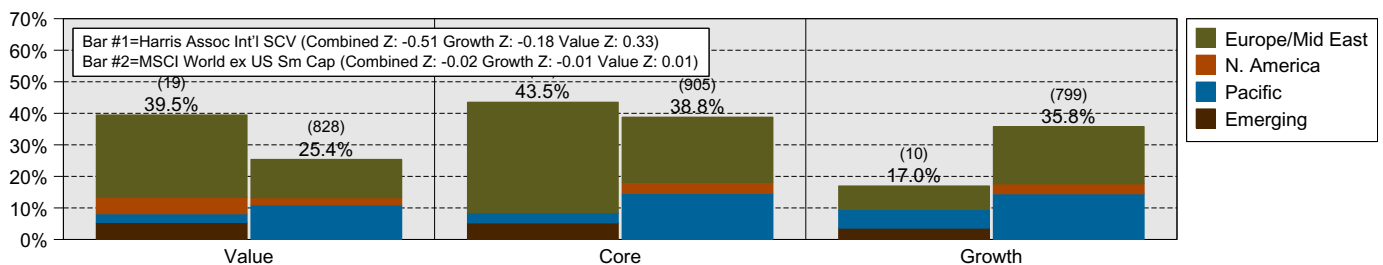
Style Map vs Callan Intl Small Cap Holdings as of September 30, 2019



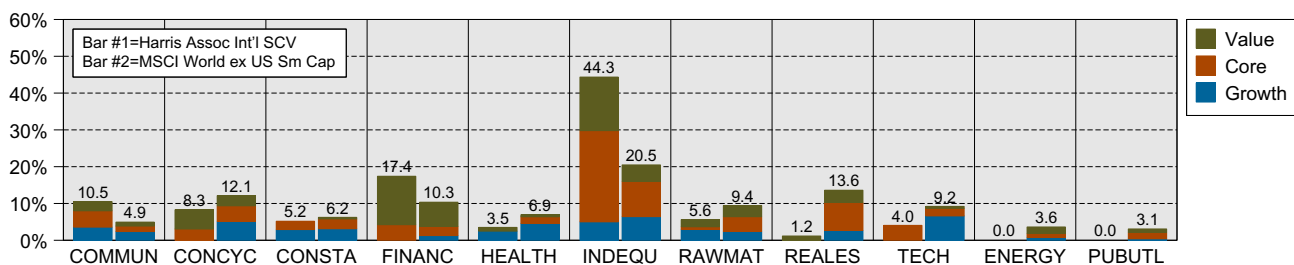
Style Exposure Matrix Holdings as of September 30, 2019

	Value	Core	Growth	Total
Europe/ Mid East	26.2% (11) 12.2% (316)	35.1% (20) 20.6% (395)	7.5% (6) 18.2% (327)	68.7% (37) 51.0% (1038)
N. America	5.2% (3) 2.2% (74)	0.0% (0) 3.6% (77)	0.0% (0) 3.1% (59)	5.2% (3) 9.0% (210)
Pacific	2.6% (3) 11.0% (438)	3.2% (4) 14.6% (433)	5.9% (2) 14.5% (413)	11.8% (9) 40.0% (1284)
Emerging	5.5% (2) 0.0% (0)	5.2% (4) 0.0% (0)	3.6% (2) 0.0% (0)	14.3% (8) 0.0% (0)
Total	39.5% (19) 25.4% (828)	43.5% (28) 38.8% (905)	17.0% (10) 35.8% (799)	100.0% (57) 100.0% (2532)

Combined Z-Score Style Distribution Holdings as of September 30, 2019



Sector Weights Distribution Holdings as of September 30, 2019

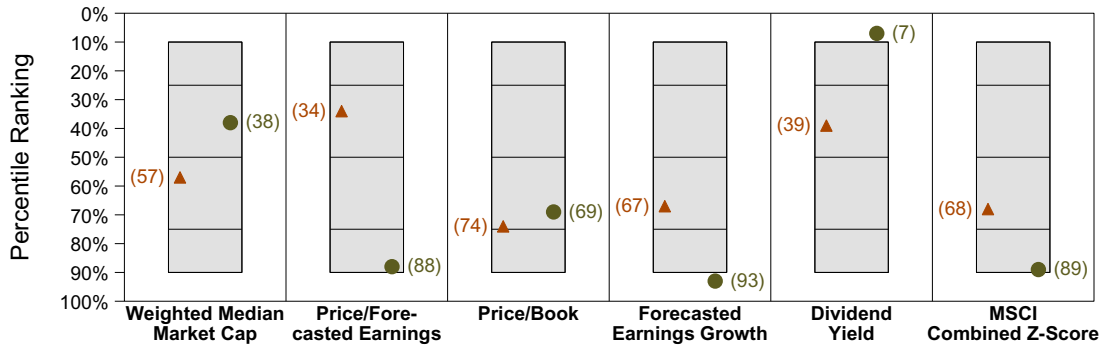


Harris Assoc Int'l SCV Equity Characteristics Analysis Summary

Portfolio Characteristics

This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

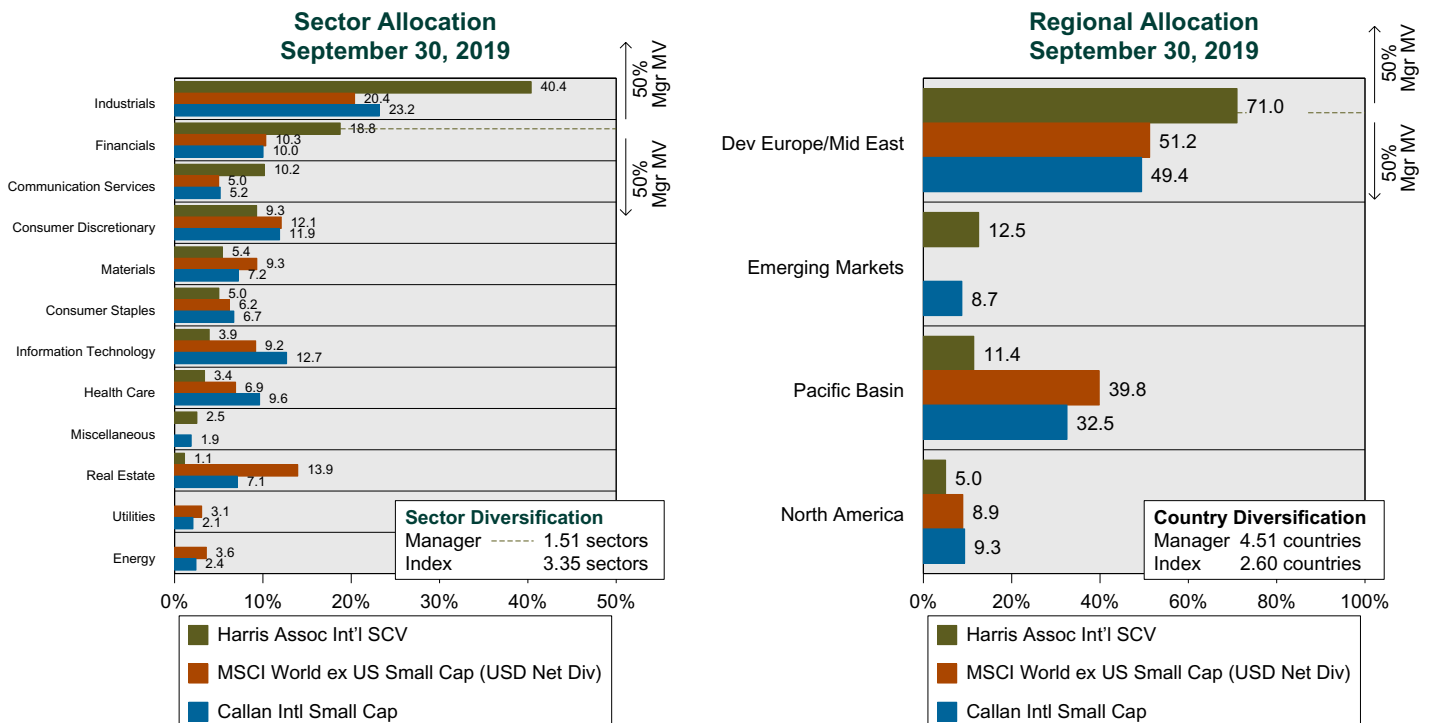
Portfolio Characteristics Percentile Rankings Rankings Against Callan International Small Cap as of September 30, 2019



	Weighted Median Market Cap	Price/Forecasted Earnings	Price/Book	Forecasted Earnings Growth	Dividend Yield	MSCI Combined Z-Score
10th Percentile	3.56	20.49	3.42	18.37	3.16	0.97
25th Percentile	3.05	17.19	2.38	14.76	2.88	0.48
Median	2.32	13.74	1.69	12.46	2.45	0.19
75th Percentile	1.50	12.38	1.33	10.10	2.04	(0.17)
90th Percentile	1.10	10.39	1.05	7.98	1.30	(0.59)
Harris Assoc Int'l SCV (Green Circle)	2.71	10.84	1.50	7.54	3.33	(0.51)
MSCI World ex US Small Cap (USD Net Div) (Orange Triangle)	2.13	15.21	1.41	10.89	2.65	(0.02)

Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. The regional allocation chart compares the manager's geographical region weights with those of the benchmark as well as the median region weights of the peer group.



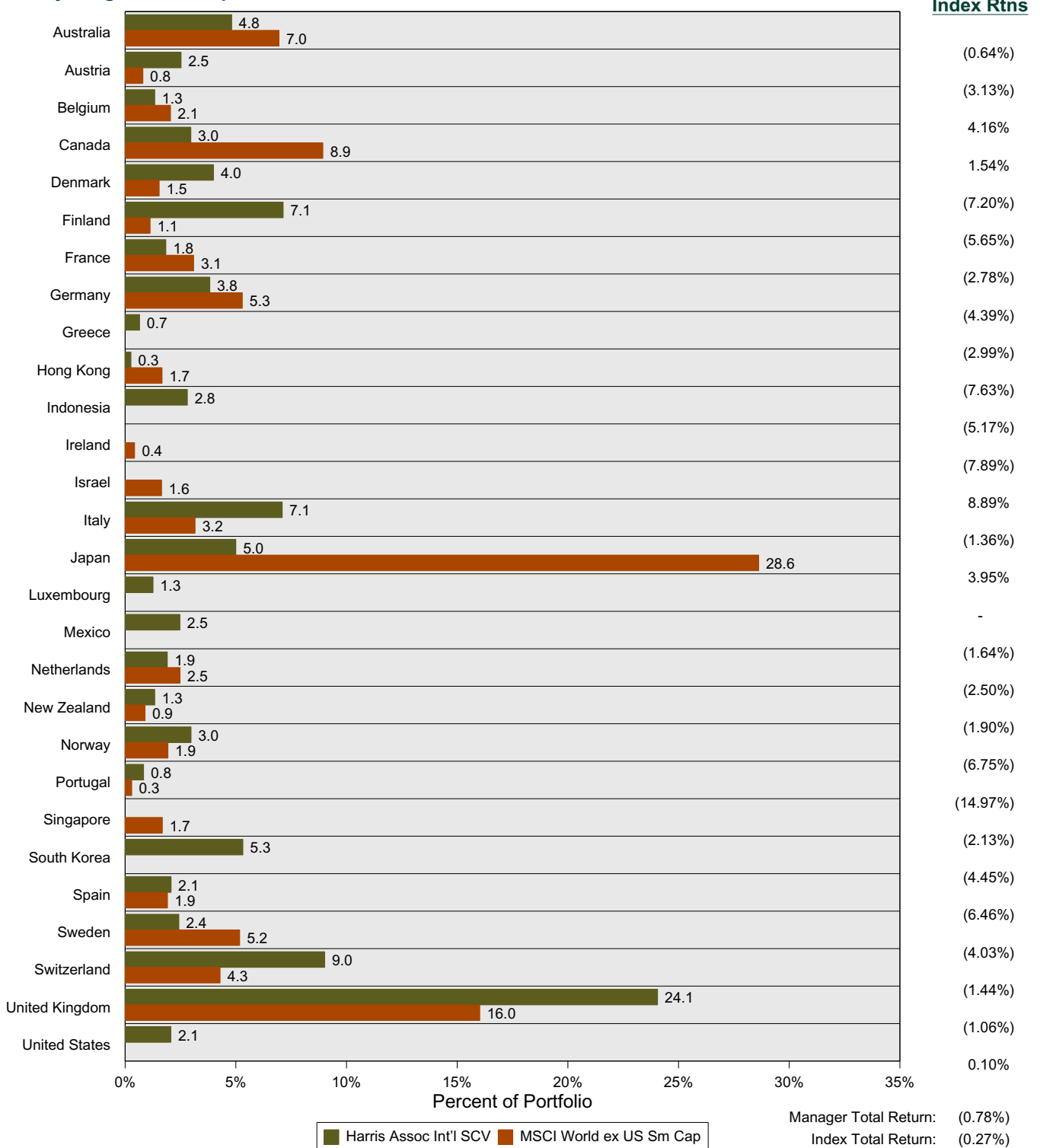
Country Allocation

Harris Assoc Int'l SCV VS MSCI World ex US Small Cap (USD Net Div)

Country Allocation

The chart below contrasts the portfolio's country allocation with that of the index as of September 30, 2019. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent quarter. To the extent that the portfolio allocation is similar to the index, the portfolio should experience more "index-like" performance. In order to illustrate the performance effect on the portfolio and index of these country allocations, the individual index country returns are also shown.

Country Weights as of September 30, 2019



Emerging Mkts Equity Period Ended September 30, 2019

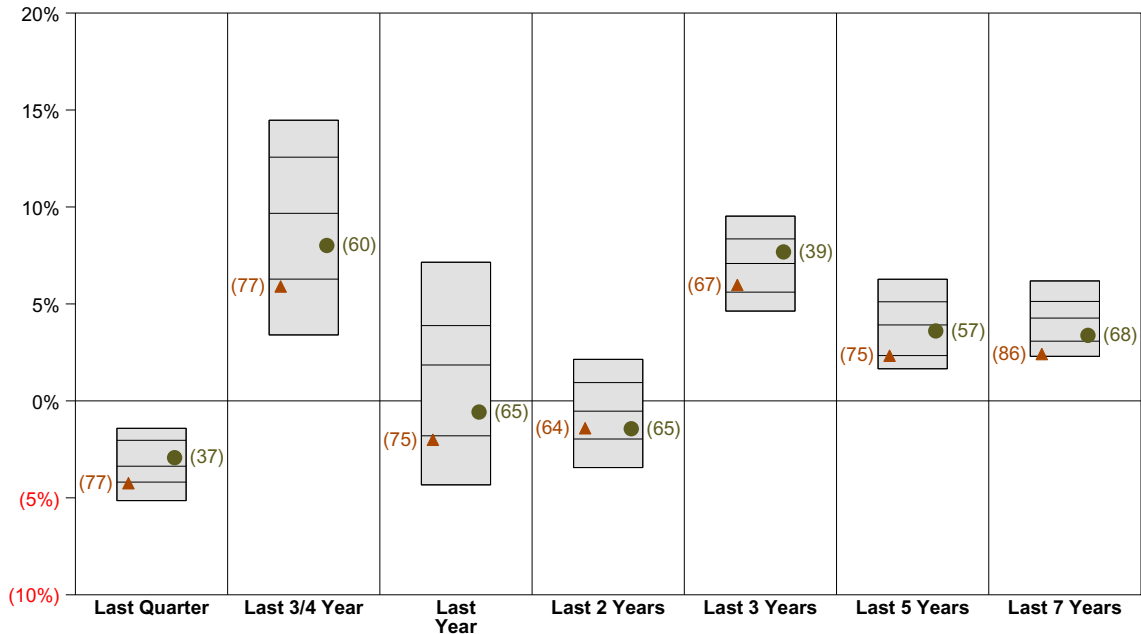
Quarterly Summary and Highlights

- Emerging Mkts Equity's portfolio posted a (2.93)% return for the quarter placing it in the 37 percentile of the Callan Emerging Broad group for the quarter and in the 65 percentile for the last year.
- Emerging Mkts Equity's portfolio outperformed the MSCI EM by 1.32% for the quarter and outperformed the MSCI EM for the year by 1.43%.

Quarterly Asset Growth

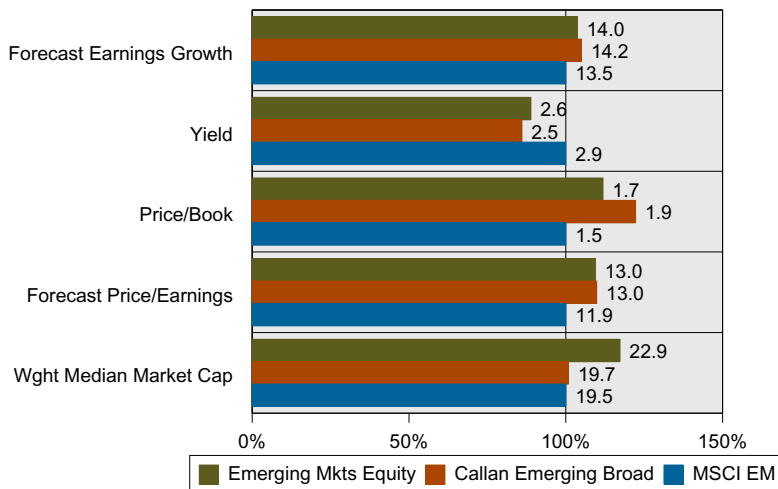
Beginning Market Value	\$1,855,115,408
Net New Investment	\$-1,472,213
Investment Gains/(Losses)	\$-54,236,650
Ending Market Value	\$1,799,406,544

Performance vs Callan Emerging Broad (Gross)

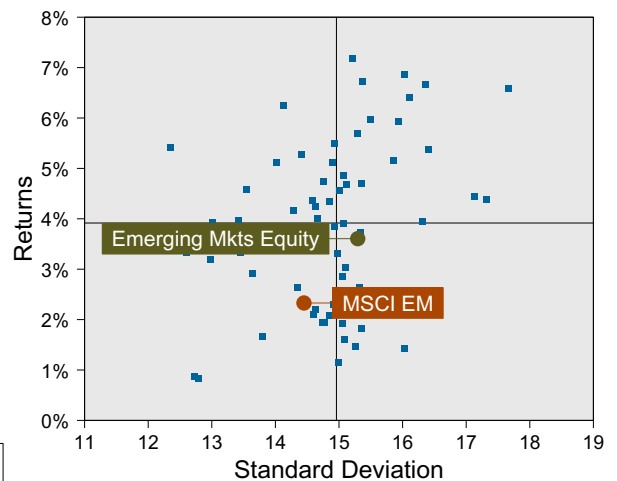


10th Percentile	(1.41)	14.47	7.15	2.14	9.53	6.27	6.19
25th Percentile	(2.03)	12.57	3.88	0.94	8.35	5.11	5.13
Median	(3.37)	9.67	1.85	(0.53)	7.08	3.92	4.27
75th Percentile	(4.19)	6.28	(1.80)	(1.97)	5.61	2.34	3.08
90th Percentile	(5.14)	3.40	(4.33)	(3.44)	4.63	1.66	2.30
Emerging Mkts Equity	● (2.93)	8.01	(0.58)	(1.44)	7.68	3.61	3.38
MSCI EM	▲ (4.25)	5.90	(2.01)	(1.41)	5.98	2.33	2.41

Portfolio Characteristics as a Percentage of the MSCI EM



Callan Emerging Broad (Gross) Annualized Five Year Risk vs Return

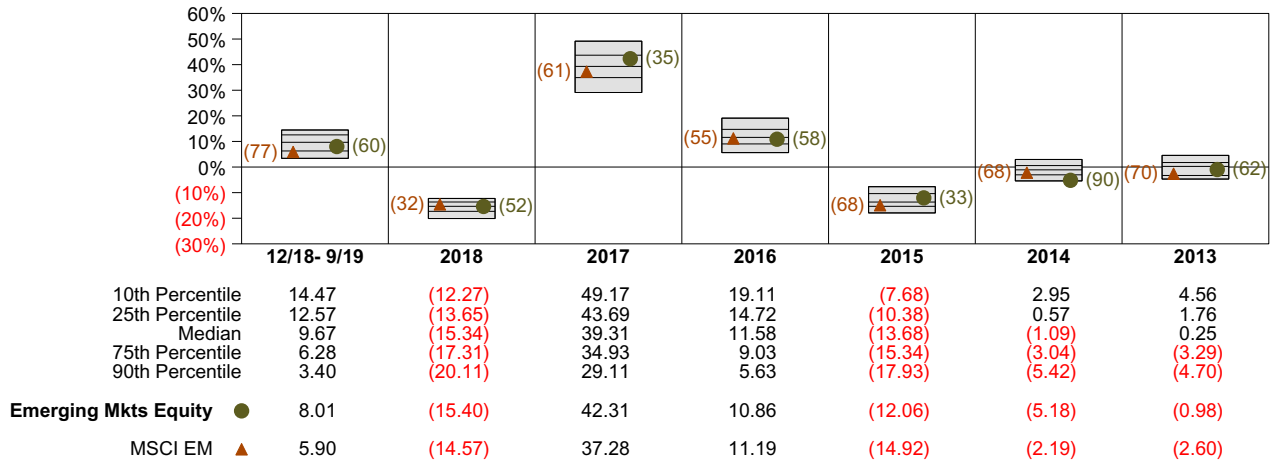


Emerging Mkts Equity Return Analysis Summary

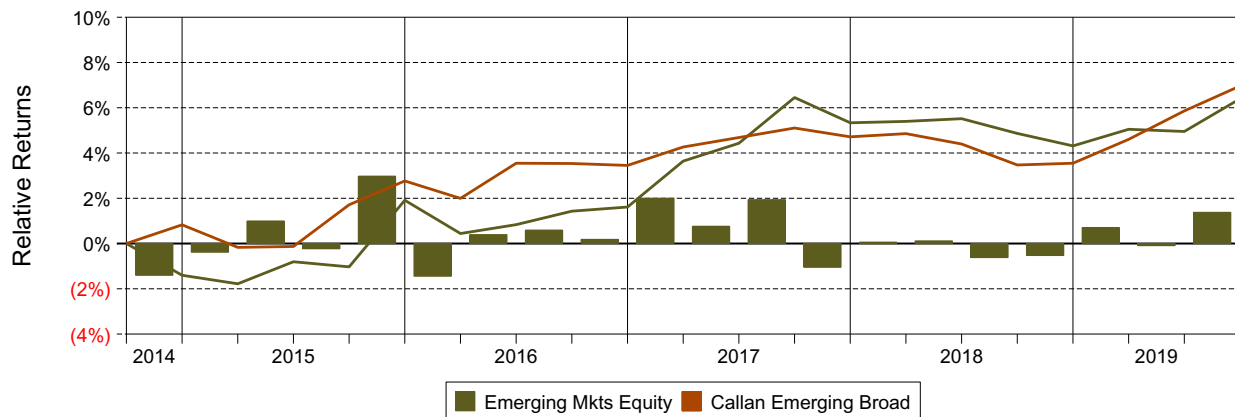
Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

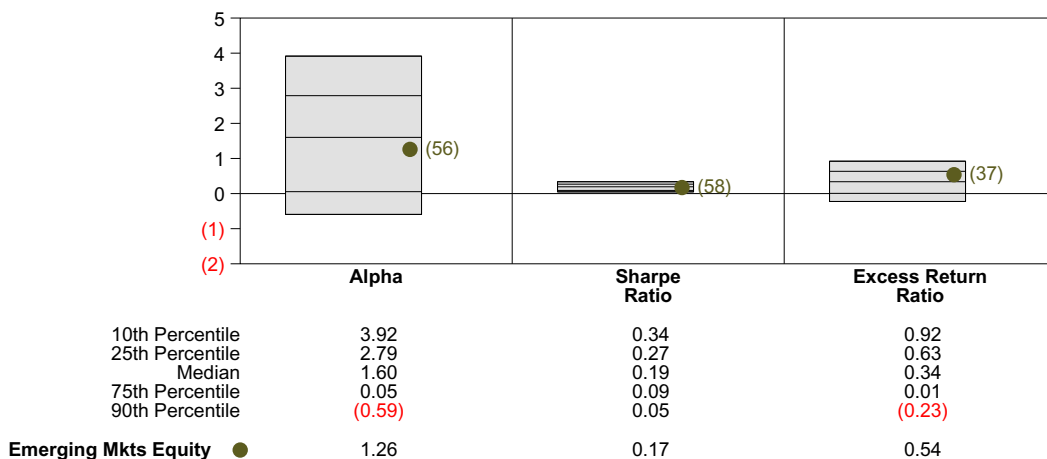
Performance vs Callan Emerging Broad (Gross)



Cumulative and Quarterly Relative Return vs MSCI EM



Risk Adjusted Return Measures vs MSCI EM Rankings Against Callan Emerging Broad (Gross) Five Years Ended September 30, 2019

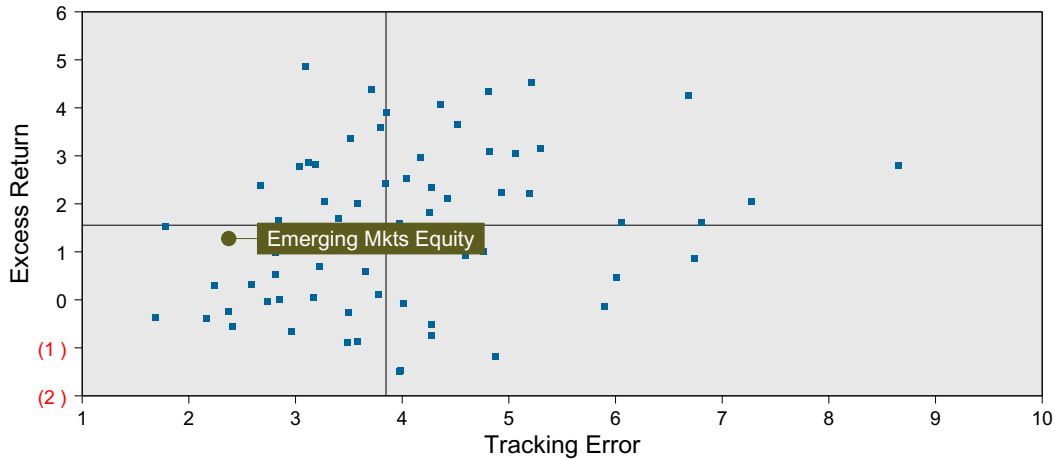


Emerging Mkts Equity Risk Analysis Summary

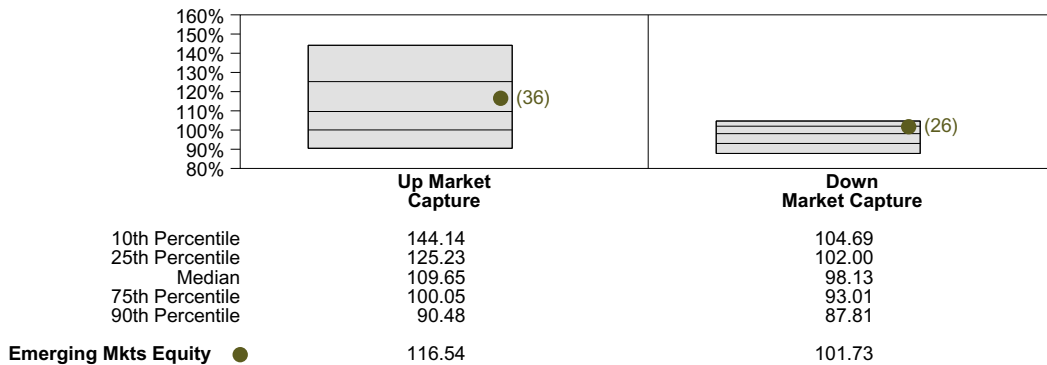
Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows Up and Down Market Capture. The last two charts show the ranking of the manager's risk statistics versus the peer group.

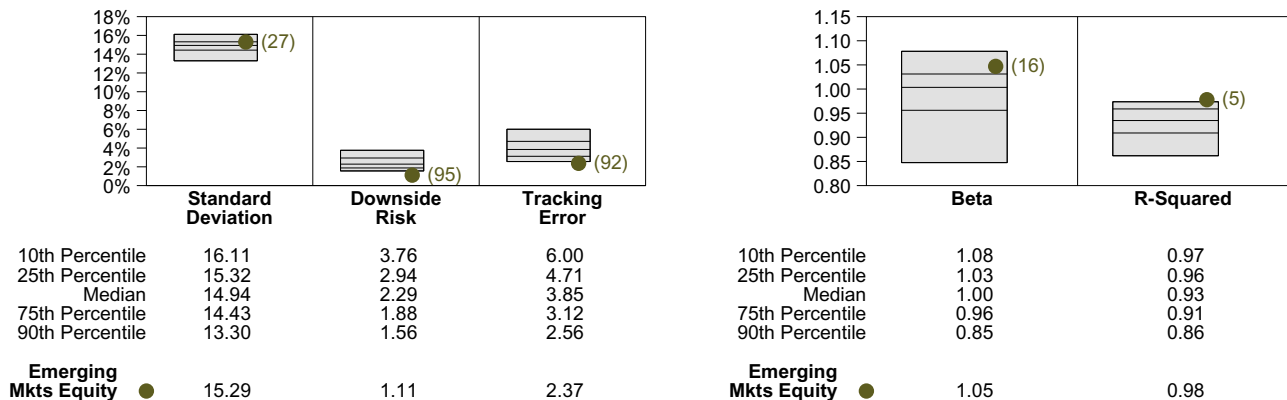
Risk Analysis vs Callan Emerging Broad (Gross) Five Years Ended September 30, 2019



Market Capture vs MSCI EM - Emerging Mkts (USD Net Div) Rankings Against Callan Emerging Broad (Gross) Five Years Ended September 30, 2019



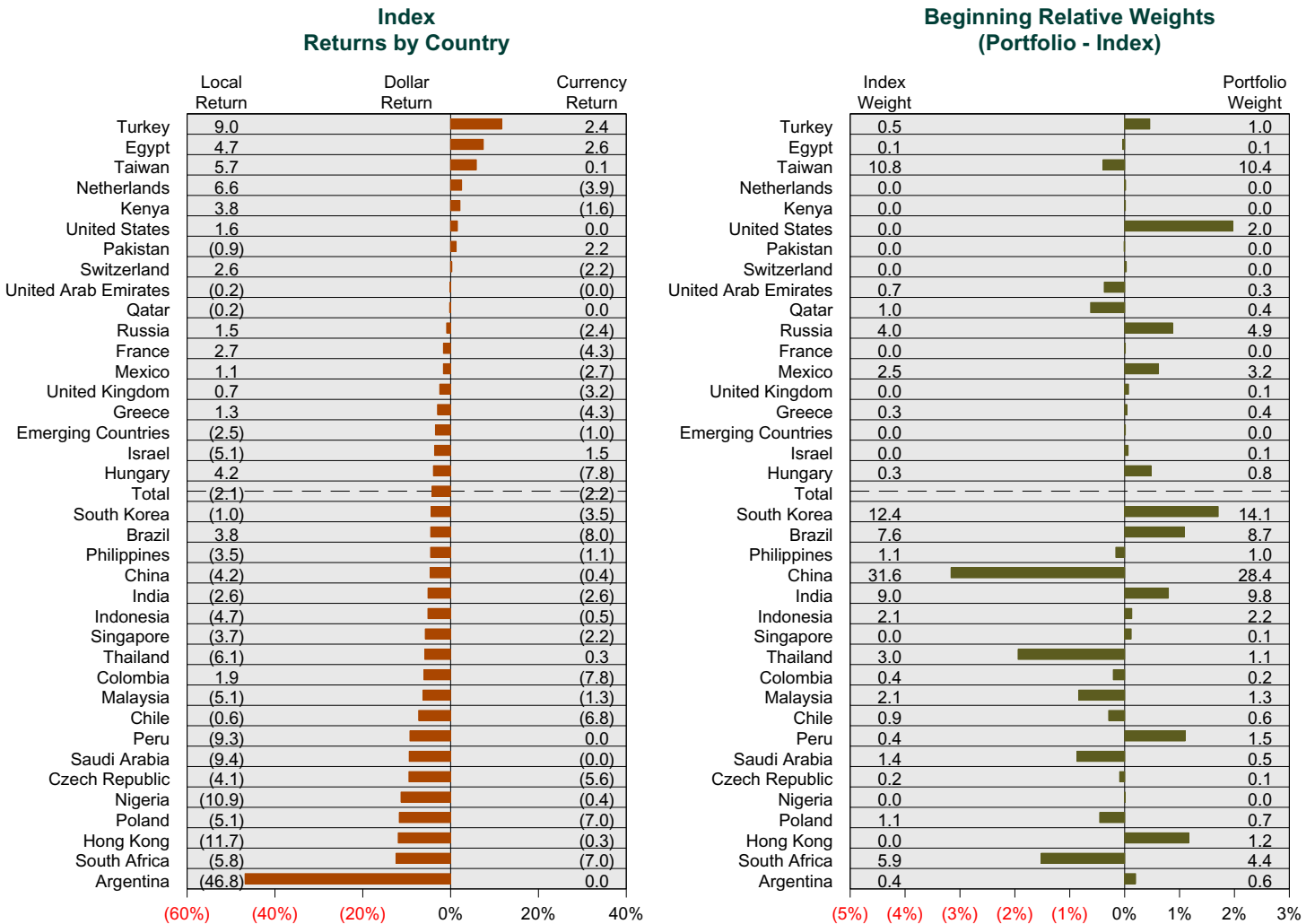
Risk Statistics Rankings vs MSCI EM - Emerging Mkts (USD Net Div) Rankings Against Callan Emerging Broad (Gross) Five Years Ended September 30, 2019



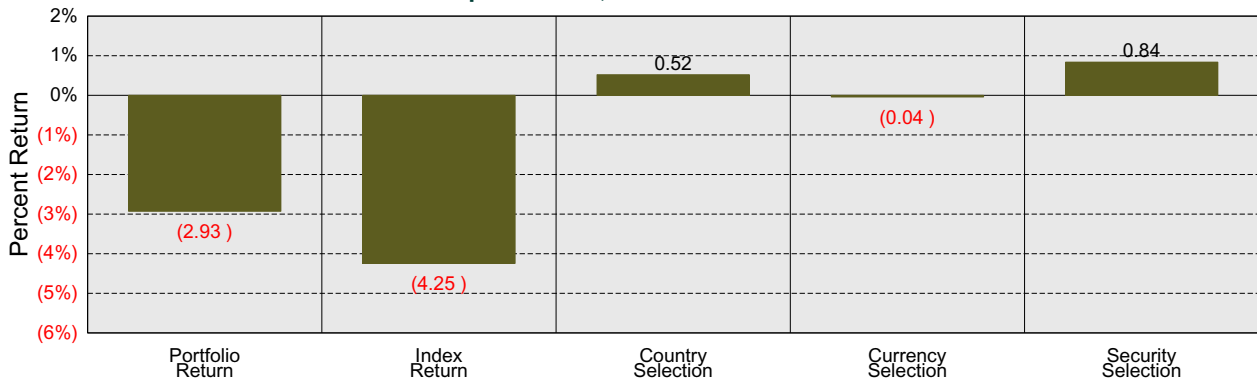
Emerging Mkts Equity vs MSCI EM Attribution for Quarter Ended September 30, 2019

International Attribution

The first chart below illustrates the return for each country in the index sorted from high to low. The total return for the index is highlighted with a dotted line. The second chart (countries presented in the same order) illustrates the manager's country allocation decisions relative to the index. To the extent that the manager over-weighted a country that had a higher return than the total return for the index (above the dotted line) it contributes positively to the manager's country (or currency) selection effect. The last chart details the manager return, the index return, and the attribution factors for the quarter.



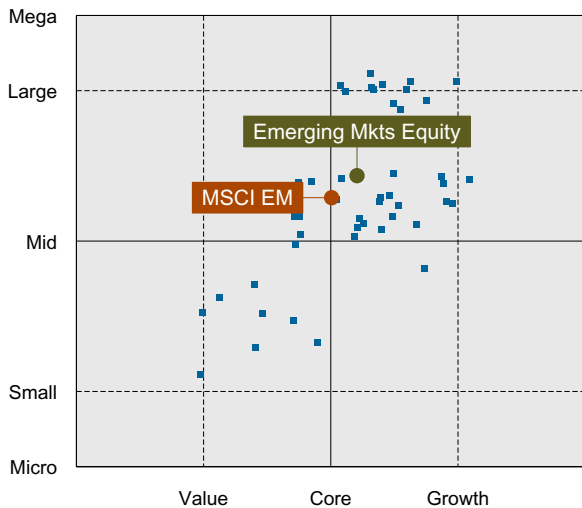
Attribution Factors for Quarter Ended September 30, 2019



Current Holdings Based Style Analysis Emerging Mkts Equity As of September 30, 2019

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various regional and style segments of the international/global equity market. The market is segmented quarterly by region and style. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left chart illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right chart displays the current portfolio and index weights and stock counts (in parentheses) in each capitalization/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

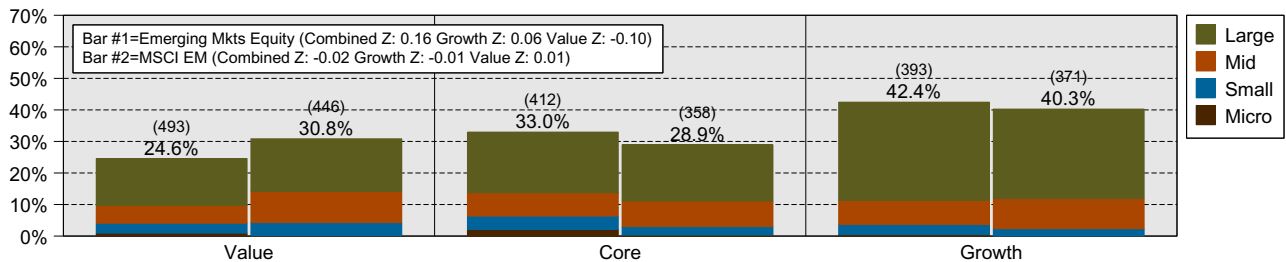
Style Map vs Callan Emerging Broad Holdings as of September 30, 2019



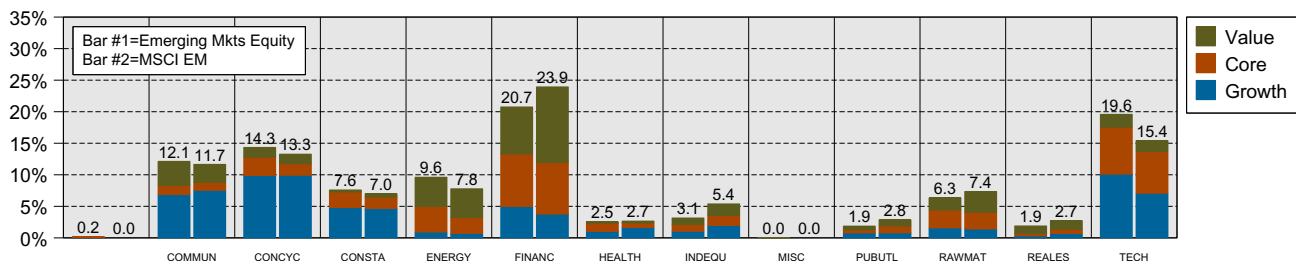
Style Exposure Matrix Holdings as of September 30, 2019

	Value	Core	Growth	Total
Large	14.9% (94)	19.2% (74)	31.1% (93)	65.2% (261)
	16.7% (84)	17.8% (72)	28.4% (88)	62.8% (244)
Mid	5.7% (163)	7.4% (156)	7.6% (167)	20.7% (486)
	9.9% (179)	8.1% (167)	9.5% (189)	27.5% (535)
Small	3.1% (191)	4.3% (140)	3.2% (114)	10.6% (445)
	4.2% (174)	2.7% (117)	2.3% (92)	9.2% (383)
Micro	0.9% (45)	2.1% (42)	0.5% (19)	3.5% (106)
	0.1% (9)	0.3% (2)	0.0% (2)	0.4% (13)
Total	24.6% (493)	33.0% (412)	42.4% (393)	100.0% (1298)
	30.8% (446)	28.9% (358)	40.3% (371)	100.0% (1175)

Combined Z-Score Style Distribution Holdings as of September 30, 2019



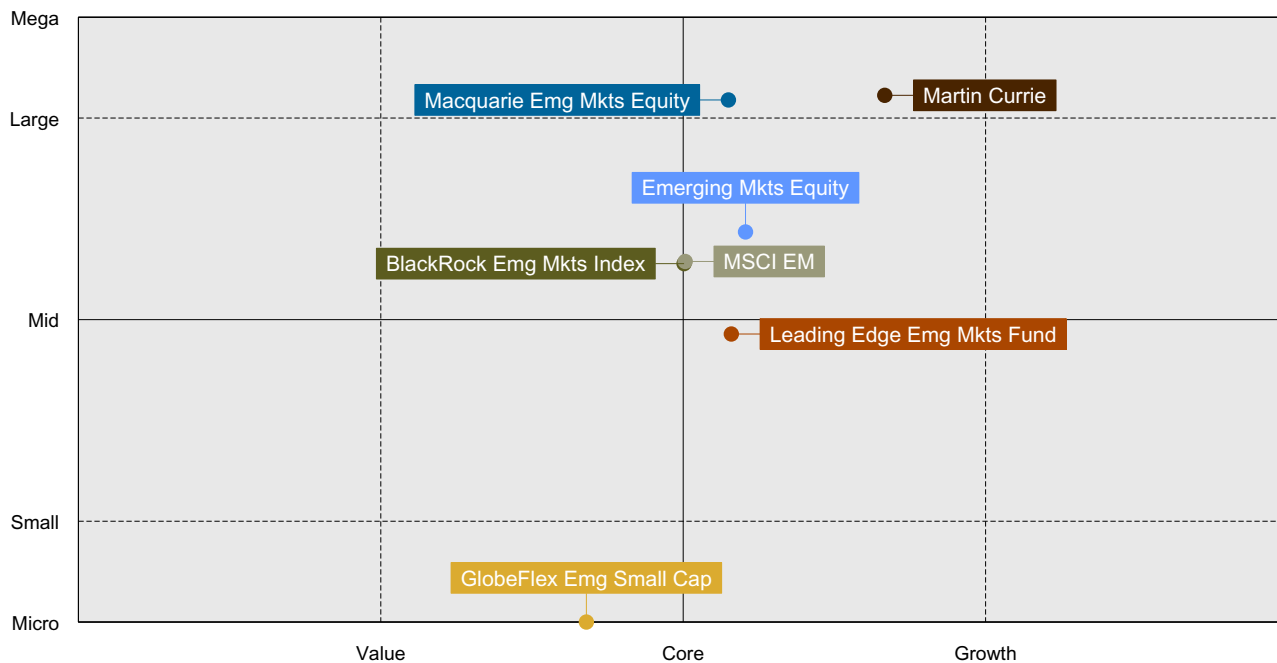
Sector Weights Distribution Holdings as of September 30, 2019



International Holdings Based Style Analysis For One Quarter Ended September 30, 2019

This page analyzes and compares the investment styles of multiple portfolios using a detailed holdings-based style analysis methodology. The size component of style is measured by the weighted median market capitalization of the holdings. The value/core/growth style dimension is captured by the "Combined Z-Score" of the portfolio. This score is based on eight fundamental factors used in the MSCI stock style scoring system. The table below gives a more detailed breakdown of several relevant style metrics on the portfolios.

Style Map Holdings for One Quarter Ended September 30, 2019



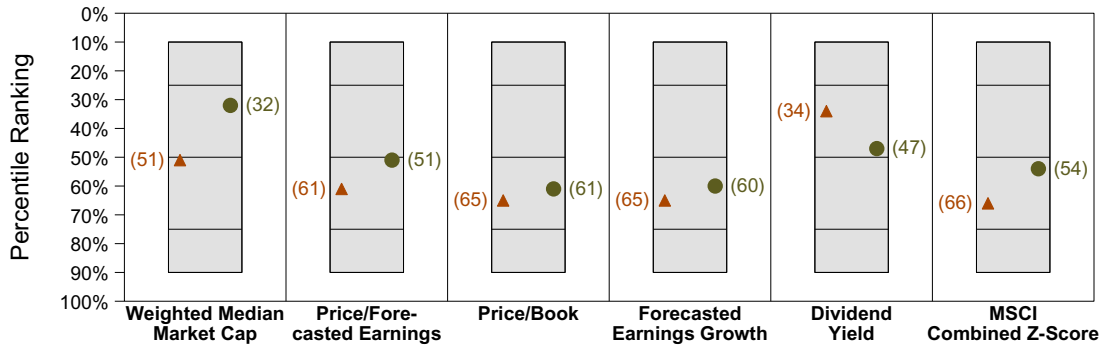
	Weight %	Wtd Median Mkt Cap	Combined Z-Score	Growth Z-Score	Value Z-Score	Number of Securities	Security Diversification
BlackRock Emg Mkts Index	36.66%	19.24	(0.02)	(0.01)	0.01	1178	76.83
Leading Edge Emg Mkts Fund	11.80%	12.09	0.12	0.09	(0.03)	233	43.66
Macquarie Emg Mkts Equity	22.72%	50.23	0.11	(0.07)	(0.18)	123	13.14
Martin Currie	23.95%	53.91	0.59	0.25	(0.34)	48	11.69
GlobeFlex Emg Small Cap	4.87%	0.45	(0.35)	0.19	0.54	131	24.24
Emerging Mkts Equity	100.00%	22.86	0.16	0.06	(0.10)	1461	49.07
MSCI EM	-	19.49	(0.02)	(0.01)	0.01	1187	79.46

Emerging Mkts Equity Equity Characteristics Analysis Summary

Portfolio Characteristics

This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

Portfolio Characteristics Percentile Rankings Rankings Against Callan Emerging Broad as of September 30, 2019

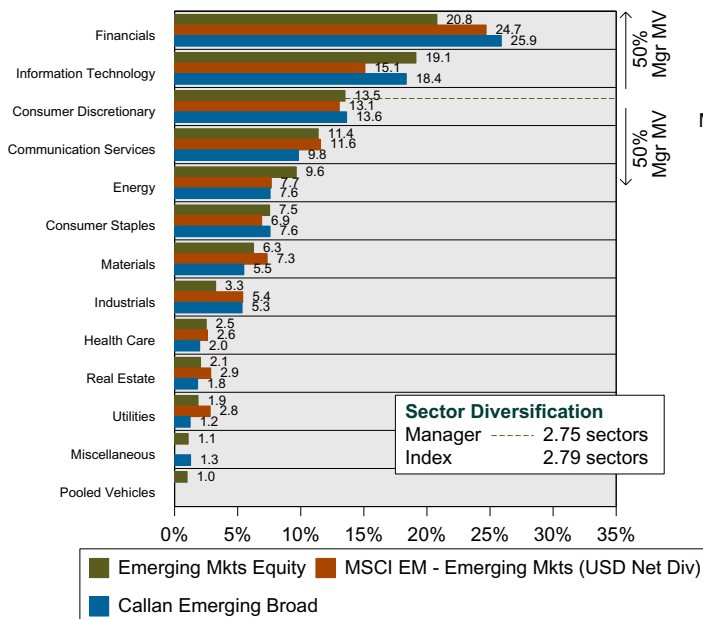


	Weighted Median Market Cap	Price/Forecasted Earnings	Price/Book	Forecasted Earnings Growth	Dividend Yield	MSCI Combined Z-Score
10th Percentile	40.40	19.49	3.22	17.90	3.65	0.79
25th Percentile	30.42	15.45	2.41	16.15	3.29	0.49
Median	19.66	13.04	1.89	14.19	2.47	0.23
75th Percentile	14.87	10.08	1.38	12.31	2.11	(0.29)
90th Percentile	7.73	8.87	1.15	11.37	1.81	(0.60)
Emerging Mkts Equity ●	22.86	12.99	1.73	14.01	2.56	0.16
MSCI EM - Emerging Mkts (USD Net Div) ▲	19.49	11.87	1.54	13.51	2.88	(0.02)

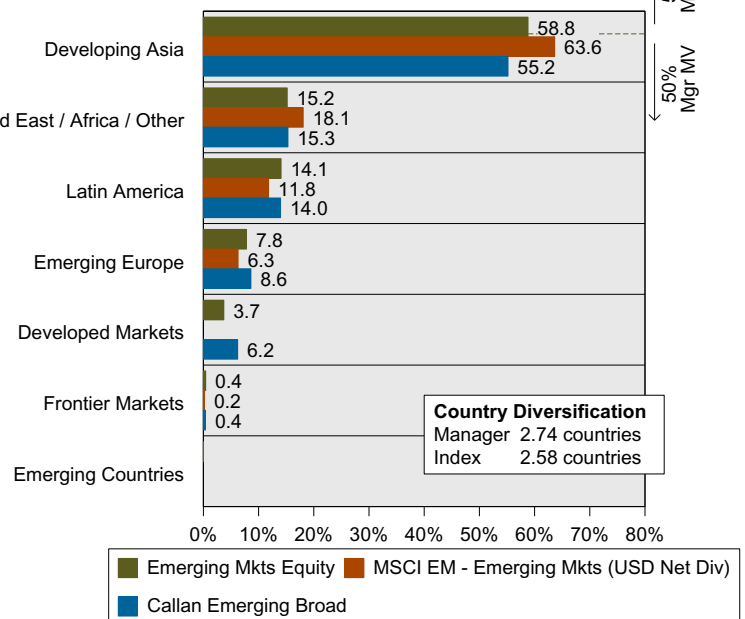
Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. The regional allocation chart compares the manager's geographical region weights with those of the benchmark as well as the median region weights of the peer group.

Sector Allocation September 30, 2019



Regional Allocation September 30, 2019

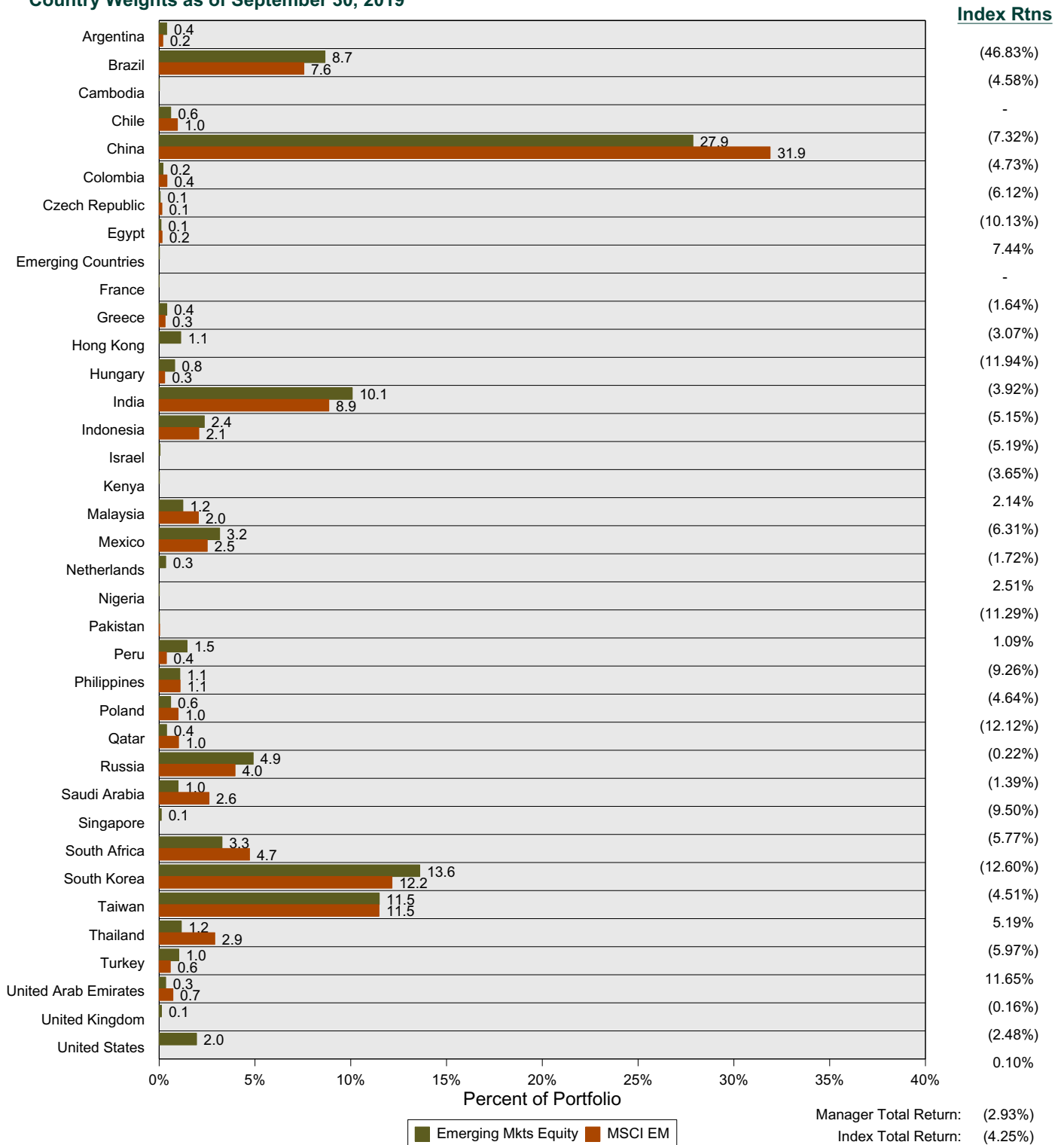


Country Allocation Emerging Mkts Equity VS MSCI EM - Emerging Mkts (USD Net Div)

Country Allocation

The chart below contrasts the portfolio's country allocation with that of the index as of September 30, 2019. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent quarter. To the extent that the portfolio allocation is similar to the index, the portfolio should experience more "index-like" performance. In order to illustrate the performance effect on the portfolio and index of these country allocations, the individual index country returns are also shown.

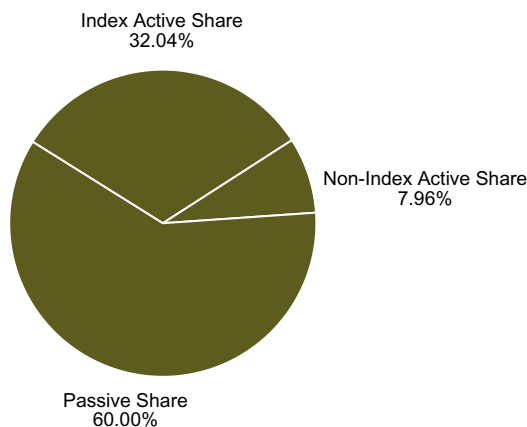
Country Weights as of September 30, 2019



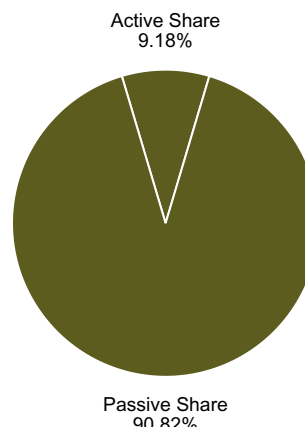
Emerging Mkts Equity Active Share Analysis as of September 30, 2019 vs. MSCI EM - Emerging Mkts (USD Net Div)

Active Share analysis compares the holdings of a portfolio to an index to measure how aggressively it differs from the index. Active share is measured at the individual stock level ("holdings-level active share") and using sector weights ("sector exposure active share"). Holdings-level active share comes from: 1) Index Active Share - over/under weighting of stocks in the index, and 2) Non-Index Active Share - positions in stocks not in the index. This analysis displays active share by sector and compares the portfolio to a relevant peer group.

Holdings-Level Active Share



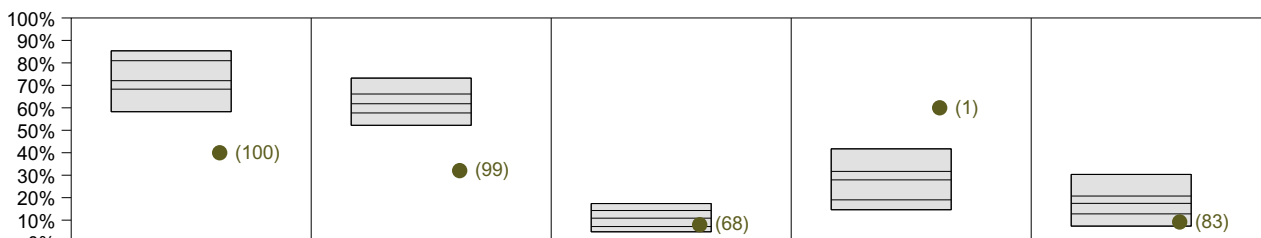
Sector Exposure Active Share



Total Active Share: 40.00%

	Index Active Share Within Sector	Non-Index Active Share Within Sector	Total Active Share Within Sector	Index Weight	Manager Weight	Contribution to Total Portfolio Active Share
Communication Services	38.04%	3.71%	41.75%	11.57%	11.38%	4.83%
Consumer Discretionary	26.78%	6.58%	33.36%	13.05%	13.51%	4.44%
Consumer Staples	42.60%	5.93%	48.52%	6.90%	7.53%	3.42%
Energy	30.24%	5.66%	35.90%	7.67%	9.65%	2.88%
Financials	31.00%	8.31%	39.31%	24.69%	20.79%	9.52%
Health Care	38.24%	16.36%	54.60%	2.60%	2.51%	1.40%
Industrials	24.66%	13.92%	38.59%	5.40%	3.25%	2.10%
Information Technology	22.03%	5.86%	27.90%	15.09%	19.13%	4.65%
Materials	39.93%	7.51%	47.43%	7.34%	6.26%	3.39%
Miscellaneous	0.00%	100.00%	100.00%	-	1.08%	0.34%
Pooled Vehicles	0.00%	100.00%	100.00%	-	0.99%	0.48%
Real Estate	23.89%	18.71%	42.60%	2.86%	2.06%	1.25%
Utilities	35.15%	4.17%	39.32%	2.82%	1.86%	1.11%
Total	32.04%	7.96%	40.00%	100.00%	100.00%	39.81%

Active Share vs. Callan Emerging Broad



	Total Active Share	Index Active Share	Non-Index Active Share	Passive Share	Sector Active Share
10th Percentile	85.37	73.23	17.38	41.73	30.36
25th Percentile	80.97	66.14	14.28	31.70	20.72
Median	72.08	61.81	10.87	27.92	17.46
75th Percentile	68.30	57.72	7.15	19.03	12.78
90th Percentile	58.27	52.21	4.81	14.63	7.33
Emerging Mkts Equity	40.00	32.04	7.96	60.00	9.18

BlackRock Emg Mkts Index Period Ended September 30, 2019

Investment Philosophy

As with all indexing strategies, the objective of the Emerging Markets Index Funds is to match the performance of the benchmark, the MSCI EM indexes. BlackRock's objective in managing the fund is to deliver a high quality and cost-effective index-based portfolio available to institutional investors. BlackRock's goal in the management of its emerging market country funds is to provide cost-effective and risk controlled exposure with close benchmark tracking. As such, country selection is dictated by the index, and BlackRock's funds approximate the sector and industry breakdowns of the respective country index. The team seeks to construct its country funds using the widest possible range of index constituent stocks to allow for replication of index returns while minimizing transaction costs. Therefore stock selection and weighting is generally dictated by the composition of the index. However, where investment restrictions exist, BlackRock may choose to use alternative investment approaches. In general, BlackRock aims to cover a significant percentage of the security market capitalization of each country index.

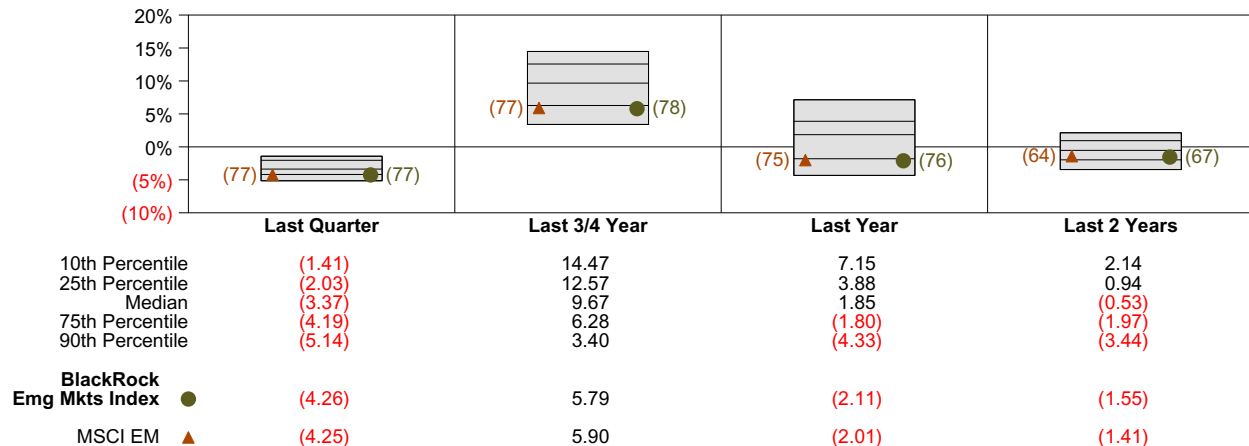
Quarterly Summary and Highlights

- BlackRock Emg Mkts Index's portfolio posted a (4.26)% return for the quarter placing it in the 77 percentile of the Callan Emerging Broad group for the quarter and in the 76 percentile for the last year.
- BlackRock Emg Mkts Index's portfolio underperformed the MSCI EM by 0.01% for the quarter and underperformed the MSCI EM for the year by 0.11%.

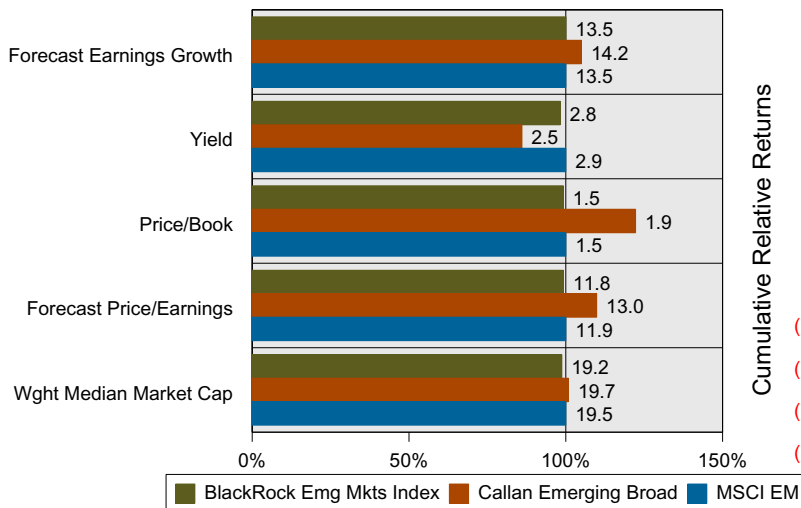
Quarterly Asset Growth

Beginning Market Value	\$688,958,032
Net New Investment	\$0
Investment Gains/(Losses)	\$-29,278,866
Ending Market Value	\$659,679,166

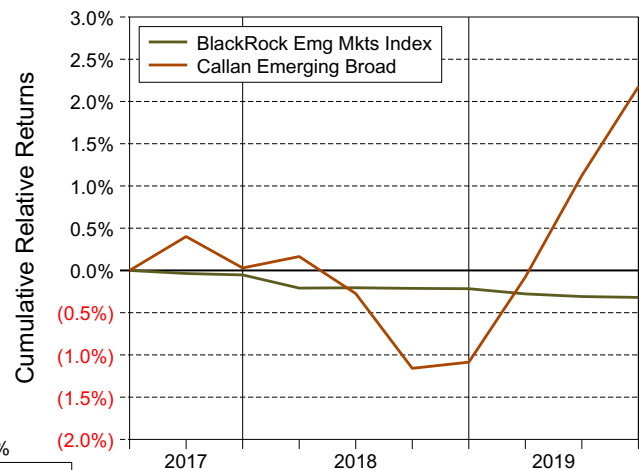
Performance vs Callan Emerging Broad (Gross)



Portfolio Characteristics as a Percentage of the MSCI EM



Cumulative Returns vs MSCI EM



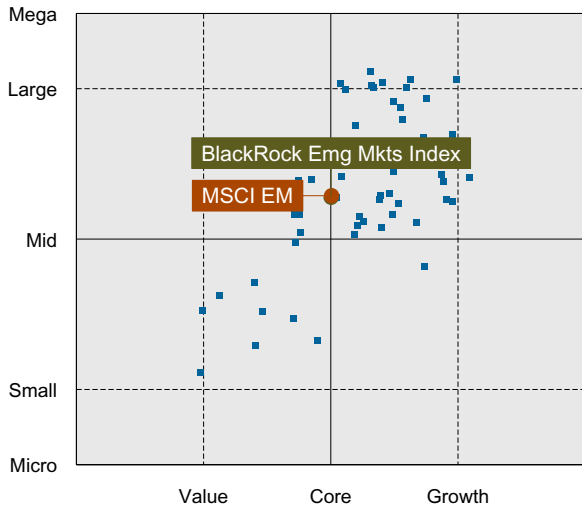
Current Holdings Based Style Analysis

BlackRock Emg Mkts Index

As of September 30, 2019

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various regional and style segments of the international/global equity market. The market is segmented quarterly by region and style. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the current portfolio and index weights and stock counts (in parentheses) in each capitalization/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

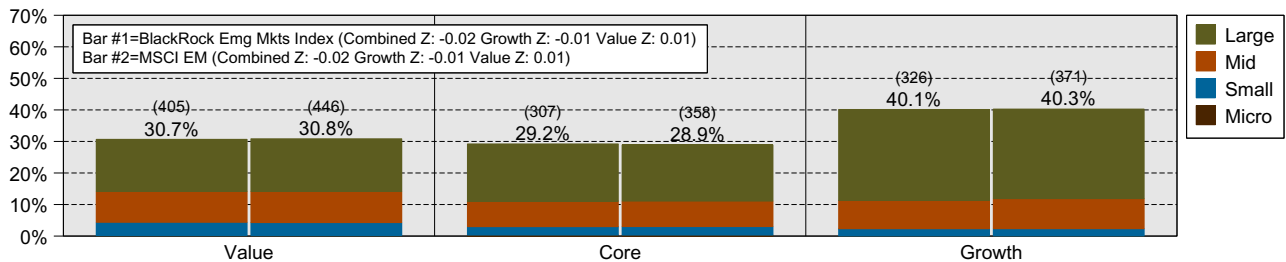
Style Map vs Callan Emerging Broad Holdings as of September 30, 2019



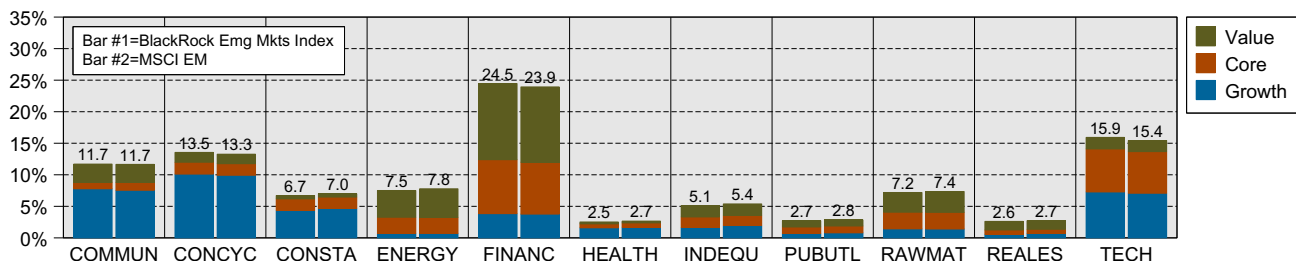
Style Exposure Matrix Holdings as of September 30, 2019

	Value	Core	Growth	Total
Large	16.5% (75)	18.1% (59)	28.8% (81)	63.5% (215)
	16.7% (84)	17.8% (72)	28.4% (88)	62.8% (244)
Mid	9.8% (154)	8.1% (140)	9.0% (157)	26.8% (451)
	9.9% (179)	8.1% (167)	9.5% (189)	27.5% (535)
Small	4.3% (166)	2.7% (106)	2.3% (86)	9.2% (358)
	4.2% (174)	2.7% (117)	2.3% (92)	9.2% (383)
Micro	0.1% (10)	0.3% (2)	0.0% (2)	0.5% (14)
	0.1% (9)	0.3% (2)	0.0% (2)	0.4% (13)
Total	30.7% (405)	29.2% (307)	40.1% (326)	100.0% (1038)
	30.8% (446)	28.9% (358)	40.3% (371)	100.0% (1175)

Combined Z-Score Style Distribution Holdings as of September 30, 2019



Sector Weights Distribution Holdings as of September 30, 2019

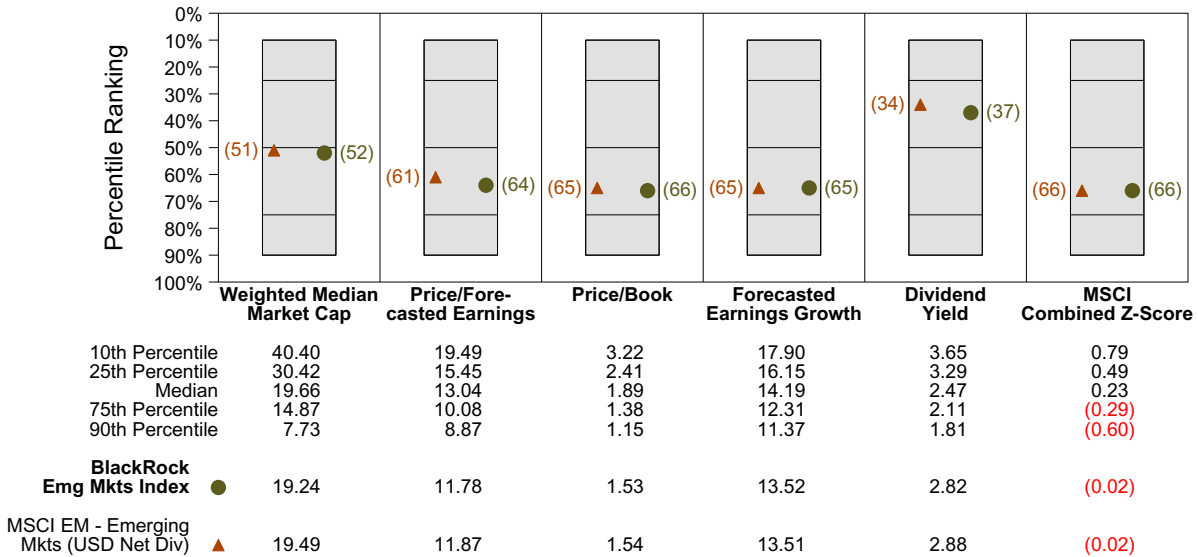


BlackRock Emg Mkts Index Equity Characteristics Analysis Summary

Portfolio Characteristics

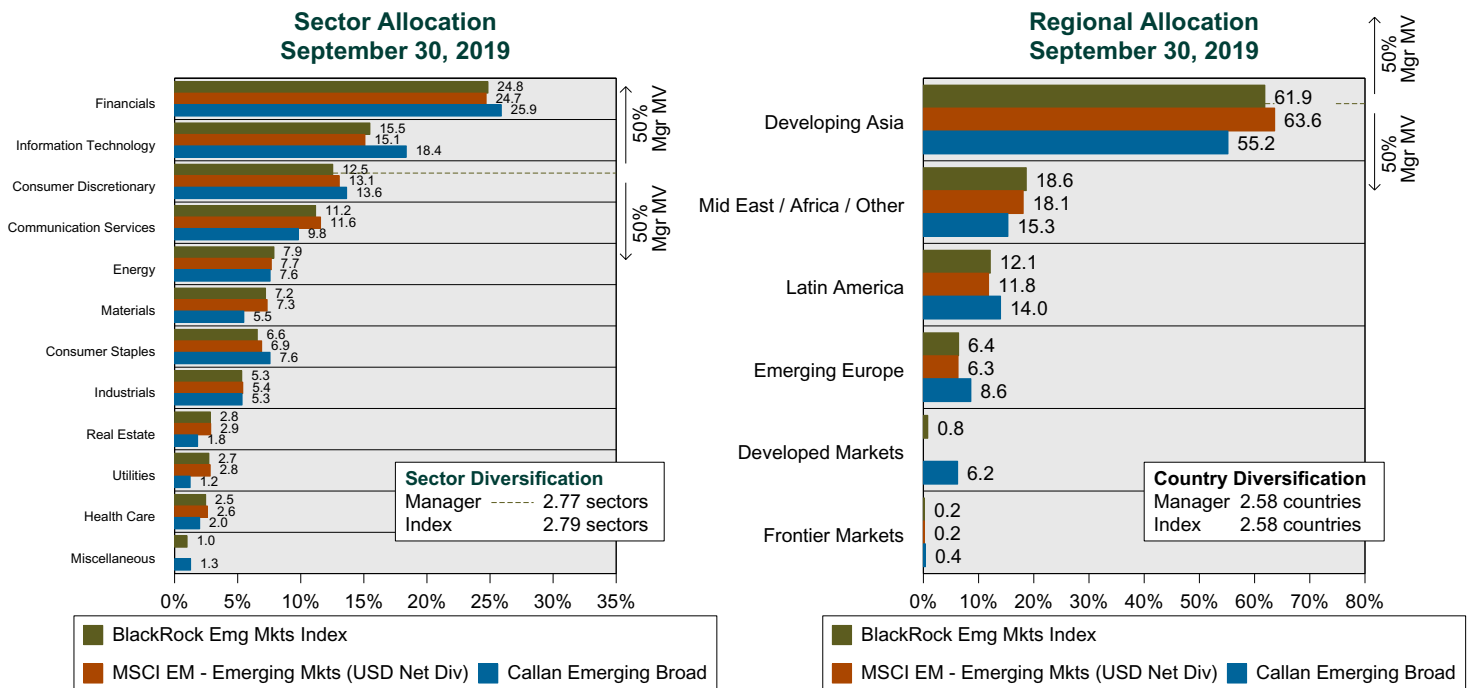
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

Portfolio Characteristics Percentile Rankings Rankings Against Callan Emerging Broad as of September 30, 2019



Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. The regional allocation chart compares the manager's geographical region weights with those of the benchmark as well as the median region weights of the peer group.

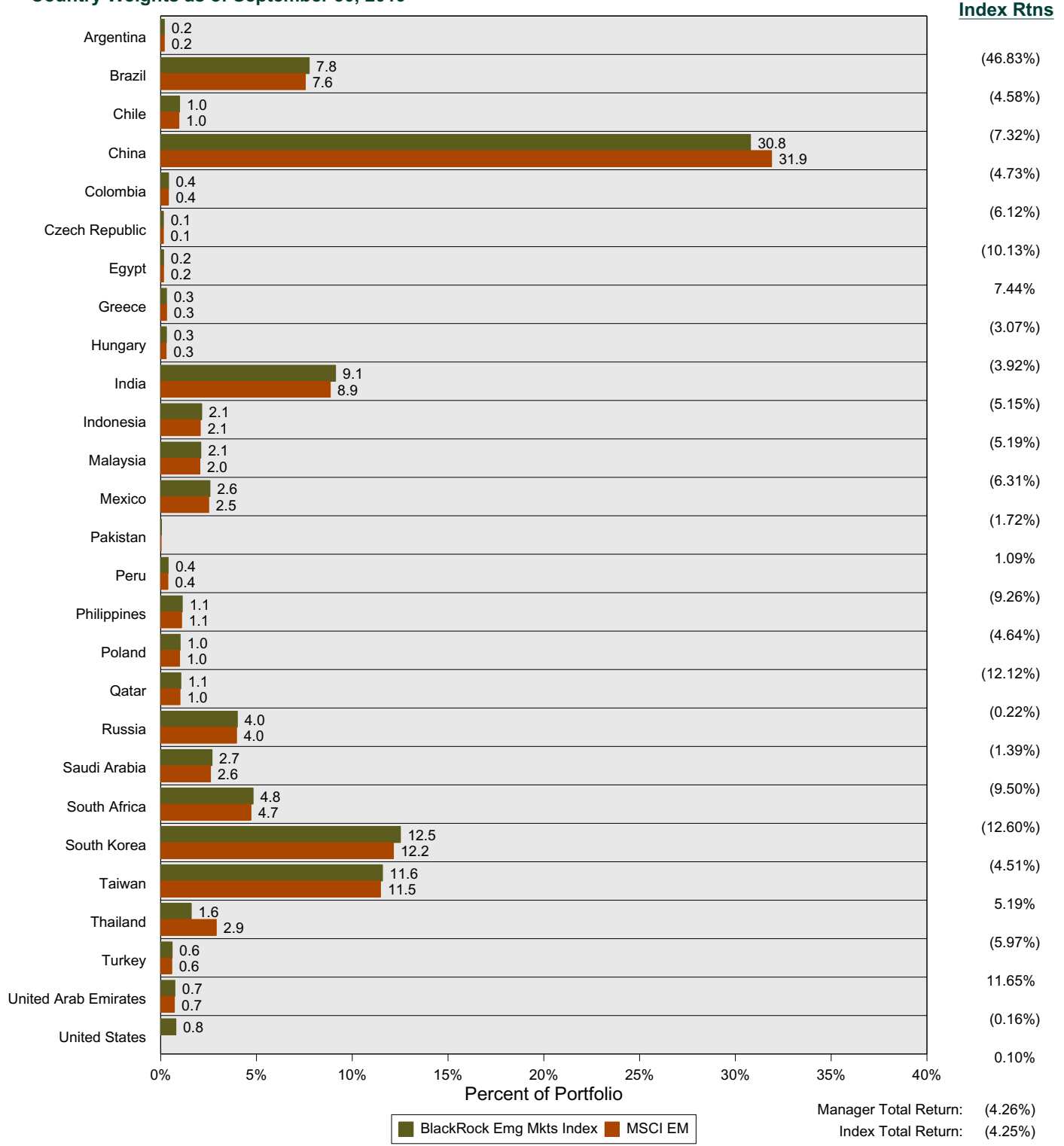


Country Allocation BlackRock Emg Mkts Index VS MSCI EM - Emerging Mkts (USD Net Div)

Country Allocation

The chart below contrasts the portfolio's country allocation with that of the index as of September 30, 2019. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent quarter. To the extent that the portfolio allocation is similar to the index, the portfolio should experience more "index-like" performance. In order to illustrate the performance effect on the portfolio and index of these country allocations, the individual index country returns are also shown.

Country Weights as of September 30, 2019



Leading Edge Emg Mkts Fund Period Ended September 30, 2019

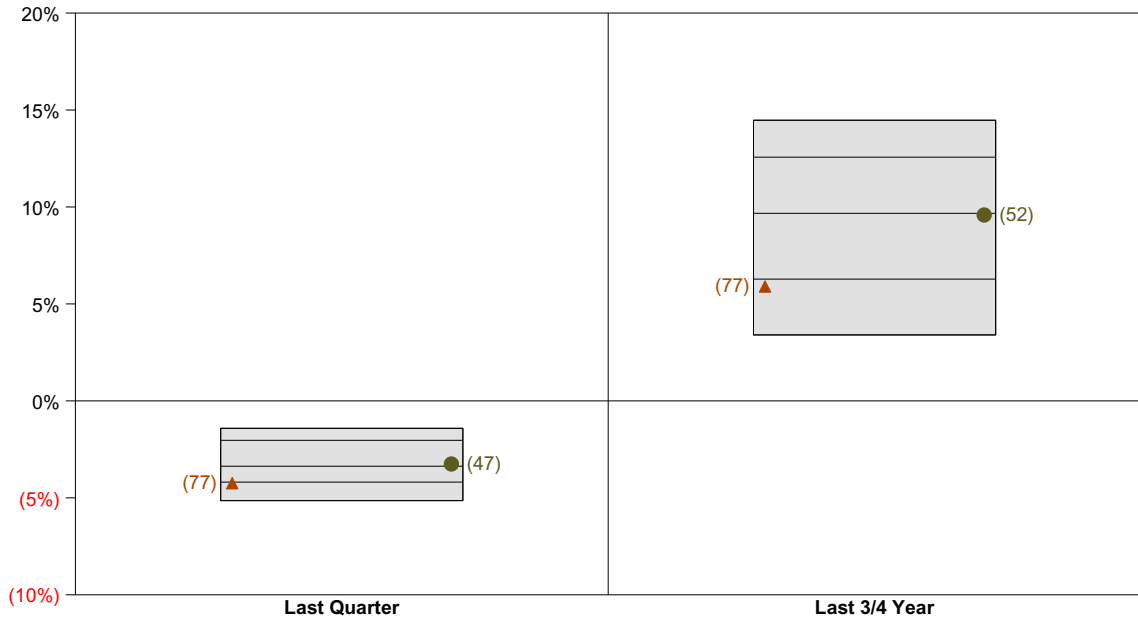
Quarterly Summary and Highlights

- Leading Edge Emg Mkts Fund's portfolio posted a (3.26)% return for the quarter placing it in the 47 percentile of the Callan Emerging Broad group for the quarter and in the 52 percentile for the last three-quarter year.
- Leading Edge Emg Mkts Fund's portfolio outperformed the MSCI EM by 0.99% for the quarter and outperformed the MSCI EM for the three-quarter year by 3.69%.

Quarterly Asset Growth

Beginning Market Value	\$219,794,480
Net New Investment	\$-283,039
Investment Gains/(Losses)	\$-7,151,921
Ending Market Value	\$212,359,520

Performance vs Callan Emerging Broad (Gross)



10th Percentile	(1.41)
25th Percentile	(2.03)
Median	(3.37)
75th Percentile	(4.19)
90th Percentile	(5.14)

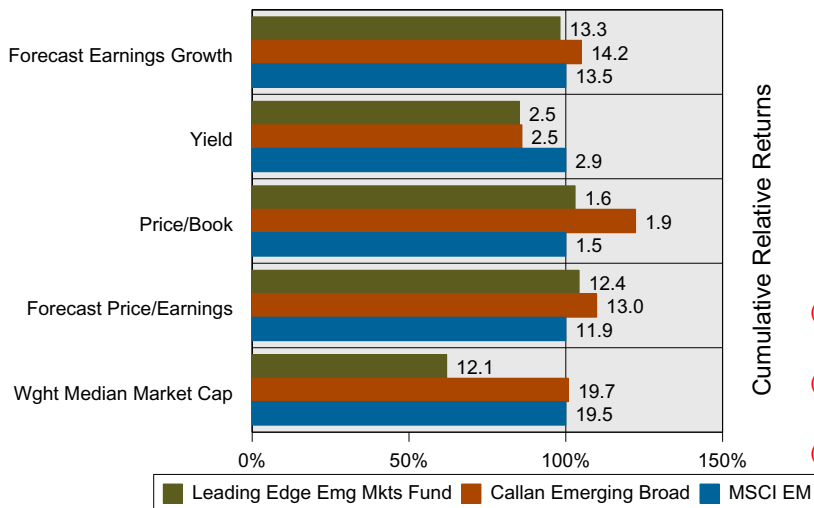
10th Percentile	14.47
25th Percentile	12.57
Median	9.67
75th Percentile	6.28
90th Percentile	3.40

Leading Edge Emg Mkts Fund ●
MSCI EM ▲

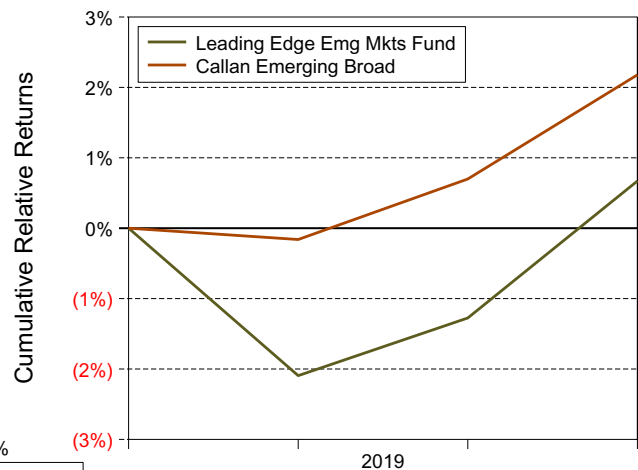
Leading Edge Emg Mkts Fund	(3.26)
MSCI EM	(4.25)

Leading Edge Emg Mkts Fund	9.58
MSCI EM	5.90

Portfolio Characteristics as a Percentage of the MSCI EM



Cumulative Returns vs MSCI EM



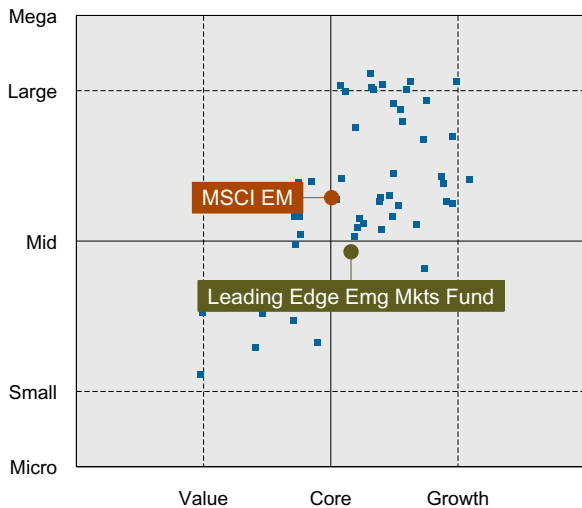
Current Holdings Based Style Analysis

Leading Edge Emg Mkts Fund

As of September 30, 2019

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various regional and style segments of the international/global equity market. The market is segmented quarterly by region and style. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left chart illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right chart displays the current portfolio and index weights and stock counts (in parentheses) in each capitalization/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

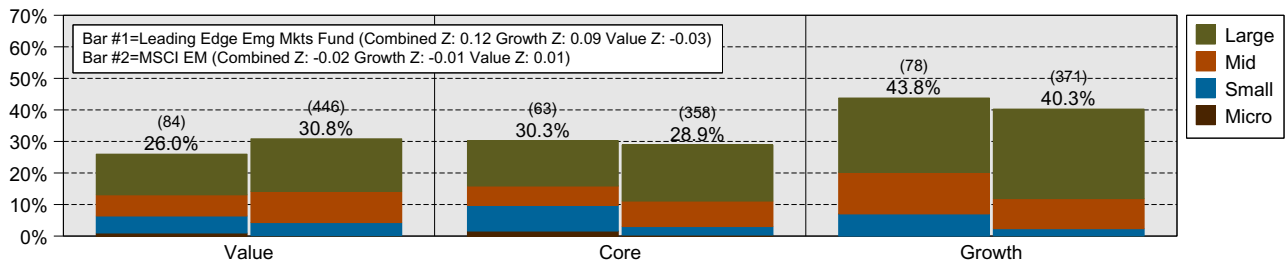
Style Map vs Callan Emerging Broad Holdings as of September 30, 2019



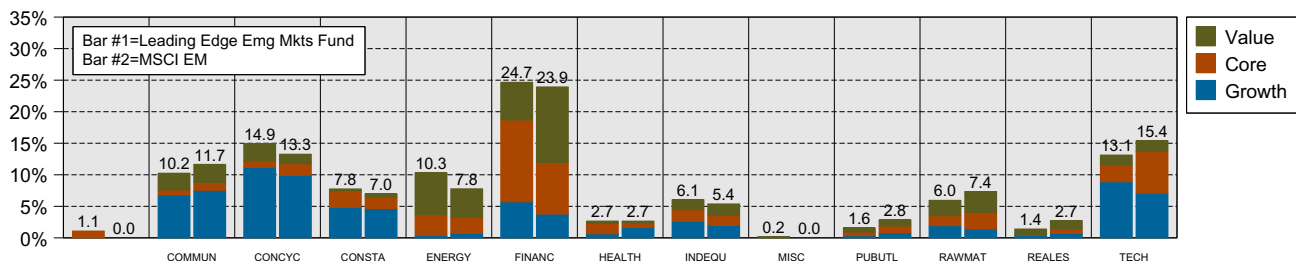
Style Exposure Matrix Holdings as of September 30, 2019

	Value	Core	Growth	Total
Large	12.9% (28)	14.4% (17)	23.6% (27)	50.9% (72)
	16.7% (84)	17.8% (72)	28.4% (88)	62.8% (244)
Mid	6.7% (27)	6.1% (20)	13.2% (26)	26.0% (73)
	9.9% (179)	8.1% (167)	9.5% (189)	27.5% (535)
Small	5.4% (26)	8.2% (20)	7.0% (25)	20.6% (71)
	4.2% (174)	2.7% (117)	2.3% (92)	9.2% (383)
Micro	1.0% (3)	1.6% (6)	0.0% (0)	2.6% (9)
	0.1% (9)	0.3% (2)	0.0% (2)	0.4% (13)
Total	26.0% (84)	30.3% (63)	43.8% (78)	100.0% (225)
	30.8% (446)	28.9% (358)	40.3% (371)	100.0% (1175)

Combined Z-Score Style Distribution Holdings as of September 30, 2019



Sector Weights Distribution Holdings as of September 30, 2019

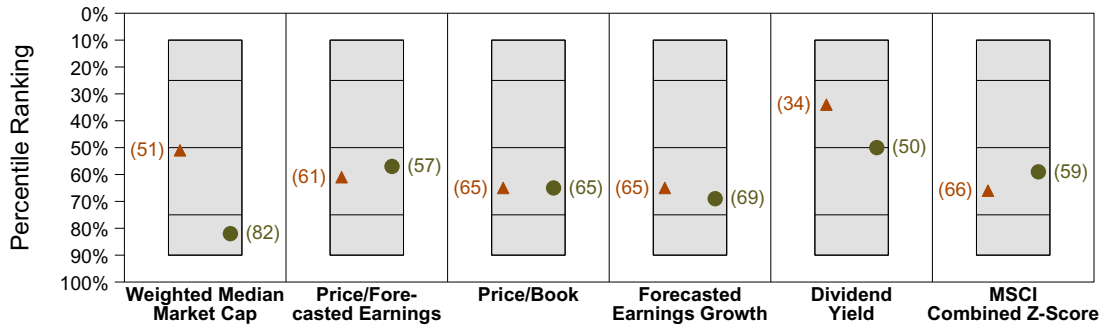


Leading Edge Emg Mkts Fund Equity Characteristics Analysis Summary

Portfolio Characteristics

This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

Portfolio Characteristics Percentile Rankings Rankings Against Callan Emerging Broad as of September 30, 2019

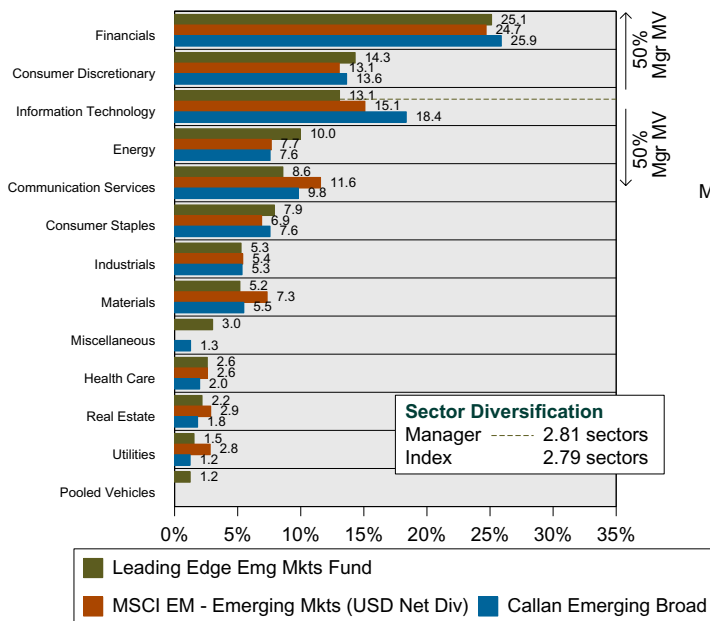


	Weighted Median Market Cap	Price/Forecasted Earnings	Price/Book	Forecasted Earnings Growth	Dividend Yield	MSCI Combined Z-Score
10th Percentile	40.40	19.49	3.22	17.90	3.65	0.79
25th Percentile	30.42	15.45	2.41	16.15	3.29	0.49
Median	19.66	13.04	1.89	14.19	2.47	0.23
75th Percentile	14.87	10.08	1.38	12.31	2.11	(0.29)
90th Percentile	7.73	8.87	1.15	11.37	1.81	(0.60)
Leading Edge Emg Mkts Fund	12.09	12.38	1.59	13.26	2.45	0.12
MSCI EM - Emerging Mkts (USD Net Div)	19.49	11.87	1.54	13.51	2.88	(0.02)

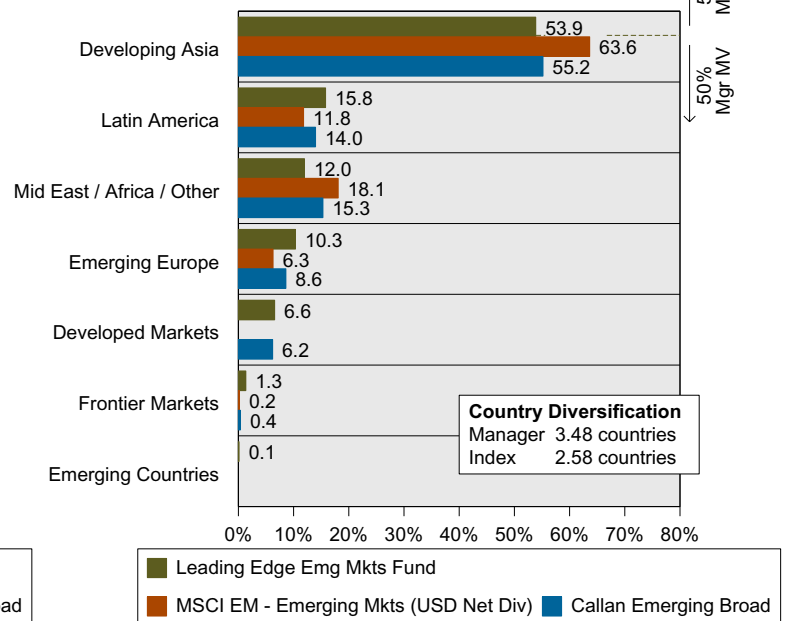
Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. The regional allocation chart compares the manager's geographical region weights with those of the benchmark as well as the median region weights of the peer group.

Sector Allocation September 30, 2019



Regional Allocation September 30, 2019

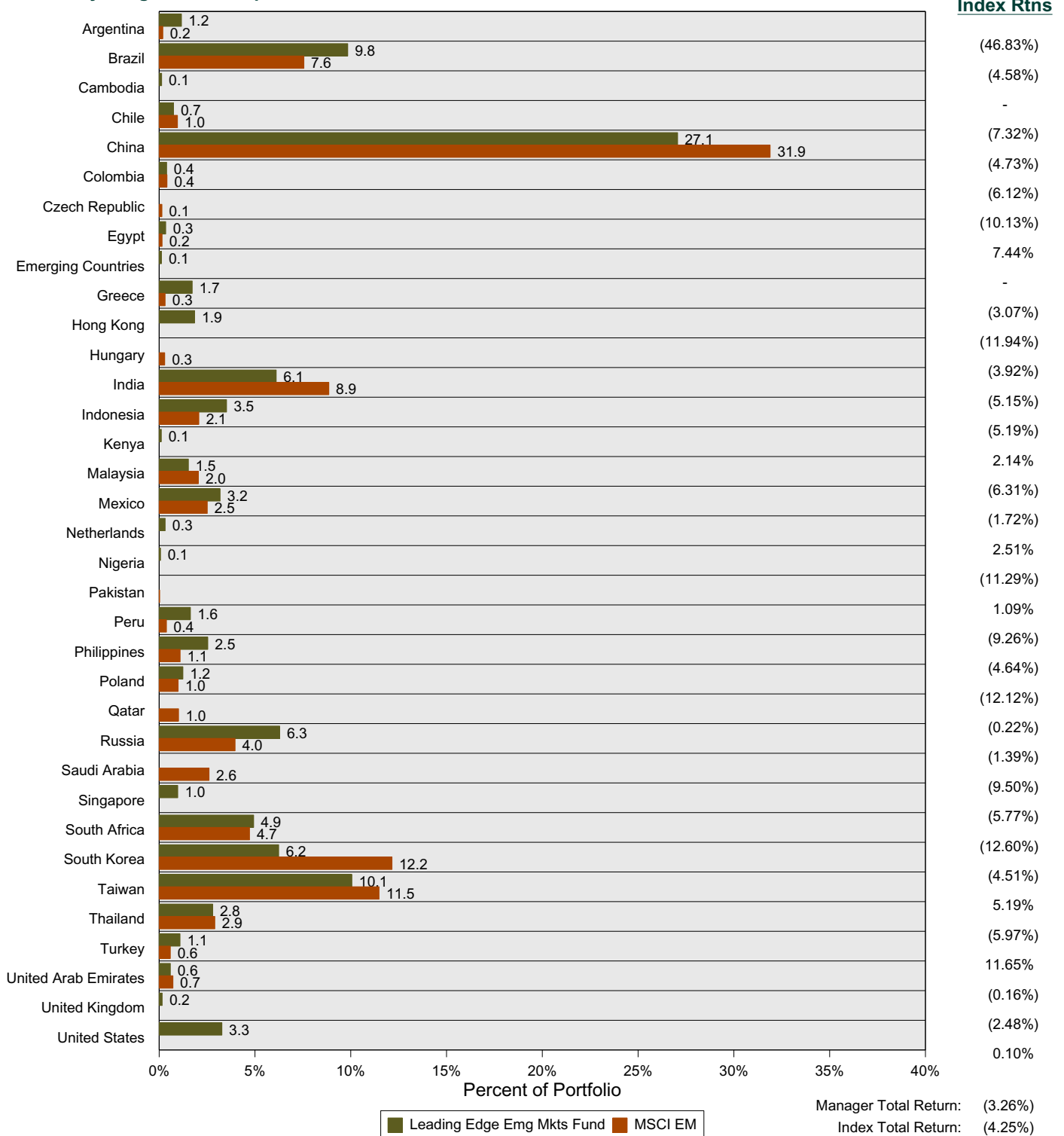


Country Allocation Leading Edge Emg Mkts Fund VS MSCI EM - Emerging Mkts (USD Net Div)

Country Allocation

The chart below contrasts the portfolio's country allocation with that of the index as of September 30, 2019. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent quarter. To the extent that the portfolio allocation is similar to the index, the portfolio should experience more "index-like" performance. In order to illustrate the performance effect on the portfolio and index of these country allocations, the individual index country returns are also shown.

Country Weights as of September 30, 2019



Macquarie Emerging Markets Equity Period Ended September 30, 2019

Investment Philosophy

Macquarie believes that market price and intrinsic business value are correlated in the long-run and short-term divergences offer disciplined, bottom-up, fundamental investors, attractive risk-adjusted opportunities. The team defines intrinsic value as the appropriately discounted value of a business' cash flow stream. They buy only when the business trades at a significant discount to their intrinsic value estimate. The team focuses resources on franchises, defined as those companies with high potential to earn excess returns above their cost of capital over the long-run. The team aims to capture market inefficiencies by: 1. Judging a franchise's sustainability and secular growth prospects better than the market 2. Maintaining a long-term, structural bias to capture franchises oversold due to temporary setbacks 3. Exploiting public market and private market valuation discrepancies 4. Buying assets below their replacement costs.

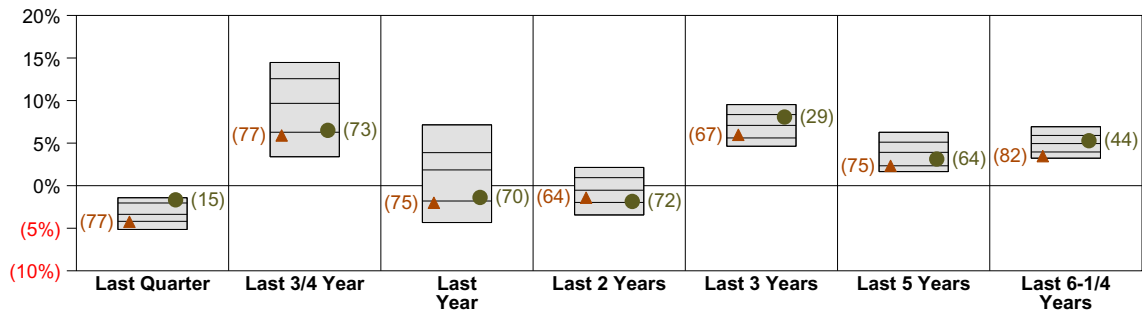
Quarterly Summary and Highlights

- Macquarie Emerging Markets Equity's portfolio posted a (1.66)% return for the quarter placing it in the 15 percentile of the Callan Emerging Broad group for the quarter and in the 70 percentile for the last year.
- Macquarie Emerging Markets Equity's portfolio outperformed the MSCI EM by 2.58% for the quarter and outperformed the MSCI EM for the year by 0.62%.

Quarterly Asset Growth

Beginning Market Value	\$415,751,110
Net New Investment	\$-76,253
Investment Gains/(Losses)	\$-6,911,691
Ending Market Value	\$408,763,166

Performance vs Callan Emerging Broad (Gross)

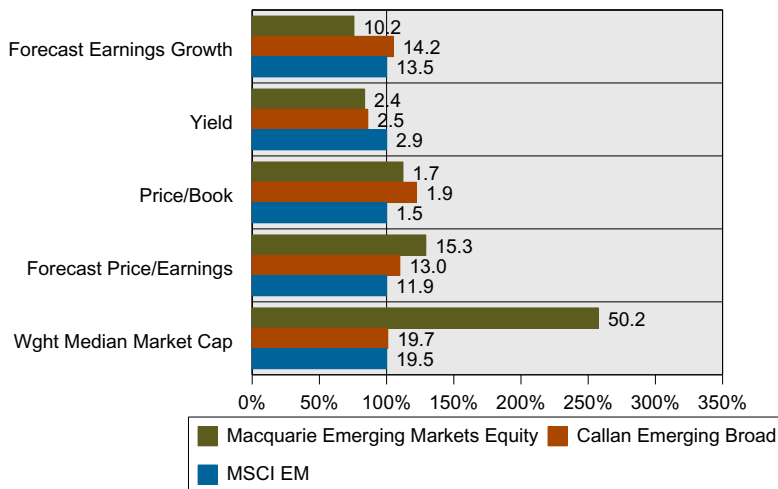


	Last Quarter	Last 3/4 Year	Last Year	Last 2 Years	Last 3 Years	Last 5 Years	Last 6-1/4 Years
10th Percentile	(1.41)	14.47	7.15	2.14	9.53	6.27	6.93
25th Percentile	(2.03)	12.57	3.88	0.94	8.35	5.11	5.90
Median	(3.37)	9.67	1.85	(0.53)	7.08	3.92	4.95
75th Percentile	(4.19)	6.28	(1.80)	(1.97)	5.61	2.34	3.96
90th Percentile	(5.14)	3.40	(4.33)	(3.44)	4.63	1.66	3.23

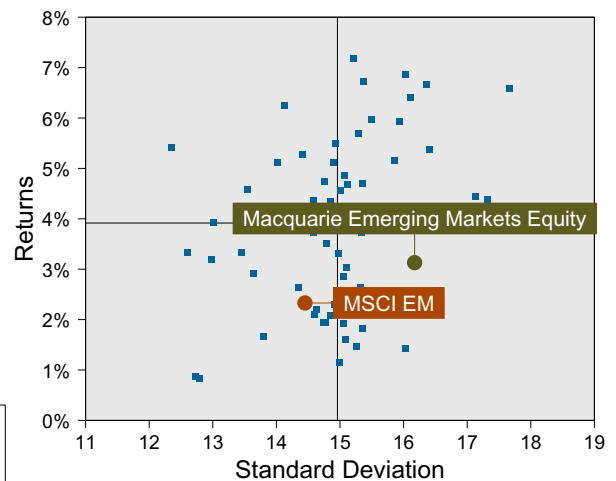
Macquarie Emerging Markets Equity

●	(1.66)	6.50	(1.38)	(1.85)	8.06	3.13	5.28
▲	(4.25)	5.90	(2.01)	(1.41)	5.98	2.33	3.47

Portfolio Characteristics as a Percentage of the MSCI EM



Callan Emerging Broad (Gross) Annualized Five Year Risk vs Return

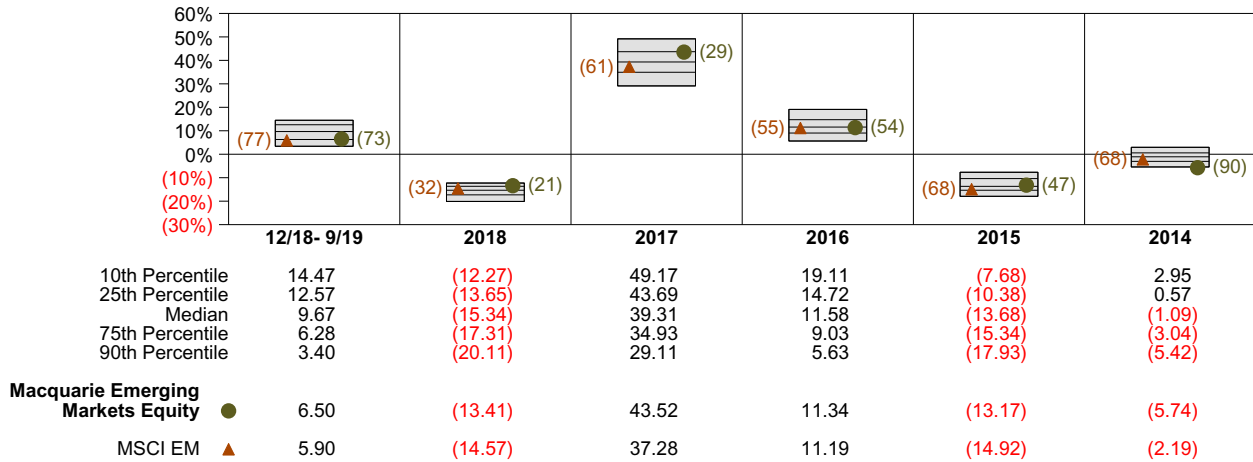


Macquarie Emerging Markets Equity Return Analysis Summary

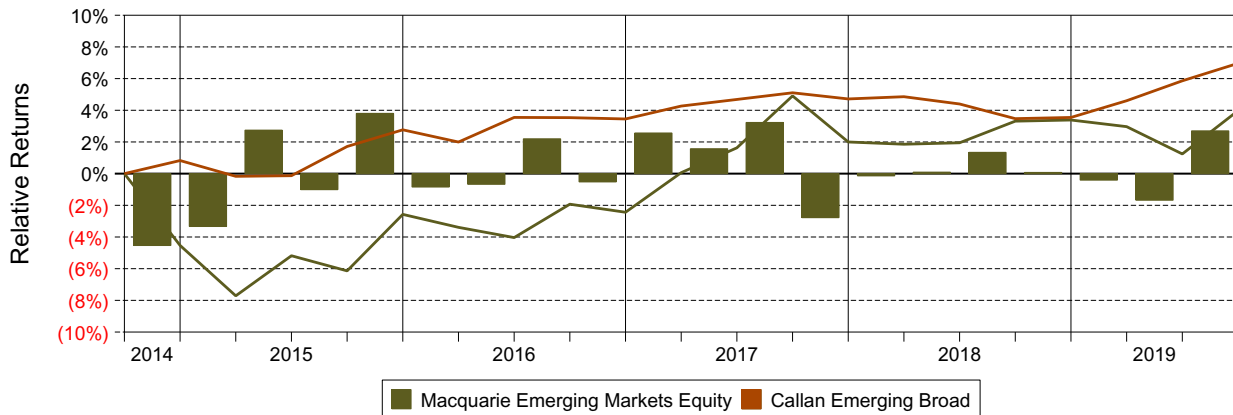
Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

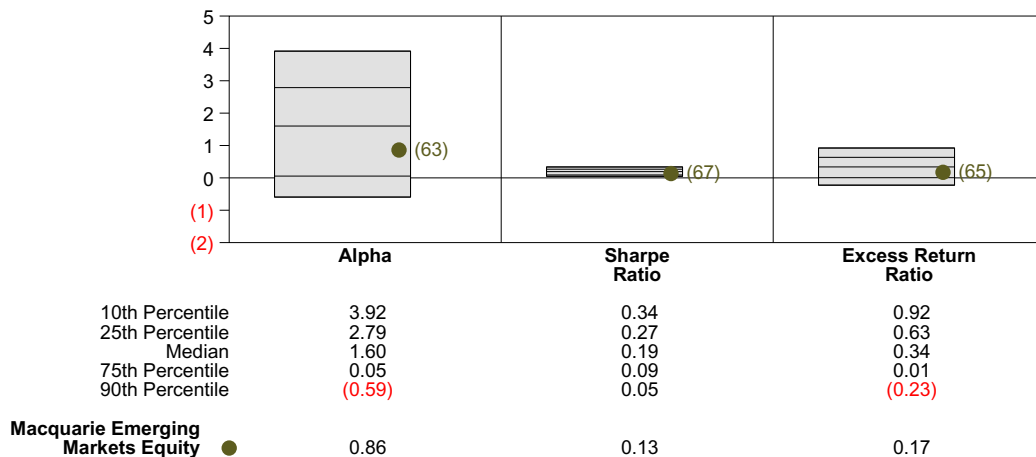
Performance vs Callan Emerging Broad (Gross)



Cumulative and Quarterly Relative Return vs MSCI EM



Risk Adjusted Return Measures vs MSCI EM Rankings Against Callan Emerging Broad (Gross) Five Years Ended September 30, 2019

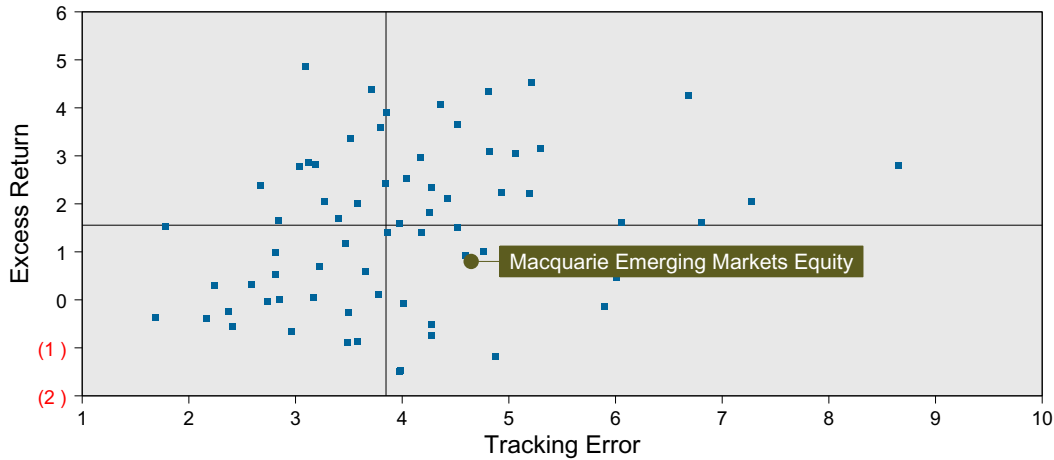


Macquarie Emerging Markets Equity Risk Analysis Summary

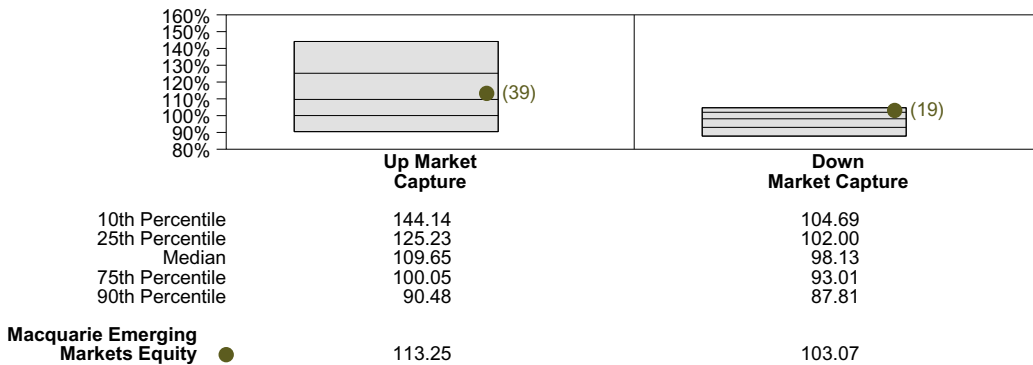
Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows Up and Down Market Capture. The last two charts show the ranking of the manager's risk statistics versus the peer group.

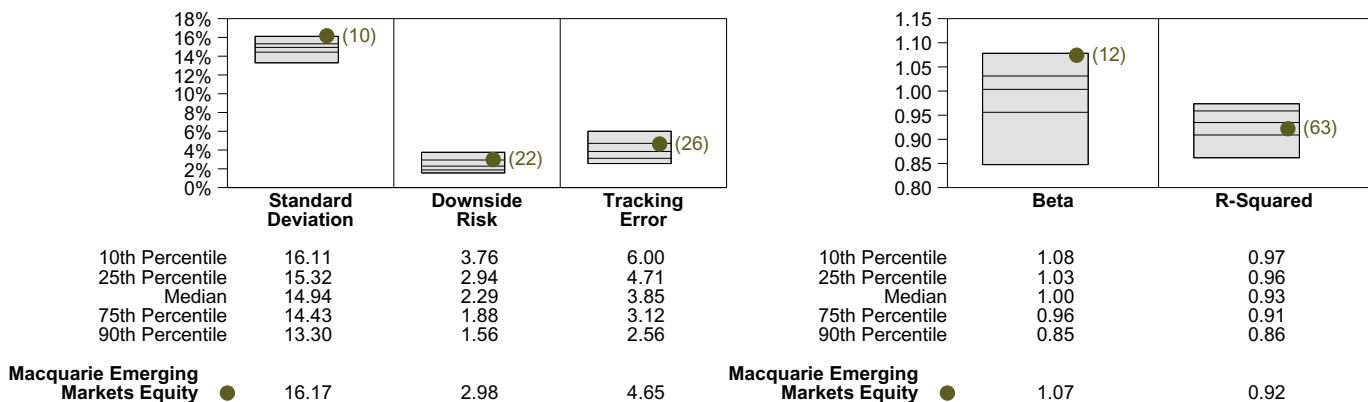
Risk Analysis vs Callan Emerging Broad (Gross) Five Years Ended September 30, 2019



Market Capture vs MSCI EM - Emerging Mkts (USD Net Div) Rankings Against Callan Emerging Broad (Gross) Five Years Ended September 30, 2019



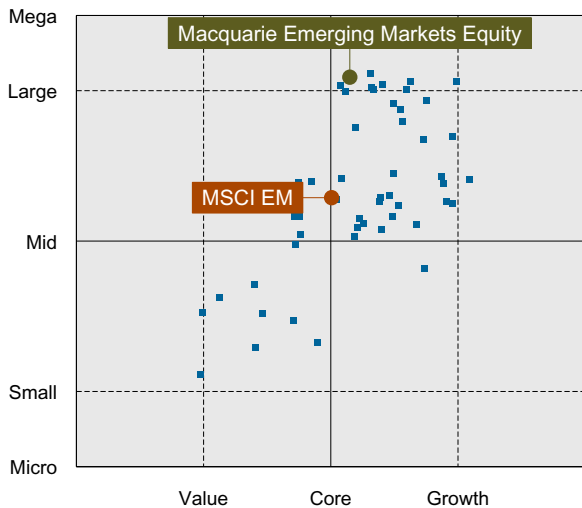
Risk Statistics Rankings vs MSCI EM - Emerging Mkts (USD Net Div) Rankings Against Callan Emerging Broad (Gross) Five Years Ended September 30, 2019



Current Holdings Based Style Analysis Macquarie Emerging Markets Equity As of September 30, 2019

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various regional and style segments of the international/global equity market. The market is segmented quarterly by region and style. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the current portfolio and index weights and stock counts (in parentheses) in each capitalization/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

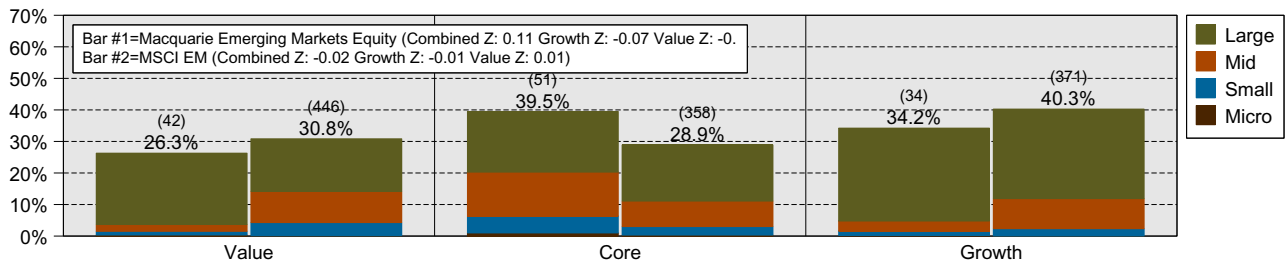
Style Map vs Callan Emerging Broad Holdings as of September 30, 2019



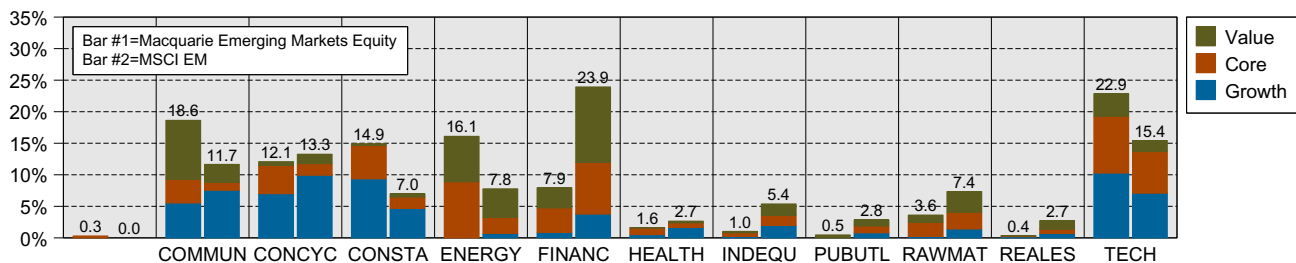
Style Exposure Matrix Holdings as of September 30, 2019

	Value	Core	Growth	Total
Large	22.6% (21) 16.7% (84)	19.2% (9) 17.8% (72)	29.4% (13) 28.4% (88)	71.3% (43) 62.8% (244)
Mid	2.2% (10) 9.9% (179)	14.0% (21) 8.1% (167)	3.2% (10) 9.5% (189)	19.3% (41) 27.5% (535)
Small	1.1% (5) 4.2% (174)	5.3% (13) 2.7% (117)	1.4% (9) 2.3% (92)	7.9% (27) 9.2% (383)
Micro	0.3% (6) 0.1% (9)	1.0% (8) 0.3% (2)	0.2% (2) 0.0% (2)	1.5% (16) 0.4% (13)
Total	26.3% (42) 30.8% (446)	39.5% (51) 28.9% (358)	34.2% (34) 40.3% (371)	100.0% (127) 100.0% (1175)

Combined Z-Score Style Distribution Holdings as of September 30, 2019



Sector Weights Distribution Holdings as of September 30, 2019

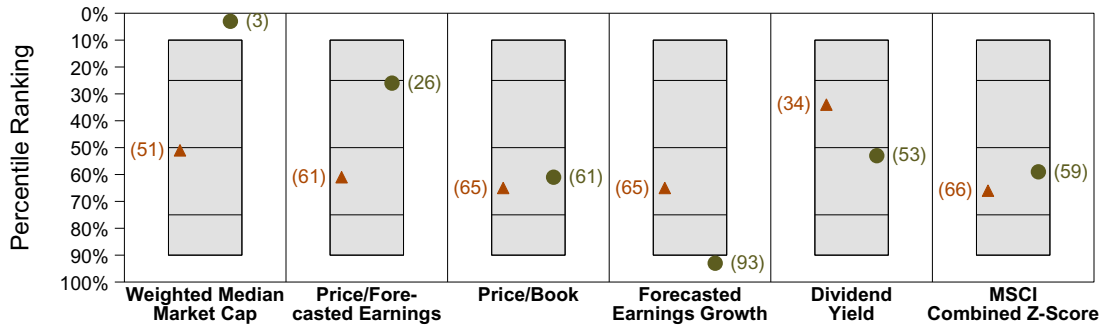


Macquarie Emerging Markets Equity Equity Characteristics Analysis Summary

Portfolio Characteristics

This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

Portfolio Characteristics Percentile Rankings Rankings Against Callan Emerging Broad as of September 30, 2019



10th Percentile	40.40	19.49	3.22	17.90	3.65	0.79
25th Percentile	30.42	15.45	2.41	16.15	3.29	0.49
Median	19.66	13.04	1.89	14.19	2.47	0.23
75th Percentile	14.87	10.08	1.38	12.31	2.11	(0.29)
90th Percentile	7.73	8.87	1.15	11.37	1.81	(0.60)

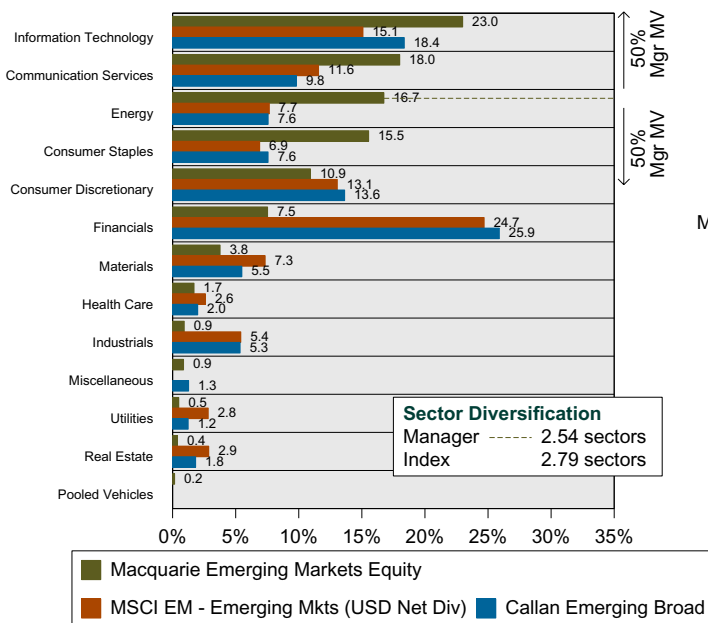
Macquarie Emerging Markets Equity ●

MSCI EM - Emerging Mkts (USD Net Div) ▲

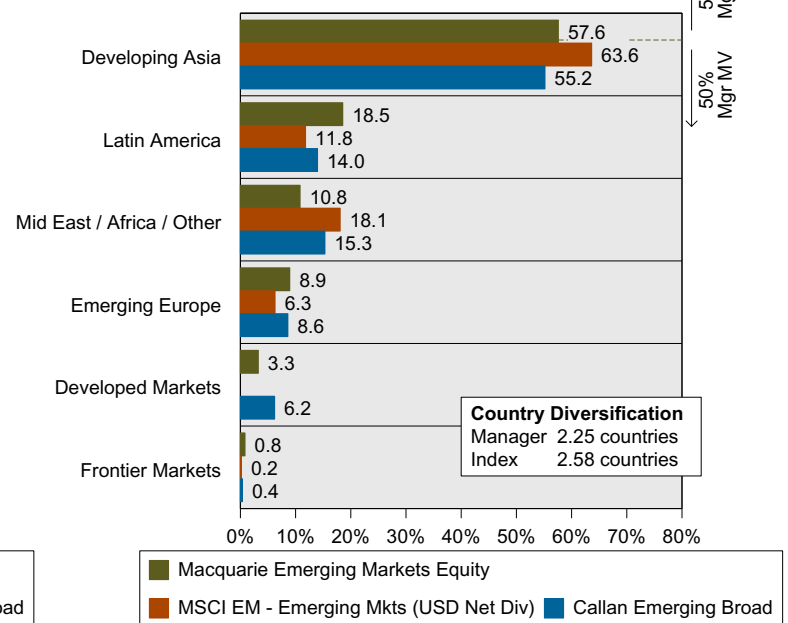
Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. The regional allocation chart compares the manager's geographical region weights with those of the benchmark as well as the median region weights of the peer group.

Sector Allocation September 30, 2019



Regional Allocation September 30, 2019



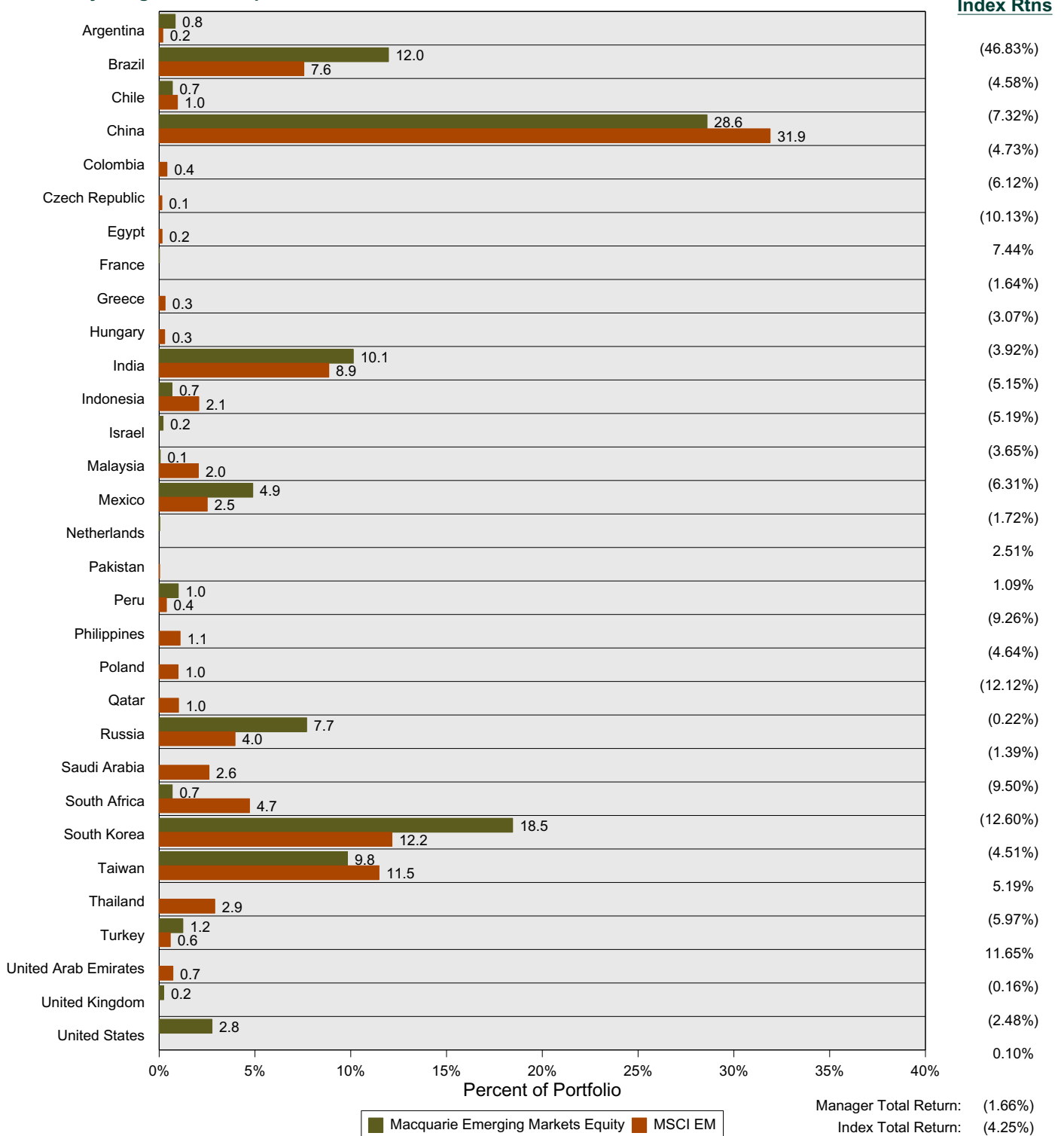
Country Allocation

Macquarie Emerging Markets Equity VS MSCI EM - Emerging Mkts (USD Net Div)

Country Allocation

The chart below contrasts the portfolio's country allocation with that of the index as of September 30, 2019. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent quarter. To the extent that the portfolio allocation is similar to the index, the portfolio should experience more "index-like" performance. In order to illustrate the performance effect on the portfolio and index of these country allocations, the individual index country returns are also shown.

Country Weights as of September 30, 2019



Martin Currie

Period Ended September 30, 2019

Investment Philosophy

The Martin Currie GEMs team builds long-term, high conviction stock-focused portfolios, driven by fundamental research within an appropriate risk framework. Their primary belief with regard to GEMs investing is that sustainable cash flows and the effective allocation of capital are the main determinants of share-price movement over the long term. They seek to identify those emerging-market companies that can sustain cash-flow growth and generate returns in excess of their cost of capital. They believe that it takes a long time for the success of a business model to become fully apparent, so they typically invest with a three-to-five-year horizon. The Martin Currie GEMs team believes that an assessment of a company environmental, social and governance (ESG) performance, or sustainability, can help identify those business models that are most likely to sustain high returns and resist competitive pressures.

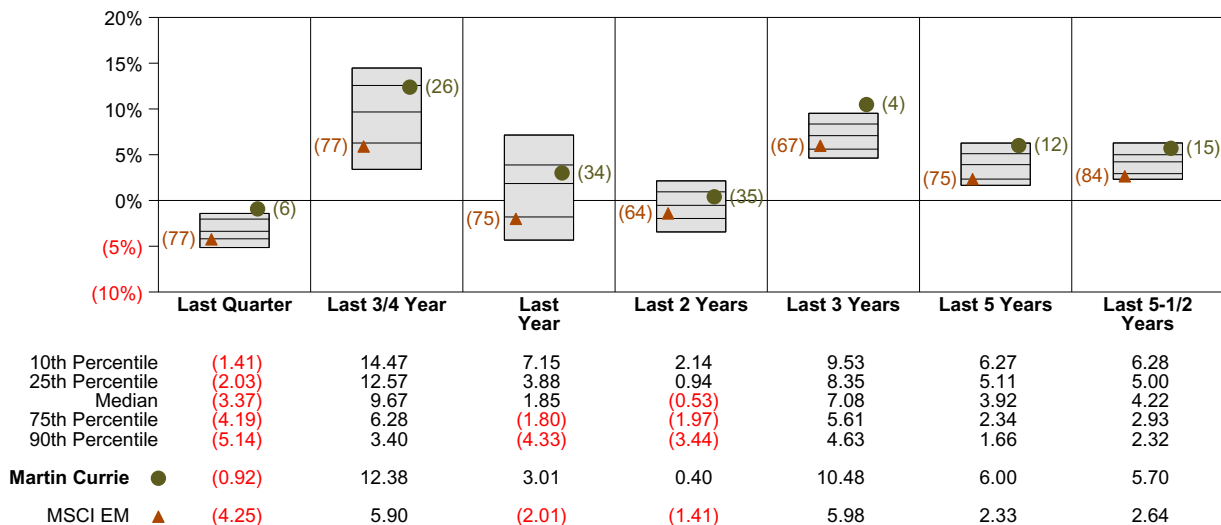
Quarterly Summary and Highlights

- Martin Currie's portfolio posted a (0.92)% return for the quarter placing it in the 6 percentile of the Callan Emerging Broad group for the quarter and in the 34 percentile for the last year.
- Martin Currie's portfolio outperformed the MSCI EM by 3.32% for the quarter and outperformed the MSCI EM for the year by 5.02%.

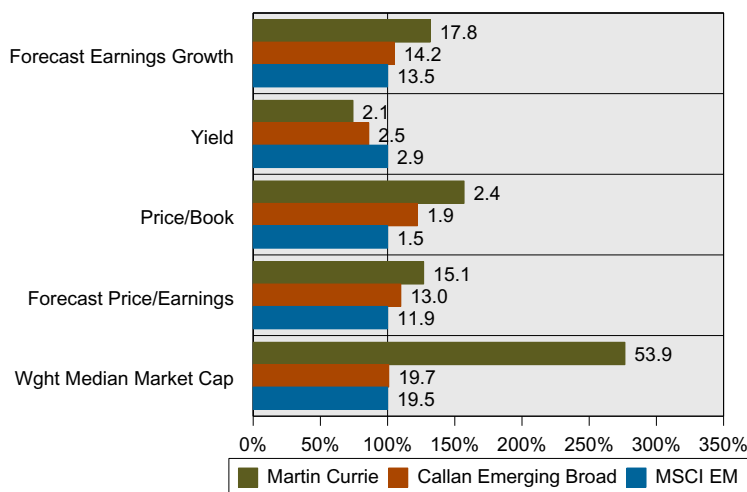
Quarterly Asset Growth

Beginning Market Value	\$435,931,557
Net New Investment	\$-889,540
Investment Gains/(Losses)	\$-4,070,619
Ending Market Value	\$430,971,398

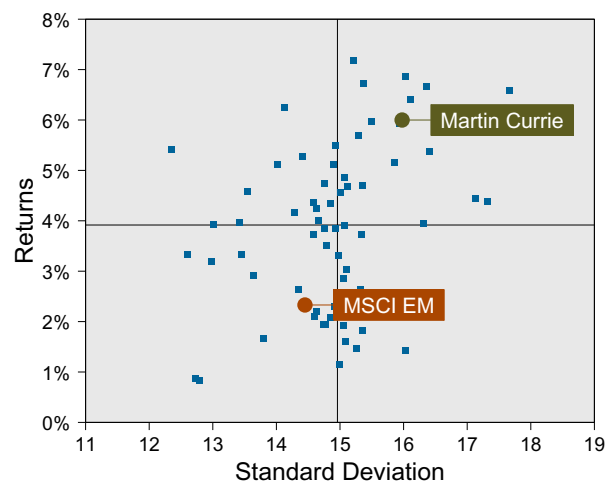
Performance vs Callan Emerging Broad (Gross)



Portfolio Characteristics as a Percentage of the MSCI EM



Callan Emerging Broad (Gross) Annualized Five Year Risk vs Return

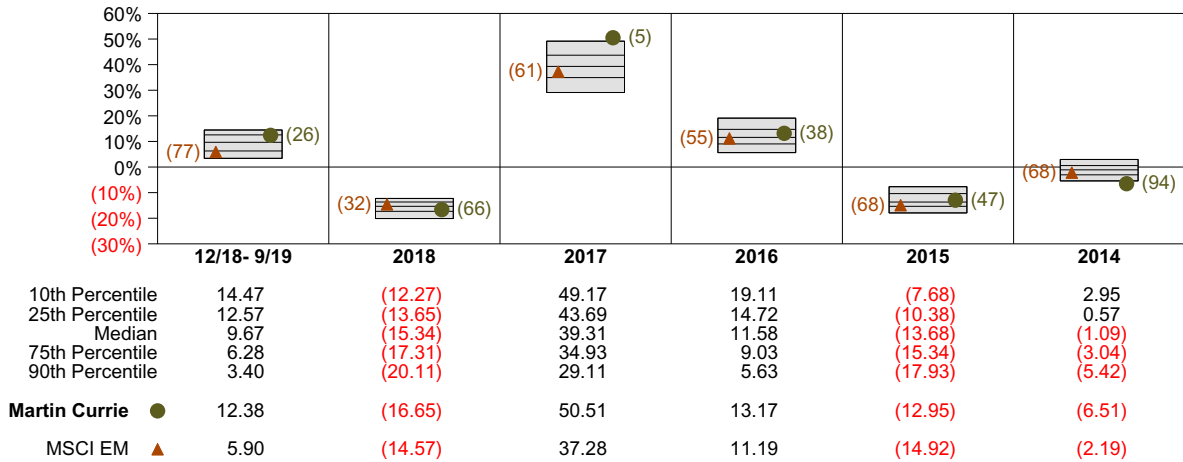


Martin Currie Return Analysis Summary

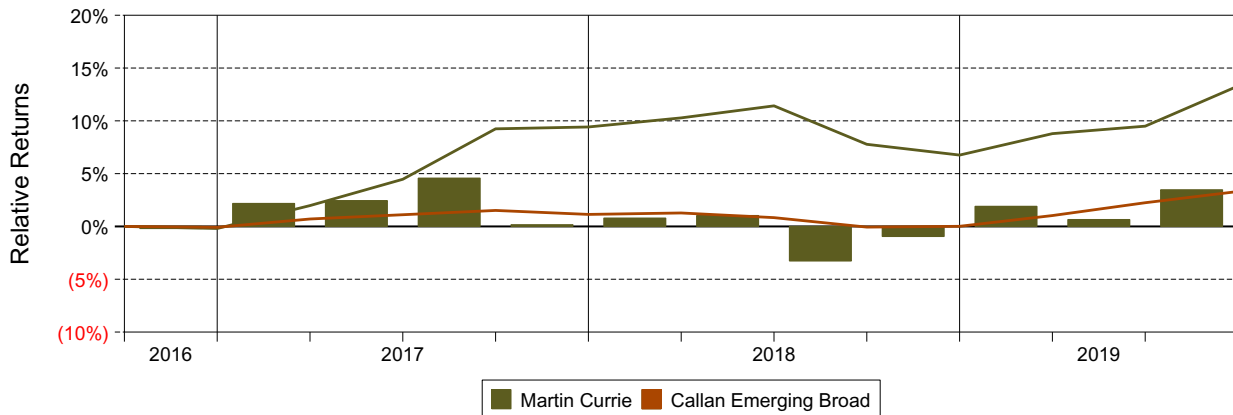
Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

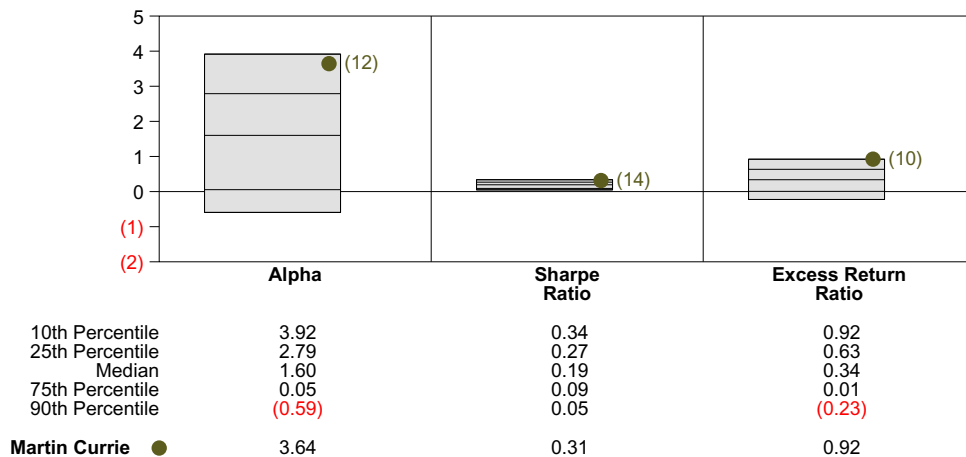
Performance vs Callan Emerging Broad (Gross)



Cumulative and Quarterly Relative Return vs MSCI EM



Risk Adjusted Return Measures vs MSCI EM Rankings Against Callan Emerging Broad (Gross) Five Years Ended September 30, 2019

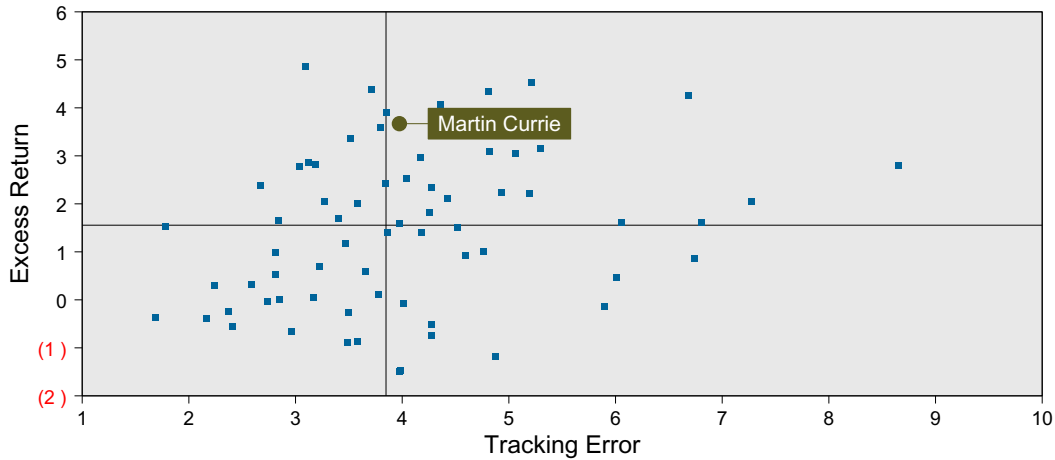


Martin Currie Risk Analysis Summary

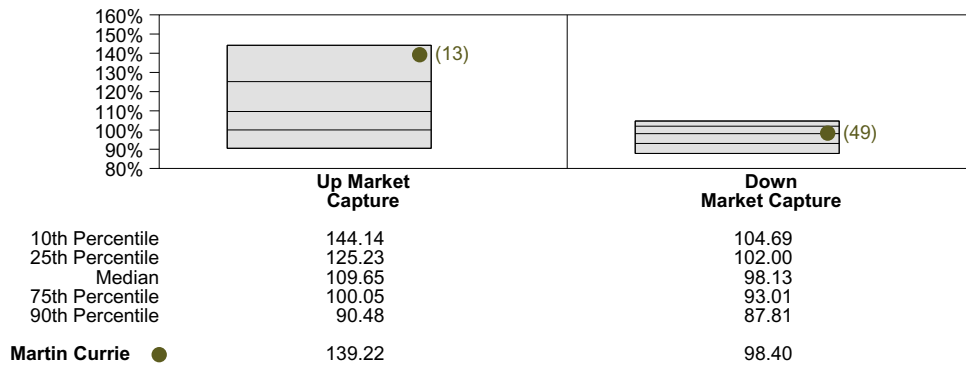
Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows Up and Down Market Capture. The last two charts show the ranking of the manager's risk statistics versus the peer group.

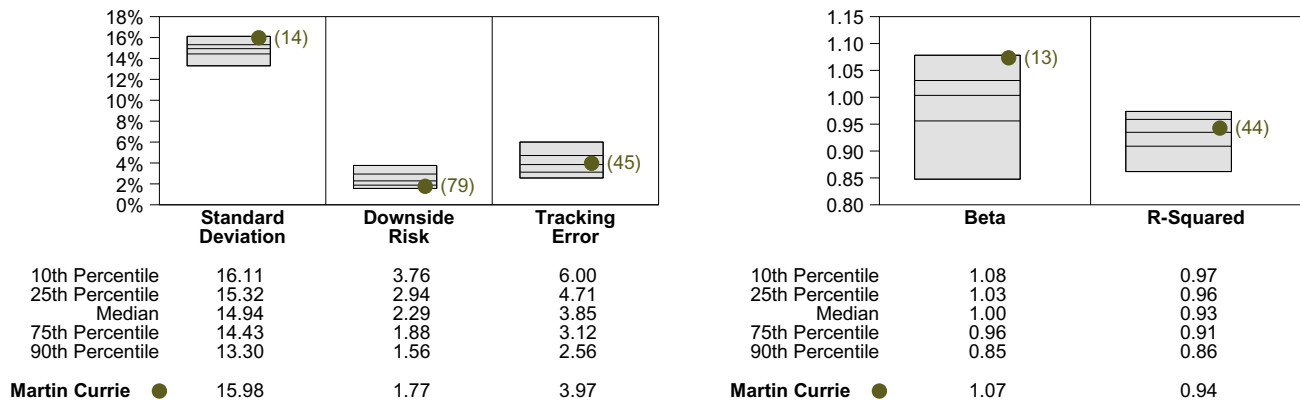
Risk Analysis vs Callan Emerging Broad (Gross) Five Years Ended September 30, 2019



Market Capture vs MSCI EM - Emerging Mkts (USD Net Div) Rankings Against Callan Emerging Broad (Gross) Five Years Ended September 30, 2019



Risk Statistics Rankings vs MSCI EM - Emerging Mkts (USD Net Div) Rankings Against Callan Emerging Broad (Gross) Five Years Ended September 30, 2019



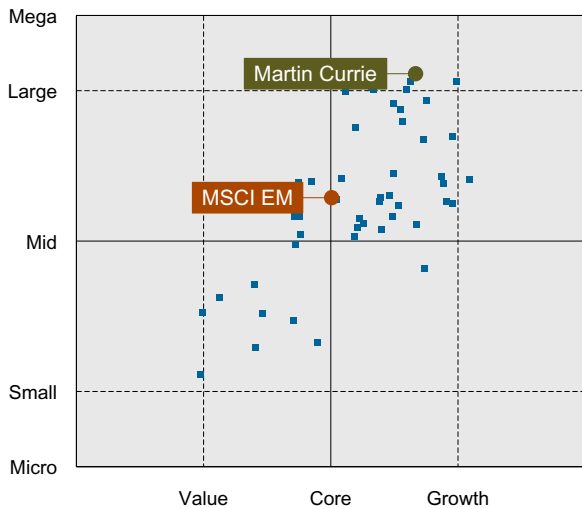
Current Holdings Based Style Analysis

Martin Currie

As of September 30, 2019

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various regional and style segments of the international/global equity market. The market is segmented quarterly by region and style. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left map illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right table displays the current portfolio and index weights and stock counts (in parentheses) in each capitalization/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

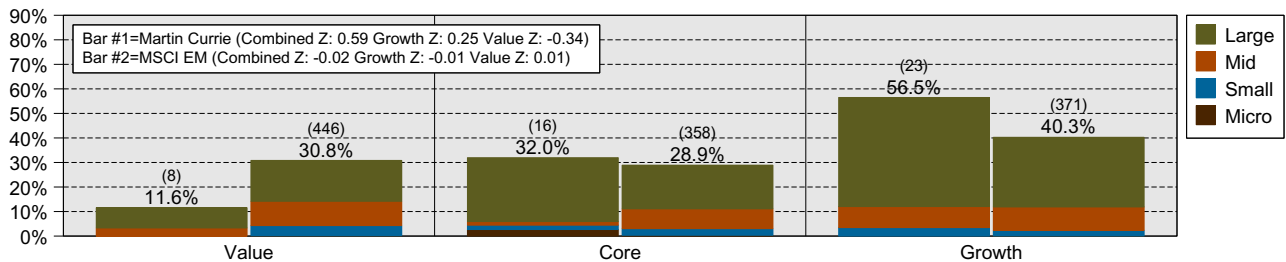
Style Map vs Callan Emerging Broad Holdings as of September 30, 2019



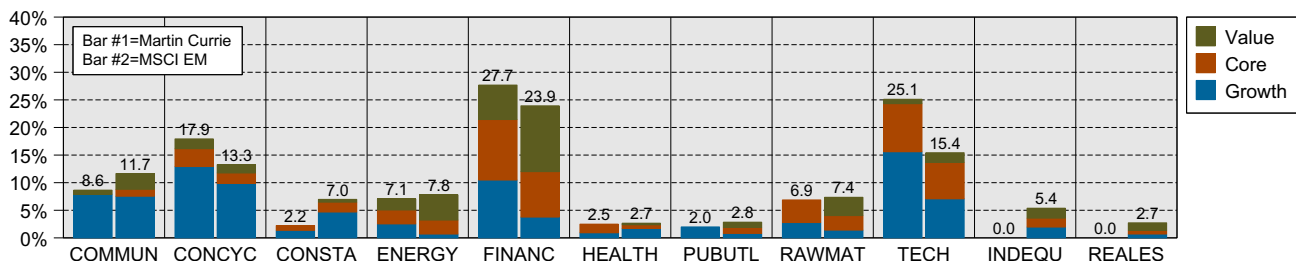
Style Exposure Matrix Holdings as of September 30, 2019

	Value	Core	Growth	Total
Large	8.2% (4) 16.7% (84)	26.0% (10) 17.8% (72)	44.5% (16) 28.4% (88)	78.7% (30) 62.8% (244)
Mid	3.3% (4) 9.9% (179)	1.5% (2) 8.1% (167)	8.6% (5) 9.5% (189)	13.4% (11) 27.5% (535)
Small	0.0% (0) 4.2% (174)	1.8% (2) 2.7% (117)	3.5% (2) 2.3% (92)	5.2% (4) 9.2% (383)
Micro	0.0% (0) 0.1% (9)	2.7% (2) 0.3% (2)	0.0% (0) 0.0% (2)	2.7% (2) 0.4% (13)
Total	11.6% (8) 30.8% (446)	32.0% (16) 28.9% (358)	56.5% (23) 40.3% (371)	100.0% (47) 100.0% (1175)

Combined Z-Score Style Distribution Holdings as of September 30, 2019



Sector Weights Distribution Holdings as of September 30, 2019

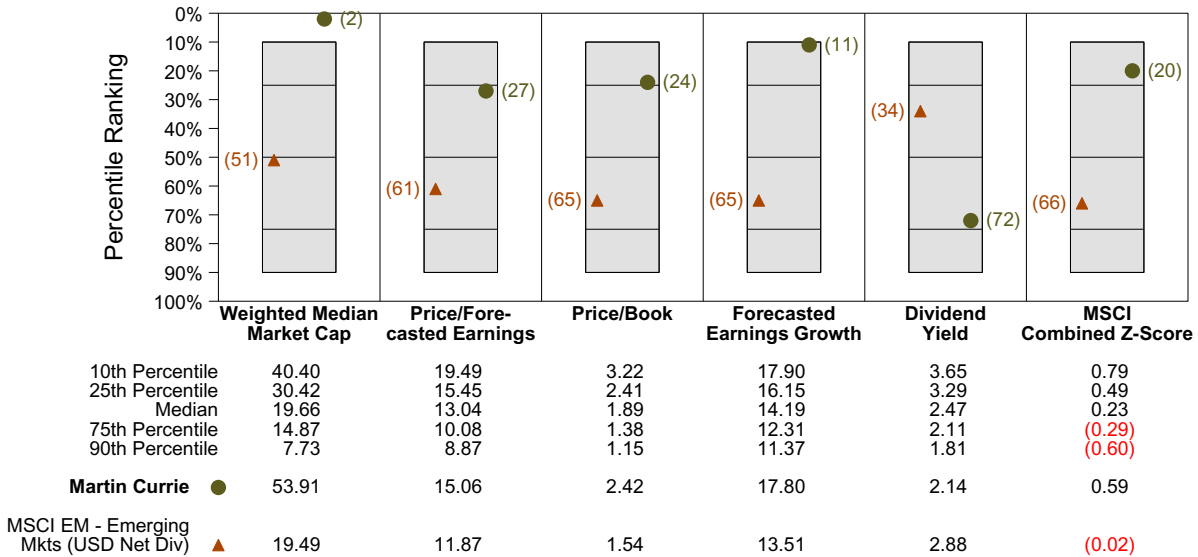


Martin Currie Equity Characteristics Analysis Summary

Portfolio Characteristics

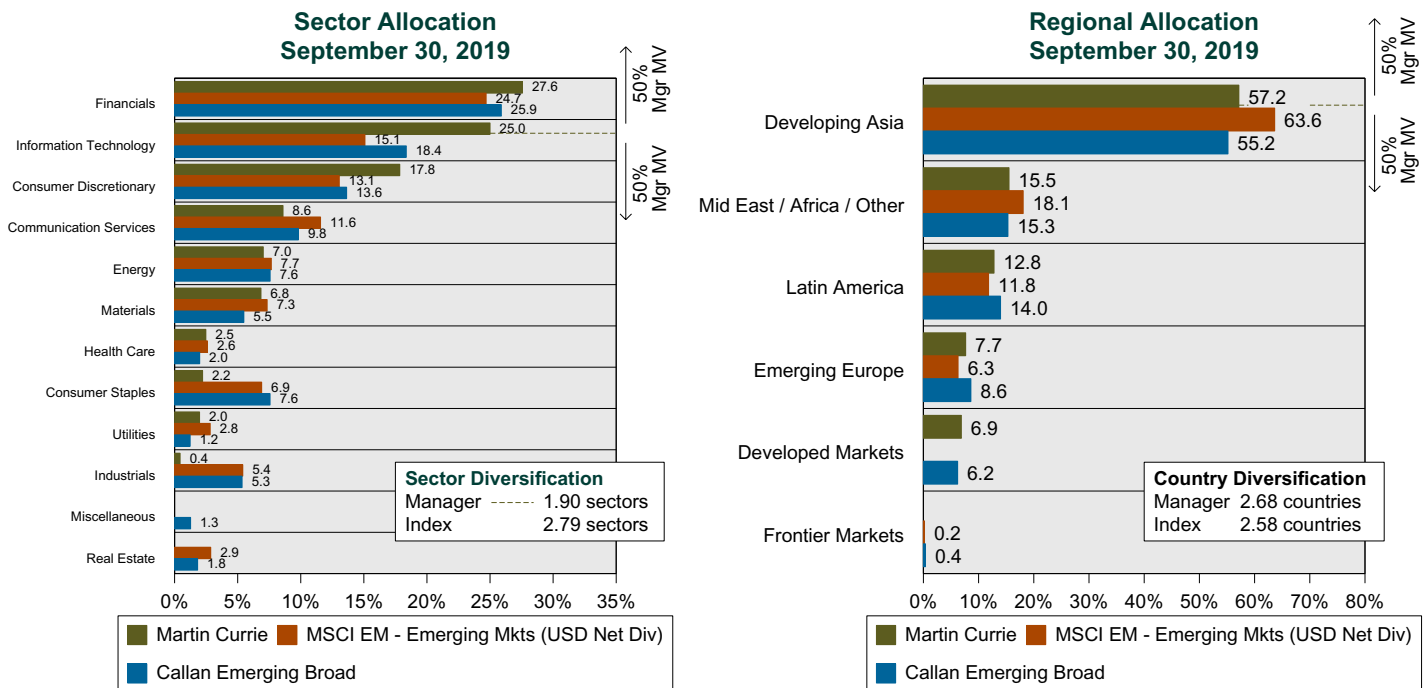
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

Portfolio Characteristics Percentile Rankings Rankings Against Callan Emerging Broad as of September 30, 2019



Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. The regional allocation chart compares the manager's geographical region weights with those of the benchmark as well as the median region weights of the peer group.

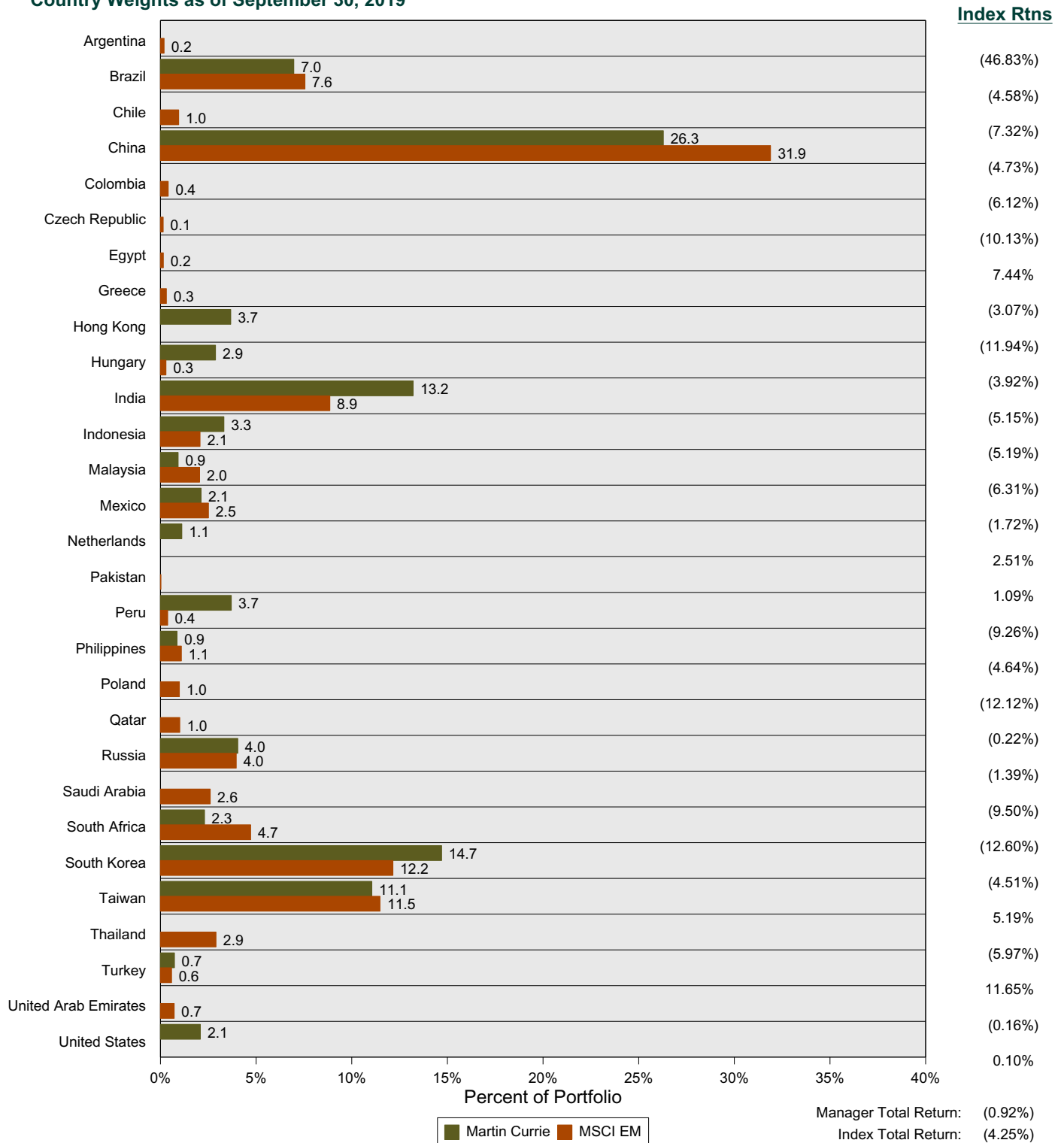


Country Allocation Martin Currie VS MSCI EM - Emerging Mkts (USD Net Div)

Country Allocation

The chart below contrasts the portfolio's country allocation with that of the index as of September 30, 2019. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent quarter. To the extent that the portfolio allocation is similar to the index, the portfolio should experience more "index-like" performance. In order to illustrate the performance effect on the portfolio and index of these country allocations, the individual index country returns are also shown.

Country Weights as of September 30, 2019



GlobeFlex Emerging Small Cap Period Ended September 30, 2019

Investment Philosophy

GlobeFlex is an active equity manager focused on bottom-up, stock selection. Their philosophy is based on the early identification of fundamental growth before it is recognized by other investors, defined by: Business Improvement: Finding companies with accelerating business conditions to identify early signs of growth; Management Quality: Evaluating the long-term growth sustainability through in-depth analysis of prospective operating performance and management's skill to increase shareholder wealth; and Relative Value: Recognizing accelerating business conditions early, buying and holding companies below fair market value given future growth prospects.

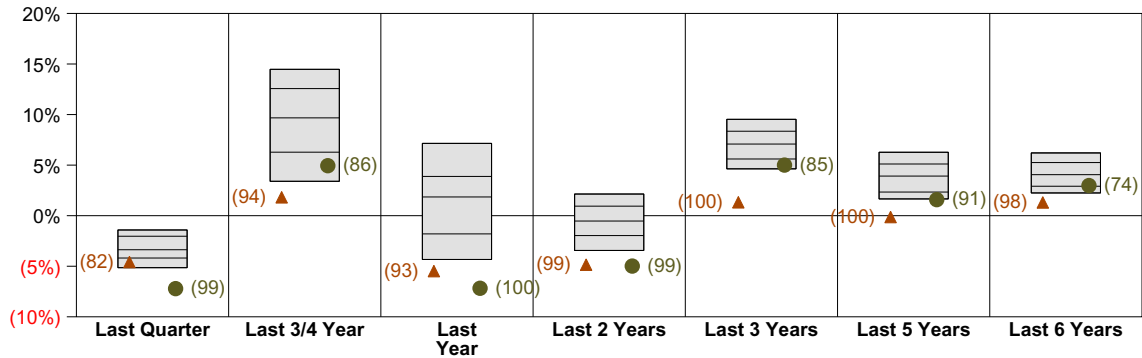
Quarterly Summary and Highlights

- GlobeFlex Emerging Small Cap's portfolio posted a (7.21)% return for the quarter placing it in the 99 percentile of the Callan Emerging Broad group for the quarter and in the 100 percentile for the last year.
- GlobeFlex Emerging Small Cap's portfolio underperformed the MSCI EM Small Cap by 2.63% for the quarter and underperformed the MSCI EM Small Cap for the year by 1.69%.

Quarterly Asset Growth

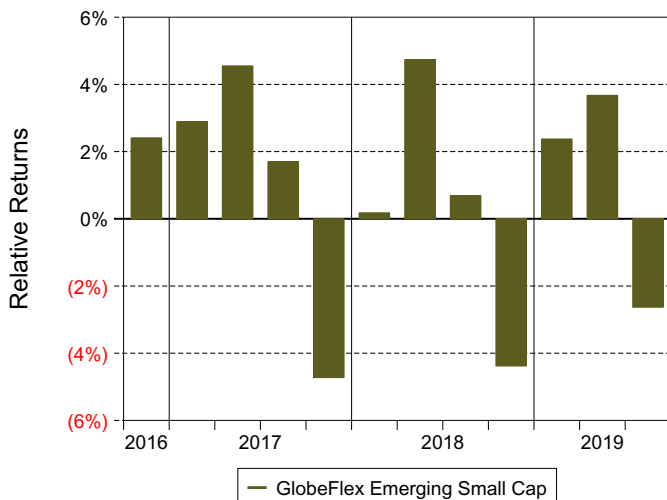
Beginning Market Value	\$94,607,772
Net New Investment	\$-150,649
Investment Gains/(Losses)	\$-6,823,829
Ending Market Value	\$87,633,294

Performance vs Callan Emerging Broad (Gross)

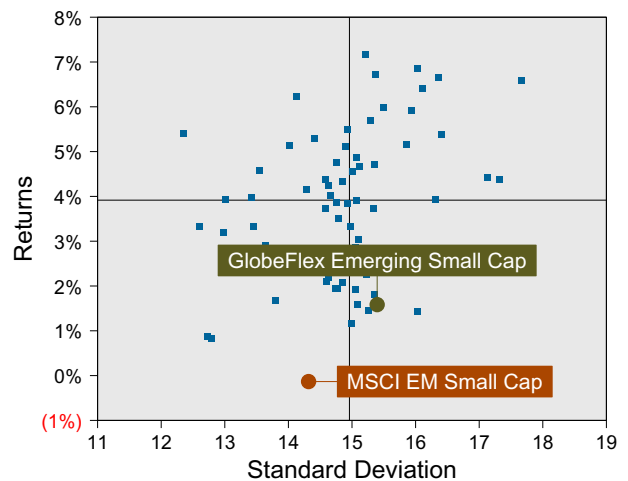


10th Percentile	(1.41)	14.47	7.15	2.14	9.53	6.27	6.21
25th Percentile	(2.03)	12.57	3.88	0.94	8.35	5.11	5.25
Median	(3.37)	9.67	1.85	(0.53)	7.08	3.92	4.06
75th Percentile	(4.19)	6.28	(1.80)	(1.97)	5.61	2.34	2.91
90th Percentile	(5.14)	3.40	(4.33)	(3.44)	4.63	1.66	2.25
GlobeFlex Emerging Small Cap	● (7.21)	4.94	(7.18)	(4.99)	5.00	1.58	2.98
MSCI EM Small Cap	▲ (4.58)	1.82	(5.48)	(4.85)	1.32	(0.13)	1.31

Relative Return vs MSCI EM Small Cap



Callan Emerging Broad (Gross) Annualized Five Year Risk vs Return

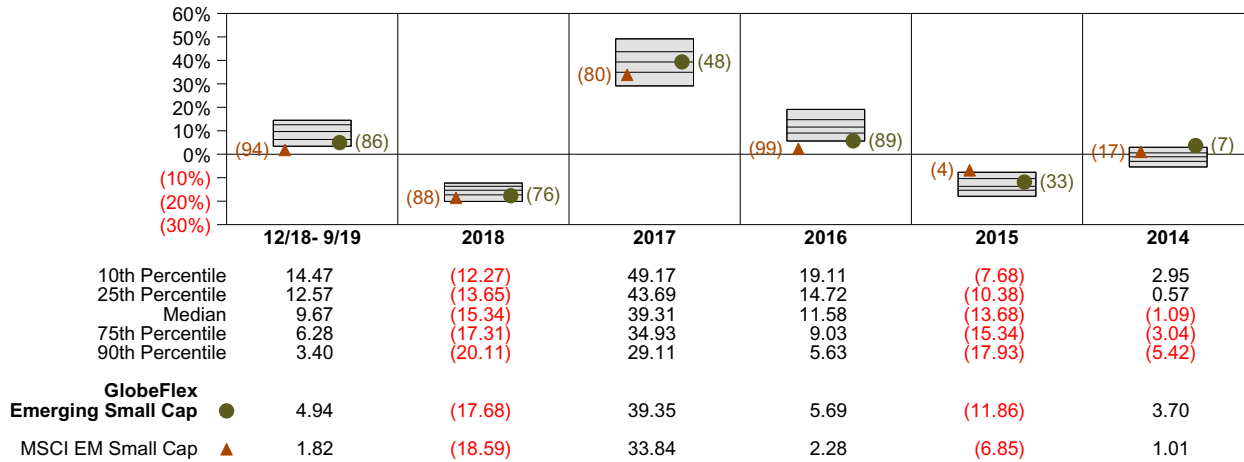


GlobeFlex Emerging Small Cap Return Analysis Summary

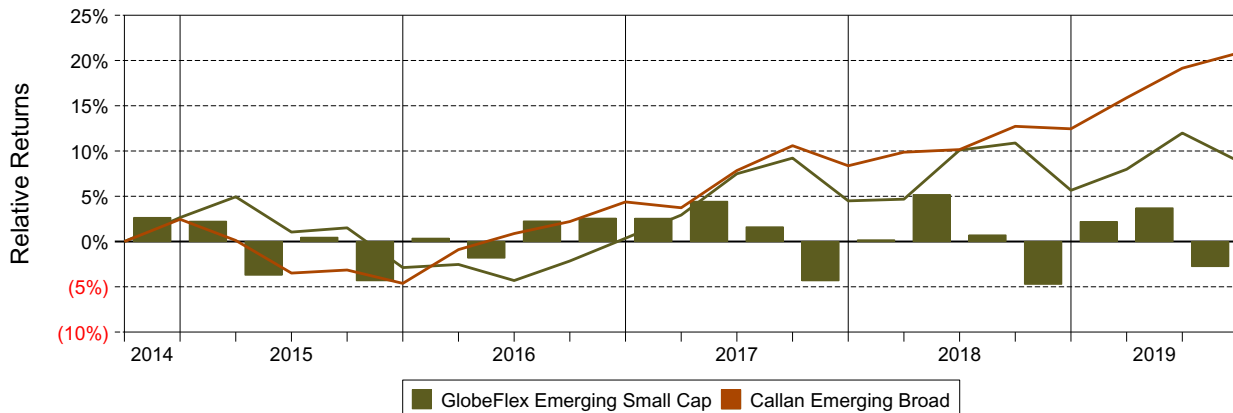
Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

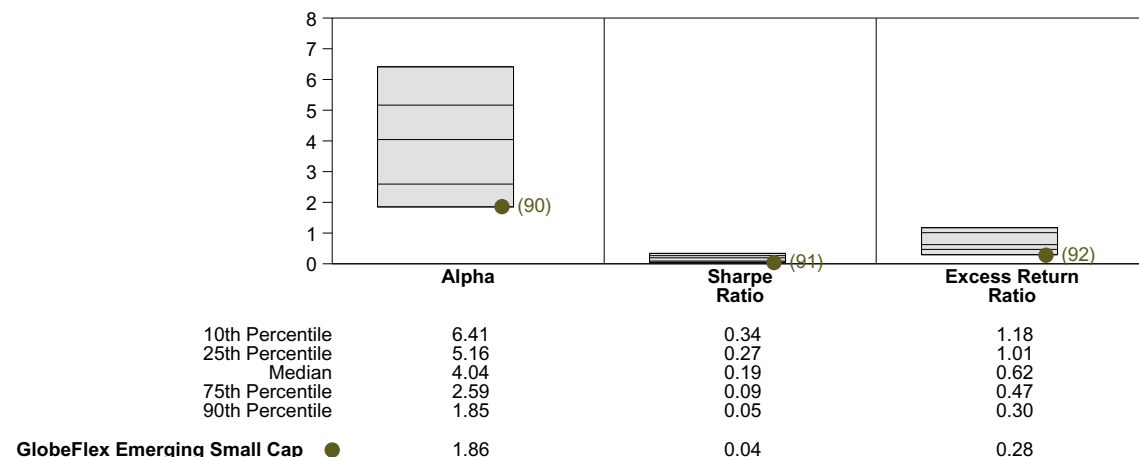
Performance vs Callan Emerging Broad (Gross)



Cumulative and Quarterly Relative Return vs MSCI EM Small Cap



Risk Adjusted Return Measures vs MSCI EM Small Cap Rankings Against Callan Emerging Broad (Gross) Five Years Ended September 30, 2019

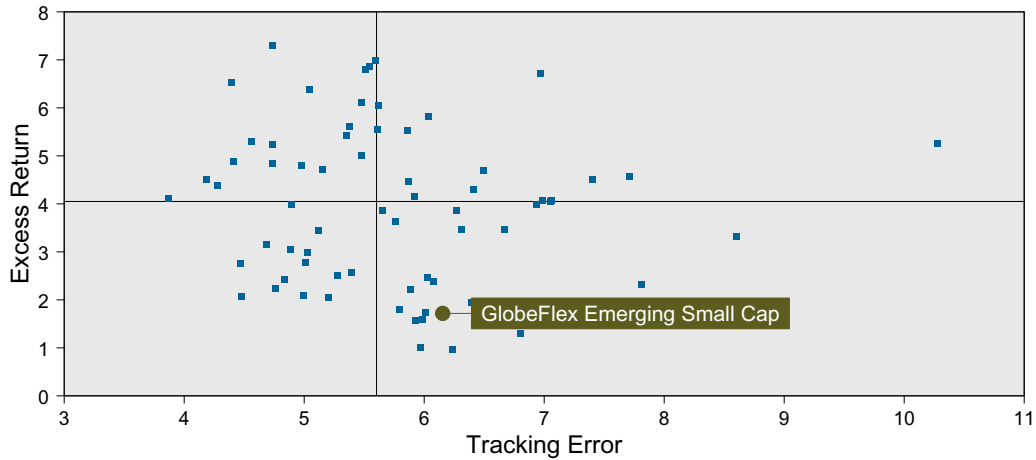


GlobeFlex Emerging Small Cap Risk Analysis Summary

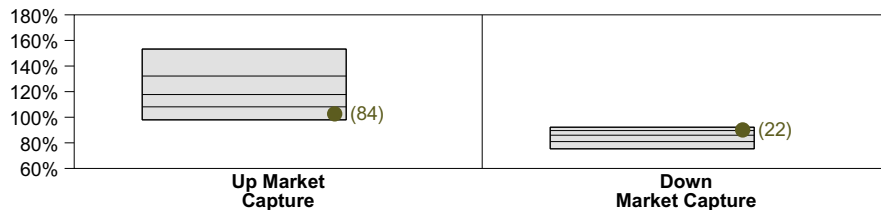
Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows Up and Down Market Capture. The last two charts show the ranking of the manager's risk statistics versus the peer group.

Risk Analysis vs Callan Emerging Broad (Gross) Five Years Ended September 30, 2019

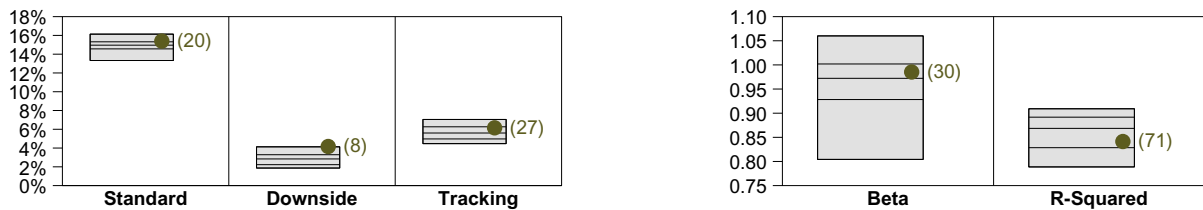


Market Capture vs MSCI EM Small Cap Index (USD Net Div) Rankings Against Callan Emerging Broad (Gross) Five Years Ended September 30, 2019



	Up Market Capture	Down Market Capture
10th Percentile	153.26	92.21
25th Percentile	132.18	89.59
Median	117.72	85.96
75th Percentile	108.14	80.98
90th Percentile	97.97	75.34
GlobeFlex Emerging Small Cap	102.65	90.09

Risk Statistics Rankings vs MSCI EM Small Cap Index (USD Net Div) Rankings Against Callan Emerging Broad (Gross) Five Years Ended September 30, 2019



	Standard Deviation	Downside Risk	Tracking Error	Beta	R-Squared
10th Percentile	16.14	4.13	7.05	1.06	0.91
25th Percentile	15.32	3.29	6.26	1.00	0.89
Median	14.96	2.84	5.60	0.97	0.87
75th Percentile	14.57	2.23	4.97	0.93	0.83
90th Percentile	13.33	1.87	4.47	0.80	0.79
GlobeFlex Emerging Small Cap	15.40	4.16	6.15	0.99	0.84

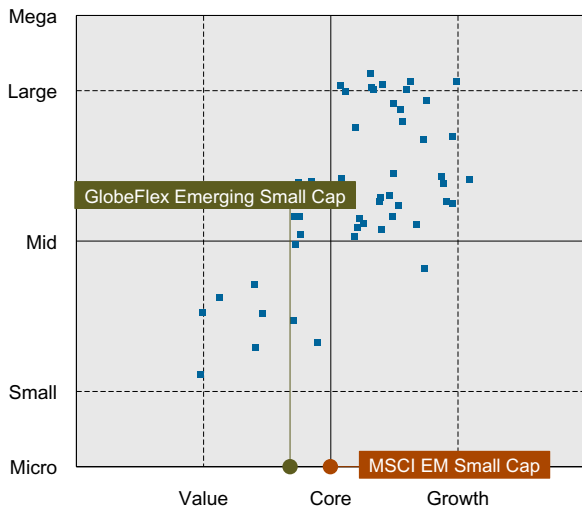
Current Holdings Based Style Analysis

GlobeFlex Emerging Small Cap

As of September 30, 2019

This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various regional and style segments of the international/global equity market. The market is segmented quarterly by region and style. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left map illustrates the current market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the current portfolio and index weights and stock counts (in parentheses) in each capitalization/style segment of the market. The middle chart illustrates the total exposures and stock counts in the three style segments, with a legend showing the total growth, value, and "combined Z" (growth - value) scores. The bottom chart exhibits the sector weights as well as the style weights within each sector.

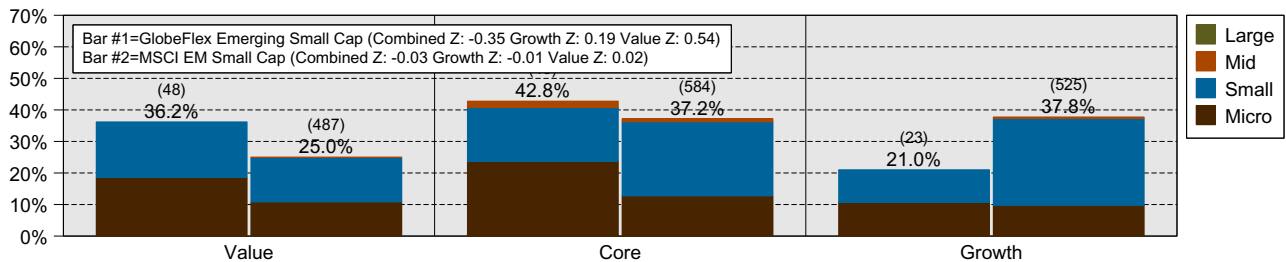
Style Map vs Callan Emerging Broad Holdings as of September 30, 2019



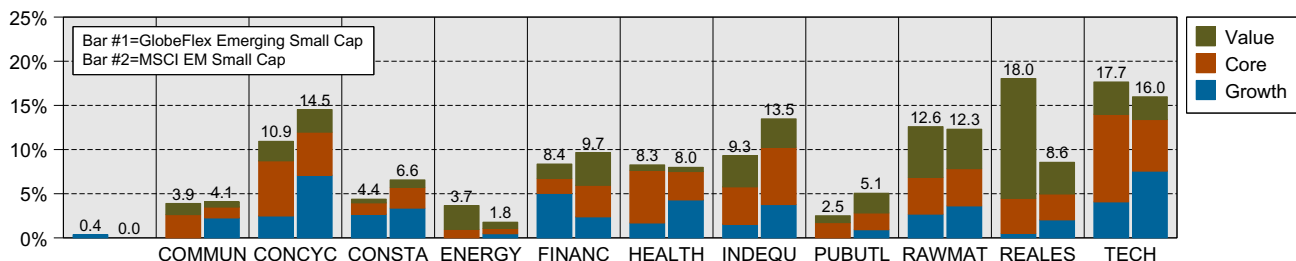
Style Exposure Matrix Holdings as of September 30, 2019

	Value	Core	Growth	Total
Large	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Mid	0.0% (0)	1.9% (2)	0.0% (0)	1.9% (2)
Small	17.6% (21)	17.1% (17)	10.3% (8)	45.1% (46)
Micro	18.6% (27)	23.7% (26)	10.7% (15)	53.0% (68)
Total	36.2% (48)	42.8% (45)	21.0% (23)	100.0% (116)

Combined Z-Score Style Distribution Holdings as of September 30, 2019



Sector Weights Distribution Holdings as of September 30, 2019

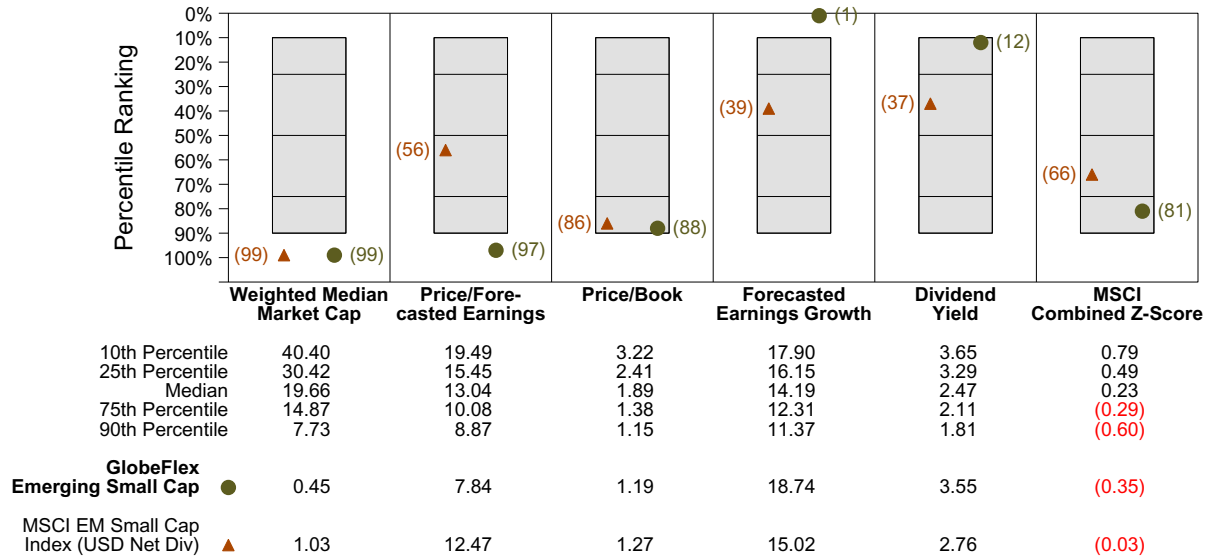


GlobeFlex Emerging Small Cap Equity Characteristics Analysis Summary

Portfolio Characteristics

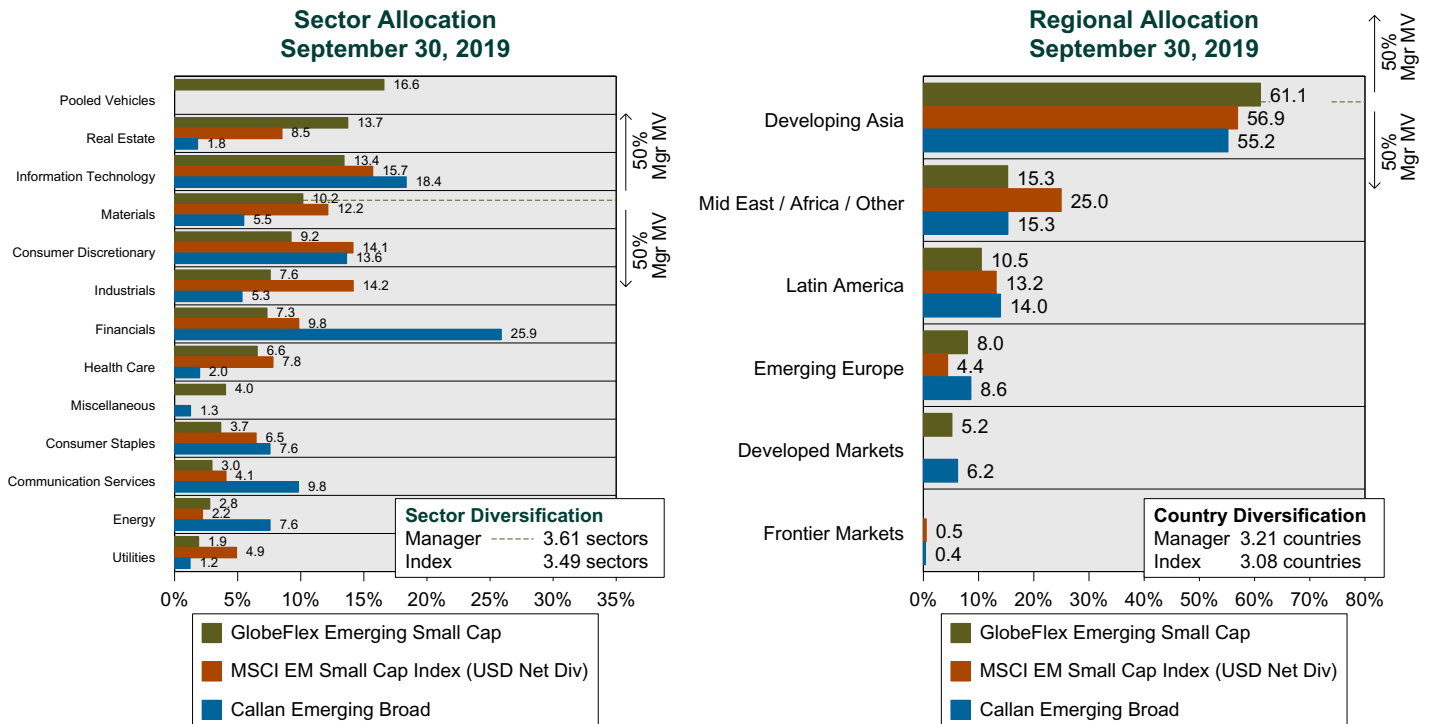
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

Portfolio Characteristics Percentile Rankings Rankings Against Callan Emerging Broad as of September 30, 2019



Sector Weights

The graph below contrasts the manager's sector weights with those of the benchmark and median sector weights across the members of the peer group. The magnitude of sector weight differences from the index and the manager's sector diversification are also shown. The regional allocation chart compares the manager's geographical region weights with those of the benchmark as well as the median region weights of the peer group.

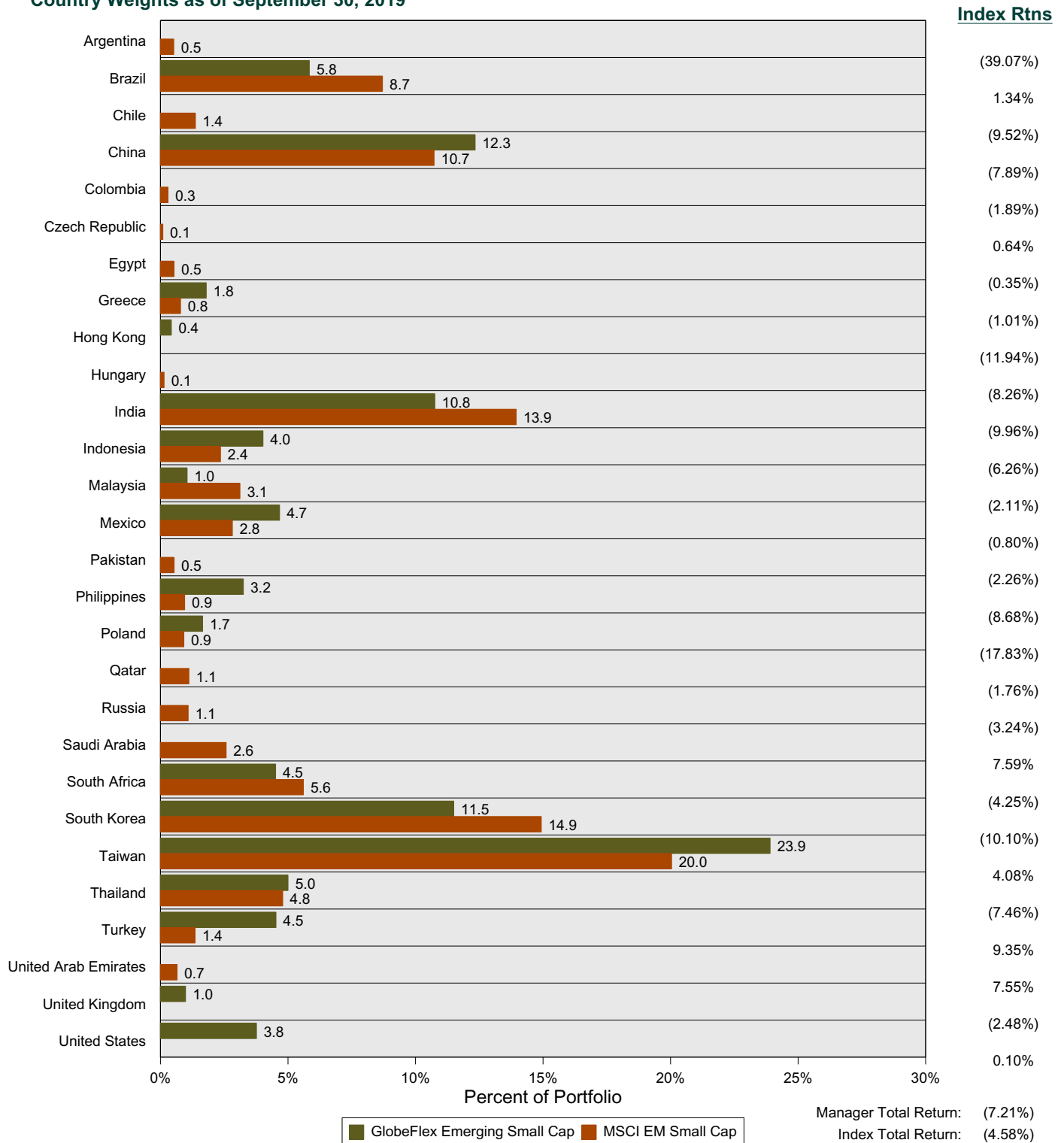


Country Allocation GlobeFlex Emerging Small Cap VS MSCI EM Small Cap Index (USD Net Div)

Country Allocation

The chart below contrasts the portfolio's country allocation with that of the index as of September 30, 2019. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent quarter. To the extent that the portfolio allocation is similar to the index, the portfolio should experience more "index-like" performance. In order to illustrate the performance effect on the portfolio and index of these country allocations, the individual index country returns are also shown.

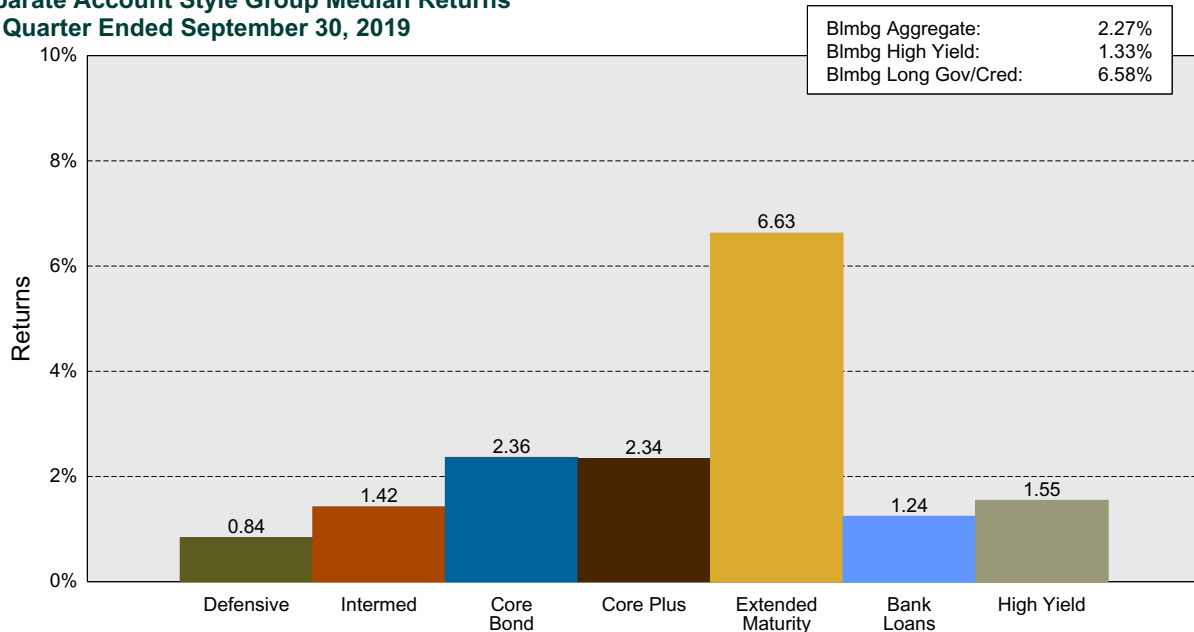
Country Weights as of September 30, 2019



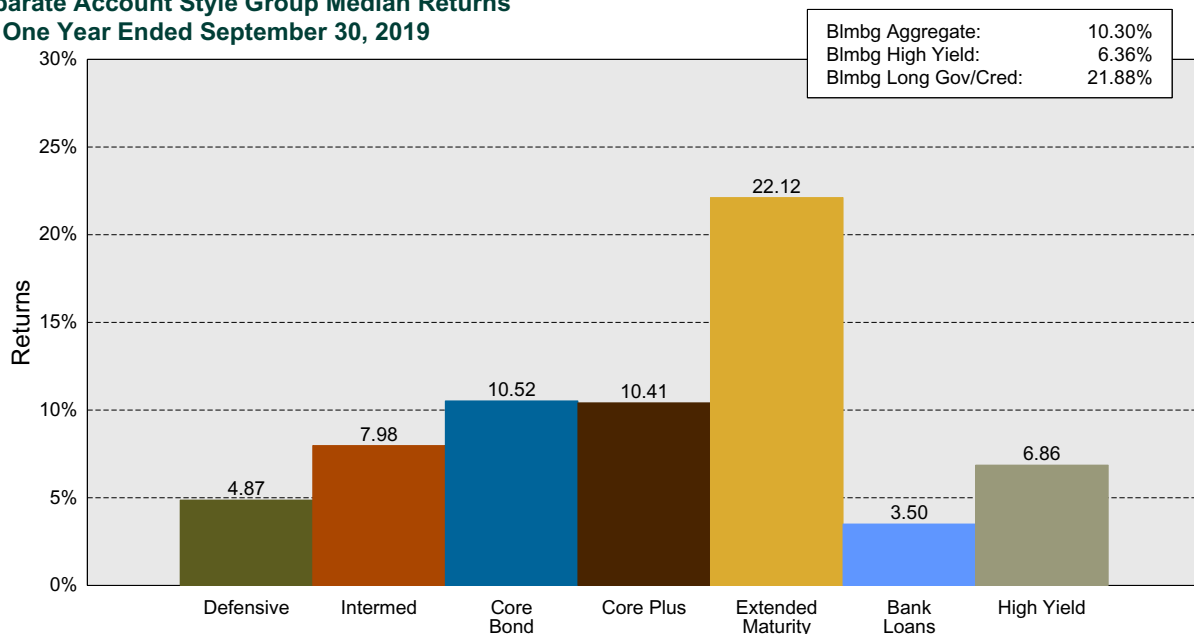
Domestic Fixed Income Active Management Overview

Ten-year U.S. Treasury yields were volatile in the third quarter, especially in September, hitting a 2019 low of 1.40% on Sept. 4, soaring to 1.90% mid-month and closing the quarter at 1.68%, down 32 bps from June 30. U.S. Treasuries thus posted strong results (Bloomberg Barclays US Treasury Index: +2.4%). Long U.S. Treasuries soared (Bloomberg Barclays Long US Treasury Index: +7.9%; +19.8% YTD) in the falling rate environment. The Bloomberg Barclays Aggregate rose 2.3%, bringing its YTD result to an impressive +8.5%. High yield was up just over 1% (+11.4% YTD) but, notably, lower quality significantly underperformed (CCC: -1.8% vs BB: +2.0%, and +5.6% vs +12.8% YTD) representing some concern about deteriorating quality at the lower end of the spectrum. TIPS (Bloomberg Barclays TIPS: +1.3%) underperformed as inflation expectations waned; 10-year breakeven spreads were 1.53% as of quarter-end, down from 1.69% as of 6/30/19. The 10-year real yield dipped briefly into negative territory in early September.

Separate Account Style Group Median Returns for Quarter Ended September 30, 2019



Separate Account Style Group Median Returns for One Year Ended September 30, 2019

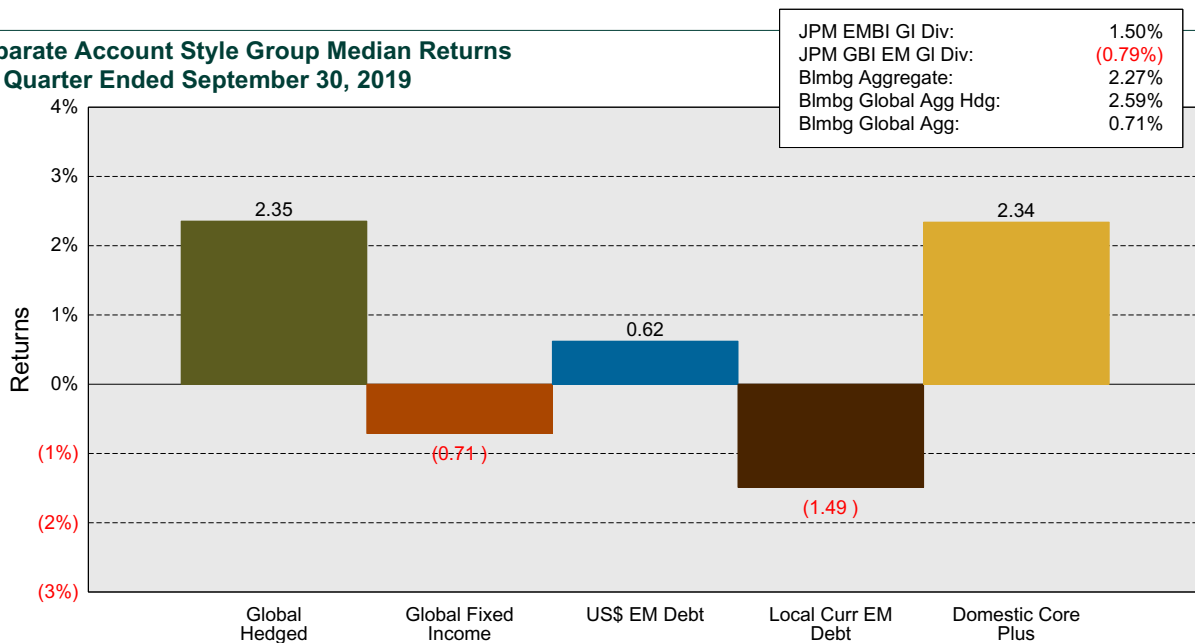


Global Fixed Income Active Management Overview

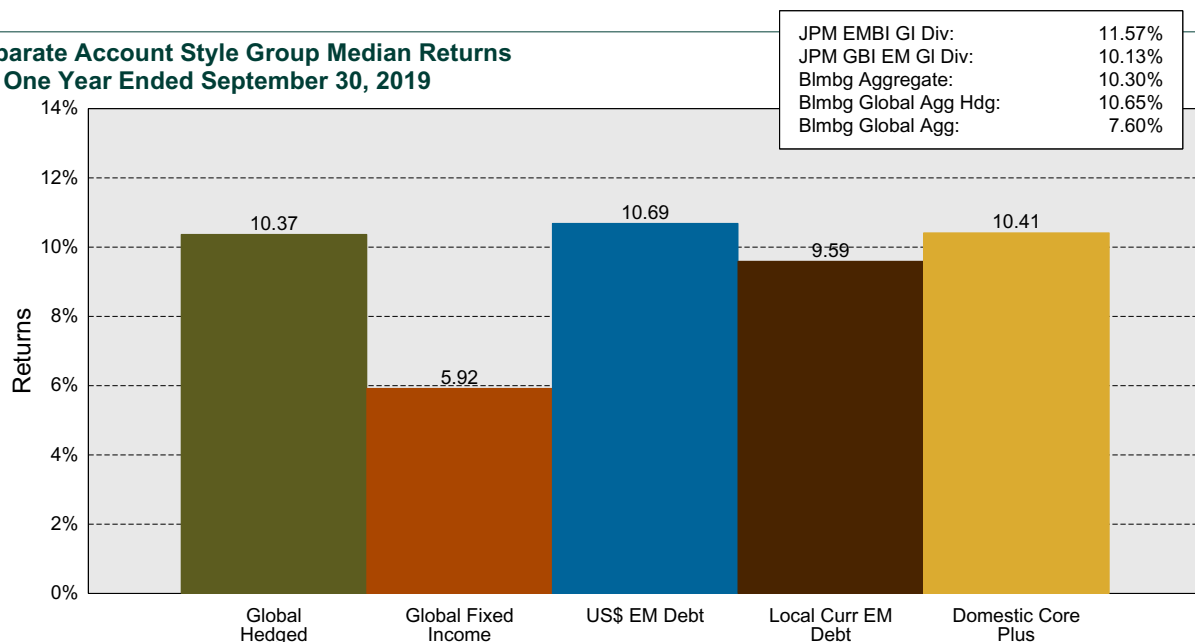
Rates across developed markets fell in the third quarter as growth continued to disappoint, but the U.S. dollar appreciated versus most currencies. As a result, most countries posted negative returns on an unhedged basis. Across the JPM Government Bond Global Index, the UK (unhedged: +3.3%; hedged: +7.1%) and Italy (unhedged: +3.8%; hedged: +9.1%) were notable exceptions given a sharper decline in yields. The JPM Government Bond Global Index return for the quarter was +1.1% (unhedged) and +3.2% (hedged). Outside the U.S., the more broadly diversified Bloomberg Barclays Global Aggregate ex US fell 0.6% (unhedged) while the hedged version was up 2.8% for the quarter.

Emerging market returns were roughly flat (JPM EMBI Global Diversified: +1.5%; JPM GBI-EM Global Diversified: -0.8%) but both are up sharply YTD (+13.0%; +7.9%) respectively. Within the dollar-denominated benchmark, Argentina (-42%) and Venezuela (-51%) were among the few to post negative returns. This external debt index is more sensitive to U.S. interest rates. Conversely, returns in the local debt benchmark were more mixed with Turkey (+19%) and Argentina (-60%) being outliers.

Separate Account Style Group Median Returns for Quarter Ended September 30, 2019



Separate Account Style Group Median Returns for One Year Ended September 30, 2019

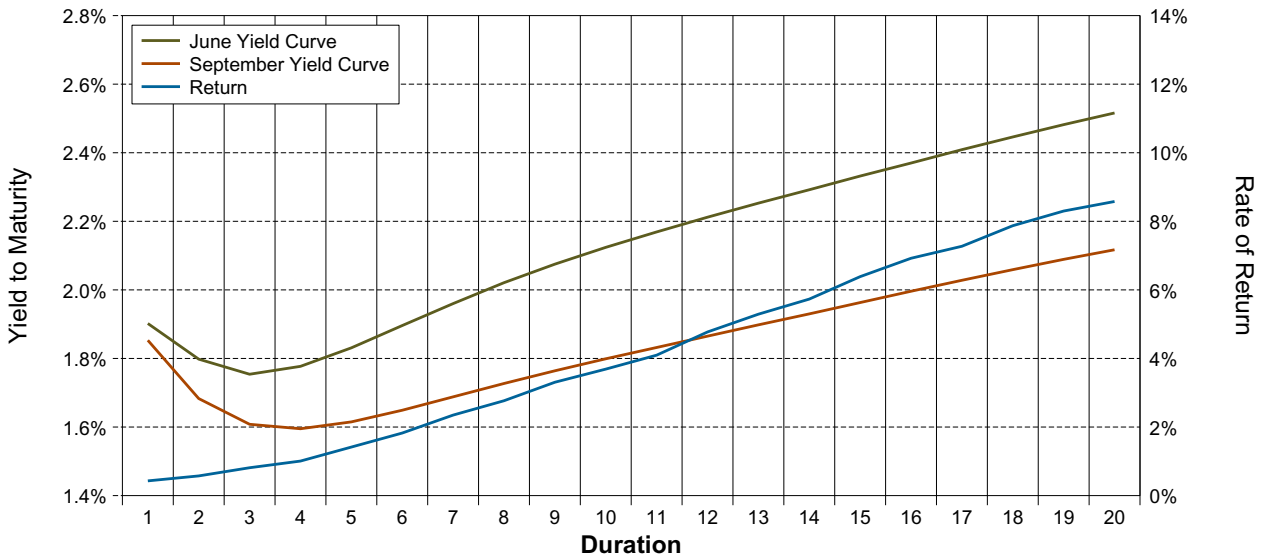


Bond Market Environment

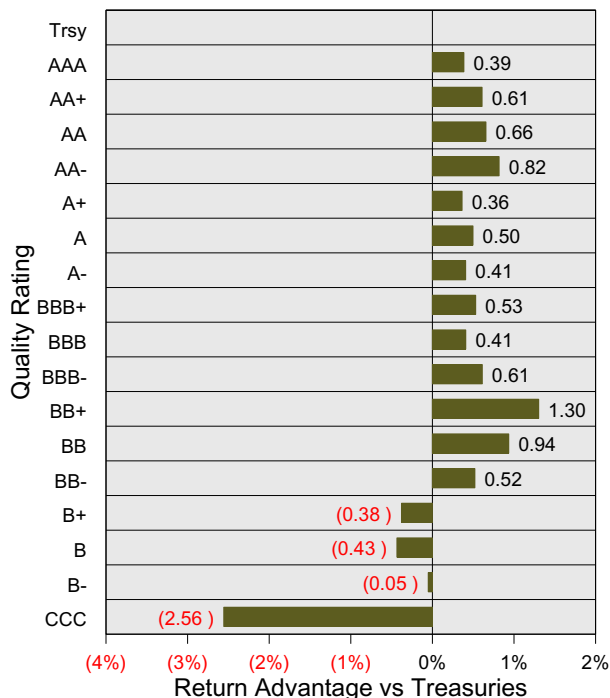
Factors Influencing Bond Returns

The charts below are designed to give you an overview of the factors that influenced bond market returns for the quarter. The first chart shows the shift in the Treasury yield curve and the resulting returns by duration. The second chart shows the average return premium (relative to Treasuries) for bonds with different quality ratings. The final chart shows the average return premium of the different sectors relative to Treasuries. These sector premiums are calculated after differences in quality and term structure have been accounted for across the sectors. They are typically explained by differences in convexity, sector specific supply and demand considerations, or other factors that influence the perceived risk of the sector.

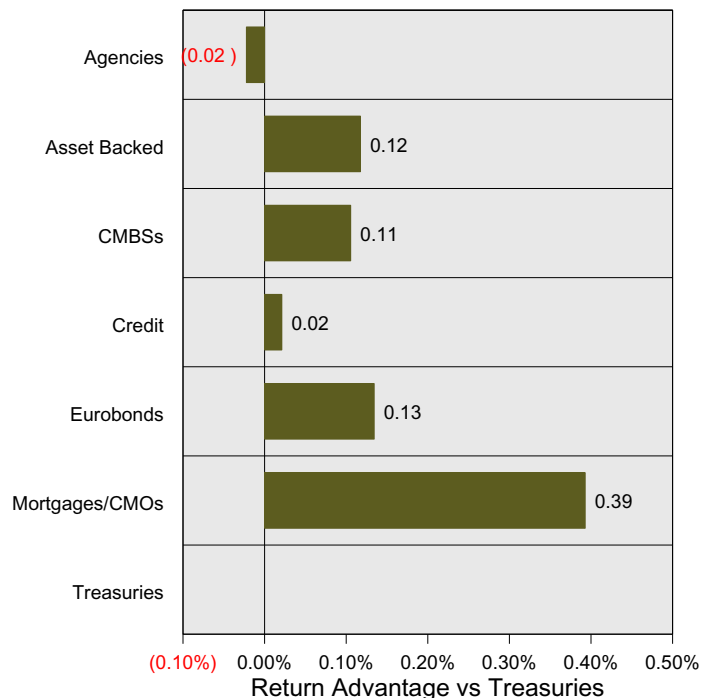
Yield Curve Change and Rate of Return One Quarter Ended September 30, 2019



Duration Adjusted Return Premium to Quality One Quarter Ended September 30, 2019



Quality and Duration Adjusted Return Premium by Sector One Quarter Ended September 30, 2019



Fixed Income Period Ended September 30, 2019

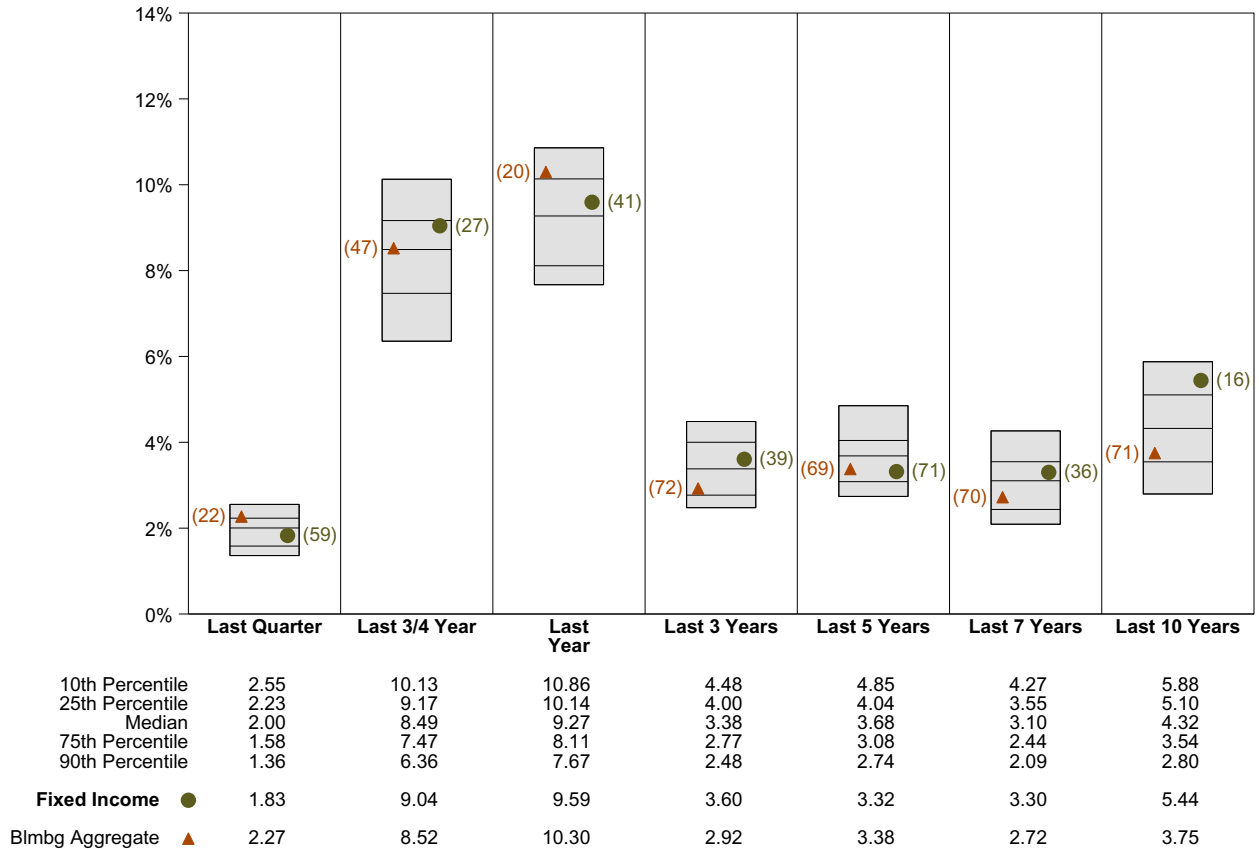
Quarterly Summary and Highlights

- Fixed Income's portfolio posted a 1.83% return for the quarter placing it in the 59 percentile of the Public Fund - Domestic Fixed group for the quarter and in the 41 percentile for the last year.
- Fixed Income's portfolio underperformed the Blmbg Aggregate by 0.44% for the quarter and underperformed the Blmbg Aggregate for the year by 0.70%.

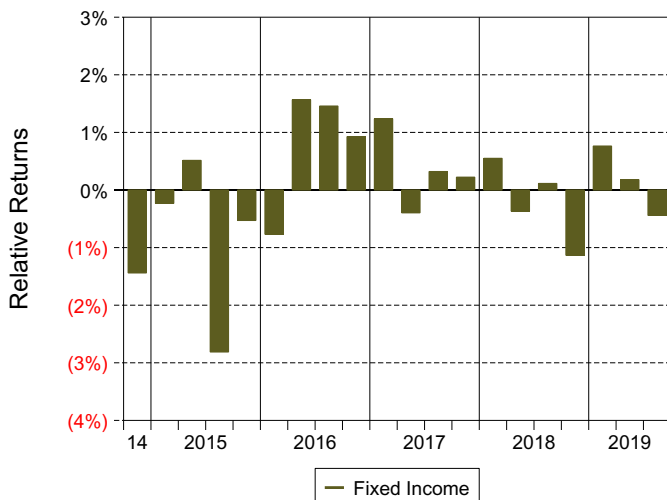
Quarterly Asset Growth

Beginning Market Value	\$4,273,494,361
Net New Investment	\$-1,108,413
Investment Gains/(Losses)	\$78,513,347
Ending Market Value	\$4,350,899,295

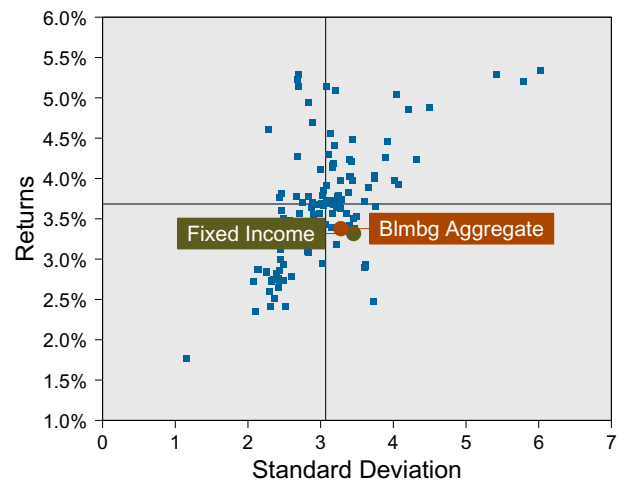
Performance vs Public Fund - Domestic Fixed (Gross)



Relative Return vs Blmbg Aggregate



Public Fund - Domestic Fixed (Gross) Annualized Five Year Risk vs Return

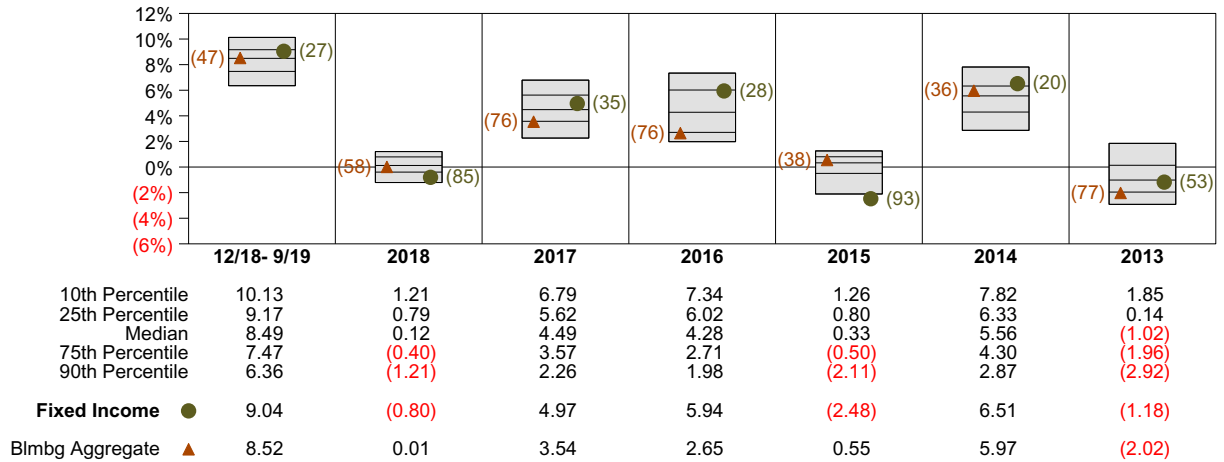


Fixed Income Return Analysis Summary

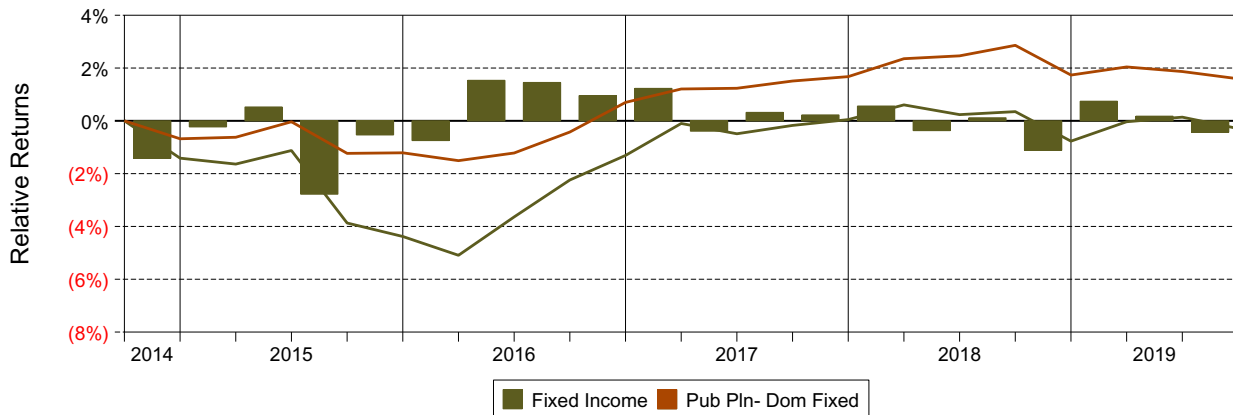
Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

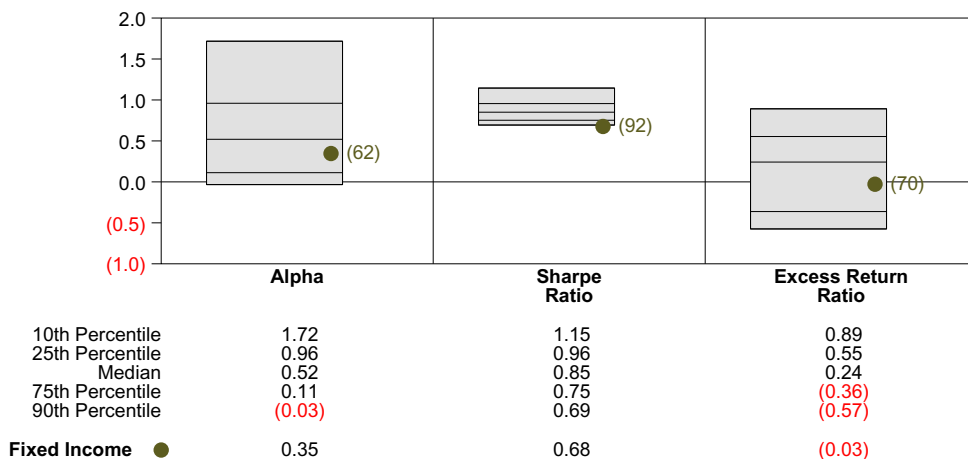
Performance vs Public Fund - Domestic Fixed (Gross)



Cumulative and Quarterly Relative Return vs Blmbg Aggregate



Risk Adjusted Return Measures vs Blmbg Aggregate Rankings Against Public Fund - Domestic Fixed (Gross) Five Years Ended September 30, 2019

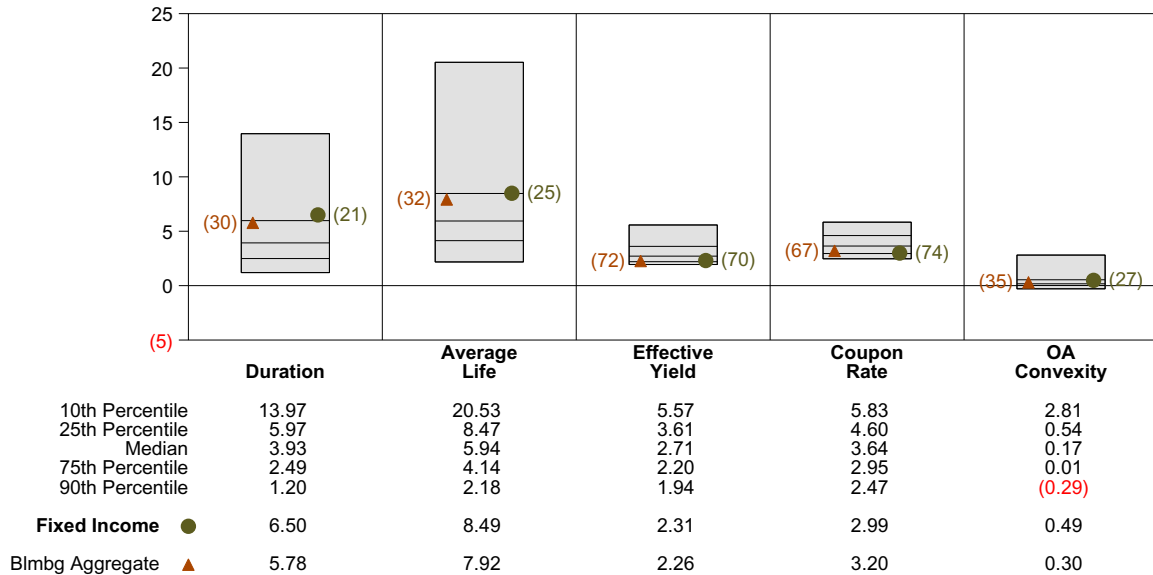


Fixed Income Bond Characteristics Analysis Summary

Portfolio Characteristics

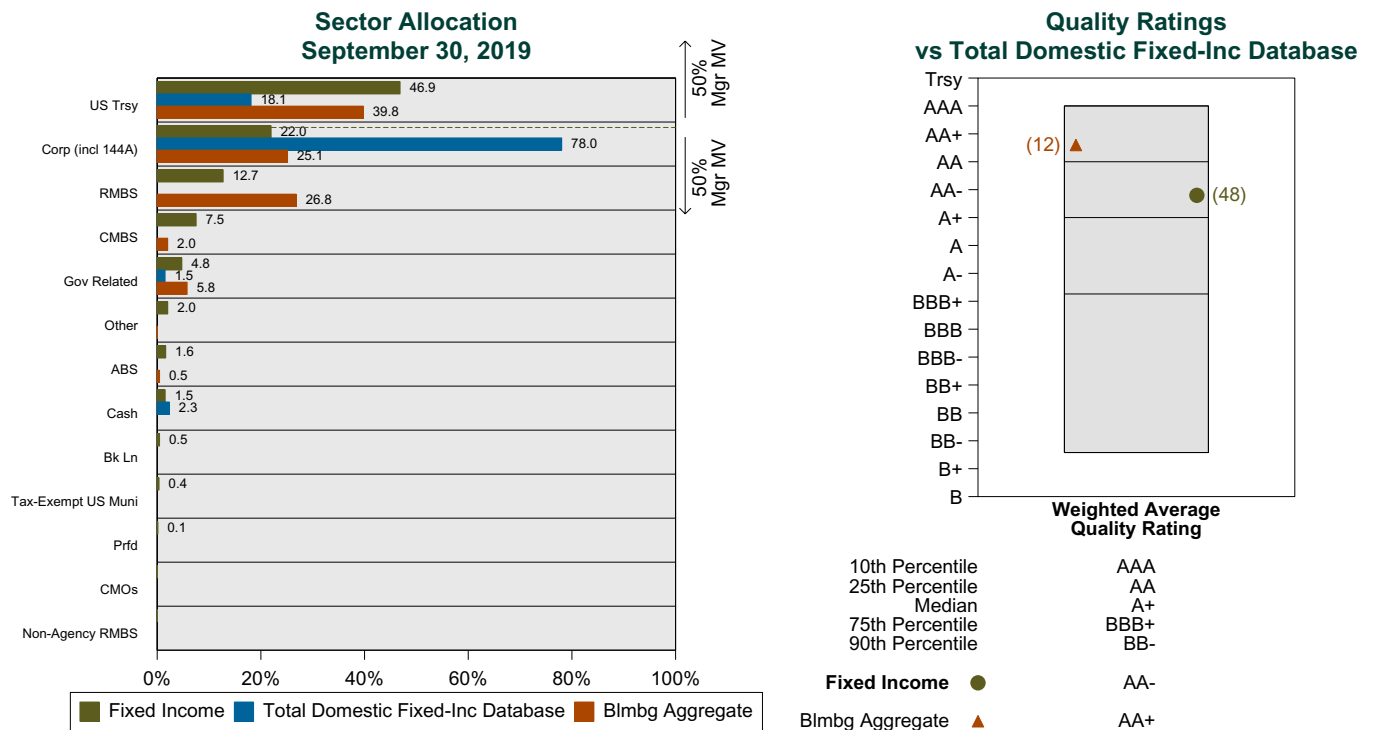
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

Fixed Income Portfolio Characteristics Rankings Against Total Domestic Fixed-Inc Database as of September 30, 2019



Sector Allocation and Quality Ratings

The first graph compares the manager's sector allocation with the average allocation across all the members of the manager's style. The second graph compares the manager's weighted average quality rating with the range of quality ratings for the style.

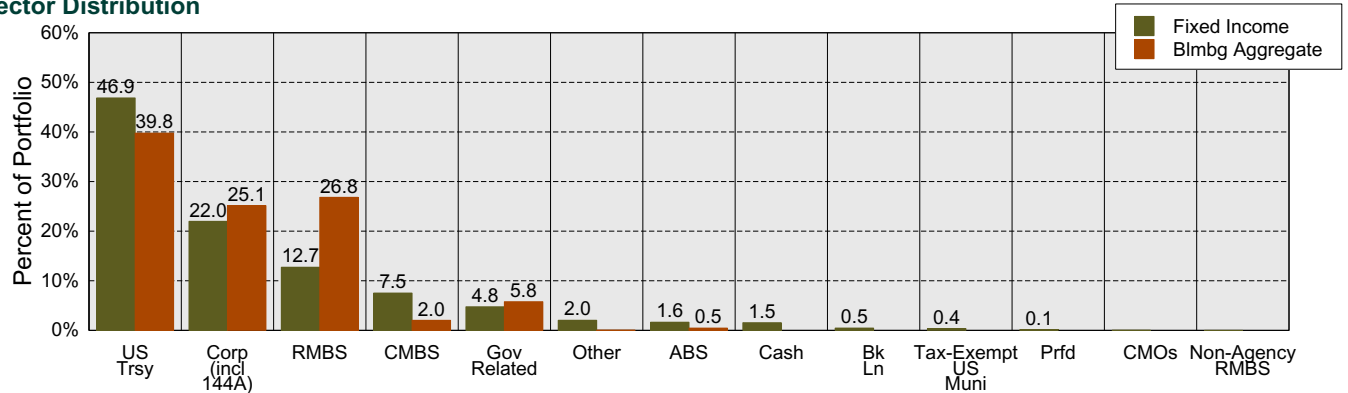


Fixed Income Portfolio Characteristics Summary As of September 30, 2019

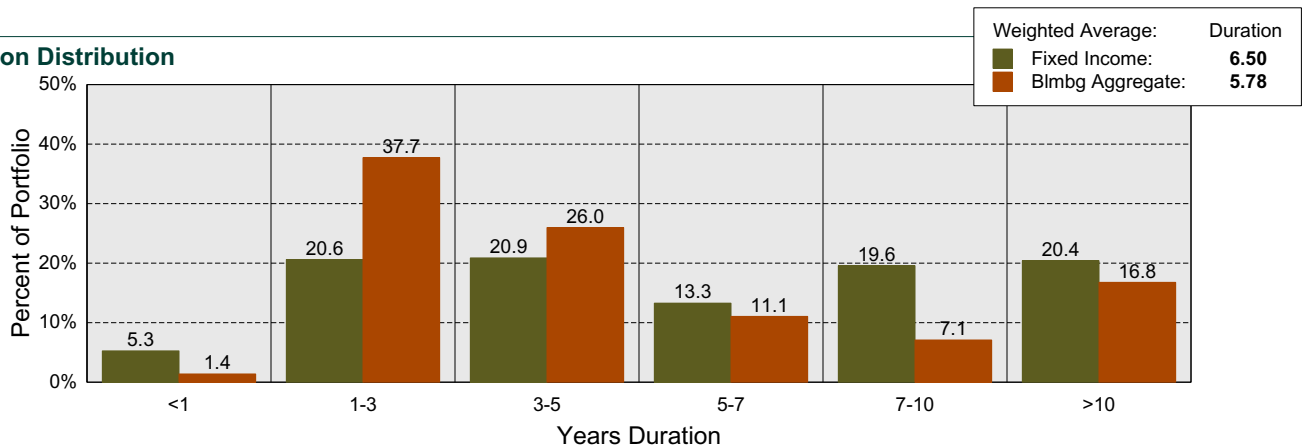
Portfolio Structure Comparison

The charts below compare the structure of the portfolio to that of the index from the three perspectives that have the greatest influence on return. The first chart compares the two portfolios across sectors. The second chart compares the duration distribution. The last chart compares the distribution across quality ratings.

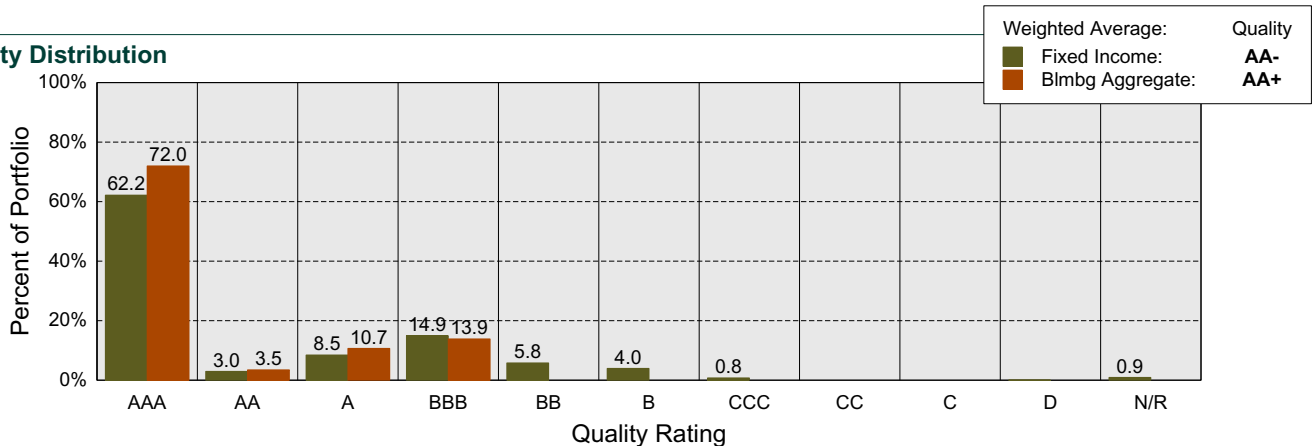
Sector Distribution



Duration Distribution



Quality Distribution



MCM Bond Index

Period Ended September 30, 2019

Investment Philosophy

Fixed income indexing offers a cost-effective, sensible investment approach to gaining diversified market exposure and receiving competitive relative returns over the long-term. Mellon Capital's Aggregate Bond Index Strategy employs a stratified sampling approach that has consistently added value with very little tracking error versus the Barclays Capital Aggregate Bond Index. We emphasize low turnover (low transaction costs) and strict risk control in the structuring of our portfolios.

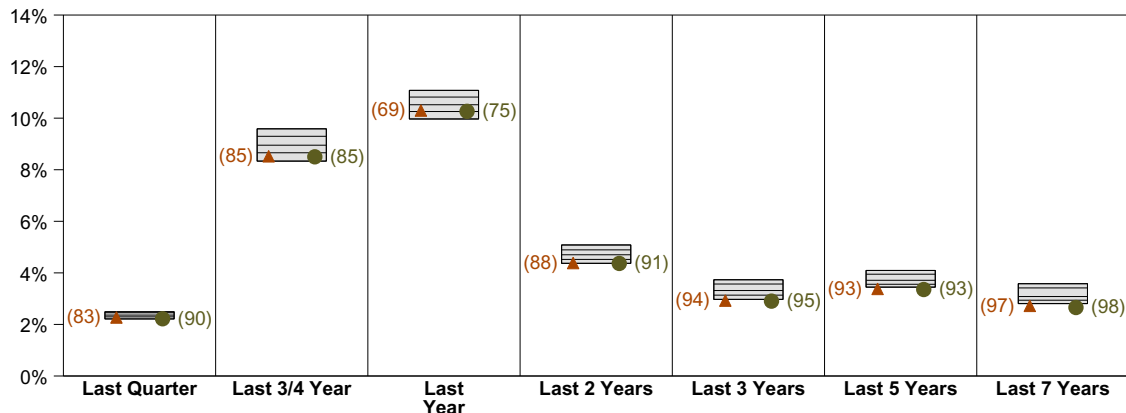
Quarterly Summary and Highlights

- MCM Bond Index's portfolio posted a 2.22% return for the quarter placing it in the 90 percentile of the Callan Core Bond Fixed Income group for the quarter and in the 75 percentile for the last year.
- MCM Bond Index's portfolio underperformed the Blmbg Aggregate by 0.05% for the quarter and underperformed the Blmbg Aggregate for the year by 0.03%.

Quarterly Asset Growth

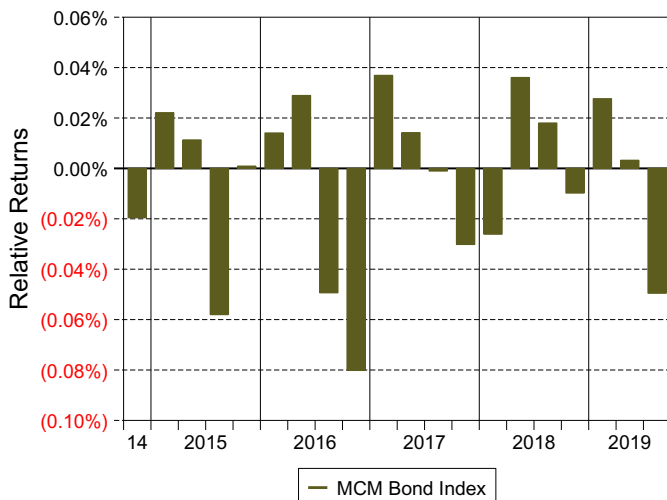
Beginning Market Value	\$1,091,921,206
Net New Investment	\$291,132
Investment Gains/(Losses)	\$24,331,822
Ending Market Value	\$1,116,544,160

Performance vs Callan Core Bond Fixed Income (Gross)

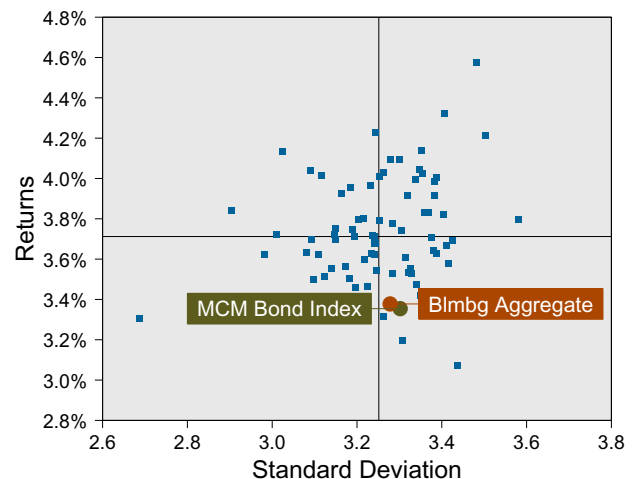


10th Percentile	2.49	9.59	11.08	5.08	3.73	4.09	3.58
25th Percentile	2.45	9.30	10.82	4.89	3.57	3.95	3.42
Median	2.36	8.95	10.52	4.70	3.32	3.71	3.08
75th Percentile	2.29	8.66	10.26	4.52	3.14	3.56	2.94
90th Percentile	2.21	8.33	9.97	4.37	2.97	3.45	2.81
MCM Bond Index ●	2.22	8.50	10.26	4.37	2.90	3.35	2.66
Blmbg Aggregate ▲	2.27	8.52	10.30	4.38	2.92	3.38	2.72

Relative Return vs Blmbg Aggregate



Callan Core Bond Fixed Income (Gross) Annualized Five Year Risk vs Return

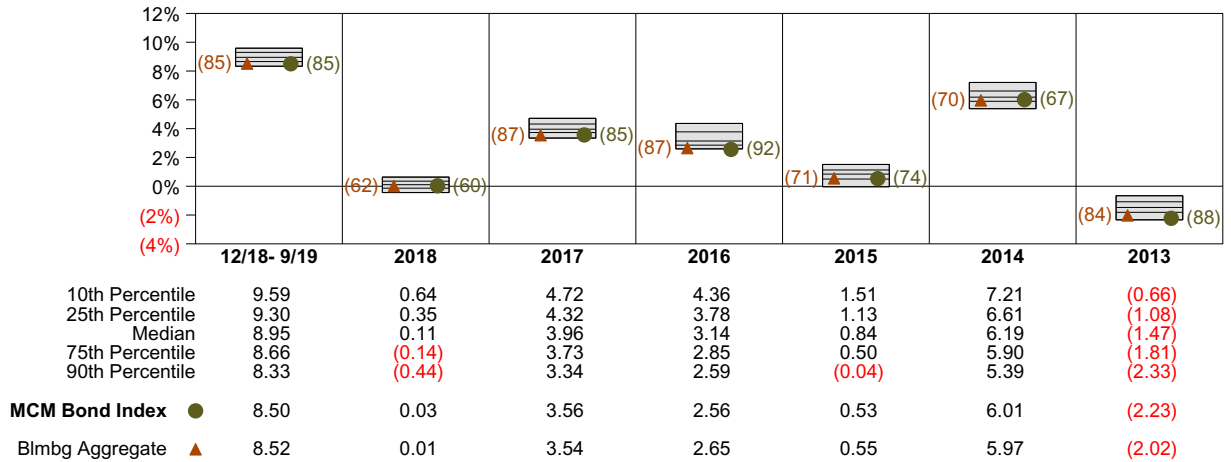


MCM Bond Index Return Analysis Summary

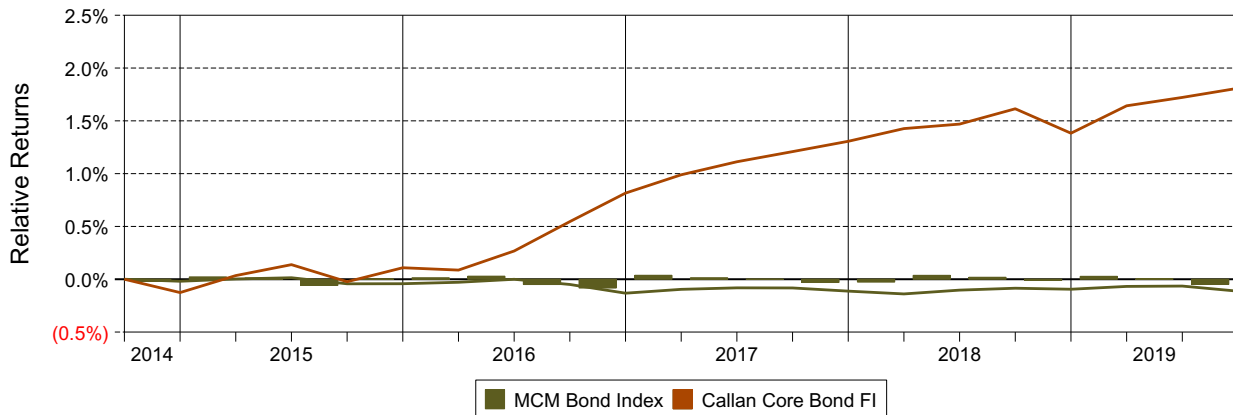
Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

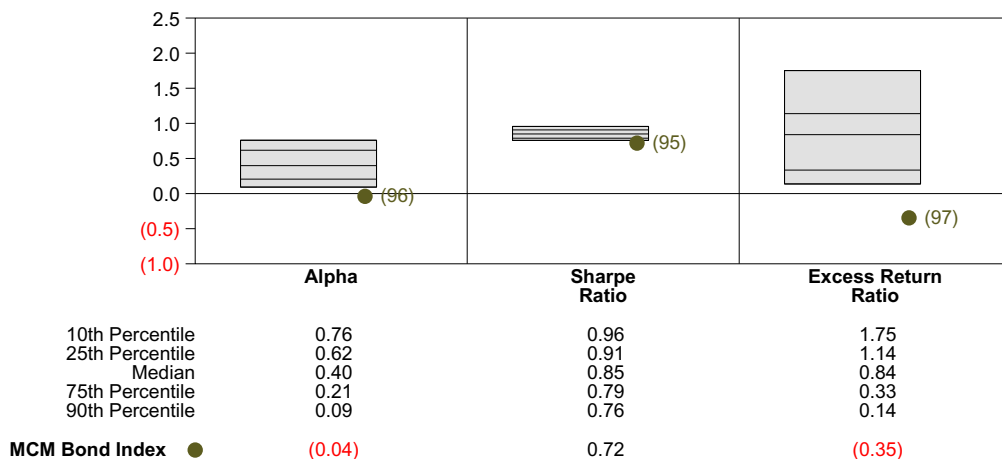
Performance vs Callan Core Bond Fixed Income (Gross)



Cumulative and Quarterly Relative Return vs Blmbg Aggregate



Risk Adjusted Return Measures vs Blmbg Aggregate Rankings Against Callan Core Bond Fixed Income (Gross) Five Years Ended September 30, 2019

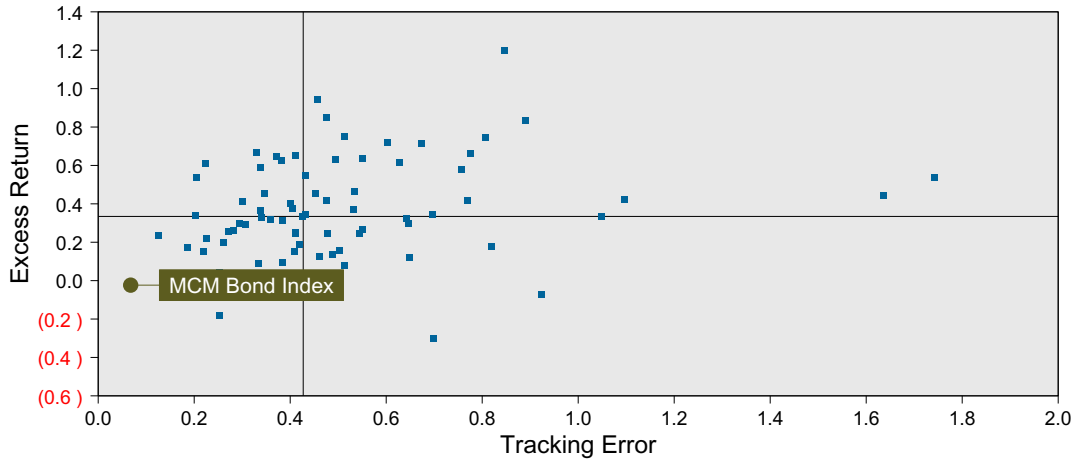


MCM Bond Index Risk Analysis Summary

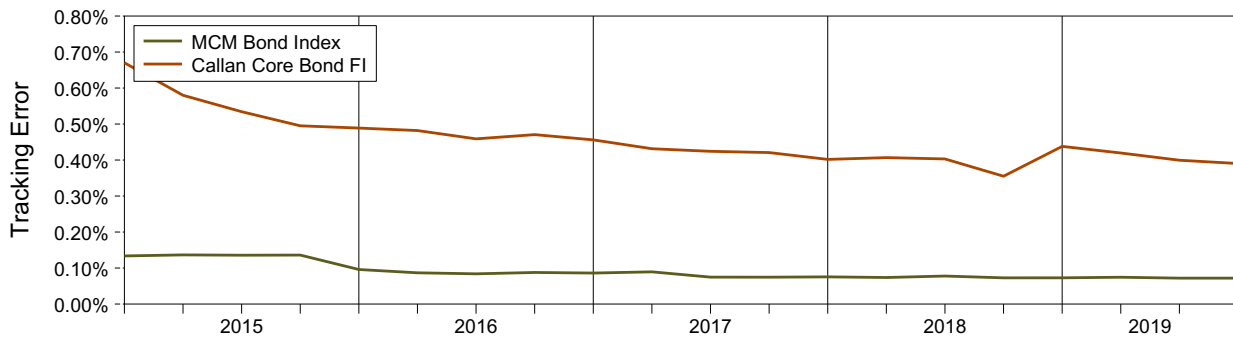
Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows tracking error patterns versus the benchmark over time. The last two charts show the ranking of the manager's risk statistics versus the peer group.

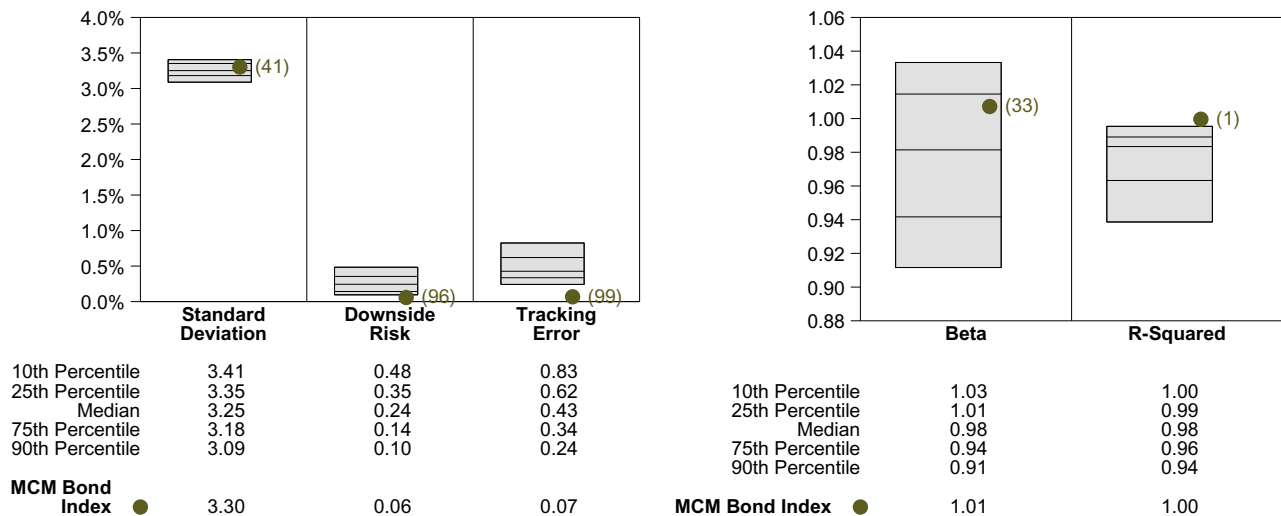
Risk Analysis vs Callan Core Bond Fixed Income (Gross) Five Years Ended September 30, 2019



Rolling 12 Quarter Tracking Error vs Bloomberg Barclays Aggregate



Risk Statistics Rankings vs Bloomberg Barclays Aggregate Rankings Against Callan Core Bond Fixed Income (Gross) Five Years Ended September 30, 2019

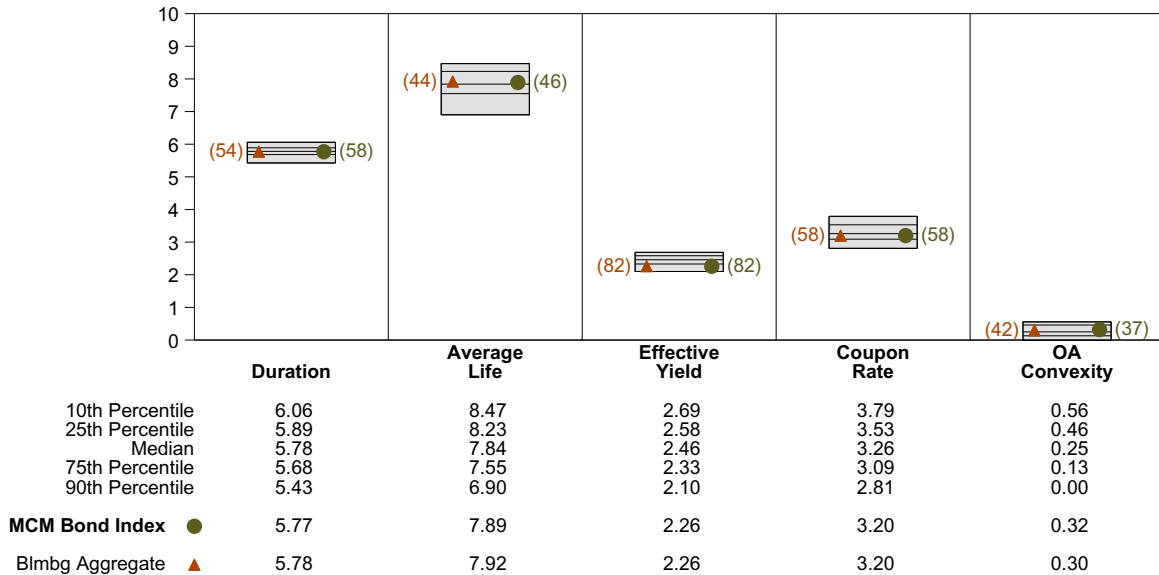


MCM Bond Index Bond Characteristics Analysis Summary

Portfolio Characteristics

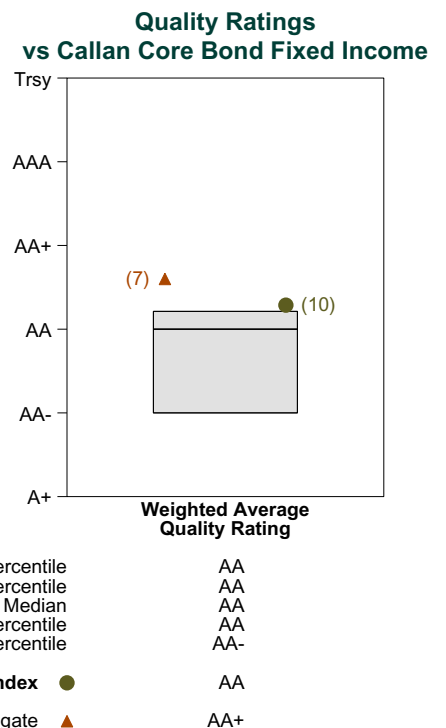
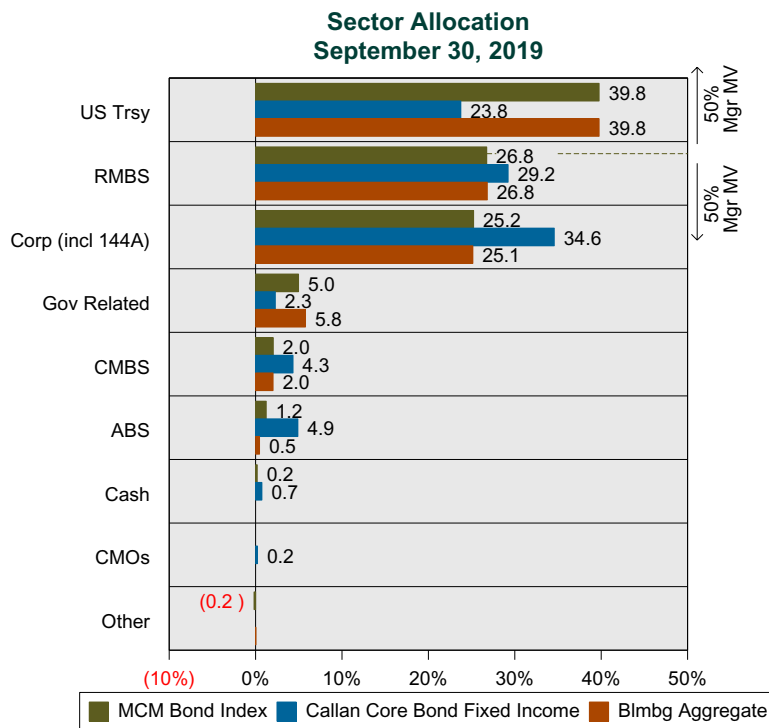
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

Fixed Income Portfolio Characteristics Rankings Against Callan Core Bond Fixed Income as of September 30, 2019



Sector Allocation and Quality Ratings

The first graph compares the manager's sector allocation with the average allocation across all the members of the manager's style. The second graph compares the manager's weighted average quality rating with the range of quality ratings for the style.

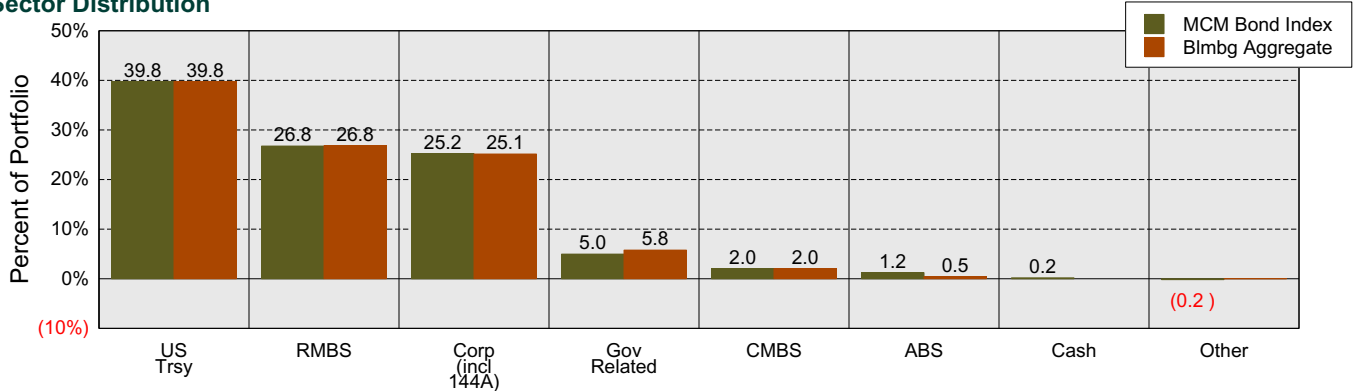


MCM Bond Index Portfolio Characteristics Summary As of September 30, 2019

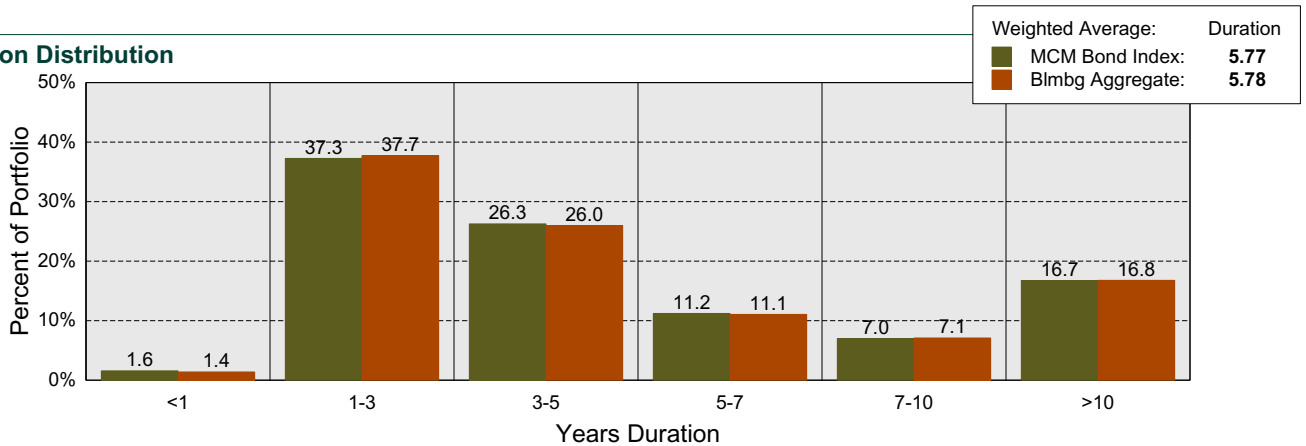
Portfolio Structure Comparison

The charts below compare the structure of the portfolio to that of the index from the three perspectives that have the greatest influence on return. The first chart compares the two portfolios across sectors. The second chart compares the duration distribution. The last chart compares the distribution across quality ratings.

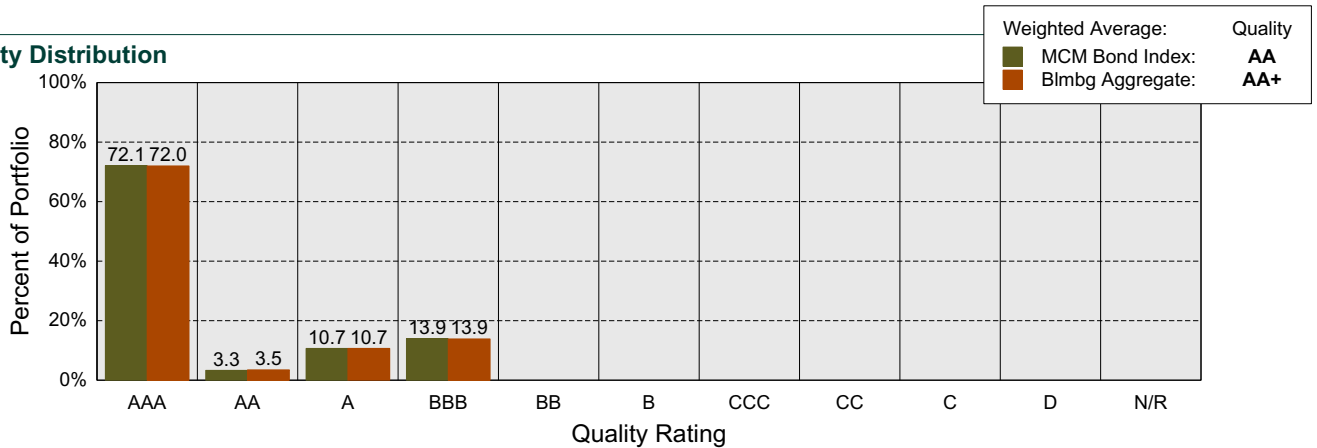
Sector Distribution



Duration Distribution



Quality Distribution



PIMCO Core Bond Fund

Period Ended September 30, 2019

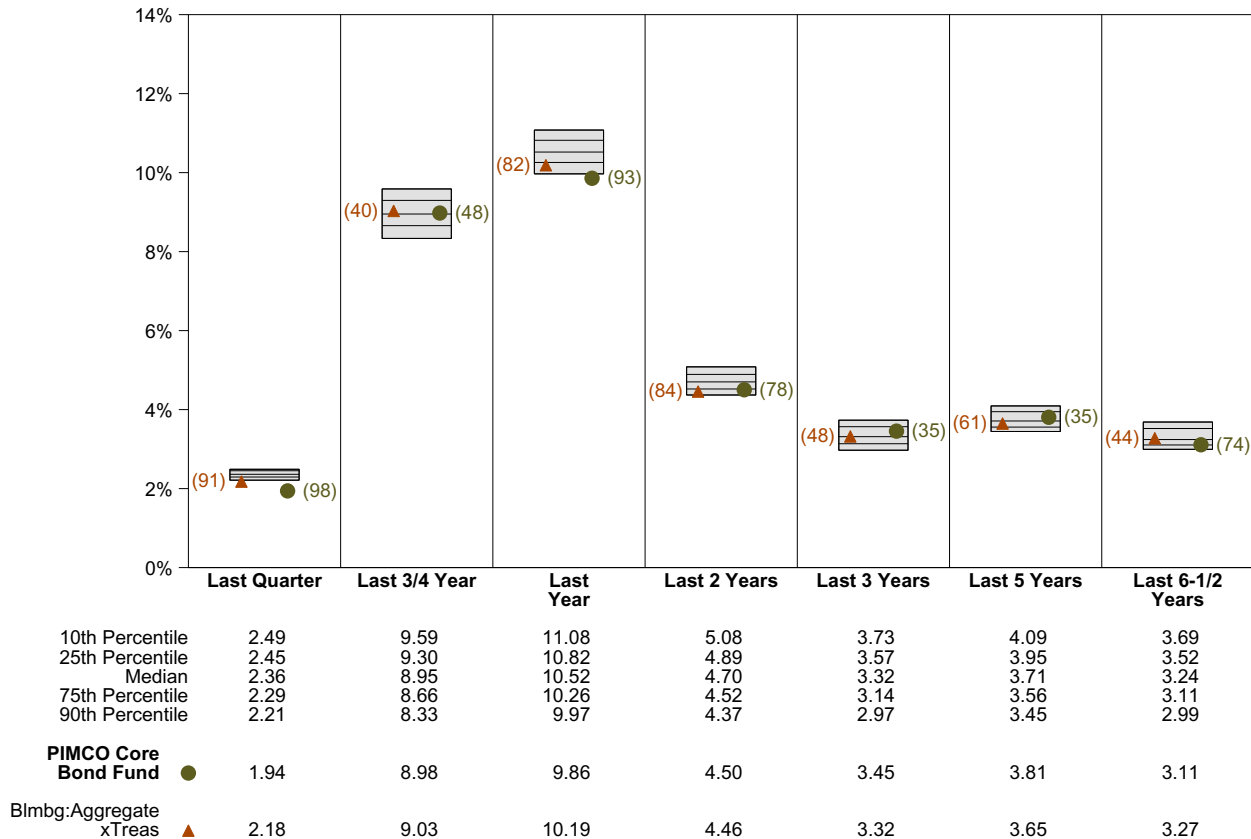
Quarterly Summary and Highlights

- PIMCO Core Bond Fund's portfolio posted a 1.94% return for the quarter placing it in the 98 percentile of the Callan Core Bond Fixed Income group for the quarter and in the 93 percentile for the last year.
- PIMCO Core Bond Fund's portfolio underperformed the Blmbg:Aggregate xTreas by 0.24% for the quarter and underperformed the Blmbg:Aggregate xTreas for the year by 0.33%.

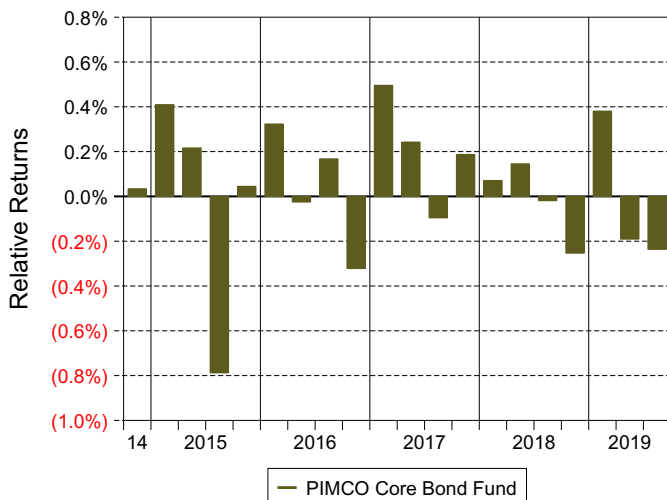
Quarterly Asset Growth

Beginning Market Value	\$652,715,596
Net New Investment	\$-257,102
Investment Gains/(Losses)	\$12,621,948
Ending Market Value	\$665,080,441

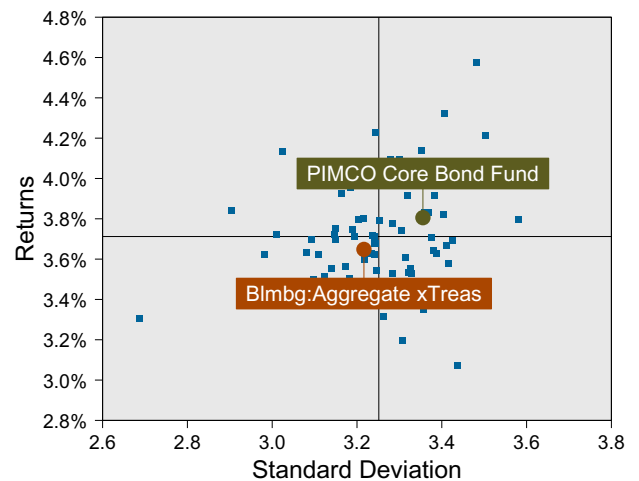
Performance vs Callan Core Bond Fixed Income (Gross)



Relative Return vs Blmbg:Aggregate xTreas



Callan Core Bond Fixed Income (Gross) Annualized Five Year Risk vs Return

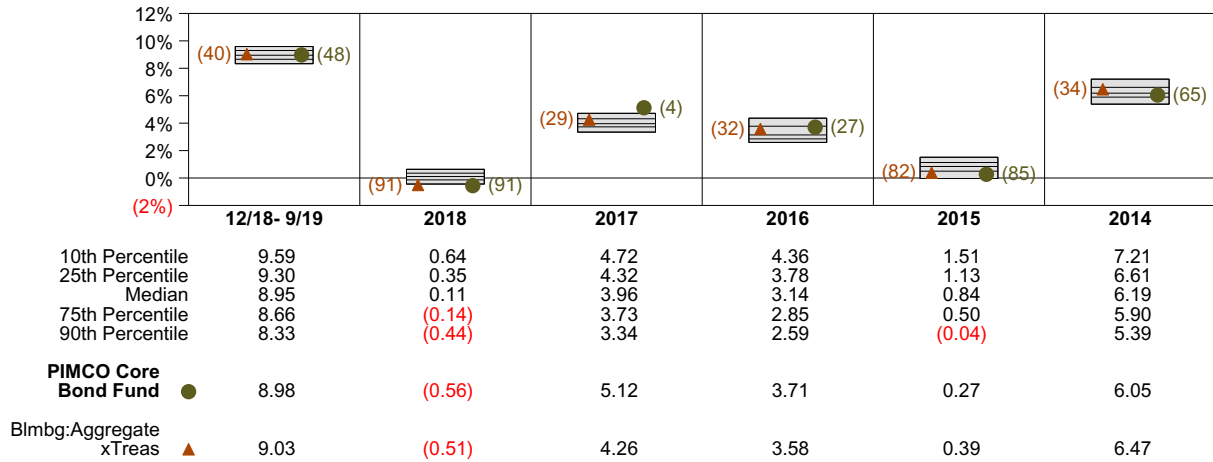


PIMCO Core Bond Fund Return Analysis Summary

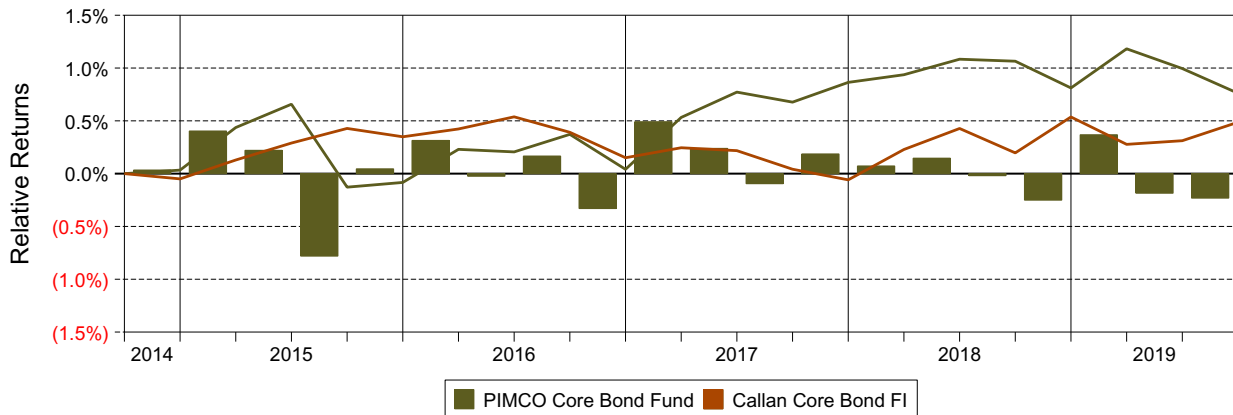
Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

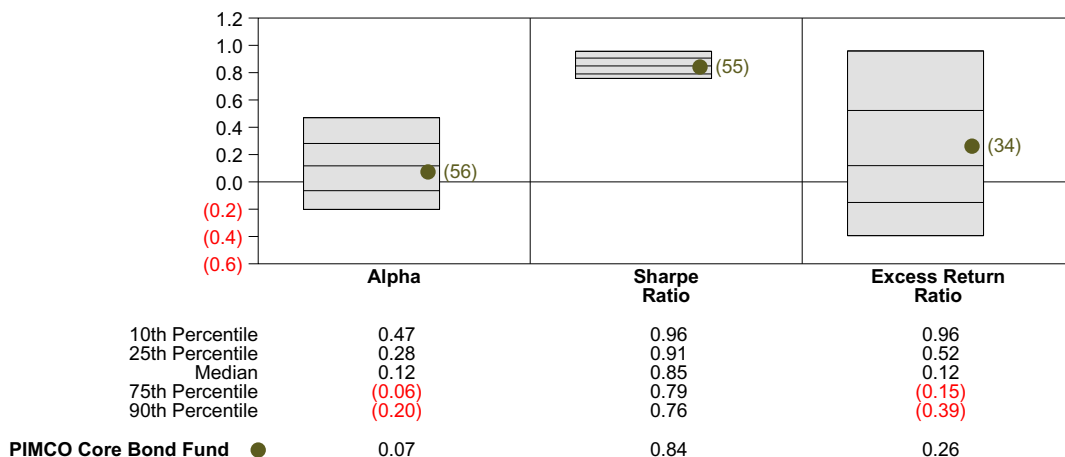
Performance vs Callan Core Bond Fixed Income (Gross)



Cumulative and Quarterly Relative Return vs Blmbg:Aggregate xTreas



Risk Adjusted Return Measures vs Blmbg:Aggregate xTreas Rankings Against Callan Core Bond Fixed Income (Gross) Five Years Ended September 30, 2019

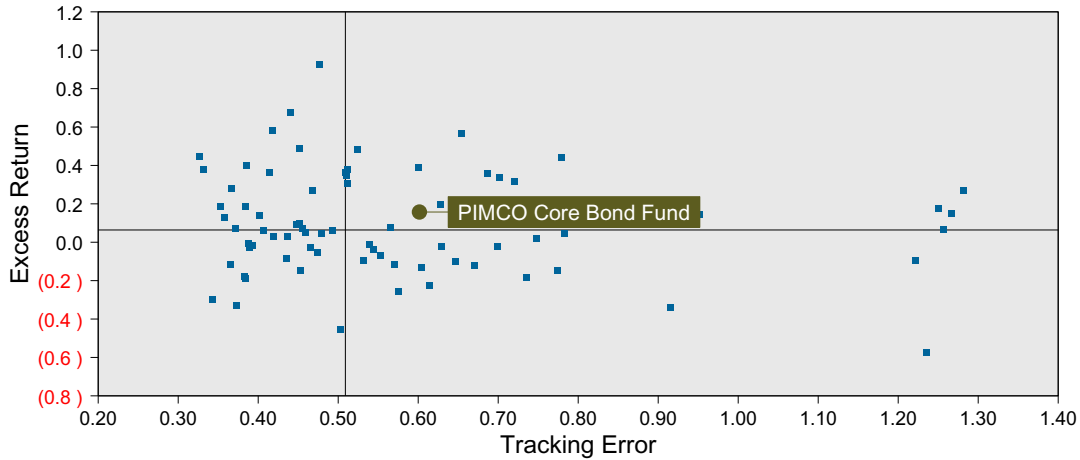


PIMCO Core Bond Fund Risk Analysis Summary

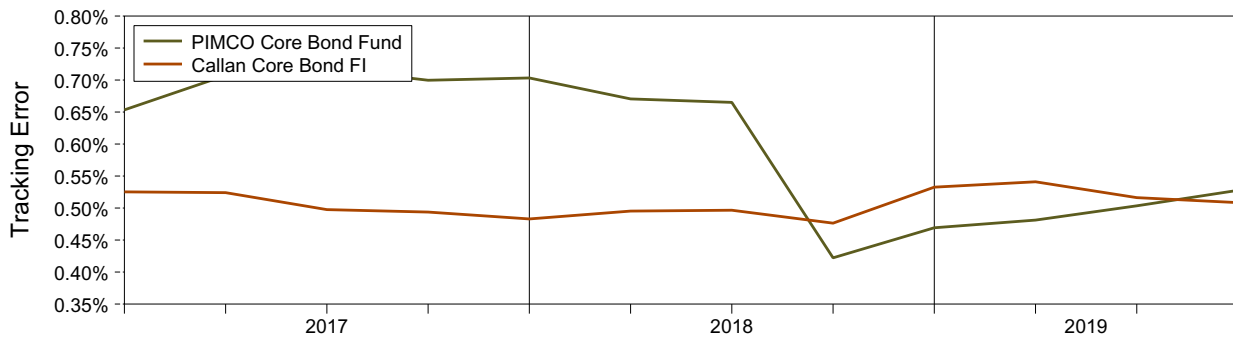
Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows tracking error patterns versus the benchmark over time. The last two charts show the ranking of the manager's risk statistics versus the peer group.

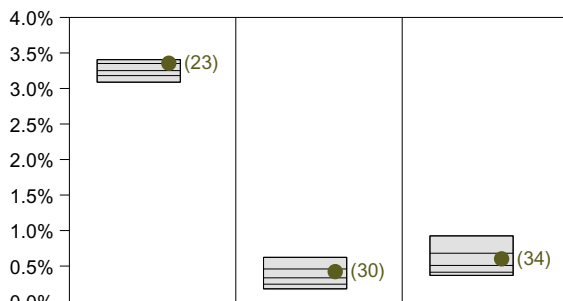
Risk Analysis vs Callan Core Bond Fixed Income (Gross) Five Years Ended September 30, 2019



Rolling 12 Quarter Tracking Error vs Bloomberg Barclays Aggregate xTreasury

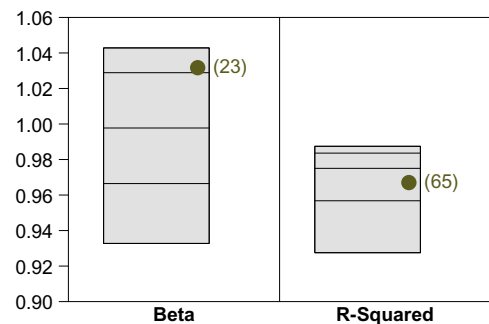


Risk Statistics Rankings vs Bloomberg Barclays Aggregate xTreasury Rankings Against Callan Core Bond Fixed Income (Gross) Five Years Ended September 30, 2019



	Standard Deviation	Downside Risk	Tracking Error
10th Percentile	3.41	0.62	0.93
25th Percentile	3.35	0.46	0.68
Median	3.25	0.33	0.51
75th Percentile	3.18	0.25	0.41
90th Percentile	3.09	0.18	0.37

PIMCO Core Bond Fund ● 3.36 0.42 0.60



	Beta	R-Squared
10th Percentile	1.04	0.99
25th Percentile	1.03	0.98
Median	1.00	0.98
75th Percentile	0.97	0.96
90th Percentile	0.93	0.93

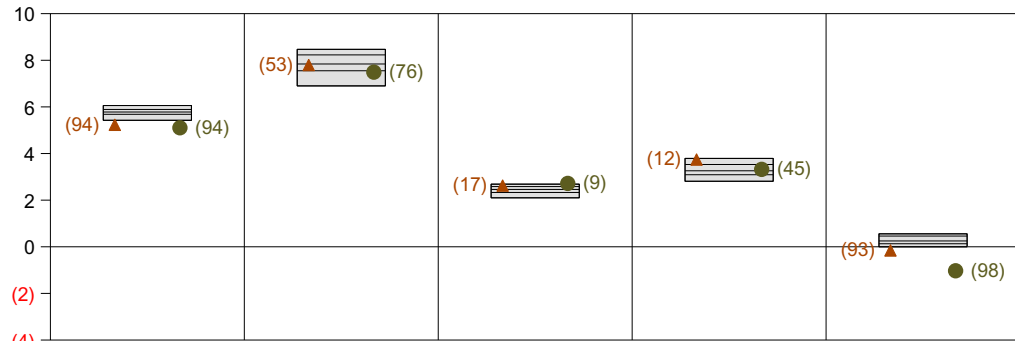
PIMCO Core Bond Fund ● 1.03 0.97

PIMCO Core Bond Fund Bond Characteristics Analysis Summary

Portfolio Characteristics

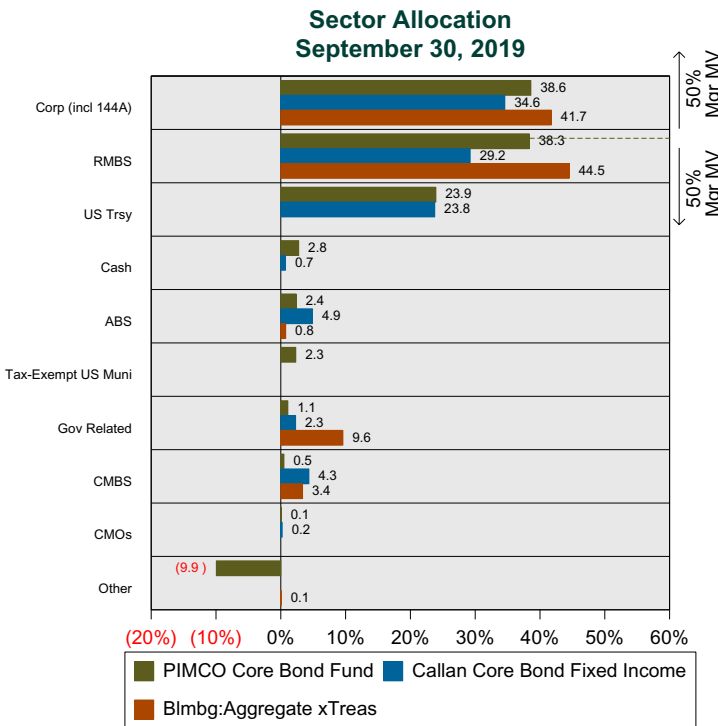
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

Fixed Income Portfolio Characteristics Rankings Against Callan Core Bond Fixed Income as of September 30, 2019

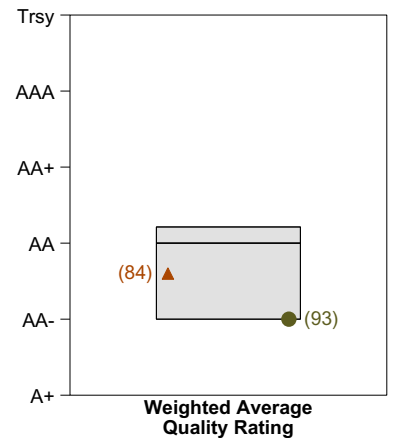


Sector Allocation and Quality Ratings

The first graph compares the manager's sector allocation with the average allocation across all the members of the manager's style. The second graph compares the manager's weighted average quality rating with the range of quality ratings for the style.



Quality Ratings vs Callan Core Bond Fixed Income

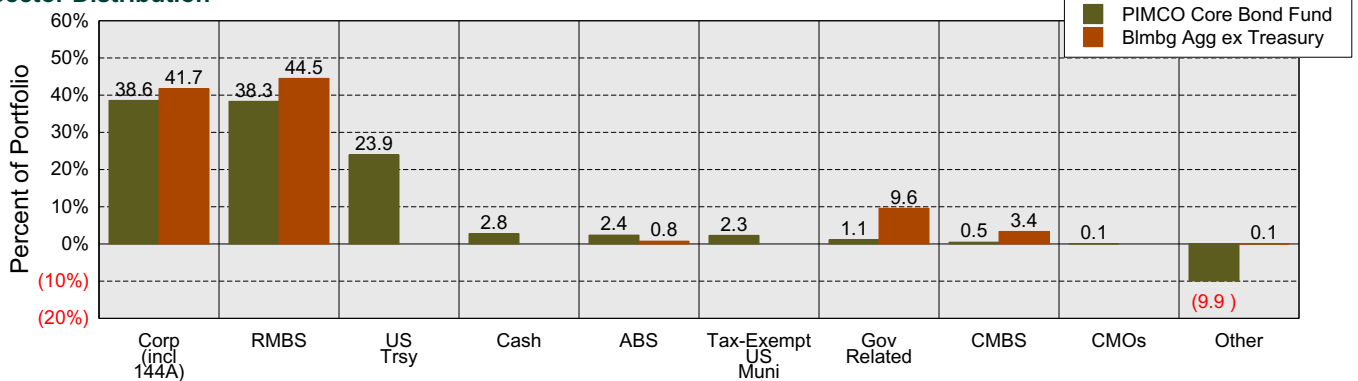


PIMCO Core Bond Fund Portfolio Characteristics Summary As of September 30, 2019

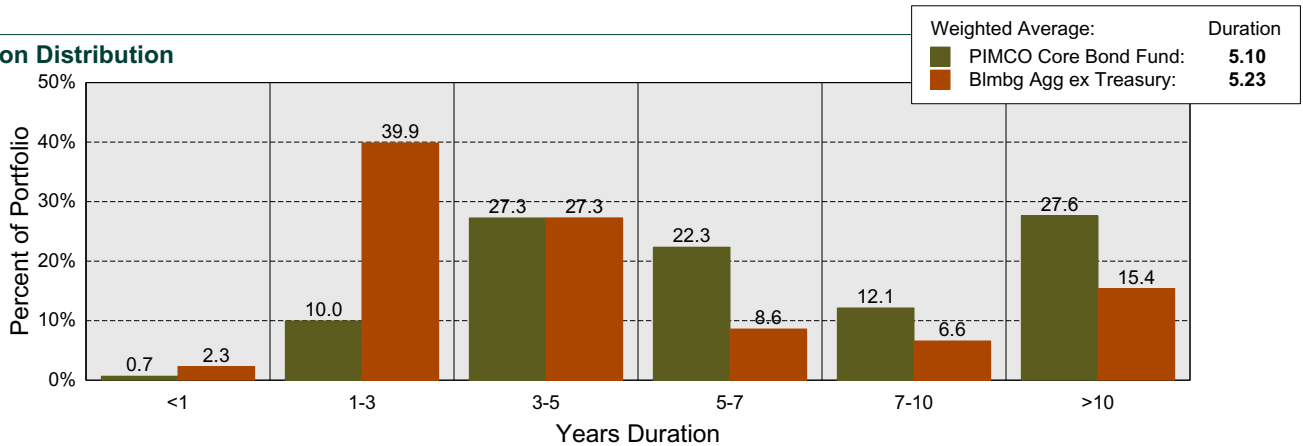
Portfolio Structure Comparison

The charts below compare the structure of the portfolio to that of the index from the three perspectives that have the greatest influence on return. The first chart compares the two portfolios across sectors. The second chart compares the duration distribution. The last chart compares the distribution across quality ratings.

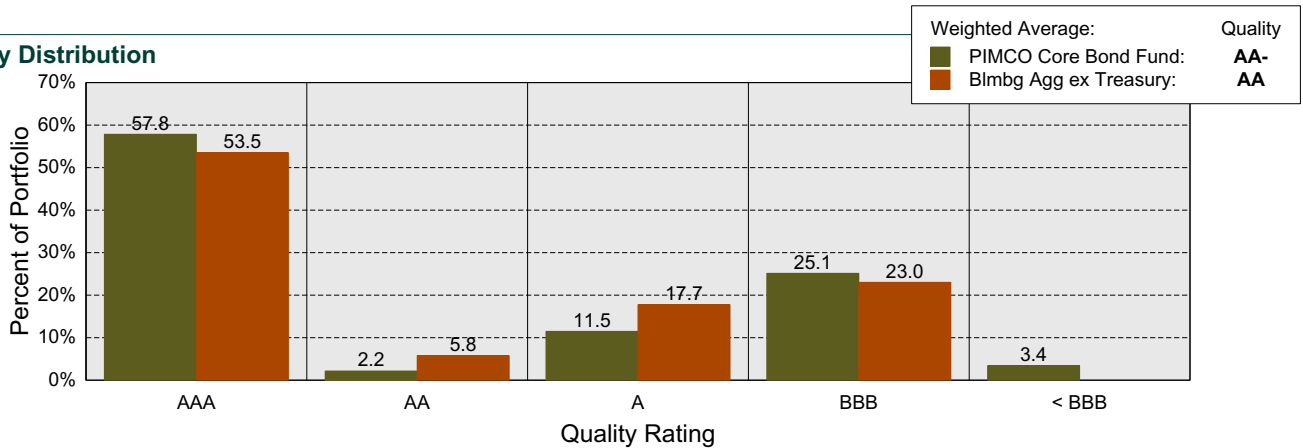
Sector Distribution



Duration Distribution



Quality Distribution



Taplin, Canida & Habacht Corp FI Period Ended September 30, 2019

Investment Philosophy

Taplin's philosophy in managing credit accounts is to add value above the benchmark index by following a strict relative value discipline, emphasizing debt securities valued too cheaply relative to the issuers fundamental creditworthiness. Yield curve positioning adds further value by focusing on the most attractive portions of the yield curve. Portfolios are constructed within a narrow duration band relative to their benchmark indices. This approach minimizes market timing and emphasizes attractive sector and issue spread opportunities within the credit universe.

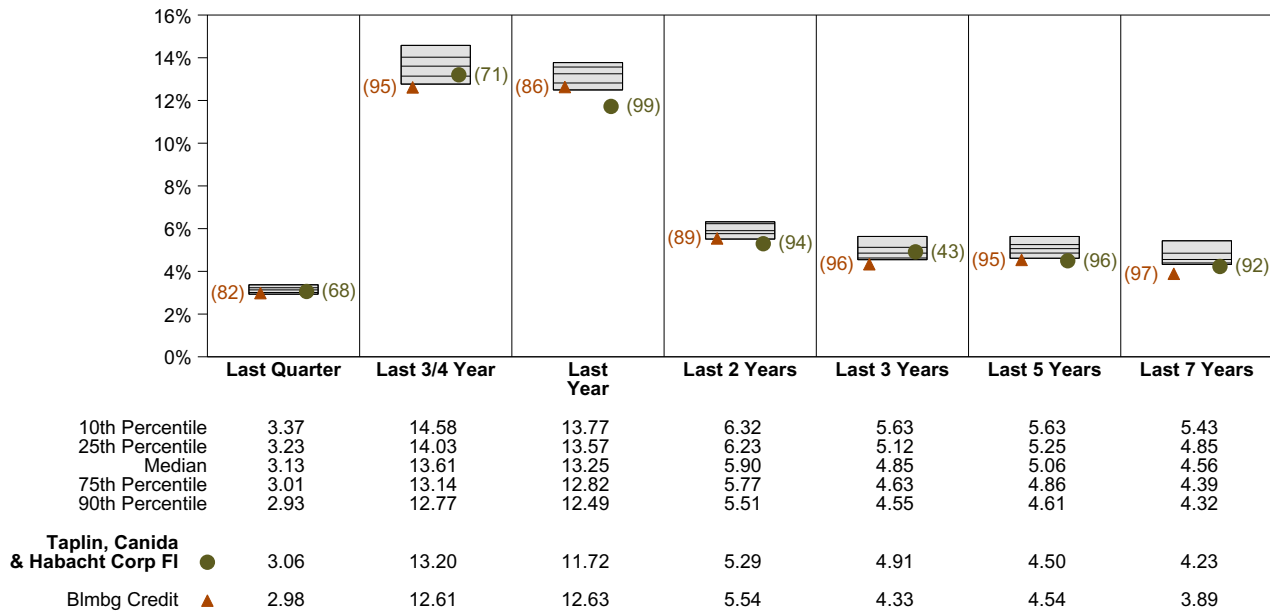
Quarterly Summary and Highlights

- Taplin, Canida & Habacht Corp FI's portfolio posted a 3.06% return for the quarter placing it in the 68 percentile of the Callan Investment Grade Credit Fixed Inc group for the quarter and in the 99 percentile for the last year.
- Taplin, Canida & Habacht Corp FI's portfolio outperformed the Blmbg Credit by 0.08% for the quarter and underperformed the Blmbg Credit for the year by 0.91%.

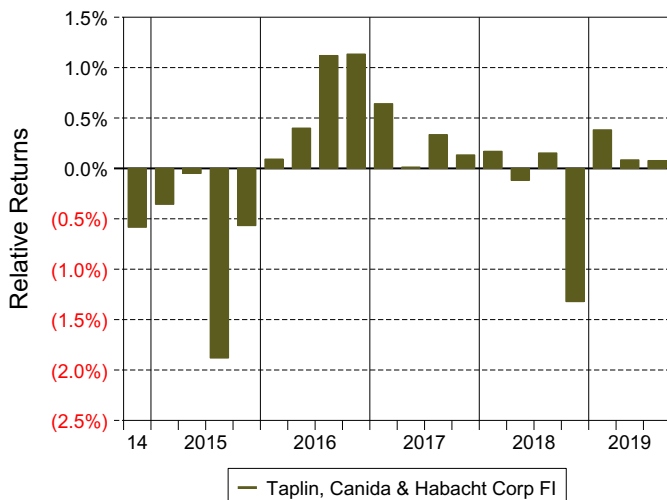
Quarterly Asset Growth

Beginning Market Value	\$195,862,705
Net New Investment	\$-111,091
Investment Gains/(Losses)	\$5,975,028
Ending Market Value	\$201,726,641

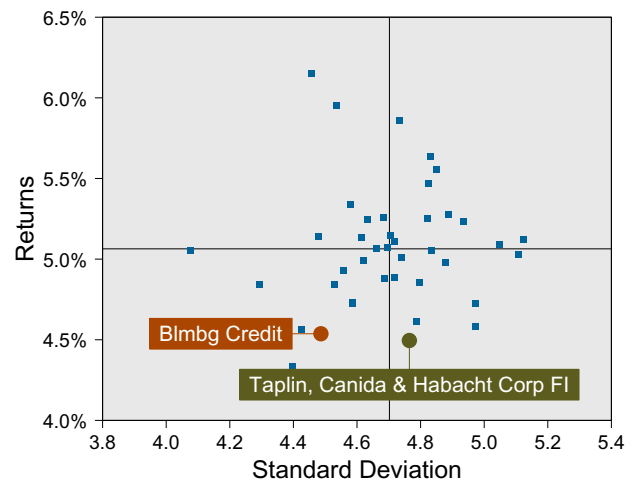
Performance vs Callan Investment Grade Credit Fixed Inc (Gross)



Relative Return vs Blmbg Credit



Callan Investment Grade Credit Fixed Inc (Gross) Annualized Five Year Risk vs Return

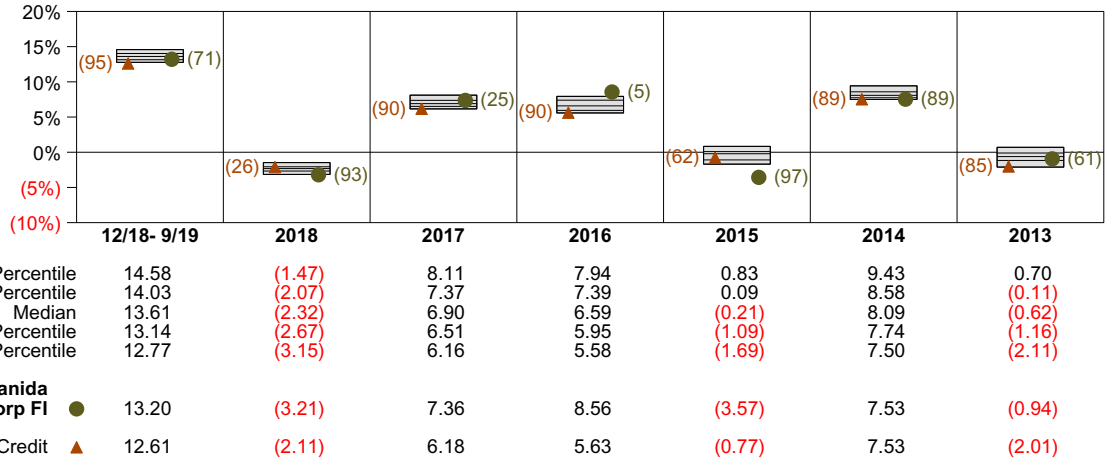


Taplin, Canida & Habacht Corp FI Return Analysis Summary

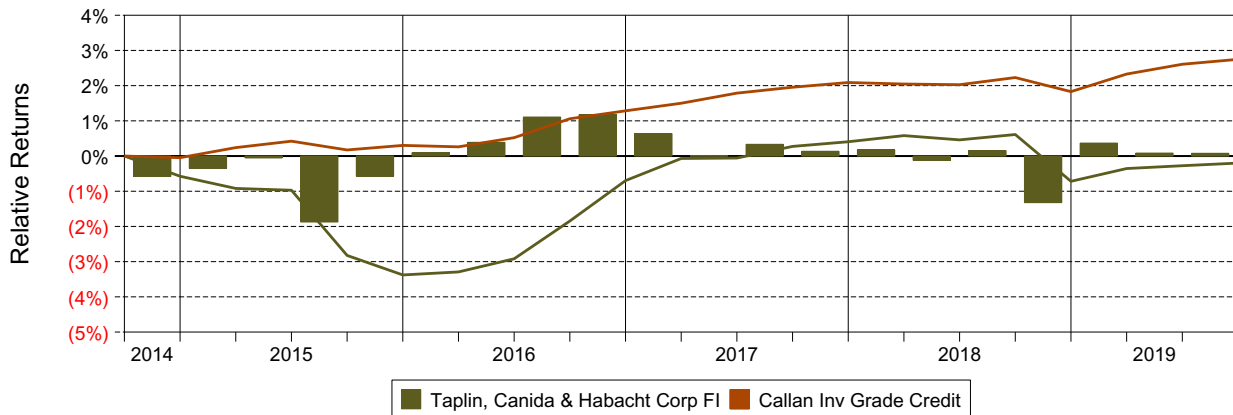
Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

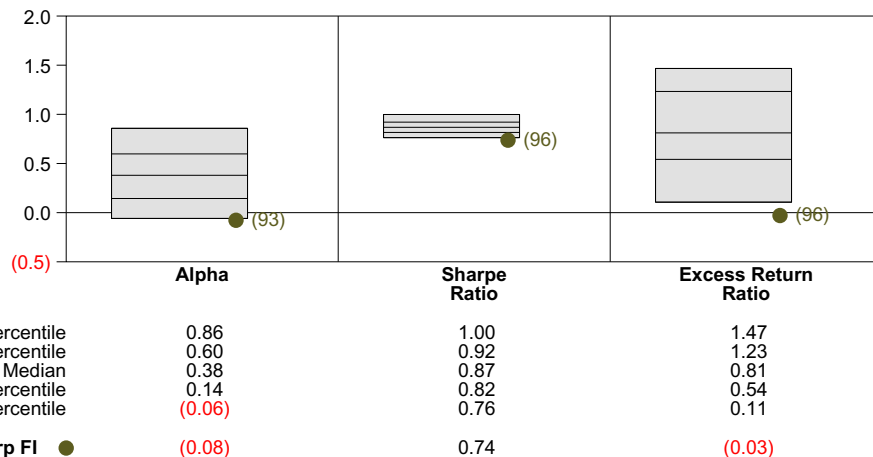
Performance vs Callan Investment Grade Credit Fixed Inc (Gross)



Cumulative and Quarterly Relative Return vs Bmbg Credit



Risk Adjusted Return Measures vs Bmbg Credit Rankings Against Callan Investment Grade Credit Fixed Inc (Gross) Five Years Ended September 30, 2019

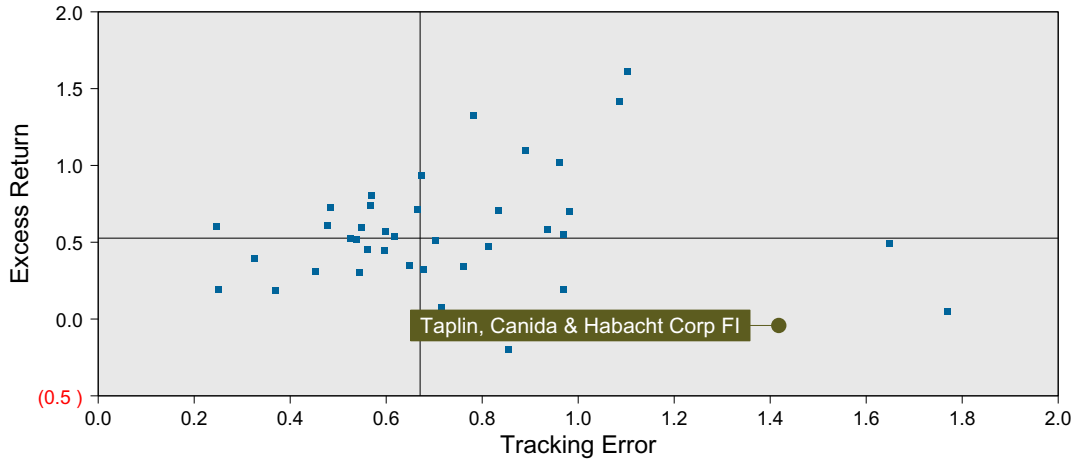


Taplin, Canida & Habacht Corp FI Risk Analysis Summary

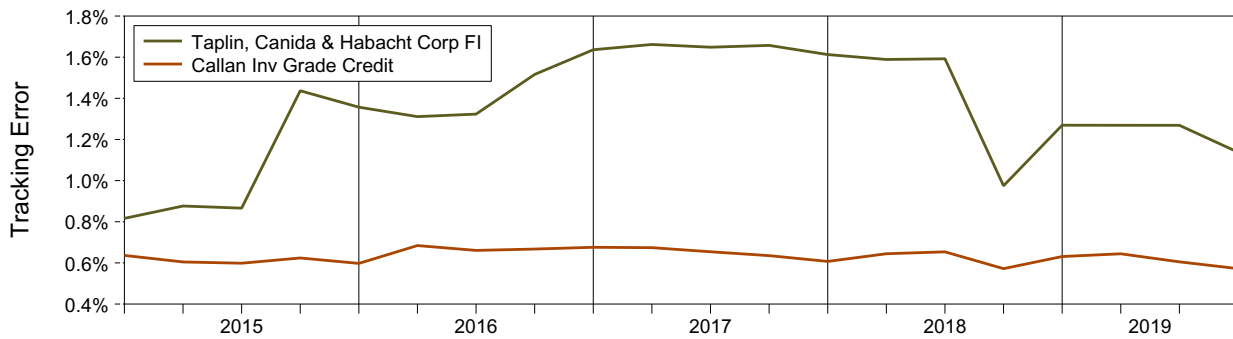
Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows tracking error patterns versus the benchmark over time. The last two charts show the ranking of the manager's risk statistics versus the peer group.

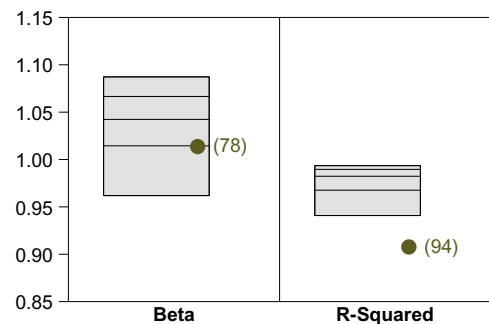
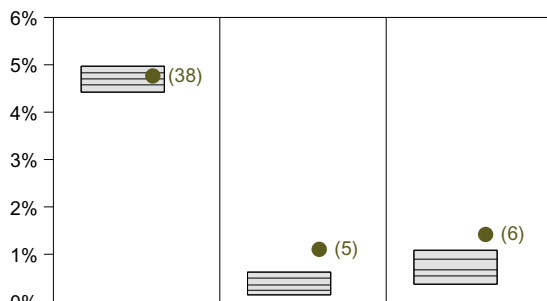
Risk Analysis vs Callan Investment Grade Credit Fixed Inc (Gross) Five Years Ended September 30, 2019



Rolling 12 Quarter Tracking Error vs Bloomberg Barclays Credit



Risk Statistics Rankings vs Bloomberg Barclays Credit Rankings Against Callan Investment Grade Credit Fixed Inc (Gross) Five Years Ended September 30, 2019



	Standard Deviation	Downside Risk	Tracking Error
10th Percentile	4.97	0.62	1.08
25th Percentile	4.83	0.50	0.90
Median	4.70	0.35	0.67
75th Percentile	4.58	0.24	0.54
90th Percentile	4.42	0.14	0.37

	Beta	R-Squared
10th Percentile	1.09	0.99
25th Percentile	1.07	0.99
Median	1.04	0.98
75th Percentile	1.01	0.97
90th Percentile	0.96	0.94

Taplin, Canida & Habacht Corp FI ●

4.76

1.10

1.42

Taplin, Canida & Habacht Corp FI ●

1.01

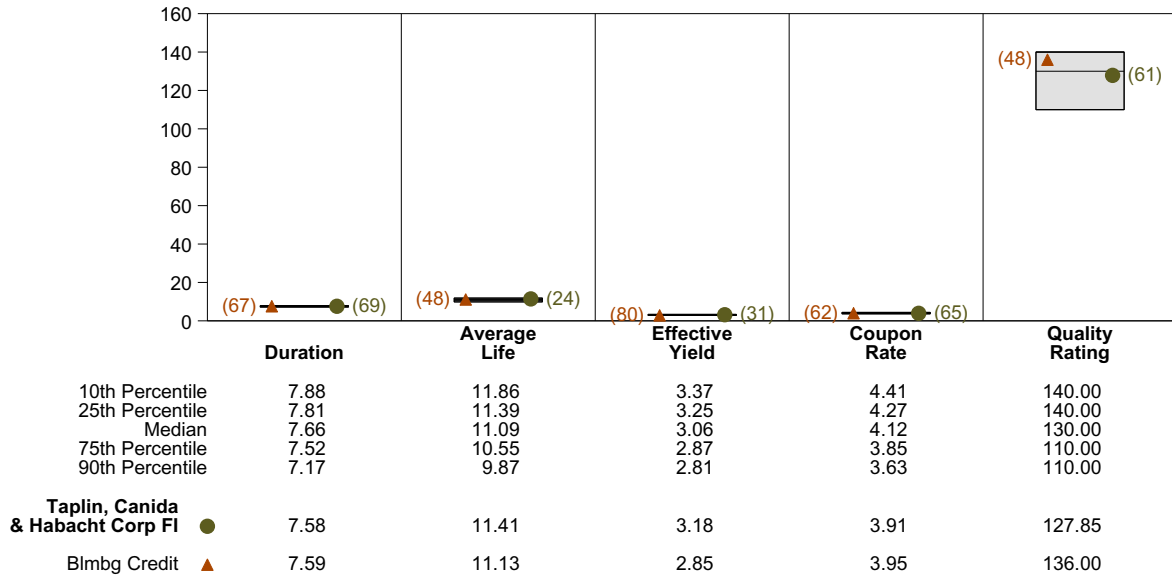
0.91

Taplin, Canida & Habacht Corp FI Bond Characteristics Analysis Summary

Portfolio Characteristics

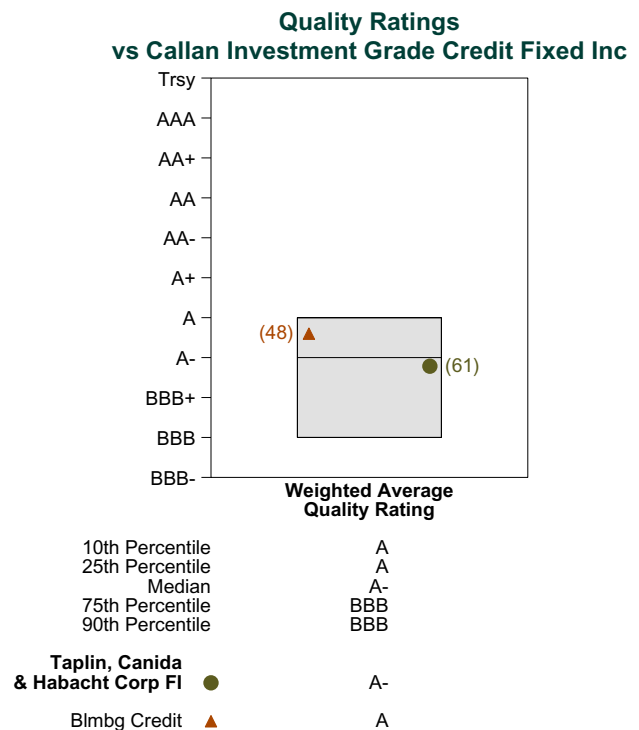
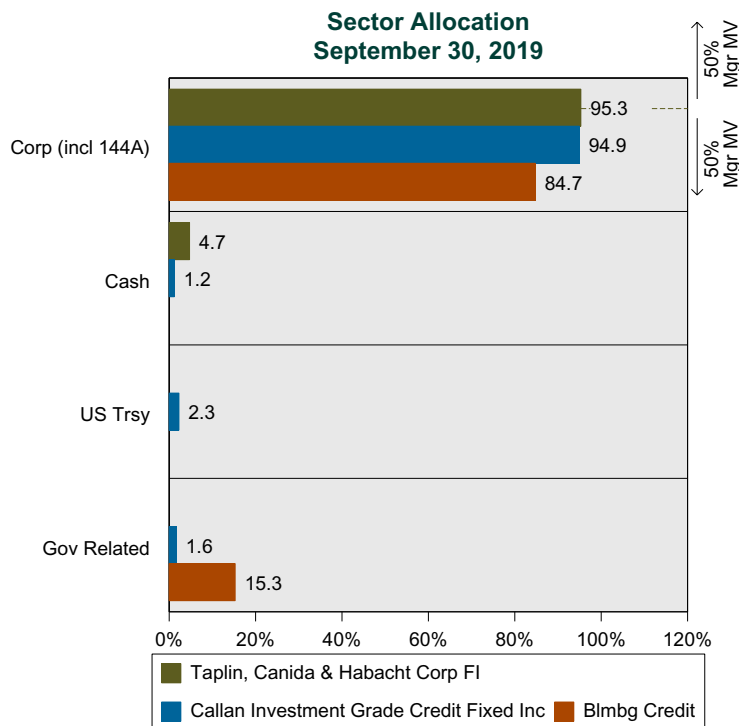
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

Fixed Income Portfolio Characteristics Rankings Against Callan Investment Grade Credit Fixed Inc as of September 30, 2019



Sector Allocation and Quality Ratings

The first graph compares the manager's sector allocation with the average allocation across all the members of the manager's style. The second graph compares the manager's weighted average quality rating with the range of quality ratings for the style.



**Taplin, Canida & Habacht Corp FI
Portfolio Characteristics Summary
As of September 30, 2019**

Portfolio Structure Comparison

The charts below compare the structure of the portfolio to that of the index from the three perspectives that have the greatest influence on return. The first chart compares the two portfolios across sectors. The second chart compares the duration distribution. The last chart compares the distribution across quality ratings.

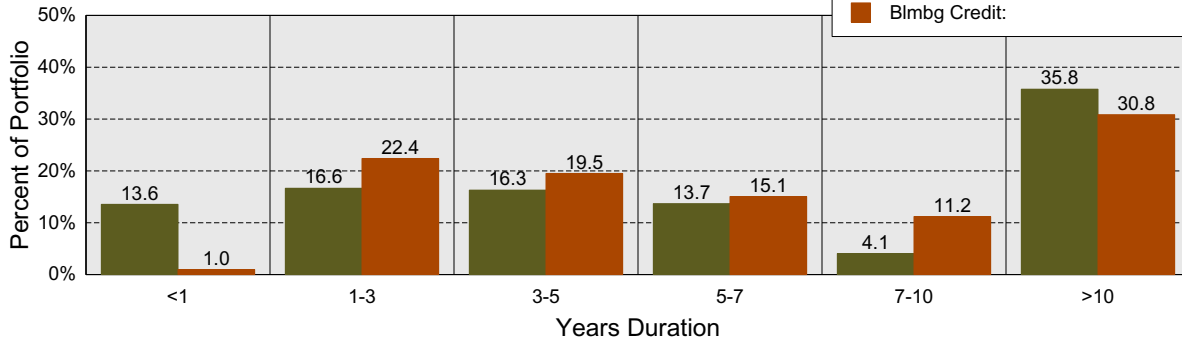
Sector Allocation



Taplin, Canida & Habacht Corp FI

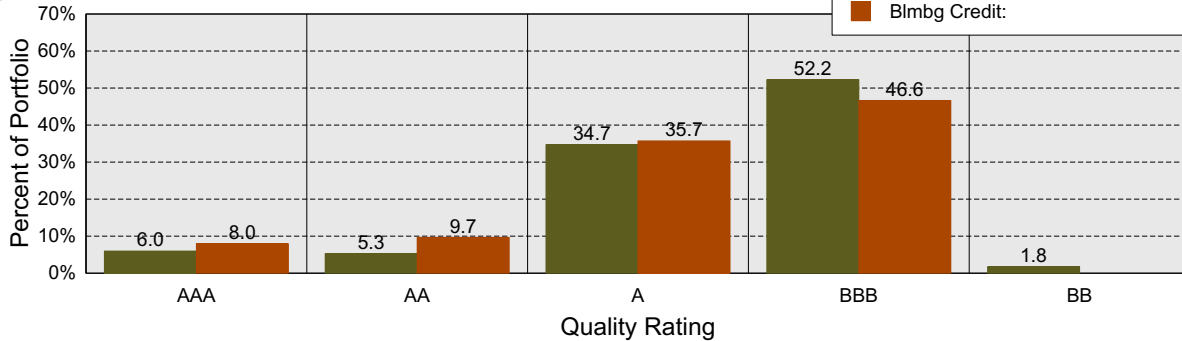
Blmbg Credit

Duration Distribution



Weighted Average:	Duration
Taplin, Canida & Habacht Corp FI:	7.58
Blmbg Credit:	7.59

Quality Distribution



Weighted Average:	Quality
Taplin, Canida & Habacht Corp FI:	A-
Blmbg Credit:	A

Brandywine Global Opp Period Ended September 30, 2019

Investment Philosophy

Brandywine's Global Opportunistic Fixed Income philosophy is a value-driven, active, strategic approach. This strategy allows for a 0-15% allocation to emerging markets and for a 0-15% allocation to high yield debt. Value is defined as a combination of above-average real interest rates and an under-valued currency. They concentrate investments where existing economic and market conditions can enable that value to be realized in an intermediate time frame. They capture excess returns through strategic investment in countries, sectors, and securities, rather than by maintaining minimum, core commitments.

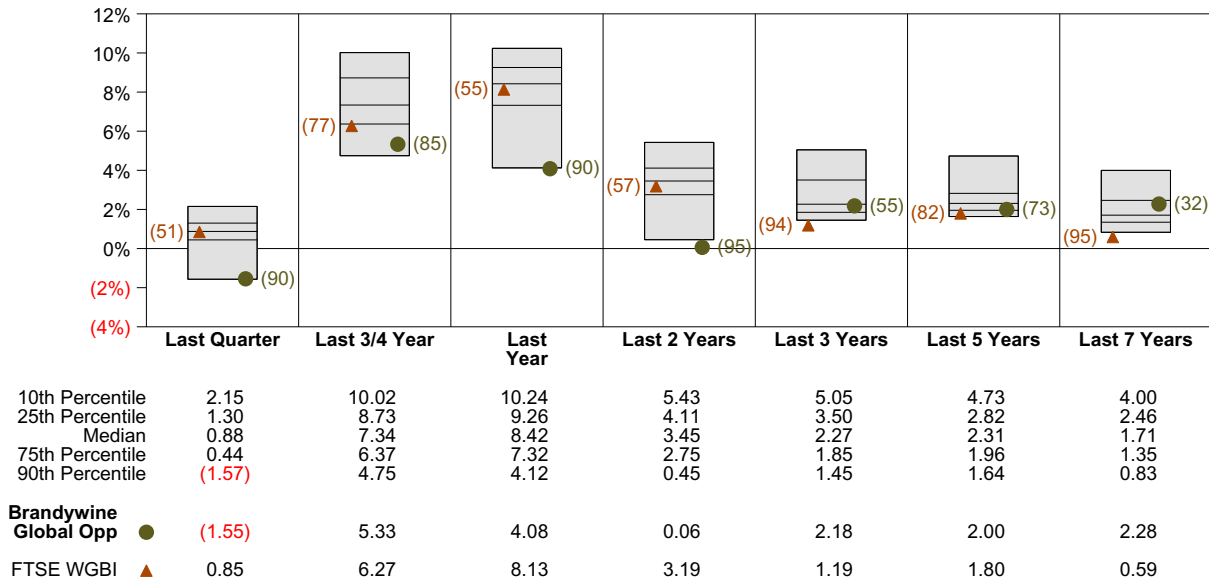
Quarterly Summary and Highlights

- Brandywine Global Opp's portfolio posted a (1.55)% return for the quarter placing it in the 90 percentile of the Callan Global Fixed Income (Unhedged) group for the quarter and in the 90 percentile for the last year.
- Brandywine Global Opp's portfolio underperformed the FTSE WGBI by 2.40% for the quarter and underperformed the FTSE WGBI for the year by 4.05%.

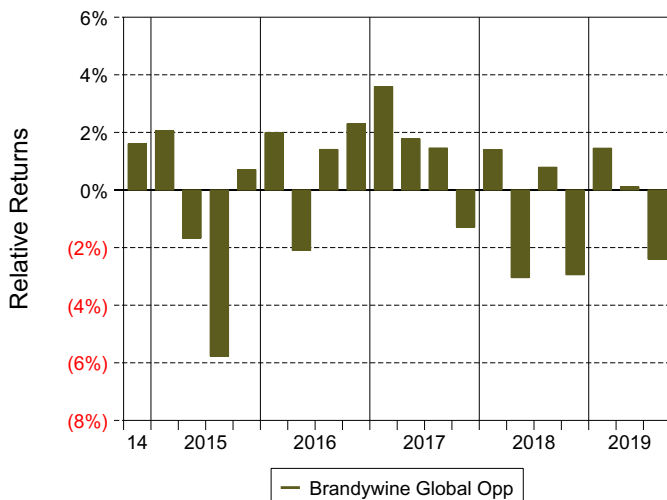
Quarterly Asset Growth

Beginning Market Value	\$199,327,218
Net New Investment	\$-188,735
Investment Gains/(Losses)	\$-3,084,124
Ending Market Value	\$196,054,360

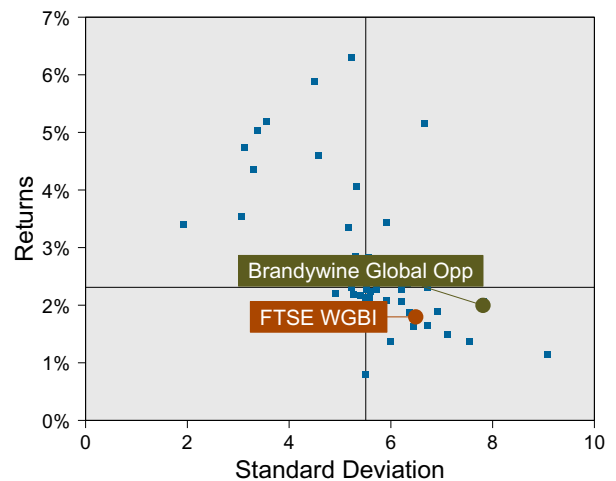
Performance vs Callan Global Fixed Income (Unhedged) (Gross)



Relative Return vs FTSE WGBI



Callan Global Fixed Income (Unhedged) (Gross) Annualized Five Year Risk vs Return

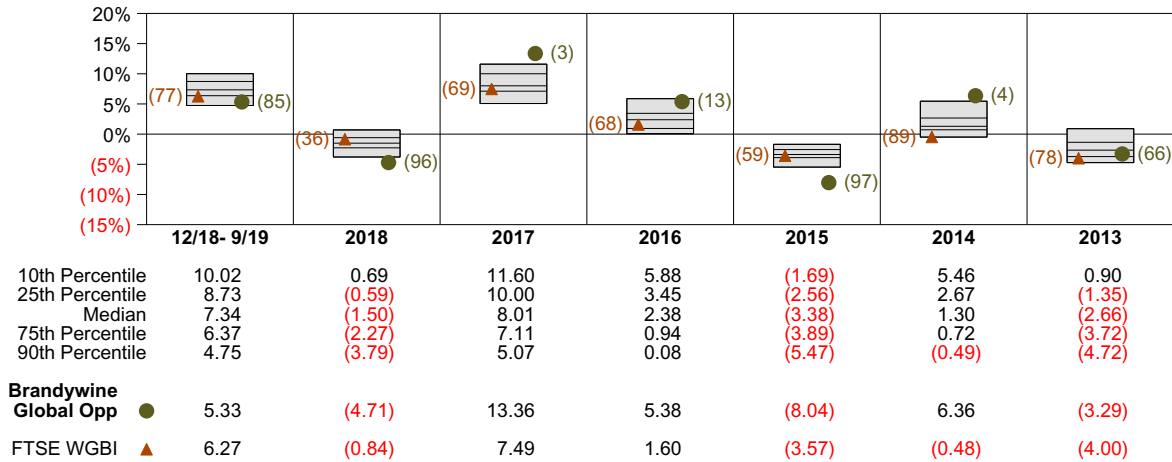


Brandywine Global Opp Return Analysis Summary

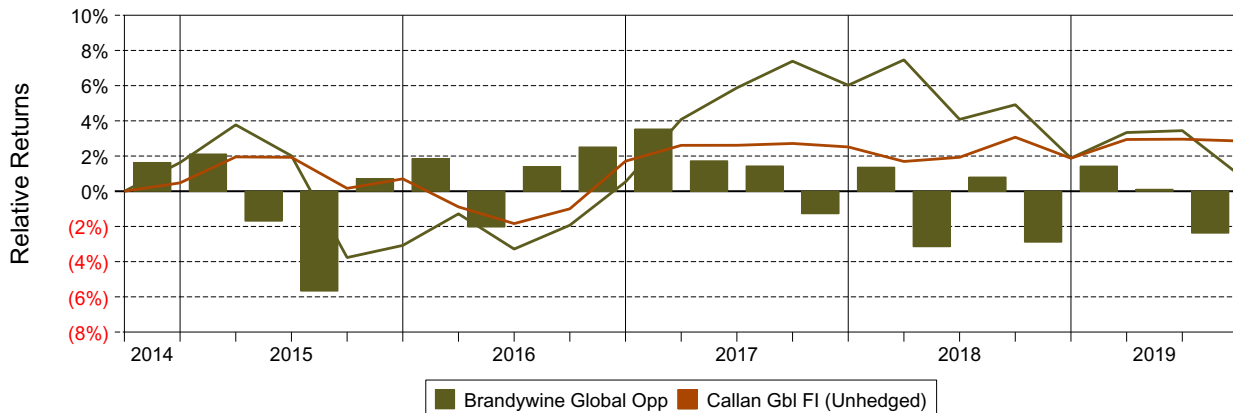
Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

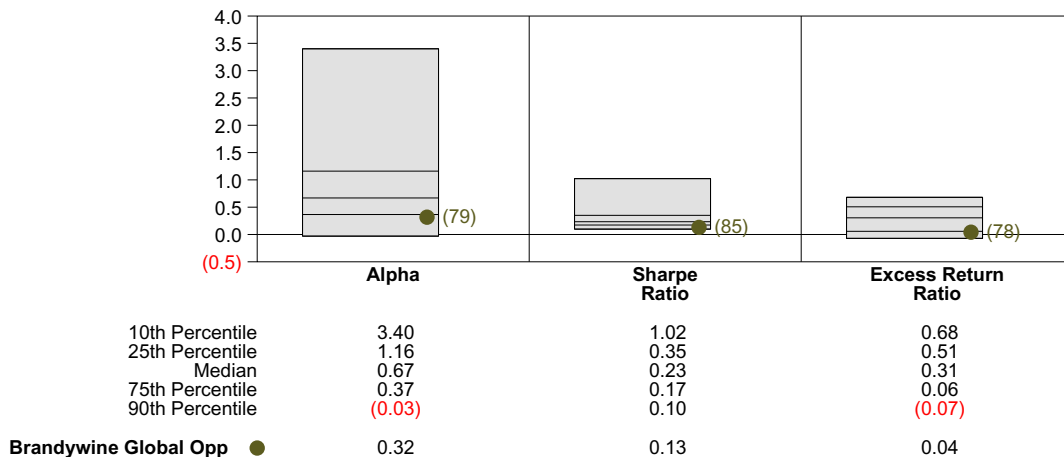
Performance vs Callan Global Fixed Income (Unhedged) (Gross)



Cumulative and Quarterly Relative Return vs FTSE WGBI



Risk Adjusted Return Measures vs FTSE WGBI Rankings Against Callan Global Fixed Income (Unhedged) (Gross) Five Years Ended September 30, 2019

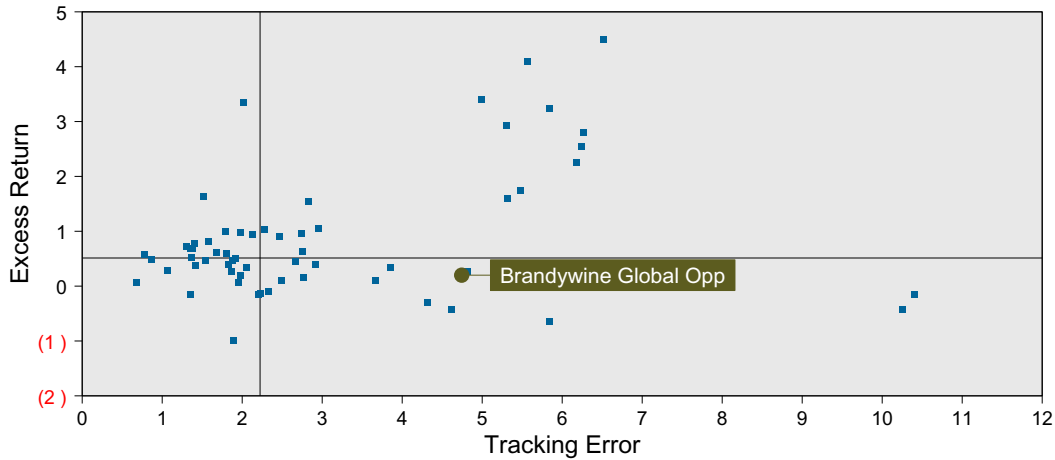


Brandywine Global Opp Risk Analysis Summary

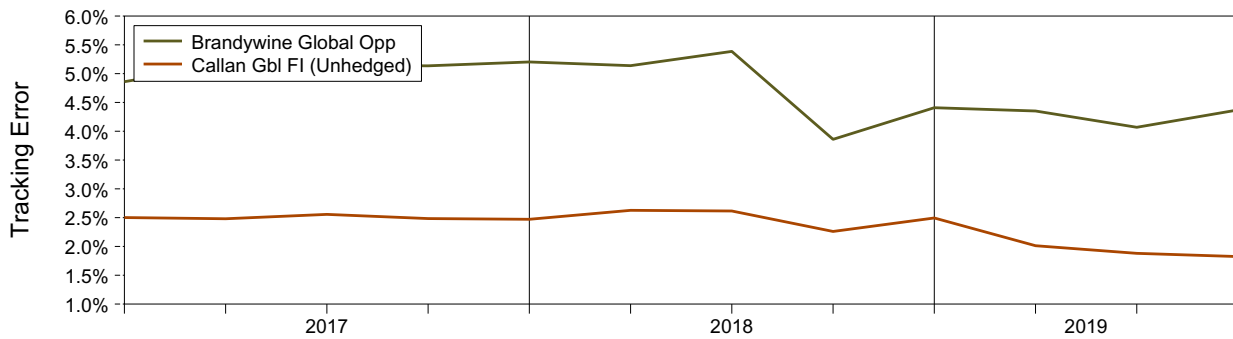
Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows tracking error patterns versus the benchmark over time. The last two charts show the ranking of the manager's risk statistics versus the peer group.

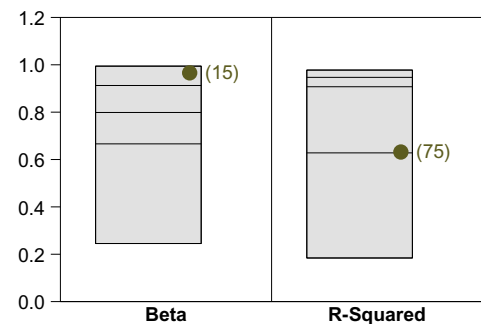
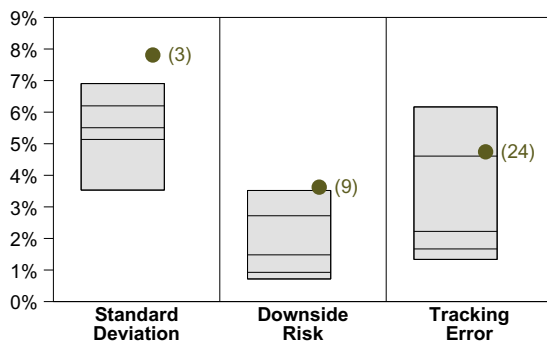
Risk Analysis vs Callan Global Fixed Income (Unhedged) (Gross) Five Years Ended September 30, 2019



Rolling 12 Quarter Tracking Error vs FTSE World Gov Bond Index (WGBI)



Risk Statistics Rankings vs FTSE World Gov Bond Index (WGBI) Rankings Against Callan Global Fixed Income (Unhedged) (Gross) Five Years Ended September 30, 2019



10th Percentile 6.91
25th Percentile 6.20
Median 5.51
75th Percentile 5.14
90th Percentile 3.53

10th Percentile 3.52
25th Percentile 2.72
Median 1.48
75th Percentile 0.93
90th Percentile 0.72

10th Percentile 6.17
25th Percentile 4.61
Median 2.22
75th Percentile 1.67
90th Percentile 1.34

10th Percentile 0.99
25th Percentile 0.91
Median 0.80
75th Percentile 0.67
90th Percentile 0.25

10th Percentile 0.98
25th Percentile 0.95
Median 0.91
75th Percentile 0.63
90th Percentile 0.18

Brandywine Global Opp ● 7.81

3.63

4.74

Brandywine Global Opp ● 0.97

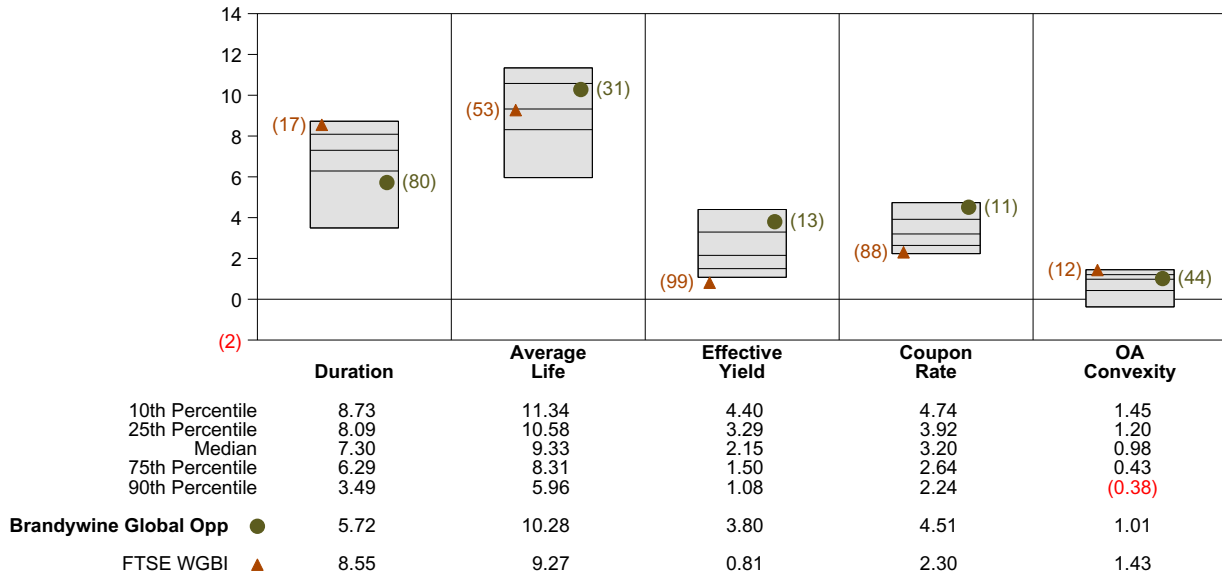
0.63

Brandywine Global Opp Bond Characteristics Analysis Summary

Portfolio Characteristics

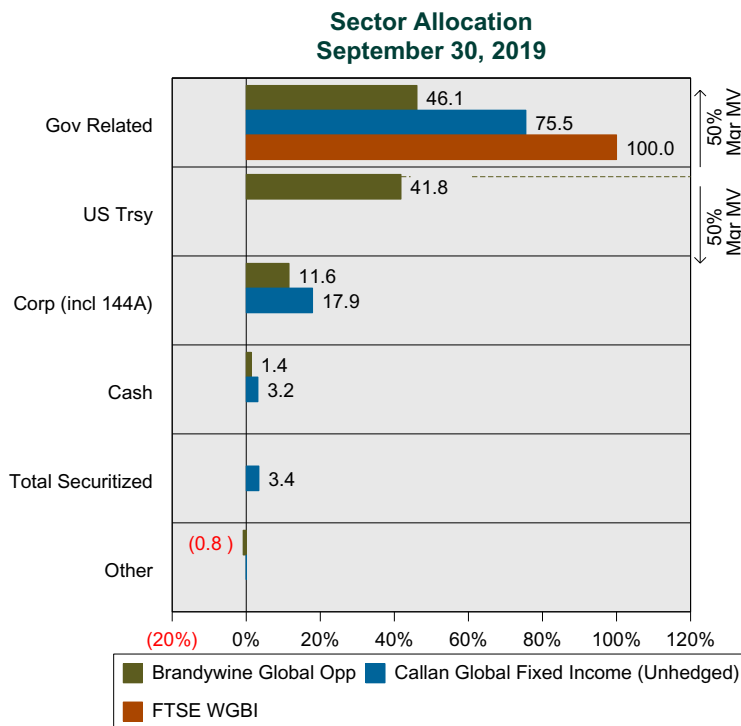
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

Fixed Income Portfolio Characteristics Rankings Against Callan Global Fixed Income (Unhedged) as of September 30, 2019

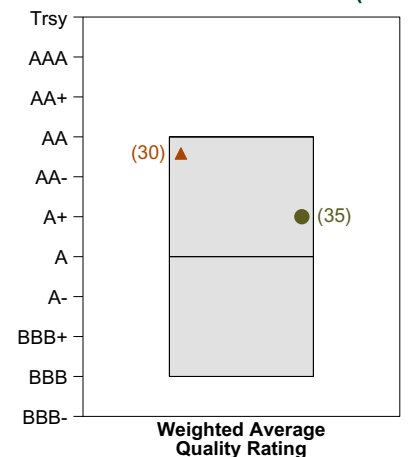


Sector Allocation and Quality Ratings

The first graph compares the manager's sector allocation with the average allocation across all the members of the manager's style. The second graph compares the manager's weighted average quality rating with the range of quality ratings for the style.



Quality Ratings vs Callan Global Fixed Income (Unhedged)



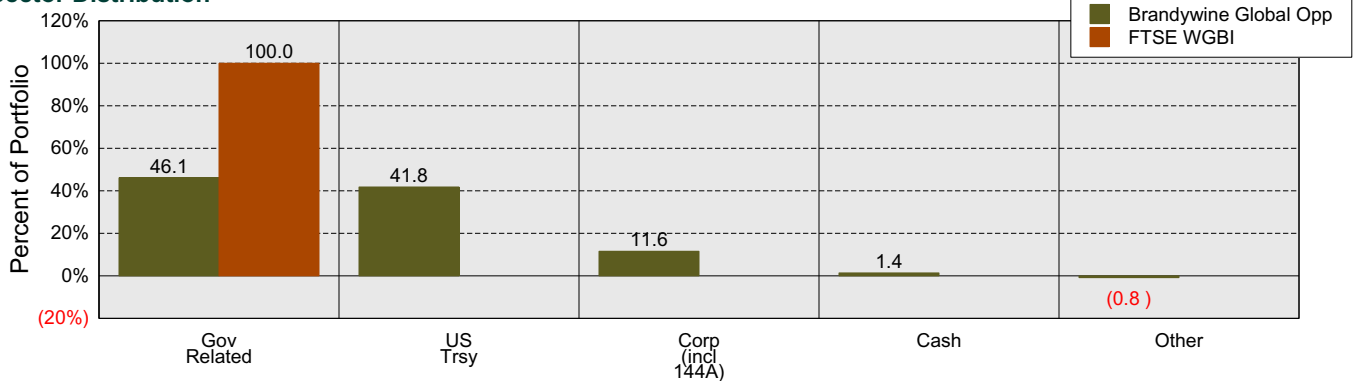
10th Percentile	AA
25th Percentile	AA
Median	A
75th Percentile	A
90th Percentile	BBB
Brandywine Global Opp ●	A+
FTSE WGBI ▲	AA

Brandywine Global Opp Portfolio Characteristics Summary As of September 30, 2019

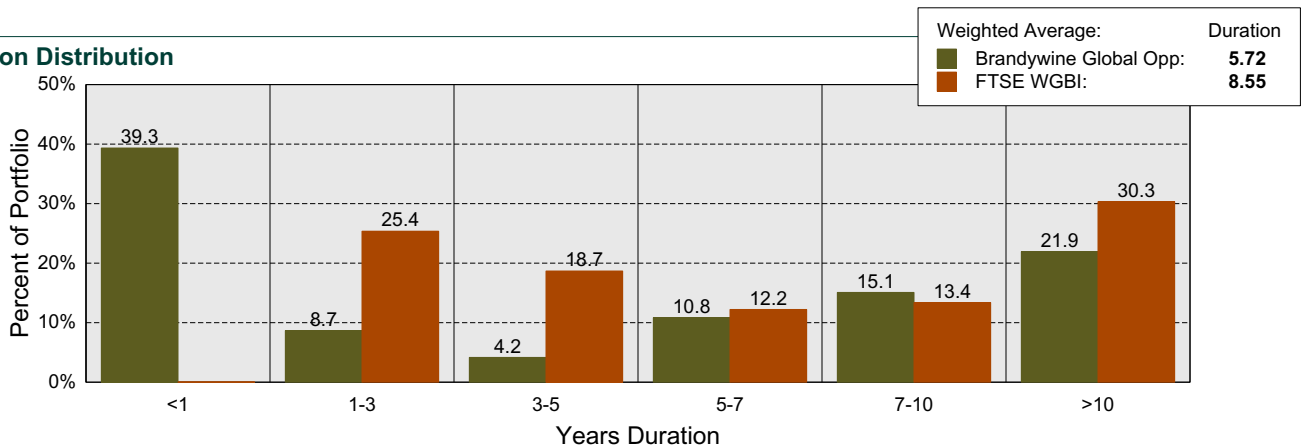
Portfolio Structure Comparison

The charts below compare the structure of the portfolio to that of the index from the three perspectives that have the greatest influence on return. The first chart compares the two portfolios across sectors. The second chart compares the duration distribution. The last chart compares the distribution across quality ratings.

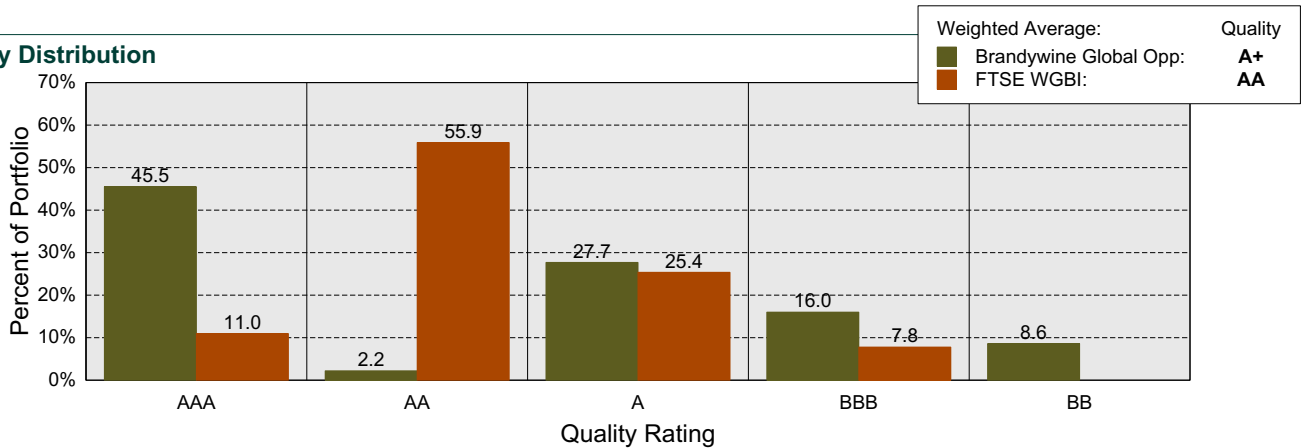
Sector Distribution



Duration Distribution



Quality Distribution



Pyramis Gbl Adv HY CMBS Period Ended September 30, 2019

Investment Philosophy

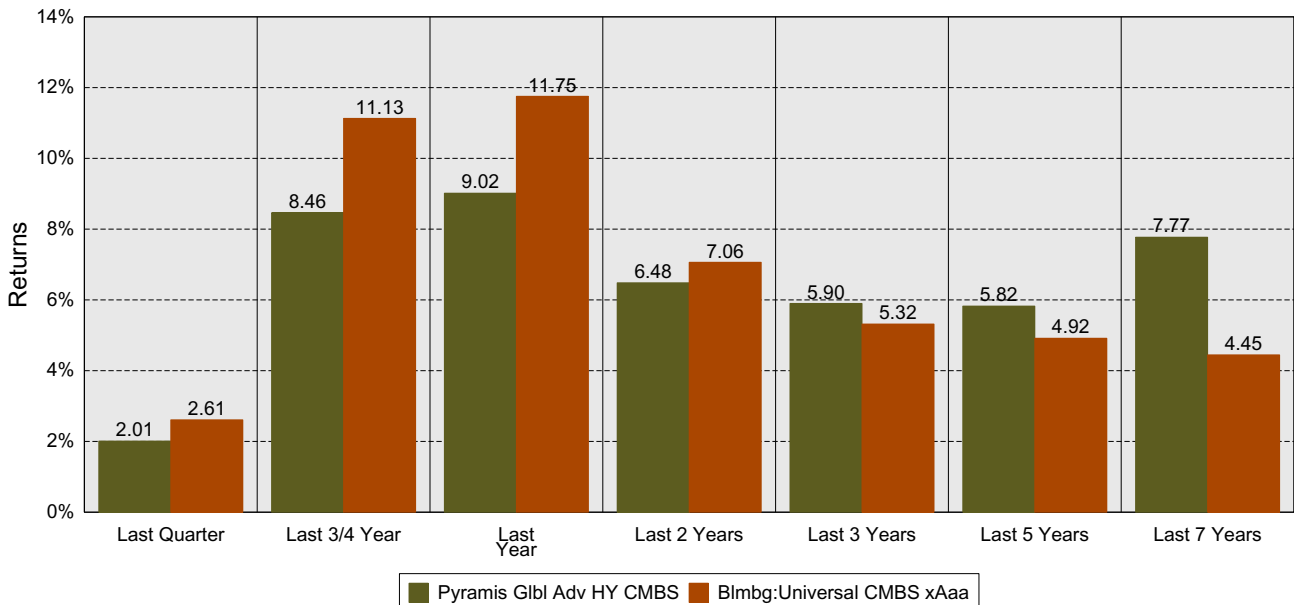
FIAM believes that unsurpassed bottom-up research on more CMBS issues than other investors will yield premiums relative to others.

Quarterly Summary and Highlights

- Pyramis Gbl Adv HY CMBS's portfolio posted a 2.01% return for the quarter placing it in the 25 percentile of the Callan Global Fixed High Yield group for the quarter and in the 11 percentile for the last year.
- Pyramis Gbl Adv HY CMBS's portfolio underperformed the Blmbg:Universal CMBS xAaa by 0.60% for the quarter and underperformed the Blmbg:Universal CMBS xAaa for the year by 2.74%.

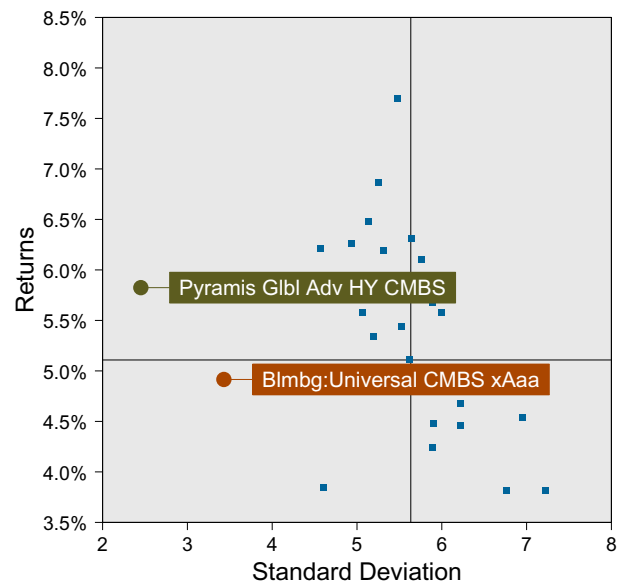
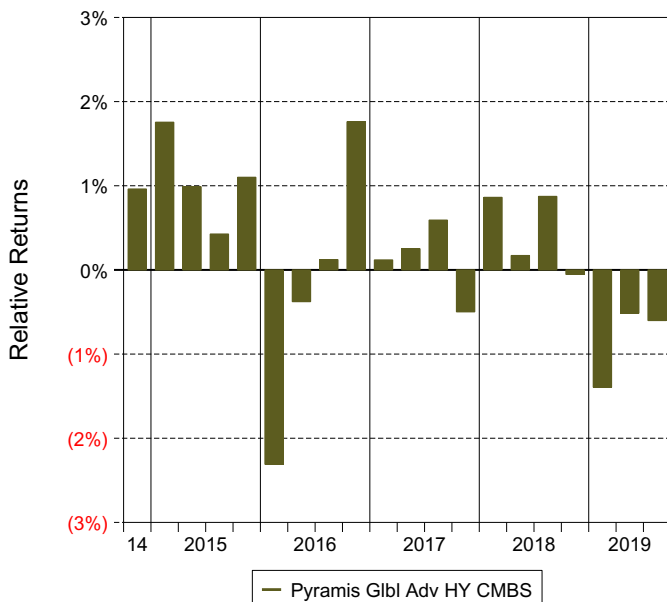
Quarterly Asset Growth

Beginning Market Value	\$333,710,222
Net New Investment	\$-512,909
Investment Gains/(Losses)	\$6,695,110
Ending Market Value	\$339,892,423



Relative Returns vs
Blmbg:Universal CMBS xAaa

Callan Global Fixed High Yield (Gross)
Annualized Five Year Risk vs Return

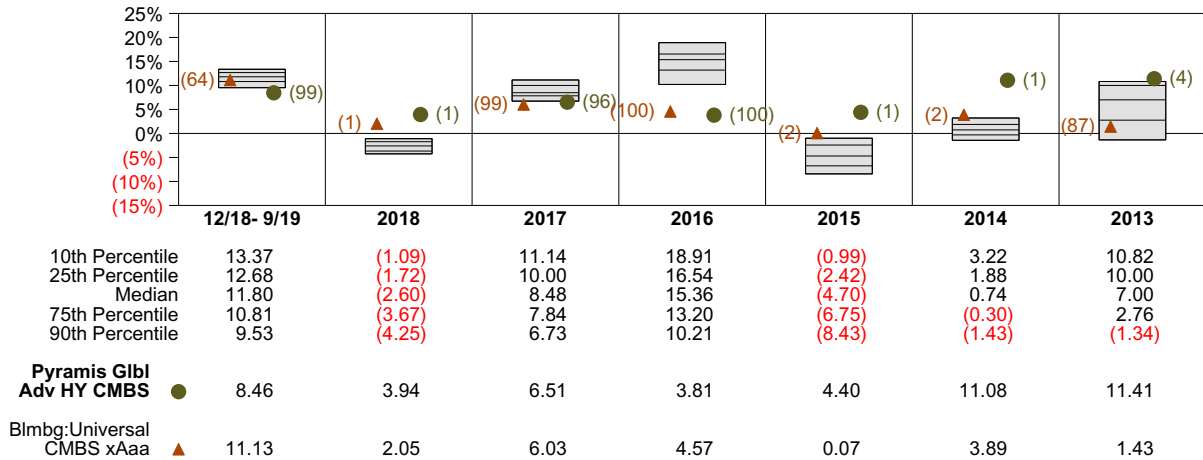


Pyramis Gbl Adv HY CMBS Return Analysis Summary

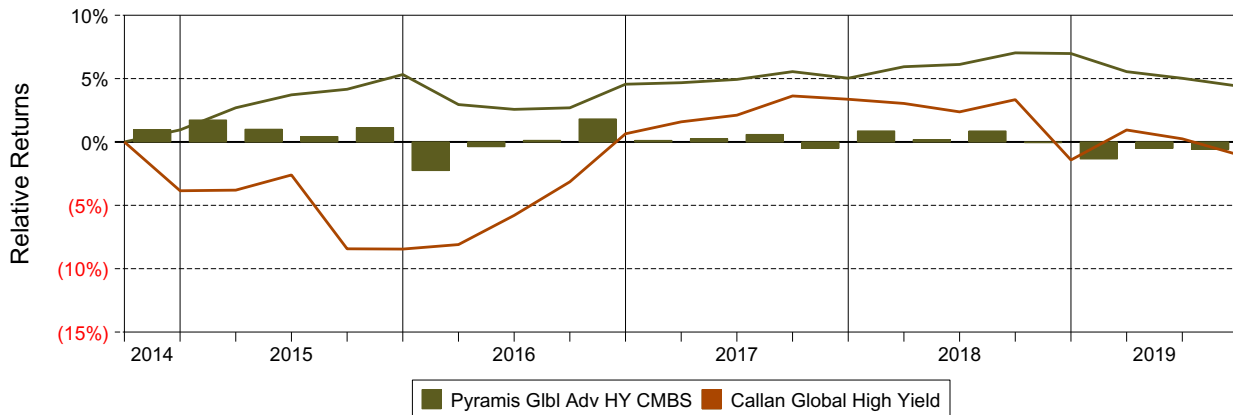
Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

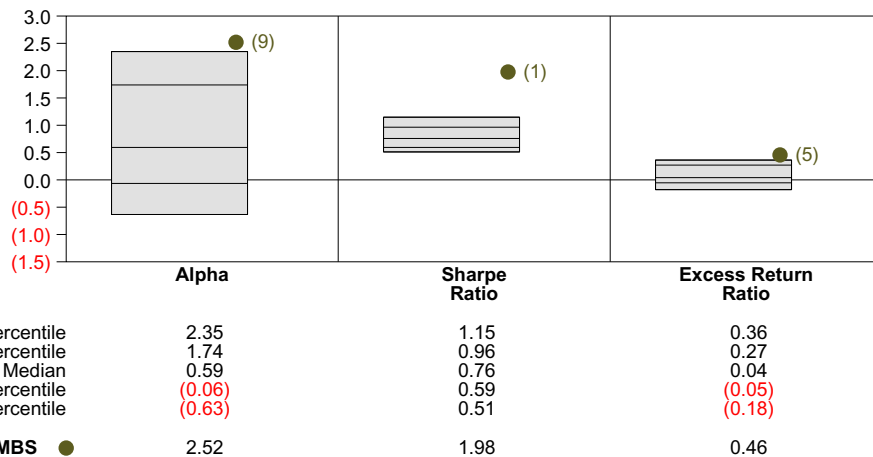
Performance vs Callan Global Fixed High Yield (Gross)



Cumulative and Quarterly Relative Return vs Blmbg:Universal CMBS xAaa



Risk Adjusted Return Measures vs Blmbg:Universal CMBS xAaa Rankings Against Callan Global Fixed High Yield (Gross) Five Years Ended September 30, 2019

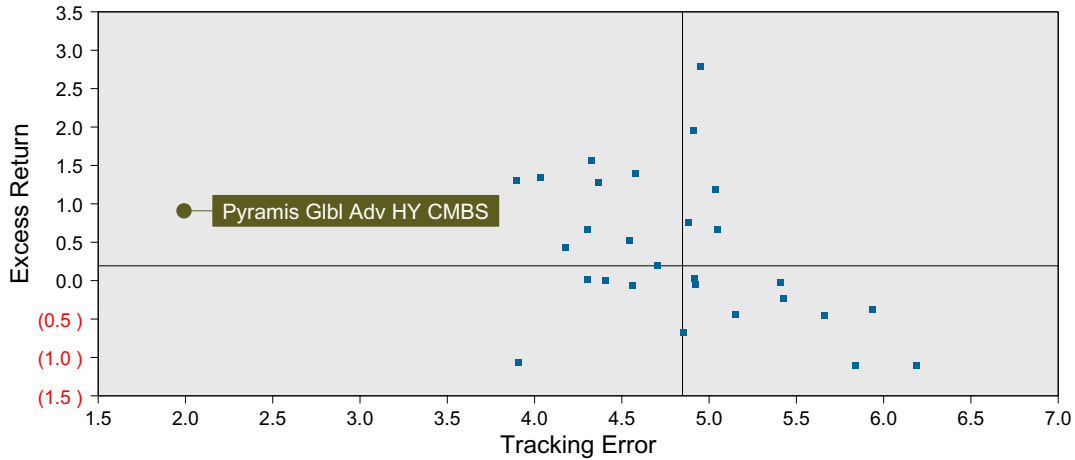


Pyramis Gbl Adv HY CMBS Risk Analysis Summary

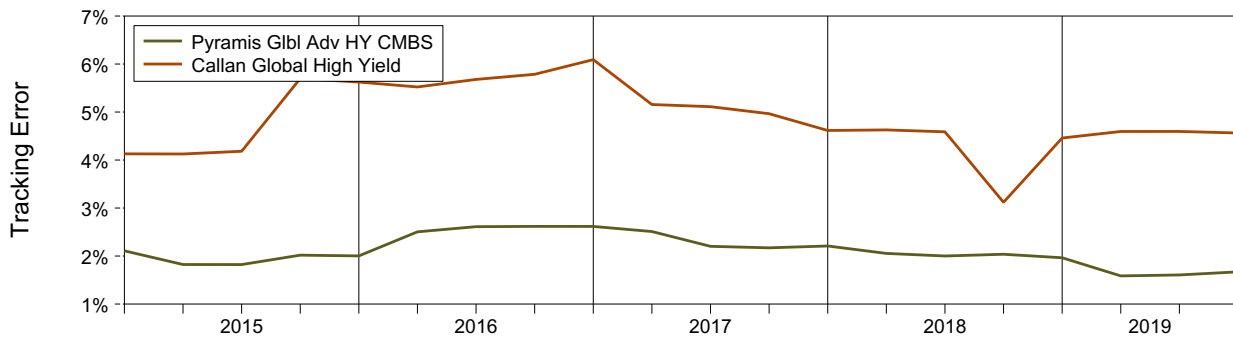
Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows tracking error patterns versus the benchmark over time. The last two charts show the ranking of the manager's risk statistics versus the peer group.

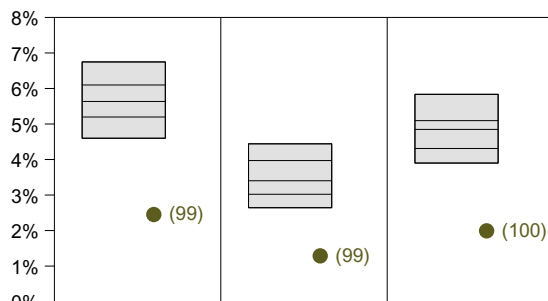
Risk Analysis vs Callan Global Fixed High Yield (Gross) Five Years Ended September 30, 2019



Rolling 12 Quarter Tracking Error vs Bloomberg Barclays Universal CMBS xAaa

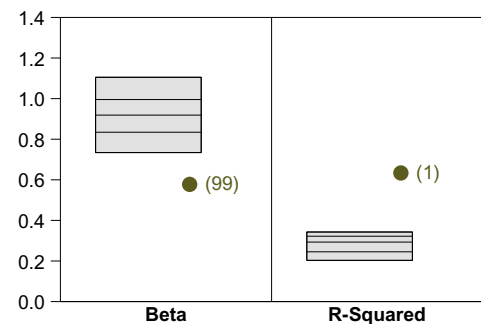


Risk Statistics Rankings vs Bloomberg Barclays Universal CMBS xAaa Rankings Against Callan Global Fixed High Yield (Gross) Five Years Ended September 30, 2019



	Standard Deviation	Downside Risk	Tracking Error
10th Percentile	6.75	4.44	5.84
25th Percentile	6.10	3.97	5.09
Median	5.63	3.40	4.85
75th Percentile	5.20	3.02	4.31
90th Percentile	4.60	2.64	3.90

Pyramis Gbl Adv HY CMBS ● 2.45 1.29 1.99



	Beta	R-Squared
10th Percentile	1.11	0.34
25th Percentile	1.00	0.32
Median	0.92	0.29
75th Percentile	0.83	0.25
90th Percentile	0.73	0.20

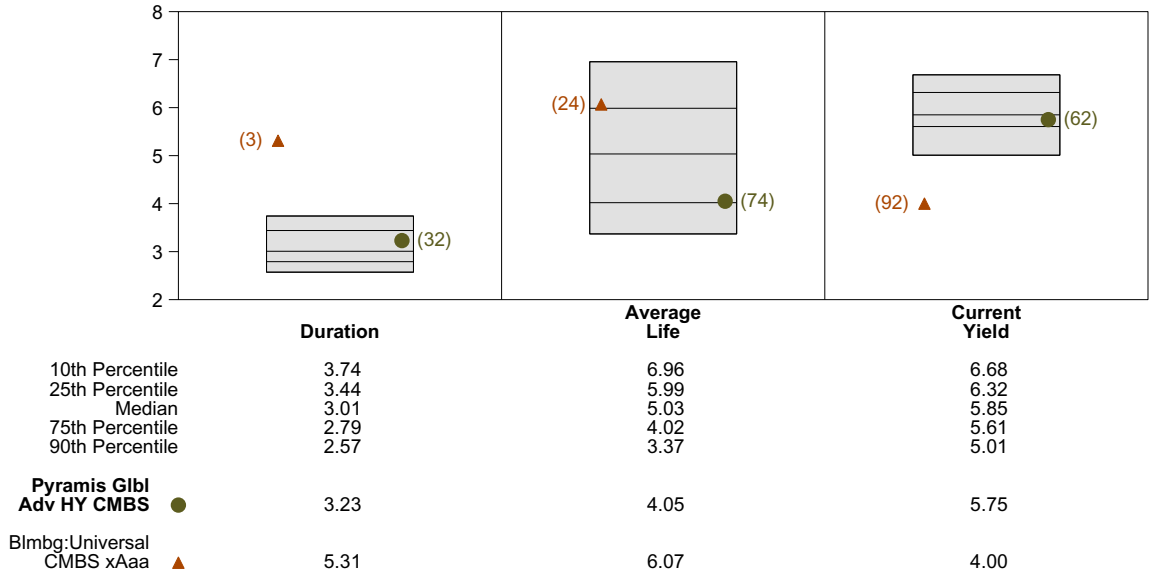
Pyramis Gbl Adv HY CMBS ● 0.58 0.63

Pyramis Gbl Adv HY CMBS Bond Characteristics Analysis Summary

Portfolio Characteristics

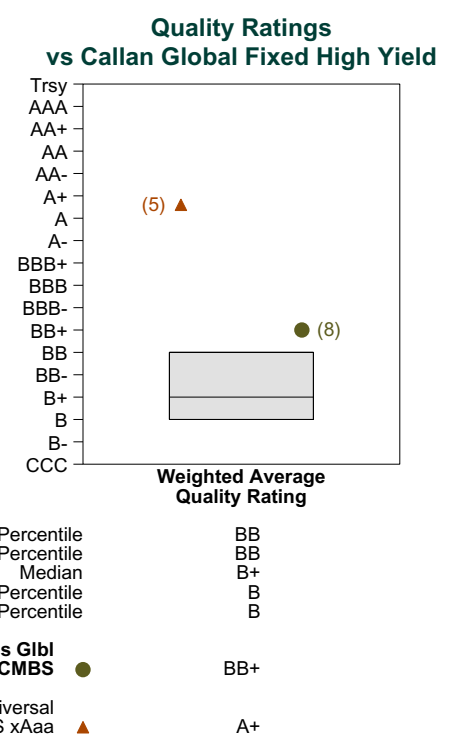
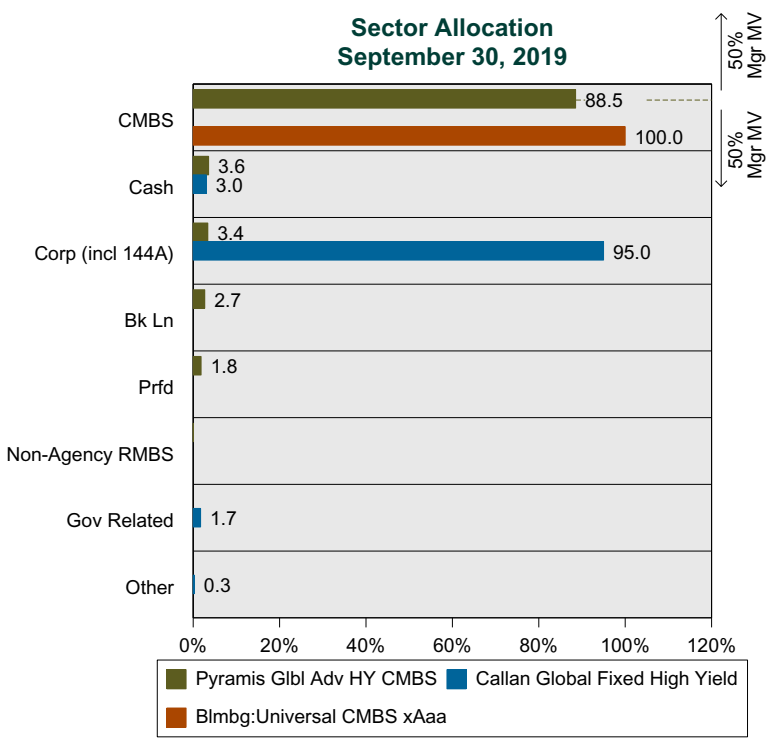
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

Fixed Income Portfolio Characteristics Rankings Against Callan Global Fixed High Yield as of September 30, 2019



Sector Allocation and Quality Ratings

The first graph compares the manager's sector allocation with the average allocation across all the members of the manager's style. The second graph compares the manager's weighted average quality rating with the range of quality ratings for the style.

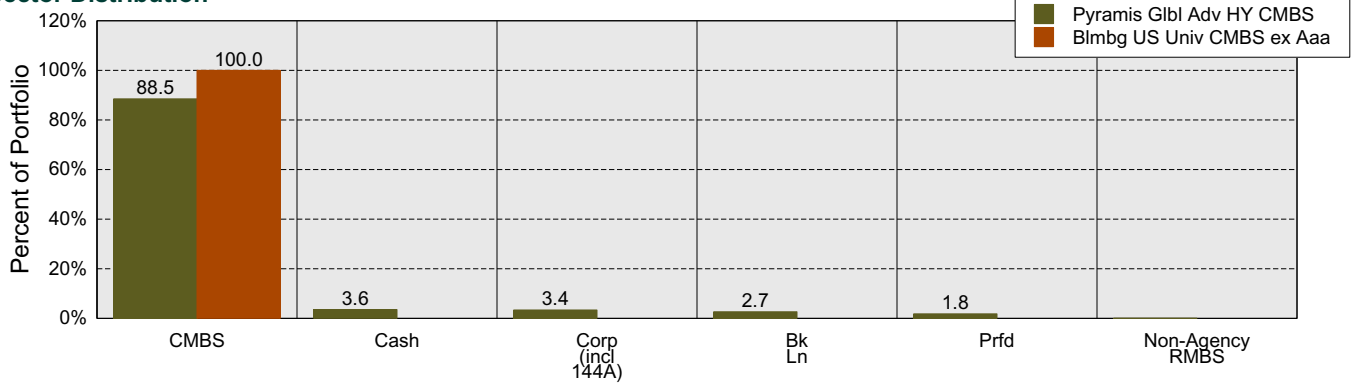


Pyramis Gbl Adv HY CMBS Portfolio Characteristics Summary As of September 30, 2019

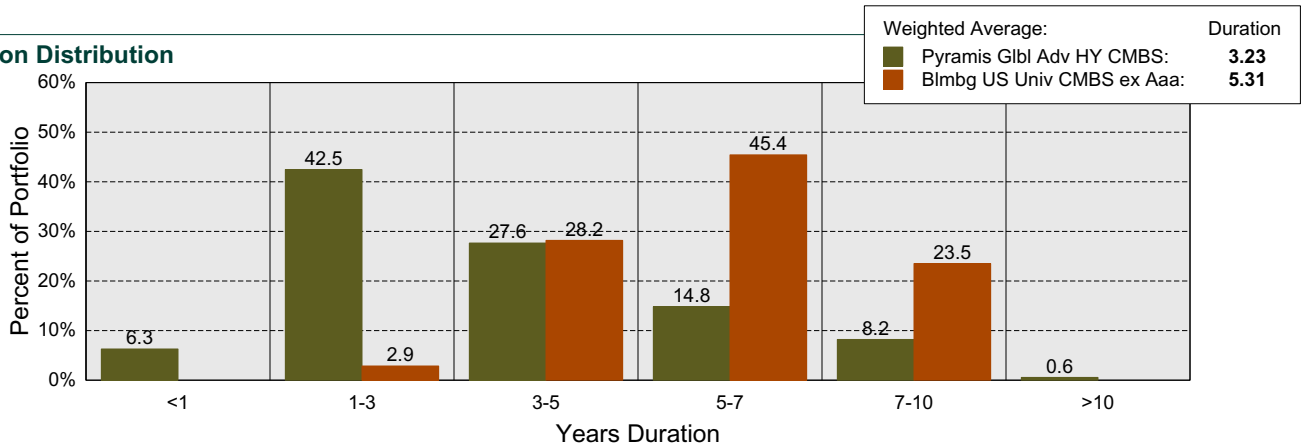
Portfolio Structure Comparison

The charts below compare the structure of the portfolio to that of the index from the three perspectives that have the greatest influence on return. The first chart compares the two portfolios across sectors. The second chart compares the duration distribution. The last chart compares the distribution across quality ratings.

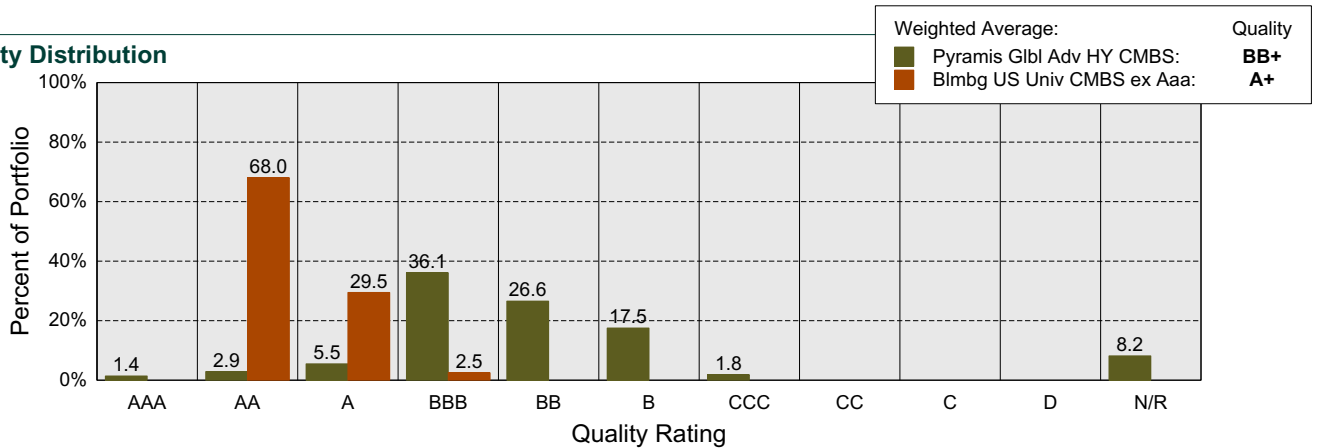
Sector Distribution



Duration Distribution



Quality Distribution



Stone Harbor EMD

Period Ended September 30, 2019

Investment Philosophy

Stone Harbor believes that a disciplined credit and relative value approach will best capture what the investment team views as a secular trend towards the expansion and development of the emerging debt markets. The team also believes that investing in a diversified portfolio of improving emerging markets debt instruments will result in strong, long-term performance. Also, they believe the key to successfully generating excess returns is through a process of rigorous credit analysis. The team's active style of investment management is characterized by fundamental credit analysis.

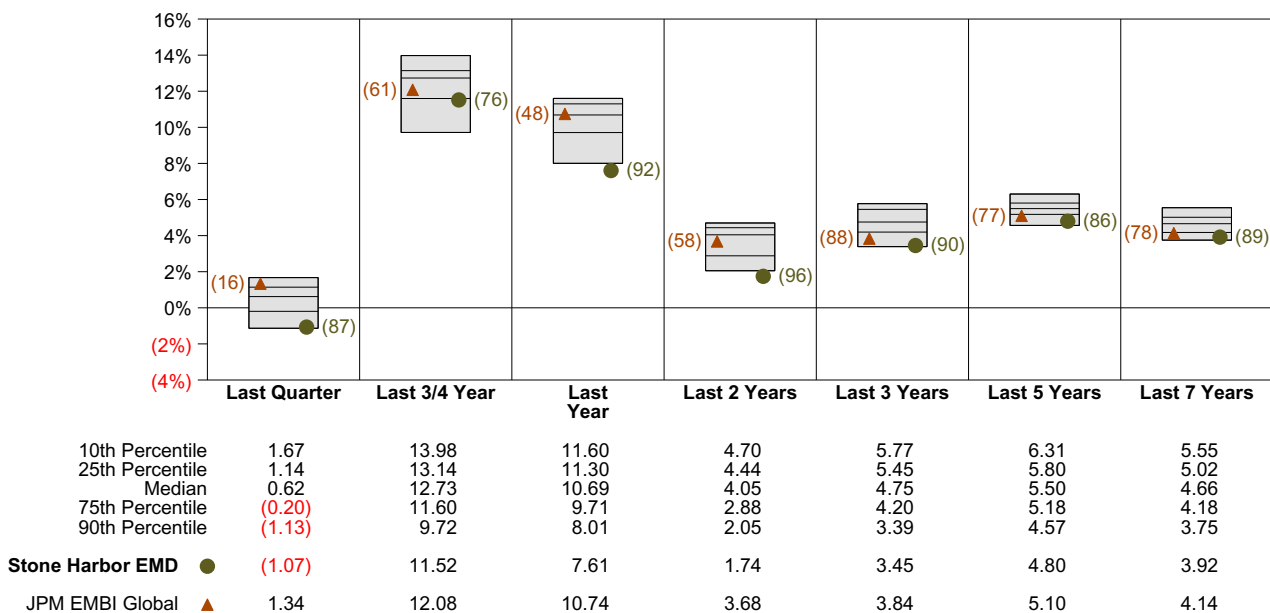
Quarterly Summary and Highlights

- Stone Harbor EMD's portfolio posted a (1.07)% return for the quarter placing it in the 87 percentile of the Callan Emerging Debt USD group for the quarter and in the 92 percentile for the last year.
- Stone Harbor EMD's portfolio underperformed the JPM EMBI Global by 2.41% for the quarter and underperformed the JPM EMBI Global for the year by 3.14%.

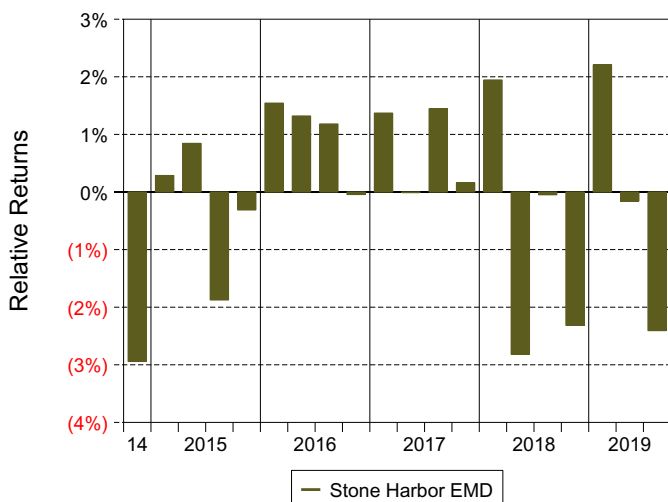
Quarterly Asset Growth

Beginning Market Value	\$156,315,025
Net New Investment	\$9,326,422
Investment Gains/(Losses)	\$-1,679,450
Ending Market Value	\$163,961,997

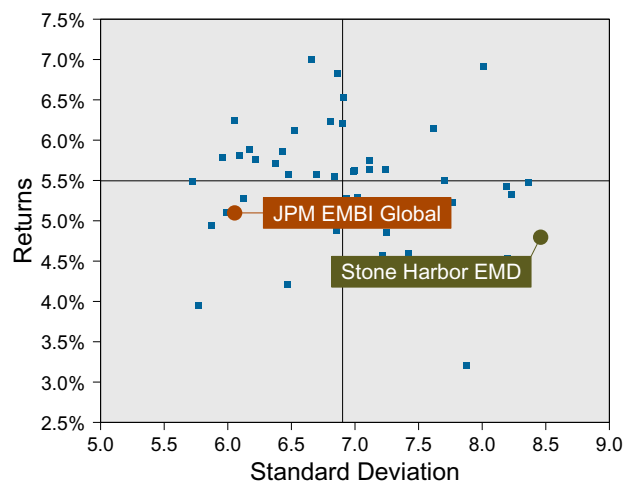
Performance vs Callan Emerging Debt USD (Gross)



Relative Return vs JPM EMBI Global



Callan Emerging Debt USD (Gross) Annualized Five Year Risk vs Return

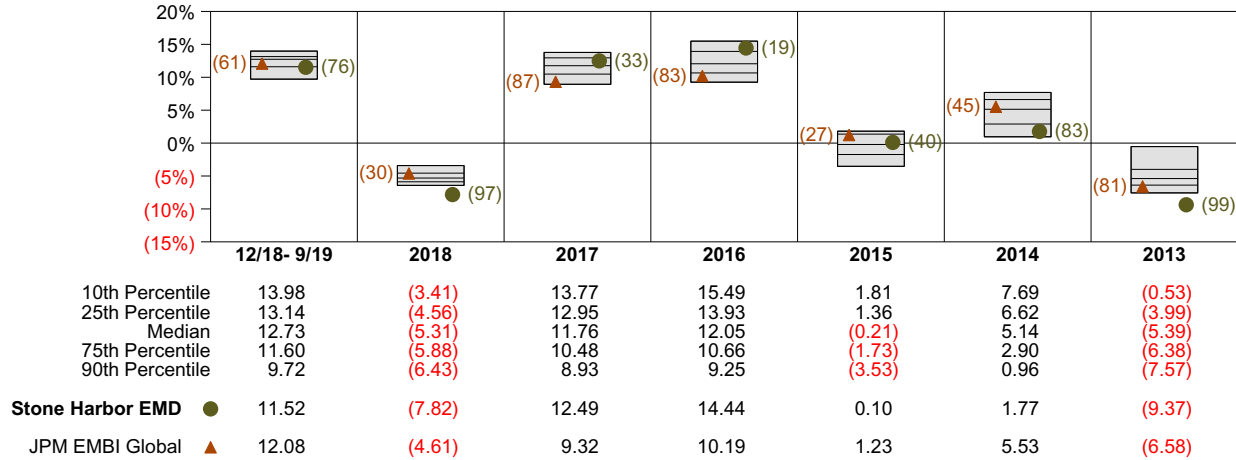


Stone Harbor EMD Return Analysis Summary

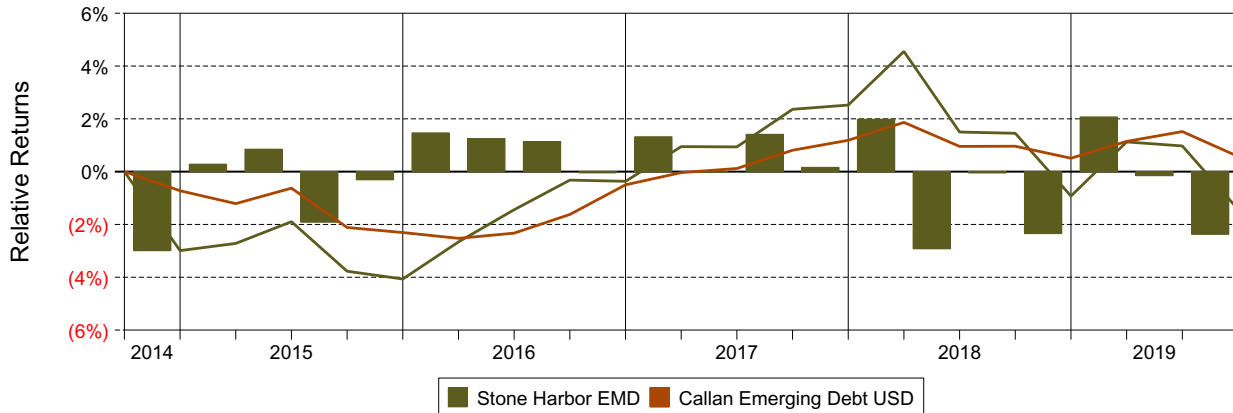
Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

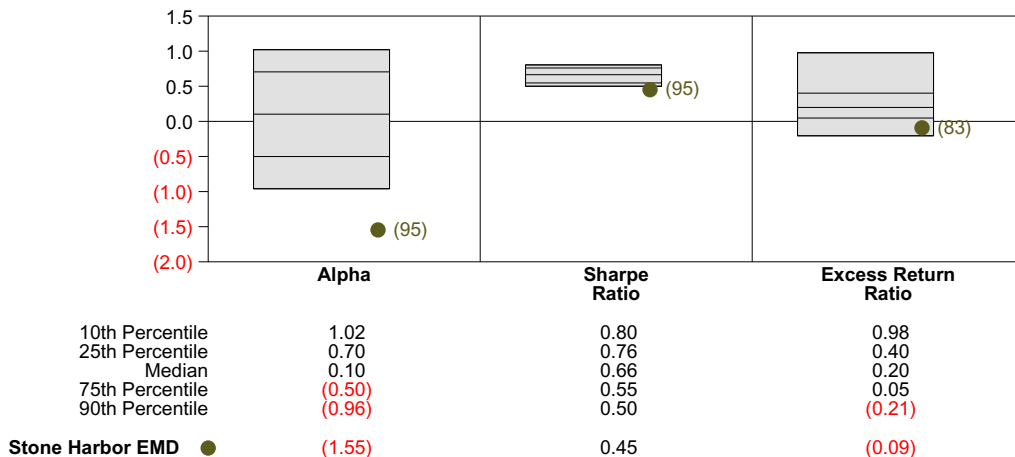
Performance vs Callan Emerging Debt USD (Gross)



Cumulative and Quarterly Relative Return vs JPM EMBI Global



Risk Adjusted Return Measures vs JPM EMBI Global Rankings Against Callan Emerging Debt USD (Gross) Five Years Ended September 30, 2019

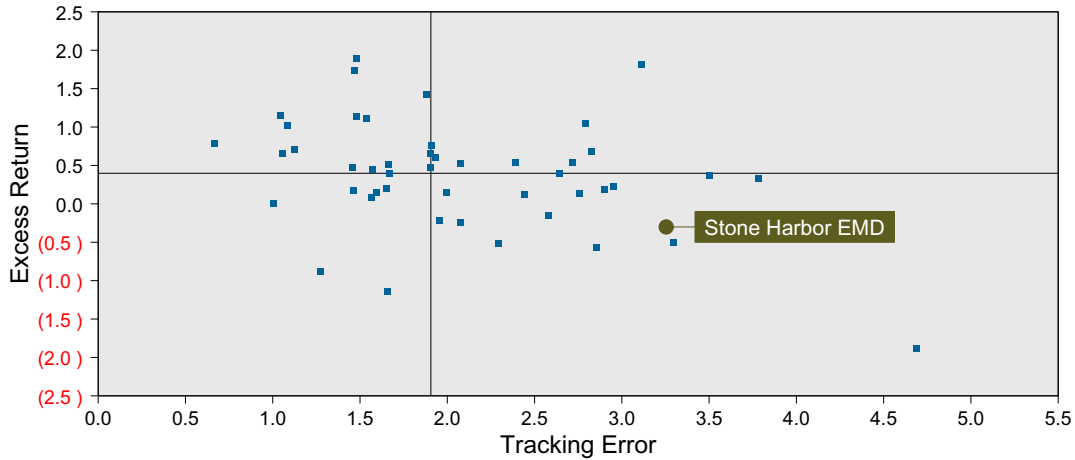


Stone Harbor EMD Risk Analysis Summary

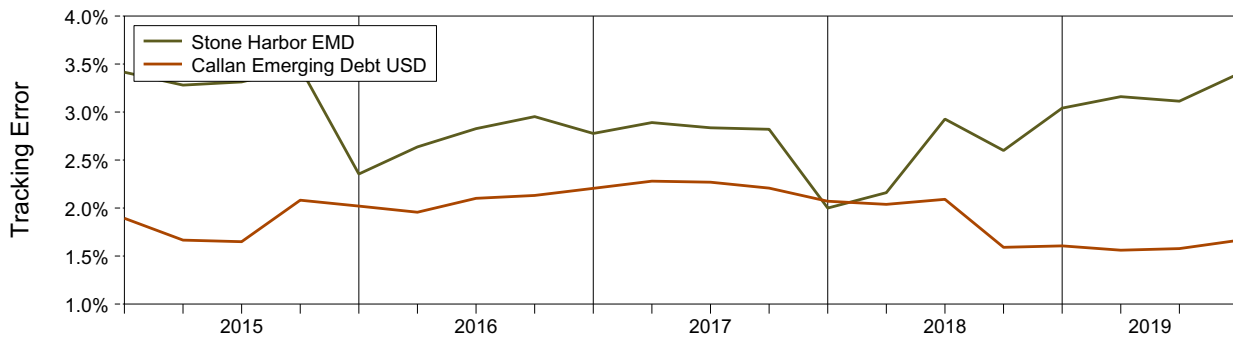
Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows tracking error patterns versus the benchmark over time. The last two charts show the ranking of the manager's risk statistics versus the peer group.

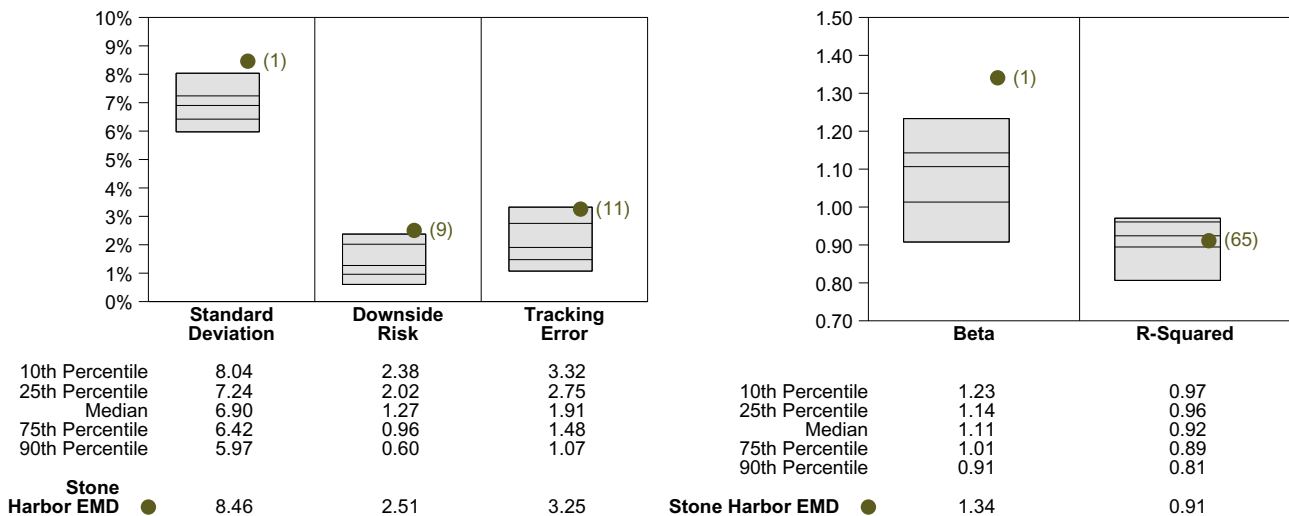
Risk Analysis vs Callan Emerging Debt USD (Gross) Five Years Ended September 30, 2019



Rolling 12 Quarter Tracking Error vs JPM Emerging Mkts Bond Global



Risk Statistics Rankings vs JPM Emerging Mkts Bond Global Rankings Against Callan Emerging Debt USD (Gross) Five Years Ended September 30, 2019

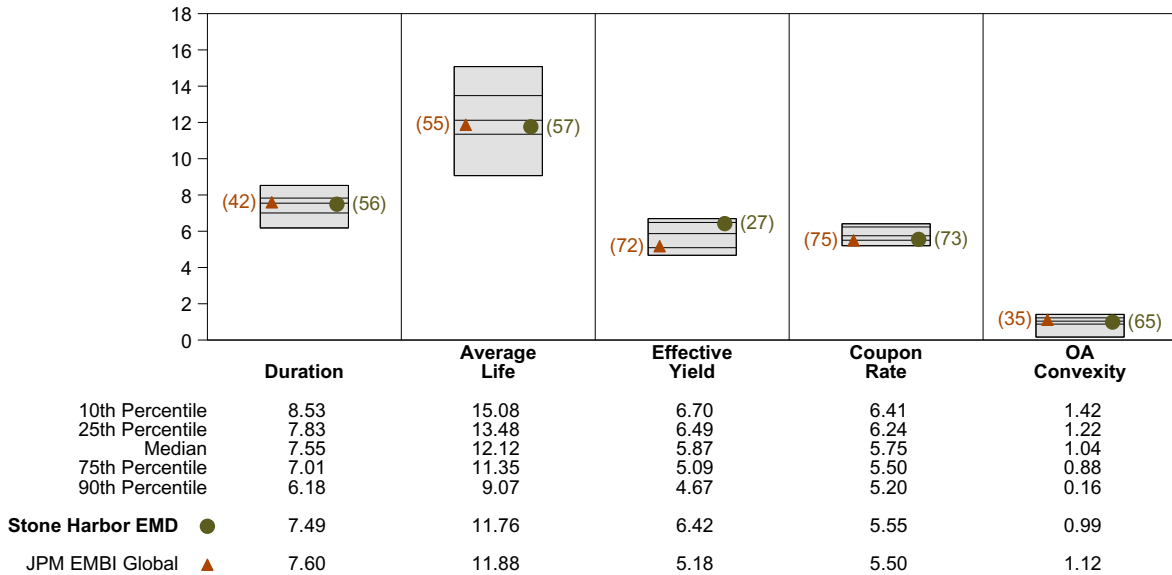


Stone Harbor EMD Bond Characteristics Analysis Summary

Portfolio Characteristics

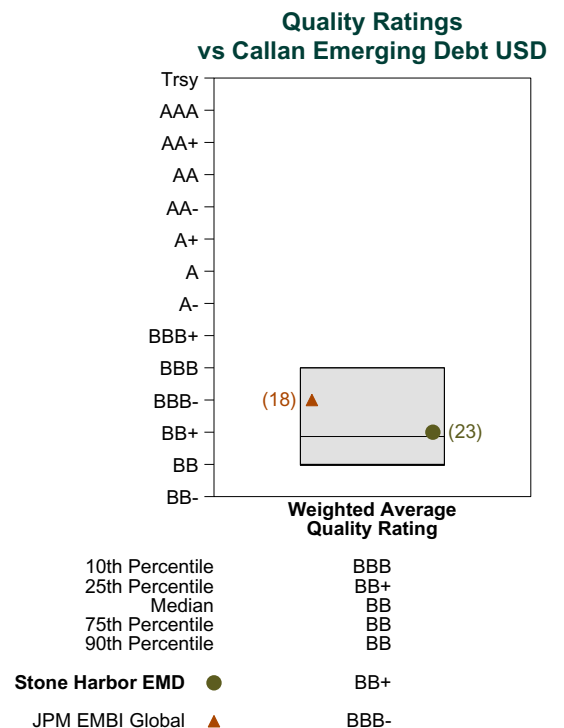
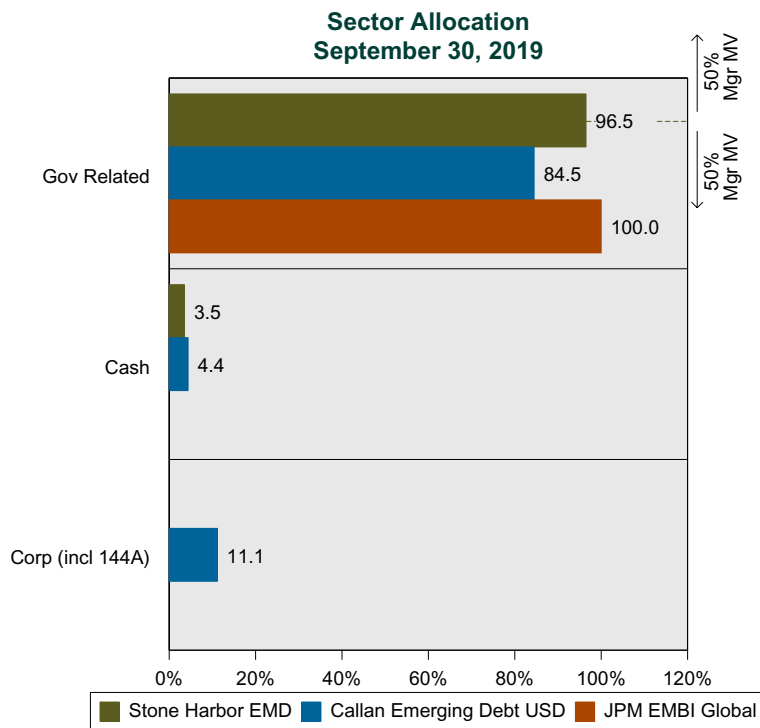
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

Fixed Income Portfolio Characteristics Rankings Against Callan Emerging Debt USD as of September 30, 2019



Sector Allocation and Quality Ratings

The first graph compares the manager's sector allocation with the average allocation across all the members of the manager's style. The second graph compares the manager's weighted average quality rating with the range of quality ratings for the style.

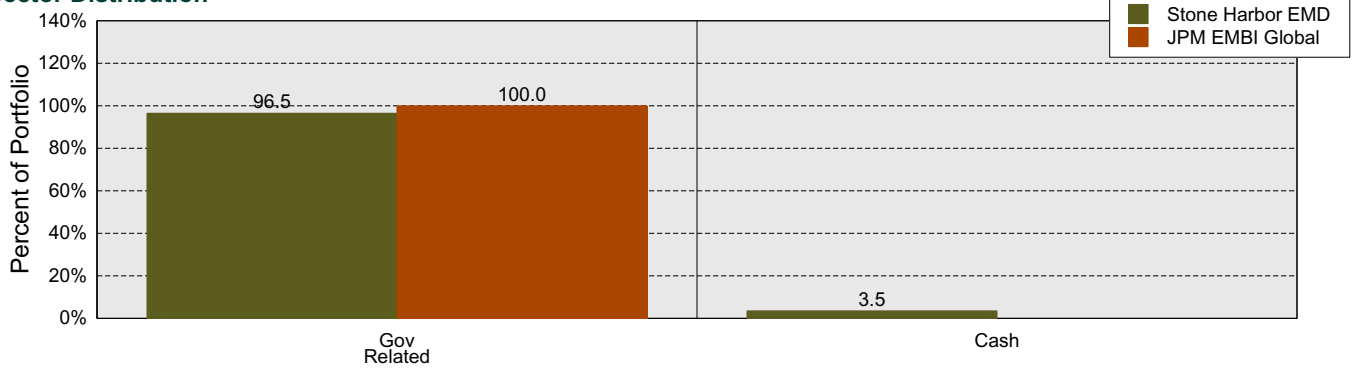


Stone Harbor EMD Portfolio Characteristics Summary As of September 30, 2019

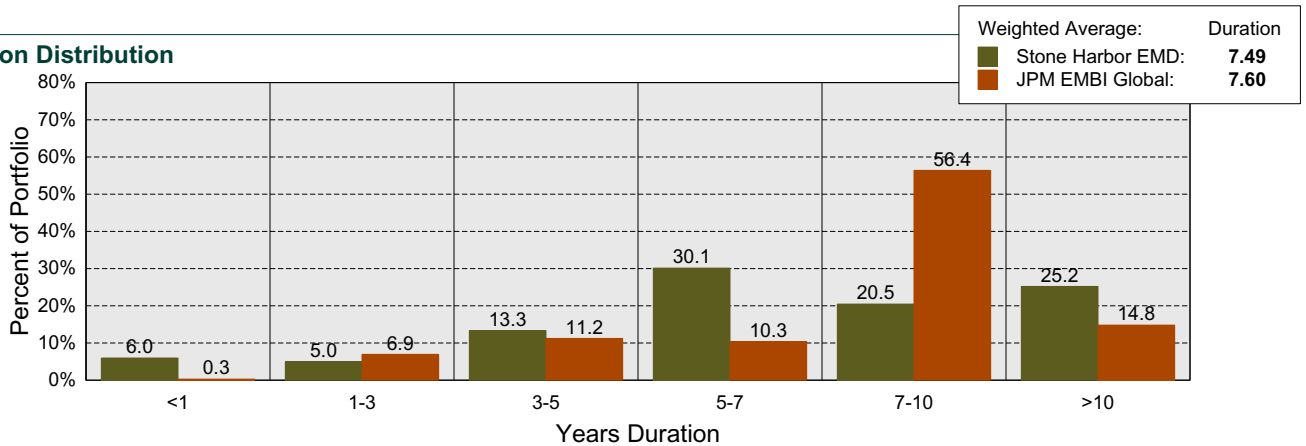
Portfolio Structure Comparison

The charts below compare the structure of the portfolio to that of the index from the three perspectives that have the greatest influence on return. The first chart compares the two portfolios across sectors. The second chart compares the duration distribution. The last chart compares the distribution across quality ratings.

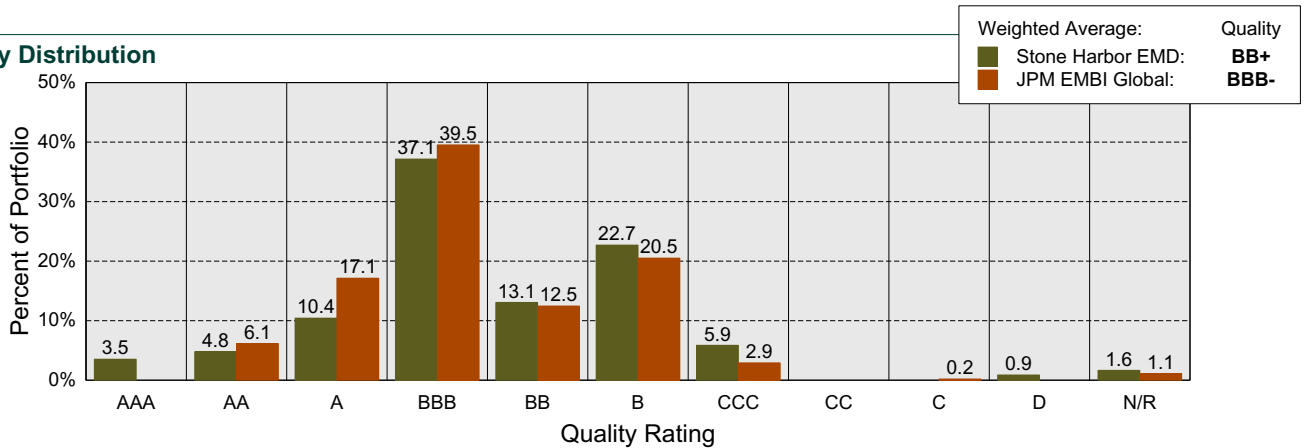
Sector Distribution



Duration Distribution



Quality Distribution



Stone Harbor Gbl HY Period Ended September 30, 2019

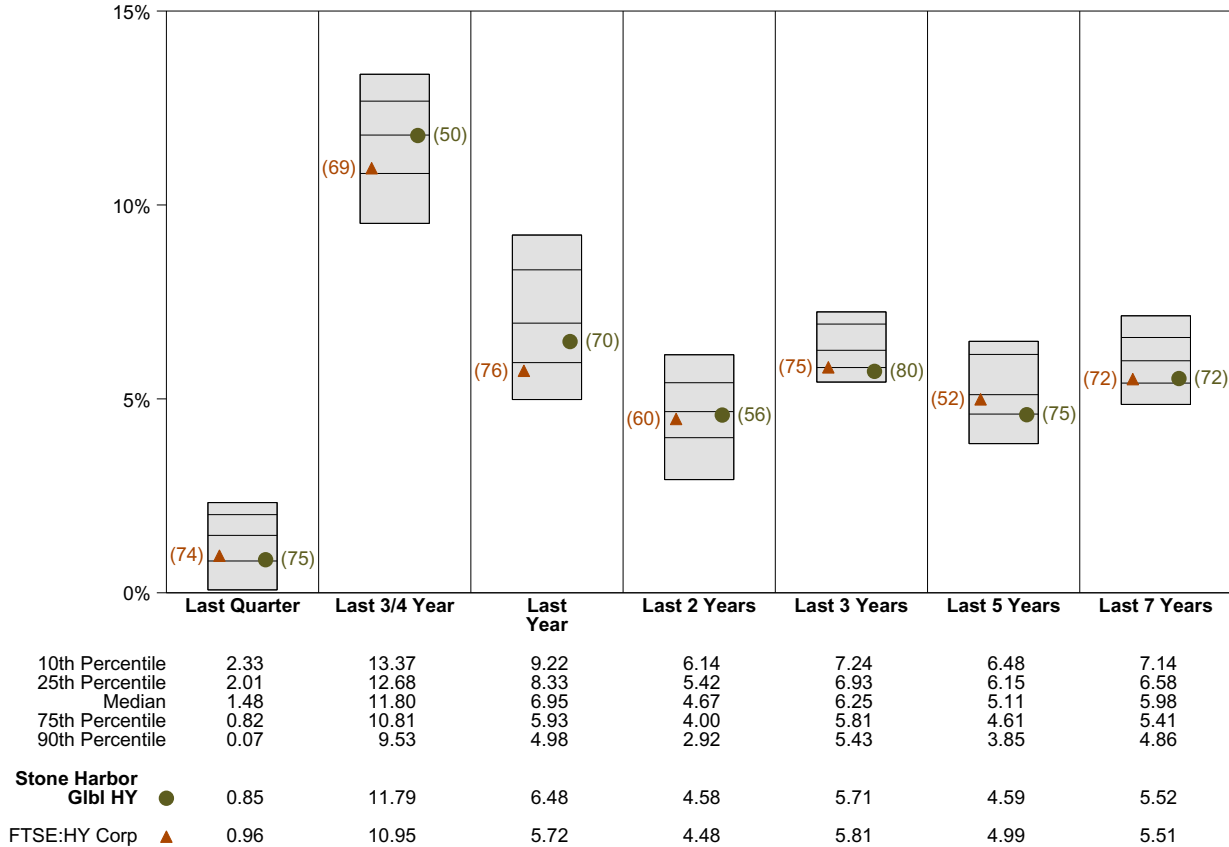
Quarterly Summary and Highlights

- Stone Harbor Gbl HY's portfolio posted a 0.85% return for the quarter placing it in the 75 percentile of the Callan Global Fixed High Yield group for the quarter and in the 70 percentile for the last year.
- Stone Harbor Gbl HY's portfolio underperformed the FTSE:HY Corp by 0.10% for the quarter and outperformed the FTSE:HY Corp for the year by 0.75%.

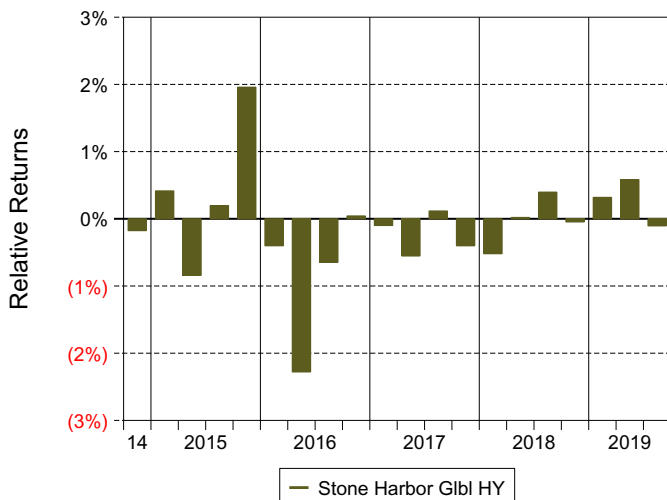
Quarterly Asset Growth

Beginning Market Value	\$200,846,214
Net New Investment	\$-9,326,421
Investment Gains/(Losses)	\$1,695,712
Ending Market Value	\$193,215,504

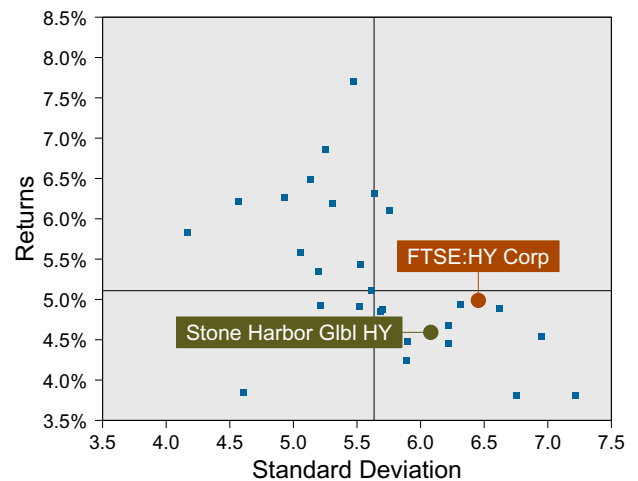
Performance vs Callan Global Fixed High Yield (Gross)



Relative Return vs FTSE:HY Corp



Callan Global Fixed High Yield (Gross) Annualized Five Year Risk vs Return

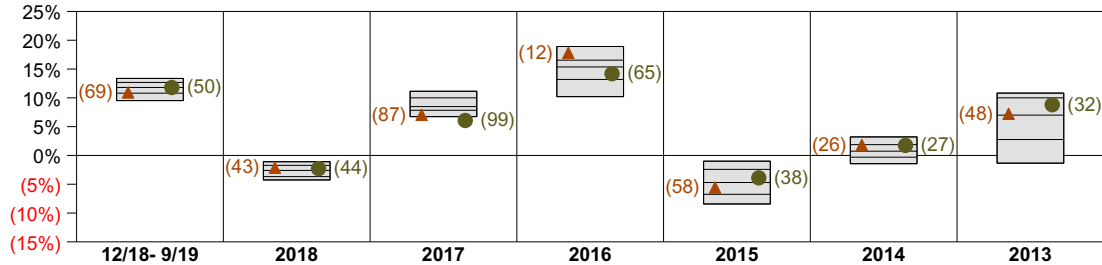


Stone Harbor Gbl HY Return Analysis Summary

Return Analysis

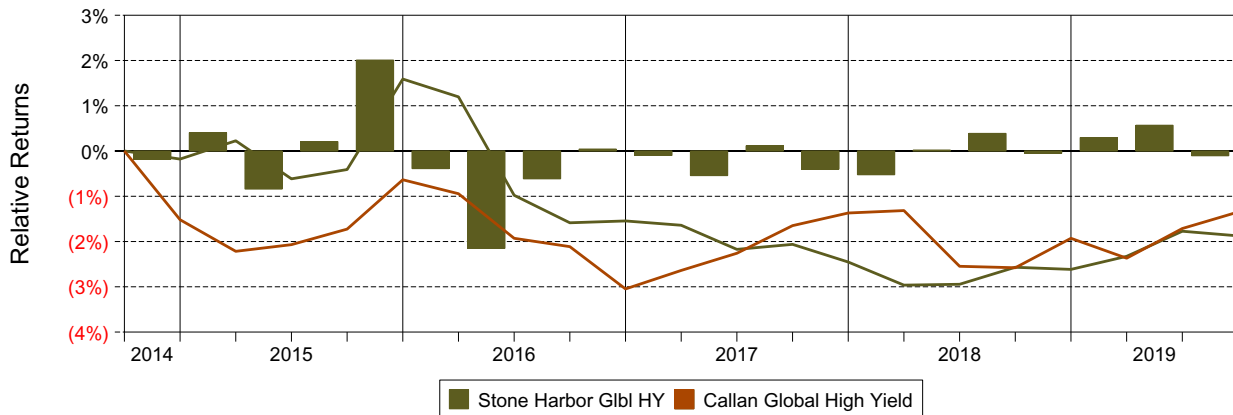
The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

Performance vs Callan Global Fixed High Yield (Gross)

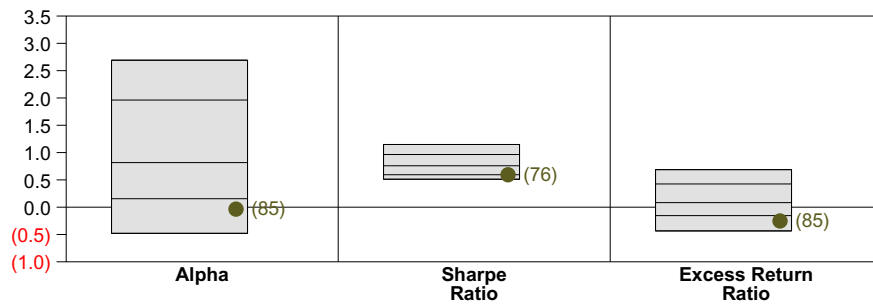


10th Percentile	13.37	(1.09)	11.14	18.91	(0.99)	3.22	10.82
25th Percentile	12.68	(1.72)	10.00	16.54	(2.42)	1.88	10.00
Median	11.80	(2.60)	8.48	15.36	(4.70)	0.74	7.00
75th Percentile	10.81	(3.67)	7.84	13.20	(6.75)	(0.30)	2.76
90th Percentile	9.53	(4.25)	6.73	10.21	(8.43)	(1.43)	(1.34)
Stone Harbor Gbl HY	11.79	(2.29)	6.06	14.19	(3.89)	1.75	8.80
FTSE:HY Corp	10.95	(2.13)	7.05	17.82	(5.56)	1.83	7.23

Cumulative and Quarterly Relative Return vs FTSE:HY Corp



Risk Adjusted Return Measures vs FTSE:HY Corp Rankings Against Callan Global Fixed High Yield (Gross) Five Years Ended September 30, 2019



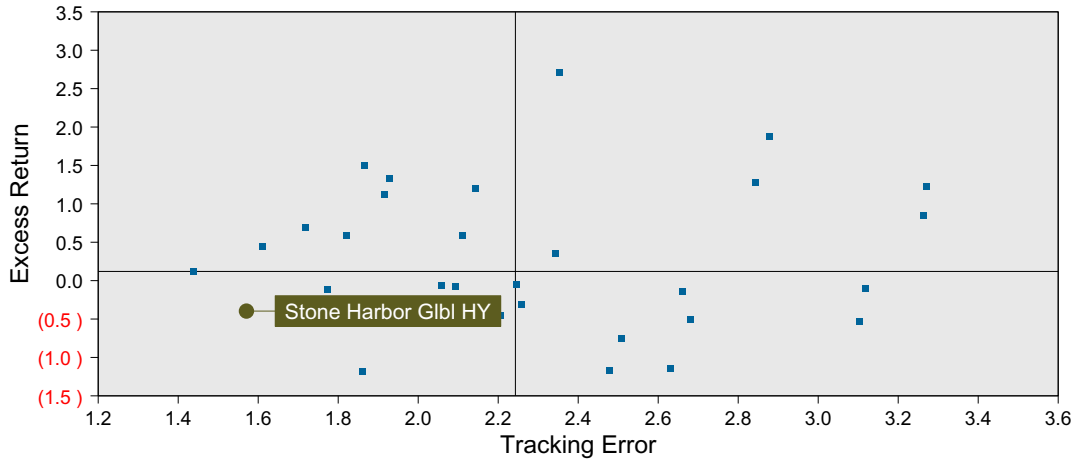
10th Percentile	2.69	1.15	0.69
25th Percentile	1.96	0.96	0.43
Median	0.82	0.76	0.08
75th Percentile	0.16	0.59	(0.15)
90th Percentile	(0.48)	0.51	(0.43)
Stone Harbor Gbl HY	(0.04)	0.59	(0.25)

Stone Harbor Gbl HY Risk Analysis Summary

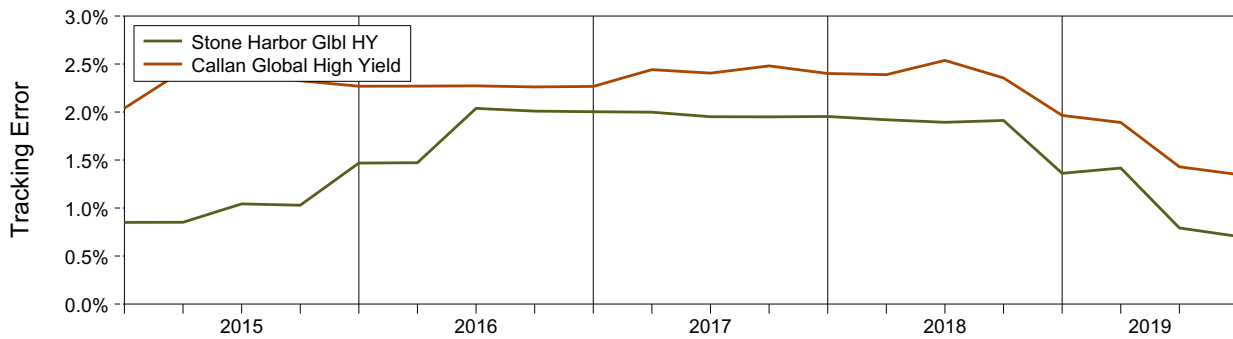
Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows tracking error patterns versus the benchmark over time. The last two charts show the ranking of the manager's risk statistics versus the peer group.

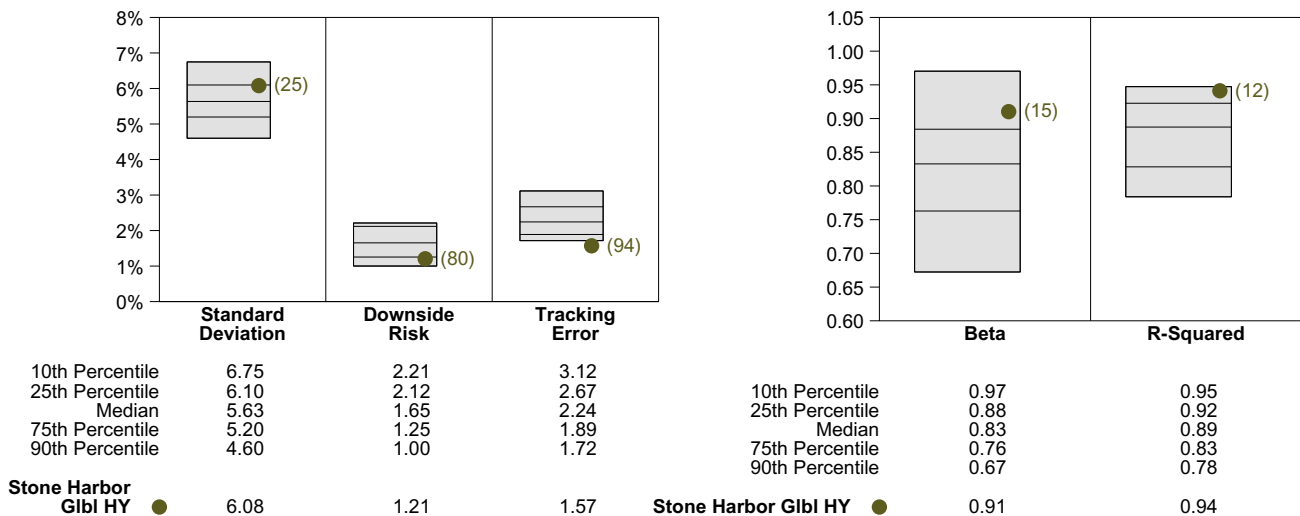
Risk Analysis vs Callan Global Fixed High Yield (Gross) Five Years Ended September 30, 2019



Rolling 12 Quarter Tracking Error vs FTSE HY Corporate



Risk Statistics Rankings vs FTSE HY Corporate Rankings Against Callan Global Fixed High Yield (Gross) Five Years Ended September 30, 2019

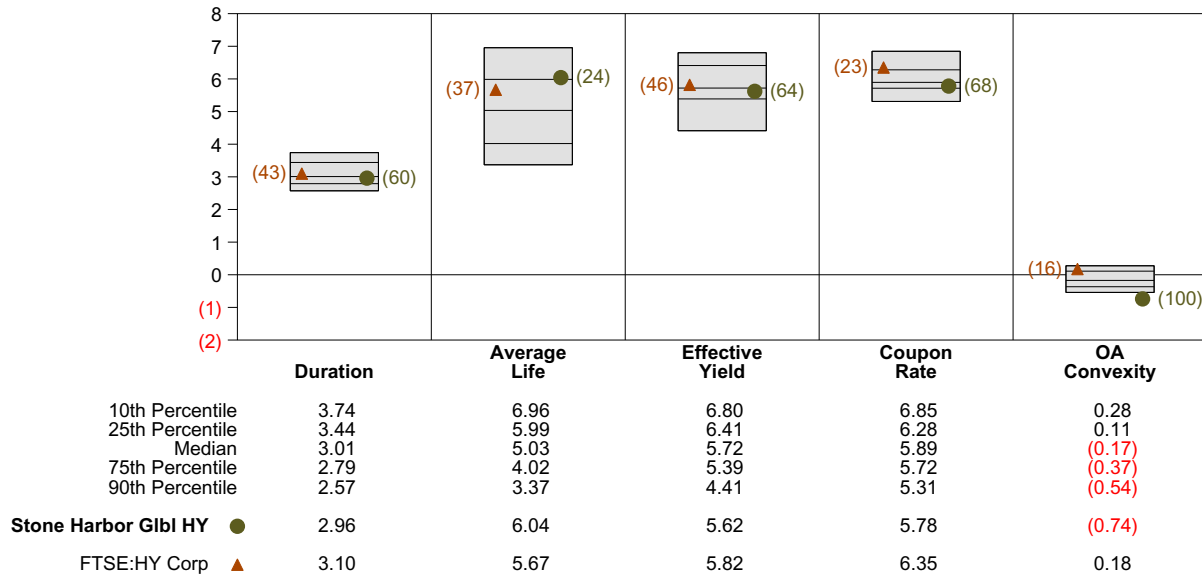


Stone Harbor GIBI HY Bond Characteristics Analysis Summary

Portfolio Characteristics

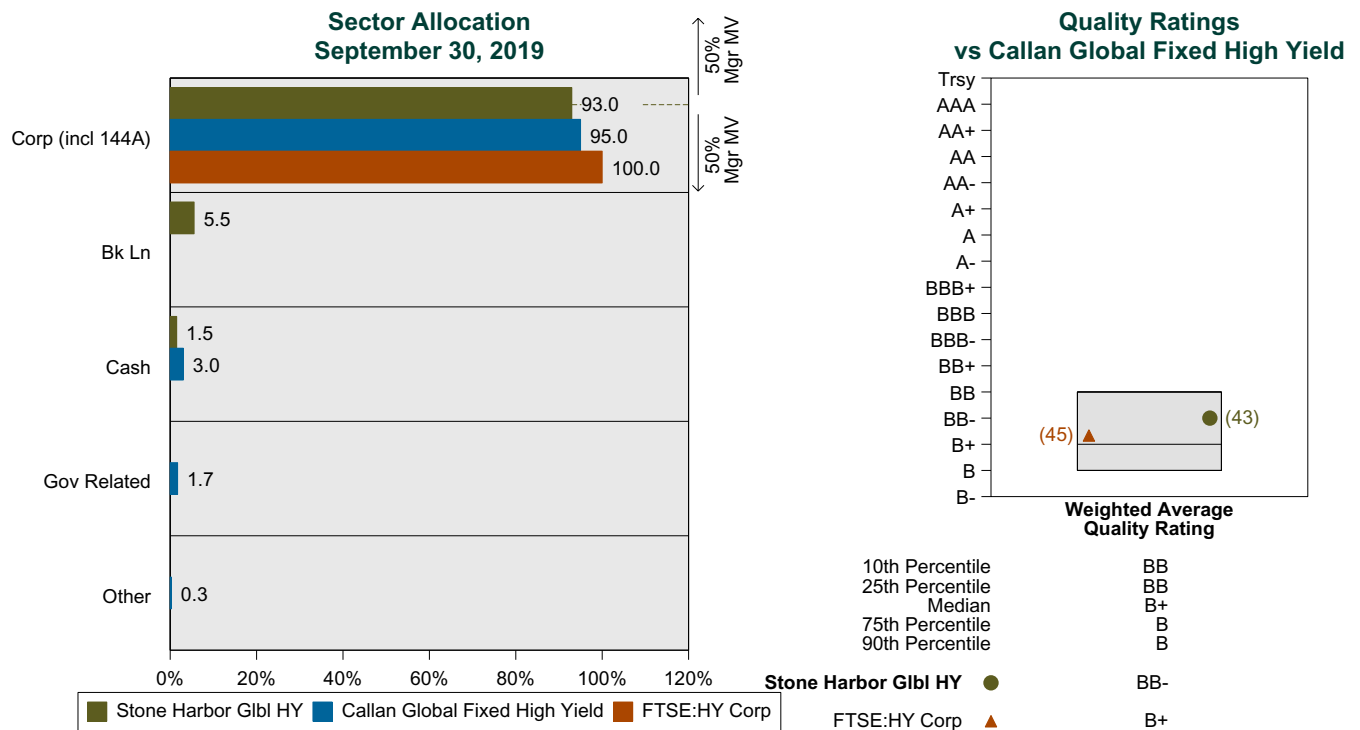
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

Fixed Income Portfolio Characteristics Rankings Against Callan Global Fixed High Yield as of September 30, 2019



Sector Allocation and Quality Ratings

The first graph compares the manager's sector allocation with the average allocation across all the members of the manager's style. The second graph compares the manager's weighted average quality rating with the range of quality ratings for the style.



Stone Harbor Gbl HY Portfolio Characteristics Summary As of September 30, 2019

Portfolio Structure Comparison

The charts below compare the structure of the portfolio to that of the index from the three perspectives that have the greatest influence on return. The first chart compares the two portfolios across sectors. The second chart compares the duration distribution. The last chart compares the distribution across quality ratings.

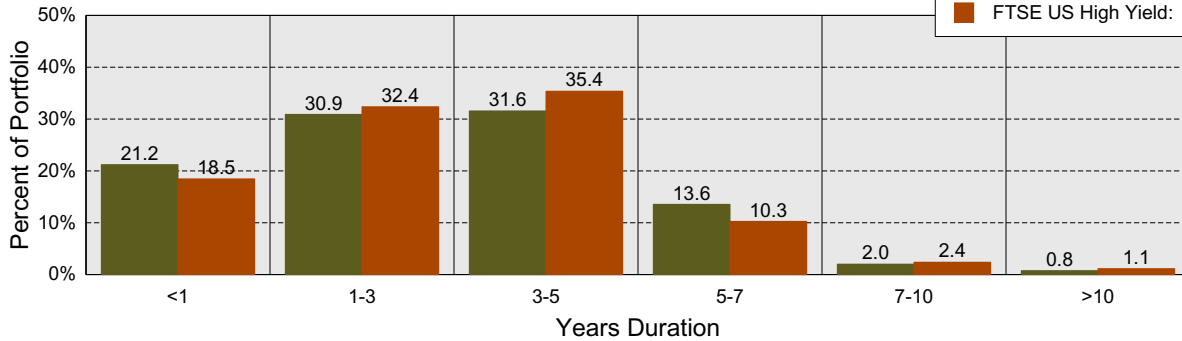
Sector Allocation



Stone Harbor Gbl HY

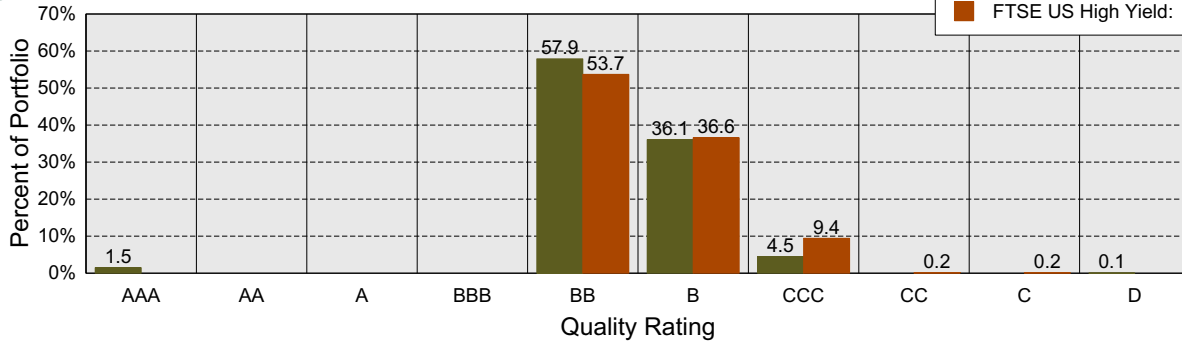
FTSE US High Yield

Duration Distribution



Weighted Average:	Duration
Stone Harbor Gbl HY:	2.96
FTSE US High Yield:	3.10

Quality Distribution



Weighted Average:	Quality
Stone Harbor Gbl HY:	BB-
FTSE US High Yield:	B+

Brown Brothers TIPS Period Ended September 30, 2019

Investment Philosophy

The BBH U.S. TIPS strategy seeks to capture a range of fundamentally-based and technically-based opportunities in the inflation-indexed securities market.

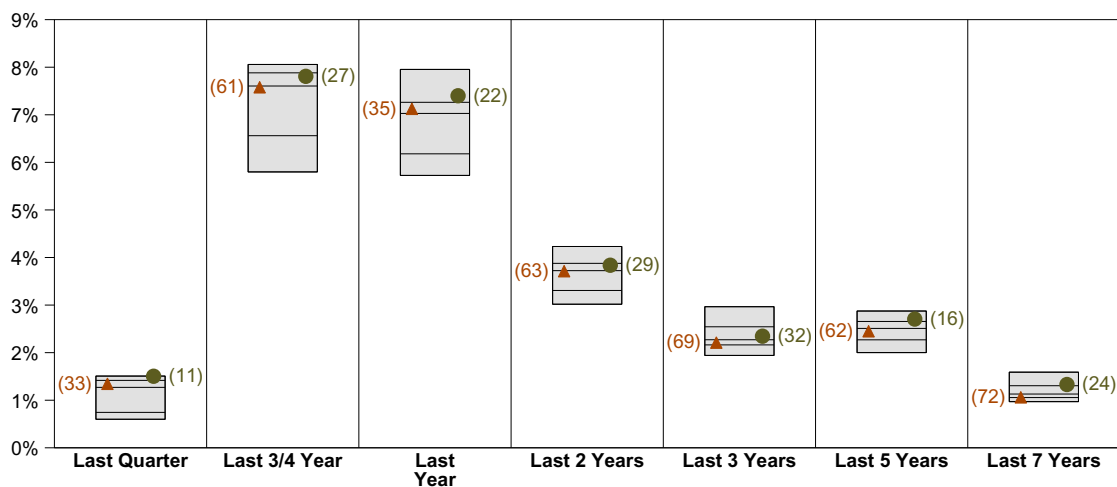
Quarterly Summary and Highlights

- Brown Brothers TIPS's portfolio posted a 1.50% return for the quarter placing it in the 11 percentile of the Callan Inflation Linked Bonds group for the quarter and in the 22 percentile for the last year.
- Brown Brothers TIPS's portfolio outperformed the Blmbg:TIPS by 0.16% for the quarter and outperformed the Blmbg:TIPS for the year by 0.27%.

Quarterly Asset Growth

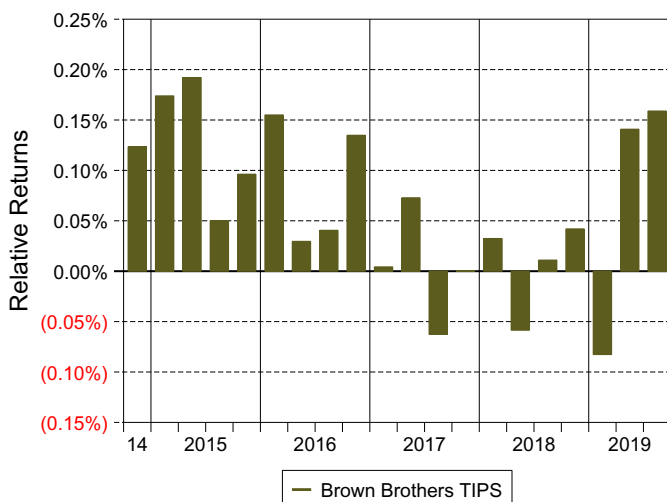
Beginning Market Value	\$226,818,626
Net New Investment	\$0
Investment Gains/(Losses)	\$3,386,991
Ending Market Value	\$230,205,617

Performance vs Callan Inflation Linked Bonds (Gross)

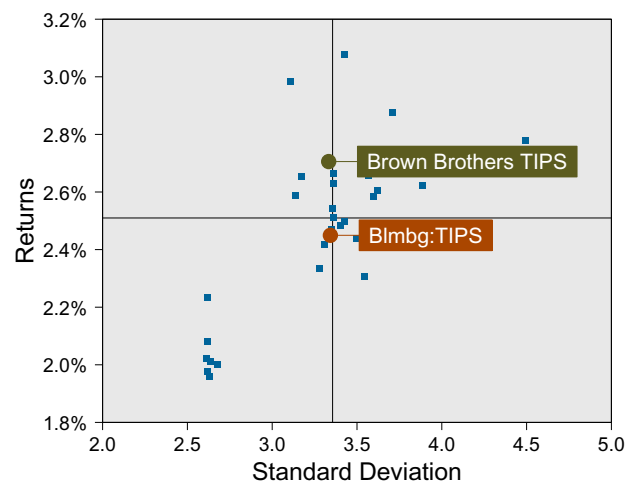


10th Percentile	1.51	8.06	7.95	4.23	2.97	2.87	1.59
25th Percentile	1.42	7.88	7.26	3.88	2.54	2.66	1.31
Median	1.27	7.60	7.03	3.72	2.27	2.51	1.13
75th Percentile	0.74	6.56	6.18	3.31	2.16	2.27	1.06
90th Percentile	0.60	5.80	5.73	3.02	1.94	2.00	0.97
Brown Brothers TIPS ●	1.50	7.81	7.40	3.84	2.35	2.71	1.33
Blmbg:TIPS ▲	1.35	7.58	7.13	3.71	2.21	2.45	1.06

Relative Return vs Blmbg:TIPS



Callan Inflation Linked Bonds (Gross) Annualized Five Year Risk vs Return

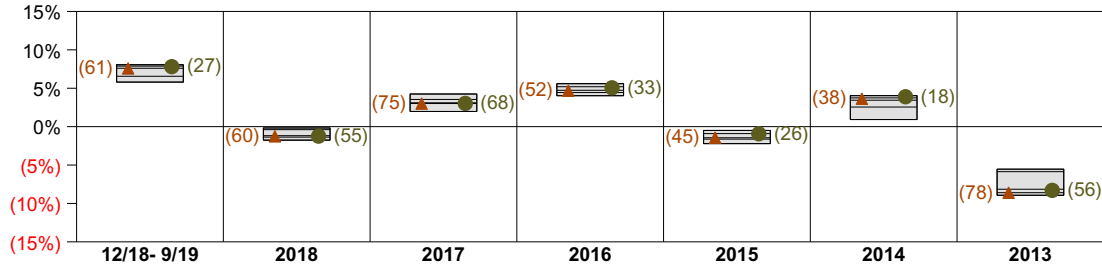


Brown Brothers TIPS Return Analysis Summary

Return Analysis

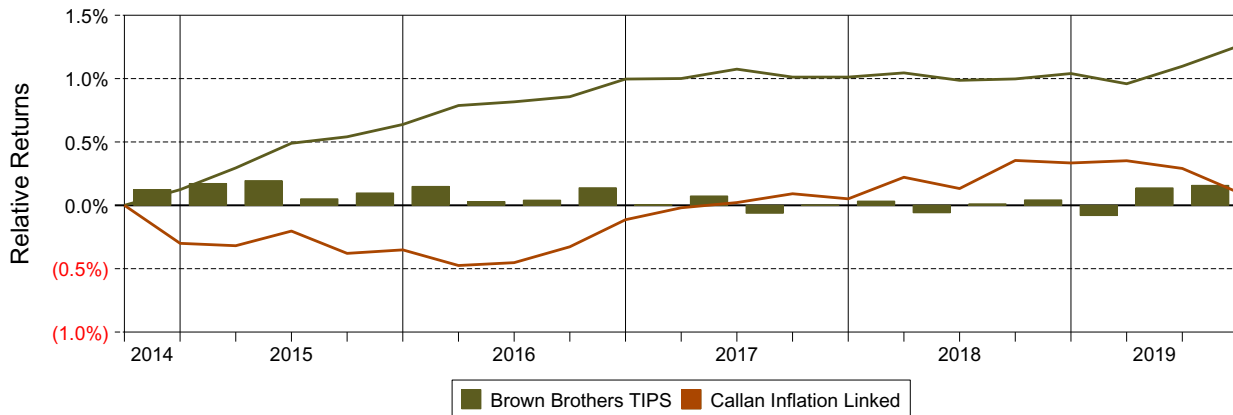
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Performance vs Callan Inflation Linked Bonds (Gross)

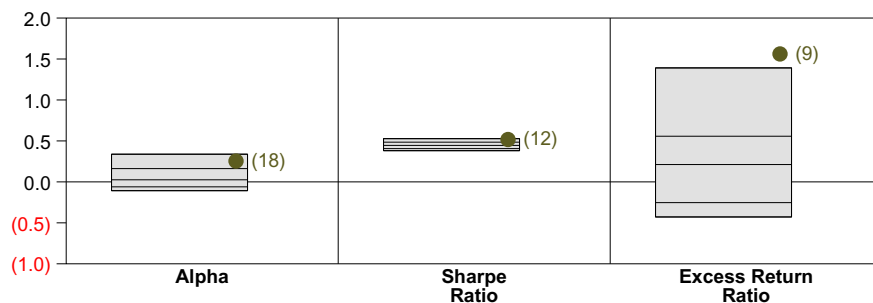


10th Percentile	8.06	(0.17)	4.25	5.59	(0.49)	4.03	(5.54)	
25th Percentile	7.88	(0.39)	3.54	5.20	(0.91)	3.74	(5.86)	
Median	7.60	(1.18)	3.10	4.73	(1.45)	3.44	(8.15)	
75th Percentile	6.56	(1.37)	3.01	4.44	(1.62)	2.55	(8.60)	
90th Percentile	5.80	(1.76)	1.98	4.03	(2.21)	0.92	(8.94)	
Brown Brothers TIPS	●	7.81	(1.23)	3.02	5.06	(0.93)	3.89	(8.30)
Blmbg:TIPS	▲	7.58	(1.26)	3.01	4.68	(1.44)	3.64	(8.61)

Cumulative and Quarterly Relative Return vs Blmbg:TIPS



Risk Adjusted Return Measures vs Blmbg:TIPS Rankings Against Callan Inflation Linked Bonds (Gross) Five Years Ended September 30, 2019



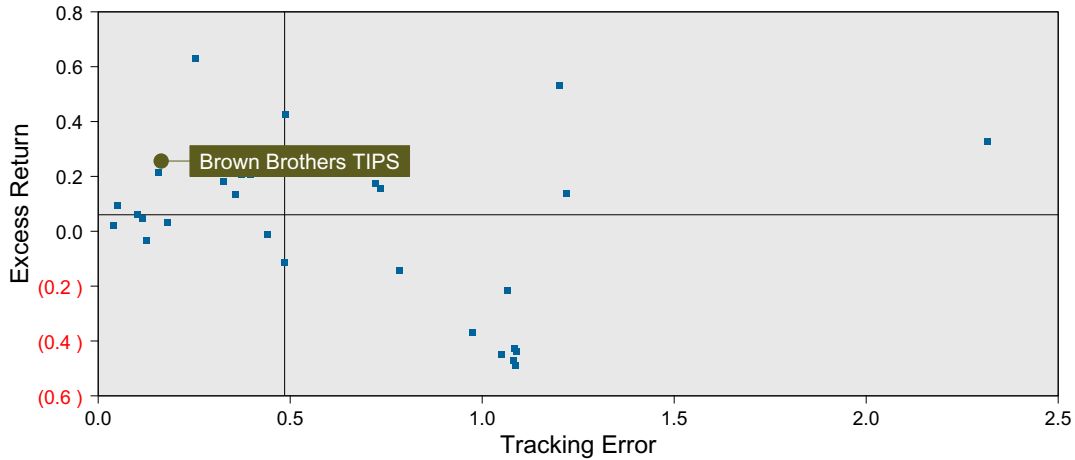
10th Percentile	0.34	0.53	1.39	
25th Percentile	0.16	0.48	0.56	
Median	0.03	0.45	0.21	
75th Percentile	(0.06)	0.41	(0.25)	
90th Percentile	(0.11)	0.38	(0.43)	
Brown Brothers TIPS	●	0.25	0.52	1.56

Brown Brothers TIPS Risk Analysis Summary

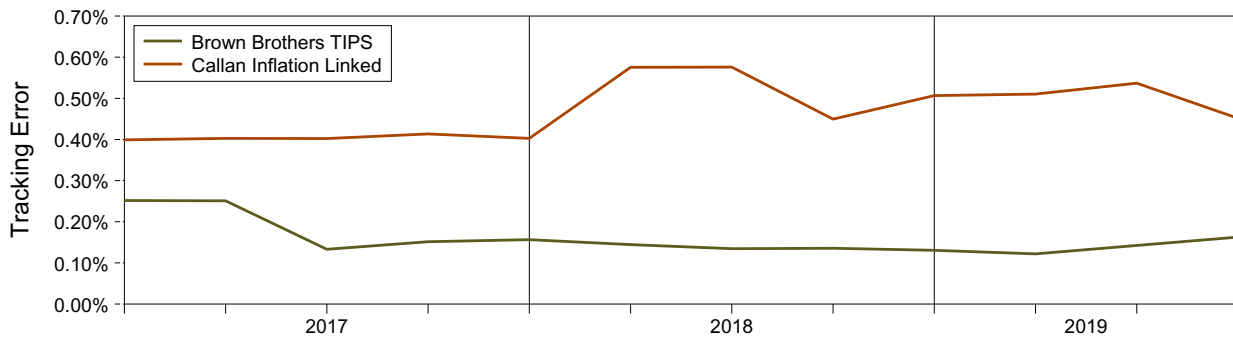
Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows tracking error patterns versus the benchmark over time. The last two charts show the ranking of the manager's risk statistics versus the peer group.

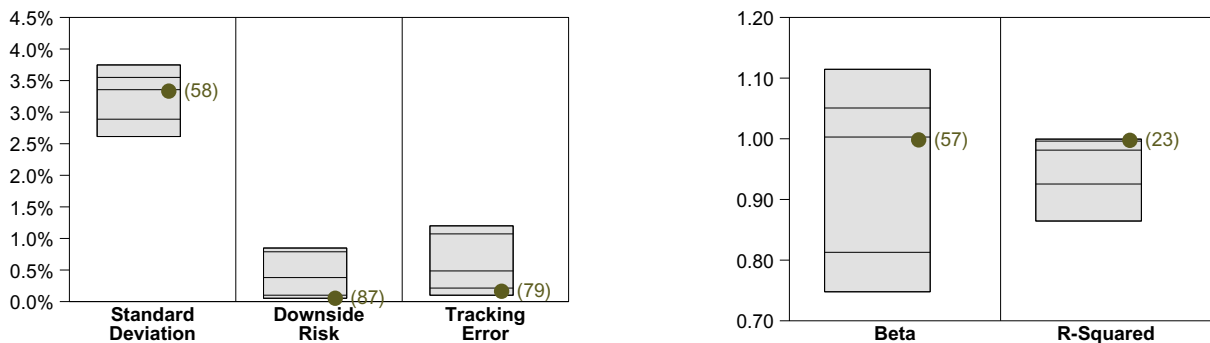
Risk Analysis vs Callan Inflation Linked Bonds (Gross) Five Years Ended September 30, 2019



Rolling 12 Quarter Tracking Error vs Bloomberg Barclays TIPS



Risk Statistics Rankings vs Bloomberg Barclays TIPS Rankings Against Callan Inflation Linked Bonds (Gross) Five Years Ended September 30, 2019



10th Percentile
25th Percentile
Median
75th Percentile
90th Percentile

3.75
3.55
3.36
2.89
2.61

0.85
0.79
0.38
0.10
0.05

1.20
1.07
0.49
0.21
0.10

10th Percentile
25th Percentile
Median
75th Percentile
90th Percentile

1.11
1.05
1.00
0.81
0.75

1.00
1.00
0.98
0.93
0.86

Brown Brothers TIPS ●

3.33

0.05

0.16

Brown Brothers TIPS ●

1.00

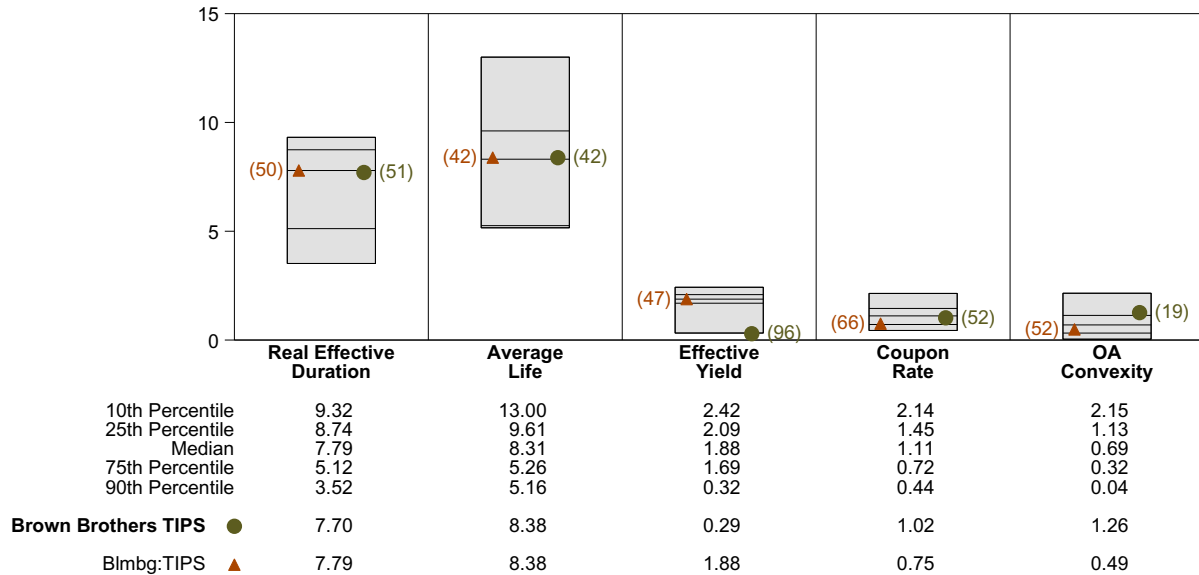
1.00

Brown Brothers TIPS Bond Characteristics Analysis Summary

Portfolio Characteristics

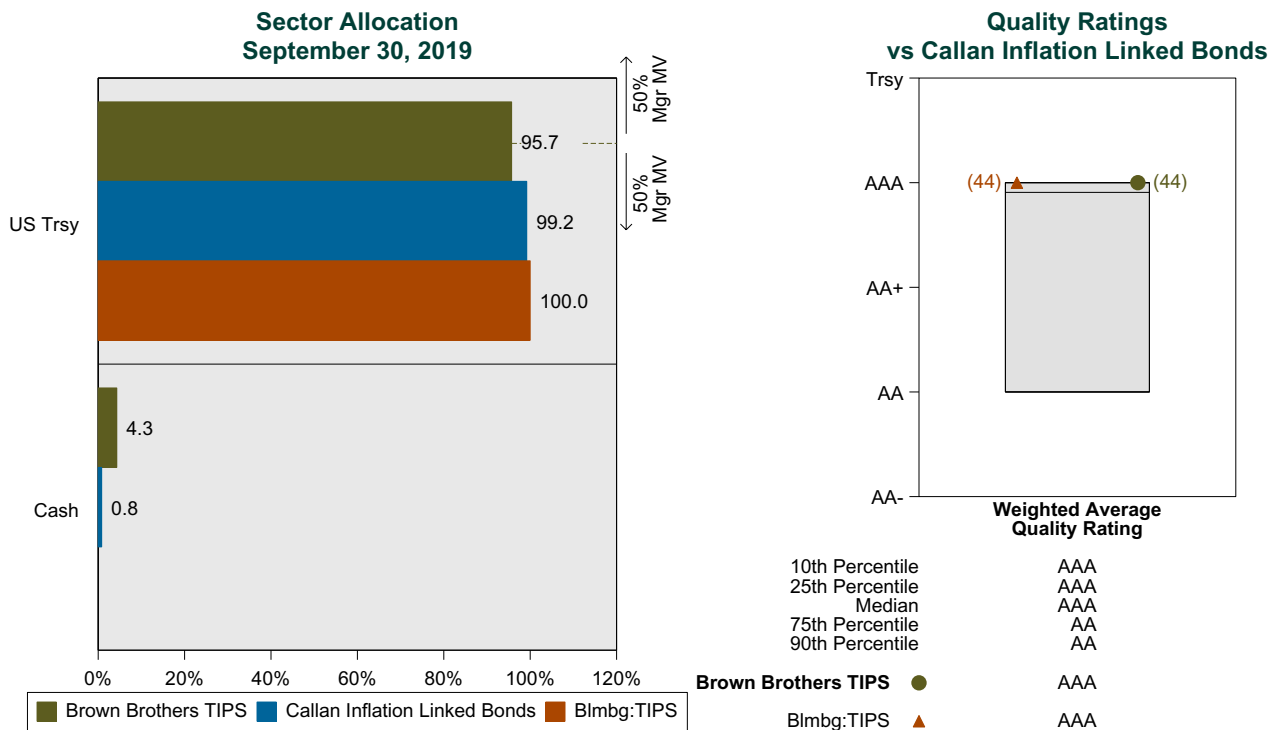
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

Fixed Income Portfolio Characteristics Rankings Against Callan Inflation Linked Bonds as of September 30, 2019



Sector Allocation and Quality Ratings

The first graph compares the manager's sector allocation with the average allocation across all the members of the manager's style. The second graph compares the manager's weighted average quality rating with the range of quality ratings for the style.



Brown Brothers TIPS Portfolio Characteristics Summary As of September 30, 2019

Portfolio Structure Comparison

The charts below compare the structure of the portfolio to that of the index from the three perspectives that have the greatest influence on return. The first chart compares the two portfolios across sectors. The second chart compares the duration distribution. The last chart compares the distribution across quality ratings.

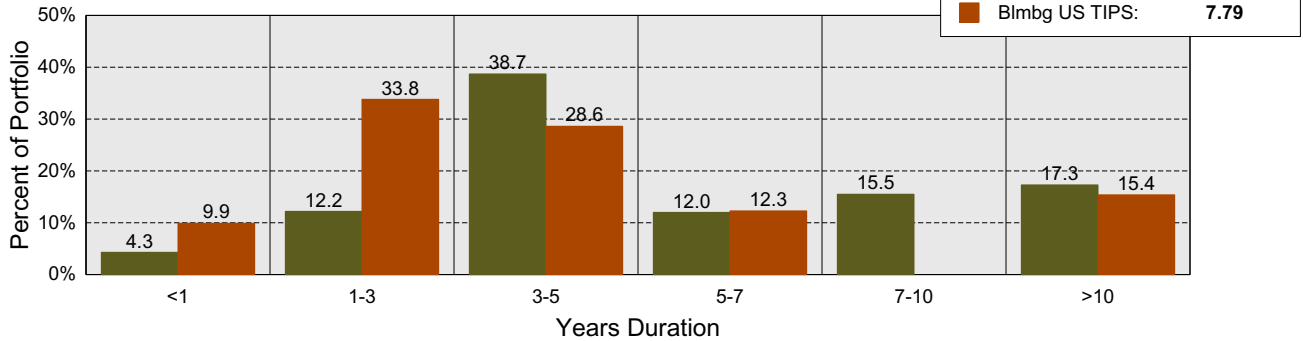
Sector Allocation



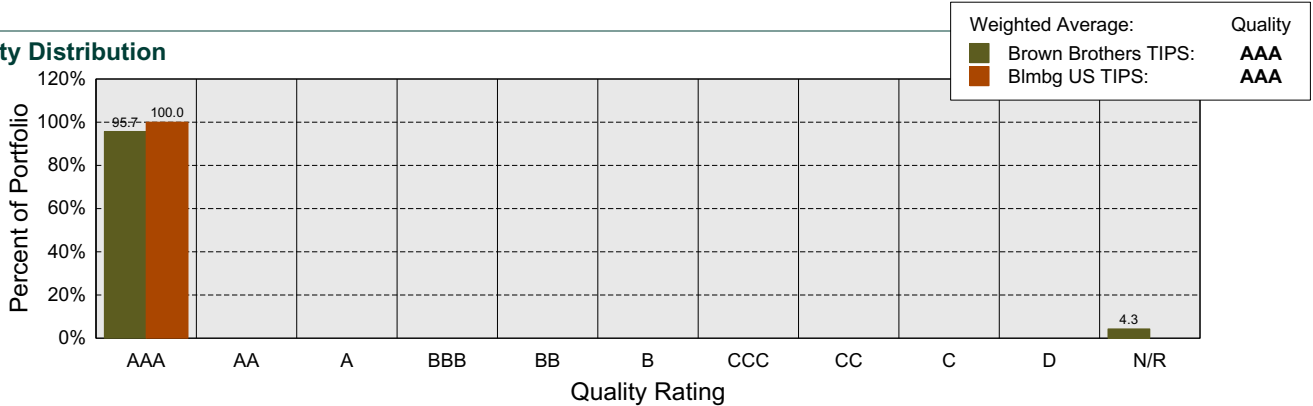
Brown Brothers TIPS

Blmbg US TIPS

Duration Distribution



Quality Distribution



New Century Global TIPS Period Ended September 30, 2019

Investment Philosophy

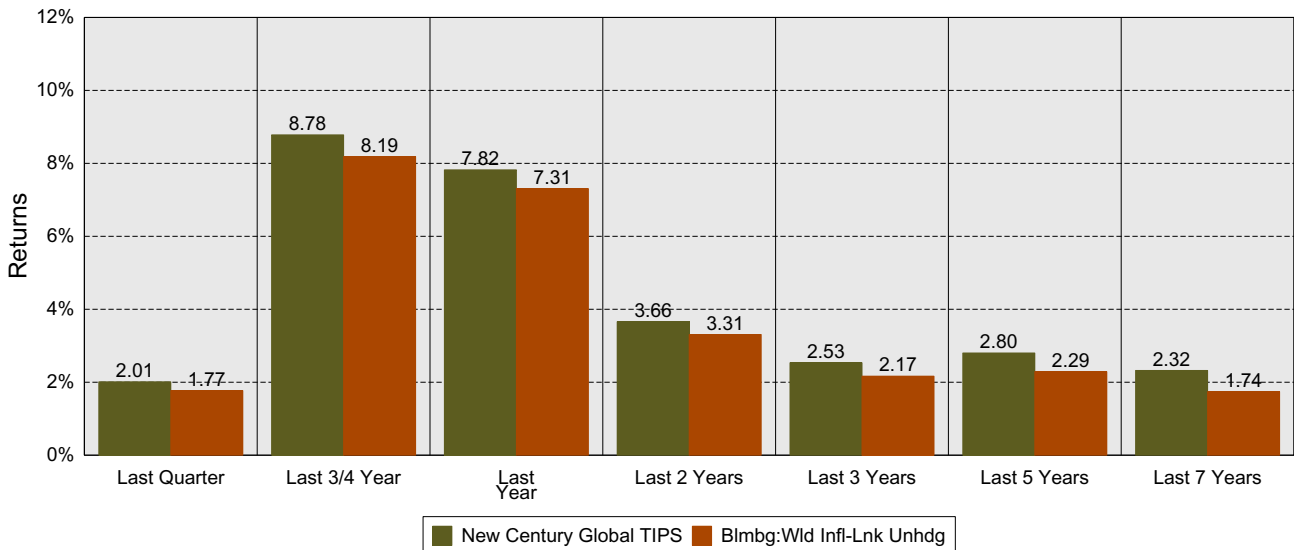
New Century Advisors believes there are five main sources of excess return that an active manager can capture in the Global Inflation Linked Bond Product: duration management, country selection, currency management, yield curve positioning, and nominal/linker relative value. New Century Advisors approach to adding value in each case is the same, a three pronged approach combining fundamental analysis, technical analysis and human judgment.

Quarterly Summary and Highlights

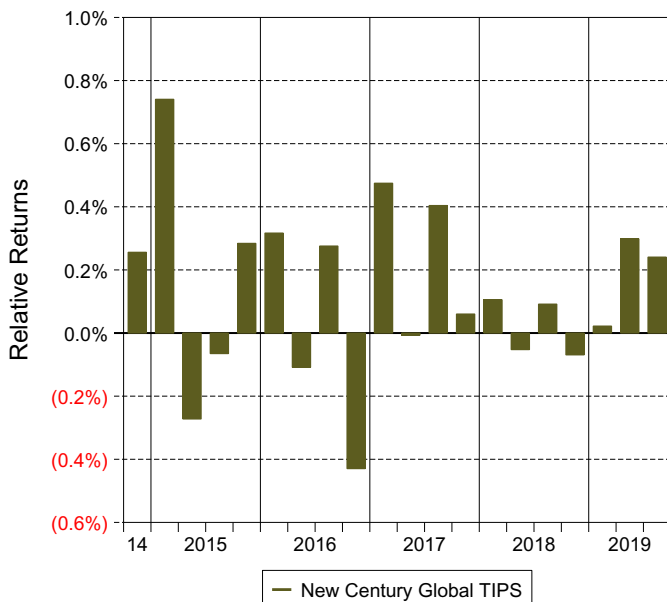
- New Century Global TIPS's portfolio posted a 2.01% return for the quarter placing it in the 2 percentile of the Callan Inflation Linked Bonds group for the quarter and in the 12 percentile for the last year.
- New Century Global TIPS's portfolio outperformed the Blmbg:Wld Infl-Lnk Unhdg by 0.24% for the quarter and outperformed the Blmbg:Wld Infl-Lnk Unhdg for the year by 0.51%.

Quarterly Asset Growth

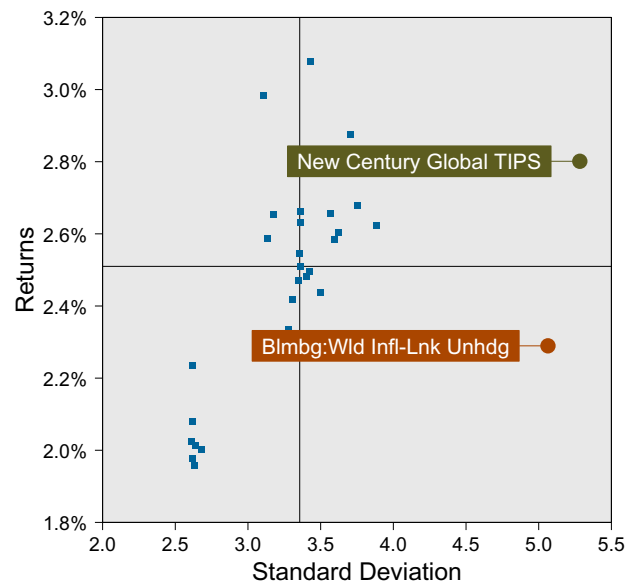
Beginning Market Value	\$118,188,416
Net New Investment	\$-68,694
Investment Gains/(Losses)	\$2,380,976
Ending Market Value	\$120,500,698



Relative Return vs Blmbg:Wld Infl-Lnk Unhdg



Callan Inflation Linked Bonds (Gross)
Annualized Five Year Risk vs Return

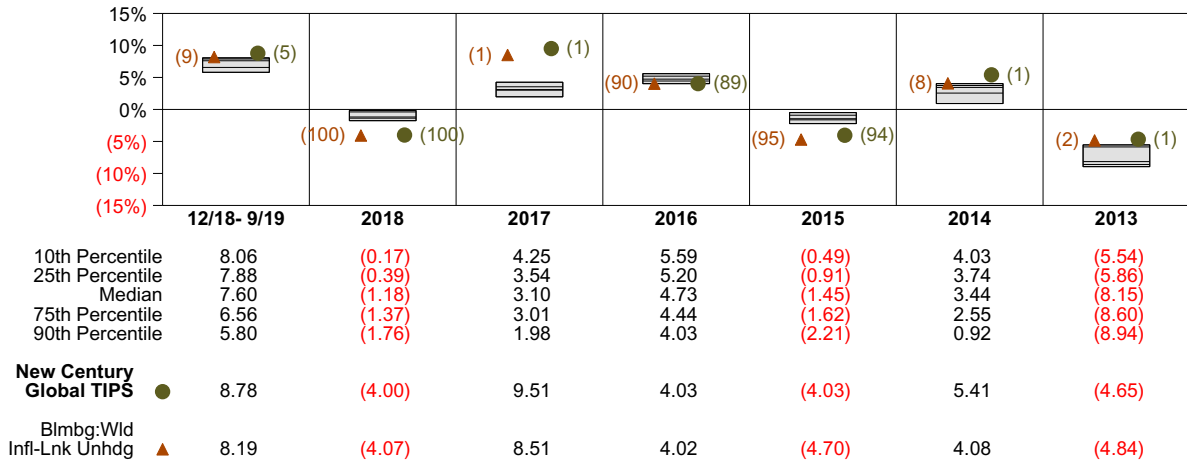


New Century Global TIPS Return Analysis Summary

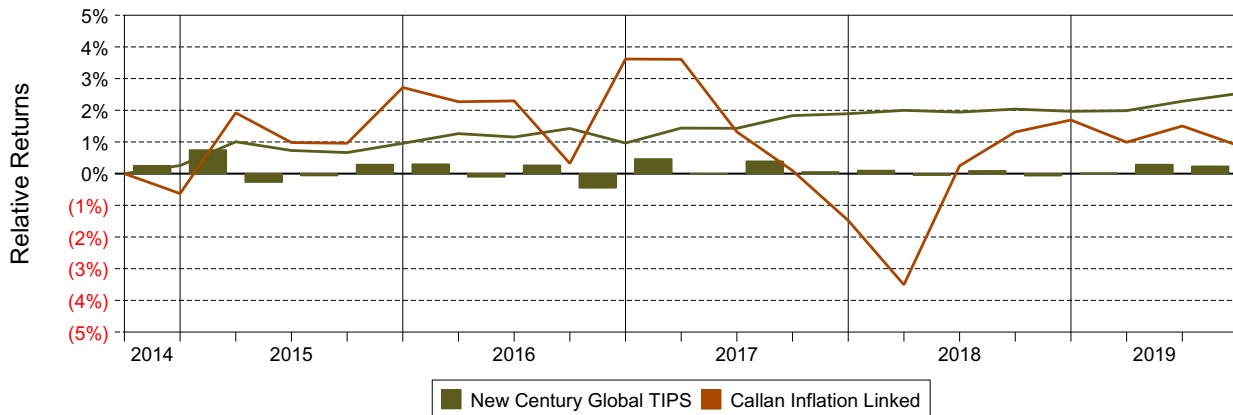
Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

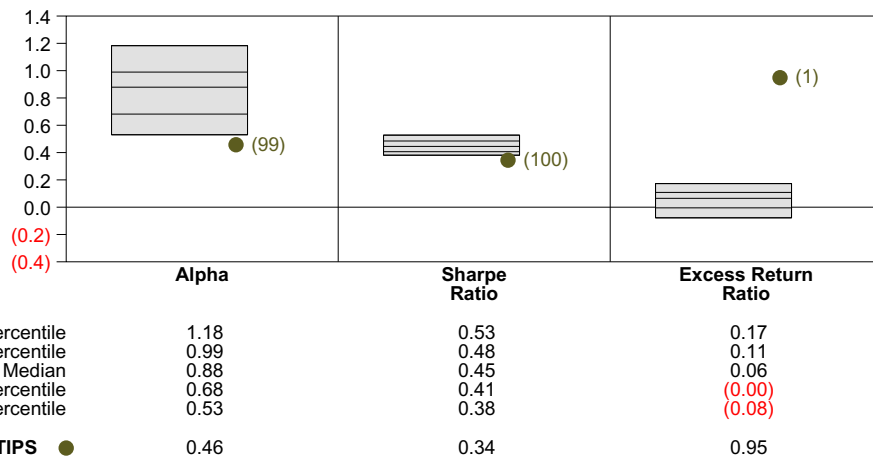
Performance vs Callan Inflation Linked Bonds (Gross)



Cumulative and Quarterly Relative Return vs Bmbg:Wld Infi-Lnk Unhdg



Risk Adjusted Return Measures vs Bmbg:Wld Infi-Lnk Unhdg Rankings Against Callan Inflation Linked Bonds (Gross) Five Years Ended September 30, 2019

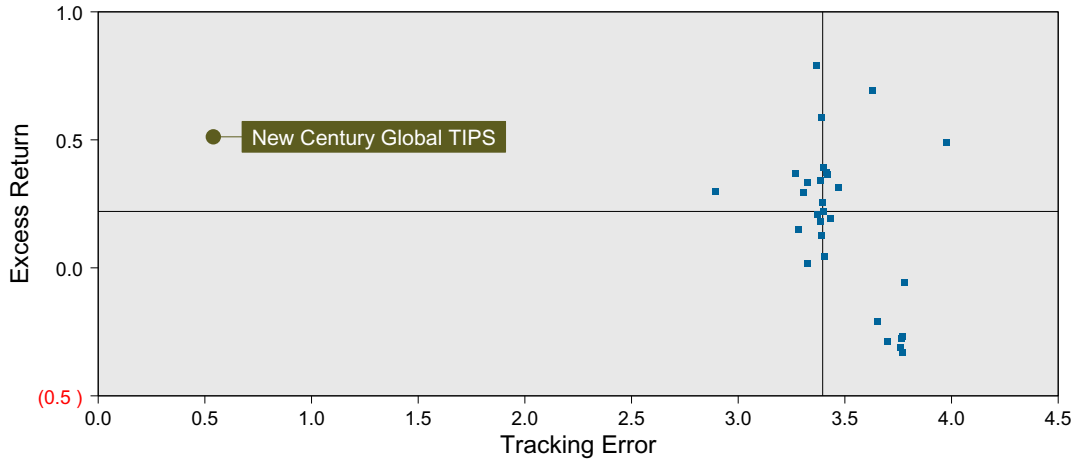


New Century Global TIPS Risk Analysis Summary

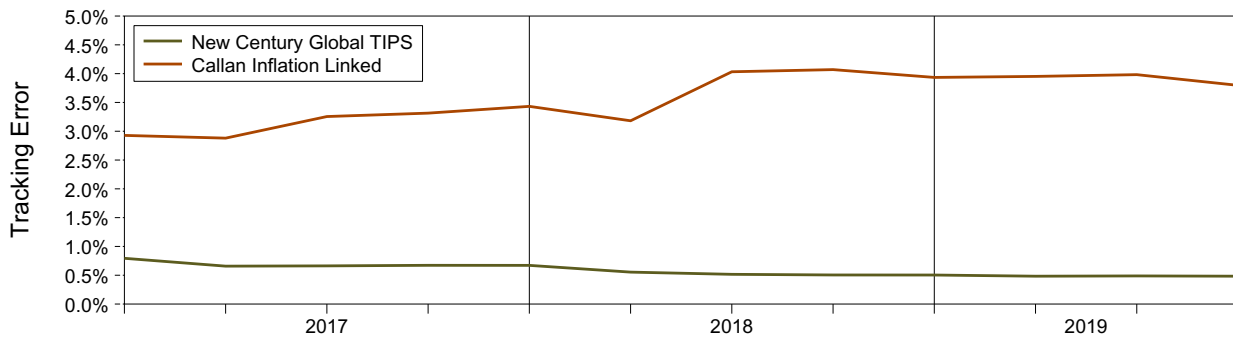
Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows tracking error patterns versus the benchmark over time. The last two charts show the ranking of the manager's risk statistics versus the peer group.

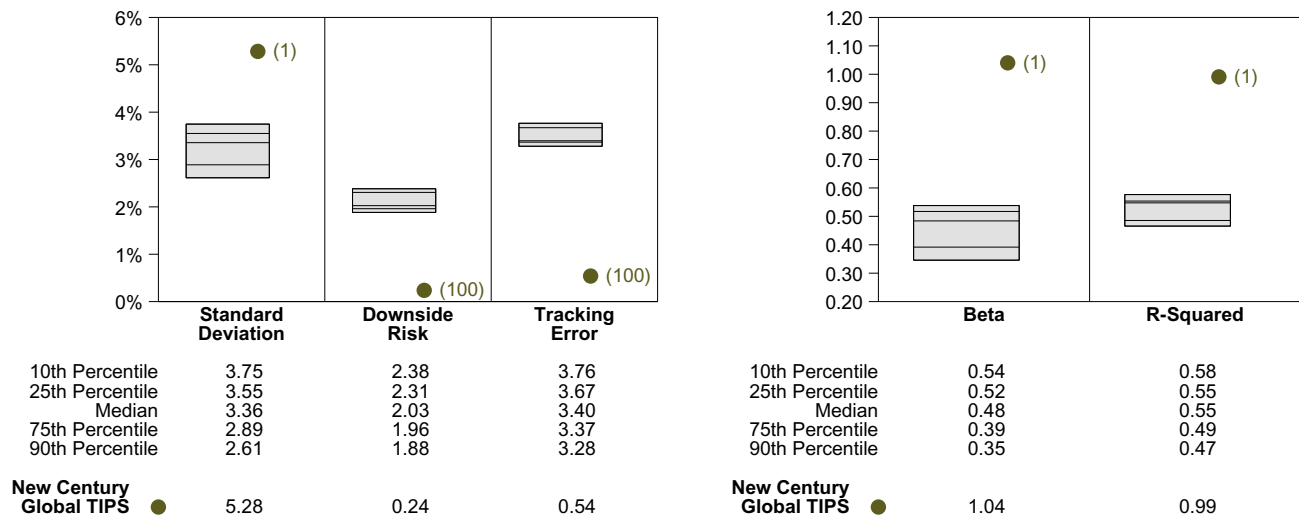
Risk Analysis vs Callan Inflation Linked Bonds (Gross) Five Years Ended September 30, 2019



Rolling 12 Quarter Tracking Error vs Bloomberg Barclays World Infi-Lnk Unhdg



Risk Statistics Rankings vs Bloomberg Barclays World Infi-Lnk Unhdg Rankings Against Callan Inflation Linked Bonds (Gross) Five Years Ended September 30, 2019

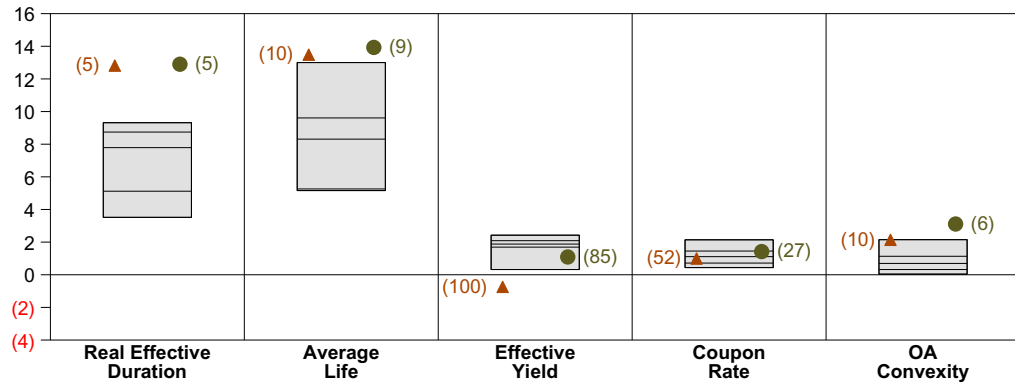


New Century Global TIPS Bond Characteristics Analysis Summary

Portfolio Characteristics

This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

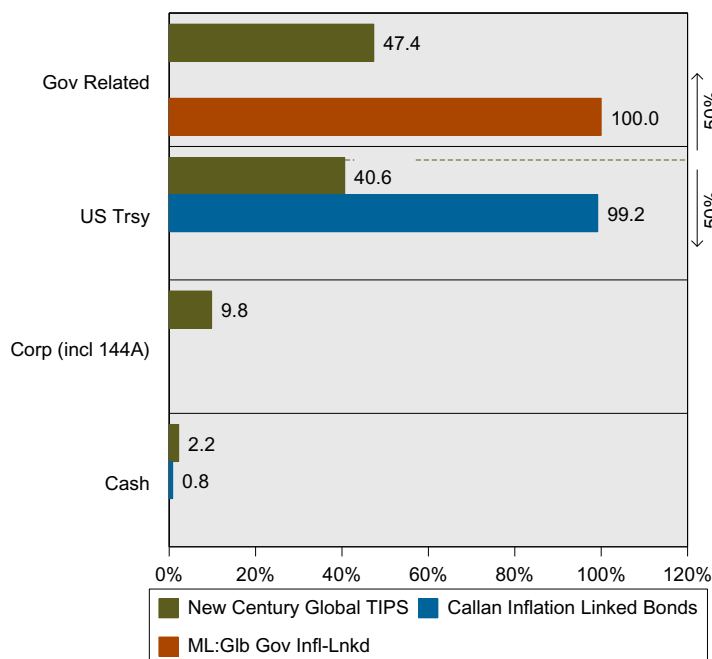
Fixed Income Portfolio Characteristics Rankings Against Callan Inflation Linked Bonds as of September 30, 2019



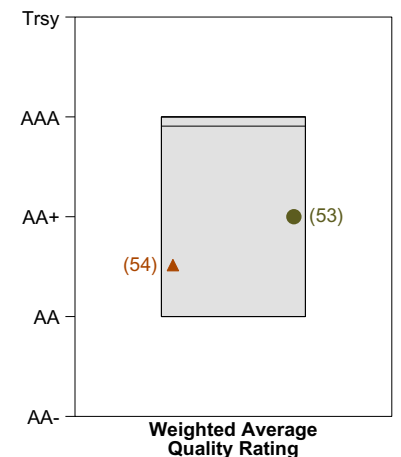
Sector Allocation and Quality Ratings

The first graph compares the manager's sector allocation with the average allocation across all the members of the manager's style. The second graph compares the manager's weighted average quality rating with the range of quality ratings for the style.

Sector Allocation September 30, 2019



Quality Ratings vs Callan Inflation Linked Bonds



10th Percentile AAA
25th Percentile AAA
Median AAA
75th Percentile AA
90th Percentile AA

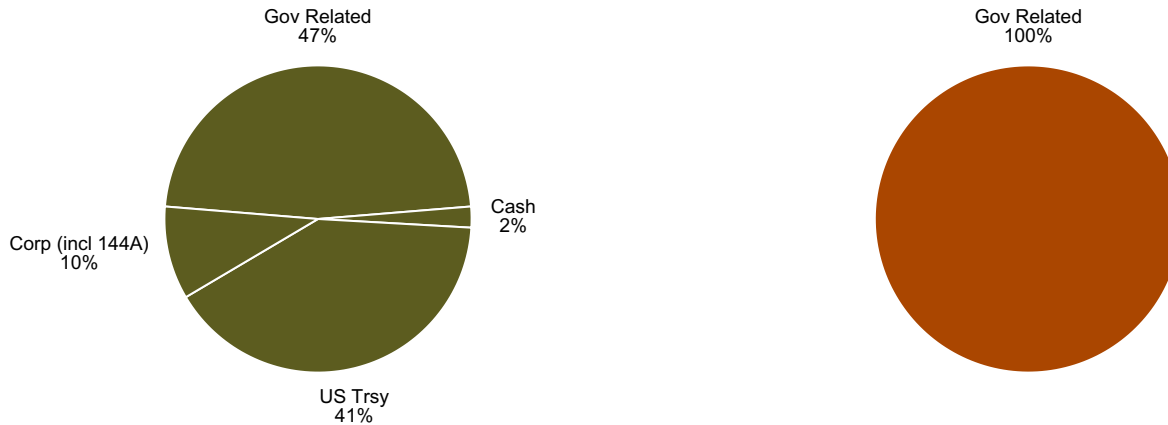
New Century Global TIPS ● AA+
ML:Glb Gov Infi-Lnkd ▲ AA+

New Century Global TIPS Portfolio Characteristics Summary As of September 30, 2019

Portfolio Structure Comparison

The charts below compare the structure of the portfolio to that of the index from the three perspectives that have the greatest influence on return. The first chart compares the two portfolios across sectors. The second chart compares the duration distribution. The last chart compares the distribution across quality ratings.

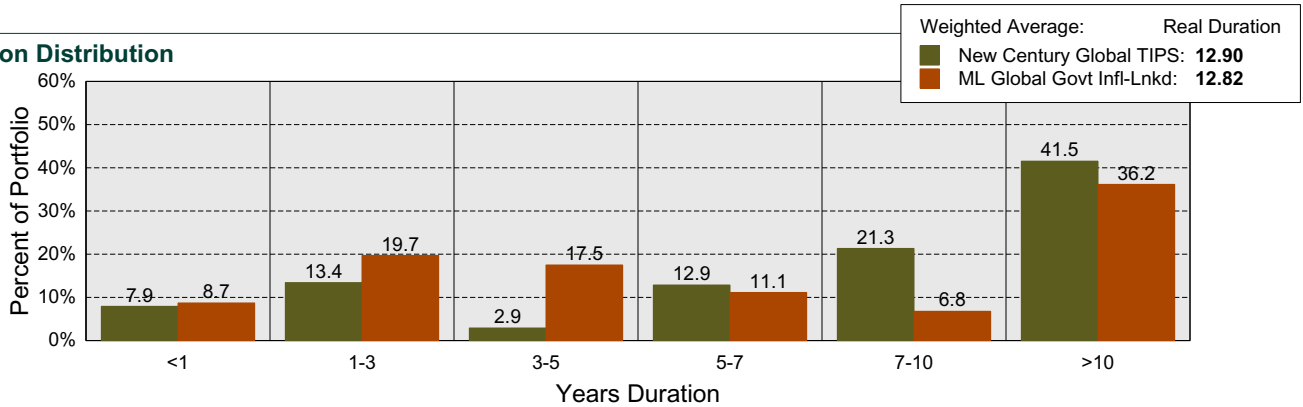
Sector Allocation



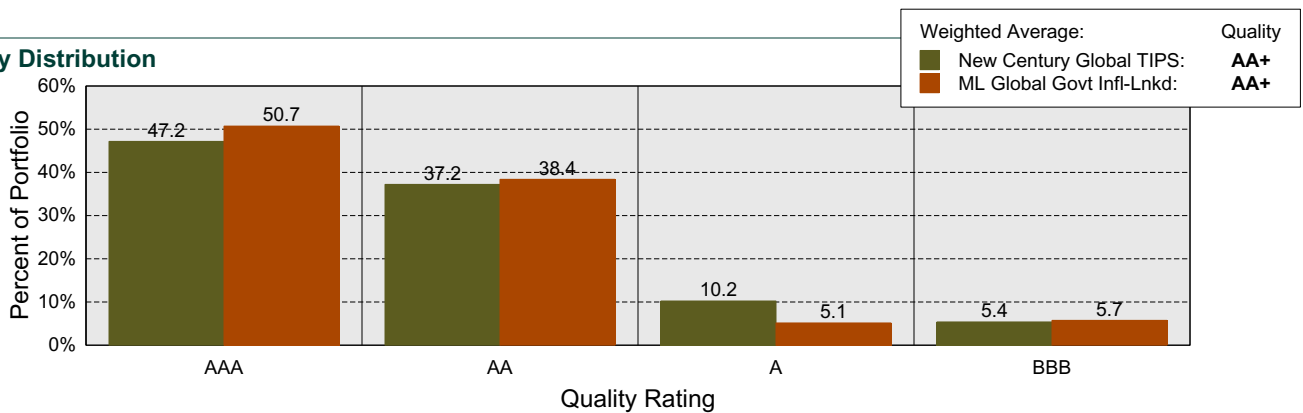
New Century Global TIPS

ML Global Govt Infi-Lnkd

Duration Distribution



Quality Distribution



NISA Inv Adv TIPS Period Ended September 30, 2019

Investment Philosophy

NISA believes that markets offer opportunities to capitalize on moderate inefficiencies for predictable gains. The team applies a fundamental approach and strategy to all fixed income portfolios, regardless of benchmark. Central to their investment philosophy is the following: practice active trading, hold high average credit quality, maintain tight duration collars, and avoid large exposure to any one entity.

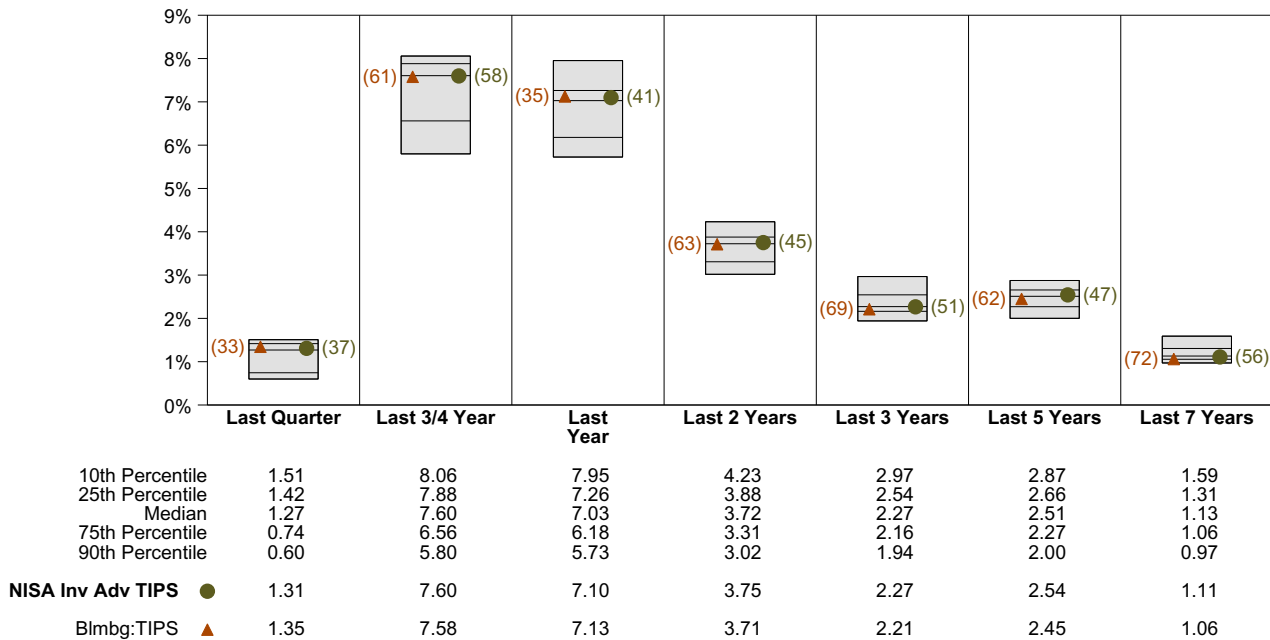
Quarterly Summary and Highlights

- NISA Inv Adv TIPS's portfolio posted a 1.31% return for the quarter placing it in the 37 percentile of the Callan Inflation Linked Bonds group for the quarter and in the 41 percentile for the last year.
- NISA Inv Adv TIPS's portfolio underperformed the Blmbg:TIPS by 0.04% for the quarter and underperformed the Blmbg:TIPS for the year by 0.03%.

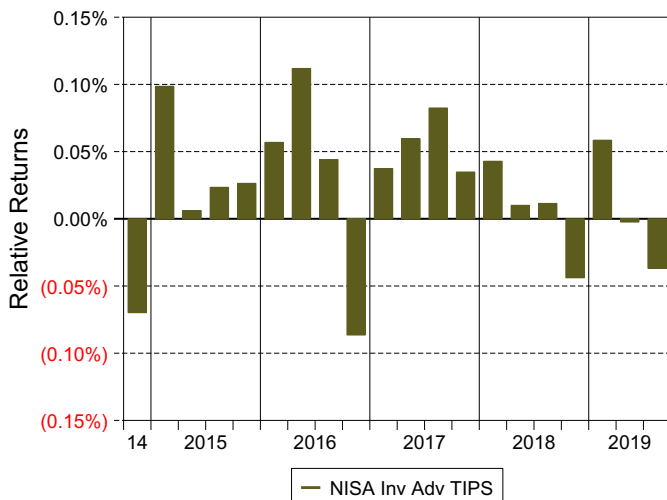
Quarterly Asset Growth

Beginning Market Value	\$510,566,633
Net New Investment	\$-126,267
Investment Gains/(Losses)	\$6,654,957
Ending Market Value	\$517,095,324

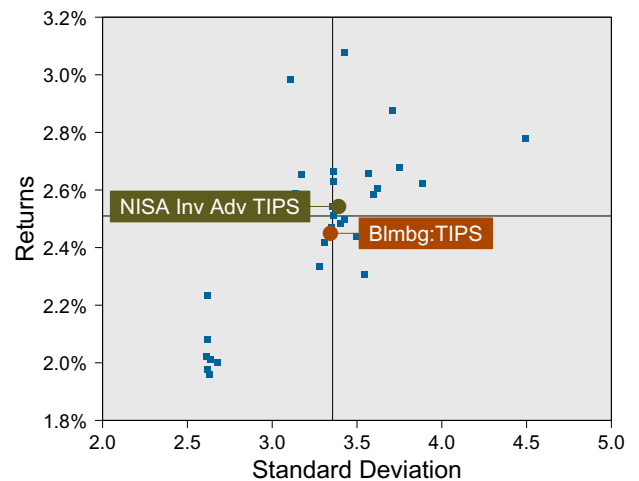
Performance vs Callan Inflation Linked Bonds (Gross)



Relative Return vs Blmbg:TIPS



Callan Inflation Linked Bonds (Gross) Annualized Five Year Risk vs Return

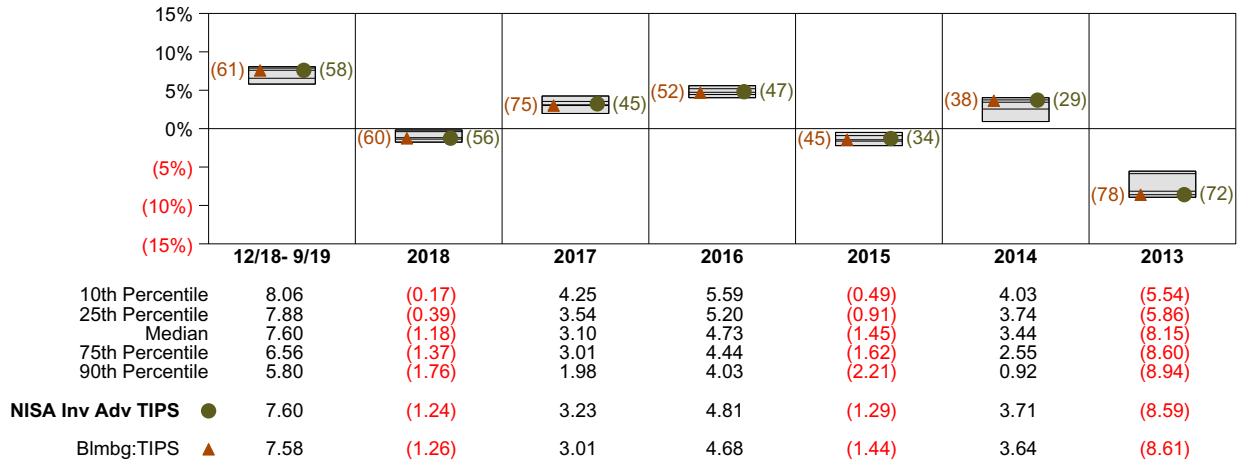


NISA Inv Adv TIPS Return Analysis Summary

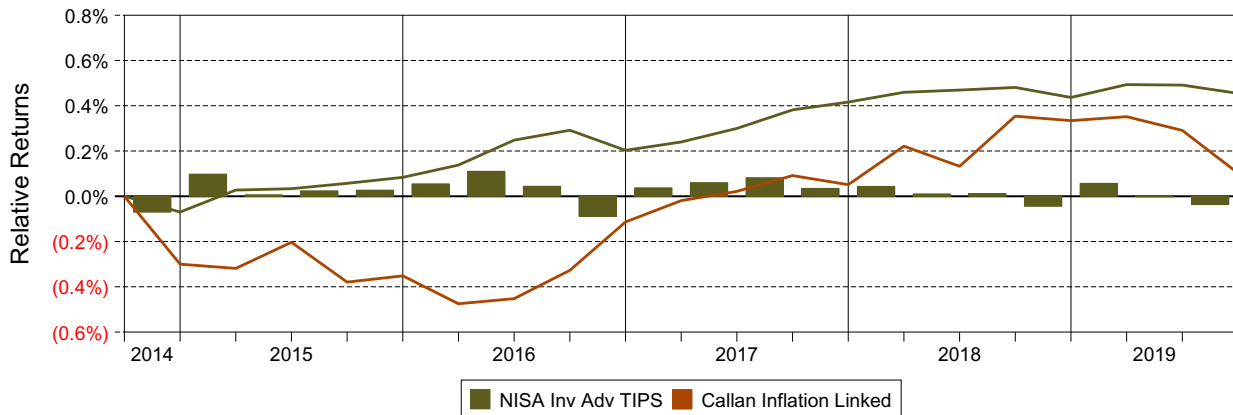
Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

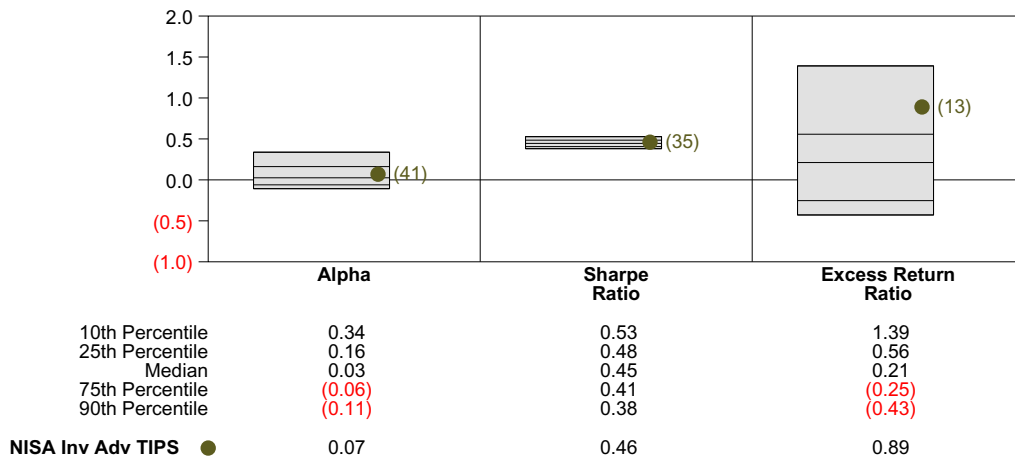
Performance vs Callan Inflation Linked Bonds (Gross)



Cumulative and Quarterly Relative Return vs Bimbg:TIPS



Risk Adjusted Return Measures vs Bimbg:TIPS Rankings Against Callan Inflation Linked Bonds (Gross) Five Years Ended September 30, 2019

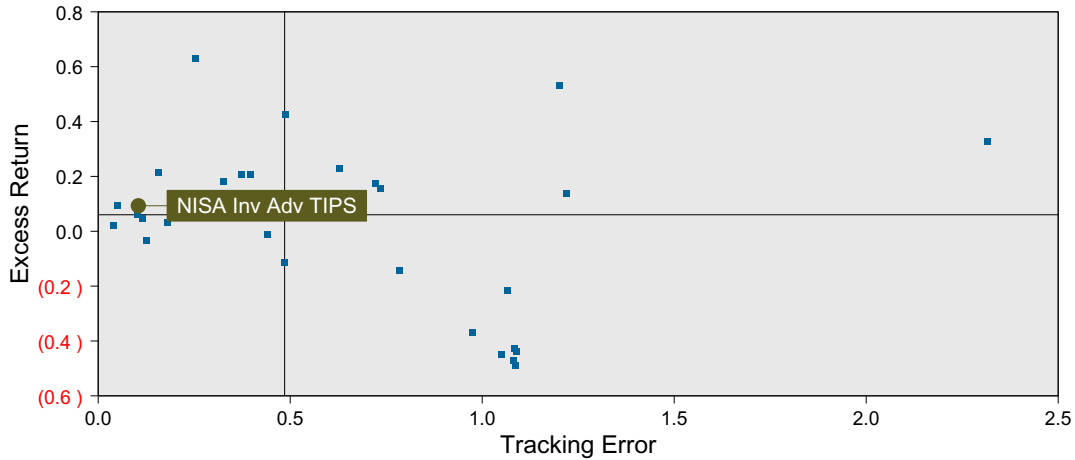


NISA Inv Adv TIPS Risk Analysis Summary

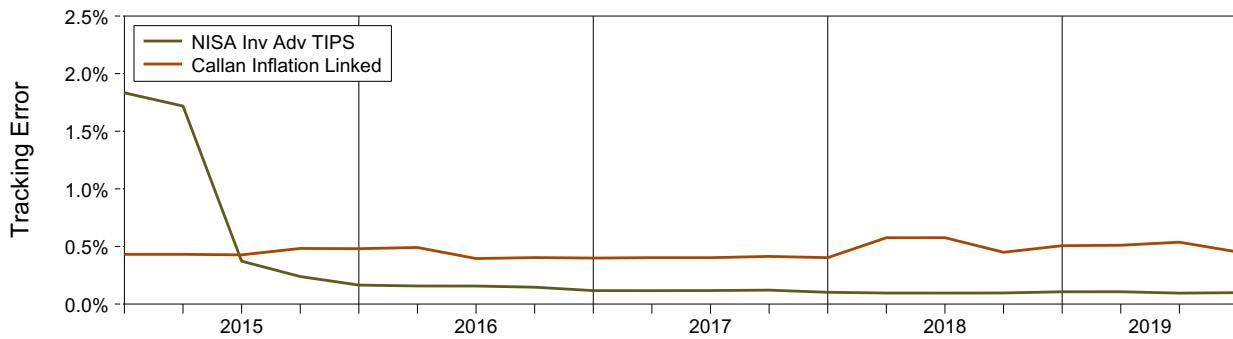
Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows tracking error patterns versus the benchmark over time. The last two charts show the ranking of the manager's risk statistics versus the peer group.

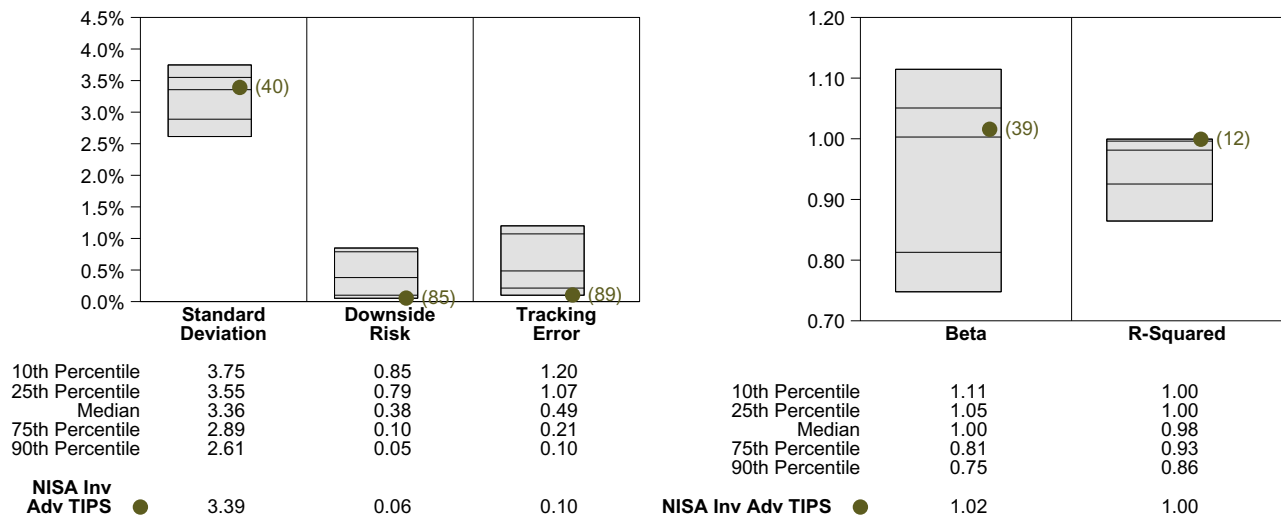
Risk Analysis vs Callan Inflation Linked Bonds (Gross) Five Years Ended September 30, 2019



Rolling 12 Quarter Tracking Error vs Bloomberg Barclays TIPS



Risk Statistics Rankings vs Bloomberg Barclays TIPS Rankings Against Callan Inflation Linked Bonds (Gross) Five Years Ended September 30, 2019

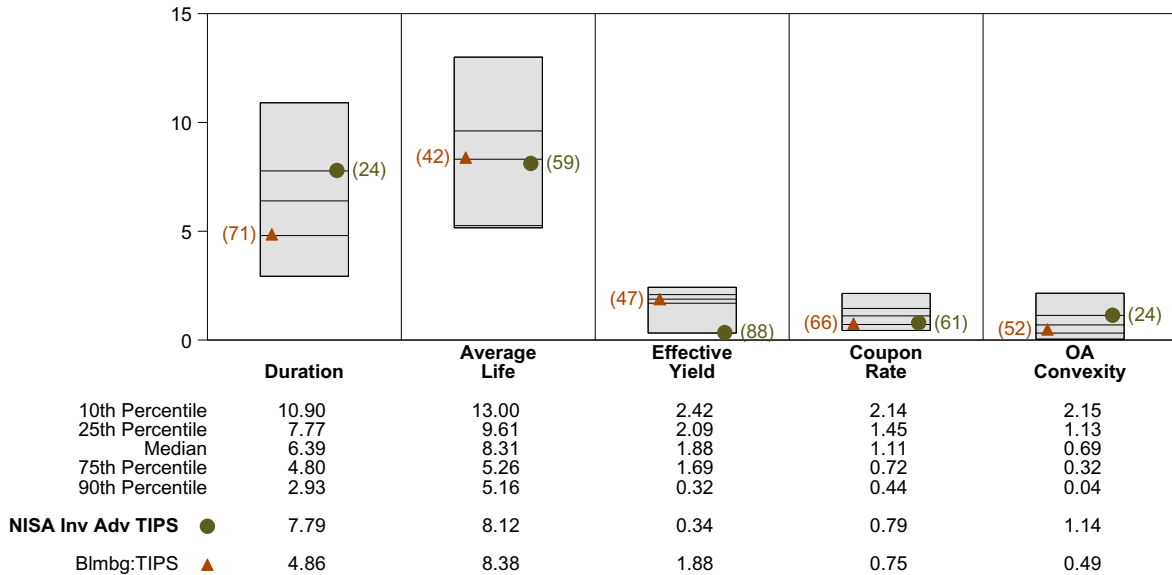


NISA Inv Adv TIPS Bond Characteristics Analysis Summary

Portfolio Characteristics

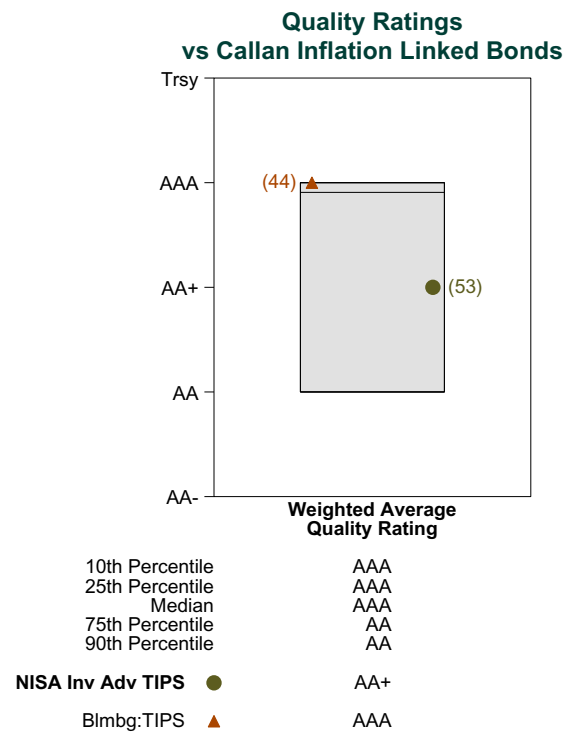
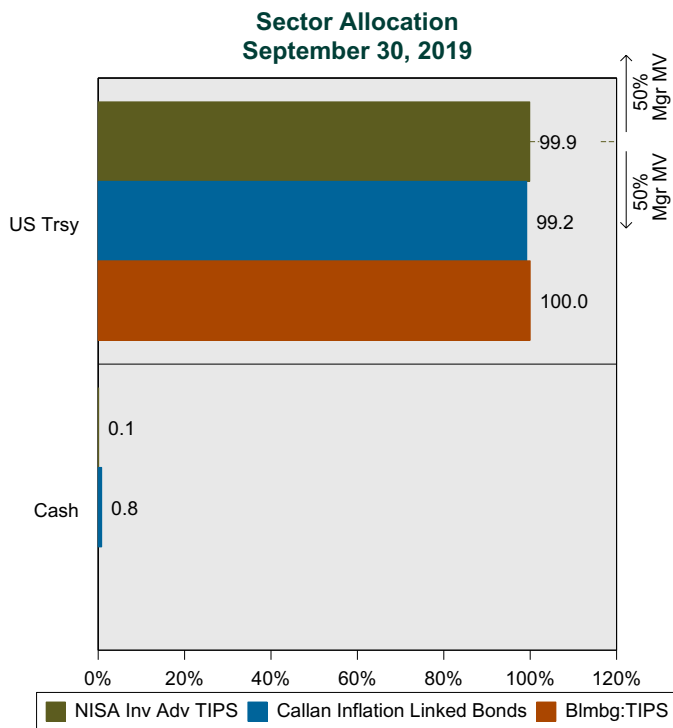
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

Fixed Income Portfolio Characteristics Rankings Against Callan Inflation Linked Bonds as of September 30, 2019



Sector Allocation and Quality Ratings

The first graph compares the manager's sector allocation with the average allocation across all the members of the manager's style. The second graph compares the manager's weighted average quality rating with the range of quality ratings for the style.



**NISA Inv Adv TIPS
Portfolio Characteristics Summary
As of September 30, 2019**

Portfolio Structure Comparison

The charts below compare the structure of the portfolio to that of the index from the three perspectives that have the greatest influence on return. The first chart compares the two portfolios across sectors. The second chart compares the duration distribution. The last chart compares the distribution across quality ratings.

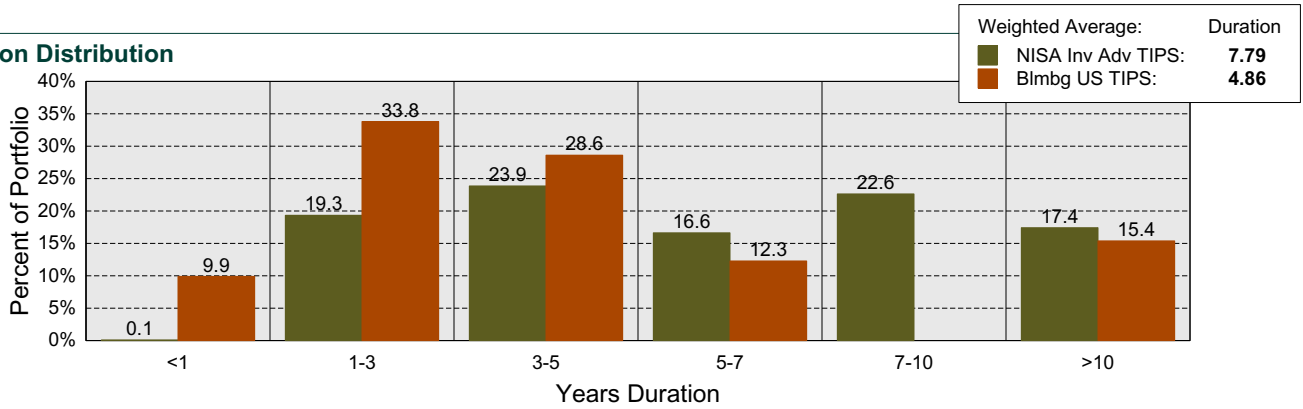
Sector Allocation



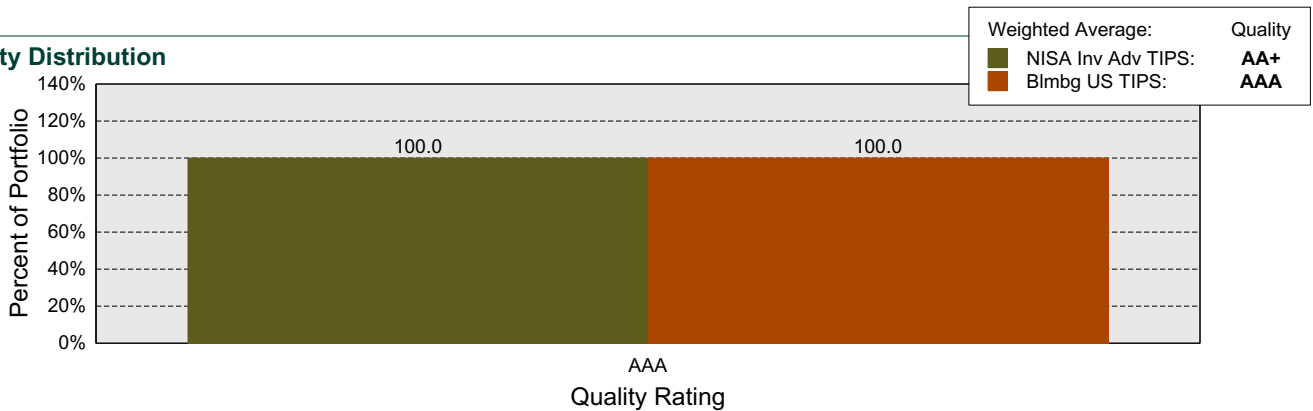
NISA Inv Adv TIPS

Blmbg US TIPS

Duration Distribution



Quality Distribution



PIMCO US Treasuries

Period Ended September 30, 2019

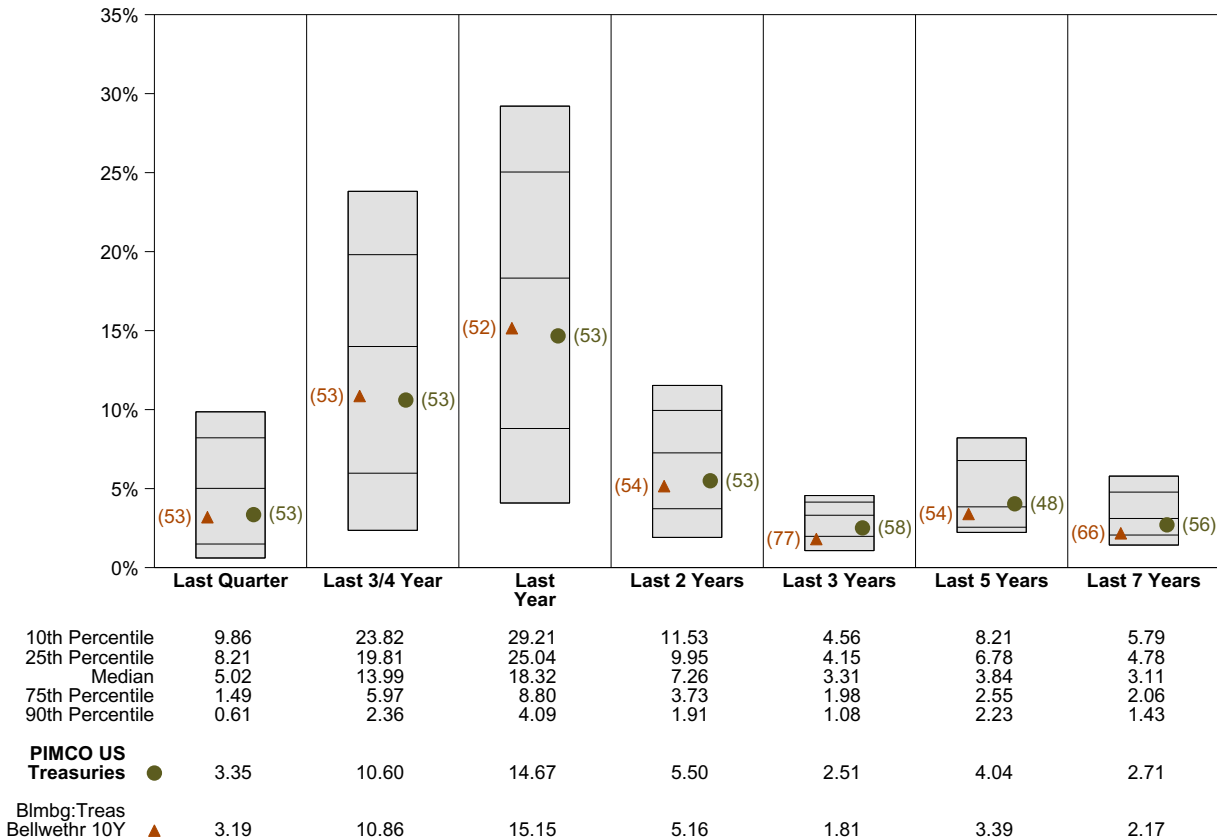
Quarterly Summary and Highlights

- PIMCO US Treasuries's portfolio posted a 3.35% return for the quarter placing it in the 53 percentile of the Callan US Treas Bond Funds group for the quarter and in the 53 percentile for the last year.
- PIMCO US Treasuries's portfolio outperformed the Blmbg:Treas Bellwethr 10Y by 0.16% for the quarter and underperformed the Blmbg:Treas Bellwethr 10Y for the year by 0.49%.

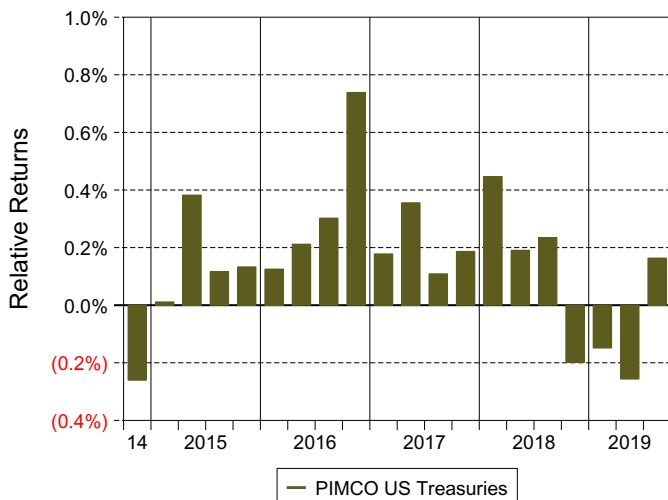
Quarterly Asset Growth

Beginning Market Value	\$587,016,244
Net New Investment	\$-134,209
Investment Gains/(Losses)	\$19,694,397
Ending Market Value	\$606,576,432

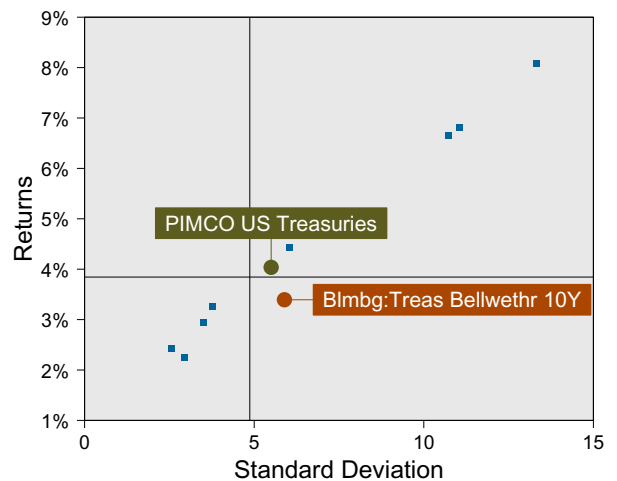
Performance vs Callan US Treas Bond Funds (Gross)



Relative Return vs Blmbg:Treas Bellwethr 10Y



Callan US Treas Bond Funds (Gross) Annualized Five Year Risk vs Return

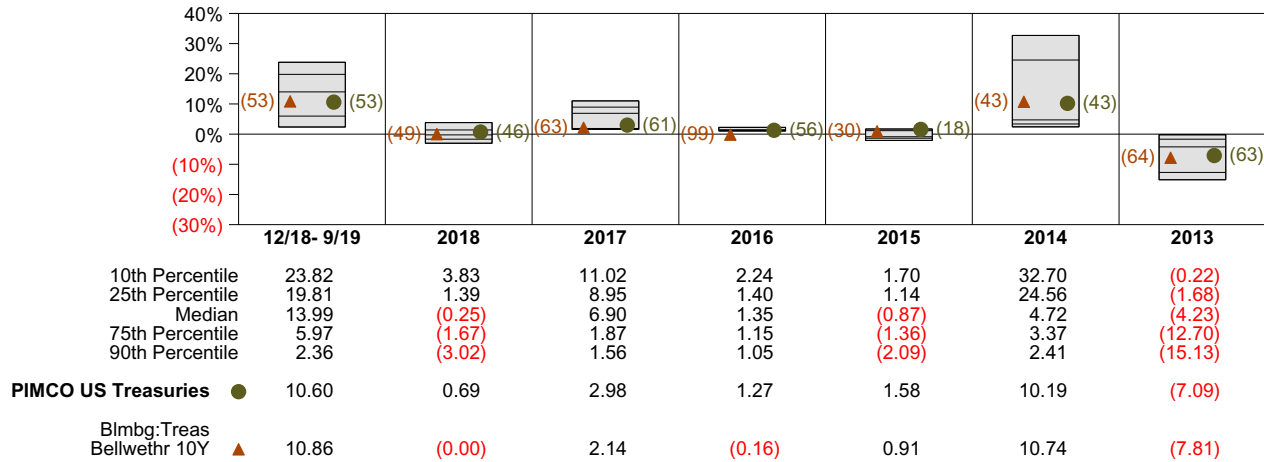


PIMCO US Treasuries Return Analysis Summary

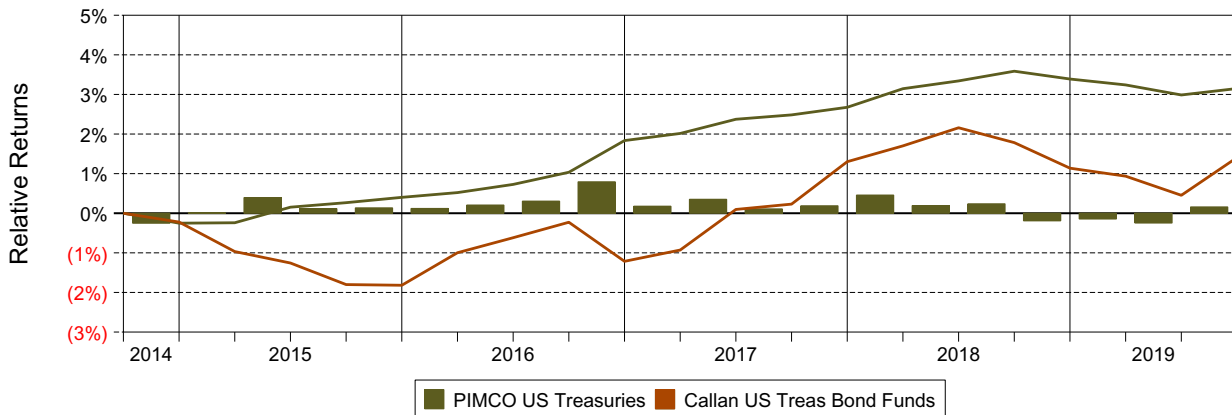
Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

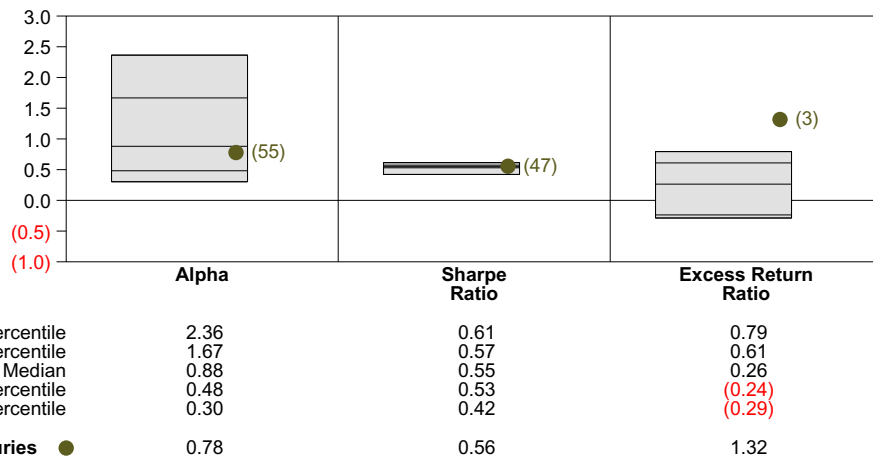
Performance vs Callan US Treas Bond Funds (Gross)



Cumulative and Quarterly Relative Return vs Blmbg:Treas Bellwethr 10Y



Risk Adjusted Return Measures vs Blmbg:Treas Bellwethr 10Y Rankings Against Callan US Treas Bond Funds (Gross) Five Years Ended September 30, 2019

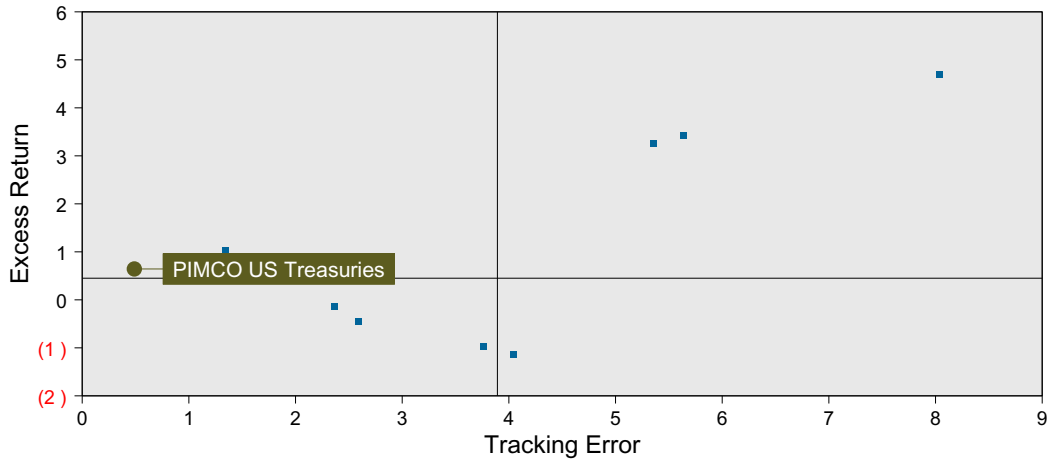


PIMCO US Treasuries Risk Analysis Summary

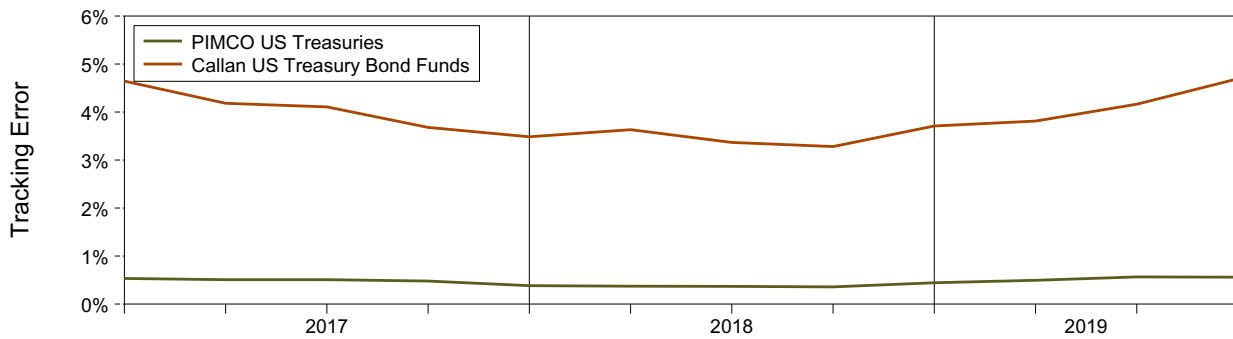
Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows tracking error patterns versus the benchmark over time. The last two charts show the ranking of the manager's risk statistics versus the peer group.

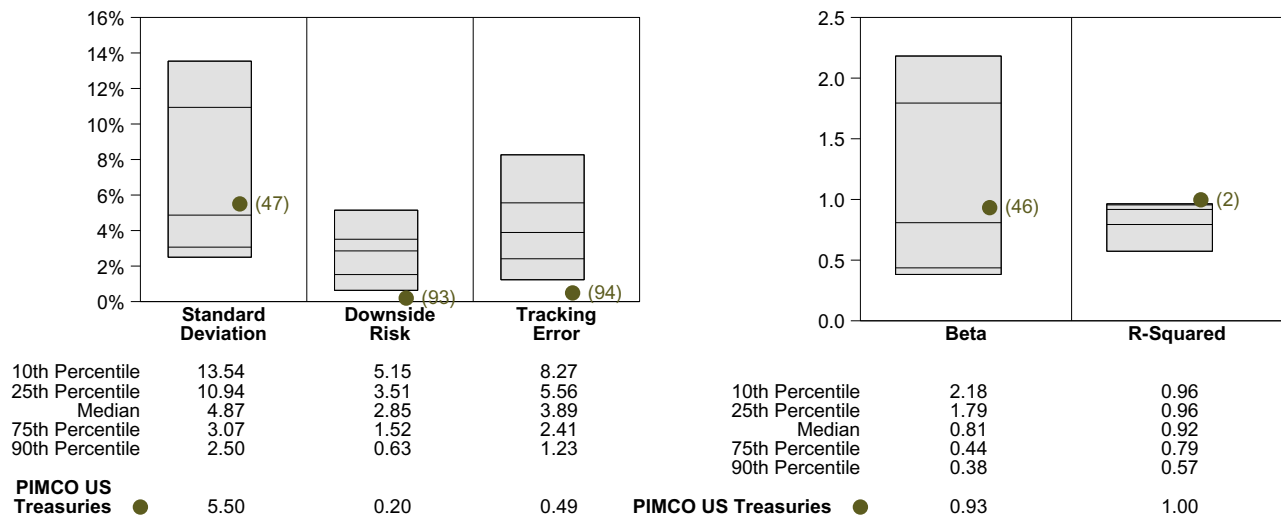
Risk Analysis vs Callan US Treasury Bond Funds (Gross) Five Years Ended September 30, 2019



Rolling 12 Quarter Tracking Error vs Bloomberg Barclays Treas Bellwethr 10Y



Risk Statistics Rankings vs Bloomberg Barclays Treas Bellwethr 10Y Rankings Against Callan US Treasury Bond Funds (Gross) Five Years Ended September 30, 2019

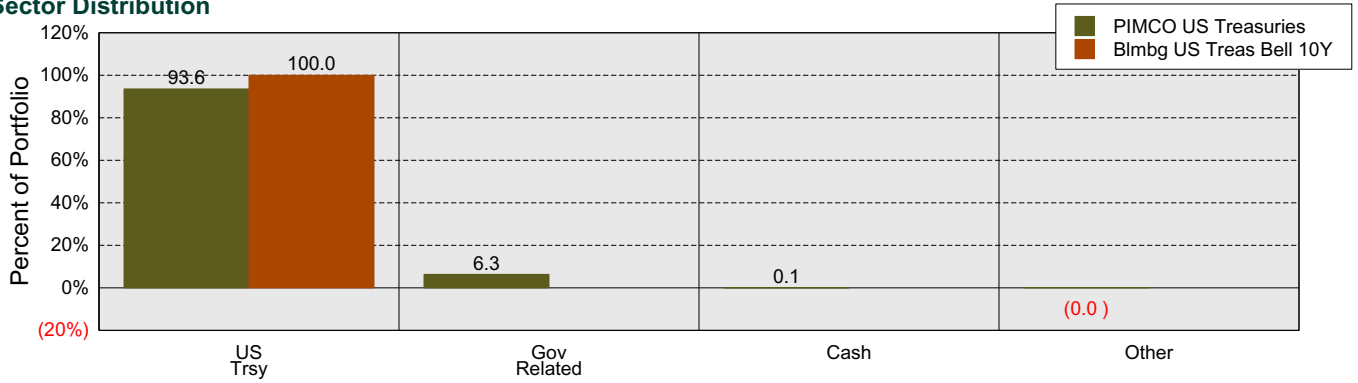


PIMCO US Treasuries Portfolio Characteristics Summary As of September 30, 2019

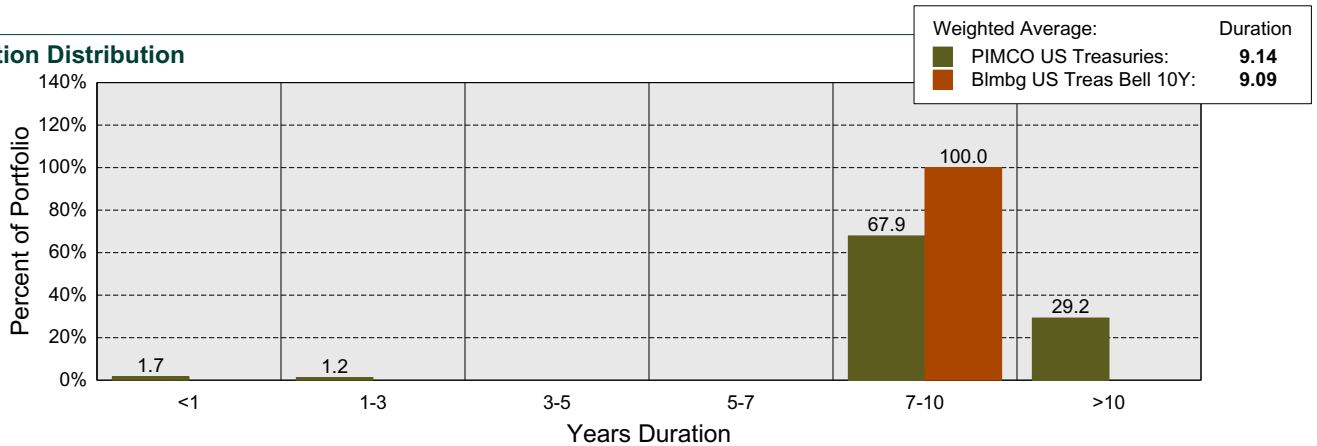
Portfolio Structure Comparison

The charts below compare the structure of the portfolio to that of the index from the three perspectives that have the greatest influence on return. The first chart compares the two portfolios across sectors. The second chart compares the duration distribution. The last chart compares the distribution across quality ratings.

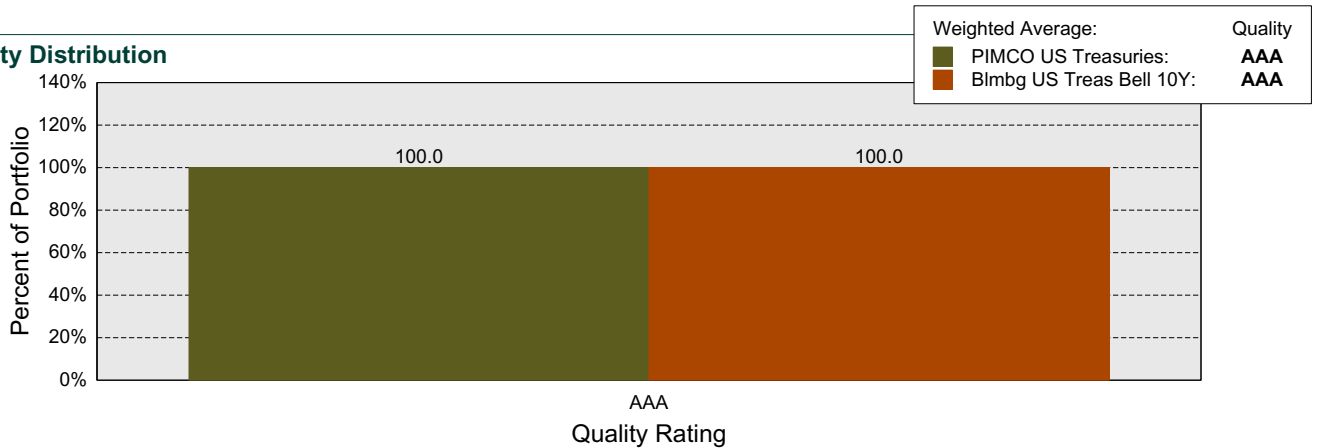
Sector Distribution



Duration Distribution



Quality Distribution



Multi-Strategy Period Ended September 30, 2019

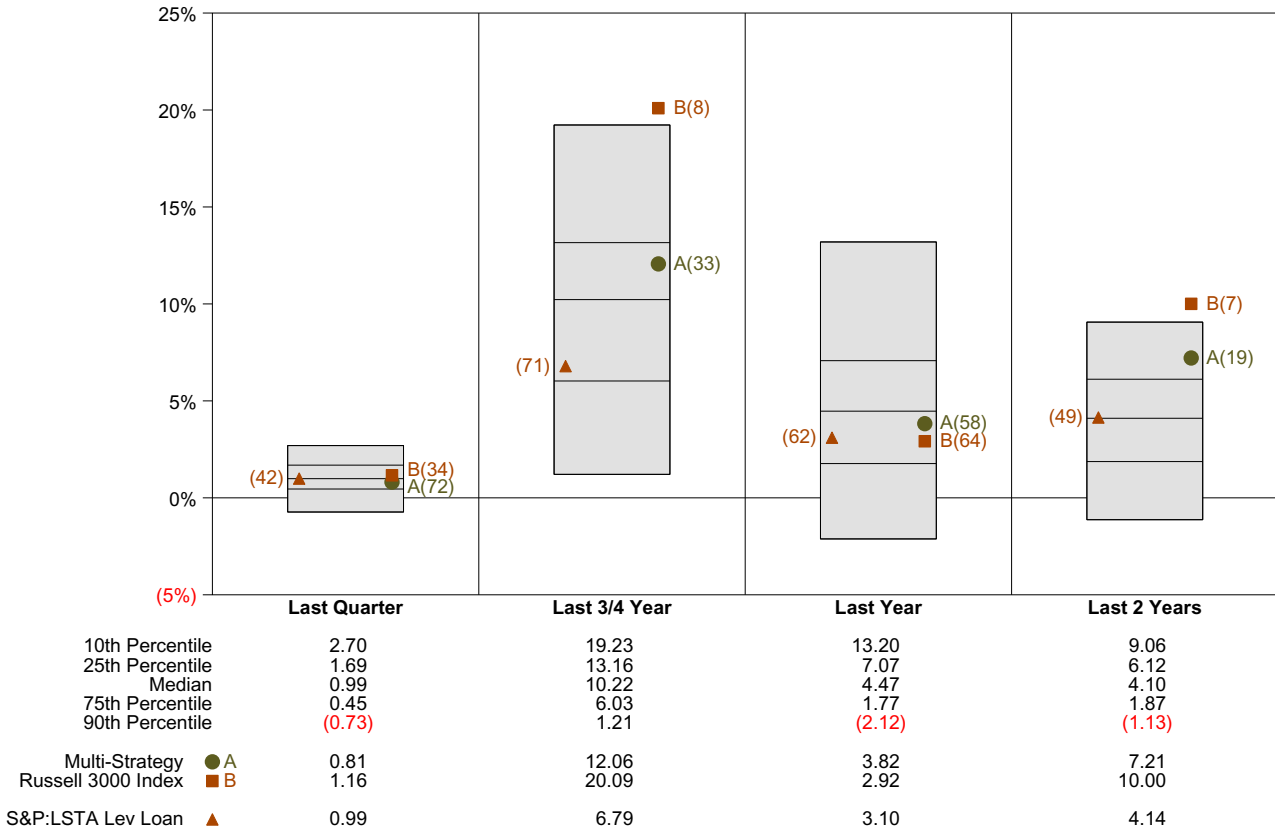
Quarterly Summary and Highlights

- Multi-Strategy's portfolio posted a 0.81% return for the quarter placing it in the 72 percentile of the Callan Multi-Asset Database group for the quarter and in the 58 percentile for the last year.
- Multi-Strategy's portfolio underperformed the S&P:LSTA Lev Loan by 0.18% for the quarter and outperformed the S&P:LSTA Lev Loan for the year by 0.72%.

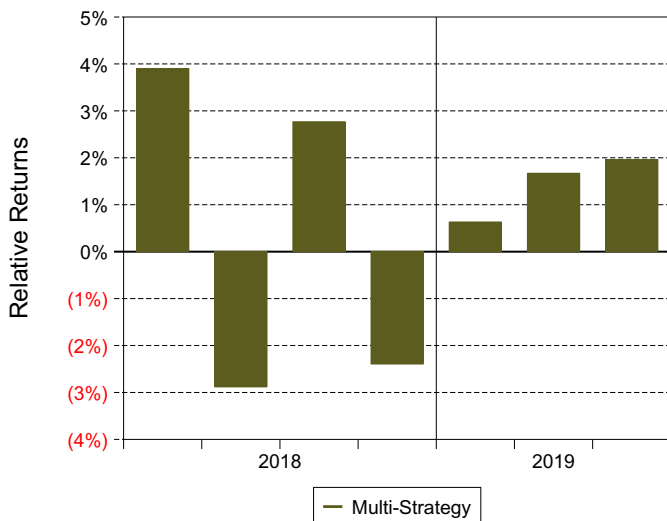
Quarterly Asset Growth

Beginning Market Value	\$1,661,162,926
Net New Investment	\$39,893,443
Investment Gains/(Losses)	\$13,413,381
Ending Market Value	\$1,714,469,751

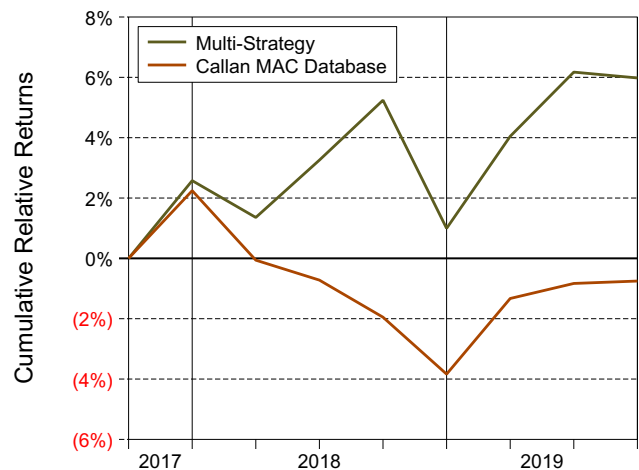
Performance vs Callan Multi-Asset Database (Gross)



Relative Return vs S&P:LSTA Lev Loan



Cumulative Returns vs S&P:LSTA Lev Loan



Blackstone Keystone Period Ended September 30, 2019

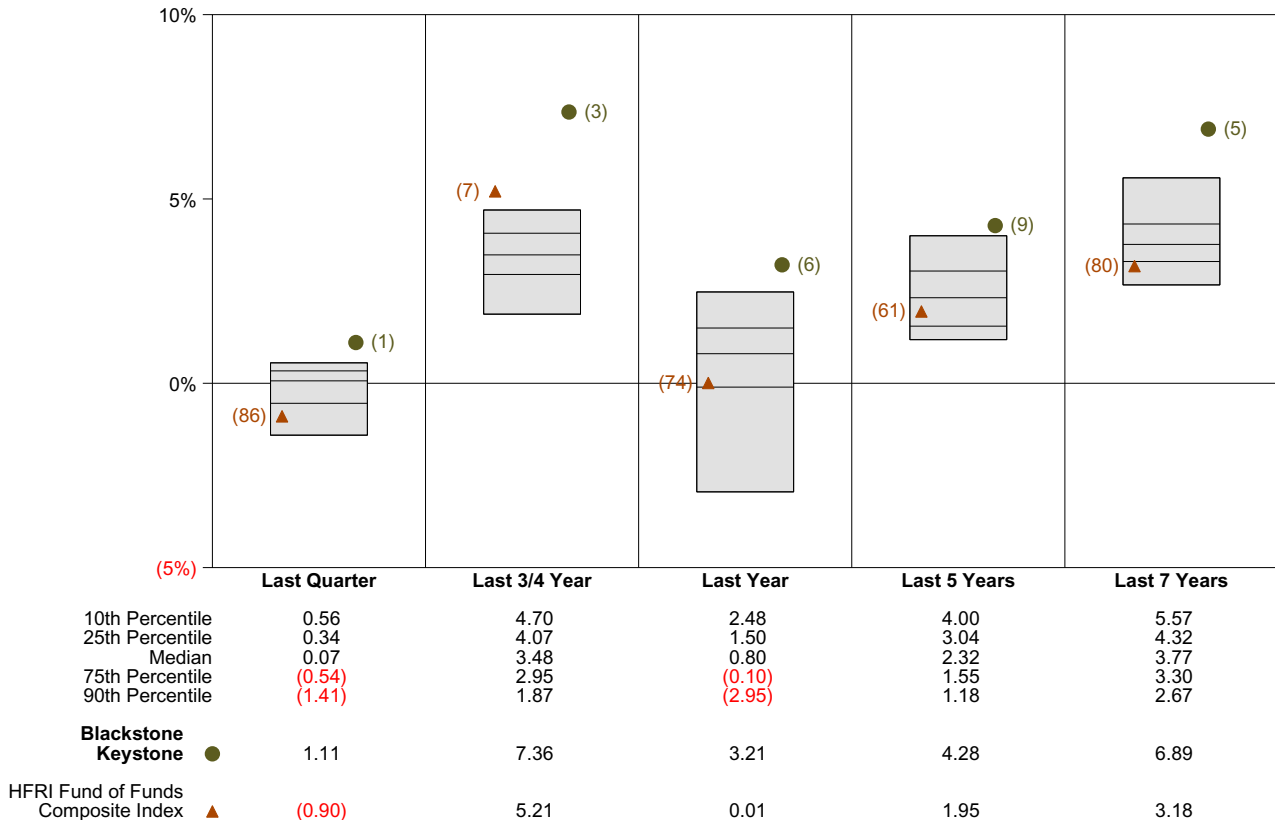
Quarterly Summary and Highlights

- Blackstone Keystone's portfolio posted a 1.11% return for the quarter placing it in the 1 percentile of the Callan Absolute Rtn Hedge Fund of Funds group for the quarter and in the 6 percentile for the last year.
- Blackstone Keystone's portfolio outperformed the HFRI Fund of Funds Composite Index by 2.00% for the quarter and outperformed the HFRI Fund of Funds Composite Index for the year by 3.20%.

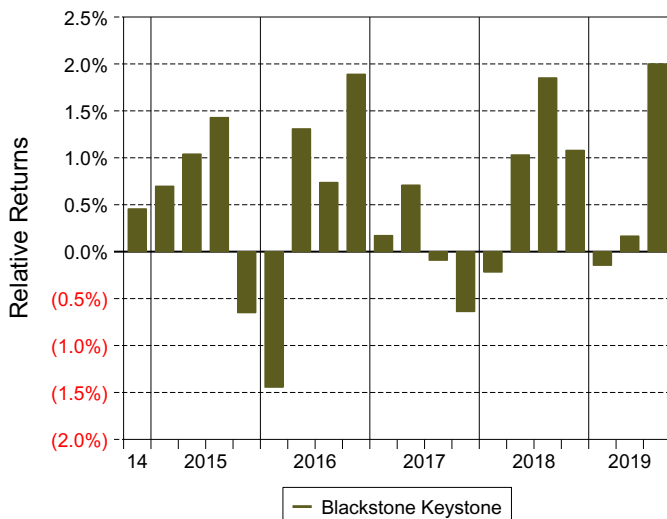
Quarterly Asset Growth

Beginning Market Value	\$926,189,658
Net New Investment	\$-2,531,399
Investment Gains/(Losses)	\$10,276,536
Ending Market Value	\$933,934,795

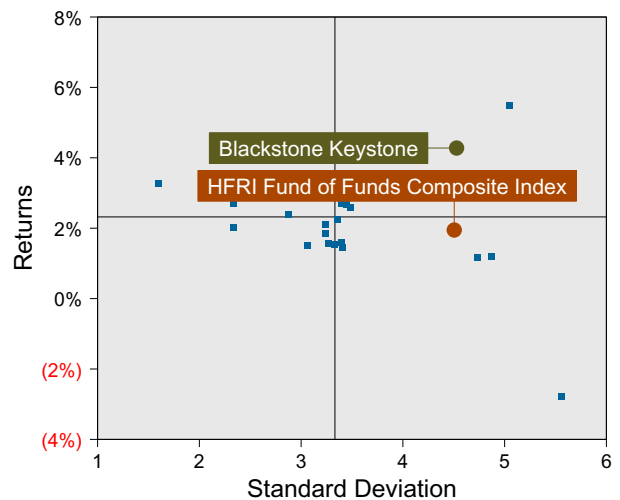
Performance vs Callan Absolute Rtn Hedge Fund of Funds (Net)



Relative Returns vs HFRI Fund of Funds Composite Index



Callan Absolute Rtn Hedge Fund of Funds (Net) Annualized Five Year Risk vs Return

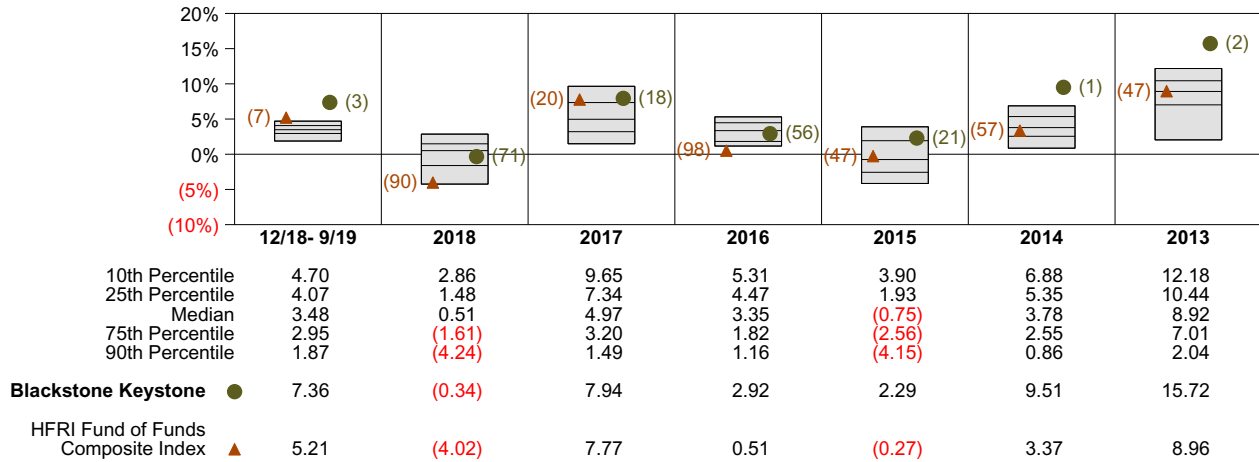


Blackstone Keystone Return Analysis Summary

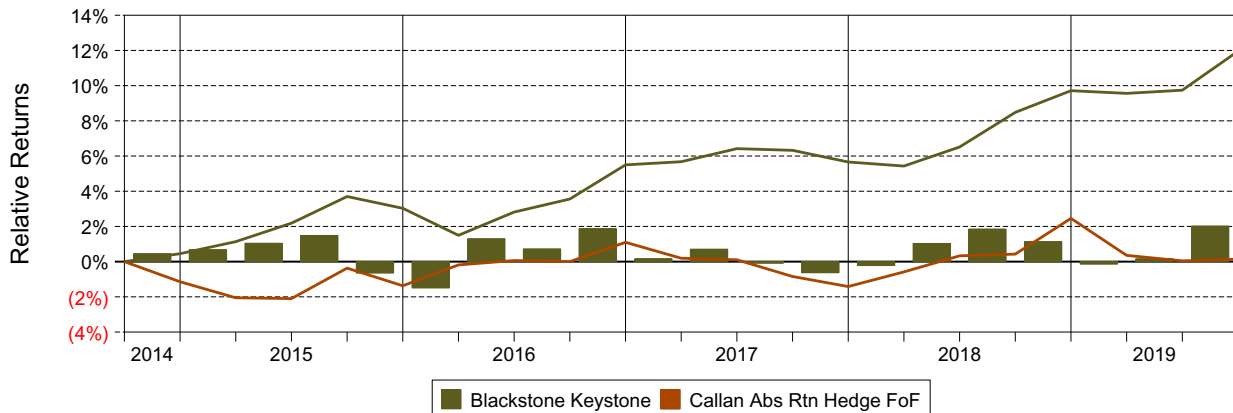
Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

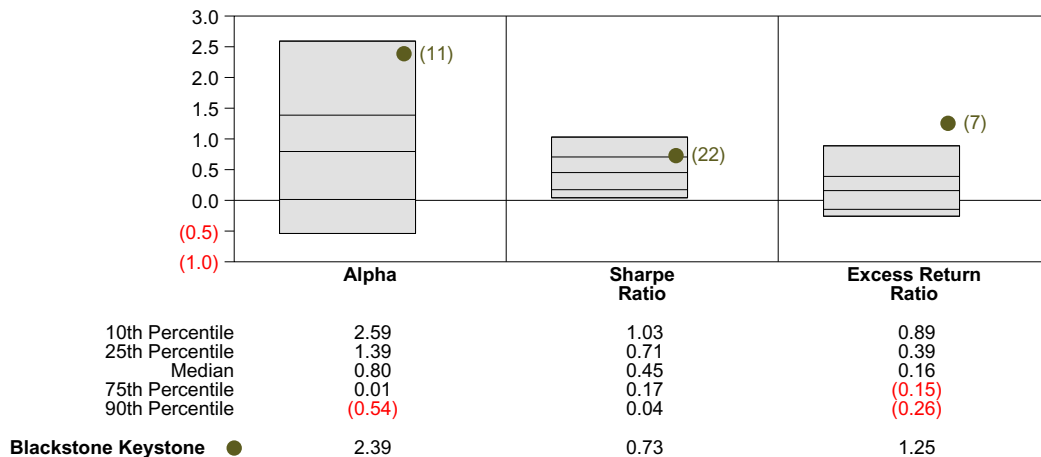
Performance vs Callan Absolute Rtn Hedge Fund of Funds (Net)



Cumulative and Quarterly Relative Return vs HFRI Fund of Funds Composite Index



Risk Adjusted Return Measures vs HFRI Fund of Funds Composite Index Rankings Against Callan Absolute Rtn Hedge Fund of Funds (Net) Five Years Ended September 30, 2019

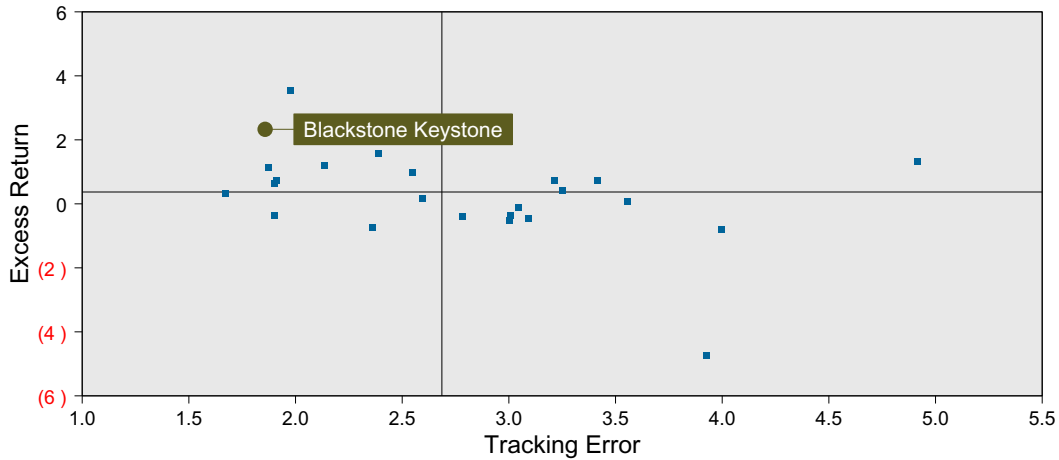


Blackstone Keystone Risk Analysis Summary

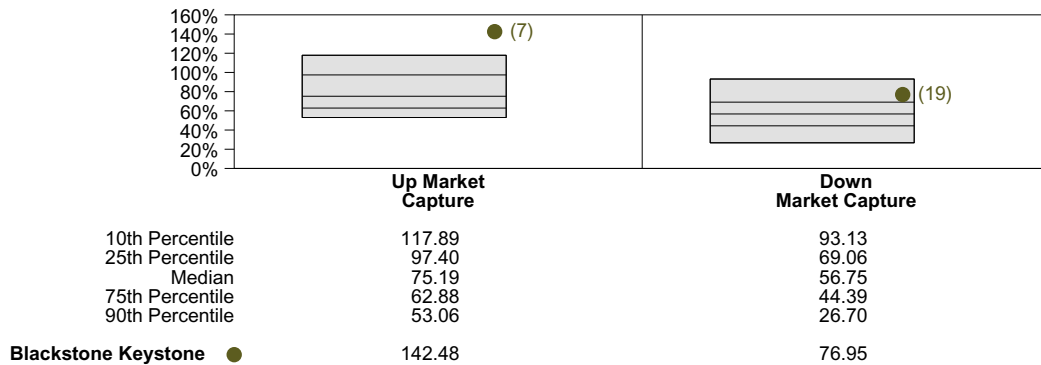
Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows Up and Down Market Capture. The last two charts show the ranking of the manager's risk statistics versus the peer group.

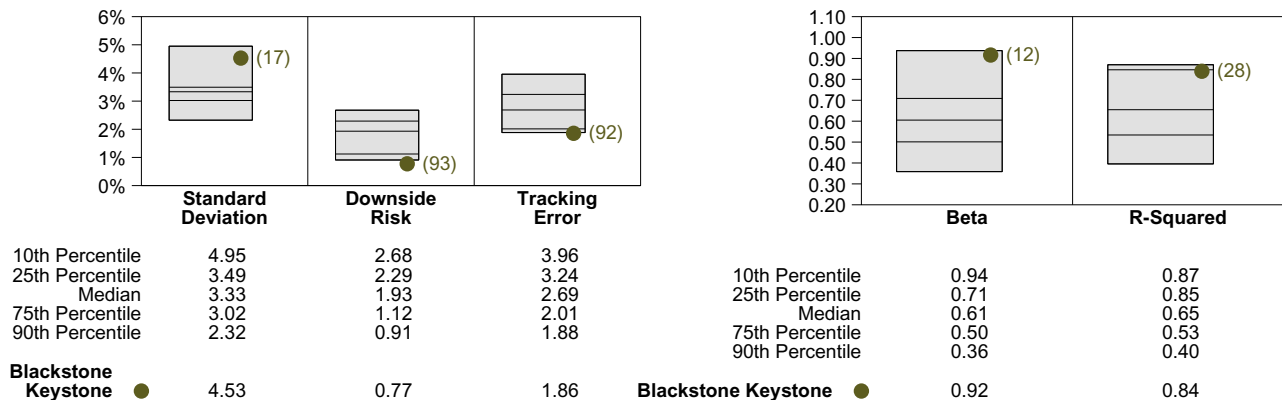
Risk Analysis vs Callan Absolute Rtn Hedge Fund of Funds (Net) Five Years Ended September 30, 2019



Market Capture vs HFRI Fund of Funds Composite Index Rankings Against Callan Absolute Rtn Hedge Fund of Funds (Net) Five Years Ended September 30, 2019



Risk Statistics Rankings vs HFRI Fund of Funds Composite Index Rankings Against Callan Absolute Rtn Hedge Fund of Funds (Net) Five Years Ended September 30, 2019



Eaton Vance GMARA

Period Ended September 30, 2019

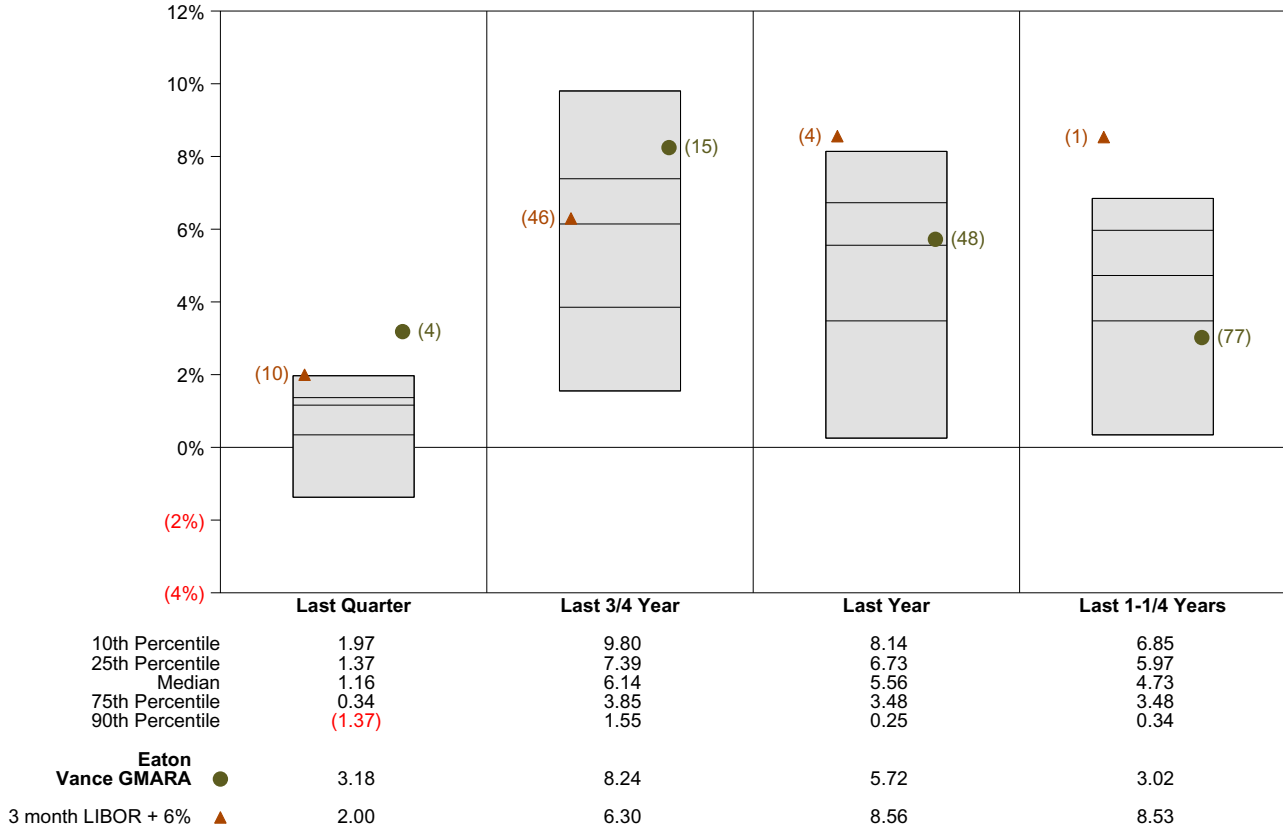
Quarterly Summary and Highlights

- Eaton Vance GMARA's portfolio posted a 3.18% return for the quarter placing it in the 4 percentile of the Callan Unconstrained Fixed Income group for the quarter and in the 48 percentile for the last year.
- Eaton Vance GMARA's portfolio outperformed the 3 month LIBOR + 6% by 1.19% for the quarter and underperformed the 3 month LIBOR + 6% for the year by 2.84%.

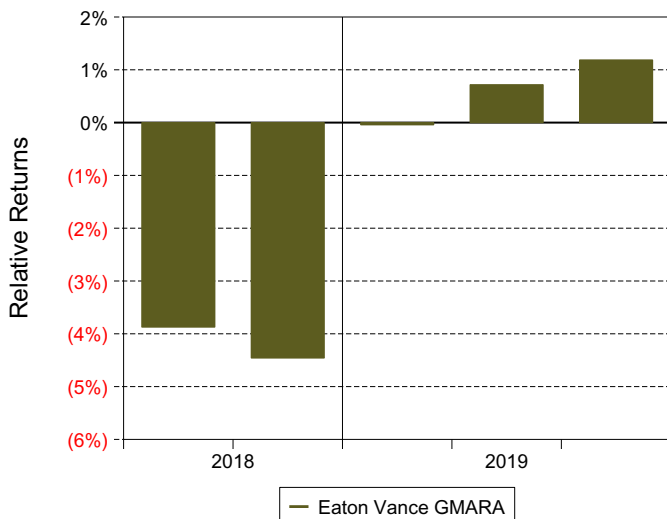
Quarterly Asset Growth

Beginning Market Value	\$198,604,400
Net New Investment	\$-634,616
Investment Gains/(Losses)	\$6,329,416
Ending Market Value	\$204,299,200

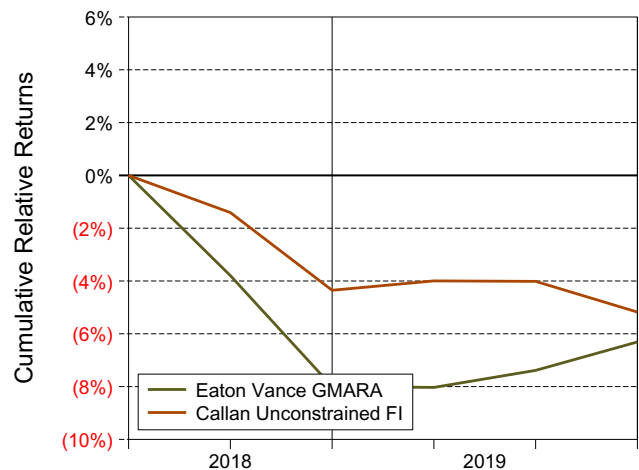
Performance vs Callan Unconstrained Fixed Income (Gross)



Relative Return vs 3 month LIBOR + 6%



Cumulative Returns vs 3 month LIBOR + 6%



Private Credit Period Ended September 30, 2019

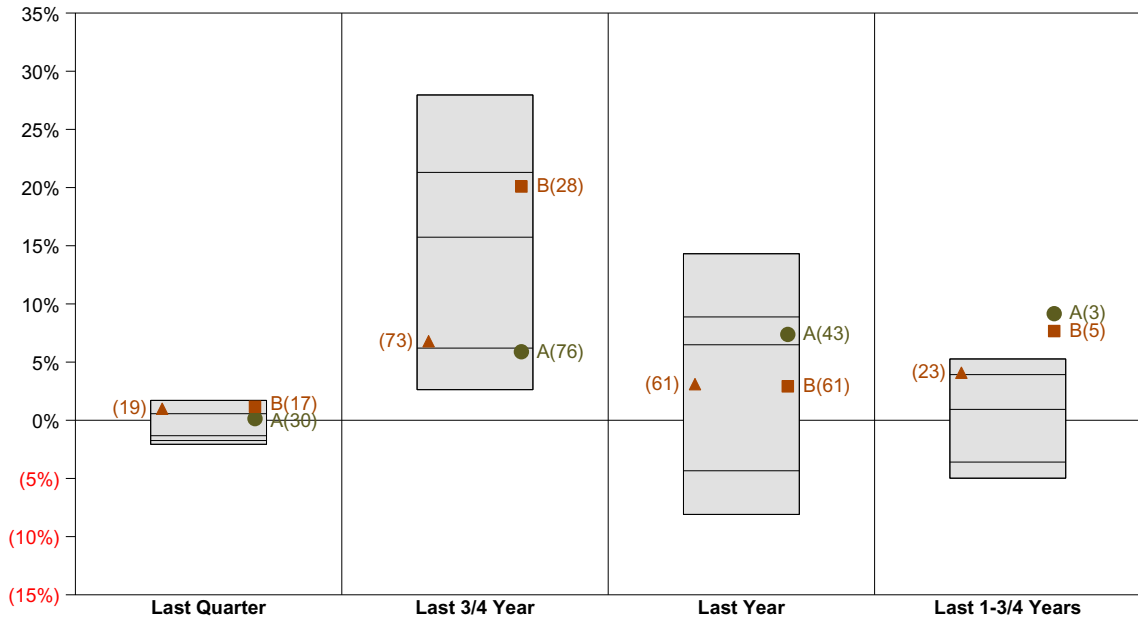
Quarterly Summary and Highlights

- Private Credit's portfolio posted a 0.14% return for the quarter placing it in the 30 percentile of the Callan Alternative Investments DB group for the quarter and in the 43 percentile for the last year.
- Private Credit's portfolio underperformed the S&P:LSTA Lev Loan by 0.85% for the quarter and outperformed the S&P:LSTA Lev Loan for the year by 4.28%.

Quarterly Asset Growth

Beginning Market Value	\$189,579,865
Net New Investment	\$43,184,253
Investment Gains/(Losses)	\$299,928
Ending Market Value	\$233,064,047

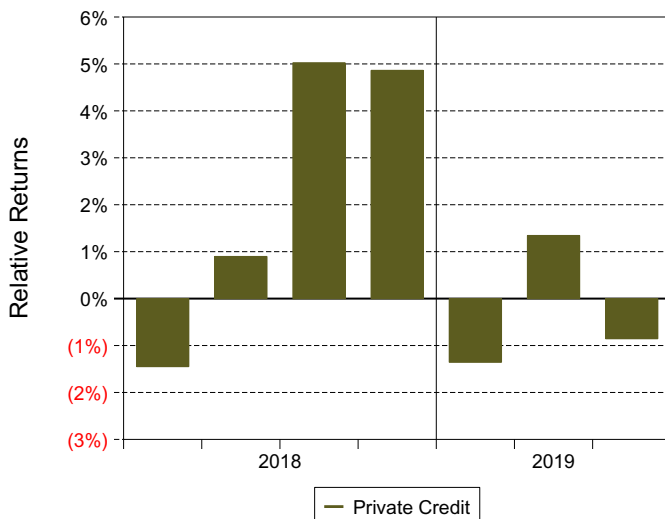
Performance vs Callan Alternative Investments DB (Net)



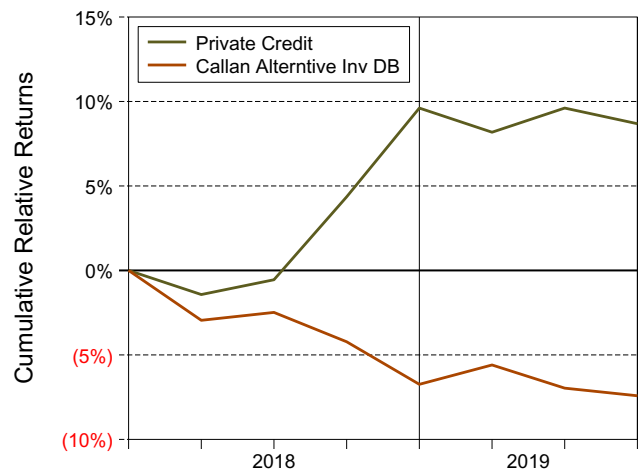
10th Percentile	1.71	27.96	14.31	5.27
25th Percentile	0.56	21.30	8.88	3.93
Median	(1.33)	15.73	6.49	0.94
75th Percentile	(1.74)	6.20	(4.34)	(3.59)
90th Percentile	(2.07)	2.63	(8.09)	(4.98)

Private Credit	● A	0.14	5.89	7.38	9.16
Russell 3000 Index	■ B	1.16	20.09	2.92	7.67
S&P:LSTA Lev Loan	▲	0.99	6.79	3.10	4.09

Relative Return vs S&P:LSTA Lev Loan



Cumulative Returns vs S&P:LSTA Lev Loan



SEI Structured Credit: HY Bank Loans Period Ended September 30, 2019

Quarterly Summary and Highlights

- SEI Structured Credit: HY Bank Loans's portfolio posted a (1.00)% return for the quarter placing it in the 95 percentile of the Callan Multi-Sector Credit group for the quarter and in the 81 percentile for the last year.
- SEI Structured Credit: HY Bank Loans's portfolio underperformed the FTSE:HY Corp by 1.96% for the quarter and underperformed the FTSE:HY Corp for the year by 2.58%.

Quarterly Asset Growth

Beginning Market Value	\$346,664,332
Net New Investment	\$0
Investment Gains/(Losses)	\$-3,492,623
Ending Market Value	\$343,171,709

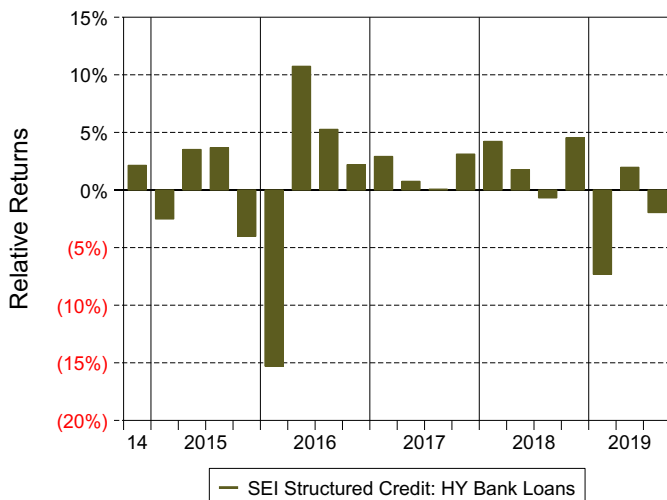
Performance vs Callan Multi-Sector Credit (Gross)



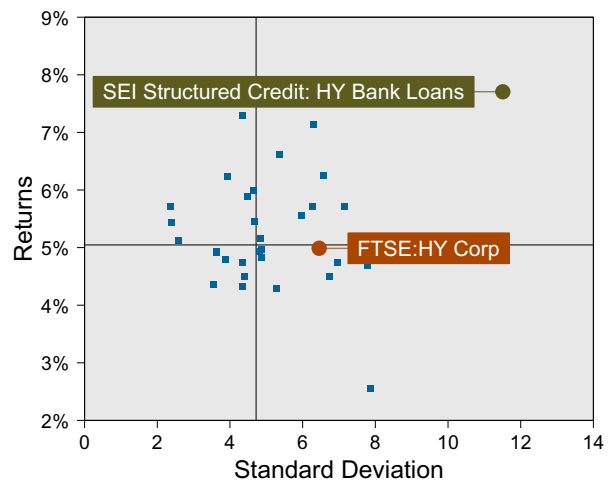
10th Percentile	2.00	11.92	8.67	5.82	7.60	6.59	7.84
25th Percentile	1.62	10.45	7.27	5.39	6.65	5.76	6.76
Median	1.33	8.97	5.33	4.61	5.80	5.05	6.20
75th Percentile	1.05	7.32	3.77	4.10	5.32	4.72	5.61
90th Percentile	(0.05)	6.04	2.55	3.39	5.01	4.33	4.83

SEI Structured Credit: HY Bank Loans ●	(1.00)	3.33	3.15	7.55	9.96	7.71	8.55
FTSE:HY Corp ▲	0.96	10.95	5.72	4.48	5.81	4.99	5.51

Relative Return vs FTSE:HY Corp



Callan Multi-Sector Credit (Gross) Annualized Five Year Risk vs Return

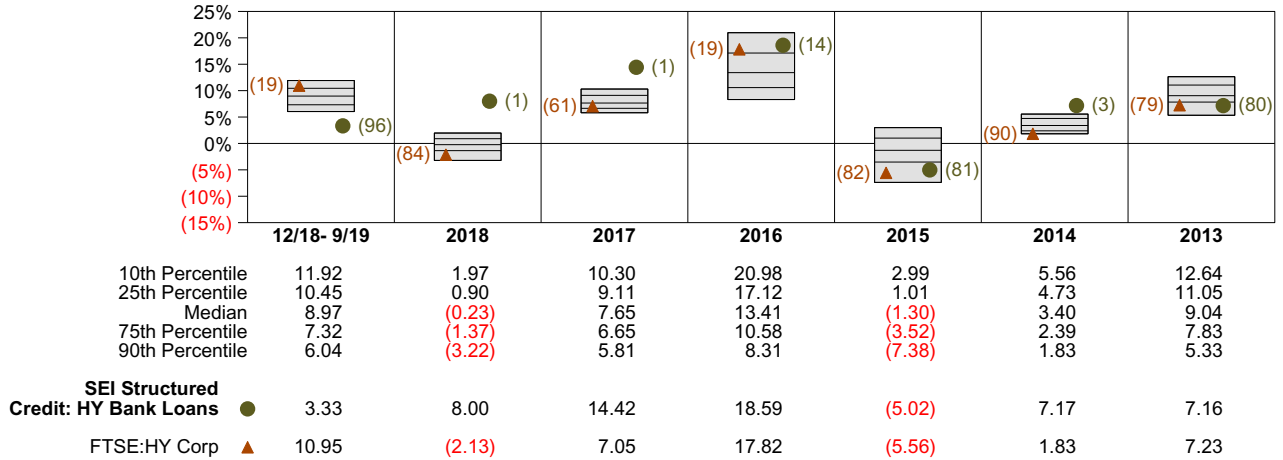


SEI Structured Credit: HY Bank Loans Return Analysis Summary

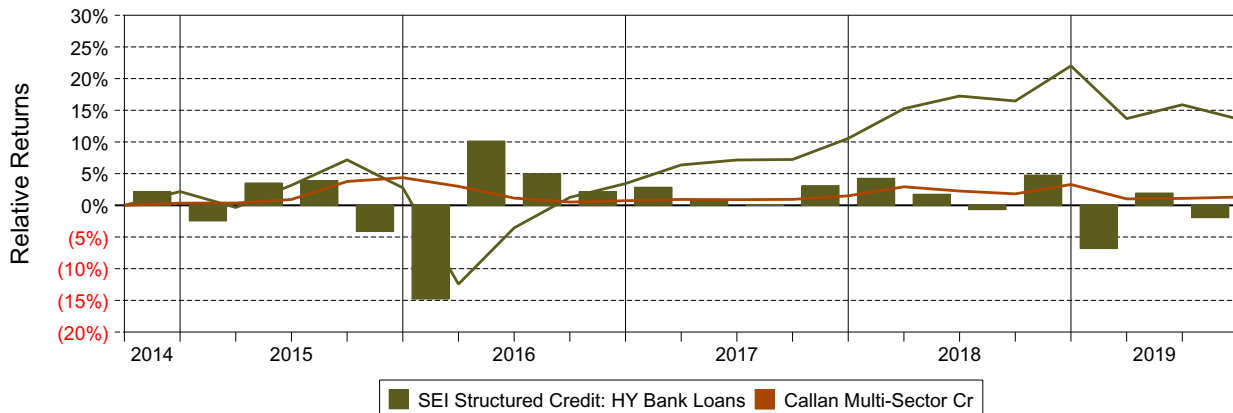
Return Analysis

The graphs below analyze the manager's return on both a risk-adjusted and unadjusted basis. The first chart illustrates the manager's ranking over different periods versus the appropriate style group. The second chart shows the historical quarterly and cumulative manager returns versus the appropriate market benchmark. The last chart illustrates the manager's ranking relative to their style using various risk-adjusted return measures.

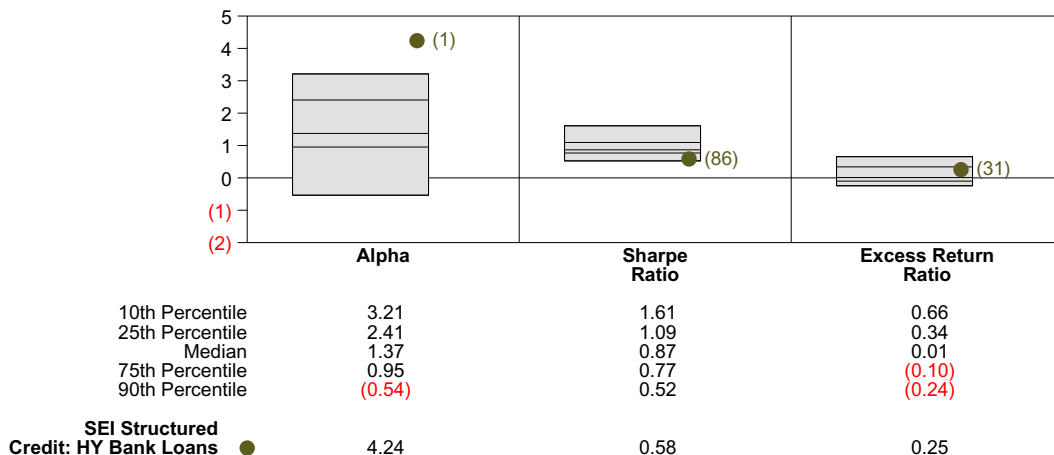
Performance vs Callan Multi-Sector Credit (Gross)



Cumulative and Quarterly Relative Return vs FTSE:HY Corp



Risk Adjusted Return Measures vs FTSE:HY Corp Rankings Against Callan Multi-Sector Credit (Gross) Five Years Ended September 30, 2019

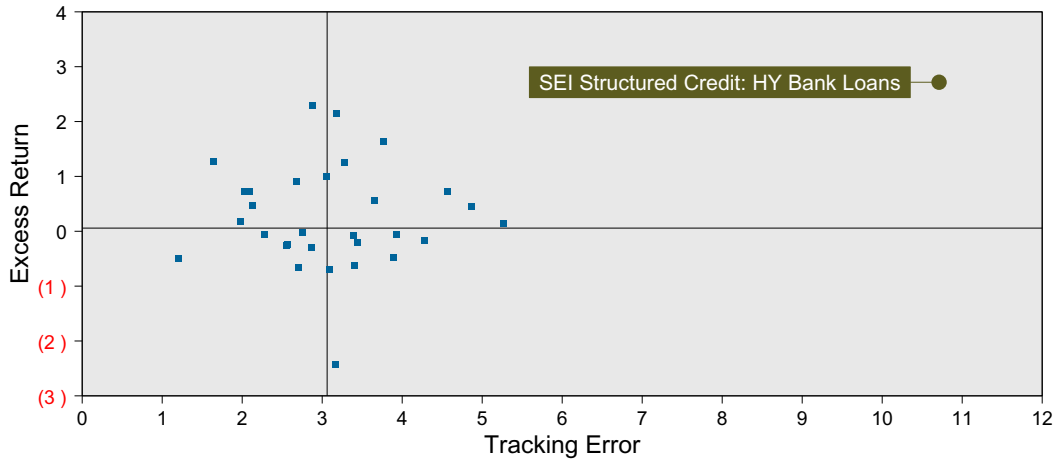


SEI Structured Credit: HY Bank Loans Risk Analysis Summary

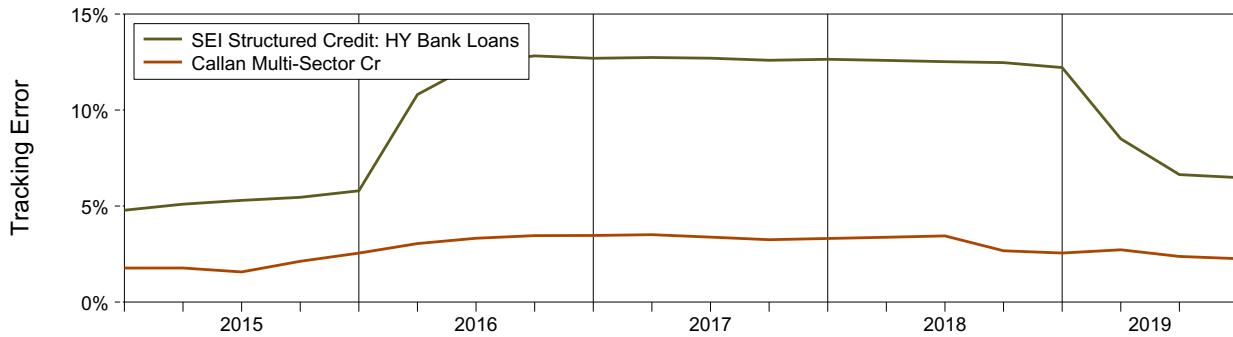
Risk Analysis

The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows tracking error patterns versus the benchmark over time. The last two charts show the ranking of the manager's risk statistics versus the peer group.

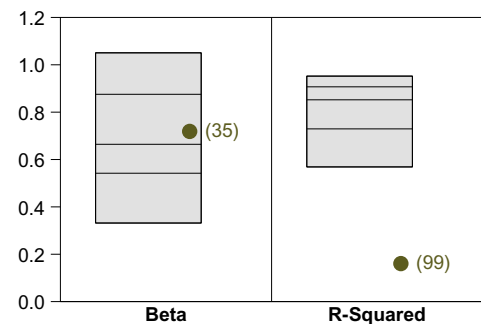
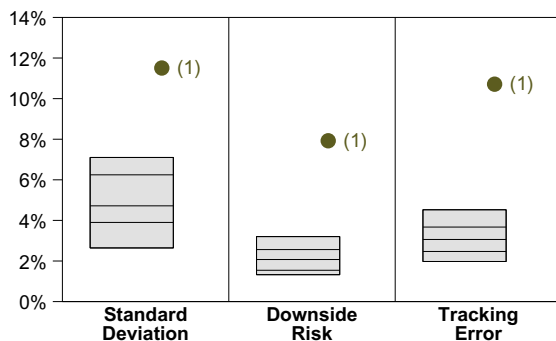
Risk Analysis vs Callan Multi-Sector Credit (Gross) Five Years Ended September 30, 2019



Rolling 12 Quarter Tracking Error vs FTSE HY Corporate



Risk Statistics Rankings vs FTSE HY Corporate Rankings Against Callan Multi-Sector Credit (Gross) Five Years Ended September 30, 2019



10th Percentile 7.10
25th Percentile 6.25
Median 4.72
75th Percentile 3.90
90th Percentile 2.64

10th Percentile 3.20
25th Percentile 2.56
Median 2.07
75th Percentile 1.54
90th Percentile 1.33

10th Percentile 4.53
25th Percentile 3.67
Median 3.06
75th Percentile 2.47
90th Percentile 1.98

10th Percentile 1.05
25th Percentile 0.88
Median 0.66
75th Percentile 0.54
90th Percentile 0.33

10th Percentile 0.95
25th Percentile 0.91
Median 0.85
75th Percentile 0.73
90th Percentile 0.57

SEI Structured Credit: HY Bank Loans ● 11.51

7.92

10.71

SEI Structured Credit: HY Bank Loans ● 0.72

0.16

0.16

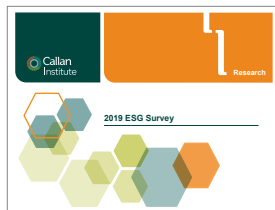
Research and Educational Programs

The Callan Institute provides research to update clients on the latest industry trends and carefully structured educational programs to enhance the knowledge of industry professionals. Visit www.callan.com/library to see all of our publications, and www.callan.com/blog to view our blog “Perspectives.” For more information contact Barb Gerraty at 415-274-3093 / institute@callan.com.

New Research from Callan’s Experts

DTS Offers Some Key Advantages for Evaluating Fixed Income Portfolios

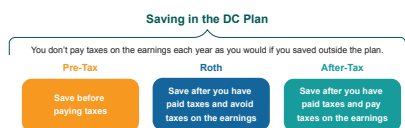
This paper describes duration times spread (DTS), which measures systematic credit-spread risk exposure. DTS estimates the return of any bond, by percentage, if its spread were to change from the current level, all else equal. DTS offers several advantages for monitoring risk in credit portfolios over other methods.



2019 ESG Survey | Callan’s seventh annual survey assessing the status of environmental, social, and governance (ESG) investing in the U.S. institutional investment market.

Callan’s DC Index in Detail | A video about the Callan DC Index™: why we started it, what it measures, and how it can benefit defined contribution plan sponsors.

DC Plan Hacks: Tips for an Efficient Design



plan sponsors should regularly evaluate their plans to make sure they serve the organization’s

benefits philosophy. When evaluating changes, the sponsor should consider its demographics, cost of benefits, vendor capabilities, impact on nondiscrimination testing, communication capabilities, and legal requirements.

2019 June Workshop Summary: In the Age of Illiquidity | For many nonprofits and defined benefit plans, the shift to higher-returning but less liquid asset classes has myriad implications. This summary discusses how consultants, institutional investors, and investment managers can work together to identify solutions tailored to each plan.

The Keys to Unlocking Private Equity Portfolio Assessment

Private equity performance evaluation has some unique considerations, so return calculations and benchmarking methodologies differ from public securities. Closed-end private equity vehicles are assessed using ratio analyses and internal rate of return (IRR) measures. Using performance metrics, private equity portfolios can be evaluated at the partnership level, at the vintage year level, and then at the total portfolio level.

Survivorship Bias and the Walking Dead

Survivorship bias, the predisposition to evaluate a data set by focusing on the “survivors” rather than also examining the record of non-survivors, is important to understand for hedge fund peer groups, which tend to have a relatively large number of constituents that disappear. Using a proprietary approach, Callan is able to adjust peer group comparisons for survivorship bias. This better-informed perspective enables a more honest assessment in considering performance relative to other opportunities.

Quarterly Periodicals

Private Equity Trends | A newsletter on private equity activity, covering both the fundraising cycle and performance over time.

Market Pulse Flipbook | A market reference guide covering trends in the U.S. economy, developments for institutional investors, and the latest data for U.S. and non-U.S. equities and fixed income, alternatives, and defined contribution plans.

Active vs. Passive Charts | This series of charts compares active managers alongside relevant benchmarks over the long term.

Capital Market Review | A newsletter providing analysis and a broad overview of the economy and public and private market activity each quarter across a wide range of asset classes.

Events

Miss out on a Callan conference or workshop? Event summaries and speakers' presentations are available on our website: www.callan.com/library/

Please mark your calendar and look forward to upcoming invitations.

2020 National Conference

Celebrating the 40th anniversary of the Callan Institute
January 27-29, 2020 – San Francisco

Please also keep your eye out for upcoming Webinars in 2019! We will be sending invitations to register for these events and will also have registration links on our website at www.callan.com/webinarsupcoming.

For more information about events, please contact Barb Gerraty: 415-274-3093 / gerraty@callan.com

The Center for Investment Training Educational Sessions

The Center for Investment Training, better known as the “Callan College,” provides a foundation of knowledge for industry professionals who are involved in the investment decision-making process. It was founded in 1994 to provide clients and non-clients alike with basic- to intermediate-level instruction.

Introduction to Investments

April 21-22, 2020

July 21-22, 2020

This program familiarizes institutional investor trustees and staff and asset management advisers with basic investment theory, terminology, and practices. It lasts one-and-a-half days and is designed for individuals who have less than two years of experience with asset-management oversight and/or support responsibilities. Tuition for the Introductory “Callan College” session is \$2,350 per person. Tuition includes instruction, all materials, breakfast and lunch on each day, and dinner on the first evening with the instructors.

Learn more at www.callan.com/events/callan-college-intro

Education: By the Numbers

525 Attendees (on average) of the Institute's annual National Conference

50+ Unique pieces of research the Institute generates each year

3,700 Total attendees of the “Callan College” since 1994

1980 Year the Callan Institute was founded



“Research is the foundation of all we do at Callan, and sharing our best thinking with the investment community is our way of helping to foster dialogue to raise the bar across the industry.”

Greg Allen, CEO and Chief Research Officer

