# Callan

**December 31, 2016** 

City of Milwaukee Employes' Retirement System

Investment Measurement Service Quarterly Review

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# Callan





Fourth Quarter 2016

# A Sentimental Journey

ECONOMY

Real GDP grew 1.9% in the fourth quarter and 1.6% for the year. The dollar strengthened, raising the cost of exports. The unemployment rate stood at 4.7% at the end of the year, the lowest since August 2007.

## **Friends Mattered**

FUND SPONSOR

Funds faced a tough fourth quarter. Taft-PAGE Hartley plans fared best, up 1.20%, while corporate funds had the weakest returns, falling 0.09%. Results stemmed primarily from how they chose "friends" in the securities markets.

## **Broad Market Quarterly Returns**

U.S. Equity (Russell 3000)

-1.25%
Non-U.S. Equity (MSCI ACWI ex USA)

-4.16%
Emerging Equity (MSCI Emerging Markets)

-2.98%
U.S. Fixed (Bloomberg Barclays Aggregate)

-10.26%
Non-U.S. Fixed (Bloomberg Barclays Global ex US)

Real Estate (NCREIF Property)
1.73%
Hedge Funds (CS HFI)
1.15%
Commodities (Bloomberg)
2.66%
Cash (90-Day T-Bills)
0.09%

Sources: Bloomberg Barclays, Bloomberg, Credit Suisse Hedge Index, Merrill Lynch, MSCI, NCREIF, Russell Investment Group

## **Election Rally**

U.S. EQUITY

The S&P 500 Index hit an all-time high during the quarter and ended up 3.82% amid a bullish rally in the wake of the presidential election and a string of encouraging economic reports. Value dominated growth during the quarter, and small cap particularly benefited from Trump-fueled enthusiasm.

## A Depressing Dollar

NON-U.S. EQUITY

The dollar's strength hampered returns for U.S. investors from non-U.S. equity markets in the fourth quarter; local investors fared better. For the year most world stock markets posted positive results, driven by economic improvements, accommodative central bank policies, and price hikes for commodities.

# Treacherous Treasuries

U.S. FIXED INCOME

The Bloomberg
Barclays U.S.
Aggregate Bond Index

fell 2.98% during the tumultuous quarter, but ended up 2.65% for the year. Rising yields sent returns across the fixed income sector down for the quarter, and spreads tightened as record new bond issuances met strong global demand.

## **Big-League Yields**

NON-U.S. FIXED INCOME

Yields overseas increased and the dollar surged, weighing heavily on sovereign debt performance. The Bloomberg Barclays Global Aggregate ex US fell 10.26%. Geopolitical risk dominated the quarter, with the U.S. election, the Brexit vote, and a referendum in Italy.

## Rates Trump Fundamentals

REAL ESTATE

The NCREIF Property Index again turned in its worst performance since the first quarter of 2010, and the NCREIF Open End Diversified Core Equity Index barely eclipsed the third quarter's five-year low return. U.S. REITs outperformed global REITs, but still posted negative returns.

# Down but Far From Out

PRIVATE EQUITY

Company investments and exits trended down during the year and the quarter for both buyouts and venture capital, but activity continued at relatively high levels (except for IPOs). The one other anomaly was that the announced dollar volume for buyouts in 2016 reached an eight-year high.

## Making Alpha Great Again

**HEDGE FUNDS** 

The Credit Suisse
Hedge Fund Index
advanced 1.15% in the
quarter, while the Callan Hedge
Fund-of-Funds Database, a proxy
for live portfolios, grew 1.33%.
The best-performing strategy was
Global Macro (+4.59%), while
Managed Futures (-5.65%) took the
worst hit.

## A Case of the Jitters

DEFINED CONTRIBUTION

The average DC plan gained 3.92% in the third quarter, as measured by the Callan DC Index™, but trailed the Age 45 Target Date Fund's return of 4.53%. Plan balances grew 3.67%, although money flowed out of plans on a net basis at the highest level since the third quarter of 2006.

## **A Sentimental Journey**

### **ECONOMY** | Jay Kloepfer

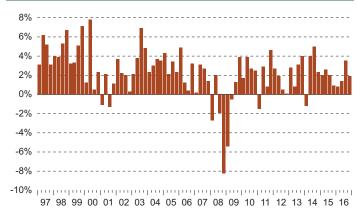
Last year turned out to be a tumultuous one, with two essentially non-economic events jolting the capital markets for reasons solely related to investor sentiment: the U.K. Brexit vote in June and the U.S. presidential election in November. In both instances, wild swings in sentiment and in confidence about the future moved markets around the globe without regard to the underlying economic data. Interest rates and the stock market were taken on a wild ride through the year, with stocks plunging through the summer and then surging following the U.S. election, and interest rates sliding while bonds rallied, only to see rates head back up in a hurry in November and December. This journey was driven almost entirely by sentiment rather than any sudden changes in economic fortune or financial fundamentals.

Real GDP growth in the U.S. came in at a modest 1.9% in the fourth quarter, down from the 3.5% gain in the third quarter. Combined with the weak growth in the first two quarters, total GDP growth for the year was 1.6%, down from the 2.6% gain in 2015. A sustained inventory correction that began in 2015 hung a black cloud over business sentiment during the first half of 2016, and the lingering effect of the bust in energy-sector investment spurred by the collapse in oil prices in 2015 held back economic growth for much of the year. The dollar strengthened over the course of the year, raising the cost of U.S. exports. The stronger dollar combined with anemic growth in Europe and Japan and slowing growth in developing markets held back demand for U.S. exports, while suppressing the cost of imports and driving demand for them higher. Imports are a negative in the GDP calculation and weigh on the measure of total GDP growth. As a result, net exports (exports minus imports) subtracted a hefty 1.7% from GDP growth during the fourth quarter, a reduction equal to the 1.7% gain provided by growth in consumption, which accounts for 70% of total GDP.

One bright spot in the fourth quarter GDP report was a rebound in fixed non-residential investment, which means capital spending: equipment, structures, and intellectual property. To give an

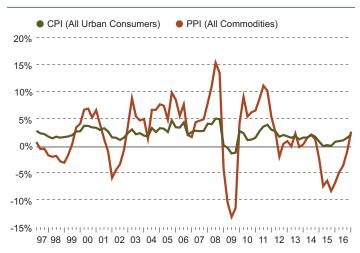


(20 Years)



Source: Bureau of Economic Analysis

## Inflation Year-Over-Year



Source: Bureau of Labor Statistics

idea of just how depressed the domestic oil and gas industry got, the drilling rig count published by Baker Hughes dropped to a 71-year low of 404 in May 2016; the count rebounded to more than 650 by the end of the year, as energy prices appear to have moved off of a bottom. The downward pressure on capital spending from energy has therefore abated, and capital spending was further aided in the third and fourth quarters by a rebound in aircraft investment.

Consumption spending rose 2.5%, leading GDP gains, supported by gains in real disposable income and household net worth. As the year drew to a close, household finances appeared to be in great shape on an aggregate basis, helped by the post-election stock market rally, rising home prices, and almost a decade of restraint in consumer borrowing. Consumer sentiment indices took big hits in October as the U.S. election loomed, only to spike back up in November and December to levels last seen in 2004. The job market has cooperated, showing a strong 204,000 gain in November after a weak October report, and adding another 156,000 in December. The unemployment rate is now 4.7%, near a nine-year low and well below any target once articulated by policymakers as sufficient to handle a rise in interest rates.

With the economy at or near full employment, interest in inflation has perked up once again, although the measures of inflation remain relatively benign. The headline all-urban CPI was up 2.1% in December year-over-year, and core inflation (less food and energy) rose 2.2%, while the GDP deflator used by the Fed to target inflation was up 2.2%. Energy prices dragged down headline inflation until the second half of 2016, when the energy index increased for four consecutive months through December. Tight labor markets, confident consumers, and a potential for continued capital spending all point to the chance for inflation to move beyond the 1% to 2% range in which it has been bound for the past several years; countering this upward pressure is the strong U.S. dollar, which allows the U.S. to import deflationary pressure through falling import prices.

## The Long-Term View

	2016	Periods	ended	Dec 3	1 2016
Index	4th Qtr	1 Year			25 Yrs
U.S. Equity					
Russell 3000	4.21	12.74	14.67	7.07	9.29
S&P 500	3.82	11.96	14.66	6.95	9.15
Russell 2000	8.83	21.31	14.46	7.07	9.69
Non-U.S. Equity					
MSCI EAFE	-0.71	1.00	6.53	0.75	4.95
MSCI Emerging Markets	-4.16	11.19	1.28	1.84	_
S&P ex-U.S. Small Cap	-3.12	3.78	9.67	3.03	6.70
Fixed Income					
Bloomberg Barclays Agg	-2.98	2.65	2.23	4.34	5.63
90-Day T-Bills	0.09	0.33	0.12	0.80	2.71
Bloomberg Barclays Long G/C	-7.84	6.67	4.07	6.85	7.58
Bloomberg Barclays Gl Agg ex US	-10.26	1.49	-1.39	2.44	4.73
Real Estate					
NCREIF Property	1.73	7.97	10.91	6.93	8.63
FTSE NAREIT Equity	-2.89	8.52	12.01	5.08	11.13
Alternatives					
CS Hedge Fund	1.15	1.25	4.34	3.75	_
Cambridge PE*	-	3.95	10.89	10.33	14.35
Bloomberg Commodity	2.66	11.77	-8.95	-5.57	2.55
Gold Spot Price	-12.56	8.63	-5.97	6.08	4.82
Inflation – CPI-U	0.00	2.07	1.36	1.81	2.26

<sup>\*</sup>Private equity returns show pooled horizon IRRs for periods ended June 30, 2016. Most recent quarterly data not available.

Sources: Bloomberg Barclays, Bloomberg, Credit Suisse, FTSE, MSCI, NCREIF, Russell Investment Group, Standard & Poor's, Thomson/Cambridge, Bureau of Economic Analysis.

#### **Recent Quarterly Economic Indicators**

	4Q16	3Q16	2Q16	1Q16	4Q15	3Q15	2Q15	1Q15
Employment Cost–Total Compensation Growth	2.2%	2.3%	2.3%	1.9%	2.0%	2.0%	2.0%	2.6%
Nonfarm Business–Productivity Growth	-0.2%*	3.1%	-0.2%	-0.6%	-1.7%	2.0%	3.1%	-0.8%
GDP Growth	1.9%	3.5%	1.4%	0.8%	0.9%	2.0%	2.6%	2.0%
Manufacturing Capacity Utilization	74.8%	74.8%	74.9%	75.3%	75.4%	75.6%	75.5%	75.5%
Consumer Sentiment Index (1966=100)	93.2	90.3	92.4	91.5	91.3	90.8	94.2	95.5

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

## **Friends Mattered**

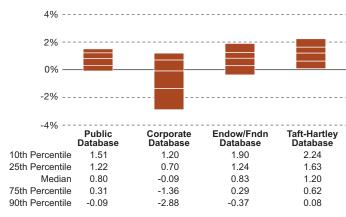
## FUND SPONSOR | Kitty Lin

The surprising election results in the U.S.—and the unsurprising December interest rate hike—spurred a significant divergence in U.S. securities markets. Despite some predictions otherwise, U.S. stocks caught fire with the election of what investors saw as a pro-business president who will lower taxes and cut regulations. U.S. fixed income markets, on the other hand, were sharply lower as they prepared for higher interest rates in the future.

These events had a significant impact on the results of institutional funds tracked by Callan, as all types experienced weaker performance compared to the previous quarter. According to Callan's database, the median return for all fund types was +0.65% in the fourth quarter, compared to +3.44% in the third. But how funds did depended on how well they chose their "friends" in the markets. Corporate plans performed the worst with a -0.09% return and Taft-Hartley plans the best at +1.20%.

Taft-Hartley plans saw better results because they had higher allocations to U.S. equity than other plan types, and the lowest among all types to non-U.S. equity. The **S&P 500 Index** jumped 3.82% for the quarter, while the **MSCI ACWI ex USA Index** dropped 1.25%. Although non-U.S. equities helped performance in the third quarter, major upcoming elections in Europe and Asia may have contributed to the shift in sentiment, contributing to the lackluster performance by stocks in the fourth quarter.

## Callan Fund Sponsor Returns for the Quarter



Source: Callan

On the other end of the spectrum, the weak performance by corporate plans may have stemmed from their higher allocations to U.S. fixed income. While Taft-Hartley plans had an average of 25% of their portfolios allocated to U.S. fixed income, corporate plans had an average of 40%, and the lowest allocation to U.S. equity among the types of plans Callan tracks. The **Bloomberg Barclays U.S. Aggregate Index** was off 2.98% for the quarter, whereas the **Russell 2000 Index** jumped 8.83% and the **Russell 1000 Index** rose 3.83%. Although corporate plans had a tough fourth quarter, they topped all other institutional funds in the past year with a +7.88% return. In addition to their solid

## Callan Database Median Returns\* for Periods ended December 31, 2016

Fund Sponsor	Quarter	YTD	Year	3 Years	5 Years	10 Years	15 Years
Public Funds	0.80	7.49	7.49	4.62	8.32	5.25	6.34
Corporate Funds	-0.09	7.88	7.88	4.70	8.02	5.36	6.37
Endowments/Foundations	0.83	7.09	7.09	3.59	7.84	4.94	6.13
Taft-Hartley	1.20	7.81	7.81	5.26	8.87	5.23	6.01

<sup>\*</sup>Returns less than one year are not annualized.

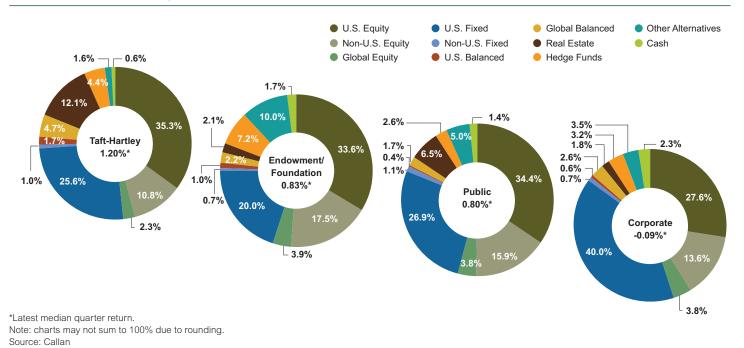
Source: Callan. Callan's database includes the following groups: public defined benefit, corporate defined benefit, endowments/foundations, and Taft-Hartley plans. Approximately 10% to 15% of the database constituents are Callan's clients. All database group returns presented gross of fees. Past performance 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.

#### FUND SPONSOR (Continued)

performance this quarter, Taft-Hartley plans have performed well over the past one, three, and five years compared to other institutional funds.

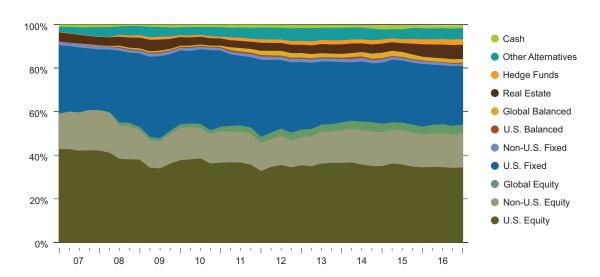
By size, small funds led during the fourth quarter with a median return of +0.72% while large funds had the lowest return at +0.56%. On the other hand, large funds performed the best when looking at funds in the 10th percentile, up 1.82%.

## **Callan Fund Sponsor Average Asset Allocation**



#### Callan Public Fund Database Average Asset Allocation

(10 Years)



Source: Callan. Callan's database includes the following groups: public defined benefit, corporate defined benefit, endowments/foundations, 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.

## **Election Rally**

## U.S. EQUITY | Lauren Mathias, CFA

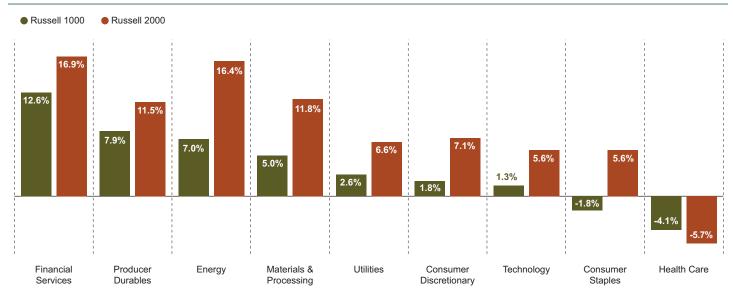
The **S&P 500 Index** notched a +3.82% return for the fourth quarter after reaching an all-time high (2,239) just days before the end of 2016. Even more impressive was the return from small-capitalization companies (**Russell 2000 Index**: +8.83%), as was the divergence between value and growth across the size spectrum (**Russell 1000 Value Index**: +6.68% vs. **Russell 1000 Growth Index**: +1.01%; **Russell 2000 Value Index**: +14.07% vs. **Russell 2000 Growth Index**: +3.57%).

The market in the fourth quarter was trumped by politics as the incoming administration promised to lower personal and corporate income taxes, decrease business and environmental regulation, and increase infrastructure spending. Investors appeared to approve; November saw the highest monthly return of the quarter (+3.70%). Other tailwinds furthered the frenzy, including upwardly revised third-quarter GDP (to +3.5%), subdued initial jobless claims, unemployment at the lowest level in nine years (4.6%), average wage growth of 2.9% in December,

and a surging U.S. dollar; home and automobile prices hit all-time highs, as did consumer confidence. In light of the progress, the Fed Funds rate was increased in December to a range of 0.50% to 0.75%. There are still pockets of uncertainty, however; across the pond the European Central Bank continued quantitative easing and back at home a Trump government could mean higher debt and subsequently inflation. Sentiment is nonetheless revved up, at least for now.

U.S. equity was the preferred market globally; small cap particularly benefited from Trump-fueled enthusiasm. Micro and small capitalization companies outpaced mid and large cap stocks (Russell Microcap Index: +10.05%, Russell 2000 Index: +8.83%, Russell Midcap Index: +3.21%, and Russell 1000 Index: +3.83%). Value regained its lead over growth in all capitalizations; the dispersion in style returns was broad across market capitalizations, with the widest (1,050 bps) in small cap (Russell 2000 Value minus Russell 2000 Growth)—the most since the technology bubble burst in 2001.

## **Economic Sector Quarterly Performance**



Source: Russell Investment Group

Note: As of the fourth quarter of 2015, the Capital Market Review reports sector-specific returns using the Russell Global Sectors (RGS) classification system rather than the Global Industry Classification Standard (GICS) system. RGS uses a three-tier classification system containing nine sectors; GICS uses a four-tier system containing 11 sectors.

#### U.S. EQUITY (Continued)

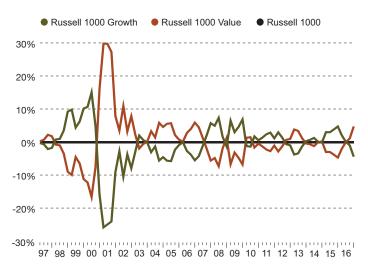
Sector performance reflected the style shift; the best-performing sectors in the S&P 500 during the quarter were value-oriented, including Financials (+21.10%), Energy (+7.28%), and Materials (+4.70%). Within Financials, banks did especially well, benefiting from both an increase in interest rates and talk of deregulation. The Organization of Petroleum Exporting Countries (OPEC) agreed on oil production cuts in the quarter, boosting Energy stocks. In general, investors preferred companies with lower leverage and higher operating margins and return on equity. The growth-oriented, momentum areas of the market declined, including Health Care (-4.00%) and Consumer

Staples (-2.02%). The new Real Estate sector, representing 2.9% of the S&P 500, finished the quarter down 4.41% as these investments tend to move in the opposite direction of interest rates.

U.S. equity valuations were elevated; the S&P 500 Index Forward P/E was 16.9x at the end of the year versus the 25-year average of 15.9x. In this environment active managers were challenged; outflows from this group have totaled over \$1 trillion since 2005. However, a future with more volatility, lower returns, and higher interest rates should favor active management.

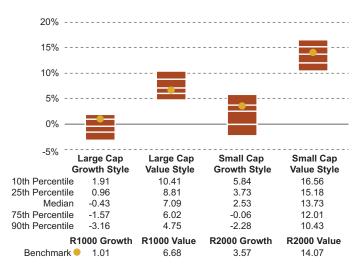
## **Rolling One-Year Relative Returns**

(vs. Russell 1000)



Source: Russell Investment Group

## **Callan Style Group Quarterly Returns**



Sources: Callan, Russell Investment Group

#### U.S. Equity Index Characteristics as of December 31, 2016

	S&P 500	Rus 3000	Rus 1000	Rus Midcap	Rus 2500	Rus 2000
Number of Issues	505	2,972	994	793	2,473	1,978
Wtd Avg Mkt Cap (\$bn)	139.0	115.8	125.6	13.0	4.2	2.1
Price/Book Ratio	2.8	2.7	2.7	2.4	2.2	2.1
Forward P/E Ratio	17.1	17.6	17.4	18.9	20.0	21.1
Dividend Yield	2.1%	2.0%	2.0%	1.7%	1.5%	1.4%
5-Yr Earnings (forecasted)	12.3%	12.3%	12.2%	10.9%	11.8%	12.8%

Sources: Russell Investment Group, Standard & Poor's.

## U.S. EQUITY (Continued)

Callan Style Median and Index Returns\* for Periods ended December 31, 2016

Large Cap Equity Quarter YTD Year 3 Years 5 Years 10 Years	
Large Cap Core Style 3.83 10.40 10.40 8.30 14.44 7.22	7.26
Russell 3000 4.21 12.74 12.74 8.43 14.67 7.07	7.11
Russell 1000 3.83 12.05 12.05 8.59 14.69 7.08	7.00
S&P 500 3.82 11.96 11.96 8.87 14.66 6.95	6.69
Large Cap Growth Style -0.43 3.42 3.42 7.31 13.98 8.18	6.55
Russell 1000 Growth 1.01 7.08 7.08 8.55 14.50 8.33	6.42
Large Cap Value Style 7.09 15.25 15.25 8.28 14.69 6.51	8.11
Russell 1000 Value 6.68 17.34 17.34 8.59 14.8 5.72	7.41
Mid Cap Equity Quarter YTD Year 3 Years 5 Years 10 Years	15 Years
Mid Cap Core Style 5.47 14.48 14.48 8.53 15.49 8.83	10.13
Russell Midcap 3.21 13.80 13.80 7.92 14.72 7.86	9.51
Mid Cap Growth Style 0.30 4.23 4.23 4.36 12.33 8.09	8.30
Russell Midcap Growth 0.46 7.33 7.33 6.23 13.51 7.83	7.96
Mid Cap Value Style 6.55 17.10 17.10 8.26 15.03 8.41	10.45
Russell Midcap Value 5.52 20.00 20.00 9.45 15.70 7.59	10.28
Small Cap Equity Quarter YTD Year 3 Years 5 Years 10 Years	15 Years
Small Cap Core Style 9.76 20.58 20.58 8.53 16.32 8.47	10.60
Russell 2000 8.83 21.31 21.31 6.74 14.46 7.07	8.49
Small Cap Growth Style 2.53 8.63 8.63 3.44 13.40 8.62	8.54
Russell 2000 Growth 3.57 11.32 11.32 5.05 13.74 7.76	7.48
Small Cap Value Style 13.73 27.75 27.75 9.13 16.43 8.61	11.17
Russell 2000 Value 14.07 31.74 31.74 8.31 15.07 6.26	9.22
Smid Cap Equity Quarter YTD Year 3 Years 5 Years 10 Years	15 Years
Smid Cap Core Style 5.56 16.00 16.00 6.84 15.17 9.47	_
Russell 2500 6.12 17.59 17.59 6.93 14.54 7.69	9.17
Smid Cap Growth Style 1.81 7.70 7.70 3.95 13.11 8.95	8.91
Russell 2500 Growth 2.60 9.73 9.73 5.45 13.88 8.24	8.03
Smid Cap Value Style 10.12 22.16 22.16 7.93 14.78 8.59	10.96
Russell 2500 Value 9.34 25.20 25.20 8.22 15.04 6.94	9.72
Russell 3000 Sectors Quarter YTD Year 3 Years 5 Years 10 Years	15 Years
Consumer Discretionary 2.22 6.85 6.85 6.90 16.75 10.79	_
Consumer Staples -1.57 5.79 5.79 10.14 13.53 10.79	_
Energy 7.31 26.29 26.29 -4.45 2.64 3.40	_
Financial Services 13.04 17.96 17.96 10.65 18.18 1.41	_
Health Care -4.22 -3.33 -3.33 9.10 17.25 10.15	_
Materials & Processing 5.95 23.09 23.09 5.65 11.94 6.42	_
Producer Durables 8.23 20.13 20.13 8.07 15.81 7.44	_
Technology 1.55 14.82 14.82 12.56 15.52 9.81	
Utilities 2.87 20.49 20.49 11.26 11.34 6.41	_

<sup>\*</sup>Returns less than one year are not annualized.

Sources: Callan, Russell Investment Group, Standard & Poor's.

## **A Depressing Dollar**

#### NON-U.S. EQUITY | Irina Sushch

During the final quarter of 2016, foreign developed and emerging markets floundered in U.S. dollar terms despite hearty local returns. Donald Trump's election drove U.S. stocks to record highs, as investors reacted positively to his business-friendly stances on taxes, trade, and regulations. The U.S. dollar hit a multi-year high versus the euro and the yen and appreciated roughly 7% compared to a basket of currencies.

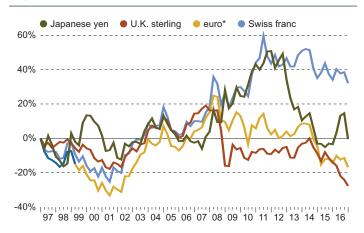
That broad-based dollar strength detracted from overseas returns for U.S. investors. The **MSCI ACWI ex USA Index** was down 1.25% for the quarter (but up 4.93% in local currency). As in the previous quarter, the defensive-oriented sectors dragged down returns (Consumer Staples: -10.09%, Health Care: -8.08%, REITs: -7.90%, Utilities: -7.19%). The interest ratesensitive sectors helped limit the damage (Energy: +8.32%, Financials: +6.84%).

In dollar-denominated results, emerging markets (MSCI Emerging Markets Index: -4.16%) trailed their developed peers (MSCI World ex USA Index: -0.36%, MSCI EAFE Index: -0.71%). The MSCI ACWI ex USA Value Index (+3.29%) fared much better than the MSCI ACWI ex USA Growth Index (-5.72%). Small cap stocks joined growth and emerging market stocks at the bottom of the barrel (MSCI ACWI ex USA Small Cap Index: -3.52%). Despite multiple headwinds, the MSCI ACWI ex USA Index ended the year up 4.50%.

The European Central Bank announced that it would extend its bond purchase program, although it plans to lower investments from €80 billion to €60 billion per month. The unemployment rate in the euro zone declined to 9.8%, the lowest since July 2009. Consumer prices ticked up 0.6% year-over-year in November, and GDP was on track to increase at a 0.4% to 0.5% pace from 0.3% in the third quarter, based on early indications ahead of the release of the official figures in early 2017. Against this backdrop, the **MSCI Europe Index** rose 5.44% in the fourth quarter and 7.23% during the year for local investors; however, in U.S. dollar terms, the Index was essentially flat for the quarter

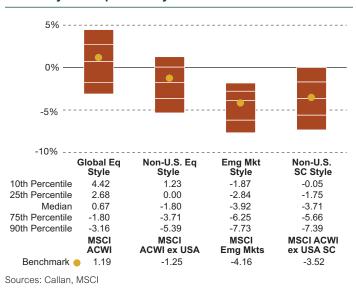
## **Major Currencies' Cumulative Returns**

(vs. U.S. Dollar)



<sup>\*</sup> German mark returns before 1Q99 Source: MSCI

## **Callan Style Group Quarterly Returns**



and year (-0.40% for both periods). Italy (+10.75%) led the pack during the quarter, while Belgium (-11.80%) brought up the rear. Across the euro zone, economically sensitive Financial (+11.45%) and Energy (+11.16%) stocks posted healthy returns, while defensively oriented REIT (-9.96%) and Utility (-9.40%) stocks faltered.

#### NON-U.S. EQUITY (Continued)

In Southeast Asia and the Pacific, Japan's stimulus measures boosted returns for local investors (+14.99%). But the dollar hit a 14-year high versus the yen, hammering returns for U.S. investors (-0.16%). New Zealand had a rough quarter (-10.88%), although it closed out the year up 18.37%. Australia was the only country in the region to end the quarter in the black, up 0.69% (and +11.45% for the year), buoyed by rebounding commodity prices and higher interest rates. The MSCI Pacific Index slumped 1.03% for the quarter, but rose for the year (+4.18%).

Despite the MSCI Emerging Markets Index's decline during the quarter, it jumped a robust 11.19% during 2016, buttressed by strengthening commodity prices as well as reform efforts and accommodative monetary policies in several countries. Russia, up 18.56% in the quarter and 54.82% for the year, and Brazil, up 2.05% in the quarter and 66.24% for the year, benefited richly from rising prices for oil and industrial commodities. China fell

## **Quarterly Returns for Non-U.S. Developed Countries**

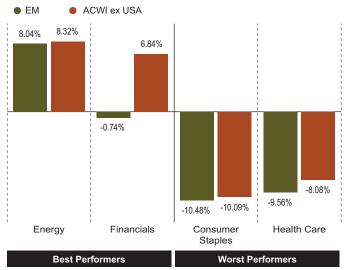
Equity Index							
Country	(US\$)	(Local Currency)	Local Currency	Weight*			
Australia	0.69%	6.41%	-5.38%	5.20%			
Austria	6.51%	13.48%	-6.14%	0.14%			
Belgium	-11.80%	-6.03%	-6.14%	0.83%			
Canada	3.26%	5.36%	-2.00%	7.05%			
Denmark	-8.74%	-2.90%	-6.01%	1.16%			
Finland	-4.40%	1.86%	-6.14%	0.68%			
France	2.93%	9.67%	-6.14%	7.16%			
Germany	1.45%	8.10%	-6.14%	6.53%			
Hong Kong	-8.97%	-9.00%	0.04%	2.28%			
Ireland	0.14%	6.69%	-6.14%	0.33%			
Israel	-11.32%	-9.61%	-2.51%	0.48%			
Italy	10.75%	18.01%	-6.14%	1.46%			
Japan	-0.16%	14.99%	-13.18%	16.95%			
Netherlands	-2.10%	3.72%	-6.14%	2.33%			
New Zealand	-10.88%	-7.06%	-4.11%	0.13%			
Norway	2.40%	10.29%	-7.15%	0.47%			
Portugal	-2.92%	3.44%	-6.14%	0.11%			
Singapore	-3.64%	2.02%	-5.62%	0.87%			
Spain	2.24%	8.94%	-6.14%	2.21%			
Sweden	-0.84%	5.15%	-5.69%	2.00%			
Switzerland	-3.86%	0.80%	-4.62%	6.08%			
U.K.	-0.90%	4.19%	-4.88%	12.89%			

\*Weight in the MSCI ACWI ex USA Index

Sources: MSCI, Russell Investment Group, Standard & Poor's.

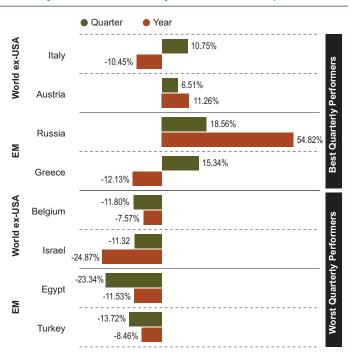
during the quarter (-7.07%) but ended the year essentially flat (+0.90%). Most emerging Asian markets gained ground during the year (MSCI EM Asia: +6.14%), despite a rough fourth quarter (-6.06%), driven by economic reform and technology stocks. Mexico dropped 7.88% for the quarter and 9.16% for the year, hurt by peso weakness and Trump's election.

#### **Quarterly Returns: Strong and Struggling Sectors**



Source: MSCI

## **Quarterly and Annual Country Performance Snapshot**



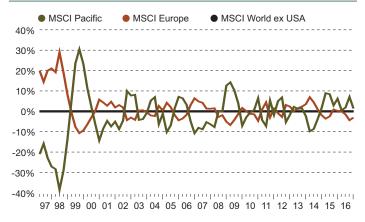
Source: MSCI

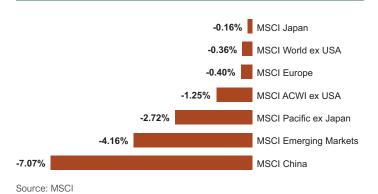
## **Rolling One-year Relative Returns**

(vs. MSCI World ex USA)

## **Regional Quarterly Performance**

(U.S. Dollar)





Source: MSCI

## Callan Style Median and Index Returns\* for Periods ended December 31, 2016

Global Equity	Quarter	YTD	Year	3 Years	5 Years	10 Years	15 Years
Global Equity Style	0.67	6.41	6.41	3.53	10.74	4.86	7.11
MSCI World	1.86	7.51	7.51	3.80	10.41	3.83	5.83
MSCI ACWI	1.19	7.86	7.86	3.13	9.36	3.56	5.92
Non-U.S. Equity	Quarter	YTD	Year	3 Years	5 Years	10 Years	15 Years
Non-U.S. Equity Style	-1.80	1.47	1.47	-0.55	7.39	2.01	7.00
MSCI World ex USA	-0.36	2.75	2.75	-1.59	6.07	0.86	5.45
MSCI ACWI ex USA	-1.25	4.50	4.50	-1.78	5.00	0.96	5.87
Regional Equity	Quarter	YTD	Year	3 Years	5 Years	10 Years	15 Years
MSCI China	-7.07	0.90	0.90	0.14	5.02	3.76	11.62
MSCI Europe ex UK	-0.20	-0.56	-0.56	-2.62	7.41	0.36	5.22
MSCI Japan	-0.16	2.38	2.38	2.49	8.17	0.54	4.69
MSCI Japan (local)	14.99	-0.74	-0.74	6.11	17.56	0.32	3.88
MSCI Pacific	-1.03	4.18	4.18	1.43	7.15	1.62	6.05
MSCI Pacific (local)	10.16	2.26	2.26	5.34	14.46	1.24	4.70
MSCI Pacific ex Japan	-2.72	7.85	7.85	-0.59	5.24	3.94	9.45
MSCI Pacific ex Japan (local)	1.23	8.34	8.34	4.28	10.08	4.25	7.43
MSCI United Kingdom	-0.90	-0.10	-0.10	-4.40	3.97	0.32	4.51
MSCI United Kingdom (local)	4.19	19.16	19.16	5.41	8.85	5.05	5.66
Emerging/Frontier Markets	Quarter	YTD	Year	3 Years	5 Years	10 Years	15 Years
Emerging Market Style	-3.92	11.66	11.66	-1.25	3.09	3.06	10.94
MSCI Emerging Markets	-4.16	11.19	11.19	-2.55	1.28	1.84	9.50
MSCI Emerging Markets (local)	-1.44	9.69	9.69	2.83	5.64	4.35	10.02
MSCI Frontier Markets	0.49	2.66	2.66	-2.10	5.16	-0.62	_
Global/Non-U.S. Small Cap Equity	Quarter	YTD	Year	3 Years	5 Years	10 Years	15 Years
Non-U.S. Small Cap Style	-3.71	-0.17	-0.17	2.35	11.72	4.69	11.27
MSCI World Small Cap	2.74	12.71	12.71	4.62	12.21	5.59	9.40
MSCI ACWI Small Cap	1.76	11.59	11.59	3.97	11.29	5.66	9.66
MSCI World ex USA Small Cap	-2.74	4.32	4.32	1.36	8.96	2.69	9.26
MSCI ACWI ex USA Small Cap	-3.52	3.91	3.91	0.76	7.74	2.89	9.64

\*Returns less than one year are not annualized.

Sources: Callan, MSCI.

## **Treacherous Treasuries**

## U.S. FIXED INCOME | Rufash Lama

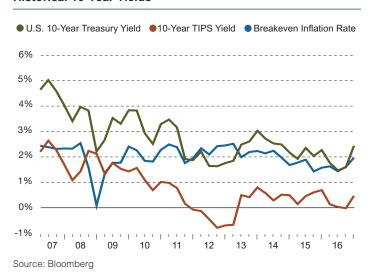
The U.S. bond market experienced a tumultuous fourth quarter, triggered by the unexpected election results and strong economic data, among other factors. The Bloomberg Barclays U.S. Aggregate Bond Index dropped 2.98%, while the Bloomberg Barclays High Yield Index rose 1.75%. But the year ended on an upbeat note, with the Aggregate up 2.65% and the High Yield Index delivering equity-like returns at 17.13%.

The yield curve rose following the presidential election and an upward revision for third-quarter GDP to 3.5%, the highest quarterly increase in two years. Yields rose across the maturity spectrum. The benchmark 10-year Treasury note showed the biggest change, ending the quarter at 2.45% (an increase of 85 bps). Yields on the 5-year and 30-year finished at 1.93% and 3.07%, respectively.

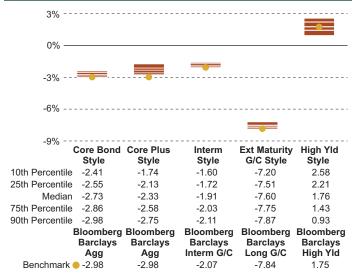
Markets entered 2016 expecting four rate hikes, but the Fed increased the Federal Funds rate only once, by 25 bps to a range of 0.50% to 0.75% in December. As a result of rising yields, returns across the broad fixed income sector were negative for the quarter. Tax-exempt municipal bonds and Treasuries dropped 3.62% and 3.84%, respectively. On a duration-adjusted basis, Treasuries underperformed credit securities by 156 bps. Long Treasuries were hit particularly hard, falling 11.67%.

Spreads tightened during the quarter. Investment-grade corporate spreads over comparable Treasuries tightened 42 bps and ended the year at 123 bps—a stark contrast to the first half of the year, in which spreads had widened up to 214 bps in February.

#### **Historical 10-Year Yields**

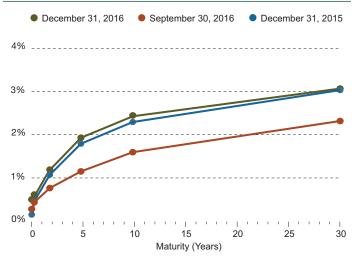


## Callan Style Group Quarterly Returns



Sources: Bloomberg Barclays, Callan

## **U.S. Treasury Yield Curves**



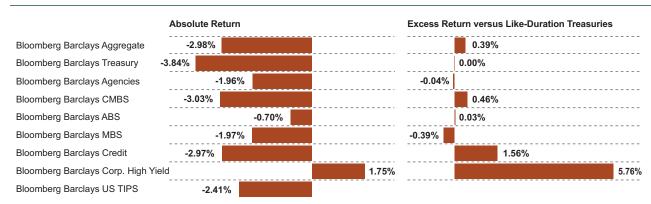
Source: Bloomberg

#### U.S. FIXED INCOME (Continued)

Corporates declined 2.8% for the quarter, but generated a strong return (+6.11%) for the year. On a duration-adjusted basis, long credit outperformed intermediate credit by 330 bps. Despite a slow start, high yield corporates made a powerful comeback to end the year on a strong note; they delivered 407 bps of excess returns for the quarter. Mortgage-backed securities (MBS), plagued by rate volatility and elevated prepayment concerns, fell 1.97% for the guarter (but were up 1.67% for the year) and underperformed duration-matched Treasuries by 39 bps. Asset-backed securities (ABS) were off 0.70% for the quarter but up 2.03% for the year. Commercial mortgage-backed securities (CMBS) experienced a similar divergence, falling 3.03% in the guarter but rising 3.32% over the year.

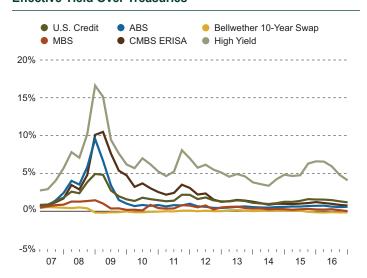
In 2016, U.S. corporations set a milestone with new high yield and investment-grade issuances that totaled \$1.5 trillion. The municipal bond market also set a record with new offerings totaling \$445 billion.

## **Fixed Income Index Quarterly Returns**



Source: Bloomberg Barclays

## **Effective Yield Over Treasuries**



Source: Bloomberg Barclays

## U.S. Fixed Income Index Characteristics as of Dec. 31, 2016

Bloomberg Barclays Indices	Yield to Worst	Mod Adj Duration	Avg Maturity
Bloomberg Barclays Aggregate	2.61	5.89	8.19
Bloomberg Barclays Universal	2.99	5.69	7.97
Bloomberg Barclays Gov/Credit	2.51	6.45	8.74
1-3 Year	1.45	1.92	1.98
Intermediate	2.11	4.05	4.39
Long-Term	3.95	14.97	24.18
Bloomberg Barclays Long Credit	4.55	13.57	23.77
Bloomberg Barclays Corp High Yield	6.12	4.11	6.30
Bloomberg Barclays TIPS	2.20	4.87	8.25
Bloomberg Barclays Muni Bond 1-5 Year	1.76	2.69	3.17
Bloomberg Barclays Muni 1-10 Year	2.11	4.04	5.79
Bloomberg Barclays Municipal	2.65	6.24	12.82

Source: Bloomberg Barclays

## U.S. FIXED INCOME (Continued)

## Callan Style Median and Index Returns\* for Periods ended December 31, 2016

Broad Fixed Income	Quarter	YTD	Year	3 Years	5 Years	10 Years	15 Years
Core Bond Style	-2.73	3.13	3.13	3.39	2.86	4.90	5.05
Core Bond Plus Style	-2.33	4.67	4.67	3.54	3.72	5.35	5.67
Bloomberg Barclays Aggregate	-2.98	2.65	2.65	3.03	2.23	4.34	4.58
Bloomberg Barclays Universal	-2.61	3.91	3.91	3.27	2.78	4.57	4.92
Long-Term	Quarter	YTD	Year	3 Years	5 Years	10 Years	15 Years
Extended Maturity Credit Style	-5.33	10.77	10.77	7.47	6.09	7.27	_
Bloomberg Barclays Long Credit	-5.40	10.22	10.22	6.98	5.20	6.87	7.15
Extended Maturity Gov/Credit Style	-7.60	7.28	7.28	7.33	4.64	7.45	7.46
Bloomberg Barclays Long Gov/Credit	-7.84	6.67	6.67	7.16	4.07	6.85	7.03
Intermediate-Term	Quarter	YTD	Year	3 Years	5 Years	10 Years	15 Years
Intermediate Style	-1.91	2.33	2.33	2.31	2.27	4.27	4.50
Bloomberg Barclays Interm Gov/Credit	-2.07	2.08	2.08	2.09	1.85	3.84	4.07
Short-Term	Quarter	YTD	Year	3 Years	5 Years	10 Years	15 Years
Defensive Style	-0.33	1.54	1.54	1.19	1.29	2.74	2.98
Bloomberg Barclays Gov/Credit 1-3 Yr	-0.39	1.28	1.28	0.90	0.92	2.44	2.72
Bank Loans	Quarter	YTD	Year	3 Years	5 Years	10 Years	15 Years
Bank Loan Style	2.13	9.38	9.38	3.90	5.43	4.89	5.17
Credit Suisse Leveraged Loans	2.25	9.88	9.88	3.76	5.21	4.26	4.87
High Yield	Quarter	YTD	Year	3 Years	5 Years	10 Years	15 Years
High Yield High Yield Style	Quarter 1.76	YTD 14.74	Year 14.74	3 Years 4.61	5 Years 7.36	10 Years 7.42	15 Years 8.26
	· · · · · · · · · · · · · · · · · · ·						
High Yield Style	1.76	14.74	14.74	4.61	7.36	7.42	8.26
High Yield Style Bloomberg Barclays Corp High Yield	<b>1.76</b> 1.75	<b>14.74</b> 17.13	<b>14.74</b> 17.13	<b>4.61</b> 4.66	<b>7.36</b> 7.36	<b>7.42</b> 7.45	<b>8.26</b> 8.35
High Yield Style Bloomberg Barclays Corp High Yield Unconstrained	1.76 1.75 Quarter	14.74 17.13 YTD	14.74 17.13 Year	4.61 4.66 3 Years	7.36 7.36 5 Years	7.42 7.45 10 Years	8.26 8.35 15 Years
High Yield Style Bloomberg Barclays Corp High Yield Unconstrained Unconstrained Fixed Style	1.76 1.75 Quarter 0.79	14.74 17.13 YTD 5.07	14.74 17.13 Year 5.07	4.61 4.66 3 Years 2.34	7.36 7.36 5 Years 3.89	7.42 7.45 10 Years 4.59	8.26 8.35 15 Years 6.33
High Yield Style Bloomberg Barclays Corp High Yield Unconstrained Unconstrained Fixed Style 90 Day T-Bill + 3%	1.76 1.75 Quarter 0.79 0.82	14.74 17.13 YTD 5.07 3.33	14.74 17.13 Year 5.07 3.33	4.61 4.66 3 Years 2.34 3.14	7.36 7.36 5 Years 3.89 3.12	7.42 7.45 10 Years 4.59 3.80	8.26 8.35 15 Years 6.33 4.34
High Yield Style Bloomberg Barclays Corp High Yield Unconstrained Unconstrained Fixed Style 90 Day T-Bill + 3% Stable Value	1.76 1.75 Quarter 0.79 0.82 Quarter	14.74 17.13 YTD 5.07 3.33 YTD	14.74 17.13 Year 5.07 3.33 Year	4.61 4.66 3 Years 2.34 3.14 3 Years	7.36 7.36 5 Years 3.89 3.12 5 Years	7.42 7.45 10 Years 4.59 3.80 10 Years	8.26 8.35 15 Years 6.33 4.34 15 Years
High Yield Style Bloomberg Barclays Corp High Yield Unconstrained Unconstrained Fixed Style 90 Day T-Bill + 3% Stable Value Stable Value Style	1.76 1.75 Quarter 0.79 0.82 Quarter 0.48	14.74 17.13 YTD 5.07 3.33 YTD 1.87	14.74 17.13 Year 5.07 3.33 Year 1.87	4.61 4.66 3 Years 2.34 3.14 3 Years 1.78	7.36 7.36 5 Years 3.89 3.12 5 Years 1.89	7.42 7.45 10 Years 4.59 3.80 10 Years 2.76	8.26 8.35 15 Years 6.33 4.34 15 Years
High Yield Style Bloomberg Barclays Corp High Yield Unconstrained Unconstrained Fixed Style 90 Day T-Bill + 3% Stable Value Stable Value Style iMoneyNet Mutual Fund Avg	1.76 1.75 Quarter 0.79 0.82 Quarter 0.48 0.05	14.74 17.13 YTD 5.07 3.33 YTD 1.87 0.13	14.74 17.13 Year 5.07 3.33 Year 1.87 0.13	4.61 4.66 3 Years 2.34 3.14 3 Years 1.78 0.05	7.36 7.36 5 Years 3.89 3.12 5 Years 1.89 0.04	7.42 7.45 10 Years 4.59 3.80 10 Years 2.76 0.71	8.26 8.35 15 Years 6.33 4.34 15 Years 3.44
High Yield Style Bloomberg Barclays Corp High Yield Unconstrained Unconstrained Fixed Style 90 Day T-Bill + 3% Stable Value Stable Value Style iMoneyNet Mutual Fund Avg TIPS	1.76 1.75 Quarter 0.79 0.82 Quarter 0.48 0.05 Quarter	14.74 17.13 YTD 5.07 3.33 YTD 1.87 0.13 YTD	14.74 17.13 Year 5.07 3.33 Year 1.87 0.13 Year	4.61 4.66 3 Years 2.34 3.14 3 Years 1.78 0.05 3 Years	7.36 7.36 5 Years 3.89 3.12 5 Years 1.89 0.04 5 Years	7.42 7.45 10 Years 4.59 3.80 10 Years 2.76 0.71 10 Years	8.26 8.35 15 Years 6.33 4.34 15 Years 3.44
High Yield Style Bloomberg Barclays Corp High Yield Unconstrained Unconstrained Fixed Style 90 Day T-Bill + 3% Stable Value Stable Value Style iMoneyNet Mutual Fund Avg TIPS Inflation-Linked Style	1.76 1.75 Quarter 0.79 0.82 Quarter 0.48 0.05 Quarter -2.34	14.74 17.13 YTD 5.07 3.33 YTD 1.87 0.13 YTD 4.82	14.74 17.13 Year 5.07 3.33 Year 1.87 0.13 Year 4.82	4.61 4.66 3 Years 2.34 3.14 3 Years 1.78 0.05 3 Years 2.27	7.36 7.36 5 Years 3.89 3.12 5 Years 1.89 0.04 5 Years 0.93	7.42 7.45 10 Years 4.59 3.80 10 Years 2.76 0.71 10 Years 4.44	8.26 8.35 15 Years 6.33 4.34 15 Years 3.44 - 15 Years 5.39
High Yield Style Bloomberg Barclays Corp High Yield Unconstrained Unconstrained Fixed Style 90 Day T-Bill + 3% Stable Value Stable Value Style iMoneyNet Mutual Fund Avg TIPS Inflation-Linked Style Bloomberg Barclays TIPS	1.76 1.75 Quarter 0.79 0.82 Quarter 0.48 0.05 Quarter -2.34 -2.41	14.74 17.13 YTD 5.07 3.33 YTD 1.87 0.13 YTD 4.82 4.68	14.74 17.13 Year 5.07 3.33 Year 1.87 0.13 Year 4.82 4.68	4.61 4.66 3 Years 2.34 3.14 3 Years 1.78 0.05 3 Years 2.27 2.26	7.36 7.36 5 Years 3.89 3.12 5 Years 1.89 0.04 5 Years 0.93 0.89	7.42 7.45 10 Years 4.59 3.80 10 Years 2.76 0.71 10 Years 4.44 4.36	8.26 8.35 15 Years 6.33 4.34 15 Years 3.44 - 15 Years 5.39 5.30
High Yield Style Bloomberg Barclays Corp High Yield Unconstrained Unconstrained Fixed Style 90 Day T-Bill + 3% Stable Value Stable Value Style iMoneyNet Mutual Fund Avg TIPS Inflation-Linked Style Bloomberg Barclays TIPS Municipal	1.76 1.75 Quarter 0.79 0.82 Quarter 0.48 0.05 Quarter -2.34 -2.41 Quarter	14.74 17.13 YTD 5.07 3.33 YTD 1.87 0.13 YTD 4.82 4.68 YTD	14.74 17.13 Year 5.07 3.33 Year 1.87 0.13 Year 4.82 4.68 Year	4.61 4.66 3 Years 2.34 3.14 3 Years 1.78 0.05 3 Years 2.27 2.26 3 Years	7.36 7.36 7.36 5 Years 3.89 3.12 5 Years 1.89 0.04 5 Years 0.93 0.89 5 Years	7.42 7.45 10 Years 4.59 3.80 10 Years 2.76 0.71 10 Years 4.44 4.36 10 Years	8.26 8.35 15 Years 6.33 4.34 15 Years 3.44 - 15 Years 5.39 5.30 15 Years
High Yield Style Bloomberg Barclays Corp High Yield Unconstrained Unconstrained Fixed Style 90 Day T-Bill + 3% Stable Value Stable Value Style iMoneyNet Mutual Fund Avg TIPS Inflation-Linked Style Bloomberg Barclays TIPS Municipal Short Municipal Style	1.76 1.75 Quarter 0.79 0.82 Quarter 0.48 0.05 Quarter -2.34 -2.41 Quarter	14.74 17.13 YTD 5.07 3.33 YTD 1.87 0.13 YTD 4.82 4.68 YTD -0.10	14.74 17.13 Year 5.07 3.33 Year 1.87 0.13 Year 4.82 4.68 Year -0.10	4.61 4.66 3 Years 2.34 3.14 3 Years 1.78 0.05 3 Years 2.27 2.26 3 Years 0.45	7.36 7.36 7.36 5 Years 3.89 3.12 5 Years 1.89 0.04 5 Years 0.93 0.89 5 Years 0.64	7.42 7.45 10 Years 4.59 3.80 10 Years 2.76 0.71 10 Years 4.44 4.36 10 Years 1.65	8.26 8.35 15 Years 6.33 4.34 15 Years 3.44 - 15 Years 5.39 5.30 15 Years 1.88
High Yield Style  Bloomberg Barclays Corp High Yield  Unconstrained  Unconstrained Fixed Style  90 Day T-Bill + 3%  Stable Value  Stable Value Style  iMoneyNet Mutual Fund Avg  TIPS  Inflation-Linked Style  Bloomberg Barclays TIPS  Municipal  Short Municipal Style  Bloomberg Barclays Municipal 1-5 Yr	1.76 1.75 Quarter 0.79 0.82 Quarter 0.48 0.05 Quarter -2.34 -2.41 Quarter -0.91 -1.36	14.74 17.13 YTD 5.07 3.33 YTD 1.87 0.13 YTD 4.82 4.68 YTD -0.10 0.00	14.74 17.13 Year 5.07 3.33 Year 1.87 0.13 Year 4.82 4.68 Year -0.10 0.00	4.61 4.66 3 Years 2.34 3.14 3 Years 1.78 0.05 3 Years 2.27 2.26 3 Years 0.45 1.08	7.36 7.36 7.36 5 Years 3.89 3.12 5 Years 1.89 0.04 5 Years 0.93 0.89 5 Years 0.64 1.25	7.42 7.45 10 Years 4.59 3.80 10 Years 2.76 0.71 10 Years 4.44 4.36 10 Years 1.65 2.86	8.26 8.35 15 Years 6.33 4.34 15 Years 3.44 - 15 Years 5.39 5.30 15 Years 1.88 2.99
High Yield Style Bloomberg Barclays Corp High Yield Unconstrained Unconstrained Fixed Style 90 Day T-Bill + 3% Stable Value Stable Value Style iMoneyNet Mutual Fund Avg TIPS Inflation-Linked Style Bloomberg Barclays TIPS Municipal Short Municipal Style Bloomberg Barclays Municipal 1-5 Yr Intermediate Municipal Style	1.76 1.75 Quarter 0.79 0.82 Quarter 0.48 0.05 Quarter -2.34 -2.41 Quarter -0.91 -1.36 -3.47	14.74 17.13 YTD 5.07 3.33 YTD 1.87 0.13 YTD 4.82 4.68 YTD -0.10 0.00 -0.29	14.74 17.13 Year 5.07 3.33 Year 1.87 0.13 Year 4.82 4.68 Year -0.10 0.00 -0.29	4.61 4.66 3 Years 2.34 3.14 3 Years 1.78 0.05 3 Years 2.27 2.26 3 Years 0.45 1.08 2.84	7.36 7.36 7.36 5 Years 3.89 3.12 5 Years 1.89 0.04 5 Years 0.93 0.89 5 Years 0.64 1.25 2.35	7.42 7.45 10 Years 4.59 3.80 10 Years 2.76 0.71 10 Years 4.44 4.36 10 Years 1.65 2.86 3.47	8.26 8.35 15 Years 6.33 4.34 15 Years 3.44 - 15 Years 5.39 5.30 15 Years 1.88 2.99 3.77

<sup>\*</sup>Returns for less than one year are not annualized.

Sources: Bloomberg Barclays, Callan, Credit Suisse, Merrill Lynch

## **Big-League Yields**

#### NON-U.S. FIXED INCOME | Kyle Fekete

The U.S. dollar skyrocketed against a trade-weighted basket of currencies on the back of the November U.S. election and higher U.S. interest rates. Investment strategies with foreign currency exposure faced strong headwinds as the Bloomberg Barclays Global Aggregate ex US fell 10.26% (-1.86% on a hedged basis).

Continuing 2016's anti-establishment geopolitical theme, Italians voted against reforms proposed by the government, leading to Italian President Matteo Renzi's resignation. In December, European Central Bank President Mario Draghi announced the extension of its stimulus program out to December 2017; however, the bond buying will be dialed

**Quarterly Returns for Non-U.S. Government Indices** 

Country	Country	Country Debt	Local	\\\a:a\b4*
Country	Debt (\$)		Currency	Weight*
Australia	-9.22%	-4.06%	-5.38%	2.45%
Austria	-8.58%	-2.60%	-6.14%	1.85%
Belgium	-9.47%	-3.54%	-6.14%	3.03%
Canada	-5.79%	-3.87%	-2.00%	2.55%
Denmark	-8.77%	-2.93%	-6.01%	0.77%
Finland	-8.12%	-2.11%	-6.14%	0.72%
France	-9.35%	-3.42%	-6.14%	11.80%
Germany	-8.47%	-2.48%	-6.14%	8.85%
Ireland	-7.81%	-1.77%	-6.14%	0.93%
Italy	-9.24%	-3.30%	-6.14%	11.41%
Japan	-14.72%	-1.78%	-13.18%	33.08%
Malaysia	-10.17%	-2.55%	-7.81%	0.52%
Mexico	-11.18%	-5.46%	-6.06%	0.94%
Netherlands	-8.70%	-2.73%	-6.14%	2.82%
Norway	-8.54%	-1.50%	-7.15%	0.33%
Poland	-10.13%	-1.98%	-8.31%	0.72%
Singapore	-8.91%	-3.49%	-5.62%	0.45%
South Africa	0.72%	0.16%	0.56%	0.64%
Spain	-8.80%	-2.83%	-6.14%	6.61%
Sweden	-7.73%	-2.16%	-5.69%	0.56%
Switzerland	-6.03%	-1.48%	-4.62%	0.29%
U.K.	-8.40%	-3.70%	-4.88%	8.69%

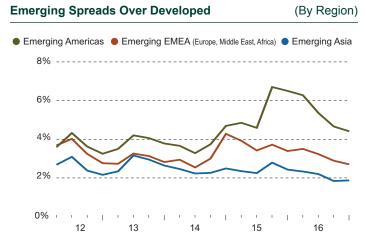
\*Weight in the Citi Non-U.S. World Government Bond Index. Source: Citigroup

back to €60 billion per month, down from €80 billion. The quantitative easing program reached approximately €1.7 trillion in 2016, and should top €2.2 trillion by the end of 2017.

Yields on 10-year German government bonds increased to 0.21%, 224 bps below that of the 10-year Treasury. The U.S./ German 10-year debt spread reached the widest it has been since 1990. The euro declined 6.14% against the dollar.

Ahead of the uncertainty surrounding the Brexit process, the Bank of England (BOE) elected to hold the benchmark rate at 0.25% and maintain the same rate of bond purchasing, saying the sterling's recent appreciation against the euro may curtail inflation. The U.K. 10-year yield jumped 49 bps to 1.24% and the sterling declined 4.9% against the dollar. Changes to Japan's monetary policy were also put on hold as the unemployment rate reached a healthy level and a weakened yen stood poised to boost potential earnings growth. The Bank of Japan upheld its pledge to keep the yield of 10-year Japanese debt near 0%; its yield settled at 0.05%.

Emerging market debt weakened and underperformed developed markets. The local currency-denominated JP Morgan GBI-EM Global Diversified Index fell 6.09%. The USDdenominated JPM EM Global Diversified Index fell 4.02%.

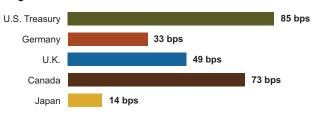


#### NON-U.S. FIXED INCOME (Continued)

#### 10-Year Global Government Bond Yields



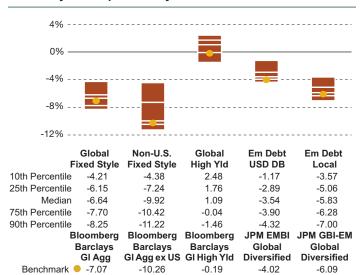
#### Change in 10-Year Yields from 3Q16 to 4Q16



Source: Bloomberg

Turkey and Mexico were among the worst performers in both indices. However, emerging market sovereign debt proved to be one of the strongest asset classes in 2016, gaining roughly 10% in both JP Morgan indices, benefiting from the tailwind of increased commodity prices.

## **Callan Style Group Quarterly Returns**



Sources: Bloomberg Barclays, Callan, JPMorgan Chase

## Callan Style Median and Index Returns\* for Periods ended December 31, 2016

Global Fixed Income	Quarter	YTD	Year	3 Years	5 Years	10 Years	15 Years
Global Fixed Income Style	-6.64	2.23	2.23	0.08	0.69	3.77	5.69
Bloomberg Barclays Global Aggregate	-7.07	2.09	2.09	-0.19	0.21	3.29	4.79
Global Fixed Income Style (hedged)	-2.32	4.37	4.37	4.29	4.17	4.96	5.36
Bloomberg Barclays Global Aggregate (hedged)	-2.34	3.95	3.95	4.15	3.59	4.39	4.55
High Yield	Quarter	YTD	Year	3 Years	5 Years	10 Years	15 Years
Global High Yield Style	1.09	14.82	14.82	3.10	6.43	6.76	9.15
Bloomberg Barclays Global High Yield	-0.19	14.27	14.27	3.60	7.37	7.35	9.18
Non-U.S. Fixed Income	Quarter	YTD	Year	3 Years	5 Years	10 Years	15 Years
Non-U.S. Fixed Income Style	-9.92	2.28	2.28	-1.70	-0.15	3.48	5.70
Bloomberg Barclays Global Aggregate ex US	-10.26	1.49	1.49	-2.59	-1.39	2.44	4.96
Emerging Markets Fixed Income	Quarter	YTD	Year	3 Years	5 Years	10 Years	15 Years
Emerging Debt Style (US\$)	-3.54	12.05	12.05	5.46	5.94	7.28	10.23
JPM EMBI Global Diversified	-4.02	10.15	10.15	6.19	5.91	6.89	9.02
Emerging Debt Style (local)	-5.83	9.97	9.97	-3.77	-0.93	3.64	7.04
JPM GBI-EM Global Diversified	-6.09	9.94	9.94	-4.10	-1.29	3.82	_
Emerging Debt Blend Style	-3.98	10.25	10.25	0.69	2.48	6.50	11.84
JPM EMBI GI Div/JPM GBI-EM GI Div	-5.06	10.24	10.24	1.05	2.36	5.44	_
Emerging Debt Corporate Style	-1.19	11.51	11.51	5.42	6.51	-	-
JPM CEMBI	-1.29	11.11	11.11	5.33	5.90	6.74	7.83

\*Returns less than one year are not annualized. Sources: Bloomberg Barclays, Callan, JPMorgan

## **Rates Trump Fundamentals**

#### REAL ESTATE | Kevin Nagy

The NCREIF Property Index advanced 1.73% during the fourth quarter (1.14% from income and 0.59% from appreciation). This was the lowest return since 2010, eclipsing the third quarter's mark of 1.78%. Appreciation fell for the seventh consecutive quarter.

Industrial (+2.89%) was the best-performing sector for the third guarter in a row and Apartments (+1.67%) and Retail (+1.65%) also posted strong relative returns; Hotels (+0.37%) were the worst performers. The West region posted the strongest results (+2.22%), and the Midwest was the weakest (+1.29%). Transaction volume totaled \$14 billion, the highest on record, a 45% jump over the previous quarter, and a 24% increase over the same period in 2015. Appraisal capitalization rates fell to 4.43%, a new all-time low, undercutting the third quarter's 4.48%. Transaction capitalization rates fell sharply from 6.2% to 5.7% in the fourth guarter, tightening the spread between appraisal and transactional rates to 123 basis points.

Occupancy rates stayed steady at 93.22%, a 15-year high hit in the third quarter. For the second straight quarter Retail and Apartment occupancy rates fell slightly, and Industrial and Office rates increased.

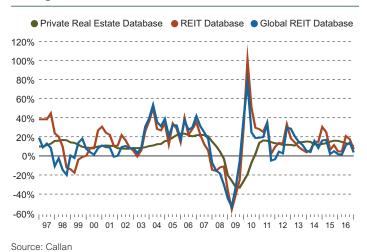
The NCREIF Open End Diversified Core Equity Index rose 1.88% (0.84% from income and 1.04% from appreciation). This marked a 5 bps increase over the third guarter return of 1.83%, which was the lowest for the Index since 2010. Income returns fell slightly, but appreciation bounced back from a five-year low in the third quarter.

Global real estate investment trusts (REITs), tracked by the FTSE EPRA/NAREIT Developed REIT Index (USD), lagged behind their U.S. counterparts and dropped 5.39%. U.S. REITs, as measured by the FTSE NAREIT Equity REITs Index, lost 2.89% for the quarter.

In the U.S., REITs started the quarter with a sharp decline due to an increase in interest rates. Donald Trump's surprise victory in the presidential election sent rates even higher and further punished many REIT sectors, especially those that represent a higher weight in the Index. Health Care (-10.80%) was the worst performer, hammered by the possibility that the incoming Republican administration would repeal the Affordable Care Act. Retail (-10.73%) and Infrastructure (-6.95%) also suffered large losses. The biggest winner for the quarter was the Hotel sector, which skyrocketed 20.39% with the election of Donald Trump, a hotelier. Specialty (+6.67%) and Data Centers (+0.82%) were other strong-performing sectors for the quarter. Politics and interest rates drove some REIT valuations downward, despite generally strong fundamentals.

Political issues also impacted the European market. Fears of a hard Brexit slowed transaction volume in the U.K., despite strong economic data suggesting that the economy was still on track. On the continent, pricing and transactions were weighed down by fears of an Italian banking crisis and uncertainty concerning France's upcoming elections.

#### **Rolling One-Year Returns**



<sup>\*</sup>Index subreturns are calculated separately from index return and may not total.

#### **REAL ESTATE** (Continued)

## **NCREIF Transaction and Appraisal Capitalization Rates**



Source: NCREIF

Note: Transaction capitalization rate is equal weighted.

Commercial mortgage-backed securities (CMBS) issuance for the guarter jumped 31% to \$26.0 billion from the \$19.8 billion in the third quarter. This also represented a 19.3% increase over the fourth quarter of 2015 (\$21.8 billion).

## **NCREIF Capitalization Rates by Property Type**



Source: NCREIF

Note: Capitalization rates are appraisal-based.

## Callan Database Median and Index Returns\* for Periods ended December 31, 2016

Private Real Estate	Quarter	YTD	Year	3 Years	5 Years	10 Years	15 Years
Real Estate Database (net of fees)	1.87	8.34	8.34	11.89	11.89	4.56	7.57
NCREIF Property	1.73	7.97	7.97	11.02	10.91	6.93	9.00
NFI-ODCE (value wtd. net)	1.88	7.79	7.79	11.04	11.16	4.84	7.15
Public Real Estate	Quarter	YTD	Year	3 Years	5 Years	10 Years	15 Years
REIT Database	-2.66	6.87	6.87	13.59	12.26	5.65	11.85
FTSE NAREIT Equity	-2.89	8.52	8.52	13.38	12.01	5.08	10.80
Global Public Real Estate	Quarter	YTD	Year	3 Years	5 Years	10 Years	15 Years
Global REIT Database	-5.11	3.97	3.97	7.26	10.83	2.82	10.55
FTSE EPRA/NAREIT Developed REIT	-5.39	4.99	4.99	6.78	10.34	2.23	9.84
Global ex U.S. Public Real Estate	Quarter	YTD	Year	3 Years	5 Years	10 Years	15 Years
Global ex-U.S. REIT Database	-7.77	0.48	0.48	1.13	8.95	-0.12	10.03
EPRA/NAREIT Dev REITs ex-U.S.	-7.68	1.97	1.97	0.61	8.42	0.12	9.24

<sup>\*</sup>Returns for less than one year are not annualized.

All REIT returns are reported gross in USD.

Sources: Callan, NAREIT, NCREIF, The FTSE Group. NCREIF statistics are the product of direct queries and may fluctuate over time.

## Down but Far From Out

## PRIVATE EQUITY | Gary Robertson

Based on preliminary data, private equity funds raised \$281 billion in 2016, a moderate \$24.2 billion (9%) increase over 2015, and 783 partnerships were formed, up by 101 (15%) over the previous year, according to Private Equity Analyst.

In the fourth guarter, commitments totaled \$86.9 billion and 267 funds were created. The amount raised skyrocketed by 125% compared to the third quarter's \$38.6 billion, and the number of new funds jumped by 87% from the prior quarter's 143.

Private equity firms purchased 1,728 companies in 2016, down 14% from 2,006 in 2015, according to Buyouts newsletter. The year's announced dollar volume was \$163.2 billion, an eight-year high and up 39% from \$117.5 billion in 2015. The fourth quarter saw 322 transactions, down from 385 in the third quarter, and disclosed dollar volume totaled \$28.3 billion, down from \$39.0 billion.

The year produced 8,136 rounds of new investment in venture capital companies, down 22% from 2015's 10,468, according to the National Venture Capital Association. The announced volume of \$69.1 billion for the year was down 13% from \$79.3 billion in 2015. Fourth quarter VC investments totaled 1,744 rounds and \$12.7 billion of announced financing, down from 1,979 rounds and \$15.7 billion in the previous quarter.

Funds Closed January 1 to December 31, 2016

Strategy	No. of Funds	Amt (\$mm)	Percent
Venture Capital	401	41,060	15%
Buyouts	278	168,798	60%
Subordinated Debt	22	17,739	6%
Distressed Debt	20	21,972	8%
Secondary and Other	23	22,525	8%
Fund-of-funds	39	8,808	3%
Totals	783	280,902	100%

Source: Private Equity Analyst

Buyouts reports that 2016's 505 private M&A exits of buyoutbacked companies was down 11% from the 567 in 2015. The year's aggregate disclosed M&A exit values of \$85.7 billion was down 35% from 2015's \$131.4 billion. In the fourth quarter, there were 105 M&A exits, and announced values totaled \$18.1 billion, down from 142 exits totaling \$27.5 billion in the third quarter. There were three buyout-backed IPOs, with a total value of \$2.0 billion, and eight for the full year, raising a total of \$4.1 billion.

Venture-backed M&A exits for the year totaled 687, down 22% from 884 in 2015, with announced values of \$43.9 billion, up 3.8% from \$42.3 billion in 2015. The guarter had 184 exits with announced values totaling \$7.52 billion, compared to 192 and \$13.4 billion in the third quarter. The year produced 39 venturebacked IPOs raising \$2.9 billion, down from the 77 IPOs in 2015 that raised \$8.1 billion.

## **Private Equity Performance Database (%)**

(Pooled Horizon IRRs through June 30, 2016\*)

3 Months	Year	3 Years	5 Years	10 Years	15 Years	20 Years
0.26	-0.09	19.18	13.63	10.38	5.66	20.65
1.60	1.83	12.86	10.13	11.25	10.25	13.65
2.85	6.29	12.91	10.81	10.40	12.32	12.62
2.25	7.09	8.79	9.67	9.35	8.12	9.19
2.34	1.41	7.34	8.73	9.26	10.50	10.55
2.13	3.95	13.11	10.89	10.33	10.32	13.26
2.46	3.99	11.66	12.10	7.42	5.75	7.87
2.63	2.14	11.13	11.60	7.40	6.09	7.96
	0.26 1.60 2.85 2.25 2.34 2.13 2.46	0.26     -0.09       1.60     1.83       2.85     6.29       2.25     7.09       2.34     1.41       2.13     3.95       2.46     3.99	0.26     -0.09     19.18       1.60     1.83     12.86       2.85     6.29     12.91       2.25     7.09     8.79       2.34     1.41     7.34       2.13     3.95     13.11       2.46     3.99     11.66	0.26       -0.09       19.18       13.63         1.60       1.83       12.86       10.13         2.85       6.29       12.91       10.81         2.25       7.09       8.79       9.67         2.34       1.41       7.34       8.73         2.13       3.95       13.11       10.89         2.46       3.99       11.66       12.10	0.26       -0.09       19.18       13.63       10.38         1.60       1.83       12.86       10.13       11.25         2.85       6.29       12.91       10.81       10.40         2.25       7.09       8.79       9.67       9.35         2.34       1.41       7.34       8.73       9.26         2.13       3.95       13.11       10.89       10.33         2.46       3.99       11.66       12.10       7.42	0.26         -0.09         19.18         13.63         10.38         5.66           1.60         1.83         12.86         10.13         11.25         10.25           2.85         6.29         12.91         10.81         10.40         12.32           2.25         7.09         8.79         9.67         9.35         8.12           2.34         1.41         7.34         8.73         9.26         10.50           2.13         3.95         13.11         10.89         10.33         10.32           2.46         3.99         11.66         12.10         7.42         5.75

<sup>\*</sup>Most recent data available at time of publication.

Notes: Private equity returns are net of fees. 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.

Sources: Russell Investment Group, Standard & Poor's, Thomson Reuters/Cambridge

## **Making Alpha Great Again**

## **HEDGE FUNDS | Jim McKee**

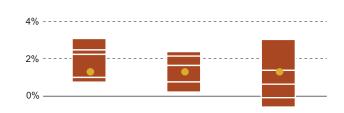
In the wake of the U.S. presidential election, the reflation trade exploded as U.S. stocks jumped and Treasuries were dumped. The dollar also strengthened dramatically. During this rapid market paradigm shift, the average hedge fund appeared to gain little over embedded betas, as most conservatively positioned their gross and net exposures going into the election. However, the hedge fund community will likely see a combination of more fiscal policy and less monetary policy as a better trading environment.

Representing the average fund's performance without implementation costs, the **Credit Suisse Hedge Fund Index** (CS HFI) rose 1.15% in the fourth quarter. As a proxy for live portfolios, the median manager in the **Callan Hedge Fund-of-Funds Database** advanced 1.26%, net of all fees.

Within CS HFI, the best-performing strategy was *Global Macro* (+4.59%), aided by a stronger dollar. *Distressed* gained 3.57%. The sharp reversals following the election across currencies, rates, and equities upset the trend-following mantra of *Managed Futures* (-5.65%). *Long/Short Equity* (-0.20%) was also caught flat-footed by the unexpected Trump effect.

Within Callan's Hedge Fund-of-Funds Database, market exposures marginally affected performance in the fourth quarter. Aided by tightening credits and supportive fundamentals, the median *Callan Absolute Return FoF* (+2.23%) outpaced the *Callan Long/Short Equity FoF* (+0.64%). With diversifying exposures to both non-directional and directional styles, the *Callan Core Diversified FoF* gained 1.64%.

#### **Callan Style Group Quarterly Returns**



<b>-</b> 2%			
-2/0	Absolute Return FOF Style	Core Diversified FOF Style	Long/Short Eq FOF Style
10th Percentile	3.08	2.38	3.03
25th Percentile	2.47	2.14	1.38
Median	2.23	1.64	0.64
75th Percentile	1.00	0.76	-0.08
90th Percentile	0.75	0.22	-0.58
T-Bills + 5%	1.31	1.31	1.31

Sources: Callan, Merrill Lynch

## Callan Database Median and Index Returns\* for Periods ended December 31, 2016

Quarter	YTD	Year	3 Years	5 Years	10 Years	15 Years
1.26	1.19	1.19	1.43	4.91	3.31	4.74
1.15	1.25	1.25	1.54	4.34	3.75	5.74
-2.65	-4.58	-4.58	-1.40	1.11	-2.93	0.47
0.42	6.60	6.60	1.85	3.85	3.69	4.43
1.85	4.29	4.29	3.07	4.76	3.42	4.25
1.16	4.41	4.41	4.78	7.30	5.19	6.81
3.57	6.38	6.38	1.09	6.02	3.96	6.94
0.77	5.89	5.89	1.62	2.51	3.33	3.66
1.77	1.25	1.25	-1.50	3.95	3.67	6.07
-0.20	-3.43	-3.43	1.82	6.10	4.03	6.00
1.82	-16.87	-16.87	-7.04	-13.65	-9.95	-8.11
4.59	3.58	3.58	2.28	3.14	5.82	8.07
-5.65	-6.84	-6.84	2.99	0.66	2.67	4.77
-0.27	4.47	4.47	1.91	4.89	3.68	7.97
	1.15 -2.65 0.42 1.85 1.16 3.57 0.77 1.77 -0.20 1.82 4.59 -5.65	1.15     1.25       -2.65     -4.58       0.42     6.60       1.85     4.29       1.16     4.41       3.57     6.38       0.77     5.89       1.77     1.25       -0.20     -3.43       1.82     -16.87       4.59     3.58       -5.65     -6.84	1.15       1.25       1.25         -2.65       -4.58       -4.58         0.42       6.60       6.60         1.85       4.29       4.29         1.16       4.41       4.41         3.57       6.38       6.38         0.77       5.89       5.89         1.77       1.25       1.25         -0.20       -3.43       -3.43         1.82       -16.87       -16.87         4.59       3.58       3.58         -5.65       -6.84       -6.84	1.15       1.25       1.25       1.54         -2.65       -4.58       -4.58       -1.40         0.42       6.60       6.60       1.85         1.85       4.29       4.29       3.07         1.16       4.41       4.41       4.78         3.57       6.38       6.38       1.09         0.77       5.89       5.89       1.62         1.77       1.25       1.25       -1.50         -0.20       -3.43       -3.43       1.82         1.82       -16.87       -16.87       -7.04         4.59       3.58       3.58       2.28         -5.65       -6.84       -6.84       2.99	1.15         1.25         1.25         1.54         4.34           -2.65         -4.58         -4.58         -1.40         1.11           0.42         6.60         6.60         1.85         3.85           1.85         4.29         4.29         3.07         4.76           1.16         4.41         4.41         4.78         7.30           3.57         6.38         6.38         1.09         6.02           0.77         5.89         5.89         1.62         2.51           1.77         1.25         1.25         -1.50         3.95           -0.20         -3.43         -3.43         1.82         6.10           1.82         -16.87         -16.87         -7.04         -13.65           4.59         3.58         3.58         2.28         3.14           -5.65         -6.84         -6.84         2.99         0.66	1.15         1.25         1.25         1.54         4.34         3.75           -2.65         -4.58         -4.58         -1.40         1.11         -2.93           0.42         6.60         6.60         1.85         3.85         3.69           1.85         4.29         4.29         3.07         4.76         3.42           1.16         4.41         4.41         4.78         7.30         5.19           3.57         6.38         6.38         1.09         6.02         3.96           0.77         5.89         5.89         1.62         2.51         3.33           1.77         1.25         1.25         -1.50         3.95         3.67           -0.20         -3.43         -3.43         1.82         6.10         4.03           1.82         -16.87         -16.87         -7.04         -13.65         -9.95           4.59         3.58         3.58         2.28         3.14         5.82           -5.65         -6.84         -6.84         2.99         0.66         2.67

<sup>\*</sup>Returns less than one year are not annualized. Sources: Callan, Credit Suisse.

## A Case of the Jitters

## **DEFINED CONTRIBUTION | Tom Szkwarla**

The average defined contribution (DC) plan gained 3.92% in the third guarter of 2016, as measured by the Callan DC Index™. Still, the Index trailed the Age 45 Target Date Fund the average of target date funds that would be selected by participants age 45 and retiring at age 65—which gained 4.53%. Since inception, the DC Index's annual return of 5.41% has trailed the Age 45 Target Date Fund by 74 basis points.

During the third quarter, DC plan balances grew by 3.67%, driven entirely by market returns. Participants appeared to be jittery; money flowed out of plans on a net basis, reducing total balance growth by 25 basis points. The quarter's outflows were the highest since the third quarter of 2006. And third quarter turnover (i.e., net transfer activity levels within DC plans) in the DC Index came in at 0.82%, its highest level since the third quarter of 2012.

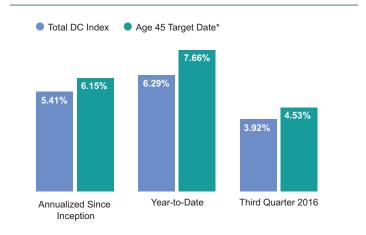
Stable value experienced its fifth quarter in a row of net inflows and the highest of the five—during the period. Meanwhile, U.S. large, small, and mid cap equity saw significant outflows. Even non-U.S. equity experienced outflows, despite its exceptional performance during the quarter. Target date funds held fast; for the third guarter, over 55 cents of every dollar that moved within DC plans flowed to TDFs. Target date funds now make up 27.7% of the average DC plan.

The Callan DC Index's overall equity allocation ended the quarter at 68%, modestly above the Index's historical average (67%).

Target date funds are less prevalent than U.S. large cap equity; however, when target date funds are available in a DC plan, they hold a much greater portion of assets (32%) than U.S. large cap equity funds (23%).

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 \$135 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 (Third Quarter 2016)

(Top Two and Bottom Two Asset Gatherers)

Asset Class	Flows as % of Total Net Flows
Target Date Funds	55.31%
Stable Value	28.35%
Company Stock	-20.41%
U.S. Large Cap	-33.88%
Total Turnover**	0.82%

Source: Callan DC Index

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

- \* DC Index inception date is January 2006.
- \*\* Total Index "turnover" measures the percentage of total invested assets (transfers only, excluding contributions and withdrawals) that moved between asset classes.

## **Investment Manager Asset Allocation**

The table below contrasts the distribution of assets across the Fund's investment managers as of December 31, 2016, with the distribution as of September 30, 2016.

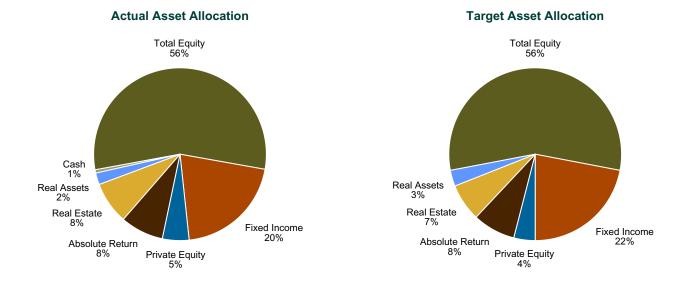
## **Asset Distribution Across Investment Managers**

	December 31,	2016	September 30, 2016		
	Market Value	Weight	Market Value	Weight	
Total Domestic Equity	\$1,262,812,288	25.90%	\$1,255,617,513	25.74%	
Northern Trust Global	496,913,959	10.19%	483,496,098	9.91%	
Cornerstone Investment Partners	169,225,209	3.47%	174,360,576	3.57%	
Polen Capital Management	162,461,031	3.33%	173,446,777	3.55%	
Earnest Partners LLC	125,134,431	2.57%	127,856,412	2.62%	
Dimensional Fund Advisors Inc.	212,747,086	4.36%	201,274,475	4.13%	
CastleArk Management	96,330,572	1.98%	95,183,176	1.95%	
otal Global Equity	\$483,086,605	9.91%	\$493,785,833	10.12%	
BlackRock Global Alpha Tilts	295,204,256	6.06%	295,337,198	6.05%	
MFS Investment Management	187,882,349	3.85%		4.07%	
MFS investment Management	107,802,349	3.05%	198,448,635	4.07%	
otal International Equity	\$970,597,215	19.91%	\$981,508,726	20.12%	
AQR Emerging Markets	101,834,998	2.09%	104,074,187	2.13%	
Brandes Investment Partners	396,005,669	8.12%	391,921,338	8.03%	
William Blair & Company	279,012,493	5.72%	295,035,454	6.05%	
Dimensional Fund Advisors Inc.	193,744,054	3.97%	190,477,748	3.90%	
otal Fixed Income	\$999,262,202	20.50%	\$1,027,144,263	21.05%	
BlackRock US Debt Idx Fd	357,800,280	7.34%	121,246,285	2.49%	
BlackRock Intermediate Agg	337,000,200	7.5470	247,525,195	5.07%	
Reams Asset Management	306,582,790	6.29%	315,124,926	6.46%	
Loomis, Sayles & Company, L.P.		6.87%		7.04%	
Loomis, Sayles & Company, L.P.	334,879,133	0.07 %	343,247,857	7.04%	
otal Private Equity	\$241,767,198	4.96%	\$223,305,977	4.58%	
Abbott Capital Management 2010	26,975,702	0.55%	26,305,398	0.54%	
Abbott Capital Management 2011	40,482,237	0.83%	38,358,844	0.79%	
Abbott Capital Management 2012	23,512,380	0.48%	20,978,293	0.43%	
Abbott Capital Management 2013	17,712,043	0.36%	15,125,437	0.31%	
Abbott Capital Management 2014	13,643,957	0.28%	11,674,514	0.24%	
Abbott Capital Management 2015	4,487,302	0.09%	3,681,372	0.08%	
Abbott Capital Management 2016	961,175	0.02%	709,379	0.01%	
Mesirow V	67,199,032	1.38%	66,891,354	1.37%	
Mesirow VI	22,539,298	0.46%	19,543,889	0.40%	
NB Secondary Opp Fund III	15,804,548	0.32%	13,306,162	0.27%	
Private Advisors	8,449,523	0.17%	6,731,335	0.14%	
bsolute Return	\$392,561,950	8.05%	\$380,676,454	7.80%	
Allianz SA 1000	108,985,976	2.24%	105,797,044	2.17%	
Newton	88,770,705	1.82%	92,991,182	1.91%	
UBS A & Q	194,805,269	4.00%	181,888,227	3.73%	
had A a a da		0.000/			
Real Assets	\$107,494,737	2.20%	\$108,476,923	2.22%	
Principal DRA	107,494,737	2.20%	108,476,923	2.22%	
otal Real Estate	\$387,388,715	7.95%	\$392,267,801	8.04%	
Real Estate	387,388,715	7.95%	392,267,801	8.04%	
otal Cash	\$30,203,021	0.62%	\$16,179,584	0.33%	
Cash	30,203,021	0.62%	16,179,584	0.33%	
Total Frond	#4 07E 470 000	400.00/	£4.070.000.074	400.007	
otal Fund	\$4,875,173,932	100.0%	\$4,878,963,074	100.0%	



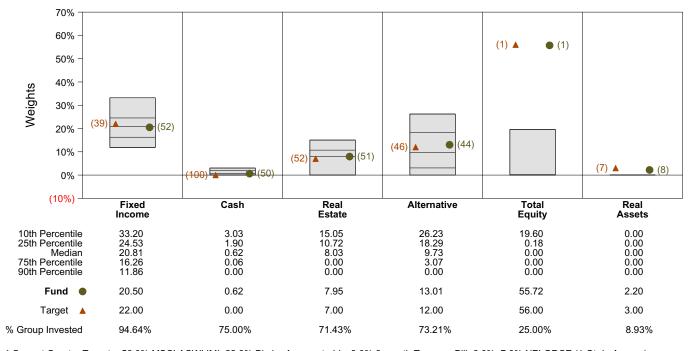
# Actual vs Target Asset Allocation As of December 31, 2016

The top left chart shows the Fund's asset allocation as of December 31, 2016. The top right chart shows the Fund's target asset allocation as outlined in the investment policy statement. The bottom chart ranks the fund's asset allocation and the target allocation versus the CAI Public Fund Sponsor - Large (>1B).



Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
ASSEL CIASS	Actual		raigei		
Total Equity	2,716,496	55.7%	56.0%	(0.3%)	(13,601)
Fixed Income	999,262	20.5%	22.0%	(1.5%)	(73,276)
Private Equity	241,767	5.0%	4.0%	`1.0%′	`46,760
Absolute Return	392,562	8.1%	8.0%	0.1%	2,548
Real Estate	387,389	7.9%	7.0%	0.9%	46,127
Real Assets	107,495	2.2%	3.0%	(0.8%)	(38,760)
Cash	30,203	0.6%	0.0%	`0.6%	30,203
Total	4,875,174	100.0%	100.0%		

## Asset Class Weights vs CAI Public Fund Sponsor - Large (>1B)



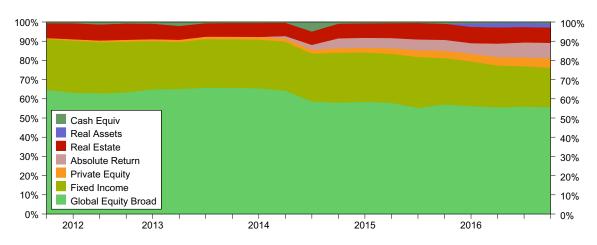
<sup>\*</sup> Current Quarter Target = 56.0% MSCI ACWI IMI, 22.0% Blmbg Aggregate Idx, 8.0% 3-month Treasury Bill+3.0%, 7.0% NFI-ODCE (1 Qtr in Arrears), 4.0% Russell 3000 (1 Qtr in Arrears)+3.0% and 3.0% Principal Blended Benchmark.



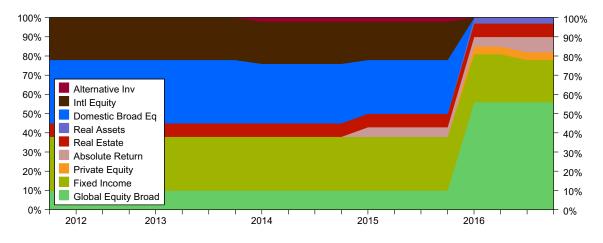
## **Actual vs Target Historical Asset Allocation**

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 CAI Public Fund Sponsor Database.

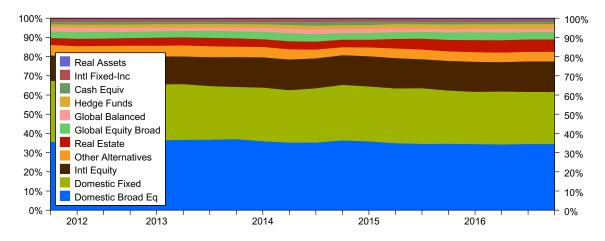
#### **Actual Historical Asset Allocation**



## **Target Historical Asset Allocation**



## Average CAI Public Fund Sponsor Database Historical Asset Allocation



<sup>\*</sup> Current Quarter Target = 56.0% MSCI ACWI IMI, 22.0% Blmbg Aggregate Idx, 8.0% 3-month Treasury Bill+3.0%, 7.0% NFI-ODCE (1 Qtr in Arrears), 4.0% Russell 3000 (1 Qtr in Arrears)+3.0% and 3.0% Principal Blended Benchmark.



## Total Fund Period Ended December 31, 2016

## **Investment Philosophy**

The Public Fund Sponsor Database consists of public employee pension total funds including both Callan Associates client and surveyed non-client funds. Current Quarter Target = 56.0% MSCI ACWI IMI, 22.0% BB Barclays Aggregate Idx, 8.0% 3-month Treasury Bill+3.0%, 7.0% NFI-ODCE (1 Qtr in Arrears), 4.0% Russell 3000 (1 Qtr in Arrears)+3.0% and 3.0% Principal Blended Benchmark.

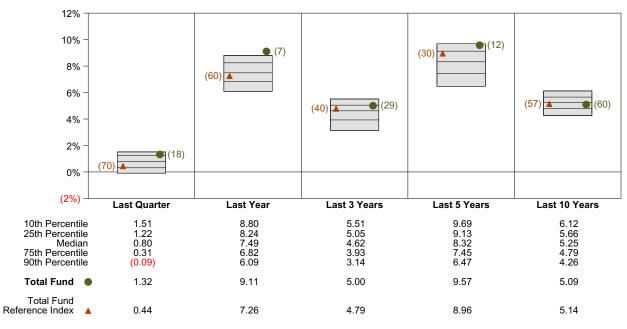
## **Quarterly Summary and Highlights**

- Total Fund's portfolio posted a 1.32% return for the quarter placing it in the 18 percentile of the CAI Public Fund Sponsor Database group for the quarter and in the 7 percentile for the last year.
- Total Fund's portfolio outperformed the Total Fund Reference Index by 0.88% for the quarter and outperformed the Total Fund Reference Index for the year by 1.85%.

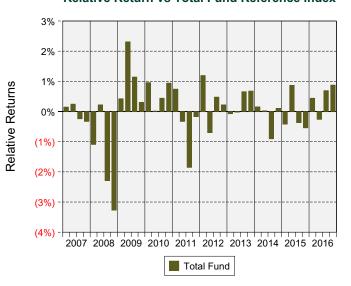
## **Quarterly Asset Growth**

Beginning Market Value	\$4,878,963,074
Net New Investment	\$-67,271,207
Investment Gains/(Losses)	\$63,482,065
Ending Market Value	\$4,875,173,932

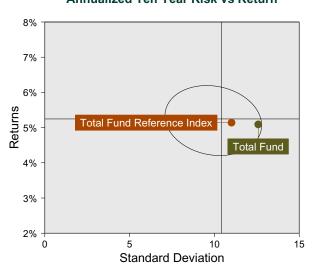
## Performance vs CAI Public Fund Sponsor Database (Gross)



## **Relative Return vs Total Fund Reference Index**



# CAI Public Fund Sponsor Database (Gross) Annualized Ten Year Risk vs Return



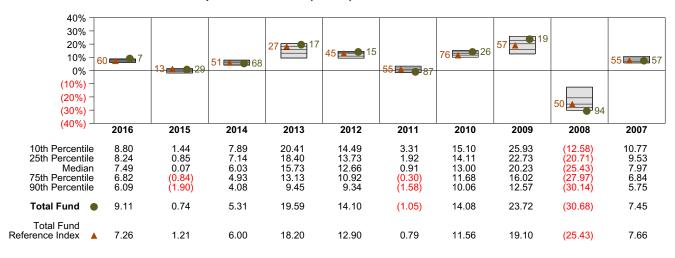


# Total Fund Return Analysis Summary

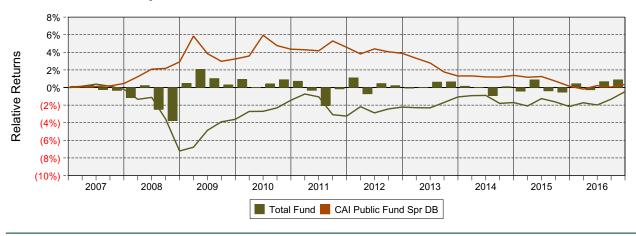
## **Return Analysis**

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.

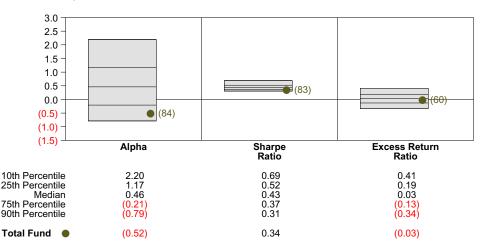
## Performance vs CAI Public Fund Sponsor Database (Gross)



## **Cumulative and Quarterly Relative Return vs Total Fund Reference Index**



Risk Adjusted Return Measures vs Total Fund Reference Index Rankings Against CAI Public Fund Sponsor Database (Gross) Ten Years Ended December 31, 2016



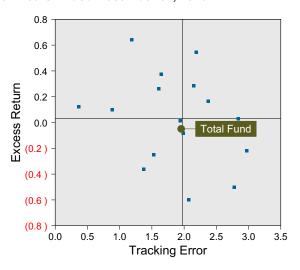


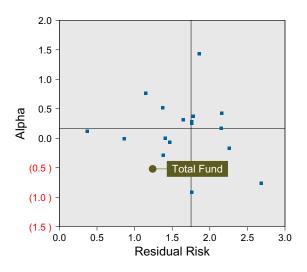
## Total Fund Total Fund vs Target Risk Analysis

#### **Risk Analysis**

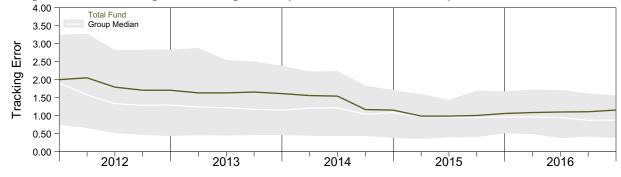
The graphs below analyze the performance and risk of the fund relative to the appropriate target mix. This relative performance is compared to a peer group of funds wherein each member fund is measured against its own target mix. The first scatter chart illustrates the relationship, called Excess Return 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 CAI Public Fund Sponsor Database Ten Years Ended December 31, 2016

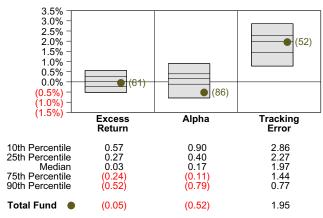


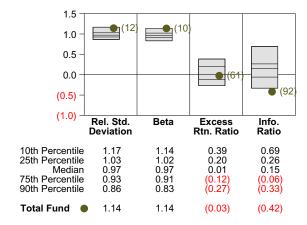


Rolling 12 Quarter Tracking Error vs Targets Compared to CAI Public Fund Sponsor Database



Risk Statistics Rankings vs Targets Rankings Against CAI Public Fund Sponsor Database Ten Years Ended December 31, 2016







## Quarterly Total Fund Relative Attribution - December 31, 2016

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.



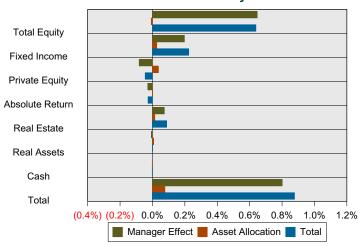


## **Actual vs Target Returns**

#### 2.44 (2.04) 3.34 5.05 0.48 0.82 2.88 1.96 (0.91) (0.57 0.18 1.32 0.44 (6%)(4%)(2%)0% 2% 4% 6% 8%

Actual Target

#### **Relative Attribution by Asset Class**



#### Relative Attribution Effects for Quarter ended December 31, 2016

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Total Equity	55%	56%	2.44%	1.27%	0.65%	(0.01%)	0.64%
Fixed Income	21%	22%	(2.04%)	(2.98%)	0.20%	0.03%	0.22%
Private Equity	5%	4%	`3.34%´	`5.05%´	(0.08%)	0.04%	(0.05%)
Absolute Return	8%	8%	0.48%	0.82%	(0.03%)	0.00%	(0.03%)
Real Estate	8%	7%	2.88%	1.96%	`0.07%	0.01%	0.09%
Real Assets	2%	3%	(0.91%)	(0.57%)	(0.01%)	0.01%	0.00%
Cash	1%	0%	`0.18%′	0.18%	0.00%	(0.00%)	(0.00%)
Total			1.32% =	0.44% +	0.80% +	0.08%	0.88%

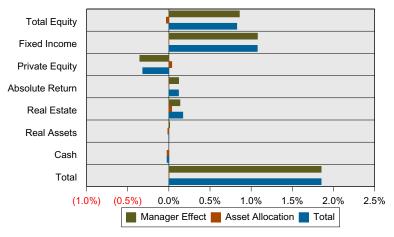
<sup>\*</sup> Current Quarter Target = 56.0% MSCI ACWI IMI, 22.0% Blmbg Aggregate Idx, 8.0% 3-month Treasury Bill+3.0%, 7.0% NFI-ODCE (1 Qtr in Arrears), 4.0% Russell 3000 (1 Qtr in Arrears)+3.0% and 3.0% Principal Blended Benchmark.



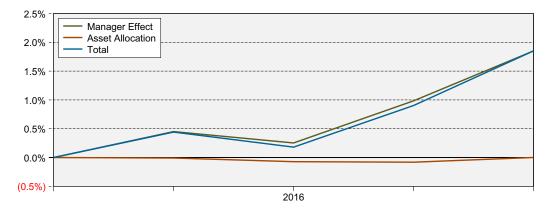
## **Cumulative Total Fund Relative Attribution - December 31, 2016**

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.

#### **One Year Relative Attribution Effects**



#### **Cumulative Relative Attribution Effects**



## One Year Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Total Equity	56%	56%	9.91%	8.36%	0.86%	(0.03%)	0.83%
Fixed Income	22%	24%	7.40%	2.65%	1.08%	(0.00%)	1.08%
Private Equity	4%	4%	9.09%	17.97%	(0.35%)	`0.04%´	(0.32%)
Absolute Return	7%	6%	5.16%	3.33%	`0.12%´	(0.00%)	`0.12%′
Real Estate	8%	7%	11.38%	9.69%	0.14%	`0.03%´	0.17%
Real Assets	2%	3%	7.00%	6.77%	0.01%	(0.01%)	(0.00%)
Cash	1%	0%	1.94%	1.94%	0.00%	(0.02%)	(0.02%)
Total			9.11% =	7.26%	+ 1.85% +	0.00%	1.85%

<sup>\*</sup> Current Quarter Target = 56.0% MSCI ACWI IMI, 22.0% Blmbg Aggregate Idx, 8.0% 3-month Treasury Bill+3.0%, 7.0% NFI-ODCE (1 Qtr in Arrears), 4.0% Russell 3000 (1 Qtr in Arrears)+3.0% and 3.0% Principal Blended Benchmark.



## **Investment Manager Returns and Peer Group Rankings**

The table below details the rates of return and peer group rankings for the Fund's investment managers over various time periods ended December 31, 2016. 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 and Rankings for Periods Ended December 31, 2016

					Last		Last		0.
	Last Quarter		Last Year		3 Years		5 Years		Since Inception
Total Domestic Equity	5.68%		13.91%		8.31%		14.58%		6.64% (7/98)
Russell 3000 Index	4.21%		12.74%		8.43%		14.67%		6.10% (7/98)
Northern Trust Global	3.83%	49	12.01%	19	8.95%	25	14.73%	39	10.16% (8/88)
S&P 500 Index	3.82%	51	11.96%	20	8.87%	28	14.66%	41	10.11% (8/88)
CAI Large Cap Core	3.83%		10.40%		8.30%		14.44%		-
Cornerstone Investment Partners	9.03%	23	16.62%	29	2.98%	100	-		11.65% (6/12)
S&P 500 Index	3.82%	96	11.96%	85	8.87%	29	14.66%	51	14.83% (6/12)
CAI Large Cap Value	7.09%		15.25%		8.28%		14.69%		-
Polen Capital Management	(0.61%)	55	1.70%	72	11.37%	2	-		13.66% (7/12)
S&P 500 Index	3.82%	4	11.96%	2	8.87%	18	14.66%	32	14.09% (7/12)
CAI Large Cap Growth	(0.43%)		3.42%		7.31%		13.98%		-
Earnest Partners LLC	5.22%	39	16.52%	29	9.20%	21	14.78%	40	10.04% (5/05)
Russell MidCap Index	3.21%	53	13.80%	42	7.92%	35	14.72%	42	9.44% (5/05)
CAI Mid Capitalization	4.21%		12.23%		6.55%		13.84%		-
Dimensional Fund Advisors Inc.	15.32%	18	29.36%	31	8.48%	65	17.40%	32	12.82% (11/96)
Russell 2000 Value Index	14.07%	39	31.74%	14	8.31%	73	15.07%	79	10.09% (11/96)
CAI Small Cap Value	13.73%		27.75%		9.13%		16.43%		-
CastleArk Management	1.21%	68	6.01%	68	2.29%	64	-		7.68% (9/13)
Russell 2000 Growth Index	3.57%	26	11.32%	35	5.05%	32	13.74%	41	9.21% (9/13)
CAI Small Cap Growth	2.53%		8.63%		3.44%		13.40%		-
Total Global Equity	(0.73%)		8.65%		2.87%		9.41%		6.51% (4/10)
MSCI World Index	1.86%		7.51%		3.80%		10.41%		7.97% (4/10)
BlackRock Global Alpha Tilts	1.35%	40	-		-		-		15.57% (3/16)
MSCI World Index	1.86%	33	7.51%	37	3.80%	45	10.41%	60	15.21% (3/16)
CAI Global Eq Broad Style	0.67%		6.41%		3.53%		10.74%		-
MFS Investment Management	(3.83%)	92	6.06%	54	3.68%	47	-		8.63% (12/12)
MSCI ACWI Idx	1.30%	41	8.48%	28	3.69%	47	9.96%	72	8.74% (12/12)
CAI Global Eq Broad Style	0.67%		6.41%		3.53%		10.74%		-



## **Investment Manager Returns and Peer Group Rankings**

The table below details the rates of return and peer group rankings for the Fund's investment managers over various time periods ended December 31, 2016. 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 and Rankings for Periods Ended December 31, 2016

	Last Quarter		Last Year		Last 3 Years		Last 5 Years		Since Inception	,
Total International Equity MSCI EAFE Index	(0.09%) (0.71%)		<b>5.78%</b> 1.00%		0.50% (1.60%)		<b>8.79%</b> 6.53%		<b>6.87%</b> 4.04%	(5/96) (5/96)
AQR Emerging Markets MSCI EM Gross Emerging Mkts Equity DB	(2.15%) (4.08%) (4.40%)	18 42	- 11.60% 10.31%	40	(2.19%) (1.33%)	68	- 1.64% 3.39%	78	1.84% (0.37%) -	(8/16) (8/16)
Brandes Investment Partners MSCI EAFE Index CAI Non-U.S. Eq. Style	2.60% (0.71%) (1.80%)	3 35	8.50% 1.00% 1.47%	3 56	0.78% (1.60%) (0.55%)	17 65	8.21% 6.53% 7.39%	29 73	8.15% 4.07% -	(2/98) (2/98)
William Blair & Company MSCI ACWI ex-US Index CAI Non-U.S. Eq. Style	(4.10%) (1.20%) (1.80%)	82 44	(1. <mark>45%)</mark> 5.01% 1.47%	82 16	(1.02%) (1.32%) (0.55%)	55 62	7.92% 5.48% 7.39%	37 89	6.89% 6.36% -	(12/03) (12/03)
Dimensional Fund Advisors Inc. Blended Benchmark CAI Intl Small Cap	1.71% (2.86%) (3.70%)	4 35	8.00% 2.18% (0.17%)	8 32	2.19% 2.10% 2.35%	52 53	11.68% 10.56% 11.72%	52 71	4.52% 2.12% -	(5/06) (5/06)
Total Fixed Income Blmbg Capital Aggregate	<b>(2.04%)</b> (2.98%)		<b>7.40%</b> 2.65%		<b>2.88%</b> 3.03%		<b>3.34%</b> 2.23%		<b>7.76%</b> 6.49%	(12/87) (12/87)
BlackRock US Debt ldx Fd Blmbg Aggregate ldx CAI Core Bond FI	(2.98%) (2.98%) (2.73%)	87 87	2.65% 3.13%	86	3.03% 3.39%	87	2.23% 2.86%	97	(1.97%) (0.78%)	
Reams Asset Management Blmbg Capital Aggregate CAI Intermediate FI	(2.71%) (2.98%) (1.91%)	100 100	4.38% 2.65% 2.33%	2 28	2.94% 3.03% 2.31%	6 5	3.09% 2.23% 2.27%	6 52	5.76% 4.82% -	(1/01) (1/01)
Loomis, Sayles & Company, L.P. Blmbg Capital Aggregate CAI Core Plus FI	(0.40%) (2.98%) (2.33%)	2 99	13.97% 2.65% 4.67%	1 99	4.28% 3.03% 3.54%	15 94	6.04% 2.23% 3.72%	1 100	9.27% 6.49% -	(12/87) (12/87)
Total Private Equity Abbott Capital Management 2010 Abbott Capital Management 2011 Abbott Capital Management 2012 Abbott Capital Management 2013 Abbott Capital Management 2014 Abbott Capital Management 2015 Abbott Capital Management 2016 Mesirow V Mesirow VI NB Secondary Opp Fund III Private Advisors Russell 3000 (1 Qtr in Arrears) + 3%	3.34% 3.87% 3.31% 3.25% 2.86% 1.66% 0.42% (1.36%) 3.95% 1.39% 7.04% 2.18% 5.05%		9.09% 11.03% 10.43% 9.42% 5.25% 2.86% (5.11%) - 12.03% 3.32% 12.83% (1.34%) 17.97%		12.25% 11.90% 9.90% 5.57% 1.72% - - 17.43% 0.47% 21.69% - 13.48%		9.71% 8.14% 4.86% - - - - 14.56% - - - 19.41%		6.53% (12.83%) (10.24%) 1.11% (0.11%) (4.17%) 3.14% (0.19%) 12.14% 0.37% (10.63%) 7.92%	(6/11) (7/12) (5/13) (4/14) (4/15) (3/16) (6/10) (7/13) (12/13)
Absolute Return	0.48%		5.16%		-		-		5.23%	(6/14)
Allianz SA 1000 T-Bills + 10% CAI Abs Return Hedge FoF	3.01% 2.49% 2.23%	13 25	11.15% 10.33% 3.53%	1	- 10.14% 1.89%	1	- 10.12% 4.27%	1	10.41% 10.15% -	(6/14) (6/14)
Newton 1-month LIBOR + 4% CAI Abs Return Hedge FoF	(4.54%) 1.12% 2.23%	100 73	3.31% 4.49% 3.53%	53 18	- 4.28% 1.89%	1	4.26% 4.27%	50	2.51% 4.31% -	(8/14) (8/14)
UBS A & Q 1-month LIBOR + 4% CAI Abs Return Hedge FoF	1.53% 1.12% 2.23%	65 73	2.42% 4.49% 3.53%	66 18	- 4.28% 1.89%	1	- 4.26% 4.27%	50	3.12% 4.34% -	(12/14) (12/14)
Real Assets	(0.91%)		7.00%		-		-		7.00%	(1/16)
Principal DRA Principal Blended Benchmark (1) CAI Alternative Invest DB	(0.91%) (0.57%) 2.55%	79 78	7.00% 6.77% 9.96%	66 69	- (1.00%)		- - 1.06%		7.00% 6.77% -	(1/16) (1/16)
Total Real Estate	2.88%		11.38%		12.89%		12.28%		6.55%	(7/86)
Real Estate Blended Benchmark (2) CAI Total Real Estate DB	2.88% 1.96% 1.87%	19 47	11.38% 9.69% 8.34%	22 33	12.89% 11.58% 11.89%	42 52	12.28% 11.34% 11.89%	42 62	6.55% - -	(7/86)
Total Fund Total Fund Reference Index*	<b>1.32%</b> 0.44%		<b>9.11%</b> 7.26%		<b>5.00%</b> 4.79%		<b>9.57%</b> 8.96%		9.52% -	(1/79)

<sup>\*</sup> Current Quarter Target = 56.0% MSCI ACWI IMI, 22.0% Blmbg Aggregate Idx, 8.0% 3-month Treasury Bill+3.0%, 7.0% NFI-ODCE (1 Qtr in Arrears), 4.0% Russell 3000 (1 Qtr in Arrears)+3.0% and 3.0% Principal Blended Benchmark. (1) Current Principal Blended Benchmark = 35% Barclays US Treasury US TIPS Idx, 15% Bloomberg Commodity Idx, 20% S&P Global Infrastructure Idx, 20% S&P Global Natural Resources Idx and 10% FTSE EPRA/NAREIT Developed Market Idx. (2) Blended Benchmark = NCREIF (NPI) through 6/30/06, NCREIF (NPI 1 Qtr Arrears) through 12/31/13 and NFI-ODCE (1 Qtr Arrears) thereafter.



### **Investment Manager Returns and Peer Group Rankings**

The table below details the rates of return and peer group rankings for the Fund's investment managers over various time periods. 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.

	2016		2015		2014		2013		2012	
Total Domestic Equity	13.91%		(0.07%)		11.63%		33.86%		16.12%	
Russell 3000 Index	12.74%		0.48%		12.56%		33.55%		16.42%	
Northern Trust Global	12.01%	19	1.49%	46	13.77%	47	32.46%	77	16.07%	48
S&P 500 Index	11.96%	20	1.38%	51	13.69%	48	32.39%	77	16.00%	48
CAI Large Cap Core	10.40%		1.41%		13.63%		34.49%		15.89%	
Cornerstone Investment Partners	16.62%	29	(13.54%)	99	8.32%	95	34.87%	46	-	
S&P 500 Index	11.96%	85	1.38%	3	13.69%	27	32.39%	75	16.00%	59
CAI Large Cap Value	15.25%		(2.56%)		12.54%		34.59%		16.78%	
Polen Capital Management	1.70%	72	15.51%	3	17.60%	6	23.45%	99	-	
S&P 500 Index	11.96%	2	1.38%	93	13.69%	25	32.39%	79	16.00%	55
CAI Large Cap Growth	3.42%		6.43%		11.83%		35.60%		16.14%	
Earnest Partners LLC	16.52%	29	1.25%	27	10.38%	46	31.29%	90	16.53%	47
Russell MidCap Index	13.80%	42	(2.44%)	67	13.22%	23	34.76%	63	17.28%	41
CAI Mid Capitalization	12.23%		(0.69%)		9.88%		35.84%		16.26%	
Dimensional Fund Advisors Inc.	29.36%	31	(6.06%)	76	5.04%	67	42.70%	23	22.43%	20
Russell 2000 Value Index	31.74%	14	(7.47%)	83	4.22%	82	34.52%	81	18.05%	50
CAI Small Cap Value	27.75%		(3.73%)		5.93%		38.72%		18.12%	
CastleArk Management	6.01%	68	(4.90%)	78	6.15%	31	-		-	
Russell 2000 Growth Index	11.32%	35	(1.38%)	50	5.60%	32	43.30%	74	14.59%	50
CAI Small Cap Growth	8.63%		(1.29%)		3.41%		46.83%		14.56%	
Total Global Equity	8.65%		(2.08%)		2.32%		24.81%		15.39%	
MSCI The World Index	7.51%		(0.87%)		4.94%		26.68%		15.83%	
MFS Investment Management	6.06%	54	(0.49%)	60	5.59%	34	23.08%	79	-	
MSCI ACWI ldx	8.48%	28	(1.84%)	72	4.71%	47	23.44%	78	16.80%	59
CAI Global Eq Broad Style	6.41%		0.17%		4.57%		27.98%		17.49%	



### **Investment Manager Returns and Peer Group Rankings**

The table below details the rates of return and peer group rankings for the Fund's investment managers over various time periods. 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.

	2016		2015		2014		2013		2012	
Total International Equity MSCI EAFE Index	<b>5.78%</b> 1.00%		<b>(0.41%)</b> (0.81%)		<b>(3.63%)</b> (4.90%)		<b>26.26%</b> 22.78%		<b>18.88%</b> 17.32%	
Brandes Investment Partners MSCI EAFE Index CAI Non-U.S. Eq. Style	8.50% 1.00% 1.47%	3 56	(1.25%) (0.81%) 0.48%	67 62	(4.45%) (4.90%) (3.88%)	56 61	29.45% 22.78% 22.49%	8 47	11.97% 17.32% 19.26%	97 70
William Blair & Company MSCI ACWI ex-US Index CAI Non-U.S. Eq. Style	(1.45%) 5.01% 1.47%	82 16	0.18% ( <mark>5.25%)</mark> 0.48%	53 92	(1.77%) (3.44%) (3.88%)	23 47	21.92% 15.78% 22.49%	54 89	23.79% 17.39% 19.26%	10 69
Dimensional Fund Advisors Inc. Blended Benchmark CAI Intl Small Cap	8.00% 2.18% (0.17%)	8 32	3.99% 9.59% 10.05%	86 56	(4.99%) (4.95%) (3.42%)	67 67	32.60% 29.30% 31.13%	35 67	22.79% 20.00% 23.55%	63 79
Total Fixed Income Blmbg Capital Aggregate	<b>7.40%</b> 2.65%		<b>(2.49%)</b> 0.55%		<b>4.00%</b> 5.97%		<b>(0.53%)</b> (2.02%)		<b>8.82%</b> 4.21%	
BlackRock Intermediate Agg Blmbg Capital Int Aggregate CAI Intermediate FI	1.97% 2.33%	72	1.31% 1.21% 1.28%	43 64	4.37% 4.12% 3.47%	9 13	(0.93%) (1.02%) (0.49%)	67 74	3.68% 3.56% 4.89%	86 87
Reams Asset Management Blmbg Capital Aggregate CAI Core Plus FI	4.38% 2.65% 4.67%	63 99	0.38% 0.55% 0.34%	49 38	4.09% 5.97% 6.20%	97 61	(1.08%) (2.02%) (0.68%)	75 96	7.94% 4.21% 8.67%	61 100
Loomis, Sayles & Company, L.P. Blmbg Capital Aggregate CAI Core Plus FI	13.97% 2.65% 4.67%	1 99	(6.10%) 0.55% 0.34%	100 38	5.94% 5.97% 6.20%	61 61	2.41% (2.02%) (0.68%)	4 96	15.47% 4.21% 8.67%	1 100
CAI Global FI (Unhedged)	2.23%		(3.38%)		1.29%		(2.66%)		6.61%	
Total Private Equity Abbott Capital Management 2010 Abbott Capital Management 2011 Abbott Capital Management 2012 Abbott Capital Management 2013 Abbott Capital Management 2014 Abbott Capital Management 2015 Mesirow V Mesirow VI NB Secondary Opp Fund III Private Advisors Russell 3000 (1 Qtr in Arrears) + 3%	9.09% 11.03% 10.43% 9.42% 5.25% 2.86% (5.11%) 12.03% 3.32% 12.83% (1.34%) 17.97%		12.34% 12.32% 10.12% 2.45% 2.23% 0.39% 		15.40% 12.36% 9.17% 4.97% (2.17%) - 21.07% 2.22% 19.77% - 20.79%		8.66% 7.33% 1.20% (2.50%) - - 14.22% - - 24.63%		3.44% (1.66%) (5.63%) - - - - 6.65% - - - 33.30%	
Absolute Return	5.16%		4.92%		-		-		-	
Allianz SA 1000 T-Bills + 10% CAI Abs Return Hedge FoF	11.15% 10.33% 3.53%	1 1	9.76% 10.05% (0.33%)	1	- 10.03% 3.78%	1	- 10.07% 8.92%	34	- 10.11% 6.42%	9
Newton 1-month LIBOR + 4% CAI Abs Return Hedge FoF	3.31% 4.49% 3.53%	53 18	1.50% 4.19% (0.33%)	29 8	- 4.16% 3.78%	39	- 4.19% 8.92%	89	- 4.24% 6.42%	79
UBS A & Q 1-month LIBOR + 4% CAI Abs Return Hedge FoF	2.42% 4.49% 3.53%	66 18	4.09% 4.19% (0.33%)	9 8	- 4.16% 3.78%	39	- 4.19% 8.92%	89	- 4.24% 6.42%	79
Total Real Estate	11.38%		13.44%		13.87%		13.58%		9.22%	
Real Estate Blended Benchmark (1) CAI Total Real Estate DB	11.38% 9.69% 8.34%	22 33	13.44% 13.82% 14.50%	57 55	13.87% 11.26% 12.61%	45 61	13.58% 10.99% 11.85%	41 59	9.22% 11.00% 10.67%	60 48
Total Fund Total Fund Reference Index*	<b>9.11%</b> 7.26%		<b>0.74%</b> 1.21%		<b>5.31%</b> 6.00%		<b>19.59%</b> 18.20%		<b>14.10%</b> 12.90%	

<sup>\*</sup> Current Quarter Target = 56.0% MSCI ACWI IMI, 22.0% Blmbg Aggregate Idx, 8.0% 3-month Treasury Bill+3.0%, 7.0% NFI-ODCE (1 Qtr in Arrears), 4.0% Russell 3000 (1 Qtr in Arrears)+3.0% and 3.0% Principal Blended Benchmark. (1) Blended Benchmark = NCREIF (NPI) through 6/30/06, NCREIF (NPI 1 Qtr Arrears) through 12/31/13 and NFI-ODCE (1 Qtr Arrears) thereafter.



### **Investment Manager Returns**

The table below details the rates of return for the Fund's investment managers over various time periods ended December 31, 2016. 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 December 31, 2016

	Last	Last	Last 3	Last 5	Since
et of Fee Returns	Quarter	Year	Years	Years	Inception
Total Domestic Equity	5.60%	13.55%	7.97%	14.23%	6.30% (7/98)
Russell 3000 Index	4.21%	12.74%	8.43%	14.67%	6.10% (7/98)
Northern Trust Global	3.82%	11.99%	8.93%	14.71%	9.24% (9/94)
S&P 500 Index	3.82%	11.96%	8.87%	14.66%	9.27% (9/94)
Cornerstone Investment Partners S&P 500 Index	8.93% 3.82%	16.16% 11.96%	2.57% 8.87%	- 14.66%	11.21% (6/12) 14.83% (6/12)
Polen Capital Management	(0.73%)	1.19%	10.82%	14.00%	13.09% (7/12)
S&P 500 Index	3.82%	11.96%	8.87%	14.66%	14.09% (7/12)
Earnest Partners LLC	5.08%	15.90%	8.62%	14.16%	9.19% (5/05)
Russell MidCap Index Dimensional Fund Advisors Inc.	3.21%	13.80%	7.92%	14.72%	9.44% (5/05)
Russell 2000 Value Index	15.17% 14.07%	28.68% 31.74%	7.89% 8.31%	16.77% 15.07%	12.15% (11/96) 10.09% (11/96)
CastleArk Management	1.04%	5.30%	1.61%	-	6.97% (9/13)
Russell 2000 Growth Index	3.57%	11.32%	5.05%	13.74%	9.21% (9/13)
Total Global Equity	(0.82%)	8.26%	2.50%	9.00%	6.06% (4/10)
MSCI World Index	1.86%	7.51%	3.80%	10.41%	7.97% (4/10)
BlackRock Global Alpha Tilts	1.34%	- 7.540/	-	-	15.53% (3/16)
MSCI World MFS Investment Management	1.86% (3.93%)	7.51% 5.62%	3.80% 3.26%	10.41%	15.21% (3/16) 8.20% (12/12)
MSCI ACWI Idx	1.30%	8.48%	3.69%	9.96%	8.20% (12/12) 8.74% (12/12)
Total International Equity	(0.21%)	5.27%	0.02%	8.23%	6.07% (5/96)
MSCI EAFE Index	(0.71%)	1.00%	(1.60%)	6.53%	4.04% (5/96)
AQR Emerging Markets	(2.15%)	-	-	-	1.84% (8/16)
MSCI EM Gross Brandes Investment Partners	(4.08%)	11.60%	(2.19%)	1.64%	(0.37%) (8/16) 7.38% (2/98)
MSCI EAFE Index	2.50% (0.71%)	8.05% 1.00%	0.37% (1.60%)	7.77% 6.53%	7.38% (2/98) 4.07% (2/98)
William Blair & Company	(4.20%)	(1.84%)	(1.41%)	7.49%	6.45% (12/03
MSCI ACWI ex-US Index	(1.20%)	5.01%	(1.32%)	5.48%	6.36% (12/03)
Dimensional Fund Advisors Inc.	1.71%	8.00%	2.19%	11.55%	4.08% (5/06)
Blended Benchmark	(2.86%)	2.18%	2.10%	10.56%	2.12% (5/06)
Total Fixed Income Blmbg Capital Aggregate	(2.09%) (2.98%)	7.21% 2.65%	2.73% 3.03%	3.19% 2.23%	6.83% (9/94) 5.64% (9/94)
BlackRock US Debt Idx Fd	(2.99%)	2.0370	3.0370	2.2570	(2.01%) (6/16)
Blmbg Aggregate Idx	(2.98%)	2.65%	3.03%	2.23%	(0.78%) (6/16)
Reams Asset Management	(2.75%)	4.22%	2.78%	2.94%	5.51% (1/01)
Loomis, Sayles & Company, L.P. Blmbg Capital Aggregate	(0.44%) (2.98%)	13.82% 2.65%	4.15% 3.03%	5.91% 2.23%	8.46% (9/94) 5.64% (9/94)
Total Private Equity	3.34%	9.09%	12.25%	9.71%	6.53% (6/10)
Abbott Capital Management 2010	3.87%	11.03%	11.90%	8.14%	(12.83%) (6/10)
Abbott Capital Management 2011	3.31%	10.43%	9.90%	4.86%	(10.24%) (6/11)
Abbott Capital Management 2012	3.25%	9.42%	5.57%	=	1.11% (7/12)
Abbott Capital Management 2013 Abbott Capital Management 2014	2.86% 1.66%	5.25% 2.86%	1.72%	-	(0.11%) (5/13) (4.17%) (4/14)
Abbott Capital Management 2015	0.42%	(5.11%)	-	-	(4.17%) (4/14) 3.14% (4/15)
Abbott Capital Management 2016	(1.36%)	(0/0)	-	-	(0.19%) (3/16)
Mesirow V	3.95%	12.03%	17.43%	14.56%	12.14% (6/10)
Mesirow IV	1.39%	3.32%	0.47%	-	0.37% (7/13)
NB Secondary Opp Fund III Private Advisors	7.04% 2.18%	12.83% (1. <mark>34%</mark> )	21.69%	-	8.78% (12/13) (10.63%) (4/15)
Russell 3000 (1 Qtr in Arrears) + 3%	5.05%	17.97%	13.48%	19.41%	7.92% (4/15)
Absolute Return	0.48%	5.16%	-	-	5.23% (6/14)
Allianz SA 1000	3.01%	11.15%	-	-	10.41% (6/14)
T-Bills + 10%	2.49%	10.33%	10.14%	10.12%	10.15% (6/14)
Newton 1-month LIBOR + 4%	( <del>4.54%)</del> 1.12%	3.31% 4.49%	4.28%	4.26%	2.51% (8/14) 4.31% (8/14)
UBS A & Q	1.53%	2.42%	-		3.12% (12/14)
1-month LIBOR + 4%	1.12%	4.49%	4.28%	4.26%	4.34% (12/14)
Real Assets	(0.91%)	7.00%	-	-	7.00% (1/16)
Principal DRA Principal Blended Benchmark (1)	(0.91%) (0.57%)	7.00% 6.77%	<del>-</del> -	- -	7.00% (1/16) 6.77% (1/16)
Total Real Estate	2.82%	11.09%	12.59%	11.94%	5.36% (7/86)
Real Estate	2.82%	11.09%	12.59%	11.94%	5.36% (7/86)
Blended Benchmark (2)	1.96%	9.69%	11.58%	11.34%	-
Total Fund	1.25%	8.80%	4.71%	9.27%	9.14% (1/79)
Total Fund Reference Index*	0.44%	7.26%	4.79%	8.96%	= ' '

<sup>\*</sup> Current Quarter Target = 56.0% MSCI ACWI IMI, 22.0% Blmbg Aggregate Idx, 8.0% 3-month Treasury Bill+3.0%, 7.0% NFI-ODCE (1 Qtr in Arrears), 4.0% Russell 3000 (1 Qtr in Arrears)+3.0% and 3.0% Principal Blended Benchmark. (1) Current Principal Blended Benchmark = 35% Barclays US Treasury US TIPS Idx, 15% Bloomberg Commodity Idx, 20% S&P Global Infrastructure Idx, 20% S&P Global Natural Resources Idx and 10% FTSE EPRA/NAREIT Developed Market Idx. (2) Blended Benchmark consists of NCREIF (NPI) through 6/30/06, NCREIF (NPI 1 Qtr Arrears) through 12/31/13 and NFI-ODCE (1 Qtr Arrears) thereafter.



### **Investment Manager Returns**

The table below details the rates of return for the Fund's investment managers over various time periods. 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.

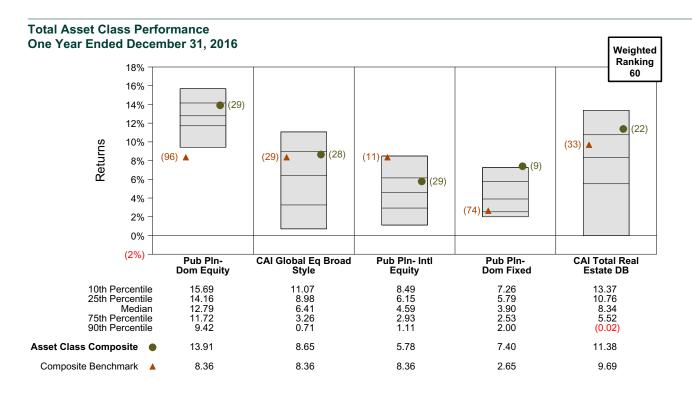
	2016	2015	2014	2013	2012
Net of Fee Returns					
Total Domestic Equity	13.55%	(0.39%)	11.28%	33.44%	15.82%
Russell 3000 Index	12.74%	0.48%	12.56%	33.55%	16.42%
Northern Trust Global	11.99%	1.47%	13.75%	32.43%	16.04%
S&P 500 Index	11.96%	1.38%	13.69%	32.39%	16.00%
Cornerstone Investment Partners	16.16%	(13.89%)	7.89%	34.35%	-
S&P 500 Index	11.96%	1.38%	13.69%	32.39%	16.00%
Polen Capital Management	1.19%	14.94%	17.02%	22.84%	-
S&P 500 Index	11.96%	1.38%	13.69%	32.39%	16.00%
Earnest Partners LLC	15.90%	0.71%	9.79%	30.60%	15.87%
Russell MidCap Index	13.80%	(2.44%)	13.22%	34.76%	17.28%
Dimensional Fund Advisors Inc.	28.68%	(6.57%)	4.47%	41.95%	21.77%
Russell 2000 Value Index	31.74%	(7.47%)	4.22%	34.52%	18.05%
CastleArk Management	5.30%	(5.54%)	5.45%	-	-
Russell 2000 Growth Index	11.32%	(1.38%)	5.60%	43.30%	14.59%
Total Global Equity	8.26%	(2.44%)	1.95%	24.37%	14.88%
MSCI The World Index	7.51%	(0.87%)	4.94%	26.68%	15.83%
MFS Investment Management	5.62%	(0.89%)	5.17%	22.47%	-
MSCI ACWI	8.48%	(1.84%)	4.71%	23.44%	16.80%
Total International Faulty	5.27%	(0.90%)	(4.09%)	25.66%	18.32%
Total International Equity		(0.89%)	(4.90%)	22.78%	
MSCI EAFE Index Brandes Investment Partners	1.00% 8.05%	(0.81%) (1.66%)	(4.84%)	28.93%	17.32% 11.51%
MSCI EAFE Index	1.00%	(0.81%)	(4.90%)	22.78%	17.32% 23.38%
William Blair & Company	(1.84%)	(0.22%)	(2.17%)	21.36%	
MSCI ACWI ex-US Index Dimensional Fund Advisors Inc.	5.01% 8.00%	(5.25%) 3.99%	(3.44%) (4.99%)	15.78% 32.39%	17.39% 22.26%
Blended Benchmark	2.18%	3.99% 9.59%	(4.95%)	32.39% 29.30%	20.00%
Total Fixed Income	7.21%	(2.63%)	3.85%	(0.69%)	8.65%
Blmbg Capital Aggregate	2.65%	0.55%	5.97%	(2.02%)	4.21%
BlackRock Intermediate Agg	4.070/	1.28%	4.34%	(0.96%)	3.65%
Blmbg Capital Int Aggregate	1.97%	1.21%	4.12%	(1.02%)	3.56%
Reams Asset Management	4.22%	0.23%	3.94%	(1.23%)	7.78%
Loomis, Sayles & Company, L.P.	13.82%	(6.20%)	5.82%	2.29%	15.33%
Blmbg Capital Aggregate	2.65%	0.55%	5.97%	(2.02%)	4.21%
Total Private Equity	9.09%	12.34%	15.40%	8.66%	3.44%
Abbott Capital Management 2010	11.03%	12.32%	12.36%	7.33%	(1.66%)
Abbott Capital Management 2011	10.43%	10.12%	9.17%	1.20%	(5.63%)
Abbott Capital Management 2012	9.42%	2.45%	4.97%	(2.50%)	-
Abbott Capital Management 2013	5.25%	2.23%	(2.17%)	-	-
Abbott Capital Management 2014	2.86%	0.39%	-	-	-
Abbott Capital Management 2015	(5.11%)	-	-	-	-
Mesirow V	12.03%	19.41%	21.07%	14.22%	6.65%
Mesirow VI	3.32%	(3.99%)	2.22%	-	-
NB Secondary Opp Fund III	12.83%	33.37%	19.77%	-	-
Private Advisors	(1.34%)	-	-	-	-
Russell 3000 (1 Qtr in Arrears) + 3%	17.97%	2.56%	20.79%	24.63%	33.30%
Absolute Return	5.16%	4.92%	-	-	-
Allianz SA 1000	11.15%	9.76%	-	-	-
T-Bills + 10%	10.33%	10.05%	10.03%	10.07%	10.11%
Newton	3.31%	1.50%	-	-	-
1-month LIBOR + 4%	4.49%	4.19%	4.16%	4.19%	4.24%
UBS A & Q	2.42%	4.09%	-	-	-
1-month LIBOR + 4%	4.49%	4.19%	4.16%	4.19%	4.24%
Total Real Estate	11.09%	13.15%	13.54%	13.15%	8.83%
Real Estate	11.09%	13.15%	13.54%	13.15%	8.83%
Blended Benchmark (1)	9.69%	13.82%	11.26%	10.99%	11.00%
Total Fund	8.80%	0.46%	5.02%	19.26%	13.78%
Total Fund Reference Index*	7.26%	1.21%	6.00%	18.20%	12.90%
		* *			

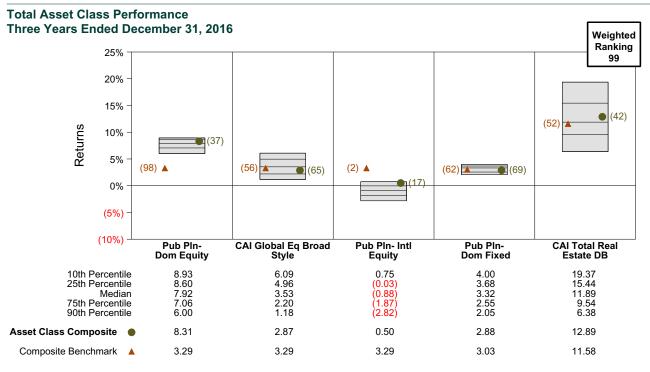
<sup>\*</sup> Current Quarter Target = 56.0% MSCI ACWI IMI, 22.0% Blmbg Aggregate Idx, 8.0% 3-month Treasury Bill+3.0%, 7.0% NFI-ODCE (1 Qtr in Arrears), 4.0% Russell 3000 (1 Qtr in Arrears)+3.0% and 3.0% Principal Blended Benchmark. (1) Blended Benchmark = NCREIF (NPI) through 6/30/06, NCREIF (NPI 1 Qtr Arrears) through 12/31/13 and NFI-ODCE (1 Qtr Arrears) thereafter.



### **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.



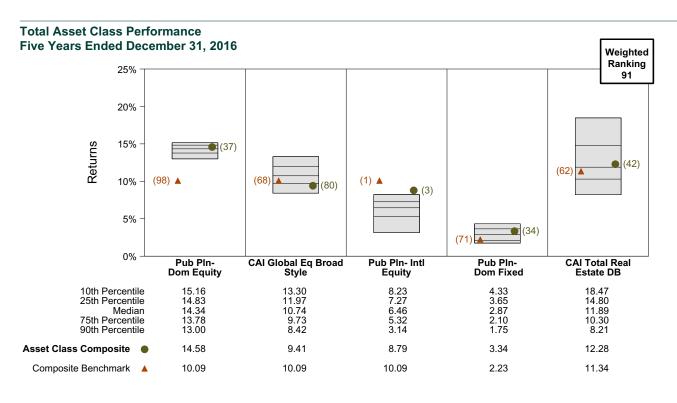


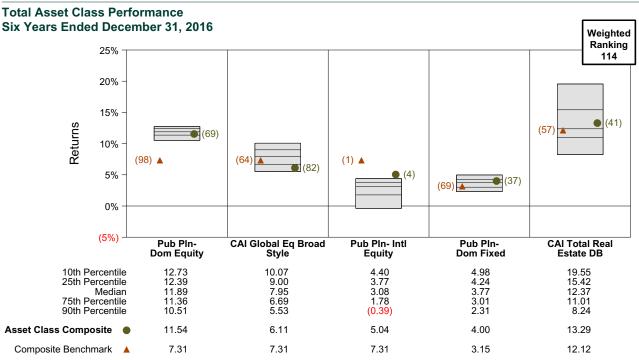
<sup>\*</sup> Current Quarter Target = 56.0% MSCI ACWI IMI, 22.0% Blmbg Aggregate ldx, 8.0% 3-month Treasury Bill+3.0%, 7.0% NFI-ODCE (1 Qtr in Arrears), 4.0% Russell 3000 (1 Qtr in Arrears)+3.0% and 3.0% Principal Blended Benchmark.



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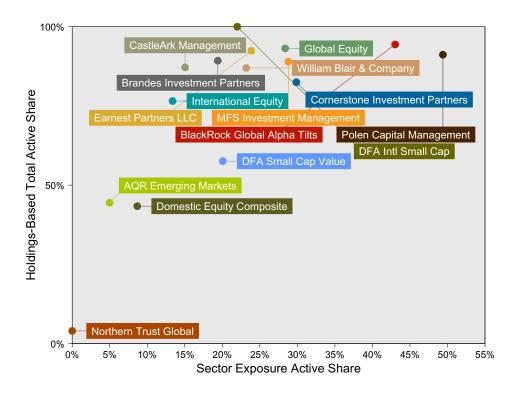
<sup>\*</sup> Current Quarter Target = 56.0% MSCI ACWI IMI, 22.0% Blmbg Aggregate ldx, 8.0% 3-month Treasury Bill+3.0%, 7.0% NFI-ODCE (1 Qtr in Arrears), 4.0% Russell 3000 (1 Qtr in Arrears)+3.0% and 3.0% Principal Blended Benchmark.



# Active Share Structure Analysis For One Quarter Ended December 31, 2016

This analysis compares multiple portfolios and composites in an active share context, illustrating the varying degrees of active risk taken by individual portfolios, and how they combine into active risk profiles for composites and the equity structure. Two sources of active share (active risk) are shown: 1) Total Holdings-Based Active Share based on individual position comparisons to the index (and the subcomponent from holding non-index securities), and 2) Sector Exposure Active Share that quantifies the more macro-level sector differences from the index.

### Active Share Analysis Ended December 31, 2016



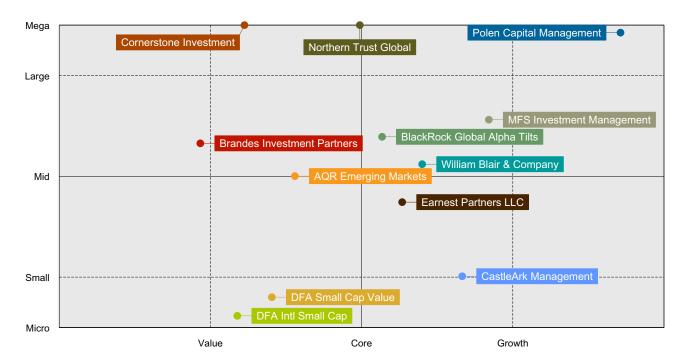
	Index	Total Act Share	Non-Idx Act Share	Sector Act Share	Number Securities	Security Diverse
Domestic Equity Composite	e Russell 3000	43.36%	1.15%	8.67%	1748	92.41
Northern Trust Global	S&P 500	3.98%	0.27%	0.00%	505	54.33
Cornerstone Investment Partr	ners S&P 500	82.48%	4.92%	29.86%	30	11.80
Polen Capital Management	S&P 500	91.16%	5.54%	49.39%	21	7.71
Earnest Partners LLC	Russell MidCap	92.40%	11.73%	23.86%	56	21.84
DFA Small Cap Value	Russell 2000 Value	57.56%	10.57%	20.07%	1097	103.29
CastleArk Management	Russell 2000 Growth	87.17%	19.77%	15.04%	104	41.39
Global Equity	MSCI World	93.15%	36.45%	28.38%	757	1.94
MFS Investment Managemen	t MSCI ACWI Gross	88.95%	2.91%	28.81%	93	29.67
BlackRock Global Alpha Tilts	MSCI World	94.40%	36.91%	43.03%	703	1.90
International Equity	MSCI EAFE	76.54%	22.59%	13.36%	2767	63.01
AQR Emerging Markets	MSCI EM Gross	44.43%	0.23%	4.97%	352	46.19
Brandes Investment Partners	MSCI EAFE	89.28%	9.35%	19.40%	57	19.15
William Blair & Company	MSCI ACWIXUS Gross	86.98%	14.21%	23.17%	174	25.40
, ,	ISCI World ex US Sm Cap	100.00%	50.00%	21.99%	2214	197.68



### Global Holdings Based Style Analysis For One Quarter Ended December 31, 2016

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 December 31, 2016



	Weight	Wtd Median	Combined	Growth	Value	Number of	Security
	%	Mkt Cap	Z-Score	Z-Score	Z-Score	Securities I	Diversification
Northern Trust Global	18.29%	81.55	(0.03)	(0.01)	0.02	505	54.33
Cornerstone Investment	6.23%	90.44	(0.62)	(0.18)	0.44	30	11.80
Polen Capital Management	5.98%	76.77	1.39	0.64	(0.74)	21	7.71
Earnest Partners LLC	4.61%	11.40	0.20	0.05	(0.15)	56	21.84
DFA Small Cap Value	7.83%	1.93	(0.48)	(0.16)	0.33	1097	103.29
CastleArk Management	3.55%	2.52	0.53	0.13	(0.40)	104	41.39
MFS Investment Management	6.92%	34.10	0.67	0.17	(0.50)	93	29.67
BlackRock Global Alpha Tilts	10.87%	28.18	0.09	0.05	(0.04)	703	1.90
AQR Emerging Markets	3.75%	14.56	(0.36)	(0.10)	0.27	352	46.19
Brandes Investment Partners	14.58%	25.91	(0.85)	(0.29)	0.56	57	19.15
William Blair & Company	10.27%	18.68	0.31	0.18	(0.13)	174	25.40
DFA Intl Small Cap	7.13%	1.49	(0.66)	(0.20)	0.47	2214	197.68



### Domestic Equity Composite Period Ended December 31, 2016

### **Quarterly Summary and Highlights**

- Domestic Equity Composite's portfolio posted a 5.68% return for the quarter placing it in the 11 percentile of the Pub Pln- Domestic Equity group for the quarter and in the 29 percentile for the last year.
- Domestic Equity Composite's portfolio outperformed the Russell 3000 Index by 1.47% for the quarter and outperformed the Russell 3000 Index for the year by 1.17%.

### **Quarterly Asset Growth**

 Beginning Market Value
 \$1,255,617,513

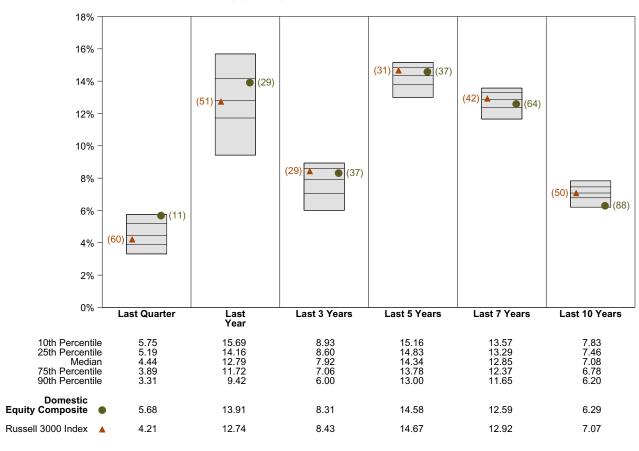
 Net New Investment
 \$-62,000,035

 Investment Gains/(Losses)
 \$69,194,810

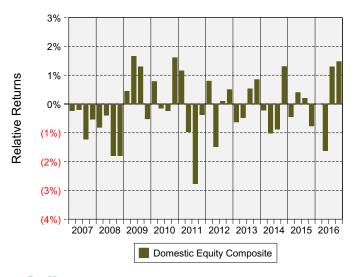
 Ending Market Value
 \$1,262,812,288

Percent Cash: 1.3%

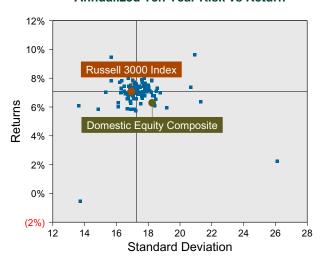
### Performance vs Pub Pln- Domestic Equity (Gross)



### Relative Return vs Russell 3000 Index



# Pub PIn- Domestic Equity (Gross) Annualized Ten Year Risk vs Return



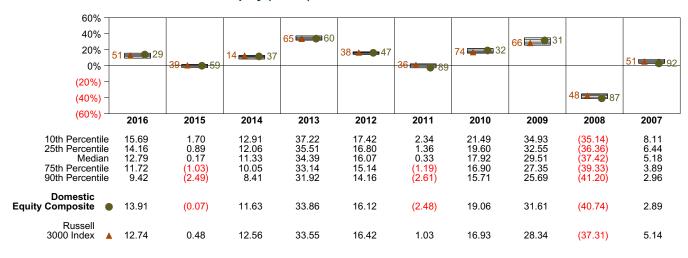


# **Domestic Equity Composite Return Analysis Summary**

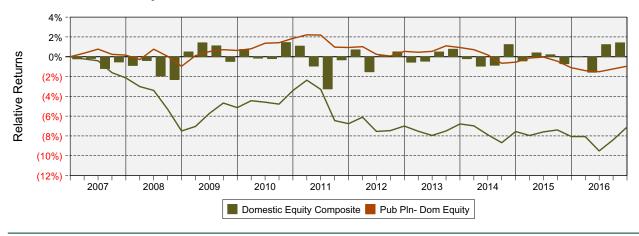
### **Return Analysis**

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.

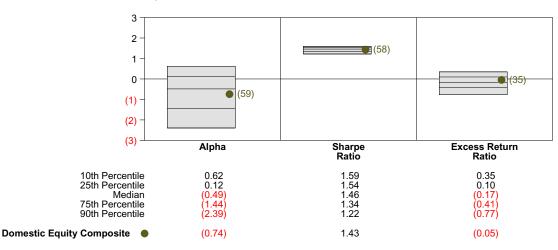
### Performance vs Pub Pln- Domestic Equity (Gross)



### **Cumulative and Quarterly Relative Return vs Russell 3000 Index**



Risk Adjusted Return Measures vs Russell 3000 Index Rankings Against Pub Pln- Domestic Equity (Gross) Five Years Ended December 31, 2016



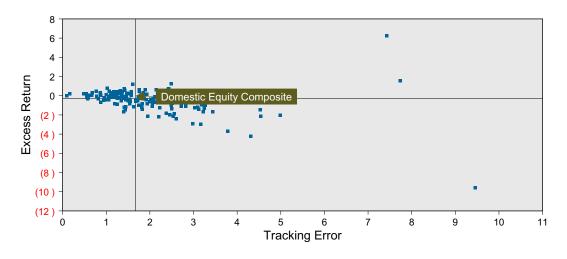


# Domestic Equity Composite Risk Analysis Summary

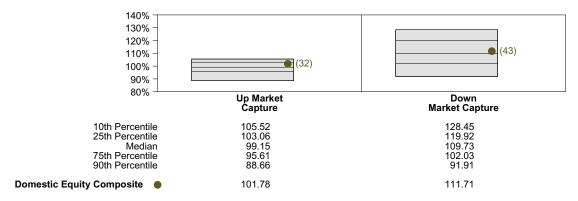
### **Risk Analysis**

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.

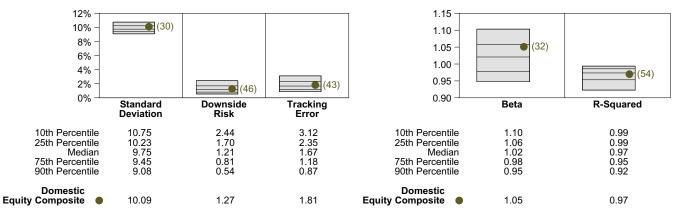
# Risk Analysis vs Pub Pln- Domestic Equity (Gross) Five Years Ended December 31, 2016



Market Capture vs Russell 3000 Index Rankings Against Pub Pln- Domestic Equity (Gross) Five Years Ended December 31, 2016



Risk Statistics Rankings vs Russell 3000 Index Rankings Against Pub Pln- Domestic Equity (Gross) Five Years Ended December 31, 2016

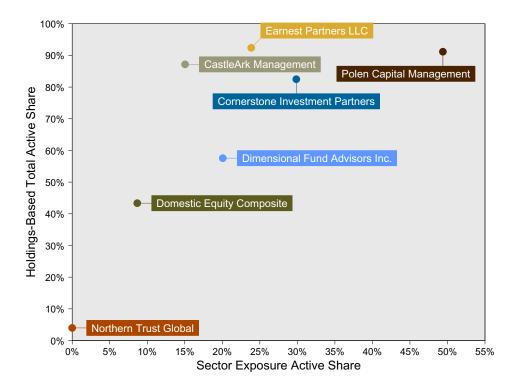




# Active Share Structure Analysis For One Quarter Ended December 31, 2016

This analysis compares multiple portfolios and composites in an active share context, illustrating the varying degrees of active risk taken by individual portfolios, and how they combine into active risk profiles for composites and the equity structure. Two sources of active share (active risk) are shown: 1) Total Holdings-Based Active Share based on individual position comparisons to the index (and the subcomponent from holding non-index securities), and 2) Sector Exposure Active Share that quantifies the more macro-level sector differences from the index.

# Active Share Analysis Ended December 31, 2016



	Index	Total Act Share	Non-Idx Act Share	Sector Act Share	Number Securities	Security Diverse
		40.000	4.4=0/			
Domestic Equity Composite	Russell 3000	43.36%	1.15%	8.67%	1748	92.41
Northern Trust Global	S&P 500	3.98%	0.27%	0.00%	505	54.33
Cornerstone Investment Partners	S&P 500	82.48%	4.92%	29.86%	30	11.80
Polen Capital Management	S&P 500	91.16%	5.54%	49.39%	21	7.71
Earnest Partners LLC	Russell MidCap	92.40%	11.73%	23.86%	56	21.84
Dimensional Fund Advisors Inc. F	Russell 2000 Value	57.56%	10.57%	20.07%	1097	103.29
CastleArk Management R	tussell 2000 Growth	87.17%	19.77%	15.04%	104	41.39



### Northern Trust Global Period Ended December 31, 2016

### **Investment Philosophy**

Northern Trust seeks to replicate the risk and returns of the S&P 500 equity index and believes that a passive approach to portfolio management will provide index-like returns with minimal transaction costs.

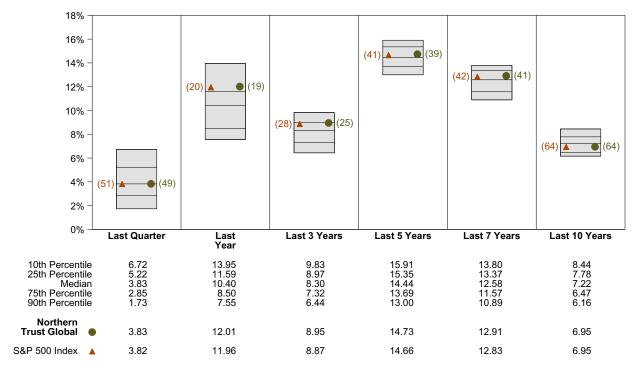
### **Quarterly Summary and Highlights**

- Northern Trust Global's portfolio posted a 3.83% return for the quarter placing it in the 49 percentile of the CAI Large Cap Core group for the quarter and in the 19 percentile for the last year.
- Northern Trust Global's portfolio outperformed the S&P 500 Index by 0.00% for the quarter and outperformed the S&P 500 Index for the year by 0.05%.

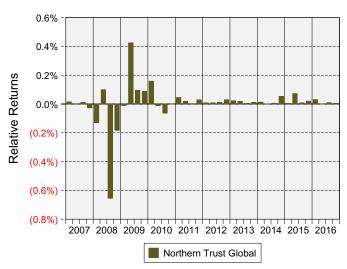
### **Quarterly Asset Growth**

Beginning Market Value	\$483,496,098
Net New Investment	\$-5,000,035
Investment Gains/(Losses)	\$18,417,896
Ending Market Value	\$496,913,959

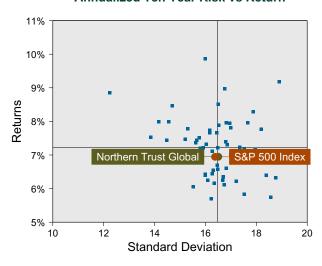
### Performance vs CAI Large Cap Core (Gross)



### Relative Return vs S&P 500 Index



# CAI Large Cap Core (Gross) Annualized Ten Year Risk vs Return



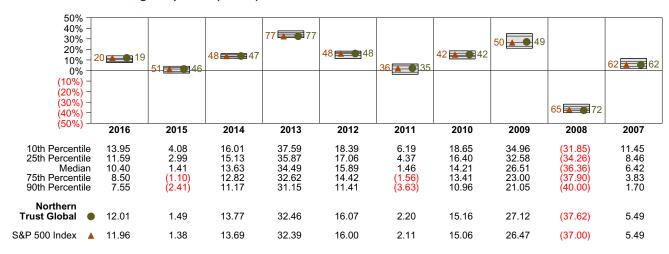


# Northern Trust Global Return Analysis Summary

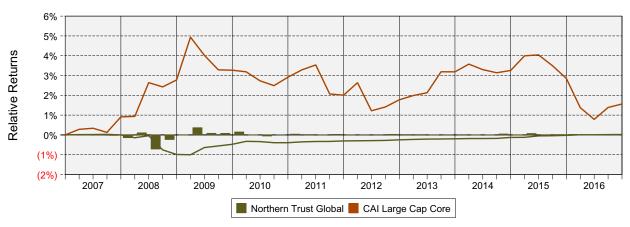
### **Return Analysis**

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 two charts illustrate the manager's ranking relative to their style using various risk-adjusted return measures and returns for rising/declining periods.

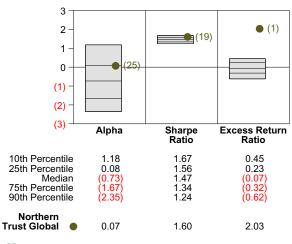
### Performance vs CAI Large Cap Core (Gross)



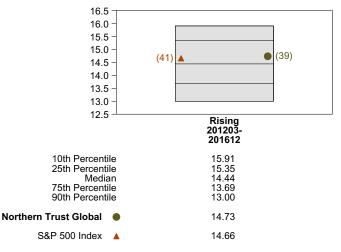
### Cumulative and Quarterly Relative Return vs S&P 500 Index



Risk Adjusted Return Measures vs S&P 500 Index Rankings Against CAI Large Cap Core (Gross) Five Years Ended December 31, 2016



Returns for Domestic Equity Rising/Declining Periods Five Years Ended December 31, 2016



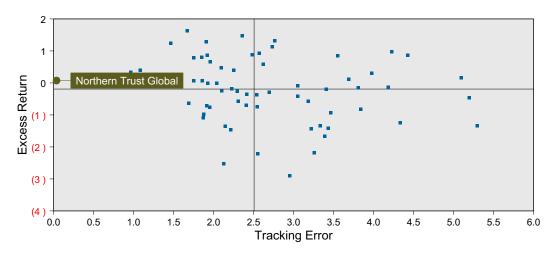


# Northern Trust Global Risk Analysis Summary

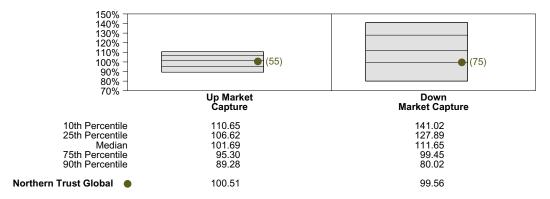
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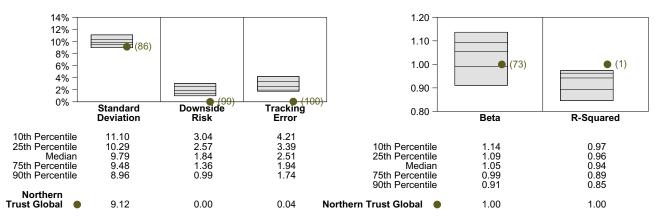
# Risk Analysis vs CAI Large Cap Core (Gross) Five Years Ended December 31, 2016



Market Capture vs S&P 500 Index Rankings Against CAI Large Cap Core (Gross) Five Years Ended December 31, 2016



Risk Statistics Rankings vs S&P 500 Index Rankings Against CAI Large Cap Core (Gross) Five Years Ended December 31, 2016



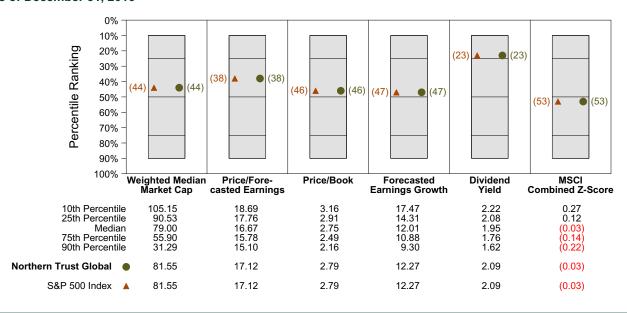


### Northern Trust Global Equity Characteristics Analysis Summary

### **Portfolio Characteristics**

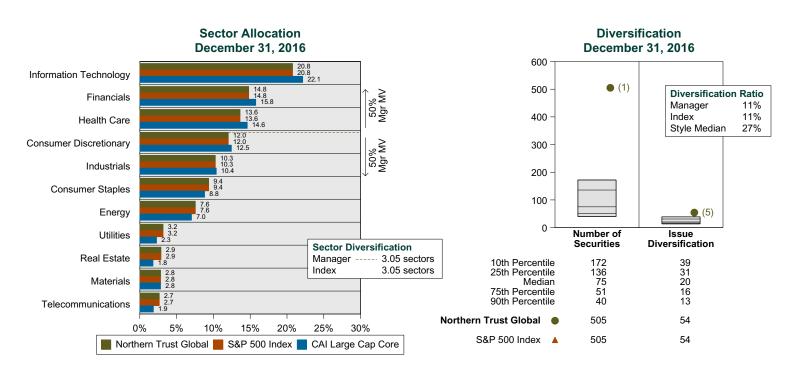
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

### Portfolio Characteristics Percentile Rankings Rankings Against CAI Large Cap Core as of December 31, 2016



### **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.





# **Northern Trust Global** Top 10 Portfolio Holdings Characteristics as of December 31, 2016

### 10 Largest Holdings

						Price/		
		Ending	Percent			Forecasted		Forecasted
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Apple Inc	Information Technology	\$15,918,677	3.2%	2.98%	608.96	12.51	1.97%	11.30%
Microsoft Corp	Information Technology	\$12,453,544	2.5%	8.60%	483.16	20.14	2.51%	11.00%
Exxon Mobil Corp	Energy	\$9,647,449	1.9%	4.32%	374.28	21.39	3.32%	18.53%
Johnson & Johnson	Health Care	\$8,078,377	1.6%	(1.80)%	313.43	16.14	2.78%	6.47%
Berkshire Hathaway Inc Del CI B New	Financials	\$7,975,240	1.6%	12.81%	209.01	20.32	0.00%	-
JPMorgan Chase & Co	Financials	\$7,958,236	1.6%	30.52%	308.77	13.40	2.23%	5.13%
Amazon.Com	Consumer Discretionary	\$7,623,054	1.5%	(10.44)%	356.31	83.32	0.00%	38.60%
General Electric Co	Industrials	\$7,205,279	1.5%	7.49%	279.55	18.92	3.04%	12.70%
Facebook Inc CI A	Information Technology	\$6,941,853	1.4%	(10.31)%	269.31	22.08	0.00%	36.46%
At&t Inc	Telecommunications	\$6,731,439	1.4%	6.01%	261.18	14.32	4.61%	5.05%

### **10 Best Performers**

						Price/		
		Ending	Percent			Forecasted		Forecasted
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Nvidia Corp	Information Technology	\$1,482,860	0.3%	56.01%	57.11	40.16	0.52%	15.00%
Keycorp	Financials	\$509,011	0.1%	50.86%	19.74	14.05	1.86%	11.31%
Goldman Sachs Group Inc	Financials	\$2,281,856	0.5%	48.93%	95.22	13.03	1.09%	17.91%
Regions Finl Corp New	Financials	\$455,767	0.1%	46.15%	17.68	14.96	1.81%	7.25%
Citizens Finl Group Inc	Financials	\$470,165	0.1%	44.85%	18.24	16.34	1.35%	15.87%
Comerica	Financials	\$302,452	0.1%	44.42%	11.73	17.60	1.35%	21.29%
Lincoln National Corp	Financials	\$390,449	0.1%	41.78%	15.15	9.56	1.75%	9.87%
Bank Amer Corp	Financials	\$5,756,326	1.2%	41.72%	223.32	13.48	1.36%	10.28%
Zions Bancorp	Financials	\$225,729	0.0%	39.04%	8.77	18.24	0.74%	10.00%
United Contl Hldgs Inc Com	Industrials	\$542,394	0.1%	38.90%	23.12	11.44	0.00%	(12.90)%

### **10 Worst Performers**

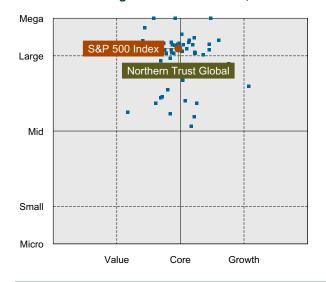
						Price/		
		Ending	Percent			Forecasted		Forecasted
		Market		Qtrly	Market	Earnings	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Illumina Inc	Health Care	\$484,865	0.1%	(29.52)%	18.81	34.70	0.00%	12.30%
Mallinckrodt	Health Care	\$134,653	0.0%	(28.60)%	5.27	6.45	0.00%	6.10%
Tripadvisor Inc	Consumer Discretionary	\$135,378	0.0%	(26.61)%	6.16	29.54	0.00%	1.35%
Under Armour Inc CI C	Consumer Discretionary	\$118,408	0.0%	(25.66)%	5.54	35.45	0.00%	-
Under Armour Inc CI A	Consumer Discretionary	\$136,410	0.0%	(24.90)%	5.34	42.10	0.00%	18.65%
Cerner Corp	Health Care	\$369,122	0.1%	(23.29)%	16.08	18.50	0.00%	12.50%
Edwards Lifesciences Corp	Health Care	\$516,408	0.1%	(22.28)%	20.03	27.64	0.00%	17.00%
Southwestern Energy Co	Energy	\$135,322	0.0%	(21.82)%	5.36	14.62	0.00%	64.14%
Coty Inc Com Cl A	Consumer Staples	\$221,966	0.0%	(21.55)%	13.67	18.13	2.73%	(1.50)%
Nielsen Hldgs Plc Shs Eur	Industrials	\$363,468	0.1%	(21.12)%	14.99	15.25	2.96%	8.65%



### Current Holdings Based Style Analysis Northern Trust Global As of December 31, 2016

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.

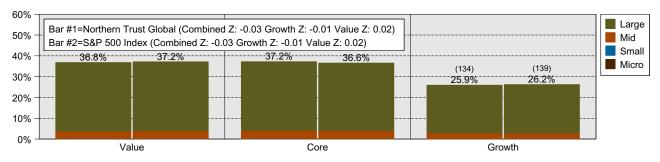
### Style Map vs CAI Large Cap Core Holdings as of December 31, 2016



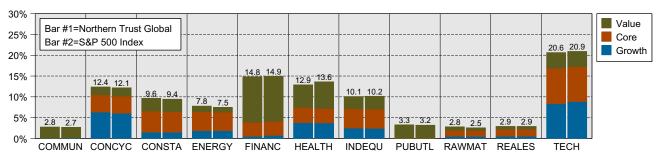
# Style Exposure Matrix Holdings as of December 31, 2016

	37.2% (184)	36.6% (180)	26.2% (139)	100.0% (503)
· Otal				
Total	36.8% (170)	37.2% (175)	25.9% (134)	100.0% (479)
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Micro	, ,	, ,	, ,	, ,
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
• · · · · · · ·	0.0% (4)	0.0% (1)	0.0% (2)	0.1% (7)
Small	0.1% (4)	0.0% (2)	0.0% (1)	0.1% (7)
	3.9% (79)	4.0% (80)	2.8% (53)	10.7% (212)
Mid				
	3.6% (70)	4.0% (78)	2.9% (52)	10.5% (200)
Large	33.2% (101)	32.5% (99)	23.4% (84)	89.2% (284)
Lorgo	33.1% (96)	33.1% (95)	23.1% (81)	89.4% (272)

# Combined Z-Score Style Distribution Holdings as of December 31, 2016



### Sector Weights Distribution Holdings as of December 31, 2016



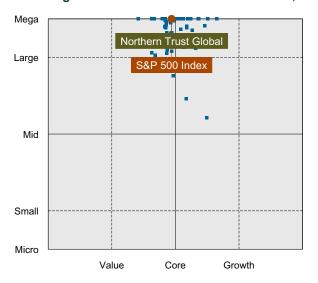


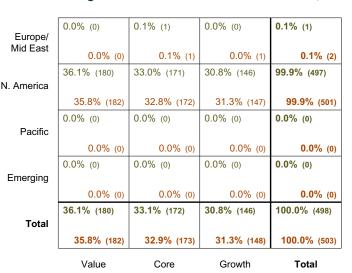
### Historical Holdings Based Style Analysis Northern Trust Global For Three Years Ended December 31, 2016

This page analyzes the historical investment style of a portfolio utilizing a detailed holdings-based style analysis to determine average actual exposures to various region 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 average historical market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the average historical portfolio and index weights and stock counts (in parentheses) in each region/style segment of the market. The next two style exposure charts illustrate the actual quarterly region/style and style only segment exposures of the portfolio through history.

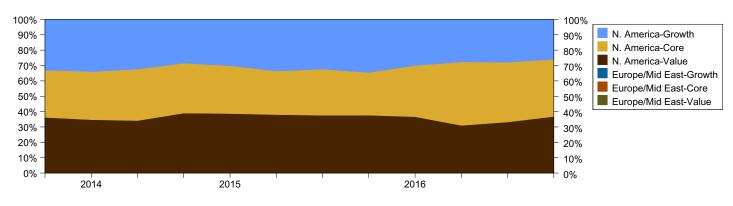
### Average Style Map vs CAI Large Cap Core Holdings for Three Years Ended December 31, 2016

# Average Style Exposure Matrix Holdings for Three Years Ended December 31, 2016

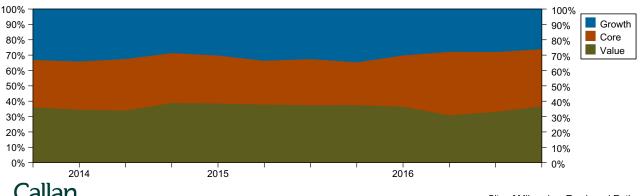




### Northern Trust Global Historical Region/Style Exposures



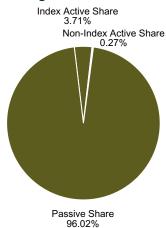
### Northern Trust Global Historical Style Only Exposures



### **Northern Trust Global** Active Share Analysis as of December 31, 2016 vs. S&P 500 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**



Passive Share 100.00%

### **Total Active Share: 3.98%**

Consumer Discretionary
Consumer Staples
Energy
Financials
Health Care
Industrials
Information Technology
Materials
Real Estate
Telecommunications
Utilities
Total

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
1.73%	0.00%	1.73%	12.03%	12.03%	0.34%
1.15%	0.00%	1.15%	9.37%	9.37%	0.21%
1.02%	0.99%	2.01%	7.56%	7.56%	0.21%
4.62%	0.05%	4.67%	14.81%	14.81%	0.65%
8.45%	0.00%	8.45%	13.63%	13.63%	0.79%
5.96%	0.00%	5.96%	10.27%	10.27%	0.49%
4.47%	0.00%	4.47%	20.77%	20.77%	0.81%
6.47%	6.47%	12.93%	2.84%	2.84%	0.30%
2.37%	0.00%	2.37%	2.89%	2.89%	0.07%
0.07%	0.00%	0.07%	2.66%	2.66%	0.04%
0.25%	0.00%	0.25%	3.17%	3.17%	0.05%
3.71%	0.27%	3.98%	100.00%	100.00%	3.98%

### Active Share vs. CAI Large Cap Core





### Cornerstone Investment Partners Period Ended December 31, 2016

### **Investment Philosophy**

Cornerstone has observed that despite an efficient market the fundamentals of large companies change less dramatically than their stock prices due to the short term nature of investors, and that by remaining disciplined and valuation driven, they can take advantage of those pricing anomalies in the market.

### **Quarterly Summary and Highlights**

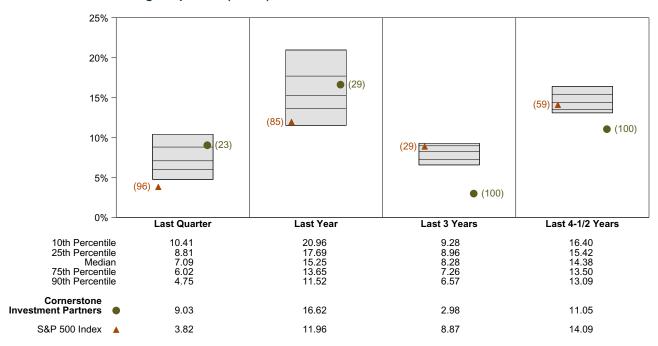
- Cornerstone Investment Partners's portfolio posted a 9.03% return for the quarter placing it in the 23 percentile of the CAI Large Cap Value group for the quarter and in the 29 percentile for the last year.
- Cornerstone Investment Partners's portfolio outperformed the S&P 500 Index by 5.21% for the quarter and outperformed the S&P 500 Index for the year by 4.66%.

### **Quarterly Asset Growth**

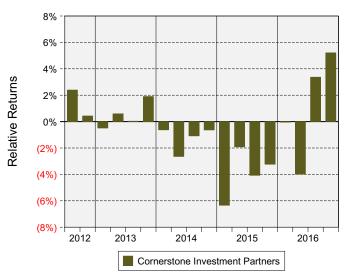
Beginning Market Value	\$174,360,576
Net New Investment	\$-20,000,000
Investment Gains/(Losses)	\$14,864,633
Ending Market Value	\$169,225,209

Percent Cash: 4.8%

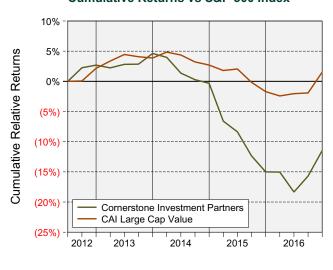
### Performance vs CAI Large Cap Value (Gross)



### Relative Return vs S&P 500 Index



### **Cumulative Returns vs S&P 500 Index**



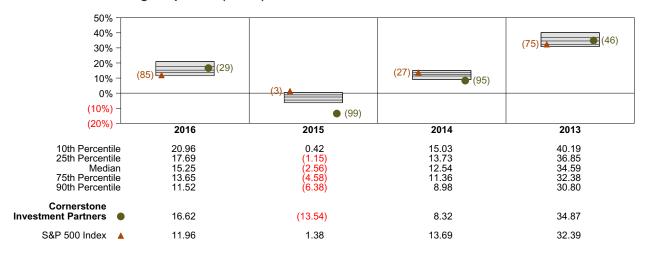


# **Cornerstone Investment Partners Return Analysis Summary**

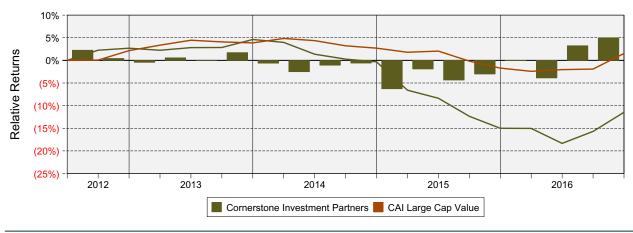
### **Return Analysis**

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 two charts illustrate the manager's ranking relative to their style using various risk-adjusted return measures and returns for rising/declining periods.

### Performance vs CAI Large Cap Value (Gross)



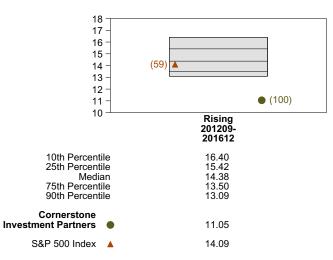
### Cumulative and Quarterly Relative Return vs S&P 500 Index



Risk Adjusted Return Measures vs S&P 500 Index Rankings Against CAI Large Cap Value (Gross) Four and One-Half Years Ended December 31, 2016

2 (99) 1 0 (96) (2)(3) (4) (5) (99) (6)Alpha Sharpe **Excess Return** Ratio Ratio 0.51 10th Percentile 1 34 173 0.46 25th Percentile 1.66 0.34 Median 1.57 0.09 75th Percentile 1.49 90th Percentile (0.29)1.35 Cornerstone **Investment Partners** (5.80)0.96 (0.54)

Returns for Domestic Equity
Rising/Declining Periods
Four and One-Half Years Ended December 31, 2016



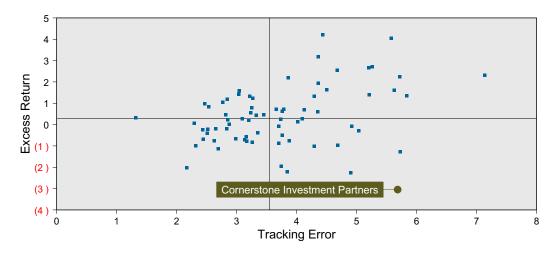


# **Cornerstone Investment Partners Risk Analysis Summary**

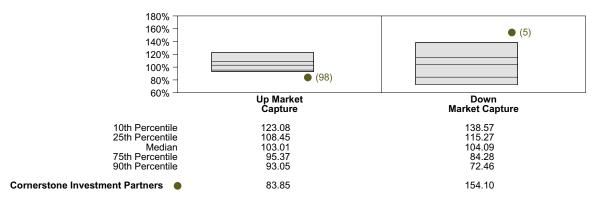
### **Risk Analysis**

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.

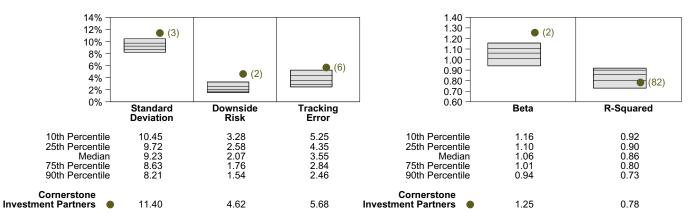
### Risk Analysis vs CAI Large Cap Value (Gross) Four and One-Half Years Ended December 31, 2016



Market Capture vs S&P 500 Index Rankings Against CAI Large Cap Value (Gross) Four and One-Half Years Ended December 31, 2016



Risk Statistics Rankings vs S&P 500 Index Rankings Against CAI Large Cap Value (Gross) Four and One-Half Years Ended December 31, 2016



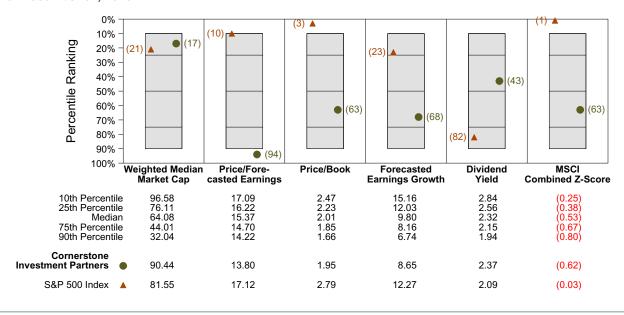


# Cornerstone Investment Partners Equity Characteristics Analysis Summary

### **Portfolio Characteristics**

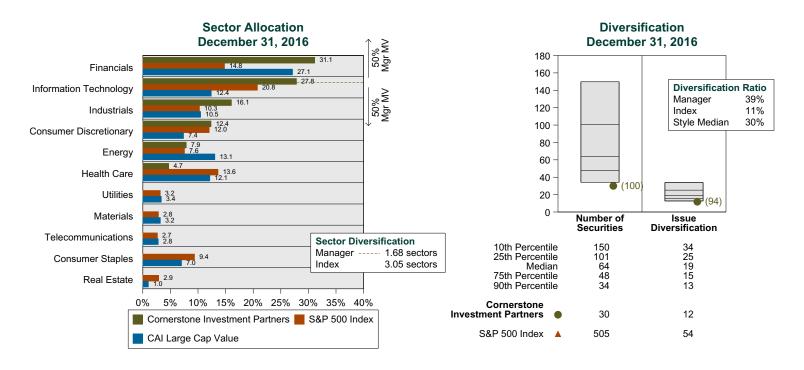
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

### Portfolio Characteristics Percentile Rankings Rankings Against CAI Large Cap Value as of December 31, 2016



### **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.





# **Cornerstone Investment Partners** Top 10 Portfolio Holdings Characteristics as of December 31, 2016

### 10 Largest Holdings

						Price/		
		Ending	Percent			Forecasted		Forecasted
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Microsoft Corp	Information Technology	\$7,840,514	4.6%	8.61%	483.16	20.14	2.51%	11.00%
Johnson & Johnson	Health Care	\$7,572,177	4.5%	(1.80)%	313.43	16.14	2.78%	6.47%
Capital One Finl Corp	Financials	\$7,064,259	4.2%	22.07%	42.08	11.04	1.83%	5.50%
Citigroup Inc	Financials	\$7,009,769	4.2%	26.28%	169.36	11.47	1.08%	2.62%
Cisco Sys Inc	Information Technology	\$7,009,529	4.2%	(3.95)%	151.70	12.49	3.44%	8.95%
Lincoln National Corp	Financials	\$6,805,929	4.0%	41.67%	15.15	9.56	1.75%	9.87%
Chevron Corp New	Energy	\$6,791,290	4.0%	15.47%	222.19	25.42	3.67%	24.53%
Us Bancorp Del	Financials	\$6,575,360	3.9%	20.44%	87.31	14.93	2.18%	5.32%
Alphabet Inc CI A	Information Technology	\$6,486,203	3.8%	(1.48)%	234.63	19.33	0.00%	18.85%
Oracle Corp	Information Technology	\$6,246,203	3.7%	(1.74)%	157.74	14.03	1.56%	6.50%

### **10 Best Performers**

						Price/			
		Ending	Percent		Forecasted				
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in	
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings	
Lincoln National Corp	Financials	\$6,805,929	4.0%	41.67%	15.15	9.56	1.75%	9.87%	
JPMorgan Chase & Co	Financials	\$3,973,655	2.4%	30.46%	308.77	13.40	2.23%	5.13%	
Pnc Finl Services Group	Financials	\$3,464,940	2.1%	30.40%	56.90	15.41	1.88%	6.13%	
Citigroup Inc	Financials	\$7,009,769	4.2%	26.28%	169.36	11.47	1.08%	2.62%	
Capital One Finl Corp	Financials	\$7,064,259	4.2%	22.07%	42.08	11.04	1.83%	5.50%	
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Boeing Co	Industrials	\$5,915,840	3.5%	19.07%	96.08	16.63	3.65%	10.87%	
Western Digital Corp	Information Technology	\$4,455,821	2.6%	17.05%	19.40	8.87	2.94%	2.00%	
American Express Co	Financials	\$5,033,736	3.0%	16.17%	67.80	13.25	1.73%	4.70%	
Chevron Corp New	Energy	\$6,791,290	4.0%	15.47%	222.19	25.42	3.67%	24.53%	

### **10 Worst Performers**

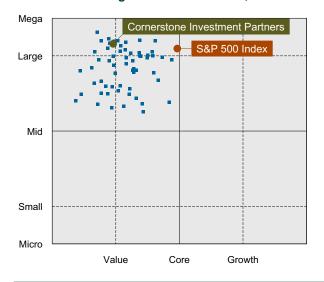
						Price/		
		Ending	Percent			Forecasted		Forecasted
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Taiwan Semiconductor Mfg Co Ltd Spon	Information Technology	\$3,745,406	2.2%	(6.03)%	146.03	13.00	3.31%	11.52%
Vf Corp	Consumer Discretionary	\$4,182,640	2.5%	(4.10)%	22.07	15.60	3.15%	7.98%
Cisco Sys Inc	Information Technology	\$7,009,529	4.2%	(3.95)%	151.70	12.49	3.44%	8.95%
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Alphabet Inc Cl A	Information Technology	\$6,486,203	3.8%	(1.48)%	234.63	19.33	0.00%	18.85%
Honeywell International	Industrials	\$6,169,012	3.7%	0.50%	88.29	16.36	2.30%	8.08%
Magna Intl Inc	Consumer Discretionary	\$6,203,206	3.7%	1.61%	16.64	7.41	2.30%	9.20%
Ford Motor Co	Consumer Discretionary	\$3,596,545	2.1%	1.75%	47.34	7.40	4.95%	(0.40)%
Apple Inc	Information Technology	\$4,045,013	2.4%	2.94%	608.96	12.51	1.97%	11.30%



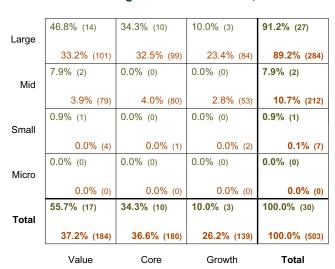
### Current Holdings Based Style Analysis Cornerstone Investment Partners As of December 31, 2016

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.

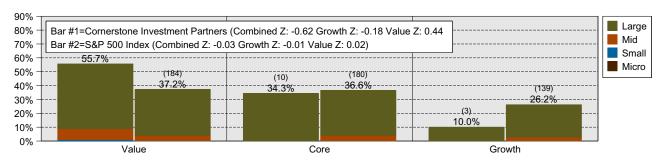
# Style Map vs CAI Large Cap Value Holdings as of December 31, 2016



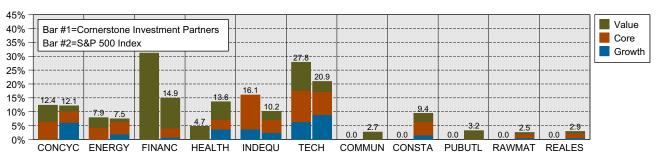
# Style Exposure Matrix Holdings as of December 31, 2016



# Combined Z-Score Style Distribution Holdings as of December 31, 2016



### Sector Weights Distribution Holdings as of December 31, 2016

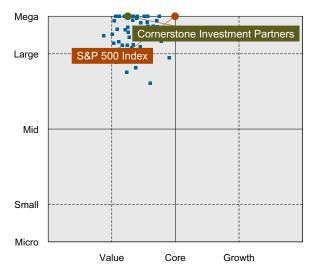




### Current Holdings Based Style Analysis Cornerstone Investment Partners As of December 31, 2016

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.

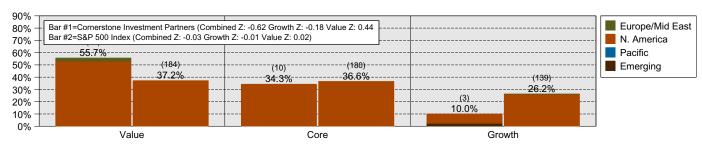
# Style Map vs CAI Large Cap Value Holdings as of December 31, 2016



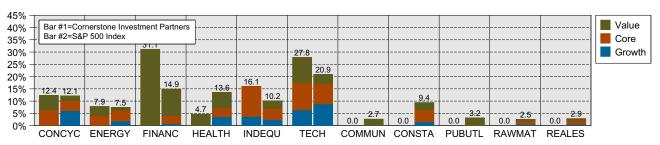
# Style Exposure Matrix Holdings as of December 31, 2016

	Value	Core	Growth	Total
	37.2% (184)	36.6% (180)	26.2% (139)	100.0% (503)
Total				
	55.7% (17)	34.3% (10)	10.0% (3)	100.0% (30)
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Emerging				
	0.0% (0)	0.0% (0)	2.3% (1)	2.3% (1)
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Pacific				
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
	37.2% (184)	36.6% (180)	26.2% (138)	100.0% (502)
N. America				
	52.9% (16)	34.3% (10)	7.7% (2)	94.9% (28)
Mid East	0.0% (0)	0.0% (0)	0.0% (1)	0.0% (1)
Europe/	2.7% (1)	0.0% (0)	0.0% (0)	2.7% (1)
	0.70/	0.00/ (0)	0.00/ (2)	0.70/ (1)

# Combined Z-Score Style Distribution Holdings as of December 31, 2016



### Sector Weights Distribution Holdings as of December 31, 2016





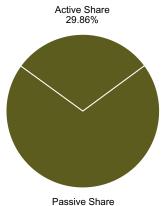
### Cornerstone Investment Partners Active Share Analysis as of December 31, 2016 vs. S&P 500 Index

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**

# Index Active Share 77.56% Non-Index Active Share 4.92% 4.92%

### **Sector Exposure Active Share**



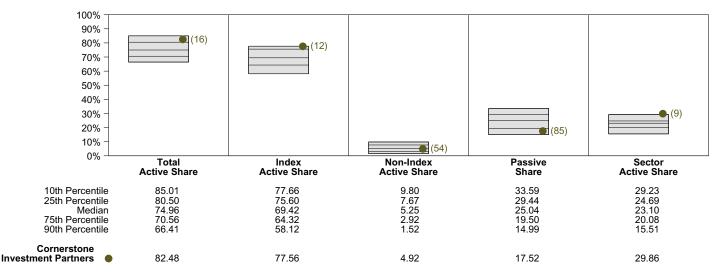
Passive Share 70.14%

### Total Active Share: 82.48%

Consumer Discretionary
Consumer Staples
Energy
Financials
Health Care
Industrials
Information Technology
Materials
Real Estate
Telecommunications
Utilities
Total

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
81.29%	15.57%	96.86%	12.03%	12.37%	11.85%
100.00%	0.00%	100.00%	9.37%	0.00%	4.71%
61.20%	23.24%	84.43%	7.56%	7.88%	6.50%
74.13%	0.00%	74.13%	14.81%	31.14%	18.73%
88.07%	0.00%	88.07%	13.63%	4.70%	7.56%
86.19%	0.00%	86.19%	10.27%	16.06%	11.77%
57.42%	4.18%	61.59%	20.77%	27.85%	15.71%
100.00%	0.00%	100.00%	2.84%	-	1.26%
100.00%	0.00%	100.00%	2.89%	-	1.45%
100.00%	0.00%	100.00%	2.66%	-	1.34%
100.00%	0.00%	100.00%	3.17%	-	1.59%
77.56%	4.92%	82.48%	100.00%	100.00%	82.48%

### Active Share vs. CAI Large Cap Value





### Polen Capital Management Period Ended December 31, 2016

### **Investment Philosophy**

Polen Capital Management believes consistent earnings growth drives intrinsic value growth and stock price appreciation. Accordingly, they focus on identifying a concentrated portfolio of high quality companies able to deliver sustainable above average growth in earnings driven by solid franchises, superior financial strength, proven management teams and powerful products/services. First full quarter of performance is third quarter 2012. Prior history represents manager composite returns.

### **Quarterly Summary and Highlights**

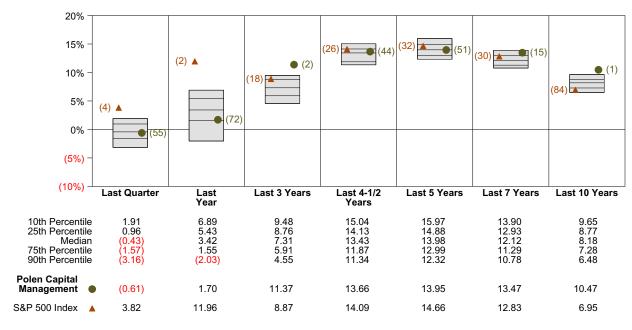
- Polen Capital Management's portfolio posted a (0.61)% return for the quarter placing it in the 55 percentile of the CAI Large Cap Growth group for the quarter and in the 72 percentile for the last year.
- Polen Capital Management's portfolio underperformed the S&P 500 Index by 4.43% for the quarter and underperformed the S&P 500 Index for the year by 10.26%.

### **Quarterly Asset Growth**

Beginning Market Value	\$173,446,777
Net New Investment	\$-10,000,000
Investment Gains/(Losses)	\$-985,746
Ending Market Value	\$162,461,031

Percent Cash: 2.9%

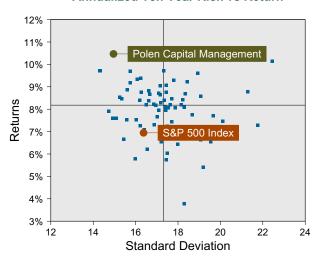
### Performance vs CAI Large Cap Growth (Gross)



### Relative Return vs S&P 500 Index



# CAI Large Cap Growth (Gross) Annualized Ten Year Risk vs Return



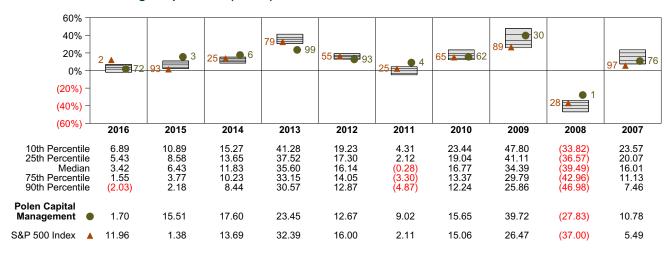


# Polen Capital Management Return Analysis Summary

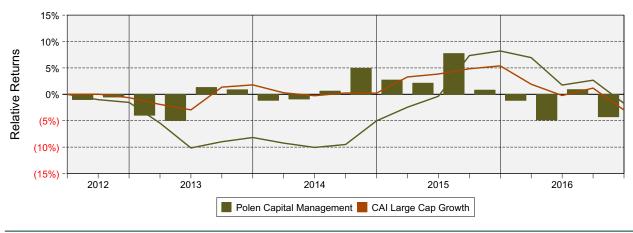
### **Return Analysis**

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 two charts illustrate the manager's ranking relative to their style using various risk-adjusted return measures and returns for rising/declining periods.

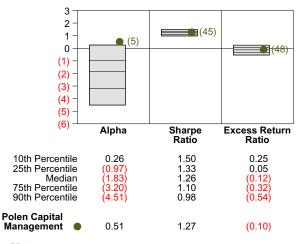
### Performance vs CAI Large Cap Growth (Gross)



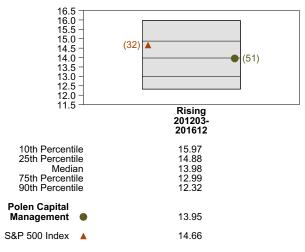
### Cumulative and Quarterly Relative Return vs S&P 500 Index



Risk Adjusted Return Measures vs S&P 500 Index Rankings Against CAI Large Cap Growth (Gross) Five Years Ended December 31, 2016



Returns for Domestic Equity
Rising/Declining Periods
Five Years Ended December 31, 2016



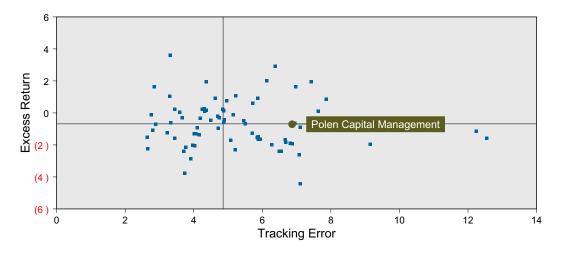


# Polen Capital Management Risk Analysis Summary

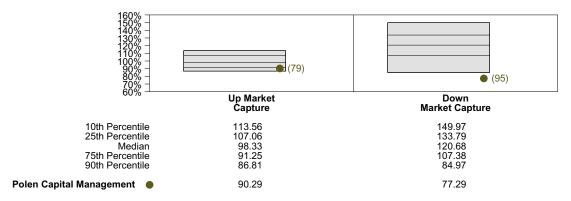
### **Risk Analysis**

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.

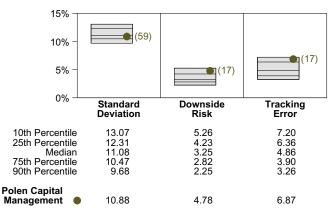
# Risk Analysis vs CAI Large Cap Growth (Gross) Five Years Ended December 31, 2016

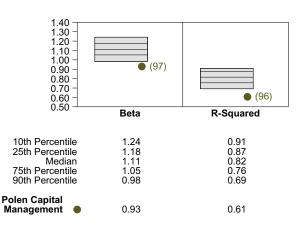


Market Capture vs S&P 500 Index Rankings Against CAI Large Cap Growth (Gross) Five Years Ended December 31, 2016



Risk Statistics Rankings vs S&P 500 Index Rankings Against CAI Large Cap Growth (Gross) Five Years Ended December 31, 2016





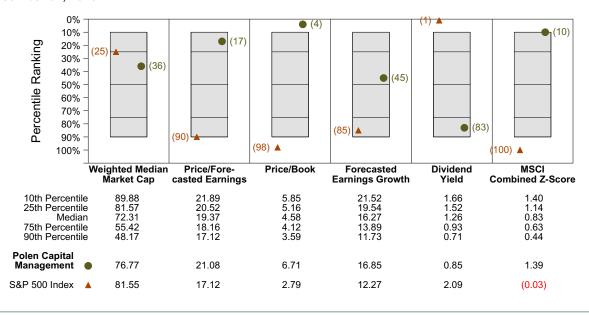


# Polen Capital Management Equity Characteristics Analysis Summary

### **Portfolio Characteristics**

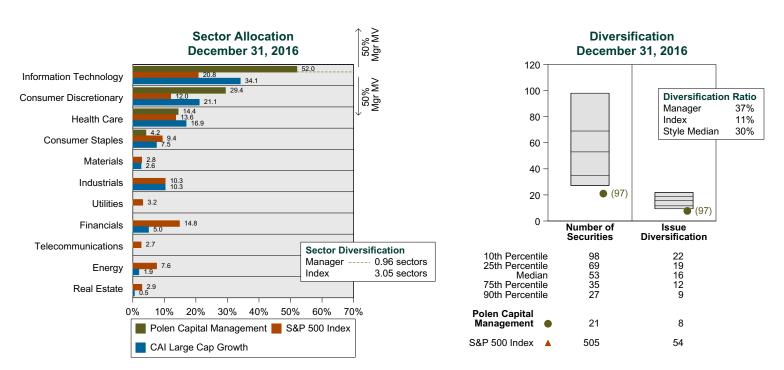
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

### Portfolio Characteristics Percentile Rankings Rankings Against CAI Large Cap Growth as of December 31, 2016



### **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.





# Polen Capital Management Top 10 Portfolio Holdings Characteristics as of December 31, 2016

### 10 Largest Holdings

						Price/		
		Ending	Percent			Forecasted		Forecasted
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Visa Inc Com Cl A	Information Technology	\$12,259,360	7.6%	(5.46)%	144.72	22.85	0.85%	15.55%
Alphabet Inc CI C	Information Technology	\$12,055,826	7.4%	(0.68)%	266.35	18.87	0.00%	18.85%
Automatic Data Processing In	Information Technology	\$10,362,588	6.4%	17.05%	46.37	26.59	2.22%	11.75%
Facebook Inc CI A	Information Technology	\$10,082,637	6.2%	(10.31)%	269.31	22.08	0.00%	36.46%
Nike Inc CI B	Consumer Discretionary	\$9,419,714	5.8%	(3.13)%	67.92	20.08	1.42%	12.19%
Starbucks Corp	Consumer Discretionary	\$9,353,510	5.8%	2.98%	80.80	24.98	1.80%	15.00%
Celgene Corp	Health Care	\$9,061,489	5.6%	10.49%	89.73	16.47	0.00%	23.00%
Regeneron Pharmaceutical	Health Care	\$8,832,919	5.4%	(9.37)%	38.02	25.69	0.00%	17.00%
Accenture Plc Ireland Shs Class A	Information Technology	\$8,367,533	5.2%	(3.11)%	72.93	19.16	2.07%	10.70%
Tjx Cos	Consumer Discretionary	\$8,190,672	5.0%	0.81%	48.98	19.90	1.38%	10.50%

### **10 Best Performers**

						Price/			
		Ending	Ending Percent		Forecasted				
		Market	of	Qtrly	Market	<b>Earnings</b>	Dividend	Growth in	
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings	
Automatic Data Processing In	Information Technology	\$10,362,588	6.4%	17.05%	46.37	26.59	2.22%	11.75%	
Gartner Inc	Information Technology	\$6,074,206	3.7%	14.26%	8.35	30.44	0.00%	16.00%	
Celgene Corp	Health Care	\$9,061,489	5.6%	10.49%	89.73	16.47	0.00%	23.00%	
Dollar Gen Corp New	Consumer Discretionary	\$5,291,413	3.3%	6.20%	20.46	15.81	1.35%	10.80%	
Cdk Global Inc	Information Technology	\$0	0.0%	4.31%	8.92	22.78	0.94%	12.50%	
Starbucks Corp	Consumer Discretionary	\$9,353,510	5.8%	2.98%	80.80	24.98	1.80%	15.00%	
Align Technology Inc	Health Care	\$4,806,308	3.0%	2.11%	7.66	32.37	0.00%	23.51%	
Mastercard Inc CI A	Information Technology	\$3,311,640	2.0%	1.62%	110.43	24.07	0.85%	15.00%	
Tjx Cos	Consumer Discretionary	\$8,190,672	5.0%	0.81%	48.98	19.90	1.38%	10.50%	
Priceline Grp Inc	Consumer Discretionary	\$7,305,377	4.5%	(0.41)%	72.34	19.27	0.00%	19.32%	
·									

### **10 Worst Performers**

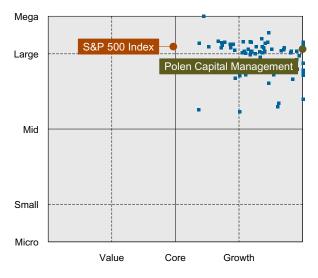
					Price/		
	Ending	Percent	Forecasted				Forecasted
	Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Information Technology	\$10,082,637	6.2%	(10.31)%	269.31	22.08	0.00%	36.46%
Health Care	\$8,832,919	5.4%	(9.37)%	38.02	25.69	0.00%	17.00%
Consumer Staples	\$6,589,247	4.1%	(9.21)%	223.69	20.29	3.08%	5.68%
Information Technology	\$12,259,360	7.6%	(5.46)%	144.72	22.85	0.85%	15.55%
Information Technology	\$7,704,778	4.7%	(5.15)%	51.19	26.32	0.00%	30.29%
Consumer Discretionary	\$9,419,714	5.8%	(3.13)%	67.92	20.08	1.42%	12.19%
Information Technology	\$8,367,533	5.2%	(3.11)%	72.93	19.16	2.07%	10.70%
Information Technology	\$7,306,115	4.5%	(1.75)%	157.74	14.03	1.56%	6.50%
Information Technology	\$4,574,814	2.8%	(1.42)%	234.63	19.33	0.00%	18.85%
Information Technology	\$12,055,826	7.4%	(0.68)%	266.35	18.87	0.00%	18.85%
	Information Technology Health Care Consumer Staples Information Technology Information Technology Consumer Discretionary Information Technology Information Technology Information Technology	Market   Value	Sector         Market Value         of Portfolio           Information Technology Health Care         \$10,082,637         6.2%           Health Care         \$8,832,919         5.4%           Consumer Staples         \$6,589,247         4.1%           Information Technology         \$12,259,360         7.6%           Information Technology         \$7,704,778         4.7%           Consumer Discretionary         \$9,419,714         5.8%           Information Technology         \$8,367,533         5.2%           Information Technology         \$7,306,115         4.5%           Information Technology         \$4,574,814         2.8%	Sector         Market Value         of Value         Qtrly Return           Information Technology Health Care         \$10,082,637         6.2%         (10.31)%           Health Care         \$8,832,919         5.4%         (9.37)%           Consumer Staples         \$6,589,247         4.1%         (9.21)%           Information Technology         \$12,259,360         7.6%         (5.46)%           Information Technology         \$7,704,778         4.7%         (5.15)%           Consumer Discretionary         \$9,419,714         5.8%         (3.13)%           Information Technology         \$8,367,533         5.2%         (3.11)%           Information Technology         \$7,306,115         4.5%         (1.75)%           Information Technology         \$4,574,814         2.8%         (1.42)%	Sector         Market Value         of Portfolio         Qtrly Return         Market Capital           Information Technology Health Care         \$10,082,637         6.2%         (10.31)%         269.31           Health Care         \$8,832,919         5.4%         (9.37)%         38.02           Consumer Staples         \$6,589,247         4.1%         (9.21)%         223.69           Information Technology         \$7,704,778         4.7%         (5.46)%         144.72           Information Technology         \$7,704,778         4.7%         (5.15)%         51.19           Consumer Discretionary         \$9,419,714         5.8%         (3.13)%         67.92           Information Technology         \$7,306,115         4.5%         (1.75)%         157.74           Information Technology         \$4,574,814         2.8%         (1.42)%         234.63	Sector         Market Value         of Portfolio         Qtrly Return         Market Capital         Earnings Ratio           Information Technology Health Care         \$10,082,637         6.2%         (10.31)%         269.31         22.08           Health Care         \$8,832,919         5.4%         (9.37)%         38.02         25.69           Consumer Staples         \$6,589,247         4.1%         (9.21)%         223.69         20.29           Information Technology         \$12,259,360         7.6%         (5.46)%         144.72         22.85           Information Technology         \$7,704,778         4.7%         (5.15)%         51.19         26.32           Consumer Discretionary         \$9,419,714         5.8%         (3.13)%         67.92         20.08           Information Technology         \$7,306,115         4.5%         (1.75)%         157.74         14.03           Information Technology         \$4,574,814         2.8%         (1.42)%         234.63         19.33	Sector         Value         Percent Portfolio         Qtrly Return         Market Earnings Poividend Portfolio         Dividend Portfolio           Information Technology Health Care         \$10,082,637         6.2%         (10.31)%         269.31         22.08         0.00%           Health Care         \$8,832,919         5.4%         (9.37)%         38.02         25.69         0.00%           Consumer Staples         \$6,589,247         4.1%         (9.21)%         223.69         20.29         3.08%           Information Technology         \$12,259,360         7.6%         (5.46)%         144.72         22.85         0.85%           Information Technology         \$7,704,778         4.7%         (5.15)%         51.19         26.32         0.00%           Consumer Discretionary         \$9,419,714         5.8%         (3.13)%         67.92         20.08         1.42%           Information Technology         \$7,306,115         4.5%         (1.75)%         157.74         14.03         1.56%           Information Technology         \$4,574,814         2.8%         (1.42)%         234.63         19.33         0.00%



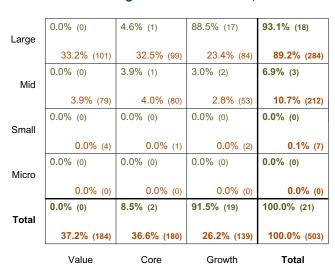
### Current Holdings Based Style Analysis Polen Capital Management As of December 31, 2016

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.

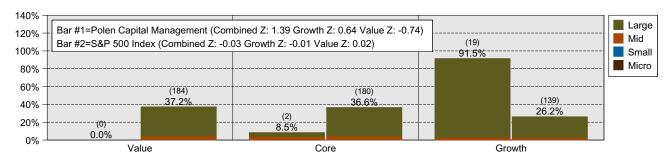
# Style Map vs CAI Large Cap Growth Holdings as of December 31, 2016



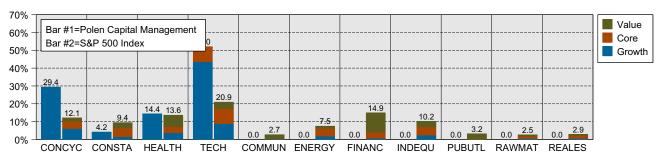
# Style Exposure Matrix Holdings as of December 31, 2016



# Combined Z-Score Style Distribution Holdings as of December 31, 2016



### Sector Weights Distribution Holdings as of December 31, 2016

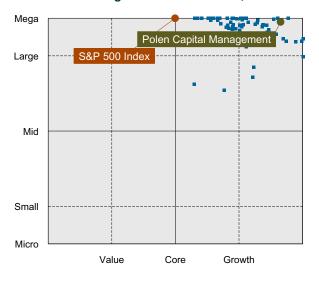




### **Current Holdings Based Style Analysis Polen Capital Management** As of December 31, 2016

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.

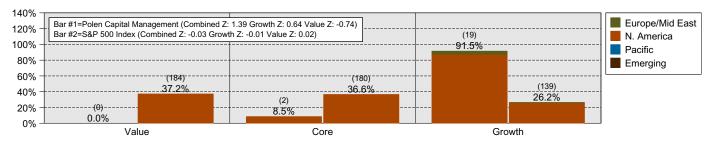
### Style Map vs CAI Large Cap Growth Holdings as of December 31, 2016



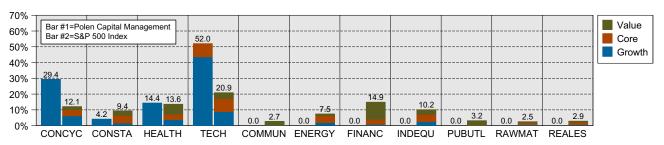
### **Style Exposure Matrix** Holdings as of December 31, 2016

	Value	Core	Growth	Total
	37.2% (184)	36.6% (180)	26.2% (139)	100.0% (503)
Total				
	0.0% (0)	8.5% (2)	91.5% (19)	100.0% (21)
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Emerging				
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Pacific	, ,		, ,	, ,
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
	37.2% (184)	36.6% (180)	26.2% (138)	100.0% (502)
N. America				
	0.0% (0)	8.5% (2)	87.3% (18)	95.8% (20)
Mid East	0.0% (0)	0.0% (0)	0.0% (1)	0.0% (1)
Europe/	0.0% (0)	0.0% (0)	4.2% (1)	4.2% (1)

### **Combined Z-Score Style Distribution** Holdings as of December 31, 2016



### **Sector Weights Distribution** Holdings as of December 31, 2016





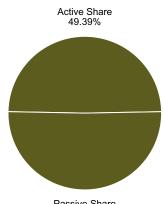
#### **Polen Capital Management** Active Share Analysis as of December 31, 2016 vs. S&P 500 Index

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**

# Index Active Share 85.62% Passive Share Non-Index Active Share

#### **Sector Exposure Active Share**



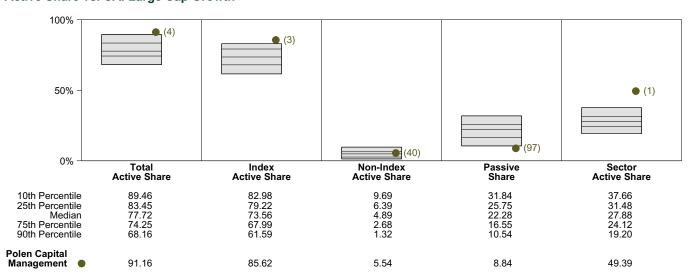
Passive Share 50.61%

#### Total Active Share: 91.16%

Consumer Discretionary Consumer Staples Energy Financials Health Care Industrials Information Technology Materials Real Estate Telecommunications Utilities Total

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
86.42%	0.00%	86.42%	12.03%	29.39%	19.10%
50.00%	50.00%	100.00%	9.37%	4.18%	6.80%
100.00%	0.00%	100.00%	7.56%	-	3.72%
100.00%	0.00%	100.00%	14.81%	-	7.44%
84.94%	10.59%	95.53%	13.63%	14.39%	13.43%
100.00%	0.00%	100.00%	10.27%	-	5.16%
65.04%	3.70%	68.74%	20.77%	52.04%	29.87%
100.00%	0.00%	100.00%	2.84%	-	1.26%
100.00%	0.00%	100.00%	2.89%	-	1.45%
100.00%	0.00%	100.00%	2.66%	-	1.34%
100.00%	0.00%	100.00%	3.17%	-	1.59%
85.62%	5.54%	91.16%	100.00%	100.00%	91.16%

#### Active Share vs. CAI Large Cap Growth





## Earnest Partners LLC Period Ended December 31, 2016

#### **Investment Philosophy**

EARNEST Partners is a fundamental, bottom-up investment manager. The Firms investment objective is to outperform the benchmark while controlling volatility and risk. EARNEST Partners implements this philosophy using a screen developed in-house called Return Pattern Recognition, thorough fundamental analysis, and risk management that minimizes the likelihood of meaningfully underperforming the benchmark.

#### **Quarterly Summary and Highlights**

- Earnest Partners LLC's portfolio posted a 5.22% return for the quarter placing it in the 39 percentile of the CAI Mid Capitalization group for the quarter and in the 29 percentile for the last year.
- Earnest Partners LLC's portfolio outperformed the Russell MidCap Index by 2.01% for the quarter and outperformed the Russell MidCap Index for the year by 2.72%.

#### **Quarterly Asset Growth**

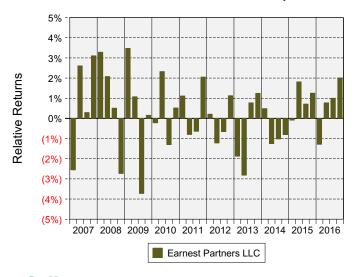
Beginning Market Value	\$127,856,412
Net New Investment	\$-9,000,000
Investment Gains/(Losses)	\$6,278,020
Ending Market Value	\$125,134,431

Percent Cash: 1.7%

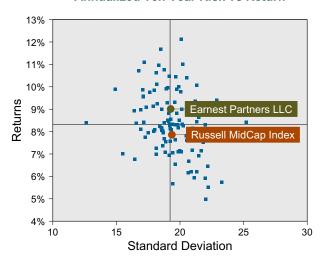
#### Performance vs CAI Mid Capitalization (Gross)



#### Relative Return vs Russell MidCap Index



## CAI Mid Capitalization (Gross) Annualized Ten Year Risk vs Return



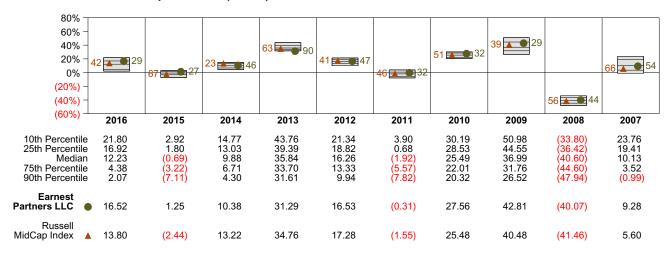


## Earnest Partners LLC Return Analysis Summary

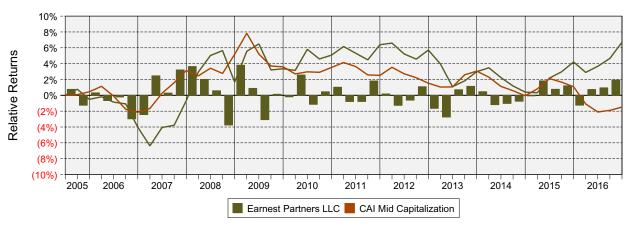
#### **Return Analysis**

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 two charts illustrate the manager's ranking relative to their style using various risk-adjusted return measures and returns for rising/declining periods.

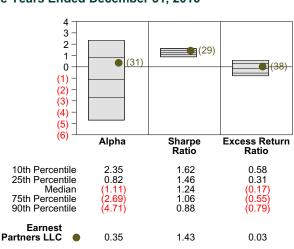
#### Performance vs CAI Mid Capitalization (Gross)



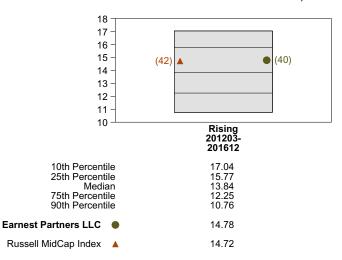
#### **Cumulative and Quarterly Relative Return vs Russell MidCap Index**



Risk Adjusted Return Measures vs Russell MidCap Index Rankings Against CAI Mid Capitalization (Gross) Five Years Ended December 31, 2016



Returns for Domestic Equity Rising/Declining Periods Five Years Ended December 31, 2016



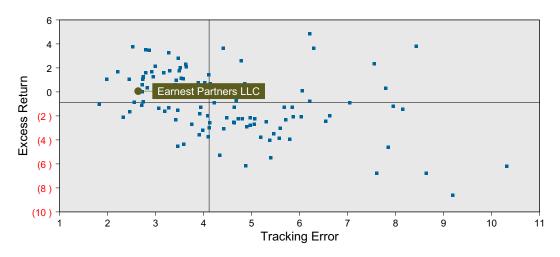


## Earnest Partners LLC Risk Analysis Summary

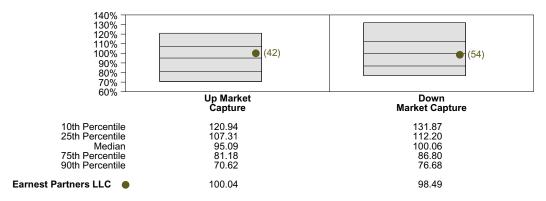
#### **Risk Analysis**

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.

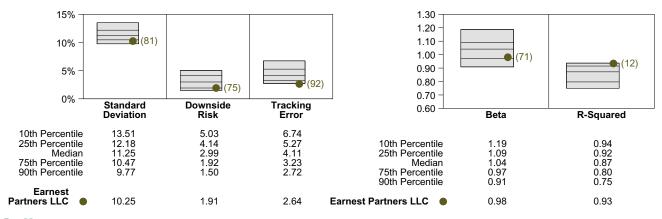
## Risk Analysis vs CAI Mid Capitalization (Gross) Five Years Ended December 31, 2016



Market Capture vs Russell Mid-Cap Index Rankings Against CAI Mid Capitalization (Gross) Five Years Ended December 31, 2016



Risk Statistics Rankings vs Russell Mid-Cap Index Rankings Against CAI Mid Capitalization (Gross) Five Years Ended December 31, 2016



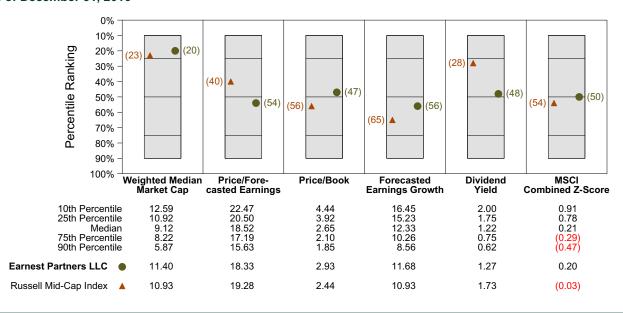


#### **Earnest Partners LLC Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

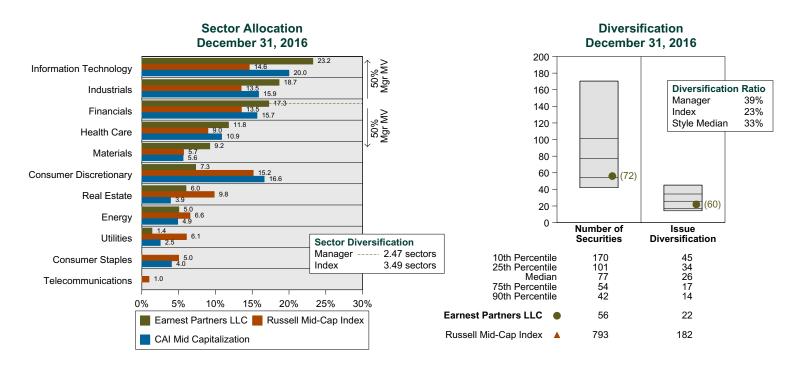
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

#### **Portfolio Characteristics Percentile Rankings Rankings Against CAI Mid Capitalization** as of December 31, 2016



#### **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.





# Earnest Partners LLC vs Russell Mid-Cap Index Domestic Equity Top 10 Contribution Holdings One Quarter Ended December 31, 2016

		Manager	Days	Index	Manager	Index	Contrib Manager	Contrib Excess
Issue	Sector	Eff Wt	Held	Eff Wt	Return	Return	Perf	Return
Keycorp	Financials	1.48%	92	0.26%	50.78%	50.86%	0.64%	0.48%
Activision Blizzard Inc	Information Technology	2.88%	92	-	(18.43)%	-	(0.57)%	(0.67)
Synchrony Finl	Financials	1.87%	92	0.42%	30.18%	30.13%	0.52%	0.35%
Gatx Corp	Industrials	1.30%	92	-	39.10%	-	0.48%	0.43%
Akamai Technologies Inc	Information Technology	2.05%	92	0.18%	25.83%	25.84%	0.44%	0.32%
Snap-On	Industrials	3.01%	92	0.15%	13.24%	13.19%	0.40%	0.27%
Raymond James Financial Inc	Financials	2.10%	92	0.13%	19.36%	19.38%	0.38%	0.29%
Stifel Finl Cap	Financials	1.31%	92	-	29.89%	-	0.36%	0.32%
Csx Corp	Industrials	1.96%	92	-	18.31%	-	0.35%	0.28%
Republic Svcs Inc	Industrials	2.59%	92	0.21%	13.68%	13.72%	0.34%	0.23%

		Manager	Days	Index	Manager	Index	Contrib Index	Contrib Excess
Issue	Sector	Eff Wt	Held	Eff Wt	Return	Return	Perf	Return
Nvidia Corp	Information Technology	-	-	0.65%	-	56.01%	0.33%	(0.30)
Illumina Inc	Health Care	-	-	0.37%	-	(29.52)%	(0.13)%	0.14%
Synchrony Finl	Financials	1.87%	92	0.42%	30.18%	30.13%	0.12%	0.35%
Keycorp	Financials	1.48%	92	0.26%	50.78%	50.86%	0.11%	0.48%
United Contl Hldgs Inc Com	Industrials	-	-	0.32%	-	38.90%	0.11%	(0.10)
Baker Hughes Inc	Energy	-	-	0.41%	-	29.13%	0.11%	(0.09)
M & T Bank Corp	Financials	-	-	0.32%	-	35.39%	0.10%	(0.09)
Citizens Finl Group Inc	Financials	-	-	0.25%	-	44.85%	0.10%	(0.09)
Regions Finl Corp New	Financials	-	-	0.24%	-	46.15%	0.10%	(0.09)
Edwards Lifesciences Corp	Health Care	-	_	0.35%	-	(22.28)%	(0.10)%	0.109

· ·							Contrib	Contrib
_		Manager	Days	Index	Manager	Index	Manager	Excess
Issue	Sector	Eff Wt	Held	Eff Wt	Return	Return	Perf	Return
Keycorp	Financials	1.48%	92	0.26%	50.78%	50.86%	0.64%	0.48%
Gatx Corp	Industrials	1.30%	92	-	39.10%	-	0.48%	0.439
Synchrony Finl	Financials	1.87%	92	0.42%	30.18%	30.13%	0.52%	0.359
Akamai Technologies Inc	Information Technology	2.05%	92	0.18%	25.83%	25.84%	0.44%	0.329
Stifel Finl Cap	Financials	1.31%	92	-	29.89%	-	0.36%	0.329
Raymond James Financial Inc	Financials	2.10%	92	0.13%	19.36%	19.38%	0.38%	0.299
Csx Corp	Industrials	1.96%	92	-	18.31%	-	0.35%	0.289
Snap-On	Industrials	3.01%	92	0.15%	13.24%	13.19%	0.40%	0.27%
Reinsurance Group Amer Inc	Financials	1.89%	92	0.12%	17.00%	17.01%	0.31%	0.239
Republic Svcs Inc	Industrials	2.59%	92	0.21%	13.68%	13.72%	0.34%	0.239

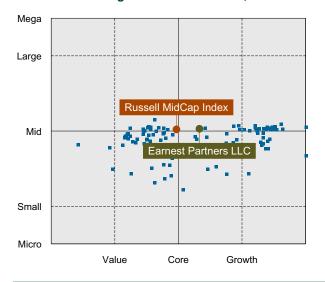
		Manager	Days	Index	Manager	Index	Contrib Manager	Contrib Excess
Issue	Sector	Eff Wt	Held	Eff Wt	Return	Return	Perf	Return
Activision Blizzard Inc	Information Technology	2.88%	92	-	(18.43)%	-	(0.57)%	(0.67)
American Tower Corp New	Real Estate	2.95%	92	-	(6.29)%	-	(0.20)%	$(0.31)^{\circ}$
Global Pmts Inc	Information Technology	2.44%	92	0.19%	(9.58)%	(9.56)%	(0.25)%	$(0.30)^{\circ}$
Nvidia Corp	Information Technology	-	-	0.65%	-	56.01%	-	$(0.30)^{\circ}$
D.R. Horton	Consumer Discretionary	2.04%	92	0.16%	(9.15)%	(9.19)%	(0.19)%	(0.24)
Vwr Corp	Health Care	1.45%	92	0.04%	(11.44)%	(11.74)%	(0.17)%	(0.22)
Masco Corp	Industrials	2.13%	92	0.18%	(7.46)%	(7.57)%	(0.17)%	$(0.21)^{\circ}$
Black Knight Finl Svcs Inc Cl A	Information Technology	1.64%	92	0.02%	(7.62)%	(7.58)%	(0.13)%	(0.19)
Newfield Exploration Co	Energy	1.65%	92	0.14%	(6.76)%	(6.81)%	(0.10)%	(0.14)
Laboratory Corp of Amer	Health Care	1.54%	92	0.22%	(6.57)%	(6.62)%	(0.10)%	(0.13)



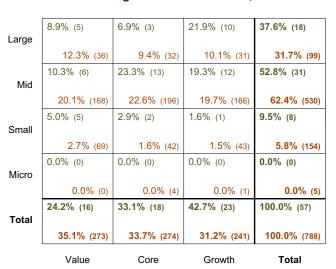
#### Current Holdings Based Style Analysis Earnest Partners LLC As of December 31, 2016

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.

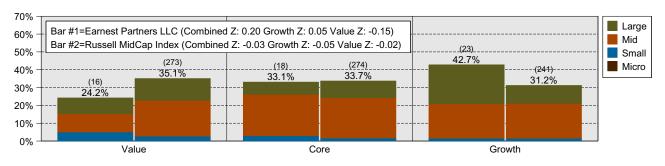
## Style Map vs CAI Mid Capitalization Holdings as of December 31, 2016

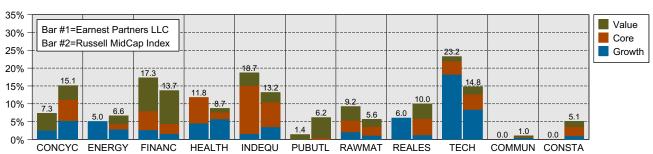


## Style Exposure Matrix Holdings as of December 31, 2016



## Combined Z-Score Style Distribution Holdings as of December 31, 2016



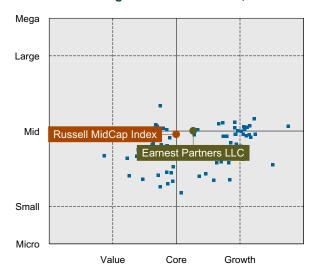




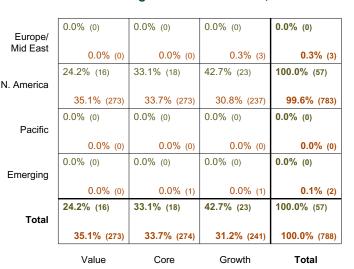
## Current Holdings Based Style Analysis Earnest Partners LLC As of December 31, 2016

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.

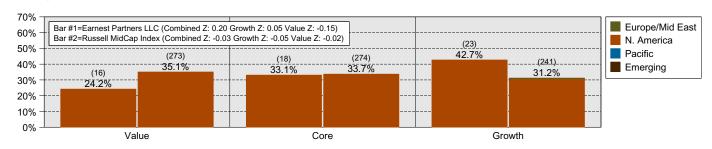
## Style Map vs CAI Mid Capitalization Holdings as of December 31, 2016

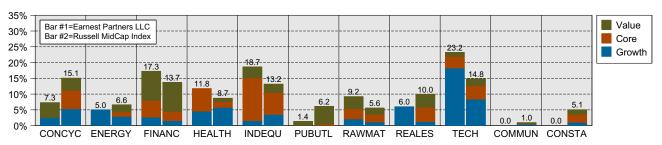


## Style Exposure Matrix Holdings as of December 31, 2016



## Combined Z-Score Style Distribution Holdings as of December 31, 2016







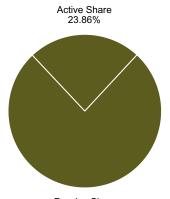
#### **Earnest Partners LLC** Active Share Analysis as of December 31, 2016 vs. Russell Mid-Cap Index

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**

# Index Active Share 80.67% Passive Share Non-Index Active Share

#### **Sector Exposure Active Share**



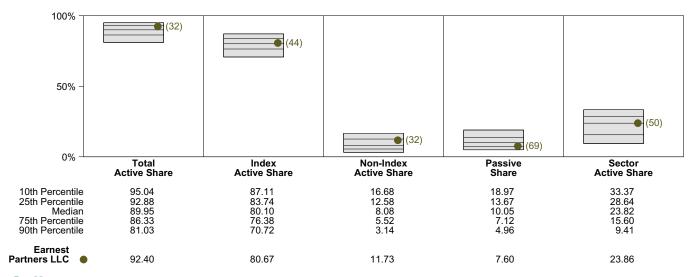
Passive Share 76.14%

Total Active Share: 92.40%

Consumer Discretionary Consumer Staples Energy Financials Health Care Industrials Information Technology Materials Real Estate Telecommunications Utilities Total

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
79.89%	17.30%	97.19%	15.15%	7.33%	10.82%
100.00%	0.00%	100.00%	5.02%	-	2.51%
93.77%	0.00%	93.77%	6.56%	5.05%	5.39%
76.19%	12.11%	88.30%	13.55%	17.26%	13.82%
85.15%	0.00%	85.15%	8.99%	11.79%	9.06%
72.30%	19.75%	92.05%	13.51%	18.66%	15.07%
78.63%	11.64%	90.27%	14.62%	23.25%	17.51%
83.16%	6.54%	89.70%	5.69%	9.25%	6.83%
72.44%	22.83%	95.28%	9.85%	6.02%	7.47%
100.00%	0.00%	100.00%	0.99%	-	0.50%
95.05%	0.00%	95.05%	6.08%	1.39%	3.43%
80.67%	11.73%	92.40%	100.00%	100.00%	92.40%

#### Active Share vs. CAI Mid Capitalization



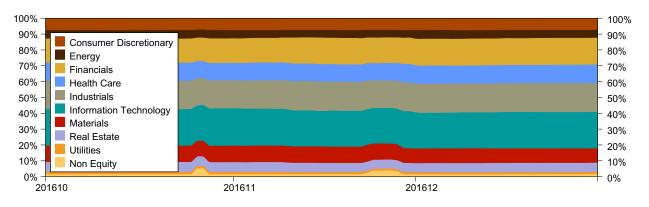


#### Earnest Partners LLC vs Russell Mid-Cap Index **Domestic Equity Daily Performance Attribution** One Quarter Ended December 31, 2016

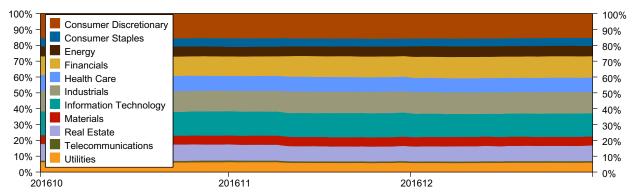
#### **Sector Exposures and Performance**

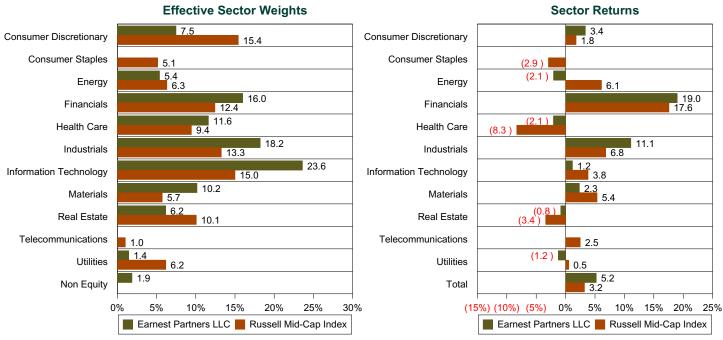
Differences in sector exposures and sector returns between a manager and index are important factors in understanding relative performance. The first two charts below show detailed sector exposures through time for both the manager and index. The third chart summarizes these exposures. The fourth chart compares the perfomance between the manager and index within individual sectors.

#### **Manager Historical Sector Allocation**



#### **Benchmark Historical Sector Allocation**





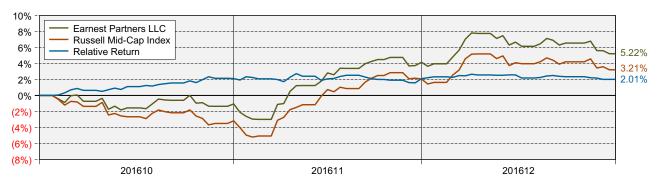


# Earnest Partners LLC vs Russell Mid-Cap Index Domestic Equity Daily Performance Attribution One Quarter Ended December 31, 2016

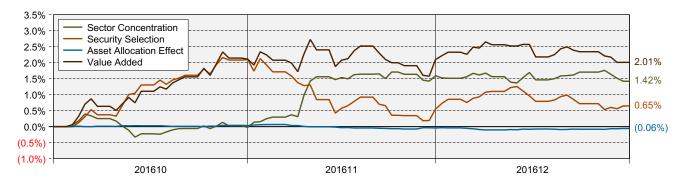
#### **Return Sources and Timing**

The charts below illustrate the timing and cumulative paths of the manager's performance, as well as attributing relative performance to three sources: Sector Concentration, Security Selection, and Asset Allocation. The first chart shows the cumulative absolute return paths for the manager and index. The second chart shows the cumulative relative return path of the manager and the attributed sources of that value-added. The bottom table breaks the annualized attribution factors down to the sector level for more insight into sources of return.

#### **Cumulative Manager and Benchmark Returns**

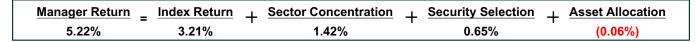


#### Cumulative Attribution Effects vs. Russell Mid-Cap Index



## Attribution Effects by Sector vs. Russell Mid-Cap Index One Quarter Ended December 31, 2016

0	Manager	Index	Manager	Index	Sector	Security	Asset
Sector	Eff Weight	Eff Weight	Return	Return	Concentration	Selection	Allocation
Consumer Discretionary	7.48%	15.43%	3.36%	1.79%	0.12%	0.12%	-
Consumer Staples	0.00%	5.14%	0.00%	(2.93)%	0.33%	0.00%	-
Energy	5.38%	6.31%	(2.06)%	6.11%	(0.05)%	(0.42)%	-
Financials	15.98%	12.44%	18.97%	17.58%	0.49%	0.19%	-
Health Care	11.61%	9.44%	(2.07)%	(8.29)%	(0.24)%	0.81%	-
Industrials	18.20%	13.25%	11.10%	6.83%	0.19%	0.76%	-
Information Technology	23.60%	15.00%	1.17%	3.82%	0.06%	(0.64)%	-
Materials	10.15%	5.72%	2.34%	5.35%	0.13%	(0.33)%	-
Real Estate	6.15%	10.07%	(0.82)%	(3.39)%	0.26%	0.17%	-
Telecommunications	0.00%	1.01%	0.00%	2.49%	0.01%	0.00%	-
Utilities	1.44%	6.18%	(1.24)%	0.51%	0.13%	(0.03)%	-
Non Equity	1.86%	0.00%	=	-	-	-	(0.06)%
Total	-	-	5.22%	3.21%	1.42%	0.65%	(0.06)%





#### Dimensional Fund Advisors Inc. Period Ended December 31, 2016

#### **Investment Philosophy**

DFA's investment philosophy stems from academic research conducted by Professors Eugene Fama and Kenneth French that finds that high book/market value stocks have higher expected returns than growth stocks. DFA's quantitative investment strategy in highly diversified portfolios of small companies with "deep" value characteristics is designed to capture the returns of small value stocks

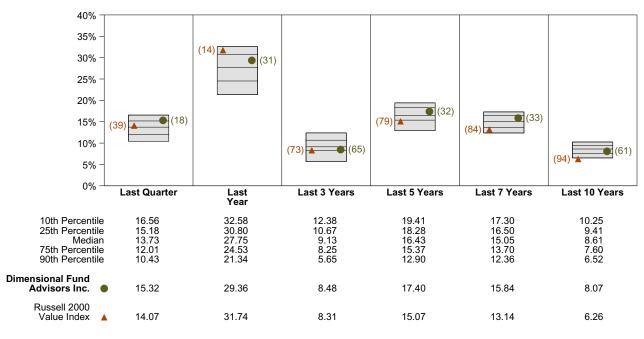
#### **Quarterly Summary and Highlights**

- Dimensional Fund Advisors Inc.'s portfolio posted a 15.32% return for the quarter placing it in the 18 percentile of the CAI Small Cap Value group for the quarter and in the 31 percentile for the last year.
- Dimensional Fund Advisors Inc.'s portfolio outperformed the Russell 2000 Value Index by 1.24% for the quarter and underperformed the Russell 2000 Value Index for the year by 2.38%.

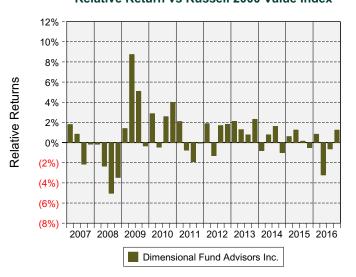
#### **Quarterly Asset Growth**

Beginning Market Value	\$201,274,475
Net New Investment	\$-18,000,000
Investment Gains/(Losses)	\$29,472,611
Ending Market Value	\$212,747,086

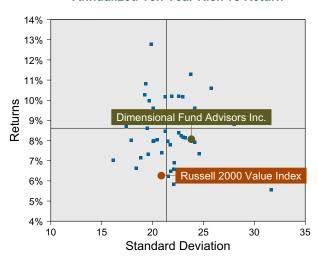
#### Performance vs CAI Small Cap Value (Gross)



#### Relative Return vs Russell 2000 Value Index



## CAI Small Cap Value (Gross) Annualized Ten Year Risk vs Return



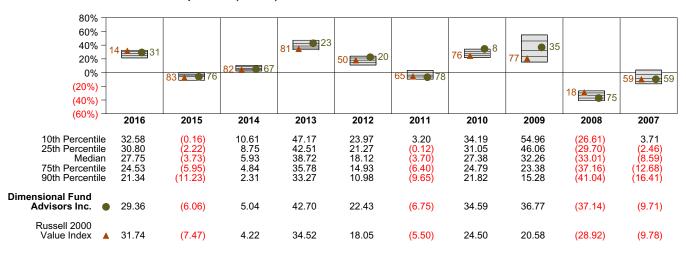


## Dimensional Fund Advisors Inc. Return Analysis Summary

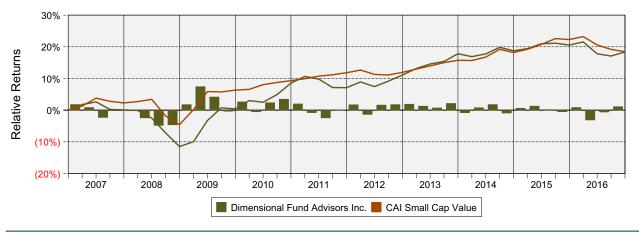
#### **Return Analysis**

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 two charts illustrate the manager's ranking relative to their style using various risk-adjusted return measures and returns for rising/declining periods.

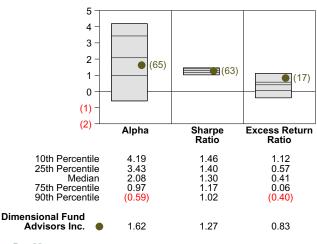
#### Performance vs CAI Small Cap Value (Gross)



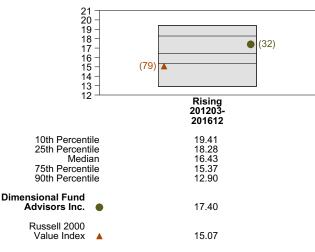
#### Cumulative and Quarterly Relative Return vs Russell 2000 Value Index



Risk Adjusted Return Measures vs Russell 2000 Value Index Rankings Against CAI Small Cap Value (Gross) Five Years Ended December 31, 2016



Returns for Domestic Equity Rising/Declining Periods Five Years Ended December 31, 2016

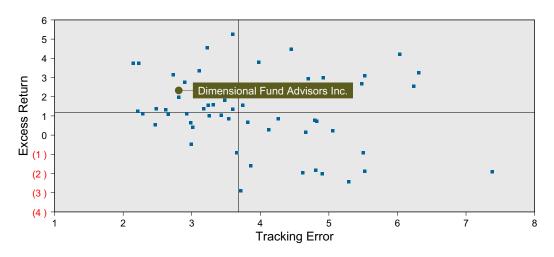


## Dimensional Fund Advisors Inc. Risk Analysis Summary

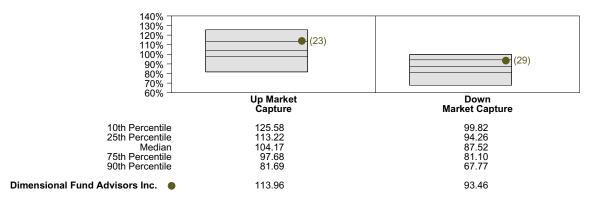
#### **Risk Analysis**

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.

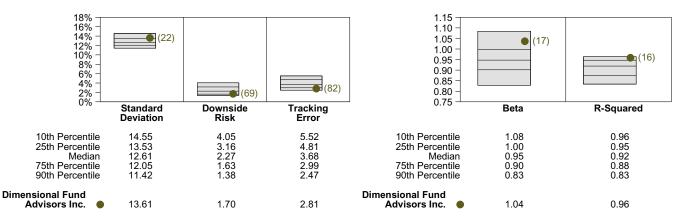
## Risk Analysis vs CAI Small Cap Value (Gross) Five Years Ended December 31, 2016



Market Capture vs Russell 2000 Value Index Rankings Against CAI Small Cap Value (Gross) Five Years Ended December 31, 2016



Risk Statistics Rankings vs Russell 2000 Value Index Rankings Against CAI Small Cap Value (Gross) Five Years Ended December 31, 2016



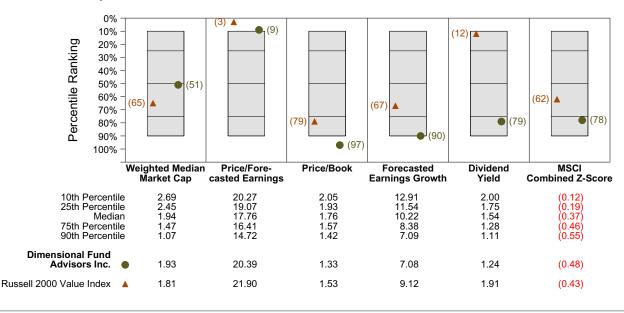


## Dimensional Fund Advisors Inc. Equity Characteristics Analysis Summary

#### **Portfolio Characteristics**

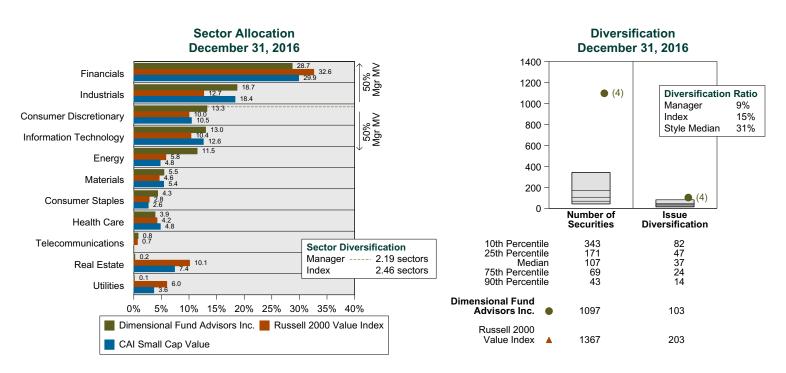
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

#### Portfolio Characteristics Percentile Rankings Rankings Against CAI Small Cap Value as of December 31, 2016



#### **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.





## **Dimensional Fund Advisors Inc.** Top 10 Portfolio Holdings Characteristics as of December 31, 2016

#### 10 Largest Holdings

					Price/		
	Ending	Percent			Forecasted		Forecasted
	Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Energy	\$2,070,132	1.0%	20.42%	3.99	(16.41)	0.30%	0.25%
Energy	\$2,068,758	1.0%	32.00%	3.58	(65.83)	0.00%	(36.30)%
Financials	\$1,890,710	0.9%	26.76%	3.72	17.90	1.94%	7.00%
Information Technology	\$1,794,033	0.8%	6.30%	4.81	16.15	0.83%	11.90%
Financials	\$1,782,262	0.8%	30.88%	3.76	18.75	0.66%	4.00%
Financials	\$1,771,262	0.8%	18.58%	3.31	12.61	1.60%	(1.20)%
Financials	\$1,660,401	0.8%	41.76%	6.25	14.60	1.65%	9.00%
Energy	\$1,633,449	0.8%	35.35%	4.65	(17.26)	1.46%	(1.50)%
Consumer Staples	\$1,629,027	0.8%	1.46%	3.14	15.23	0.99%	17.37%
Financials	\$1,628,030	0.8%	21.35%	3.87	13.46	2.20%	(1.10)%
	Energy Energy Financials Information Technology Financials Financials Financials Energy Consumer Staples	Sector         Market Value           Energy         \$2,070,132           Energy         \$2,068,758           Financials         \$1,890,710           Information Technology         \$1,794,033           Financials         \$1,782,262           Financials         \$1,771,262           Financials         \$1,660,401           Energy         \$1,633,449           Consumer Staples         \$1,629,027	Sector         Market Value         of Portfolio           Energy         \$2,070,132         1.0%           Energy         \$2,068,758         1.0%           Financials         \$1,890,710         0.9%           Information Technology         \$1,794,033         0.8%           Financials         \$1,782,262         0.8%           Financials         \$1,771,262         0.8%           Financials         \$1,660,401         0.8%           Energy         \$1,633,449         0.8%           Consumer Staples         \$1,629,027         0.8%	Sector         Market Value         of Portfolio         Qtrly Return           Energy         \$2,070,132         1.0%         20.42%           Energy         \$2,068,758         1.0%         32.00%           Financials         \$1,890,710         0.9%         26.76%           Information Technology         \$1,794,033         0.8%         6.30%           Financials         \$1,782,262         0.8%         30.88%           Financials         \$1,771,262         0.8%         18.58%           Financials         \$1,660,401         0.8%         41.76%           Energy         \$1,633,449         0.8%         35.35%           Consumer Staples         \$1,629,027         0.8%         1.46%	Sector         Market Value         of Portfolio         Qtrly Return         Market Capital           Energy         \$2,070,132         1.0%         20.42%         3.99           Energy         \$2,068,758         1.0%         32.00%         3.58           Financials         \$1,890,710         0.9%         26.76%         3.72           Information Technology         \$1,794,033         0.8%         6.30%         4.81           Financials         \$1,782,262         0.8%         30.88%         3.76           Financials         \$1,771,262         0.8%         18.58%         3.31           Financials         \$1,660,401         0.8%         41.76%         6.25           Energy         \$1,633,449         0.8%         35.35%         4.65           Consumer Staples         \$1,629,027         0.8%         1.46%         3.14	Bending Market         Percent of Value         Qtrly Portfolio         Market Return         Forecasted Earnings           Benergy         \$2,070,132         1.0%         20.42%         3.99         (16.41)           Benergy         \$2,068,758         1.0%         32.00%         3.58         (65.83)           Financials         \$1,890,710         0.9%         26.76%         3.72         17.90           Information Technology         \$1,794,033         0.8%         6.30%         4.81         16.15           Financials         \$1,782,262         0.8%         30.88%         3.76         18.75           Financials         \$1,771,262         0.8%         18.58%         3.31         12.61           Financials         \$1,660,401         0.8%         41.76%         6.25         14.60           Energy         \$1,633,449         0.8%         35.35%         4.65         (17.26)           Consumer Staples         \$1,629,027         0.8%         1.46%         3.14         15.23	Sector         Value         Portfolio         Return         Capital         Ratio         Yield           Energy         \$2,070,132         1.0%         20.42%         3.99         (16.41)         0.30%           Energy         \$2,068,758         1.0%         32.00%         3.58         (65.83)         0.00%           Financials         \$1,890,710         0.9%         26.76%         3.72         17.90         1.94%           Information Technology         \$1,794,033         0.8%         6.30%         4.81         16.15         0.83%           Financials         \$1,782,262         0.8%         30.88%         3.76         18.75         0.66%           Financials         \$1,771,262         0.8%         18.58%         3.31         12.61         1.60%           Financials         \$1,660,401         0.8%         41.76%         6.25         14.60         1.65%           Energy         \$1,633,449         0.8%         35.35%         4.65         (17.26)         1.46%           Consumer Staples         \$1,629,027         0.8%         1.46%         3.14         15.23         0.99%

#### **10 Best Performers**

				Price/							
		Ending	Percent			Forecasted		Forecasted			
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in			
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings			
Altisource Asset Man.	Real Estate	\$10,245	0.0%	189.20%	0.08	(28.32)	0.00%	-			
Interpace Diagnostics Group	Health Care	\$113	0.0%	178.48%	0.01	(0.54)	0.00%	-			
Siebert Finl Corp	Financials	\$1,732	0.0%	150.22%	0.07	(27.85)	0.00%	-			
Intersections Inc	Industrials	\$4,762	0.0%	120.44%	0.09	(5.23)	20.05%	-			
Era Group Inc	Energy	\$178,196	0.1%	110.81%	0.36	(24.24)	0.00%	(35.16)%			
NI Inds Inc	Industrials	\$21,241	0.0%	107.38%	0.40	23.29	6.13%	(5.55)%			
Freds	Consumer Discretionary	\$269,452	0.1%	106.10%	0.69	(76.38)	1.29%	8.00%			
Pier 1 Imports Inc	Consumer Discretionary	\$138,055	0.1%	104.80%	0.71	19.86	3.28%	(0.65)%			
Republic First Bancorp Inc	Financials	\$4,876	0.0%	103.16%	0.47	59.64	0.00%	(6.40)%			
Misonix Inc	Health Care	\$20,297	0.0%	97.17%	0.08	(91.67)	0.00%	-			

#### **10 Worst Performers**

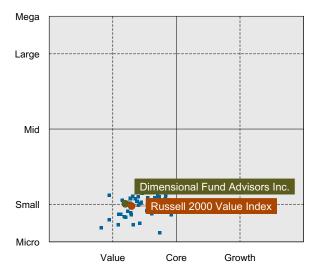
		Ending	Percent			Forecasted		Forecasted
		Market Value	of	Qtrly	Market	Earnings	Dividend Yield	Growth in
Stock	Sector		Portfolio	Return	Capital	Ratio		Earnings
Adeptus Health Inc CI A	Health Care	\$6,971	0.0%	(82.25)%	0.13	4.06	0.00%	-
Castle A M & Co	Materials	\$773	0.0%	(68.50)%	0.01	(0.09)	0.00%	-
Bioscrip Inc	Health Care	\$3,987	0.0%	(64.01)%	0.12	(7.43)	0.00%	12.50%
Cumulus Media Inc Cl A New	Consumer Discretionary	\$3,311	0.0%	(61.36)%	0.03	(3.00)	0.00%	(12.30)%
Emergent Cap Inc	Financials	\$701	0.0%	(58.70)%	0.03	(2.02)	0.00%	-
Diplomat Pharmacy Inc	Health Care	\$2,903	0.0%	(55.02)%	0.84	15.56	0.00%	13.90%
Community Health Sys Inc New	Health Care	\$34,435	0.0%	(51.56)%	0.64	8.22	0.00%	5.55%
Agrofresh Solutions	Materials	\$1,052	0.0%	(49.91)%	0.13	(265.00)	0.00%	15.00%
Achillion Pharmaceuticals In	Health Care	\$12,182	0.0%	(49.01)%	0.56	(9.60)	0.00%	-
Hertz Global Holdings Inc	Industrials	\$42,053	0.0%	(46.31)%	1.79	10.73	0.00%	40.40%



# Current Holdings Based Style Analysis Dimensional Fund Advisors Inc. As of December 31, 2016

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.

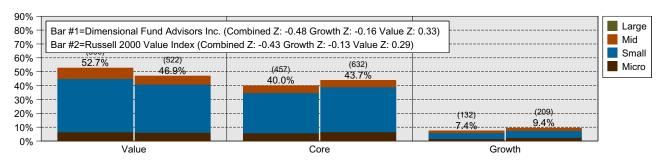
## Style Map vs CAI Small Cap Value Holdings as of December 31, 2016

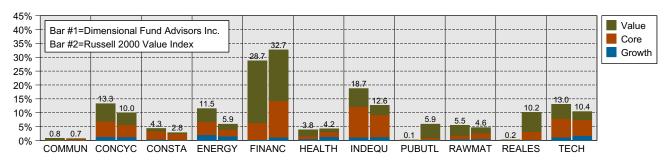


## Style Exposure Matrix Holdings as of December 31, 2016

	Value	Core	Growth	Total
	46.9% (522)	43.7% (632)	9.4% (209)	100.0% (1363)
Total	52.7% (506)	40.0% (457)	7.4% (132)	100.0% (1095)
	6.2% (239)	6.6% (296)	2.4% (127)	15.1% (662)
Micro				
	6.5% (293)	5.8% (260)	1.6% (82)	13.9% (635)
Oman	34.7% (267)	32.4% (320)	5.1% (76)	72.2% (663)
Small	38.5% (192)	29.0% (178)	4.3% (42)	71.8% (412)
	6.1% (16)	4.7% (16)	1.8% (6)	12.6% (38)
Mid				
	7.7% (21)	5.2% (19)	1.5% (8)	14.3% (48)
Large	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Lorgo	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)

## Combined Z-Score Style Distribution Holdings as of December 31, 2016



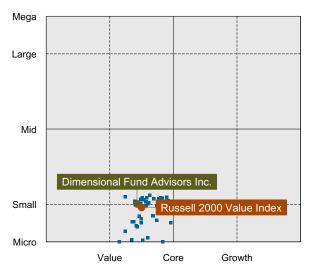




# Current Holdings Based Style Analysis Dimensional Fund Advisors Inc. As of December 31, 2016

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.

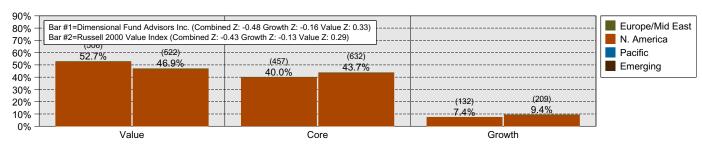
## Style Map vs CAI Small Cap Value Holdings as of December 31, 2016

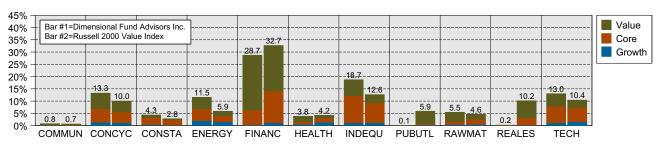


## Style Exposure Matrix Holdings as of December 31, 2016

	Value	Core	Growth	Total
	46.9% (522)	43.7% (632)	9.4% (209)	100.0% (1363)
Total	, ,			, ,
	52.7% (506)	40.0% (457)	7.4% (132)	100.0% (1095)
	0.0% (0)	0.1% (1)	0.0% (0)	0.1% (1)
Emerging				
	0.0% (0)	0.3% (1)	0.0% (0)	0.3% (1)
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Pacific				
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
	46.7% (519)	43.3% (629)	9.4% (208)	99.4% (1356)
N. America				
	52.7% (505)	39.6% (455)	7.4% (132)	99.6% (1092)
Mid East	0.3% (3)	0.3% (2)	0.0% (1)	0.5% (6)
Europe/	0.0% (1)	0.0% (1)	0.0% (0)	0.0% (2)

## Combined Z-Score Style Distribution Holdings as of December 31, 2016







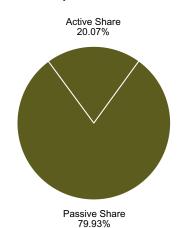
#### Dimensional Fund Advisors Inc. Active Share Analysis as of December 31, 2016 vs. Russell 2000 Value Index

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**

# Index Active Share 46.99% Non-Index Active Share 10.57% Passive Share 42.44%

#### **Sector Exposure Active Share**

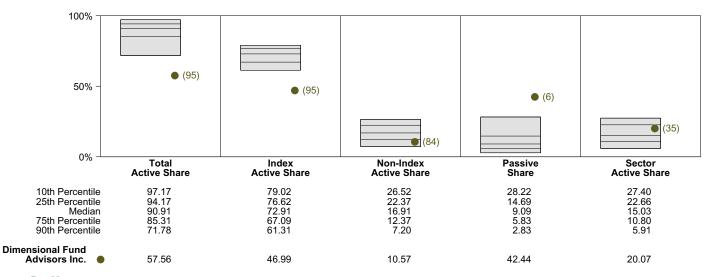


Total Active Share: 57.56%

Consumer Discretionary
Consumer Staples
Energy
Financials
Health Care
Industrials
Information Technology
Materials
Real Estate
Telecommunications
Utilities
Total

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
40.49%	7.62%	48.11%	10.02%	13.26%	5.98%
37.99%	3.27%	41.27%	2.81%	4.34%	1.73%
30.23%	21.16%	51.39%	5.82%	11.49%	5.00%
45.88%	8.42%	54.30%	32.62%	28.71%	16.23%
51.23%	22.06%	73.29%	4.22%	3.86%	2.93%
37.29%	11.32%	48.62%	12.68%	18.71%	8.54%
42.87%	6.73%	49.60%	10.37%	13.02%	6.24%
37.81%	9.00%	46.81%	4.62%	5.47%	2.47%
95.34%	1.18%	96.52%	10.12%	0.21%	5.00%
37.62%	28.87%	66.49%	0.67%	0.79%	0.50%
94.02%	0.11%	94.14%	5.99%	0.13%	2.93%
46.99%	10.57%	57.56%	100.00%	100.00%	57.56%

#### Active Share vs. CAI Small Cap Value





## CastleArk Management Period Ended December 31, 2016

#### **Investment Philosophy**

CastleArk believes that excess returns can be achieved by investing in companies with improving business fundamentals, and that companies with superior earnings and revenue growth rates outperform over time. A differentiating factor of the team's philosophy is the belief that the direction of growth is more important than the absolute level of growth. First full quarter of performance is fourth quarter 2013. Prior history represents manager composite returns.

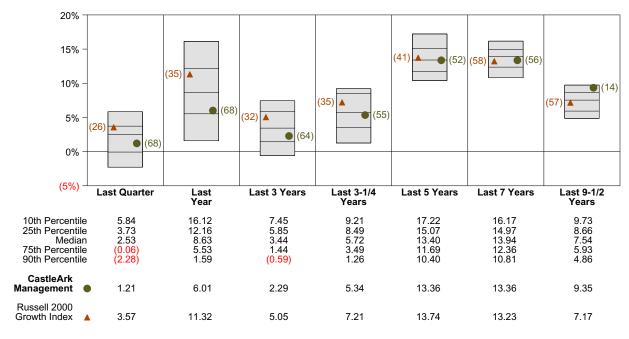
#### **Quarterly Summary and Highlights**

- CastleArk Management's portfolio posted a 1.21% return for the quarter placing it in the 68 percentile of the CAI Small Cap Growth group for the quarter and in the 68 percentile for the last year.
- CastleArk Management's portfolio underperformed the Russell 2000 Growth Index by 2.36% for the quarter and underperformed the Russell 2000 Growth Index for the year by 5.31%.

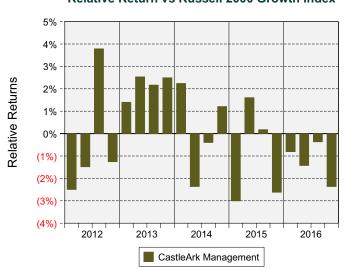
Quarterl	/ Asset	Growth
----------	---------	--------

Beginning Market Value	\$95,183,176
Net New Investment	\$0
Investment Gains/(Losses)	\$1,147,397
Ending Market Value	\$96.330.572

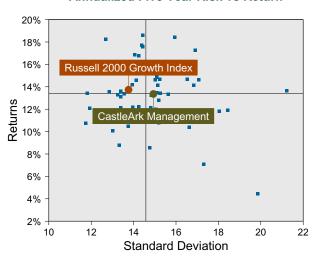
#### Performance vs CAI Small Cap Growth (Gross)



#### Relative Return vs Russell 2000 Growth Index



## CAI Small Cap Growth (Gross) Annualized Five Year Risk vs Return



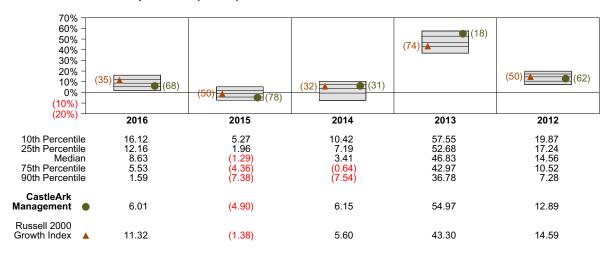


## CastleArk Management Return Analysis Summary

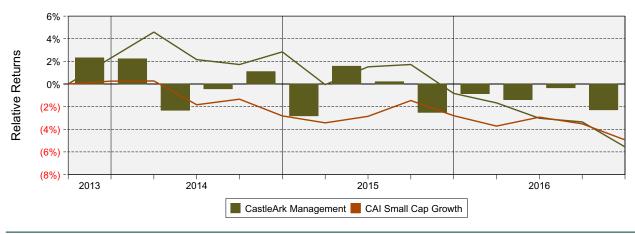
#### **Return Analysis**

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 two charts illustrate the manager's ranking relative to their style using various risk-adjusted return measures and returns for rising/declining periods.

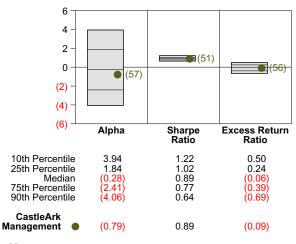
#### Performance vs CAI Small Cap Growth (Gross)



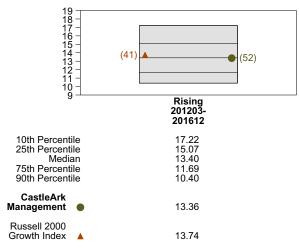
#### Cumulative and Quarterly Relative Return vs Russell 2000 Growth Index



Risk Adjusted Return Measures vs Russell 2000 Growth Index Rankings Against CAI Small Cap Growth (Gross) Five Years Ended December 31, 2016



Returns for Domestic Equity Rising/Declining Periods Five Years Ended December 31, 2016

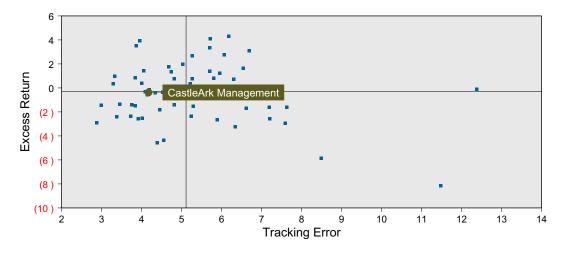


## CastleArk Management Risk Analysis Summary

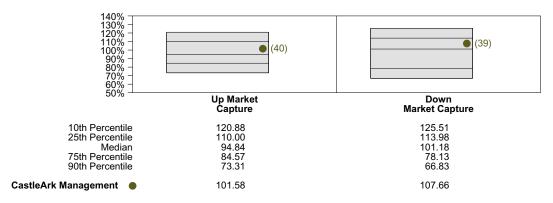
#### **Risk Analysis**

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.

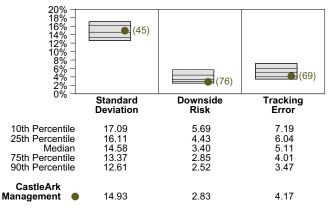
## Risk Analysis vs CAI Small Cap Growth (Gross) Five Years Ended December 31, 2016

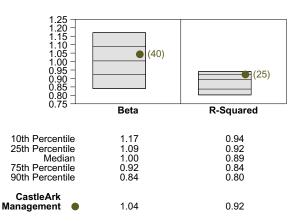


Market Capture vs Russell 2000 Growth Index Rankings Against CAI Small Cap Growth (Gross) Five Years Ended December 31, 2016



Risk Statistics Rankings vs Russell 2000 Growth Index Rankings Against CAI Small Cap Growth (Gross) Five Years Ended December 31, 2016





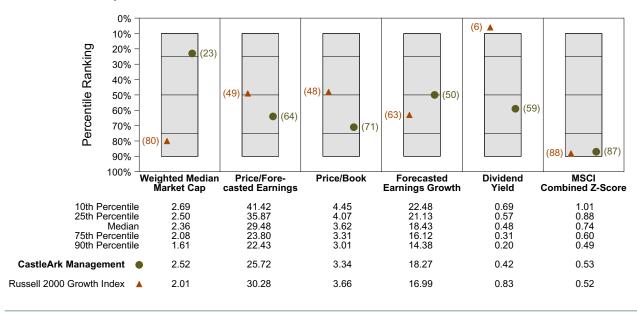


## CastleArk Management Equity Characteristics Analysis Summary

#### **Portfolio Characteristics**

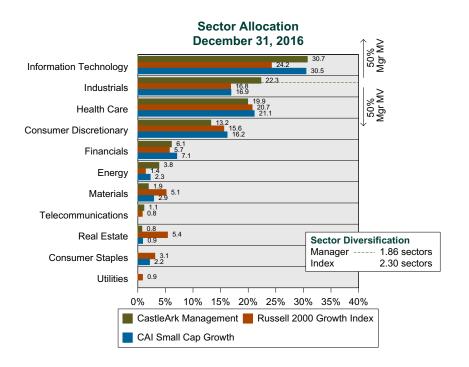
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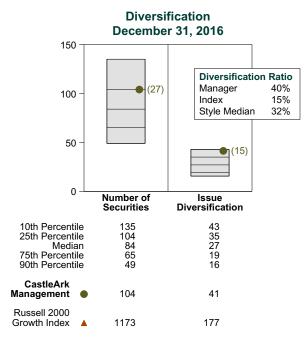
#### Portfolio Characteristics Percentile Rankings Rankings Against CAI Small Cap Growth as of December 31, 2016



#### **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.







## **CastleArk Management** Top 10 Portfolio Holdings Characteristics as of December 31, 2016

#### 10 Largest Holdings

						Price/		
		Ending	Percent			Forecasted		Forecasted
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Microsemi Corp	Information Technology	\$1,726,230	1.8%	28.56%	6.23	14.23	0.00%	16.61%
Itron Inc	Information Technology	\$1,495,516	1.6%	12.72%	2.40	21.38	0.00%	51.00%
Quanta Services Common	Industrials	\$1,312,625	1.4%	24.71%	5.04	17.17	0.00%	29.63%
Astec Industries	Industrials	\$1,293,545	1.3%	12.88%	1.55	23.26	0.59%	10.00%
Synovus Finl Corp	Financials	\$1,290,323	1.3%	26.33%	5.02	19.02	1.17%	8.00%
Western Alliance Bancorp	Financials	\$1,282,047	1.3%	29.61%	5.12	16.80	0.00%	10.00%
Mastec Inc	Industrials	\$1,258,042	1.3%	28.61%	3.15	18.39	0.00%	14.00%
Monolithic Pwr Sys Inc	Information Technology	\$1,236,733	1.3%	2.02%	3.33	29.05	0.98%	25.00%
Tessera Hldg Corp	Information Technology	\$1,228,981	1.3%	15.80%	2.15	14.93	1.81%	15.00%
Mercury Sys Inc	Industrials	\$1,204,720	1.3%	12.68%	1.24	50.79	0.00%	10.00%

#### **10 Best Performers**

						Price/		
		Ending	Percent			Forecasted		Forecasted
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Impinj Inc	Information Technology	\$480,306	0.5%	47.04%	0.70	130.89	0.00%	-
Western Alliance Bancorp	Financials	\$1,282,047	1.3%	29.61%	5.12	16.80	0.00%	10.00%
Mastec Inc	Industrials	\$1,258,042	1.3%	28.61%	3.15	18.39	0.00%	14.00%
Microsemi Corp	Information Technology	\$1,726,230	1.8%	28.56%	6.23	14.23	0.00%	16.61%
Synovus Finl Corp	Financials	\$1,290,323	1.3%	26.33%	5.02	19.02	1.17%	8.00%
Old Dominion Fght Lines Inc	Industrials	\$923,100	1.0%	25.04%	7.07	21.45	0.00%	9.29%
Quanta Services Common	Industrials	\$1,312,625	1.4%	24.71%	5.04	17.17	0.00%	29.63%
Lions Gate Entmnt Corp Cl A Vtg	Consumer Discretionary	\$875,797	0.9%	23.93%	2.12	21.61	0.00%	(10.51)%
Gtt Communications Inc	Information Technology	\$1,201,606	1.3%	22.37%	1.07	102.68	0.00%	25.00%
John Bean Technologies Corp	Industrials	\$1,179,664	1.2%	22.02%	2.51	29.64	0.47%	16.00%

#### **10 Worst Performers**

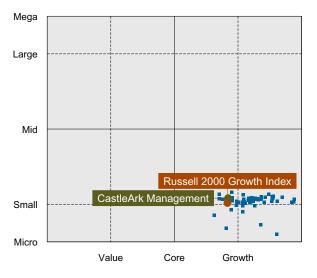
						Price/		
		Ending	Percent			Forecasted		Forecasted
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Barracuda Networks Inc	Information Technology	\$765,158	0.8%	(15.97)%	1.12	29.64	0.00%	21.00%
Abiomed Inc	Health Care	\$677,770	0.7%	(12.37)%	4.89	68.71	0.00%	27.50%
Medidata Solutions Inc	Health Care	\$752,252	0.8%	(11.17)%	2.86	40.38	0.00%	21.00%
Varonis Sys Inc	Information Technology	\$347,194	0.4%	(10.98)%	0.71	(297.78)	0.00%	-
Digitalglobe Inc	Industrials	\$933,560	1.0%	(9.98)%	1.78	92.42	0.00%	10.35%
Five9 Inc	Information Technology	\$868,357	0.9%	(9.45)%	0.75	(236.50)	0.00%	(114.30)%
Scientific Games Corp Cl A	Consumer Discretionary	\$469,770	0.5%	(8.99)%	1.23	(5.17)	0.00%	35.50%
Dsw Inc CI A	Consumer Discretionary	\$645,412	0.7%	(8.89)%	1.64	14.45	3.53%	3.00%
Yelp Inc Cl A	Information Technology	\$954,203	1.0%	(8.76)%	2.99	272.36	0.00%	21.00%
Pros Holdings Inc	Information Technology	\$515,834	0.5%	(8.72)%	0.66	(25.93)	0.00%	15.00%



#### Current Holdings Based Style Analysis CastleArk Management As of December 31, 2016

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.

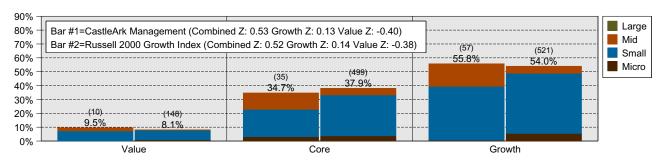
## Style Map vs CAI Small Cap Growth Holdings as of December 31, 2016

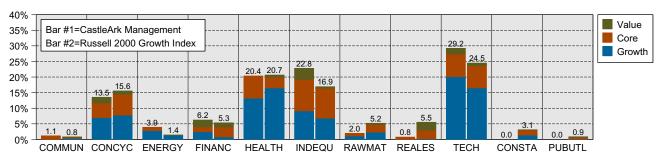


## Style Exposure Matrix Holdings as of December 31, 2016

	8.1% (148)	37.9% (499)	54.0% (521)	100.0% (1168)
Total				
	9.5% (10)	34.7% (35)	55.8% (57)	100.0% (102)
	0.9% (68)	3.7% (219)	5.4% (200)	10.0% (487)
Micro				
	0.0% (0)	3.1% (3)	0.6% (1)	3.7% (4)
	7.0% (77)	29.5% (265)	43.3% (308)	79.8% (650)
Small	(0)	(==)	(11)	(01)
	7.3% (8)	19.7% (20)	38.8% (41)	65.8% (69)
IVIIG	0.2% (3)	4.8% (15)	5.2% (13)	10.2% (31)
Mid	2.3% (2)	11.9% (12)	16.4% (15)	30.5% (29)
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Large	0.00/ (0)	0.00/ (0)	0.00/ (0)	0.00/ (0)
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)

## Combined Z-Score Style Distribution Holdings as of December 31, 2016



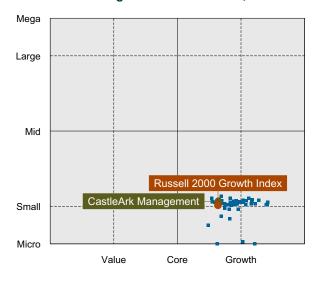




#### Current Holdings Based Style Analysis CastleArk Management As of December 31, 2016

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.

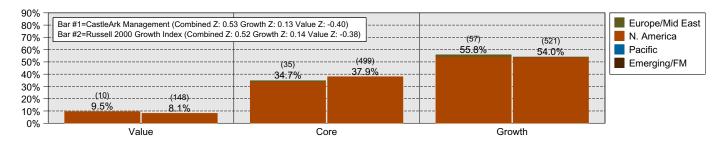
## Style Map vs CAI Small Cap Growth Holdings as of December 31, 2016

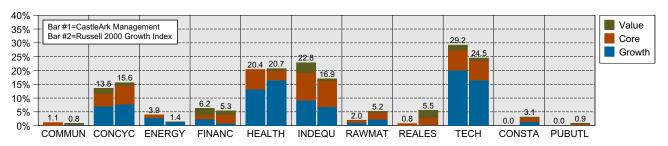


## Style Exposure Matrix Holdings as of December 31, 2016

	Value	Core	Growth	Total
	8.1% (148)	37.9% (499)	54.0% (521)	100.0% (1168)
Total				
	9.5% (10)	34.7% (35)	55.8% (57)	100.0% (102)
Emerging/ FM	0.0% (0)	0.0% (1)	0.1% (1)	0.1% (2)
<b>-</b>	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Pacific	, ,		, ,	. ,
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
	8.1% (148)	37.9% (498)	53.8% (517)	99.8% (1163)
N. America	( ),	(,,	(**)	(**)
	9.5% (10)	34.0% (34)	54.3% (55)	97.8% (99)
Europe/ Mid East	0.0% (0)	0.0% (0)	0.1% (3)	0.1% (3)
Furana/	0.0% (0)	0.7% (1)	1.4% (2)	2.2% (3)

## Combined Z-Score Style Distribution Holdings as of December 31, 2016







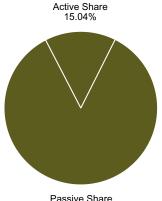
## CastleArk Management Active Share Analysis as of December 31, 2016 vs. Russell 2000 Growth Index

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**

# Passive Share 12.83% Non-Index Active Share 19.77%

#### **Sector Exposure Active Share**



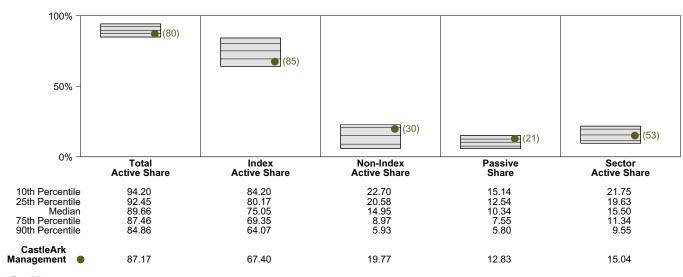
Passive Sh 84.96%

#### Total Active Share: 87.17%

Consumer Discretionary
Consumer Staples
Energy
Financials
Health Care
Industrials
Information Technology
Materials
Real Estate
Telecommunications
Utilities
Total

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
65.08%	24.40%	89.48%	15.60%	13.25%	12.74%
100.00%	0.00%	100.00%	3.11%	0.00%	1.55%
30.05%	30.05%	60.10%	1.41%	3.84%	1.89%
53.25%	36.31%	89.56%	5.74%	6.11%	5.28%
75.66%	7.73%	83.39%	20.72%	19.93%	16.89%
63.13%	26.71%	89.84%	16.84%	22.32%	17.87%
66.81%	15.47%	82.28%	24.23%	30.73%	23.23%
65.39%	26.99%	92.38%	5.15%	1.94%	3.17%
50.00%	50.00%	100.00%	5.41%	0.76%	3.13%
98.01%	0.00%	98.01%	0.83%	1.12%	0.96%
100.00%	0.00%	100.00%	0.88%	-	0.44%
67.40%	19.77%	87.17%	100.00%	100.00%	87.17%

#### Active Share vs. CAI Small Cap Growth





#### Global Equity Period Ended December 31, 2016

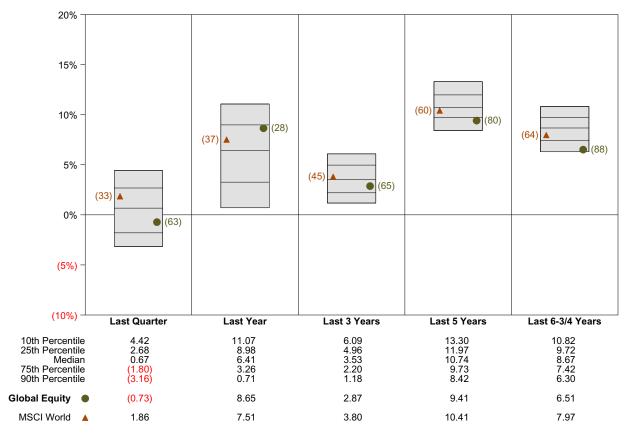
#### **Quarterly Summary and Highlights**

- Global Equity's portfolio posted a (0.73)% return for the quarter placing it in the 63 percentile of the CAI Global Equity Broad Style group for the quarter and in the 28 percentile for the last year.
- Global Equity's portfolio underperformed the MSCI World by 2.58% for the quarter and outperformed the MSCI World for the year by 1.14%.

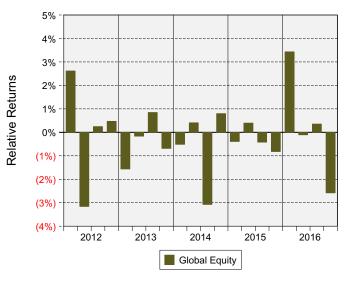
#### **Quarterly Asset Growth**

Beginning Market Value	\$493,785,833
Net New Investment	\$-7,000,000
Investment Gains/(Losses)	\$-3,699,228
Ending Market Value	\$483,086,605

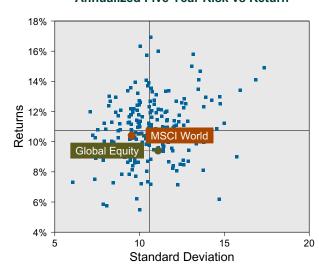
#### Performance vs CAI Global Equity Broad Style (Gross)



#### Relative Return vs MSCI World



## CAI Global Equity Broad Style (Gross) Annualized Five Year Risk vs Return





#### BlackRock Global Alpha Tilts Period Ended December 31, 2016

#### **Investment Philosophy**

First full guarter of performance is second guarter 2016. Prior history represents manager composite returns.

#### **Quarterly Summary and Highlights**

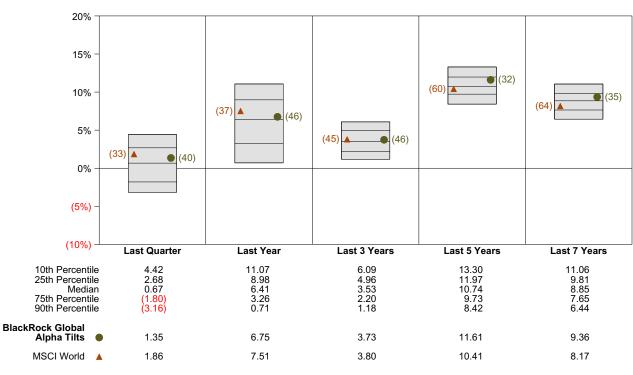
- BlackRock Global Alpha Tilts's portfolio posted a 1.35% return for the quarter placing it in the 40 percentile of the CAI Global Equity Broad Style group for the quarter and in the 46 percentile for the last year.
- BlackRock Global Alpha Tilts's portfolio underperformed the MSCI World by 0.50% for the quarter and underperformed the MSCI World for the year by 0.76%.

#### **Quarterly Asset Growth**

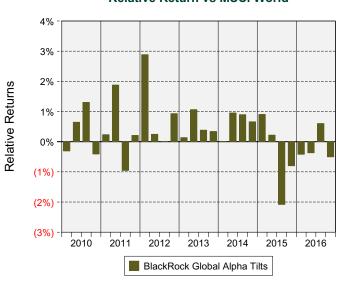
Beginning Market Value	\$295,337,198
Net New Investment	\$-4,000,000
Investment Gains/(Losses)	\$3,867,058

Ending Market Value \$295,204,256

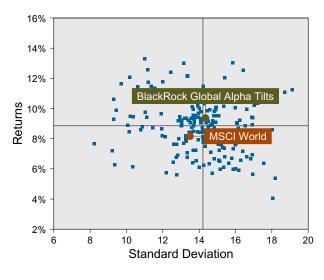
#### Performance vs CAI Global Equity Broad Style (Gross)



#### Relative Return vs MSCI World



## CAI Global Equity Broad Style (Gross) Annualized Seven Year Risk vs Return



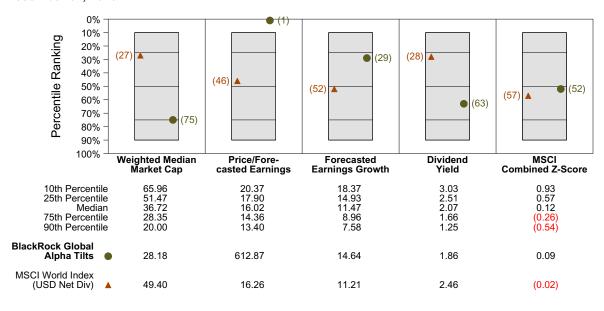


#### BlackRock Global Alpha Tilts **Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

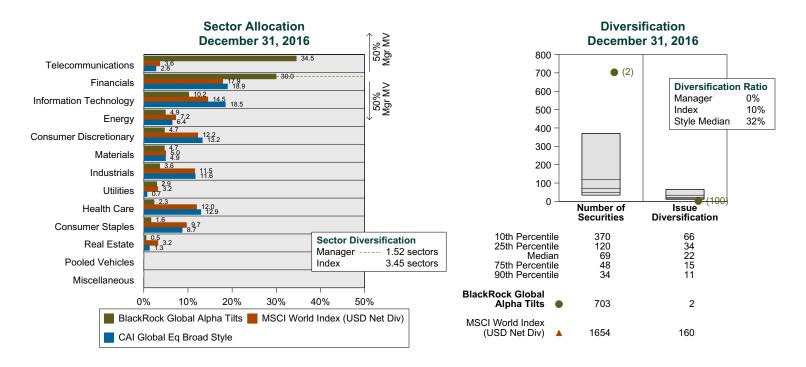
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

#### **Portfolio Characteristics Percentile Rankings** Rankings Against CAI Global Equity Broad Style as of December 31, 2016



#### **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.





## **BlackRock Global Alpha Tilts** Top 10 Portfolio Holdings Characteristics as of December 31, 2016

#### 10 Largest Holdings

	Ending	Percent			Forecasted	Dividend Yield	Forecasted Growth in Earnings
Sector	Market Value	of Portfolio	Qtrly Return	Market Capital			
Financials	\$2,780,700,000	22.6%	(8.60)%	28.08	17.16	1.13%	8.90%
Information Technology	\$684,357,000	5.6%	0.00%	26.94	8.89	1.12%	(1.77)%
Telecommunications	\$321,424,100	2.6%	(8.86)%	90.38	13.93	2.82%	13.90%
Energy	\$271,464,500	2.2%	(20.00)%	11.22	7.17	3.28%	21.54%
Consumer Discretionary	\$230,413,000	1.9%	3.00%	192.42	11.52	3.05%	4.12%
Telecommunications	\$226,443,200	1.8%	(9.64)%	88.29	12.00	2.44%	6.14%
Materials	\$215,785,000	1.8%	3.88%	18.59	11.26	2.04%	137.18%
Utilities	\$196,221,900	1.6%	13.76%	10.44	22.21	2.17%	22.19%
Financials	\$189,113,720	1.5%	11.85%	45.66	9.14	3.57%	(5.60)%
	Telecommunications Financials Information Technology Telecommunications Energy Consumer Discretionary Telecommunications Materials Utilities	Sector         Market Value           Telecommunications Financials         \$3,617,422,000           Information Technology Telecommunications Energy         \$684,357,000           Consumer Discretionary Telecommunications Materials         \$271,464,500           Materials         \$226,443,200           Utilities         \$196,221,900	Sector         Market Value         of Portfolio           Telecommunications Financials         \$3,617,422,000         29.4%           Financials         \$2,780,700,000         22.6%           Information Technology Telecommunications         \$321,424,100         2.6%           Energy         \$271,464,500         2.2%           Consumer Discretionary Telecommunications         \$230,413,000         1.9%           Materials         \$215,785,000         1.8%           Utilities         \$196,221,900         1.6%	Market Sector         Market Value         of Portfolio         Qtrly Return           Telecommunications Financials         \$3,617,422,000         29.4%         (0.57)%           Financials         \$2,780,700,000         22.6%         (8.60)%           Information Technology         \$684,357,000         5.6%         0.00%           Telecommunications         \$321,424,100         2.6%         (8.86)%           Energy         \$271,464,500         2.2%         (20.00)%           Consumer Discretionary         \$230,413,000         1.9%         3.00%           Telecommunications         \$226,443,200         1.8%         (9.64)%           Materials         \$215,785,000         1.8%         3.88%           Utilities         \$196,221,900         1.6%         13.76%	Sector         Market Value         of Portfolio         Qtrly Return         Market Capital           Telecommunications         \$3,617,422,000         29.4%         (0.57)%         29.78           Financials         \$2,780,700,000         22.6%         (8.60)%         28.08           Information Technology         \$684,357,000         5.6%         0.00%         26.94           Telecommunications         \$321,424,100         2.6%         (8.86)%         90.38           Energy         \$271,464,500         2.2%         (20.00)%         11.22           Consumer Discretionary         \$230,413,000         1.9%         3.00%         192.42           Telecommunications         \$226,443,200         1.8%         (9.64)%         88.29           Materials         \$215,785,000         1.8%         3.88%         18.59           Utilities         \$196,221,900         1.6%         13.76%         10.44	Sector         Warket Value         of Portfolio         Qtrly Return         Market Capital         Earnings Ratio           Telecommunications         \$3,617,422,000         29.4%         (0.57)%         29.78         17.65           Financials         \$2,780,700,000         22.6%         (8.60)%         28.08         17.16           Information Technology         \$684,357,000         5.6%         0.00%         26.94         8.89           Telecommunications         \$321,424,100         2.6%         (8.86)%         90.38         13.93           Energy         \$271,464,500         2.2%         (20.00)%         11.22         7.17           Consumer Discretionary         \$230,413,000         1.9%         3.00%         192.42         11.52           Telecommunications         \$226,443,200         1.8%         (9.64)%         88.29         12.00           Materials         \$215,785,000         1.8%         3.88%         18.59         11.26           Utilities         \$196,221,900         1.6%         13.76%         10.44         22.21	Sector         Value         Percent of Portfolio         Qtrly Return         Market Capital         Forecasted Earnings         Dividend Yield           Telecommunications         \$3,617,422,000         29.4%         (0.57)%         29.78         17.65         1.68%           Financials         \$2,780,700,000         22.6%         (8.60)%         28.08         17.16         1.13%           Information Technology         \$684,357,000         5.6%         0.00%         26.94         8.89         1.12%           Telecommunications         \$321,424,100         2.6%         (8.86)%         90.38         13.93         2.82%           Energy         \$271,464,500         2.2%         (20.00)%         11.22         7.17         3.28%           Consumer Discretionary         \$230,413,000         1.9%         3.00%         192.42         11.52         3.05%           Telecommunications         \$226,443,200         1.8%         (9.64)%         88.29         12.00         2.44%           Materials         \$215,785,000         1.8%         3.88%         18.59         11.26         2.04%           Utilities         \$196,221,900         1.6%         13.76%         10.44         22.21         2.17%

#### **10 Best Performers**

						Price/	Dividend Yield	Forecasted Growth in Earnings
	Sector	Ending Market Value	Percent			5		
Stock			of Portfolio	Qtrly Return	Market Capital			
Enerplus Res Fd Unit Tr G New	Energy	\$50,654	0.0%	49.40%	2.28	38.62	0.94%	131.87%
Oz Minerals Ltd Shs	Materials	\$304,657	0.0%	48.70%	1.73	19.43	2.53%	(22.83)%
Regions Finl Corp New	Financials	\$128,895	0.0%	46.15%	17.68	14.96	1.81%	7.25%
Citizens Finl Group Inc	Financials	\$1,982,738	0.0%	44.85%	18.24	16.34	1.35%	15.87%
Bca.Ppo.Emilia Romagna	Financials	\$59,769	0.0%	43.40%	2.57	11.00	1.98%	(25.88)%
Stmicroelectronics N V Shs	Information Technology	\$171,387	0.0%	42.49%	10.35	23.19	2.36%	39.03%
Lincoln National Corp	Financials	\$188,936	0.0%	41.78%	15.15	9.56	1.75%	9.87%
Nomura Hldgs Inc Shs	Financials	\$28,873,290	0.2%	41.78%	22.58	13.16	1.74%	17.26%
Bank Amer Corp	Financials	\$1,270,286	0.0%	41.72%	223.32	13.48	1.36%	10.28%

#### **10 Worst Performers**

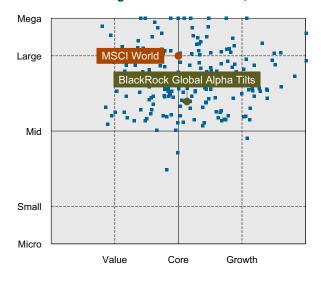
Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/ Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Fitbit Inc CI A	Information Technology	\$12,283	0.0%	(50.67)%	1.25	11.26	0.00%	(4.60)%
Ig Group Holdings Plc London Shs	Financials	\$91,656	0.0%	(46.04)%	2.24	10.78	6.35%	6.70%
Colopl	Information Technology	\$4,563,200	0.0%	(44.88)%	1.07	14.25	1.71%	(27.57)%
St Barbara Ltd Shs New	Materials	\$2,715	0.0%	(39.49)%	0.73	5.64	0.00%	16.81%
Groupon Inc Com CI A	Consumer Discretionary	\$28,851	0.0%	(35.53)%	1.90	33.20	0.00%	25.00%
Mfi Furniture Group Plc Ord	Industrials	\$31,172	0.0%	(34.27)%	2.98	13.86	2.71%	20.33%
Berendsen Plc Shs	Industrials	\$21,266	0.0%	(33.44)%	1.86	12.72	3.50%	5.60%
Petkim Petrokimya Holding As Shs	Materials	\$243,771	0.0%	(30.63)%	1.58	12.80	8.51%	5.83%
Ucb Act	Health Care	\$14,436	0.0%	(28.44)%	12.50	17.06	1.32%	31.65%
Regis Resources NI Shs	Materials	\$57,885	0.0%	(28.16)%	1.08	10.10	4.38%	10.48%



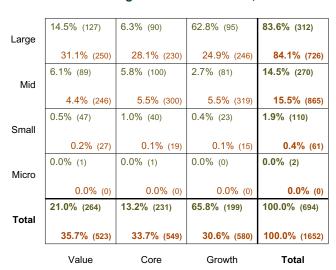
#### **Current Holdings Based Style Analysis BlackRock Global Alpha Tilts** As of December 31, 2016

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.

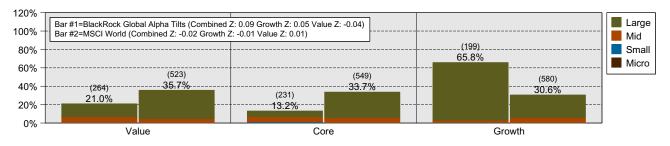
#### Style Map vs CAI Global Eg Broad Style Holdings as of December 31, 2016

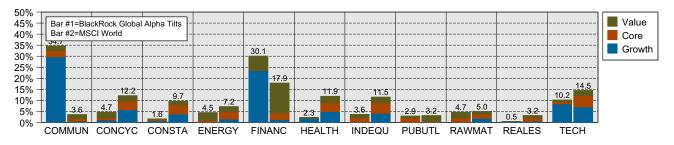


#### **Style Exposure Matrix** Holdings as of December 31, 2016



#### **Combined Z-Score Style Distribution** Holdings as of December 31, 2016



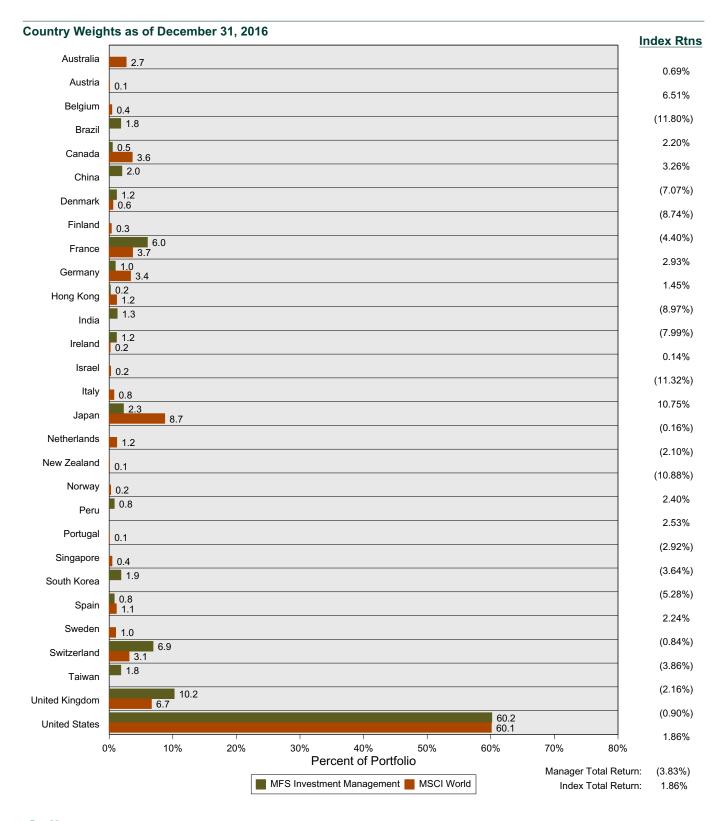




#### **Country Allocation** MFS Investment Management VS MSCI World Index (USD Net Div)

#### **Country Allocation**

The chart below contrasts the portfolio's country allocation with that of the index as of December 31, 2016. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent guarter. 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.





#### **MFS Investment Management** Period Ended December 31, 2016

#### **Investment Philosophy**

MFS believes earnings growth drives share price performance over the long term. They conduct proprietary fundamental and quantitative research to identify companies with the following characteristics: (1) higher sustainable earnings growth rates and returns than the company's industry, (2) improving fundamentals leading to multiple expansion and (3) stock valuations not fully reflecting the company's long-term growth prospects. First full quarter of performance is first quarter 2013. Prior history represents manager composite returns.

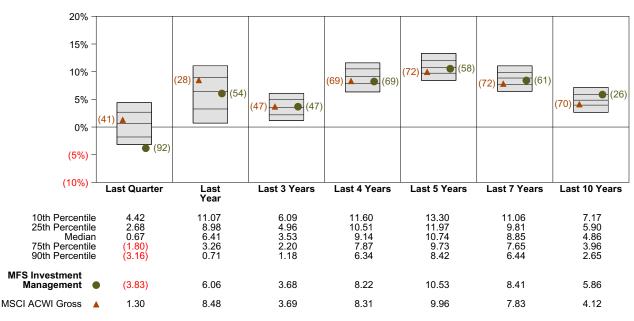
#### **Quarterly Summary and Highlights**

- MFS Investment Management's portfolio posted a (3.83)% return for the quarter placing it in the 92 percentile of the CAI Global Equity Broad Style group for the quarter and in the 54 percentile for the last year.
- MFS Investment Management's portfolio underperformed the MSCI ACWI Gross by 5.13% for the guarter and underperformed the MSCI ACWI Gross for the year by 2.42%.

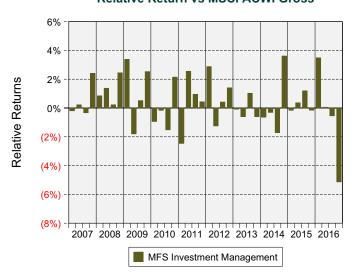
#### **Quarterly Asset Growth**

Beginning Market Value	\$198,448,635
Net New Investment	\$-3,000,000
Investment Gains/(Losses)	\$-7,566,287
Ending Market Value	\$187.882.349

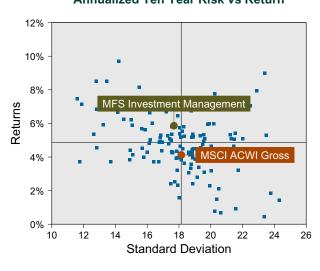
#### Performance vs CAI Global Equity Broad Style (Gross)



#### **Relative Return vs MSCI ACWI Gross**



#### **CAI Global Equity Broad Style (Gross)** Annualized Ten Year Risk vs Return



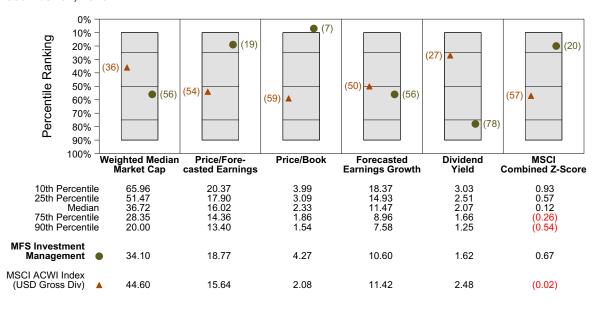


#### MFS Investment Management **Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

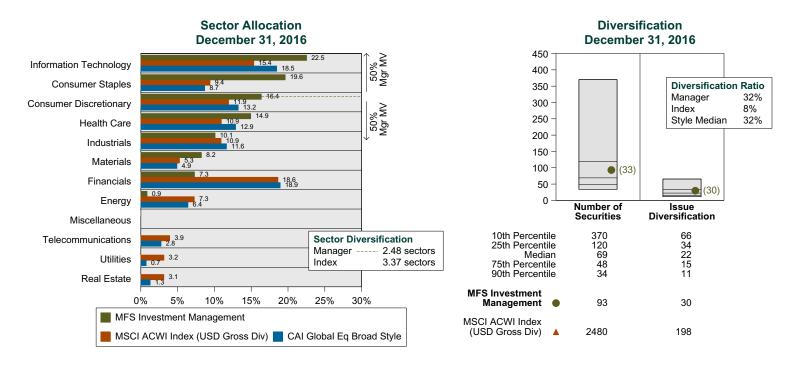
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

#### **Portfolio Characteristics Percentile Rankings** Rankings Against CAI Global Equity Broad Style as of December 31, 2016



#### **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.





# MFS Investment Management Top 10 Portfolio Holdings Characteristics as of December 31, 2016

# 10 Largest Holdings

						Price/		
		Ending	Percent			Forecasted		Forecasted
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Alphabet Inc CI A	Information Technology	\$6,477,486	3.5%	(1.44)%	234.63	19.33	0.00%	18.85%
Thermo Fisher Scientific Inc	Health Care	\$4,537,635	2.4%	(11.20)%	55.74	15.25	0.43%	11.40%
Accenture Plc Ireland Shs Class A	Information Technology	\$4,468,158	2.4%	(3.13)%	72.93	19.16	2.07%	10.70%
Abbott Laboratories	Health Care	\$3,954,578	2.1%	(8.60)%	56.55	15.87	2.76%	10.00%
Nike Inc CI B	Consumer Discretionary	\$3,735,903	2.0%	(3.11)%	67.92	20.08	1.42%	12.19%
Nestle S A Shs Nom New	Consumer Staples	\$3,719,451	2.0%	(8.56)%	223.69	20.29	3.08%	5.68%
Cognizant Tech Solutions	Information Technology	\$3,648,898	1.9%	17.44%	33.99	15.31	0.00%	9.25%
Lvmh Moet Hennessy Lou Vuitt Ord	Consumer Discretionary	\$3,634,536	1.9%	11.87%	97.03	20.92	1.98%	9.05%
Taiwan Semiconductor Mfg Co Ltd Spon	Information Technology	\$3,394,225	1.8%	(6.02)%	146.03	13.00	3.31%	11.52%
Ecolab	Materials	\$3,201,395	1.7%	(3.40)%	34.18	23.78	1.26%	12.00%

### **10 Best Performers**

						Price/		
		Ending	Percent			Forecasted		Forecasted
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Schwab Charles Corp New	Financials	\$1,292,327	0.7%	25.28%	52.32	25.30	0.71%	20.00%
Time Warner Inc	Consumer Discretionary	\$1,241,376	0.7%	21.78%	74.44	16.28	1.67%	12.46%
Cognizant Tech Solutions	Information Technology	\$3,648,898	1.9%	17.44%	33.99	15.31	0.00%	9.25%
Twenty First Centy Fox Inc Cl A	Consumer Discretionary	\$2,766,090	1.5%	15.77%	29.34	13.85	1.28%	11.60%
Colfax Corp	Industrials	\$1,340,297	0.7%	14.32%	4.41	21.91	0.00%	9.50%
Fastenal Co	Industrials	\$709,586	0.4%	13.33%	13.58	26.10	2.55%	2.51%
Disney Walt Co Com Disney	Consumer Discretionary	\$864,296	0.5%	13.08%	165.86	17.03	1.50%	9.20%
Lvmh Moet Hennessy Lou Vuitt Ord	Consumer Discretionary	\$3,634,536	1.9%	11.87%	97.03	20.92	1.98%	9.05%
United Technologies Corp	Industrials	\$844,512	0.5%	8.56%	90.26	16.68	2.41%	6.70%
Julius Baer Gruppe Ag Zueric Namen -	Financials	\$1,732,834	0.9%	7.89%	9.96	13.22	2.43%	5.90%

# **10 Worst Performers**

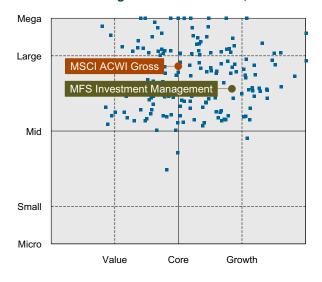
						Price/		
		Ending	Percent			Forecasted		Forecasted
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Coty Inc Com Cl A	Consumer Staples	\$1,955,215	1.0%	(21.55)%	13.67	18.13	2.73%	(1.50)%
Zimmer Biomet Holdings	Health Care	\$1,938,818	1.0%	(20.44)%	20.67	11.89	0.93%	10.00%
Naver Corp Shs	Information Technology	\$1,790,880	1.0%	(19.93)%	21.15	23.19	0.14%	38.39%
Kose Corp Tokyo Shs	Consumer Staples	\$2,322,708	1.2%	(17.93)%	5.04	22.83	0.97%	11.07%
Ambev Sa Sponsored Adr	Consumer Staples	\$2,240,291	1.2%	(17.55)%	76.90	18.88	4.19%	3.00%
Alibaba Group Hldg Ltd Sponsored Ads	Information Technology	\$2,134,310	1.1%	(17.00)%	217.24	22.90	0.00%	25.70%
Symrise	Materials	\$1,097,016	0.6%	(16.00)%	7.93	23.94	1.38%	8.00%
Hdfc Bank Ltd Adr Reps 3 Shs	Financials	\$2,345,949	1.3%	(15.59)%	45.41	17.95	0.79%	22.51%
Waters Corp	Health Care	\$1,312,453	0.7%	(15.21)%	10.83	18.88	0.00%	9.00%
Hengan International Grp Co Shs New	Consumer Staples	\$833,703	0.4%	(14.97)%	8.85	16.58	3.76%	4.59%



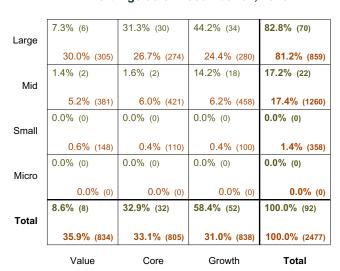
# **Current Holdings Based Style Analysis MFS Investment Management** As of December 31, 2016

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.

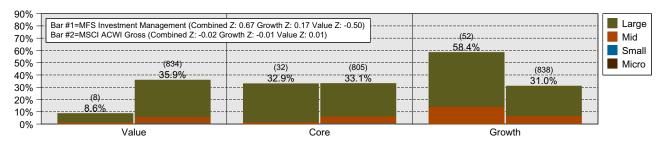
### Style Map vs CAI Global Eg Broad Style Holdings as of December 31, 2016

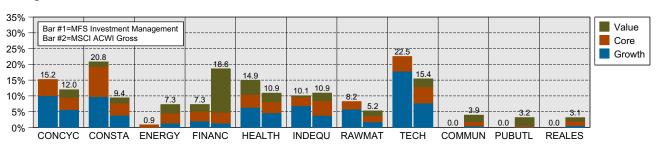


### **Style Exposure Matrix** Holdings as of December 31, 2016



### **Combined Z-Score Style Distribution** Holdings as of December 31, 2016



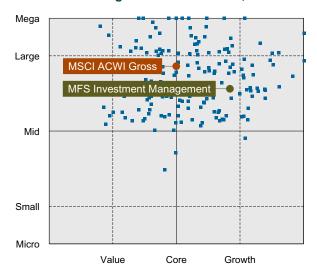




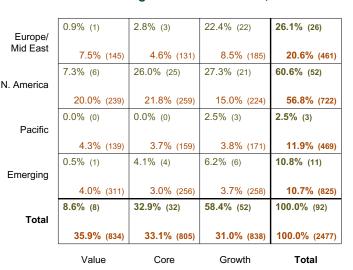
# **Current Holdings Based Style Analysis MFS Investment Management** As of December 31, 2016

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.

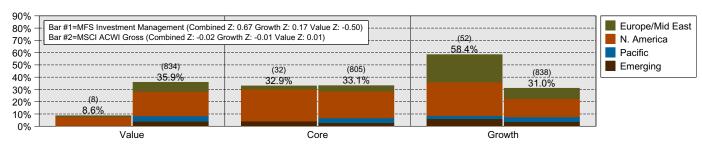
### Style Map vs CAI Global Eg Broad Style Holdings as of December 31, 2016

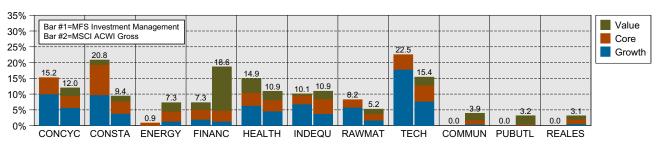


### **Style Exposure Matrix** Holdings as of December 31, 2016



### **Combined Z-Score Style Distribution** Holdings as of December 31, 2016



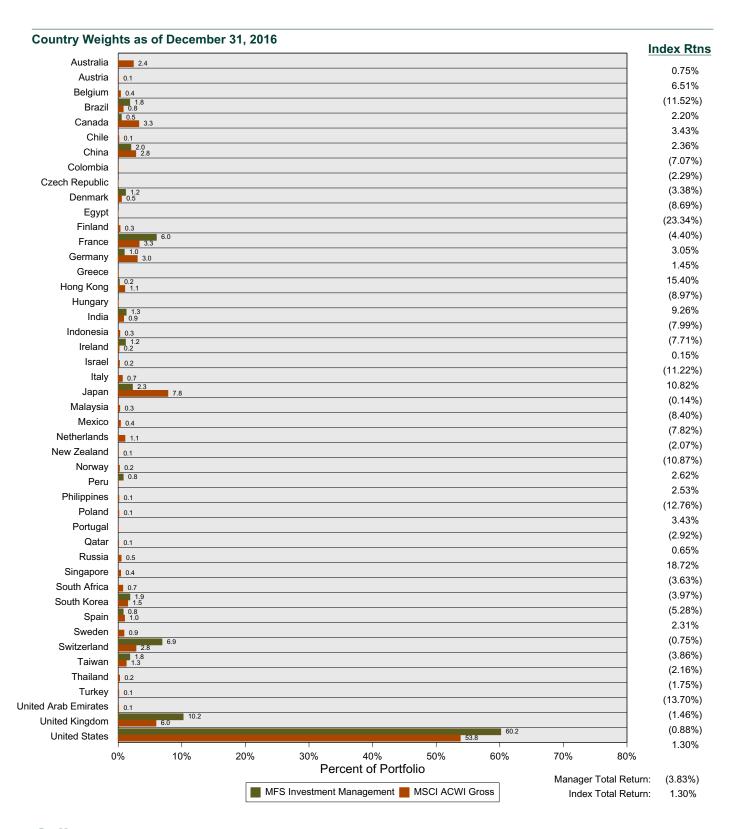




# **Country Allocation** MFS Investment Management VS MSCI ACWI Index (USD Gross Div)

### **Country Allocation**

The chart below contrasts the portfolio's country allocation with that of the index as of December 31, 2016. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent guarter. 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.





# **International Equity** Period Ended December 31, 2016

### **Quarterly Summary and Highlights**

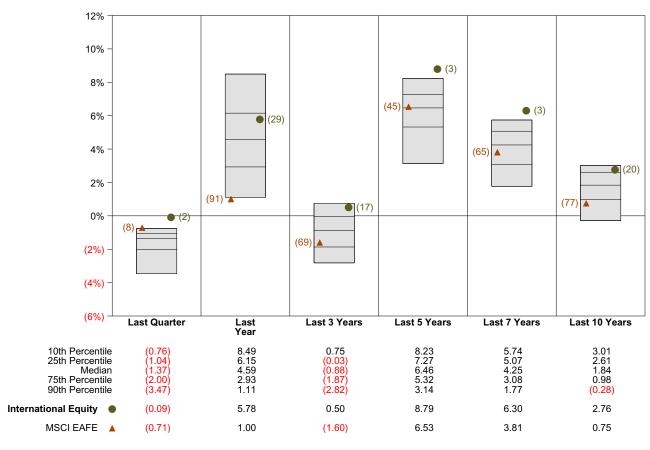
- International Equity's portfolio posted a (0.09)% return for the quarter placing it in the 2 percentile of the Pub Pln-International Equity group for the quarter and in the 29 percentile for the last year.
- International Equity's portfolio outperformed the MSCI EAFE by 0.62% for the guarter and outperformed the MSCI EAFE for the year by 4.78%.

### **Quarterly Asset Growth**

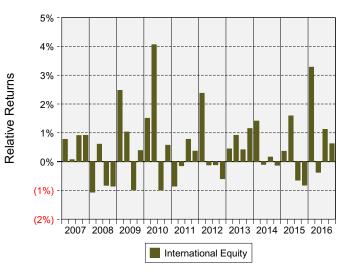
Beginning Market Value \$981,508,726 Net New Investment \$-10,000,000 Investment Gains/(Losses) \$-911,511

**Ending Market Value** \$970,597,215

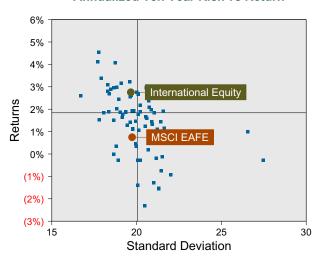
### Performance vs Pub Pln-International Equity (Gross)



### **Relative Return vs MSCI EAFE**



### **Pub Pln- International Equity (Gross)** Annualized Ten Year Risk vs Return



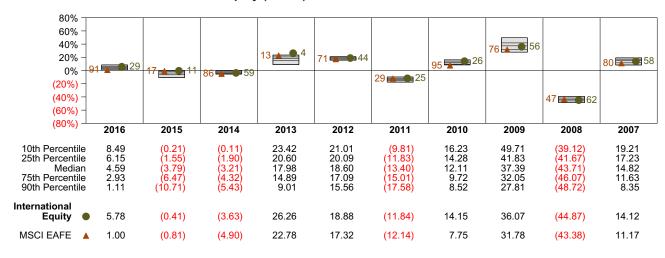


# **International Equity Return Analysis Summary**

### **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.

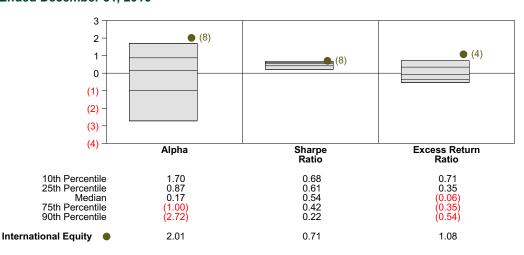
### Performance vs Pub Pln-International Equity (Gross)



### **Cumulative and Quarterly Relative Return vs MSCI EAFE**



Risk Adjusted Return Measures vs MSCI EAFE Rankings Against Pub Pln- International Equity (Gross) Five Years Ended December 31, 2016



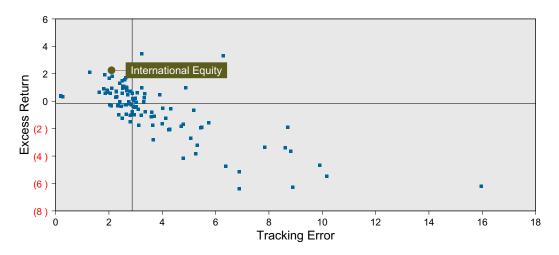


# **International Equity Risk Analysis Summary**

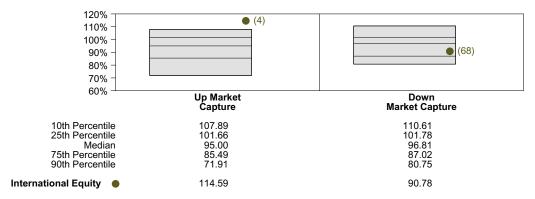
### Risk Analysis

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.

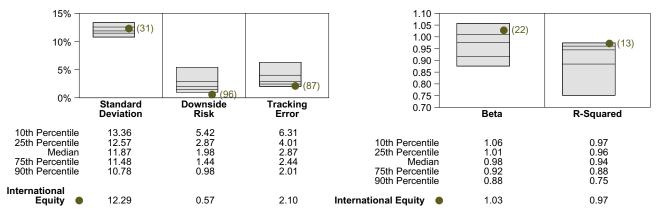
### Risk Analysis vs Pub Pln- International Equity (Gross) Five Years Ended December 31, 2016



Market Capture vs MSCI EAFE Index (USD Net Div) Rankings Against Pub Pln- International Equity (Gross) Five Years Ended December 31, 2016



Risk Statistics Rankings vs MSCI EAFE Index (USD Net Div) Rankings Against Pub Pln- International Equity (Gross) Five Years Ended December 31, 2016





# **AQR Emerging Markets** Period Ended December 31, 2016

### **Investment Philosophy**

AQR considers themselves as fundamental investors who employ quantitative tools to build diversified portfolios which favor undervalued securities with good momentum characteristics - two negatively correlated categories. The strategy employs three models: stock selection, country selection and currency selection. The view from each model is implemented distinctly through stock selection and country and currency overlays, allowing each model to be fully expressed in the portfolio. First full quarter of performance is fourth quarter 2016. Prior history represents manager composite returns.

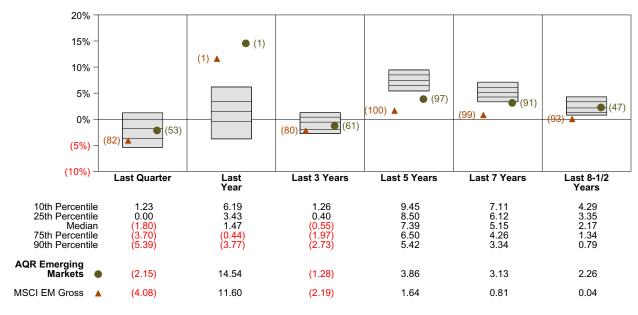
### **Quarterly Summary and Highlights**

- AQR Emerging Markets's portfolio posted a (2.15)% return for the quarter placing it in the 53 percentile of the CAI Non-U.S. Equity Style group for the quarter and in the 1 percentile for the last year.
- AQR Emerging Markets's portfolio outperformed the MSCI EM Gross by 1.93% for the quarter and outperformed the MSCI EM Gross for the year by 2.94%.

### **Quarterly Asset Growth**

Beginning Market Value	\$104,074,187
Net New Investment	\$0
Investment Gains/(Losses)	\$-2,239,189
Ending Market Value	\$101.834.998

### Performance vs CAI Non-U.S. Equity Style (Gross)



### Relative Return vs MSCI EM Gross



### CAI Non-U.S. Equity Style (Gross) Annualized Five Year Risk vs Return



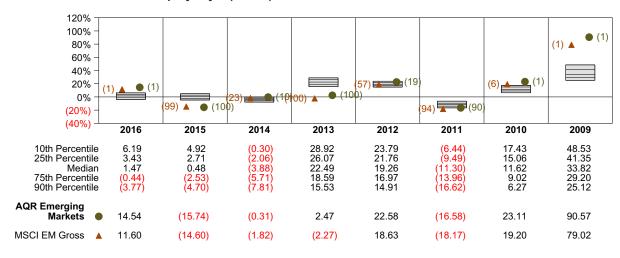


# **AQR Emerging Markets Return Analysis Summary**

### **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 two charts illustrate the manager's ranking relative to their style using various risk-adjusted return measures and returns for rising/declining periods.

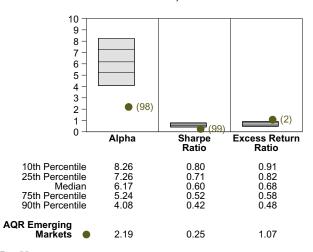
### Performance vs CAI Non-U.S. Equity Style (Gross)



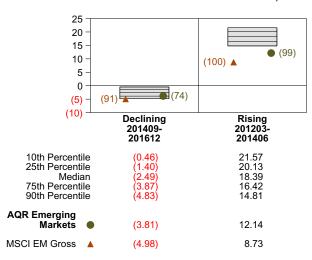
### **Cumulative and Quarterly Relative Return vs MSCI EM Gross**



Risk Adjusted Return Measures vs MSCI EM Gross Rankings Against CAI Non-U.S. Equity Style (Gross) Five Years Ended December 31, 2016



**Returns for International Equity Rising/Declining Periods** Five Years Ended December 31, 2016



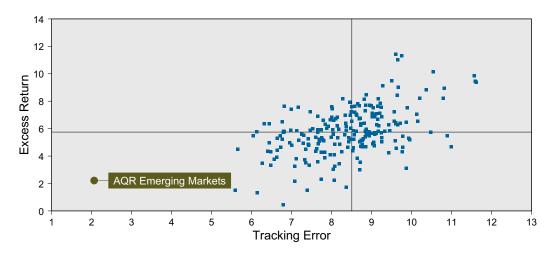


# AQR Emerging Markets **Risk Analysis Summary**

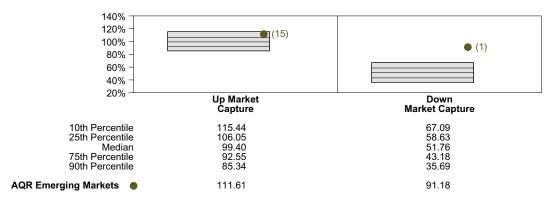
### Risk Analysis

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.

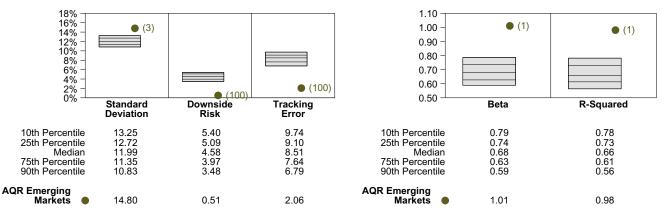
### Risk Analysis vs CAI Non-U.S. Equity Style (Gross) Five Years Ended December 31, 2016



Market Capture vs MSCI EM - Emerging Mkts (USD Gross Div) Rankings Against CAI Non-U.S. Equity Style (Gross) Five Years Ended December 31, 2016



Risk Statistics Rankings vs MSCI EM - Emerging Mkts (USD Gross Div) Rankings Against CAI Non-U.S. Equity Style (Gross) Five Years Ended December 31, 2016



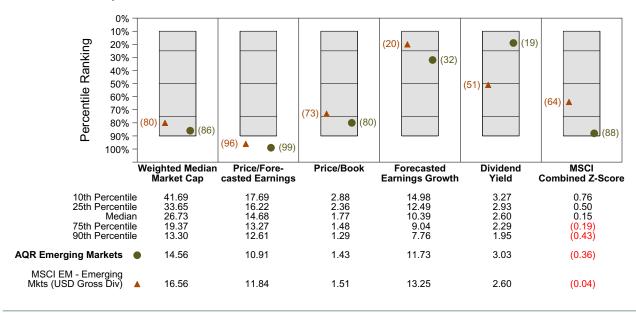


# **AQR Emerging Markets Equity Characteristics Analysis Summary**

### **Portfolio Characteristics**

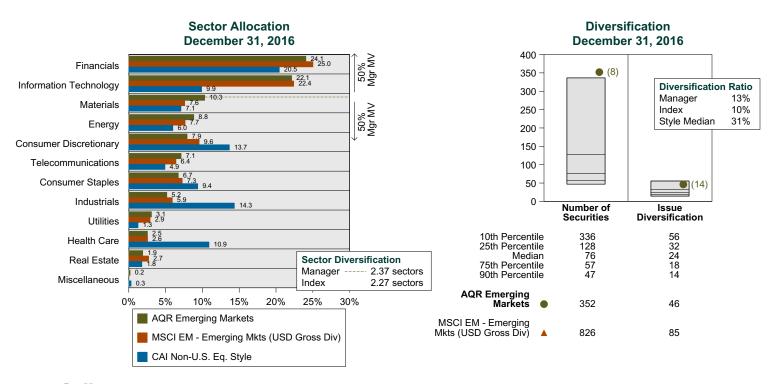
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

### **Portfolio Characteristics Percentile Rankings** Rankings Against CAI Non-U.S. Equity Style as of December 31, 2016



### **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.





# AQR Emerging Markets Top 10 Portfolio Holdings Characteristics as of December 31, 2016

# 10 Largest Holdings

						Price/		
		Ending	Percent			Forecasted		Forecasted
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Samsung Electronics Co Ltd Ord	Information Technology	\$4,541,717	4.5%	2.82%	209.89	9.97	1.17%	17.33%
China Mobile Hong Kong Limit Ord	Telecommunications	\$3,668,145	3.6%	(11.33)%	217.08	12.88	3.81%	6.07%
Taiwan Semicond Manufac Co L Shs	Information Technology	\$3,572,367	3.5%	(3.27)%	146.03	13.00	3.31%	11.52%
Alibaba Group Hldg Ltd Sponsored Ads	Information Technology	\$2,596,705	2.5%	(17.00)%	217.24	22.90	0.00%	25.70%
China Construction Bank Shs H	Financials	\$2,360,259	2.3%	9.97%	185.12	5.83	5.49%	1.85%
Tencent Holdings Limited Shs Par Hkd	Information Technology	\$1,998,373	2.0%	(11.14)%	231.88	28.39	0.25%	31.17%
Industrial and Comm Bk of Cn Hkd Shs	Financials	\$1,748,692	1.7%	(5.81)%	52.06	5.36	6.01%	1.68%
Bradesco S A Pfd	Financials	\$1,437,036	1.4%	(0.48)%	24.74	8.53	4.57%	9.50%
Hon Hai Precision Inds Ltd Ord	Information Technology	\$1,346,053	1.3%	3.66%	45.27	10.08	4.32%	(1.50)%
Itau Unibanco Holding Sa Pfd Shs	Financials	\$1,319,676	1.3%	6.29%	33.60	9.22	4.67%	0.29%

### **10 Best Performers**

					Price/		
	Ending	Percent			Forecasted		Forecasted
	Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Materials	\$318,529	0.3%	52.24%	14.54	25.61	4.18%	99.60%
Materials	\$619,309	0.6%	43.43%	3.63	9.62	5.51%	(7.60)%
Energy	\$476,051	0.5%	37.66%	15.24	7.52	2.57%	13.20%
Financials	\$92,724	0.1%	33.97%	34.31	15.37	3.83%	16.17%
Materials	\$457,378	0.4%	32.47%	12.93	9.13	7.76%	(24.73)%
Materials	\$41,783	0.0%	27.40%	3.66	11.02	1.66%	20.75%
Telecommunications	\$571,815	0.6%	25.43%	8.48	10.05	10.04%	(0.20)%
Telecommunications	\$417,157	0.4%	25.33%	2.85	11.86	1.77%	16.63%
Financials	\$173,208	0.2%	23.82%	24.73	7.24	4.65%	7.33%
Materials	\$34,567	0.0%	21.85%	3.80	21.15	0.65%	(30.00)%
	Materials Materials Energy Financials Materials Materials Telecommunications Telecommunications Financials	Sector         Market           Value         Value           Materials         \$318,529           Materials         \$619,309           Energy         \$476,051           Financials         \$92,724           Materials         \$457,378           Materials         \$41,783           Telecommunications         \$571,815           Telecommunications         \$417,157           Financials         \$173,208	Sector         Market Value         of Portfolio           Materials         \$318,529         0.3%           Materials         \$619,309         0.6%           Energy         \$476,051         0.5%           Financials         \$92,724         0.1%           Materials         \$457,378         0.4%           Materials         \$41,783         0.0%           Telecommunications         \$571,815         0.6%           Telecommunications         \$417,157         0.4%           Financials         \$173,208         0.2%	Sector         Market Value         of Portfolio Portfolio         Qtrly Return           Materials         \$318,529         0.3%         52.24%           Materials         \$619,309         0.6%         43.43%           Energy         \$476,051         0.5%         37.66%           Financials         \$92,724         0.1%         33.97%           Materials         \$457,378         0.4%         32.47%           Materials         \$41,783         0.0%         27.40%           Telecommunications         \$571,815         0.6%         25.43%           Telecommunications         \$417,157         0.4%         25.33%           Financials         \$173,208         0.2%         23.82%	Sector         Market Value         of Portfolio         Qtrly Return         Market Capital           Materials         \$318,529         0.3%         52.24%         14.54           Materials         \$619,309         0.6%         43.43%         3.63           Energy         \$476,051         0.5%         37.66%         15.24           Financials         \$92,724         0.1%         33.97%         34.31           Materials         \$457,378         0.4%         32.47%         12.93           Materials         \$41,783         0.0%         27.40%         3.66           Telecommunications         \$571,815         0.6%         25.43%         8.48           Telecommunications         \$417,157         0.4%         25.33%         2.85           Financials         \$173,208         0.2%         23.82%         24.73	Sector         Value         Percent of Portfolio         Qtrly Return         Market Capital         Forecasted Earnings           Materials         \$318,529         0.3%         52.24%         14.54         25.61           Materials         \$619,309         0.6%         43.43%         3.63         9.62           Energy         \$476,051         0.5%         37.66%         15.24         7.52           Financials         \$92,724         0.1%         33.97%         34.31         15.37           Materials         \$457,378         0.4%         32.47%         12.93         9.13           Materials         \$41,783         0.0%         27.40%         3.66         11.02           Telecommunications         \$571,815         0.6%         25.43%         8.48         10.05           Telecommunications         \$417,157         0.4%         25.33%         2.85         11.86           Financials         \$173,208         0.2%         23.82%         24.73         7.24	Sector         Value         Percent Portfolio         Return         Capital Capital         Ratio         Dividend Yield           Materials         \$318,529         0.3%         52.24%         14.54         25.61         4.18%           Materials         \$619,309         0.6%         43.43%         3.63         9.62         5.51%           Energy         \$476,051         0.5%         37.66%         15.24         7.52         2.57%           Financials         \$92,724         0.1%         33.97%         34.31         15.37         3.83%           Materials         \$457,378         0.4%         32.47%         12.93         9.13         7.76%           Materials         \$41,783         0.0%         27.40%         3.66         11.02         1.66%           Telecommunications         \$571,815         0.6%         25.43%         8.48         10.05         10.04%           Telecommunications         \$417,157         0.4%         25.33%         2.85         11.86         1.77%           Financials         \$173,208         0.2%         23.82%         24.73         7.24         4.65%

# **10 Worst Performers**

		Ending Market	Percent of	Qtrly	Market	Price/ Forecasted Earnings	Dividend	Forecasted Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Sibanye Gold Ltd	Materials	\$99,012	0.1%	(48.37)%	1.72	5.67	6.89%	36.10%
58 Com Inc Sponsored Adr Repstg CI A	Information Technology	\$51,332	0.1%	(41.25)%	3.37	33.73	0.00%	-
Divis Laboratories	Health Care	\$114,683	0.1%	(40.44)%	3.07	15.02	1.28%	20.07%
Impala Platinum Holdings	Materials	\$31,780	0.0%	(38.16)%	2.30	13.79	0.00%	124.50%
Anglogold Ashanti	Materials	\$340,466	0.3%	(37.86)%	4.55	7.54	0.00%	149.20%
Sm Investments	Industrials	\$38,395	0.0%	(36.83)%	15.87	21.22	1.08%	9.20%
Gold Fields	Materials	\$151,160	0.1%	(34.58)%	2.62	9.11	1.63%	58.10%
Pacific Utama	Consumer Discretionary	\$78,290	0.1%	(33.33)%	3.28	18.36	2.83%	15.58%
Petkim Petrokimya Holding As Shs	Materials	\$211,074	0.2%	(30.63)%	1.58	12.80	8.51%	5.83%
Anglo Platinum	Materials	\$255,099	0.3%	(30.24)%	5.21	13.96	0.00%	105.70%



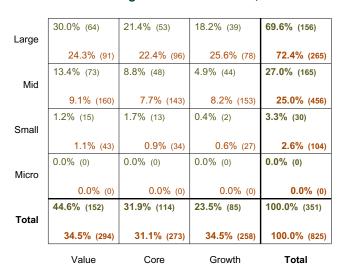
# **Current Holdings Based Style Analysis AQR Emerging Markets** As of December 31, 2016

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.

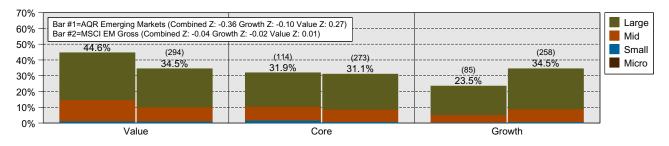
### Style Map vs CAI Non-U.S. Eq. Style Holdings as of December 31, 2016

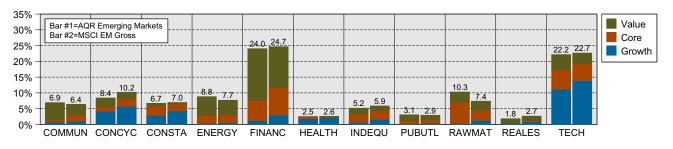


### **Style Exposure Matrix** Holdings as of December 31, 2016



### **Combined Z-Score Style Distribution** Holdings as of December 31, 2016



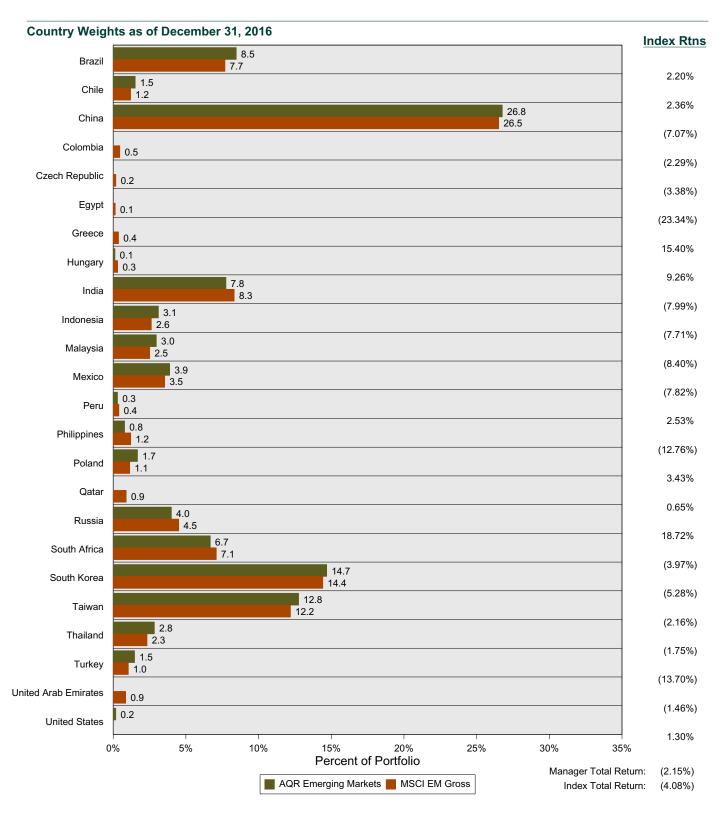




# **Country Allocation** AQR Emerging Markets VS MSCI EM - Emerging Mkts (USD Gross Div)

### **Country Allocation**

The chart below contrasts the portfolio's country allocation with that of the index as of December 31, 2016. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent guarter. 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.

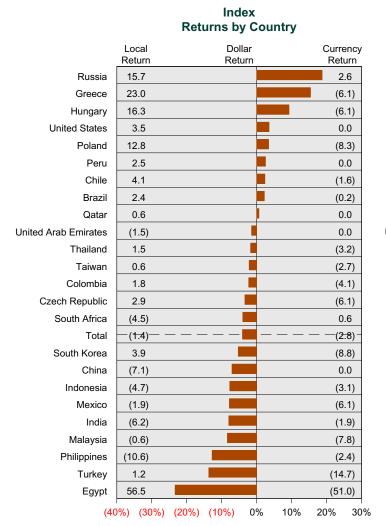




# **AQR Emerging Markets vs MSCI EM Gross** Attribution for Quarter Ended December 31, 2016

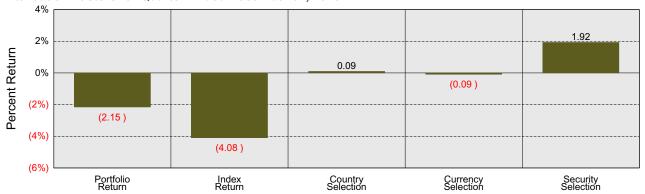
### International Attribution

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.



#### **Beginning Relative Weights** (Portfolio - Index) Index Portfolio Weight Weight 3.3 Russia 3.7 0.3 0.0 Greece 0.3 0.1 Hungary **United States** 0.0 0.2 Poland 1.1 1.5 Peru 0.4 0.3 Chile 1.1 1.2 Brazil 7.4 8.0 Qatar 0.9 0.0 United Arab Emirates 8.0 0.0 Thailand 2.2 2.7 12.6 Taiwan 12.1 Colombia 0.5 0.0 Czech Republic 0.0 0.1 South Africa 6.9 7.1 Total South Korea 14.8 15.3 China 27.0 27.0 Indonesia 2.7 3.3 Mexico 3.7 4.2 India 8.5 8.1 Malaysia 2.7 3.2 Philippines 1.3 8.0 1.2 1.6 Turkey 0.0 0.2 Egypt (1.0%)(0.5%)0.5% (1.5%)0.0% 1.0%







# **Brandes Investment Partners** Period Ended December 31, 2016

### **Investment Philosophy**

Brandes employs a bottom-up approach to building international equity portfolios. The core goal of the investment process is to build portfolios with high overall average margin of safety ("MOS") which the firm believes offer attractive long-term appreciation potential. A focus is given to stocks that are selling at a discount to the firm's estimates of their intrinsic business value, seen as an opportunity for competitive performance. The firm utilizes fundamental research to select undervalued companies in the developed and emerging markets.

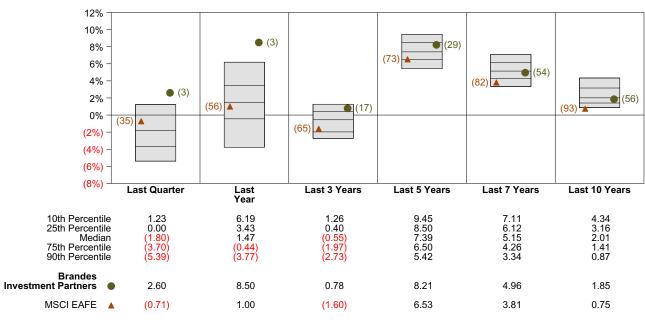
### **Quarterly Summary and Highlights**

- Brandes Investment Partners's portfolio posted a 2.60% return for the quarter placing it in the 3 percentile of the CAI Non-U.S. Equity Style group for the quarter and in the 3 percentile for the last year.
- Brandes Investment Partners's portfolio outperformed the MSCI EAFE by 3.31% for the quarter and outperformed the MSCI EAFE for the year by 7.50%.

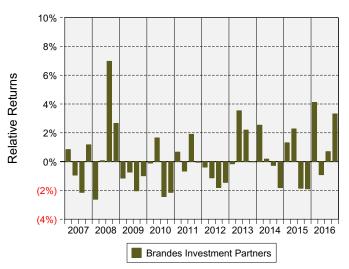
### **Quarterly Asset Growth**

Beginning Market Value	\$391,921,338
Net New Investment	\$-6,000,000
Investment Gains/(Losses)	\$10,084,331
Ending Market Value	\$396 005 669

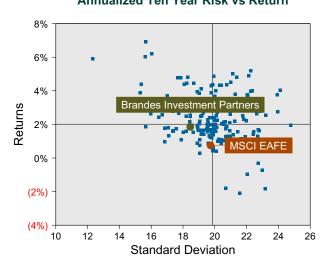
# Performance vs CAI Non-U.S. Equity Style (Gross)



### **Relative Return vs MSCI EAFE**



### CAI Non-U.S. Equity Style (Gross) Annualized Ten Year Risk vs Return



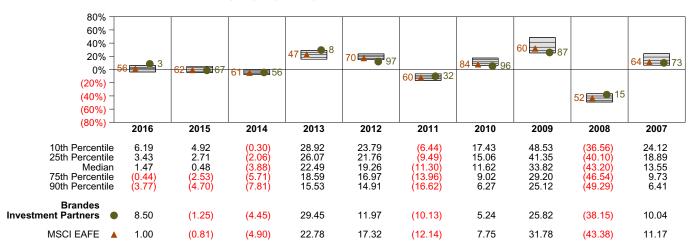


# **Brandes Investment Partners Return Analysis Summary**

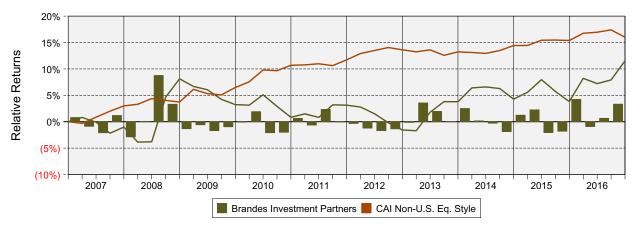
### **Return Analysis**

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 two charts illustrate the manager's ranking relative to their style using various risk-adjusted return measures and returns for rising/declining periods.

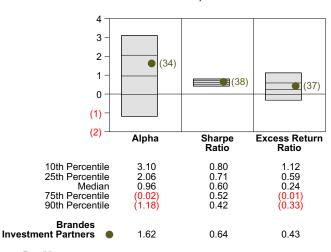
### Performance vs CAI Non-U.S. Equity Style (Gross)



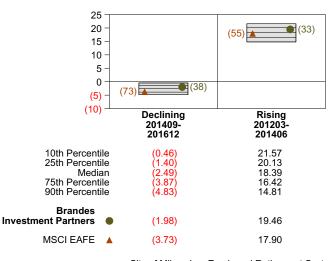
### **Cumulative and Quarterly Relative Return vs MSCI EAFE**



Risk Adjusted Return Measures vs MSCI EAFE Rankings Against CAI Non-U.S. Equity Style (Gross) Five Years Ended December 31, 2016



**Returns for International Equity Rising/Declining Periods** Five Years Ended December 31, 2016



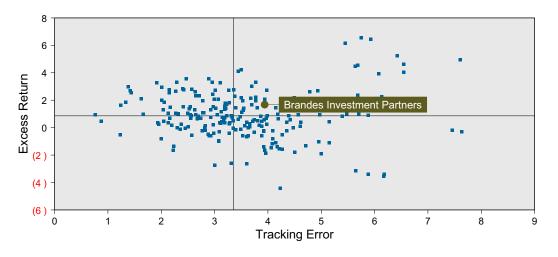


# **Brandes Investment Partners Risk Analysis Summary**

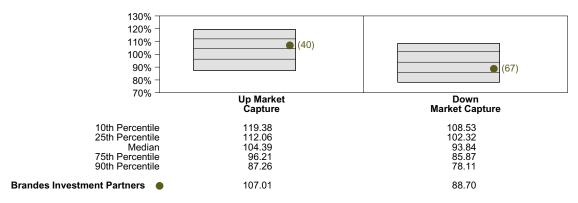
### Risk Analysis

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.

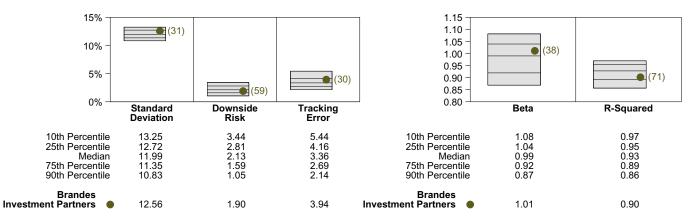
### Risk Analysis vs CAI Non-U.S. Equity Style (Gross) Five Years Ended December 31, 2016



Market Capture vs MSCI EAFE Index (USD Net Div) Rankings Against CAI Non-U.S. Equity Style (Gross) Five Years Ended December 31, 2016



Risk Statistics Rankings vs MSCI EAFE Index (USD Net Div) Rankings Against CAI Non-U.S. Equity Style (Gross) Five Years Ended December 31, 2016



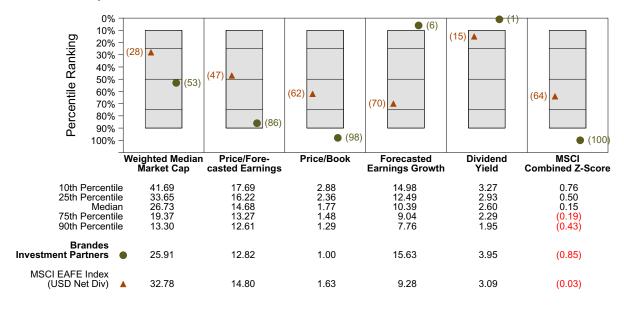


# **Brandes Investment Partners Equity Characteristics Analysis Summary**

### **Portfolio Characteristics**

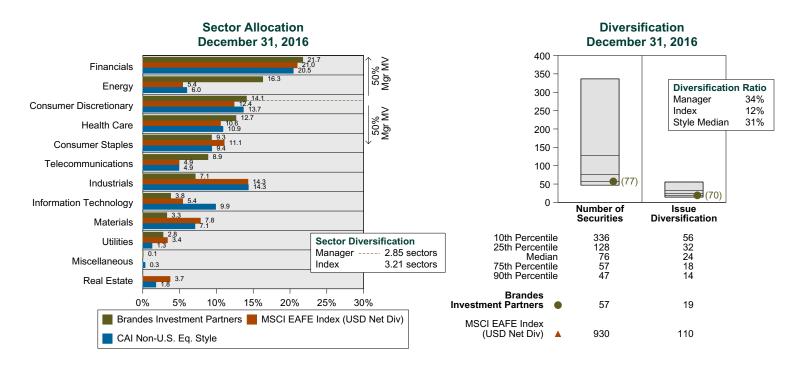
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

### **Portfolio Characteristics Percentile Rankings** Rankings Against CAI Non-U.S. Equity Style as of December 31, 2016



### **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.





# **Brandes Investment Partners Top 10 Portfolio Holdings Characteristics** as of December 31, 2016

# 10 Largest Holdings

						Price/		
		Ending	Percent			Forecasted		Forecasted
		Market	of Portfolio	Qtrly	Market Capital	Earnings Ratio	Dividend Yield	Growth in
Stock	Sector	Value		Return				Earnings
Bp Plc Shs	Energy	\$13,411,368	3.4%	8.33%	122.62	16.15	5.73%	14.30%
Eni Spa Roma Az	Energy	\$11,871,241	3.0%	15.52%	59.30	24.95	5.17%	196.22%
Pjsc Lukoil Sponsored Adr	Energy	\$11,520,426	2.9%	17.03%	48.06	6.39	5.42%	5.25%
Sanofi Shs	Health Care	\$11,293,875	2.9%	6.87%	104.70	13.98	3.81%	6.00%
Glaxosmithkline Plc Ord	Health Care	\$11,134,025	2.8%	(11.97)%	94.77	14.38	5.12%	14.00%
Wm Morrison Supermarkets Plc Shs	Consumer Staples	\$10,862,093	2.8%	0.81%	6.66	20.07	2.20%	14.84%
Gdf Suez Shs	Utilities	\$9,937,615	2.5%	(18.46)%	31.13	12.24	8.25%	0.39%
Tesco Plc Ord	Consumer Staples	\$9,355,624	2.4%	5.31%	20.89	21.51	0.00%	39.10%
Aegon	Financials	\$8,853,702	2.2%	44.92%	11.44	8.17	4.97%	3.10%
Takeda Pharmaceutical Co Ltd Shs	Health Care	\$8,742,672	2.2%	(14.14)%	32.77	34.60	3.72%	19.27%

### **10 Best Performers**

						Price/		
		Ending	Percent			Forecasted		Forecasted
Stock		Market	of Portfolio	Qtrly	Market Capital	Earnings Ratio	Dividend Yield	Growth in
	Sector	Value		Return				Earnings
Aegon	Financials	\$8,853,702	2.2%	44.92%	11.44	8.17	4.97%	3.10%
Mitsubishi Ufj Finl Group In Shs	Financials	\$7,708,026	2.0%	28.73%	87.49	10.42	2.50%	3.56%
Barclays Plc Shs	Financials	\$6,421,560	1.6%	23.93%	46.83	10.91	2.91%	16.80%
Gazprom O A O Spon Adr	Energy	\$3,467,257	0.9%	21.95%	59.94	3.95	5.11%	(2.00)%
Pjsc Lukoil Sponsored Adr	Energy	\$11,520,426	2.9%	17.03%	48.06	6.39	5.42%	5.25%
Surgutneftegaz Jsc Sponsored Adr	Energy	\$4,957,940	1.3%	15.85%	4.05	5.30	21.58%	3.45%
Ubs Ag Shs New	Financials	\$7,002,197	1.8%	15.53%	60.43	12.55	5.33%	(0.40)%
Eni Spa Roma Az	Energy	\$11,871,241	3.0%	15.52%	59.30	24.95	5.17%	196.22%
Nissan Motor Co	Consumer Discretionary	\$6,794,891	1.7%	15.00%	42.54	7.97	3.83%	10.71%
Saint-Gobain	Industrials	\$8,216,675	2.1%	13.42%	25.91	15.92	2.80%	14.10%

# **10 Worst Performers**

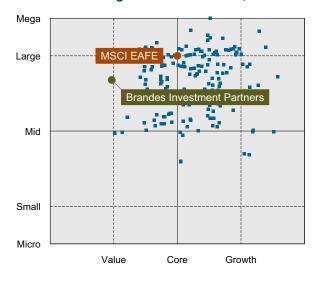
						Price/		
		Ending	Percent			Forecasted		Forecasted
Stock		Market	of Portfolio	Qtrly Return	Market Capital	Earnings Ratio	Dividend Yield	Growth in
	Sector	Value						Earnings
Ericsson (Lm) B	Information Technology	\$5,328,699	1.4%	(19.31)%	18.08	18.07	6.92%	(13.90)%
Daiichi Sankyo Co	Health Care	\$6,551,072	1.7%	(18.98)%	14.54	23.81	2.72%	(4.12)%
Taisho Pharmaceutical Co Ltd Ord	Health Care	\$2,328,632	0.6%	(18.52)%	7.50	31.06	1.03%	0.78%
Gdf Suez Shs	Utilities	\$9,937,615	2.5%	(18.46)%	31.13	12.24	8.25%	0.39%
Nokia Ord A Eur 0.24	Information Technology	\$4,583,916	1.2%	(16.93)%	28.24	18.33	5.67%	(1.80)%
Takeda Pharmaceutical Co Ltd Shs	Health Care	\$8,742,672	2.2%	(14.14)%	32.77	34.60	3.72%	19.27%
Hyundai Mobis Shs	Consumer Discretionary	\$6,937,268	1.8%	(12.34)%	21.28	7.27	1.33%	7.74%
Glaxosmithkline Plc Ord	Health Care	\$11,134,025	2.8%	(11.97)%	94.77	14.38	5.12%	14.00%
Kingfisher Plc Shs	Consumer Discretionary	\$3,327,650	0.8%	(11.64)%	9.71	14.20	2.90%	9.80%
China Mobile Hong Kong Limit Ord	Telecommunications	\$5,210,953	1.3%	(11.33)%	217.08	12.88	3.81%	6.07%



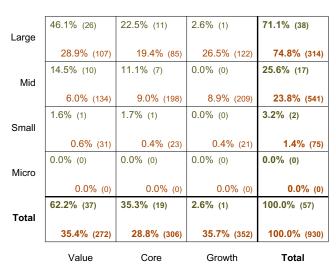
# **Current Holdings Based Style Analysis Brandes Investment Partners** As of December 31, 2016

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.

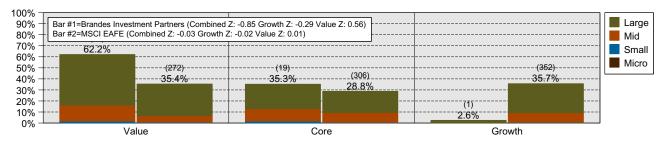
### Style Map vs CAI Non-U.S. Eq. Style Holdings as of December 31, 2016

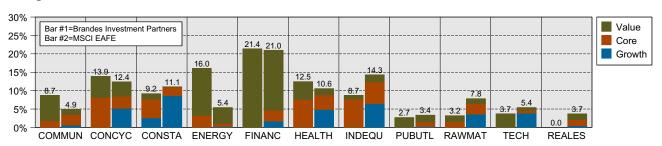


### **Style Exposure Matrix** Holdings as of December 31, 2016



### **Combined Z-Score Style Distribution** Holdings as of December 31, 2016



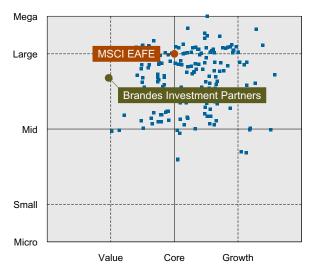




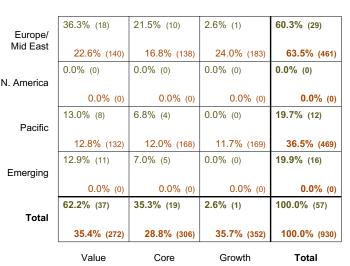
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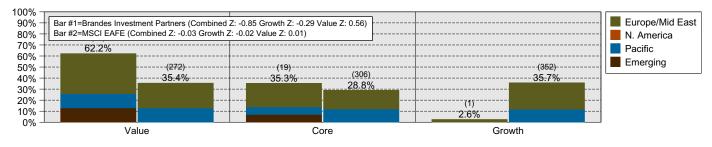
### Style Map vs CAI Non-U.S. Eq. Style Holdings as of December 31, 2016

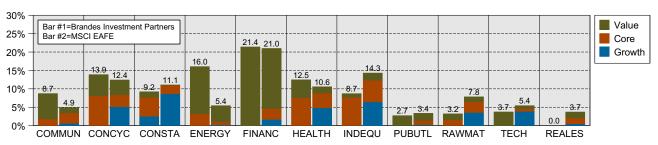


### **Style Exposure Matrix** Holdings as of December 31, 2016



### **Combined Z-Score Style Distribution** Holdings as of December 31, 2016



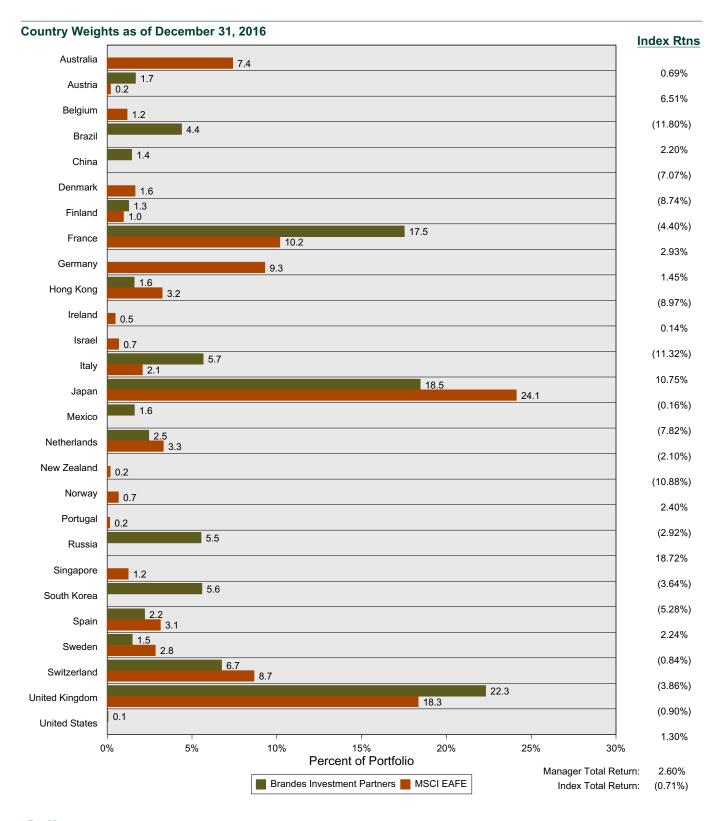




# **Country Allocation Brandes Investment Partners VS MSCI EAFE Index (USD Net Div)**

### **Country Allocation**

The chart below contrasts the portfolio's country allocation with that of the index as of December 31, 2016. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent guarter. 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.



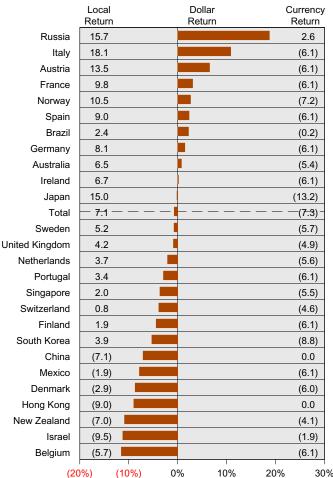


# **Brandes Investment Partners vs MSCI EAFE** Attribution for Quarter Ended December 31, 2016

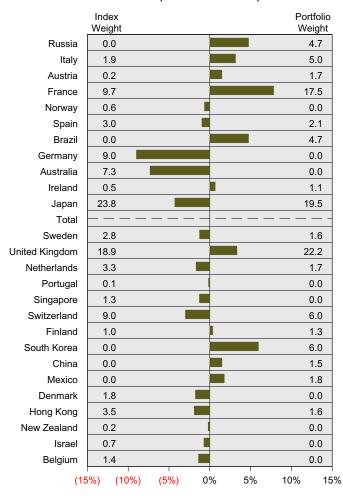
### **International Attribution**

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.





### **Beginning Relative Weights** (Portfolio - Index)



### Attribution Factors for Quarter Ended December 31, 2016





# William Blair & Company Period Ended December 31, 2016

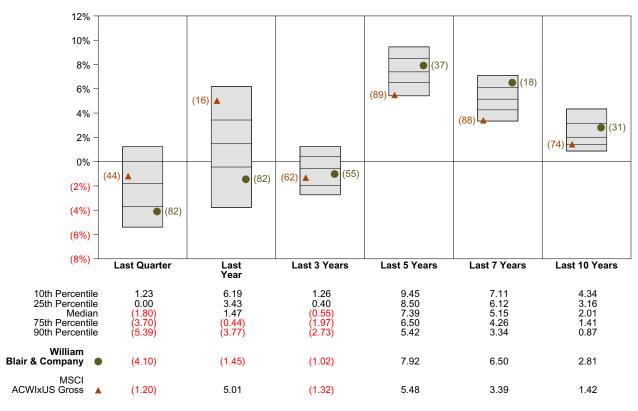
### **Investment Philosophy**

William Blair & Company focuses on companies with above-average growth prospects where growth can be sustained through leading or franchise positions in terms of proprietary products, marketing dominance, or cost/asset base advantage.

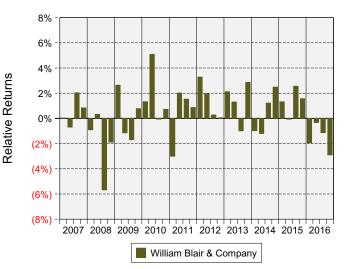
### **Quarterly Summary and Highlights**

- William Blair & Company's portfolio posted a (4.10)% return for the quarter placing it in the 82 percentile of the CAI Non-U.S. Equity Style group for the quarter and in the 82 percentile for the last year.
- William Blair & Company's portfolio underperformed the MSCI ACWIxUS Gross by 2.90% for the quarter and underperformed the MSCI ACWIxUS Gross for the year by 6.46%.

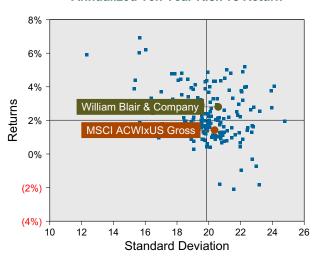
### Performance vs CAI Non-U.S. Equity Style (Gross)



### Relative Return vs MSCI ACWIxUS Gross



### CAI Non-U.S. Equity Style (Gross) Annualized Ten Year Risk vs Return



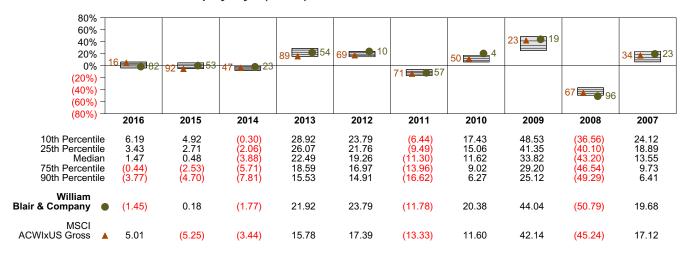


# William Blair & Company **Return Analysis Summary**

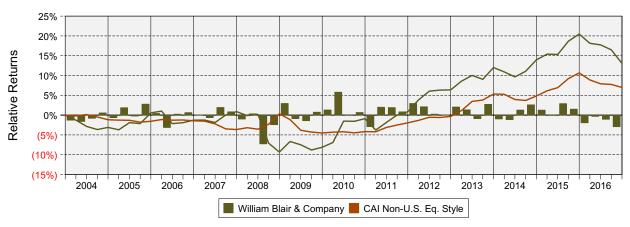
### **Return Analysis**

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 two charts illustrate the manager's ranking relative to their style using various risk-adjusted return measures and returns for rising/declining periods.

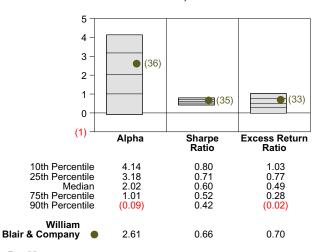
### Performance vs CAI Non-U.S. Equity Style (Gross)



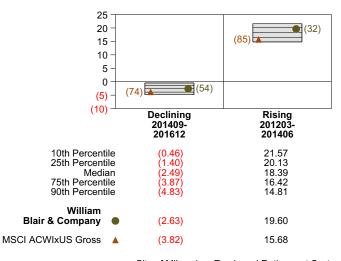
### Cumulative and Quarterly Relative Return vs MSCI ACWIxUS Gross



Risk Adjusted Return Measures vs MSCI ACWIxUS Gross Rankings Against CAI Non-U.S. Equity Style (Gross) Five Years Ended December 31, 2016



**Returns for International Equity Rising/Declining Periods** Five Years Ended December 31, 2016

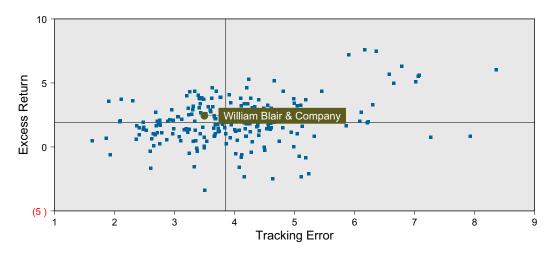


# William Blair & Company **Risk Analysis Summary**

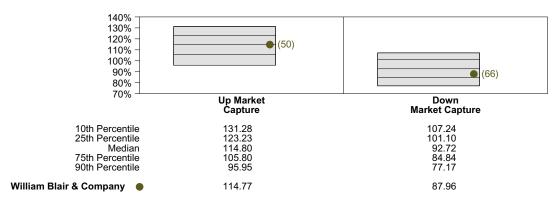
### Risk Analysis

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.

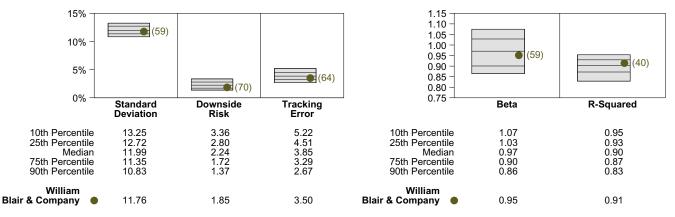
### Risk Analysis vs CAI Non-U.S. Equity Style (Gross) Five Years Ended December 31, 2016



Market Capture vs MSCI ACWI ex US Index (USD Gross Div) Rankings Against CAI Non-U.S. Equity Style (Gross) Five Years Ended December 31, 2016



Risk Statistics Rankings vs MSCI ACWI ex US Index (USD Gross Div) Rankings Against CAI Non-U.S. Equity Style (Gross) Five Years Ended December 31, 2016



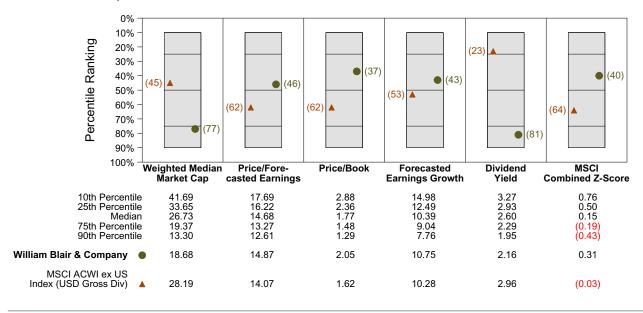


# William Blair & Company **Equity Characteristics Analysis Summary**

### **Portfolio Characteristics**

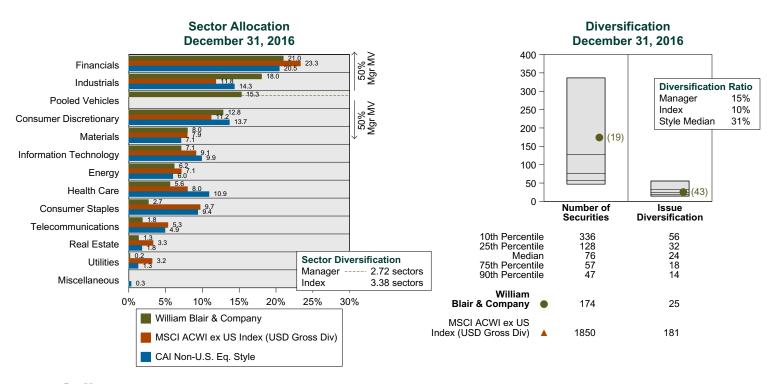
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

### **Portfolio Characteristics Percentile Rankings** Rankings Against CAI Non-U.S. Equity Style as of December 31, 2016



### **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.





# William Blair & Company Top 10 Portfolio Holdings Characteristics as of December 31, 2016

# 10 Largest Holdings

						Price/		
		Ending	Percent			Forecasted		Forecasted
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Bnp Paribas Ord	Financials	\$5,215,097	1.9%	21.30%	79.60	10.23	3.82%	5.31%
Royal Dutch Shell A Shs	Energy	\$5,197,455	1.9%	13.03%	121.39	14.35	6.55%	11.06%
Axa Paris Act Ord	Financials	\$5,083,188	1.8%	18.02%	61.30	10.03	4.59%	3.10%
Rio Tinto Ltd Ord	Materials	\$5,059,703	1.8%	20.90%	18.40	13.99	4.95%	(5.72)%
Toronto Dominion Bk Ont	Financials	\$4,861,038	1.7%	12.82%	91.73	12.71	3.32%	7.05%
Foreningssparbanken	Financials	\$4,534,912	1.6%	0.36%	27.45	13.75	4.86%	5.95%
Fuji Heavy Industries	Consumer Discretionary	\$4,492,353	1.6%	11.95%	31.47	10.67	3.02%	0.04%
Macquarie Group Limited Shs New	Financials	\$4,436,921	1.6%	2.78%	21.47	13.74	4.94%	5.78%
Total Sa Act	Energy	\$4,424,714	1.6%	9.58%	124.78	12.44	5.01%	0.50%
Schneider Electric S A Act	Industrials	\$4,242,344	1.5%	(0.74)%	41.26	16.69	3.03%	2.74%

### **10 Best Performers**

		Price/						
		Ending	Percent		Forecasted			Forecasted
	Sector	Market Value	of Portfolio	Qtrly Return	Market Capital	Earnings Ratio	Dividend Yield	Growth in Earnings
Stock								
Randstad Holding NV Ord	Industrials	\$847,119	0.3%	33.19%	9.95	13.78	3.26%	4.80%
Mitsubishi Ufj Finl Group In Shs	Financials	\$3,741,323	1.3%	28.73%	87.49	10.42	2.50%	3.56%
Actelion Ltd Allschwil Namen Akt	Health Care	\$2,636,411	0.9%	27.98%	23.38	28.20	0.68%	13.85%
Banca Generali	Financials	\$855,619	0.3%	24.52%	2.78	15.85	5.30%	4.08%
Mitsui Mining & Smelting Co Ord	Materials	\$227,100	0.1%	22.45%	1.45	15.39	2.03%	10.62%
Asahi Kasei Corp	Materials	\$2,054,122	0.7%	21.63%	12.26	14.17	1.96%	3.57%
Bnp Paribas Ord	Financials	\$5,215,097	1.9%	21.30%	79.60	10.23	3.82%	5.31%
Rio Tinto Ltd Ord	Materials	\$5,059,703	1.8%	20.90%	18.40	13.99	4.95%	(5.72)%
Sumitomo Mitsui Finl Grp Inc Shs	Financials	\$3,376,499	1.2%	20.60%	54.07	8.85	3.36%	4.40%
Christian Dior Sa Act Ord	Consumer Discretionary	\$1,459,133	0.5%	20.19%	38.19	18.20	1.78%	7.60%

# **10 Worst Performers**

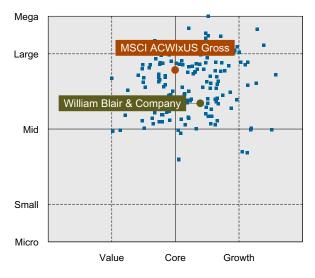
		Price/ Ending Percent Forecasted					Forecasted	
Stock	Sector	Market Value	of Portfolio	Qtrly Return	Market Capital	Earnings Ratio	Dividend Yield	Growth in Earnings
Berendsen Plc Shs	Industrials	\$291.292	0.1%	(33.44)%	1.86	12.72	3.50%	5.60%
Line Corp Sponsored Adr	Information Technology	\$361,458	0.1%	(29.73)%	7.40	27.83	0.00%	56.50%
Halma Plc Shs	Information Technology	\$391,509	0.1%	(23.51)%	4.21	21.33	1.47%	10.07%
Zenkoku Hosho	Financials	\$373,456	0.1%	(21.78)%	2.22	12.84	1.46%	4.50%
Technicolor Shs Prov De Re	Consumer Discretionary	\$286,863	0.1%	(20.65)%	2.24	10.93	1.17%	13.56%
Huhtamaki Oy Ord Ser I	Materials	\$409,662	0.1%	(20.13)%	4.01	17.29	1.87%	8.50%
Infogenie Europe Nm	Information Technology	\$498,223	0.2%	(19.44)%	5.33	19.09	0.34%	29.30%
Bunzl Pub Ltd Co Shs	Industrials	\$1,238,703	0.4%	(19.05)%	8.75	19.11	1.86%	8.60%
So-Net M3	Health Care	\$409,045	0.1%	(17.94)%	8.17	51.85	0.31%	23.04%
Nippon Prologis Reit Inc	Real Estate	\$413,751	0.1%	(17.54)%	3.90	32.51	2.87%	2.50%



# **Current Holdings Based Style Analysis** William Blair & Company As of December 31, 2016

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.

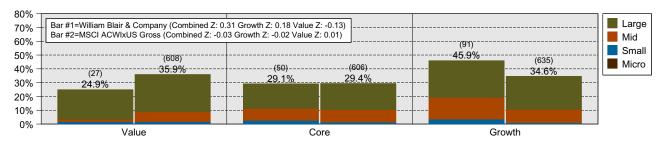
# Style Map vs CAI Non-U.S. Eq. Style Holdings as of December 31, 2016

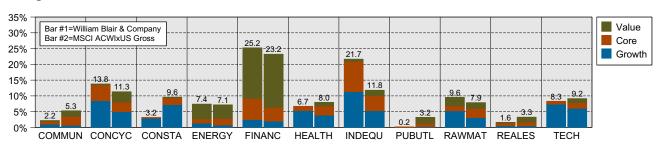


### **Style Exposure Matrix** Holdings as of December 31, 2016

0.0% (1) 24.9% (27) 35.9% (608)	0.0% (0) 29.1% (50) 29.4% (606)	0.0% (0) 45.9% (91) 34.6% (635)	0.0% (1) 100.0% (168) 100.0% (1849)
` '	* /	, ,	
` '	* /	, ,	
0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
1.6% (168)	1.3% (136)	1.0% (115)	3.9% (419)
` ′	, ,	, ,	` ,
1.8% (10)	2.6% (13)	3.4% (19)	7.8% (42)
7.3% (272)	9.1% (327)	9.6% (360)	26.0% (959)
1.5 /0 (4)	0.070 (23)	13.070 (44)	23.370 (71)
1.5% (4)	8.6% (23)		25.9% (71)
27.0% (167)	19.0% (143)	24.1% (160)	70.0% (470)
21.7% (13)	17.9% (14)	26.7% (28)	66.3% (55)
	27.0% (167) 1.5% (4) 7.3% (272) 1.8% (10) 1.6% (168)	27.0% (167) 19.0% (143) 1.5% (4) 8.6% (23) 7.3% (272) 9.1% (327) 1.8% (10) 2.6% (13) 1.6% (168) 1.3% (136)	27.0% (167)     19.0% (143)     24.1% (160)       1.5% (4)     8.6% (23)     15.8% (44)       7.3% (272)     9.1% (327)     9.6% (360)       1.8% (10)     2.6% (13)     3.4% (19)       1.6% (168)     1.3% (136)     1.0% (115)

### **Combined Z-Score Style Distribution** Holdings as of December 31, 2016



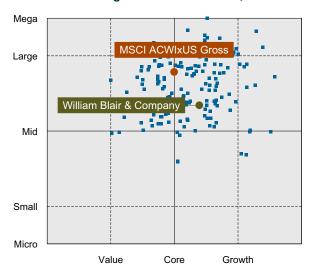




# **Current Holdings Based Style Analysis** William Blair & Company As of December 31, 2016

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.

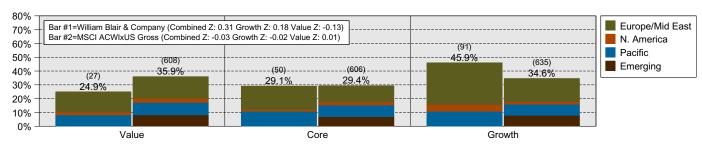
### Style Map vs CAI Non-U.S. Eq. Style Holdings as of December 31, 2016

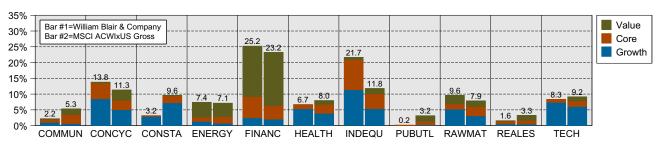


### **Style Exposure Matrix** Holdings as of December 31, 2016

	Value	Core	Growth	Total
	35.9% (608)	29.4% (606)	34.6% (635)	100.0% (1849)
Total				
	24.9% (27)	29.1% (50)	45.9% (91)	100.0% (168)
	8.2% (303)	7.0% (268)	7.8% (254)	23.0% (825)
Emerging				
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
	9.0% (132)	8.4% (168)	8.2% (169)	25.5% (469)
Pacific				
	8.2% (9)	10.8% (15)	10.8% (26)	29.7% (50)
	3.0% (33)	2.3% (32)	1.9% (29)	7.3% (94)
N. America				
	2.1% (1)	1.6% (3)	4.9% (7)	8.6% (11)
Europe/ Mid East	15.8% (140)	11.7% (138)	16.8% (183)	44.3% (461)
E	14.6% (17)	16.8% (32)	30.3% (58)	61.7% (107)

### **Combined Z-Score Style Distribution** Holdings as of December 31, 2016



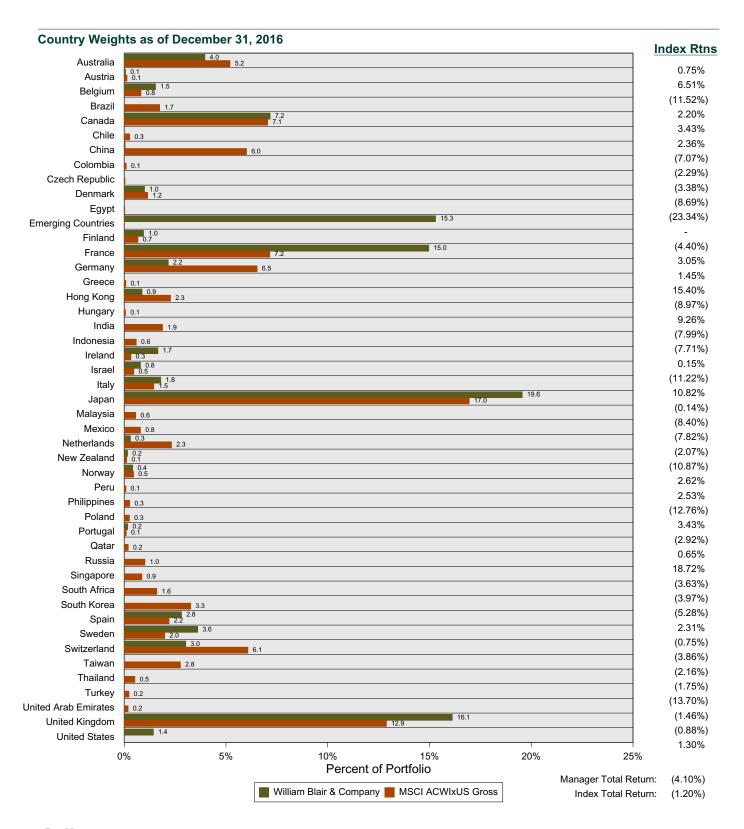




# **Country Allocation** William Blair & Company VS MSCI ACWI ex US Index (USD Gross Div)

### **Country Allocation**

The chart below contrasts the portfolio's country allocation with that of the index as of December 31, 2016. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent guarter. 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.

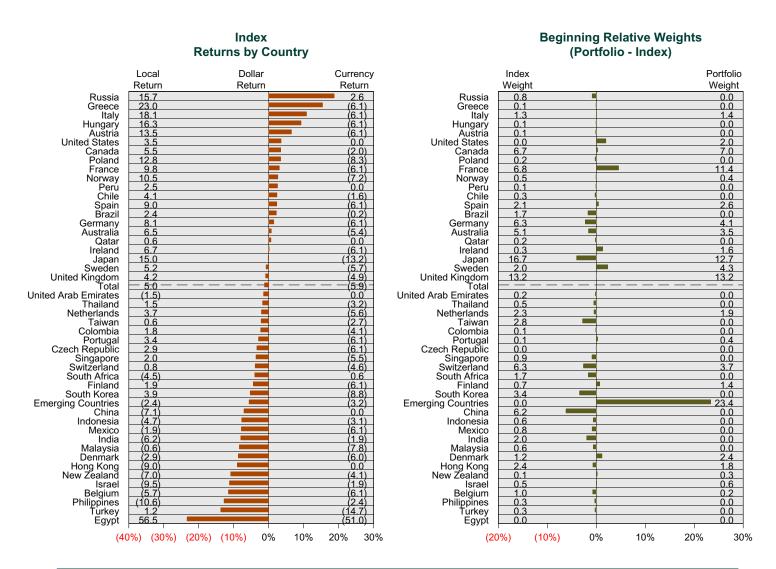


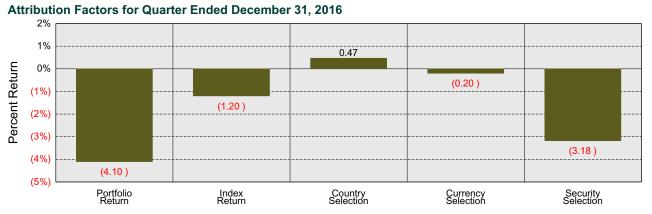


# William Blair & Company vs MSCI ACWIXUS Gross Attribution for Quarter Ended December 31, 2016

### 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.







# **Dimensional Fund Advisors Inc.** Period Ended December 31, 2016

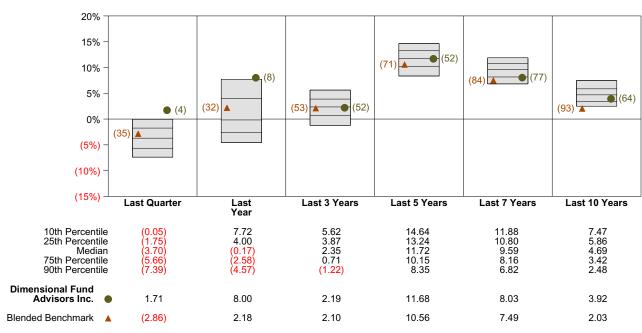
### **Investment Philosophy**

Dimensional's philosophy of investing is based on empirical and academic research and over thirty years' experience structuring and implementing investment solutions to address global investors' needs. Their philosophy follows three beliefs: (1) Public capital markets work - In liquid and competitive markets, market prices reflect available information about fundamental values and the aggregate risk and return expectations of all market participants. As a result, Dimensional uses information in market prices to identify reliable dimensions of expected returns market, size, relative price, and expected profitability and to structure and implement strategies along those dimensions. (2) Diversification is essential -Diversification helps reduce uncertainty, manage risk, and increase the reliability of outcomes. (3) Managing trade-offs adds value - Investing involves trading off risks and costs with expected returns.

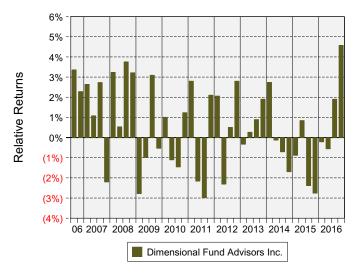
### **Quarterly Summary and Highlights**

- Dimensional Fund Advisors Inc.'s portfolio posted a 1.71% return for the quarter placing it in the 4 percentile of the CAI International Small Cap group for the quarter and in the 8 percentile for the last year.
- Dimensional Fund Advisors Inc.'s portfolio outperformed the Blended Benchmark by 4.57% for the quarter and outperformed the Blended Benchmark for the year by 5.82%.

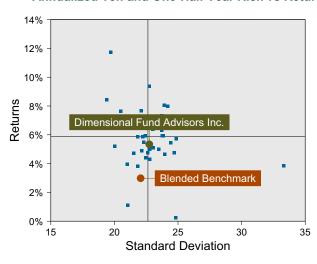
### Performance vs CAI International Small Cap (Gross)



### Relative Return vs Blended Benchmark



### **CAI International Small Cap (Gross)** Annualized Ten and One-Half Year Risk vs Return



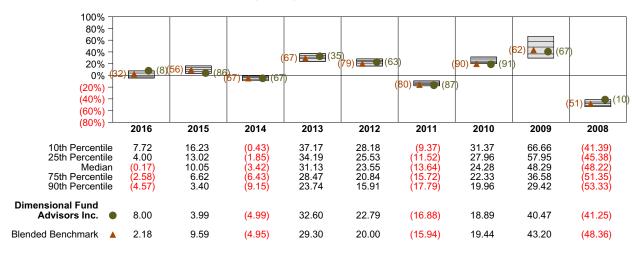


# Dimensional Fund Advisors Inc. Return Analysis Summary

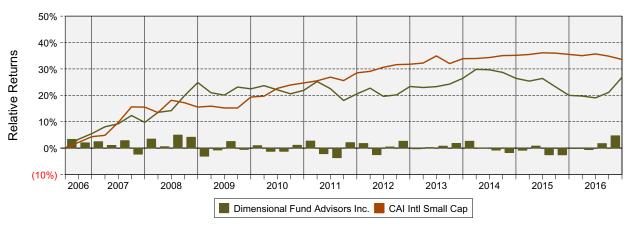
### **Return Analysis**

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 two charts illustrate the manager's ranking relative to their style using various risk-adjusted return measures and returns for rising/declining periods.

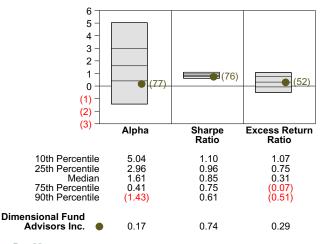
### Performance vs CAI International Small Cap (Gross)



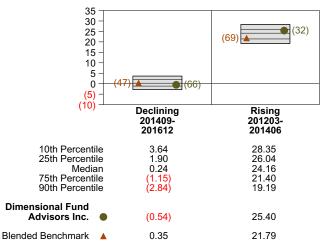
### **Cumulative and Quarterly Relative Return vs Blended Benchmark**



Risk Adjusted Return Measures vs Blended Benchmark Rankings Against CAI International Small Cap (Gross) Five Years Ended December 31, 2016



Returns for International Equity Rising/Declining Periods Five Years Ended December 31, 2016



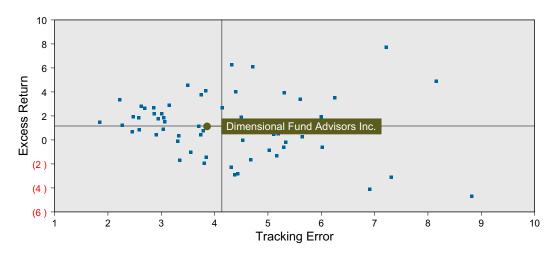


# **Dimensional Fund Advisors Inc. Risk Analysis Summary**

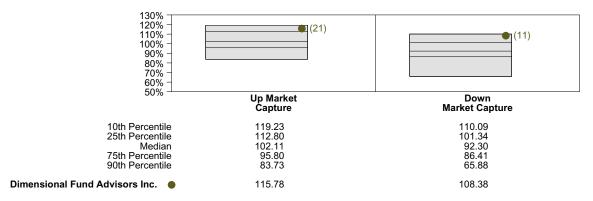
#### Risk Analysis

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.

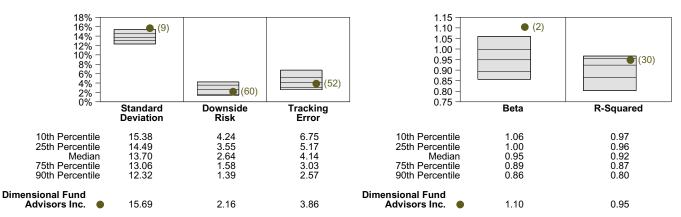
## Risk Analysis vs CAI International Small Cap (Gross) Five Years Ended December 31, 2016



#### Market Capture vs Blended Benchmark Rankings Against CAI International Small Cap (Gross) Five Years Ended December 31, 2016



## Risk Statistics Rankings vs Blended Benchmark Rankings Against CAI International Small Cap (Gross) Five Years Ended December 31, 2016



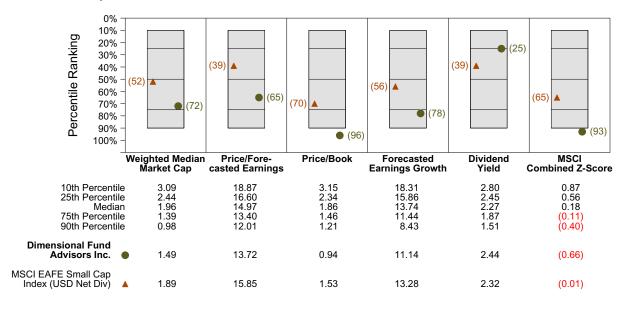


# **Dimensional Fund Advisors Inc. Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

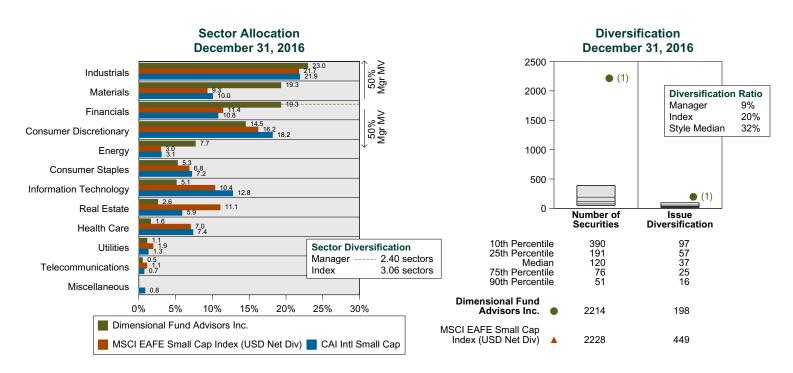
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## **Portfolio Characteristics Percentile Rankings** Rankings Against CAI International Small Cap as of December 31, 2016



#### **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.





# **Dimensional Fund Advisors Inc.** Top 10 Portfolio Holdings Characteristics as of December 31, 2016

# 10 Largest Holdings

					Price/		
	Ending	Percent			Forecasted		Forecasted
	Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Materials	\$1,559,094	0.8%	5.65%	5.97	20.40	0.81%	22.40%
Consumer Discretionary	\$1,500,621	0.8%	2.49%	3.75	7.38	4.36%	(4.90)%
Materials	\$1,462,637	0.8%	6.45%	7.40	15.19	2.04%	19.81%
Industrials	\$1,400,727	0.7%	7.80%	4.61	21.59	2.02%	17.50%
Financials	\$1,399,015	0.7%	(6.31)%	3.59	15.95	2.41%	(0.27)%
Energy	\$1,293,242	0.7%	3.49%	4.12	16.91	2.69%	(3.41)%
Financials	\$1,281,115	0.7%	6.82%	5.37	11.11	3.46%	6.70%
Financials	\$1,132,728	0.6%	43.40%	2.57	11.00	1.98%	(25.88)%
Consumer Staples	\$1,088,108	0.6%	8.69%	3.42	19.30	5.27%	10.60%
Industrials	\$1,082,327	0.6%	(3.91)%	2.93	12.03	0.47%	13.60%
	Materials Consumer Discretionary Materials Industrials Financials Energy Financials Financials Consumer Staples	Sector         Market Value           Materials         \$1,559,094           Consumer Discretionary         \$1,500,621           Materials         \$1,462,637           Industrials         \$1,400,727           Financials         \$1,399,015           Energy         \$1,293,242           Financials         \$1,281,115           Financials         \$1,132,728           Consumer Staples         \$1,088,108	Sector         Market Value         of Value           Materials         \$1,559,094         0.8%           Consumer Discretionary         \$1,500,621         0.8%           Materials         \$1,462,637         0.8%           Industrials         \$1,400,727         0.7%           Financials         \$1,399,015         0.7%           Energy         \$1,293,242         0.7%           Financials         \$1,281,115         0.7%           Financials         \$1,132,728         0.6%           Consumer Staples         \$1,088,108         0.6%	Sector         Market Value         of Portfolio Peturn         Qtrly Return           Materials         \$1,559,094         0.8%         5.65%           Consumer Discretionary Materials         \$1,500,621         0.8%         2.49%           Materials         \$1,462,637         0.8%         6.45%           Industrials         \$1,400,727         0.7%         7.80%           Financials         \$1,399,015         0.7%         (6.31)%           Energy         \$1,293,242         0.7%         3.49%           Financials         \$1,281,115         0.7%         6.82%           Financials         \$1,132,728         0.6%         43.40%           Consumer Staples         \$1,088,108         0.6%         8.69%	Sector         Market Value         of Portfolio         Qtrly Return         Market Capital           Materials         \$1,559,094         0.8%         5.65%         5.97           Consumer Discretionary         \$1,500,621         0.8%         2.49%         3.75           Materials         \$1,462,637         0.8%         6.45%         7.40           Industrials         \$1,400,727         0.7%         7.80%         4.61           Financials         \$1,399,015         0.7%         (6.31)%         3.59           Energy         \$1,293,242         0.7%         3.49%         4.12           Financials         \$1,281,115         0.7%         6.82%         5.37           Financials         \$1,132,728         0.6%         43.40%         2.57           Consumer Staples         \$1,088,108         0.6%         8.69%         3.42	Sector         Value         Percent Portfolio         Qtrly Return         Market Capital Ratio           Materials         \$1,559,094         0.8%         5.65%         5.97         20.40           Consumer Discretionary         \$1,500,621         0.8%         2.49%         3.75         7.38           Materials         \$1,462,637         0.8%         6.45%         7.40         15.19           Industrials         \$1,400,727         0.7%         7.80%         4.61         21.59           Financials         \$1,399,015         0.7%         (6.31)%         3.59         15.95           Energy         \$1,293,242         0.7%         3.49%         4.12         16.91           Financials         \$1,281,115         0.7%         6.82%         5.37         11.11           Financials         \$1,132,728         0.6%         43.40%         2.57         11.00           Consumer Staples         \$1,088,108         0.6%         8.69%         3.42         19.30	Sector         Value         Percent Portfolio         Qtrly Return         Market Capital Ratio         Dividend Yield           Materials         \$1,559,094         0.8%         5.65%         5.97         20.40         0.81%           Consumer Discretionary Materials         \$1,500,621         0.8%         2.49%         3.75         7.38         4.36%           Materials         \$1,462,637         0.8%         6.45%         7.40         15.19         2.04%           Industrials         \$1,400,727         0.7%         7.80%         4.61         21.59         2.02%           Financials         \$1,399,015         0.7%         (6.31)%         3.59         15.95         2.41%           Energy         \$1,293,242         0.7%         3.49%         4.12         16.91         2.69%           Financials         \$1,281,115         0.7%         6.82%         5.37         11.11         3.46%           Financials         \$1,132,728         0.6%         43.40%         2.57         11.00         1.98%           Consumer Staples         \$1,088,108         0.6%         8.69%         3.42         19.30         5.27%

## **10 Best Performers**

						Price/		
		Ending	Percent			Forecasted		Forecasted
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Questerre En.	Energy	\$2,237	0.0%	282.57%	0.20	-	0.00%	41.42%
Fred. Olsen Energy	Energy	\$31,775	0.0%	165.92%	0.25	(1.04)	0.00%	(11.48)%
Tembec	Materials	\$6,000	0.0%	131.24%	0.18	7.34	0.00%	20.96%
Meiko Electronics	Information Technology	\$14,045	0.0%	119.12%	0.21	30.31	0.00%	(68.11)%
Takata Corp Tokyo Shs	Consumer Discretionary	\$39,719	0.0%	110.00%	0.61	(5.52)	0.00%	-
Luen Thai Holdings	Consumer Discretionary	\$6,267	0.0%	104.50%	0.44	14.07	1.52%	(49.52)%
Odfjell Drilling	Energy	\$3,615	0.0%	88.55%	0.40	20.10	0.00%	5.85%
Lavendon Group	Industrials	\$98,440	0.1%	86.02%	0.55	13.93	2.16%	22.48%
Copper Mountain Mining	Materials	\$16,491	0.0%	85.31%	0.09	15.56	0.00%	(34.46)%
Japan Display Inc	Information Technology	\$299,930	0.2%	85.00%	1.72	(98.62)	0.00%	-

# **10 Worst Performers**

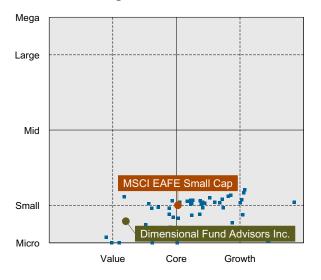
		Ending Market	Percent of	Qtrly	Market	Price/ Forecasted Earnings	Dividend	Forecasted Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Franc-Or Res.Corp.	Materials	\$56,894	0.0%	(86.13)%	1.06	7.16	0.00%	-
Troy Resources Limited Shs	Materials	\$6,284	0.0%	(69.71)%	0.05	17.50	0.00%	(34.95)%
Rb Energy Inc	Materials	\$198	0.0%	(63.64)%	0.00	-	0.00%	-
Metals X Ltd Shs New	Materials	\$13,494	0.0%	(60.89)%	0.25	11.93	2.33%	(17.24)%
Laird Group Plc Ord	Information Technology	\$104,266	0.1%	(56.84)%	0.51	10.05	8.58%	(5.50)%
Primero Mining Corp	Materials	\$34,875	0.0%	(54.18)%	0.15	79.00	0.00%	(49.62)%
Africa Israel Inv	Real Estate	\$2,627	0.0%	(50.95)%	0.03	(0.05)	0.00%	(28.80)%
Kingsgate Cons N L	Materials	\$8,533	0.0%	(49.05)%	0.05	(0.28)	0.00%	-
Farstad Shipping	Energy	\$837	0.0%	(48.78)%	0.02	(0.17)	0.00%	(19.72)%
Platinum Group Metals Ltd Com No Par	Materials	\$3,261	0.0%	(48.08)%	0.16	(20.71)	0.00%	-



# **Current Holdings Based Style Analysis Dimensional Fund Advisors Inc.** As of December 31, 2016

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.

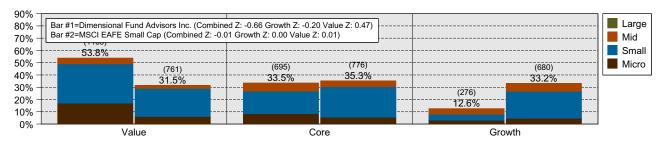
## Style Map vs CAI Intl Small Cap Holdings as of December 31, 2016



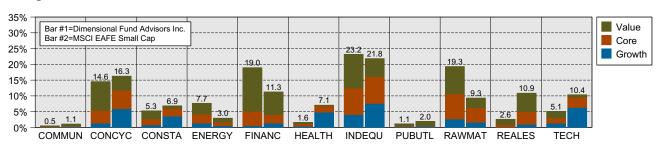
## **Style Exposure Matrix** Holdings as of December 31, 2016

	31.5% (761)	35.3% (776)	33.2% (680)	100.0% (2217)
Total	53.8% (1189)	33.5% (695)	12.6% (276)	100.0% (2160)
	6.1% (349)	5.5% (320)	4.6% (276)	16.3% (945)
Micro				
	17.0% (856)	8.4% (463)	3.1% (173)	28.4% (1492)
	22.8% (393)	24.9% (428)	21.9% (362)	69.6% (1183)
Small	32.070 (304)	10.470 (199)	3.0 % (62)	33.470 (363)
	32.0% (304)	18.4% (199)	5.0% (82)	55.4% (585)
IVIIU	2.6% (19)	4.8% (28)	6.6% (42)	14.1% (89)
Mid	4.9% (29)	6.8% (33)	4.6% (21)	16.2% (83)
Largo	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Large	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)

#### **Combined Z-Score Style Distribution** Holdings as of December 31, 2016



## **Sector Weights Distribution** Holdings as of December 31, 2016



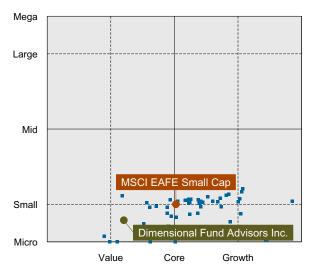


# **Current Holdings Based Style Analysis Dimensional Fund Advisors Inc.** As of December 31, 2016

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.

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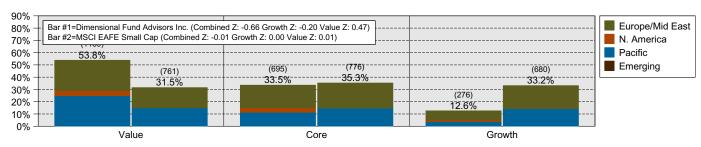
## Style Map vs CAI Intl Small Cap Holdings as of December 31, 2016



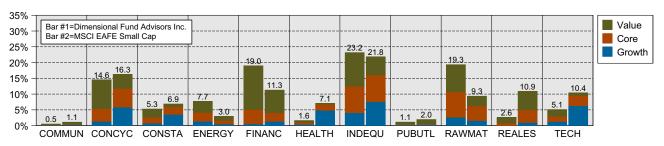
## **Style Exposure Matrix** Holdings as of December 31, 2016

0.1% (2) 0.0% (0) 53.8% (1189) 31.5% (761)	0.0% (2) 0.0% (0) 33.5% (695) 35.3% (776)	0.0% (0) 0.0% (0) 12.6% (276) 33.2% (680)	0.1% (4) 0.0% (0) 100.0% (2160) 100.0% (2217)
0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
, ,	, ,	, ,	, ,
0.1% (2)	0.0% (2)	0.0% (0)	0.1% (4)
0.1% (2)	0.0% (2)	0.0% (0)	0.1% (4)
14.9% (439)	14.7% (415)	14.2% (370)	43.8% (1224)
24.7% (758)	11.3% (352)	3.6% (111)	39.6% (1221)
0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
4.2% (74)	3.7% (78)	1.3% (28)	9.2% (180)
16.7% (322)	20.6% (361)	19.0% (310)	56.2% (993)
24.9% (355)	18.5% (263)	7.7% (137)	51.1% (755)
	16.7% (322) 4.2% (74) 0.0% (0) 24.7% (758)	16.7% (322) 20.6% (361) 4.2% (74) 3.7% (78)  0.0% (0) 0.0% (0) 24.7% (758) 11.3% (352)	16.7% (322)     20.6% (361)     19.0% (310)       4.2% (74)     3.7% (78)     1.3% (28)       0.0% (0)     0.0% (0)     0.0% (0)       24.7% (758)     11.3% (352)     3.6% (111)

# **Combined Z-Score Style Distribution** Holdings as of December 31, 2016



# **Sector Weights Distribution** Holdings as of December 31, 2016

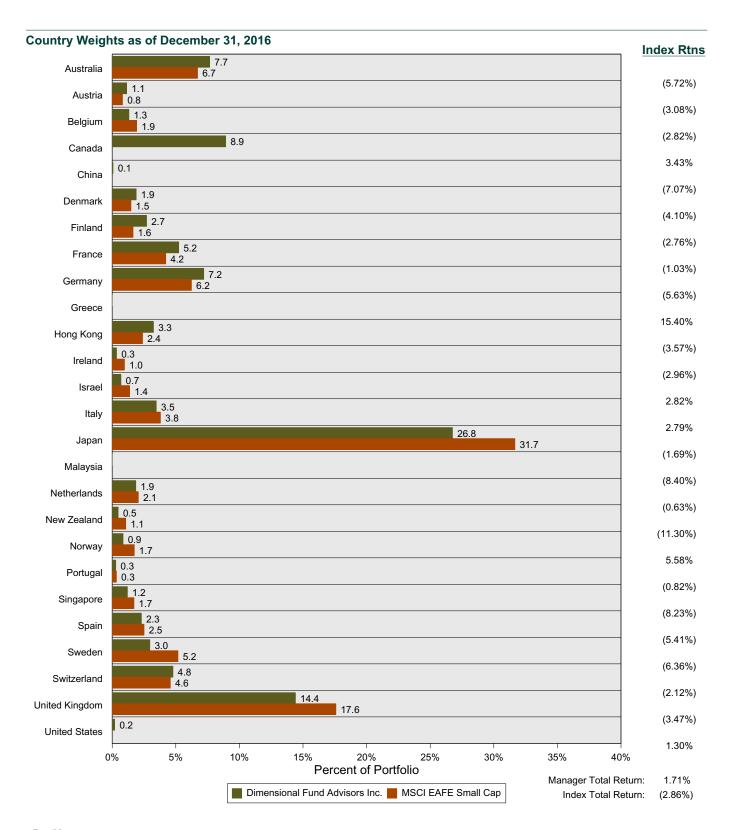




# **Country Allocation** Dimensional Fund Advisors Inc. VS MSCI EAFE Small Cap Index (USD Net Div)

## **Country Allocation**

The chart below contrasts the portfolio's country allocation with that of the index as of December 31, 2016. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent guarter. 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.





# Dimensional Fund Advisors Inc. vs MSCI EAFE Small Cap Attribution for Quarter Ended December 31, 2016

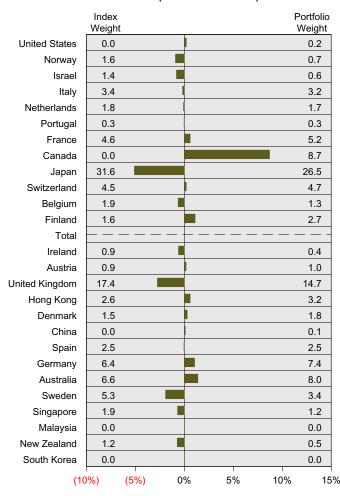
#### **International Attribution**

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.

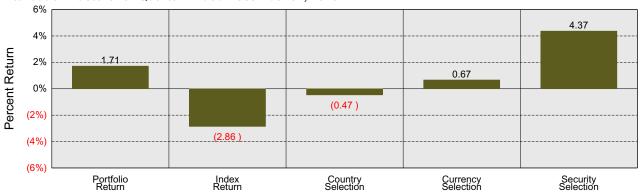


#### Dollar Local Currency Return Return Return 0.0 **United States** 7.0 Norway 13.8 (7.1)5.1 (2.0)Israel Italy 9.6 (6.1)5.4 Netherlands (5.7)Portugal 5.7 (6.1)France 5.5 (6.1)Canada 0.5 (2.0)Japan 13.3 (13.2)Switzerland 2.6 (4.6)Belgium 3.7 (6.1)Finland 3.6 (6.1)Total 5.5 (7.9)3.5 Ireland (6.1)Austria 3.3 (6.1)United Kingdom 1.5 (4.9)Hong Kong (3.6)0.0 Denmark 2.0 (6.0)China (0.0)(4.7)Spain 0.9 (6.1)0.6 (6.1)Germany Australia (0.3)(5.4)Sweden (0.7)(5.7)Singapore (2.7)(5.6)Malaysia (3.0)(7.8)New Zealand (7.4)(4.1)South Korea (8.8)(7.1)(20%) (15%) (10%) (5%)0% 5% 10% 15%

#### **Beginning Relative Weights** (Portfolio - Index)



#### Attribution Factors for Quarter Ended December 31, 2016





# **Fixed Income** Period Ended December 31, 2016

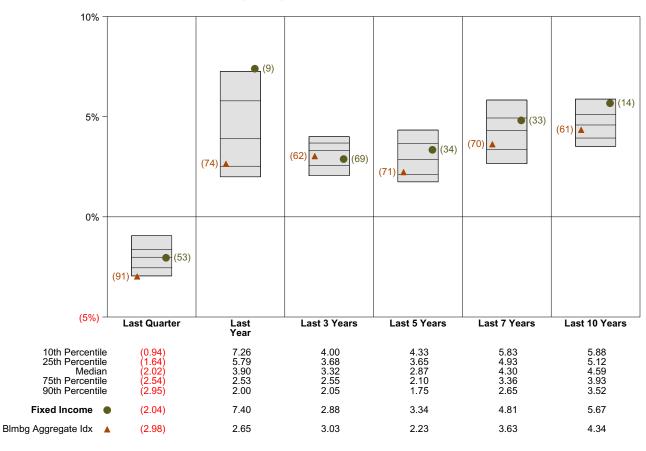
#### **Quarterly Summary and Highlights**

- Fixed Income's portfolio posted a (2.04)% return for the quarter placing it in the 53 percentile of the Pub Pln-Domestic Fixed group for the quarter and in the 9 percentile for the last year.
- Fixed Income's portfolio outperformed the Blmbg Aggregate ldx by 0.93% for the guarter and outperformed the Blmbg Aggregate Idx for the year by 4.75%.

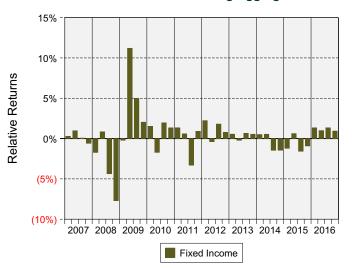
#### **Quarterly Asset Growth**

Beginning Market Value \$1,027,144,263 Net New Investment \$-7,000,000 \$-20,882,061 Investment Gains/(Losses) **Ending Market Value** \$999,262,202

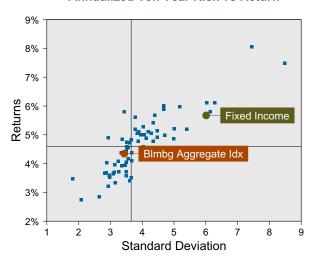
# Performance vs Pub PIn- Domestic Fixed (Gross)



## Relative Return vs Blmbg Aggregate ldx



#### **Pub PIn- Domestic Fixed (Gross)** Annualized Ten Year Risk vs Return



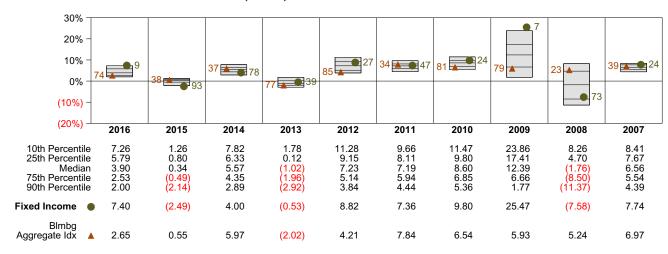


# **Fixed Income Return Analysis Summary**

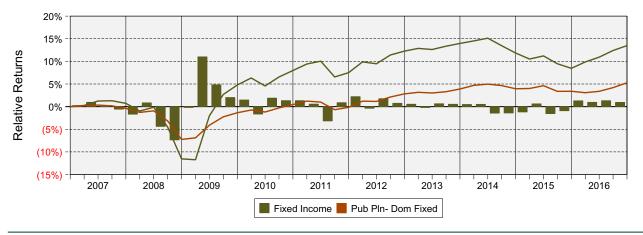
#### **Return Analysis**

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.

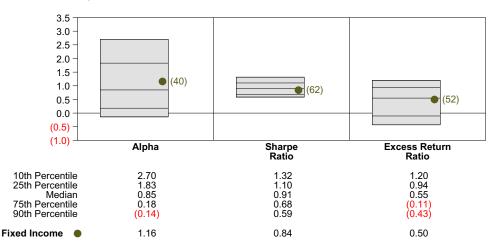
## Performance vs Pub Pln- Domestic Fixed (Gross)



#### Cumulative and Quarterly Relative Return vs Blmbg Aggregate Idx



Risk Adjusted Return Measures vs Blmbg Aggregate ldx Rankings Against Pub Pln- Domestic Fixed (Gross) Five Years Ended December 31, 2016



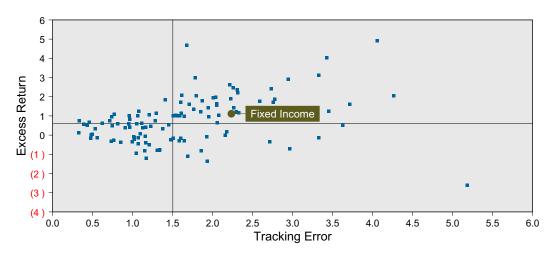


# **Fixed Income Risk Analysis Summary**

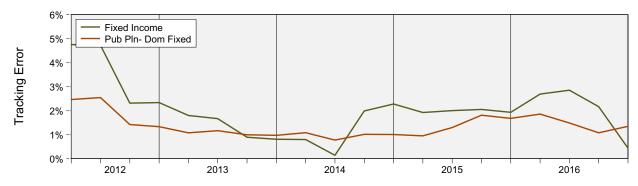
#### Risk Analysis

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.

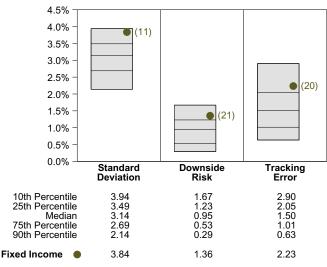
## Risk Analysis vs Pub Pln- Domestic Fixed (Gross) Five Years Ended December 31, 2016

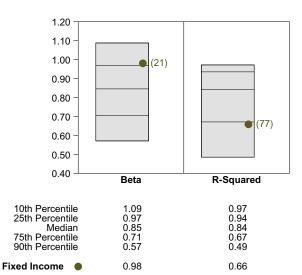


Rolling 4 Quarter Tracking Error vs Bloomberg Barclays Aggregate Index



Risk Statistics Rankings vs Bloomberg Barclays Aggregate Index Rankings Against Pub Pln- Domestic Fixed (Gross) Five Years Ended December 31, 2016







# BlackRock US Debt Idx Fd Period Ended December 31, 2016

#### **Investment Philosophy**

The U.S. Debt Index Fund is constructed to ensure that the risk and return profile of the Barclays Capital Aggregate Bond index is replicated and tracking error is minimized. First full quarter of performance is third quarter 2016. Prior history represents manager composite returns.

#### **Quarterly Summary and Highlights**

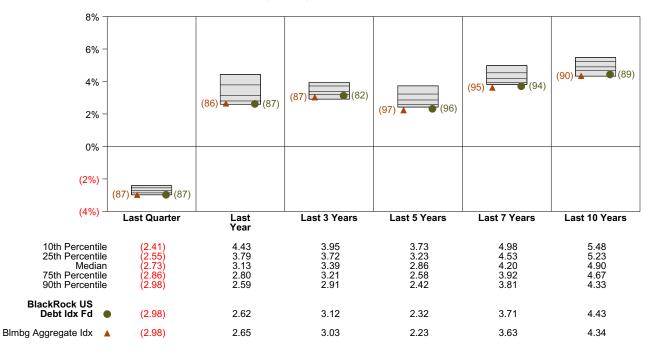
- BlackRock US Debt Idx Fd's portfolio posted a (2.98)% return for the quarter placing it in the 87 percentile of the CAI Core Bond Fixed Income group for the quarter and in the 87 percentile for the last year.
- BlackRock US Debt Idx Fd's portfolio underperformed the Blmbg Aggregate Idx by 0.00% for the guarter and underperformed the Blmbg Aggregate ldx for the year by 0.03%.

#### **Quarterly Asset Growth**

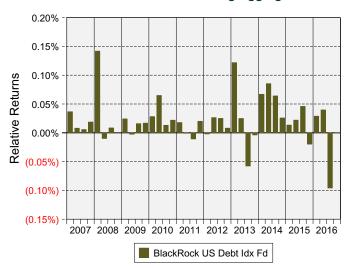
Beginning Market Value	\$121,246,285
Net New Investment	\$247,525,195
Investment Gains/(Losses)	\$-10,971,200
Ending Market Value	\$357 800 280

Percent Cash: 0.0%

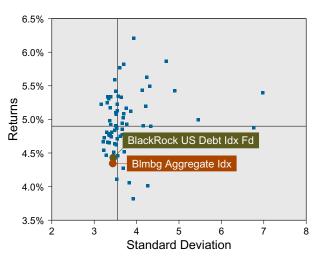
#### Performance vs CAI Core Bond Fixed Income (Gross)



#### Relative Return vs Blmbg Aggregate Idx



#### **CAI Core Bond Fixed Income (Gross)** Annualized Ten Year Risk vs Return



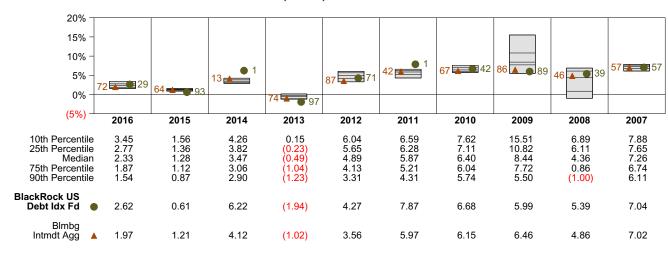


# BlackRock US Debt Idx Fd **Return Analysis Summary**

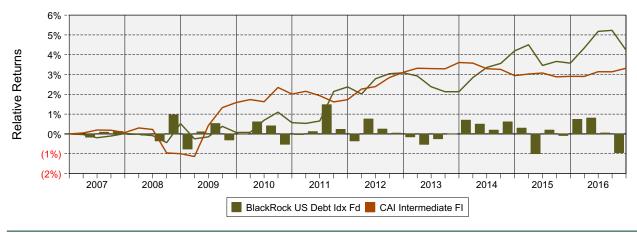
#### **Return Analysis**

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.

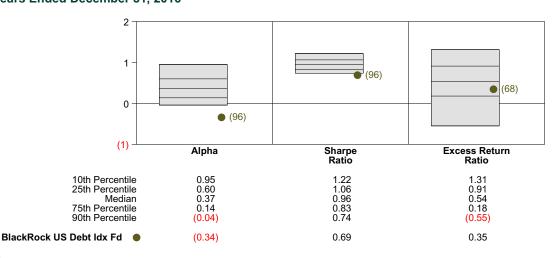
## Performance vs CAI Intermediate Fixed Income (Gross)



## Cumulative and Quarterly Relative Return vs Blmbg Intmdt Agg



Risk Adjusted Return Measures vs Blmbg Intmdt Agg Rankings Against CAI Intermediate Fixed Income (Gross) Five Years Ended December 31, 2016



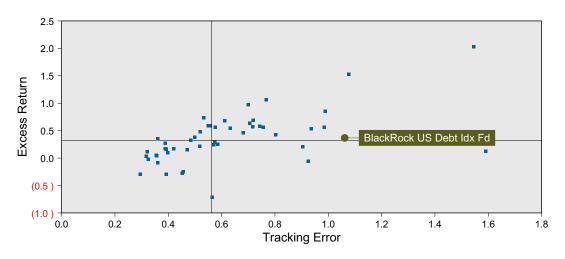


# BlackRock US Debt Idx Fd **Risk Analysis Summary**

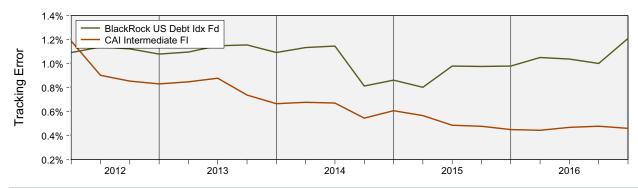
#### Risk Analysis

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.

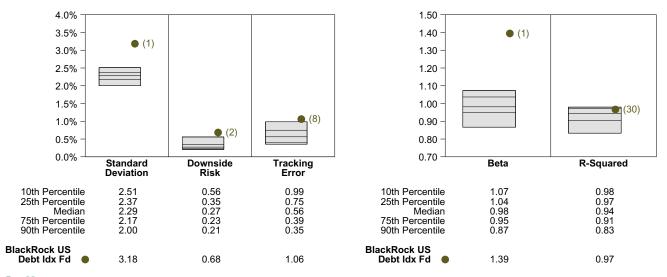
## Risk Analysis vs CAI Intermediate Fixed Income (Gross) Five Years Ended December 31, 2016



Rolling 12 Quarter Tracking Error vs Bloomberg Barclays Intmdt Aggregate



Risk Statistics Rankings vs Bloomberg Barclays Intmdt Aggregate Rankings Against CAI Intermediate Fixed Income (Gross) Five Years Ended December 31, 2016

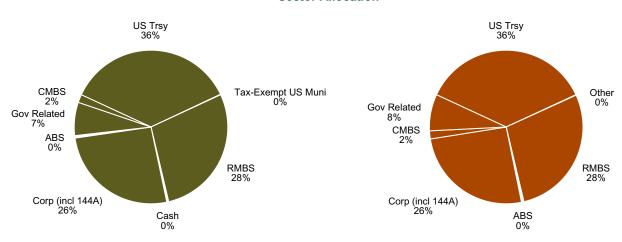


# BlackRock US Debt Idx Fd **Portfolio Characteristics Summary** As of December 31, 2016

#### **Portfolio Structure Comparison**

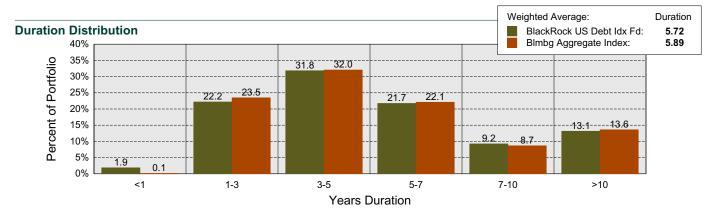
The charts below compare the structure of the portfolio to that of the index from the three perspectives that have the greatest influence on return. The first chart compares the two portfolios across sectors. The second chart compares the duration distribution. The last chart compares the distribution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

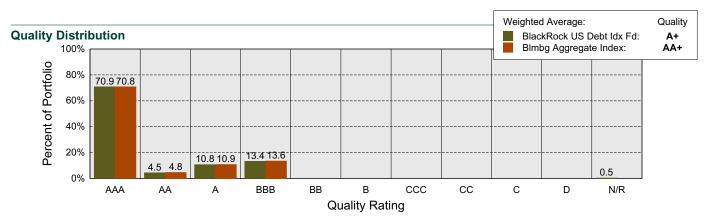
#### **Sector Allocation**



# BlackRock US Debt Idx Fd

# **Blmbg Aggregate Index**







# **Reams Asset Management** Period Ended December 31, 2016

#### **Investment Philosophy**

The investment process combines active duration and yield-curve management with bottom-up issue selection, focusing on undervalued sectors of the fixed income market.

#### **Quarterly Summary and Highlights**

- Reams Asset Management's portfolio posted a (2.71)% return for the quarter placing it in the 87 percentile of the CAI Core Plus Fixed Income group for the quarter and in the 63 percentile for the last year.
- Reams Asset Management's portfolio outperformed the Blmbg Aggregate ldx by 0.26% for the quarter and outperformed the Blmbg Aggregate ldx for the year by 1.73%.

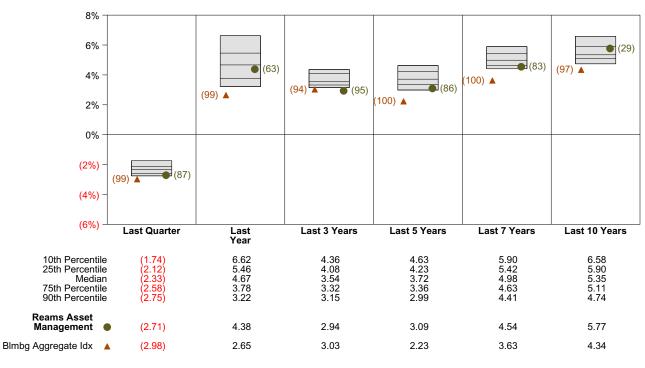
## **Quarterly Asset Growth**

Beginning Market Value	\$315,124,926
Net New Investment	\$0
Investment Gains/(Losses)	\$-8,542,136

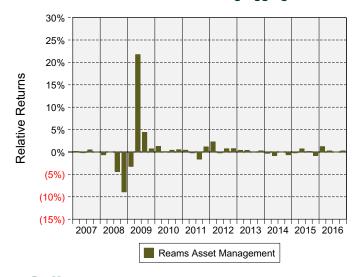
\$306,582,790

**Ending Market Value** 

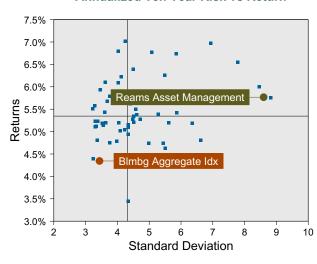
#### Performance vs CAI Core Plus Fixed Income (Gross)



#### Relative Return vs Blmbg Aggregate ldx



#### CAI Core Plus Fixed Income (Gross) Annualized Ten Year Risk vs Return



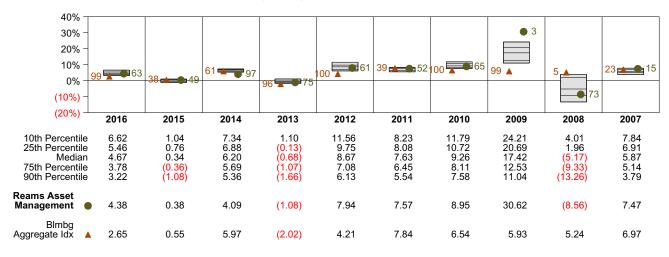


# **Reams Asset Management Return Analysis Summary**

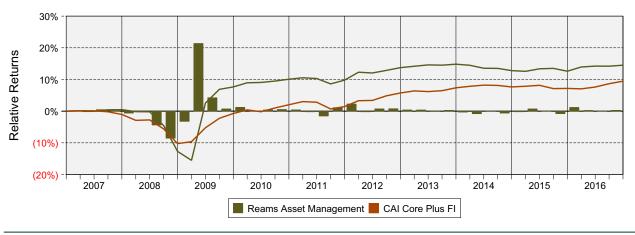
#### **Return Analysis**

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.

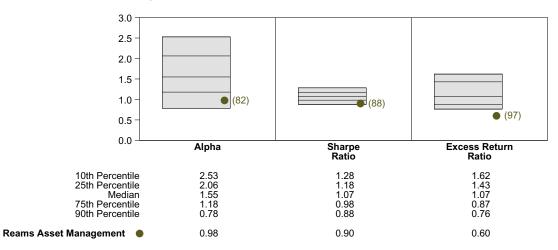
# Performance vs CAI Core Plus Fixed Income (Gross)



# Cumulative and Quarterly Relative Return vs Blmbg Aggregate Idx



Risk Adjusted Return Measures vs Blmbg Aggregate ldx Rankings Against CAI Core Plus Fixed Income (Gross) Five Years Ended December 31, 2016



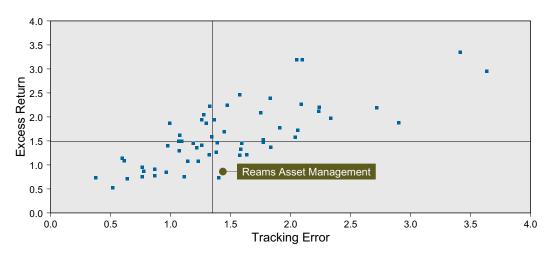


# **Reams Asset Management Risk Analysis Summary**

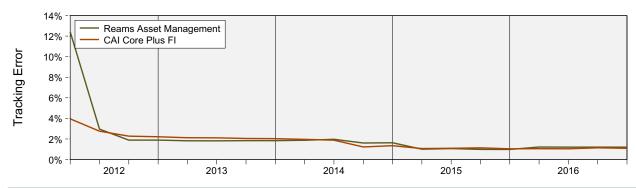
#### Risk Analysis

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.

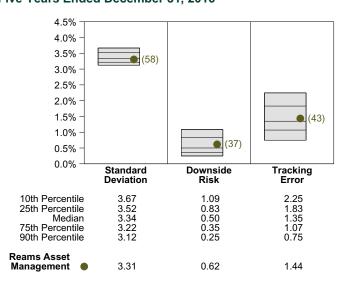
## Risk Analysis vs CAI Core Plus Fixed Income (Gross) Five Years Ended December 31, 2016

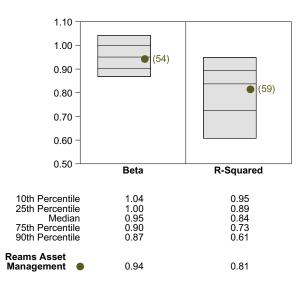


Rolling 12 Quarter Tracking Error vs Bloomberg Barclays Aggregate Index



Risk Statistics Rankings vs Bloomberg Barclays Aggregate Index Rankings Against CAI Core Plus Fixed Income (Gross) Five Years Ended December 31, 2016





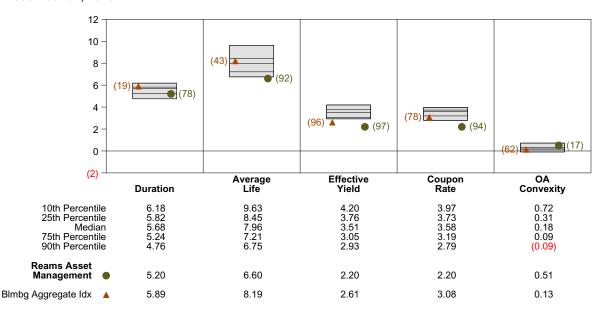


# **Reams Asset Management Bond Characteristics Analysis Summary**

#### **Portfolio Characteristics**

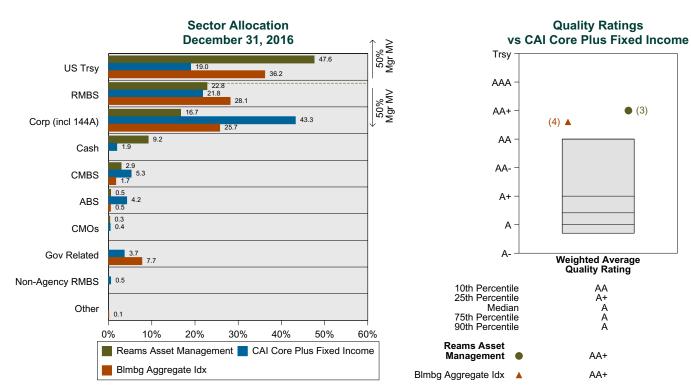
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

#### **Fixed Income Portfolio Characteristics Rankings Against CAI Core Plus Fixed Income** as of December 31, 2016



# **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.



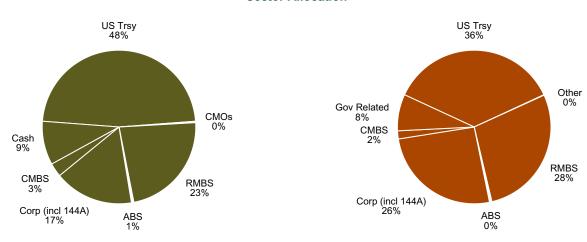


# **Reams Asset Management Portfolio Characteristics Summary** As of December 31, 2016

#### **Portfolio Structure Comparison**

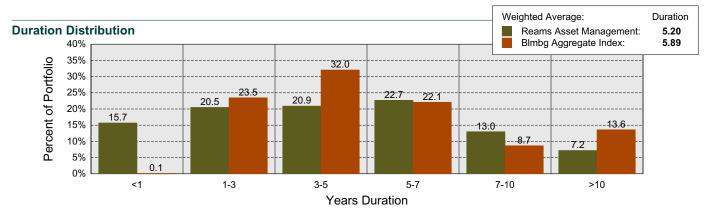
The charts below compare the structure of the portfolio to that of the index from the three perspectives that have the greatest influence on return. The first chart compares the two portfolios across sectors. The second chart compares the duration distribution. The last chart compares the distribution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

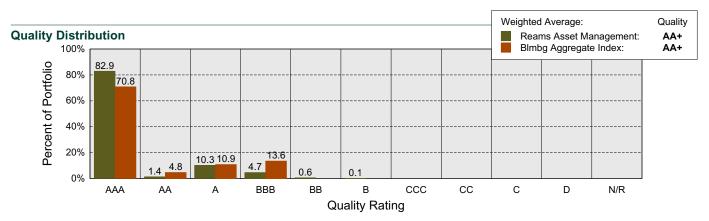
#### **Sector Allocation**



# **Reams Asset Management**

# **Blmbg Aggregate Index**







# Loomis, Sayles & Company, L.P. Period Ended December 31, 2016

#### **Investment Philosophy**

The fixed income investment process at Loomis Sayles seeks to capture market anomalies or inefficiencies by uncovering mispriced bonds which they believe have the potential to be upgraded. They focus on economic, political, and financial market forces that influence the general direction of interest rates as an overlay and enhancement to their bottom-up, sector and issue selection construction of portfolios.

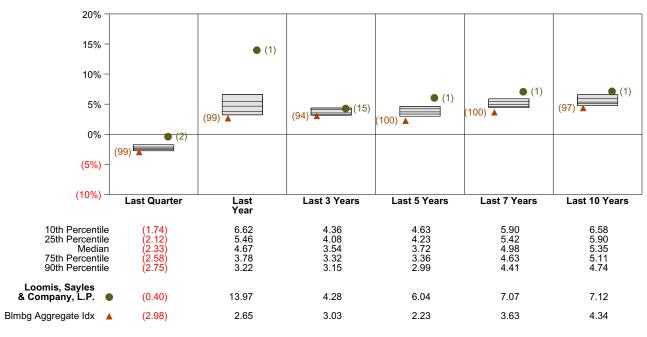
#### **Quarterly Summary and Highlights**

- Loomis, Sayles & Company, L.P.'s portfolio posted a (0.40)% return for the quarter placing it in the 2 percentile of the CAI Core Plus Fixed Income group for the quarter and in the 1 percentile for the last year.
- Loomis, Sayles & Company, L.P.'s portfolio outperformed the Blmbg Aggregate Idx by 2.57% for the guarter and outperformed the Blmbg Aggregate ldx for the year by 11.33%.

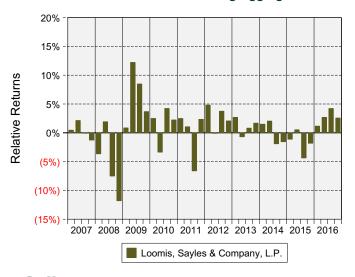
# **Quarterly Asset Growth**

Beginning Market Value	\$343,247,857
Net New Investment	\$-7,000,000
Investment Gains/(Losses)	\$-1,368,724
Ending Market Value	\$334.879.133

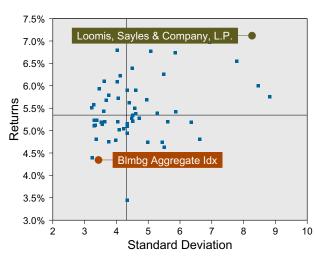
## Performance vs CAI Core Plus Fixed Income (Gross)



#### Relative Return vs Blmbg Aggregate ldx



#### **CAI Core Plus Fixed Income (Gross)** Annualized Ten Year Risk vs Return



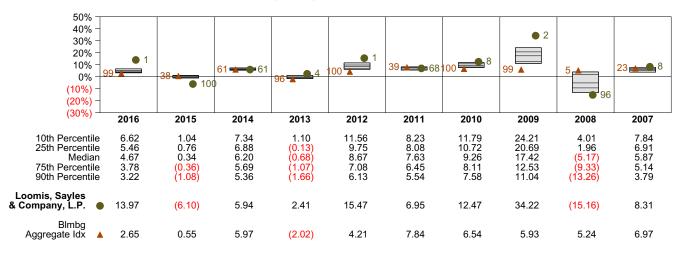


# Loomis, Sayles & Company, L.P. **Return Analysis Summary**

#### **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.

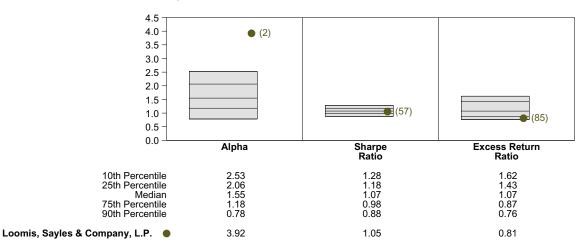
# Performance vs CAI Core Plus Fixed Income (Gross)



#### Cumulative and Quarterly Relative Return vs Blmbg Aggregate Idx



Risk Adjusted Return Measures vs Blmbg Aggregate ldx Rankings Against CAI Core Plus Fixed Income (Gross) Five Years Ended December 31, 2016



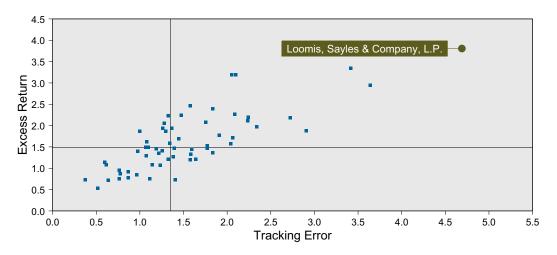


# Loomis, Sayles & Company, L.P. **Risk Analysis Summary**

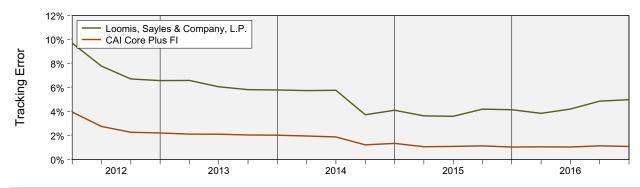
#### **Risk Analysis**

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.

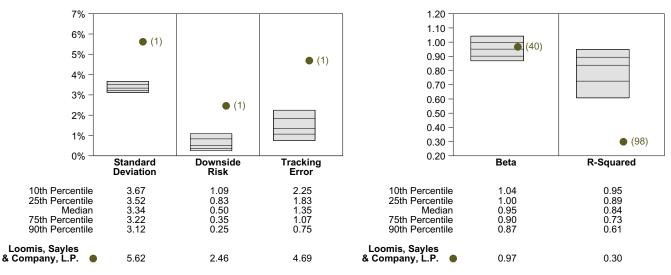
## Risk Analysis vs CAI Core Plus Fixed Income (Gross) Five Years Ended December 31, 2016



Rolling 12 Quarter Tracking Error vs Bloomberg Barclays Aggregate Index



Risk Statistics Rankings vs Bloomberg Barclays Aggregate Index Rankings Against CAI Core Plus Fixed Income (Gross) Five Years Ended December 31, 2016



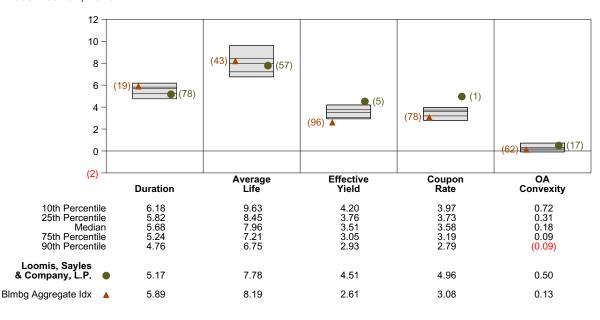


# Loomis, Sayles & Company, L.P. **Bond Characteristics Analysis Summary**

## **Portfolio Characteristics**

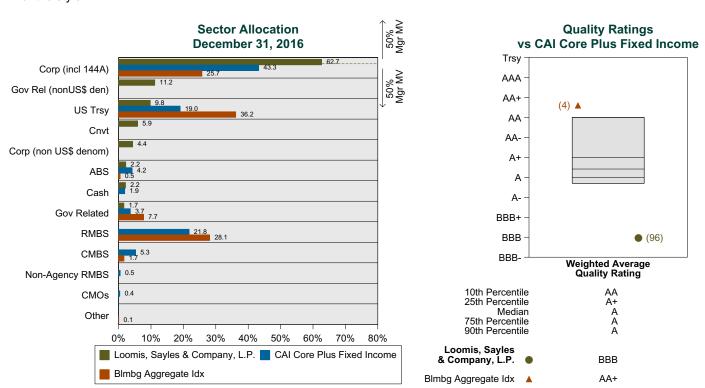
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

#### **Fixed Income Portfolio Characteristics Rankings Against CAI Core Plus Fixed Income** as of December 31, 2016



#### 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.



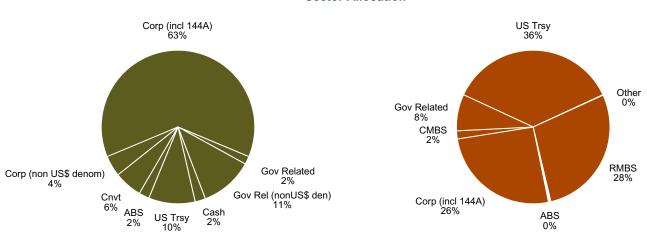


# Loomis, Sayles & Company, L.P. **Portfolio Characteristics Summary** As of December 31, 2016

#### **Portfolio Structure Comparison**

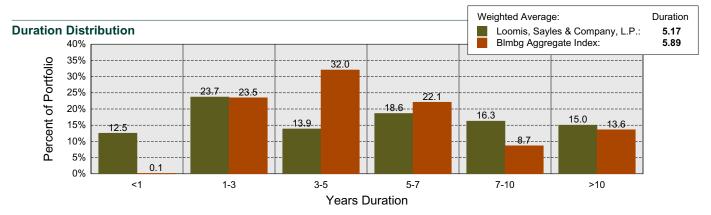
The charts below compare the structure of the portfolio to that of the index from the three perspectives that have the greatest influence on return. The first chart compares the two portfolios across sectors. The second chart compares the duration distribution. The last chart compares the distribution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

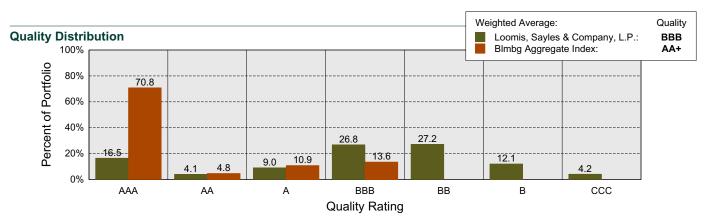
#### **Sector Allocation**



# Loomis, Sayles & Company, L.P.

# **Blmbg Aggregate Index**







# Allianz SA 1000 Period Ended December 31, 2016

#### **Quarterly Summary and Highlights**

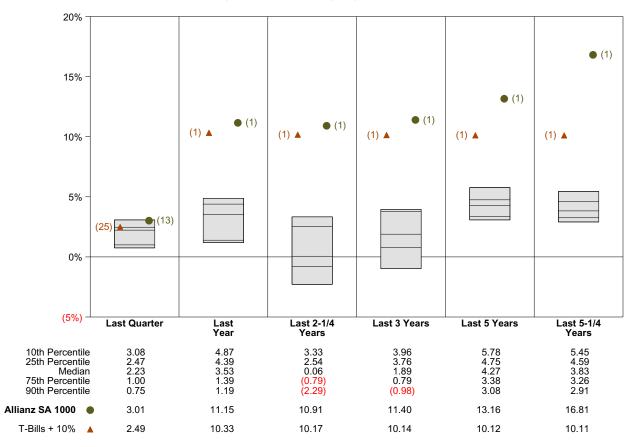
- Allianz SA 1000's portfolio posted a 3.01% return for the quarter placing it in the 13 percentile of the CAI Absolute Return Hedge Fund of Funds group for the quarter and in the 1 percentile for the last year.
- Allianz SA 1000's portfolio outperformed the T-Bills + 10% by 0.52% for the guarter and outperformed the T-Bills + 10% for the year by 0.83%.

#### **Quarterly Asset Growth**

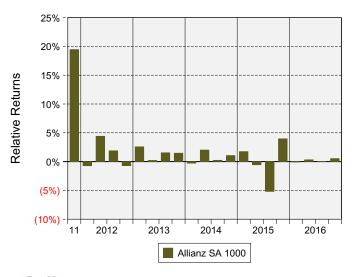
Beginning Market Value \$105,797,044 Net New Investment Investment Gains/(Losses) \$3,188,932 **Ending Market Value** \$108,985,976

Percent Cash: 0.0%

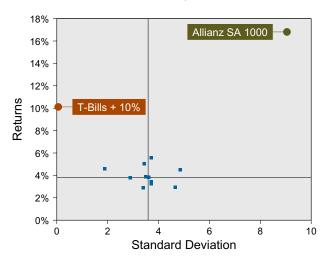
#### Performance vs CAI Absolute Return Hedge Fund of Funds (Net)



#### Relative Return vs T-Bills + 10%



#### **CAI Absolute Return Hedge Fund of Funds (Net)** Annualized Five and One-Quarter Year Risk vs Return



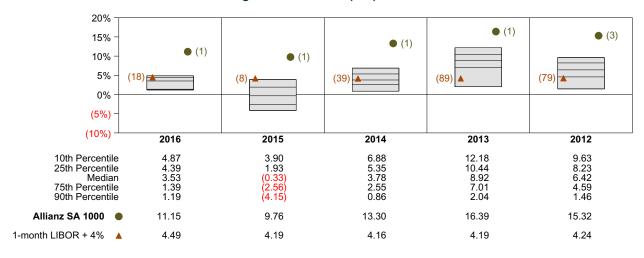


# Allianz SA 1000 **Return Analysis Summary**

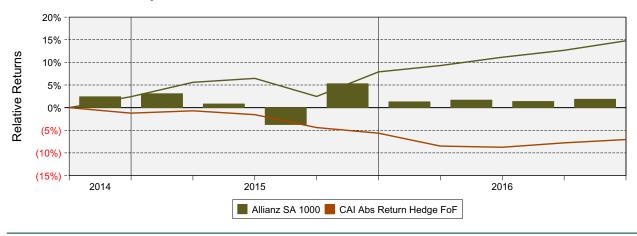
#### **Return Analysis**

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.

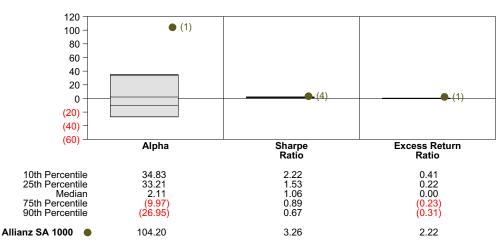
#### Performance vs CAI Absolute Return Hedge Fund of Funds (Net)



## Cumulative and Quarterly Relative Return vs 1-month LIBOR + 4%



Risk Adjusted Return Measures vs 1-month LIBOR + 4% Rankings Against CAI Absolute Return Hedge Fund of Funds (Net) Five Years Ended December 31, 2016



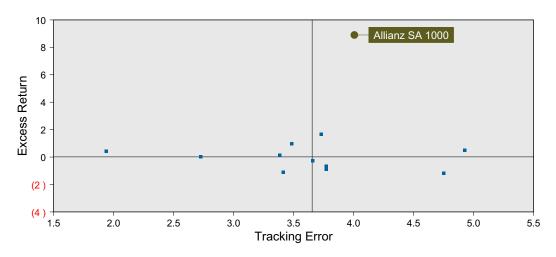


# Allianz SA 1000 **Risk Analysis Summary**

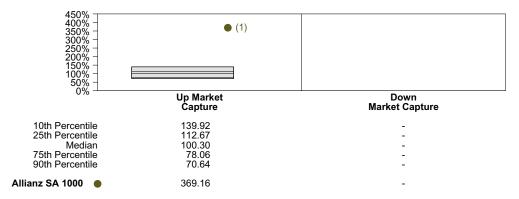
#### Risk Analysis

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.

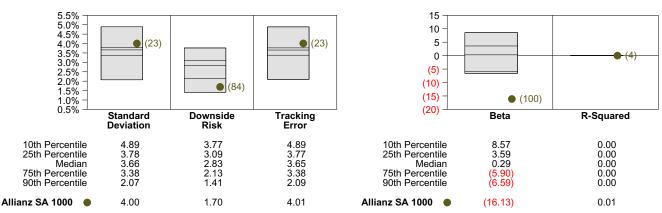
## Risk Analysis vs CAI Absolute Return Hedge Fund of Funds (Net) Five Years Ended December 31, 2016



Market Capture vs 1-month LIBOR + 4% Rankings Against CAI Absolute Return Hedge Fund of Funds (Net) Five Years Ended December 31, 2016



Risk Statistics Rankings vs 1-month LIBOR + 4% Rankings Against CAI Absolute Return Hedge Fund of Funds (Net) Five Years Ended December 31, 2016





# Newton Period Ended December 31, 2016

#### **Quarterly Summary and Highlights**

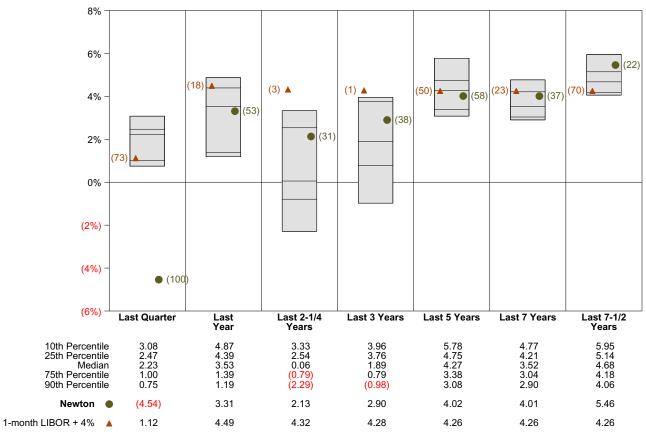
- Newton's portfolio posted a (4.54)% return for the guarter placing it in the 100 percentile of the CAI Absolute Return Hedge Fund of Funds group for the quarter and in the 53 percentile for the last year.
- Newton's portfolio underperformed the 1-month LIBOR + 4% by 5.66% for the quarter and underperformed the 1-month LIBOR + 4% for the year by 1.19%.

#### **Quarterly Asset Growth**

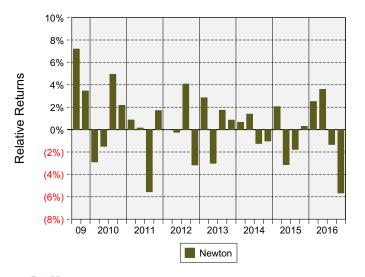
Beginning Market Value	\$92,991,182
Net New Investment	\$0
Investment Gains/(Losses)	\$-4,220,477
Ending Market Value	\$88 770 705

Percent Cash: 0.0%

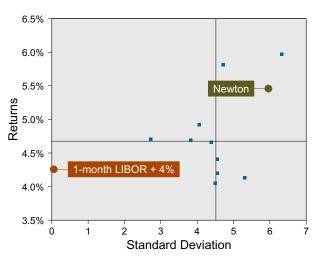
#### Performance vs CAI Absolute Return Hedge Fund of Funds (Net)



# Relative Return vs 1-month LIBOR + 4%



#### **CAI Absolute Return Hedge Fund of Funds (Net)** Annualized Seven and One-Half Year Risk vs Return



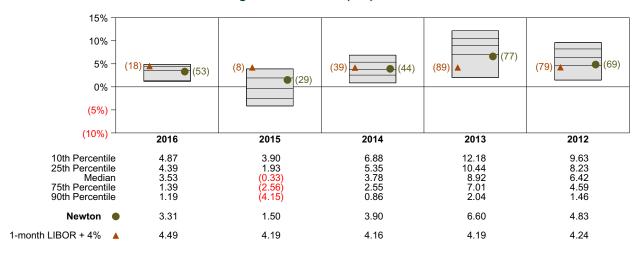


# **Newton Return Analysis Summary**

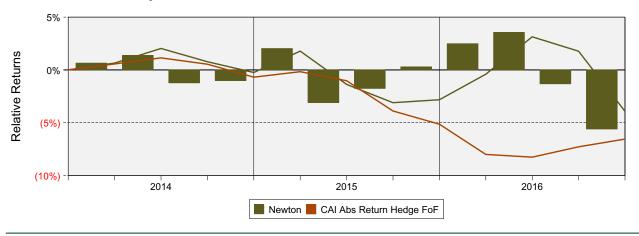
#### **Return Analysis**

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.

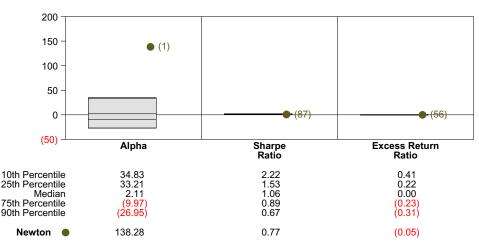
#### Performance vs CAI Absolute Return Hedge Fund of Funds (Net)



## Cumulative and Quarterly Relative Return vs 1-month LIBOR + 4%



Risk Adjusted Return Measures vs 1-month LIBOR + 4% Rankings Against CAI Absolute Return Hedge Fund of Funds (Net) Five Years Ended December 31, 2016



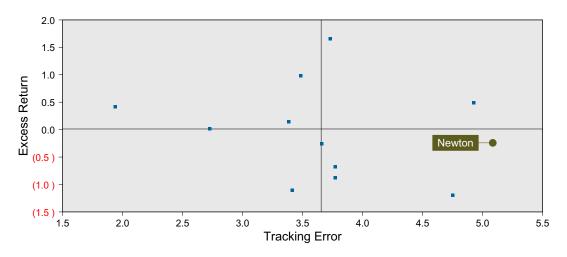


# Newton **Risk Analysis Summary**

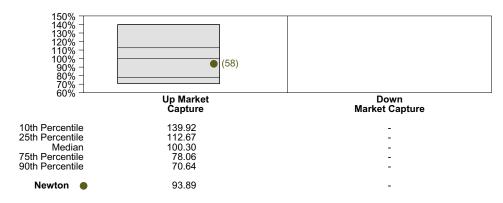
#### Risk Analysis

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.

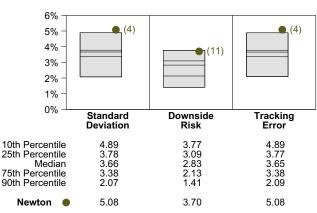
## Risk Analysis vs CAI Absolute Return Hedge Fund of Funds (Net) Five Years Ended December 31, 2016

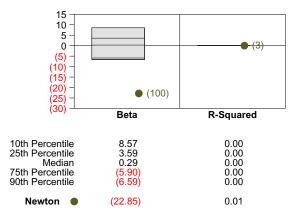


Market Capture vs 1-month LIBOR + 4% Rankings Against CAI Absolute Return Hedge Fund of Funds (Net) Five Years Ended December 31, 2016



Risk Statistics Rankings vs 1-month LIBOR + 4% Rankings Against CAI Absolute Return Hedge Fund of Funds (Net) Five Years Ended December 31, 2016







# UBS A & Q Period Ended December 31, 2016

## **Quarterly Summary and Highlights**

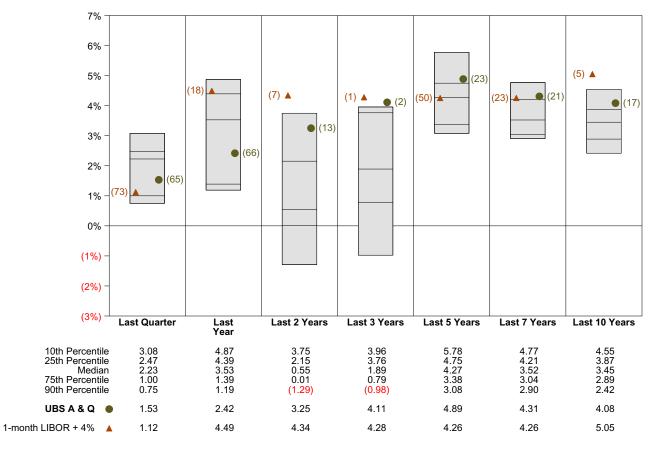
- UBS A & Q's portfolio posted a 1.53% return for the quarter placing it in the 65 percentile of the CAI Absolute Return Hedge Fund of Funds group for the quarter and in the 66 percentile for the last year.
- UBS A & Q's portfolio outperformed the 1-month LIBOR + 4% by 0.41% for the quarter and underperformed the 1-month LIBOR + 4% for the year by 2.08%.

#### **Quarterly Asset Growth**

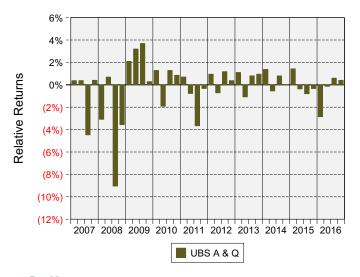
Beginning Market Value \$181,888,227 Net New Investment \$10,000,000 Investment Gains/(Losses) \$2,917,042 **Ending Market Value** \$194,805,269

Percent Cash: 0.0%

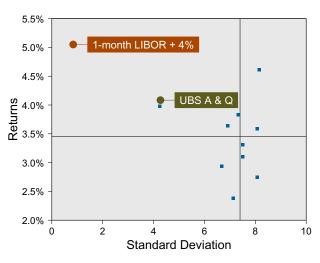
## Performance vs CAI Absolute Return Hedge Fund of Funds (Net)



# Relative Return vs 1-month LIBOR + 4%



#### **CAI Absolute Return Hedge Fund of Funds (Net)** Annualized Ten Year Risk vs Return



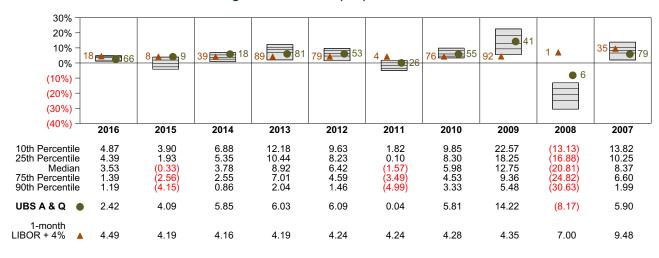


# UBS A & Q **Return Analysis Summary**

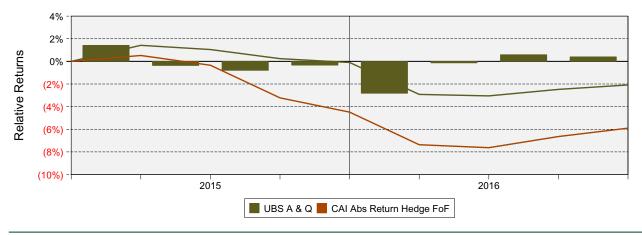
#### **Return Analysis**

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.

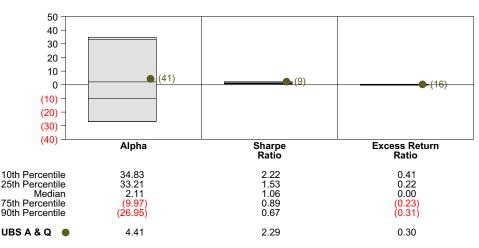
#### Performance vs CAI Absolute Return Hedge Fund of Funds (Net)



#### Cumulative and Quarterly Relative Return vs 1-month LIBOR + 4%



Risk Adjusted Return Measures vs 1-month LIBOR + 4% Rankings Against CAI Absolute Return Hedge Fund of Funds (Net) Five Years Ended December 31, 2016



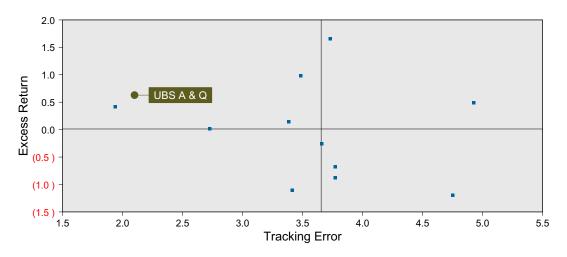


# UBS A & Q **Risk Analysis Summary**

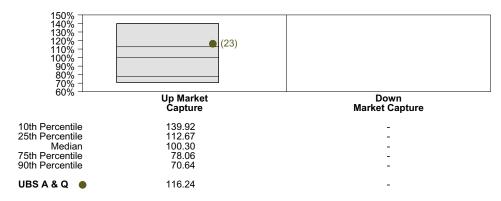
#### Risk Analysis

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.

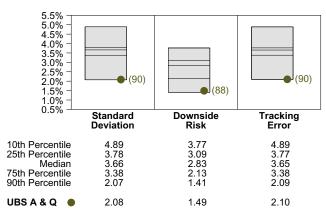
## Risk Analysis vs CAI Absolute Return Hedge Fund of Funds (Net) Five Years Ended December 31, 2016

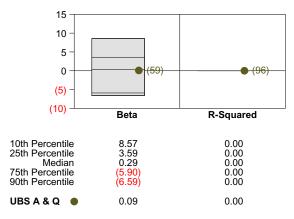


Market Capture vs 1-month LIBOR + 4% Rankings Against CAI Absolute Return Hedge Fund of Funds (Net) Five Years Ended December 31, 2016



Risk Statistics Rankings vs 1-month LIBOR + 4% Rankings Against CAI Absolute Return Hedge Fund of Funds (Net) Five Years Ended December 31, 2016







# **Principal Diversified Real Asset** Period Ended December 31, 2016

#### **Investment Philosophy**

The investment philosophy of the Principal Diversified Real Asset Fund is based on the premise that stocks and bonds exhibit low correlations to inflation over short and long time horizons. In their opinion, the most effective method to manage the impacts of longevity, sequential return, and inflation risks is to maintain an allocation to a diverse portfolio of real asset classes. First full quarter of performance is second quarter 2016. Prior history represents commingled fund returns. Current Principal Blended Benchmark = 35% Barclays US Treasury US TIPS Idx, 15% Bloomberg Commodity Idx, 20% S&P Global Infrastructure Idx, 20% S&P Global Natural Resources Idx and 10% FTSE EPRA/NAREIT Developed Market ldx.

#### **Quarterly Summary and Highlights**

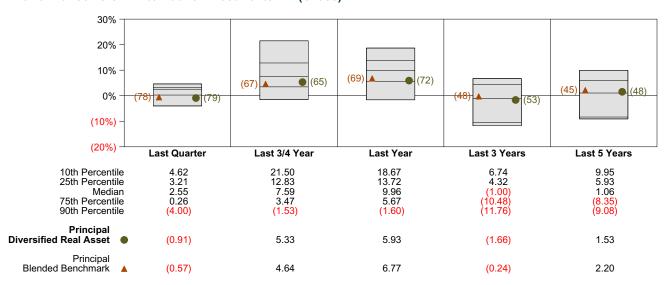
- Principal Diversified Real Asset's portfolio posted a (0.91)% return for the quarter placing it in the 79 percentile of the CAI Alternative Investments DB group for the quarter and in the 72 percentile for the last year.
- Principal Diversified Real Asset's portfolio underperformed the Principal Blended Benchmark by 0.33% for the quarter and underperformed the Principal Blended Benchmark for the year by 0.85%.

#### **Quarterly Asset Growth**

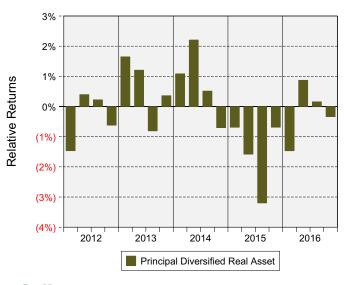
Beginning Market Value	\$108,476,923
Net New Investment	\$0
Investment Gains/(Losses)	\$-982,185
Ending Market Value	\$107 494 737

Percent Cash: 0.0%

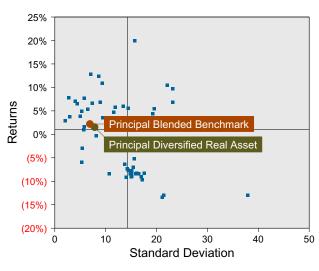
#### Performance vs CAI Alternative Investments DB (Gross)



## Relative Returns vs **Principal Blended Benchmark**



#### **CAI Alternative Investments DB (Gross)** Annualized Five Year Risk vs Return





# **Research and Educational Programs**

The Callan Institute provides research that updates clients on the latest industry trends while helping them learn through carefully structured educational programs. Visit www.callan.com/research to see all of our publications, or for more information contact Anna West at 415.974.5060 / institute@callan.com.

# **New Research from Callan's Experts**

2017 Defined Contribution Trends Survey | Callan's 10th Annual DC Trends Survey highlights plan sponsors' key themes from 2016 and expectations for 2017.

ESG Factors: U.S. Investor Usage Crystalizes | This charticle looks at environmental, social, and governance (ESG) factors from the perspectives of U.S. asset owners and global investment managers, revealing the growing incorporation of ESG factors in investment decision making.



Fixed Income: A Macroeconomic Lightning Rod | Callan's October 2016 Regional Workshop addressed alternative fixed income strategies to deal with the shifting market and economic environment investors face, as the extended period of low yields in the wake of the Global Financial Crisis appears to be ending.

ESG Interest and Implementation Survey | Callan's fourth annual survey on the status of ESG factor integration in the U.S. institutional market reflects responses from 84 funds representing approximately \$843 billion in assets.

2016 Cost of Doing Business Survey | In this survey, Callan compares the costs of administering and operating



funds and trusts across all types of tax-exempt and taxqualified organizations in the U.S. We identify practices and trends to help institutional investors manage expenses.

ESG and Investors: What, Why, and Who | In this video, Mark Wood, CFA, of Callan's Global Manager Research group explains ESG investing principles and how asset managers can implement them.

Momentum: The Trend Is Your Friend | Callan's director of Hedge Fund Research, Jim McKee, explores the advantages of momentum-based investing strategies, which profit from market trends in whichever direction. He discusses the rationale behind them, how they are defined and harnessed for different diversification needs, and whether they are appropriate for fund sponsors.

#### Periodicals

Private Markets Trends, Fall 2016 | Gary Robertson, manager of Callan's Private Equity Research group, discusses the steady performance of private markets in 2016, with yearto-date figures tracking very close to 2015's levels.

DC Observer, 3rd Quarter 2016 | This quarter's cover story is "Merging DC Plans: Making the Transition Smooth."

Hedge Fund Monitor, 3rd Quarter 2016 | This quarter's cover story is "Musketeers or Mercenaries...," on the growing appeal of the multi-strategy hedge fund category.

Capital Market Review, 3rd Quarter 2016 | A quarterly macroeconomic newsletter providing thoughtful insights on the economy and recent performance in equity, fixed income, alternatives, international, real estate, and other capital markets.

#### **Events**

Miss out on a Callan conference or workshop? Event summaries and speakers' presentations are available on our website: https://www.callan.com/education/CII/

Mark your calendars for our **National Conference**, January 23–25, 2017, at the Palace Hotel in San Francisco.

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. Our next sessions are:

#### Introduction to Investments

San Francisco, April 18-19, 2017 San Francisco, July 25-26, 2017 Chicago, October 24-25, 2017

This program familiarizes fund sponsor trustees, staff, and asset management advisors 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.

#### **Customized Sessions**

The "Callan College" is equipped to customize a curriculum to meet the training and educational needs of a specific organization. These tailored sessions range from basic to advanced and can take place anywhere—even at your office.

Learn more at https://www.callan.com/education/college/ or contact Kathleen Cunnie: 415.274.3029 / cunnie@callan.com

# **Education: By the Numbers**

**500** 

Attendees (on average) of the Institute's annual National Conference

**50**+

Unique pieces of research the Institute generates each year

3,500

Total attendees of the "Callan College" since 1994

1980

Year the Callan Institute was founded



"We think the best way to learn something is to teach it.

Entrusting client education to our consultants and specialists ensures that they have a total command of their subject matter. This is one reason why education and research have been cornerstones of our firm for more than 40 years."

Ron Peyton, Chairman and CEO



# **List of Callan's Investment Manager Clients**

Confidential - For Callan Client Use Only

Callan takes its fiduciary and disclosure responsibilities to clients very seriously. We recognize that there are numerous potential conflicts of interest encountered in the investment consulting industry and that it is our responsibility to manage those conflicts effectively and in the best interest of our clients. At Callan, we employ a robust process to identify, manage, monitor and disclose potential conflicts on an on-going basis.

The list below is an important component of our conflicts management and disclosure process. It identifies those investment managers that pay Callan fees for educational, consulting, software, database or reporting products and services. We update the list quarterly because we believe that our fund sponsor clients should know the investment managers that do business with Callan, particularly those investment manager clients that the fund sponsor clients may be using or considering using. Please refer to Callan's ADV Part 2A for a more detailed description of the services and products that Callan makes available to investment manager clients through our Institutional Consulting Group, Independent Adviser Group and Fund Sponsor Consulting Group. Due to the complex corporate and organizational ownership structures of many investment management firms, parent and affiliate firm relationships are not indicated on our list.

Fund sponsor clients may request a copy of the most currently available list at any time. Fund sponsor clients may also request specific information regarding the fees paid to Callan by particular fund manager clients. Per company policy, information requests regarding fees are handled exclusively by Callan's Compliance Department.

1607 Capital Partners, LLC Aberdeen Asset Management PLC Acadian Asset Management LLC AEGON USA Investment Management Affiliated Managers Group, Inc. AllianceBernstein
Acadian Asset Management LLC AEGON USA Investment Management Affiliated Managers Group, Inc.
AEGON USA Investment Management Affiliated Managers Group, Inc.
Affiliated Managers Group, Inc.
AlliancePornetain
Alliancebellistell
Allianz Global Investors
Allianz Life Insurance Company of North America
American Century Investment Management
Amundi Smith Breeden LLC
Analytic Investors
Angelo, Gordon & Co.
Apollo Global Management
AQR Capital Management
Ares Management LLC
Ariel Investments, LLC
Aristotle Capital Management, LLC
Artisan Holdings
Atlanta Capital Management Co., LLC
Aviva Investors Americas
AXA Investment Managers
Babson Capital Management
Baillie Gifford Overseas Limited
Baird Advisors
Bank of America
Baring Asset Management
Barings LLC
Baron Capital Management, Inc.
Barrow, Hanley, Mewhinney & Strauss, LLC
BlackRock
BMO Global Asset Management
BNP Paribas Investment Partners
BNY Mellon Asset Management
Boston Partners
Brandes Investment Partners, L.P.
Brandywine Global Investment Management, LLC
Brown Brothers Harriman & Company

Manager Name
Cambiar Investors, LLC
Capital Group
CastleArk Management, LLC
Causeway Capital Management
Channing Capital Management, LLC
Chartwell Investment Partners
ClearBridge Investments, LLC
Cohen & Steers Capital Management, Inc.
Columbia Management Investment Advisers, LLC
Columbia Threadneedle Investments
Columbus Circle Investors
Corbin Capital Partners, L.P.
Cornerstone Capital Management
Cramer Rosenthal McGlynn, LLC
Credit Suisse Asset Management
Crestline Investors, Inc.
D.E. Shaw Investment Management, L.L.C.
Delaware Investments
DePrince, Race & Zollo, Inc.
Deutsche Asset Management
Diamond Hill Capital Management, Inc.
Duff & Phelps Investment Mgmt. Co.
Eagle Asset Management, Inc.
EARNEST Partners, LLC
Eaton Vance Management
Epoch Investment Partners, Inc.
Fayez Sarofim & Company
Federated Investors
Fidelity Institutional Asset Management
Fiera Capital Global Asset Management
First Eagle Investment Management, LLC
First Hawaiian Bank Wealth Management Division
First Quadrant L.P.
Fisher Investments
Fort Washington Investment Advisors, Inc.
Franklin Templeton Institutional
Fred Alger Management, Inc.

Manager Name Manager Name Fuller & Thaler Asset Management, Inc. Opus Capital Management Inc. Pacific Investment Management Company GAM (USA) Inc. **GE Asset Management** Parametric Portfolio Associates GMO Peregrine Capital Management, Inc. Goldman Sachs Asset Management **PGIM** PGIM Fixed Income Guggenheim Investments **GW&K Investment Management** Pictet Asset Management Ltd. Harbor Capital Group Trust PineBridge Investments Hartford Funds Pinnacle Asset Management L.P. Hartford Investment Management Co. Pioneer Investments Henderson Global Investors PNC Capital Advisors, LLC Holland Capital Management Principal Global Investors Hotchkis & Wiley Capital Management, LLC Private Advisors, LLC **HSBC Global Asset Management** Putnam Investments, LLC Income Research + Management, Inc. QMA (Quantitative Management Associates) Insight Investment Management Limited **RBC Global Asset Management** Institutional Capital LLC Regions Financial Corporation INTECH Investment Management, LLC RidgeWorth Capital Management, Inc. Invesco Rockefeller & Co., Inc. **Investec Asset Management** Rothschild Asset Management, Inc. Ivy Investments Russell Investments Janus Capital Management, LLC Santander Global Facilities Jennison Associates LLC Schroder Investment Management North America Inc. Jensen Investment Management Scout Investments J.P. Morgan Asset Management SEI Investments KeyCorp Smith, Graham & Co. Investment Advisors, L.P. Lazard Asset Management Smith Group Asset Management Legal & General Investment Management America Standard Life Investments Limited Lincoln National Corporation Standish LMCG Investments, LLC State Street Global Advisors Logan Capital Management Stone Harbor Investment Partners, L.P. Logan Circle Partners, L.P. Systematic Financial Management **Longview Partners** T. Rowe Price Associates. Inc. Loomis, Sayles & Company, L.P. Taplin, Canida & Habacht Lord Abbett & Company The Boston Company Asset Management, LLC Los Angeles Capital Management The Davis Companies LSV Asset Management The Hartford MacKay Shields LLC The London Company Man Investments Inc. The TCW Group, Inc. Manning & Napier Advisors, LLC Thompson, Siegel & Walmsley LLC Manulife Asset Management Timberland Investment Resources, LLC Martin Currie Inc. Tri-Star Trust Bank Mellon Capital Management **UBS Asset Management** MFS Investment Management Van Eck Global MidFirst Bank Versus Capital Group Mondrian Investment Partners Limited Victory Capital Management Inc. Montag & Caldwell, LLC Vontobel Asset Management, Inc. Morgan Stanley Investment Management Voya Financial Mountain Lake Investment Management LLC Voya Investment Management (fka ING) MUFG Union Bank, N.A. Waddell & Reed Asset Management Group Neuberger Berman WCM Investment Management Newton Investment Management (fka Newton Capital Management) WEDGE Capital Management Nicholas Investment Partners Wellington Management Company, LLP Nikko Asset Management Co., Ltd. Wells Capital Management Northern Trust Asset Management Western Asset Management Company Nuveen Investments, Inc. William Blair & Company OFI Global Asset Management Windham Capital Management, LLC Old Mutual Asset Management