





PERIOD ENDING: DECEMBER 31, 2016

Investment Performance Review for

San Mateo County Employees' Retirement Association

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4th quarter summary

THE ECONOMIC CLIMATE

- Economies around the globe experienced higher inflation as the effects of lower energy prices fall out of year-over-year inflation figures. U.S. headline inflation rose to 1.7% YoY and the market's inflation expectations increased sharply, as indicated by TIPS breakeven rates.
- U.S. consumer and business sentiment indicators improved markedly in the fourth quarter based on positive expectations of future economic growth.

MARKET PORTFOLIO IMPACTS

- U.S. interest rates moved higher in Q4, returning the yield curve to levels experienced one year ago. The Federal Reserve is not likely to increase rates drastically because of lower yields and economic growth around the globe, and due to an already strong U.S. dollar.
- The U.S. dollar rose 6.4% in Q4 on a trade-weighted basis. Currency movement continues to contribute to higher volatility for investors with unhedged currency exposure.

THE INVESTMENT CLIMATE

- The U.S. presidential election results took many investors by surprise. After an initial overnight plunge in the futures market, U.S. equities rallied on expectations of a more pro-business regulatory environment and the possibility of large-scale fiscal stimulus. U.S. equities may possess greater upside potential post-election.
- Fourth quarter earnings for the S&P 500 are estimated to grow 3.2% YoY, according to FactSet. If this positive growth comes to fruition it will mark the second quarter of positive growth and may indicate that the recent oil-driven earnings slump is behind us.

ASSET ALLOCATION ISSUES

 Global inflation rises in Q4 may mark a change in trend from disinflation seen in recent years. Investors should work to understand the degree of inflation protection in their portfolio. A neutral risk stance seems warranted

Global reflation trends should be watched, and investors should understand the degree of inflation protection in their portfolio



U.S. economics summary

- U.S. real GDP grew 1.7% YoY in Q3, up from 1.3% in Q2.
 Consumer spending continued to account for the majority of economic growth, and rising sentiment may act as a boon for future growth. Net exports helped boost production, as well as private investment.
- Inflation moved higher during the quarter as headline CPI rose to 1.7% YoY, as of November, while core CPI rose to 2.1%. Increases in energy prices have resulted in a convergence between headline and core inflation figures. If oil prices remain stable, this will act as a tailwind for headline inflation in the future.
- The Fed raised its target federal funds rate to 0.50%-0.75% and forecast three rate hikes in 2017 at its December meeting, citing

- continued modest economic growth and a tightening labor market, in addition to firming consumer prices.
- The labor market added 165,000 jobs per month on average during the fourth quarter. This is slightly below the expansion average of 199,000, but still a solid pace of hiring given where we are at in the labor cycle. The unemployment rate fell 0.2% to 4.7% at the end of December.
- While the economy continued to steadily add jobs, wage growth has lagged behind. Real average hourly earnings only increased 0.7% YoY in November. Softer wage growth may be due in part to workers taking on part-time roles who could not find full time work.

	Most Recent	12 Months Prior
GDP (annual YoY)	1.7% 9/30/16	2.2 % 9/30/15
Inflation (CPI YoY, Headline)	1.7% 11/30/16	0.4% 11/30/15
Expected Inflation (5yr-5yr forward)	2.1% 12/31/16	1.8% 12/31/15
Fed Funds Rate	0.50% 12/31/16	0.25% 12/31/15
10 Year Rate	2.5% 12/31/16	2.3% 12/31/15
U-3 Unemployment	4.7% 12/31/16	5.0% 12/31/15
U-6 Unemployment	9.2% 12/31/16	9.9% 12/31/15

International economics summary

- The central theme of slow, but positive growth in countries across the globe continued in the third quarter. The U.S., western Europe, and Japan all experienced year-over-year growth rates between 1-2%.
- Developed countries experienced a coordinated pick up in inflation in recent months, suggesting we may be moving into a reflationary environment. Headline CPI was up 1.1% in the Eurozone in December, its highest rate in more than three years.
- The ECB announced it would continue its asset purchase program through the initially scheduled end date of March 2017, but at a reduced rate. The program will extend until at least the end of 2017, and monthly

- bond purchases will fall to €60 billion from €80 billion in April.
- The tapering of ECB purchases is likely more a result of mechanical and political obstacles than due to a need for tightening. If the central bank is forced to tighten quicker than desired, it could have an adverse impact on the current economic recovery.
- Italy voted against a referendum on constitutional reform on December 4th that would have weakened the power of the Senate in an attempt to make the country easier to govern. The Italian Prime Minister, Matteo Renzi, resigned shortly thereafter. Although Renzi's Democratic party will remain in power, the country's antiestablishment Five Star party has recently gained popularity.

Area	GDP (Real, YoY)	Inflation (CPI, YoY)	Unemployment
United States	1.7% 9/30/16	1.7% 11/30/16	4.7% 12/31/16
Western Europe	1.8% 9/30/16	0.9% 12/31/16	8.4% 9/30/16
Japan	1.1% 9/30/16	0.5% 11/30/16	3.1% 11/30/16
BRIC Nations	5.1% 9/30/16	3.4% 6/30/16	5.5% 9/30/16
Brazil	(2.9%) 9/30/16	6.3% 12/31/16	11.9% <i>12/31/16</i>
Russia	(0.4%) 9/30/16	5.4% 12/31/16	5.2% 9/30/16
India	7.3 % 9/30/16	3.6% 11/30/16	7.1% 12/31/15
China	6.7% 9/30/16	2.1% 12/31/16	4.0% 12/30/16

Equity environment

- We believe the U.S. election results have had a material impact on possible future equity return outcomes. There is likely greater upside potential for U.S. equities, though some of this has already been priced in with higher prices post-election.
- Both consumer and private sector sentiment have risen robustly. This positive shift may provide a tailwind to U.S. economic growth through spending and investment.
- Fourth quarter earnings for the S&P 500 are estimated to grow 3.2% year-over-year, according to FactSet. If this positive growth comes to fruition it will mark the second quarter of positive growth and may mean the recent earnings slump is now behind us.

- Value equities outperformed growth equities in the fourth quarter. The Russell 1000 Value index and Russell 1000 Growth index returned 6.7% and 1.0%, respectively. Energy and financial service companies have contributed to the performance rebound.
- The U.S. dollar rose 6.4% in Q4 on a trade-weighted basis which directly detracts from investment returns of U.S. investors with unhedged currency exposure.
- Japanese equities (Nikkei 225) delivered a 16.1% return on a hedged basis, but 1.2% on an unhedged basis – a 15% swing caused by currency movement.

	QTD TOTAL	L RETURN	YTD TOTAL	. RETURN	1 YEAR T				
	(unhedged)	(hedged)	(unhedged)	(hedged)	(unhedged)	(hedged)			
US Large Cap (Russell 1000)	3.8	%	12.1	1%	12.1%				
US Small Cap (Russell 2000)	8.8	%	21.3	3%	21.3%				
US Large Value (Russell 1000 Value)	6.7	%	17.3	3%	17.3%				
US Large Growth (Russell 1000 Growth)	1.0	%	7.1	%	7.1	%			
International Large (MSCI EAFE)	(-0.7%)	7.3%	1.5%	6.2%	1.5%	6.2%			
Eurozone (Euro Stoxx 50)	3.2%	10.3%	0.7%	5.1%	0.7%	5.1%			
U.K. (FTSE 100)	(0.8%)	4.4%	(0.2%)	19.0%	(0.2%)	19.0%			
Japan (NIKKEI 225)	1.2%	16.1%	5.8%	1.3%	5.8%	1.3%			
Emerging Markets (MSCI Emerging Markets)	(4.1%)	(2.0%)	11.6%	7.5%	11.6%	7.5%			

Source: Russell Investments, MSCI, STOXX, FTSE, Nikkei, as of 12/31/16



Domestic equity

U.S. equity markets fell sharply in futures markets on the night of the election, but then recovered before market open the next morning. After this initial stumble, equities rallied higher to finish the quarter.

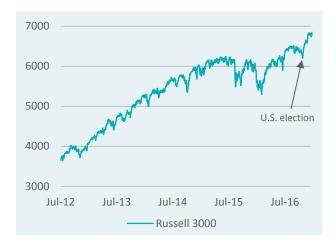
Post-election equity movement was likely driven by an improved economic outlook as well as several proposed policy changes that would benefit corporations, including lower tax rates and deregulation.

The financials sector was responsible for much of the gain in equity prices, likely due to the prospects of higher rates and a steeper curve. The S&P 500 Financials sector was up 16.5% after the election, compared to a 2.8% gain across the rest of the index.

As of December 30th, estimated earnings growth for the fourth quarter was 3.2% from the previous year, according to FactSet. Looking ahead, bottom-up analyst EPS forecasts point toward improving corporate earnings growth.

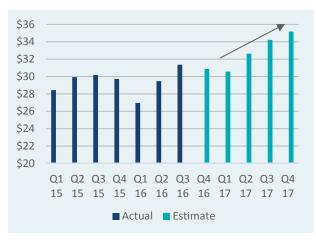
Proposed tax reform and deregulation have helped improve the U.S. earnings outlook

U.S. EQUITIES



Source: Russell Investments, as of 12/30/16

S&P 500 EPS



Source: FactSet, as of 12/30/16

S&P 500 FINANCIALS



Source: Bloomberg, as of 12/30/16



Domestic equity size and style

Small cap equities outperformed large cap equities in the fourth quarter as the Russell 2000 Index and Russell 1000 Index returned 8.8% and 3.8%, respectively. Much of this outperformance came after the U.S. presidential election as smaller companies could receive greater marginal benefit from deregulation proposed by Donald Trump. Renewed U.S. dollar strength also benefits smaller companies relative to larger companies due to greater insulation from foreign currency movements.

Value equities outperformed growth equities during the quarter. The Russell 1000 Value Index and Russell 1000 Growth Index returned 6.7% and 1.0%, respectively. This relative outperformance was driven by the Financials and Energy sectors, which are the two largest sectors in the value index. The magnitude of this recent value bounce back has brought the value premium back into positive territory for most trailing windows.

SMALL CAP VS LARGE CAP (YOY)



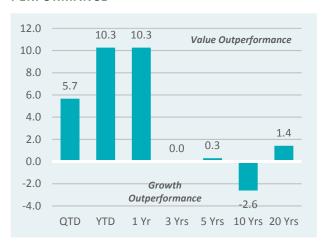
Source: Russell Investments, as of 12/31/16

VALUE VS GROWTH (YOY)



Source: Russell Investments, as of 12/31/16

U.S. VALUE VS. GROWTH RELATIVE PERFORMANCE



Source: Morningstar, as of 12/31/16



International equity

International equity markets narrowly outperformed domestic equities in December (S&P 500 2.0%) as the MSCI ACWI ex U.S. returned 2.2%.

European equity markets remained calm on the back of the announcement that the ECB would continue its asset purchase program through the initially scheduled end date of March 2017, but at a reduced rate. Adjustments to program constraints will be likely, given the mandated rule that the ECB cannot purchase more than 33% of any one country's national debt.

International developed equities delivered a 7.3% total return on a hedged basis over the quarter, but delivered -0.7% on an unhedged basis. Unhedged currency exposure continues to cause higher volatility for investors who choose not to hedge.

Japanese equities delivered a 16.1% return on a hedged basis, but 1.2% on an unhedged basis — a 15% swing caused by currency movement. Expectations of continued loose monetary policy and low interest rates in Japan contributed to yen weakness.

GLOBAL EQUITY PERFORMANCE



Source: Bloomberg, as of 12/31/16

INTERNATIONAL FORWARD P/E RATIOS



Source: Bloomberg, as of 12/31/16

EFFECT OF CURRENCY (1 YEAR ROLLING)



Source: MSCI, as of 12/31/16



Emerging market equity

Emerging market economic growth has shown recovery as Russia and Brazil begin moving out of severe depressions and as commodity prices improve. Economic growth of the "BRIC" nations continues at a pace materially higher than that of developed nations, consistent with recent decades.

Some renewed investor optimism can be seen as equity valuations move higher. Emerging market equities

provided a muted guarter with a -2.0% return on a hedged basis, but delivered a positive 7.5% return for the year (MSCI Emerging Markets). Much of the recent performance stability can be attributed to a reversal or flattening of emerging market currency depreciation trends occurring since 2012. Earnings across the broader emerging markets have also reversed their downward trend, though not as quickly as the pace of price improvement as demonstrated in higher equity valuations.

12-MONTH ROLLING PERFORMANCE



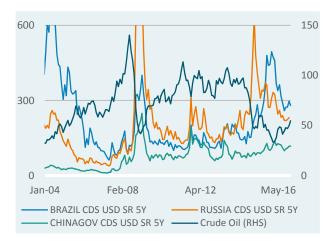
Source: MPI, as of 12/31/16

FORWARD P/E RATIOS



Source: Bloomberg, as of 12/31/16

CDS SPREADS



Source: MSCI, as of 12/31/16



Interest rate environment

- The Federal Reserve raised interest rates at its December meeting, increasing the federal funds target rate by 0.25%, to a range of 0.50% to 0.75%. The Fed also increased its outlook for the number of 2017 rate hikes from two to three. Lower yields and economic growth outside of the U.S., along with an already strong dollar, reduce the probability of drastic rate rises.
- U.S. Treasury yields moved higher and the curve steepened on the prospects of higher inflation and economic growth. The spread between the 10 and 2-year yields was 1.25% at the end of December, its highest level in more than a year.
- Developed sovereign yields increased along with U.S. rates following the presidential election. The Japanese 10-year bond yield moved out of negative territory to 0.46% at the end of December, while the German 10-year bund yield hit an 11-month high of 0.37% before falling to finish the month at 0.20%.
- The U.S. is much further ahead in the monetary policy cycle than other developed countries, which has led to a widening yield differential between Treasuries and global sovereign bonds. While Treasuries remain expensive compared to history, the higher yield makes them relatively attractive.

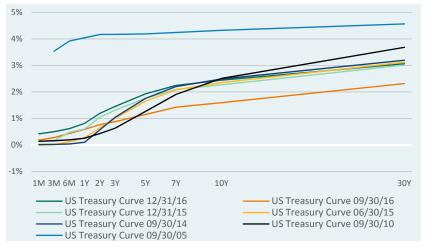
Area	Short Term (3M)	10 Year
United States	0.50%	2.45%
Germany	(0.99%)	0.20%
France	(0.90%)	0.68%
Spain	(0.49%)	1.38%
Italy	(0.50%)	1.81%
Greece	1.37%	7.02%
U.K.	0.51%	1.24%
Japan	(0.42%)	0.04%
Australia	1.70%	2.77%
China	2.35%	3.06%
Brazil	12.91%	10.55%
Russia	8.78%	8.29%

Source: Bloomberg, as of 12/31/16

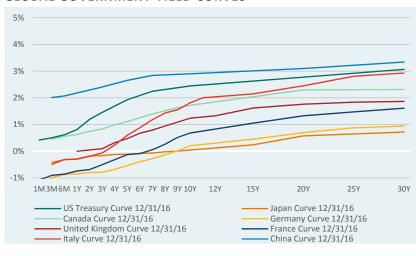


Yield environment



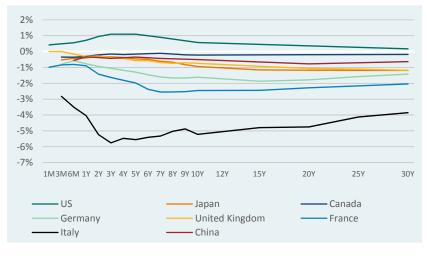


GLOBAL GOVERNMENT YIELD CURVES



Global investors continue to prefer U.S. **Treasuries** due to higher relative yields

YIELD CURVE CHANGES OVER LAST FIVE YEARS



IMPLIED CHANGES OVER NEXT YEAR



Source: Bloomberg, as of 12/31/16



Currency

The U.S. dollar rose considerably in the fourth quarter, up 6.4% against a basket of major currencies. The strong dollar created a large gap between hedged and unhedged international exposures, as foreign currency losses eroded unhedged returns.

Renewed dollar strength occurred after the presidential election likely due to increased expectations of U.S. economic growth and higher interest rates. A widening gap between Treasury yields and other developed sovereign bonds could cause greater demand for

Treasuries and provide a tailwind for further dollar appreciation. However, higher inflation at the same time could offset some of the potential strength.

Emerging market currencies were hit hard by the strength in the U.S. dollar, influenced by the Fed pointing towards faster than anticipated interest rates increases and possible protectionist trade policies from the Trump administration. The JPM EM Currency Index was down 4.0% in the fourth quarter.

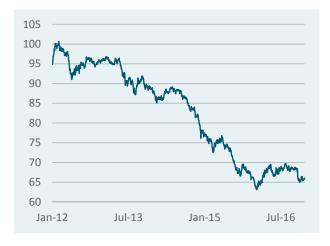
EFFECT OF CURRENCY (1YR ROLLING)



LONG-TERM TRADE WEIGHTED DOLLAR



JPM EM CURRENCY INDEX



Source: FRED, as of 12/31/16

12/31/16 Source: Bloomberg, as of 12/31/16



Source: MPI, as of 12/31/16

Executive Summary

- The Total Fund, net of manager fees, returned 0.9% in the fourth quarter of 2016 and ranked 48th among other public plans greater than \$1 billion (median of 0.8%). It lagged the policy index return of 1.1%. The Total Fund w/o Overlay was 0.9% for the quarter. The Total Fund one year return of 8.3% was behind its policy index return of 8.9% and ranked in 33rd percentile of its peer universe. The three-year return of 4.9% (28th percentile) was above median among large public plans (4.1%).
- Fourth quarter results were enhanced by the following factors:
 - 1. Franklin Templeton gained 6.5% beating the BBgBarc Multiverse (-6.7%) and ranked in the 1st percentile of its peers. The portfolio benefited from underweight positions in the Japanese yen, Euro, and Australian dollar. The portfolio's conservative underweighted duration position in the US also contributed to performance.
 - 2. Barrow Hanley was up 8.7% while the Russell 1000 Value index rose 6.7%. Performance was enhanced by underweight to REITs and utilities and stock selection within energy, technology, and consumer staples.
 - 2. QMA US Small Cap ranked in the 26th percentile of small cap managers, gaining 10.6% versus the Russell 2000 (8.8%). Valuation was the main driver of return for the fourth quarter. Valuation worked well in most sectors, but particularly well in the healthcare sector.

- Fourth quarter results were hindered by the following factors:
 - 1. Mondrian lost 1.1% % while the MSCI ACWI ex US Value gained 3.4%. Most International Large Value managers underperformed the index as the index ranked in the 6th percentile of the peer group. Stock selection in Switzerland and the UK, along with an underweight position to Japan and an overweight positions to India contributed to the underperformance.
 - 2. Brown Advisory lost 4.6% underperforming the Russell 1000 Growth (1.0%), and ranked in the bottom decile of managers. Consumer discretionary stock selection was the biggest detractor from performance. This portfolio will close in January 2017.
 - 3. QMA Baillie Gifford underperformed the MSCI ACWI ex US Growth (-7.1% vs -5.7%). Limited exposure to bank and energy producers contributed to the underperformance.

	3 Mo (%)	Rank	6 Mo (%)	Rank*	1 Yr (%)	Rank	2 Yrs (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Total Fund**	0.9	48	4.7	50	8.3	33	4.5	22	4.9	28	8.9	19	4.4	67
Policy Index ¹	1.1	39	4.9	43	8.9	13	4.3	25	4.8	29	9.0	15	5.4	16
Allocation Index	1.1	39	4.6	52	8.7	15	4.1	37	4.7	34				
InvestorForce Public DB > \$1B Net Median	0.8		4.6		7.7		3.5		4.1		8.1		4.8	
Total Fund ex Overlay	0.9	45	4.8	44	8.2	34	4.4	23	4.8	30	8.9	21	4.3	71
Policy Index ¹	1.1	39	4.9	43	8.9	13	4.3	25	4.8	29	9.0	15	5.4	16
Allocation Index	1.1	39	4.6	52	8.7	15	4.1	37	4.7	34				
InvestorForce Public DB > \$1B Net Median	0.8		4.6		7.7		3.5		4.1		8.1		4.8	
Public Equity	1.0	70	6.1	74	8.0	68	3.7	45	4.1	46	10.9	46	3.9	81
Blended Public Equity Index ²	1.9	46	7.7	40	9.7	41	3.8	43	4.4	42	11.1	42	5.0	39
InvestorForce All DB Total Eq Net Median	1.8		7.3		8.9		3.6		3.9		10.7		4.6	
US Equity	4.1	58	8.6	68	11.2	72	6.0	54	7.2	58	14.0	56	5.8	91
Blended US Equity Index ²	4.2	54	9.1	52	12.9	40	6.2	47	8.0	39	14.5	30	7.0	30
Russell 3000	4.2	54	8.8	61	12.7	43	6.4	38	8.4	20	14.7	20	7.1	28
InvestorForce All DB US Eq Net Median	4.2		9.1		12.5	_	6.1		7.6		14.1		6.8	
Large Cap Equity	3.3		7.6		10.6		6.5		8.2		14.4		6.0	
Russell 1000	3.8		8.0		12.1		6.3		8.6		14.7		7.1	
Barrow Hanley	8.7	14	13.9	17	13.8	50	6.6	22	7.3	47	14.6	29		
Russell 1000 Value	6.7	42	10.4	49	17.3	19	6.2	28	8.6	19	14.8	25	5.7	66
eA US Large Cap Value Equity Net Median	5.9		10.2		13.8		4.9		7.2		13.4		6.1	
BlackRock S&P 500 Index	3.8	42	7.8	39	12.0	20	6.6	18	8.9	14	-			
S&P 500	3.8	42	7.8	39	12.0	21	6.5	18	8.9	15	14.7	20	6.9	41
eA US Large Cap Core Equity Net Median	3.4		7.1		9.3		4.7		7.3		13.3		6.8	

^{2.} See Appendix for Benchmark History.



^{*} Total Fund and asset class aggregates are ranked in InvestorForce universes. Managers are ranked in eVest (eA) manager universes.

^{**} Includes Parametric Minneapolis manager funded in August 2013.

^{1.} Effective 10/1/16, Policy Index is 28% Russell 3000/19% MSCI ACWI ex US IMI/ 10% BBgBarc Aggregate/ 2% BBgBarc TIPS/ 6% BBgBarc BA Intermediate HY / 3% BBgBarc Multi-verse/ 7% NCREIF NFI ODCE/ 7% Russell 3000 + 3% 8% (60% Russell 3000/40% BBgBarc Aggregate)/ 5% Libor +4%/ 3% Bloomberg Commodity/ 5% (34% Bloomberg Roll Select Commodity/ 33% S&P Global Large-MidCap Commodity and Resources/ 33% S&P Global Infrastructure)

	3 Mo (%)	Rank	6 Mo (%)	Rank	1 Yr (%)	Rank	2 Yrs (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Brown Advisory	-4.6	95	-1.2	99	-2.7	92	1.9	82	3.5	92			-	
Russell 1000 Growth	1.0	33	5.6	39	7.1	20	6.4	13	8.6	12	14.5	19	8.3	21
eA US Large Cap Growth Equity Net Median	-0.3		4.9		3.4		3.7		6.3		13.0		7.5	
DE Shaw	3.6	47	8.9	26	13.9	9	8.7	4	9.7	5	16.0	2		
Russell 1000	3.8	42	8.0	38	12.1	20	6.3	21	8.6	18	14.7	19	7.1	36
eA US Large Cap Core Equity Net Median	3.4		7.1		9.3		4.7		7.3		13.3		6.8	
Small Cap Equity	10.6	36	17.0	46	17.2	62	4.9	73	4.3	71	12.8	70	4.9	95
Russell 2000	8.8	50	18.7	38	21.3	42	7.7	50	6.7	49	14.5	49	7.1	66
eA US Small Cap Equity Net Median	8.8		16.6		19.7		7.7		6.5		14.3		7.6	
QMA US Small Cap *	10.6	26			-			-	-				-	
Russell 2000	8.8	54	18.7	32	21.3	34	7.7	57	6.7	53	14.5	54	7.1	70
eA US Small Cap Core Equity Net Median	9.0		16.5		19.5		8.0		7.2		14.8		7.8	
International Equity	-3.5	79	2.5	84	3.2	61	0.2	33	-0.8	24	5.4	65	0.2	72
MSCI ACWI ex US IMI ²	-1.5	35	5.5	34	4.9	28	0.3	32	-1.0	32	5.7	56	1.5	34
MSCI EAFE Gross	-0.7	21	5.8	30	1.5	78	0.6	25	-1.2	38	7.0	21	1.2	44
InvestorForce All DB ex-US Eq Net Median	-2.2		4.6		3.8		-0.4		-1.4		5.9		1.1	
Developed Markets	-3.6	74	2.4	75	2.2	42	0.5	35	-0.6	29	6.0	56	0.5	75
MSCI ACWI ex USA Gross	-1.2	31	5.7	30	5.0	15	-0.3	55	-1.3	48	5.5	69	1.4	38
InvestorForce All DB Dev Mkt ex-US Eq Net Median	-2.1		4.1		1.8		0.2		-1.4		6.3		0.9	
Baillie Gifford	-7.1	68	0.7	51	0.7	33	1.0	56	-0.1	43				
MSCI ACWI ex US ²	-1.2	4	5.7	7	5.0	7	-0.3	68	-1.3	60				-
MSCI ACWI ex US Growth ²	-5.7	52	0.1	59	0.5	36	-0.2	68	-0.9	54				
eA ACWI ex-US Growth Equity Net Median	-5.5		0.7		-1.7		1.2		-0.6		6.7		3.1	

^{*} Funded August 2016.2. See Appendix for Benchmark History.



	3 Mo (%)	Rank	6 Mo (%)	Rank	1 Yr (%)	Rank	2 Yrs (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
BlackRock EAFE Index	-0.7	23	5.8	28	1.4	28	0.4	55	-1.3	60	-			
MSCI EAFE	-0.7	24	5.7	30	1.0	31	0.1	59	-1.6	61	6.5	71	0.7	72
MSCI EAFE Gross	-0.7	23	5.8	27	1.5	26	0.6	52	-1.2	59	7.0	67	1.2	57
eA EAFE Core Equity Net Median	-2.4		4.4		-0.4		0.7		-0.7		7.7		1.6	
FIAM Equity	-5.6	59	0.8	58	1.3	35	2.3	68	0.2	68				
MSCI ACWI ex US Small Cap Gross	-3.5	27	4.2	32	4.3	28	3.6	54	1.1	52	8.1	86	3.3	84
eA ACWI ex-US Small Cap Equity Net Median	-5.1		1.1		0.4		4.2		1.1		9.9		5.3	
Mondrian	-1.1	69	2.7	81	4.8	52	-0.4	79	-0.8	58	4.8	92	1.2	53
MSCI ACWI ex USA Value Gross	3.4	6	11.5	9	9.6	14	-0.5	79	-1.9	78	5.2	85	0.9	68
MSCI ACWI ex USA Gross	-1.2	70	5.7	66	5.0	51	-0.3	78	-1.3	62	5.5	82	1.4	45
eA ACWI ex-US Value Equity Net Median	-0.2		7.8		5.3		2.0		-0.3		7.3		1.3	
Emerging Markets	-2.7	19	2.5	62	13.0	24	-2.5	53	-3.0	71	-	-	-	
MSCI Emerging Markets Gross	-4.1	38	4.7	22	11.6	44	-2.4	52	-2.2	44	1.6	50	2.2	36
InvestorForce All DB Emg Mkt Eq Net Median	-4.5		3.2		10.7		-2.4		-2.4		1.6		1.7	
Parametric Core	-2.7	16	2.5	51	13.1	22					-			
MSCI Emerging Markets Gross	-4.1	34	4.7	31	11.6	33	-2.4	46	-2.2	56	1.6	72	2.2	62
eA Emg Mkts Equity Net Median	-5.2		2.5		8.2		-2.7		-2.0		2.5		2.6	
Fixed Income	0.8	6	3.2	6	8.1	12	3.4	9	3.8	30	4.8	16	5.1	47
Blended Fixed Income Index2	-2.4	60	-0.9	44	5.5	46	2.4	27	3.1	41	2.4	79	4.5	68
InvestorForce All DB Total Fix Inc Net Median	-2.2		-1.3		5.1		1.9		2.9		3.2		5.0	
US Fixed Income	-0.3	12	2.6	7	8.1	15	3.6	7	4.2	30	4.5	23	5.2	40
Blended US Fixed Index ²	-1.6	31	0.0	26	6.0	36	2.9	17	3.7	36	2.7	68	4.8	53
InvestorForce All DB US Fix Inc Net Median	-2.1		-1.6		4.7		2.0		3.3		3.4		4.8	

^{2.} See Appendix for Benchmark History.



	3 Mo (%)	Rank	6 Mo (%)	Rank	1 Yr (%)	Rank	2 Yrs (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Core Fixed	-1.6		0.0		4.7		2.4		3.7		3.4		4.6	
BBgBarc US Aggregate TR	-3.0		-2.5		2.6		1.6		3.0		2.2		4.3	
FIAM Bond	-2.7	41	-1.5	19	4.5	8	2.3	20	3.6	20	3.1	25	4.8	37
Western TRU	0.8	1	3.4	1	5.3	5		-	-		-			
3-Month Libor Total Return USD	0.2	1	0.4	2	0.7	99	0.5	99	0.4	99	0.4	99	1.2	99
BBgBarc US Aggregate TR	-3.0	71	-2.5	74	2.6	71	1.6	72	3.0	60	2.2	79	4.3	78
eA US Core Fixed Inc Net Median	-2.8		-2.1		3.1		1.8		3.1		2.7		4.6	
Opportunistic Credit	2.6	-	8.5	-	15.1	-	6.3		6.0		10.6	-		
BBgBarc BA Intermediate HY	0.6		4.7		11.8		5.4		5.1		4.8			
Angelo Gordon Opportunistic*	2.5		7.4		7.3		4.1		-		-			
Angelo Gordon STAR*	2.0		6.2		6.2		5.6		8.6					
BBgBarc US Aggregate TR	-3.0		-2.5		2.6		1.6		3.0		2.2		4.3	
Beach Point Select	3.6	8	9.0	11	16.1	21		-	-		-			
BBgBarc BA Intermediate HY ²	0.6	91	4.7	79	11.8	69	5.4	32	5.1	15	4.8	93		
eA US High Yield Fixed Inc Net Median	1.6		6.6		13.5		4.8		4.0		6.6		6.7	
Brigade Capital	2.5	20	9.8	8	22.8	1	4.9	47	3.2	77	6.4	64		
BBgBarc BA Intermediate HY ²	0.6	91	4.7	79	11.8	69	5.4	32	5.1	15	4.8	93		
50% Barclays HY/ 50% Bank Loan	2.0	36	6.4	55	13.5	51	5.2	38	4.2	41	6.4	65		
eA US High Yield Fixed Inc Net Median	1.6		6.6		13.5		4.8		4.0		6.6		6.7	
TCP Direct Lending VIII * **	0.2	99												
BBgBarc BA Intermediate HY	0.6	91	4.7	79	11.8	69	5.4	32	5.1	15	4.8	93		
eA US High Yield Fixed Inc Net Median	1.6		6.6		13.5		4.8		4.0		6.6		6.7	
Global Fixed Income	6.5	1	6.4	9	7.7	45	1.7	55	1.2	75	5.4	16		
BBgBarc Multiverse TR	-6.7	97	-5.7	97	2.8	96	-0.3	74	0.0	87	0.5	91	3.4	99
InvestorForce All DB Glbl Fix Inc Net Median	-1.7		1.0		7.3		1.8		2.0		3.4		5.2	

^{2.} See Appendix for Benchmark History.



^{*} Preliminary return as of 12/31/2016. ** Funded September 2016.

	3 Mo (%)	Rank	6 Mo (%)	Rank	1 Yr (%)	Rank	2 Yrs (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Franklin Templeton	6.5	1	6.4	10	7.7	27	1.7	50	1.2	59	5.4	23		
BBgBarc Multiverse TR	-6.7	82	-5.7	84	2.8	72	-0.3	66	0.0	72	0.5	80	3.4	76
eA All Global Fixed Inc Net Median	-2.0		0.3		5.0	_	1.4		2.0	_	3.5		4.4	
Risk Parity	-3.9	-	-1.8		12.0		2.3	-	5.3		5.6			
60/40 Russell 3000/BBgBarc US Aggregate	1.3		4.2		8.8		4.7		6.4		9.7		6.3	
AQR GRP, 10% Volatility	-2.4		-0.2		10.5		0.1		2.6		4.0			
PanAgora	-5.2		-3.1		13.2		4.4							
60/40 Russell 3000/BBgBarc US Aggregate	1.3		4.2		8.8		4.7		6.4		9.7		6.3	
60/40 MSCI World/BBgBarc Global Aggregate	0.2		3.3		6.2		3.1		4.1		7.8			
Alternatives	3.8	-	10.2		9.2		7.6	-	6.9		6.9			
Alternatives Allocation Index ²	3.3		6.9		10.5		4.0		3.6		6.1			-
Blended Alternatives Index	3.4		7.2		10.8		4.3		4.5		8.5			
Private Equity**	5.0	9	16.0	1	14.7	5	17.6	1	16.9	4	16.4	5	-	
Russell 3000 +3%	5.0	9	10.7	4	15.7	2	9.4	31	11.4	33	17.7	1	10.1	11
InvestorForce All DB Private Eq Net Median	2.4		4.8		7.4		7.6		9.4		10.0		7.7	
Hedge Fund/Absolute Return	2.3	27	3.8	62	0.9	68	5.4	5	6.8	2	6.4	10		
Libor 1 month +4%	1.2	67	2.3	85	4.5	23	4.4	7	4.3	10	4.3	61		
InvestorForce All DB Hedge Funds Net Median	1.6		4.4		2.2		0.7		1.7		4.8		2.8	
AQR DELTA XN	2.4	34	4.1	42	1.6	69	6.0	28	7.2	26	6.7	44		
Libor 1 month +4%	1.2	48	2.3	60	4.5	52	4.4	38	4.3	47	4.3	64		
eV Alt All Multi-Strategy Median	0.9		3.2		4.8		2.6		3.7		5.7		6.1	
Standard Life GARS*	1.8	39	2.2	60	-1.9	80								
Libor 1 month +4%	1.2	48	2.3	60	4.5	52	4.4	38	4.3	47	4.3	64		
eV Alt All Multi-Strategy Median	0.9		3.2		4.8		2.6		3.7		5.7		6.1	
Inflation Hedge	1.4		2.8		-									
Blended Inflation Pool Index ²	1.0		1.6											

^{2.} See Appendix for Benchmark History.



^{*} Funded October 2015.

^{**} Returns are one-quarter lag.

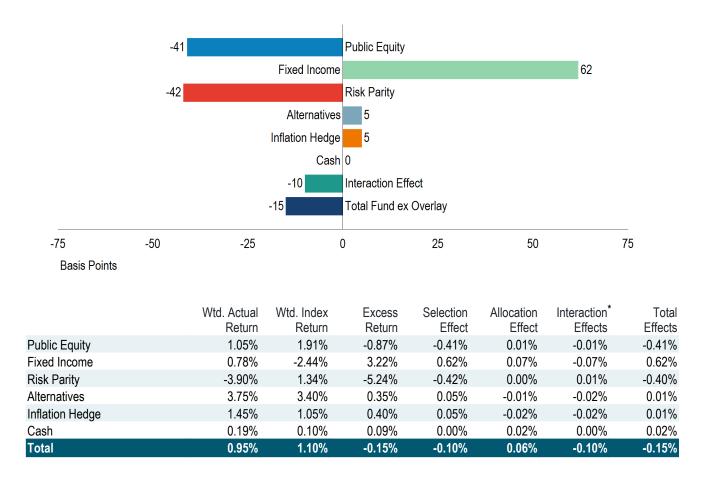
	3 Mo (%)	Rank	6 Mo (%)	Rank	1 Yr (%)	Rank	2 Yrs (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Real Estate	2.0	21	3.7	33	8.8	17	11.8	8	11.9	18	11.5	22	5.4	16
NCREIF ODCE	2.1	20	4.2	22	8.8	17	11.8	8	12.1	15	12.2	9	6.2	1
InvestorForce All DB Real Estate Pub Net Median	1.3		2.9		7.1		10.0		10.9		10.7		4.7	
Invesco	2.1		3.7		8.9		11.6		11.7		11.4		5.3	
NCREIF ODCE	2.1		4.2		8.8		11.8		12.1		12.2		6.2	
Invesco US Val IV*	1.0		4.6		6.5			-			-			
NCREIF ODCE	2.1		4.2		8.8		11.8		12.1		12.2		6.2	
NCREIF CEVA 1Q Lag - NET	2.5		4.8		13.1		15.0		15.1					
Private Real Asset **	0.0		0.0	-	44.6		17.9			-	-			
Blended Real Asset Index	1.0		2.4		6.4		5.6		5.6					
Liquid Pool	-			-	-	-		-		-	-			
Blended Real Asset Index	1.0		2.4		6.4		5.6		5.6					
SSgA Custom Real Asset***					-			-						
Blended Real Asset Index ²	1.0		2.4		6.4		5.6		5.6					
TIPS	-0.6		0.6	-	4.9		1.8	-	1.6		0.6			
BBgBarc US TIPS TR	-2.4		-1.5		4.7		1.6		2.3		0.9		4.4	
Brown Brothers Harriman	-0.6	16	0.6	17	4.9	34	1.8	12	1.6	66	0.6	72		
BBgBarc US TIPS TR	-2.4	57	-1.5	67	4.7	49	1.6	25	2.3	30	0.9	45	4.4	51
eA TIPS / Infl Indexed Fixed Inc Net Median	-2.3		-1.4		4.6		1.4		1.9		0.8		4.4	
Cash	0.2		0.4	-	0.8		1.0	-	0.8		0.7		0.9	
91 Day T-Bills	0.1		0.2		0.3		0.2		0.1		0.1		0.7	
General Account	0.2		0.5		1.0		1.5		1.2		0.7		1.3	
Treasury & LAIF	-0.2		-0.1		0.9		0.8	-	0.8		0.8		0.9	
91 Day T-Bills	0.1		0.2		0.3		0.2		0.1		0.1		0.7	

^{2.} See Appendix for Benchmark History.



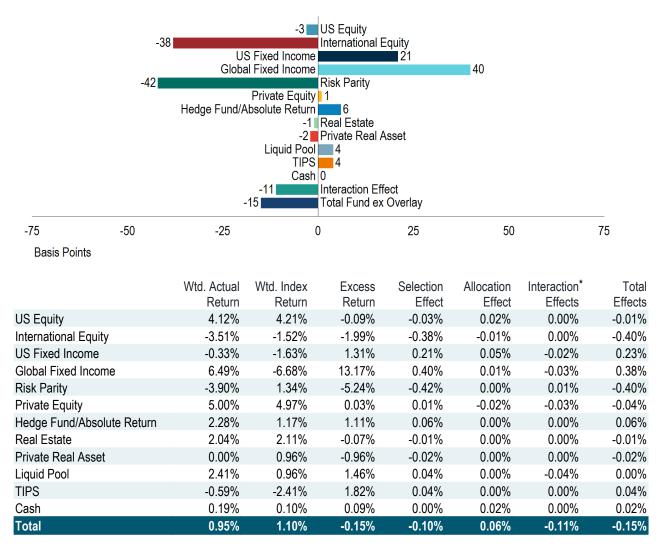
^{*} Funded December 2015.

^{**} Returns are one-quarter lag. *** Funded October 2016.



Attribution does not include the impact of the Parametric Minneapolis strategy.

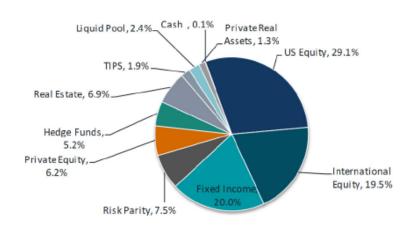
^{*} Interaction Effects include Residual Effects.



Attribution does not include the impact of the Parametric Minneapolis strategy. * Interaction Effects include Residual Effects.

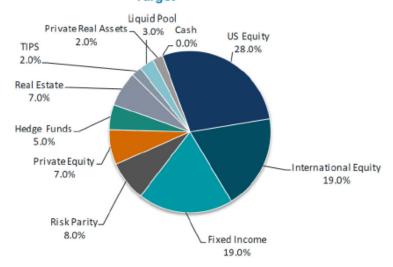


Current w/Overlay

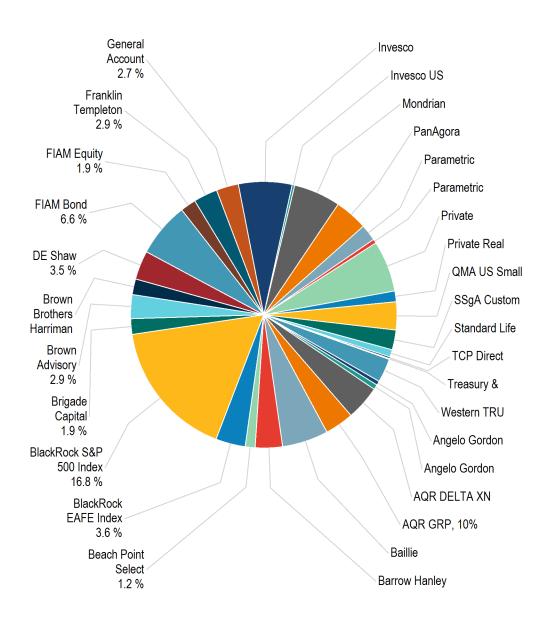


MARKET VALUE		
W/OVERLAY	W/OVERLAY	W/O OVERLAY
1,076,604,752	29.1%	29.9%
720,330,505	19.5%	18.7%
737,833,919	20.0%	16.8%
275,358,758	7.5%	7.5%
228,518,673	6.2%	6.2%
190,830,665	5.2%	5.2%
254,284,737	6.9%	6.9%
70,531,255	1.9%	1.9%
87037479	2.4%	2.4%
49,679,381	1.3%	1.3%
2,850,847	0.1%	3.3%
3,693,860,970	100.0%	100.0%
	W/OVERLAY 1,076,604,752 720,330,505 737,833,919 275,358,758 228,518,673 190,830,665 254,284,737 70,531,255 87037479 49,679,381 2,850,847	W/OVERLAY W/OVERLAY 1,076,604,752 29.1% 720,330,505 19.5% 737,833,919 20.0% 275,358,758 7.5% 228,518,673 6.2% 190,830,665 5.2% 254,284,737 6.9% 70,531,255 1.9% 87037479 2.4% 49,679,381 1.3% 2,850,847 0.1%

Target



ASSET ALLOCATION	W/OVERLAY	TARGET	DIFF
US Equity	29.1%	28.0%	1.1%
International Equity	19.5%	19.0%	0.5%
Fixed Income	20.0%	19.0%	1.0%
Risk Parity	7.5%	8.0%	-0.5%
Private Equity	6.2%	7.0%	-0.8%
Hedge Funds	5.2%	5.0%	0.2%
Real Estate	6.9%	7.0%	-0.1%
TIPS	1.9%	2.0%	-0.1%
Liquid Pool	2.4%	3.0%	-0.6%
Private Real Assets	1.3%	2.0%	-0.7%
Cash	0.1%	0.0%	0.1%
TOTAL	100.0%	100.0%	-0.0%



	Actual (\$)	Actual %
Angelo Gordon Opportunistic	\$18,019,000	0%
Angelo Gordon STAR	\$22,602,000	1%
AQR DELTA XN	\$156,647,941	4%
AQR GRP, 10% Volatility	\$128,374,183	3%
Baillie Gifford	\$205,117,199	6%
Barrow Hanley	\$121,655,270	3%
Beach Point Select	\$44,619,814	1%
BlackRock EAFE Index	\$131,587,491	4%
BlackRock S&P 500 Index	\$620,849,247	17%
Brigade Capital	\$70,052,952	2%
Brown Advisory	\$108,744,142	3%
Brown Brothers Harriman	\$70,531,255	2%
DE Shaw	\$129,387,705	4%
FIAM Bond	\$243,708,418	7%
FIAM Equity	\$69,987,002	2%
Franklin Templeton	\$106,360,730	3%
General Account	\$98,924,434	3%
Invesco	\$241,433,357	7%
Invesco US Val IV	\$12,851,380	0%
Mondrian	\$209,134,318	6%
PanAgora	\$146,984,575	4%
Parametric Core	\$74,641,305	2%
Parametric Minneapolis Overlay	\$20,025,722	1%
Private Equity	\$228,518,673	6%
Private Real Asset	\$49,679,381	1%
QMA US Small Cap	\$124,333,868	3%
SSgA Custom Real Asset	\$87,037,479	2%
Standard Life GARS	\$34,182,724	1%
TCP Direct Lending VIII	\$7,491,035	0%
Transition Account	\$4,707	0%
Treasury & LAIF	\$2,686,504	0%
Western TRU	\$107,687,157	3%
Total	\$3,693,860,970	100%

3 Years

	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank	Information Ratio	Information Ratio Rank	Tracking Error	Tracking Error Rank
Total Fund	4.9%	28	6.6%	67	0.7	34	0.0	36	1.1%	46
Policy Index	4.8%	29	7.1%	83	0.7	43			0.0%	1
InvestorForce Public DB > \$1B Net Median	4.1%		6.2%		0.6		-0.1		1.2%	

Statistics Summary

	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank	Information Ratio	Information Ratio Rank	Tracking Error	Tracking Error Rank
Total Fund	8.9%	19	6.9%	74	1.3	41	0.0	68	1.0%	22
Policy Index	9.0%	15	7.2%	82	1.2	47			0.0%	1
InvestorForce Public DB > \$1B Net Median	8.1%		6.3%		1.2		0.1		1.2%	

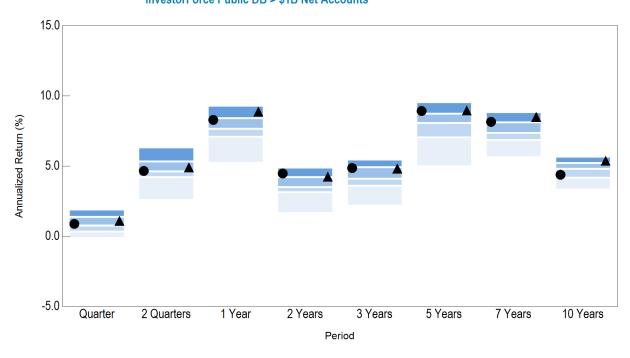
3 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Cash	0.8%	0.4%	1.8	1.9	0.4%
91 Day T-Bills	0.1%	0.0%	0.0		0.0%
General Account	1.2%	0.6%	1.8	1.8	0.6%
91 Day T-Bills	0.1%	0.0%	0.0		0.0%
Treasury & LAIF	0.8%	0.6%	1.3	1.3	0.6%
91 Day T-Bills	0.1%	0.0%	0.0		0.0%

Statistics Summary

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Cash	0.7%	0.3%	2.1	2.1	0.3%
91 Day T-Bills	0.1%	0.0%	0.0		0.0%
General Account	0.7%	0.5%	1.4	1.4	0.5%
91 Day T-Bills	0.1%	0.0%	0.0		0.0%
Treasury & LAIF	0.8%	0.4%	1.6	1.6	0.4%
91 Day T-Bills	0.1%	0.0%	0.0		0.0%

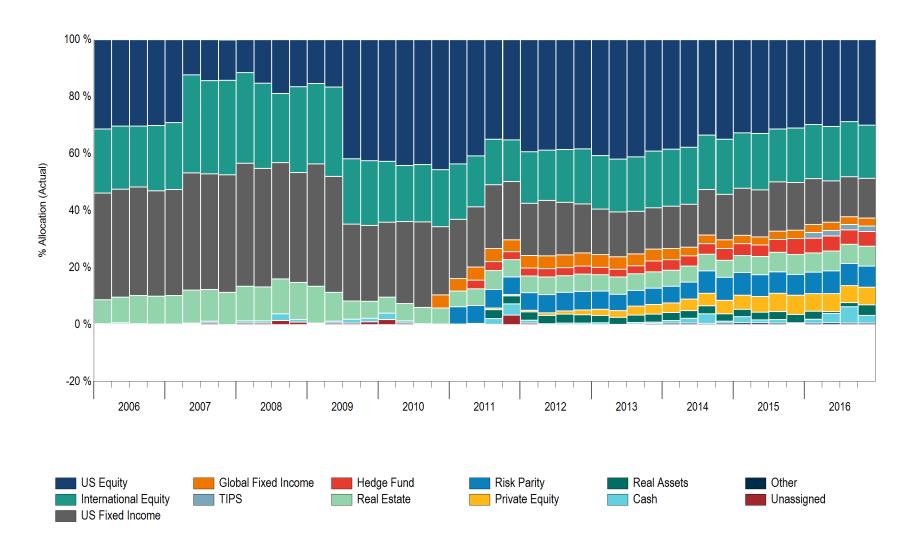
InvestorForce Public DB > \$1B Net Accounts



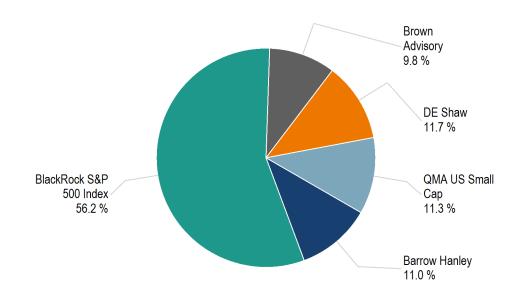
5th Percentile
25th Percentile
Median
75th Percentile
95th Percentile
of Portfolios

Total FundPolicy Index

Return (Ran	ık)						
1.9	6.3	9.3	4.9	5.4	9.5	8.8	5.7
1.4	5.4	8.4	4.2	4.9	8.8	8.1	5.2
8.0	4.6	7.7	3.5	4.1	8.1	7.4	4.8
0.3	4.2	7.1	3.2	3.6	7.1	6.9	4.2
-0.1	2.6	5.3	1.7	2.2	5.0	5.6	3.3
62	62	62	61	60	60	59	55
0.9 (48)	4.7 (50)	8.3 (33)	4.5 (22)	4.9 (28)	8.9 (19)	8.2 (25)	4.4 (67)
1.1 (39)	4.9 (43)	8.9 (13)	4.3 (25)	4.8 (29)	9.0 (15)	8.5 (13)	5.4 (16)







			Manager Contribution to
	Actual \$	Actual %	Excess Return %
Barrow Hanley	\$121,655,270	11.0%	0.2%
BlackRock S&P 500 Index	\$620,849,247	56.2%	0.0%
Brown Advisory	\$108,744,142	9.8%	-0.6%
DE Shaw	\$129,387,705	11.7%	-0.0%
QMA US Small Cap	\$124,333,868	11.3%	0.2%
Transition Account	\$4,707	0.0%	0.0%
Actual vs. Policy Weight Difference			0.1%
Total	\$1,104,974,940	100.0%	-0.1%

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
US Equity	7.2%	11.1%	0.6	-0.9	0.8%
Blended US Equity Index	8.0%	11.2%	0.7		0.0%
Russell 3000	8.4%	11.0%	0.8	0.5	0.9%

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Large Cap Equity	8.2%	10.7%	0.8	-0.5	0.8%
Russell 1000	8.6%	10.8%	0.8		0.0%
Barrow Hanley	7.3%	11.7%	0.6	-0.4	3.3%
Russell 1000 Value	8.6%	10.9%	0.8		0.0%
BlackRock S&P 500 Index	8.9%	10.7%	0.8	0.7	0.0%
S&P 500	8.9%	10.7%	0.8		0.0%
Brown Advisory	3.5%	11.2%	0.3	-1.2	4.3%
Russell 1000 Growth	8.6%	11.3%	0.7		0.0%
DE Shaw	9.7%	11.2%	0.9	0.5	2.2%
Russell 1000	8.6%	10.8%	0.8		0.0%
Small Cap Equity	4.3%	15.2%	0.3	-0.9	2.9%
Russell 2000	6.7%	16.0%	0.4		0.0%

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
US Equity	14.0%	10.8%	1.3	-0.6	0.9%
Blended US Equity Index	14.5%	10.9%	1.3		0.0%
Russell 3000	14.7%	10.6%	1.4	0.2	0.8%

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error		
Large Cap Equity	14.4%	10.5%	1.4	-0.3	0.9%		
Russell 1000	14.7%	10.5%	1.4		0.0%		
Barrow Hanley	14.6%	11.1%	1.3	-0.1	3.0%		
Russell 1000 Value	14.8%	10.6%	1.4		0.0%		
DE Shaw	16.0%	11.0%	1.4	0.7	2.0%		
Russell 1000	14.7%	10.5%	1.4		0.0%		
Small Cap Equity	12.8%	14.1%	0.9	-0.6	2.9%		
Russell 2000	14.5%	14.6%	1.0		0.0%		

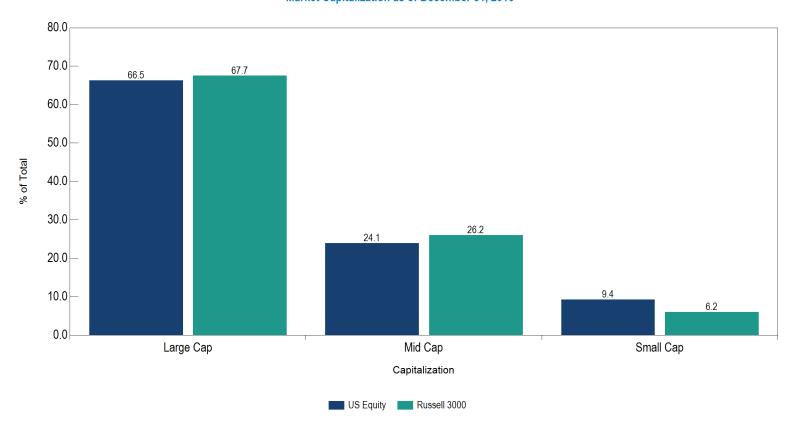
InvestorForce All DB US Eq Net Accounts



	Return	(Rank)											
5th Percentile	6.5	12.8	1	3.2	7.5	9.0		15.2		13.5		8.0	
25th Percentile	5.1	10.3	1	3.9	6.7	8.3		14.6		12.9		7.1	
Median	4.2	9.1	1:	2.5	6.1	7.6		14.1		12.4		6.8	
75th Percentile	3.8	8.2	! 1	0.9	5.0	6.5		13.4		11.8		6.4	
95th Percentile	1.6	6.0		7.4	3.2	4.7		12.1		10.7		5.5	
# of Portfolios	683	679	6	78	663	638		540		458		360	
US EquityBlended US Equity Index	4.1 4.2	(58) 8.6 (54) 9.1	\ /	1.2 (72 2.9 (40	,	(54) 7.2 (47) 8.0	(58) (39)	14.0 14.5	(56) (30)	12.2 12.9	(62) (28)	5.8 7.0	(91) (30)



Market Capitalization as of December 31, 2016



See appendix for the market capitalization breakpoints.

	Portfolio	Russell 3000
Number of Holdings	2,346	2,976
Weighted Avg. Market Cap. (\$B)	108.7	115.4
Median Market Cap. (\$B)	2.2	1.5
Price To Earnings	23.1	22.7
Price To Book	4.3	3.7
Price To Sales	3.5	3.2
Return on Equity (%)	19.4	16.4
Yield (%)	1.8	2.0
Beta (holdings; domestic)	1.0	1.0

Top Holdings	Post Porformers	Worst Performers

APPLE	2.6%
MICROSOFT	1.6%
AMAZON.COM	1.6%
JOHNSON & JOHNSON	1.2%
ALPHABET 'C'	1.2%
FACEBOOK CLASS A	1.2%
JP MORGAN CHASE & CO.	1.2%
EXXON MOBIL	1.1%
BERKSHIRE HATHAWAY 'B'	1.1%
VISA 'A'	1.0%

Best Performers							
	Return %						
ALTISOURCE ASSET MAN. (AAMC)	189.2%						
AK STEEL HLDG.	111.4%						
ERA GROUP (ERA)	110.8%						
FRED'S 'A'	106.1%						
PIER 1 IMPORTS (PIR)	104.8%						
REP.FIRST BANC.	103.2%						
WESTMORELAND COAL	99.4%						
CIVEO	93.0%						
KEMET	85.7%						
INTREPID POTASH	84.1%						

Worst Performers	
	Return %
OPHTHOTECH (OPHT)	-89.5%
ADEPTUS HEALTH CL.A	-82.3%
PROTEON THERAPEUTICS	-79.6%
ANTHERA PHARMACEUTICALS	-79.4%
OVASCIENCE	-78.6%
SENOMYX	-77.5%
TANDEM DIABETES CARE	-71.9%
BIOSCRIP (BIOS)	-64.0%
DYNAVAX TECHNOLOGIES	-62.3%
INVUITY	-58.1%

US Equity Performance Attribution vs. Russell 3000

		Attribution Effects				rns	Sector Weights		
	Total	Selection	Allocation	Interaction					
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark	
Energy	0.1%	0.1%	0.0%	0.0%	8.7%	7.4%	6.2%	6.8%	
Materials	0.0%	0.0%	0.0%	0.0%	4.4%	5.2%	4.0%	3.3%	
Industrials	0.0%	0.0%	0.0%	0.0%	7.9%	8.2%	10.8%	10.5%	
Consumer Discretionary	-0.2%	-0.2%	0.0%	0.0%	1.4%	3.0%	12.4%	12.6%	
Consumer Staples	0.0%	0.0%	0.0%	0.0%	-1.8%	-1.6%	9.2%	8.8%	
Health Care	0.1%	0.1%	0.0%	0.0%	-3.6%	-4.2%	14.3%	14.1%	
Financials	0.0%	0.0%	0.0%	0.0%	20.9%	20.6%	13.2%	13.4%	
Information Technology	-0.1%	0.0%	0.0%	0.0%	1.0%	1.2%	21.7%	20.5%	
Telecommunication Services	0.0%	0.0%	0.0%	0.0%	3.4%	5.3%	2.1%	2.4%	
Utilities	0.0%	0.0%	0.0%	0.0%	1.1%	0.8%	2.5%	3.3%	
Real Estate	0.2%	0.2%	0.1%	-0.1%	0.7%	-3.0%	2.9%	4.3%	
Cash	0.0%	0.0%	0.0%	0.0%	0.1%		0.6%	0.0%	
Unclassified	0.0%	0.0%	0.0%	0.0%	4.0%		0.1%	0.0%	
Portfolio	-0.1%	= 0.0%	+ 0.0%	+ -0.1%	4.2%	4.2%	100.0%	100.0%	

U.S. Effective Style Map



eA US Large Cap Equity Net Accounts



5th Percentile 25th Percentile
Median
75th Percentile
95th Percentile
of Portfolios
Large Cap Equity Russell 1000

9.0	15.4		18.8		7.9		9.6		15.9		13.8		9.1	
5.6	10.3		13.4		5.9		8.1		14.5		12.6		7.6	
3.3	6.9		9.4		4.5		6.9		13.3		11.7		6.8	
8.0	4.5		4.9		2.8		5.5		12.1		10.6		5.9	
-2.3	1.4		-0.8		0.3		2.8		10.0		9.1		4.6	
586	586		584		569		558		502		468		400	
3.3 (50	7.6	(45)	10.6	(40)	6.5	(18)	8.2	(24)	14.4	(27)	12.2	(37)	6.0	(74)
3.8 (43	8.0	(41)	12.1	(32)	6.3	(20)	8.6	(16)	14.7	(21)	12.9	(18)	7.1	(40)

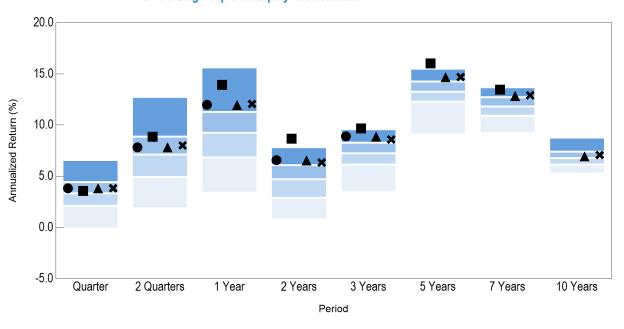
	Portfolio	Russell 1000
Number of Holdings	2,238	999
Weighted Avg. Market Cap. (\$B)	122.5	125.2
Median Market Cap. (\$B)	2.7	8.3
Price To Earnings	22.9	22.4
Price To Book	4.5	4.1
Price To Sales	3.6	3.3
Return on Equity (%)	19.9	18.0
Yield (%)	1.9	2.0
Beta (holdings; domestic)	1.0	1.0

Top Holdings		Best Performers	S	Worst Performers		
APPLE	3.0%		Return %		Return %	
MICROSOFT	1.8%	ALTISOURCE ASSET MAN.	189.2%	ОРНТНОТЕСН	-89.5%	
AMAZON.COM	1.8%	AK STEEL HLDG.	111.4%	ADEPTUS HEALTH CL.A	-82.3%	
JOHNSON & JOHNSON	1.4%	ERA GROUP (ERA)	110.8%	PROTEON THERAPEUTICS	-79.6%	
		FRED'S 'A' (FRED)	106.1%	ANTHERA PHARMACEUTICALS (ANTH)	-79.4%	
ALPHABET 'C'	1.4%	PIER 1 IMPORTS	104.8%	OVASCIENCE	-78.6%	
FACEBOOK CLASS A	1.4%	REP.FIRST BANC. (FRBK)	103.2%	SENOMYX	-77.5%	
JP MORGAN CHASE & CO.	1.3%	WESTMORELAND COAL	99.4%	TANDEM DIABETES CARE	-71.9%	
EXXON MOBIL	1.2%	CIVEO	93.0%	BIOSCRIP (BIOS)	-64.0%	
BERKSHIRE HATHAWAY 'B'	1.2%	KEMET (KEM)	85.7%	DYNAVAX TECHNOLOGIES (DVAX)	-62.3%	
		INTREPID POTASH (IPI)	84.1%	INVUITY (IVTY)	-58.1%	
VISA 'A'	1.2%	,				

Large Cap Equity Performance Attribution vs. Russell 1000

		Attribution Effects			Re	eturns	Secto	Sector Weights		
	Total	Selection	Allocation	Interaction						
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark		
Energy	0.0%	0.1%	0.0%	0.0%	8.0%	7.0%	6.6%	7.0%		
Materials	0.0%	0.0%	0.0%	0.0%	4.2%	4.5%	3.8%	3.2%		
Industrials	-0.1%	-0.1%	0.0%	0.0%	7.0%	7.7%	10.4%	10.2%		
Consumer Discretionary	-0.2%	-0.2%	0.0%	0.0%	0.6%	2.5%	12.3%	12.6%		
Consumer Staples	-0.1%	0.0%	0.0%	0.0%	-2.0%	-1.8%	9.9%	9.3%		
Health Care	0.0%	0.0%	0.0%	0.0%	-4.1%	-4.1%	14.4%	14.1%		
Financials	0.0%	0.0%	0.0%	0.0%	20.6%	20.4%	12.8%	13.1%		
Information Technology	-0.1%	-0.1%	0.0%	0.0%	0.6%	1.0%	22.0%	20.7%		
Telecommunication Services	0.0%	0.0%	0.0%	0.0%	3.3%	5.2%	2.3%	2.6%		
Utilities	0.0%	0.0%	0.0%	0.0%	0.2%	0.3%	2.4%	3.2%		
Real Estate	0.1%	0.0%	0.1%	0.0%	-4.1%	-4.2%	2.3%	4.0%		
Cash	0.0%	0.0%	0.0%	0.0%	0.1%		0.7%	0.0%		
Unclassified	0.0%	0.0%	0.0%	0.0%	4.0%		0.1%	0.0%		
Portfolio	-0.4%	= -0.4%	+ 0.0%	+ 0.0%	3.4%	3.8%	100.0%	100.0%		

eA US Large Cap Core Equity Net Accounts

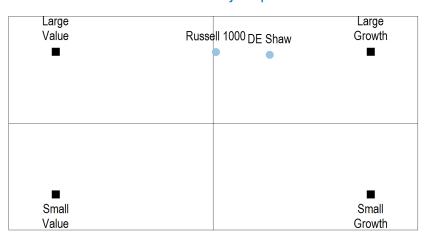


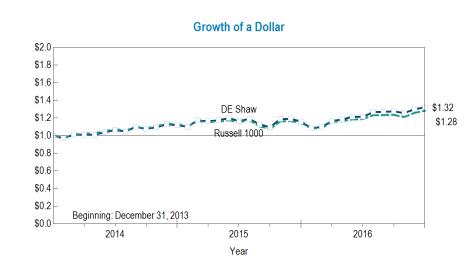
	Return	(Rank)							
5th Percentile	6.6	12.7	15.6	7.8	9.6	15.5	13.7	8.8	
25th Percentile	4.4	8.9	11.3	6.1	8.3	14.3	12.7	7.4	
Median	3.4	7.1	9.3	4.7	7.3	13.3	11.8	6.8	
75th Percentile	2.1	5.0	6.9	2.9	6.2	12.3	10.9	6.2	
95th Percentile	-0.1	1.9	3.4	0.8	3.5	9.1	9.2	5.3	
# of Portfolios	177	177	177	172	169	150	135	120	
● BlackRock S&P 500 Index	3.8	(42) 7.8	(39) 12.0	(20) 6.6	(18) 8.9	(14)	()	()	()
■ DE Shaw	3.6	(47) 8.9	(26) 13.9	(9) 8.7	(4) 9.7	(5) 16.0	(2) 13.4	(8)	()
▲ S&P 500	3.8	(42) 7.8	(39) 12.0	(21) 6.5	(18) 8.9	(15) 14.7	(20) 12.8	(21) 6.9	(41)
X Russell 1000	3.8	(42) 8.0	(38) 12.1	(20) 6.3	(21) 8.6	(18) 14.7	(19) 12.9	(18) 7.1	(36)

	Portfolio	S&P 500
Number of Holdings	506	505
Weighted Avg. Market Cap. (\$B)	138.5	138.5
Median Market Cap. (\$B)	18.8	18.8
Price To Earnings	23.1	22.3
Price To Book	4.7	4.4
Price To Sales	3.5	3.3
Return on Equity (%)	20.8	18.5
Yield (%)	2.1	2.1
Beta (holdings; domestic)	1.0	1.0

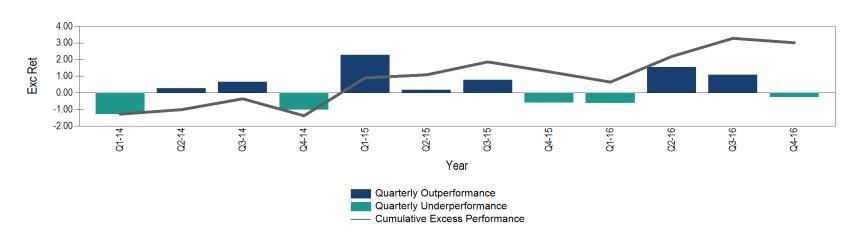
Top Holdings		Best Performers		Worst Performers		
APPLE	3.2%		Return %		Return %	
MICROSOFT	2.5%	NVIDIA (NVDA)	56.0%	ILLUMINA	-29.5%	
EXXON MOBIL	1.9%	KEYCORP	50.9%	MALLINCKRODT	-28.6%	
JOHNSON & JOHNSON	1.6%	GOLDMAN SACHS GP. (GS)	48.9%	TRIPADVISOR 'A' (TRIP)	-26.6%	
		REGIONS FINL.NEW (RF)	46.1%	UNDER ARMOUR CL C ORD (UA)	-25.7%	
BERKSHIRE HATHAWAY 'B'	1.6%	CITIZENS FINANCIAL GROUP	44.8%	UNDER ARMOUR 'A' (UAA)	-24.9%	
JP MORGAN CHASE & CO.	1.6%	COMERICA (CMA)	44.4%	CERNER	-23.3%	
AMAZON.COM	1.5%	LINCOLN NATIONAL	41.8%	EDWARDS LIFESCIENCES (EW)	-22.3%	
GENERAL ELECTRIC	1.5%	BANK OF AMERICA	41.7%	SOUTHWESTERN ENERGY	-21.8%	
FACEBOOK CLASS A	1.4%	ZIONS BANCORP.	39.0%	COTY CL.A	-21.6%	
		UNITED CONTINENTAL HDG.	38.9%	NIELSEN	-21.1%	
AT&T	1.4%					

U.S. Effective Style Map

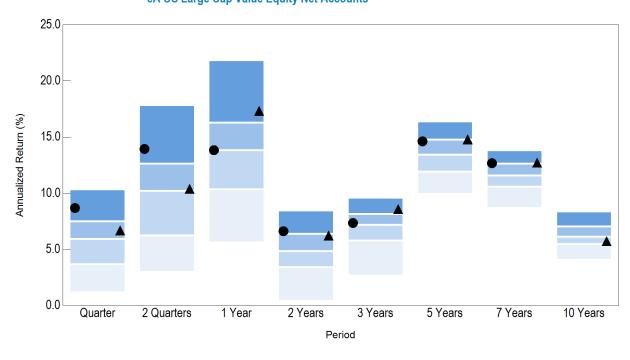




Quarterly and Cumulative Excess Performance



eA US Large Cap Value Equity Net Accounts



	Return (Rai	nk)					
5th Percentile	10.3	17.8	21.8	8.4	9.6	16.4	13.8
25th Percentile	7.5	12.6	16.3	6.4	8.2	14.8	12.7
Median	5.9	10.2	13.8	4.9	7.2	13.4	11.6
75th Percentile	3.7	6.3	10.4	3.4	5.8	11.9	10.6
95th Percentile	1.2	3.0	5.6	0.4	2.7	9.9	8.7
# of Portfolios	225	225	225	219	212	190	179
● Barrow Hanley ▲ Russell 1000 Value	8.7 (14 6.7 (42	, , ,	13.8 (50) 17.3 (19)	6.6 (22) 6.2 (28)	7.3 (47) 8.6 (19)	14.6 (29) 14.8 (25)	()

8.4 7.0 6.1 5.5 4.1

-- (--) 5.7 (66)

Number of Holdings 76 696 Weighted Avg. Market Cap. (\$B) 90.5 114.0 Median Market Cap. (\$B) 36.8 8.0 Price To Earnings 17.3 19.8 Price To Book 2.9 2.4 Price To Sales 2.3 2.8 Return on Equity (%) 16.0 11.6 Yield (%) 2.3 2.4 Pota (baldings: demostic) 1.1 1.0		Portfolio	Russell 1000 Value
Median Market Cap. (\$B) 36.8 8.0 Price To Earnings 17.3 19.8 Price To Book 2.9 2.4 Price To Sales 2.3 2.8 Return on Equity (%) 16.0 11.6 Yield (%) 2.3 2.4	Number of Holdings	76	696
Price To Earnings 17.3 19.8 Price To Book 2.9 2.4 Price To Sales 2.3 2.8 Return on Equity (%) 16.0 11.6 Yield (%) 2.3 2.4	Weighted Avg. Market Cap. (\$B)	90.5	114.0
Price To Book 2.9 2.4 Price To Sales 2.3 2.8 Return on Equity (%) 16.0 11.6 Yield (%) 2.3 2.4	Median Market Cap. (\$B)	36.8	8.0
Price To Sales 2.3 2.8 Return on Equity (%) 16.0 11.6 Yield (%) 2.3 2.4	Price To Earnings	17.3	19.8
Return on Equity (%) 16.0 11.6 Yield (%) 2.3 2.4	Price To Book	2.9	2.4
Yield (%) 2.3 2.4	Price To Sales	2.3	2.8
	Return on Equity (%)	16.0	11.6
Pota (holdings: domestic)	Yield (%)	2.3	2.4
beta (notatings, domestic)	Beta (holdings; domestic)	1.1	1.0

Tan Haldings	D (D)	W (D f
Top Holdings	Rest Performers	Worst Performers

		•	
CITIGROUP			2.6%
JP MORGAN CHAS	E & CO.		2.4%
BANK OF AMERICA	4		2.2%
CAPITAL ONE FINL			2.0%
WELLS FARGO & C	CO		1.9%
UNITEDHEALTH GI	ROUP		1.8%
PNC FINL.SVS.GP.			1.7%
HESS			1.7%
CHEVRON			1.7%
CONOCOPHILLIPS			1.7%

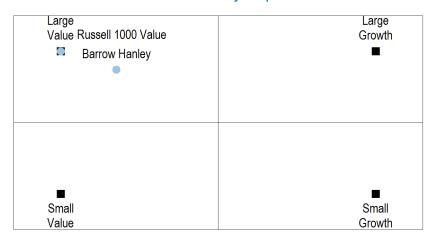
Best Performers	
	Return %
KEYCORP (KEY)	50.9%
SLM (SLM)	47.5%
BANK OF AMERICA (BAC)	41.7%
SEAWORLD ENTERTAINMENT (SEAS)	40.4%
FAIRMONT SANTROL HDG. (FMSA)	39.0%
FIFTH THIRD BANCORP (FITB)	32.5%
SPIRIT AEROSYSTEMS CL.A (SPR)	31.2%
PNC FINL.SVS.GP. (PNC)	30.6%
JP MORGAN CHASE & CO. (JPM)	30.5%
DISCOVER FINANCIAL SVS. (DFS)	28.2%

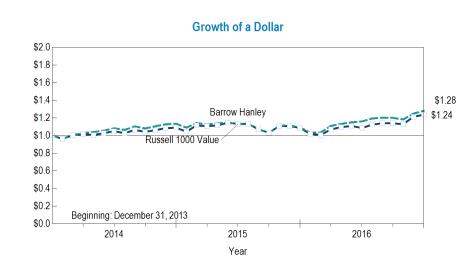
worst Performers	
	Return %
NIELSEN (NLSN)	-21.1%
COCA COLA ENTS. (CCE)	-20.9%
TEVA PHARM.INDS.ADR 1:1 (TEVA)	-20.5%
MEDTRONIC (MDT)	-17.1%
HANESBRANDS (HBI)	-14.2%
CVS HEALTH (CVS)	-10.9%
WILLIS GROUP HOLDINGS (WLTW)	-7.5%
FIDELITY NAT.FINANCIAL (FNF)	-7.3%
CARDINAL HEALTH (CAH)	-6.8%
STANLEY BLACK & DECKER (SWK)	-6.3%

Barrow Hanley Performance Attribution vs. Russell 1000 Value

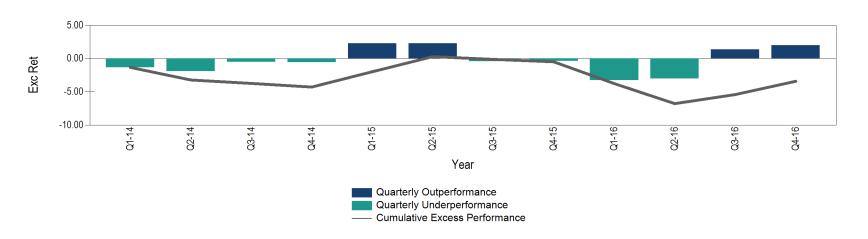
		Attribution Effects			Re	eturns	Secto	Sector Weights	
	Total	Selection	Allocation	Interaction					
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark	
Energy	0.6%	0.8%	0.0%	-0.2%	13.3%	7.4%	10.8%	13.5%	
Materials	0.1%	0.0%	0.1%	0.0%	7.3%	7.5%	6.5%	2.9%	
Industrials	-0.4%	-0.4%	0.1%	-0.1%	4.4%	8.7%	13.9%	9.8%	
Consumer Discretionary	0.1%	0.1%	-0.1%	0.1%	7.4%	4.8%	7.7%	4.6%	
Consumer Staples	0.3%	0.2%	0.2%	0.0%	-1.5%	-3.4%	6.7%	8.9%	
Health Care	0.0%	0.4%	-0.4%	0.1%	-2.0%	-4.9%	15.0%	11.5%	
Financials	0.5%	-0.1%	0.6%	0.0%	21.4%	22.0%	28.3%	23.4%	
Information Technology	0.3%	0.3%	0.1%	0.0%	3.1%	0.6%	8.6%	10.0%	
Telecommunication Services	0.0%	-0.1%	0.0%	0.0%	3.9%	5.4%	1.5%	3.9%	
Utilities	0.4%		0.4%			0.3%	0.0%	6.5%	
Real Estate	0.5%		0.5%			-3.6%	0.0%	5.1%	
Cash	-0.1%	0.0%	-0.1%	0.0%	0.1%		0.9%	0.0%	
Portfolio	2.4%	= 1.1%	+ 1.5%	+ -0.2%	9.1%	6.7%	100.0%	100.0%	

U.S. Effective Style Map

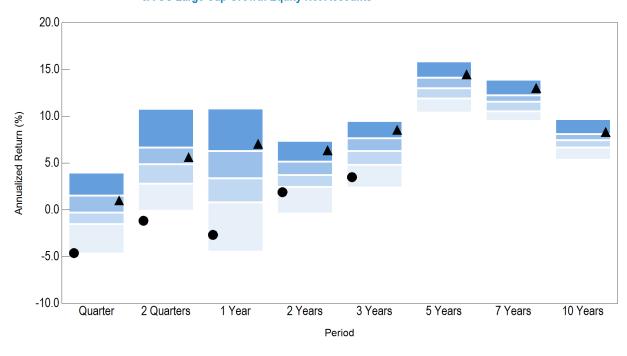




Quarterly and Cumulative Excess Performance



eA US Large Cap Growth Equity Net Accounts



	Return (Rai	ık)						
5th Percentile	4.0	10.8	10.8	7.4	9.5	15.9	13.9	9.7
25th Percentile	1.5	6.7	6.3	5.2	7.7	14.2	12.3	8.1
Median	-0.3	4.9	3.4	3.7	6.3	13.0	11.6	7.5
75th Percentile	-1.5	2.8	8.0	2.5	4.8	11.9	10.6	6.7
95th Percentile	-4.7	-0.1	-4.5	-0.4	2.4	10.4	9.5	5.4
# of Portfolios	184	184	182	178	177	162	154	130
Brown AdvisoryRussell 1000 Growth	-4.6 (95 1.0 (33	, , ,	-2.7 (92) 7.1 (20)	1.9 (82) 6.4 (13)	3.5 (92) 8.6 (12)	() 14.5 (19)	() 13.0 (15)	() 8.3 (21)

	Portfolio	Russell 1000 Growth
Number of Holdings	35	606
Weighted Avg. Market Cap. (\$B)	71.0	136.9
Median Market Cap. (\$B)	20.7	8.8
Price To Earnings	33.3	25.2
Price To Book	5.6	6.6
Price To Sales	6.4	3.5
Return on Equity (%)	17.0	25.8
Yield (%)	0.5	1.6
Beta (holdings; domestic)	1.0	1.0

Top Holdings		Best Performers		Worst Performers		
VISA 'A'	4.7%		Return %		Return %	
AMAZON.COM	4.6%	AKAMAI TECHS. (AKAM)	25.8%	DEXCOM (DXCM)	-31.9%	
STARBUCKS	4.4%	COGNIZANT TECH.SLTN.'A' (CTSH)	17.4%	TRIPADVISOR 'A' (TRIP)	-26.6%	
FACEBOOK CLASS A	4.4%	FORTIVE WHEN ISSUED (FTV)	5.5%	UNDER ARMOUR CL C ORD (UA)	-25.7%	
		COSTCO WHOLESALE (COST)	5.3%	UNDER ARMOUR 'A' (UAA)	-24.9%	
COSTCO WHOLESALE	4.1%	AMPHENOL 'A' (APH)	3.8%	FLEETCOR TECHNOLOGIES (FLT)	-18.5%	
DANAHER	4.0%	STARBUCKS (SBUX)	3.0%	ESTEE LAUDER COS.'A' (EL)	-13.3%	
AMPHENOL 'A'	3.9%	WABTEC (WAB)	1.8%	INTUITIVE SURGICAL (ISRG)	-12.5%	
ECOLAB	3.9%	GENPACT (G)	1.6%	AMAZON.COM (AMZN)	-10.4%	
INTUITIVE SURGICAL	3.6%	ROPER TECHNOLOGIES (ROP)	0.5%	FACEBOOK CLASS A (FB)	-10.3%	
NYD OF MICONDUCTORS	3.0%	ANSYS (ANSS)	-0.1%	MEAD JOHNSON NUTRITION (MJN)	-9.9%	

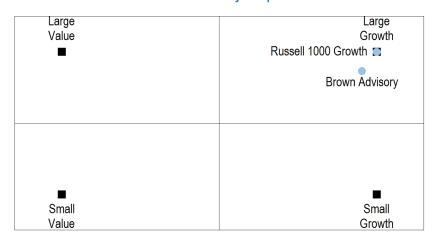
NXP SEMICONDUCTORS

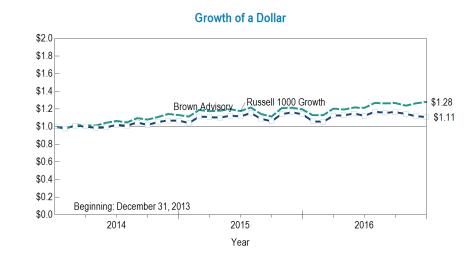
3.6%

Brown Advisory Performance Attribution vs. Russell 1000 Growth

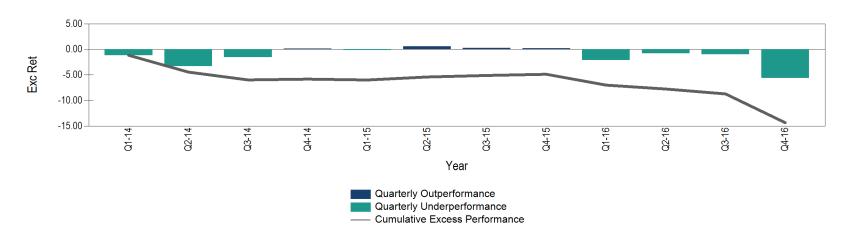
			Attribution Effec	ets	Re	eturns	Sector Weights	
	Total	Selection	Allocation	Interaction				
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	0.0%		0.0%	-		-0.9%	0.0%	0.6%
Materials	-0.2%	-0.2%	0.0%	0.0%	-3.4%	2.1%	3.4%	3.6%
Industrials	-0.5%	-0.4%	-0.2%	0.1%	2.7%	6.8%	7.1%	10.5%
Consumer Discretionary	-2.1%	-3.1%	-0.1%	1.0%	-12.4%	2.1%	14.1%	20.5%
Consumer Staples	-0.5%	-0.5%	0.0%	0.0%	-5.7%	-0.5%	9.9%	9.6%
Health Care	-0.8%	-0.9%	0.1%	0.0%	-8.9%	-3.4%	15.0%	16.8%
Financials	-0.2%		-0.2%			6.7%	0.0%	2.7%
Information Technology	-1.6%	-1.2%	0.0%	-0.4%	-2.7%	1.1%	43.3%	31.5%
Telecommunication Services	-0.3%	-0.1%	0.1%	-0.2%	-7.9%	4.5%	2.5%	1.2%
Utilities	0.0%		0.0%			3.4%	0.0%	0.1%
Real Estate	0.2%		0.2%			-5.3%	0.0%	2.8%
Cash	-0.1%	0.0%	-0.1%	0.0%	0.1%		4.6%	0.0%
Portfolio	-5.9%	= -6.4%	+ -0.1%	+ 0.6%	-4.9%	1.0%	100.0%	100.0%

U.S. Effective Style Map





Quarterly and Cumulative Excess Performance







5th Percentile 25th Percentile Median 75th Percentile
95th Percentile # of Portfolios

● Small Cap Equity ▲ Russell 2000

Return	(Rank)														
15.5		25.2		32.3		13.0		10.8		18.0		16.7		10.5	
11.8		20.5		25.6		10.4		8.7		15.8		14.6		8.5	
8.8		16.6		19.7		7.7		6.5		14.3		13.5		7.6	
4.3		12.4		12.8		4.6		3.5		12.5		12.0		6.7	
-0.9		7.0		5.0		-0.5		-0.9		9.7		9.5		4.9	
378		375		374		355		349		318		303		248	
10.6 8.8	(36) (50)	17.0 18.7	(46) (38)	17.2 21.3	(62) (42)	4.9 7.7	(73) (50)	4.3 6.7	(71) (49)	12.8 14.5	(70) (49)	12.9 13.2	(61) (54)	4.9 7.1	(95) (66)

Top Holdings

0.7%

Characteristics

	Portfolio	Russell 2000
Number of Holdings	345	1,978
Weighted Avg. Market Cap. (\$B)	1.9	2.1
Median Market Cap. (\$B)	1.2	0.8
Price To Earnings	24.9	25.1
Price To Book	3.4	3.0
Price To Sales	2.2	2.1
Return on Equity (%)	15.2	10.1
Yield (%)	1.3	1.1
Beta (holdings; domestic)	1.2	1.3

10p Holdings		DC3LFCHOIHICI3		Worst renormers			
GEO GROUP	0.9%		Return %		Return %		
WINTRUST FINANCIAL	0.8%	WESTMORELAND COAL	99.4%	AVID TECHNOLOGY	-44.6%		
EMCOR GROUP	0.8%	CORRECTIONS AMER NEW	79.4%	JAKKS PACIFIC (JAKK)	-40.4%		
UNITED COMMUNITY BANKS	0.8%	MERCHANTS BANCSHARES	68.4%	BRIGHTCOVE	-38.3%		
		EVOLUTION PETROLEUM	60.4%	PDL BIOPHARMA	-36.7%		
IROBOT	0.7%	VECTRUS (VEC)	56.6%	RESOURCE CAPITAL	-34.6%		
MAGELLAN HEALTH	0.7%	GEO GROUP (GEO)	55.3%	LIBERTY TRIP ADVI.HDG. SR.A (LTRPA)	-31.1%		
GRAND CANYON EDUCATION	0.7%	SOUTHWEST BANC.OF OK.	53.4%	MALLINCKRODT	-28.6%		
RYMAN HOSPITALITY PROPS.	0.7%	EXTERRAN WNI. (EXTN)	52.4%	TAHOE RESOURCES	-25.9%		
SYNNEX	0.7%	CAPELLA EDUCATION	52.0%	COEUR MINING	-23.2%		
STRINEA	0.7 %	MCDERMOTT INTL.	47.5%	FIRST NBC BANK HOLDING (FNBC)	-22.7%		

Best Performers

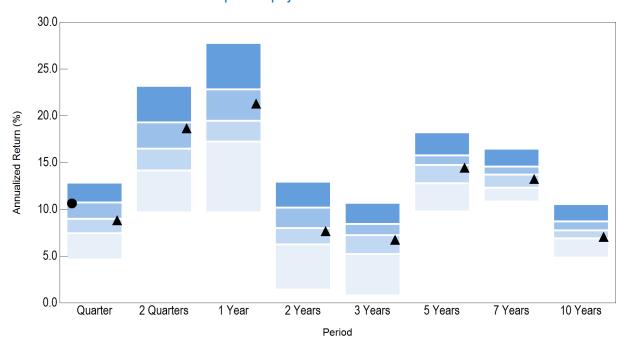
TEXAS ROADHOUSE

Worst Performers

Small Cap Equity Performance Attribution vs. Russell 2000

			Attribution Effec	ts		eturns	Sector Weights		
	Total	Selection	Allocation	Interaction					
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark	
Energy	0.1%	0.3%	-0.1%	-0.1%	26.5%	17.7%	2.3%	3.2%	
Materials	-0.3%	-0.3%	0.0%	0.0%	5.5%	11.4%	5.2%	4.7%	
Industrials	0.2%	0.1%	0.0%	0.0%	13.5%	12.5%	14.7%	14.2%	
Consumer Discretionary	0.0%	0.0%	0.0%	0.0%	8.2%	7.9%	13.5%	12.7%	
Consumer Staples	-0.1%	-0.1%	0.0%	0.0%	3.6%	6.4%	3.1%	3.0%	
Health Care	1.0%	1.0%	0.0%	0.0%	0.8%	-6.3%	13.7%	14.0%	
Financials	-0.1%	0.0%	-0.2%	0.0%	23.2%	22.9%	16.7%	18.0%	
Information Technology	-0.1%	0.0%	-0.1%	0.0%	4.7%	4.7%	19.1%	17.7%	
Telecommunication Services	0.0%	0.0%	0.0%	0.0%	8.0%	9.1%	0.3%	0.8%	
Utilities	0.1%	0.1%	0.0%	0.0%	7.0%	5.3%	3.1%	3.8%	
Real Estate	0.7%	0.7%	0.0%	0.0%	13.1%	4.1%	7.8%	7.9%	
Cash	0.0%	0.0%	0.0%	0.0%	0.1%		0.4%	0.0%	
Portfolio	1.5%	= 1.9%	+ -0.3%	+ -0.1%	10.2%	8.7%	100.0%	100.0%	

eA US Small Cap Core Equity Net Accounts



E(I B) (II
5th Percentile
25th Percentile
Median
75th Percentile
95th Percentile
of Portfolios
OMA HE Small

Return	(Rank)															
12.9		23.2		27.8		12.9		10.7		18.2		16.5		10.6		
10.8		19.3		22.8		10.2		8.5		15.8		14.6		8.7		
9.0		16.5		19.5		8.0		7.2		14.8		13.7		7.8		
7.5		14.2		17.3		6.2		5.2		12.8		12.3		6.9		
4.6		9.7		9.7		1.4		8.0		9.8		10.8		4.8		
99		99		99		97		96		88		78		59		
10.6 8.8	(26) (54)	 18.7	() (32)	21.3	() (34)	 7.7	() (57)	6.7	() (53)	 14.5	() (54)	 13.2	() (57)	 7 1	() (70)	
0.0	(54)	10.7	(32)	21.3	(04)	1.1	(31)	0.7	(55)	14.5	(34)	13.2	(37)	7.1	(10)	

QMA US Small CapRussell 2000

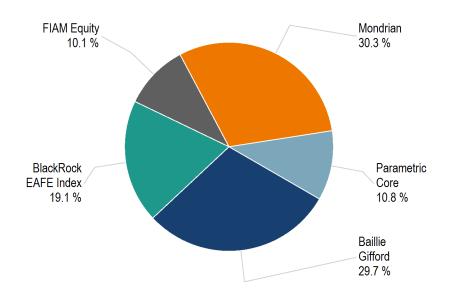
	Portfolio	Russell 2000
Number of Holdings	344	1,978
Weighted Avg. Market Cap. (\$B)	1.9	2.1
Median Market Cap. (\$B)	1.2	0.8
Price To Earnings	24.9	25.1
Price To Book	3.4	3.0
Price To Sales	2.2	2.1
Return on Equity (%)	15.2	10.1
Yield (%)	1.3	1.1
Beta (holdings; domestic)	1.2	1.3

Top Holdings	Best Performers	Worst Performers

GEO GROUP	0.9%	Destr chomics	Return %		Return %
WINTRUST FINANCIAL	0.8%	WESTMORELAND COAL	99.4%	AVID TECHNOLOGY (AVID)	-44.6%
EMCOR GROUP	0.8%	CORRECTIONS AMER NEW	79.4%	JAKKS PACIFIC (JAKK)	-40.4%
UNITED COMMUNITY BANKS	0.8%	MERCHANTS BANCSHARES (MBVT)	68.4%	BRIGHTCOVE (BCOV)	-38.3%
IROBOT	0.7%	EVOLUTION PETROLEUM	60.4%	PDL BIOPHARMA	-36.7%
		VECTRUS (VEC)	56.6%	RESOURCE CAPITAL (RSO)	-34.6%
MAGELLAN HEALTH	0.7%	GEO GROUP	55.3%	LIBERTY TRIP ADVI.HDG. SR.A	-31.1%
GRAND CANYON EDUCATION	0.7%	SOUTHWEST BANC.OF OK.	53.4%	MALLINCKRODT	-28.6%
RYMAN HOSPITALITY PROPS.	0.7%	EXTERRAN WNI.	52.4%	TAHOE RESOURCES (C:THO)	-25.9%
SYNNEX	0.7%	CAPELLA EDUCATION	52.0%	COEUR MINING	-23.2%
TEXAS ROADHOUSE	0.7%	MCDERMOTT INTL.	47.5%	FIRST NBC BANK HOLDING (FNBC)	-22.7%

QMA US Small Cap Performance Attribution vs. Russell 2000

			Attribution Effects			turns	Sector Weights	
	Total	Selection	Allocation	Interaction				
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	0.1%	0.3%	-0.1%	-0.1%	26.5%	17.7%	2.4%	3.2%
Materials	-0.3%	-0.3%	0.0%	0.0%	5.5%	11.4%	5.2%	4.7%
Industrials	0.2%	0.1%	0.0%	0.0%	13.5%	12.5%	14.7%	14.2%
Consumer Discretionary	0.0%	0.0%	0.0%	0.0%	8.2%	7.9%	13.6%	12.7%
Consumer Staples	-0.1%	-0.1%	0.0%	0.0%	3.6%	6.4%	3.1%	3.0%
Health Care	1.0%	1.0%	0.0%	0.0%	0.8%	-6.3%	13.8%	14.0%
Financials	-0.1%	0.0%	-0.2%	0.0%	23.2%	22.9%	16.7%	18.0%
Information Technology	-0.1%	0.0%	-0.1%	0.0%	4.7%	4.7%	19.2%	17.7%
Telecommunication Services	0.0%	0.0%	0.0%	0.0%	8.0%	9.1%	0.3%	0.8%
Utilities	0.1%	0.1%	0.0%	0.0%	7.0%	5.3%	3.1%	3.8%
Real Estate	0.7%	0.7%	0.0%	0.0%	13.1%	4.1%	7.8%	7.9%
Cash	0.0%						0.0%	0.0%
Portfolio	1.5%	= 1.9%	+ -0.2%	+ -0.1%	10.3%	8.7%	100.0%	100.0%



	A	A	Manager Contribution to
	Actual \$	Actual %	Excess Return %
Baillie Gifford	\$205,117,199	29.7%	-1.8%
BlackRock EAFE Index	\$131,587,491	19.1%	0.0%
FIAM Equity	\$69,987,002	10.1%	-0.2%
Mondrian	\$209,134,318	30.3%	-1.3%
Parametric Core	\$74,641,305	10.8%	0.2%
Actual vs. Policy Weight Difference			1.2%
Total	\$690,467,316	100.0%	-2.0%

Statistics Summary

3 Years

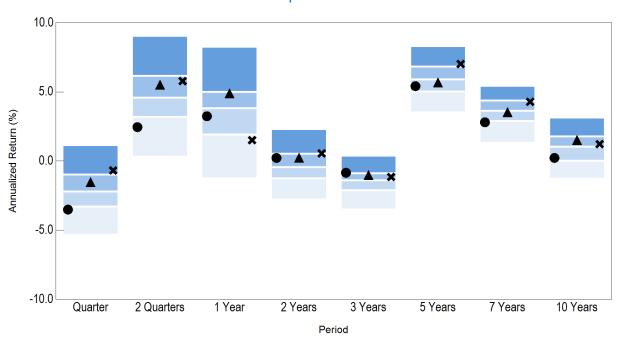
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
International Equity	-0.8%	12.4%	-0.1	0.1	1.7%
MSCI ACWI ex US IMI	-1.0%	12.6%	-0.1		0.0%
Developed Markets	-0.6%	12.4%	-0.1	0.3	2.2%
MSCI ACWI ex USA Gross	-1.3%	12.7%	-0.1		0.0%
Baillie Gifford	-0.1%	13.8%	0.0	0.3	4.3%
MSCI ACWI ex US	-1.3%	12.7%	-0.1		0.0%
BlackRock EAFE Index	-1.3%	12.7%	-0.1	2.6	0.1%
MSCI EAFE	-1.6%	12.6%	-0.1		0.0%
FIAM Equity	0.2%	12.0%	0.0	-0.3	2.6%
MSCI ACWI ex US Small Cap Gross	1.1%	12.3%	0.1		0.0%
Mondrian	-0.8%	12.0%	-0.1	0.2	5.0%
MSCI ACWI ex USA Value Gross	-1.9%	13.7%	-0.1		0.0%

Statistics Summary

5 Years

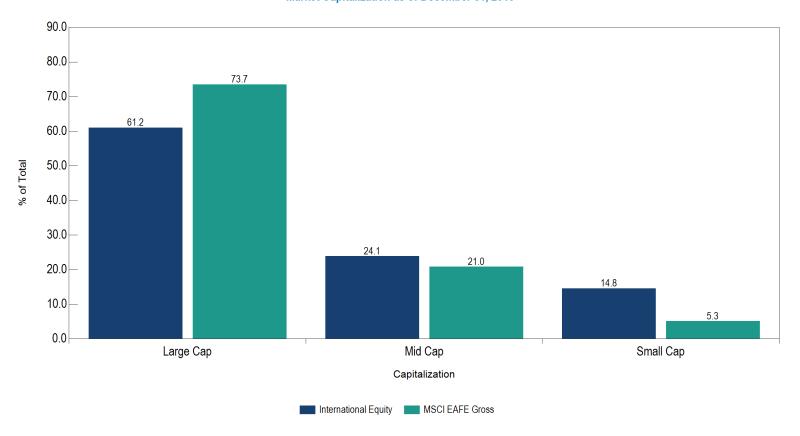
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
International Equity	5.4%	12.6%	0.4	-0.1	2.0%
MSCI ACWI ex US IMI	5.7%	13.3%	0.4		0.0%
Developed Markets	6.0%	12.6%	0.5	0.2	2.3%
MSCI ACWI ex USA Gross	5.5%	13.3%	0.4		0.0%
Mondrian	4.8%	12.5%	0.4	-0.1	4.8%
MSCI ACWI ex USA Value Gross	5.2%	14.4%	0.4		0.0%

InvestorForce All DB ex-US Eq Net Accounts



	Return	(Rank)														
5th Percentile	1.1		9.0		8.3		2.3		0.4		8.3		5.4		3.1	
25th Percentile	-1.0		6.2		5.0		0.5		-0.9		6.8		4.4		1.8	
Median	-2.2		4.6		3.8		-0.4		-1.4		5.9		3.6		1.1	
75th Percentile	-3.3		3.2		1.9		-1.2		-2.1		5.0		2.9		0.0	
95th Percentile	-5.3		0.3		-1.2		-2.8		-3.5		3.5		1.3		-1.3	
# of Portfolios	483		480		479		464		442		369		311		244	
 International Equity 	-3.5	(79)	2.5	(84)	3.2	(61)	0.2	(33)	-0.8	(24)	5.4	(65)	2.8	(78)	0.2	(72)
▲ MSCI ACWI ex US IMI	-1.5	(35)	5.5	(34)	4.9	(28)	0.3	(32)	-1.0	(32)	5.7	(56)	3.5	(54)	1.5	(34)
★ MSCI EAFE Gross	-0.7	(21)	5.8	(30)	1.5	(78)	0.6	(25)	-1.2	(38)	7.0	(21)	4.3	(28)	1.2	(44)





Excludes FIAM Equity holdings.

See appendix for the market capitalization breakpoints.



	Portfolio	MSCI ACWI ex USA IMI Gross
Number of Holdings	2,061	6,150
Weighted Avg. Market Cap. (\$B)	40.5	42.7
Median Market Cap. (\$B)	5.8	1.2
Price To Earnings	22.4	20.1
Price To Book	3.7	2.5
Price To Sales	2.8	1.8
Return on Equity (%)	15.9	13.2
Yield (%)	2.9	2.8
Beta (holdings; global)	1.0	1.0

To	op Holdings	Best Performers		Worst Performers		
NESTLE 'R'	1.4%		Return %		Return %	
UNITED OVERSEAS BAN	NK 1.3%	BUMI RESOURCES (ID:BMH)	296.0%	SIGMAGOLD INTI PERKASA (ID:LAG)	-82.1%	
UNILEVER (UK)	1.3%	SHARP (J:SH@N)	73.6%	SIBANYE GOLD	-48.4%	
SANOFI	1.1%	VIA VAREJO UNITS	68.5%	DRYSHIPS (DRYS)	-45.8%	
		ASSORE (R:ASRJ)	60.5%	HANMI PHARM (KO:HPM)	-45.2%	
BP	1.0%	COMPANIA SUDAMERICANA DE VAPORES	58.1%	VOCUS COMMUNICATIONS (A:VOCX)	-41.2%	
GLAXOSMITHKLINE	1.0%	(CL:VPR)	30.170	SWANCOR INDUSTRIES (TW:SWC)	-41.2%	
COCHLEAR	1.0%	NVIDIA (NVDA)	56.0%	DENA	-39.3%	
HONDA MOTOR	0.9%	INDO TAMBANGRAYA MEGAH (ID:INM)	53.9%	FELDA GLOBAL VENT.HDG.	-38.9%	
		SAMART FB (Q:SAAF)	52.8%	IMPALA PLATINUM	-38.2%	
ABB LTD N	0.9%	UNION PROPERTIES	51.7%	COSTAMARE	-37.9%	
IBERDROLA	0.9%	CHINA BLUE CHEMICAL 'H' (K:CHBC)	51.5%			



International Equity Performance Attribution vs. MSCI ACWI ex USA IMI Gross

		. Α	ttribution Effects		Retu	rns	Sector W	/eights
	Total	Selection	Allocation	Interaction				
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	0.0%	0.1%	-0.1%	0.0%	10.0%	8.4%	5.2%	6.2%
Materials	-0.1%	-0.8%	-0.1%	0.8%	-5.3%	1.8%	4.8%	8.0%
Industrials	-0.2%	-0.5%	0.0%	0.3%	-3.6%	-2.1%	12.9%	12.8%
Consumer Discretionary	-0.8%	-0.6%	0.0%	-0.2%	-4.8%	-1.4%	14.5%	12.0%
Consumer Staples	-0.6%	0.2%	-0.4%	-0.4%	-8.7%	-9.5%	13.7%	10.5%
Health Care	-0.2%	0.1%	-0.1%	-0.1%	-7.1%	-8.3%	10.3%	8.5%
Financials	-0.4%	-0.1%	-0.4%	0.0%	4.2%	6.5%	14.6%	20.0%
Information Technology	0.1%	0.1%	-0.1%	0.1%	-2.7%	-5.0%	12.7%	9.9%
Telecommunication Services	0.1%	0.0%	0.0%	0.1%	-3.9%	-6.7%	4.9%	4.4%
Utilities	0.1%	0.0%	0.0%	0.0%	-5.0%	-6.6%	3.6%	3.2%
Real Estate	0.4%	-0.1%	0.2%	0.3%	-7.6%	-7.8%	2.1%	4.4%
Cash	-0.1%	0.0%	-0.1%	0.0%	0.1%		0.7%	0.0%
Portfolio	-1.7%	= -1.5%	+ -1.1%	+ 0.9%	-3.3%	-1.5%	100.0%	100.0%



Int'l Equity Performance Attribution vs. MSCI ACWI ex USA IMI Gross

		Returns and	Weights		Attribution Effects					
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	Total Effects	
Europe										
Austria	-1.1%	2.3%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	
Belgium	-7.6%	-10.1%	0.1%	1.0%	0.0%	0.1%	0.1%	0.0%	0.1%	
Czech Republic*	-2.9%	-2.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Denmark	-12.2%	-8.2%	1.8%	1.2%	-0.1%	0.0%	0.0%	0.0%	-0.1%	
Finland	-10.4%	-4.0%	0.6%	0.8%	-0.1%	0.0%	0.0%	0.0%	0.0%	
France	5.9%	2.7%	3.0%	6.3%	0.2%	-0.2%	0.2%	-0.1%	0.2%	
Germany	-1.5%	0.8%	4.6%	6.0%	-0.1%	0.0%	0.1%	0.0%	-0.1%	
Greece*	8.3%	13.7%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	
Hungary*	8.9%	9.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	
Ireland	-3.4%	-0.6%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	
Italy	5.6%	9.1%	1.2%	1.5%	-0.1%	0.0%	0.0%	0.0%	-0.1%	
Luxembourg	-5.3%	-1.5%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Netherlands	-0.6%	-2.0%	1.4%	2.2%	0.0%	0.0%	0.0%	0.0%	0.1%	
Norway	9.7%	3.5%	0.1%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	
Poland*	2.1%	3.2%	0.4%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	
Portugal	-10.3%	-2.4%	0.4%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	
Russia*	18.1%	19.1%	0.9%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	
Spain	-6.1%	1.3%	2.5%	2.1%	-0.2%	0.0%	0.0%	0.0%	-0.2%	
Sweden	-3.7%	-2.1%	2.9%	2.2%	0.0%	0.0%	0.0%	0.0%	-0.1%	
Switzerland	-3.8%	-3.7%	6.3%	5.9%	0.0%	0.0%	0.0%	0.0%	0.0%	
United Kingdom	-4.1%	-1.1%	13.1%	12.8%	-0.4%	0.0%	0.0%	0.0%	-0.4%	



Int'l Equity Performance Attribution vs. MSCI ACWI ex USA IMI Gross

		Returns and	Weights		Attribution Effects					
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	Total Effects	
AsiaPacific										
Australia	-5.5%	0.0%	3.5%	5.1%	-0.3%	0.0%	0.1%	0.1%	-0.1%	
China*	-8.1%	-6.7%	2.7%	6.2%	-0.1%	0.4%	0.0%	0.0%	0.4%	
Hong Kong	-5.2%	-8.4%	2.4%	2.4%	0.1%	0.0%	0.0%	0.0%	0.1%	
India*	-9.2%	-7.9%	1.8%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Indonesia*	-5.4%	-6.8%	0.5%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	
Japan	-2.6%	-0.4%	14.5%	17.6%	-0.5%	-0.3%	0.5%	0.1%	-0.2%	
Korea*	-8.1%	-8.5%	2.8%	3.6%	-0.1%	0.0%	0.1%	0.0%	0.1%	
Malaysia*	-7.2%	-8.7%	0.9%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	
New Zealand	-10.9%	-11.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	
Pakistan**	15.6%	16.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Philippines*	-13.4%	-12.3%	0.6%	0.3%	0.0%	0.0%	0.0%	0.0%	-0.1%	
Singapore	-4.6%	-4.5%	2.8%	1.0%	0.0%	-0.1%	-0.1%	0.0%	-0.2%	
Taiwan*	-4.4%	-2.7%	2.8%	3.0%	-0.1%	0.0%	0.0%	0.0%	0.0%	
Thailand*	-4.7%	0.4%	0.5%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	
Americas										
Brazil*	0.3%	2.1%	1.2%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	
Canada	-5.0%	2.7%	0.3%	6.8%	-0.5%	0.0%	0.1%	0.5%	0.1%	
Chile*	2.7%	2.1%	0.5%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	
Colombia*	-0.9%	-1.5%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	
Mexico*	-10.4%	-8.0%	1.2%	0.8%	0.0%	0.0%	0.0%	0.0%	-0.1%	
Peru*	1.8%	2.5%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	
United States	3.6%	3.4%	16.3%	0.0%	0.0%	-0.2%	0.0%	0.0%	-0.2%	

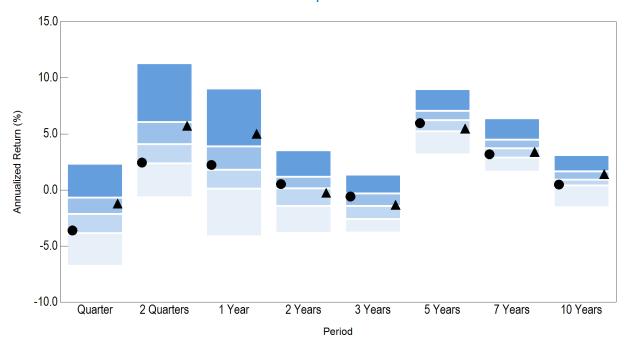


Int'l Equity Performance Attribution vs. MSCI ACWI ex USA IMI Gross

		Returns and	Weights			Attribution Effects					
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	Total Effects		
Other											
Egypt*		-22.7%	0.0%	0.1%		0.0%	0.0%	-	0.0%		
Israel	-3.1%	-6.8%	0.1%	0.6%	0.0%	0.0%	0.0%	0.0%	0.1%		
Kazakhstan**	0.5%	-0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
Kuwait**	9.0%	10.9%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
Qatar*	2.8%	0.9%	0.3%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%		
Romania**	-2.2%	-4.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
South Africa*	-6.5%	-3.2%	2.2%	1.6%	-0.1%	0.0%	0.0%	0.0%	-0.1%		
Turkey*	-11.1%	-13.5%	0.5%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%		
United Arab Emirates*	4.5%	-0.9%	0.3%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%		
Totals											
Americas	2.3%	1.6%	19.9%	9.7%	-0.1%	-0.1%	0.1%	-0.1%	-0.2%		
Europe	-2.5%	-0.3%	39.8%	44.3%	-1.1%	0.0%	0.4%	0.1%	-0.7%		
Asia/Pacific	-4.8%	-3.3%	36.1%	43.2%	-0.8%	0.0%	0.7%	0.1%	0.0%		
Other	-4.5%	-4.8%	3.5%	2.9%	0.0%	0.0%	0.0%	0.0%	-0.1%		
Cash	0.1%		0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
Total	-2.4%	-1.5%	100.0%	100.0%	-2.0%	-0.2%	1.2%	0.1%	-0.9%		
Totals											
Developed	-1.9%	-0.6%	78.1%	76.8%	-2.1%	0.0%	1.1%	0.0%	-1.0%		
Emerging*	-4.9%	-4.5%	20.8%	23.2%	-0.2%	0.2%	0.1%	0.0%	0.2%		
Frontier**	11.2%		0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
Cash	0.1%		0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		



InvestorForce All DB Dev Mkt ex-US Eq Net Accounts



	Return (F	Rank)							
5th Percentile	2.3	11.3	9.0	3.5	1.4	9.0	6.4	3.1	
25th Percentile	-0.7	6.1	3.9	1.2	-0.3	7.1	4.5	1.7	
Median	-2.1	4.1	1.8	0.2	-1.4	6.3	3.7	0.9	
75th Percentile	-3.8	2.4	0.1	-1.4	-2.6	5.2	2.9	0.4	
95th Percentile	-6.7	-0.6	-4.1	-3.8	-3.8	3.2	1.6	-1.5	
# of Portfolios	165	165	165	163	154	135	106	65	
Developed Markets	-3.6	(74) 2.4	(75) 2.2	(42) 0.5	(35) -0.6	(29) 6.0	(56) 3.2	(71) 0.5	(75)
▲ MSCI ACWI ex USA Gross	-1.2 ((31) 5.7	(30) 5.0	(15) -0.3	(55) -1.3	(48) 5.5	(69) 3.4	(66) 1.4	(38)

	Portfolio	MSCI ACWI ex USA Gross
Number of Holdings	1,055	1,856
Weighted Avg. Market Cap. (\$B)	43.6	49.2
Median Market Cap. (\$B)	9.2	6.7
Price To Earnings	22.9	20.2
Price To Book	3.8	2.5
Price To Sales	2.8	1.9
Return on Equity (%)	16.0	13.2
Yield (%)	3.0	2.9
Beta (holdings; global)	1.1	1.1

Top Holdings		Best Performers		Worst Performers		
NESTLE 'R'	1.5%		Return %		Return %	
UNITED OVERSEAS BANK	1.5%	SHARP (J:SH@N)	73.6%	VOCUS COMMUNICATIONS (A:VOCX)	-41.2%	
UNILEVER (UK)	1.4%	NVIDIA (NVDA)	56.0%	DENA	-39.3%	
SANOFI	1.2%	CHINA BLUE CHEMICAL 'H'	51.5%	FRESNILLO	-36.0%	
		KEYCORP (KEY)	50.9%	ILLUMINA (ILMN)	-29.5%	
BP	1.2%	GOLDMAN SACHS GP. (GS)	48.9%	HEALTHSCOPE	-29.4%	
GLAXOSMITHKLINE	1.1%	REGIONS FINL.NEW (RF)	46.1%	MALLINCKRODT (MNK)	-28.6%	
COCHLEAR	1.1%	CITIZENS FINANCIAL GROUP (CFG)	44.8%	LINE ORD	-28.4%	
HONDA MOTOR	1.0%	COMERICA (CMA)	44.4%	RWE (D:RWE)	-28.0%	
		FIAT CHRYSLER AUTOS. (I:FCA)	43.9%	ORION (KO:DGY)	-27.8%	
ABB LTD N	1.0%	AEGON	43.9%	SOHGO SECURITIES	-27.7%	
IBERDROLA	1.0%					



Developed Markets Performance Attribution vs. MSCI ACWI ex USA Gross

		•	Attribution Effects			Returns		Sector Weights	
	Total	Selection	Allocation	Interaction					
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark	
Energy	0.0%	0.1%	-0.1%	0.1%	8.7%	8.3%	4.7%	6.6%	
Materials	-0.2%	-0.8%	-0.2%	0.8%	-6.5%	2.7%	3.9%	7.5%	
Industrials	-0.3%	-0.5%	0.0%	0.1%	-4.0%	-2.1%	13.3%	11.7%	
Consumer Discretionary	-0.9%	-0.7%	0.1%	-0.3%	-4.9%	-0.9%	15.0%	11.4%	
Consumer Staples	-0.6%	0.2%	-0.4%	-0.4%	-8.9%	-9.8%	14.1%	11.1%	
Health Care	-0.2%	0.1%	-0.1%	-0.1%	-7.3%	-8.1%	10.8%	8.6%	
Financials	-0.5%	-0.1%	-0.5%	0.1%	4.1%	6.9%	14.5%	21.7%	
Information Technology	0.0%	0.1%	-0.1%	0.0%	-2.9%	-4.9%	13.2%	9.6%	
Telecommunication Services	0.1%	0.0%	0.0%	0.1%	-4.8%	-6.6%	4.5%	5.0%	
Utilities	0.1%	0.0%	0.0%	0.0%	-5.6%	-7.2%	3.2%	3.4%	
Real Estate	0.3%	-0.1%	0.1%	0.2%	-7.7%	-7.7%	2.1%	3.5%	
Cash	-0.1%	0.0%	-0.1%	0.0%	0.1%		0.7%	0.0%	
Unclassified	0.0%						0.0%	0.0%	
Portfolio	-2.4%	= -1.7%	+ -1.3%	+ 0.6%	-3.6%	-1.2%	100.0%	100.0%	

Developed Markets Performance Attribution vs. MSCI ACWI ex USA Gross

		Returns and	Weights		Attribution Effects					
	Manager	Index	Manager	Index	Selection	Allocation	Currency	Interaction	Total	
	Return	Return	Weight	Weight	Effect	Effect	Effect	Effect	Effects	
Europe										
Austria	-1.1%	6.5%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	
Belgium	-7.6%	-11.8%	0.1%	1.0%	0.0%	0.1%	0.0%	0.0%	0.1%	
Czech Republic*		-2.4%	0.0%	0.0%		0.0%	0.0%		0.0%	
Denmark	-12.2%	-8.8%	2.0%	1.2%	0.0%	-0.1%	0.0%	0.0%	-0.2%	
Finland	-10.4%	-4.4%	0.7%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	
France	5.9%	3.1%	3.4%	6.8%	0.2%	-0.2%	0.2%	-0.1%	0.2%	
Germany	-1.5%	1.5%	5.2%	6.2%	-0.2%	0.0%	0.1%	0.0%	-0.1%	
Greece*		15.4%	0.0%	0.1%		0.0%	0.0%		0.0%	
Hungary*		9.3%	0.0%	0.1%	-	0.0%	0.0%		0.0%	
Ireland	-3.4%	0.1%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	
Italy	5.6%	10.8%	1.3%	1.3%	-0.1%	0.0%	0.0%	0.0%	-0.1%	
Luxembourg	-5.9%	-1.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Netherlands	-0.7%	-2.0%	1.5%	2.3%	0.0%	0.0%	0.0%	0.0%	0.1%	
Norway	9.7%	2.6%	0.1%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	
Poland*		4.0%	0.0%	0.2%		0.0%	0.0%		0.0%	
Portugal	-10.3%	-3.0%	0.4%	0.1%	0.0%	0.0%	0.0%	0.0%	-0.1%	
Russia*	19.1%	18.8%	0.2%	0.9%	0.0%	-0.1%	0.0%	0.0%	-0.1%	
Spain	-6.1%	2.2%	2.8%	2.1%	-0.2%	0.0%	0.0%	-0.1%	-0.3%	
Sweden	-3.7%	-0.8%	3.3%	2.0%	-0.1%	0.0%	-0.1%	0.0%	-0.2%	
Switzerland	-3.8%	-3.9%	7.0%	6.3%	0.0%	0.0%	0.0%	0.0%	-0.1%	
United Kingdom	-4.0%	-0.8%	14.6%	12.9%	-0.4%	0.0%	-0.1%	-0.1%	-0.6%	

Excludes FIAM Equity holdings.



Developed Markets Performance Attribution vs. MSCI ACWI ex USA Gross

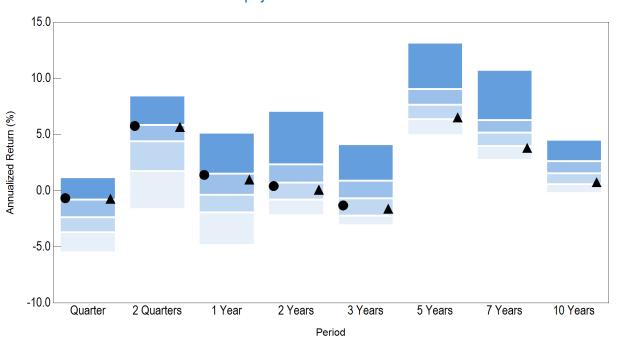
		Returns and	Weights			Attribution Effects				
	Manager	Index	Manager	Index	Selection	Allocation	Currency	Interaction	Total	
	Return	Return	Weight	Weight	Effect	Effect	Effect	Effect	Effects	
AsiaPacific										
Australia	-5.5%	0.8%	3.9%	5.2%	-0.3%	0.0%	0.1%	0.1%	-0.2%	
China*	-9.4%	-6.9%	2.4%	6.3%	-0.2%	0.5%	0.0%	0.1%	0.4%	
Hong Kong	-5.2%	-9.0%	2.0%	2.5%	0.1%	0.1%	0.0%	0.0%	0.1%	
India*	-9.9%	-7.8%	1.3%	1.9%	-0.1%	0.1%	0.0%	0.0%	0.0%	
Indonesia*	-4.3%	-7.4%	0.2%	0.6%	0.0%	0.0%	0.0%	0.0%	0.1%	
Japan	-2.6%	-0.1%	16.2%	16.9%	-0.5%	-0.1%	0.2%	0.0%	-0.4%	
Korea*	-7.0%	-6.9%	2.2%	3.5%	-0.1%	0.0%	0.2%	0.0%	0.1%	
Malaysia*	-6.2%	-8.4%	0.6%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	
New Zealand	-10.9%	-10.8%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	
Philippines*	-15.9%	-12.8%	0.3%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	
Singapore	-4.5%	-3.6%	3.1%	0.9%	0.0%	-0.1%	-0.1%	0.0%	-0.2%	
Taiwan*	-4.6%	-2.2%	2.2%	2.8%	-0.1%	0.0%	0.1%	0.0%	0.0%	
Thailand*	-8.2%	-1.6%	0.2%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	
Americas										
Brazil*	2.4%	2.3%	0.4%	1.7%	0.0%	0.0%	0.0%	0.0%	0.0%	
Canada	-5.0%	3.4%	0.3%	6.7%	-0.6%	0.0%	0.1%	0.6%	0.1%	
Chile*	4.5%	2.4%	0.1%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	
Colombia*		-2.3%	0.0%	0.1%		0.0%	0.0%		0.0%	
Mexico*	-14.9%	-7.8%	0.6%	0.9%	-0.1%	0.0%	0.0%	0.0%	0.0%	
Peru*	3.7%	2.5%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	
United States	3.6%	3.4%	18.1%	0.0%	0.0%	-0.3%	0.0%	0.0%	-0.3%	

Developed Markets Performance Attribution vs. MSCI ACWI ex USA Gross

		Returns and	Weights			Attri	bution Effects	i	
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	Total Effects
Other									
Egypt*		-23.3%	0.0%	0.0%		0.0%	0.0%		0.0%
Israel	-3.1%	-10.0%	0.1%	0.5%	0.0%	0.0%	0.0%	0.0%	0.1%
Kazakhstan**	0.5%	-0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Qatar*	4.6%	1.0%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Romania**	-2.2%	-4.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
South Africa*	-9.4%	-3.8%	1.6%	1.7%	-0.1%	0.0%	0.0%	0.0%	-0.1%
Turkey*	-10.1%	-13.7%	0.1%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
United Arab Emirates*	8.9%	-0.9%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Totals									
Americas	2.9%	2.1%	19.6%	9.8%	-0.1%	-0.1%	0.2%	-0.1%	-0.1%
Europe	-3.0%	0.1%	42.8%	45.2%	-1.5%	0.0%	0.2%	0.1%	-1.2%
Asia/Pacific	-4.6%	-3.0%	34.7%	42.2%	-0.5%	0.0%	0.4%	0.1%	0.0%
Other	-6.9%	-5.5%	2.2%	2.9%	-0.1%	0.1%	0.1%	0.0%	0.0%
Cash	0.1%		0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	-2.5%	-1.2%	100.0%	100.0%	-2.2%	-0.1%	0.9%	0.1%	-1.3%
Totals									
Developed	-1.8%	-0.3%	86.5%	76.7%	-2.3%	0.2%	0.5%	-0.3%	-1.9%
Emerging*	-7.0%	-4.2%	12.8%	23.3%	-0.8%	0.7%	0.4%	0.4%	0.6%
Frontier**	-0.8%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cash	0.1%		0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%



eA EAFE Core Equity Net Accounts



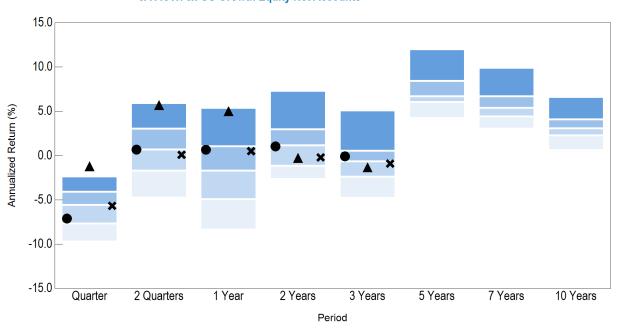
	Return (Rar	ık)						
5th Percentile	1.2	8.5	5.2	7.1	4.1	13.2	10.8	4.5
25th Percentile	-0.8	5.9	1.5	2.4	0.9	9.1	6.3	2.6
Median	-2.4	4.4	-0.4	0.7	-0.7	7.7	5.2	1.6
75th Percentile	-3.7	1.8	-1.9	-0.8	-2.2	6.4	4.0	0.6
95th Percentile	-5.5	-1.6	-4.8	-2.2	-3.1	5.0	2.8	-0.2
# of Portfolios	113	113	113	107	104	87	75	55
BlackRock EAFE IndexMSCI EAFE	-0.7 (23 -0.7 (24	, ,	1.4 (28 1.0 (31	, , ,	-1.3 (60) -1.6 (61)	() 6.5 (71)	() 3.8 (80)	, , ,

Characteristics

	Portfolio	MSCI EAFE
Number of Holdings	934	930
Weighted Avg. Market Cap. (\$B)	50.5	50.6
Median Market Cap. (\$B)	8.6	8.6
Price To Earnings	21.8	21.3
Price To Book	3.1	2.4
Price To Sales	2.3	1.7
Return on Equity (%)	13.8	11.8
Yield (%)	3.1	3.1
Beta (holdings; global)	1.1	1.1

Top Holdings		Best Performers		Worst Performer	rs
NESTLE 'R'	1.8%		Return %		Return %
HSBC HOLDINGS	1.3%	SHARP	73.6%	VOCUS COMMUNICATIONS	-41.2%
		NVIDIA (NVDA)	56.0%	DENA	-39.3%
NOVARTIS 'R'	1.3%	KEYCORP (KEY)	50.9%	FRESNILLO	-36.0%
ROCHE HOLDING	1.3%	GOLDMAN SACHS GP. (GS)	48.9%	ILLUMINA (ILMN)	-29.5%
TOYOTA MOTOR	1.3%	REGIONS FINL.NEW (RF)	46.1%	HEALTHSCOPE (A:HSOX)	-29.4%
ROYAL DUTCH SHELL A	1.0%	CITIZENS FINANCIAL GROUP (CFG)	44.8%	MALLINCKRODT (MNK)	-28.6%
BP	1.0%	COMERICA (CMA)	44.4%	LINE ORD	-28.4%
		FIAT CHRYSLER AUTOS. (I:FCA)	43.9%	RWE (D:RWE)	-28.0%
TOTAL	1.0%	AEGON (H:AGN)	43.9%	SOHGO SECURITIES	-27.7%
ROYAL DUTCH SHELL B	0.9%	SOCIETE GENERALE	42.5%	GEA GROUP	-27.7%
BRITISH AMERICAN TOBACCO	0.9%				

eA ACWI ex-US Growth Equity Net Accounts



	Return (Ra	nk)						
5th Percentile	-2.4	5.9	5.4	7.3	5.1	12.0	9.9	6.6
25th Percentile	-4.1	3.1	1.1	3.0	0.6	8.5	6.7	4.1
Median	-5.5	0.7	-1.7	1.2	-0.6	6.7	5.4	3.1
75th Percentile	-7.7	-1.7	-4.9	-1.1	-2.4	6.1	4.4	2.3
95th Percentile	-9.7	-4.7	-8.4	-2.6	-4.8	4.3	3.1	0.6
# of Portfolios	68	68	68	62	58	51	45	37
Baillie Gifford	-7.1 (68	3) 0.7 (51)	0.7 (33)	1.0 (56)	-0.1 (43)	()	()	()
▲ MSCI ACWI ex US	-1.2 (4	5.7 (7)	5.0 (7)	-0.3 (68)	-1.3 (60)	()	()	()
★ MSCI ACWI ex US Growth	-5.7 (52	2) 0.1 (59)	0.5 (36)	-0.2 (68)	-0.9 (54)	()	()	()

Characteristics

	Portfolio	MSCI ACWI ex USA Gross
Number of Holdings	79	1,856
Weighted Avg. Market Cap. (\$B)	32.5	49.2
Median Market Cap. (\$B)	10.9	6.7
Price To Earnings	25.3	20.2
Price To Book	5.9	2.5
Price To Sales	4.1	1.9
Return on Equity (%)	23.8	13.2
Yield (%)	1.8	2.9
Beta (holdings; global)	1.1	1.1

Top Holdings		Best Performers		Worst Performers	
COCHLEAR	2.9%		Return %		Return %
TAIWAN SEMICON.SPN.ADR 1:5	2.5%	MESOBLAST (A:MSBX)	20.8%	RAKUTEN (J:RAKT)	-24.1%
		THK (J:THAK)	13.9%	CAPITA (UKIR:CPI)	-23.2%
MS&AD INSURANCE GP.HDG.	2.3%	MS&AD INSURANCE GP.HDG. (J:MSAD)	12.8%	PROTALIX BIOTH. (PLX)	-21.9%
NASPERS	2.2%	THE SWATCH GROUP 'B' (S:UHR)	10.0%	NOVOZYMES (DK:NZY)	-21.5%
ATLAS COPCO 'B'	2.1%	DENSO (J:DE@N)	9.9%	DISTRIBUIDORA INTNAC.DE ALIMENTACION	-20.5%
HARGREAVES LANSDOWN	2.1%	WOOD GROUP (JOHN) (UKIR:WG.)	9.7%	(E:DIA)	
		RICHEMONT N (S:CFR)	8.7%	COCHLEAR (A:COHX)	-17.8%
SHIMANO	2.1%	SHIMANO (J:SHMO)	7.2%	THAI BEVERAGE PUBLIC (T:THBE)	-17.3%
SVENSKA HANDBKN.'A'	2.0%	WEIR GROUP (UKIR:WEIR)	5.8%	ALIBABA GROUP HLDG.SPN. ADR 1:1 (BABA)	-17.0%
KAO	2.0%	ITAU UNIBANCO BANCO HLDG.ADR 1:1 (ITUB)	5.0%	MAHINDRA & MAHINDRA GDR REG 'S' (UKIR:MHID)	-17.0%
JAPAN EXCHANGE GROUP	1.9%	(55)		WALMART DE MEXICO 'V' (MX:WAV)	-16.9%

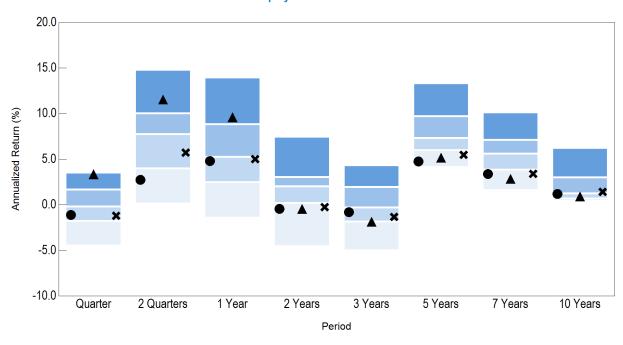
			Attribution Effec	ts	Re	eturns	Secto	r Weights
	Total	Selection	Allocation	Interaction				
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	-0.2%	0.2%	-0.4%	0.0%	9.7%	8.3%	0.7%	6.6%
Materials	-0.2%	-1.2%	-0.2%	1.1%	-12.5%	2.7%	2.3%	7.5%
Industrials	-0.8%	-0.8%	0.0%	-0.1%	-6.5%	-2.1%	14.8%	11.7%
Consumer Discretionary	-1.6%	-0.8%	0.2%	-1.0%	-6.0%	-0.9%	21.0%	11.4%
Consumer Staples	-1.6%	0.0%	-0.8%	-0.8%	-11.2%	-9.8%	19.8%	11.1%
Health Care	-0.3%	-0.2%	-0.1%	0.0%	-9.6%	-8.1%	9.9%	8.6%
Financials	-1.5%	-1.1%	-0.5%	0.1%	-2.3%	6.9%	15.1%	21.7%
Information Technology	-0.6%	-0.4%	-0.2%	0.0%	-6.0%	-4.9%	13.9%	9.6%
Telecommunication Services	0.5%		0.2%			-6.6%	0.0%	5.0%
Utilities	0.4%		0.2%			-7.2%	0.0%	3.4%
Real Estate	0.4%		0.2%			-7.7%	0.0%	3.5%
Cash	-0.1%	0.0%	-0.1%	0.0%	0.1%		2.5%	0.0%
Portfolio	-5.6%	= -4.3%	+ -1.3%	+ 0.0%	-6.8%	-1.2%	100.0%	100.0%

		Returns and	Weights			Attribution Effects					
	Manager	Index	Manager	Index	Selection	Allocation	Currency	Interaction	Total		
	Return	Return	Weight	Weight	Effect	Effect	Effect	Effect	Effects		
Europe											
Austria		6.4%	0.0%	0.1%		0.0%	0.0%		0.0%		
Belgium		-11.8%	0.0%	1.0%		0.1%	0.1%		0.2%		
Czech Republic*		-2.4%	0.0%	0.0%		0.0%	0.0%		0.0%		
Denmark	-13.5%	-8.9%	4.4%	1.2%	-0.1%	-0.2%	-0.2%	-0.2%	-0.6%		
Finland	-11.5%	-4.4%	1.3%	0.7%	-0.1%	0.0%	0.0%	0.0%	-0.1%		
France	-3.5%	3.1%	0.9%	6.8%	-0.4%	-0.3%	0.4%	0.4%	0.0%		
Germany	-8.2%	1.5%	3.6%	6.2%	-0.6%	-0.1%	0.2%	0.2%	-0.3%		
Greece*		15.5%	0.0%	0.1%		0.0%	0.0%		0.0%		
Hungary*	-	9.3%	0.0%	0.1%		0.0%	0.0%		0.0%		
Ireland		0.1%	0.0%	0.3%		0.0%	0.0%		0.0%		
Italy		10.8%	0.0%	1.3%		-0.2%	0.1%		-0.1%		
Netherlands		-2.0%	0.0%	2.3%		0.0%	0.1%		0.2%		
Norway		2.7%	0.0%	0.4%		0.0%	0.0%		0.0%		
Poland*		4.1%	0.0%	0.2%		0.0%	0.0%		0.0%		
Portugal	-10.4%	-3.1%	1.1%	0.1%	0.0%	0.0%	-0.1%	-0.1%	-0.2%		
Russia*		18.8%	0.0%	0.9%		-0.1%	0.0%		-0.1%		
Spain	-12.2%	2.2%	2.5%	2.1%	-0.3%	0.0%	0.0%	-0.1%	-0.4%		
Sweden	1.6%	-0.7%	4.9%	2.0%	0.0%	0.0%	-0.2%	0.1%	-0.1%		
Switzerland	-2.8%	-3.9%	5.9%	6.3%	0.1%	0.0%	0.0%	0.0%	0.1%		
United Kingdom	-6.7%	-0.9%	16.4%	13.2%	-0.7%	0.0%	-0.1%	-0.2%	-1.1%		

		Returns and	Weights			Attribution Effects				
	Manager Return	Index Return	Manager	Index	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	Total Effects	
	Return	Ketuiii	Weight	Weight	Ellect	Ellect	Ellect	Ellect	Ellecis	
AsiaPacific										
Australia	-11.2%	0.8%	7.2%	5.1%	-0.6%	0.0%	-0.1%	-0.2%	-0.9%	
China*	-10.0%	-7.0%	6.6%	6.3%	-0.2%	-0.1%	0.0%	0.0%	-0.3%	
Hong Kong	-4.3%	-9.0%	1.3%	2.5%	0.1%	0.1%	0.0%	-0.1%	0.2%	
India*	-17.0%	-7.8%	1.5%	1.9%	-0.2%	0.1%	0.0%	0.1%	-0.1%	
Indonesia*		-7.4%	0.0%	0.6%		0.1%	0.0%		0.1%	
Japan	-5.9%	-0.1%	21.7%	16.8%	-1.0%	0.4%	-0.6%	-0.3%	-1.4%	
Korea*	-4.3%	-6.9%	3.3%	3.5%	-0.1%	0.0%	0.2%	0.0%	0.1%	
Malaysia*	-8.3%	-8.4%	0.7%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	
New Zealand		-10.8%	0.0%	0.1%		0.0%	0.0%		0.0%	
Philippines*	-10.5%	-12.8%	0.4%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	
Singapore	-4.1%	-3.6%	4.2%	0.9%	0.0%	-0.1%	-0.1%	-0.1%	-0.3%	
Taiwan*	-3.9%	-2.1%	3.5%	2.8%	-0.1%	0.0%	0.1%	0.0%	-0.1%	
Thailand*		-1.6%	0.0%	0.5%		0.0%	0.0%		0.0%	
Americas										
Brazil*	20.0%	2.4%	0.0%	1.7%	0.1%	0.0%	0.0%	-0.1%	0.0%	
Canada		3.5%	0.0%	6.7%		0.0%	0.1%		0.1%	
Chile*		2.5%	0.0%	0.3%		0.0%	0.0%		0.0%	
Colombia*		-2.2%	0.0%	0.1%		0.0%	0.0%		0.0%	
Mexico*	-16.9%	-7.8%	0.6%	0.9%	-0.1%	0.0%	0.0%	0.0%	0.0%	
Peru*		2.6%	0.0%	0.1%		0.0%	0.0%		0.0%	
United States	-0.9%	3.4%	1.8%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.1%	

		Returns and	Weights			Attri	bution Effects		
	Manager	Index	Manager	Index	Selection	Allocation	Currency	Interaction	Total
	Return	Return	Weight	Weight	Effect	Effect	Effect	Effect	Effects
Other									
Egypt*		-23.3%	0.0%	0.0%		0.0%	0.0%		0.0%
Israel		-10.9%	0.0%	0.5%		0.1%	0.0%		0.1%
Qatar*		1.0%	0.0%	0.2%		0.0%	0.0%		0.0%
South Africa*	-12.8%	-3.9%	3.5%	1.7%	-0.1%	-0.2%	0.0%	-0.2%	-0.5%
Turkey*		-13.7%	0.0%	0.3%		0.0%	0.0%		0.0%
United Arab Emirates*	-	-2.2%	0.0%	0.2%		0.0%	0.0%		0.0%
Totals									
Americas	-5.2%	2.3%	2.4%	9.7%	-0.8%	0.1%	0.2%	0.6%	0.0%
Europe	-6.5%	0.0%	41.0%	45.3%	-3.0%	0.0%	0.3%	0.2%	-2.4%
Asia/Pacific	-7.1%	-3.0%	50.5%	42.1%	-1.9%	0.0%	-0.4%	-0.4%	-2.7%
Other	-12.8%	-5.8%	3.5%	2.9%	-0.3%	-0.1%	0.1%	-0.1%	-0.3%
Cash	0.1%	-	2.5%	0.0%	0.0%	-0.1%	0.0%	0.0%	-0.1%
Total	-6.8%	-1.2%	100.0%	100.0%	-5.9%	-0.1%	0.1%	0.4%	-5.6%
Totals									
Developed	-6.4%	-0.3%	77.2%	76.7%	-4.4%	0.0%	-0.3%	0.0%	-4.7%
Emerging*	-9.2%	-4.2%	20.3%	23.3%	-1.5%	0.2%	0.4%	0.2%	-0.8%
Cash	0.1%		2.5%	0.0%	0.0%	-0.1%	0.0%	0.0%	-0.1%

eA ACWI ex-US Value Equity Net Accounts



	Return	(Rank)														
5th Percentile	3.5	1	4.8		14.0		7.5		4.3		13.3		10.1		6.2	
25th Percentile	1.7	1	0.0		8.8		3.1		2.0		9.7		7.1		3.0	
Median	-0.2		7.8		5.3		2.0		-0.3		7.3		5.6		1.3	
75th Percentile	-1.8	4	4.0		2.5		0.2		-1.8		6.0		3.9		0.7	
95th Percentile	-4.4	(0.2		-1.4		-4.5		-5.0		4.1		1.6		0.4	
# of Portfolios	38		37		35		33		29		25		21		18	
Mondrian	-1.1	(69)	2.7	(81)	4.8	(52)	-0.4	(79)	-0.8	(58)	4.8	(92)	3.4	(86)	1.2	(53)
▲ MSCI ACWI ex USA Value Gross	3.4	(6) 1	1.5	(9)	9.6	(14)	-0.5	(79)	-1.9	(78)	5.2	(85)	2.9	(92)	0.9	(68)
★ MSCI ACWI ex USA Gross	-1.2		5.7	(66)	5.0	(51)	-0.3	(78)	-1.3	(62)	5.5	(82)	3.4	(86)	1.4	(45)

Top Holdings

2.2%

ENI (I:ENI)

Characteristics

Number of Holdings 136	1,061
Weighted Avg. Market Cap. (\$B) 50.0	47.9
Median Market Cap. (\$B) 15.9	6.5
Price To Earnings 21.3	15.3
Price To Book 2.5	1.5
Price To Sales 1.7	1.6
Return on Equity (%)	9.8
Yield (%) 4.0	3.7
Beta (holdings; global) 0.9	1.1

SANOFI	2.7%		Return %		Return %
ABB LTD N	2.5%	CHINA BLUE CHEMICAL 'H' (K:CHBC)	51.5%	RWE (D:RWE)	-28.0%
GLAXOSMITHKLINE	2.5%	SOCIETE GENERALE (F:SGE)	42.5%	PLDT.TEL.SPN.ADR 1:1	-22.8%
HONDA MOTOR	2.4%	SUZANO BAHIA SUL PAPEL CELULOSE A PN	35.4%	INDIABULLS HOUSING FIN	-22.1%
		(BR:BU5)	33.470	TURK TELEKOMUNIKASYON	-20.6%
IBERDROLA	2.4%	QBE INSURANCE GROUP (A:QBEX)	26.5%	AMEC FOSTER WHEELER (UKIR:AMFW)	-20.4%
SYNGENTA	2.4%	OAO GAZPROM SPN.ADR 1:2	20.3%	ERICSSON 'B'	-18.6%
BP	2.4%	CAIRN INDIA	18.7%	AXIS BANK	-18.5%
KIRIN HOLDINGS	2.3%	LUKOIL OAO SPN.ADR 1:1 (LUKOY)	17.6%	KIMBERLY-CLARK DE MEXICO 'A'	-18.5%
		ROYAL DUTCH SHELL B	14.1%	AMBEV SPONSORED ADR 1:1 (ABEV)	-17.5%
TESCO	2.3%	ROYAL DUTCH SHELL A(LON) (UKIR:RDSA)	13.6%	ISS AS (DK:ISS)	-17.2%
				` '	

13.3%

Best Performers

TELIASONERA

Worst Performers

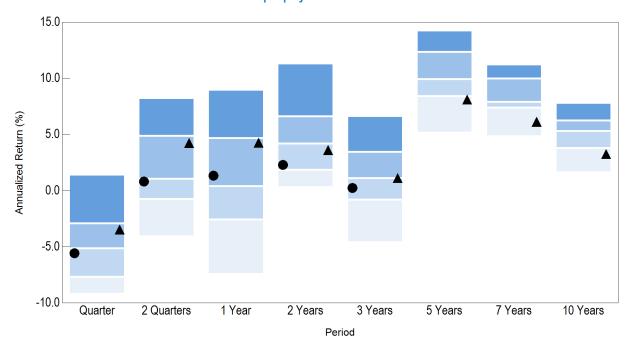
			Attribution Effec	ts	Re	eturns	Secto	r Weights
	Total	Selection	Allocation	Interaction				
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	-0.1%	0.0%	-0.1%	0.0%	9.3%	10.0%	8.6%	10.7%
Materials	-0.2%	-0.8%	-0.2%	0.8%	-1.4%	7.0%	3.5%	8.4%
Industrials	-0.2%	-0.4%	0.0%	0.2%	-1.0%	0.7%	10.4%	9.9%
Consumer Discretionary	-0.3%	-0.5%	0.0%	0.2%	-1.5%	1.2%	10.0%	9.6%
Consumer Staples	-1.4%	0.1%	-1.3%	-0.2%	-4.8%	-8.2%	12.8%	2.4%
Health Care	-0.6%	0.2%	-0.6%	-0.3%	-4.9%	-7.5%	10.2%	5.0%
Financials	0.0%	-0.2%	-1.0%	1.2%	7.5%	8.7%	15.0%	34.3%
Information Technology	-0.9%	-0.2%	-0.1%	-0.6%	-4.3%	-0.4%	9.9%	5.1%
Telecommunication Services	-0.9%	0.0%	-0.7%	-0.2%	-6.3%	-7.0%	11.0%	5.3%
Utilities	-0.3%	0.0%	-0.2%	-0.1%	-7.1%	-7.1%	6.8%	5.1%
Real Estate	0.5%	-0.1%	0.3%	0.3%	-9.7%	-8.0%	1.4%	4.2%
Cash	0.0%	0.0%	0.0%	0.0%	0.1%		0.3%	0.0%
Portfolio	-4.4%	= -1.9%	+ -3.7%	+ 1.3%	-1.2%	3.2%	100.0%	100.0%

		Returns and	Weights			Attri	bution Effects		
	Manager	Index	Manager	Index	Selection	Allocation	Currency	Interaction	Total
	Return	Return	Weight	Weight	Effect	Effect	Effect	Effect	Effects
Europe									
Austria		9.5%	0.0%	0.2%		0.0%	0.0%		0.0%
Belgium		2.4%	0.0%	0.5%		0.0%	0.0%		0.0%
Czech Republic*		-5.8%	0.0%	0.0%		0.0%	0.0%		0.0%
Denmark	-17.2%	1.6%	0.7%	0.5%	-0.1%	0.0%	0.0%	0.0%	-0.2%
Finland		-3.2%	0.0%	1.1%		0.1%	0.1%		0.1%
France	13.3%	6.2%	5.0%	8.0%	0.6%	-0.1%	0.2%	-0.2%	0.5%
Germany	2.2%	6.3%	7.9%	5.8%	-0.3%	0.1%	-0.1%	-0.1%	-0.4%
Greece*		15.8%	0.0%	0.1%		0.0%	0.0%		0.0%
Hungary*		11.5%	0.0%	0.1%		0.0%	0.0%		0.0%
Ireland		18.1%	0.0%	0.0%		0.0%	0.0%		0.0%
Italy	7.2%	8.4%	3.0%	1.9%	0.0%	0.1%	-0.1%	0.0%	-0.1%
Netherlands	-0.3%	10.3%	3.5%	1.1%	-0.1%	0.2%	-0.2%	-0.3%	-0.4%
Norway		6.3%	0.0%	0.7%		0.0%	0.1%		0.0%
Poland*		9.7%	0.0%	0.2%		0.0%	0.0%		0.0%
Portugal		-9.1%	0.0%	0.1%		0.0%	0.0%		0.0%
Russia*	19.1%	19.5%	0.5%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%
Spain	-3.8%	5.7%	4.4%	3.0%	-0.3%	0.0%	-0.1%	-0.1%	-0.5%
Sweden	-11.1%	1.5%	3.4%	2.0%	-0.3%	0.0%	-0.1%	-0.2%	-0.6%
Switzerland	-5.0%	3.5%	11.4%	3.2%	-0.3%	-0.1%	-0.3%	-0.7%	-1.5%
United Kingdom	-2.2%	2.5%	19.6%	15.9%	-0.8%	-0.1%	-0.1%	-0.2%	-1.2%

		Returns and	Weights			Attri	bution Effects		
	Manager	Index	Manager	Index	Selection	Allocation	Currency	Interaction	Total
	Return	Return	Weight	Weight	Effect	Effect	Effect	Effect	Effects
AsiaPacific									
Australia	26.5%	5.5%	0.8%	5.3%	1.2%	-0.1%	0.3%	-1.0%	0.4%
China*	1.2%	-2.9%	0.4%	6.1%	0.2%	0.7%	0.0%	-0.2%	0.7%
Hong Kong	-5.7%	-7.7%	3.0%	2.5%	0.0%	-0.1%	0.0%	0.0%	0.0%
India*	-5.6%	-6.3%	2.5%	2.0%	0.0%	-0.1%	0.0%	0.0%	-0.1%
Indonesia*	-4.3%	-4.2%	0.5%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%
Japan	1.5%	4.9%	14.5%	16.8%	-0.7%	-0.3%	0.5%	0.1%	-0.4%
Korea*	-6.2%	-5.2%	2.2%	3.6%	0.0%	0.1%	0.1%	0.0%	0.2%
Malaysia*	-4.7%	-7.8%	1.1%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%
New Zealand	-	-6.6%	0.0%	0.1%	-	0.0%	0.0%		0.0%
Philippines*	-22.8%	-12.7%	0.3%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Singapore	-4.3%	1.2%	4.5%	0.9%	0.0%	-0.1%	-0.2%	-0.2%	-0.6%
Taiwan*	-5.4%	-0.3%	3.0%	2.7%	-0.1%	0.0%	0.0%	0.0%	-0.2%
Thailand*	-8.2%	0.3%	0.6%	0.5%	0.0%	0.0%	0.0%	0.0%	-0.1%
Americas									
Brazil*	2.4%	11.0%	1.2%	1.8%	-0.2%	0.0%	0.0%	0.0%	-0.1%
Canada	-5.0%	8.8%	1.1%	6.9%	-1.0%	-0.1%	0.1%	0.8%	-0.1%
Chile*	4.5%	3.3%	0.3%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Colombia*		-0.8%	0.0%	0.1%		0.0%	0.0%		0.0%
Mexico*	-13.6%	-2.7%	1.1%	0.8%	-0.1%	0.0%	0.0%	0.0%	-0.1%
Peru*	3.7%	0.6%	0.4%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
United States	-8.6%	3.6%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%

		Returns and	Weights			Attri	bution Effects		
	Manager	Index	Manager	Index	Selection	Allocation	Currency	Interaction	Total
	Return	Return	Weight	Weight	Effect	Effect	Effect	Effect	Effects
Other									
Egypt*		-24.2%	0.0%	0.0%		0.0%	0.0%		0.0%
Israel		-9.4%	0.0%	0.5%		0.1%	0.0%		0.1%
Kazakhstan**	0.5%	3.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Qatar*	4.6%	3.3%	0.6%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Romania**	-2.2%	3.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
South Africa*	1.6%	2.2%	1.2%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%
Turkey*	-10.1%	-10.9%	0.4%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
United Arab Emirates*	8.9%	3.8%	0.3%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Totals									
Americas	-4.0%	7.9%	4.4%	9.9%	-1.2%	0.0%	0.1%	0.7%	-0.4%
Europe	-0.9%	4.6%	59.4%	45.2%	-2.7%	0.1%	-0.6%	-0.8%	-4.0%
Asia/Pacific	-1.7%	0.8%	33.3%	42.1%	-0.9%	0.0%	0.6%	0.2%	0.0%
Other	1.4%	-1.2%	2.5%	2.8%	0.1%	0.0%	0.0%	0.0%	0.1%
Cash	0.1%		0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	-1.2%	3.2%	100.0%	100.0%	-4.7%	0.1%	0.2%	0.0%	-4.4%
Totals									
Developed	-0.8%	4.4%	83.0%	76.9%	-4.5%	0.1%	0.0%	-0.4%	-4.6%
Emerging*	-3.5%	-1.0%	16.5%	23.1%	-0.5%	0.5%	0.1%	0.1%	0.3%
Frontier**	-0.8%		0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cash	0.1%		0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

eA ACWI ex-US Small Cap Equity Net Accounts



F	Return	(Rank)														
5th Percentile	1.4		8.2		9.0		11.3		6.6		14.3		11.2		7.8	
25th Percentile	-2.9		4.9		4.7		6.6		3.5		12.4		10.0		6.3	
Median	-5.1		1.1		0.4		4.2		1.1		9.9		7.9		5.3	
75th Percentile	-7.7		-0.7		-2.6		1.9		-0.8		8.5		7.4		3.8	
95th Percentile	-9.2		-4.1		-7.4		0.3		-4.6		5.2		4.9		1.6	
# of Portfolios	44		43		42		36		30		22		17		12	
● FIAM Equity ▲ MSCI ACWI ex US Small Cap Gross	-5.6 -3.5	(59) (27)	0.8 4.2	(58) (32)	1.3 4.3	(35) (28)	2.3 3.6	(68) (54)	0.2 1.1	(68) (52)	 8.1	() (86)	 6.1	() (87)	3.3	() (84)

Characteristics

	Portfolio	MSCI ACWI ex-US Small Cap
No. of Securities	228	4,284
Wgtd. Avg. Market Cap (000's)	2,671	1,986
Price to Book Ratio	1.8	1.6
Return on Equity	11.8%	10.0%

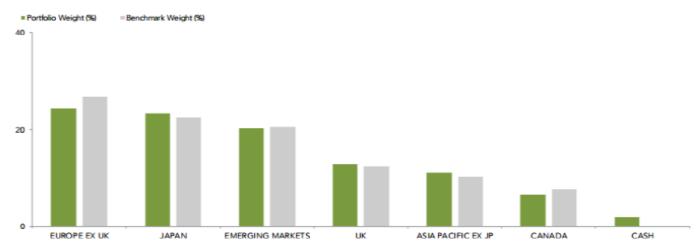
Ten Holdings

Best Performers (Absolute Return %)

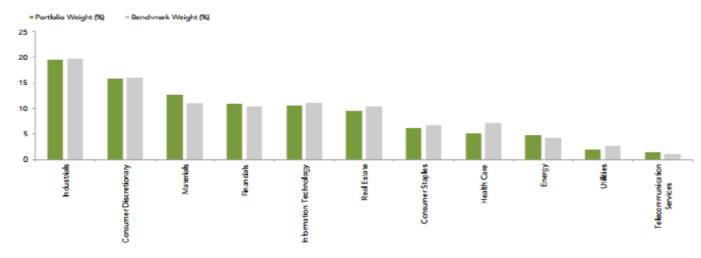
Worst Performers (Absolute Return %)

TECHTRONIC INDUSTRIES CO LTD	1.5	LIFESTYLE CHINA GROUP LTD	180.5	THE RESTAURANT GROUP PLC	(58.2)
OBIC CO LTD	1.3	KINGBOARD LAMINAT HOLDINGS LTD	144.1	ORION CORP	(44.8)
NIHON PARKERIZING CO LTD	1.3	TRICAN WELL SERVICE LTD	141.7	TRAVIS PERKINS PLC	(41.0)
FRUTAROM INDS LTD	1.2	MINERAL DEPOSITS LTD	137.9	KEPCO PLANT SER & ENG CO LTD	(39.2)
JUNGHEINRICH AG NON-VT G PFD	1.2	T4F ENTRETENIMENTO SA	120.5	REGUS PLC	(37.6)
DOWA HOLDINGS CO LTD	1.0	COPPER MOUNTAIN MINING CORP	118.8	PAT RIZIA IMMOBILIEN AG	(37.6)
NITTO KOHKI CO LTD	1.0	TIMAH TBK PT	118.7	INGENICO GROUP	(35.9)
SURUGA BANK LTD	1.0	TRILOGYENERGYCORP	113.7	HYUNDAI WIA CORP	(35.5)
QUEBECOR INC CL B SUB VT G	1.0	ALAMOS GOLD INC A	111.4	PAX GLOBAL TECHNOLOGY LTD	(35.1)
AAREAL BANK AG	1.0	TEGMA GESTAO LOGISTICA	98.9	ABLYNX NV	(34.0)

REGIONAL WEIGHTS

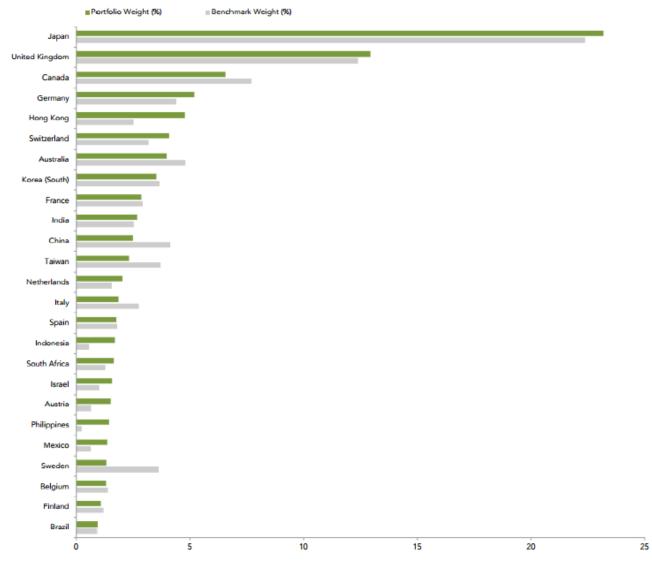


SECTOR WEIGHTS



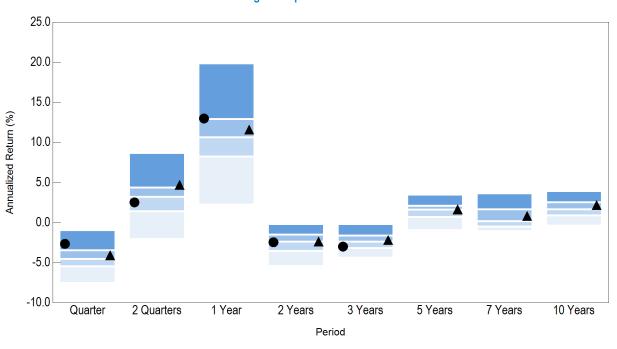
Sector breakdowns are only applied to equities and convertibles and the allocation percentages may not add to 100%. Benchmark: MSCI AC Wld Sm Cap xUS(N)

TOP 25 COUNTRY WEIGHTS



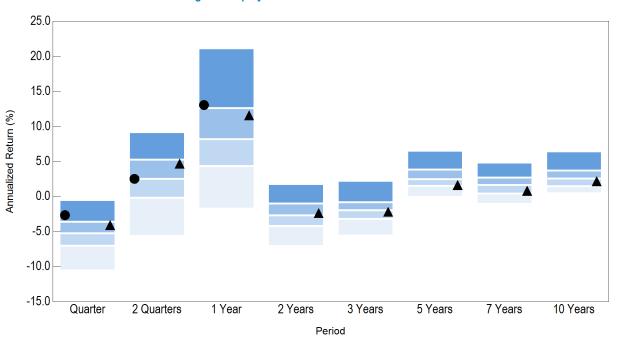
Benchmark: MSCI AC Wld Sm Cap xUS(N)

InvestorForce All DB Emg Mkt Eq Net Accounts



	Return	(Rank)														
5th Percentile	-1.0	-	8.7		19.8		-0.2		-0.2		3.4		3.6		3.9	
25th Percentile	-3.5		4.4		12.9		-1.5		-1.6		2.1		1.7		2.6	
Median	-4.5		3.2		10.7		-2.4		-2.4		1.6		0.2		1.7	
75th Percentile	-5.4		1.4		8.3		-3.5		-3.2		0.7		-0.5		0.9	
95th Percentile	-7.5		-2.0		2.3		-5.4		-4.4		-0.9		-1.1		-0.4	
# of Portfolios	107		105		105		98		90		63		26		19	
Emerging Markets	-2.7	(19)	2.5	(62)	13.0	(24)	-2.5	(53)	-3.0	(71)		()		()		()
▲ MSCI Emerging Markets Gross	-4.1	(38)	4.7	(22)	11.6	(44)	-2.4	(52)	-2.2	(44)	1.6	(50)	8.0	(34)	2.2	(36)

eA Emg Mkts Equity Net Accounts



	Return	(Rank)														
5th Percentile	-0.5	-	9.2		21.1		1.8		2.2		6.5		4.8		6.4	
25th Percentile	-3.6		5.3		12.7		-1.0		-0.8		3.9		2.7		3.7	
Median	-5.2		2.5		8.2		-2.7		-2.0		2.5		1.7		2.6	
75th Percentile	-7.0		-0.2		4.4		-4.2		-3.2		1.5		0.4		1.5	
95th Percentile	-10.5		-5.6		-1.7		-7.1		-5.5		0.0		-1.0		0.5	
# of Portfolios	182		182		181		174		162		121		85		52	
Parametric Core	-2.7	(16)	2.5	(51)	13.1	(22)		()		()		()		()		()
▲ MSCI Emerging Markets Gross	-4.1	(34)	4.7	(31)	11.6	(33)	-2.4	(46)	-2.2	(56)	1.6	(72)	8.0	(71)	2.2	(62)

Characteristics

	Portfolio	MSCI Emerging Markets Gross
Number of Holdings	1,073	832
Weighted Avg. Market Cap. (\$B)	18.0	48.4
Median Market Cap. (\$B)	2.8	4.6
Price To Earnings	18.4	18.3
Price To Book	2.8	2.6
Price To Sales	2.4	5.2
Return on Equity (%)	15.4	16.3
Yield (%)	2.8	2.6
Beta (holdings; global)	0.9	1.0

Top Holdings	Best Performers	Worst Performers
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AMERICA MOVIL SAB DE CV SPN.ADR 'L' 1:20	1.0%
TAIWAN SEMICON.MNFG.	0.9%
SBERBANK OF RUSSIA	0.9%
DEUTSCHE XTRS.HARVST.CSI 300 CHINA A-SHS.ETF	0.8%
CHINA MOBILE	0.8%
SASOL	0.8%
OAO GAZPROM SPN.ADR 1:2	0.7%
SAMSUNG ELECTRONICS	0.7%
MAGNIT	0.7%
PTRO.BRAO.ADR 1:2	0.6%

Best Performers	
	Return %
BUMI RESOURCES	296.0%
VIA VAREJO UNITS	68.5%
ASSORE	60.5%
COMPANIA SUDAMERICANA DE VAPORES (CL:VPR)	58.1%
INDO TAMBANGRAYA MEGAH (ID:INM)	53.9%
SAMART FB (Q:SAAF)	52.8%
UNION PROPERTIES (DU:UNP)	51.7%
CHINA BLUE CHEMICAL 'H'	51.5%
TRANSNEFT PREF.	51.3%
AVIANCA HOLDING PREF.	47.0%

WOIST LEHOHIIGIS	
	Return %
SIGMAGOLD INTI PERKASA (ID:LAG)	-82.1%
SIBANYE GOLD (R:SGLJ)	-48.4%
DRYSHIPS (DRYS)	-45.8%
HANMI PHARM (KO:HPM)	-45.2%
SWANCOR INDUSTRIES (TW:SWC)	-41.2%
FELDA GLOBAL VENT.HDG.	-38.9%
MPALA PLATINUM (R:IMPJ)	-38.2%
COSTAMARE	-37.9%
DOUBLEDRAGON PROPERTIES	-36.0%
TUNG THIH ELECTRONIC	-35.9%

Parametric Core Performance Attribution vs. MSCI Emerging Markets Gross

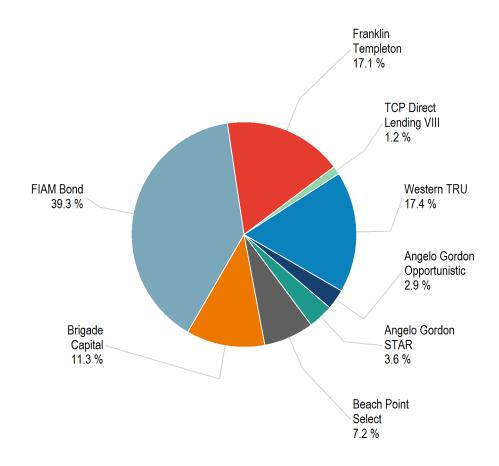
		A	ttribution Effects		Retu	rns	Sector Weights	
	Total	Selection	Allocation	Interaction				
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	0.3%	0.1%	0.3%	-0.1%	8.6%	8.4%	9.9%	6.9%
Materials	0.2%	-0.1%	0.5%	-0.2%	3.4%	4.0%	12.1%	6.8%
Industrials	0.2%	0.2%	0.0%	0.0%	-2.5%	-6.2%	9.4%	5.9%
Consumer Discretionary	0.2%	0.2%	0.0%	0.0%	-8.5%	-9.7%	10.2%	10.6%
Consumer Staples	0.2%	0.2%	-0.1%	0.1%	-6.8%	-10.6%	9.8%	7.8%
Health Care	-0.2%	0.1%	-0.2%	0.0%	-7.9%	-10.0%	6.0%	2.6%
Financials	0.3%	0.6%	-0.3%	0.0%	1.7%	-0.7%	15.6%	23.7%
Information Technology	0.8%	0.0%	0.3%	0.6%	-5.8%	-6.4%	8.4%	23.8%
Telecommunication Services	0.2%	0.2%	-0.1%	0.1%	-2.0%	-6.2%	8.7%	6.1%
Utilities	-0.1%	0.1%	-0.1%	0.0%	-4.9%	-7.0%	7.2%	3.0%
Real Estate	0.1%	0.1%	0.1%	0.0%	-6.5%	-10.0%	1.9%	2.7%
Cash	0.0%	0.0%	0.0%	0.0%	0.1%		0.7%	0.0%
Portfolio	2.3% =	= 1.7% -	⊦ 0.3%	+ 0.3%	-1.9%	-4.2%	100.0%	100.0%

Parametric Core Performance Attribution vs. MSCI Emerging Markets Gross

	Returns and Weights					Attribution Effects				
	Manager	Index	Manager	Index	Selection	Allocation	Currency	Interaction	Total	
	Return	Return	Weight	Weight	Effect	Effect	Effect	Effect	Effects	
Europe										
Czech Republic*	-2.9%	-2.4%	0.6%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	
Greece*	8.3%	15.4%	1.6%	0.3%	0.0%	0.3%	-0.1%	-0.1%	0.1%	
Hungary*	8.9%	9.3%	0.9%	0.3%	0.0%	0.1%	0.0%	0.0%	0.1%	
Luxembourg	2.6%	-4.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Netherlands	9.5%	-2.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Poland*	2.1%	4.0%	3.7%	1.1%	0.0%	0.4%	-0.2%	-0.1%	0.1%	
Russia*	17.9%	18.8%	6.9%	3.7%	0.0%	0.6%	0.0%	0.0%	0.6%	
United Kingdom	-15.4%	-0.9%	0.4%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.1%	
AsiaPacific										
China*	-3.1%	-6.9%	5.4%	27.2%	1.0%	1.2%	0.0%	-0.8%	1.4%	
Hong Kong	-5.2%	-9.0%	5.6%	0.0%	0.0%	-0.4%	0.0%	0.2%	-0.2%	
India*	-7.5%	-7.8%	5.4%	8.3%	-0.1%	0.1%	0.1%	0.0%	0.2%	
Indonesia*	-5.9%	-7.4%	3.5%	2.8%	0.0%	0.0%	0.0%	0.0%	0.0%	
Korea*	-10.7%	-6.9%	7.5%	14.9%	-0.6%	-0.3%	0.7%	0.3%	0.1%	
Malaysia*	-8.8%	-8.4%	3.5%	2.7%	0.0%	0.0%	-0.1%	0.0%	-0.1%	
Pakistan**	15.6%	16.2%	1.9%	0.0%	0.0%	0.3%	0.0%	0.0%	0.3%	
Philippines*	-11.9%	-12.8%	3.3%	1.3%	0.0%	-0.2%	0.0%	0.0%	-0.2%	
Singapore	-15.5%	-3.6%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Taiwan*	-4.0%	-2.2%	7.8%	12.1%	-0.2%	-0.1%	0.1%	0.1%	-0.1%	
Thailand*	-3.1%	-1.6%	3.4%	2.2%	0.0%	0.0%	0.0%	0.0%	-0.1%	
Americas										
Brazil*	-0.6%	2.3%	7.9%	7.4%	-0.2%	0.0%	0.0%	0.0%	-0.2%	
Chile*	2.3%	2.4%	3.6%	1.1%	0.0%	0.1%	0.0%	0.0%	0.1%	
Colombia*	-0.9%	-2.3%	1.8%	0.5%	0.0%	0.0%	-0.1%	0.0%	0.0%	
Mexico*	-6.9%	-7.8%	6.4%	3.7%	-0.1%	0.0%	0.0%	0.0%	-0.1%	
Peru*	0.4%	2.5%	1.5%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	
United States	2.8%	3.4%	1.3%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	

Parametric Core Performance Attribution vs. MSCI Emerging Markets Gross

	Returns and Weights					Attribution Effects				
	Manager	Index	Manager	Index	Selection	Allocation	Currency	Interaction	Total	
	Return	Return	Weight	Weight	Effect	Effect	Effect	Effect	Effects	
Other										
Egypt*		-23.3%	0.0%	0.2%		-0.1%	0.1%		0.0%	
Kuwait**	9.0%	10.9%	1.6%	0.0%	0.0%	0.2%	0.0%	0.0%	0.2%	
Qatar*	1.2%	1.0%	1.7%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	
South Africa*	-0.8%	-3.8%	6.8%	7.1%	0.2%	0.0%	0.0%	0.0%	0.2%	
Turkey*	-11.4%	-13.7%	3.3%	1.2%	0.0%	0.1%	-0.3%	0.1%	-0.2%	
United Arab Emirates*	2.0%	-0.9%	1.5%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	
Totals										
Americas	-1.7%	-0.7%	22.4%	13.0%	-0.2%	0.3%	-0.1%	-0.1%	-0.2%	
Europe	10.3%	14.7%	14.3%	5.5%	-0.1%	1.5%	-0.4%	-0.2%	0.8%	
Asia/Pacific	-5.7%	-6.2%	47.5%	71.4%	0.3%	0.4%	0.8%	-0.1%	1.4%	
Other	-1.6%	-4.6%	15.0%	10.2%	0.4%	0.0%	-0.2%	0.2%	0.3%	
Cash	0.1%	-	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Total	-1.9%	-4.2%	100.0%	100.0%	0.3%	2.1%	0.1%	-0.2%	2.3%	
Totals										
Developed	-4.5%	-	7.5%	0.0%	0.0%	0.0%	0.0%	-0.2%	-0.2%	
Emerging*	-2.3%	-4.2%	88.2%	100.0%	2.2%	0.0%	0.1%	-0.3%	2.0%	
Frontier**	12.5%	-	3.5%	0.0%	0.0%	0.0%	0.0%	0.5%	0.5%	
Cash	0.1%		0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	



			Manager Contribution to
	Actual \$	Actual %	Excess Return %
Angelo Gordon Opportunistic	\$18,019,000	2.9%	0.2%
Angelo Gordon STAR	\$22,602,000	3.6%	0.2%
Beach Point Select	\$44,619,814	7.2%	0.2%
Brigade Capital	\$70,052,952	11.3%	0.2%
FIAM Bond	\$243,708,418	39.3%	-1.2%
Franklin Templeton	\$106,360,730	17.1%	2.1%
TCP Direct Lending VIII	\$7,491,035	1.2%	-0.0%
Western Asset TRU	\$107,687,157	17.4%	0.1%
Actual vs. Policy Weight Difference			1.4%
Total	\$620,541,106	100.0%	3.2%

Statistics Summary

3 Years

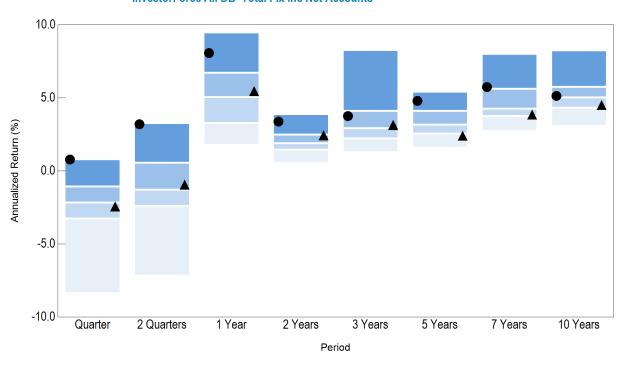
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Fixed Income	3.8%	3.0%	1.2	0.3	2.1%
Blended Fixed Income Index	3.1%	3.2%	1.0		0.0%
US Fixed Income	4.2%	2.9%	1.4	0.4	1.5%
Blended US Fixed Index	3.7%	3.0%	1.2		0.0%
FIAM Bond	3.6%	3.2%	1.1	0.7	0.9%
BBgBarc US Aggregate TR	3.0%	3.0%	1.0		0.0%
Angelo Gordon STAR	8.6%	5.4%	1.6	0.9	6.6%
BBgBarc US Aggregate TR	3.0%	3.0%	1.0		0.0%
Brigade Capital	3.2%	7.5%	0.4	-0.4	4.6%
BBgBarc BA Intermediate HY	5.1%	4.9%	1.0		0.0%
Global Fixed Income	1.2%	6.5%	0.2	0.2	8.0%
BBgBarc Multiverse TR	0.0%	5.0%	0.0		0.0%
Franklin Templeton	1.2%	6.5%	0.2	0.1	8.0%
BBgBarc Multiverse TR	0.0%	5.0%	0.0		0.0%

Statistics Summary

5 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Fixed Income	4.8%	3.5%	1.4	1.1	2.2%
Blended Fixed Income Index	2.4%	3.3%	0.7		0.0%
US Fixed Income	4.5%	3.1%	1.4	1.2	1.4%
Blended US Fixed Index	2.7%	3.3%	0.8		0.0%
FIAM Bond	3.1%	3.2%	1.0	1.2	0.8%
BBgBarc US Aggregate TR	2.2%	2.9%	0.7		0.0%
Brigade Capital	6.4%	6.3%	1.0	0.4	4.3%
BBgBarc BA Intermediate HY	4.8%	5.0%	1.0		0.0%
Global Fixed Income	5.4%	7.9%	0.7	0.6	7.8%
BBgBarc Multiverse TR	0.5%	4.6%	0.1		0.0%
Franklin Templeton	5.4%	7.9%	0.7	0.6	7.8%
BBgBarc Multiverse TR	0.5%	4.6%	0.1		0.0%

InvestorForce All DB Total Fix Inc Net Accounts



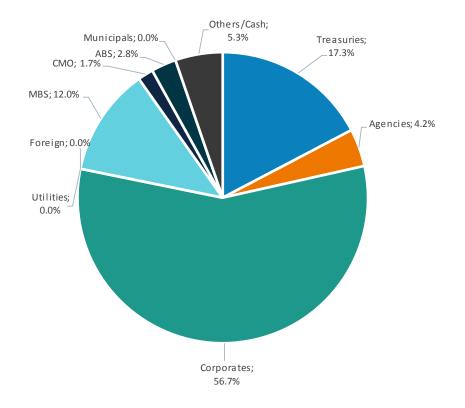
	Return (l	Rank)							
5th Percentile	8.0	3.3	9.5	3.9	8.3	5.4	8.0	8.2	
25th Percentile	-1.1	0.6	6.7	2.5	4.1	4.1	5.6	5.8	
Median	-2.2	-1.3	5.1	1.9	2.9	3.2	4.3	5.0	
75th Percentile	-3.2	-2.4	3.3	1.5	2.2	2.6	3.8	4.3	
95th Percentile	-8.4	-7.1	1.8	0.6	1.3	1.6	2.7	3.1	
# of Portfolios	357	355	354	346	336	307	240	199	
Fixed IncomeBlended Fixed Income Index	0.8 -2.4	(6) 3.2 (60) -0.9	(6) 8.1 (44) 5.5	(12) 3.4 (46) 2.4	(9) 3.8 (27) 3.1	(30) 4.8 (41) 2.4	(16) 5.7 (79) 3.9	\ /	(47) (68)

InvestorForce All DB US Fix Inc Net Accounts



	Return (Ran	k)						
5th Percentile	0.5	3.0	9.8	3.9	8.0	5.8	8.2	7.6
25th Percentile	-1.4	0.0	7.0	2.6	4.6	4.4	5.9	5.6
Median	-2.1	-1.6	4.7	2.0	3.3	3.4	4.6	4.8
75th Percentile	-4.0	-2.8	2.8	1.5	2.5	2.4	3.7	4.2
95th Percentile	-8.7	-7.5	1.5	0.9	1.7	1.4	2.7	3.3
# of Portfolios	444	442	441	437	423	351	294	211
US Fixed IncomeBlended US Fixed Index	-0.3 (12) -1.6 (31)	2.6 (7) 0.0 (26)	8.1 (15) 6.0 (36)	3.6 (7) 2.9 (17)	4.2 (30) 3.7 (36)	4.5 (23) 2.7 (68)	5.8 (27) 4.2 (62)	5.2 (40) 4.8 (53)





		BBgBarc Aggregate	
Sector*	Account Weight	Weight	Difference
Treasuries	17.3%	36.1%	-18.8%
Agencies	4.2%	7.9%	-3.7%
Corporates	56.7%	25.9%	30.8%
Utilities	0.0%	0.0%	0.0%
Foreign	0.0%	0.0%	0.0%
MBS	12.0%	28.0%	-16.0%
CMO	1.7%	0.0%	1.7%
ABS	2.8%	2.1%	0.7%
Municipals	0.0%	0.0%	0.0%
Others/Cash	5.3%	0.0%	5.3%
TOTAL	100.0%	100.0%	0.0%

^{*} Sector Allocation excludes Opportunistic Credit Managers.

Bond Summary Statistics

Portfolio Characteristics*	
	Portfolio
Total Number of Securities	
Total Market Value	\$ 351,395,575
Current Coupon	2.32
Yield to Maturity	3.41
Average Life	8.97
Duration	4.92
Quality	AA-

BBgBarc Aggregate
3.16
2.59
7.95
5.85
AA

Yield to Maturity	
Range	% Held
0.0 - 5.0	n/a
5.0 - 7.0	n/a
7.0 - 9.0	n/a
9.0 - 11.0	n/a
11.0 - 13.0	n/a
13.0+	n/a
Unclassified	n/a

Average Life	
Range	% Held
0.0 - 1.0	1.6
1.0 - 3.0	6.4
3.0 - 5.0	20.2
5.0 - 10.0	59.0
10.0 - 20.0	2.0
20.0+	10.9
Unclassified	0.0

Duration	
Range	% Held
0.0 - 1.0	1.6
1.0 - 3.0	40.0
3.0 - 5.0	21.7
5.0 - 7.0	19.0
7.0 - 10.0	6.1
10.0+	11.7
Unclassified	0.0

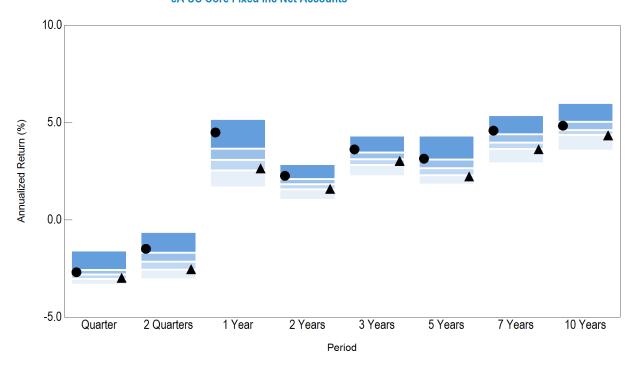
Quality	
Range	% Held
Govt (10)	35.4
Aaa (10)	0.9
Aa (9)	1.6
A (8)	11.2
Baa (7)	46.1
Below Baa (6-1)	2.0
Other	2.7

Coupon	
Range	% Held
0.0 - 5.0	84.0
5.0 - 7.0	10.7
7.0 - 9.0	2.1
9.0 - 11.0	0.1
11.0 - 13.0	0.0
13.0+	3.1
Unclassified	0.0

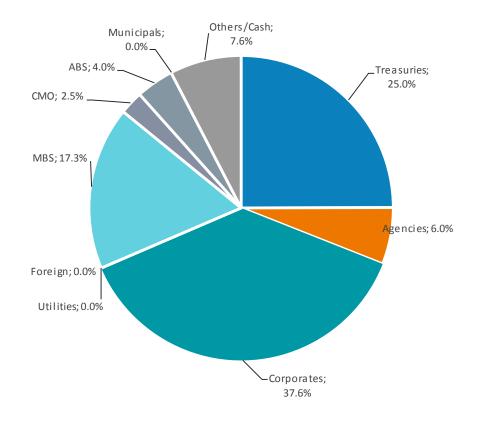
^{*} Characteristics excludes Opportunistic Credit Managers.



eA US Core Fixed Inc Net Accounts



	Return (R	ank)						
5th Percentile	-1.6	-0.6	5.2	2.9	4.3	4.3	5.4	6.0
25th Percentile	-2.6	-1.7	3.7	2.1	3.5	3.1	4.4	5.0
Median	-2.8	-2.1	3.1	1.8	3.1	2.7	4.0	4.6
75th Percentile	-3.0	-2.5	2.5	1.6	2.8	2.3	3.6	4.4
95th Percentile	-3.3	-3.0	1.7	1.0	2.2	1.8	2.9	3.6
# of Portfolios	133	133	132	131	131	126	116	102
► FIAM Bond▲ BBgBarc US Aggregate TR	\	41) -1.5 (19) 71) -2.5 (74)	4.5 (8) 2.6 (71)	2.3 (20) 1.6 (72)	3.6 (20) 3.0 (60)	3.1 (25) 2.2 (79)	4.6 (18) 3.6 (76)	4.8 (37) 4.3 (78)



		BBgBarc Aggregate	•
Sector	Account Weight	Weight	Difference
Treasuries	25.0%	36.1%	-11.1%
Agencies	6.0%	7.9%	-1.9%
Corporates	37.6%	25.9%	11.7%
Utilities	0.0%	0.0%	0.0%
Foreign	0.0%	0.0%	0.0%
MBS	17.3%	28.0%	-10.7%
CMO	2.5%	0.0%	2.5%
ABS	4.0%	2.1%	1.9%
Municipals	0.0%	0.0%	0.0%
Others/Cash	7.6%	0.0%	7.6%
TOTAL	100.0%	100.0%	0.0%

3.16 2.59 7.95 5.85

BBgBarc Aggregate

Portfolio Characteristics	
	Portfolio
Total Number of Securities	908
Total Market Value	\$ 243,708,418
Current Coupon	3.34
Yield to Maturity	3.01
Average Life	8.67
Duration	5.99
Quality	AA-

Yield to Maturity	
Range	% Held
0.0 - 5.0	94.2
5.0 - 7.0	6.4
7.0 - 9.0	1.3
9.0 - 11.0	0.1
11.0 - 13.0	0.0
13.0+	-2.0
Unclassified	0.0

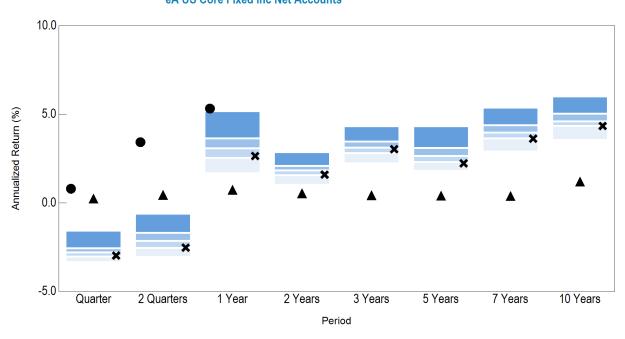
Average Life	
Range	% Held
0.0 - 1.0	2.3
1.0 - 3.0	9.2
3.0 - 5.0	29.1
5.0 - 10.0	40.8
10.0 - 20.0	2.9
20.0+	15.7
Unclassified	0.0

Duration	
Range	% Held
0.0 - 1.0	2.3
1.0 - 3.0	13.5
3.0 - 5.0	31.3
5.0 - 7.0	27.4
7.0 - 10.0	8.8
10.0+	16.8
Unclassified	0.0

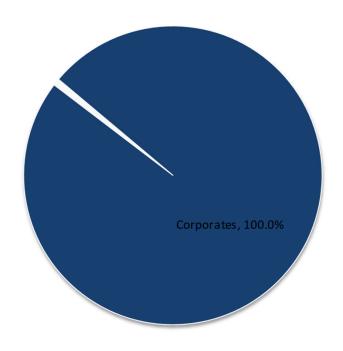
Quality	
Range	% Held
Govt (10)	51.1
Aaa (10)	1.3
Aa (9)	2.3
A (8)	16.1
Baa (7)	22.3
Below Baa (6-1)	2.9
Other	4.0

% Held
76.9
15.4
3.0
0.1
0.0
4.5
0.0

eA US Core Fixed Inc Net Accounts



	Return	(Rank)														
5th Percentile	-1.6		-0.6		5.2		2.9		4.3		4.3		5.4		6.0	
25th Percentile	-2.6		-1.7		3.7		2.1		3.5		3.1		4.4		5.0	
Median	-2.8		-2.1		3.1		1.8		3.1		2.7		4.0		4.6	
75th Percentile	-3.0		-2.5		2.5		1.6		2.8		2.3		3.6		4.4	
95th Percentile	-3.3		-3.0		1.7		1.0		2.2		1.8		2.9		3.6	
# of Portfolios	133		133		132		131		131		126		116		102	
Western TRU	0.8	(1)	3.4	(1)	5.3	(5)		()		()		()		()		()
▲ 3-Month Libor Total Return USD	0.2	(1)	0.4	(2)	0.7	(99)	0.5	(99)	0.4	(99)	0.4	(99)	0.4	(99)	1.2	(99)
★ BBgBarc US Aggregate TR	-3.0	(7 1)	-2.5	(74)	2.6	(71)	1.6	(72)	3.0	(60)	2.2	(79)	3.6	(76)	4.3	(78)



		BBgBarc Aggregate	
Sector	Account Weight	Weight	Difference
Treasuries	0.0%	36.1%	-36.1%
Agencies	0.0%	7.9%	-7.9%
Corporates	100.0%	25.9%	74.1%
Utilities	0.0%	0.0%	0.0%
Foreign	0.0%	0.0%	0.0%
MBS	0.0%	28.0%	-28.0%
CMO	0.0%	0.0%	0.0%
ABS	0.0%	2.1%	-2.1%
Municipals	0.0%	0.0%	0.0%
Others/Cash	0.0%	0.0%	0.0%
TOTAL	100.0%	100.0%	0.0%

Portfolio Characteristics	
	Portfolio
Total Number of Securities	1
Total Market Value	\$ 107,687,157
Current Coupon	0.00
Yield to Maturity	4.32
Average Life	9.66
Duration	2.49
Quality	A-

3.16 2.59 7.95 5.85		
3.16 2.59 7.95		
2.59 7.95	BBgBarc Aggrega	te
2.59 7.95		
2.59 7.95		
7.95	3.	16
	2.5	59
5.85 AA	7.9	95
AA	5.8	85
	A	۱A

Yield to Maturity	
Range	% Held
0.0 - 5.0	n/a
5.0 - 7.0	n/a
7.0 - 9.0	n/a
9.0 - 11.0	n/a
11.0 - 13.0	n/a
13.0+	n/a
Unclassified	n/a

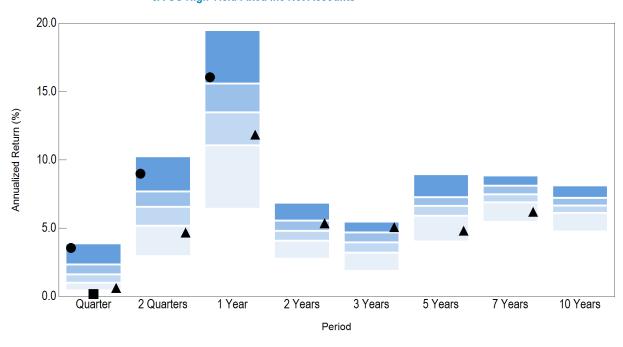
Average Life	
Range	% Held
0.0 - 1.0	0.0
1.0 - 3.0	0.0
3.0 - 5.0	0.0
5.0 - 10.0	100.0
10.0 - 20.0	0.0
20.0+	0.0
Unclassified	0.0

Duration	
Range	% Held
< 1.0	0.0
1.0 - 3.0	100.0
3.0 - 5.0	0.0
5.0 - 7.0	0.0
7.0 - 10.0	0.0
10.0+	0.0
Unclassified	0.0

Quality	
Range	% Held
Govt (10)	0.0
Aaa (10)	0.0
Aa (9)	0.0
A (8)	0.0
Baa (7)	100.0
Below Baa (6-1)	0.0
Other	0.0

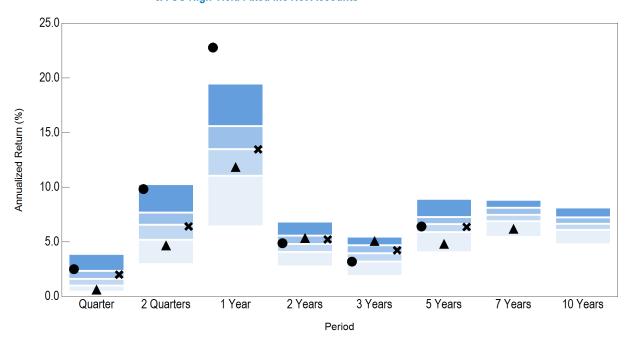
Coupon	
Range	% Held
0.0 - 5.0	100.0
5.0 - 7.0	0.0
7.0 - 9.0	0.0
9.0 - 10.0	0.0
10.0+	0.0
Unclassified	0.0

eA US High Yield Fixed Inc Net Accounts



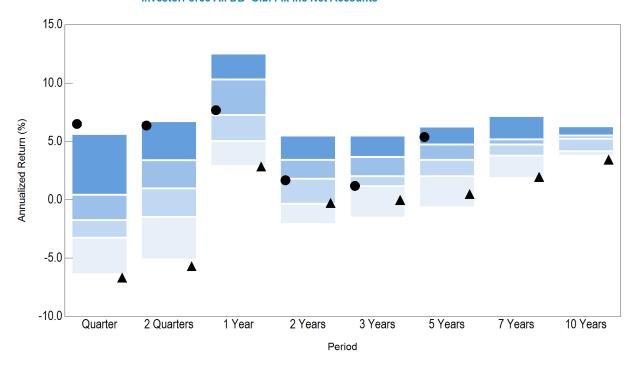
	Return (Rank)						
5th Percentile	3.9	10.3	19.5	6.9	5.5	8.9	8.8	8.1
25th Percentile	2.4	7.7	15.6	5.6	4.7	7.3	8.1	7.2
Median	1.6	6.6	13.5	4.8	4.0	6.6	7.5	6.7
75th Percentile	1.0	5.2	11.1	4.1	3.2	5.9	6.9	6.1
95th Percentile	0.4	3.0	6.4	2.8	1.9	4.1	5.5	4.8
# of Portfolios	115	115	114	107	102	92	78	62
Beach Point Select	3.6 (8)	9.0 (11)	16.1 (21)	()	()	()	()	()
TCP Direct Lending VIII	0.2 (99)	()	()	()	()	()	()	()
▲ BBgBarc BA Intermediate HY	0.6 (91)	4.7 (79)	11.8 (69)	5.4 (32)	5.1 (15)	4.8 (93)	6.2 (91)	()

eA US High Yield Fixed Inc Net Accounts



	Return (Rank)						
5th Percentile	3.9	10.3	19.5	6.9	5.5	8.9	8.8	8.1
25th Percentile	2.4	7.7	15.6	5.6	4.7	7.3	8.1	7.2
Median	1.6	6.6	13.5	4.8	4.0	6.6	7.5	6.7
75th Percentile	1.0	5.2	11.1	4.1	3.2	5.9	6.9	6.1
95th Percentile	0.4	3.0	6.4	2.8	1.9	4.1	5.5	4.8
# of Portfolios	115	115	114	107	102	92	78	62
Brigade Capital	2.5 (20)	9.8 (8)	22.8 (1)	4.9 (47)	3.2 (77)	6.4 (64)	()	()
BBgBarc BA Intermediate HY	0.6 (91)	4.7 (79)	11.8 (69)	5.4 (32)	5.1 (15)	4.8 (93)	6.2 (91)	()
➤ 50% Barclays HY/ 50% Bank Loan	2.0 (36)	6.4 (55)	13.5 (51)	5.2 (38)	4.2 (41)	6.4 (65)	()	()

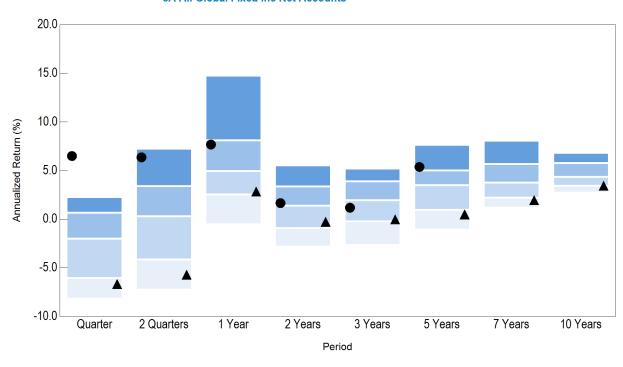
InvestorForce All DB Glbl Fix Inc Net Accounts



	Return	(Rank)															
5th Percentile	5.6		6.7		12.5		5.5		5.5		6.3		7.2		6.3		
25th Percentile	0.4		3.4		10.3		3.4		3.7		4.8		5.2		5.5		
Median	-1.7		1.0		7.3		1.8		2.0		3.4		4.7		5.2		
75th Percentile	-3.3		-1.4		5.1		-0.3		1.2		2.0		3.8		4.2		
95th Percentile	-6.4		-5.1		2.9		-2.1		-1.5		-0.6		1.9		3.8		
# of Portfolios	47		46		46		45		40		34		23		17		
 Global Fixed Income 	6.5	(1)	6.4	(9)	7.7	(45)	1.7	(55)	1.2	(75)	5.4	(16)		()		()	
▲ BBgBarc Multiverse TR	-6.7	(97)	-5.7	(97)	2.8	(96)	-0.3	(74)	0.0	(87)	0.5	(91)	2.0	(94)	3.4	(99)	

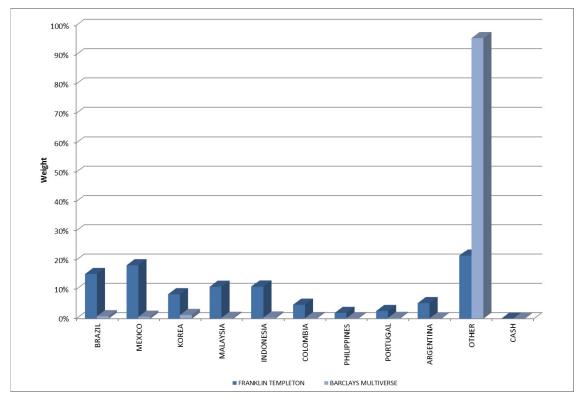


eA All Global Fixed Inc Net Accounts

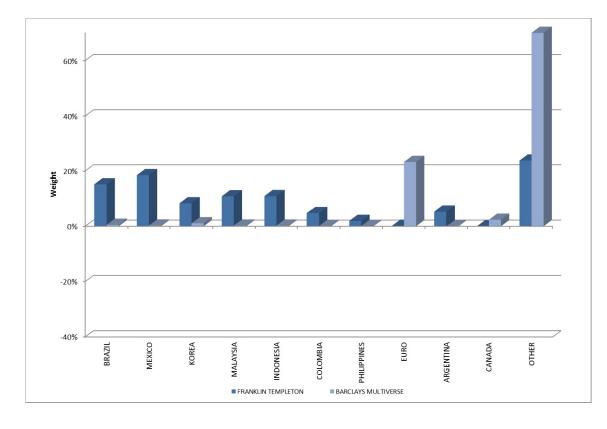


	Return (Ra	nk)						
5th Percentile	2.3	7.2	14.7	5.5	5.2	7.6	8.1	6.8
25th Percentile	0.7	3.4	8.1	3.4	3.9	5.0	5.7	5.8
Median	-2.0	0.3	5.0	1.4	2.0	3.5	3.8	4.4
75th Percentile	-6.0	-4.1	2.6	-0.9	-0.2	1.0	2.2	3.5
95th Percentile	-8.2	-7.2	-0.5	-2.8	-2.7	-1.1	1.2	2.8
# of Portfolios	212	211	209	195	187	157	120	87
Franklin Templeton	6.5 (1	, , ,	7.7 (27)	1.7 (50)	1.2 (59)	5.4 (23)	()	()
▲ BBgBarc Multiverse TR	-6.7 (82	2) -5.7 (84)	2.8 (72)	-0.3 (66)	0.0 (72)	0.5 (80)	2.0 (80)	3.4 (76)

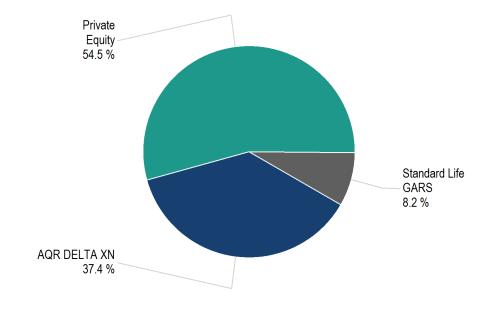




COUNTRY	MARKET VALUE	FRANKLIN TEMPLETON	BBgBarc MULTIVERSE	DIFF
BRAZIL	\$ 16,231	15.3%	0.9%	+14.4%
MEXICO	\$ 19,411	18.3%	0.7%	+17.6%
KOREA	\$ 8,892	8.4%	1.3%	+7.1%
MALAYSIA	\$ 11,604	10.9%	0.3%	+10.6%
INDONESIA	\$ 11,678	11.0%	0.4%	+10.6%
COLOMBIA	\$ 5,084	4.8%	0.2%	+4.6%
PHILIPPINES	\$ 2,095	2.0%	0.2%	+1.8%
PORTUGAL	\$ 2,797	2.6%	0.3%	+2.3%
ARGENTINA	\$ 5,658	5.3%	0.1%	+5.2%
OTHER	\$ 22,910	21.5%	95.7%	-74.1%
CASH	\$ -	0.0%	0.0%	0.0%
	\$ 106,361	100.0%	100.0%	0.0%



CURRENCY	MARKET VALUE	FRANKLIN TEMPLETON	BBgBarc MULTIVERSE	DIFF
BRAZIL	\$ 16,231	15.3%	0.5%	+14.7%
MEXICO	\$ 19,645	18.5%	0.3%	+18.2%
KOREA	\$ 8,892	8.4%	1.1%	+7.3%
MALAYSIA	\$ 11,604	10.9%	0.2%	+10.7%
INDONESIA	\$ 11,678	11.0%	0.2%	+10.7%
COLOMBIA	\$ 5,084	4.8%	0.1%	+4.7%
PHILIPPINES	\$ 2,095	2.0%	0.1%	+1.9%
EURO	\$ 181	0.2%	23.3%	-23.1%
ARGENTINA	\$ 5,658	5.3%	0.0%	+5.3%
CANADA	\$ -	0.0%	2.4%	-2.4%
OTHER	\$ 25,293	23.8%	71.8%	-48.0%
•	\$ 106,361	100.0%	100.0%	0.0%

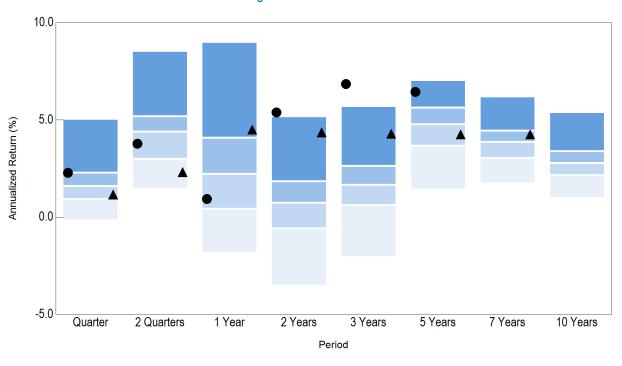


	Actual \$	Actual %	Manager Contribution to Excess Return %
AQR DELTA XN	\$156,647,941	37.4%	0.5%
Private Equity	\$228,518,673	54.5%	0.0%
Standard Life GARS	\$34,182,724	8.2%	0.1%
Actual vs. Policy Weight Difference			-0.1%
Total	\$419,349,338	100.0%	0.5%

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Alternatives	6.9%	5.0%	1.4	0.5	6.9%
Alternatives Allocation Index	3.6%	6.1%	0.6		0.0%
Private Equity	16.9%	9.5%	1.8	0.4	14.5%
Russell 3000 +3%	11.4%	10.8%	1.0		0.0%
Hedge Fund/Absolute Return	6.8%	5.0%	1.3	0.5	5.0%
Libor 1 month +4%	4.3%	0.1%	38.7		0.0%
AQR DELTA XN	7.2%	5.2%	1.4	0.6	5.2%
Libor 1 month +4%	4.3%	0.1%	38.7		0.0%

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Alternatives	6.9%	5.8%	1.2	0.1	6.1%
Alternatives Allocation Index	6.1%	6.0%	1.0		0.0%
Private Equity	16.4%	9.9%	1.7	-0.1	13.9%
Russell 3000 +3%	17.7%	10.5%	1.7		0.0%
Hedge Fund/Absolute Return	6.4%	5.2%	1.2	0.4	5.2%
Libor 1 month +4%	4.3%	0.1%	42.2		0.0%
AQR DELTA XN	6.7%	5.2%	1.3	0.5	5.3%
Libor 1 month +4%	4.3%	0.1%	42.2		0.0%

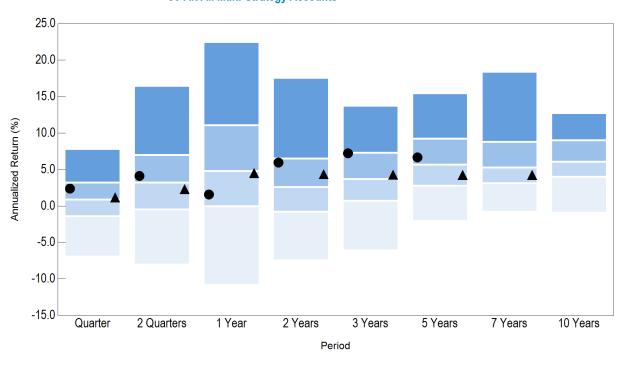
InvestorForce All DB Hedge Funds Net Accounts



	Return	(Rank)														
5th Percentile	5.1		8.5		9.0		5.2		5.7		7.1		6.2		5.4	
25th Percentile	2.3		5.2		4.1		1.8		2.6		5.6		4.5		3.4	
Median	1.6		4.4		2.2		0.7		1.7		4.8		3.9		2.8	
75th Percentile	0.9		3.0		0.4		-0.6		0.6		3.7		3.1		2.2	
95th Percentile	-0.2		1.5		-1.8		-3.5		-2.0		1.4		1.7		1.0	
# of Portfolios	258		258		256		251		246		212		151		83	
Hedge Fund/Absolute ReturnLibor 1 month +4%	2.3 1.2	(27) (67)	3.8 2.3	(62) (85)	0.9 4.5	(68) (23)	5.4 4.4	(5) (7)	6.8 4.3	(2) (10)	6.4 4.3	(10) (61)	4.3	() (35)		() ()

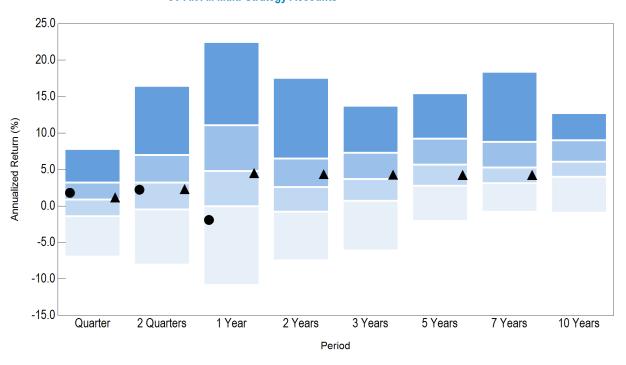


eV Alt All Multi-Strategy Accounts



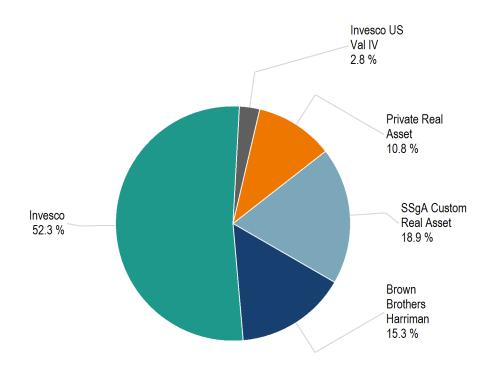
	Return	(Rank)														
5th Percentile	7.8	16.5		22.5		17.6		13.7		15.5		18.4		12.7		
25th Percentile	3.2	7.0		11.1		6.5		7.3		9.3		8.8		9.0		
Median	0.9	3.2		4.8		2.6		3.7		5.7		5.3		6.1		
75th Percentile	-1.4	-0.4		0.0		-0.8		0.7		2.8		3.1		4.0		
95th Percentile	-6.9	-8.0		-10.8		-7.4		-6.1		-2.0		-0.8		-0.9		
# of Portfolios	316	313		308		287		264		197		165		103		
● AQR DELTA XN ▲ Libor 1 month +4%	2.4 1.2	(34) 4.1 (48) 2.3	(42) (60)	1.6 4.5	(69) (52)	6.0 4.4	(28) (38)	7.2 4.3	(26) (47)	6.7 4.3	(44) (64)	 4.3	() (64)		() ()	

eV Alt All Multi-Strategy Accounts



	Return	(Rank)														
5th Percentile	7.8	16.5		22.5		17.6		13.7		15.5		18.4		12.7		_
25th Percentile	3.2	7.0		11.1		6.5		7.3		9.3		8.8		9.0		
Median	0.9	3.2		4.8		2.6		3.7		5.7		5.3		6.1		
75th Percentile	-1.4	-0.4		0.0		-0.8		0.7		2.8		3.1		4.0		
95th Percentile	-6.9	-8.0		-10.8		-7.4		-6.1		-2.0		-0.8		-0.9		
# of Portfolios	316	313		308		287		264		197		165		103		
Standard Life GARS	1.8	(39) 2.2	()	-1.9	(80)		()		()		()		()		()	
▲ Libor 1 month +4%	1.2	(48) 2.3	(60)	4.5	(52)	4.4	(38)	4.3	(47)	4.3	(64)	4.3	(64)		()	



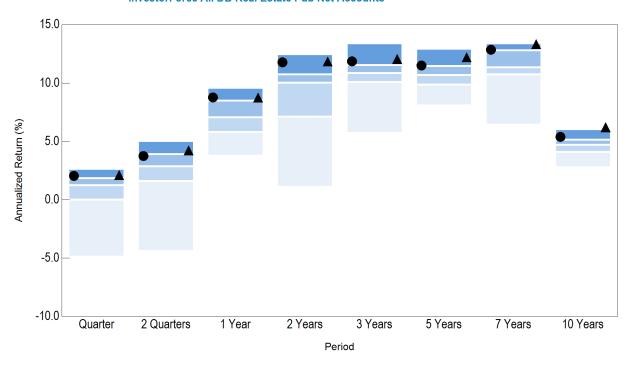


			Manager Contribution to
	Actual \$	Actual %	Excess Return %
Invesco	\$241,433,357	52.3%	-0.0%
Invesco US Val IV	\$12,851,380	2.8%	-0.0%
Brown Brother Harriman	\$70,531,255	15.3%	0.3%
Private Real Asset	\$49,679,381	10.8%	-0.1%
SSgA Custom Real Asset	\$87,037,479	18.9%	0.0%
Actual vs. Policy Weight Difference			0.2%
Total	\$461,532,853	100.0%	0.4%

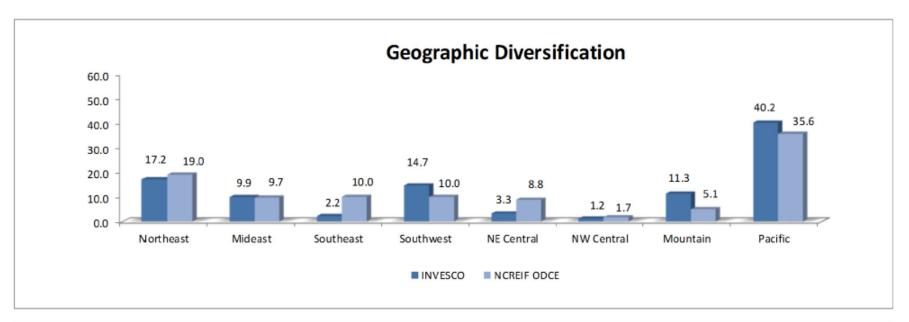
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Real Estate	11.86%	5.17%	2.27	-0.13	1.48%
NCREIF ODCE	12.06%	4.95%	2.41		0.00%
Invesco	11.74%	5.13%	2.27	-0.20	1.56%
NCREIF ODCE	12.06%	4.95%	2.41		0.00%
TIPS	1.60%	3.04%	0.49	-0.41	1.59%
BBgBarc US TIPS TR	2.26%	4.14%	0.52		0.00%
Brown Brothers Harriman	1.60%	3.04%	0.49	-0.41	1.59%
BBgBarc US TIPS TR	2.26%	4.14%	0.52		0.00%

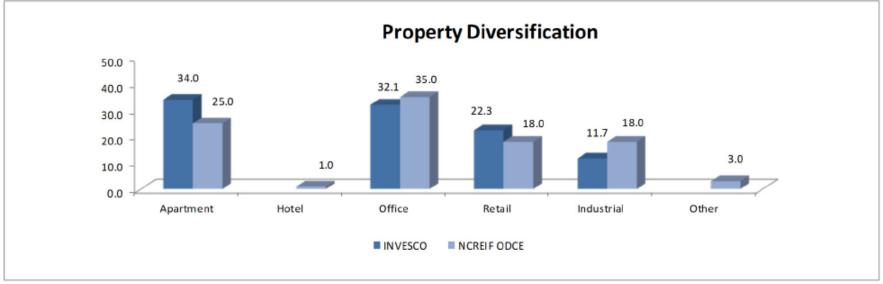
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error Rank
Real Estate	11.50%	4.99%	2.29	-0.46	32
NCREIF ODCE	12.21%	4.95%	2.45		1
Invesco	11.43%	4.96%	2.28	-0.49	
NCREIF ODCE	12.21%	4.95%	2.45		
TIPS	0.64%	4.29%	0.13	-0.19	
BBgBarc US TIPS TR	0.89%	4.76%	0.17		
Brown Brothers Harriman	0.64%	4.29%	0.13	-0.19	55
BBgBarc US TIPS TR	0.89%	4.76%	0.17		1

InvestorForce All DB Real Estate Pub Net Accounts



	Return (Rai	ık)						
5th Percentile	2.6	5.0	9.6	12.5	13.4	12.9	13.4	6.0
25th Percentile	1.9	3.9	8.5	10.8	11.6	11.5	12.8	5.2
Median	1.3	2.9	7.1	10.0	10.9	10.7	11.4	4.7
75th Percentile	0.0	1.6	5.8	7.1	10.1	9.9	10.8	4.1
95th Percentile	-4.9	-4.4	3.8	1.1	5.7	8.1	6.4	2.8
# of Portfolios	93	93	93	92	89	76	68	40
■ Real Estate▲ NCREIF ODCE	2.0 (21 2.1 (20	, , ,	8.8 (17) 8.8 (17)		(8) 11.9 (18) (8) 12.1 (15)	\ /	12.9 (23) 13.3 (6)	5.4 (16) 6.2 (1)

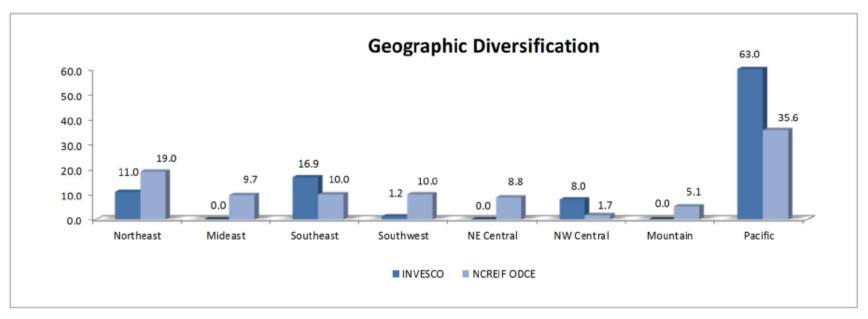


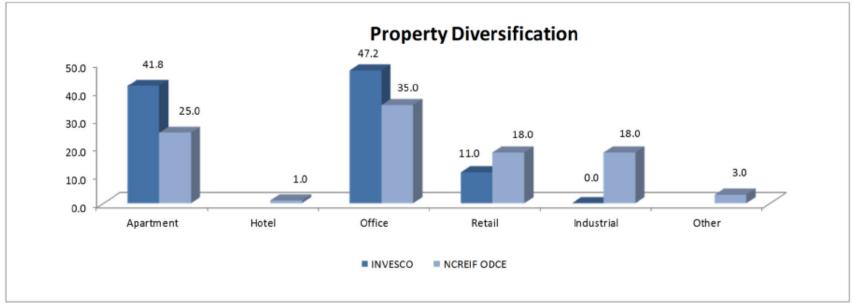


Property Name	MSA	Prior Quarter Carry Value	Current Quarter Carry Value	Net Market Value	Date Added to Fund	Last Valuation Date	SamCERA ownership as of 12/31/2016 2.97%
APARTMENTS							2.31 /6
Stoneridge Apartments	Pleasanton, CA	\$228,000,000	\$232,000,000	\$232,000,000	4Q06	December-16	\$6,901,246
Instrata Pentagon City	Arlington, VA	\$148,000,000	\$148,000,000	\$87,997,107	3Q10	December-16	\$2,617,628
Ladd Tower	Portland, OR	\$135,000,000	\$136,000,000	\$78,978,523	4Q10	December-16	\$2,349,354
Legacy Fountain Plaza	San Jose, CA	\$151,956,119	\$157,955,192	\$157,955,192	1Q11	December-16	\$4,698,654
Instrata Gramercy (fka The Elektra)	New York, NY	\$173,000,000	\$173,000,000	\$100,258,388	1Q11	December-16	\$2,982,361
Instrata Brooklyn Heights (fka 75 Clinton Street)	Brooklyn, NY	\$70,800,000	\$66,100,000	\$66,100,000	1Q12	December-16	\$1,966,260
The Artisan Laguna Beach	Orange County, CA	\$159,000,000	\$162,000,000	\$100,290,976	3Q12	December-16	\$2,983,331
The GoodWynn	Atlanta, GA	\$100,000,000	\$100,000,000	\$63,000,000	4Q12	December-16	\$1,874,045
Instrata Hell's Kitchen	New York, NY	\$210,000,000	\$194,000,000	\$119,828,000	1Q13	December-16	\$3,564,494
Sunset Vine Tower	Los Angeles, CA	\$96,000,000	\$97,100,000	\$97,100,000	2Q13	December-16	\$2,888,409
The Ashton	Dallas, TX	\$119,000,000	\$124,000,000	\$66,676,586	4Q13	December-16	\$1,983,412
The Pointe at Westchester	West Chester, PA	\$62,700,000	\$58,500,000	\$58,500,000	4Q13	December-16	\$1,740,185
206 Bell	Seattle, WA	\$45,800,000	\$46,100,000	\$46,100,000	4Q13	December-16	\$1,371,325
Cadence Union Station	Denver, CO	\$86,700,000	\$87,300,000	\$50,082,992	1Q14	December-16	\$1,489,806
Joseph Arnold Lofts	Seattle, WA	\$70,100,000	\$70,100,000	\$35,770,955	2Q14	December-16	\$1,064,070
Verve	Denver, CO	\$113,000,000	\$114,000,000	\$114,000,000	3Q14	December-16	\$3,391,130
Broadstone Little Italy	San Diego CA	\$118,000,000	\$116,000,000	\$62,665,969	3Q14	December-16	\$1,864,109
33 Tehama	San Francisco, CA	\$154,801,246	\$189,004,305	\$157,863,806	3Q14	December-16	\$4,695,935
The Parker	Portland, OR	\$66,200,000	\$66,200,000	\$33,497,615	1Q15	December-16	\$996,445
Legacy West Apartments	Plano, TX	\$62,419,279	\$78,191,439	\$62,456,611	1Q15	December-16	\$1,857,881
Village at Park Place	Irvine, CA	\$89,020,025	\$103,205,383	\$84,079,097	2Q15	December-16	\$2,501,080
Wheaton 121	Wheaton, IL	\$93,100,000	\$88,800,000	\$88,800,000	2Q15	December-16	\$2,641,511
Jefferson Marketplace	Washington, DC	\$146,000,000	\$149,000,000	\$78,537,265	4Q15	December-16	\$2,336,228
Retreat at Park Meadows	Littleton,CO	\$127,000,000	\$129,000,000	\$129,000,000	4Q15	December-16	\$3,837,331
North Water	Chicago, IL	\$261,000,000	\$261,000,000	\$261,000,000	1Q16	December-16	\$7,763,902
2270 Broadway	Oakland, CA	\$18,940,464	\$20,091,330	\$20,091,330	1Q16	December-16	\$597,652
Runway at Playa Vista -Apartments	Playa Vista, CA	\$149,990,000	\$150,520,000	\$87,046,108	1Q16	December-16	\$2,589,339
Clayton Lane Apartments	Denver, CO	\$33,043,200	\$33,580,740	\$33,580,740	1Q16	December-16	\$998,918
Biscayne 27	Miami, FL	\$16,100,714	\$16,540,362	\$16,540,362	2Q16	December-16	\$492,022
Flats 8300	Washington DC	\$214,000,000	\$215,000,000	\$111,500,000	2Q16	December-16	\$3,316,763
407 1st Ave	New York, NY	\$0	\$190,000,000	\$190,000,000	4Q16	December-16	\$5,651,883
		\$3,518,671,047	\$3,772,288,751	\$2,891,297,622			\$86,006,709
INDUSTRIAL							
Arjons Industrial Park	San Diego CA	\$39,500,000	\$40,100,000	\$40,100,000	2Q04	December-16	\$1,192,845
Gateway Business Park	Dallas TX	\$13,100,000	\$13,300,000	\$13,300,000	2Q04	December-16	\$395,632
Hayward Industrial	Oakland CA	\$149,300,000	\$156,200,000	\$156,200,000	3Q04-3Q07	December-16	\$4,646,442
Lackman Park	Kansas City MO-KS	\$24,700,000	\$24,900,000	\$24,900,000	2Q04	December-16	\$740,694
Crossroads Industrial	Kansas City MO-KS	\$7,900,000	\$7,900,000	\$7,900,000	1Q06	December-16	\$234,999
Oakesdale Commerce Center	Seattle - Belle - Eve WA	\$49,900,000	\$52,300,000	\$52,300,000	1Q06	December-16	\$1,555,755
South Bay Industrial	Los Angeles, CA	\$45,800,000	\$45,800,000	\$45,800,000	4Q06	December-16	\$1,362,401
Steeplechase 95 International Business Park	Capitol Heights, MD	\$92,800,000	\$93,300,000	\$93,300,000	1Q11	December-16	\$2,775,372
Airport Trade Center Portfolio	Dallas, TX	\$120,700,000	\$121,400,000	\$121,400,000	1Q11	December-16	\$3,611,256
IE Logistics	San Bernardino, CA	\$129,900,000	\$133,400,000	\$133,400,000	3Q11	December-16	\$3,968,217
Railhead Drive Industrial	Dallas, TX	\$62,100,000	\$62,200,000	\$62,200,000	4Q11	December-16	\$1,850,248
Empire Gateway aka Chino South Logistics Cente	r Chino, CA	\$242,000,000	\$244,000,000	\$244,000,000	4Q12	December-16	\$7,258,207
SFO Logistics Center	San Francisco, CA	\$142,000,000	\$140,000,000	\$140,000,000	4Q13	December-16	\$4,164,545
Miami Industrial Portfolio	Various ,FL	\$92,388,194	\$92,683,687	\$61,502,725	1Q16	December-16	\$1,829,506
OMP Burbank	Los Angeles, CA	\$67,483,981	\$67,285,295	\$67,285,295	2Q16	December-16	\$2,001,519
		\$1,279,572,175	\$1,294,768,982	\$1,263,588,020			\$37,587,638



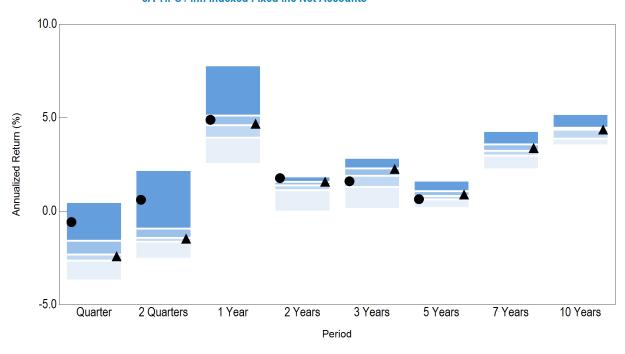
OFFICE							
5 Cambridge Parkway	Boston MA - NH	\$257,000,000	\$262,000,000	\$262,000,000	4Q06	December-16	\$7,793,649
he Executive Building	Washington, D.C.	\$228,000,000	\$0	\$0	2Q08	Sold 4Q16	\$0
111 Pennsylvania Avenue	Washington, D.C.	\$313,000,000	\$316,000,000	\$316,000,000	4Q10	December-16	\$9,399,973
800 Larimer	Denver, CO	\$314,000,000	\$314,000,000	\$314,000,000	1Q11	December-16	\$9,340,480
illview Office	San Jose, CA	\$77,300,000	\$78,300,000	\$78,300,000	3Q12	December-16	\$2,329,171
/illiams Tower	Houston, TX	\$586,000,000	\$587,000,000	\$402,457,701	1Q13	December-16	\$11,971,809
Vestlake Park Place	Westlake Village, CA	\$111,000,000	\$111,000,000	\$111,000,000	4Q13	December-16	\$3,301,889
01 Second	San Francisco, CA	\$373,000,000	\$376,000,000	\$376,000,000	1Q14	December-16	\$11,184,778
nergy Crossing II	Houston, TX	\$108,000,000	\$108,000,000	\$108,000,000	2Q14	December-16	\$3,212,649
776 Wilson Blvd.	Arlington, VA	\$93,900,000	\$94,300,000	\$94,300,000	3Q14	December-16	\$2,805,119
31 Howard	San Francisco, CA	\$93,600,000	\$94,700,000	\$94,700,000	3Q14	December-16	\$2,817,017
arton Oaks	Austin, TX	\$86,500,000	\$85,700,000	\$85,700,000	3Q14	December-16	\$2,549,297
ercules East and South Campus	Los Angeles, CA	\$156,943,473	\$161,584,535	\$161,584,535	3Q14	December-16	\$4,806,615
ne Reserve	Playa Vista, CA	\$354,240,239	\$354,587,594	\$354,587,594	1Q15	December-16	\$10,547,829
ort Point Portfolio	Boston, MA	\$215,519,271	\$218,201,592	\$129,595,957	2015	December-16	\$3,855,059
egacy West Office	Plano, TX	\$46.622.955	\$55.620.714	\$31,362,854	1Q15	December-16	\$932,943
immit IV	Aliso Viejo, CA	\$120,000,000	\$122,000,000	\$83,546,446	2Q15	December-16	\$2,485,235
101 Westlake	Seattle, WA	\$85,300,000	\$97,500,000	\$97,500,000	3Q15	December-16	\$2,900,308
earlWest	Boulder, CO	\$83,300,000	\$122,312,425	\$122.312.425	4Q16	Acq 4Q16	\$3,638,397
Sallwest	boulder, CO	\$3,619,925,938	\$3,558,806,860	\$3,222,947,512	7010	Acq TQIO	\$95,872,216
ETAIL		\$3,013,323,338	\$3,338,800,800	\$3,222,347,512			\$95,672,210
roadway at Surf	Chicago IL	\$33,100,000	\$0	\$0	2Q04	Sold 4Q16	\$0
latthews Township	Charlotte - G - RH NC-SC	\$26,000,000	\$26,500,000	\$26,500,000	2Q04	December-16	\$788,289
tyline at Tenley	Washington, D.C.	\$58,600,000	\$59,600,000	\$59,600,000	4Q05	December-16	\$1,772,906
dgehaven Shopping Center	Minnetonka, MN	\$41,500,000	\$42,500,000	\$42,500,000	4Q05	December-16	\$1,772,333
ne Beacon Retail	San Francisco, CA	\$65,100,000	\$67,500,000	\$67,500,000	1Q06	December-16	\$2,007,906
ne Beacon Garage (units)	San Francisco, CA	\$35,600,000	\$35,600,000	\$35,600,000	1Q06	December-16	\$1,058,984
ne Beacon Office (210 King)	San Francisco, CA	\$22,400,000	\$23,900,000	\$23,900,000	1015	December-16	\$710,947
awthorne Plaza	Overland Park, KS	\$54,800,000	\$54,800,000	\$54,800,000	4Q07	December-16	\$1,630,122
ne Loop	Boston MA - NH	\$96,900,000	\$96,900,000	\$96,900,000	1Q08	December-16	\$2,882,460
10 Lincoln Road	Miami, FL	\$37,100,000	\$33,000,000	\$33,000,000	4Q10	December-16	\$981,643
		. , ,	. , ,	- ' ' '	4Q10	December-16	\$2,345,531
ke Pointe Village	Houston, TX Hawaii	\$76,850,000 \$86,200,000	\$78,850,000 \$91,400,000	\$78,850,000 \$55.097,862	4Q11 4Q11	December-16	\$1,638,982
feway Kapahulu		' ' '	· ' ' '	· / /	4Q11 4Q11	December-16	\$1,062,224
feway Burlingame	San Francisco, CA	\$56,700,000	\$58,500,000	\$35,708,906	4Q11 4Q11	December-16	\$667,380
namrock Plaza	Oakland, CA	\$38,600,000	\$38,700,000	\$22,435,388	1Q12	December-16	\$1,159,358
avilions Marketplace	West Hollywood, CA	\$62,400,000	\$63,700,000	\$38,974,288	2Q12	December-16 December-16	\$1,159,358
30 Prince	New York, NY	\$203,700,000	\$204,000,000	\$204,000,000	4Q12	December-16 December-16	\$2,433,284
rfeway Pleasanton	Pleasanton, CA	\$81,800,000	\$81,800,000	\$81,800,000	4Q12 4Q12	December-16	\$1,686,648
berty Wharf	Boston, MA	\$90,000,000	\$90,200,000	\$56,700,245	3Q13	December-16 December-16	\$1,686,648
nops at Legacy	Plano, TX	\$109,710,916	\$109,710,916	\$109,710,916	3Q13 4Q14	December-16 December-16	\$3,263,543
asadena Commons	Pasadena, CA	\$52,900,000	\$53,400,000	\$53,400,000			. , ,
ush Street Retail	Chicago, IL	\$15,600,000	\$15,700,000	\$15,700,000	4Q14	December-16	\$467,024
gacy West Retail	Plano, TX	\$135,408,223	\$141,651,344	\$116,082,249	1Q15	December-16	\$3,453,070
gacy West Land	Plano, TX	\$8,535,453	\$8,541,584	\$8,541,584	2Q16	December-16	\$254,084
1-137 Spring Street	New York, NY	\$230,879,027	\$235,177,039	\$124,643,831	3Q15	December-16	\$3,707,749
ınway at Playa Vista - Retail	Playa Vista, CA	\$117,130,000	\$118,720,000	\$56,306,215	1Q16	December-16	\$1,674,927
9 Spring	New York, NY	\$117,008,800	\$118,992,000	\$118,992,000	1Q16	December-16	\$3,539,625
ayton Lane	Denver, CO	\$143,003,528	\$142,966,879	\$96,178,691	1Q16	December-16	\$2,861,004
h & Colorado	Santa Monica, CA	\$12,720,000	\$12,720,000	\$12,720,000	1Q16	December-16	\$378,379
nops at Crystals	Las Vegas, NV	\$287,500,000	\$287,500,000	\$150,093,637	2Q16	December-16	\$4,464,798
		\$2,479,845,947	\$2,477,629,762	\$1,961,335,812			\$58,343,367
	Portfolio Total	\$10,898,015,107	\$11,103,494,355	\$9,339,168,966			\$277,809,929



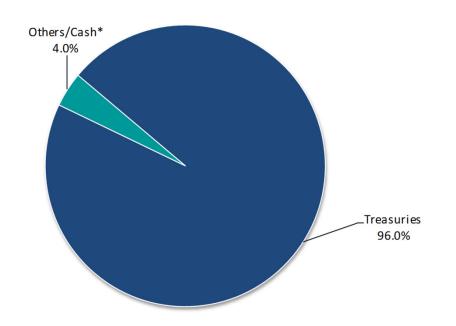


Property Name	Region Classification	Geographic Classification	MSA	Prior Quarter Carry Value	Current Quarter Carry Value	Net Market Value	Date Added to Fund	Last Valuation Date
APARTMENTS								
Brookwood	West	Southeast	Atlanta, GA	\$62,580,557	\$66,152,752	\$21,229,752	3Q14	December-16
Broadstone Harbor Beach	East	Southeast	Ft. Lauderdale, FL	\$75,441,690	\$85,217,025	\$36,968,385	1Q15	December-16
Downtown East	MidWest	West North Central	Minneapolis, MN	\$72,000,000	\$71,600,000	\$31,422,536	2Q15	December-16
Wyndham Park	West	Pacific	Portland, OR	\$88,000,000	\$0	\$0	2Q15	Sold - 4Q16
Legacy West Mid-Rise	MidWest	Southwest	Dallas, TX	\$8,210,036	\$10,698,179	\$10,149,221	2Q16	December-16
LaSalle Apartments	West	Pacific	Beaverton, OR	\$0	\$141,762,585	\$47,067,209	4Q16	December-16
	•	•		\$306,232,284	\$375,430,542	\$146,837,104		
INDUSTRIAL								
OFFICE								
55 Hawthorne	East	Pacific	San Francisco, CA	\$119,000,000	\$0	\$0	3Q14	Sold - 4Q16
Silicon Valley Towers	East	Pacific	San Jose, CA	\$98,000,000	\$110,000,000	\$62,675,968	2Q15	December-16
Post 3rd	West	Pacific	Los Angeles, CA	\$82,246,503	\$88,000,000	\$37,256,292	1Q16	December-16
LAM Campus	West	Pacific	San Jose, CA	\$82,204,986	\$83,000,000	\$32,179,201	2Q16	December-16
Fashion Island	West	Pacific	San Mateo, CA	\$140,669,073	\$143,200,000	\$58,372,723	3Q16	December-16
				\$522,120,562	\$424,200,000	\$190,484,185		
RETAIL								
Ledgewood Mall	East	Northeast	Roxbury, NJ	\$32,000,000	\$32,600,000	\$16,868,997	3Q15	December-16
Paramus Retail Portfolio	East	Northeast	Paramus, NJ	\$68,500,000	\$65,800,000	\$29,267,394	4Q15	December-16
				\$100,500,000	\$98,400,000	\$46,136,391		
			Portfolio Total	\$928,852,846	\$898,030,542	\$383,457,679		

eA TIPS / Infl Indexed Fixed Inc Net Accounts



	Return (R	lank)						
5th Percentile	0.5	2.2	7.8	1.9	2.8	1.6	4.3	5.2
25th Percentile	-1.6	-0.9	5.1	1.6	2.3	1.1	3.6	4.5
Median	-2.3	-1.4	4.6	1.4	1.9	0.8	3.2	4.4
75th Percentile	-2.6	-1.6	3.9	1.1	1.3	0.6	3.0	3.9
95th Percentile	-3.7	-2.5	2.5	0.0	0.1	0.2	2.2	3.5
# of Portfolios	22	22	22	20	20	18	14	10
 Brown Brothers Harriman 	,	16) 0.6 (17	,	,	1.6 (66)	0.6 (72)	()	()
▲ BBgBarc US TIPS TR	-2.4 (57) -1.5 (67	4.7 (49)) 1.6 (25)	2.3 (30)	0.9 (45)	3.4 (36)	4.4 (51)



Sector	Account Weight	BBgBarc TIPS Index	Difference
Treasuries	96.0%	100.0%	-4.0%
Agencies	0.0%	0.0%	0.0%
Corporates	0.0%	0.0%	0.0%
Utilities	0.0%	0.0%	0.0%
Foreign	0.0%	0.0%	0.0%
MBS	0.0%	0.0%	0.0%
CMO	0.0%	0.0%	0.0%
ABS	0.0%	0.0%	0.0%
Municipals	0.0%	0.0%	0.0%
Others/Cash*	4.0%	0.0%	4.0%
TOTAL	100.0%	100.0%	0.0%

^{*} May include Derivatives, Futures, Swaps, Credit Default Swaps, Total Return Swaps or Currency Contracts.

Portfolio Characteristics	
	Portfolio
Total Number of Securities	12
Total Market Value	\$ 70,531,255
Current Coupon	1.03
Yield to Maturity	0.12
Average Life	
Duration	7.46
Quality	GOV

BBgBarc TIPS
37
N/A
0.82
0.18
7.59
AAA

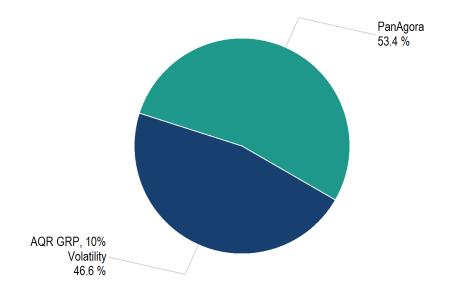
Yield to Maturity	
Range	% Held
0.0 - 5.0	100.0
5.0 - 7.0	n/a
7.0 - 9.0	n/a
9.0 - 11.0	n/a
11.0 - 13.0	n/a
13.0+	n/a
Unclassified	n/a

Average Life	
Range	% Held
0.0 - 3.0	19.1
3.0 - 5.0	10.6
5.0 - 10.0	44.6
10.0- 15.0	9.7
15.0+	16.0
Unclassified	0.0

Duration	
Range	% Held
0.0 - 3.0	15.5
3.0 - 5.0	16.5
5.0 - 10.0	44.8
10.0- 15.0	12.1
15.0+	11.0
Unclassified	0.0

Quality	
Range	% Held
Govt (10)	96.0
Aaa (10)	0.0
Aa (9)	0.0
A (8)	0.0
Baa (7)	0.0
Below Baa (6-1)	0.0
Other	4.0

Coupon	
Range	% Held
0.0 - 5.0	100.0
5.0 - 7.0	0.0
7.0 - 9.0	0.0
9.0 - 11.0	0.0
11.0 - 13.0	0.0
13.0+	0.0
Unclassified	0.0



	Actual \$	Actual %	Manager Contribution to Excess Return %
AQR GRP, 10% Volatility	\$128,374,183	46.6%	-1.7%
PanAgora	\$146,984,575	53.4%	-3.5%
Actual vs. Policy Weight Difference			0.0%
Total	\$275,358,758	100.0%	-5.2%

3 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Risk Parity	5.3%	8.9%	0.6	-0.2	6.8%
60/40 Russell 3000/BBgBarc US Aggregate	6.4%	6.6%	1.0		0.0%
AQR GRP, 10% Volatility	2.6%	8.8%	0.3	-0.6	6.7%
60/40 Russell 3000/BBgBarc US Aggregate	6.4%	6.6%	1.0		0.0%
PanAgora					
60/40 Russell 3000/BBgBarc US Aggregate	6.4%	6.6%	1.0		0.0%

Statistics Summary

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Risk Parity	5.6%	8.9%	0.6	-0.6	7.0%
60/40 Russell 3000/BBgBarc US Aggregate	9.7%	6.4%	1.5		0.0%
AQR GRP, 10% Volatility	4.0%	8.9%	0.4	-0.8	6.9%
60/40 Russell 3000/BBgBarc US Aggregate	9.7%	6.4%	1.5		0.0%
PanAgora					
60/40 Russell 3000/BBgBarc US Aggregate	9.7%	6.4%	1.5		0.0%

	3 Mo (%)	6 Mo (%)	1 Yr (%)	2 Yrs (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Total Fund	0.9	4.8	8.6	4.8	5.1	9.2	4.7
Policy Index	1.1	4.9	8.9	4.3	4.8	9.0	5.4
Allocation Index	1.1	4.6	8.7	4.1	4.7		
Total Fund ex Overlay	1.0	5.0	8.4	4.6	5.1	9.2	4.7
Policy Index	1.1	4.9	8.9	4.3	4.8	9.0	5.4
Allocation Index	1.1	4.6	8.7	4.1	4.7		
Public Equity	1.1	6.3	8.4	4.1	4.5	11.3	4.2
Blended Public Equity Index	1.9	7.7	9.7	3.8	4.4	11.1	5.0
US Equity	4.2	8.8	11.6	6.4	7.6	14.3	6.1
Blended US Equity Index	4.2	9.1	12.9	6.2	8.0	14.5	7.0
Russell 3000	4.2	8.8	12.7	6.4	8.4	14.7	7.1
Large Cap Equity	3.4	7.7	10.9	6.8	8.4	14.7	6.3
Russell 1000	3.8	8.0	12.1	6.3	8.6	14.7	7.1
Barrow Hanley	8.8	14.2	14.4	7.2	7.8	15.1	
Russell 1000 Value	6.7	10.4	17.3	6.2	8.6	14.8	5.7
BlackRock S&P 500 Index	3.8	7.8	12.0	6.6	8.9		
S&P 500	3.8	7.8	12.0	6.5	8.9	14.7	6.9
Brown Advisory	-4.5	-0.9	-2.2	2.4	4.0		
Russell 1000 Growth	1.0	5.6	7.1	6.4	8.6	14.5	8.3
DE Shaw	3.8	9.3	14.8	9.5	10.3	16.7	
Russell 1000	3.8	8.0	12.1	6.3	8.6	14.7	7.1
Small Cap Equity	10.7	17.5	18.2	5.9	5.0	13.7	5.7
Russell 2000	8.8	18.7	21.3	7.7	6.7	14.5	7.1
QMA US Small Cap	10.8						
Russell 2000	8.8	18.7	21.3	7.7	6.7	14.5	7.1
International Equity	-3.4	2.7	3.6	0.6	-0.5	5.8	0.6
MSCI ACWI ex US IMI	-1.5	5.5	4.9	0.3	-1.0	5.7	1.5
MSCI EAFE Gross	-0.7	5.8	1.5	0.6	-1.2	7.0	1.2



	3 Mo (%)	6 Mo (%)	1 Yr (%)	2 Yrs (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Developed Markets	-3.5	2.6	2.6	0.9	-0.2	6.3	0.8
MSCI ACWI ex USA Gross	-1.2	5.7	5.0	-0.3	-1.3	5.5	1.4
Baillie Gifford	-7.0	0.9	1.1	1.5	0.3		
MSCI ACWI ex US	-1.2	5.7	5.0	-0.3	-1.3		
MSCI ACWI ex US Growth	-5.7	0.1	0.5	-0.2	-0.9		
BlackRock EAFE Index	-0.7	5.8	1.5	0.5	-1.3		
MSCI EAFE	-0.7	5.7	1.0	0.1	-1.6	6.5	0.7
MSCI EAFE Gross	-0.7	5.8	1.5	0.6	-1.2	7.0	1.2
FIAM Equity	-5.4	1.3	2.2	3.2	1.1		
MSCI ACWI ex US Small Cap Gross	-3.5	4.2	4.3	3.6	1.1	8.1	3.3
Mondrian	-1.0	2.9	5.2	0.0	-0.5	5.0	1.5
MSCI ACWI ex USA Value Gross	3.4	11.5	9.6	-0.5	-1.9	5.2	0.9
MSCI ACWI ex USA Gross	-1.2	5.7	5.0	-0.3	-1.3	5.5	1.4
Emerging Markets	-2.6	2.7	13.4	-1.9	-2.4	-	
MSCI Emerging Markets Gross	-4.1	4.7	11.6	-2.4	-2.2	1.6	2.2
Parametric Core	-2.6	2.7	13.4				
MSCI Emerging Markets Gross	-4.1	4.7	11.6	-2.4	-2.2	1.6	2.2
Fixed Income	0.9	3.3	8.4	3.7	4.1	5.1	5.4
Blended Fixed Income Index	-2.4	-0.9	5.5	2.4	3.1	2.4	4.5
US Fixed Income	-0.2	2.7	8.5	4.1	4.6	4.9	5.4
Blended US Fixed Index	-1.6	0.0	6.0	2.9	3.7	2.7	4.8
Core Fixed	-1.5	0.1	5.0	2.6	3.9	3.6	4.8
BBgBarc US Aggregate TR	-3.0	-2.5	2.6	1.6	3.0	2.2	4.3
FIAM Bond	-2.7	-1.4	4.6	2.4	3.8	3.3	5.0
Western TRU	1.1	3.8	5.8				
3-Month Libor Total Return USD	0.2	0.4	0.7	0.5	0.4	0.4	1.2
BBgBarc US Aggregate TR	-3.0	-2.5	2.6	1.6	3.0	2.2	4.3



	3 Mo (%)	6 Mo (%)	1 Yr (%)	2 Yrs (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Opportunistic Credit	2.7	8.8	16.0	7.2	7.0	11.3	
BBgBarc BA Intermediate HY	0.6	4.7	11.8	5.4	5.1	4.8	
Angelo Gordon Opportunistic	2.5	7.6	8.1	5.0			-
Angelo Gordon STAR	2.0	6.7	7.5	7.0	10.0		-
BBgBarc US Aggregate TR	-3.0	-2.5	2.6	1.6	3.0	2.2	4.3
Beach Point Select	3.8	9.5	17.2				-
BBgBarc BA Intermediate HY	0.6	4.7	11.8	5.4	5.1	4.8	
Brigade Capital	2.5	9.8	23.1	5.4	3.8	6.9	-
BBgBarc BA Intermediate HY	0.6	4.7	11.8	5.4	5.1	4.8	
50% Barclays HY/ 50% Bank Loan	2.0	6.4	13.5	5.2	4.2	6.4	
TCP Direct Lending VIII	0.2						-
BBgBarc BA Intermediate HY	0.6	4.7	11.8	5.4	5.1	4.8	
Global Fixed Income	6.5	6.4	7.7	1.7	1.2	5.5	
BBgBarc Multiverse TR	-6.7	-5.7	2.8	-0.3	0.0	0.5	3.4
Franklin Templeton	6.5	6.4	7.7	1.7	1.2	5.5	
BBgBarc Multiverse TR	-6.7	-5.7	2.8	-0.3	0.0	0.5	3.4
Risk Parity	-3.9	-1.8	12.0	2.3	5.3	5.8	
60/40 Russell 3000/BBgBarc US Aggregate	1.3	4.2	8.8	4.7	6.4	9.7	6.3
AQR GRP, 10% Volatility	-2.4	-0.2	10.5	0.1	2.6	4.1	
PanAgora	-5.2	-3.1	13.2	4.4			
60/40 Russell 3000/BBgBarc US Aggregate	1.3	4.2	8.8	4.7	6.4	9.7	6.3
60/40 MSCI World/BBgBarc Global Aggregate	0.2	3.3	6.2	3.1	4.1	7.8	
Alternatives	3.8	10.2	9.2	7.7	7.0	7.1	
Alternatives Allocation Index	3.3	6.9	10.5	4.0	3.6	6.1	
Blended Alternatives Index	3.4	7.2	10.8	4.3	4.5	8.5	
Private Equity	5.0	16.0	14.7	17.6	16.9	16.4	
Russell 3000 +3%	5.0	10.7	15.7	9.4	11.4	17.7	10.1



	3 Mo (%)	6 Mo (%)	1 Yr (%)	2 Yrs (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Hedge Fund/Absolute Return	2.3	3.8	0.9	5.4	6.8	6.6	
Libor 1 month +4%	1.2	2.3	4.5	4.4	4.3	4.3	
AQR DELTA XN	2.4	4.1	1.6	6.0	7.2	6.8	
Libor 1 month +4%	1.2	2.3	4.5	4.4	4.3	4.3	
Standard Life GARS	1.8	2.2	-1.9				
Libor 1 month +4%	1.2	2.3	4.5	4.4	4.3	4.3	
Inflation Hedge	1.5	2.9	-				
Blended Inflation Pool Index	1.0	1.6					
Real Estate	2.1	3.9	9.2	12.1	12.3	11.9	5.8
NCREIF ODCE	2.1	4.2	8.8	11.8	12.1	12.2	6.2
Invesco	2.2	3.9	9.3	11.9	12.1	11.8	5.8
NCREIF ODCE	2.1	4.2	8.8	11.8	12.1	12.2	6.2
Invesco US Val IV	1.3	5.2	8.0				
NCREIF ODCE	2.1	4.2	8.8	11.8	12.1	12.2	6.2
NCREIF CEVA 1Q Lag - NET	2.5	4.8	13.1	15.0	15.1		
Private Real Asset	0.0	0.0	44.6	21.1			
Blended Real Asset Index	1.0	2.4	6.4	5.6	5.6		
Liquid Pool	-	-	-	-	-		
Blended Real Asset Index	1.0	2.4	6.4	5.6	5.6		
SSgA Custom Real Asset							
Blended Real Asset Index	1.0	2.4	6.4	5.6	5.6		
TIPS	-0.5	0.7	5.0	1.9	1.8	0.8	
BBgBarc US TIPS TR	-2.4	-1.5	4.7	1.6	2.3	0.9	4.4
Brown Brothers Harriman	-0.5	0.7	5.0	1.9	1.8	0.8	
BBgBarc US TIPS TR	-2.4	-1.5	4.7	1.6	2.3	0.9	4.4
Cash	0.2	0.4	0.8	1.0	0.8	0.7	0.9
91 Day T-Bills	0.1	0.2	0.3	0.2	0.1	0.1	0.7

Angelo, Gordon & Co. - AG STAR Fund

The STAR Fund will focus on CMBS and non-Agency RMBS priced between 25-75% of par, which AG believes are even today mispriced due to their complex nature and a dearth of natural buyers capable of accurately valuing these assets. In addition, AG will target securities that are well-positioned to benefit from home and commercial property price stabilization and recovery, and/or borrower credit quality improvement. In this regard the STAR Fund will be more aggressive than the PPIP Fund since it will target securities that are more geared to a recovery of the commercial and residential real estate markets. The Fund will utilize a moderate amount of leverage (1x to 1.5x) and is targeting a base-case 15% net IRR with a downside return in the mid/high single digits and an upside projection of 25%+ returns.

Angelo, Gordon & Co. - AG Opportunistic Whole Loan Fund

As bank balance sheets have strengthened since the crisis, Angelo Gordon expects approximately \$40 billion of re-performing loans and non-performing loans will trade hands each year in the near term. By acquiring these loans at a discounted price and replacing original servicers with better-focused special servicers, Angelo Gordon believes it can improve operational efficiency and generate attractive returns. To take advantage of this opportunity, Angelo Gordon established this Opportunistic Whole Loan Fund to make investments primarily in a portfolio of non-performing loans and re-performing, but will also include investments in new residential mortgage loans and excess mortgage servicing rights. Opportunistic investments in commercial mortgage loans and other mortgage related investments may also be included in the Fund's portfolio. Angelo Gordon has been an active participant in the residential and consumer debt market since 2008. The Partnership's investment approach to residential mortgage loans and securities is guided by an analytically based investment process anchored by distressed asset valuation and cash flow modeling. Angelo Gordon's analysis of re-performing and non-performing loans begins with its loan due diligence process. This process will include a review of substantially all of the properties in the pool, as well as a review of the loan files backing the loan pool. In addition, a macro overlay is embedded in the investment process which incorporates general economic trends, along with specific views on interest rates, unemployment, collateral appreciation or depreciation, governmental intervention in creditors' rights and liquidation timelines.

AQR Delta

The AQR DELTA Fund aims to deliver efficient exposure to a well-diversified portfolio of hedge fund strategies, including Convertible Arbitrage, Event Driven, Fixed Income Relative Value, Equity Market Neutral, Long/Short Equity, Dedicated Short Bias, Global Macro, Managed Futures, and Emerging Markets. The Delta Fund's approach is to capture and deliver the "hedge fund risk premiums" that explain much of the returns of each of these strategies by building bottom-up positions in each strategy. AQR's research has demonstrated that many hedge funds use similar strategies to generate returns. These strategies are often well-known, widely understood and share common exposures. AQR's experience and research suggests much of the insight underlying these strategies - as well as a meaningful portion of their returns - can be captured using a dynamic, disciplined investment approach. Just as the equity risk premium can explain a large portion of the returns from equity investing, hedge fund risk premiums can explain the returns from hedge fund investing. Importantly, while compensation for equity risk is dependent on economic growth, hedge fund risk premiums are largely unrelated to economic activity, and thus provide attractive diversification properties.



AQR - Risk Parity

The objective of Global Risk Parity (GRP) is to generate excess returns from a risk diversified portfolio of asset exposures. AQR believes that its approach maximizes the diversification benefit across a broad range of economic environments. For many institutional portfolios, equity risk has historically been the predominant risk and the source of most return expectations since equities offer higher expected returns to compensate for their high risk. Investor preference for and concentration in equities has been driven by their expected return needs, which cannot be satisfied in a well-diversified un-levered portfolio. GRP is a diversified portfolio that can be scaled to similar levels of risk as a portfolio concentrated in equities, but with a higher expected return resulting from diversification across asset class risk. The approach helps do away with the compromise of concentrating in high risk assets to meet high return needs. Consistent with portfolio theory, the GRP strategy is designed to maximize diversification across a broad spectrum of liquid global risk premia to create a portfolio with higher expected risk-adjusted returns. Research shows that risk-adjusted returns across asset classes are similar over the long-term. Since realized risk-adjusted returns across asset classes are similar, AQR expects a portfolio that is diversified equally by risk to perform better. The Global Risk Premium strategy aims to deliver efficient market exposure across four broad asset classes in a risk balanced fashion.

Baillie Gifford – ACWI ex US Focus Equities

ACWI ex US Focus is a fundamental growth strategy. Research is organized primarily by regional teams, with each member of the ACWI ex US Focus Portfolio Construction Group representing a regional team. Four global sector groups also contribute research. Baillie Gifford conducts approximately 2000 company meetings annually both in Edinburgh and onsite. Companies are evaluated on their growth opportunity relative to the average company, their ability to execute on that opportunity, and the degree to which probability of future success is already valued by the market. Baillie Gifford's basic philosophy is that share prices ultimately follow earnings. They believe that the stock market has a recurring tendency to under-appreciate the value of long-term compound growth. The process seeks to add value through use of proprietary fundamental research to identify companies exhibiting some combination of sustained above average growth, and attractive financial characteristics. The portfolio generally holds 80-120 stocks, with country and sector weights +/-6% relative to the index and industry weights +/-5% relative to the index.

Barrow Hanley – Diversified Large Cap Value

Barrow Hanley takes a bottom up value approach to equity investing. They seek to buy stocks that exhibit all three of the following characteristics: price/earnings and price/book ratios below the market, and dividend yield above the market (with the S&P 500 representing the market). Their view is that a portfolio that emphasizes low price/book and high dividend yield stocks will provide some protection in down markets and participation in improving economic cycles. In addition to their basic valuation criteria, Barrow Hanley is also looking for profitable companies with earnings growth greater than the market. After the quantitative screening process, Barrow Hanley's equity research team conducts qualitative analysis of candidate investments. This involves forecasting ROE 5-years out and treating this forecast as the basis for earnings, book value and dividend yield projections for the same five year period. These projections are used as inputs into a dividend discount model and relative return model. Stocks that appear to be attractively valued according to both of these models comprise the firm's buy list. The portfolio managers construct the portfolio with 70-90 of the buy list names. Securities are weighted approximately equally, with core positions in the range of 1.5%. Sector weightings are limited to 35% (at cost) and industry weightings are limited to 15%. Stocks are generally held for three to four years, resulting in average turnover of 25% - 35%.



Beach Point Select Fund

Beach Point Select Fund is a commingled fund vehicle within the firm's Opportunistic Credit strategy. This fund focuses on off-the-run, complex, and less-liquid securities. It is a best ideas portfolio of distressed debt, special situations, private/direct loans, catalyst-driven high yield bonds and bank loans, and credit-informed equities with a North American and European focus. The Select Fund differs from other funds and accounts in the Opportunistic Credit strategy by pursuing a more concentrated portfolio and emphasizing a higher percentage of less-liquid/private investments. Beach Point invests up and down the entire capital structure and it constructs portfolios with a bottom-up, research-driven approach that also takes into account top-down macro considerations. Its investment process includes idea generation, detailed credit analysis, relative value decision making and investment selection, portfolio construction and on-going monitoring. The ultimate goal of its investment process is to produce a well-diversified investment portfolio with limited downside risk and substantial upside potential.

BlackRock - EAFE Index

The EAFE Index Fund seeks to replicate the return of the MSCI EAFE Index. This index represents the developed equity markets outside of North America: Europe, Austral, Asia and the Far East.

BlackRock - S&P 500 Index

The Equity Index Fund seeks to capture the growth potential of large companies and achieve broad diversification with low costs by fully replicating the Standard & Poor's (S&P) 500 Index. Representing approximately 80% of the total US equity market capitalization, the S&P 500 Index is one of the most widely followed benchmarks of US stock market performance. Introduced in 1977, this fund was the investment management industry's first institutional S&P 500 Index fund.

Brigade – Opportunistic Credit

Opportunistic Credit is a fundamental, bottom-up strategy focused on high yield corporate bonds and bank loans with tactical allocations to structured securities, convertibles and other sectors of the bond markets as they become attractive on a relative value basis. While performing credits represent the majority, Brigade will invest up to 35% of the portfolio in distressed securities and restructuring situations if these types of opportunities are attractive on a risk-adjusted basis and the timing is right with respect to the credit cycle. The portfolio is comprised of mostly North American issuers, but they are not restricted geographically and expect to have a moderate allocation to Europe over time. Although the portfolio is generally long-only, Brigade has the ability to implement a limited amount of tactical macro hedges.

Brown Advisory – Large Cap Growth Equity

Brown Advisory's Large-Cap Growth Equity philosophy is based on the belief that concentrated portfolios of fundamentally strong businesses should generate returns in excess of the portfolio's index and the broad market, with an acceptable level of risk. The success of the philosophy is based on a talented, highly collaborative investment team with a long-term outlook, performing deep investment research on a broad universe of stocks. This culminates in bottom-up company selection that strives to identify drivers of growth in the large capitalization universe. With conviction in strict investment criteria and rigorous due diligence, Brown concentrate its portfolios in its best ideas, creating the potential for above-average returns. The objective is to exceed the returns of the strategy's benchmark, the Russell 1000 Growth Index, over a full market cycle (typically 3-5 years) on a risk-adjusted basis.



Brown Brothers Harriman – Inflation Indexed Securities

BBH manages TIPS using three main types of strategies: Fundamental, Technical and Opportunistic. The Fundamental bucket has two sub-strategies, real yield duration and real yield curve slope vs. nominal yield curve slope. The Technical strategies consist of yield curve roll-down, auction cycle trading, seasonal vs. non-seasonal CPI and security selection/option value analysis. Finally, nominal Treasuries vs. TIPS, sector relative value (i.e., corporate or Agency inflation-linked bonds) and non-Dollar inflation-linked bonds make up the Opportunistic group. Real yield duration is held to +/- 1 year vs. the benchmark and the portfolio has a limited allocation to non-index securities, typically 5-10% with a maximum of 20% (including nominal Treasuries).

DE Shaw - DE Shaw US Broad Market Core Alpha Extension Fund

The D. E. Shaw group believes that there exist some market inefficiencies that may be identified through quantitative analysis, advanced technology, and the insight of practitioners. Identifying these inefficiencies involves a process of hypothesis formulation, testing, and validation. Importantly, to avoid data-mining, the hypothesis formulation precedes the analysis of the historical data. D.E. Shaw's Structured Equity strategies rely largely on quantitative and computational investment techniques developed by the D. E. Shaw over the last 19 years in the course of research conducted for purposes of managing the firm's hedge funds. In addition to its beta one strategies, D.E. Shaw manages substantial assets in its hedge fund strategies. D.E. Shaw's investment process involves a suite of quantitative models, each designed to capitalize on a distinct and uncorrelated set of market inefficiencies. Some of these models are technical in nature and involve price and volume inputs. Other models rely on fundamental data, such as figures gleaned from corporate balance sheets or income statements. Still others, again quantitative, anticipate or react to a particular corporate event or set of events. These models typically operate with forecast horizons of a few weeks to many months. The ability to trade on shorter-term signals distinguishes D.E. Shaw from many of its long only and 130/30 peers. Portfolio construction involves the use of a proprietary optimizer which runs dynamically throughout the trading day. The portfolio is broadly diversified with several hundred long and short positions. Over- and under-weighting of sectors and industries relative to the benchmark will be quite modest, with the intention that most of the alpha be generated by security selection. The US Broad Market Core Alpha Extension Fund is a 130/30 strategy which maintains a beta that is approximately neutral to the Russell 1000 Index.

Eaton Vance/Parametric - Structured Emerging Markets Core Equity

Parametric utilizes a structured, rules-based approach, which they believe is capable of generating enhanced returns with lower volatility compared to both traditional active management and passive capitalization weighted indices. The basic idea is to structure the portfolio with more balanced country weights than the market cap weighted indices, and also to capture a rebalancing premium. This provides more diversification and greater exposure to smaller countries than is provided by the market cap weighted indices. The approach is to divide emerging markets countries into three tiers, and to equally weight the countries within each tier. Tier 1 countries are the largest eight countries that dominate the cap weighted index. Each successive tier is comprised of smaller countries, each of which is given a smaller target weighting in the model portfolio. In aggregate, the eight Tier 1 countries are given a much lower weighting than in the capitalization weighted index, but they nevertheless comprise more than 50% of the portfolio. The Core SEM strategy targets excess return of 3% over a market cycle with 2.5%-4.5% tracking error. It is designed to generate a level of volatility 90%-100% of the MSCI EM index. The strategy invests in 44 countries and will typically hold 700-1,000 securities. Turnover is expected to be in the range of 5%-15%.



Franklin Templeton Investments – Global Fixed Income

Franklin Templeton manages the global bond mandate in an unconstrained fashion using a top-down, fundamental framework. In the short term and on a country-by-country basis there are often inefficiencies in global bond and currency markets, however, over the longer term the market will generally price to fundamentals. Thus, FT focuses on fundamental research to identify long-term opportunities and uses short-term market inefficiencies to build positions in such investments. The investment and portfolio construction process begins with the determination of the Fund's or institutional client's investment objectives, resulting in a set of risk-return parameters and exposure limits within which the portfolio is managed. Next the firm's global economic outlook for the industrialized countries is developed, with a focus on interest rate and exchange rate forecasts. The portfolio's interest rate outlook is a function of global general equilibrium macroeconomic analysis as well as country-specific research. Macroeconomic conditions in the G-3 economies are analyzed first, primarily with respect to how current and projected growth and inflation dynamics are expected to influence monetary policy. This analysis is then extended out to the rest of the industrialized countries (G-13) as well as emerging markets, which results in broad targets for cash, duration, currencies and the developed/emerging market mix. Using the firm's interest rate and exchange rate outlook, probability-weighted horizon returns for bonds of various countries are then calculated. This analysis is used to establish specific country weights and duration targets based on risk-adjusted expected total return measured in the portfolio's base currency. Analysis of emerging markets includes sovereign credit analysis along with greater emphasis on capital flows, inter-market dynamics and trends in the level of risk aversion in the market.

INVESCO Realty Advisors – INVESCO Core Equity, LLC

SamCERA is a founding member of INVESCO's open end Core Equity real estate fund and rolled its separate account properties into the fund. INVESCO Core Equity, LLC (the "Fund") is a perpetual life, open-end vehicle which invests in a diversified portfolio of institutional quality office, retail, industrial and multifamily residential real estate assets. The Fund buys core properties that are located within the United States, typically requiring an investment of \$10 million or more. The portfolio cannot be more than 30% leveraged.

INVESCO Realty Advisors – INVESCO US Val IV

Invesco has provided SamCERA with Core Real Estate exposure since 2004 through the Invesco Core Equity Fund. The Invesco real estate team manages around \$62B in assets with investments and offices around the globe. Invesco Value Fund IV will look to acquire fundamentally sound but broken "core" assets that can be repositioned into institutional-quality, income producing properties. Investments will be limited to direct equity interests in office, multi-family, retail and industrial properties across the US. The Fund is expected to be geographically concentrated in U.S. gateway cities and top 25 Metropolitan Statistical Areas (MSA's). Invesco Value Fund IV will provide a nice compliment to the more conservative Invesco Core Fund and offer the potential of enhanced returns to the SamCERA Real Estate portfolio.



Mondrian Investment Partners – International Equity

Mondrian is a value-oriented, defensive manager whose investment philosophy is based on the principle that investments must be evaluated for their fundamental long-term value. The firm's philosophy involves three stated investment objectives: 1) provide a rate of return meaningfully greater than the client's domestic rate of inflation, 2) structure client portfolios that preserve capital during protracted international market declines, and 3) provide portfolio performance that is less volatile than benchmark indices and other international managers. Mondrian applies typical value screening criteria to a universe of 1,500 stocks, from which 500 are selected for more detailed work. Through fundamental research, and the deliberations of the Investment Committee, the universe is further reduced to a list of 150 stocks. The investment team conducts detailed fundamental analysis on the remaining stocks, a process which includes applying the firm's dividend discount model consistently across all markets and industries. Mondrian also uses a purchasing power parity model to give an accurate currency comparison of the value of the stocks under consideration. The firm will only consider buying stocks in countries with good investor protection practices and relatively simple repatriation procedures. A computer based optimization program is employed in the portfolio construction process. Mondrian's portfolio holds 80-125 issues.

Panagora - Diversified Risk Multi Asset Fund

The Multi Asset team is headed up by Edward Qian, CIO of the group, and the founder of Panagora's risk parity strategy. A staff of approximately thirteen works in this group on research and portfolio construction, with some people spending more time on the former and some more on the latter. Panagora implements risk parity by distinguishing between three categories of assets: equities, nominal fixed income, and inflation protection. Each of these categories corresponds to a respective economic environment: economic growth, economic contraction and inflation. Panagora's risk allocation targets 40% each from equities and nominal fixed income, and 20% from inflation protection. In addition to applying concept of risk parity between asset classes, Panagora also applies it within each asset class. The 40/40/20 allocation to equities/nominal fixed income/inflation protection is a long term strategic allocation. In 2009 Panagora introduced what they refer to as "Dynamic Risk Allocation" or "DRA," which involves tactically tilting the risk allocations away from the neutral targets in order to enhance returns and reduce risk.

Pyramis Global Advisors - Broad Market Duration Commingled Pool

Pyramis' Broad Market Duration (BMD) investment strategy seeks to achieve absolute and risk-adjusted returns in excess of the BC U.S. Aggregate Index, focusing its investments in US Treasuries, agencies, investment grade corporate bonds, mortgage-backed and asset-backed securities. The BMD commingled pool can also hold small, opportunistic positions in out-of-benchmark securities, such as inflation-linked bonds. The investable universe includes all US dollar denominated, investment grade debt securities. The BMD investment approach emphasizes issuer and sector valuation and individual security selection. Through the integration of fundamental and quantitative research and trading, the BMD strategy is implemented in a team environment. Risk management technology is utilized to explicitly quantify benchmark exposures on a daily basis, and Pyramis uses the same analytical framework to assess both index and portfolio risk. Tracking error should range between 40 and 60 basis points per annum over the benchmark, and stringent portfolio construction risk control rules are strictly adhered to.



Pyramis Global Advisors – Select International Small Cap

Pyramis Select International Small Cap is a core strategy. The approach is designed to leverage Pyramis/Fidelity's proprietary resources to add value exclusively via stock selection. To that end the portfolio is constructed to be regionally neutral, with only modest deviations from the benchmark's country and sector weights. The investment process involves three basic stages. The first stage is the security level research conducted by the analysts. The second stage is stock selection from within the pool of names that are highly ranked by the analysts. The third step is portfolio construction and risk management. The essential differentiating feature of this strategy is the breadth of coverage that is made possible by the large staff of analysts. Analysts actively conduct regular fundamental research on, and give a formal rating of 1-5, 1200-1300 international small cap companies. While there is no single firm-wide approach to security research, analysts are expected to establish an upside target for any given stock and assign a formal rating. The decision making structure is quite efficient, with portfolio manager Rob Feldman making all the buy and sell decisions. His role, as he puts it, is to be an intelligent user of the analysts' research. He selects the 1-and 2- rated stocks that he thinks are compelling and additive to his portfolio, and he sells names when they are downgraded by the analysts. There are approximately 200 holdings in the portfolio. Country and sector weights are within 3 percentage points of the benchmark and position sizes are within 2 percentage points of the benchmark. Turnover tends to be in the 60%-80% range.

Quantitative Management Associates – QMA Small-Cap Core

Quantitative Management Associates (QMA) utilizes a bottom-up quantitative framework in order provide a diversified exposure to core U.S. small-cap stocks, while attempting to produce consistent outperformance versus the benchmark with moderate tracking error levels. QMA uses an adaptive, systematic investment process to exploit opportunities created by mispriced securities to consistently add value over long time periods. Bottom-up stock selection drives exposure to key sources of alpha (valuation, growth, and quality). The QMA stock selection model adapts to changes in company growth rates and market environments by putting more emphasis on valuation for slowly growing companies, and more emphasis on future growth projections for companies with higher projected growth rates.

Standard Life Global Absolute Return Strategy (GARS)

The Standard Life Global Absolute Return Strategy (GARS) was initially launched in 2005 to help address Standard Life's own pension plan's deficit problem. GARS' primary investment objective is to deliver a positive absolute return over the medium to long term with lower volatility than equities, irrespective of market conditions. It seeks returns through dynamic allocation to investment opportunities in traditional and advanced asset classes, and also separately exploits the team's security selection expertise. In the search for attractive investment positions, the team follows a rigorous research process. This includes a variety of research techniques, including broad global macro-economic, fundamental analysis, quantitative research and valuation modeling. The GARS investment process is designed to capitalize on an array of research and investment techniques and draws together the team's three-year investment insights. The team then rigorously examines and review position proposals to approve a high conviction, short list of positions that work well together. Having a cash benchmark means that GARS has a potentially unrestricted investment universe and all portfolio holdings are at the Portfolio Manager's discretion. The GARS portfolio also routinely uses a variety of conventional derivatives for investment, liquidity, efficiency and hedging purposes. The GARS strategy has experienced significant growth in its asset under management since it becomes available to external investors in 2006.



State Street Global Advisors (SSgA) Custom Real Asset

SSgA Custom Real Asset portfolio uses a portfolio of liquid real assets to proxy private real assets. The portfolio is comprised of equal weightings of the Bloomberg Commodity Index, S&P Global Natural Resources Index, and S&P Global Infrastructure Index. The portfolio is used to fund upcoming private real asset mandates.

Tennenbaum Capital Partners - TCP Direct Lending Fund VIII

TCP Direct Lending Fund VIII is a private investment fund managed by Tennenbaum Capital Partners ("TCP"). The Fund is designed to continue TCP's successful strategy of investing in privately-originated, performing senior secured debt primarily in North America-based companies with target enterprise values between \$100 million and \$1.5 billion. The Fund will include positions in 1st lien, 2nd lien and unitranche debt, with a preference for floating-rate debt, which TCP believes provides better flexibility to adapt to market conditions. TCP's direct lending strategy has generated attractive investment opportunities across market cycles, as evidenced by the Firm's prior direct lending track record. Fund VIII targets an unlevered annual yield of approximately 9-12%, with its return primarily driven by current income.

Western Asset Management – Total Return Unconstrained (TRU)

Western Asset's Total Return Unconstrained strategy (TRU) seeks to provide bond-like risk and return over the long term, but does not have a benchmark. This allows for asset allocation based on value rather than using the construction of a benchmark as baseline positioning. The investment approach is active with very broad latitude on duration (-3 to +8 years) and on asset allocation across all of the eligible sectors in a core plus mandate. The portfolio must have at least 50% of its holdings in investment-grade securities. The flexibility offered by this strategy allows for defensive positioning in rising rate environments and opportunistic deployment of capital when value opportunities arise. It also allows the portfolio managers to emphasize (or deemphasize) either credit or rates when one or the other appears to offer greater (or lesser) value.um non-US exposure.



Total Plan Policy Index	As of													
	10/1/16	9/1/16	1/1/16	7/1/14	1/1/14	2/1/13	1/1/11	10/1/10	1/1/09	5/1/07	6/1/00	3/1/99	9/1/98	7/1/96
10 Year Treasury +2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8.0%	10.0%	10.0%
60/40 MSCI World/BBgBarc Global Aggregate (RP)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
60/40 Russell 3000/BBgBarc US Aggregate (RP)	8.0%	8.0%	8.0%	8.0%	8.0%	6.0%	6.0%	6.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
BBgBarc Aggregate	10.0%	10.0%	10.0%	10.0%	9.3%	11.0%	11.0%	12.9%	27.0%	27.0%	29.0%	25.0%	21.0%	21.0%
BBgBarc BA Intermediate HY	6.0%	5.0%	5.0%	5.0%	5.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
BBgBarc BBB	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
BBgBarc Credit BAA	0.0%	0.0%	0.0%	0.0%	0.0%	3.5%	3.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
BBgBarc Multiverse	3.0%	3.0%	3.0%	3.0%	3.8%	4.4%	4.4%	4.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
BBgBarc TIPS	2.0%	2.0%	2.0%	2.0%	2.0%	3.1%	3.3%	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bloomberg Commodity	0.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Citigroup non-US WGBI	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.0%	9.0%	9.0%
CPI + 5% (RA)	0.0%	2.0%	2.0%	2.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Blended Real Asset	5.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Libor +4% (HF)	5.0%	5.0%	5.0%	4.0%	4.0%	3.0%	3.0%	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
MSCI ACWI ex-US	0.0%	0.0%	0.0%	0.0%	0.0%	18.0%	18.0%	18.0%	21.0%	21.0%	15.0%	0.0%	0.0%	0.0%
MSCI ACWI ex-US IMI	19.0%	20.0%	20.0%	20.0%	20.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
MSCI EAFE	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	20.0%	20.0%	20.0%
NCREIF ODCE	7.0%	7.0%	7.0%	6.0%	6.0%	5.0%	5.0%	5.0%	6.0%	0.0%	0.0%	0.0%	0.0%	0.0%
NCREIF Property	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.0%	6.0%	0.0%	0.0%	0.0%
Russell 1000	0.0%	0.0%	24.0%	24.0%	24.0%	28.0%	28.0%	28.0%	37.0%	37.0%	40.0%	22.0%	20.0%	20.0%
Russell 1000 Value	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.0%	5.0%	0.0%
Russell 2000	0.0%	0.0%	4.0%	6.0%	6.0%	7.0%	7.0%	7.0%	9.0%	9.0%	10.0%	15.0%	15.0%	15.0%
Russell 3000	28.0%	28.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Russell 3000 +3% (PE)	7.0%	7.0%	7.0%	7.0%	7.0%	8.0%	8.0%	8.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
S&P 500	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.0%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Total Equity Benchmark	As of:					
	10/1/16	9/1/16	1/1/16	1/1/14	10/1/10	5/1/07
MSCI ACWI ex-US	0.0%	0.0%	0.0%	0.0%	34.0%	31.3%
MSCI ACWI ex-US IMI	40.4%	41.7%	41.7%	40.0%	0.0%	0.0%
MSCI EAFE	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Russell 1000	0.0%	0.0%	50.0%	48.0%	52.8%	55.2%
Russell 1000 Value	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Russell 2000	0.0%	0.0%	8.3%	12.0%	13.2%	13.5%
Russell 3000	59.6%	58.3%	0.0%	0.0%	0.0%	0.0%
S&P 500	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
US Fausity Banahmank	As of:					
US Equity Benchmark	AS 01. 9/1/16	1/1/16	6/1/00	3/1/99	9/1/98	7/1/96
Russell 1000	0.0%	85.7%	80.0%	52.0%	50.0%	50.0%
Russell 1000 Value	0.0%	0.0%	0.0%	12.0%	12.5%	0.0%
Russell 2000	0.0%	14.3%	20.0%	36.0%	37.5%	37.5%
Russell 3000	100.0%		0.0%			
S & P 500	0.0%	0.0% 0.0%	0.0%	0.0% 0.0%	0.0% 0.0%	0.0% 12.5%
S & P 500					100.0%	
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
International Equity Benchmark	As of:	100.0%	100.0%	100.0%	100.0%	100.0%
International Equity Benchmark		6/1/00	1/1/96	100.0%	100.0%	100.0%
International Equity Benchmark MSCI ACWI ex US	As of:			100.0%	100.0%	100.0%
	As of: 1/1/14	6/1/00	1/1/96	100.0%	100.0%	100.0%
MSCI ACWI ex US	As of: 1/1/14 0.0%	6/1/00 100.0%	1/1/96 0.0%	100.0%	100.0%	100.0%
MSCI ACWI ex US MSCI ACWI ex US IMI	As of: 1/1/14 0.0% 100.0%	6/1/00 100.0% 0.0%	1/1/96 0.0% 0.0%	100.0%	100.0%	100.0%
MSCI ACWI ex US MSCI ACWI ex US IMI MSCI EAFE	As of: 1/1/14 0.0% 100.0% 0.0% 100.0%	6/1/00 100.0% 0.0% 0.0%	1/1/96 0.0% 0.0% 100.0%	100.0%	100.0%	100.0%
MSCI ACWI ex US MSCI ACWI ex US IMI	As of: 1/1/14 0.0% 100.0% 0.0% 100.0% As of:	6/1/00 100.0% 0.0% 0.0% 100.0%	1/1/96 0.0% 0.0% 100.0% 100.0%			
MSCI ACWI ex US MSCI ACWI ex US IMI MSCI EAFE Total Fixed Income Benchmark	As of: 1/1/14 0.0% 100.0% 0.0% 100.0% As of: 10/1/16	6/1/00 100.0% 0.0% 0.0% 100.0%	1/1/96 0.0% 0.0% 100.0% 100.0%	1/1/14	2/1/13	1/1/11
MSCI ACWI ex US MSCI ACWI ex US IMI MSCI EAFE Total Fixed Income Benchmark BBgBarc Aggregate	As of: 1/1/14 0.0% 100.0% 0.0% 100.0% As of: 10/1/16 52.6%	6/1/00 100.0% 0.0% 0.0% 100.0%	1/1/96 0.0% 0.0% 100.0% 100.0% 7/1/14 50.0%	1/1/14 46.3%	2/1/13 50.0%	1/1/11 50.0%
MSCI ACWI ex US MSCI ACWI ex US IMI MSCI EAFE Total Fixed Income Benchmark BBgBarc Aggregate BBgBarc BA Intermediate HY	As of: 1/1/14 0.0% 100.0% 0.0% 100.0% As of: 10/1/16 52.6% 31.6%	6/1/00 100.0% 0.0% 0.0% 100.0% 4/1/16 55.5% 27.8%	1/1/96 0.0% 0.0% 100.0% 100.0% 7/1/14 50.0% 25.0%	1/1/14 46.3% 25.0%	2/1/13 50.0% 0.0%	1/1/11 50.0% 0.0%
MSCI ACWI ex US MSCI ACWI ex US IMI MSCI EAFE Total Fixed Income Benchmark BBgBarc Aggregate BBgBarc BA Intermediate HY BBgBarc BBB	As of: 1/1/14 0.0% 100.0% 0.0% 100.0% As of: 10/1/16 52.6% 31.6% 0.0%	6/1/00 100.0% 0.0% 0.0% 100.0% 4/1/16 55.5% 27.8% 0.0%	1/1/96 0.0% 0.0% 100.0% 100.0% 7/1/14 50.0% 25.0% 0.0%	1/1/14 46.3% 25.0% 0.0%	2/1/13 50.0% 0.0% 0.0%	1/1/11 50.0% 0.0% 0.0%
MSCI ACWI ex US MSCI ACWI ex US IMI MSCI EAFE Total Fixed Income Benchmark BBgBarc Aggregate BBgBarc BA Intermediate HY BBgBarc BBB BBgBarc Credit BAA	As of: 1/1/14 0.0% 100.0% 0.0% 100.0% As of: 10/1/16 52.6% 31.6% 0.0% 0.0%	6/1/00 100.0% 0.0% 0.0% 100.0% 4/1/16 55.5% 27.8% 0.0% 0.0%	1/1/96 0.0% 0.0% 100.0% 100.0% 7/1/14 50.0% 25.0% 0.0%	1/1/14 46.3% 25.0% 0.0% 0.0%	2/1/13 50.0% 0.0% 0.0% 16.0%	1/1/11 50.0% 0.0% 0.0% 15.0%
MSCI ACWI ex US MSCI ACWI ex US IMI MSCI EAFE Total Fixed Income Benchmark BBgBarc Aggregate BBgBarc BA Intermediate HY BBgBarc BBB BBgBarc Credit BAA BBgBarc Multiverse	As of: 1/1/14 0.0% 100.0% 100.0% As of: 10/1/16 52.6% 31.6% 0.0% 0.0% 15.8%	6/1/00 100.0% 0.0% 0.0% 100.0% 4/1/16 55.5% 27.8% 0.0% 0.0% 16.7%	1/1/96 0.0% 0.0% 100.0% 100.0% 7/1/14 50.0% 25.0% 0.0% 0.0% 15.0%	1/1/14 46.3% 25.0% 0.0% 0.0% 18.8%	2/1/13 50.0% 0.0% 0.0% 16.0% 20.0%	1/1/11 50.0% 0.0% 0.0% 15.0% 20.0%
MSCI ACWI ex US MSCI ACWI ex US IMI MSCI EAFE Total Fixed Income Benchmark BBgBarc Aggregate BBgBarc BA Intermediate HY BBgBarc BBB BBgBarc Credit BAA BBgBarc Multiverse BBgBarc TIPS	As of: 1/1/14 0.0% 100.0% 100.0% As of: 10/1/16 52.6% 31.6% 0.0% 0.0% 15.8% 0.0%	6/1/00 100.0% 0.0% 0.0% 100.0% 4/1/16 55.5% 27.8% 0.0% 0.0% 16.7% 0.0%	1/1/96 0.0% 0.0% 100.0% 100.0% 7/1/14 50.0% 25.0% 0.0% 0.0% 15.0% 10.0%	1/1/14 46.3% 25.0% 0.0% 0.0% 18.8% 10.0%	2/1/13 50.0% 0.0% 0.0% 16.0% 20.0% 14.0%	1/1/11 50.0% 0.0% 0.0% 15.0% 20.0% 15.0%
MSCI ACWI ex US MSCI ACWI ex US IMI MSCI EAFE Total Fixed Income Benchmark BBgBarc Aggregate BBgBarc BA Intermediate HY BBgBarc BBB BBgBarc Credit BAA BBgBarc Multiverse	As of: 1/1/14 0.0% 100.0% 100.0% As of: 10/1/16 52.6% 31.6% 0.0% 0.0% 15.8%	6/1/00 100.0% 0.0% 0.0% 100.0% 4/1/16 55.5% 27.8% 0.0% 0.0% 16.7%	1/1/96 0.0% 0.0% 100.0% 100.0% 7/1/14 50.0% 25.0% 0.0% 0.0% 15.0%	1/1/14 46.3% 25.0% 0.0% 0.0% 18.8%	2/1/13 50.0% 0.0% 0.0% 16.0% 20.0%	1/1/11 50.0% 0.0% 0.0% 15.0% 20.0%



US Fixed Income Benchmark	As of:					
	10/1/16	4/1/16	7/1/14	1/1/14	2/1/13	1/1/11
BBgBarc Aggregate	62.5%	66.7%	58.8%	56.9%	62.5%	62.5%
BBgBarc BA Intermediate HY	37.5%	33.3%	29.4%	30.8%	0.0%	0.0%
BBgBarc BBB	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
BBgBarc Credit BAA	0.0%	0.0%	0.0%	0.0%	20.0%	18.8%
BBgBarc TIPS	0.0%	0.0%	11.8%	12.3%	17.5%	18.8%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Opportunistic Credit Benchmark	As of:			
	1/1/14	12/1/09		
BBgBarc BA Intermediate HY	100.0%	0.0%		
BBgBarc Credit BAA	0.0%	100.0%		
	100.0%	100.0%		
Risk Parity Benchmark	As of:			
	10/1/10			
BBgBarc Aggregate	40.0%			
BBgBarc Global Aggregate	0.0%			
MSCI World	0.0%			
Russell 3000	60.0%			
	100.0%			
Alternatives Benchmark	As of:			
Alternatives Bellemmark	4/1/16	1/1/16	1/1/14	1/1/11
60/40 Russell 3000/BBgBarc US Aggregate (RP)	0.0%	0.0%	0.0%	30.0%
Bloomberg Commodity	0.0%	17.7%	18.8%	15.0%
CPI + 5% (RA)	0.0%	11.8%	12.5%	0.0%
Libor +4% (HF)	41.7%	29.4%	25.0%	15.0%
Russell 3000 +3% (PE)	58.3%	41.2%	43.8%	40.0%
	100.0%	100.0%	100.0%	100.0%
Private Equity Benchmark	As of:			
Filvate Equity Benchmark	10/1/10			
Russell 3000 +3%	100.0%			
T(U33GII 3000 ±370	100.0%			
	100.070			

Hedge Fund Benchmark	As of:		
	10/1/10		
Libor +4%	100.0%		
	100.0%		
Inflation Hedge	As of:		
	10/1/16	4/1/16	
BBgBarc TIPS	14.3%	14.3%	
Bloomberg Commodity	0.0%	21.4%	
CPI + 5% (RA)	0.0%	14.3%	
Bloomberg Roll Select Commodity	12.1%	0.0%	
S&P Global Large-MidCap Commodity and Resource	11.8%	0.0%	
S&P Global Infrastructure	11.8%	0.0%	
NCREIF ODCE	50.0%	50.0%	
	100.0%	100.0%	
Real Asset Benchmark	As of:		
	10/1/16	1/1/14	
Bloomberg Roll Select Commodity	34.00%	0.0%	
S&P Global Large-MidCap Commodity and Resource	33.00%	0.0%	
S&P Global Infrastructure	33.00%	0.0%	
CPI + 5%	0.00%	100.0%	
	100.0%	100.0%	
D 1544 D 1			
Real Estate Benchmark	As of:	014100	=1410
40.V T 00/	1/1/09	6/1/00	7/1/9
10 Year Treasury +2%	0.0%	0.0%	100.09
NCREIF ODCE	100.0%	0.0%	0.09
NCREIF Property	0.0%	100.0%	0.09
	100.0%	100.0%	100.09



Baillie Gifford Benchmark	As of:	
	1/1/14	5/1/12
MSCI ACWI ex-US	100.0%	0.0%
MSCI EAFE	0.0%	100.0%
	100.0%	100.0%
Dellis Official Occupation Development		
Baillie Gifford Secondary Benchmark	As of:	
	1/1/14	5/1/12
MSCI ACWI ex-US Growth	100.0%	0.0%
MSCI EAFE Growth	0.0%	100.0%
	100.0%	100.0%
Brigade Secondary Benchmark	As of:	
	8/1/10	
BBgBarc High Yield	50.0%	
Credit Suisse Leveraged Loans	50.0%	
	100.0%	

FEE SCHEDULES

Baillie Gifford		Brown Advisory		<u>Parametric</u>	
First \$25 million:	0.60% per annum	First \$50 million:	0.47% per annum	On All Assets:	0.30% per annum
Next \$75 million:	0.50% per annum	Next \$50 million:	0.45% per annum		
Next \$300 million:	0.40% per annum	Next \$200 million:	0.40% per annum	FIAM Bond	
Thereafter:	0.30% per annum	Thereafter:	0.35% per annum	First \$50 million:	0.20% per annum
				Next \$50 million:	0.175% per annum
Barrow, Hanley, Mewhinney & Strauss		Brown Brothers Harriman		Next \$100 million:	0.10% per annum
First \$15 million:	0.75% per annum	On All Assets:	0.15% per annum	Thereafter:	0.085% per annum
Next \$10 million:	0.55% per annum				
Next \$75 million:	0.45% per annum	Clifton Group		FIAM Equity	
Next \$100 million:	0.35% per annum	First \$50 million:	0.12% per annum	On All Assets:	0.90% per annum
Next \$800 million	0.25% per annum	Next \$100 million:	0.10% per annum		
Thereafter:	0.15% per annum	Thereafter:	0.05% per annum	Western Asset Management	
		Plus monthly reporting fee of \$1500		On All Assets:	0.25% per annum
BlackRock-Russell S&P 500 Fund				Performance Fee:	20%
First \$250 million:	0.02% per annum	Franklin Templeton Investment			
Thereafter:	0.015% per annum	First \$50 million:	0.45% per annum	<u>QMA</u>	
		Next \$50 million:	0.35% per annum	First \$50 million:	0.55% per annum
BlackRock-EAFE Equity Index Fund		Thereafter:	0.30% per annum	Thereafter:	0.50% per annum
On All Assets:	0.05% per annum				
		Mondrian Investment Partners			
		Assets Below \$190 million			
		First \$20 million:	1.00% per annum		
		Thereafter:	0.33% per annum		
		Apparts Albanya (*400 maillion	'		
		Assets Above \$190 million	4.000/ nononnum		
		First \$50 million:	1.00% per annum		
		Next \$150 million:	0.19% per annum		
		Thereafter:	0.33% per annum		

Name	Primary Benchmark	Rule 1	Rule 2	Rule 3
Barrow Hanley	Russell 1000 Value	R	\checkmark	B
Brown Advisory	Russell 1000 Growth	-		
DE Shaw	Russell 1000	\checkmark	\checkmark	\checkmark
QMA US Small Cap	Russell 2000			
Baillie Gifford	MSCI ACWI ex US	-		
FIAM Equity	MSCI ACWI ex US Small Cap Gross	-		
Mondrian	MSCI ACWI ex USA Value Gross	B	R	\checkmark
Parametric Core	MSCI Emerging Markets Gross	-		
FIAM Bond	BBgBarc US Aggregate TR	\checkmark	\checkmark	\checkmark
Western TRU	3-Month Libor Total Return USD			
Beach Point Select	BBgBarc BA Intermediate HY	-		
Brigade Capital	BBgBarc BA Intermediate HY	\checkmark	R	\checkmark
TCP Direct Lending VIII	BBgBarc BA Intermediate HY			
Franklin Templeton	BBgBarc Multiverse TR	\checkmark	\checkmark	\checkmark

Rule 1 - Manager has underperformed the benchmark index for the five year period.

Rule 2 - Manager has underperformed the 50th percentile in the appropriate style universe for the five year period.

Rule 3 - Excess 5 Year Sharpe Ratio vs. Benchmark is positive

Name	Primary Benchmark	Rule 1	Rule 2	Rule 3
Barrow Hanley	Russell 1000 Value	\checkmark	\checkmark	R
Brown Advisory	Russell 1000 Growth			
DE Shaw	Russell 1000	\checkmark	\checkmark	\checkmark
QMA US Small Cap	Russell 2000	-	-	-
Baillie Gifford	MSCI ACWI ex US			
FIAM Equity	MSCI ACWI ex US Small Cap Gross			
Mondrian	MSCI ACWI ex USA Value Gross	B	B	\checkmark
Parametric Core	MSCI Emerging Markets Gross			
FIAM Bond	BBgBarc US Aggregate TR	\checkmark	\checkmark	\checkmark
Western TRU	3-Month Libor Total Return USD			
Beach Point Select	BBgBarc BA Intermediate HY			
Brigade Capital	BBgBarc BA Intermediate HY	\checkmark	\checkmark	\checkmark
TCP Direct Lending VIII	BBgBarc BA Intermediate HY			
Franklin Templeton	BBgBarc Multiverse TR	\checkmark	\checkmark	\checkmark

Rule 1 - Manager has underperformed the benchmark index for the five year period.

Rule 2 - Manager has underperformed the 50th percentile in the appropriate style universe for the five year period.

Rule 3 - Excess 5 Year Sharpe Ratio vs. Benchmark is positive

	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	4th Qtr. 2016	<u>Difference</u>	3rd Qtr. 2016	<u>Difference</u>	2nd Qtr. 2016	<u>Difference</u>	1st Qtr. 2016	<u>Difference</u>	4th Qtr. 2015	<u>Difference</u>
Verus	-0.68%	7.42%	1.99%	8.81%		4.97%		1.69%		-1.50%		5.41%	
Barrow Hanley	-0.68%	7.45%	1.96%	8.81%	-0.00%	4.98%	-0.01%	1.69%	0.00%	-1.51%	0.01%	5.40%	0.01%
Russell 1000 Value Index	-1.55%	5.71%	2.50%	6.68%		3.48%		4.58%		1.64%		5.64%	
Verus	-1.82%	3.71%	1.98%	3.83%		3.86%		2.46%		1.36%		7.05%	
BlackRock S&P 500 Fund	-1.82%	3.71%	1.98%	3.84%	-0.01%	3.86%	0.00%	2.46%	-0.00%	1.37%	-0.01%	7.05%	0.00%
S&P 500 Index	-1.82%	3.70%	1.98%	3.82%		3.85%		2.46%		1.34%		7.03%	
Verus	-1.50%	-2.35%	-0.72%	-4.51%]	3.74%]	-0.04%	·]	-1.26%		7.68%]
BrownAdvisory	-1.46%	-2.35%	-0.72%	-4.51%	0.01%	3.75%	-0.01%	-0.04%	0.00%	-1.26%	0.00%	7.68%	0.01%
Russell 1000 Growth Index	-2.35%	2.18%	1.24%	1.01%	0.0170	4.58%	-0.0170	0.61%	0.0070	0.75%	0.0070	7.33%	0.0170
]]]]		1]]
Verus	-1.49%	3.56%	1.71%	3.76%	0.000	5.32%	0.040/	4.28%	0.040/	0.75%	0.040/	6.11%	0.000/
D.E. Shaw	-1.49% -1.95%	3.56% 3.94%	1.71% 1.88%	3.76%	0.00%	5.33% 4.03%	-0.01%	4.29%	-0.01%	0.76%	-0.01%	6.10% 6.51%	0.00%
Russell 1000 Index	-1.95%	3.94%	1.00%	3.03%		4.03%		2.54%		1.18%		0.51%	J
Verus	-3.82%	11.21%	3.44%	10.64%									
QMA US Small Cap (Net)	-3.82%	11.21%	3.44%	10.64%	0.00%								
Russell 2000 Index	-4.75%	11.15%	2.80%	8.83%									
Verus	-3.56%	-3.73%	0.16%	-7.01%		8.50%		-0.20%		0.42%		7.59%	
Baillie Gifford	-3.59%	-3.71%	0.17%	-7.01%	0.00%	8.55%	-0.05%	-0.21%	0.01%	0.42%	0.00%	7.57%	0.02%
MSCI ACWI ex US	-1.43%	-2.30%	2.59%	-1.20%		7.00%		-0.40%		-0.26%		3.29%	
MSCI ACWI ex US Growth	-3.39%	-3.80%	1.49%	-5.68%		6.11%		0.64%		-0.24%		5.05%	
Verus	-2.02%	-1.97%	3.44%	-0.66%]	6.49%]	-1.24%		-2.90%		4.72%	
BlackRock EAFE Equity	-2.02%	-1.97%	3.44%	-0.65%	-0.01%	6.49%	0.00%	-1.24%	-0.00%	-2.90%	-0.00%	4.72%	0.00%
MSCI EAFE (Net)	-2.05%	-1.99%	3.42%	-0.71%		6.43%		-1.46%		-3.01%		4.71%	
MSCI EAFE (Gross)	-2.04%	-1.98%	3.44%	-0.68%		6.51%		-1.19%		-2.89%		4.75%	
Verus	-2.83%	-4.21%	1.68%	-5.35%]	7.00%		-0.16%		1.12%		5.51%	
FIAM Equity	-2.83%	-4.21%	1.68%	-5.36%	-0.01%	6.99%	0.01%	-0.15%	-0.01%	1.11%	0.01%	5.51%	0.00%
MSCI ACWI -ex US Small Cap Index	-2.63%	-2.96%	2.15%	-3.47%		8.00%		-0.72%		0.76%		5.34%	
Verus	-2.08%	-2.62%	3.81%	-1.01%]	3.99%]	0.49%		1.70%		2.33%]
Mondrian	-2.07%	-2.60%	3.82%	-0.97%	-0.04%	4.00%	-0.01%	0.50%	-0.01%	1.70%	-0.00%	2.33%	0.00%
MSCI ACWI -ex US Value Index	0.57%	-0.84%	3.64%	3.36%		7.92%		-1.46%		-0.29%		1.50%	
MSCI ACWI -ex US	-1.43%	-2.30%	2.59%	-1.20%		7.00%		-0.40%		-0.26%		3.29%	



	<u>Oct</u>	Nov	<u>Dec</u>	4th Qtr. 2016	<u>Difference</u>	3rd Qtr. 2016	<u>Difference</u>	2nd Qtr. 2016	<u>Difference</u>	1st Qtr. 2016	<u>Difference</u>	4th Qtr. 2015	<u>Difference</u>
Verus	0.44%	-4.73%	1.81%	-2.58%		5.41%		1.40%		8.88%		-0.97%	
Parametric Core	0.46%	-4.72%	1.82%	-2.54%	-0.04%	5.47%	-0.06%	1.42%	-0.02%	8.91%	-0.03%	-0.97%	0.00%
MSCI EM Market Index	0.25%	-4.60%	0.29%	-4.08%		9.15%		0.80%		5.74%		0.72%	
Verus	-0.57%	-2.45%	0.36%	-2.66%]	1.27%		2.77%		3.28%		-0.39%	
FIAM Bond	-0.57%	-2.45%	0.36%	-2.66%	-0.00%	1.27%	-0.00%	2.77%	0.00%	3.28%	0.00%	-0.39%	0.00%
BBgBarc US Aggregate Index	-0.76%	-2.37%	0.14%	-2.98%		0.46%		2.21%		3.02%		-0.58%	
Verus	0.98%	-0.86%	0.98%	1.09%]	2.67%]	2.62%]	-0.64%		0.63%]
Western TRU	0.98%	-0.86%	0.98%	1.09%	0.00%	2.67%	0.00%	2.62%	-0.01%	-0.63%	-0.01%	0.63%	0.00%
3-Month Libor Total Return USD Index	0.08%	0.08%	0.09%	0.24%		0.21%		0.17%		0.13%		0.13%	
BBgBarc US Aggregate Index	-0.76%	-2.37%	0.14%	-2.98%		0.46%		2.21%		3.04%		-0.58%	
Verus (Net)				2.54%]	5.38%]	0.31%]	0.70%	· 	-0.57%]
Angelo Gordon Opportunistic				2.54%	0.00%	5.38%	0.00%	0.31%	0.00%	0.70%	0.00%	-0.57%	0.00%
BBgBarc US Aggregate Index				-2.98%	0.0070	-0.06%	0.0070	2.21%	0.0070	0.92%	0.0070	-0.57%	0.0070
<u> </u>]	5.17%	1	2.05%]	-2.17%		-0.91%]
Verus (Net) Angelo Gordon STAR Fund (Net)				1.99% 1.99%	0.00%	5.17%	0.00%	2.05%	0.00%	-2.17% -2.17%	0.00%	-0.91%	0.00%
BBgBarc US Aggregate Index				-2.98%	0.0076	-0.06%	0.0076	2.03%	0.0076	0.92%	0.0076	-0.57%	0.0076
	0.070/]]]]]] 1
Verus	0.97%	0.60%	1.95%	3.56%	0.000	5.50%	0.050	4.23%	0.000/	2.67%	0.000/	-1.35%	0.000/
Beach Point Select (Net)	0.97%	0.60%	1.95%	3.56%	-0.00%	5.25%	0.25%	3.98%	0.26%	2.41%	0.26%	-1.35%	0.00%
BBgBarc BA Intermediate HY	0.13%	-0.68%	1.19%	0.63%]	4.04%]	3.29%]	3.43%	1	0.01%	
Verus	0.79%	-0.47%	2.17%	2.50%		7.15%		8.52%		3.29%		-6.30%	
Brigade Capital	0.79%	-0.45%	2.16%	2.50%	-0.00%	7.09%	0.06%	8.48%	0.05%	3.29%	0.00%	-6.30%	-0.01%
BBgBarc BA Intermediate HY	0.13%	-0.68%	1.19%	0.63%		4.04%		3.29%		3.43%		0.01%	
50% BBgBarc HY/ 50% Bank Loan	0.58%	-0.07%	1.50%	2.00%		4.32%		4.19%		2.34%		-2.00%	
Verus				0.17%									
TCP Direct Lending VIII				0.17%	-0.00%								
BBgBarc BA Intermediate HY				0.63%									
Verus	3.68%	-0.29%	3.01%	6.49%		-0.13%		1.11%		0.12%		2.22%	
Franklin Templeton Investments	3.68%	-0.29%	3.01%	6.49%	0.00%	-0.13%	-0.00%	1.11%	0.00%	0.12%	0.00%	2.22%	0.00%
BBgBarc Multiverse	-2.62%	-3.88%	-0.30%	-6.68%		1.05%		3.00%		5.88%		-0.87%	

	<u>Oct</u>	Nov	<u>Dec</u>	4th Qtr. 2016	Difference	3rd Qtr. 2016	<u>Difference</u>	2nd Qtr. 2016	Difference	1st Qtr. 2016	<u>Difference</u>	4th Qtr. 2015	<u>Difference</u>
Verus	-1.98%	-2.54%	2.18%	-2.38%]	2.23%]	5.80%	7	4.65%]	-2.87%]
AQR GRP, 10% Volatility (Net)	-1.98%	-2.54%	2.18%	-2.39%	-0.01%	2.23%	-0.01%	5.80%	-0.00%	4.65%	0.00%	-2.87%	0.00%
60% R3000/ 40% BBgBarc Agg	-1.60%	1.74%	1.23%	1.34%	-0.0176	2.24%	-0.01%	2.47%	-0.00%	1.89%	0.00%	3.54%	0.00%
60% MSCI World/ 40% BBgBarc Glb	-1.55%		1.23%		1	3.13%	1	1.62%	-	1.09%	+		
		0.20%		0.17%]]		_		_	3.37%]
Verus	-3.94%	-3.41%	2.18%	-5.19%		2.20%		7.99%		8.22%		-0.50%	
PanAgora (Net)	-3.94%	-3.41%	2.18%	-5.19%	-0.00%	2.20%	-0.00%	7.99%	0.00%	8.23%	-0.01%	-0.50%	0.00%
60% R3000/ 40% BBgBarc Agg	-1.60%	1.74%	1.23%	1.34%		2.82%		2.47%		1.89%		3.54%	
60% MSCI World/ 40% BBgBarc Glb	-1.55%	0.20%	1.54%	0.17%		3.13%		1.62%		1.21%		3.37%	
Verus	1.63%	-0.22%	0.96%	2.38%]	1.69%]	-1.39%	7	-1.06%]	2.54%	
AQR DELTA XN (Net)	1.63%	-0.22%	0.96%	2.38%	0.00%	1.70%	-0.01%	-1.39%	-0.00%	-1.07%	0.01%	2.54%	0.00%
Libor + 4%	0.38%	0.38%	0.40%	1.17%		1.14%		1.13%	1	0.99%		1.09%	
Verus	0.27%	-0.19%	1.72%	1.80%]	0.42%	1	-0.85%	- 1	-3.24%	1	0.00%]
Standard Life GARS (Net)	0.27%	-0.19%	1.72%	1.80%	0.00%	0.42%	-0.00%	-0.85%	-0.01%	-3.25%	-0.01%	0.00%	0.00%
Libor + 4%	0.27 %	0.38%	0.40%	1.17%	0.0078	1.14%	-0.00 /6	1.13%	-0.0176	0.99%	-0.0176	0.00%	0.0076
	0.3070	0.3070	0.4070] 1]]] 1
Verus				2.19%		1.68%		3.64%	l	1.47%	l	2.44%	
INVESCO Real Estate				2.17%	0.02%	1.68%	0.00%	3.62%	0.02%	1.47%	0.00%	2.50%	-0.06%
NCREIF NFI ODCE Index				2.11%	J	2.07%		2.13%		2.18%		3.34%	
Verus				1.31%]	3.82%]	2.31%]	-0.19%]	0.00%]
Invesco US Val IV				1.31%	-0.00%	3.82%	0.00%	2.31%	0.00%	-0.19%	0.00%	0.00%	0.00%
NCREIF NFI ODCE Index				2.11%	1	2.07%	1	2.13%	1	2.18%		3.34%	
NCREIF CEVA 1Q Lag - NET				2.54%]	2.17%]	1.99%	1	5.84%	1	2.98%	
Verus	0.19%	-0.69%	-0.04%	-0.55%	-]	1.24%	-]	0.90%	- 1	3.41%	-]	-0.18%]
Brown Brothers Harriman	0.19%	-0.68%	-0.04%	-0.53%	-0.02%	1.22%	0.02%	0.91%	-0.02%	3.52%	-0.11%	-0.18%	-0.00%
BBgBarc U.S Tips	-0.40%	-1.92%	-0.10%	-2.41%	-0.02/0	0.97%	0.02/0	1.71%	-0.02/0	4.46%	-0.1170	-0.64%	-0.0070
bbgbarc 0.5 rips	-0.4070	1.52/0	-0.1070	-2.71/0	J	0.5170]	1.7 1 70	_	4.4070		0.0-70	J

1 MSCI

1.1 MSCI US MARKET BREAKPOINTS

Break Point*	Companies included
Large Cap	1-200
Medium-Large Cap	201-550
Medium Cap	551-750
Medium-Small Cap	751-2500
Small Cap	2501+

*MSCI only categorizes equities per size into large, mid and small cap. For InvestorForce Report analytics coherence regarding domestic benchmarks the buffer zones of the mid-cap category are used to determine Medium-Large and Medium-Small Cap categories.

As Of	Large Cap	Medium Large Cap	Medium Cap	Medium Small Cap	Small Cap
12/31/2016	15.239	9.375	4.416	2.520	0
9/30/2016	15.239	9.375	4.416	2.520	0
6/30/2016	15.358	9.43	4.548	2.591	0
3/31/2016	15.358	9.43	4.548	2.591	0
12/31/2015	16.507	9.968	5.069	2.917	0
9/30/2015	16.507	9.968	5.069	2.917	0
6/30/2015	15.288	9.09	4.506	2.596	0
3/31/2015	15.356	9.083	4.491	2.577	0
12/31/2014	15.356	9.083	4.491	2.577	0

Number in billion USD

InvestorForce Report reflects changes in the MSCI breakpoints once MSCI publishes new breakpoints. For months when no new breakpoints are published always the last breakpoints are applied. Changes usually but always happen around re-balancing of the indexes. Some index reviews do not contain changes to the market-cap breakpoints.

1.2 MSCI DEVELOPED AND EMERGING MARKET BREAKPOINTS

In case of MSCI Indexes to define the Size - Segment Indexes for a market, the following free float - adjustedmarket capitalization Market Coverage Target Ranges are applied to the Market Investable Equity Universe:

Break Point	Companies included
Large Cap Index	70% ±5%
Standard Index*	85% ±5%
Investable Market Index**	99%+1% or -0.5%

^{*} Standard Index (Large+Mid)

MSCI Country Classification can be found here: https://www.msci.com/market-classification

For Emerging Markets, the Global Minimum Size Reference is set at *one-half* the corresponding level of full market capitalization used for the Developed Markets for each size-segment.

As Of	Large Cap DM	Large Cap EM	Medium Cap DM	Medium Cap EM	Small Cap
12/31/2016	14.361	7.180	5.077	2.538	0
9/30/2016	14.180	7.090	5.076	2.538	0
6/30/2016	14.180	7.090	5.076	2.538	0
3/31/2016	14.077	7.0385	5.046	2.523	0
12/31/2015	14.077	7.0385	5.046	2.5230	0
9/30/2015	14.883	7.4415	5.359	2.6795	0
6/30/2015	14.883	7.4415	5.359	2.6795	0
3/31/2015	13.368	6.684	4.781	2.3905	0
12/31/2014	13.368	6.684	4.781	2.3905	0

Number in billion USD

InvestorForce Report shows changes in the MSCI breakpoints once MSCI publishes a new one. For months when no new breakpoints are published always the last breakpoint is applied. Changes usually happen around re-balancing of the indexes.



^{**}Investable Market Index (Large+Mid+Small)

2 RUSSELL US BREAKPOINTS

The market capitalization breakpoints that appear in the Market Capitalization Chart are defined by the Russell 3000 Index and change for each period end. Russell calculated the total market capitalization of each security for the end of the period, based on the total shares and price, to determine whether it is large enough for inclusion in one or more of the Russell Breakpoints.

Once the market capitalization for each security is determined, each security is then placed in the appropriate market capitalization breakpoint. A market capitalization breakpoint is determined by the break between the companies below.

Break Point	Companies included
Large Cap	50 Largest US Companies
Medium Large Cap	Next largest 150 US Companies
Medium Cap	Next largest 300 US Companies
Medium Small Cap	Next largest 500 US Companies
Small Cap	All US Companies below 1,000 largest

After the breakpoints are determined by the ranges above, new members are assigned on the basis of the breakpoints and existing members are reviewed to determine if they fall within a cumulative 5% market cap range around the new market capitalization breakpoints. If an existing securities market cap falls within this 5%, it will remain in its current index rather than move into a new market capitalization based index.

As Of	Large Cap	Medium Large Cap	Medium Cap	Medium Small Cap	Small Cap
12/31/2016	84.960	23.168	7.890	2.702	0
9/30/2016	78.745	23.385	7.394	2.533	0
6/30/2016	77.349	22.250	7.1432	2.444	0
3/31/2016	83.360	22.414	7.435	2.395	0
12/31/2015	90.075	24.308	8.141	2.936	0
9/30/2015	88.944	23.139	7.993	2.946	0
6/30/2015	92.87	25.07	8.797	3.352	0
3/31/2015	93.082	25.494	8.794	3.384	0
12/31/2014	89.92	25.19	8.51	3.29	0
9/30/2014	84.51	24.44	7.97	3.04	0
6/30/2014	80.39	23.62	8.07	3.24	0

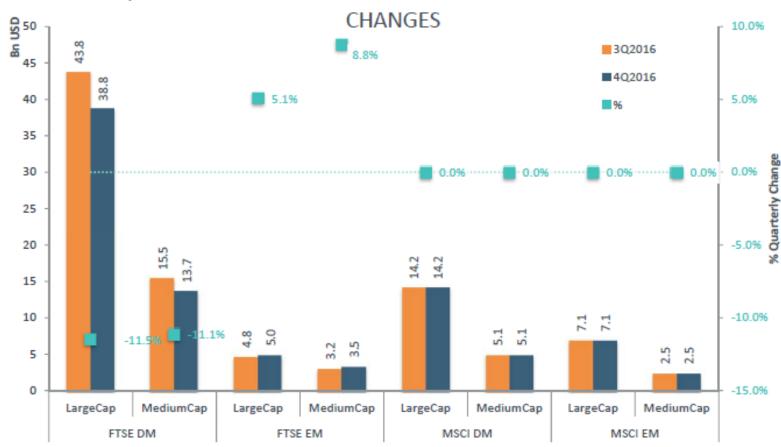
As Of	Large Cap	Medium Large Cap	Medium Cap	Medium Small Cap	Small Cap
3/31/2014	76.77	23.15	7.83	3.06	0
12/31/2013	77.11	22.27	7.65	3.03	0
9/30/2013	72.4	19.93	7.15	2.71	0
6/30/2013	68.47	19.36	6.48	2.46	0
3/31/2013	64.31	18.64	6.39	2.39	0
12/31/2012	58.45	16.8	5.75	2.13	0
9/30/2012	57.06	16.48	5.49	2.08	0
6/30/2012	55.65	16.13	5.14	1.99	0
3/31/2012	57.58	16.43	5.55	2.13	0
12/31/2011	51.97	14.66	4.93	1.93	0
9/30/2011	45.35	13.88	4.38	1.66	0
6/30/2011	54.25	15.95	5.66	2.16	0
3/31/2011	52.22	15.69	5.7	2.16	0
12/31/2010	49.54	14.8	5.16	2.04	0
9/30/2010	42.83	13.13	4.64	1.8	0
6/30/2010	39.95	11.58	4.1	1.59	0
3/31/2010	42.43	12.61	4.3	1.68	0

Numbers are billions USD



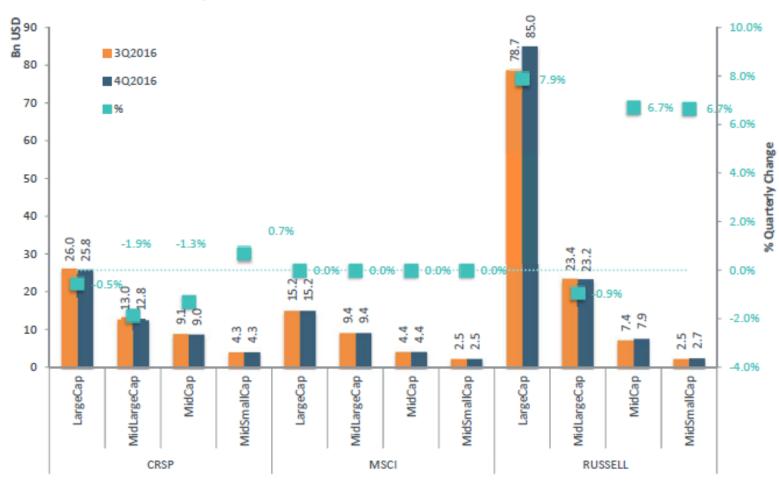
BREAKPOINT TRENDS

4Q2016 DEVELOPED AND EMERGING MARKET BREAKPOINT



MSCI is releasing market capitalization breakpoints less frequently then FTSE, hence the market capitalization breakpoints are longer in effect, showing as no change.

4Q2016 US MARKET BREAKPOINT CHANGES



MSCI is releasing market capitalization breakpoints less frequently than others, hence the market capitalization breakpoints are longer in effect. This could result in no change.



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4th quarter summary

THE ECONOMIC CLIMATE

- Economies around the globe experienced higher inflation as the effects of lower energy prices fall out of year-over-year inflation figures. U.S. headline inflation rose to 1.7% YoY and the market's inflation expectations increased sharply, as indicated by TIPS breakeven rates. p. 14
- U.S. consumer and business sentiment indicators improved markedly in the fourth quarter based on positive expectations of future economic growth.
 p. 12

MARKET PORTFOLIO IMPACTS

- U.S. interest rates moved higher in Q4, returning the yield curve to levels experienced one year ago. The Federal Reserve is not likely to increase rates drastically because of lower yields and economic growth around the globe, and due to an already strong U.S. dollar. p. 22
- The U.S. dollar rose 6.4% in Q4 on a trade-weighted basis. Currency movement continues to contribute to higher volatility for investors with unhedged currency exposure. p. 37

THE INVESTMENT CLIMATE

- The U.S. presidential election results took many investors by surprise. After an initial overnight plunge in the futures market, U.S. equities rallied on expectations of a more pro-business regulatory environment and the possibility of large-scale fiscal stimulus. U.S. equities may possess greater upside potential post-election. p. 16
- Fourth quarter earnings for the S&P 500 are estimated to grow 3.2% YoY, according to FactSet. If this positive growth comes to fruition it will mark the second quarter of positive growth and may indicate that the recent oil-driven earnings slump is behind us. p. 28

ASSET ALLOCATION ISSUES

— Global inflation rises in Q4 may mark a change in trend from disinflation seen in recent years. Investors should work to understand the degree of inflation protection in their portfolio. p. 14 & 19 A neutral risk stance seems warranted

Global reflation trends should be watched, and investors should understand the degree of inflation protection in their portfolio



What drove the market in Q4?

"World Markets Plunge, Then Steady, On Trump Victory"

POST-ELECTION ASSET PRICE MOVEMENTS

<u>S&P 500</u>		10-Yr Treasury		Bloomberg USD Spot	
Nov 9 th	Dec 30 th	Nov 9 th	Dec 30 th	Nov 9 th	Dec 30 th
2163	2239	2.06%	2.44%	1237	1267

Source: Fortune. November 9th 2016

"U.S. Consumer Sentiment Rises To Highest Level Since 2004"

U OF MICHIGAN CONSUMER SENTIMENT SURVEY

Jul 31st	Aug 31st	Sep 30th	Oct 31st	Nov 30th	Dec 31st
90.0	89.8	91.2	87.2	93.8	98.2

Source: WSJ, December 23rd 2016

"OPEC Reaches Deal To Limit Production, Sending Prices Soaring"

WTI OIL (\$/BARREL)

Jul 29 th	Aug 31st	Sep 30 th	Oct 31st	Nov 30 th	Dec 30 th
\$41.60	\$44.70	\$48.24	\$46.86	\$49.44	\$53.72

Source: New York Times, November 30th 2016

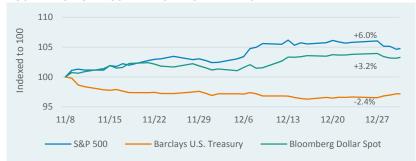
"Inflation Expectations Hit Highest Level In More Than A Decade"

10-YEAR U.S. TIPS BREAKEVEN RATE

Jul 29 th	Aug 31st	Sep 30 th	Oct 31 st	Nov 30 th	Dec 30 th
1.49%	1.47%	1.60%	1.73%	1.94%	1.95%

Source: Financial Times, November 16th 2016

POST-ELECTION ASSET PRICE MOVEMENTS



Source: Bloomberg, 11/8/16-12/31/16

U.S. CONSUMER SENTIMENT



Source: Bloomberg, as of 12/31/16

WTI CRUDE OIL



Source: Bloomberg, as of 12/31/16



Economic environment



U.S. economics summary

- U.S. real GDP grew 1.7% YoY in Q3, up from 1.3% in Q2.
 Consumer spending continued to account for the majority of economic growth, and rising sentiment may act as a boon for future growth. Net exports helped boost production, as well as private investment.
- Inflation moved higher during the quarter as headline CPI rose to 1.7% YoY, as of November, while core CPI rose to 2.1%.
 Increases in energy prices have resulted in a convergence between headline and core inflation figures. If oil prices remain stable, this will act as a tailwind for headline inflation in the future.
- The Fed raised its target federal funds rate to 0.50%-0.75% and forecast three rate hikes in 2017 at its December meeting, citing

- continued modest economic growth and a tightening labor market, in addition to firming consumer prices.
- The labor market added 165,000 jobs per month on average during the fourth quarter. This is slightly below the expansion average of 199,000, but still a solid pace of hiring given where we are at in the labor cycle. The unemployment rate fell 0.2% to 4.7% at the end of December.
- While the economy continued to steadily add jobs, wage growth has lagged behind. Real average hourly earnings only increased 0.7% YoY in November. Softer wage growth may be due in part to workers taking on part-time roles who could not find full time work.

	Most Recent	12 Months Prior
GDP (annual YoY)	1.7% 9/30/16	2.2 % 9/30/15
Inflation (CPI YoY, Headline)	1.7% 11/30/16	0.4% 11/30/15
Expected Inflation (5yr-5yr forward)	2.1% 12/31/16	1.8% 12/31/15
Fed Funds Rate	0.50% 12/31/16	0.25% 12/31/15
10 Year Rate	2.5% 12/31/16	2.3% 12/31/15
U-3 Unemployment	4.7% 12/31/16	5.0% 12/31/15
U-6 Unemployment	9. 2 % 12/31/16	9.9% 12/31/15

U.S. economics – GDP growth

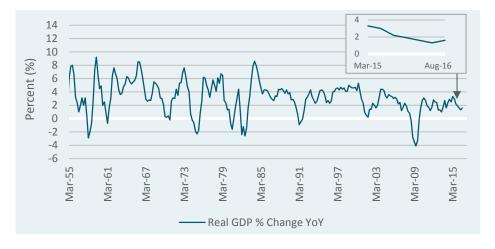
In the third quarter U.S. real GDP rose 1.7% YoY, and 3.5% (annualized) from the previous quarter. This marked the highest quarterly growth rate in two years.

Consumer spending continued to be the main driver of overall growth, contributing 2.0% to quarterly GDP growth. During this economic recovery, the American consumer has been aided by low interest rates that have decreased household debt burdens. The pace of interest rate increases will be an important factor in consumer spending moving forward.

Net exports and private domestic investment were the next two largest contributors to economic growth. Private domestic investment had been a drag on GDP over the past three quarters and was driven by a positive change in private inventories.

The Atlanta Fed GDP Now forecast as of January 10th for the fourth quarter stood at a 2.9% annualized rate, suggesting the economy is continuing to grow at a slow, but positive rate.

U.S. REAL GDP GROWTH



Source: FRED, as of 9/30/16

U.S. GDP COMPONENTS



Source: BEA, annualized quarterly rate, as of 9/30/16



U.S. economics – Labor market

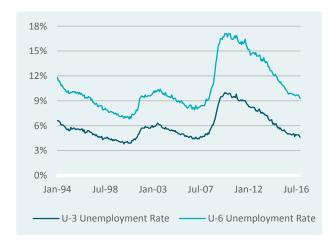
The U.S. labor market added 165,000 jobs on average in the third quarter, compared to an average of 199,000 during the current economic expansion. The unemployment rate fell to a recovery period low of 4.6% in November before rising to 4.7% in December. The participation rate continued its long-term downtrend to finish the quarter at 62.7%. Much of this effect can likely be explained by demographic changes.

While the overall labor market appears strong, some pockets of weakness may still exist. The broader U-6 unemployment rate that includes people who want a job but have stopped

looking and workers who are employed part-time but would like a full-time job currently sits at 9.2%, slightly above prerecession levels. Another indicator of weakness is the lack of recovery in unemployment duration. It still takes job seekers 26 weeks to find a job after being unemployed, on average.

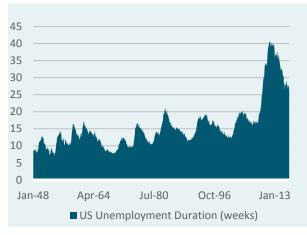
U.S. workers have yet to experience robust wage growth, which we would expect to see under current labor conditions. Real average hourly earnings only rose 0.7% in November.

U.S. UNEMPLOYMENT



Source: FRED, as of 11/30/16

UNEMPLOYMENT DURATION



Source: FRED, as of 11/30/16

REAL AVERAGE HOURLY EARNINGS



Source: FRED, as of 11/30/16



U.S. economics – The consumer

The U.S. consumer continued to buoy the overall economy as historically low interest rates have helped reduce debt burdens and provided a tailwind for consumer spending. While low interest rates have decreased consumer debt payments, they have not resulted in a credit boom. Tighter post-recession lending standards created a headwind to consumer loan growth.

Consumer spending grew 1.6% YoY in November, reiterating the trend of modest spending growth over the

past five years. Sales of durable goods, such as autos, however, have displayed relative strength.

Consumer spending has been a relatively strong area of the economy despite only modest gains in wages and personal income. Higher wages could be an important factor for greater spending growth moving forward, especially if interest rates rise, resulting in greater household debt payments.

CONSUMER LOAN GROWTH



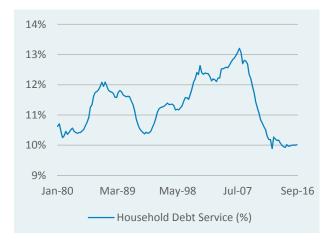
Source: FRED, as of 11/30/16

CONSUMER SPENDING



Source: Bloomberg, as of 10/31/16

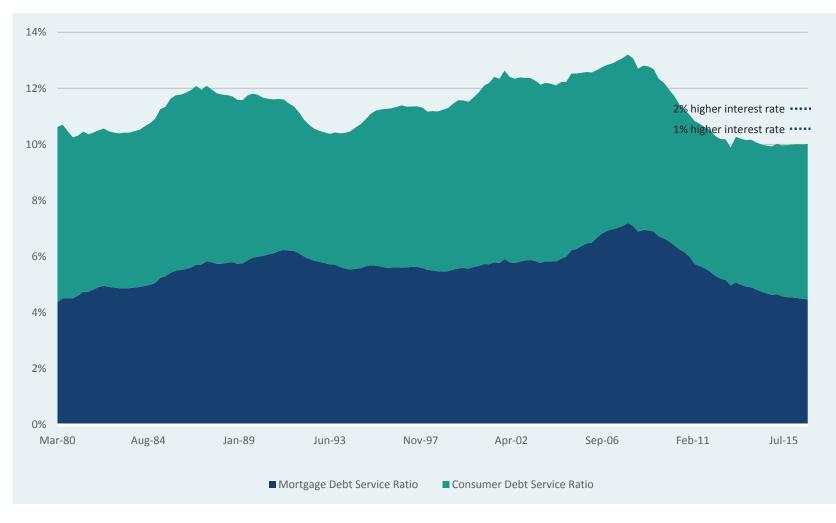
HOUSEHOLD DEBT SERVICE



Source: FRED, as of 9/30/16



A closer look at household debt burden



Low interest rates have helped decrease household debt burden

If interest rates continue to rise, concurrent gains in income will be important

Source: Federal Reserve Bank, as of 9/30/16. Household debt service payments are composed of mortgage payments and other consumer payments. This analysis assumes an equal weight of debt burden between mortgage and consumer debt. It is also assumed that interest rates on consumer debt move 1:1 with market rates and effective mortgage rates have only a 5% sensitivity to changes in market rates given the preference for fixed mortgages.



U.S. economics – Sentiment

Consumer sentiment hit its highest level since January 2004 as the University of Michigan sentiment survey reached 98.2 in December. A record 18% of survey respondents spontaneously mentioned that they expected a favorable impact from Trump's economic policies. Favorable expectations of policy changes was the main reason identified for the jump in sentiment.

The Bloomberg Consumer Comfort Index also moved higher during the period. The index rose 4.4 points to

46.0 for the week ending December 25th.

Higher consumer sentiment could have positive flow through effects on the economy if consumers base current spending decisions on expectations of future economic conditions. However, much of this positive sentiment is based on the uncertain economic policies of the new political administration and may only be temporary if these policies do not come to fruition.

CONSUMER COMFORT INDEX



Source: Bloomberg, as of 12/4/16 (see Appendix)

CONSUMER SENTIMENT



Source: University of Michigan, as of 12/9/16 (see Appendix)

ECONOMIC SURPRISE



Source: Bloomberg, as of 11/30/16 (see Appendix)



A broad rise in confidence

OECD U.S. CONSUMER CONFIDENCE



U OF MICHIGAN CONSUMER SENTIMENT



The U.S. has experienced a rise in confidence in nearly all areas of the economy

OECD U.S. BUSINESS CONFIDENCE



NFIB SMALL BUSINESS OUTLOOK



Sources: OECD, University of Michigan, NFIB, as of 12/31/16 See Appendix for details regarding the surveys shown above



U.S. economics – Housing

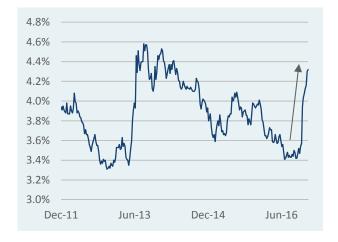
U.S. mortgage rates moved sharply higher during the quarter. The 30-year fixed mortgage rate rose 90 bps to 4.3% to finish the year at its highest rate since April of 2014. If higher mortgage rates are sustained, it will put downward pressure on demand for single-family homes and in turn home prices. However, if mortgage rates rise in tandem with consumer exuberance and higher spending the net effects could in fact be positive.

There is still a large imbalance between supply and demand in the housing market. While the number of

single-family houses for sale has recently increased, the overall supply of houses is well below historical norms. At the end of October, there were only 239,000 homes on the market – very low by historical standards.

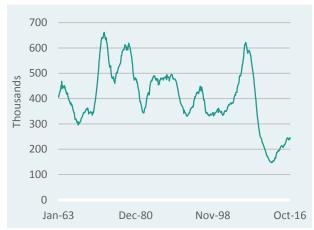
Low interest rates and a lack of supply have helped push median home prices well above pre-recession levels. Increasing interest rates and greater supply coming to market could provide a headwind for prices going forward.

30-YEAR FIXED MORTGAGE RATE



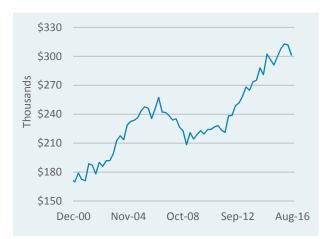
Source: FRED, as of 12/29/16

SINGLE-FAMILY HOUSES FOR SALE



Source: U.S. Census Bureau, as of 10/31/16, adj. for pop. growth

MEDIAN HOUSE SALES PRICE



Source: FRED, as of 9/30/16



U.S. economics – Inflation

Realized inflation and future inflation expectations both rose in recent months. Headline CPI was 1.7% YoY in November, up 0.2% from September, while core CPI fell 0.1% during the same time period to 2.1%. Higher rent and energy prices contributed to an increased headline CPI figure.

Market expectations for inflation rose after the U.S. presidential election on anticipation of increased fiscal stimulus from the new administration. The 10-year TIPS breakeven rate finished December at 1.95%, an increase of 35 bps during the quarter.

We believe the risk of inflation is skewed to the upside while the market is only discounting a small rise in prices over the next 10 years. Oil prices appear to have stabilized and may continue higher if global rebalancing occurs faster than anticipated. At the same time, the new political administration's proposed fiscal and trade policies suggest higher inflation. Investors may consider reexamining their inflation protecting portfolio and how their overall portfolio might behave in a rising inflation environment.

U.S. CPI (YOY)



U.S. TIPS BREAKEVEN RATES



Source: FRED, as of 11/30/16

INFLATION EXPECTATIONS



Source: Bloomberg, as of 12/31/16



Source: FRED, as of 11/30/16

Post-election price movements



Source: Bloomberg, 10/3/16-1/10/17



Implications of the election

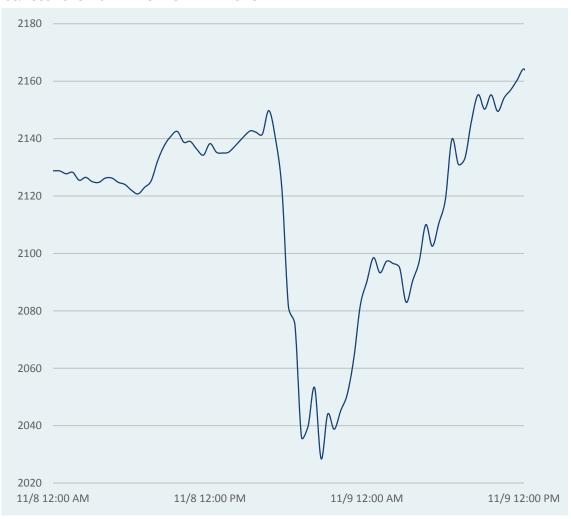
At first, financial markets reacted negatively to the news of Trump's victory as equity market futures fell sharply the night of the election. S&P 500 futures dropped 6% in a four hour span and then recovered before market open the next morning. Much like Brexit, this was another example where the market's initial response was incorrect and equity prices snapped back quickly.

Risk assets in the U.S. have moved higher while safe haven assets such as Treasuries have declined since the election results on the prospects of improved domestic economic growth.

While a Trump presidency has materially altered the confidence outlook for the U.S. economy, we believe that markets and consumers should avoid overreacting to policies that have yet to be determined in nature and scope.

Although much uncertainty surrounds Trump's actual policy changes, there has been an upswing in confidence in nearly every area of the U.S. economy. Higher confidence from consumers and businesses could have a self-enforcing effect on the economy. At the same time, expectations act as a double edged sword. Increased confidence in the Trump administration's economic policies could leave more room for disappointment.

S&P 500 FUTURES THE NIGHT OF THE ELECTION



Source: Bloomberg, 11/8/16-11/9/16



Trump policies – Initial areas of focus

POLICY AREA	PROPOSED POLICY
Taxes	 Trump has proposed tax cuts for both individuals and corporations that will cost \$4.5 trillion over the next 10 years according to the Center for a Responsible Fiscal Budget. The CFRB has also estimated that more than half of the tax cuts for individuals will go to the richest 1% of Americans on a total dollar basis. Corporate tax rates may be lowered to 15% from the current statutory rate of 35%, although the actual rate paid is estimated at only around 25%.
Trade	 The President has also promised to renegotiate trade deals, such as NAFTA, to better protect American businesses from foreign interests. The details on how he will go about doing so remains unclear. More protectionist policies could result in higher consumer prices as domestic businesses will face less competition.
Deregulation	 Perhaps the biggest unknown is how President Trump will work to lessen regulations on businesses. This may also be the area that he can have the quickest impact through the use of executive orders. Repealing parts of both the Affordable Care Act and the Dodd Frank Act are two of the more notable pieces of regulation Trump has said he will target.
Infrastructure Spending	 President Trump has proposed tax breaks on private infrastructure equity investment that he hopes will result in \$1 trillion of total spending on a levered basis. While the private sector may be able to provide more efficiency, it may be difficult to incentivize them to complete projects that will benefit the public and overall economy.



International economics summary

- The central theme of slow, but positive growth in countries across the globe continued in the third quarter. The U.S., western Europe, and Japan all experienced year-over-year growth rates between 1-2%.
- Developed countries experienced a coordinated pick up in inflation in recent months, suggesting we may be moving into a reflationary environment. Headline CPI was up 1.1% in the Eurozone in December, its highest rate in more than three years.
- The ECB announced it would continue its asset purchase program through the initially scheduled end date of March 2017, but at a reduced rate. The program will extend until at least the end of 2017, and monthly

- bond purchases will fall to €60 billion from €80 billion in April.
- The tapering of ECB purchases is likely more a result of mechanical and political obstacles than due to a need for tightening. If the central bank is forced to tighten quicker than desired, it could have an adverse impact on the current economic recovery.
- Italy voted against a referendum on constitutional reform on December 4th that would have weakened the power of the Senate in an attempt to make the country easier to govern. The Italian Prime Minister, Matteo Renzi, resigned shortly thereafter. Although Renzi's Democratic party will remain in power, the country's antiestablishment Five Star party has recently gained popularity.

Area	GDP (Real, YoY)	Inflation (CPI, YoY)	Unemployment
United States	1.7% 9/30/16	1.7% 11/30/16	4.7% 12/31/16
Western	1.8%	0.9%	8.4%
Europe	9/30/16	12/31/16	9/30/16
Japan	1.1%	0.5%	3.1%
	9/30/16	11/30/16	11/30/16
BRIC Nations	5.1%	3.4%	5.5%
	9/30/16	6/30/16	9/30/16
Brazil	(2.9%)	6.3%	11.9%
	9/30/16	12/31/16	12/31/16
Russia	(0.4%) 9/30/16	5.4% 12/31/16	5.2% 9/30/16
India	7.3% 9/30/16	3.6% 11/30/16	7.1% 12/31/15
China	6.7%	2.1%	4.0%
	9/30/16	12/31/16	12/30/16



International economics

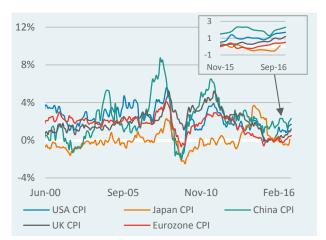
Outside of the U.S., developed market central banks have remained accommodative, which has helped inflation gradually increase and economic growth move forward slowly. Eurozone headline CPI was 1.1% YoY in December, its highest reading in more than three years. Unemployment rates have continued to trend downward, although the European rate is still elevated at 9.8%.

Both the Bank of Japan and European Central Bank have continued their negative rate policies and asset purchase programs, although the ECB announced a tapering of purchases that will begin in April.

Especially in Europe, there is a risk that the central bank may need to tighten more quickly than desired due to a lack of eligible bonds to purchase, and perhaps due to political opposition.

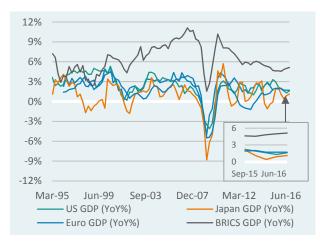
Emerging market economies grew at 5.1% in the third quarter based on the combined real GDP of the BRICs countries. Growth in these countries was driven by China and India, while Brazil and Russia remained in recession.

INTERNATIONAL INFLATION



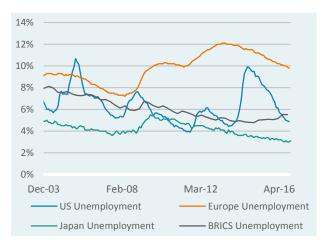
Source: Bloomberg, as of 11/30/16

REAL GDP GROWTH



Source: Bloomberg, as of 9/30/16

GLOBAL UNEMPLOYMENT



Source: Bloomberg, as of 11/30/16 or most recent release



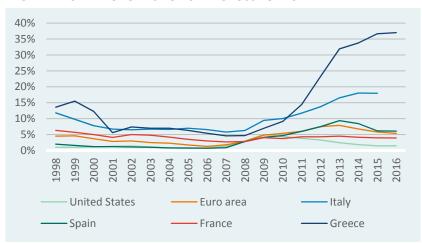
European banking crisis

While the European economic recovery has continued at a modest pace, due in part to extremely accommodative monetary policy, a major systematic risk is still apparent in the financial system. In other areas, such as the United States, banks have worked through the pain of cleaning up their loan books after the financial crisis. Meanwhile, the loan quality in European banks, notably in Italy and Greece, has deteriorated.

Instead of writing off bad loans, many European banks have kept these loans as assets to avoid insolvency. Overall in the Euro Area, the percentage of non-performing loans (NPLs) to total gross loans was 5.4% as of year-end. This number has fallen only slightly since peaking at 7.9% in 2013. Comparatively, this figure in the U.S. was 1.5% at the end of December.

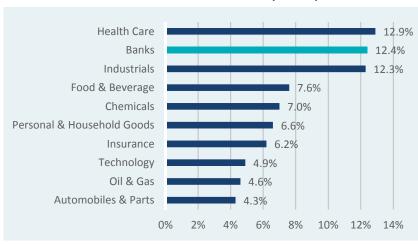
Risks stemming from the Italian financial system may be the most important to the overall health of Europe. As of the last data point, the ratio of NPLs to total gross loans was 18.0% at the end of 2015. In many circumstances, the banks have carried these loans at 50% of face value, when some analysts have suggested they would be more accurately valued at 20-30%. The adverse consequences from these NPLs cannot be avoided and only delayed. Given the risks and the large weight to financials, we believe exposure to European equities should be considered carefully.

NON-PERFORMING LOANS TO TOTAL GROSS LOANS



European
equities
should be
considered
carefully
given the
large
exposure to
banks

EURO STOXX 600 EX U.K. SECTOR WEIGHTINGS (TOP 10)



Top chart source: World Bank, as of 12/31/16. Data on Italy only available through 12/31/15. Bottom chart source: Stoxx, as of 11/30/16.



Fixed income rates & credit



Interest rate environment

- The Federal Reserve raised interest rates at its December meeting, increasing the federal funds target rate by 0.25%, to a range of 0.50% to 0.75%. The Fed also increased its outlook for the number of 2017 rate hikes from two to three. Lower yields and economic growth outside of the U.S., along with an already strong dollar, reduce the probability of drastic rate rises.
- U.S. Treasury yields moved higher and the curve steepened on the prospects of higher inflation and economic growth. The spread between the 10 and 2-year yields was 1.25% at the end of December, its highest level in more than a year.
- Developed sovereign yields increased along with U.S. rates following the presidential election. The Japanese 10-year bond yield moved out of negative territory to 0.46% at the end of December, while the German 10-year bund yield hit an 11-month high of 0.37% before falling to finish the month at 0.20%.
- The U.S. is much further ahead in the monetary policy cycle than other developed countries, which has led to a widening yield differential between Treasuries and global sovereign bonds. While Treasuries remain expensive compared to history, the higher yield makes them relatively attractive.

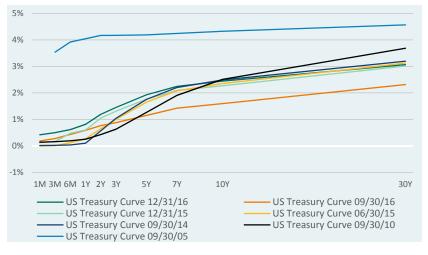
Area	Short Term (3M)	10 Year
United States	0.50%	2.45%
Germany	(0.99%)	0.20%
France	(0.90%)	0.68%
Spain	(0.49%)	1.38%
Italy	(0.50%)	1.81%
Greece	1.37%	7.02%
U.K.	0.51%	1.24%
Japan	(0.42%)	0.04%
Australia	1.70%	2.77%
China	2.35%	3.06%
Brazil	12.91%	10.55%
Russia	8.78%	8.29%

Source: Bloomberg, as of 12/31/16

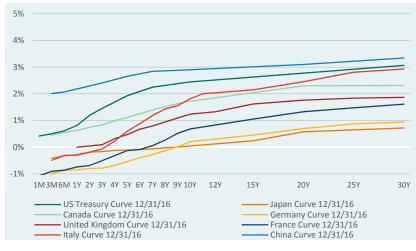


Yield environment

U.S. YIELD CURVE

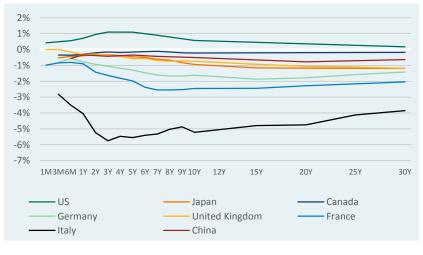


GLOBAL GOVERNMENT YIELD CURVES



Global investors continue to prefer U.S. Treasuries due to higher relative yields

YIELD CURVE CHANGES OVER LAST FIVE YEARS



IMPLIED CHANGES OVER NEXT YEAR



Source: Bloomberg, as of 12/31/16



Credit environment

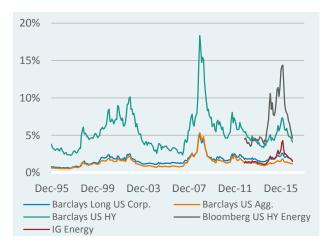
High yield returns across all sectors - energy and metals and mining in particular - have been strong since the trough in Q1. As evidence of this performance, high yield spreads have compressed to below 4.3% as of December from a high of 8.0% earlier in the year.

U.S. credit markets showed surprising strength following a brief period of increased volatility in Q1. While below the long-term trend, U.S. GDP growth has begun to show signs of improvement which has provided a tailwind to credit markets in general. Overall foreign demand for U.S. credit issuance has

remained positive as low developed market yields have been supportive of the "carry trade", where investors buy relatively higher yielding assets.

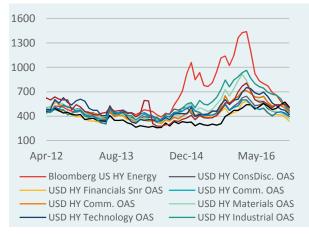
The Federal Reserve Bank moved to increase rates by 0.25% in December and hinted at higher rates in 2017. Continued growth in the job market and increasing inflation were key considerations for the increase. While rising rates may increase borrowing costs and put downward pressure on bond prices, the U.S. credit market remains attractive compared to other developed markets.

CREDIT SPREADS



Source: Barclays Capital Indices, Bloomberg, as of 12/31/16

HIGH YIELD SECTOR SPREADS



Source: Bloomberg, as of 12/31/16

SPREADS

Market	Credit Spread (12/31/16)	Credit Spread (1 Year Ago)
Long US Corporate	1.5%	2.1%
US Aggregate	0.9%	1.1%
US High Yield	4.4%	7.1%
US High Yield Energy	4.6%	13.6%
US Bank Loans	3.9%	3.9%

Source: Barclays, Credit Suisse, Bloomberg, as of 12/31/16



Issuance and default

Defaults have been trending higher from their lows in 2014 due mostly to lower commodity prices. While the current level of default have risen above the trailing 20-year average, it remains below the peak in 2002 and 2009, respectively.

Corporate issuance in emerging markets has remained strong due mainly to perceived relative value compared to developed market corporates. Rising U.S. rates will most likely result in increased borrowing costs.

Issuance in both high yield bonds and bank loans has been trending lower. Some of the fall in issuance volume can be attributed to the recent sell off in the energy sector. Additionally, rising U.S. interest rates have resulted in increased borrowing costs which has acted as a headwind.

HY DEFAULT TRENDS (ROLLING 1 YEAR)



Source: Credit Suisse, BofA, as of 12/31/16

EM DEBT ISSUANCE



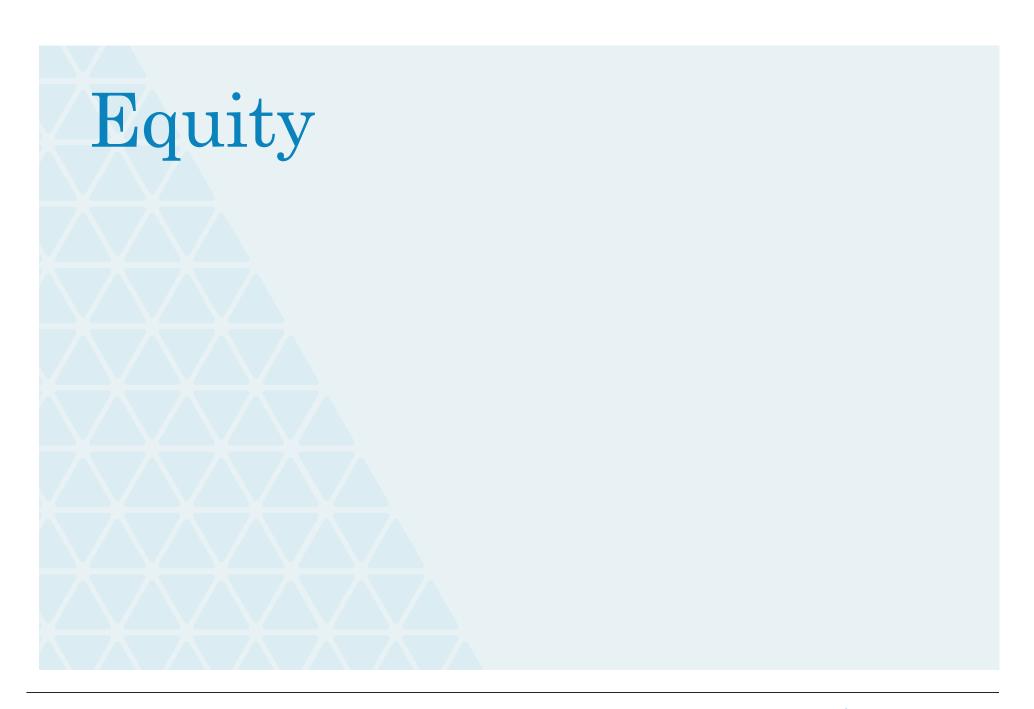
Source: JP Morgan, as of 11/30/16

GLOBAL ISSUANCE



Source: Bloomberg, BofA Merrill Lynch, as of 12/31/16





Equity environment

- We believe the U.S. election results have had a material impact on possible future equity return outcomes. There is likely greater upside potential for U.S. equities, though some of this has already been priced in with higher prices post-election.
- Both consumer and private sector sentiment have risen robustly. This positive shift may provide a tailwind to U.S. economic growth through spending and investment.
- Fourth quarter earnings for the S&P 500 are estimated to grow 3.2% year-over-year, according to FactSet. If this positive growth comes to fruition it will mark the second quarter of positive growth and may mean the recent earnings slump is now behind us.

- Value equities outperformed growth equities in the fourth quarter. The Russell 1000 Value index and Russell 1000 Growth index returned 6.7% and 1.0%, respectively. Energy and financial service companies have contributed to the performance rebound.
- The U.S. dollar rose 6.4% in Q4 on a trade-weighted basis which directly detracts from investment returns of U.S. investors with unhedged currency exposure.
- Japanese equities (Nikkei 225) delivered a 16.1% return on a hedged basis, but 1.2% on an unhedged basis – a 15% swing caused by currency movement.

	QTD TOTAL	L RETURN	YTD TOTAL	. RETURN	1 YEAR T		
	(unhedged)	(hedged)	(unhedged)	(hedged)	(unhedged)	(hedged)	
US Large Cap (Russell 1000)	3.8	%	12.1	1%	12.1	1%	
US Small Cap (Russell 2000)	8.8	%	21.3	3%	21.3%		
US Large Value (Russell 1000 Value)	6.7	%	17.3	3%	17.3%		
US Large Growth (Russell 1000 Growth)	1.0	%	7.1	%	7.1%		
International Large (MSCI EAFE)	(-0.7%)	7.3%	1.5%	6.2%	1.5%	6.2%	
Eurozone (Euro Stoxx 50)	3.2%	10.3%	0.7%	5.1	0.7%	5.1%	
U.K. (FTSE 100)	(0.8%)	4.4%	(0.2%)	19.0%	(0.2%)	19.0%	
Japan (NIKKEI 225)	1.2%	16.1%	5.8%	1.3%	5.8%	1.3%	
Emerging Markets (MSCI Emerging Markets)	(4.1%)	(2.0%)	11.6%	7.5%	11.6%	7.5%	

Source: Russell Investments, MSCI, STOXX, FTSE, Nikkei, as of 12/31/16



Domestic equity

U.S. equity markets fell sharply in futures markets on the night of the election, but then recovered before market open the next morning. After this initial stumble, equities rallied higher to finish the quarter.

Post-election equity movement was likely driven by an improved economic outlook as well as several proposed policy changes that would benefit corporations, including lower tax rates and deregulation.

The financials sector was responsible for much of the gain in equity prices, likely due to the prospects of higher rates and a steeper curve. The S&P 500 Financials sector was up 16.5% after the election, compared to a 2.8% gain across the rest of the index.

As of December 30th, estimated earnings growth for the fourth quarter was 3.2% from the previous year, according to FactSet. Looking ahead, bottom-up analyst EPS forecasts point toward improving corporate earnings growth.

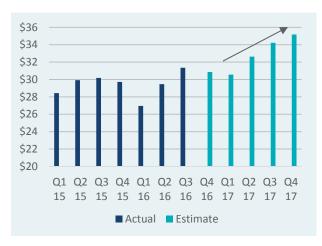
Proposed tax reform and deregulation have helped improve the U.S. earnings outlook

U.S. EQUITIES



Source: Russell Investments, as of 12/30/16

S&P 500 EPS



Source: FactSet, as of 12/30/16

S&P 500 FINANCIALS



Source: Bloomberg, as of 12/30/16



Domestic equity size and style

Small cap equities outperformed large cap equities in the fourth quarter as the Russell 2000 Index and Russell 1000 Index returned 8.8% and 3.8%, respectively. Much of this outperformance came after the U.S. presidential election as smaller companies could receive greater marginal benefit from deregulation proposed by Donald Trump. Renewed U.S. dollar strength also benefits smaller companies relative to larger companies due to greater insulation from foreign currency movements.

Value equities outperformed growth equities during the quarter. The Russell 1000 Value Index and Russell 1000 Growth Index returned 6.7% and 1.0%, respectively. This relative outperformance was driven by the Financials and Energy sectors, which are the two largest sectors in the value index. The magnitude of this recent value bounce back has brought the value premium back into positive territory for most trailing windows.

SMALL CAP VS LARGE CAP (YOY)



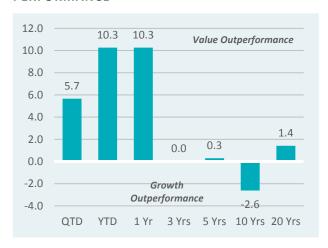
Source: Russell Investments, as of 12/31/16

VALUE VS GROWTH (YOY)



Source: Russell Investments, as of 12/31/16

U.S. VALUE VS. GROWTH RELATIVE PERFORMANCE



Source: Morningstar, as of 12/31/16



International equity

International equity markets narrowly outperformed domestic equities in December (S&P 500 2.0%) as the MSCI ACWI ex U.S. returned 2.2%.

European equity markets remained calm on the back of the announcement that the ECB would continue its asset purchase program through the initially scheduled end date of March 2017, but at a reduced rate. Adjustments to program constraints will be likely, given the mandated rule that the ECB cannot purchase more than 33% of any one country's national debt.

International developed equities delivered a 7.3% total return on a hedged basis over the quarter, but delivered -0.7% on an unhedged basis. Unhedged currency exposure continues to cause higher volatility for investors who choose not to hedge.

Japanese equities delivered a 16.1% return on a hedged basis, but 1.2% on an unhedged basis — a 15% swing caused by currency movement. Expectations of continued loose monetary policy and low interest rates in Japan contributed to yen weakness.

GLOBAL EQUITY PERFORMANCE



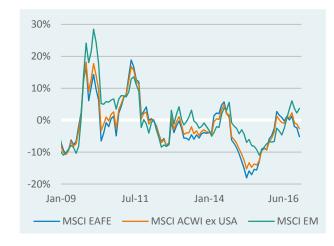
Source: Bloomberg, as of 12/31/16

INTERNATIONAL FORWARD P/E RATIOS



Source: Bloomberg, as of 12/31/16

EFFECT OF CURRENCY (1 YEAR ROLLING)



Source: MSCI, as of 12/31/16



Emerging market equity

Emerging market economic growth has shown recovery as Russia and Brazil begin moving out of severe depressions and as commodity prices improve. Economic growth of the "BRIC" nations continues at a pace materially higher than that of developed nations, consistent with recent decades.

Some renewed investor optimism can be seen as equity valuations move higher. Emerging market equities

provided a muted quarter with a -2.0% return on a hedged basis, but delivered a positive 7.5% return for the year (MSCI Emerging Markets). Much of the recent performance stability can be attributed to a reversal or flattening of emerging market currency depreciation trends occurring since 2012. Earnings across the broader emerging markets have also reversed their downward trend, though not as quickly as the pace of price improvement as demonstrated in higher equity valuations.

12-MONTH ROLLING PERFORMANCE



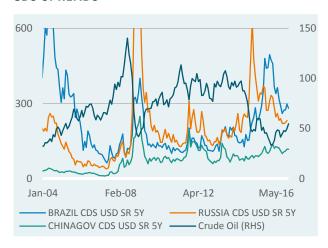
Source: MPI, as of 12/31/16

FORWARD P/E RATIOS



Source: Bloomberg, as of 12/31/16

CDS SPREADS



Source: MSCI, as of 12/31/16



Equity valuations

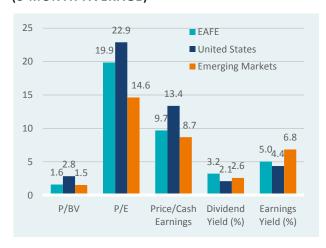
The forward P/E ratio for the S&P 500 was 18.8 at yearend and remains above the long-term average of 16.9 since 1995. The current P/E of 18.8 places it in the 79th percentile.

While elevated, valuations for U.S. large cap equities remain within one standard deviation of the average. The expected pick up in corporate earnings would help bring P/E ratios more in line with long-term averages, all else equal.

Low real interest rate and inflation environments have historically supported higher equity valuations, meaning current valuations may not be unusual given the conditions.

International developed valuations expanded during the quarter, especially in Europe, but are still relatively cheap compared to the U.S. Emerging market P/E ratios expanded off historic lows and emerging market equities remain relatively attractive from a valuation standpoint.

MSCI VALUATION METRICS (3 MONTH AVERAGE)



S&P 500 FORWARD P/E



Source: Bloomberg, as of 12/31/16

INTERNATIONAL FORWARD P/E RATIOS



Source: Bloomberg, as of 12/31/16



Source: MSCI, as of 12/31/16

Equity volatility

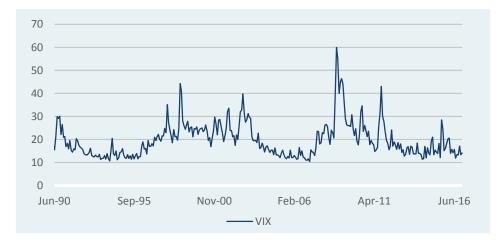
Equity volatility has remained subdued, despite the arguably surprising U.S. election results and uncertain future policy environment. However, uncertainty surrounding a set of policies with highly unclear ramifications for the markets is different from uncertainty in the traditional sense.

Low implied volatility, as shown by the VIX index, is consistent with the renewed bull market in U.S.

equities. Realized risk has also been low across international developed equity markets (MSCI EAFE).

Unhedged currency exposure has resulted in materially higher volatility and often significant variation in equity portfolio performance.

U.S. IMPLIED EQUITY VOLATILITY



Source: CBOE, as of 12/30/16 Source: MSCI, as of 12/31/16

INTERNATIONAL EQUITY VOLATILITY



Verus⁷⁷⁷

Long-term equity performance



Source: MPI, as of 12/31/16



Other assets

Real estate & REITs

After six consecutive years of double digit returns in core real estate, 2016 is on pace to come in around 8-9% - still a very good return, but slightly down from the pace of recent history.

Fundamentals remain strong with generally declining vacancy rates. The exception is multifamily, where vacancies have come up slightly off historic lows. NOI growth rates are positive and strong for all property types, near or above 5% for all over the last year.

New supply remains below historical averages in all property types except multifamily. Continued tight lending standards have kept new construction, especially speculative construction, under control relative to previous cycles.

Pricing from a cap rate perspective looks historically high at 4.5%, however relative spreads to Treasuries remain healthy. Rising interest rates could put pressure on pricing, but the spread keeps a small cushion in place.

VACANCY RATES



NET OPERATING INCOME GROWTH



CAP RATES AND SPREADS



Source: NCREIF, as of 9/30/16

Source: NCREIF, as of 9/30/16



Source: NCREIF, as of 9/30/16

Currency

The U.S. dollar rose considerably in the fourth quarter, up 6.4% against a basket of major currencies. The strong dollar created a large gap between hedged and unhedged international exposures, as foreign currency losses eroded unhedged returns.

Renewed dollar strength occurred after the presidential election likely due to increased expectations of U.S. economic growth and higher interest rates. A widening gap between Treasury yields and other developed sovereign bonds could cause greater demand for

Treasuries and provide a tailwind for further dollar appreciation. However, higher inflation at the same time could offset some of the potential strength.

Emerging market currencies were hit hard by the strength in the U.S. dollar, influenced by the Fed pointing towards faster than anticipated interest rates increases and possible protectionist trade policies from the Trump administration. The JPM EM Currency Index was down 4.0% in the fourth quarter.

EFFECT OF CURRENCY (1YR ROLLING)

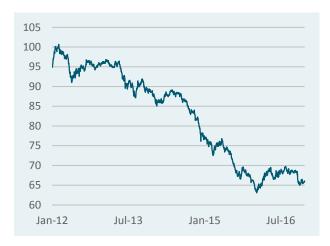


LONG-TERM TRADE WEIGHTED DOLLAR



Source: FRED, as of 12/31/16

JPM EM CURRENCY INDEX



Source: Bloomberg, as of 12/31/16



Source: MPI, as of 12/31/16

Appendix

Periodic table of returns – December 2016

BEST																											
ω .		1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	5-Year	10-Year
1	Small Cap Value	74.8	16.6	38.4	23.2	35.2	38.7	66.4	31.8	14.0	25.9	56.3	26.0	34.5	32.6	39.8	5.2	79.0	29.1	14.3	18.6	43.3	13.5	10.1	31.7	15.1	8.3
	Small Cap Equity	32.9	8.1	37.8	23.1	32.9	27.0	43.1	22.8	8.4	10.3	48.5	22.2	21.4	26.9	16.2	1.4	37.2	26.9	7.8	18.1	38.8	13.2	5.7	21.3	14.8	7.8
	Large Cap Value	26.3	6.4	37.2	22.4	31.8	20.3	33.2	12.2	7.3	6.7	47.3	20.7	20.1	23.5	15.8	-6.5	34.5	24.5	2.6	17.9	34.5	13.0	0.9	17.3	14.7	7.2
	Large Cap Equity	23.8	4.4	31.0	21.6	30.5	19.3	27.3	11.6	3.3	1.6	46.0	18.3	14.0	22.2	11.8	-21.4	32.5	19.2	1.5	17.5	33.5	11.8	0.6	12.1	14.5	7.1
	Commodities	19.3	3.2	28.5	21.4	22.4	16.2	26.5	7.0	2.8	1.0	39.2	16.5	7.5	18.4	11.6	-25.9	28.4	16.8	0.4	16.4	33.1	6.0	0.0	11.8	14.5	7.1
	Small Cap Growth	18.9	2.6	25.7	16.5	16.2	15.6	24.3	6.0	2.5	-5.9	30.0	14.5	7.1	16.6	10.9	-28.9	27.2	16.7	0.1	16.3	32.5	5.6	-0.4	11.3	13.7	6.3
	Emerging Markets Equity	18.1	0.4	19.6	14.4	13.9	8.7	21.3	4.1	-2.4	-6.0	29.9	14.3	6.3	15.5	10.3	-33.8	23.3	16.1	-2.1	15.3	23.3	4.9	-0.8	11.2	11.2	5.7
	Large Cap Growth	13.4	-1.5	18.5	11.3	12.9	4.9	20.9	-3.0	-5.6	-11.4	29.7	12.9	5.3	15.1	7.0	-35.6	20.6	15.5	-2.9	14.6	12.1	4.2	-1.4	7.1	6.5	4.3
	Real Estate	10.2	-1.8	15.2	10.3	10.6	1.2	13.2	-7.3	-9.1	-15.5	25.2	11.4	4.7	13.3	7.0	-36.8	19.7	13.1	-4.2	11.5	11.0	3.4	-2.5	6.1	5.8	3.8
	60/40 Global Portfolio	9.7	-2.0	11.6	9.9	9.7	-2.5	11.4	-7.8	-9.2	-15.7	23.9	9.1	4.6	10.4	5.8	-37.6	18.9	10.2	-5.5	10.5	9.0	2.8	-3.8	5.7	3.4	1.8
	US Bonds	3.1	-2.4	11.1	6.4	5.2	-5.1	7.3	-14.0	-12.4	-20.5	11.6	6.9	4.6	9.1	4.4	-38.4	11.5	8.2	-5.7	4.8	0.1	0.0	-4.4	2.6	2.2	1.3
	International Equity	2.9	-2.9	7.5	6.0	2.1	-6.5	4.8	-22.4	-19.5	-21.7	9.0	6.3	4.2	4.8	-0.2	-38.5	5.9	6.5	-11.7	4.2	-2.0	-1.8	-7.5	1.0	1.3	0.7
	Hedge Funds of Funds	1.4	-3.5	5.7	5.1	-3.4	-25.3	-0.8	-22.4	-20.4	-27.9	4.1	4.3	3.2	4.3	-1.6	-43.1	0.2	5.7	-13.3	0.1	-2.3	-4.5	-14.9	0.5	0.1	0.7
V	Cash	-1.1	-7.3	-5.2	3.6	-11.6	-27.0	-1.5	-30.6	-21.2	-30.3	1.0	1.4	2.4	2.1	-9.8	-53.2	-16.9	0.1	-18.2	-1.1	-9.5	-17.0	-24.7	0.3	-9.0	-5.6
WORST				Large	Cap E	quity					Small	Cap G	rowth					Comm	noditie	es							
≶				Large	Cap V	alue					Interr	nation	al Equi	ity				Real E	state								
				Large	Cap G	irowth	ı				Emerging Markets Equity					Hedge	e Fund	s of Fu	nds								
	Small Cap Equity					US Bonds				60% MSCI ACWI/40% BC Global Bond																	
				Small	Cap V	alue					Cash																

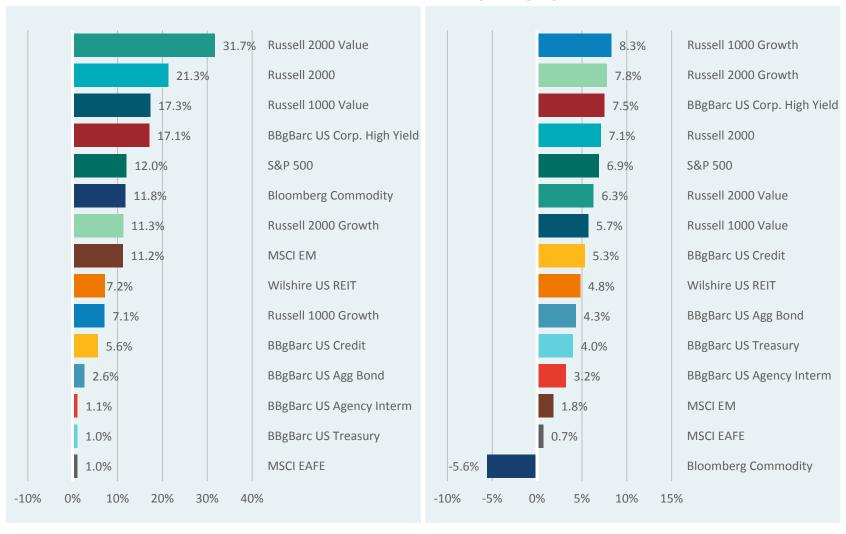
Source Data: Morningstar, Inc., Hedge Fund Research, Inc. (HFR), National Council of Real Estate Investment Fiduciaries (NCREIF). Indices used: Russell 1000, Russell 1000 Value, Russell 1000 Growth, Russell 2000, Russell 2000 Value, Russell 2000 Growth, MSCI EAFE, MSCI EM, BC Agg, T-Bill 90 Day, Bloomberg Commodity, NCREIF Property, HFRI FOF, MSCI ACWI, BC Global Bond. NCREIF Property performance data as of 9/30/16.



Major asset class returns

ONE YEAR ENDING DECEMBER

TEN YEARS ENDING DECEMBER

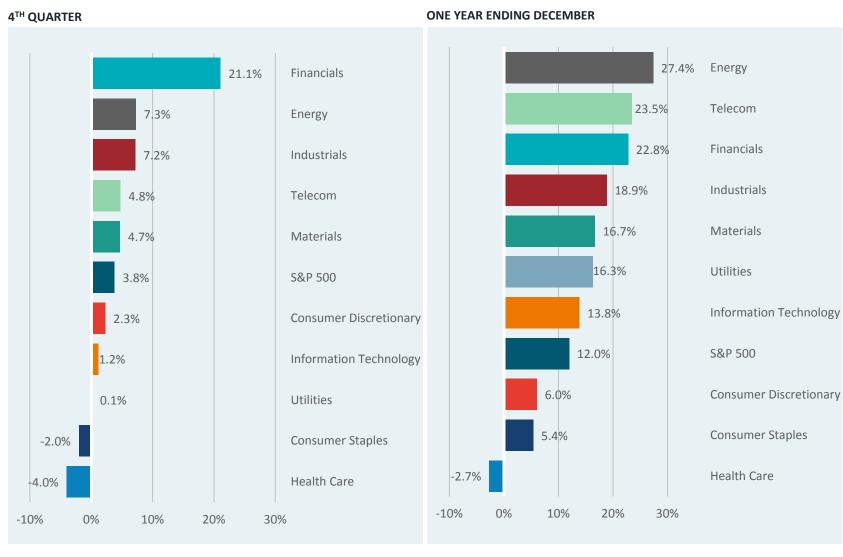


Source: Morningstar, as of 12/31/16

Source: Morningstar, as of 12/31/16



S&P 500 and S&P 500 sector returns





Source: Morningstar, as of 12/30/16



Detailed index returns

DON	MEST	C F	OΠ	ITY

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Core Index							
S&P 500	2.0	3.8	12.0	12.0	8.9	14.7	6.9
S&P 500 Equal Weighted	1.1	3.8	14.8	14.8	8.7	15.5	8.4
DJ Industrial Average	3.4	8.7	16.5	16.5	8.7	12.9	7.5
Russell Top 200	2.2	4.1	11.3	11.3	8.9	14.7	6.8
Russell 1000	1.9	3.8	12.1	12.1	8.6	14.7	7.1
Russell 2000	2.8	8.8	21.3	21.3	6.7	14.5	7.1
Russell 3000	2.0	4.2	12.7	12.7	8.4	14.7	7.1
Russell Mid Cap	1.1	3.2	13.8	13.8	7.9	14.7	7.9
Style Index							
Russell 1000 Growth	1.2	1.0	7.1	7.1	8.6	14.5	8.3
Russell 1000 Value	2.5	6.7	17.3	17.3	8.6	14.8	5.7
Russell 2000 Growth	1.4	3.6	11.3	11.3	5.1	13.7	7.8
Russell 2000 Value	4.1	14.1	31.7	31.7	8.3	15.1	6.3

FIXED INCOME

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Broad Index							
BBgBarc US Treasury US TIPS	(0.1)	(2.4)	4.7	4.7	2.3	0.9	4.4
BBgBarc US Treasury Bills	0.0	0.1	0.4	0.4	0.2	0.2	0.9
BBgBarc US Agg Bond	0.1	(3.0)	2.6	2.6	3.0	2.2	4.3
Duration							
BBgBarc US Treasury 1-3 Yr	0.0	(0.5)	0.9	0.9	0.7	0.6	2.1
BBgBarc US Treasury Long	(0.5)	(11.7)	1.3	1.3	7.8	2.5	6.7
BBgBarc US Treasury	(0.1)	(3.8)	1.0	1.0	2.3	1.2	4.0
Issuer							
BBgBarc US MBS	(0.0)	(2.0)	1.7	1.7	3.1	2.1	4.3
BBgBarc US Corp. High Yield	1.8	1.8	17.1	17.1	4.7	7.4	7.5
BBgBarc US Agency Interm	(0.0)	(1.1)	1.1	1.1	1.5	1.1	3.2
BBgBarc US Credit	0.6	(3.0)	5.6	5.6	4.1	3.8	5.3

INTERNATIONAL EQUITY

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Broad Index							
MSCI ACWI	2.2	1.2	7.9	7.9	3.1	9.4	3.6
MSCI ACWI ex US	2.6	(1.3)	4.5	4.5	(1.8)	5.0	1.0
MSCI EAFE	3.4	(0.7)	1.0	1.0	(1.6)	6.5	0.7
MSCI EM	0.2	(4.2)	11.2	11.2	(2.6)	1.3	1.8
MSCI EAFE Small Cap	2.9	(2.9)	2.2	2.2	2.1	10.6	2.9
Style Index							
MSCI EAFE Growth	2.2	(5.5)	(3.0)	(3.0)	(1.2)	6.7	1.6
MSCI EAFE Value	4.6	4.2	5.0	5.0	(2.1)	6.3	(0.2)
Regional Index							
MSCI UK	4.1	(0.9)	(0.1)	(0.1)	(4.4)	4.0	0.3
MSCI Japan	1.0	(0.2)	2.4	2.4	2.5	8.2	0.5
MSCI Euro	6.6	2.0	1.4	1.4	(3.3)	7.1	(0.6)
MSCI EM Asia	(1.4)	(6.1)	6.1	6.1	0.1	4.4	3.4
MSCI EM Latin American	0.9	(0.9)	31.0	31.0	(7.5)	(5.7)	0.3

OTHER

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Index							
Bloomberg Commodity	1.8	2.7	11.8	11.8	(11.3)	(9.0)	(5.6)
Wilshire US REIT	4.9	(2.3)	7.2	7.2	13.8	12.0	4.8
Regional Index							
JPM EMBI Global Div	1.3	(4.0)	10.2	10.2	6.2	5.9	6.9
JPM GBI-EM Global Div	1.9	(6.1)	9.9	9.9	(4.1)	(1.3)	3.8
Hedge Funds							
HFRI Composite	1.1	1.3	5.6	5.6	2.4	4.5	3.4
HFRI FOF Composite	0.9	0.8	0.5	0.5	1.2	3.4	1.3
Currency (Spot)							
Euro	(0.6)	(6.1)	(2.9)	(2.9)	(8.5)	(4.1)	(2.2)
Pound	(1.1)	(4.9)	(16.2)	(16.2)	(9.3)	(4.5)	(4.5)
Yen	(2.3)	(13.2)	3.1	3.1	(3.4)	(8.0)	0.2

Source: Morningstar, as of 12/31/16



Definitions

Bloomberg US Weekly Consumer Comfort Index - tracks the public's economic attitudes each week, providing a high-frequency read on consumer sentiment. The index, based on cell and landline telephone interviews with a random, representative national sample of U.S. adults, tracks Americans' ratings of the national economy, their personal finances and the buying climate on a weekly basis, with views of the economy's direction measured separately each month. (www.langerresearch.com)

University of Michigan Consumer Sentiment Index - A survey of consumer attitudes concerning both the present situation as well as expectations regarding economic conditions conducted by the University of Michigan. For the preliminary release approximately three hundred consumers are surveyed while five hundred are interviewed for the final figure. The level of consumer sentiment is related to the strength of consumer spending. (www.Bloomberg.com)

Citi Economic Surprise Index - objective and quantitative measures of economic news. Defined as weighted historical standard deviations of data surprises (actual releases vs Bloomberg survey median). A positive reading of the Economic Surprise Index suggests that economic releases have on balance been beating consensus. The indices are calculated daily in a rolling three-month window. The weights of economic indicators are derived from relative high-frequency spot FX impacts of 1 standard deviation data surprises. The indices also employ a time decay function to replicate the limited memory of markets. (www.Bloomberg.com)

Merrill Lynch Option Volatility Estimate (MOVE) Index — a yield curve weighted index comprised of a weighted set of 1-month Treasury options, including 2.5.10 and 30 year tenor contracts. This index is an indicator of the expected (implied) future volatility in the rate markets. (www.Bloomberg.com)

OECD Consumer Confidence Index - based on households' plans for major purchases and their economic situation, both currently and their expectations for the immediate future. Opinions compared to a "normal" state are collected and the difference between positive and negative answers provides a qualitative index on economic conditions. (https://data.oecd.org/)

OECD Business Confidence Index - based on enterprises' assessment of production, orders and stocks, as well as its current position and expectations for the immediate future. Opinions compared to a "normal" state are collected and the difference between positive and negative answers provides a qualitative index on economic conditions. (https://data.oecd.org/)

NFIB Small Business Outlook - Small Business Economic Trends (SBET) is a monthly assessment of the U.S. small-business economy and its near-term prospects. Its data are collected through mail surveys to random samples of the National Federal of Independent Business (NFIB) membership. The survey contains three broad question types: recent performance, near-term forecasts, and demographics. The topics addressed include: outlook, sales, earnings, employment, employee compensation, investment, inventories, credit conditions, and single most important problem. (http://www.nfib-sbet.org/about/)

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Glossary

Allocation Effect: An attribution effect that describes the amount attributable to the managers' asset allocation decisions, relative to the benchmark.

Alpha: The excess return of a portfolio after adjusting for market risk. This excess return is attributable to the selection skill of the portfolio manager. Alpha is calculated as: Portfolio Return - [Risk-free Rate + Portfolio Beta x (Market Return - Risk-free Rate)].

Beachmark R-squared: Measures how well the Benchmark return series fits the manager's return series. The higher the Benchmark R-squared, the more appropriate the benchmark is for the manager. **Beta:** A measure of systematic, or market risk; the part of risk in a portfolio or security that is attributable to general market movements. Beta is calculated by dividing the covariance of a security by the variance of the market.

Book-to-Market: The ratio of book value per share to market price per share. Growth managers typically have low book-to-market ratios while value managers typically have high book-to-market ratios. Capture Ratio: A statistical measure of an investment manager's overall performance in up or down markets. The capture ratio is used to evaluate how well an investment manager performed relative to an index during periods when that index has risen (up market) or fallen (down market). The capture ratio is calculated by dividing the manager's returns by the returns of the index during the up/down market, and multiplying that factor by 100.

Correlation: A measure of the relative movement of returns of one security or asset class relative to another over time. A correlation of 1 means the returns of two securities move in lock step, a correlation of -1 means the returns of two securities move in the exact opposite direction over time. Correlation is used as a measure to help maximize the benefits of diversification when constructing an investment portfolio.

Excess Return: A measure of the difference in appreciation or depreciation in the price of an investment compared to its benchmark, over a given time period. This is usually expressed as a percentage and may be annualized over a number of years or represent a single period.

Information Ratio: A measure of a manager's ability to earn excess return without incurring additional risk. Information ratio is calculated as: excess return divided by tracking error.

Interaction Effect: An attribution effect that describes the portion of active management that is contributable to the cross interaction between the allocation and selection effect. This can also be explained as an effect that cannot be easily traced to a source.

Portfolio Turnover: The percentage of a portfolio that is sold and replaced (turned over) during a given time period. Low portfolio turnover is indicative of a buy and hold strategy while high portfolio turnover implies a more active form of management.

Price-to-Earnings Ratio (P/E): Also called the earnings multiplier, it is calculated by dividing the price of a company's stock into earnings per share. Growth managers typically hold stocks with high price-to-earnings ratios whereas value managers hold stocks with low price-to-earnings ratios.

R-Squared: Also called the coefficient of determination, it measures the amount of variation in one variable explained by variations in another, i.e., the goodness of fit to a benchmark. In the case of investments, the term is used to explain the amount of variation in a security or portfolio explained by movements in the market or the portfolio's benchmark.

Selection Effect: An attribution effect that describes the amount attributable to the managers' stock selection decisions, relative to the benchmark.

Sharpe Ratio: A measure of portfolio efficiency. The Sharpe Ratio indicates excess portfolio return for each unit of risk associated with achieving the excess return. The higher the Sharpe Ratio, the more efficient the portfolio. Sharpe ratio is calculated as: Portfolio Excess Return / Portfolio Standard Deviation.

Sortino Ratio: Measures the risk-adjusted return of an investment, portfolio, or strategy. It is a modification of the Sharpe Ratio, but penalizes only those returns falling below a specified benchmark. The Sortino Ratio uses downside deviation in the denominator rather than standard deviation, like the Sharpe Ratio.

Standard Deviation: A measure of volatility, or risk, inherent in a security or portfolio. The standard deviation of a series is a measure of the extent to which observations in the series differ from the arithmetic mean of the series. For example, if a security has an average annual rate of return of 10% and a standard deviation of 5%, then two-thirds of the time, one would expect to receive an annual rate of return between 5% and 15%.

Style Analysis: A return based analysis designed to identify combinations of passive investments to closely replicate the performance of funds

Style Map: A specialized form or scatter plot chart typically used to show where a Manager lies in relation to a set of style indices on a two-dimensional plane. This is simply a way of viewing the asset loadings in a different context. The coordinates are calculated by rescaling the asset loadings to range from -1 to 1 on each axis and are dependent on the Style Indices comprising the Map.

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