





PERIOD ENDING: SEPTEMBER 30, 2017

Investment Performance Review for

San Mateo County Employees' Retirement Association

Table of Contents



VERUSINVESTMENTS.COM

SEATTLE 206-622-3700 LOS ANGELES 310-297-1777 SAN FRANCISCO 415-362-3484

Market Environment	ТАВ І	Alternatives	TAB VI
Total Fund	TAB II	Inflation Hedge	TAB VII
US Equity	TAB III	Risk Parity	TAB VIII
International Equity	TAB IV	Appendix	TAB IX
Fixed Income	TAB V		

3rd quarter summary

THE ECONOMIC CLIMATE

- Growth strengthened across developed and emerging economies. Business surveys suggest conditions are improving in both manufacturing and service industries.
- The U.S. job market tightened as unemployment dropped from 4.4 to 4.2%, despite disappointing job growth data. Unemployment has not been this low since March of 2001.
- An independence movement in Catalonia has received little attention from the financial community, and risk premiums may not reflect the negative possible knock-on effects on the EU.

PORTFOLIO IMPACTS

- Improving economic growth, low inflation, low unemployment, and supportive monetary policy across most markets has created a positive environment for global risk assets, justifying a moderate overweight risk position.
- Within risk assets, we believe opportunities exist in emerging markets.

THE INVESTMENT CLIMATE

- Global interest rates are still at historic lows, and very little monetary tightening is priced in across developed markets over the next few years. Even in the U.S., the market is only expecting two rate hikes through the end of next year.
- Valuations across global equities and credit are elevated, and have been so for the past few years.
 Further price appreciation through equity multiple expansion or credit spread contraction is unlikely.

ASSET ALLOCATION ISSUES

- Equity performance remains strong. Year-to-date returns have been fundamentally driven, supported by earnings growth rather than valuation expansion.
- Equity volatility is near historic lows. Stable economic growth and inflation have likely contributed to the muted volatility environment. Investors should monitor leverage in strategies with a specific volatility target.

We believe a moderate overweight to risk is warranted



U.S. economics summary

- U.S. real GDP grew 2.2% YoY in Q2, consistent with the trend of slow, but steady growth in the current expansion. Consumer spending and business investment were the primary drivers of growth.
- Purchasing manager indexes
 (PMIs) moved higher to above
 average levels, indicating a likely
 acceleration in economic growth
 over the coming quarters. The ISM
 Manufacturing and Services PMIs
 for September were 60.8 and
 59.8, respectively.
- The economy added an average of 91,000 jobs per month to payrolls in the third quarter. The September employment data was heavily influenced by hurricanes Harvey and Irma, which resulted in a decline of 33,000 jobs from payrolls, the first drop since 2010. Due to the calculation methodology, a bounce back should be expected in October.

- The U3 unemployment rate (unaffected by the hurricanes) fell 0.2% to a 17-year low of 4.2% over the quarter. The broader U6 unemployment rate also tightened, dropping 0.3% to 8.3%.
- Year-over-year headline CPI accelerated from 1.6% in June to 2.2% in September, while the core inflation rate was unchanged over the quarter at 1.7%. Outside of volatile energy prices inflationary pressures still appear absent, and core inflation remains below the Fed's 2% target.
- The Fed paused from raising interest rates following three consecutive quarters with hikes.
 Core inflation that has persistently been below the Fed's 2% target was the primary reason given to delay further tightening. The market is expecting the Fed to raise interest rates again in December based on fed fund futures prices.

	Most Recent	12 Months Prior
GDP (YoY)	2.2% 6/30/17	1.2% 6/30/16
Inflation (CPI YoY, Headline)	2.2% 9/30/17	1.5% 9/30/16
Expected Inflation (5yr-5yr forward)	2.0% 9/30/17	1.8% 9/30/16
Fed Funds Rate	1.25% 9/30/17	0.50% 9/30/16
10 Year Rate	2.3% 9/30/17	1.6% 9/30/16
U-3 Unemployment	4.2% 9/30/17	4.9% 9/30/16
U-6 Unemployment	8.3% 9/30/17	9.7% 9/30/16



International economics summary

- International economic growth advanced in the second quarter in both developed and emerging markets. PMIs are above 50 (indicating expansion) in nearly every country across the world, pointing towards a continuation in the recent global growth pickup.
- The IMF raised its projections for global GDP growth 0.1% for both 2017 and 2018 to 3.6% and 3.7%, respectively. For comparison, global GDP growth was 3.2% in 2016.
- Economic conditions in emerging markets have improved. Several countries, such as Brazil and Russia, are still at the beginning stages of a recovery. Lower inflation has allowed emerging central banks to pursue looser monetary policy, which should provide a tailwind to further economic growth.

- Inflation in developed countries has yet to see much pressure outside of the U.K., and remains well below central bank targets.
- Inflation in the U.K. (headline CPI) rose 3.0% YoY in September, driven partly by a weaker pound, while wages only increased by 2.2%. The Bank of England stated that a rate hike may be necessary before the end of the year to slow price increases.
- On October 1st, Catalonia passed a referendum to declare independence from Spain, which the Spanish government declared illegal. Although the Catalan prime minister accepted the vote as a mandate to declare independence, he immediately suspended this declaration with the goal of bringing the Spanish government to the negotiating table.

Area	GDP (Real, YoY)	Inflation (CPI, YoY)	Unemployment
United States	2.2% 6/30/17	2.2% 9/30/17	4.2% 9/30/17
Western	2.0%	1.5%	7.9% 6/30/17
Europe	6/30/17	9/30/17	
Japan	1.4% 6/30/17	0.7 % 8/31/17	2.8% 8/31/17
BRICS	5.6%	2.0%	5.8%
Nations	6/30/17	6/30/17	6/30/17
Brazil	0.3%	2.5%	12.7%
	6/30/17	9/30/17	9/30/17
Russia	2.5% 6/30/17	3.0% 9/30/17	4.9% 8/31/17
India	5.7%	3.3%	8.4%
	6/30/17	9/30/17	12/31/16
China	6.9%	1.6%	4.0%
	6/30/17	9/30/17	6/30/17



Equity environment

- We maintain a moderate
 overweight to equities with a
 preference for emerging markets.
 Emerging markets have
 historically delivered outsized
 economic growth and
 performance during strong global
 growth environments. These
 markets remain attractively
 valued relative to developed
 markets, though valuations rose
 over the quarter.
- U.S. equities moved upward in Q3, setting record highs.
 Performance has been fueled by earnings growth.
- The possibility of U.S. corporate tax reform has led the market to price in greater expectations for future equity earnings growth. Significant uncertainty remains around the timing and nature of the reform, and the outcome will have a material impact on equity prices in the short-term.

- Equity volatility remains unusually low. Lower volatility has historically indicated less downside risk in equity markets.
- According to FactSet as of
 October 6th, the estimated Q3
 earnings growth rate of the S&P
 500 was 2.8% YoY, a materially
 weaker figure than the 7.5%
 which was expected as of June
 30. Much of the weakness was
 caused by expected insurance
 industry losses due to hurricane
 damage. Excluding the insurance
 sector, earnings are expected to
 grow by 4.9% YoY.
- U.S. dollar weakness year-to-date has caused significant earnings differences between companies with greater international sales focus and companies that are more domestically-focused.
 Overall, U.S. dollar movement has acted as a tailwind to earnings growth.

	QTD TOTAL	. RETURN	YTD TOTAL	. RETURN	1 YEAR	
	(unhedged)	(hedged)	(unhedged)	(hedged)	(unhedged)	(hedged)
US Large Cap (Russell 1000)	4.5	%	14.2	2%	18.5	5%
US Small Cap (Russell 2000)	5.7	%	10.9	9%	20.7	7%
US Large Value (Russell 1000 Value)	3.1	%	7.9	%	15.1	1%
US Large Growth (Russell 1000 Growth)	5.9	%	20.7	7%	21.9	9%
International Large (MSCI EAFE)	5.4%	3.7%	20.0%	12.3%	19.1%	20.5%
Eurozone (Euro Stoxx 50)	8.5%	5.2%	25.2%	13.2%	29.2%	24.9%
U.K. (FTSE 100)	4.8%	2.1%	15.7%	7.2%	14.9%	11.9%
Japan (NIKKEI 225)	2.0%	2.7%	12.1%	9.4%	13.4%	27.0%
Emerging Markets (MSCI Emerging Markets)	7.9%	7.2%	27.8%	22.1%	22.5%	19.6%

Source: Russell Investments, MSCI, STOXX, FTSE, Nikkei, as of 9/30/17



Domestic equity

U.S. equities moved upward over the quarter (S&P 500 +4.5%), reaching record highs, but underperformed international markets (MSCI EAFE +5.4%). Earnings growth remained the primary driver of robust equity performance, though Q3 earnings growth expectations have fallen due to hurricane-related insurance industry losses. The possibility of U.S. tax reform has likely contributed to a positive domestic equity outlook.

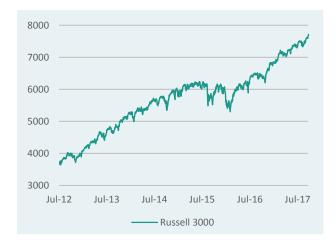
According to FactSet, as of October 6th the estimated Q3 earnings growth rate of the S&P 500 was 2.8% YoY, a

materially weaker figure than the 7.5% which was expected as of June 30. Most of the weakness was caused by insurance industry losses due to hurricane damage. Excluding this sector would result in a current estimate of 4.9% overall growth rather than 2.8%.

We maintain a neutral weight to U.S. equities

U.S. domestically-facing business in aggregate are expected to face flat sales and revenue growth, while externally-facing businesses are expected to produce strong growth. U.S. dollar depreciation and international growth have created a tailwind to the performance of externally-focused U.S. businesses.

U.S. EQUITIES



Source: Russell Investments, as of 9/29/17

S&P 500 EPS GROWTH



Source: Bloomberg, as of 9/30/17

Q3 EXPECTATIONS



Source: FactSet, as of 10/6/17



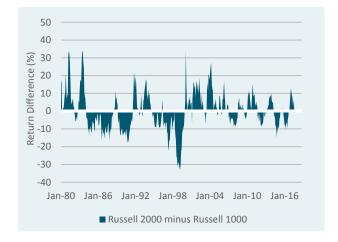
Domestic equity size and style

Large cap equities led small cap equities through July and August. However, small cap equities rallied in September (+6.2% in the month) and outperformed large cap equities over the quarter. The move in September was partially attributed to an increased focus on U.S. tax reform. If passed, tax cuts will likely provide a greater marginal benefit to smaller companies. Expectations of lower taxes and deregulation have contributed to small cap price appreciation that has outpaced earnings. The relative P/E ratio between large and small companies is at its highest level since the financial crisis.

Large cap equities were led by the technology sector, from which the strongest contributors were semiconductor and internet software companies. The top three individual contributors were Apple, Facebook and Microsoft. Small cap equities were mainly driven by producer durables companies.

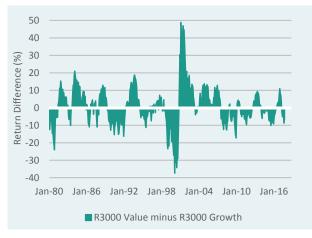
Growth outperformed value in Q3 due to a higher relative weighting to technology companies. Financial services, the most heavily weighted sector in value, returned a positive 5.0%, but still underperformed technology by 3.2%.

SMALL CAP VS LARGE CAP (YOY)



Source: Russell Investments, as of 9/30/17

VALUE VS GROWTH (YOY)



Source: Russell Investments, as of 9/30/17

U.S. LARGE VS. SMALL RELATIVE VALUATIONS



Source: Russell, Bloomberg, as of 9/30/17



International equity

International equities outperformed domestic equities during the third quarter. The MSCI ACWI ex U.S. returned 6.2% (+4.6% hedged) while the S&P 500 returned 4.5%. Consistent with the first half of 2017, emerging markets outperformed (MSCI EM +7.9% unhedged) both the EAFE Small Cap Index (+7.5%) and the broad EAFE Index (+5.4%).

Japanese equities were the largest contributors to the EAFE index in Q3, particularly companies within the industrials and consumer discretionary sectors. Despite the positive moves, Japanese equity valuations based on earnings and

sales remain attractive relative to those in Europe and the United Kingdom.

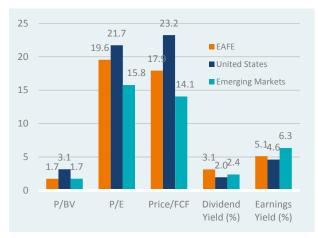
MSCI EAFE valuations have remained relatively stable in 2017 as earnings and sales growth have kept pace with price appreciation.

Currency effects added a positive 1.7% to the unhedged MSCI EAFE in Q3 (+7.6% year-to-date), as the U.S. dollar fell for a third consecutive quarter against a trade weighted basket of currencies.

GLOBAL EQUITY PERFORMANCE



VALUATIONS



Source: Bloomberg, as of 9/30/17

EFFECT OF CURRENCY (1 YEAR ROLLING)



Source: MSCI, as of 9/30/17



Source: Bloomberg, as of 9/30/17

Emerging market equity

We maintain an overweight to emerging market equities, which have historically delivered outsized economic growth and performance during stronger global growth environments.

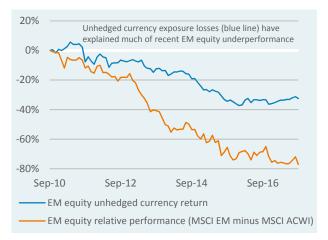
Emerging market equities have outperformed developed markets over the quarter (7.9% vs. 4.8%) and the past year (22.5% vs 18.2%), reversing an extended period of underperformance following the global financial crisis. Currency movement was a significant contributor to

emerging market underperformance during this time, and the recent reversal in currency trends has been additive to the outperformance of these markets.

Valuations have risen off of low levels, bolstering returns. These markets are no longer cheap relative to history though strong earnings growth and mean reversion of currencies could likely fuel further outsized equity gains.

Accelerating global growth should have a positive effect on emerging economies

EMERGING MARKET FX & RELATIVE PERFORMANCE (7YR CUMULATIVE)



Source: MSCI, JP Morgan EM Currency Index, as of 9/30/17

EQUITY PERFORMANCE (3YR ROLLING)



Source: Standard & Poor's, MSCI, as of 9/30/17

FORWARD P/E RATIOS



Source: Bloomberg as of 9/30/17



Interest rate environment

- After bottoming out to a postelection low of 2.04% on September 7th following increased tensions with North Korea, the U.S. 10-year rose to finish the quarter slightly higher at 2.33%.
- The Fed kept interest rates unchanged over the quarter, citing concerns over the lack of inflation. However, Fed officials have communicated that they believe recent low inflation is transitory. An additional rate hike in December appears likely based on market implied probabilities.
- The Fed will begin to reduce its balance sheet in October. The central bank's plan is to runoff \$6 billion of Treasuries and \$4 billion of mortgage-backed securities per month. This will be scaled up commensurately every 3 months to \$50 billion per month. At this pace it will take more than seven years to return the balance sheet to pre-crisis levels.

- U.K. sovereign yields experienced the biggest increase among developed countries after the Bank of England acknowledged that a rate hike may be necessary by the end of the year to slow inflation.
- Very little monetary tightening is priced into short-term developed market interest rates over the next few years. Although we expect central banks to be cautious, faster than expected increases in interest rates represents a potential risk.
- Our underweight position to both
 U.S. and developed sovereign
 rates (currency hedged) was
 unchanged over the quarter,
 primarily due to the low carry.
 However, Treasuries still play an
 important role in portfolios by
 offering equity risk diversification.

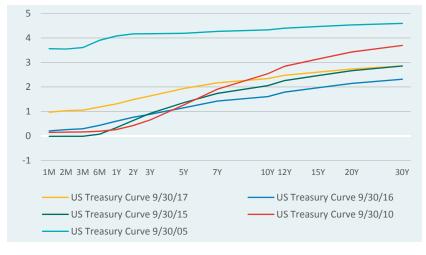
Area	Short Term (3M)	10 Year
United States	1.02%	2.33%
Germany	(0.70%)	0.46%
France	(0.59%)	0.74%
Spain	(0.45%)	1.60%
Italy	(0.39%)	2.11%
Greece	2.02%	5.66%
U.K.	0.28%	1.37%
Japan	(0.17%)	0.07%
Australia	1.71%	2.84%
China	3.04%	3.62%
Brazil	7.46%	9.77%
Russia	7.76%	7.66%

Source: Bloomberg, as of 9/30/17

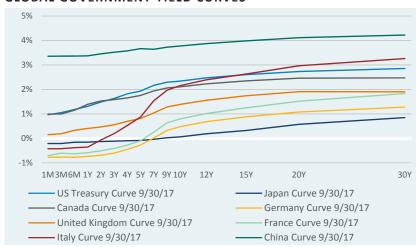


Yield environment

U.S. YIELD CURVE



GLOBAL GOVERNMENT YIELD CURVES



YIELD CURVE CHANGES OVER LAST FIVE YEARS



IMPLIED CHANGES OVER NEXT YEAR



Source: Bloomberg, as of 9/30/17



Currency

The U.S. dollar depreciated an additional 2.7% in Q3 against a trade weighted basket of developed currencies, which brought the year-to-date decline to 8.0%. The downward trend partially reversed in September after prospects of another interest rate hike in December from the Fed helped lead to the first month of dollar appreciation so far this year. The euro appreciated 3.4% against the dollar over the quarter, influenced by improving economic conditions and the possibility of ECB tightening monetary policy.

After several years of depreciation, emerging market

currencies have stabilized. Improved current account balances and economic growth conditions have provided a positive backdrop for these currencies moving forward. However, a quicker than expected rise in U.S. interest rates could represent a headwind to further appreciation.

Currency losses from unhedged exposure to developed international equities has begun to reverse due to recent dollar weakness, although currency exposure has still resulted in materially higher volatility.



Source: Federal Reserve, as of 9/30/17

EFFECT OF CURRENCY (1-YEAR ROLLING)



Source: MPI, as of 9/30/17

JPM EM CURRENCY INDEX



Source: JPMorgan, as of 9/30/17



- The Total Fund, net of manager fees, returned 3.3% in the third quarter of 2017 and ranked 70th percentile among other public plans greater than \$1 billion (median of 3.5%). It lagged the policy index return of 3.7%. The Total Fund w/o Overlay was 3.2% for the quarter. The Total Fund one year return of 11.8% lagged the policy (12.6%, and ranked in 65th percentile of its peer universe. The three-year return of 7.1% (31st percentile) was above median among large public plans (6.6%).
- Third quarter results were enhanced by the following factors:
 - 1. DE Shaw gained 7.5 % beating the Russell 1000 (4.5%) and ranked in the 1st percentile of its peers. Event-driven and technical forecasts added to the excess return of the portfolio. Stock-specific exposures were the main drivers of outperformance for the quarter.
 - 2. AQR GRP gained 4.5% vs the risk parity index (3.2%). All four risk categories were positive for the quarter. Equities contributed 1.7%, inflation-sensitive assets contributed 1.5%, credit/currencies contributed 1.0%, and nominal bonds contributed 0.3%.
 - 3. Western TRU ranked in the 1st percentile of Core Fixed Income managers, gaining 1.9% versus the Barclays Aggregate (0.8%). Continuing the trend from the second quarter, risk assets did well this quarter, and macro strategies were strong contributors to performance. Spread sector performance also contributed to performance as corporate credit, structured products, and emerging markets outperformed.
- Third quarter results were hindered by the following factors:
 - 1. Baillie Gifford gained 5.0% trailing the MSCI ACWI ex US return of 6.3%, and ranked in the bottom quartile of its peer group. The portfolio lagged due to stock selection in Asia/Pacific markets.
 - 2. Parametric Core gained 6.8% while the MSCI Emerging Markets gained 8.0%. An underweight to Korea (which was up 8.41%) and overweight to Mexico (which was down -7.57%) detracted from relative performance.
 - 3. Mondrian trailed the MSCI ACWI ex US Value (5.0% vs 6.1%). Stock selection within Sweden and Netherlands held back performance.

	3 Mo (%)	Rank*	YTD (%)	Rank	1 Yr (%)	Rank	2 Yrs (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Total Fund **	3.3	70	10.9	65	11.8	65	11.0	46	7.1	31	8.8	33	4.9	59
Policy Index ¹	3.7	29	11.3	51	12.6	47	11.8	13	7.2	27	8.9	27	5.6	21
Allocation Index	3.7	36	11.2	57	12.4	53	11.6	22	7.0	40	8.8	31		
InvestorForce Public DB > \$1B Net Median	3.5		11.3		12.5		10.9		6.6		8.3		5.0	
Total Fund ex Overlay	3.2	74	10.7	67	11.8	66	10.8	54	7.0	43	8.7	38	4.8	61
Policy Index1	3.7	29	11.3	51	12.6	47	11.8	13	7.2	27	8.9	27	5.6	21
Allocation Index	3.7	36	11.2	57	12.4	53	11.6	22	7.0	40	8.8	31		
InvestorForce Public DB > \$1B Net Median	3.5		11.3		12.5		10.9		6.6		8.3		5.0	
Public Equity	5.2	38	17.0	43	18.2	65	15.4	55	8.6	52	11.6	55	4.8	68
Blended Public Equity Index ²	5.4	21	17.4	37	19.7	24	16.3	21	8.9	43	11.8	49	5.6	41
InvestorForce All DB Total Eq Net Median	5.0		16.4		18.7		15.5		8.7		11.7		5.4	
US Equity	5.1	17	13.7	50	18.3	58	15.9	63	10.3	56	13.7	57	6.7	79
Blended US Equity Index ²	4.6	44	13.9	41	18.7	44	16.7	34	10.8	31	14.1	36	7.6	29
Russell 3000	4.6	44	13.9	41	18.7	44	16.8	28	10.7	34	14.2	26	7.6	31
InvestorForce All DB US Eq Net Median	4.5		13.6		18.6		16.3		10.4		13.8		7.3	
Large Cap Equity	5.0	36	15.2	39	19.1	43	16.6	24	11.0	23	14.3	31	7.0	59
Russell 1000	4.5	49	14.2	45	18.5	47	16.7	22	10.6	28	14.3	31	7.5	43
eA US Large Cap Equity Net Median	4.5		13.6		18.2		15.1		9.4		13.4		7.3	
BlackRock Russell 1000 ***	4.5	50							-					
Russell 1000	4.5	50	14.2	47	18.5	43	16.7	16	10.6	24	14.3	22	7.5	40
eA US Large Cap Core Equity Net Median	4.5		14.1		18.0		14.9		9.6		13.2		7.3	

^{*} 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.

^{***}Funded January 2017.

^{1.} Effective 2/1/17, Policy Index is 23% Russell 3000/19% MSCI ACWI ex US IMI/ 12% 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)/ 6% Libor +4%/ 7% (34% Bloomberg Roll Select Commodity/ 33% S&P Global Large-MidCap Commodity and Resources/ 33% S&P Global Infrastructure)

^{2.} See Appendix for Benchmark History.

	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	2 Yrs (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
DE Shaw	7.5	1	17.9	8	22.1	11	19.3	3	13.1	3	16.0	3		
Russell 1000	4.5	50	14.2	47	18.5	43	16.7	16	10.6	24	14.3	22	7.5	40
eA US Large Cap Core Equity Net Median	4.5		14.1		18.0		14.9	_	9.6		13.2		7.3	
Small Cap Equity	5.7	44	10.0	50	21.7	35	15.8	61	9.1	80	12.4	75	6.3	86
Russell 2000	5.7	44	10.9	44	20.7	47	18.1	36	12.2	44	13.8	55	7.8	54
eA US Small Cap Equity Net Median	5.3		10.0		20.5		16.8		11.8		14.0		8.0	
QMA US Small Cap*	5.7	43	10.0	51	21.8	33					-			
Russell 2000	5.7	43	10.9	38	20.7	47	18.1	35	12.2	49	13.8	59	7.8	59
eA US Small Cap Core Equity Net Median	5.1		10.1		20.2		17.1		12.0		14.2		8.1	
International Equity	5.2	84	21.5	72	17.3	86	14.4	54	5.6	46	7.6	57	0.8	78
MSCI ACWI ex US IMI ²	6.4	41	21.9	64	20.1	47	15.1	37	5.6	46	7.7	54	1.9	44
MSCI EAFE Gross	5.5	76	20.5	84	19.7	54	13.2	80	5.5	50	8.9	25	1.8	46
InvestorForce All DB ex-US Eq Net Median	6.2		22.6		19.9		14.5		5.5		7.9		1.7	
Developed Markets	5.0	77	21.5	42	17.1	78	14.1	35	6.0	45	8.2	63	1.1	78
MSCI ACWI ex USA Gross	6.3	31	21.6	41	20.2	40	14.9	27	5.2	64	7.5	76	1.7	54
InvestorForce All DB Dev Mkt ex-US Eq Net Median	5.7		21.0		19.2		13.5		5.9		8.7		1.8	
Baillie Gifford	5.0	87	25.6	61	16.7	79	16.6	33	8.3	50	9.8	41		
MSCI ACWI ex US ²	6.3	69	21.6	95	20.2	56	14.9	57	5.2	93	9.0	67		
MSCI ACWI ex US Growth 2	6.4	68	25.2	68	18.1	73	15.0	57	6.8	72	9.6	46		-
eA ACWI ex-US Growth Equity Net Median	7.9		27.2		20.6		15.7		8.2		9.6		3.8	
BlackRock EAFE Index	5.5	69	20.4	67	19.6	55	13.1	51	5.4	72	-			
MSCI EAFE	5.4	71	20.0	71	19.1	58	12.6	56	5.0	76	8.4	70	1.3	83
MSCI EAFE Gross	5.5	69	20.5	66	19.7	55	13.2	50	5.5	69	8.9	63	1.8	66
eA EAFE Core Equity Net Median	6.3		21.8		20.4		13.1		6.3		9.6		2.6	

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



	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	2 Yrs (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Mondrian	5.0	63	18.2	68	16.9	69	12.5	63	3.9	80	6.9	88	1.6	53
MSCI ACWI ex USA Value Gross	6.1	31	18.3	68	22.2	43	14.7	46	3.5	82	6.6	89	1.2	89
MSCI ACWI ex USA Gross	6.3	30	21.6	34	20.2	58	14.9	45	5.2	67	7.5	83	1.7	44
eA ACWI ex-US Value Equity Net Median	5.4		20.1		21.4		14.1		6.0		8.9		1.6	
Emerging Markets	6.8	51	21.8	91	18.6	67	16.7	83	2.0	95	3.5	64	-	
MSCI Emerging Markets Gross	8.0	21	28.1	26	22.9	21	20.0	32	5.3	30	4.4	33	1.7	39
InvestorForce All DB Emg Mkt Eq Net Median	6.8		26.0		20.2		18.6		4.4		4.0		1.5	
Parametric Core	6.8	63	21.8	84	18.6	69	16.8	73			-			
MSCI Emerging Markets Gross	8.0	45	28.1	52	22.9	42	20.0	43	5.3	51	4.4	70	1.7	68
eA Emg Mkts Equity Net Median	7.8		28.4		21.9		19.4		5.3		5.2		2.3	
Fixed Income	1.2	57	5.1	45	5.9	6	6.3	26	4.0	31	3.8	24	5.4	42
Blended Fixed Income Index ²	1.2	49	4.5	54	2.0	52	4.7	50	3.4	42	2.2	72	4.6	66
InvestorForce All DB Total Fix Inc Net Median	1.2		4.7		2.1		4.7		3.1		2.7		5.1	
US Fixed Income	1.2	38	5.1	33	4.7	9	6.0	25	4.3	28	3.8	27	5.4	37
Blended US Fixed Index ²	1.1	45	4.2	48	2.4	28	4.9	41	3.8	35	2.5	61	4.8	55
InvestorForce All DB US Fix Inc Net Median	1.1		4.0		1.1		4.0		3.2		2.9		5.0	
Core Fixed	1.1		4.1		2.4		4.4	-	3.4		2.9		4.7	
BBgBarc US Aggregate TR	0.8		3.1		0.1		2.6		2.7		2.1		4.3	
BlackRock Intermediate Govt *	0.4	98												
FIAM Bond	1.1	9	3.7	25	0.9	30	3.9	13	3.3	18	2.7	24	5.0	26
Western TRU	1.9	1	7.4	1	8.3	1	6.7	1						
3-Month Libor Total Return USD	0.3	99	0.9	99	1.2	19	0.9	99	0.7	99	0.5	99	0.9	99
BBgBarc US Aggregate TR	0.8	52	3.1	64	0.1	73	2.6	71	2.7	61	2.1	66	4.3	78
eA US Core Fixed Inc Net Median	0.9		3.3		0.4		2.9		2.8		2.3		4.6	

^{*} Funded January 2017.2. See Appendix for Benchmark History.



	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	2 Yrs (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Opportunistic Credit	1.7		7.7		10.5		9.6	-	6.4		8.3	-		
BBgBarc BA Intermediate HY	1.7		6.1		6.8		8.9		5.9		4.2			
Angelo Gordon Opportunistic*	-0.6		7.9		10.6		7.3		5.2		-			
Angelo Gordon STAR*	5.0		15.7		17.9		10.3	-	9.6		-			
BBgBarc US Aggregate TR	0.8		3.1		0.1		2.6		2.7		2.1		4.3	-
Beach Point Select	2.1	26	6.6	47	10.4	10	10.3	20	-		-			
BBgBarc BA Intermediate HY ²	1.7	62	6.1	64	6.8	81	8.9	58	5.9	25	4.2	95		
eA US High Yield Fixed Inc Net Median	1.8		6.5		8.1		9.1		5.0		5.7		7.0	
Brigade Capital	1.4	81	7.2	19	9.9	15	11.0	8	4.6	68	5.5	63		
BBgBarc BA Intermediate HY ²	1.7	62	6.1	64	6.8	81	8.9	58	5.9	25	4.2	95		-
50% Barclays HY/ 50% Bank Loan	1.5	77	5.0	83	7.1	73	8.1	76	4.9	56	5.4	67		-
eA US High Yield Fixed Inc Net Median	1.8		6.5		8.1		9.1		5.0		5.7		7.0	
PIMCO Diversified**		-						-	-		-			
Blended PIMCO Diversified Index ²	1.9	50	6.5	53	4.7	95	8.3	71	5.3	36	5.0	81	6.8	61
BBgBarc BA Intermediate HY	1.7	62	6.1	64	6.8	81	8.9	58	5.9	25	4.2	95		
eA US High Yield Fixed Inc Net Median	1.8		6.5		8.1		9.1		5.0		5.7		7.0	
Private Credit	0.8		4.6	-	5.4					-	-	-		
BBgBarc BA Intermediate HY	1.7		6.1		6.8		8.9		5.9		4.2			-
TCP Direct Lending VIII* ***	2.7	4	6.7	45	7.5	66		-	-		-			
White Oak Yield* ****	-4.6	99	-					-	-		-			
BBgBarc BA Intermediate HY	1.7	62	6.1	64	6.8	81	8.9	58	5.9	25	4.2	95		
eA US High Yield Fixed Inc Net Median	1.8		6.5		8.1		9.1		5.0		5.7		7.0	
Global Fixed Income	1.3	90	5.5	77	12.4	6	7.8	49	2.2	72	3.6	30		
BBgBarc Multiverse TR	1.9	58	6.6	53	-0.6	99	4.2	96	1.6	82	0.8	79	3.5	99
InvestorForce All DB Glbl Fix Inc Net Median	2.0		7.2		6.2		7.8		2.8		2.9		5.3	

^{*} Preliminary return as of 09/30/2017.

** Funded August 2017.

*** Funded September 2016.

****Funded June 2017.

^{2.} See Appendix for Benchmark History.



	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	2 Yrs (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Franklin Templeton	1.3	81	5.5	70	12.4	3	7.8	29	2.2	64	3.6	41		
BBgBarc Multiverse TR	1.9	45	6.6	52	-0.6	88	4.2	73	1.6	74	0.8	83	3.5	77
eA All Global Fixed Inc Net Median	1.8		6.6		4.3		5.9		3.0		3.1	_	4.8	
Risk Parity	3.7		9.8		5.6		10.0	-	5.1		4.9			
Blended Risk Parity Index2	3.2		10.3		11.8		11.5		7.9		9.5			
AQR GRP, 10% Volatility	4.5		10.8		8.2		9.1		2.9		3.5			
PanAgora	3.0		9.0		3.3		10.8		7.3					
Blended Risk Parity Index 2	3.2		10.3		11.8		11.5		7.9		9.5			
Blended RP Secondary Index	3.1		9.5		9.7		9.7		5.7		7.7			
Alternatives	1.7		8.0		12.1		8.0		8.2		6.0	-		
Alternatives Allocation Index 2	3.5		10.0		13.6		11.2		5.8		6.4			
Blended Alternatives Index	3.6		10.2		14.0		11.3		6.4		8.2			
Private Equity **	0.6	77	12.0	26	17.6	11	13.1	12	17.6	1	15.2	6		
Russell 3000 +3%	5.6	8	15.9	5	21.7	4	19.8	1	13.7	10	17.2	3	10.6	5
InvestorForce All DB Private Eq Net Median	2.8		9.2		12.4		8.6		8.6		9.9		7.5	
Hedge Fund/Absolute Return	2.8	21	3.5	66	5.8	61	3.3	51	6.8	4	6.8	13		
Libor 1 month +4%	1.2	74	3.7	62	4.9	75	4.6	35	4.5	18	4.4	62		
InvestorForce All DB Hedge Funds Net Median	1.7		4.0		6.3		3.3		2.3		4.8		2.5	
AQR DELTA XN	4.0	26	4.2	59	6.7	49	4.2	58	7.5	30	7.2	43		
Libor 1 month +4%	1.2	67	3.7	64	4.9	58	4.6	55	4.5	48	4.4	60		
eV Alt All Multi-Strategy Median	2.0		5.2		6.4		5.0		4.0		5.2		5.2	
Aberdeen Standard GARS	0.3	80	1.7	79	3.6	68		-	-		-			
Libor 1 month +4%	1.2	67	3.7	64	4.9	58	4.6	55	4.5	48	4.4	60		
eV Alt All Multi-Strategy Median	2.0		5.2		6.4		5.0		4.0		5.2		5.2	
Inflation Hedge	2.4		5.6		7.1			-						
Blended Inflation Pool Index ²	3.2		5.9		7.0									-

^{2.} See Appendix for Benchmark History.

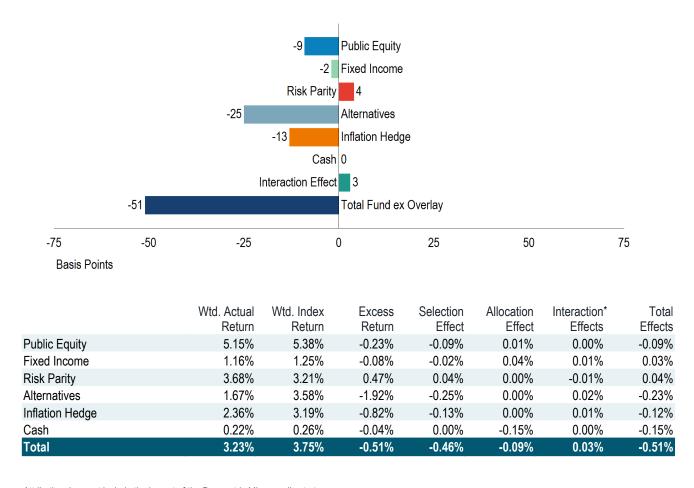


^{**} Returns are one-quarter lag.

	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	2 Yrs (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Real Estate	1.5	44	5.9	23	8.1	14	8.9	26	11.0	8	11.5	3	4.9	17
NCREIF ODCE	1.9	23	5.4	30	7.7	18	8.9	26	10.8	14	11.6	3	5.6	5
InvestorForce All DB Real Estate Pub Net Median	1.4		4.6		6.1		7.9		9.1		9.9		4.1	
Invesco	1.4		5.8		8.0		8.6		10.9		11.4		4.8	
NCREIF ODCE	1.9		5.4		7.7		8.9		10.8		11.6		5.6	
Invesco US Val IV	5.3		9.9		11.0			-			-			
NCREIF ODCE	1.9		5.4		7.7		8.9		10.8		11.6		5.6	
NCREIF CEVA 1Q Lag - NET	2.6		6.9		9.7		11.6		13.5					
PGIM RE US Debt Fund***					-									
NCREIF ODCE	1.9		5.4		7.7		8.9		10.8		11.6		5.6	
Private Real Asset **	-3.1	-	-0.4		-0.4	-	16.8	-	11.6		-	-		
Blended Real Asset Index ²	5.1		7.8		8.9		7.8		6.5					-
Liquid Pool	5.6	-	9.0				-	-						
Blended Real Asset Index ²	5.1		7.8		8.9		7.8		6.5					
SSgA Custom Real Asset****	5.6		9.0											
Blended Real Asset Index	5.1		7.8		8.9		7.8		6.5					
TIPS	0.7	-	1.2		0.6		2.9		1.3		-0.4			
BBgBarc US TIPS TR	0.9		1.7		-0.7		2.9		1.6		0.0		3.9	
Brown Brothers Harriman	0.7	85	1.2	84	0.6	14	2.9	53	1.3	60	-0.4	94		
BBgBarc US TIPS TR	0.9	52	1.7	45	-0.7	60	2.9	55	1.6	25	0.0	47	3.9	67
eA TIPS / Infl Indexed Fixed Inc Net Median	0.9		1.7		-0.7		2.9		1.4		0.0		4.0	
Cash	0.2	-	0.7		0.9		1.1		1.0		0.8		0.7	
91 Day T-Bills	0.3		0.6		0.7		0.5		0.3		0.2		0.4	
General Account	0.5		1.1		1.3		1.7		1.4		0.9		1.0	
Treasury & LAIF	0.3		1.0		0.7		0.8		0.9		0.8		0.7	
91 Day T-Bills	0.3		0.6		0.7		0.5		0.3		0.2		0.4	

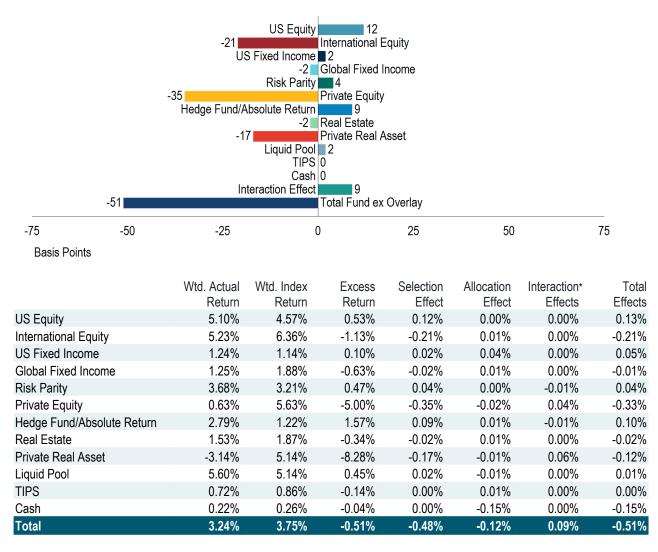
^{**} Returns are one-quarter lag.
"Funded July 2017.
"Funded October 2016.
2. See Appendix for Benchmark History.





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

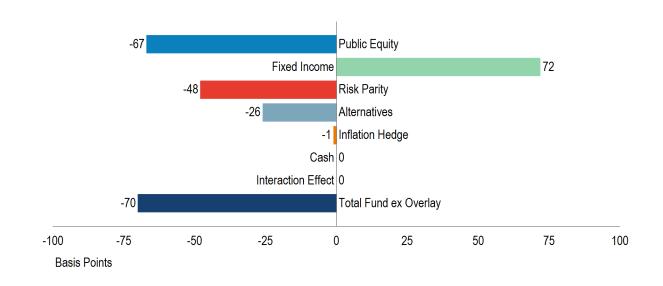
^{*} Interaction Effects include Residual Effects.



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



^{*} Interaction Effects include Residual Effects.

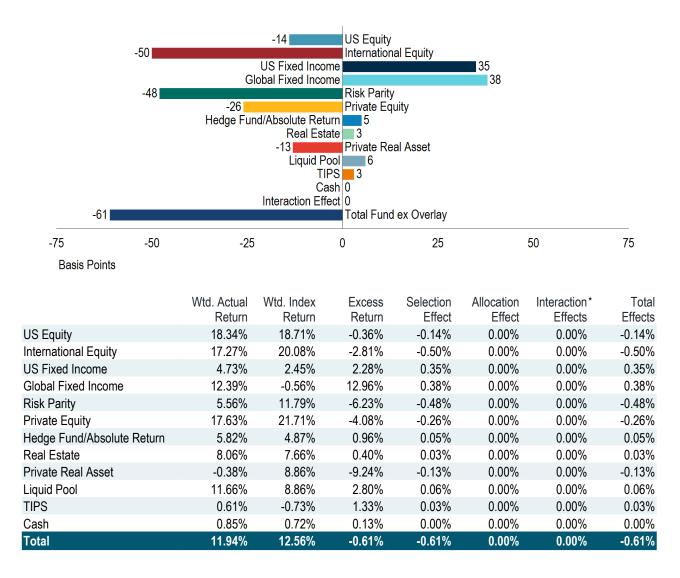


	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction * Effects	Total Effects
Public Equity	18.18%	19.66%	-1.47%	-0.67%	0.00%	0.00%	-0.67%
Fixed Income	5.89%	1.95%	3.93%	0.72%	0.00%	0.00%	0.72%
Risk Parity	5.56%	11.79%	-6.23%	-0.48%	0.00%	0.00%	-0.48%
Alternatives	12.08%	13.96%	-1.89%	-0.26%	0.00%	0.00%	-0.26%
Inflation Hedge	7.15%	6.97%	0.18%	-0.01%	0.00%	0.00%	-0.01%
Cash	0.85%	0.72%	0.13%	0.00%	0.00%	0.00%	0.00%
Total	11.90%	12.61%	-0.70%	-0.70%	0.00%	0.00%	-0.70%

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

* Interaction Effects include Residual Effects.



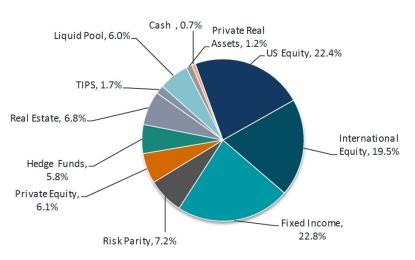


Attribution does not include the impact of the Parametric Minneapolis strategy.

* Interaction Effects include Residual Effects.

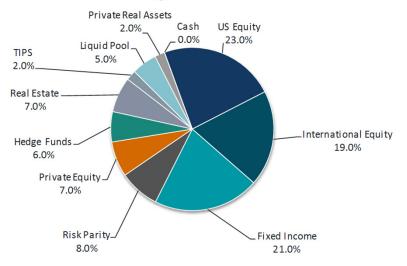


Current w/Overlay

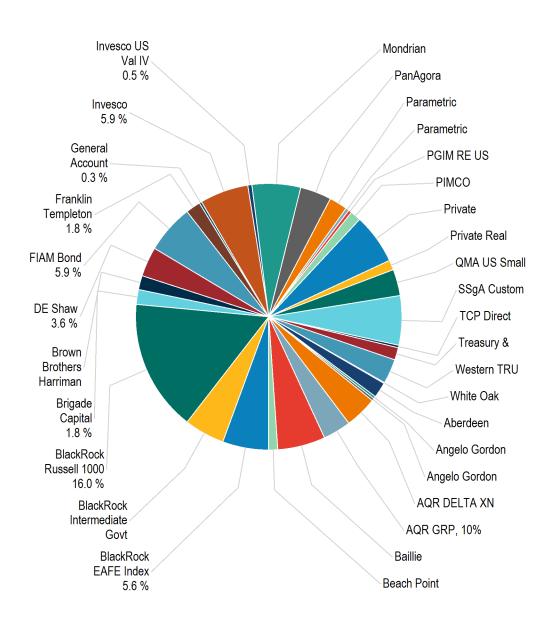


	MARKET VALUE		
ASSET ALLOCATION	W/OVERLAY	W/OVERLAY	W/O OVERLAY
US Equity	944,581,378	22.4%	22.9%
International Equity	821,621,528	19.5%	19.4%
Fixed Income	960,995,526	22.8%	20.8%
Risk Parity	302,479,596	7.2%	7.2%
Private Equity	255,291,095	6.1%	6.1%
Hedge Funds	243,755,086	5.8%	5.8%
Real Estate	285,318,525	6.8%	6.8%
TIPS	71,456,823	1.7%	1.7%
Liquid Pool	251,921,564	6.0%	6.0%
Private Real Assets	51,735,386	1.2%	1.2%
Cash	29,053,438	0.7%	2.2%
TOTAL	4,218,209,946	100.0%	100.0%

Target



ASSET ALLOCATION	W/OVERLAY	TARGET	DIFF
US Equity	22.4%	23.0%	-0.6%
International Equity	19.5%	19.0%	0.5%
Fixed Income	22.8%	21.0%	1.8%
Risk Parity	7.2%	8.0%	-0.8%
Private Equity	6.1%	7.0%	-0.9%
Hedge Funds	5.8%	6.0%	-0.2%
Real Estate	6.8%	7.0%	-0.2%
TIPS	1.7%	2.0%	-0.3%
Liquid Pool	6.0%	5.0%	1.0%
Private Real Assets	1.2%	2.0%	-0.8%
Cash	0.7%	0.0%	0.7%
TOTAL	100.0%	100.0%	0.0%



Total	\$4,218,209,946	100%
White Oak Yield	\$5,331,786	0%
Western TRU	\$126,377,577	3%
Treasury & LAIF	\$62,930,191	1%
Transition 3	\$18,559	0%
TCP Direct Lending VIII	\$13,567,663	0%
SSgA Custom Real Asset	\$251,921,564	6%
QMA US Small Cap	\$136,829,297	3%
Private Real Asset	\$51,735,386	1%
Private Equity	\$255,291,095	6%
PIMCO Diversified	\$55,333,249	1%
PGIM RE US Debt Fund	\$15,604,756	0%
Parametric Minneapolis Overlay	\$17,234,536	0%
Parametric Core	\$91,121,702	2%
PanAgora	\$160,181,576	4%
Mondrian	\$247,918,326	6%
Invesco US Val IV	\$19,994,974	0%
Invesco	\$249,718,795	6%
General Account	\$12,568,039	0%
Franklin Templeton	\$76,587,252	2%
FIAM Bond	\$247,292,190	6%
DE Shaw	\$152,567,859	4%
Brown Brothers Harriman	\$71,456,823	2%
Brigade Capital	\$75,109,597	2%
BlackRock Russell 1000	\$674,536,883	16%
BlackRock Intermediate Govt	\$206,758,791	5%
BlackRock EAFE Index	\$237,794,885	6%
Beach Point Select	\$47,569,341	1%
Baillie Gifford	\$243,435,148	6%
AQR GRP, 10% Volatility	\$142,298,020	3%
AQR DELTA XN	\$163,224,752	4%
Angelo Gordon STAR	\$14,063,000	0%
Angelo Gordon Opportunistic	\$11,306,000	0%
Aberdeen Standard GARS	\$80,530,334	2%
	Actual	Actua

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	7.1%	31	6.0%	62	1.1	39	-0.1	59	1.1%	54
Policy Index	7.2%	27	6.5%	84	1.1	51			0.0%	1
InvestorForce Public DB > \$1B Net Median	6.6%		5.6%		1.1		0.0		1.1%	

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	8.8%	33	6.0%	69	1.4	43	-0.1	76	0.9%	35	
Policy Index	8.9%	27	6.4%	82	1.4	51			0.0%	1	
InvestorForce Public DB > \$1B Net Median	8.3%		5.6%		1.4		0.1		1.1%		

3 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Cash	1.0%	0.4%	1.8	1.7	0.4%
91 Day T-Bills	0.3%	0.1%	0.0		0.0%
General Account	1.4%	0.6%	1.9	1.9	0.6%
91 Day T-Bills	0.3%	0.1%	0.0		0.0%
Treasury & LAIF	0.9%	0.5%	1.2	1.2	0.5%
91 Day T-Bills	0.3%	0.1%	0.0		0.0%

Statistics Summary

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Cash	0.8%	0.3%	1.8	1.8	0.3%
91 Day T-Bills	0.2%	0.1%	0.0		0.0%
General Account	0.9%	0.5%	1.5	1.5	0.5%
91 Day T-Bills	0.2%	0.1%	0.0	-	0.0%
Treasury & LAIF	0.8%	0.4%	1.5	1.5	0.4%
91 Day T-Bills	0.2%	0.1%	0.0		0.0%

InvestorForce Public DB > \$1B Net Accounts

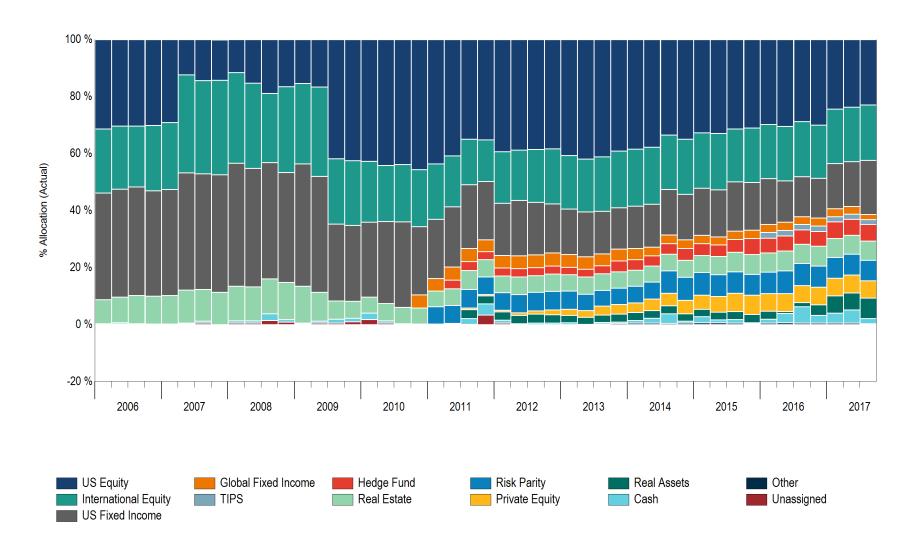


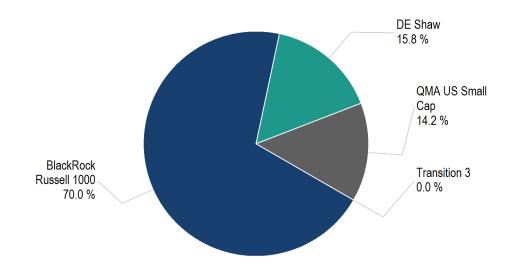
5th Percentile
25th Percentile
Median
75th Percentile
95th Percentile
of Portfolios

Total Fund

▲ Policy Index

Return (Ra	ank)						
4.2	13.5	14.6	12.2	7.9	9.8	9.7	6.0
3.8	12.2	13.2	11.6	7.2	9.0	9.0	5.5
3.5	11.3	12.5	10.9	6.6	8.3	8.4	5.0
3.2	10.2	11.1	9.9	6.0	7.4	7.5	4.5
2.7	8.4	9.5	8.6	4.7	6.1	6.1	3.5
54	54	54	54	53	53	50	47
3.3 (7	0) 10.9	(65) 11.8	(65) 11.0	(46) 7.1	(31) 8.8	(33) 8.8	(34) 4.9 (59)
3.7 (2	9) 11.3	(51) 12.6	(47) 11.8	(13) 7.2	(27) 8.9	(27) 9.2	(18) 5.6 (21)





			Manager
			Contribution to
	Actual \$	Actual %	Excess Return %
BlackRock Russell 1000	\$674,536,883	70.0%	0.0%
DE Shaw	\$152,567,859	15.8%	0.5%
QMA US Small Cap	\$136,829,297	14.2%	0.0%
Transition Account	\$18,559	0.0%	0.0%
Actual vs. Policy Weight Difference			0.1%
Total	\$963,952,598	100.0%	0.5%

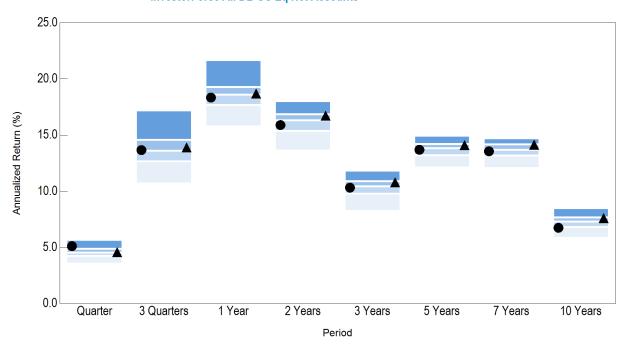
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
US Equity	10.3%	10.2%	1.0	-0.6	0.8%
Blended US Equity Index	10.8%	10.3%	1.0		0.0%
Russell 3000	10.7%	10.2%	1.0	-0.1	0.7%

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Large Cap Equity	11.0%	10.1%	1.1	0.5	0.8%
Russell 1000	10.6%	10.1%	1.0		0.0%
DE Shaw	13.1%	10.5%	1.2	1.0	2.4%
Russell 1000	10.6%	10.1%	1.0		0.0%
Small Cap Equity	9.1%	14.0%	0.6	-1.1	2.8%
Russell 2000	12.2%	14.5%	0.8		0.0%

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
US Equity	13.7%	9.8%	1.4	-0.5	0.8%
Blended US Equity Index	14.1%	10.0%	1.4		0.0%
Russell 3000	14.2%	9.8%	1.4	0.1	0.8%

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Large Cap Equity	14.3%	9.5%	1.5	0.0	0.8%
Russell 1000	14.3%	9.6%	1.5		0.0%
DE Shaw	16.0%	10.0%	1.6	0.8	2.2%
Russell 1000	14.3%	9.6%	1.5		0.0%
Small Cap Equity	12.4%	13.5%	0.9	-0.5	2.8%
Russell 2000	13.8%	14.0%	1.0		0.0%

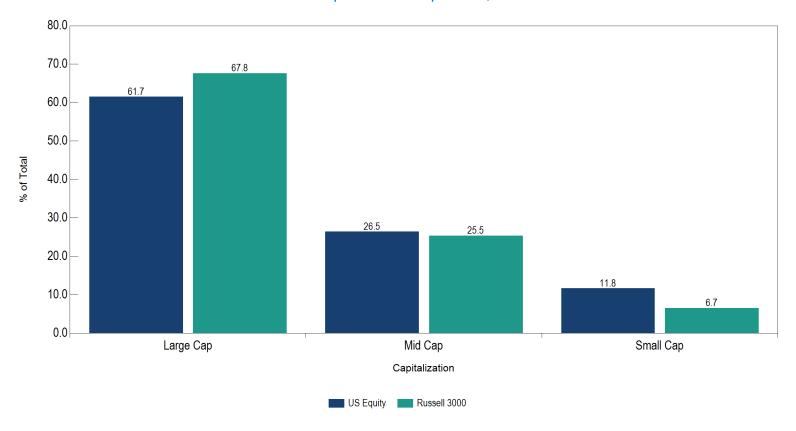
InvestorForce All DB US Eq Net Accounts



	Return	(Rank)						
5th Percentile	5.6	17.2	21.7	18.0	11.8	14.9	14.7	8.5
25th Percentile	4.9	14.6	19.3	16.9	10.9	14.2	14.2	7.7
Median	4.5	13.6	18.6	16.3	10.4	13.8	13.7	7.3
75th Percentile	4.2	12.7	17.7	15.4	9.8	13.2	13.2	6.8
95th Percentile	3.6	10.7	15.8	13.6	8.2	12.1	12.1	5.8
# of Portfolios	669	664	659	649	629	552	458	364
US EquityBlended US Equity Index	5.1 4.6	(17) 13.7 (44) 13.9	(50) 18.3 (41) 18.7	(58) 15.9 (44) 16.7	(63) 10.3 (34) 10.8	(56) 13.7 (31) 14.1	(57) 13.6 (36) 14.1	(58) 6.7 (79) (28) 7.6 (29)



Market Capitalization as of September 30, 2017



See appendix for the market capitalization breakpoints.

	Portfolio	Russell 3000
Number of Holdings	2,554	2,981
Weighted Avg. Market Cap. (\$B)	123.0	135.9
Median Market Cap. (\$B)	2.9	1.6
Price To Earnings	25.2	25.1
Price To Book	4.8	4.4
Price To Sales	3.4	3.6
Return on Equity (%)	20.2	17.2
Yield (%)	1.8	1.8
Beta (holdings; domestic)	1.1	1.0

Top Holdings	Worst Performers

APPLE	3.4%
MICROSOFT	1.6%
JOHNSON & JOHNSON	1.4%
FACEBOOK CLASS A	1.2%
AMAZON.COM	1.1%
ALPHABET 'C'	1.1%
JP MORGAN CHASE & CO.	1.1%
ALPHABET 'A'	1.0%
EXXON MOBIL	1.0%
BERKSHIRE HATHAWAY 'B'	1.0%

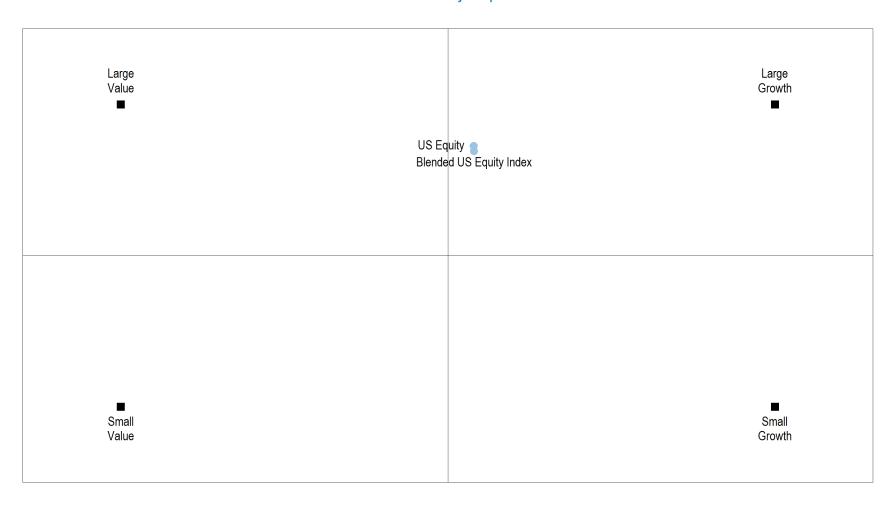
Best Performers	
	Return %
DIMENSION THERAPEUTICS	313.8%
MYOKARDIA (MYOK)	227.1%
MIRATI THERAPEUTICS(NAS) (MRTX)	220.5%
XOMA (XOMA)	181.1%
ARROWHEAD PHARMS.	167.3%
ZOGENIX	141.7%
DYNAVAX TECHNOLOGIES	122.8%
ION GEOPHYSICAL (IO)	118.6%
CELADON GROUP (CGI)	114.3%
TRANSENTERIX	101.4%

worst Performers	
	Return %
VERSARTIS	-86.0%
DTONOMY (OTIC)	-82.8%
GENOCEA BIOSCIENCES (GNCA)	-72.0%
BABCOCK & WILCOX ENTS.	-71.7%
AXOVANT SCIENCES	-70.3%
RAIT FINANCIAL TRUST (RAS)	-64.9%
RADISYS (RSYS)	-63.6%
BLACK BOX	-62.0%
CHEROKEE (CHKE)	-60.4%
CPI CARD GROUP	-58.6%

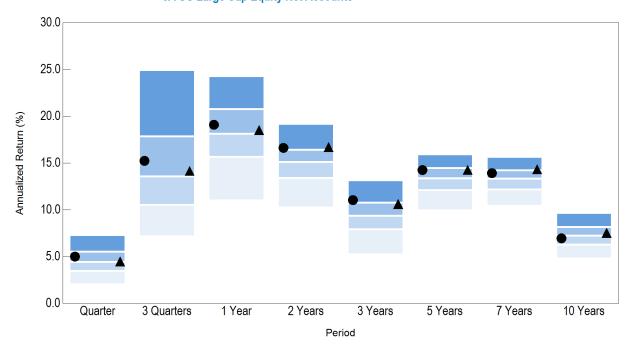
US Equity Performance Attribution vs. Russell 3000

		A	Attribution Effects			rns	Sector Weights		
	Total	Selection	Selection Allocation Interaction						
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark	
Energy	0.0%	0.0%	0.0%	0.0%	6.4%	6.8%	5.2%	5.7%	
Materials	0.0%	0.0%	0.0%	0.0%	6.0%	5.3%	3.2%	2.8%	
Industrials	0.1%	0.1%	0.0%	0.0%	6.2%	5.1%	11.4%	10.9%	
Consumer Discretionary	0.0%	0.0%	0.0%	0.0%	1.2%	1.3%	12.4%	12.7%	
Consumer Staples	0.1%	0.0%	0.0%	0.0%	-0.7%	-1.2%	7.0%	7.8%	
Health Care	0.1%	0.1%	0.0%	0.0%	4.7%	3.7%	14.3%	14.1%	
Financials	0.0%	0.0%	0.0%	0.0%	5.3%	5.2%	14.8%	15.1%	
Information Technology	0.2%	0.1%	0.0%	0.0%	9.0%	8.4%	22.6%	21.7%	
Telecommunication Services	0.0%	0.0%	0.0%	0.0%	6.4%	6.3%	1.9%	2.0%	
Utilities	0.0%	0.0%	0.0%	0.0%	2.7%	3.1%	2.9%	3.2%	
Real Estate	0.0%	0.0%	0.0%	0.0%	1.1%	1.1%	3.8%	4.1%	
Cash	0.0%						0.0%	0.0%	
Unclassified	0.0%	0.0%	0.0%	0.0%	4.4%		0.5%	0.0%	
Portfolio	0.5%	= 0.4%	+ 0.1%	+ 0.0%	5.1%	4.5%	100.0%	100.0%	

U.S. Effective Style Map



eA US Large Cap Equity Net Accounts



	Return (Rank	x)						
5th Percentile	7.3	24.9	24.3	19.2	13.2	15.9	15.7	9.7
25th Percentile	5.6	17.9	20.8	16.4	10.8	14.5	14.2	8.2
Median	4.5	13.6	18.2	15.1	9.4	13.4	13.4	7.3
75th Percentile	3.5	10.5	15.7	13.4	7.9	12.1	12.2	6.3
95th Percentile	2.1	7.2	11.0	10.3	5.3	10.0	10.4	4.8
# of Portfolios	584	584	583	571	558	514	464	401
Large Cap EquityRussell 1000	5.0 (36) 4.5 (49)	15.2 (39) 14.2 (45)	19.1 (43) 18.5 (47)	16.6 (24) 16.7 (22)	11.0 (23) 10.6 (28)	14.3 (31) 14.3 (31)	13.9 (33) 14.4 (23)	7.0 (59) 7.5 (43)

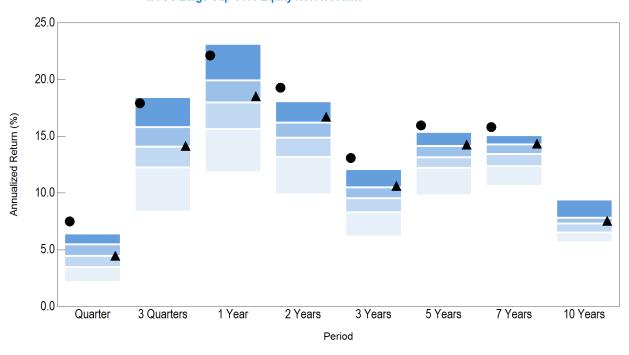
	Portfolio	Russell 1000
Number of Holdings	2,478	981
Weighted Avg. Market Cap. (\$B)	143.1	147.2
Median Market Cap. (\$B)	3.6	9.4
Price To Earnings	25.0	25.1
Price To Book	4.9	4.7
Price To Sales	3.6	3.6
Return on Equity (%)	20.8	18.6
Yield (%)	1.9	1.9
Beta (holdings; domestic)	1.0	1.0

Top Holdings	5	Best Performers		Worst Performers		
APPLE	3.9%		Return %		Return %	
MICROSOFT	1.9%	DIMENSION THERAPEUTICS	313.8%	VERSARTIS	-86.0%	
JOHNSON & JOHNSON	1.7%	MYOKARDIA	227.1%	OTONOMY	-82.8%	
FACEBOOK CLASS A	1.4%	MIRATI THERAPEUTICS(NAS)	220.5%	GENOCEA BIOSCIENCES (GNCA)	-72.0%	
		XOMA (XOMA)	181.1%	BABCOCK & WILCOX ENTS. (BW)	-71.7%	
AMAZON.COM	1.3%	ARROWHEAD PHARMS.	167.3%	AXOVANT SCIENCES	-70.3%	
ALPHABET 'C'	1.3%	ZOGENIX (ZGNX)	141.7%	RAIT FINANCIAL TRUST (RAS)	-64.9%	
JP MORGAN CHASE & CO.	1.3%	DYNAVAX TECHNOLOGIES (DVAX)	122.8%	RADISYS	-63.6%	
ALPHABET 'A'	1.2%	ION GEOPHYSICAL (IO)	118.6%	BLACK BOX	-62.0%	
EXXON MOBIL	1.2%	CELADON GROUP	114.3%	CHEROKEE (CHKE)	-60.4%	
EXXON WOBIL		TRANSENTERIX	101.4%	CPI CARD GROUP	-58.6%	
BERKSHIRE HATHAWAY 'B'	1.2%					

Large Cap Equity Performance Attribution vs. Russell 1000

		Attribution Effects			Retu	rns	Sector Weights		
	Total	Selection	Allocation	Interaction					
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark	
Energy	0.0%	0.0%	0.0%	0.0%	6.8%	6.8%	5.6%	5.8%	
Materials	0.0%	0.0%	0.0%	0.0%	5.5%	5.1%	3.0%	2.7%	
Industrials	0.1%	0.1%	0.0%	0.0%	5.7%	4.7%	10.9%	10.6%	
Consumer Discretionary	0.0%	0.0%	0.0%	0.0%	1.4%	1.2%	12.4%	12.7%	
Consumer Staples	0.0%	0.0%	0.0%	0.0%	-1.2%	-1.4%	7.7%	8.2%	
Health Care	0.1%	0.1%	0.0%	0.0%	3.9%	3.4%	14.3%	14.1%	
Financials	0.0%	0.0%	0.0%	0.0%	5.2%	5.2%	14.0%	14.8%	
Information Technology	0.1%	0.1%	0.0%	0.0%	8.9%	8.6%	23.2%	22.0%	
Telecommunication Services	0.0%	0.0%	0.0%	0.0%	6.6%	6.5%	2.2%	2.1%	
Utilities	0.0%	0.0%	0.0%	0.0%	2.9%	2.9%	2.8%	3.2%	
Real Estate	0.0%	0.0%	0.0%	0.0%	0.8%	1.0%	3.4%	3.8%	
Cash	0.0%						0.0%	0.0%	
Unclassified	0.0%	0.0%	0.0%	0.0%	4.4%		0.6%	0.0%	
Portfolio	0.4%	= 0.3%	+ 0.1%	+ 0.0%	4.9%	4.5%	100.0%	100.0%	

eA US Large Cap Core Equity Net Accounts



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

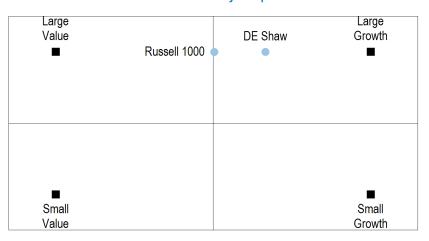
● DE Shaw ▲ Russell 1000

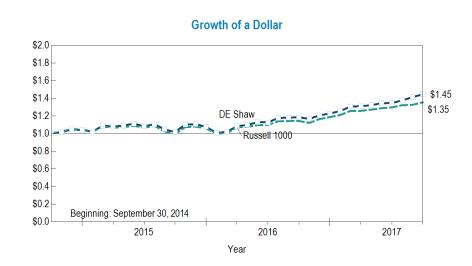
Return ((Rank)														
6.4		18.4		23.1		18.1		12.1		15.4		15.1		9.4	
5.5		15.8		20.0		16.2		10.5		14.2		14.3		7.8	
4.5		14.1		18.0		14.9		9.6		13.2		13.4		7.3	
3.5		12.3		15.7		13.2		8.3		12.2		12.4		6.5	
2.2		8.4		11.8		9.9		6.2		9.8		10.6		5.7	
185		185		184		179		176		158		142		126	
7.5	(1)	17.9	(8)	22.1	(11)	19.3	(3)	13.1	(3)	16.0	(3)	15.8	(2)		()
4.5	(50)	14.2	(47)	18.5	(43)	16.7	(16)	10.6	(24)	14.3	(22)	14.4	(23)	7.5	(40)

	Portfolio	Russell 1000
Number of Holdings	979	981
Weighted Avg. Market Cap. (\$B)	147.2	147.2
Median Market Cap. (\$B)	9.4	9.4
Price To Earnings	25.5	25.1
Price To Book	5.4	4.7
Price To Sales	3.7	3.6
Return on Equity (%)	20.5	18.6
Yield (%)	1.9	1.9
Beta (holdings; domestic)	1.0	1.0

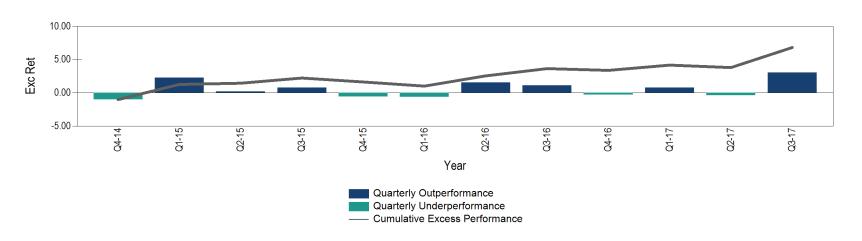
Top Holdings		Best Performers		Worst Performers		
APPLE	3.3%		Return %		Return %	
MICROSOFT	2.3%	JUNO THERAPEUTICS	50.1%	INTERCEPT PHARMS.	-52.1%	
FACEBOOK CLASS A	1.7%	NRG ENERGY	48.8%	UNITI GROUP	-39.3%	
AMAZON.COM	1.6%	ALNYLAM PHARMACEUTICALS	47.3%	TAHOE RESOURCES (NYS)	-38.6%	
		ALCOA (AA)	42.8%	SPIRIT AIRLINES	-35.3%	
BERKSHIRE HATHAWAY 'B'	1.5%	TAKE TWO INTACT.SFTW. (TTWO)	39.3%	RITE AID (RAD)	-33.6%	
JOHNSON & JOHNSON	1.5%	ORBITAL ATK	35.8%	DEXCOM	-33.1%	
EXXON MOBIL	1.4%	INTERNATIONAL GAME TECH. (IGT)	35.5%	DICK'S SPORTING GOODS	-31.8%	
JP MORGAN CHASE & CO.	1.4%	ACADIA PHARMACEUTICALS (ACAD)	35.1%	MEDNAX	-28.6%	
ALPHABET 'C'	1.2%	SPIRIT AEROSYSTEMS CL.A	34.3%	ENVISION HEALTHCARE	-28.3%	
ALFRADET C		GAP (GPS)	34.3%	FOOT LOCKER	-28.1%	
ALPHABET 'A'	1.2%	,				

U.S. Effective Style Map

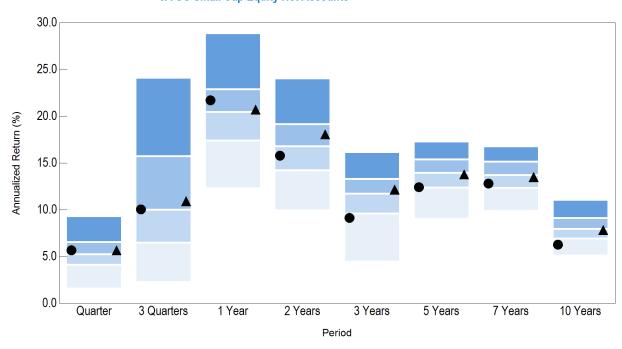




Quarterly and Cumulative Excess Performance







● Small Cap Equity ▲ Russell 2000

Return (Rank)														
9.3		24.1		28.9		24.0		16.2		17.3		16.8		11.1	
6.6		15.8		22.9		19.2		13.3		15.4		15.2		9.1	
5.3		10.0		20.5		16.8		11.8		14.0		13.7		8.0	
4.2		6.5		17.4		14.2		9.6		12.4		12.4		7.0	
1.6		2.3		12.3		10.0		4.5		9.1		9.9		5.1	
390		389		388		376		362		340		317		270	
5.7 5.7	(44) (44)	10.0 10.9	(50) (44)	21.7 20.7	(35) (47)	15.8 18.1	(61) (36)	9.1 12.2	(80) (44)	12.4 13.8	(75) (55)	12.8 13.5	(69) (55)	6.3 7.8	(86) (54)

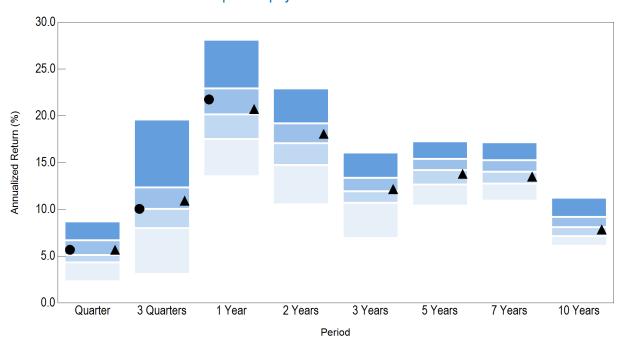
	Portfolio	Russell 2000
Number of Holdings	349	2,000
Weighted Avg. Market Cap. (\$B)	2.1	2.2
Median Market Cap. (\$B)	1.2	0.8
Price To Earnings	26.1	24.6
Price To Book	4.1	3.2
Price To Sales	2.4	3.0
Return on Equity (%)	16.7	10.4
Yield (%)	1.3	1.1
Beta (holdings; domestic)	1.3	1.3

Top Holdings		Best Performers		Worst Performers		
BRINK'S	0.9%		Return %		Return %	
GRAND CANYON EDUCATION	0.9%	FIBROGEN (FGEN)	66.6%	AXOVANT SCIENCES (AXON)	-70.3%	
CORCEPT THERAPEUTICS	0.8%	CORCEPT THERAPEUTICS (CORT)	63.6%	RAIT FINANCIAL TRUST (RAS)	-64.9%	
SANDERSON FARMS	0.8%	ULTRA CLEAN HOLDINGS	63.3%	AVON PRODUCTS (AVP)	-38.7%	
		MATRIX SERVICE (MTRX)	62.6%	FTD COMPANIES (FTD)	-34.8%	
ADVANCED ENERGY INDS.	0.8%	QUIDEL (QDEL)	61.6%	MICROSTRATEGY (MSTR)	-33.4%	
ENTEGRIS	0.8%	W&T OFFSHORE (WTI)	55.6%	FRANCESCA'S HOLDINGS (FRAN)	-32.7%	
FIBROGEN	0.8%	JOHNSON OUTDOORS 'A' (JOUT)	52.3%	VERITIV (VRTV)	-27.8%	
LOUISIANA PACIFIC	0.8%	CONN'S	47.4%	EAGLE PHARMACEUTICALS	-24.4%	
MGIC INVESTMENT	0.8%	APPFOLIO CLASS A	47.1%	CONTANGO OIL & GAS	-24.2%	
		IXYS (IXYS)	44.1%	SMART SAND	-23.9%	
BLUCORA	0.7%	,				

Small Cap Equity Performance Attribution vs. Russell 2000

			Attribution Effects		Retu		Sector Weights		
	Total	Selection	Allocation	Interaction			-		
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark	
Energy	-0.2%	-0.2%	0.0%	0.0%	0.7%	6.5%	2.6%	3.4%	
Materials	0.1%	0.1%	0.0%	0.0%	8.0%	6.8%	4.7%	4.4%	
Industrials	0.0%	0.0%	0.0%	0.0%	8.7%	8.6%	14.5%	14.6%	
Consumer Discretionary	-0.4%	-0.4%	0.0%	0.0%	0.2%	3.5%	13.2%	12.5%	
Consumer Staples	0.2%	0.2%	0.0%	-0.1%	10.6%	2.7%	2.1%	2.7%	
Health Care	0.2%	0.2%	0.0%	0.0%	9.3%	7.8%	14.7%	15.1%	
Financials	0.1%	0.1%	0.0%	0.0%	5.9%	5.5%	19.5%	18.5%	
Information Technology	0.9%	0.9%	0.0%	0.1%	10.0%	4.9%	18.3%	17.1%	
Telecommunication Services	0.0%	0.0%	0.0%	0.0%	-3.0%	0.7%	0.2%	0.9%	
Utilities	-0.1%	-0.1%	0.0%	0.0%	1.2%	5.2%	3.0%	3.7%	
Real Estate	0.0%	0.0%	0.0%	0.0%	1.9%	1.7%	6.8%	7.1%	
Cash	0.0%	0.0%	0.0%	0.0%	0.3%		0.5%	0.0%	
Portfolio	0.8%	= 0.7%	+ 0.0%	+ 0.1%	6.4%	5.6%	100.0%	100.0%	

eA US Small Cap Core Equity Net Accounts



5th Percentile
25th Percentile
Median
75th Percentile
95th Percentile
of Portfolios
QMA US Small Cap

▲ Russell 2000

Return	(Rank)														
8.7		19.6		28.1		22.9		16.1		17.3		17.2		11.2	
6.7		12.4		23.0		19.2		13.4		15.4		15.3		9.2	
5.1		10.1		20.2		17.1		12.0		14.2		14.1		8.1	
4.4		8.0		17.5		14.8		10.7		12.7		12.8		7.2	
2.3		3.1		13.6		10.6		7.0		10.4		11.0		6.1	
103		102		102		101		99		92		84		64	
5.7	(43)	10.0	(51)	21.8	(33)		()		()		()		()		()
5.7	(43)	10.9	(38)	20.7	(47)	18.1	(35)	12.2	(49)	13.8	(59)	13.5	(61)	7.8	(59)

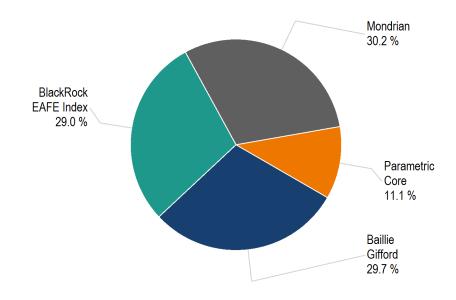
Number of Holdings 349 2,000 Weighted Avg. Market Cap. (\$B) 2.1 2.2 Median Market Cap. (\$B) 1.2 0.8 Price To Earnings 26.1 24.6 Price To Book 4.1 3.2 Price To Sales 2.4 3.0 Return on Equity (%) 16.7 10.4 Yield (%) 1.3 1.1 Beta (holdings; domestic) 1.3 1.3		Portfolio	Russell 2000
Median Market Cap. (\$B) 1.2 0.8 Price To Earnings 26.1 24.6 Price To Book 4.1 3.2 Price To Sales 2.4 3.0 Return on Equity (%) 16.7 10.4 Yield (%) 1.3 1.1	Number of Holdings	349	2,000
Price To Earnings 26.1 24.6 Price To Book 4.1 3.2 Price To Sales 2.4 3.0 Return on Equity (%) 16.7 10.4 Yield (%) 1.3 1.1	Weighted Avg. Market Cap. (\$B)	2.1	2.2
Price To Book 4.1 3.2 Price To Sales 2.4 3.0 Return on Equity (%) 16.7 10.4 Yield (%) 1.3 1.1	Median Market Cap. (\$B)	1.2	0.8
Price To Sales 2.4 3.0 Return on Equity (%) 16.7 10.4 Yield (%) 1.3 1.1	Price To Earnings	26.1	24.6
Return on Equity (%) 16.7 10.4 Yield (%) 1.3 1.1	Price To Book	4.1	3.2
Yield (%) 1.3 1.1	Price To Sales	2.4	3.0
	Return on Equity (%)	16.7	10.4
Beta (holdings; domestic) 1.3	Yield (%)	1.3	1.1
	Beta (holdings; domestic)	1.3	1.3

l op Holdings	Best Performers	Worst Performers

BRINK'S	0.9%	200t i siriormore	Return %		Return %
GRAND CANYON EDUCATION	0.9%	FIBROGEN	66.6%	AXOVANT SCIENCES	-70.3%
CORCEPT THERAPEUTICS	0.8%	CORCEPT THERAPEUTICS (CORT)	63.6%	RAIT FINANCIAL TRUST	-64.9%
SANDERSON FARMS	0.8%	ULTRA CLEAN HOLDINGS (UCTT)	63.3%	AVON PRODUCTS (AVP)	-38.7%
ADVANCED ENERGY INDS.	0.8%	MATRIX SERVICE (MTRX)	62.6%	FTD COMPANIES (FTD)	-34.8%
ENTEGRIS	0.8%	QUIDEL (QDEL)	61.6%	MICROSTRATEGY (MSTR)	-33.4%
ENTEGRIO	0.0%	W&T OFFSHORE (WTI)	55.6%	FRANCESCA'S HOLDINGS (FRAN)	-32.7%
FIBROGEN	0.8%	JOHNSON OUTDOORS 'A'	52.3%	VERITIV	-27.8%
LOUISIANA PACIFIC	0.8%	CONN'S	47.4%	EAGLE PHARMACEUTICALS	-24.4%
MGIC INVESTMENT	0.8%	APPFOLIO CLASS A	47.1%	CONTANGO OIL & GAS (MCF)	-24.2%
BLUCORA	0.7%	IXYS (IXYS)	44.1%	SMART SAND (SND)	-23.9%

QMA US Small Cap Performance Attribution vs. Russell 2000

		Α	ttribution Effects		Retu	rns	Sector Weights		
	Total	Selection	Allocation	Interaction					
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark	
Energy	-0.2%	-0.2%	0.0%	0.0%	0.7%	6.5%	2.6%	3.4%	
Materials	0.1%	0.1%	0.0%	0.0%	8.0%	6.8%	4.7%	4.4%	
Industrials	0.0%	0.0%	0.0%	0.0%	8.7%	8.6%	14.5%	14.6%	
Consumer Discretionary	-0.4%	-0.4%	0.0%	0.0%	0.2%	3.5%	13.2%	12.5%	
Consumer Staples	0.2%	0.2%	0.0%	-0.1%	10.6%	2.7%	2.1%	2.7%	
Health Care	0.2%	0.2%	0.0%	0.0%	9.3%	7.8%	14.7%	15.1%	
Financials	0.1%	0.1%	0.0%	0.0%	5.9%	5.5%	19.5%	18.5%	
Information Technology	0.9%	0.9%	0.0%	0.1%	10.0%	4.9%	18.3%	17.1%	
Telecommunication Services	0.0%	0.0%	0.0%	0.0%	-3.0%	0.7%	0.2%	0.9%	
Utilities	-0.1%	-0.1%	0.0%	0.0%	1.2%	5.2%	3.0%	3.7%	
Real Estate	0.0%	0.0%	0.0%	0.0%	1.9%	1.7%	6.8%	7.1%	
Cash	0.0%	0.0%	0.0%	0.0%	0.3%		0.5%	0.0%	
Portfolio	0.8% =	= 0.7% ·	+ 0.0% ·	+ 0.1%	6.4%	5.6%	100.0%	100.0%	



	Actual \$	Actual %	Manager Contribution to Excess Return %
Baillie Gifford	\$243,435,148	29.7%	-0.4%
BlackRock EAFE Index	\$237,794,885	29.0%	0.0%
Mondrian	\$247,918,326	30.2%	-0.4%
Parametric Core	\$91,121,702	11.1%	-0.1%
Actual vs. Policy Weight Difference			-0.2%
Total	\$820,270,060	100.0%	-1.1%

Statistics Summary

3 Years

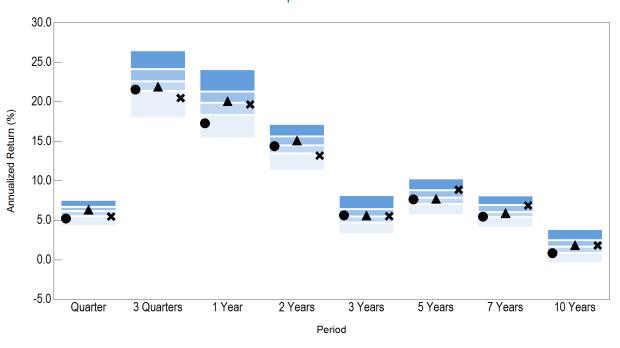
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
International Equity	5.6%	11.9%	0.4	0.0	1.9%
MSCI ACWI ex US IMI	5.6%	12.1%	0.4		0.0%
Developed Markets	6.0%	11.9%	0.5	0.4	2.3%
MSCI ACWI ex USA Gross	5.2%	12.3%	0.4		0.0%
Baillie Gifford	8.3%	13.2%	0.6	0.7	4.2%
MSCI ACWI ex US	5.2%	12.3%	0.4		0.0%
BlackRock EAFE Index	5.4%	12.3%	0.4	2.8	0.1%
MSCI EAFE	5.0%	12.3%	0.4		0.0%
Mondrian	3.9%	11.6%	0.3	0.1	5.4%
MSCI ACWI ex USA Value Gross	3.5%	13.2%	0.2		0.0%

Statistics Summary

5 Years

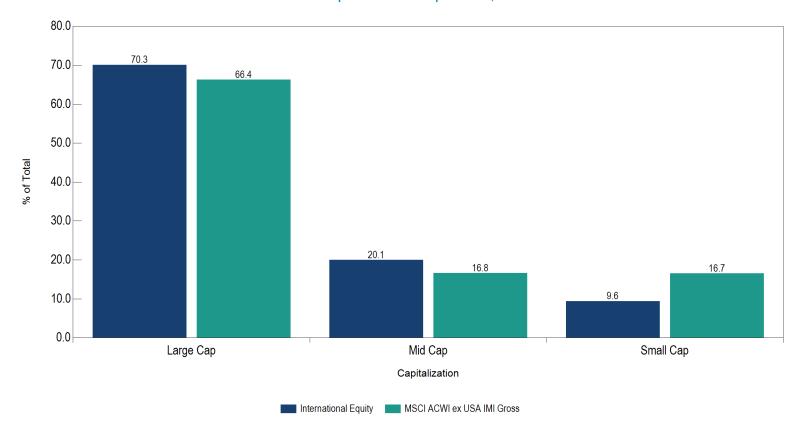
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
International Equity	7.6%	11.3%	0.7	0.0	1.8%
MSCI ACWI ex US IMI	7.7%	11.5%	0.7		0.0%
Developed Markets	8.2%	11.3%	0.7	0.3	2.2%
MSCI ACWI ex USA Gross	7.5%	11.6%	0.6		0.0%
Baillie Gifford	9.8%	12.4%	0.8	0.2	4.1%
MSCI ACWI ex US	9.0%	11.8%	0.7		0.0%
Mondrian	6.9%	11.2%	0.6	0.1	4.6%
MSCI ACWI ex USA Value Gross	6.6%	12.5%	0.5		0.0%

InvestorForce All DB ex-US Eq Net Accounts



	Return	(Rank)														
5th Percentile	7.6		26.5		24.1		17.2		8.2		10.3		8.1		3.9	
25th Percentile	6.7		24.2		21.3		15.6		6.4		8.8		7.0		2.5	
Median	6.2		22.6		19.9		14.5		5.5		7.9		6.1		1.7	
75th Percentile	5.5		21.4		18.4		13.5		4.7		7.1		5.4		0.9	
95th Percentile	4.3		18.0		15.4		11.3		3.3		5.7		4.1		-0.4	
# of Portfolios	468		463		462		451		439		381		321		251	
 International Equity 	5.2	(84)	21.5	(72)	17.3	(86)	14.4	(54)	5.6	(46)	7.6	(57)	5.5	(74)	0.8	(78)
▲ MSCI ACWI ex US IMI	6.4	(41)	21.9	(64)	20.1	(47)	15.1	(37)	5.6	(46)	7.7	(54)	5.9	(56)	1.9	(44)
★ MSCI EAFE Gross	5.5	(76)	20.5	(84)	19.7	(54)	13.2	(80)	5.5	(50)	8.9	(25)	6.9	(29)	1.8	(46)

Market Capitalization as of September 30, 2017



See appendix for the market capitalization breakpoints.

	Portfolio	MSCI ACWI ex USA IMI Gross
Number of Holdings	2,143	6,157
Weighted Avg. Market Cap. (\$B)	49.3	54.3
Median Market Cap. (\$B)	6.8	1.5
Price To Earnings	23.1	21.0
Price To Book	3.5	2.6
Price To Sales	2.8	2.2
Return on Equity (%)	17.6	14.5
Yield (%)	2.8	2.7
Beta (holdings; global)	1.1	1.0

To	op Holdings	Best Performers		Worst Performers	
UNITED OVERSEAS BAN	NK 1.2%		Return %		Return %
SANOFI	1.1%	CHULARAT HOSPITAL FB (Q:CUHF)	353.9%	PROVIDENT FINANCIAL (UKIR:PFG)	-64.7%
NOVARTIS 'R'	1.0%	VIA VAREJO UNITS (BR:VVU)	122.5%	THAI AIRWAYS INTL.FB	-62.3%
NESTLE 'R'	1.0%	ESTACIO PARTICIPACOES ON	122.0%	SUGIH ENERGY (ID:SUA)	-56.6%
		SUNAC CHINA HOLDINGS	118.9%	TEVA PHARM.INDS.ADR 1:1	-46.7%
BP	0.9%	NATURALENDO TECH	99.8%	ORION HOLDINGS (KO:DGY)	-42.2%
HONDA MOTOR	0.9%	CHINA EVERGRANDE	94.3%	BUMI RESOURCES (ID:BMH)	-42.1%
NASPERS	0.8%	H & H INTL. HDG.	93.0%	PAK SUZUKI MOTOR	-41.6%
IBERDROLA	0.8%	USINAS SIDERURGICAS DE MINAS GERAIS A PN (BR:US5)	77.2%	SIEMENS GAMESA RENEWABLE ENERGY (E:GAM)	-38.5%
GLAXOSMITHKLINE	0.8%	ALUMINUM CORP.OF CHINA 'H'	75.2%	HONDA ATLAS CARS(PAK.)	-37.7%
ALLIANZ	0.8%	FIAT CHRYSLER AUTOS. (I:FCA)	71.0%	MATAHARI DEPARTMENT SOE. (ID:MDS)	-35.3%

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

			Attribution Effec	ts	Re	eturns	Sector Weights		
	Total	Selection	Allocation	Interaction					
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark	
Energy	-0.1%	0.1%	0.0%	-0.1%	13.1%	12.6%	4.9%	5.9%	
Materials	-0.1%	0.2%	-0.1%	-0.1%	11.8%	10.0%	5.1%	8.0%	
Industrials	-0.1%	-0.1%	0.0%	0.0%	5.3%	6.1%	13.3%	13.0%	
Consumer Discretionary	-0.1%	-0.1%	0.0%	0.0%	5.9%	6.9%	14.7%	11.9%	
Consumer Staples	0.2%	0.2%	-0.1%	0.1%	3.7%	1.5%	12.5%	9.4%	
Health Care	0.1%	0.1%	0.0%	0.0%	3.1%	1.3%	9.1%	8.1%	
Financials	-0.4%	-0.3%	0.0%	-0.1%	4.2%	6.2%	17.6%	21.6%	
Information Technology	-0.5%	-0.5%	0.0%	0.0%	5.6%	10.0%	11.0%	11.0%	
Telecommunication Services	0.0%	0.0%	0.0%	0.0%	2.7%	2.6%	4.8%	3.9%	
Utilities	0.0%	0.0%	0.0%	0.0%	3.9%	4.6%	3.8%	3.1%	
Real Estate	-0.1%	-0.1%	0.0%	0.0%	4.0%	5.8%	2.6%	4.2%	
Cash	0.0%	0.0%	0.0%	0.0%	0.3%	-	0.7%	0.0%	
Unclassified	0.0%		0.0%			6.3%	0.0%	0.0%	
Portfolio	-1.0%	= -0.5%	+ -0.4%	+ -0.1%	5.3%	6.3%	100.0%	100.0%	

Int'l Equity Performance Attribution vs. MSCI ACWI ex USA IMI 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	6.5%	10.3%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	
Belgium	9.1%	8.9%	0.3%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	
Czech Republic*	10.8%	9.8%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Denmark	9.2%	8.0%	2.3%	1.2%	0.0%	0.0%	0.0%	0.0%	0.1%	
Finland	3.2%	3.8%	0.7%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	
France	7.7%	8.6%	4.8%	6.8%	-0.1%	0.0%	-0.1%	0.0%	-0.1%	
Germany	9.3%	8.7%	6.5%	6.3%	0.0%	0.0%	0.0%	0.0%	0.0%	
Greece*	-3.8%	-8.7%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	
Hungary*	8.2%	9.4%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	
Ireland	-4.6%	6.7%	0.1%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	
Italy	14.3%	13.8%	1.9%	1.8%	0.0%	0.0%	0.0%	0.0%	0.0%	
Luxembourg	-2.0%	6.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Netherlands	8.3%	9.6%	1.9%	2.3%	0.0%	0.0%	0.0%	0.0%	0.0%	
Norway	20.2%	18.5%	0.2%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	
Poland*	10.0%	9.4%	0.4%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	
Portugal	2.0%	11.1%	0.4%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	
Russia*	17.7%	17.9%	1.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	
Spain	1.4%	4.1%	3.0%	2.3%	-0.1%	0.0%	0.0%	0.0%	-0.1%	
Sweden	2.7%	5.1%	3.6%	2.3%	-0.1%	0.0%	0.0%	0.0%	-0.1%	
Switzerland	2.6%	2.1%	6.5%	5.6%	0.0%	0.0%	0.0%	0.0%	0.0%	
United Kingdom	7.3%	5.8%	14.5%	12.4%	0.2%	0.0%	0.1%	0.0%	0.3%	



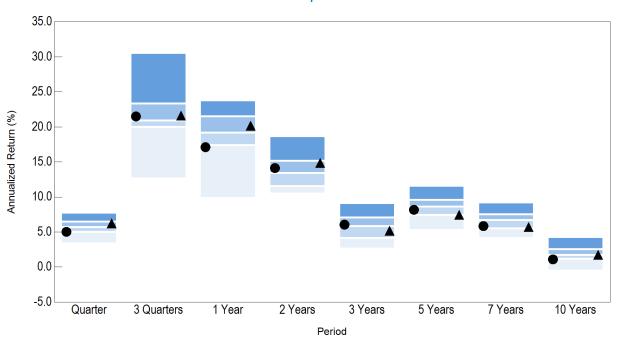
Int'l Equity Performance Attribution vs. MSCI ACWI ex USA IMI Gross

		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	2.0%	3.3%	3.9%	4.9%	-0.1%	0.0%	0.0%	0.0%	0.0%		
China*	10.0%	14.5%	3.3%	6.3%	-0.3%	-0.3%	0.0%	0.1%	-0.4%		
Hong Kong	5.6%	4.9%	3.2%	2.3%	0.0%	0.0%	0.0%	0.0%	0.0%		
India*	2.7%	2.8%	2.4%	2.2%	0.0%	0.0%	0.0%	0.0%	0.0%		
Indonesia*	-2.6%	-1.6%	0.5%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%		
Japan	2.9%	4.4%	16.3%	17.1%	-0.2%	0.0%	0.0%	0.0%	-0.2%		
Korea*	0.7%	1.6%	3.2%	3.7%	0.0%	0.0%	0.0%	0.0%	0.0%		
Malaysia*	1.7%	1.9%	0.9%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%		
New Zealand	0.3%	2.8%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%		
Pakistan*	-10.7%	-12.1%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%		
Philippines*	4.1%	2.8%	0.6%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%		
Singapore	2.7%	3.4%	3.3%	0.9%	0.0%	-0.1%	0.0%	0.0%	0.0%		
Taiwan*	2.2%	2.5%	3.0%	3.1%	0.0%	0.0%	0.0%	0.0%	0.0%		
Thailand*	5.5%	10.2%	0.5%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%		
Americas											
Brazil*	17.5%	23.7%	1.6%	1.5%	-0.1%	0.0%	0.0%	0.0%	-0.1%		
Canada	9.6%	7.7%	0.4%	6.6%	0.2%	0.1%	-0.3%	-0.2%	-0.2%		
Chile*	18.2%	17.3%	0.4%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%		
Colombia*	6.9%	6.7%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%		
Mexico*	-0.3%	1.3%	1.4%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%		
Peru*	14.3%	15.6%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%		
United States	3.7%	4.3%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		

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			
Other												
Egypt*	5.4%	3.4%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
Israel	-4.3%	-8.6%	0.2%	0.6%	0.0%	0.0%	0.0%	0.0%	0.1%			
Kazakhstan**	5.0%	3.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
Kuwait**	17.8%	17.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
Qatar*	-5.3%	-4.7%	0.3%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%			
Romania**	19.2%	4.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
South Africa*	6.1%	3.6%	2.3%	1.5%	0.0%	0.0%	0.0%	0.0%	0.1%			
Turkey*	1.8%	0.6%	0.7%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%			
United Arab Emirates*	0.5%	3.8%	0.3%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%			
Totals												
Americas	9.0%	10.0%	5.2%	9.4%	0.1%	-0.1%	-0.3%	0.0%	-0.3%			
Europe	6.8%	7.0%	48.6%	45.1%	0.0%	0.0%	0.0%	0.0%	0.0%			
Asia/Pacific	3.3%	5.2%	41.3%	42.9%	-0.8%	0.0%	0.0%	0.0%	-0.8%			
Other	4.2%	0.3%	4.1%	2.7%	0.1%	0.0%	0.0%	0.1%	0.1%			
Cash	0.3%		0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
Total	5.3%	6.3%	100.0%	100.0%	-0.7%	-0.2%	-0.2%	0.0%	-1.0%			
Totals												
Developed	5.3%	5.9%	75.1%	76.5%	-0.3%	0.0%	-0.2%	0.0%	-0.5%			
Emerging*	5.4%	7.7%	23.9%	23.5%	-0.5%	0.0%	0.0%	0.0%	-0.5%			
Frontier**	16.5%	-	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
Cash	0.3%		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 (Rar	ık)						
5th Percentile	7.7	30.5	23.8	18.7	9.1	11.6	9.2	4.3
25th Percentile	6.5	23.4	21.5	15.2	7.1	9.6	7.6	2.6
Median	5.7	21.0	19.2	13.5	5.9	8.7	6.7	1.8
75th Percentile	5.1	20.0	17.4	11.6	4.2	7.5	5.5	1.2
95th Percentile	3.4	12.7	9.9	10.5	2.7	5.3	4.2	-0.5
# of Portfolios	168	168	163	160	151	130	102	68
Developed MarketsMSCI ACWI ex USA Gross	5.0 (77 6.3 (31	21.5 (42) 21.6 (41)	17.1 (78) 20.2 (40)	14.1 (35) 14.9 (27)	6.0 (45) 5.2 (64)	8.2 (63) 7.5 (76)	5.8 (69) 5.7 (73)	1.1 (78) 1.7 (54)

	Portfolio	MSCI ACWI ex USA Gross
Number of Holdings	1,069	1,859
Weighted Avg. Market Cap. (\$B)	52.6	62.9
Median Market Cap. (\$B)	11.3	8.0
Price To Earnings	23.4	21.1
Price To Book	3.6	2.6
Price To Sales	2.8	2.2
Return on Equity (%)	17.8	14.6
Yield (%)	2.8	2.8
Beta (holdings; global)	1.1	1.1

Top Holdings		Best Performers		Worst Performers		
UNITED OVERSEAS BANK	1.4%		Return %		Return %	
SANOFI	1.2%	FIAT CHRYSLER AUTOS.	71.0%	PROVIDENT FINANCIAL	-64.7%	
NOVARTIS 'R'	1.1%	PROGRAMMED MAINT.SVS. SUSP -	68.3%	TEVA PHARM.INDS.ADR 1:1 (TEVA)	-46.7%	
NECTI E IDI	4.40/	SUSP.11/10/17 (A:PRGX)		ORION HOLDINGS (KO:DGY)	-42.2%	
NESTLE 'R'	1.1%	KAZ MINERALS (UKIR:KAZ)	54.4%	SIEMENS GAMESA RENEWABLE ENERGY	-38.5%	
BP	1.0%	YASKAWA ELECTRIC	50.1%	MESOBLAST (A:MSBX)	-31.9%	
HONDA MOTOR	1.0%	NEXT	46.5%	PERMANENT TSB GHG. (LON) (UKIR:IL0AS)	-30.7%	
IBERDROLA	0.9%	LI & FUNG (K:FUNG)	42.2%	ORION 'B' (M:ORNB)	-27.2%	
OLAYOOMITHIS INF		YOOX NET-A-PORTER (I:YOOX)	42.0%	KUDELSKI 'B' (S:KUD)	-26.7%	
GLAXOSMITHKLINE	0.9%	BROADLEAF (J:BDLF)	39.3%	DIXONS CARPHONE	-26.5%	
ALLIANZ	0.9%	NCC GROUP (UKIR:NCC)	38.9%	GEMALTO	-25.5%	
TAKEDA PHARMACEUTICAL	0.9%	BAIDU 'A' ADR 10:1 (BIDU)	38.5%	<u> </u>	20.070	

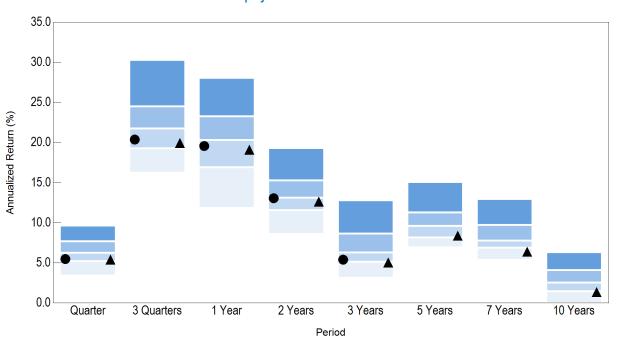
			Attribution Effec	ts	Re	eturns	Secto	r Weights
	Total	Selection	Allocation	Interaction				
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	-0.1%	0.0%	-0.1%	-0.1%	13.4%	12.9%	4.5%	6.3%
Materials	-0.1%	0.1%	-0.1%	-0.1%	12.3%	10.6%	4.3%	7.5%
Industrials	0.0%	0.0%	0.0%	0.0%	5.3%	5.6%	13.8%	11.8%
Consumer Discretionary	-0.1%	-0.1%	0.0%	0.0%	5.8%	7.0%	15.3%	11.3%
Consumer Staples	0.2%	0.3%	-0.1%	0.1%	3.6%	1.3%	12.8%	9.9%
Health Care	0.1%	0.2%	-0.1%	0.0%	3.0%	1.0%	9.5%	8.3%
Financials	-0.5%	-0.4%	0.0%	-0.1%	4.0%	6.1%	17.9%	23.3%
Information Technology	-0.5%	-0.5%	0.0%	0.0%	5.5%	9.9%	11.2%	10.8%
Telecommunication Services	0.0%	-0.1%	0.0%	0.0%	1.9%	2.5%	4.2%	4.4%
Utilities	0.0%	0.0%	0.0%	0.0%	3.8%	4.6%	3.4%	3.1%
Real Estate	-0.1%	-0.1%	0.0%	0.0%	2.4%	6.2%	2.3%	3.2%
Cash	0.0%	0.0%	0.0%	0.0%	0.3%		0.7%	0.0%
Unclassified	0.0%						0.0%	0.0%
Portfolio	-1.1%	= -0.7%	+ -0.4%	+ 0.0%	5.1%	6.2%	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	6.5%	12.8%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Belgium	9.1%	9.2%	0.3%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%
Czech Republic*		10.1%	0.0%	0.0%		0.0%	0.0%		0.0%
Denmark	9.2%	7.8%	2.5%	1.2%	0.0%	0.0%	0.0%	0.0%	0.1%
Finland	3.2%	3.3%	0.8%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%
France	7.7%	8.5%	5.4%	7.3%	-0.1%	0.0%	-0.1%	0.0%	-0.1%
Germany	9.3%	7.8%	7.3%	6.6%	0.1%	0.0%	0.0%	0.0%	0.1%
Greece*		-12.0%	0.0%	0.1%		0.0%	0.0%		0.0%
Hungary*		9.6%	0.0%	0.1%		0.0%	0.0%		0.0%
Ireland	-4.6%	6.2%	0.1%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Italy	14.3%	13.9%	2.2%	1.6%	0.0%	0.0%	0.0%	0.0%	0.1%
Luxembourg	-3.0%	6.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Netherlands	8.3%	9.5%	2.1%	2.5%	0.0%	0.0%	0.0%	0.0%	0.0%
Norway	20.2%	19.3%	0.2%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Poland*		9.6%	0.0%	0.3%		0.0%	0.0%		0.0%
Portugal	2.0%	13.4%	0.4%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Russia*	16.1%	18.1%	0.5%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%
Spain	1.4%	4.2%	3.4%	2.4%	-0.1%	0.0%	0.0%	0.0%	-0.1%
Sweden	2.7%	5.5%	4.1%	2.0%	-0.1%	0.0%	0.1%	-0.1%	-0.1%
Switzerland	2.6%	2.0%	7.3%	5.9%	0.0%	0.0%	0.0%	0.0%	0.0%
United Kingdom	7.4%	5.3%	16.2%	12.3%	0.2%	-0.1%	0.1%	0.1%	0.4%

		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	2.0%	3.1%	4.4%	5.0%	-0.1%	0.0%	0.0%	0.0%	0.0%
China*	10.1%	14.7%	3.0%	6.6%	-0.3%	-0.4%	0.0%	0.2%	-0.5%
Hong Kong	2.1%	5.1%	2.8%	2.4%	-0.1%	0.0%	0.0%	0.0%	-0.1%
India*	3.2%	3.0%	1.8%	2.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Indonesia*	-0.9%	-1.1%	0.1%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%
Japan	2.9%	4.0%	18.4%	16.3%	-0.2%	0.0%	0.0%	0.0%	-0.2%
Korea*	0.2%	2.5%	2.7%	3.7%	-0.1%	0.0%	0.0%	0.0%	0.0%
Malaysia*	1.4%	1.9%	0.6%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%
New Zealand	0.3%	0.2%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Pakistan*		-16.2%	0.0%	0.0%		0.0%	0.0%		0.0%
Philippines*	5.6%	3.5%	0.2%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Singapore	2.7%	3.1%	3.6%	0.9%	0.0%	-0.1%	0.0%	0.0%	-0.1%
Taiwan*	2.5%	1.4%	2.5%	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Thailand*	3.5%	10.6%	0.2%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%
Americas									
Brazil*	13.0%	22.9%	0.9%	1.6%	-0.1%	-0.1%	0.0%	0.1%	-0.2%
Canada	9.6%	8.1%	0.4%	6.6%	0.2%	0.0%	-0.3%	-0.2%	-0.2%
Chile*	16.9%	17.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Colombia*		6.5%	0.0%	0.1%		0.0%	0.0%		0.0%
Mexico*	-2.8%	1.5%	0.6%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%
Peru*	14.3%	14.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
United States	2.5%	4.3%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

		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*		1.1%	0.0%	0.0%		0.0%	0.0%		0.0%
Israel	-4.3%	-13.1%	0.2%	0.5%	0.0%	0.0%	0.0%	0.0%	0.1%
Kazakhstan**	5.0%	3.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Qatar*	-4.9%	-5.0%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Romania**	19.2%	4.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
South Africa*	7.4%	4.0%	1.8%	1.6%	0.1%	0.0%	0.0%	0.0%	0.1%
Turkey*	0.9%	0.3%	0.3%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
United Arab Emirates*	-2.4%	4.0%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Totals									
Americas	6.1%	10.2%	3.2%	9.5%	-0.2%	-0.1%	-0.3%	0.1%	-0.5%
Europe	6.7%	6.7%	53.0%	45.7%	0.0%	-0.1%	0.2%	0.0%	0.1%
Asia/Pacific	3.1%	5.2%	40.4%	42.1%	-0.9%	0.0%	0.0%	0.0%	-0.9%
Other	4.4%	0.0%	2.7%	2.7%	0.1%	0.0%	0.0%	0.0%	0.1%
Cash	0.3%		0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	5.1%	6.2%	100.0%	100.0%	-1.0%	-0.2%	-0.1%	0.2%	-1.1%
Totals									
Developed	5.1%	5.7%	83.4%	76.3%	-0.2%	-0.1%	0.0%	0.0%	-0.4%
Emerging*	5.0%	8.0%	15.8%	23.7%	-0.6%	-0.3%	-0.1%	0.2%	-0.8%
Frontier**	12.0%		0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cash	0.3%		0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

eA EAFE Core Equity Net Accounts

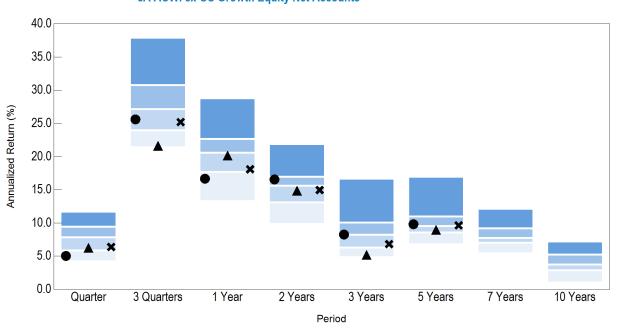


	Return	(Rank)														
5th Percentile	9.6	3	0.3		28.1		19.3		12.8		15.1		13.0		6.3	
25th Percentile	7.7	2	4.5		23.3		15.3		8.7		11.3		9.7		4.1	
Median	6.3	2	1.8		20.4		13.1		6.3		9.6		7.8		2.6	
75th Percentile	5.2	1	9.3		16.9		11.6		5.1		8.2		6.9		1.5	
95th Percentile	3.4	1	6.3		11.9		8.6		3.1		7.0		5.4		0.1	
# of Portfolios	128		128		128		121		113		95		83		67	
BlackRock EAFE Index	5.5	(69) 2	0.4	(67)	19.6	(55)	13.1	(51)	5.4	(72)		()		()		()
MSCIEAFE	5.4	(71) 2	0.0	(71)	19.1	(58)	12.6	(56)	5.0	(76)	8.4	(70)	6.4	(83)	1.3	(83)

	Portfolio	MSCI EAFE
Number of Holdings	931	926
Weighted Avg. Market Cap. (\$B)	58.5	58.7
Median Market Cap. (\$B)	10.8	10.9
Price To Earnings	22.6	20.9
Price To Book	3.0	2.6
Price To Sales	2.4	2.1
Return on Equity (%)	15.6	13.6
Yield (%)	3.0	3.0
Beta (holdings; global)	1.1	1.1

Top Holdings		Best Performers		Worst Performers		
NESTLE 'R'	1.8%		Return %		Return %	
HSBC HOLDINGS	1.4%	FIAT CHRYSLER AUTOS. (I:FCA)	71.0%	PROVIDENT FINANCIAL (UKIR:PFG)	-64.7%	
		YASKAWA ELECTRIC	50.1%	TEVA PHARM.INDS.ADR 1:1 (TEVA)	-46.7%	
NOVARTIS 'R'	1.3%	NEXT	46.5%	SIEMENS GAMESA RENEWABLE ENERGY	-38.5%	
ROCHE HOLDING	1.2%	LI & FUNG (K:FUNG)	42.2%	(E:GAM)	-30.570	
TOYOTA MOTOR	1.1%	SANTOS	35.7%	ORION 'B'	-27.2%	
BRITISH AMERICAN TOBACCO	1.0%	STMICROELECTRONICS (PAR) (F:STM)	35.3%	DIXONS CARPHONE (UKIR:DC.)	-26.5%	
		ANGLO AMERICAN (UKIR:AAL)	35.1%	GEMALTO	-25.5%	
ROYAL DUTCH SHELL A	0.9%	WORLDPAY GROUP	33.8%	HEALTHSCOPE (A:HSOX)	-21.1%	
TOTAL	0.9%	RAIFFEISEN BANK INTL. (O:RAI)	33.0%	CARREFOUR (F:CRFR)	-20.0%	
BP	0.9%	NEXON (J:NXCL)	32.0%	ERICSSON 'B' (W:SL@G)	-19.8%	
ROYAL DUTCH SHELL B	0.8%	,		ASICS	-19.6%	

eA ACWI ex-US Growth Equity Net Accounts



	Return	(Rank)							
5th Percentile	11.7	37.9	28.8	21.9	16.7	16.9	12.1	7.2	
25th Percentile	9.5	30.8	22.7	17.0	10.1	11.0	9.2	5.3	
Median	7.9	27.2	20.6	15.7	8.2	9.6	7.8	3.8	
75th Percentile	5.9	24.0	17.7	13.1	6.3	8.6	7.0	2.9	
95th Percentile	4.3	21.4	13.3	9.9	4.9	6.8	5.4	1.1	
# of Portfolios	73	73	73	70	62	56	48	38	
Baillie Gifford	5.0	(87) 25.6	(61) 16.7	(79) 16.6	(33) 8.3	(50) 9.8	(41)	()	()
▲ MSCI ACWI ex US	6.3	(69) 21.6	(95) 20.2	(56) 14.9	(57) 5.2	(93) 9.0	(67)	()	()
➤ MSCI ACWI ex US Growth	6.4	(68) 25.2	(68) 18.1	(73) 15.0	(57) 6.8	(72) 9.6	(46)	()	()

Worst Performers

Characteristics

	Portfolio	MSCI ACWI ex USA Gross
Number of Holdings	94	1,859
Weighted Avg. Market Cap. (\$B)	45.5	62.9
Median Market Cap. (\$B)	12.8	8.0
Price To Earnings	29.5	21.1
Price To Book	6.2	2.6
Price To Sales	4.2	2.2
Return on Equity (%)	25.1	14.6
Yield (%)	1.7	2.8
Beta (holdings; global)	1.2	1.1

Top Holdings		Dest i citorillers		Worst i chomicis	
TAIWAN SEMICON.SPN.ADR 1:5	2.7%		Return %		Return %
NASPERS	2.6%	BAIDU 'A' ADR 10:1 (BIDU)	38.5%	MESOBLAST (A:MSBX)	-31.9%
		SHOPIFY 'A' (NYS) (SHOP)	34.1%	PAX GLOBAL TECHNOLOGY (K:PGTL)	-16.2%
ATLAS COPCO 'B'	2.4%	JOHNSON MATTHEY (UKIR:JMAT)	23.0%	SHIMANO (J:SHMO)	-15.8%
HARGREAVES LANSDOWN	2.2%	INTERTEK GROUP (UKIR:ITRK)	22.6%	CAPITA (UKIR:CPI)	-15.6%
COCHLEAR	2.1%	ALIBABA GROUP HLDG.SPN. ADR 1:1 (BABA)	22.6%	MAKEMYTRIP (MMYT)	-14.3%
METTLER TOLEDO INTL.	2.0%	PJSC MAGNIT GDR (REG S) (UKIR:MGNT)	21.6%	TSINGTAO BREWERY 'H' (K:TSIN)	-12.5%
MS&AD INSURANCE GP.HDG.	2.0%	DENSO (J:DE@N)	21.1%	NAVER (KO:NHN)	-11.2%
		FAIRFAX FINL.HDG.	20.0%	SURUGA BANK (J:SURB)	-10.6%
NOVO NORDISK 'B'	2.0%	HARGREAVES LANSDOWN (UKIR:HL.)	19.0%	KAKAKU.COM (J:KAKA)	-10.2%
BAIDU 'A' ADR 10:1	2.0%	WEIR GROUP (UKIR:WEIR)	18.2%	MAHINDRA & MAHINDRA GDR REG 'S'	-9.0%
ALIBABA GROUP HLDG.SPN. ADR 1:1	2.0%			(UKIR:MHID)	0.070

Best Performers

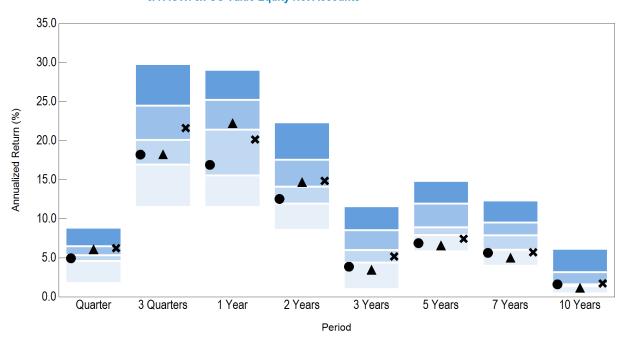
			Attribution Effec	ts	Re	eturns	Secto	r Weights
	Total	Selection	Allocation	Interaction				
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	-0.5%	0.0%	-0.3%	-0.2%	11.4%	12.9%	0.5%	6.3%
Materials	-0.1%	0.3%	-0.2%	-0.2%	15.2%	10.7%	3.5%	7.5%
Industrials	0.0%	0.0%	0.0%	0.0%	5.6%	5.6%	14.3%	12.0%
Consumer Discretionary	-0.4%	-0.3%	0.1%	-0.2%	3.9%	6.9%	20.4%	11.2%
Consumer Staples	0.0%	0.2%	-0.5%	0.2%	2.7%	1.4%	18.8%	9.9%
Health Care	0.3%	0.3%	0.0%	0.0%	4.7%	0.8%	8.2%	8.2%
Financials	-0.5%	-0.4%	0.0%	-0.1%	3.8%	6.2%	16.4%	23.4%
Information Technology	0.2%	-0.1%	0.2%	0.0%	9.2%	10.0%	15.9%	10.8%
Telecommunication Services	0.1%		0.2%			2.6%	0.0%	4.4%
Utilities	0.0%		0.1%			4.6%	0.0%	3.1%
Real Estate	-0.1%		0.0%			6.1%	0.0%	3.2%
Cash	-0.1%	0.0%	-0.1%	0.0%	0.3%		1.9%	0.0%
Portfolio	-1.1%	= 0.1%	+ -0.4%	+ -0.7%	5.2%	6.2%	100.0%	100.0%

		Returns and	Weights			Attri	bution Effects	i	
	Manager	Index	Manager	Index	Selection	Allocation	Currency	Interaction	Total
	Return	Return	Weight	Weight	Effect	Effect	Effect	Effect	Effects
Europe									
Austria	-	12.9%	0.0%	0.2%		0.0%	0.0%		0.0%
Belgium		9.2%	0.0%	0.8%		0.0%	0.0%		0.0%
Czech Republic*	-	10.0%	0.0%	0.0%		0.0%	0.0%		0.0%
Denmark	10.9%	7.7%	4.9%	1.2%	0.0%	0.0%	0.1%	0.1%	0.3%
Finland	4.3%	3.3%	1.2%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%
France	3.4%	8.4%	1.0%	7.3%	-0.4%	0.0%	-0.2%	0.3%	-0.3%
Germany	13.5%	7.8%	4.6%	6.6%	0.4%	0.0%	-0.1%	-0.1%	0.2%
Greece*	-	-12.1%	0.0%	0.1%		0.0%	0.0%		0.0%
Hungary*	-	9.6%	0.0%	0.1%		0.0%	0.0%		0.0%
Ireland	-	6.1%	0.0%	0.3%		0.0%	0.0%		0.0%
Italy	-	13.9%	0.0%	1.6%		-0.1%	-0.1%		-0.1%
Netherlands		9.6%	0.0%	2.5%		0.0%	-0.1%		-0.1%
Norway	-	19.3%	0.0%	0.4%		0.0%	0.0%		-0.1%
Poland*	-	9.6%	0.0%	0.3%		0.0%	0.0%		0.0%
Portugal	1.2%	13.4%	1.1%	0.1%	0.0%	0.0%	0.0%	-0.1%	0.0%
Russia*	21.6%	18.3%	0.5%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%
Spain	-2.1%	4.3%	2.3%	2.4%	-0.2%	0.0%	0.0%	0.0%	-0.1%
Sweden	7.2%	5.5%	5.5%	2.0%	0.0%	-0.1%	0.1%	0.1%	0.1%
Switzerland	5.1%	2.0%	6.0%	5.9%	0.2%	0.0%	0.0%	0.0%	0.2%
United Kingdom	9.6%	5.3%	14.9%	12.3%	0.5%	-0.1%	0.1%	0.1%	0.7%

		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	2.4%	3.1%	5.6%	5.0%	0.0%	0.0%	0.0%	0.0%	-0.1%
China*	10.5%	14.7%	7.0%	6.6%	-0.3%	0.1%	0.0%	0.0%	-0.2%
Hong Kong	-2.6%	5.1%	1.9%	2.4%	-0.2%	0.0%	0.0%	0.0%	-0.2%
India*	-4.8%	3.0%	2.3%	2.1%	-0.2%	0.0%	0.0%	0.0%	-0.2%
Indonesia*		-1.0%	0.0%	0.6%		0.0%	0.0%		0.0%
Japan	-1.3%	4.0%	17.7%	16.3%	-0.9%	0.0%	0.0%	-0.1%	-0.9%
Korea*	2.2%	2.5%	4.0%	3.7%	0.0%	0.0%	0.0%	0.0%	0.0%
Malaysia*	3.6%	1.9%	0.6%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%
New Zealand		0.3%	0.0%	0.1%		0.0%	0.0%		0.0%
Pakistan*		-16.4%	0.0%	0.0%		0.0%	0.0%		0.0%
Philippines*	16.3%	3.5%	0.4%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Singapore	3.0%	3.1%	4.5%	0.9%	0.0%	-0.1%	0.0%	0.0%	-0.1%
Taiwan*	2.9%	1.4%	4.1%	3.0%	0.1%	0.0%	0.0%	0.0%	0.0%
Thailand*		10.6%	0.0%	0.5%		0.0%	0.0%		0.0%
Americas									
Brazil*	12.3%	23.0%	1.0%	1.6%	-0.1%	-0.1%	0.0%	0.0%	-0.2%
Canada	23.1%	8.1%	0.2%	6.6%	1.2%	0.0%	-0.3%	-1.1%	-0.1%
Chile*		16.9%	0.0%	0.3%		0.0%	0.0%		0.0%
Colombia*		6.5%	0.0%	0.1%		0.0%	0.0%		0.0%
Mexico*	-1.0%	1.6%	0.6%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%
Peru*		14.0%	0.0%	0.1%		0.0%	0.0%		0.0%
United States	2.3%	4.3%	2.5%	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*		1.1%	0.0%	0.0%		0.0%	0.0%		0.0%
Israel		-12.6%	0.0%	0.5%		0.1%	0.0%		0.1%
Qatar*		-5.0%	0.0%	0.2%		0.0%	0.0%		0.0%
South Africa*	11.0%	4.0%	3.6%	1.6%	0.1%	0.1%	-0.1%	0.1%	0.2%
Turkey*		0.3%	0.0%	0.3%		0.0%	0.0%		0.0%
United Arab Emirates*		4.0%	0.0%	0.2%		0.0%	0.0%		0.0%
Totals									
Americas	7.3%	10.2%	4.4%	9.5%	0.0%	-0.1%	-0.3%	0.0%	-0.4%
Europe	8.3%	6.7%	42.0%	45.7%	0.8%	0.0%	-0.2%	-0.1%	0.6%
Asia/Pacific	1.9%	5.2%	48.1%	42.2%	-1.4%	0.0%	0.0%	-0.2%	-1.5%
Other	11.0%	-0.1%	3.6%	2.7%	0.3%	0.0%	-0.1%	0.1%	0.4%
Cash	0.3%		1.9%	0.0%	0.0%	-0.1%	0.0%	0.0%	-0.1%
Total	5.2%	6.2%	100.0%	100.0%	-0.3%	-0.1%	-0.5%	-0.1%	-1.1%
Totals									
Developed	4.9%	5.7%	73.9%	76.3%	-0.3%	0.0%	-0.3%	0.0%	-0.6%
Emerging*	6.4%	8.0%	24.2%	23.7%	-0.2%	0.0%	-0.1%	0.0%	-0.4%
Cash	0.3%		1.9%	0.0%	0.0%	-0.1%	0.0%	0.0%	-0.1%

eA ACWI ex-US Value Equity Net Accounts



	Return	(Rank)														
5th Percentile	8.9		29.8		29.0		22.3		11.6		14.9		12.3		6.2	
25th Percentile	6.5		24.5		25.2		17.6		8.6		12.0		9.6		3.2	
Median	5.4		20.1		21.4		14.1		6.0		8.9		7.9		1.6	
75th Percentile	4.6		17.0		15.6		12.0		4.4		8.0		6.1		1.4	
95th Percentile	1.8		11.6		11.6		8.6		1.0		5.9		4.0		0.5	
# of Portfolios	37		37		37		33		33		28		23		19	
Mondrian	5.0	(63)	18.2	(68)	16.9	(69)	12.5	(63)	3.9	(80)	6.9	(88)	5.6	(89)	1.6	(53)
▲ MSCI ACWI ex USA Value Gross	6.1	(31)	18.3	(68)	22.2	(43)	14.7	(46)	3.5	(82)	6.6	(89)	5.0	(92)	1.2	(89)
★ MSCI ACWI ex USA Gross	6.3	(30)	21.6	(34)	20.2	(58)	14.9	(45)	5.2	(67)	7.5	(83)	5.7	(88)	1.7	(44)

Characteristics

	Portfolio	MSCI ACWI ex USA Value Gross
Number of Holdings	144	1,053
Weighted Avg. Market Cap. (\$B)	53.9	59.1
Median Market Cap. (\$B)	17.9	7.5
Price To Earnings	18.8	15.2
Price To Book	2.0	1.6
Price To Sales	1.7	1.6
Return on Equity (%)	13.4	11.1
Yield (%)	3.8	3.7
Beta (holdings; global)	1.0	1.1

Top Holdings		Best Performers		Worst Performers	
SANOFI	2.8%		Return %		Return %
HONDA MOTOR	2.5%	NEXT (UKIR:NXT)	46.5%	ERICSSON 'B'	-19.8%
IBERDROLA	2.5%	CHINA BLUE CHEMICAL 'H'	37.2%	GOLDEN EAGLE RETAIL GP.	-14.3%
TAKEDA PHARMACEUTICAL	2.4%	SUZANO BAHIA SUL PAPEL CELULOSE A PN	34.5%	CHINA STE.CON.INTL.HDG.	-13.7%
		(BR:BU5)	J 4 .570	HYUNDAI MOTOR PF.2 (KO:MOT)	-12.1%
UNITED OVERSEAS BANK	2.3%	ITAUSA INVESTIMENTOS ITAU PN	29.1%	QBE INSURANCE GROUP	-11.5%
ENEL	2.3%	ITAU UNIBANCO BANCO HLDG.ADR 1:1	25.4%	G4S	-10.8%
TELIA COMPANY	2.3%	VEDANTA	24.9%	TONGDA GROUP HOLDINGS	-9.7%
TESCO	2.2%	VEDANTA ADR 1:4	24.7%	FIBRA UNO ADMINISTRACION REIT	-9.7%
		EMBRAER SPNS ADR 1:4	24.3%	(MX:FUN)	-9.1 70
ABB LTD N	2.2%	AMBEV SPONSORED ADR 1:1 (ABEV)	20.0%	TURKIYE HALK BANKASI	-8.7%
ENI	2.2%	ROMGAZ GDR REGS (UKIR:SNGR)	19.2%	CHINA RES.POWER HDG.	-8.0%

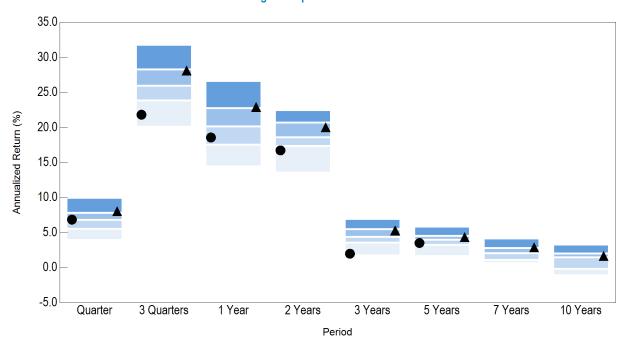
			Attribution Effec	ts	Re	eturns	Secto	r Weights
	Total	Selection	Allocation	Interaction				
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	0.0%	0.0%	0.0%	0.0%	14.0%	14.2%	9.0%	9.1%
Materials	-0.3%	0.6%	-0.3%	-0.6%	19.9%	12.5%	1.5%	6.6%
Industrials	-0.3%	-0.3%	0.0%	0.0%	1.8%	5.0%	10.6%	8.9%
Consumer Discretionary	0.4%	0.2%	0.0%	0.2%	8.4%	5.7%	12.1%	8.3%
Consumer Staples	0.4%	0.2%	-0.4%	0.6%	6.9%	-1.8%	9.2%	2.8%
Health Care	0.3%	0.3%	-0.3%	0.3%	3.3%	-1.5%	10.5%	6.2%
Financials	-0.8%	-0.4%	0.0%	-0.4%	4.1%	6.3%	18.3%	37.8%
Information Technology	-0.3%	-0.1%	-0.1%	0.0%	-0.7%	1.2%	9.5%	5.1%
Telecommunication Services	-0.1%	-0.1%	-0.1%	0.1%	1.8%	2.5%	9.1%	6.1%
Utilities	-0.1%	-0.1%	0.0%	0.0%	3.9%	5.7%	7.4%	4.9%
Real Estate	-0.2%	-0.3%	0.0%	0.1%	-0.1%	7.1%	2.8%	4.3%
Cash	0.0%						0.0%	0.0%
Portfolio	-1.2%	= -0.2%	+ -1.3%	+ 0.3%	4.9%	6.0%	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		15.4%	0.0%	0.3%		0.0%	0.0%		0.0%
Belgium		10.5%	0.0%	0.4%		0.0%	0.0%		0.0%
Czech Republic*		12.7%	0.0%	0.0%		0.0%	0.0%		0.0%
Denmark	2.5%	6.4%	0.8%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%
Finland		3.2%	0.0%	1.0%		0.0%	0.0%		0.0%
France	7.6%	7.9%	6.1%	7.6%	0.0%	0.0%	-0.1%	0.0%	-0.1%
Germany	7.9%	9.0%	8.2%	6.3%	-0.1%	0.0%	0.1%	0.0%	0.0%
Greece*		-11.8%	0.0%	0.1%		0.0%	0.0%		0.0%
Hungary*		14.6%	0.0%	0.1%		0.0%	0.0%		0.0%
Ireland		4.1%	0.0%	0.0%		0.0%	0.0%		0.0%
Italy	14.1%	12.0%	4.3%	2.4%	0.0%	0.1%	0.1%	0.0%	0.2%
Netherlands	5.1%	10.7%	3.2%	1.2%	-0.1%	0.1%	0.1%	-0.1%	-0.1%
Norway		20.0%	0.0%	0.5%		0.0%	0.0%		-0.1%
Poland*		11.3%	0.0%	0.3%		0.0%	0.0%		0.0%
Portugal		15.3%	0.0%	0.1%		0.0%	0.0%		0.0%
Russia*	12.5%	15.2%	0.8%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%
Spain	2.6%	5.8%	4.4%	3.6%	-0.1%	0.0%	0.0%	0.0%	-0.1%
Sweden	-6.1%	3.5%	3.8%	2.0%	-0.2%	-0.1%	0.0%	-0.2%	-0.4%
Switzerland	1.2%	2.0%	7.9%	5.5%	0.0%	0.0%	0.0%	0.0%	-0.1%
United Kingdom	6.5%	7.3%	17.6%	13.7%	-0.1%	0.0%	0.1%	0.0%	0.0%

		Returns and	Weights			Attri	bution Effects	;	
	Manager	Index	Manager	Index	Selection	Allocation	Currency	Interaction	Total
	Return	Return	Weight	Weight	Effect	Effect	Effect	Effect	Effects
AsiaPacific									
Australia	-11.5%	3.8%	0.9%	4.9%	-0.7%	0.1%	-0.1%	0.6%	-0.1%
China*	7.9%	8.7%	1.4%	6.2%	-0.1%	-0.2%	0.0%	0.1%	-0.2%
Hong Kong	2.3%	5.2%	2.6%	2.4%	-0.1%	0.0%	0.0%	0.0%	-0.1%
India*	9.5%	3.9%	3.0%	2.0%	0.1%	0.0%	0.0%	0.1%	0.2%
Indonesia*	-0.9%	-2.2%	0.4%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%
Japan	6.6%	4.1%	14.5%	16.1%	0.4%	0.0%	0.0%	0.0%	0.4%
Korea*	0.5%	0.6%	3.0%	3.6%	0.0%	0.0%	0.0%	0.0%	0.0%
Malaysia*	0.2%	1.4%	1.2%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%
New Zealand		2.2%	0.0%	0.1%	-	0.0%	0.0%		0.0%
Pakistan*		-5.4%	0.0%	0.0%		0.0%	0.0%		0.0%
Philippines*	-7.1%	1.2%	0.3%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Singapore	2.6%	3.9%	4.6%	1.0%	0.0%	-0.1%	0.1%	0.0%	-0.1%
Taiwan*	2.1%	-0.7%	2.9%	3.0%	0.1%	0.0%	0.0%	0.0%	0.1%
Thailand*	3.5%	10.1%	0.6%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%
Americas									
Brazil*	13.4%	24.6%	1.7%	1.5%	-0.2%	0.0%	0.0%	0.0%	-0.2%
Canada	3.2%	9.2%	1.0%	6.6%	-0.4%	-0.1%	-0.2%	0.3%	-0.3%
Chile*	16.9%	14.8%	0.1%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Colombia*		7.2%	0.0%	0.1%		0.0%	0.0%		0.0%
Mexico*	-3.8%	5.2%	1.1%	0.9%	-0.1%	0.0%	0.0%	0.0%	-0.1%
Peru*	14.3%	13.5%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%

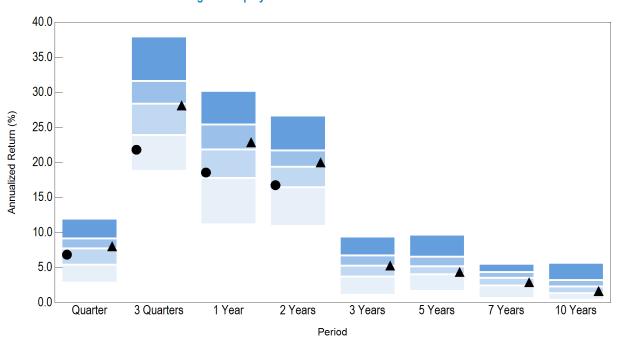
		Returns and	Weights			Attri	bution Effects		
	Manager	Index	Manager	Index	Selection	Allocation	Currency	Interaction	Total
	Return	Return	Weight	Weight	Effect	Effect	Effect	Effect	Effects
Other									
Egypt*		3.0%	0.0%	0.0%		0.0%	0.0%		0.0%
Israel		-30.4%	0.0%	0.5%		0.2%	0.0%		0.2%
Kazakhstan**	5.0%	6.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Qatar*	-4.9%	-2.2%	0.4%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Romania**	19.2%	6.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
South Africa*	-1.1%	0.7%	1.6%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%
Turkey*	0.9%	-0.6%	1.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
United Arab Emirates*	-2.4%	3.7%	0.4%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Totals									
Americas	6.5%	11.5%	4.2%	9.5%	-0.4%	-0.2%	-0.3%	0.2%	-0.6%
Europe	5.5%	7.3%	57.1%	46.4%	-0.8%	0.0%	0.2%	-0.2%	-0.7%
Asia/Pacific	4.2%	4.0%	35.3%	41.3%	0.1%	0.0%	0.0%	0.0%	0.1%
Other	-1.0%	-4.8%	3.4%	2.7%	0.1%	-0.1%	0.0%	0.0%	0.1%
Cash			0.0%	0.0%		0.0%	0.0%		0.0%
Total	4.9%	6.0%	100.0%	100.0%	-0.9%	-0.2%	-0.1%	0.0%	-1.2%
Totals									
Developed	5.1%	6.2%	79.8%	76.7%	-0.7%	0.0%	0.0%	0.0%	-0.8%
Emerging*	3.8%	5.7%	20.1%	23.3%	-0.4%	0.0%	-0.1%	0.1%	-0.4%
Frontier**	12.0%		0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

InvestorForce All DB Emg Mkt Eq Net Accounts



	Return	(Rank)														
5th Percentile	9.9		31.8		26.6		22.5		6.9		5.8		4.1		3.3	
25th Percentile	7.8		28.3		22.8		20.7		5.5		4.5		2.8		2.0	
Median	6.8		26.0		20.2		18.6		4.4		4.0		2.1		1.5	
75th Percentile	5.6		23.9		17.6		17.4		3.6		3.3		1.1		-0.1	
95th Percentile	3.9		20.1		14.5		13.6		1.8		1.7		0.7		-1.1	
# of Portfolios	105		104		101		98		93		70		36		14	
Emerging Markets	6.8	(51)	21.8	(91)	18.6	(67)	16.7	(83)	2.0	(95)	3.5	(64)		()		()
▲ MSCI Emerging Markets Gross	8.0	(21)	28.1	(26)	22.9	(21)	20.0	(32)	5.3	(30)	4.4	(33)	2.9	(23)	1.7	(39)

eA Emg Mkts Equity Net Accounts



	Return	(Rank)														
5th Percentile	11.9		37.9		30.2		26.7		9.4		9.7		5.5		5.7	
25th Percentile	9.2		31.6		25.4		21.7		6.8		6.6		4.4		3.2	
Median	7.8		28.4		21.9		19.4		5.3		5.2		3.6		2.3	
75th Percentile	5.4		23.9		17.8		16.5		3.7		4.0		2.5		1.3	
95th Percentile	2.9		18.8		11.2		10.9		1.1		1.7		0.7		0.5	
# of Portfolios	185		181		181		177		166		134		87		56	
Parametric Core	6.8	(63)	21.8	(84)	18.6	(69)	16.8	(73)		()		()		()		()
▲ MSCI Emerging Markets Gross	8.0	(45)	28.1	(52)	22.9	(42)	20.0	(43)	5.3	(51)	4.4	(70)	2.9	(69)	1.7	(68)

Characteristics

	Portfolio	MSCI Emerging Markets Gross
Number of Holdings	1,151	839
Weighted Avg. Market Cap. (\$B)	22.7	80.6
Median Market Cap. (\$B)	3.3	5.5
Price To Earnings	20.2	21.5
Price To Book	3.1	2.8
Price To Sales	2.6	2.2
Return on Equity (%)	16.2	17.4
Yield (%)	2.8	2.3
Beta (holdings; global)	0.9	1.0

Top Holdings		Best Performers		Worst Performers	
SAMSUNG ELECTRONICS	0.9%		Return %		Return %
AMERICA MOVIL SAB DE CV SPN.ADR 'L' 1:20	0.9%	CHULARAT HOSPITAL FB (Q:CUHF)	353.9%	THAI AIRWAYS INTL.FB (Q:TAIF)	-62.3%
SBERBANK OF RUSSIA	0.9%	VIA VAREJO UNITS (BR:VVU)	122.5%	SUGIH ENERGY	-56.6%
CHINA MOBILE	0.8%	ESTACIO PARTICIPACOES ON (BR:EST)	122.0%	ORION HOLDINGS (KO:DGY)	-42.2%
•		SUNAC CHINA HOLDINGS (K:SCHL)	118.9%	BUMI RESOURCES	-42.1%
NASPERS	0.8%	NATURALENDO TECH	99.8%	PAK SUZUKI MOTOR (PK:PSM)	-41.6%
SASOL	0.7%	CHINA EVERGRANDE	94.3%	HONDA ATLAS CARS(PAK.)	-37.7%
CREDICORP	0.6%	H & H INTL. HDG. (K:BIHT)	93.0%	MATAHARI DEPARTMENT SOE. (ID:MDS)	-35.3%
GRUPO TELEVISA SPN.ADR 1:5	0.6%	USINAS SIDERURGICAS DE MINAS GERAIS	77.2%	HOUSING DEV.&.INFR. (IN:IHD)	-34.3%
		A PN (BR:US5)	11.270	GS RETAIL	-33.1%
MAGNIT	0.6%	ALUMINUM CORP.OF CHINA 'H'	75.2%	HABIB BANK	-32.1%
OAO GAZPROM SPN.ADR 1:2	0.5%	EVRAZ (UKIR:EVR)	70.4%		

Parametric Core Performance Attribution vs. MSCI Emerging Markets Gross

			Attribution Effec	ts		eturns	Sector Weights		
	Total	Selection	Allocation	Interaction					
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark	
Energy	0.0%	0.0%	0.1%	0.0%	12.1%	13.3%	8.6%	6.5%	
Materials	0.1%	0.0%	0.1%	0.0%	10.3%	10.2%	12.1%	7.1%	
Industrials	0.1%	0.2%	-0.2%	0.2%	5.2%	1.7%	9.6%	5.7%	
Consumer Discretionary	0.3%	0.1%	0.0%	0.1%	7.4%	5.0%	9.6%	10.5%	
Consumer Staples	0.1%	0.2%	-0.2%	0.1%	4.8%	2.4%	9.5%	6.8%	
Health Care	-0.1%	0.0%	-0.1%	0.0%	3.9%	3.2%	5.5%	2.4%	
Financials	-0.2%	-0.4%	0.1%	0.1%	6.1%	7.4%	15.0%	23.6%	
Information Technology	-0.9%	-1.2%	-0.6%	0.8%	7.1%	11.0%	8.9%	26.8%	
Telecommunication Services	0.1%	0.1%	-0.1%	0.1%	5.9%	3.7%	9.0%	5.4%	
Utilities	-0.2%	0.0%	-0.1%	0.0%	4.3%	6.6%	6.4%	2.6%	
Real Estate	-0.2%	-0.2%	0.3%	-0.2%	9.9%	17.9%	5.2%	2.6%	
Cash	-0.1%	0.0%	-0.1%	0.0%	0.3%		0.7%	0.0%	
Unclassified	0.0%						0.0%	0.0%	
Portfolio	-0.9%	= -1.3%	+ -0.9%	+ 1.2%	7.0%	8.0%	100.0%	100.0%	

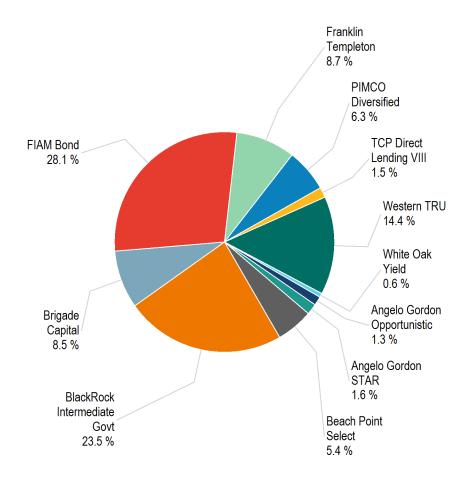
Parametric Core Performance Attribution vs. MSCI Emerging Markets Gross

		Returns and	Weights		Attribution Effects					
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	Total Effects	
Europe										
Czech Republic*	10.8%	10.1%	0.9%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	
Greece*	-3.8%	-12.0%	1.6%	0.4%	0.0%	-0.3%	0.0%	0.1%	-0.1%	
Hungary*	8.2%	9.6%	1.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	
Luxembourg	4.0%	8.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Netherlands	10.0%	9.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Poland*	10.0%	9.6%	3.9%	1.3%	0.0%	0.0%	0.0%	0.0%	0.1%	
Russia*	18.9%	18.1%	5.2%	3.2%	0.1%	0.2%	0.0%	0.0%	0.3%	
United Kingdom	2.0%	5.2%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AsiaPacific										
China*	9.9%	14.7%	5.7%	27.9%	-1.3%	-1.6%	0.0%	1.1%	-1.8%	
Hong Kong	18.8%	5.1%	6.2%	0.0%	0.0%	-0.2%	0.0%	0.9%	0.7%	
India*	1.4%	3.0%	6.7%	8.8%	-0.2%	0.1%	0.0%	0.0%	0.0%	
Indonesia*	-3.1%	-1.1%	3.3%	2.5%	-0.1%	-0.1%	0.0%	0.0%	-0.1%	
Korea*	2.1%	2.5%	7.2%	15.7%	-0.1%	0.4%	0.0%	0.0%	0.4%	
Malaysia*	2.2%	1.9%	3.4%	2.4%	0.0%	-0.1%	0.0%	0.0%	0.0%	
Pakistan*	-10.7%	-16.2%	1.5%	0.1%	0.0%	-0.3%	0.0%	0.1%	-0.2%	
Philippines*	3.3%	3.5%	3.5%	1.2%	0.0%	-0.1%	0.0%	0.0%	-0.1%	
Singapore	7.3%	3.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Taiwan*	1.5%	1.4%	7.8%	12.5%	0.0%	0.3%	0.0%	0.0%	0.3%	
Thailand*	6.5%	10.6%	3.3%	2.2%	-0.1%	0.0%	0.0%	0.0%	-0.1%	
Americas										
Brazil*	22.9%	22.9%	6.6%	6.6%	0.0%	0.0%	-0.1%	0.0%	0.0%	
Chile*	18.3%	17.0%	3.5%	1.1%	0.0%	0.1%	0.1%	0.0%	0.3%	
Colombia*	6.9%	6.5%	1.7%	0.5%	0.0%	-0.1%	0.0%	0.0%	0.0%	
Mexico*	1.3%	1.5%	7.7%	3.7%	0.0%	-0.2%	0.0%	0.0%	-0.3%	
Peru*	14.2%	14.1%	1.4%	0.4%	0.0%	0.1%	0.0%	0.0%	0.1%	
United States	12.0%	4.3%	1.2%	0.0%	0.0%	0.0%	0.0%	0.1%	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*	5.4%	1.1%	0.9%	0.1%	0.0%	-0.1%	0.0%	0.0%	0.0%		
Kuwait**	17.8%	17.2%	1.6%	0.0%	0.0%	0.1%	0.0%	0.0%	0.2%		
Qatar*	-5.6%	-5.0%	1.5%	0.7%	0.0%	-0.1%	0.0%	0.0%	-0.1%		
South Africa*	3.2%	4.0%	6.2%	6.6%	-0.1%	0.0%	0.0%	0.0%	0.0%		
Turkey*	2.5%	0.3%	3.7%	1.2%	0.0%	-0.2%	0.0%	0.1%	-0.1%		
United Arab Emirates*	2.6%	4.0%	1.4%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%		
Totals											
Americas	12.3%	15.1%	22.1%	12.2%	-0.2%	0.4%	0.1%	-0.2%	0.1%		
Europe	11.5%	13.1%	13.1%	5.4%	-0.1%	0.2%	0.2%	-0.1%	0.2%		
Asia/Pacific	4.6%	7.1%	48.8%	73.2%	-1.9%	0.1%	0.1%	0.6%	-1.1%		
Other	3.8%	2.9%	15.3%	9.3%	0.0%	-0.2%	0.0%	0.0%	-0.2%		
Cash	0.3%		0.7%	0.0%	0.0%	-0.1%	0.0%	0.0%	-0.1%		
Total	7.0%	8.0%	100.0%	100.0%	-2.1%	0.5%	0.3%	0.4%	-0.9%		
Totals											
Developed	16.7%		8.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.7%		
Emerging*	6.0%	8.0%	89.7%	100.0%	-2.3%	0.0%	0.3%	0.2%	-1.8%		
Frontier**	17.8%	-	1.6%	0.0%	0.0%	0.0%	0.0%	0.2%	0.2%		
Cash	0.3%		0.7%	0.0%	0.0%	-0.1%	0.0%	0.0%	-0.1%		



			Manager Contribution to
	Actual \$	Actual %	Excess Return %
Angelo Gordon Opportunistic	\$11,306,000	1.3%	0.0%
Angelo Gordon STAR	\$14,063,000	1.6%	0.1%
Beach Point Select	\$47,569,341	5.4%	0.0%
BlackRock Intermediate Govt	\$206,758,791	23.5%	0.0%
Brigade Capital	\$75,109,597	8.5%	0.0%
FIAM Bond	\$247,292,190	28.1%	0.2%
Franklin Templeton	\$76,587,252	8.7%	-0.1%
PIMCO Diversified	\$55,333,249	6.3%	0.0%
TCP Direct Lending VIII	\$13,567,663	1.5%	0.0%
Western Asset TRU	\$126,377,577	14.4%	0.2%
White Oak Yield	\$5,331,786	0.6%	0.0%
Actual vs. Policy Weight Difference			-0.5%
Total	\$879,296,446	100.0%	-0.1%

Statistics Summary

3 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Fixed Income	4.0%	2.9%	1.3	0.3	2.1%
Blended Fixed Income Index	3.4%	2.9%	1.1		0.0%
US Fixed Income	4.3%	2.7%	1.5	0.4	1.4%
Blended US Fixed Index	3.8%	2.7%	1.3		0.0%
FIAM Bond	3.3%	3.0%	1.0	0.6	0.9%
BBgBarc US Aggregate TR	2.7%	2.9%	0.8		0.0%
Angelo Gordon Opportunistic	5.2%	4.6%	1.0	0.4	5.9%
BBgBarc US Aggregate TR	2.7%	2.9%	0.8		0.0%
Angelo Gordon STAR	9.6%	5.8%	1.6	1.0	6.9%
BBgBarc US Aggregate TR	2.7%	2.9%	0.8		0.0%
Brigade Capital	4.6%	7.4%	0.6	-0.3	4.7%
BBgBarc BA Intermediate HY	5.9%	4.5%	1.2		0.0%
Global Fixed Income	2.2%	6.6%	0.3	0.1	8.4%
BBgBarc Multiverse TR	1.6%	4.8%	0.3		0.0%
Franklin Templeton	2.2%	6.6%	0.3	0.1	8.4%
BBgBarc Multiverse TR	1.6%	4.8%	0.3		0.0%

Statistics Summary

5 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Fixed Income	3.8%	3.1%	1.2	0.8	1.9%
Blended Fixed Income Index	2.2%	3.2%	0.6		0.0%
US Fixed Income	3.8%	2.9%	1.2	1.0	1.3%
Blended US Fixed Index	2.5%	3.1%	0.7		0.0%
FIAM Bond	2.7%	3.0%	0.8	0.9	0.8%
BBgBarc US Aggregate TR	2.1%	2.8%	0.7		0.0%
Brigade Capital	5.5%	6.2%	0.9	0.3	4.2%
BBgBarc BA Intermediate HY	4.2%	4.7%	0.8		0.0%
Global Fixed Income	3.6%	6.2%	0.5	0.4	7.1%
BBgBarc Multiverse TR	0.8%	4.6%	0.1		0.0%
Franklin Templeton	3.6%	6.2%	0.5	0.4	7.1%
BBgBarc Multiverse TR	0.8%	4.6%	0.1		0.0%

InvestorForce All DB Total Fix Inc Net Accounts



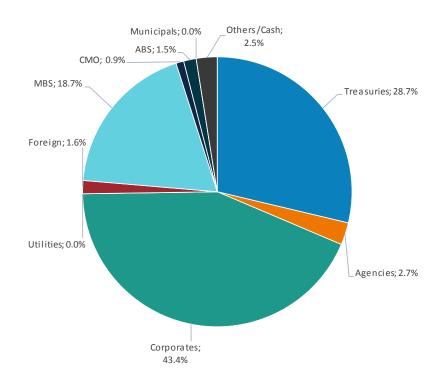
	Return (I	Rank)						
5th Percentile	2.0	8.7	5.9	8.3	6.3	5.0	7.0	8.7
25th Percentile	1.5	6.3	3.6	6.4	4.3	3.7	4.8	5.9
Median	1.2	4.7	2.1	4.7	3.1	2.7	3.8	5.1
75th Percentile	0.9	3.4	0.5	3.3	2.6	2.1	3.2	4.4
95th Percentile	0.6	2.1	-1.0	1.8	1.7	1.3	2.2	3.2
# of Portfolios	336	335	331	324	314	285	235	192
Fixed IncomeBlended Fixed Income Index		(57) 5.1 (45) (49) 4.5 (54)	5.9 (6) 2.0 (52)	6.3 (26) 4.7 (50)	4.0 (31) 3.4 (42)	3.8 (24) 2.2 (72)	4.9 (24) 3.4 (66)	5.4 (42) 4.6 (66)

InvestorForce All DB US Fix Inc Net Accounts



	Return (Ran	k)						
5th Percentile	1.9	8.7	5.4	8.2	6.3	5.1	6.9	8.2
25th Percentile	1.4	6.2	2.6	5.9	4.4	3.9	5.1	6.0
Median	1.1	4.0	1.1	4.0	3.2	2.9	3.9	5.0
75th Percentile	0.7	2.8	0.1	2.5	2.4	2.0	3.0	4.1
95th Percentile	0.5	2.0	-1.6	1.5	1.7	1.2	1.9	3.2
# of Portfolios	445	442	442	437	429	380	306	230
US Fixed IncomeBlended US Fixed Index	1.2 (38) 1.1 (45)	5.1 (33) 4.2 (48)	4.7 (9) 2.4 (28)	6.0 (25) 4.9 (41)	4.3 (28) 3.8 (35)	3.8 (27) 2.5 (61)	4.9 (28) 3.7 (57)	5.4 (37) 4.8 (55)





Sector*	Account Weight	BBgBarc Aggregate Weight	Difference
Treasuries	28.7%	37.0%	-8.3%
Agencies	2.7%	7.1%	-4.4%
Corporates	43.4%	25.4%	18.0%
Utilities	0.0%	0.0%	0.0%
Foreign	1.6%	0.0%	1.6%
MBS	18.7%	28.1%	-9.4%
CMO	0.9%	0.0%	0.9%
ABS	1.5%	2.4%	-0.9%
Municipals	0.0%	0.0%	0.0%
Others/Cash	2.5%	0.0%	2.5%
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	\$ 580,428,559
Current Coupon	2.44
Yield to Maturity	2.90
Average Life	8.20
Duration	4.99
Quality	AA-

BBgBarc Aggregate
3.14
2.52
8.02
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	n/a
1.0 - 3.0	n/a
3.0 - 5.0	n/a
5.0 - 10.0	n/a
10.0 - 20.0	n/a
20.0+	n/a
Unclassified	n/a

Duration	
Range	% Held
0.0 - 1.0	0.6
1.0 - 3.0	34.5
3.0 - 5.0	31.0
5.0 - 7.0	15.7
7.0 - 10.0	5.1
10.0+	13.1
Unclassified	0.0

Quality	
Range	% Held
Govt (10)	26.0
Aaa (10)	25.8
Aa (9)	1.8
A (8)	30.6
Baa (7)	12.8
Below Baa (6-1)	0.8
Other	2.0

Coupon	
Range	% Held
0.0 - 5.0	92.8
5.0 - 7.0	4.1
7.0 - 9.0	0.9
9.0 - 11.0	0.0
11.0 - 13.0	0.0
13.0+	2.1
Unclassified	0.0

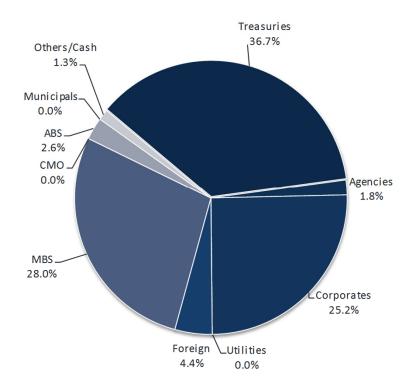
^{*} Characteristics excludes Opportunistic Credit Managers.



eA US Core Fixed Inc Net Accounts



	Return (Rai	ık)						
5th Percentile	1.2	4.4	2.3	4.9	3.9	3.4	4.4	5.8
25th Percentile	1.0	3.7	1.0	3.4	3.2	2.7	3.7	5.0
Median	0.9	3.3	0.4	2.9	2.8	2.3	3.3	4.6
75th Percentile	0.8	3.0	0.0	2.5	2.6	1.9	2.9	4.3
95th Percentile	0.5	2.3	-0.6	1.6	1.9	1.5	2.4	3.5
# of Portfolios	139	136	136	133	133	130	122	107
BlackRock Intermediate Govt	0.4 (98) ()	()	()	()	()	()	()
■ FIAM Bond	1.1 (9) 3.7 (25)	0.9 (30)	3.9 (13)	3.3 (18)	2.7 (24)	3.8 (21)	5.0 (26)
▲ BBgBarc US Aggregate TR	0.8 (52	3.1 (64)	0.1 (73)	2.6 (71)	2.7 (61)	2.1 (66)	3.0 (70)	4.3 (78)



		BBgBarc Aggregate	
Sector	Account Weight	Weight	Difference
Treasuries	36.7%	37.0%	-0.3%
Agencies	1.8%	7.1%	-5.3%
Corporates	25.2%	25.4%	-0.2%
Utilities	0.0%	0.0%	0.0%
Foreign	4.4%	0.0%	4.4%
MBS	28.0%	28.1%	-0.2%
CMO	0.0%	0.0%	0.0%
ABS	2.6%	2.4%	0.3%
Municipals	0.0%	0.0%	0.0%
Others/Cash	1.3%	0.0%	1.3%
TOTAL	100.0%	100.0%	0.0%

Portfolio Characteristics	
	Portfolio
Total Number of Securities	7,609
Total Market Value	\$ 206,758,791
Current Coupon	3.16
Yield to Maturity	2.53
Average Life	8.02
Duration	5.71
Quality	AA

BBgBarc Aggregate)
3.14	ļ
2.52)
8.02)
5.85	5
AA	١

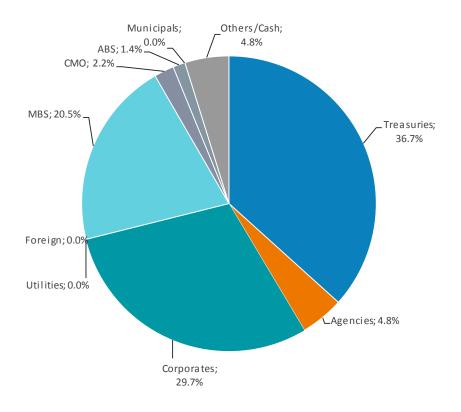
Yield to Maturity	
Range	% Held
0.0 - 5.0	99.0
5.0 - 7.0	1.0
7.0 - 9.0	0.0
9.0 - 11.0	0.0
11.0 - 13.0	0.0
13.0+	0.0
Unclassified	0.0

Average Life	
Range	% Held
0.0 - 1.0	n/a
1.0 - 3.0	n/a
3.0 - 5.0	n/a
5.0 - 10.0	n/a
10.0 - 20.0	n/a
20.0+	n/a
Unclassified	n/a

Duration	
Range	% Held
< 1.0	0.0
1.0 - 3.0	24.9
3.0 - 5.0	34.5
5.0 - 7.0	18.1
7.0 - 10.0	8.2
10.0+	14.3
Unclassified	0.0

Quality	
Range	% Held
Govt (10)	0.0
Aaa (10)	72.0
Aa (9)	3.8
A (8)	10.5
Baa (7)	13.7
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
	0.0
Unclassified	0.0



		BBgBarc Aggregate)
Sector	Account Weight	Weight	Difference
Treasuries	36.7%	37.0%	-0.4%
Agencies	4.8%	7.1%	-2.4%
Corporates	29.7%	25.4%	4.3%
Utilities	0.0%	0.0%	0.0%
Foreign	0.0%	0.0%	0.0%
MBS	20.5%	28.1%	-7.6%
CMO	2.2%	0.0%	2.2%
ABS	1.4%	2.4%	-1.0%
Municipals	0.0%	0.0%	0.0%
Others/Cash	4.8%	0.0%	4.8%
TOTAL	100.0%	100.0%	0.0%

Portfolio Characteristics	
	Portfolio
Total Number of Securities	848
Total Market Value	\$ 247,292,190
Current Coupon	3.08
Yield to Maturity	2.57
Average Life	7.85
Duration	5.67
Quality	AA

BBgBarc Aggregate
3.14
2.52
8.02
5.85
 AA

Yield to Maturity	
Range	% Held
0.0 - 5.0	98.1
5.0 - 7.0	2.3
7.0 - 9.0	0.1
9.0 - 11.0	0.1
11.0 - 13.0	0.0
13.0+	-0.6
Unclassified	0.0

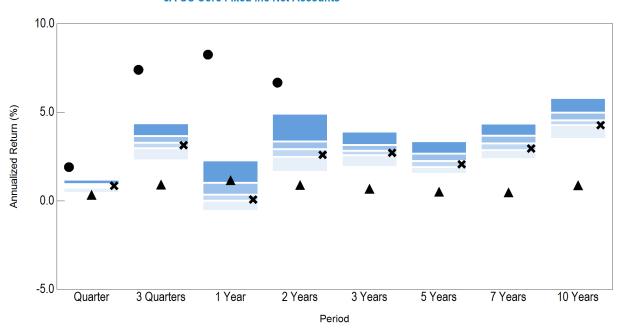
4	
Average Life	
Range	% Held
0.0 - 1.0	1.4
1.0 - 3.0	8.6
3.0 - 5.0	30.8
5.0 - 10.0	38.5
10.0 - 20.0	3.9
20.0+	16.8
Unclassified	0.0

Duration	
Range	% Held
0.0 - 1.0	1.5
1.0 - 3.0	9.0
3.0 - 5.0	44.0
5.0 - 7.0	21.8
7.0 - 10.0	5.0
10.0+	18.8
Unclassified	0.0

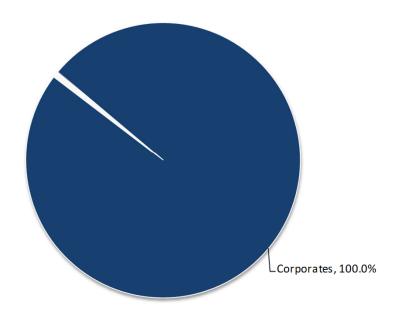
Quality	
Range	% Held
Govt (10)	61.1
Aaa (10)	0.4
Aa (9)	1.1
A (8)	12.1
Baa (7)	18.6
Below Baa (6-1)	2.0
Other	4.7

Coupon	
Range	% Held
0.0 - 5.0	83.1
5.0 - 7.0	9.7
7.0 - 9.0	2.1
9.0 - 11.0	0.1
11.0 - 13.0	0.0
13.0+	5.0
Unclassified	0.0

eA US Core Fixed Inc Net Accounts



	Return (Ran	c)						
5th Percentile	1.2	4.4	2.3	4.9	3.9	3.4	4.4	5.8
25th Percentile	1.0	3.7	1.0	3.4	3.2	2.7	3.7	5.0
Median	0.9	3.3	0.4	2.9	2.8	2.3	3.3	4.6
75th Percentile	0.8	3.0	0.0	2.5	2.6	1.9	2.9	4.3
95th Percentile	0.5	2.3	-0.6	1.6	1.9	1.5	2.4	3.5
# of Portfolios	139	136	136	133	133	130	122	107
 Western TRU 3-Month Libor Total Return USD BBgBarc US Aggregate TR 	1.9 (1) 0.3 (99) 0.8 (52)	7.4 (1) 0.9 (99) 3.1 (64)	8.3 (1) 1.2 (19) 0.1 (73)	6.7 (1) 0.9 (99) 2.6 (71)	() 0.7 (99) 2.7 (61)	() 0.5 (99) 2.1 (66)	() 0.5 (99) 3.0 (70)	() 0.9 (99) 4.3 (78)
TT DDGDaile Go Agglegate III	0.0 (32)	J. 1 (U4)	0.1 (13)	2.0 (11)	2.1 (01)	2.1 (00)	3.0 (10)	4.0 (10)



		BBgBarc Aggregate	
Sector	Account Weight	Weight	Difference
Treasuries	0.0%	37.0%	-37.0%
Agencies	0.0%	7.1%	-7.1%
Corporates	100.0%	25.4%	74.6%
Utilities	0.0%	0.0%	0.0%
Foreign	0.0%	0.0%	0.0%
MBS	0.0%	28.1%	-28.1%
CMO	0.0%	0.0%	0.0%
ABS	0.0%	2.4%	-2.4%
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	\$ 126,377,577
Current Coupon	0.00
Yield to Maturity	4.14
Average Life	9.19
Duration	2.47
Quality	A-

В	BgBarc Aggregate
	3.14
	2.52
	8.02
	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

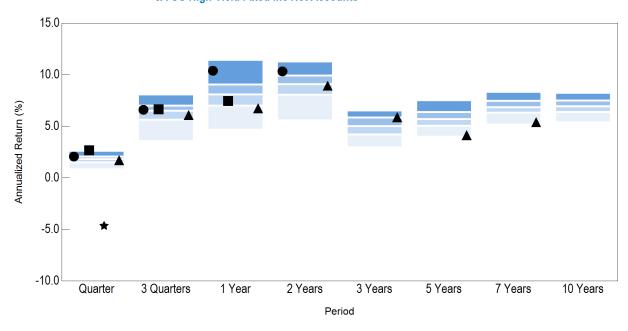
Average Life	
Range	% Held
0.0 - 1.0	0.0
1.0 - 3.0	0.0
3.0 - 5.0	0.0
5.0 - 10.0	100.0
10.0 - 20.0	0.0
20.0+	0.0
Unclassified	0.0

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)	100.0
Baa (7)	0.0
Below Baa (6-1)	0.0
Other	0.0

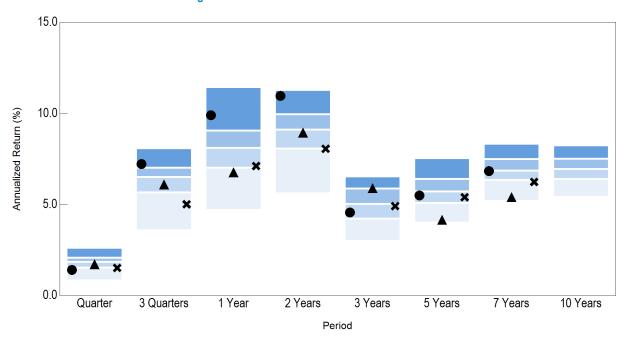
Coupon	
Range	% Held
0.0 - 5.0	100.0
5.0 - 7.0	0.0
7.0 - 9.0	0.0
9.0 - 10.0	0.0
10.0+	0.0
Unclassified	0.0

eA US High Yield Fixed Inc Net Accounts



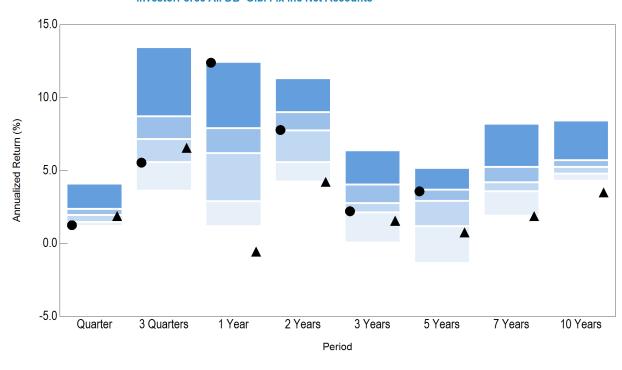
	Return (Rank)							
5th Percentile	2.6	8.1	11.4	11.3	6.5	7.5	8.3	8.2	
25th Percentile	2.1	7.0	9.1	10.0	5.9	6.4	7.5	7.5	
Median	1.8	6.5	8.1	9.1	5.0	5.7	6.9	7.0	
75th Percentile	1.5	5.7	7.0	8.1	4.2	5.1	6.4	6.4	
95th Percentile	8.0	3.6	4.7	5.6	3.0	4.0	5.2	5.4	
# of Portfolios	124	124	123	121	113	98	82	65	
Beach Point Select	2.1	(26) 6.6	(47) 10.4	(10) 10.3	(20)	()	()	()	()
TCP Direct Lending VIII	2.7	(4) 6.7	(45) 7.5	(66)	()	()	()	()	()
★ White Oak Yield	-4.6	(99)	()	()	()	()	()	()	()
▲ BBgBarc BA Intermediate HY	1.7	(62) 6.1	(64) 6.8	(81) 8.9	(58) 5.9	(25) 4.2	(95) 5.4	(94)	()

eA US High Yield Fixed Inc Net Accounts



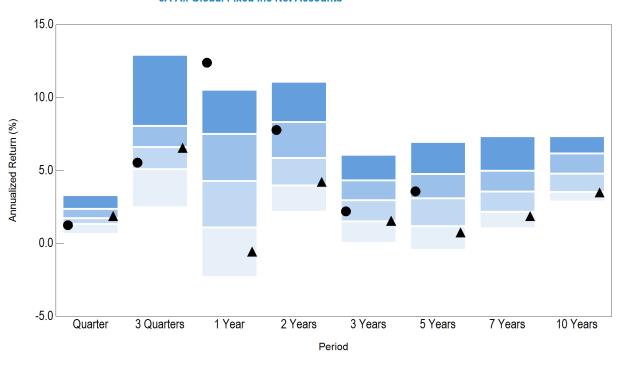
	Return	(Rank)													
5th Percentile	2.6	8	1	11.4		11.3		6.5		7.5		8.3		8.2	
25th Percentile	2.1	7	0	9.1		10.0		5.9		6.4		7.5		7.5	
Median	1.8	6	5	8.1		9.1		5.0		5.7		6.9		7.0	
75th Percentile	1.5	5	7	7.0		8.1		4.2		5.1		6.4		6.4	
95th Percentile	0.8	3	6	4.7		5.6		3.0		4.0		5.2		5.4	
# of Portfolios	124	12	4	123		121		113		98		82		65	
Brigade Capital	1.4	(81) 7	2 (19)	9.9	(15)	11.0	(8)	4.6	(68)	5.5	(63)	6.8	(55)		()
▲ BBgBarc BA Intermediate HY	1.7	(62) 6	1 (64)	6.8	(81)	8.9	(58)	5.9	(25)	4.2	(95)	5.4	(94)		()
➤ 50% Barclays HY/ 50% Bank Loa	n 1.5	(77) 5	0 (83)	7.1	(73)	8.1	(76)	4.9	(56)	5.4	(67)	6.2	(80)		()

InvestorForce All DB Glbl Fix Inc Net Accounts



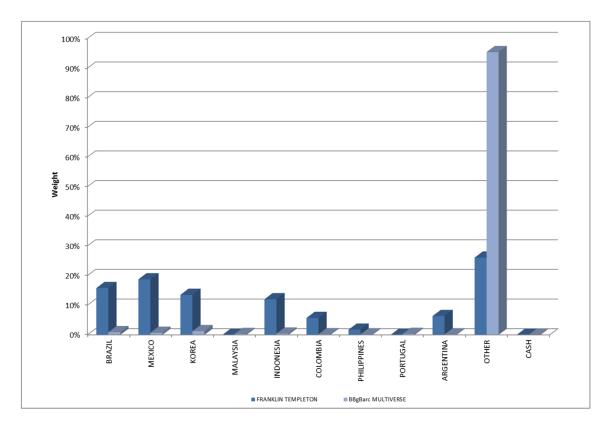
	Return (Ra	ınk)						
5th Percentile	4.1	13.5	12.4	11.3	6.4	5.2	8.2	8.4
25th Percentile	2.4	8.7	7.9	9.0	4.1	3.7	5.3	5.7
Median	2.0	7.2	6.2	7.8	2.8	2.9	4.2	5.3
75th Percentile	1.5	5.6	2.9	5.6	2.1	1.2	3.6	4.8
95th Percentile	1.2	3.6	1.2	4.3	0.1	-1.3	1.9	4.3
# of Portfolios	40	39	39	38	36	28	19	13
Global Fixed IncomeBBgBarc Multiverse TR	1.3 (9 1.9 (5	,	'	7.8 (49) (9) 4.2 (96)	2.2 (72) 1.6 (82)	3.6 (30) 0.8 (79)	() 1.9 (96)	() 3.5 (99)

eA All Global Fixed Inc Net Accounts

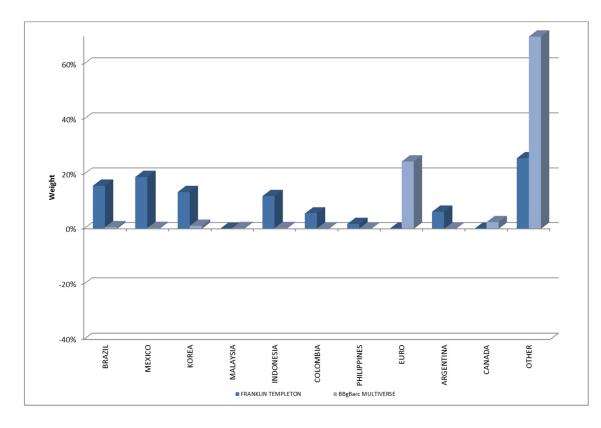


	Return	(Rank)							
5th Percentile	3.3	12.9	10.5	11.1	6.1	7.0	7.3	7.3	
25th Percentile	2.4	8.1	7.5	8.3	4.3	4.8	5.0	6.2	
Median	1.8	6.6	4.3	5.9	3.0	3.1	3.6	4.8	
75th Percentile	1.4	5.1	1.1	4.0	1.5	1.2	2.2	3.5	
95th Percentile	0.7	2.5	-2.3	2.2	0.1	-0.4	1.0	2.9	
# of Portfolios	220	219	214	204	191	168	129	90	
Franklin TempletonBBgBarc Multiverse TR	1.3 1.9	(81) 5.5 (45) 6.6	(70) 12.4 (52) -0.6	(3) 7.8 (88) 4.2	(29) 2.2 (73) 1.6	(64) 3.6 (74) 0.8	(41) (83) 1.9	() (81) 3.5	() (77)

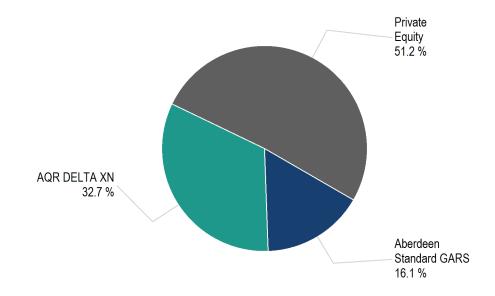




COUNTRY	MARKET VALUE	FRANKLIN TEMPLETON	BBgBarc MULTIVERSE	DIFF	
BRAZIL	\$ 12,109	15.8%	0.9%	+14.9%	
MEXICO	\$ 14,361	18.8%	0.7%	+18.0%	
KOREA	\$ 10,348	13.5%	1.3%	+12.2%	
MALAYSIA	\$ -	0.0%	0.3%	-0.3%	
INDONESIA	\$ 9,216	12.0%	0.4%	+11.6%	
COLOMBIA	\$ 4,377	5.7%	0.2%	+5.5%	
PHILIPPINES	\$ 1,341	1.8%	0.2%	+1.6%	
PORTUGAL	\$ -	0.0%	0.3%	-0.3%	
ARGENTINA	\$ 4,869	6.4%	0.2%	+6.2%	
OTHER	\$ 19,966	26.1%	95.4%	-69.4%	
CASH	\$ -	0.0%	0.0%	0.0%	
	\$ 76.587	100.0%	100.0%	0.0%	



CURRENCY	MARKET VALUE	FRANKLIN TEMPLETON	BBgBarc MULTIVERSE	DIFF
BRAZIL	\$ 12,109	15.8%	0.6%	+15.2%
MEXICO	\$ 14,550	19.0%	0.3%	+18.7%
KOREA	\$ 10,348	13.5%	1.1%	+12.4%
MALAYSIA	\$ -	0.0%	0.3%	-0.3%
INDONESIA	\$ 9,216	12.0%	0.3%	+11.8%
COLOMBIA	\$ 4,377	5.7%	0.1%	+5.6%
PHILIPPINES	\$ 1,341	1.8%	0.1%	+1.6%
EURO	\$ 21	0.0%	24.6%	-24.6%
ARGENTINA	\$ 4,869	6.4%	0.0%	+6.4%
CANADA	\$ -	0.0%	2.4%	-2.4%
OTHER	\$ 19,757	25.8%	70.3%	-44.5%
	\$ 76,587	100.0%	100.0%	0.0%

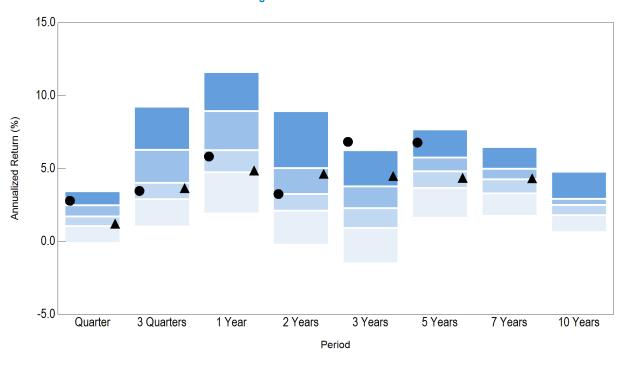


	Actual \$	Actual %	Manager Contribution to Excess Return %
Aberdeen Standard GARS	\$80,530,334	16.1%	-0.2%
AQR DELTA XN	\$163,224,752	32.7%	1.1%
Private Equity	\$255,291,095	51.2%	-3.1%
Actual vs. Policy Weight Difference			0.4%
Total	\$499,046,181	100.0%	-1.8%

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Alternatives	8.2%	5.1%	1.5	0.3	6.7%
Alternatives Allocation Index	5.8%	5.6%	1.0		0.0%
Private Equity	17.6%	9.7%	1.8	0.3	13.6%
Russell 3000 +3%	13.7%	10.0%	1.3		0.0%
Hedge Fund/Absolute Return	6.8%	5.0%	1.3	0.5	5.0%
Libor 1 month +4%	4.5%	0.1%	29.2		0.0%
AQR DELTA XN	7.5%	5.3%	1.3	0.6	5.4%
Libor 1 month +4%	4.5%	0.1%	29.2		0.0%

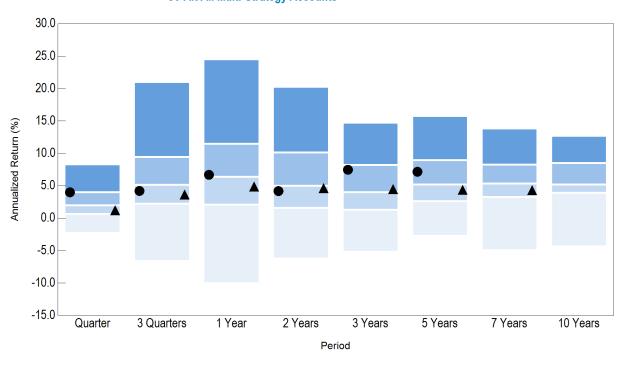
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Alternatives	6.0%	5.1%	1.1	-0.1	6.0%
Alternatives Allocation Index	6.4%	5.4%	1.1		0.0%
Private Equity	15.2%	9.0%	1.7	-0.2	12.8%
Russell 3000 +3%	17.2%	9.6%	1.8		0.0%
Hedge Fund/Absolute Return	6.8%	4.6%	1.4	0.5	4.6%
Libor 1 month +4%	4.4%	0.1%	32.1		0.0%
AQR DELTA XN	7.2%	4.9%	1.4	0.6	4.9%
Libor 1 month +4%	4.4%	0.1%	32.1		0.0%

InvestorForce All DB Hedge Funds Net Accounts



	Return	(Rank)														
5th Percentile	3.4		9.2		11.6		8.9		6.2		7.7		6.5		4.8	
25th Percentile	2.5		6.3		8.9		5.0		3.8		5.8		5.0		2.9	
Median	1.7		4.0		6.3		3.3		2.3		4.8		4.3		2.5	
75th Percentile	1.1		2.9		4.8		2.1		0.9		3.7		3.3		1.8	
95th Percentile	-0.1		1.0		1.9		-0.2		-1.5		1.6		1.8		0.7	
# of Portfolios	243		243		240		233		227		209		160		89	
Hedge Fund/Absolute ReturnLibor 1 month +4%	2.8 1.2	(21) (74)	3.5 3.7	(66) (62)	5.8 4.9	(61) (75)	3.3 4.6	(51) (35)	6.8 4.5	(4) (18)	6.8 4.4	(13) (62)	4.3	() (46)		()

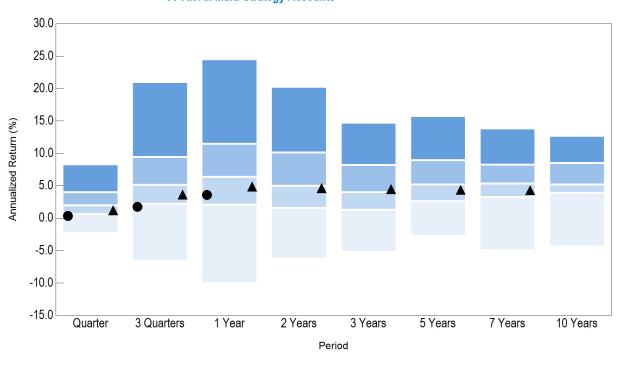
eV Alt All Multi-Strategy Accounts



	Return	(Rank)							
5th Percentile	8.3	21.0	24.5	20.3	14.7	15.7	13.8	12.7	
25th Percentile	4.0	9.5	11.5	10.2	8.2	9.0	8.3	8.6	
Median	2.0	5.2	6.4	5.0	4.0	5.2	5.4	5.2	
75th Percentile	0.7	2.3	2.1	1.6	1.3	2.6	3.3	3.9	
95th Percentile	-2.2	-6.6	-10.0	-6.2	-5.2	-2.7	-4.9	-4.3	
# of Portfolios	312	304	300	280	257	204	162	101	
● AQR DELTA XN ▲ Libor 1 month +4%	4.0 1.2	(26) 4.2 (67) 3.7	(59) 6.7 (64) 4.9	(49) 4.2 (58) 4.6	(58) 7.5 (55) 4.5	(30) 7.2 (48) 4.4	(43) (60) 4.3	() (63)	() ()
		()	()	()	()	(/	()	(/	\ /

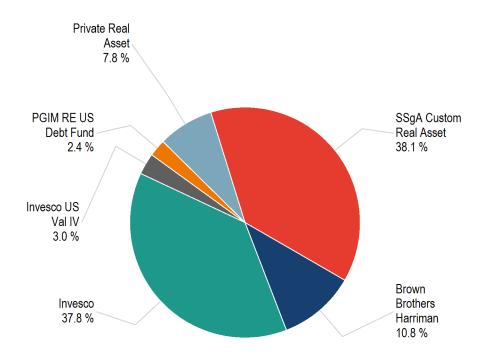


eV Alt All Multi-Strategy Accounts



	Return	(Rank)															
5th Percentile	8.3		21.0		24.5		20.3		14.7		15.7		13.8		12.7		
25th Percentile	4.0		9.5		11.5		10.2		8.2		9.0		8.3		8.6		
Median	2.0		5.2		6.4		5.0		4.0		5.2		5.4		5.2		
75th Percentile	0.7		2.3		2.1		1.6		1.3		2.6		3.3		3.9		
95th Percentile	-2.2		-6.6		-10.0		-6.2		-5.2		-2.7		-4.9		-4.3		
# of Portfolios	312		304		300		280		257		204		162		101		
● Aberdeen Standard GARS ▲ Libor 1 month +4%	0.3 1.2	(80) (67)	1.7 3.7	(79) (64)	3.6 4.9	(68) (58)	 4.6	() (55)	 4.5	() (48)	 4.4	() (60)	4.3	() (63)		()	
- Liboi i illolluli +4/0	1.2	(07)	3.1	(04)	4.3	(30)	4.0	(33)	4.5	(40)	4.4	(00)	4.5	(03)		()	





			Manager Contribution to
	Actual \$	Actual %	Excess Return %
Brown Brother Harriman	\$71,456,823	10.8%	0.0%
Invesco	\$249,718,795	37.8%	-0.2%
Invesco US Val IV	\$19,994,974	3.0%	0.1%
PGIM RE US Debt Fund	\$15,604,756	2.4%	0.0%
Private Real Asset	\$51,735,386	7.8%	-0.8%
SSgA Custom Real Asset	\$251,921,564	38.1%	0.2%
Actual vs. Policy Weight Difference			0.0%
Total	\$660,432,299	100.0%	-0.8%

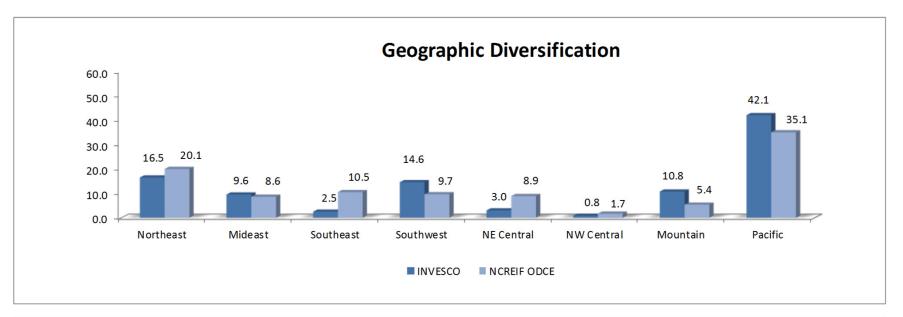
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Real Estate	11.02%	4.90%	2.18	0.12	1.45%
NCREIF ODCE	10.84%	4.60%	2.29		0.00%
Invesco	10.86%	4.85%	2.17	0.01	1.54%
NCREIF ODCE	10.84%	4.60%	2.29		0.00%
Private Real Asset	11.59%	26.75%	0.42	0.19	26.74%
Blended Real Asset Index	6.51%	3.30%	1.88		0.00%
TIPS	1.31%	2.61%	0.38	-0.20	1.49%
BBgBarc US TIPS TR	1.62%	3.58%	0.36		0.00%
Brown Brothers Harriman	1.31%	2.61%	0.38	-0.20	1.49%
BBgBarc US TIPS TR	1.62%	3.58%	0.36		0.00%

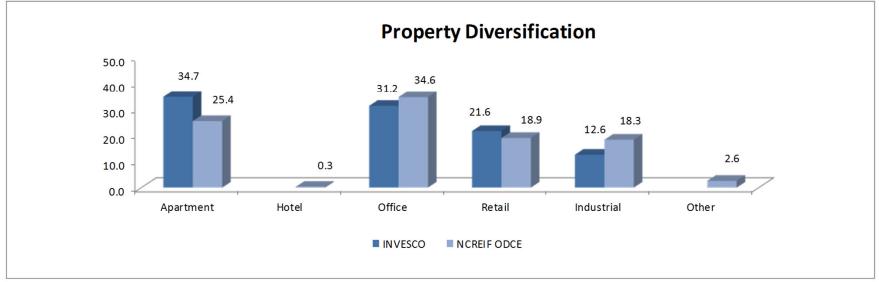
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error Rank
Real Estate	11.47%	4.98%	2.26	-0.08	24
NCREIF ODCE	11.59%	4.80%	2.37		1
Invesco	11.37%	4.95%	2.25	-0.15	
NCREIF ODCE	11.59%	4.80%	2.37		
TIPS	-0.43%	3.87%	-0.17	-0.34	
BBgBarc US TIPS TR	0.02%	4.47%	-0.04		
Brown Brothers Harriman	-0.43%	3.87%	-0.17	-0.34	54
BBgBarc US TIPS TR	0.02%	4.47%	-0.04		1

InvestorForce All DB Real Estate Pub Net Accounts



	Return (Rank)						
5th Percentile	2.7	9.3	8.8	9.7	11.1	11.4	12.4	5.5
25th Percentile	1.8	5.6	7.2	8.9	10.1	10.7	11.6	4.4
Median	1.4	4.6	6.1	7.9	9.1	9.9	11.1	4.1
75th Percentile	0.9	3.5	3.3	7.1	8.6	9.5	10.1	3.4
95th Percentile	0.4	2.0	0.4	5.8	6.7	6.8	8.1	1.6
# of Portfolios	86	83	83	81	79	70	65	40
■ Real Estate▲ NCREIF ODCE	1.5 (44) 1.9 (23)	5.9 (23) 5.4 (30)	8.1 (14) 7.7 (18)	8.9 (26) 8.9 (26)	11.0 (8) 10.8 (14)	11.5 (3 11.6 (3	, , ,	4.9 (17) 5.6 (5)



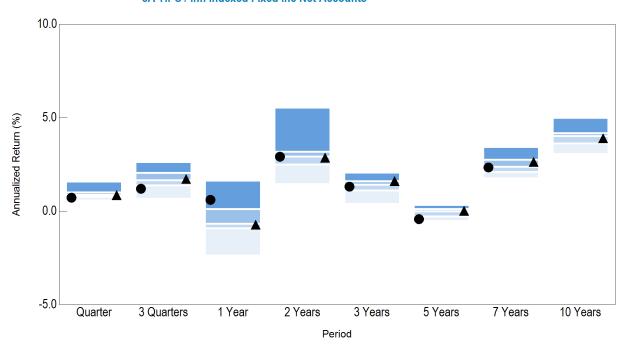


					Date Added to	Last Valuation	SamCERA ownership as of
Property Name	MSA	Prior Quarter Carry Value	Current Quarter Carry Value	Net Market Value	Fund	Date	09/30/2017
APARTMENTS							2.87%
Stoneridge Apartments	Pleasanton, CA	\$234,000,000	\$236,000,000	\$236,000,000	4Q06	September-17	\$6,784,261
Instrata Pentagon City	Arlington, VA	\$151,000,000	\$152,000,000	\$152,000,000	3Q10	September-17	\$4,369,524
Ladd Tower	Portland, OR	\$137,000,000	\$137,000,000	\$79,804,636	4Q10	September-17	\$2,294,134
Legacy Fountain Plaza	San Jose, CA	\$155,962,259	\$156,964,172	\$156,964,172	1Q11	September-17	\$4,512,229
Instrata Gramercy (fka The Elektra)	New York, NY	\$176,900,000	\$172,500,000	\$99,479,943	1011	September-17	\$2,859,737
Instrata Brooklyn Heights (fka 75 Clinton Street)	Brooklyn, NY	\$66,400,000	\$67,300,000	\$67,300,000	1012	September-17	\$1,934,664
The Artisan Laguna Beach	Orange County, CA	\$164,000,000	\$165,000,000	\$103,102,794	3Q12	September-17	\$2,963,883
The GoodWynn	Atlanta, GA	\$97,500,000	\$97,500,000	\$97,500,000	4Q12	September-17	\$2,802,820
Instrata Hell's Kitchen	New York, NY	\$188,000,000	\$189,000,000	\$189,000,000	1013	September-17	\$5,433,158
Sunset Vine Tower	Los Angeles, CA	\$96,300,000	\$97,100,000	\$97,100,000	2Q13	September-17	\$2,791,321
The Ashton	Dallas, TX	\$124,000,000	\$123,000,000	\$65,501,779	4Q13	September-17	\$1,882,971
The Pointe at Westchester	West Chester, PA	\$58,800,000	\$59,400,000	\$59,400,000	4Q13	September-17	\$1,707,564
206 Bell	Seattle, WA	\$48,000,000	\$48,500,000	\$48,500,000	4Q13	September-17	\$1,394,223
Cadence Union Station	Denver, CO	\$90,000,000	\$90,000,000	\$52,669,499	1Q14	September-17	\$1,514,083
Joseph Arnold Lofts	Seattle, WA	\$71,200,000	\$71,600,000	\$37,166,268	2014	September-17	\$1,068,414
Verve	Denver, CO	\$113,000,000	\$113,000,000	\$113,000,000	3Q14	September-17	\$3,248,396
Broadstone Little Italy	San Diego CA	\$121,000,000	\$121,000,000	\$67,503,327	3Q14	September-17	\$1,940,509
33 Tehama	San Francisco, CA	\$234,229,935	\$260,917,747	\$165,607,964	3Q14	September-17	\$4,760,711
The Parker	Portland, OR	\$67,000,000	\$67.000.000	\$34,686,981	1015	September-17	\$997,142
Legacy West Apartments	Plano, TX	\$103,991,140	\$111,520,438	\$80,120,186	1015	September-17	\$2,303,205
Village at Park Place	Irvine, CA	\$130,808,885	\$146,729,082	\$91,725,387	2Q15	September-17	\$2,636,818
Wheaton 121	Wheaton, IL	\$81,900,000	\$81,400,000	\$81,400,000	2Q15	September-17	\$2,339,995
Jefferson Marketplace	Washington, DC	\$152,000,000	\$153,000,000	\$82,196,136	4Q15	September-17	\$2,362,882
Retreat at Park Meadows	Littleton,CO	\$132,000,000	\$137,000,000	\$137.000.000	4Q15	September-17	\$3,938,321
North Water	Chicago, IL	\$263,000,000	\$264,000,000	\$264,000,000	1016	September-17	\$7,589,174
2270 Broadway	Oakland, CA	\$23,105,355	\$25,551,852	\$25,551,852	1Q16	September-17	\$734,536
Runway at Playa Vista - Apartments	Playa Vista, CA	\$163,770,000	\$163,770,000	\$100,296,108	1Q16	September-17	\$2,883,199
Clayton Lane Apartments	Denver, CO	\$34,788,644	\$35,564,159	\$35,564,159	1Q16	September-17	\$1,022,358
Biscayne 27	Miami, FL	\$36,026,090	\$42,307,897	\$42,307,897	2Q16	September-17	\$1,216,220
Flats 8300	Washington DC	\$228,000,000	\$231,000,000	\$127,500,000	2Q16	September-17	\$3,665,226
407 1st Ave	New York, NY	\$193,500,000	\$194,000,000	\$194,000,000	4Q16	September-17	\$5,576,893
5250 Park	Miami, FL	\$8,711,262	\$10,409,778	\$10,042,677	2Q17	September-17	\$288,696
The Mason	Pleasanton, CA	\$0	\$99,625,000	\$99,625,000	3Q17	Acq 3Q17	\$2,863,907
	,	\$3,945,893,570	\$4,120,660,125	\$3,293,616,765			\$94,681,174
INDUSTRIAL							
Arjons Industrial Park	San Diego CA	\$40,900,000	\$41,300,000	\$41,300,000	2Q04	September-17	\$1,187,246
Gateway Business Park	Dallas TX	\$13,500,000	\$13,000,000	\$13,000,000	2Q04	September-17	\$373,709
Hayward Industrial	Oakland CA	\$183,000,000	\$185,100,000	\$185,100,000	3Q04-3Q07	September-17	\$5,321,046
Lackman Park	Kansas City MO-KS	\$25,100,000	\$0	\$0	2Q04	Sold 3Q17	\$0
Crossroads Industrial	Kansas City MO-KS	\$8,800,000	\$0	\$0	1Q06	Sold 3Q17	\$0
Oakesdale Commerce Center	Seattle - Belle - Eve WA	\$53,100,000	\$54,700,000	\$54,700,000	1Q06	September-17	\$1,572,454
South Bay Industrial	Los Angeles, CA	\$55,800,000	\$56,200,000	\$56,200,000	4Q06	September-17	\$1,615,574
Steeplechase 95 International Business Park	Capitol Heights, MD	\$96,400,000	\$97,200,000	\$97,200,000	1Q11	September-17	\$2,794,196
Airport Trade Center Portfolio	Dallas, TX	\$126,800,000	\$130,500,000	\$130,500,000	1Q11	September-17	\$3,751,467
IE Logistics	San Bernardino, CA	\$132,700,000	\$133,100,000	\$133,100,000	3Q11	September-17	\$3,826,208
Railhead Drive Industrial	Dallas, TX	\$62,500,000	\$62,500,000	\$62,500,000	4Q11	September-17	\$1,796,679
Empire Gateway aka Chino South Logistics Center	Chino, CA	\$257,000,000	\$264,000,000	\$264,000,000	4Q12	September-17	\$7,589,174
SFO Logistics Center	San Francisco, CA	\$140,000,000	\$141,000,000	\$141,000,000	4Q13	September-17	\$4,053,309
Miami Industrial Portfolio	Various,FL	\$114,495,190	\$116,050,274	\$85,322,327	1Q16	September-17	\$2,452,750
OMP Burbank	Los Angeles, CA	\$70,539,525	\$73,788,384	\$73,788,384	2Q16	September-17	\$2,121,185
Pacific Commons	Freemont, CA	\$122,661,267	\$124,566,938	\$124,566,938	1Q17	September-17	\$3,580,910
		\$1,503,295,982	\$1,493,005,596	\$1,462,277,649			\$42,035,906

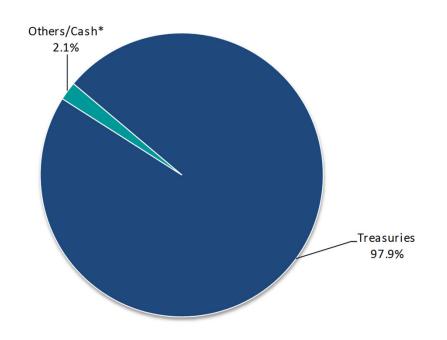


OFFICE							
55 Cambridge Parkway	Boston MA - NH	\$285,000,000	\$286,000,000	\$286,000,000	4Q06	September-17	\$8,221,605
1111 Pennsylvania Avenue	Washington, D.C.	\$317,000,000	\$322,000,000	\$322,000,000	4Q10	September-17	\$9,256,492
1800 Larimer	Denver, CO	\$328,000,000	\$327,000,000	\$327,000,000	1Q11	September-17	\$9,400,227
Hillview Office	San Jose, CA	\$78,400,000	\$79,500,000	\$79,500,000	3Q12	September-17	\$2,285,376
Williams Tower	Houston, TX	\$590,000,000	\$590,000,000	\$405,828,766	1Q13	September-17	\$11,666,307
Westlake Park Place	Westlake Village, CA	\$112,000,000	\$112,000,000	\$112,000,000	4Q13	September-17	\$3,219,649
101 Second	San Francisco, CA	\$394,000,000	\$408,000,000	\$408,000,000	1014	September-17	\$11,728,723
Energy Crossing II	Houston, TX	\$108,000,000	\$101,300,000	\$101,300,000	2Q14	September-17	\$2,912,058
1776 Wilson Blvd.	Arlington, VA	\$94,600,000	\$90,200,000	\$90,200,000	3Q14	September-17	\$2,592,968
631 Howard	San Francisco, CA	\$94,700,000	\$90,600,000	\$90,600,000	3Q14	September-17	\$2,604,466
Barton Oaks	Austin, TX	\$87,300,000	\$88,600,000	\$88,600,000	3Q14	September-17	\$2,546,973
Hercules East and South Campus	Los Angeles, CA	\$166,413,301	\$168,308,406	\$168,308,406	3Q14	September-17	\$4,838,340
The Reserve	Playa Vista, CA	\$367,470,065	\$367,778,942	\$367,778,942	1Q15	September-17	\$10,572,494
Fort Point Portfolio	Boston, MA	\$223,120,254	\$232,288,247	\$232,288,247	2Q15	September-17	\$6,677,560
Legacy West Office	Plano, TX	\$64,509,497	\$76,634,009	\$36,189,574	1Q15	September-17	\$1,040,337
Summit IV	Aliso Viejo, CA	\$123,000,000	\$123,000,000	\$84,522,336	2Q15	September 17	\$2,429,753
1101 Westlake	Seattle, WA	\$106,000,000	\$121,000,000	\$121,000,000	3Q15	September-17	\$3,478,371
PearlWest	Boulder, CO	\$122,000,000	\$121,000,000	\$121,000,000	4Q16	September-17	\$3,478,371
1 Carry Cot	554,46,766	\$3,661,513,117	\$3,705,209,604	\$3,442,116,271	.410	Soprember 17	\$98,950,070
RETAIL		40,000,000,000,000,000,000,000,000,000,	+	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			\u00e40000000000000000000000000000000000
Chandler Pavilion	Phoenix - Mesa AZ	\$24,000,000	\$24,000,000	\$24,000,000	2Q04	September-17	\$689,925
Cityline at Tenley	Washington, D.C.	\$63,100,000	\$63,700,000	\$63,700,000	4Q05	September-17	\$1,831,176
Ridgehaven Shopping Center	Minnetonka, MN	\$42,940,000	\$42,300,000	\$42,300,000	4Q05	September-17	\$1,215,993
The Beacon Retail	San Francisco, CA	\$68,496,378	\$68,430,894	\$68,430,894	1Q06	September-17	\$1,967,174
The Beacon Garage (units)	San Francisco, CA	\$36,103,622	\$36,069,106	\$36,069,106	1006	September 17	\$1,036,874
The Beacon Office (210 King)	San Francisco, CA	\$25,000,000	\$25,300,000	\$25,300,000	1Q15	September-17	\$727,296
Hawthorne Plaza	Overland Park, KS	\$52,925,000	\$51,525,000	\$51,525,000	4007	September-17	\$1,481,182
The Loop	Boston MA - NH	\$92,800,000	\$89,000,000	\$89,000,000	1Q08	September 17	\$2,558,471
Westbank Market	Austin, TX	\$62,000,000	\$62,000,000	\$62,000,000	3Q10	September-17	\$1,782,306
Lake Pointe Village	Houston, TX	\$79,650,000	\$79,350,000	\$79,350,000	4011	September-17	\$983,143
Safeway Kapahulu	Hawaii	\$91,700,000	\$91,400,000	\$55,066,993	4Q11	September-17	\$1,583,004
Safeway Burlingame	San Francisco, CA	\$58,600,000	\$58,600,000	\$35,770,092	4Q11	September-17	\$1,028,278
Shamrock Plaza	Oakland, CA	\$39,500,000	\$39,600,000	\$23,314,913	4011	September-17	\$670,231
Pavilions Marketplace	West Hollywood, CA	\$67,600,000	\$67,600,000	\$42,819,336	1012	September-17	\$1,230,922
130 Prince	New York, NY	\$219,700,000	\$217,000,000	\$217,000,000	2Q12	September-17	\$6,238,071
Safeway Pleasanton	Pleasanton, CA	\$82,800,000	\$82,800,000	\$82,800,000	4Q12	September-17	\$2,380,241
Liberty Wharf	Boston, MA	\$94,900,000	\$94,500,000	\$64,442,969	4Q12	September-17	\$1,852,534
Shops at Legacy	Plano, TX	\$110,690,478	\$110,690,478	\$110,690,478	3013	September-17	\$3,182,005
Pasadena Commons	Pasadena, CA	\$58,800,000	\$60,300,000	\$60,300,000	4Q14	September-17	\$1,733,436
Rush Street Retail	Chicago, IL	\$16,100,000	\$16,400,000	\$16,400,000	4Q14 4Q14	September-17	\$471,449
Legacy West Retail	Plano, TX	\$182,331,898	\$188,811,999	\$148,367,563	1Q15	September-17	\$4,265,103
Legacy West Land	Plano, TX	\$917.188	\$917,929	\$917.929	2017	September-17	\$26,388
131-137 Spring Street	New York, NY	\$236,769,849	\$237,294,192	\$125,765,922	3Q15	September-17	\$3,615,377
Runway at Playa Vista - Retail	Playa Vista, CA	\$121,900,000	\$122,430,000	\$125,765,922	1Q16	September-17	\$1,725,278
139 Spring	New York, NY	\$121,900,000	\$122,430,000	\$126,924,800	1Q16 1Q16	September-17 September-17	\$1,725,278
Clayton Lane	Denver, CO	\$125,933,200	\$126,924,800	\$126,924,800	1Q16 1Q16	September-17	\$3,648,691
4th & Colorado	,		. , ,		1Q16 1Q16		
	Santa Monica, CA	\$13,120,000	\$13,280,000	\$13,280,000		September-17	\$381,758
Shops at Crystals	Las Vegas, NV	\$290,000,000	\$290,000,000	\$152,193,491	2Q16	September-17	\$4,375,087
		\$2,560,519,612	\$2,563,547,726	\$2,034,236,865	<u> </u>		\$57,979,185
	B 46 H = 1 1	A44 671 222 221	444.000.000	A40.000.000			4207
	Portfolio Total	\$11,671,222,281	\$11,882,423,051	\$10,232,247,550	I	1 1	\$293,646,334

eA TIPS / Infl Indexed Fixed Inc Net Accounts



	Return (F	Rank)						
5th Percentile	1.6	2.6	1.6	5.5	2.1	0.3	3.4	5.0
25th Percentile	1.0	2.1	0.1	3.2	1.6	0.1	2.8	4.2
Median	0.9	1.7	-0.7	2.9	1.4	0.0	2.4	4.0
75th Percentile	0.8	1.4	-0.9	2.5	1.1	-0.3	2.1	3.6
95th Percentile	0.6	0.7	-2.4	1.5	0.4	-0.5	1.8	3.1
# of Portfolios	20	20	20	20	18	17	14	10
Brown Brothers HarrimanBBgBarc US TIPS TR	,	,	,	'	,	60) -0.4 (94 25) 0.0 (4	,	, ,



Sector	Account Weight	BBgBarc TIPS Index	Difference
Treasuries	97.9%	100.0%	-2.1%
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*	2.1%	0.0%	2.1%
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	13
Total Market Value	\$ 71,456,823
Current Coupon	1.16
Yield to Maturity	0.28
Average Life	
Duration	7.55
Quality	GOV

BBgBarc TIPS
38
N/A
0.79
0.27
7.73
AAA

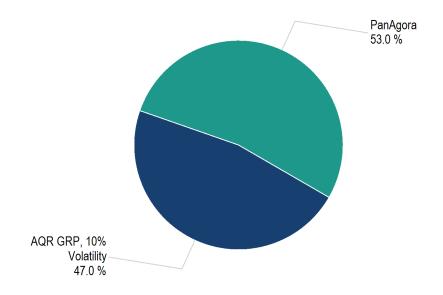
Yield to Maturity	
Range	% Held
0.0 - 5.0	100.0
5.0 - 7.0	0.0
7.0 - 9.0	0.0
9.0 - 11.0	0.0
11.0 - 13.0	0.0
13.0+	0.0
Unclassified	0.0

Average Life	
Range	% Held
0.0 - 3.0	23.1
3.0 - 5.0	14.1
5.0 - 10.0	33.2
10.0- 15.0	16.1
15.0+	13.4
Unclassified	0.0

Duration	
Range	% Held
0.0 - 3.0	23.1
3.0 - 5.0	14.1
5.0 - 10.0	43.2
10.0- 15.0	6.2
15.0+	13.4
Unclassified	0.0

Quality	
Range	% Held
Govt (10)	97.9
Aaa (10)	0.0
Aa (9)	0.0
A (8)	0.0
Baa (7)	0.0
Below Baa (6-1)	0.0
Other	2.1

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	\$142,298,020	47.0%	0.6%
PanAgora	\$160,181,576	53.0%	-0.1%
Actual vs. Policy Weight Difference			0.0%
Total	\$302,479,596	100.0%	0.5%

3 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Risk Parity	5.1%	7.9%	0.6	-0.4	6.6%
Blended Risk Parity Index	7.9%	6.0%	1.3		0.0%
AQR GRP, 10% Volatility	2.9%	7.8%	0.3	-0.8	6.4%
Blended Risk Parity Index	7.9%	6.0%	1.3		0.0%

Statistics Summary

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Risk Parity	4.9%	8.6%	0.5	-0.7	6.8%
Blended Risk Parity Index	9.5%	5.9%	1.6		0.0%
AQR GRP, 10% Volatility	3.5%	8.6%	0.4	-0.9	6.7%
Blended Risk Parity Index	9.5%	5.9%	1.6		0.0%

	3 Mo (%)	YTD (%)	1 Yr (%)	2 Yrs (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Total Fund	3.3	11.0	12.1	11.3	7.4	9.1	5.2
Policy Index	3.7	11.3	12.6	11.8	7.2	8.9	5.6
Allocation Index	3.7	11.2	12.4	11.6	7.0	8.8	
Total Fund ex Overlay	3.3	10.9	12.0	11.1	7.2	9.0	5.1
Policy Index	3.7	11.3	12.6	11.8	7.2	8.9	5.6
Allocation Index	3.7	11.2	12.4	11.6	7.0	8.8	
Public Equity	5.2	17.2	18.5	15.8	9.0	12.0	5.2
Blended Public Equity Index	5.4	17.4	19.7	16.3	8.9	11.8	5.6
US Equity	5.2	13.8	18.6	16.2	10.6	14.0	7.1
Blended US Equity Index	4.6	13.9	18.7	16.7	10.8	14.1	7.6
Russell 3000	4.6	13.9	18.7	16.8	10.7	14.2	7.6
Large Cap Equity	5.0	15.4	19.3	16.9	11.3	14.5	7.2
Russell 1000	4.5	14.2	18.5	16.7	10.6	14.3	7.5
BlackRock Russell 1000	4.5						
Russell 1000	4.5	14.2	18.5	16.7	10.6	14.3	7.5
DE Shaw	7.6	18.4	22.8	20.1	13.8	16.6	
Russell 1000	4.5	14.2	18.5	16.7	10.6	14.3	7.5
Small Cap Equity	5.9	10.5	22.4	16.7	10.0	13.2	7.1
Russell 2000	5.7	10.9	20.7	18.1	12.2	13.8	7.8
QMA US Small Cap	5.9	10.5	22.4				
Russell 2000	5.7	10.9	20.7	18.1	12.2	13.8	7.8
International Equity	5.3	21.9	17.7	14.8	6.1	8.0	1.2
MSCI ACWI ex US IMI	6.4	21.9	20.1	15.1	5.6	7.7	1.9
MSCI EAFE Gross	5.5	20.5	19.7	13.2	5.5	8.9	1.8
Developed Markets	5.1	21.8	17.6	14.6	6.5	8.6	1.5
MSCI ACWI ex USA Gross	6.3	21.6	20.2	14.9	5.2	7.5	1.7
Baillie Gifford	5.1	26.0	17.2	17.1	8.7	10.3	
MSCI ACWI ex US	6.3	21.6	20.2	14.9	5.2	9.0	
MSCI ACWI ex US Growth	6.4	25.2	18.1	15.0	6.8	9.6	



	3 Mo (%)	YTD (%)	1 Yr (%)	2 Yrs (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
BlackRock EAFE Index	5.5	20.4	19.6	13.1	5.4		
MSCI EAFE	5.4	20.0	19.1	12.6	5.0	8.4	1.3
MSCI EAFE Gross	5.5	20.5	19.7	13.2	5.5	8.9	1.8
Mondrian	5.1	18.5	17.3	13.0	4.3	7.2	1.9
MSCI ACWI ex USA Value Gross	6.1	18.3	22.2	14.7	3.5	6.6	1.2
MSCI ACWI ex USA Gross	6.3	21.6	20.2	14.9	5.2	7.5	1.7
Emerging Markets	6.9	22.1	18.9	17.1	2.5	4.1	
MSCI Emerging Markets Gross	8.0	28.1	22.9	20.0	5.3	4.4	1.7
Parametric Core	6.9	22.1	18.9	17.1			
MSCI Emerging Markets Gross	8.0	28.1	22.9	20.0	5.3	4.4	1.7
Fixed Income	1.2	5.2	6.2	6.6	4.3	4.1	5.6
Blended Fixed Income Index	1.2	4.5	2.0	4.7	3.4	2.2	4.6
US Fixed Income	1.3	5.2	5.1	6.4	4.7	4.1	5.7
Blended US Fixed Index	1.1	4.2	2.4	4.9	3.8	2.5	4.8
Core Fixed	1.1	4.3	2.7	4.6	3.7	3.1	4.9
BBgBarc US Aggregate TR	0.8	3.1	0.1	2.6	2.7	2.1	4.3
BlackRock Intermediate Govt	0.4						
FIAM Bond	1.1	3.8	1.0	4.0	3.4	2.9	5.1
Western TRU	2.1	8.1	9.3	7.3			
3-Month Libor Total Return USD	0.3	0.9	1.2	0.9	0.7	0.5	0.9
BBgBarc US Aggregate TR	0.8	3.1	0.1	2.6	2.7	2.1	4.3
Opportunistic Credit	1.7	7.7	10.8	10.3	7.2	9.1	
BBgBarc BA Intermediate HY	1.7	6.1	6.8	8.9	5.9	4.2	
Angelo Gordon Opportunistic	-0.6	7.9	11.0	8.0	6.0		
Angelo Gordon STAR	5.0	15.7	18.5	11.4	10.8		
BBgBarc US Aggregate TR	0.8	3.1	0.1	2.6	2.7	2.1	4.3
Beach Point Select	2.1	6.6	10.7	11.0			
BBgBarc BA Intermediate HY	1.7	6.1	6.8	8.9	5.9	4.2	

	3 Mo (%)	YTD (%)	1 Yr (%)	2 Yrs (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Brigade Capital	1.4	7.2	10.1	11.5	5.2	6.0	
BBgBarc BA Intermediate HY	1.7	6.1	6.8	8.9	5.9	4.2	
50% Barclays HY/ 50% Bank Loan	1.5	5.0	7.1	8.1	4.9	5.4	
PIMCO Diversified			-				
Blended PIMCO Diversified Index	1.9	6.5	4.7	8.3	5.3	5.0	6.8
BBgBarc BA Intermediate HY	1.7	6.1	6.8	8.9	5.9	4.2	
Private Credit	0.8	4.6	5.4				
BBgBarc BA Intermediate HY	1.7	6.1	6.8	8.9	5.9	4.2	
TCP Direct Lending VIII	2.7	6.7	7.5				
White Oak Yield	-4.6		-				
BBgBarc BA Intermediate HY	1.7	6.1	6.8	8.9	5.9	4.2	
Global Fixed Income	1.3	5.5	12.4	7.8	2.2	3.7	
BBgBarc Multiverse TR	1.9	6.6	-0.6	4.2	1.6	0.8	3.5
Franklin Templeton	1.3	5.5	12.4	7.8	2.2	3.7	
BBgBarc Multiverse TR	1.9	6.6	-0.6	4.2	1.6	0.8	3.5
Risk Parity	3.7	9.8	5.6	10.0	5.1	5.0	
Blended Risk Parity Index	3.2	10.3	11.8	11.5	7.9	9.5	
AQR GRP, 10% Volatility	4.5	10.8	8.2	9.1	2.9	3.6	
PanAgora	3.0	9.0	3.3	10.8	7.3		
Blended Risk Parity Index	3.2	10.3	11.8	11.5	7.9	9.5	
Blended RP Secondary Index	3.1	9.5	9.7	9.7	5.7	7.7	
Alternatives	1.7	8.0	12.1	8.0	8.2	6.1	
Alternatives Allocation Index	3.5	10.0	13.6	11.2	5.8	6.4	
Blended Alternatives Index	3.6	10.2	14.0	11.3	6.4	8.2	
Private Equity	0.6	12.0	17.6	13.1	17.6	15.2	
Russell 3000 +3%	5.6	15.9	21.7	19.8	13.7	17.2	10.6
Hedge Fund/Absolute Return	2.8	3.5	5.8	3.3	6.8	6.8	
Libor 1 month +4%	1.2	3.7	4.9	4.6	4.5	4.4	



	3 Mo (%)	YTD (%)	1 Yr (%)	2 Yrs (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
AQR DELTA XN	4.0	4.2	6.7	4.2	7.5	7.2	
Libor 1 month +4%	1.2	3.7	4.9	4.6	4.5	4.4	
Aberdeen Standard GARS	0.3	1.7	3.6				
Libor 1 month +4%	1.2	3.7	4.9	4.6	4.5	4.4	
Inflation Hedge	2.4	5.8	7.4				
Blended Inflation Pool Index	3.2	5.9	7.0				
Real Estate	1.6	6.2	8.5	9.2	11.4	11.9	5.3
NCREIF ODCE	1.9	5.4	7.7	8.9	10.8	11.6	5.6
Invesco	1.5	6.0	8.3	8.9	11.2	11.8	5.3
NCREIF ODCE	1.9	5.4	7.7	8.9	10.8	11.6	5.6
Invesco US Val IV	5.6	10.6	12.1				
NCREIF ODCE	1.9	5.4	7.7	8.9	10.8	11.6	5.6
NCREIF CEVA 1Q Lag - NET	2.6	6.9	9.7	11.6	13.5		
PGIM RE US Debt Fund			-				
NCREIF ODCE	1.9	5.4	7.7	8.9	10.8	11.6	5.6
Private Real Asset	-3.1	-0.4	-0.4	17.8	14.1	-	
Blended Real Asset Index	5.1	7.8	8.9	7.8	6.5		
Liquid Pool	5.6	9.1	-	-	-	-	
Blended Real Asset Index	5.1	7.8	8.9	7.8	6.5		-
SSgA Custom Real Asset	5.6	9.1	-				
Blended Real Asset Index	5.1	7.8	8.9	7.8	6.5		
TIPS	0.8	1.3	8.0	3.1	1.5	-0.3	
BBgBarc US TIPS TR	0.9	1.7	-0.7	2.9	1.6	0.0	3.9
Brown Brothers Harriman	0.8	1.3	0.8	3.1	1.5	-0.3	
BBgBarc US TIPS TR	0.9	1.7	-0.7	2.9	1.6	0.0	3.9
Cash	0.2	0.7	0.9	1.1	1.0	0.8	0.7
91 Day T-Bills	0.3	0.6	0.7	0.5	0.3	0.2	0.4
General Account	0.5	1.1	1.3	1.7	1.4	0.9	1.0
Treasury & LAIF	0.3	1.0	0.7	0.8	0.9	8.0	0.7
91 Day T-Bills	0.3	0.6	0.7	0.5	0.3	0.2	0.4



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.

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 - Intermediate Government Index

The Intermediate Government Index Fund seeks to track the results of an index composed of U.S. dollar-denominated government, government related, and investment grade U.S. corporate bonds with maturities between 1 and 10 years.

BlackRock - Russell 1000 Index

The Russell 1000 Index Fund tracks large U.S. companies and achieve broad diversification with low costs by fully replicating the Russell 1000 Index.

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 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.

PGIM RE Debt

PGIM Real Estate US Debt Fund focuses on a loan origination strategy with a mix of 20% senior long duration loans on stable assets, 60% senior short/medium duration loans on stable and transitional assets, and 20% mezzanine mid/long duration debt.



PIMCO Diversified

PIMCO Diversified Income Fund offers a broad and flexible multi-credit approach in a liquid and cost-effective format. The Diversified Income Fund seeks to produce consistent above benchmark performance using diversified sources of alpha from a universe that includes global credit as well as "non-core" credit sectors (ex., securitized, emerging markets).

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 Aberdeen Global Absolute Return Strategy (GARS)

The Standard Life Aberdeen 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.

White Oak - White Oak Yield Spectrum Fund

The White Oak Yield Spectrum Fund's objective is to earn substantial current income by originating, extending, and/or investing in a diversified portfolio of primarily senior secured corporate credit and debt instruments consisting of term loans, asset based loans and equipment leases and loans issued by small to middle-market companies located primarily in the United States and Canada. It focuses on providing self-originated deals for predominantly non-sponsored, privately-held borrowers.



Total Plan Policy Index	As of															
•	2/1/17	1/1/17	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%	0.0%	0.0%	8.0%	10.0%	10.0%
60/40 MSCI World/BBgBarc Global Aggregate (RP)	8.0%	8.0%	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%	0.0%
60/40 Russell 3000/BBgBarc US Aggregate (RP)	0.0%	0.0%	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	12.0%	10.0%	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%	6.0%	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%	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%	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%	3.0%	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%	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%	0.0%	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%	0.0%	0.0%	5.0%	9.0%	9.0%
CPI + 5% (RA)	0.0%	0.0%	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	7.0%	5.0%	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)	6.0%	5.0%	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%	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%	19.0%	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%	0.0%	0.0%	20.0%	20.0%	20.0%
NCREIF ODCE	7.0%	7.0%	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%	0.0%	0.0%	6.0%	6.0%	0.0%	0.0%	0.0%
Russell 1000	0.0%	0.0%	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%	0.0%	0.0%	5.0%	5.0%	0.0%
Russell 2000	0.0%	0.0%	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	23.0%	28.0%	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%	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%	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%	100.0%	100.0%

Total Equity Benchmark	As of:	40/4/40	011110	41414	414.44	40///40	514105	0/4/00	0/4/00	0/4/00	4/4/00
MCCLACIALL SYLLIC	2/1/17	10/1/16	9/1/16	1/1/16 0.0%	1/1/14 0.0%	10/1/10	5/1/07 31.3%	6/1/00	3/1/99	9/1/98	1/1/96 0.0%
MSCI ACWI ex-US	0.0%	0.0%	0.0%			34.0% 0.0%		23.1%	0.0%	0.0%	0.0%
MSCI ACWI ex-US IMI	45.2% 0.0%	40.4% 0.0%	41.7%	41.7% 0.0%	40.0% 0.0%		0.0%	0.0%	0.0%	0.0%	
MSCI EAFE			0.0%			0.0%	0.0%	0.0%	32.3%	33.3%	33.3% 33.3%
Russell 1000	0.0%	0.0%	0.0%	50.0%	48.0%	52.8%	55.2%	61.5%	35.5%	33.3%	
Russell 1000 Value	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8.0%	8.4%	0.0%
Russell 2000	0.0%	0.0%	0.0%	8.3%	12.0%	13.2%	13.5%	15.4%	24.2%	25.0%	25.0%
Russell 3000	54.8%	59.6%	58.3%	0.0%	0.0%	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%	8.4%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
US Equity Benchmark	As of:										
	9/1/16	1/1/16	6/1/00	3/1/99	9/1/98	7/1/96	1/1/95				
Russell 1000	0.0%	85.7%	80.0%	52.0%	50.0%	50.0%	69.0%				
Russell 1000 Value	0.0%	0.0%	0.0%	12.0%	12.5%	0.0%	0.0%				
Russell 2000	0.0%	14.3%	20.0%	36.0%	37.5%	37.5%	14.0%				
Russell 3000	100.0%	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%	12.5%	17.0%				
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%				
International Equity Benchmark	As of:										
	1/1/14	6/1/00	1/1/96								
MSCI ACWI ex US	0.0%	100.0%	0.0%								
MSCI ACWI ex US IMI	100.0%	0.0%	0.0%								
MSCI EAFE	0.0%	0.0%	100.0%								
	100.0%	100.0%	100.0%								
Total Fixed Income Benchmark	As of:										
	2/1/17	10/1/16	4/1/16	7/1/14	1/1/14	2/1/13	1/1/11	10/1/10	6/1/00	3/1/99	7/1/96
BBgBarc Aggregate	57.1%	52.6%	55.5%	50.0%	46.3%	50.0%	50.0%	58.6%	100.0%	83.3%	70.0%
BBgBarc BA Intermediate HY	28.6%	31.6%	27.8%	25.0%	25.0%	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%	7.3%	0.0%	0.0%	0.0%
BBgBarc Credit BAA	0.0%	0.0%	0.0%	0.0%	0.0%	16.0%	15.0%	0.0%	0.0%	0.0%	0.0%
BBgBarc Multiverse	14.3%	15.8%	16.7%	15.0%	18.8%	20.0%	20.0%	20.5%	0.0%	0.0%	0.0%
				40.00/		44.00/	15.0%	13.6%	0.0%	0.0%	
BBgBarc TIPS	0.0%	0.0%	0.0%	10.0%	10.0%	14.0%	15.0%	13.0%	0.070	0.0%	0.0%
	0.0% 0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	16.7%	0.0% 30.0%

US Fixed Income Benchmark	As of:								
	2/1/17	10/1/16	4/1/16	7/1/14	1/1/14	2/1/13	1/1/11	10/1/10	7/1/96
BBgBarc Aggregate	66.7%	62.5%	66.7%	58.8%	56.9%	62.5%	62.5%	73.7%	100.0%
BBgBarc BA Intermediate HY	33.3%	37.5%	33.3%	29.4%	30.8%	0.0%	0.0%	0.0%	0.0%
BBgBarc BBB	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	9.1%	0.0%
BBgBarc Credit BAA	0.0%	0.0%	0.0%	0.0%	0.0%	20.0%	18.8%	0.0%	0.0%
BBgBarc TIPS	0.0%	0.0%	0.0%	11.8%	12.3%	17.5%	18.8%	17.2%	0.0%
	100.0%	100.0%	100.0%	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:				
-	1/1/17	10/1/10			
BBgBarc Aggregate	0.0%	40.0%			
BBgBarc Global Aggregate	40.0%	0.0%			
MSCI World	60.0%	0.0%			
Russell 3000	0.0%	60.0%			
	100.0%	100.0%			
Alternatives Benchmark	As of:				
	2/1/17	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%	0.0%	30.0%
Bloomberg Commodity	0.0%	0.0%	17.7%	18.8%	15.0%
CPI + 5% (RA)	0.0%	0.0%	11.8%	12.5%	0.0%
Libor +4% (HF)	46.2%	41.7%	29.4%	25.0%	15.0%
Russell 3000 +3% (PE)	53.8%	58.3%	41.2%	43.8%	40.0%
	100.0%	100.0%	100.0%	100.0%	100.0%
Private Equity Benchmark	As of:				
ato Equity Dollorillian	10/1/10				
Russell 3000 +3%	100.0%				
	100.0%				

10/1/10	Hedge Fund Benchmark	As of:		
Inflation Hedge		10/1/10		
Inflation Hedge	Libor +4%	100.0%		
2/1/17		100.0%		
BBgBarc TIPS 12.50% 14.3% 14.3% 14.3% 16.3	Inflation Hedge	As of:		
Bloomberg Commodity		2/1/17	10/1/16	4/1/16
CPI + 5% (RA) 0.00% 0.0% 14.3% Bloomberg Roll Select Commodity 14.87% 12.1% 21.4% S&P Global Large-MidCap Commodity and Resource 14.44% 11.8% 14.3% S&P Global Infrastructure 14.44% 11.8% 0.0% NCREIF ODCE 43.75% 50.0% 50.0% 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% Real Estate Benchmark As of: 1/1/09 6/1/00 7/1/96 10 Year Treasury +2% 0.0% 0.0% 0.0% NCREIF ODCE 100.0% 0.0% 0.0% NCREIF Property 0.0% 100.0% 0.0%	BBgBarc TIPS	12.50%	14.3%	14.3%
Bloomberg Roll Select Commodity	Bloomberg Commodity	0.00%	0.0%	21.4%
S&P Global Large-MidCap Commodity and Resource 14.44% 11.8% 14.3% S&P Global Infrastructure 14.44% 11.8% 0.0% NCREIF ODCE 43.75% 50.0% 50.0% Real Asset Benchmark As of: 10/1/16 1/1/1/14 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% CPI + 5% 0.0% 100.0% Real Estate Benchmark As of: 1/1/09 6/1/00 7/1/96 10 Year Treasury +2% 0.0% 0.0% 100.0% NCREIF ODCE 100.0% 0.0% 0.0% NCREIF Property 0.0% 100.0% 0.0%	CPI + 5% (RA)	0.00%	0.0%	14.3%
S&P Global Infrastructure 14.44% 11.8% 0.0% NCREIF ODCE 43.75% 50.0% 50.0% 100.0% 100.0% 135.7% Real Asset Benchmark As of:	Bloomberg Roll Select Commodity	14.87%	12.1%	21.4%
NCREIF ODCE 43.75% 50.0% 50.0% 100.0% 100.0% 135.7% Real Asset Benchmark As of:	S&P Global Large-MidCap Commodity and Resource	14.44%	11.8%	14.3%
100.0% 100.0% 135.7% Real Asset Benchmark As of:	S&P Global Infrastructure	14.44%	11.8%	0.0%
Real Asset Benchmark As of: 10/1/16 1/1/14 Bloomberg Roll Select Commodity 34.00% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%	NCREIF ODCE	43.75%	50.0%	50.0%
10/1/16		100.0%	100.0%	135.7%
10/1/16				
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% Real Estate Benchmark As of: 1/1/09 6/1/00 7/1/96 10 Year Treasury +2% 0.0% 0.0% 100.0% NCREIF ODCE 100.0% 0.0% 0.0% NCREIF Property 0.0% 100.0% 0.0%	Real Asset Benchmark	As of:		
S&P Global Infrastructure 33.00% 0.0% CPI + 5% 0.00% 100.0% Real Estate Benchmark As of: 1/1/09 6/1/00 7/1/96 10 Year Treasury +2% 0.0% 0.0% 100.0% NCREIF ODCE 100.0% 0.0% 0.0% NCREIF Property 0.0% 100.0% 0.0%	Real Asset Benchmark		1/1/14	
CPI + 5% 0.00% 100.0% 0.0% 100.0% 100.0% Real Estate Benchmark As of: 1/1/09 6/1/00 7/1/96 10 Year Treasury +2% 0.0% 0.0% 100.0% NCREIF ODCE 100.0% 0.0% 0.0% NCREIF Property 0.0% 100.0% 0.0%		10/1/16		
Real Estate Benchmark As of: 1/1/09 6/1/00 7/1/96 10 Year Treasury +2% 0.0% 0.0% 100.0% NCREIF ODCE 100.0% 0.0% 0.0% NCREIF Property 0.0% 100.0% 0.0%	Bloomberg Roll Select Commodity	10/1/16 34.00%	0.0%	
Real Estate Benchmark As of: 1/1/09 6/1/00 7/1/96 10 Year Treasury +2% 0.0% 0.0% 100.0% NCREIF ODCE 100.0% 0.0% 0.0% NCREIF Property 0.0% 100.0% 0.0%	Bloomberg Roll Select Commodity S&P Global Large-MidCap Commodity and Resource	10/1/16 34.00% 33.00%	0.0%	
1/1/09 6/1/00 7/1/96 10 Year Treasury +2% 0.0% 0.0% 100.0% NCREIF ODCE 100.0% 0.0% 0.0% NCREIF Property 0.0% 100.0% 0.0%	Bloomberg Roll Select Commodity S&P Global Large-MidCap Commodity and Resource S&P Global Infrastructure	10/1/16 34.00% 33.00% 33.00%	0.0% 0.0% 0.0%	
1/1/09 6/1/00 7/1/96 10 Year Treasury +2% 0.0% 0.0% 100.0% NCREIF ODCE 100.0% 0.0% 0.0% NCREIF Property 0.0% 100.0% 0.0%	Bloomberg Roll Select Commodity S&P Global Large-MidCap Commodity and Resource S&P Global Infrastructure	10/1/16 34.00% 33.00% 33.00% 0.00%	0.0% 0.0% 0.0% 100.0%	
10 Year Treasury +2% 0.0% 0.0% 100.0% NCREIF ODCE 100.0% 0.0% 0.0% NCREIF Property 0.0% 100.0% 0.0%	Bloomberg Roll Select Commodity S&P Global Large-MidCap Commodity and Resource S&P Global Infrastructure CPI + 5%	10/1/16 34.00% 33.00% 33.00% 0.00%	0.0% 0.0% 0.0% 100.0%	
NCREIF ODCE 100.0% 0.0% 0.0% NCREIF Property 0.0% 100.0% 0.0%	Bloomberg Roll Select Commodity S&P Global Large-MidCap Commodity and Resource S&P Global Infrastructure CPI + 5%	10/1/16 34.00% 33.00% 33.00% 0.00% 0.00% As of:	0.0% 0.0% 0.0% 100.0%	
NCREIF Property 0.0% 100.0% 0.0%	Bloomberg Roll Select Commodity S&P Global Large-MidCap Commodity and Resource S&P Global Infrastructure CPI + 5% Real Estate Benchmark	10/1/16 34.00% 33.00% 33.00% 0.00% 0.00% As of: 1/1/09	0.0% 0.0% 0.0% 100.0%	
	Bloomberg Roll Select Commodity S&P Global Large-MidCap Commodity and Resource S&P Global Infrastructure CPI + 5% Real Estate Benchmark 10 Year Treasury +2%	10/1/16 34.00% 33.00% 33.00% 0.00% 0.00% As of: 1/1/09 0.0%	0.0% 0.0% 0.0% 100.0% 100.0%	100.0%
100.0% 100.0% 100.0%	Bloomberg Roll Select Commodity S&P Global Large-MidCap Commodity and Resource S&P Global Infrastructure CPI + 5% Real Estate Benchmark 10 Year Treasury +2% NCREIF ODCE	10/1/16 34.00% 33.00% 33.00% 0.00% 0.00% As of: 1/1/09 0.0% 100.0%	0.0% 0.0% 0.0% 100.0% 100.0%	100.0%
	Bloomberg Roll Select Commodity S&P Global Large-MidCap Commodity and Resource S&P Global Infrastructure CPI + 5% Real Estate Benchmark 10 Year Treasury +2% NCREIF ODCE	10/1/16 34.00% 33.00% 33.00% 0.00% 0.0% As of: 1/1/09 0.0% 100.0% 0.0%	0.0% 0.0% 0.0% 100.0% 100.0% 6/1/00 0.0% 0.0% 100.0%	100.0% 0.0% 0.0%

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%
Deillie Cifford Coordon, Donaharada	A	
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%
MOOFE EATE GROWTH	100.0%	100.0%
	1001070	1001070
Brigade Secondary Benchmark	As of:	
,	8/1/10	
BBgBarc High Yield	50.0%	
Credit Suisse Leveraged Loans	50.0%	
	100.0%	
AQR GRP, 10% Volatility	As of:	
DD-D A	1/1/17	3/1/11
BBgBarc Aggregate	0.0% 40.0%	40.0% 0.0%
BBgBarc Global Aggregate MSCI World	40.0% 60.0%	0.0%
Russell 3000	0.0%	60.0%
Trassell 5000	100.0%	100.0%
	100.070	100.070
PanAgora	As of:	
·	1/1/17	8/1/14
BBgBarc Aggregate	0.0%	40.0%
BBgBarc Global Aggregate	40.0%	0.0%
MSCI World	60.0%	0.0%
Russell 3000	0.0%	60.0%
	100.0%	100.0%
PIMOO Pinoo Ifford		
PIMCO Diversified	As of:	
JPMorgan EMBI Global	9/1/17 33.3%	
BofAMLBB-BRatedDvlpdMktsHYHdgdUSD	33.3%	
Global Agg Credit Ex EM USD hedged	33.4%	
Siddal rigg Stould Ex Elvi GOD Hougod	100.0%	
	100.070	



Baillie Gifford	
First \$25 million:	0.60% per annum
Next \$75 million:	0.50% per annum
Next \$300 million:	0.40% per annum
Thereafter:	0.30% per annum
BlackRock-EAFE Equity Index Fund	
On All Assets:	0.05% per annum
BlackRock-Russell 1000 Index Fund	
First \$250 million:	0.02% per annum
Thereafter:	0.015% per annum
BlackRock-Intermediate Govt Bond Index Fund	
On All Assets:	0.04% per annum
Brown Brothers Harriman	
On All Assets:	0.15% per annum

Clifton Group	
First \$50 million:	0.12% per annum
Next \$100 million:	0.10% per annum
Thereafter:	0.05% per annum
Plus monthly reporting fee of \$1500	
Franklin Templeton Investment	
First \$50 million:	0.45% per annum
Next \$50 million:	0.35% per annum
Thereafter:	0.30% per annum
FIAM Bond	
First \$50 million:	0.20% per annum
Next \$50 million:	0.175% per annum

Next \$100 million:

Thereafter:

0.10% per annum

0.085% per annum

<u>Parametric</u>	
On All Assets:	0.30% per annum
<u>QMA</u>	
First \$50 million:	0.55% per annum
Thereafter:	0.50% per annum
Western Asset Management	
	0.25% per appum
On All Assets:	0.25% per annum
On All Assets: Performance Fee:	20.00%
	•
01171117100010.	•
Performance Fee:	•
Performance Fee:	•
Performance Fee: Mondrian Investment Partners	•
Performance Fee: Mondrian Investment Partners Assets Below \$190 million	20.00%
Performance Fee: Mondrian Investment Partners Assets Below \$190 million First \$20 million:	20.00% 1.00% per annum
Performance Fee: Mondrian Investment Partners Assets Below \$190 million First \$20 million:	20.00% 1.00% per annum
Performance Fee: Mondrian Investment Partners Assets Below \$190 million First \$20 million: Thereafter:	20.00% 1.00% per annum
Performance Fee: Mondrian Investment Partners Assets Below \$190 million First \$20 million: Thereafter: Assets Above \$190 million	20.00% 1.00% per annum 0.33% per annum

Name	Primary Benchmark	Rule 1	Rule 2	Rule 3
DE Shaw	Russell 1000	\checkmark	\checkmark	\checkmark
QMA US Small Cap	Russell 2000			
Baillie Gifford	MSCI ACWI ex US	\checkmark	\checkmark	R
Mondrian	MSCI ACWI ex USA Value Gross	\checkmark	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	R
TCP Direct Lending VIII	BBgBarc BA Intermediate HY			
White Oak Yield	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
DE Shaw	Russell 1000	\checkmark	\checkmark	\checkmark
QMA US Small Cap	Russell 2000			
Baillie Gifford	MSCI ACWI ex US	\checkmark	\checkmark	\checkmark
Mondrian	MSCI ACWI ex USA Value Gross	\checkmark	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	\checkmark	R
TCP Direct Lending VIII	BBgBarc BA Intermediate HY	-		
White Oak Yield	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>Jul</u>	<u>Aug</u>	<u>Sep</u>	3rd Qtr. 2017	Difference	2nd Qtr. 2017	Difference	1st Qtr. 2017	<u>Difference</u>	4th Qtr. 2016	<u>Difference</u>	3rd Qtr. 2016	Difference
Verus	1.98%	0.31%	2.14%	4.49%	1	3.07%	1						
BlackRock Russell 1000	1.98%	0.31%	2.14%	4.49%	0.00%	3.07%	0.00%						
Russell 1000 Index	1.98%	0.31%	2.14%	4.48%	0.00 %	3.07%	0.00 /6]						
] 1] 1		1		1		1
Verus	2.34%	2.63%	2.44%	7.60%		2.79%		7.02%		3.76%		5.32%	
D.E. Shaw	2.34%	2.63%	2.45%	7.60%	0.00%	2.79%	0.00%	7.02%	0.00%	3.76%	0.00%	5.33%	-0.01%
Russell 1000 Index	1.98%	0.31%	2.13%	4.48%	J	3.07%		6.02%		3.83%		4.03%	
Verus	1.02%	-1.35%	6.30%	5.94%	1	1.82%	1	2.46%	1	10.64%	1		
QMA US Small Cap (Net)	1.03%	-1.35%	6.30%	5.95%	-0.01%	1.82%	0.00%	2.46%	0.00%	10.64%	-0.01%		
Russell 2000 Index	0.74%	-1.27%	6.24%	5.67%	-0.0176	2.46%	0.0076	2.47%	0.0076	8.83%	-0.0176		
					J 1		J 1		J 1		J 1		1
Verus	2.86%	1.05%	1.15%	5.14%		8.83%		10.12%		-7.01%		8.50%	
Baillie Gifford	2.93%	0.99%	1.13%	5.12%	0.02%	8.80%	0.03%	10.07%	0.01%	-7.01%	0.00%	8.55%	-0.05%
MSCI ACWI ex US	3.71%	0.55%	1.89%	6.25%		5.99%		7.98%		-1.20%		7.00%	
MSCI ACWI ex US Growth	3.47%	1.02%	1.78%	6.39%	J	7.74%	J	9.22%	J	-5.68%	J	6.11%	
Verus	2.90%	-0.02%	2.52%	5.47%]	6.32%		7.38%		-0.66%		6.49%	
BlackRock EAFE Equity	2.90%	-0.02%	2.52%	5.47%	0.00%	6.32%	0.00%	7.38%	0.00%	-0.65%	-0.01%	6.49%	0.00%
MSCI EAFE (Net)	2.88%	-0.04%	2.49%	5.40%		6.12%		7.25%		-0.71%		6.43%	
MSCI EAFE (Gross)	2.89%	-0.02%	2.53%	5.47%		6.37%		7.39%		-0.68%		6.51%	
Verus	2.91%	-0.72%	2.83%	5.05%]	4.26%]	8.23%]	-1.01%		3.99%	
Mondrian	2.92%	-0.72%	2.84%	5.08%	-0.03%	4.29%	-0.03%	8.23%	0.00%	-0.97%	-0.04%	4.00%	-0.01%
MSCI ACWI -ex US Value Index	3.95%	0.07%	2.01%	6.11%		4.33%		6.82%		3.36%		7.92%	
MSCI ACWI -ex US	3.71%	0.55%	1.89%	6.25%	1	5.99%		7.98%		-1.20%		7.00%	
Verus	5.17%	2.34%	-0.67%	6.91%	j	3.44%	, I	10.39%	, I	-2.58%	j	5.41%	
Parametric Core	5.18%	2.36%	-0.65%	6.96%	-0.05%	3.47%	-0.03%	10.33%	0.00%	-2.54%	-0.04%	5.47%	-0.06%
MSCI EM Market Index	6.04%	2.27%	-0.37%	8.04%	-0.0070	6.38%	-0.0070	11.49%	0.0070	-4.08%	-0.0470	9.15%	-0.0070
IVIOOI LIVI MAIKELIIIUEX	0.04 /0	2.21 /0	-0.01 /0	0.0470	J	0.0070	J	11.40/0	J	-4.00/0	J	9.1070	I

	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	3rd Qtr. 2017	<u>Difference</u>	2nd Qtr. 2017	<u>Difference</u>	1st Qtr. 2017	<u>Difference</u>	4th Qtr. 2016	Difference	3rd Qtr. 2016	<u>Difference</u>
Verus BlackRock Intermediate Govt BBgBarc US Aggregate Index	0.34% 0.34% 0.43%	0.63% 0.63% 0.90%	-0.56% -0.56% -0.48%	0.40% 0.41% 0.85%	-0.01%	0.73% 0.73% 1.45%	0.00%						
Verus FIAM Bond BBgBarc US Aggregate Index	0.62% 0.62% 0.43%	0.91% 0.90% 0.90%	-0.39% -0.39% -0.48%	1.13% 1.13% 0.85%	0.00%	1.36% 1.36% 1.45%	0.00%	1.24% 1.24% 0.82%	0.00%	-2.66% -2.66% -2.98%	0.00%	1.27% 1.27% 0.46%	0.00%
Verus Western TRU 3-Month Libor Total Return USD Index	0.70% 0.70% 0.11%	0.80% 0.80% 0.11%	0.58% 0.58% 0.11%	2.09% 2.09% 0.34%	0.00%	3.54% 3.54% 0.31%	0.00%	2.25% 2.25% 0.27%	0.00%	1.09% 1.09% 0.24%	0.00%	2.67% 2.67% 0.21%	0.00%
BBgBarc US Aggregate Index Verus (Net) Angelo Gordon Opportunistic BBgBarc US Aggregate Index	0.43%	0.90%	-0.48%	0.85% -0.59% -0.59% 0.85%	0.00%	1.45% 4.18% 4.18% 1.45%	0.00%	0.82% 4.34% 4.34% 0.82%	0.00%	-2.98% 2.54% 2.54% -2.98%	0.00%	0.46% 5.38% 5.38% -0.06%	0.00%
Verus (Net) Angelo Gordon STAR Fund (Net) BBgBarc US Aggregate Index				4.96% 4.96% 0.85%	0.00%	6.13% 6.13% 1.45%	0.00%	4.58% 4.58% 0.82%	0.00%	1.99% 1.99% -2.98%	0.00%	5.17% 5.17% -0.06%	0.00%
Verus Beach Point Select (Net) BBgBarc BA Intermediate HY	0.80% 0.80% 0.88%	0.47% 0.47% 0.19%	0.79% 0.79% 0.64%	2.07% 2.07% 1.72%	0.00%	1.95% 1.95% 2.50%	0.00%	2.45% 2.45% 1.76%	0.00%	3.56% 3.56% 0.63%	0.00%	5.50% 5.25% 4.04%	0.25%
Verus Brigade Capital (Net) BBgBarc BA Intermediate HY 50% BBgBarc HY/ 50% Bank Loan	0.98% 0.98% 0.88% 0.95%	-0.26% -0.24% 0.19% -0.09%	0.69% 0.70% 0.64% 0.65%	1.40% 1.44% 1.72% 1.52%	-0.04%	1.83% 1.77% 2.50% 1.46%	0.06%	3.84% 3.77% 1.76% 1.95%	0.01%	2.50% 2.50% 0.63% 2.00%	0.00%	7.15% 7.09% 4.04% 4.32%	0.06%
Verus TCP Direct Lending VIII BBgBarc BA Intermediate HY				2.69% 2.69% 1.72%	0.00%	2.65% 2.65% 2.50%	0.00%	2.06% 2.06% 1.76%	0.00%	0.17% 0.17% 0.63%	0.00%		-
Verus White Oak Yield BBgBarc BA Intermediate HY				-4.64% -4.64% 1.72%	0.00%								



	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	3rd Qtr. 2017	<u>Difference</u>	2nd Qtr. 2017	<u>Difference</u>	1st Qtr. 2017	<u>Difference</u>	4th Qtr. 2016	<u>Difference</u>	3rd Qtr. 2016	<u>Difference</u>
Verus	-0.55%	-0.08%	1.89%	1.25%]	-0.98%		5.27%]	6.49%]	-0.13%	
Franklin Templeton Investments	-0.55%	-0.08%	1.89%	1.25%	0.00%	-0.98%	0.00%	5.27%	0.00%	6.49%	0.00%	-0.13%	0.00%
BBgBarc Multiverse	1.71%	0.97%	-0.80%	1.88%		2.64%		1.90%		-6.68%		1.05%	
Verus	2.75%	1.89%	-0.21%	4.47%]	1.46%		4.57%]	-2.38%		2.23%]
AQR GRP, 10% Volatility (Net)	2.75%	1.89%	-0.21%	4.47%	0.00%	1.46%	0.00%	4.57%	0.00%	-2.39%	0.00%	2.24%	-0.01%
60% R3000/ 40% BBgBarc Agg	1.57%	0.45%	1.16%	3.21%		2.39%		3.76%		1.34%		2.82%	
60% MSCI World/ 40% BBgBarc Glb	1.30%	0.47%	1.27%	3.08%		2.80%		3.98%]	0.17%		3.13%	
Verus	1.37%	2.64%	-1.02%	2.98%]	1.60%		4.16%]	-5.19%]	2.20%]
PanAgora (Net)	1.37%	2.64%	-1.02%	2.98%	0.00%	1.60%	0.00%	4.16%	0.00%	-5.19%	0.00%	2.20%	0.00%
60% R3000/ 40% BBgBarc Agg	1.57%	0.45%	1.16%	3.21%		2.39%		3.76%		1.34%		2.82%	
60% MSCI World/ 40% BBgBarc Glb	1.30%	0.47%	1.27%	3.08%	1	2.80%		3.98%	1	0.17%		3.13%	
Verus	0.67%	1.34%	1.93%	3.99%	j	-1.19%		1.42%	j	2.38%	,]	1.69%	,]
AQR DELTA XN (Net)	0.67%	1.34%	1.93%	3.99%	0.00%	-1.19%	0.00%	1.43%	0.00%	2.38%	0.00%	1.70%	-0.01%
Libor + 4%	0.45%	0.32%	0.45%	1.22%		1.29%		1.11%		1.17%		1.14%	
Verus	0.78%	-0.15%	-0.29%	0.34%	j	0.81%		0.59%	j	1.80%	ĺ	0.42%	ĺ
Aberdeen Standard GARS (Net)	0.78%	-0.15%	-0.29%	0.34%	0.00%	0.81%	0.00%	0.59%	0.00%	1.80%	0.00%	0.42%	0.00%
Libor + 4%	0.45%	0.32%	0.45%	1.22%		1.29%		1.11%		1.17%		1.14%	
Verus				1.48%	Ì	1.88%		2.55%	ĺ	2.19%	,]	1.68%	,]
INVESCO Real Estate				1.46%	0.02%	1.88%	0.00%	2.54%	0.00%	2.17%	0.02%	1.68%	0.00%
NCREIF NFI ODCE Index				1.87%		1.70%		1.77%		2.11%	0.0270	2.07%	
Verus				5.56%	,]	1.85%		2.90%	,]	1.31%	,]	3.82%)]
Invesco US Val IV				5.56%	0.00%	1.85%	0.00%	2.90%	0.00%	1.31%	0.00%	3.82%	0.00%
NCREIF NFI ODCE Index				1.87%	0.0070	1.70%	0.0070	1.77%	0.0070	2.11%	0.0070	2.07%	0.0070
NCREIF CEVA 1Q Lag - NET				2.61%	1	1.36%		2.75%	1	2.54%		2.17%	
Verus	0.40%	0.67%	-0.31%	0.76%]	-0.58%		1.13%]	-0.55%	i I	1.24%]
Brown Brothers Harriman	0.40%	0.68%	-0.32%	0.76%	0.00%	-0.60%	0.02%	1.13%	0.00%	-0.53%	-0.02%	1.22%	0.02%
BBgBarc U.S Tips	0.44%	1.06%	-0.64%	0.86%	3.3370	-0.40%	5.5270	1.26%	3.5570	-2.41%	3.3270	0.97%	3.3270

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
9/30/2017	17.696	9.979	5.011	2.793	0
6/30/2017	15.834	9.267	4.517	2.573	0
3/31/2017	15.834	9.267	4.517	2.573	0
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
9/30/2017	15.008	7.504	5.500	2.750	0
6/30/2017	15.008	7.504	5.500	2.750	0
3/31/2017	14.361	7.180	5.077	2.538	0
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.

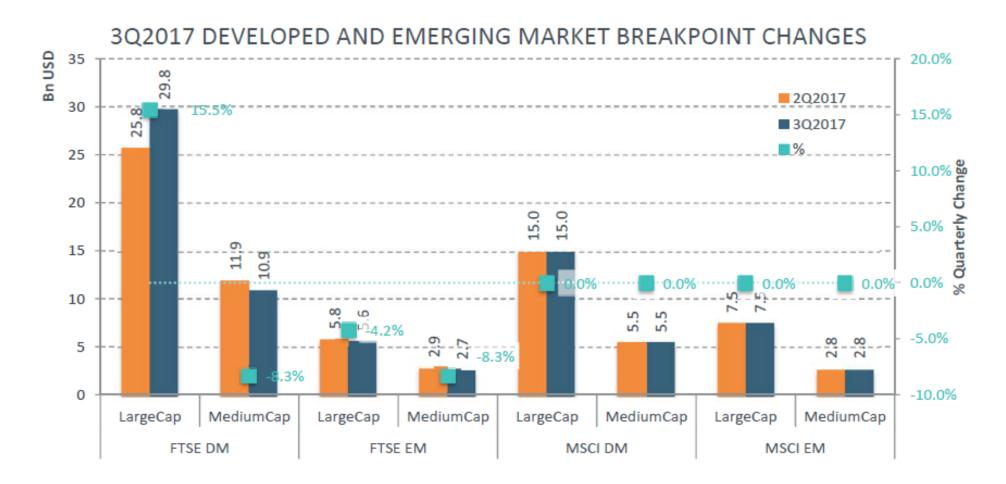
		Medium	Medium	Medium	
As Of	Large Cap	Large Cap	Сар	Small Cap	Small Cap
9/30/2017	93.539	24.882	8.344	2.935	0
6/30/2017	87.845	25.481	8.204	2.859	0
3/31/2017	89.968	25.293	8.241	2.737	0
12/31/2016	84.960	23.168	7.890	2.702	0
9/30/2016	78.745	23.385	7.394	2.533	0
6/30/2016	77.349	22.250	7.1432	2.444	0
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



As Of	Large Cap	Medium Large Cap	Medium Cap	Medium Small Cap	Small Cap
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
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	7.1 5	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

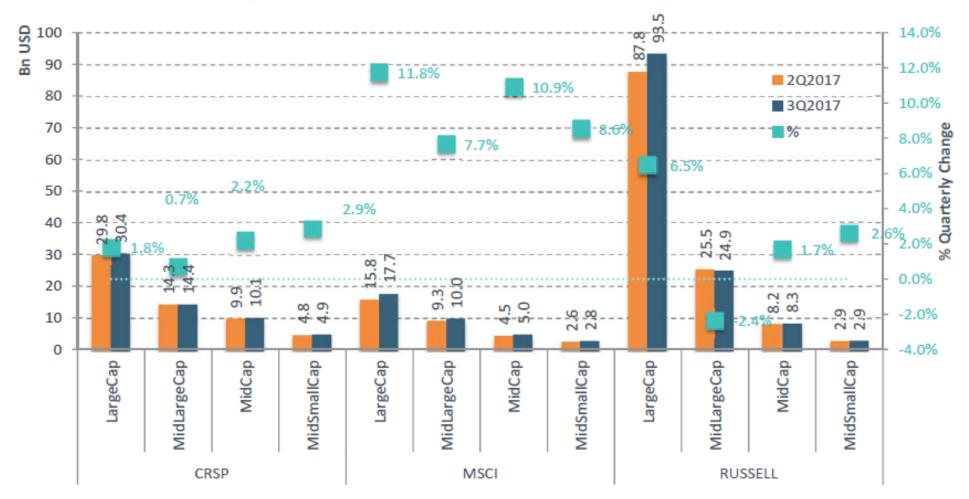
Numbers are billions USD

BREAKPOINT TRENDS



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

3Q2017 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.



Table of contents



VERUSINVESTMENTS.COM

SEATTLE 206-622-3700 LOS ANGELES 310-297-1777 SAN FRANCISCO 415-362-3484

Economic environment	5
Fixed income rates & credit	19
Equity	25
Other assets	37
Appendix	40

3rd quarter summary

THE ECONOMIC CLIMATE

- Growth strengthened across developed and emerging economies. Business surveys suggest conditions are improving in both manufacturing and service industries. p. 17
- The U.S. job market tightened as unemployment dropped from 4.4 to 4.2%, despite disappointing job growth data. Unemployment has not been this low since March of 2001. *p. 9*
- An independence movement in Catalonia has received little attention from the financial community, and risk premiums may not reflect the negative possible knock-on effects on the EU. p. 16

PORTFOLIO IMPACTS

- Improving economic growth, low inflation, low unemployment, and supportive monetary policy across most markets has created a positive environment for global risk assets, justifying a moderate overweight risk position. p. 16
- Within risk assets, we believe opportunities exist in emerging markets. *p. 33*

THE INVESTMENT CLIMATE

- Global interest rates are still at historic lows, and very little monetary tightening is priced in across developed markets over the next few years. Even in the U.S., the market is only expecting two rate hikes through the end of next year. p. 20
- Valuations across global equities and credit are elevated, and have been so for the past few years.
 Further price appreciation through equity multiple expansion or credit spread contraction is unlikely.
 p. 23 & 34

ASSET ALLOCATION ISSUES

- Equity performance remains strong. Year-to-date returns have been fundamentally driven, supported by earnings growth rather than valuation expansion. p. 29
- Equity volatility is near historic lows. Stable economic growth and inflation have likely contributed to the muted volatility environment. Investors should monitor leverage in strategies with a specific volatility target. p. 35

We believe a moderate overweight to risk is warranted

What drove the market in Q3?

"Traders keep bets on Fed rate hike in December after jobs report"

DECEMBER RATE HIKE PROBABILITY BASED ON MARKET PRICING

Apr 30 th	May 31 st	Jun 30 th	Jul 31st	Aug 31st	Oct 6 th
47%	43%	52%	42%	34%	80%

Article Source: Bloomberg, September 27th 2017

"U.S.-North Korea tensions fuel flight to safety"

DAILY PRICE REACTION DURING NORTH KOREA EVENTS

Fire & fury comments 8/28 missile launch 9/15 missile launch

S&P 500	Gold	S&P 500	Gold	S&P 500	Gold
-1.5%	1.3%	-0.1%	1.5%	-0.1%	0.6%

Article Source: Financial Times, August 9th 2017

"Strong earnings lift U.S. stocks"

MSCI U.S. INDEX EARNINGS GROWTH (YOY)

Q3 16	Q4 16	Q1 17	Q2 17
-7.3%	-3.2%	2.2%	9.2%

Article Source: Wall Street Journal, July 25th 2017

"S&P 500 volatility hits 50-year low"

S&P 500 30-DAY ANNUALIZED TRAILING VOLATILITY

Apr 30 th	May 31st	Jun 30 th	Jul 31 st	Aug 31st	Sep 30 th	
7.3%	7.8%	6.8%	7.1%	8.1%	5.8%	

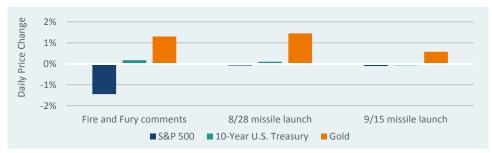
Article Source: Forbes, August 1st 2017

DECEMBER RATE HIKE PROBABILITY



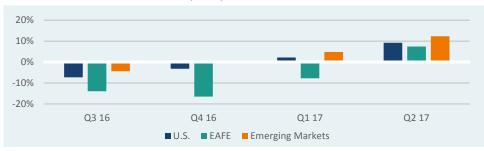
Source: Bloomberg, as of 10/6/17, based on Fed fund futures prices

MARKET REACTION DURING NORTH KOREA EVENTS



Source: Bloomberg

EQUITY EARNINGS GROWTH (YOY)



Source: Bloomberg, MSCI, as of 9/30/17



Economic environment



U.S. economics summary

- U.S. real GDP grew 2.2% YoY in Q2, consistent with the trend of slow, but steady growth in the current expansion. Consumer spending and business investment were the primary drivers of growth.
- Purchasing manager indexes
 (PMIs) moved higher to above
 average levels, indicating a likely
 acceleration in economic growth
 over the coming quarters. The ISM
 Manufacturing and Services PMIs
 for September were 60.8 and
 59.8, respectively.
- The economy added an average of 91,000 jobs per month to payrolls in the third quarter. The September employment data was heavily influenced by hurricanes Harvey and Irma, which resulted in a decline of 33,000 jobs from payrolls, the first drop since 2010. Due to the calculation methodology, a bounce back should be expected in October.

- The U3 unemployment rate (unaffected by the hurricanes) fell 0.2% to a 17-year low of 4.2% over the quarter. The broader U6 unemployment rate also tightened, dropping 0.3% to 8.3%.
- Year-over-year headline CPI accelerated from 1.6% in June to 2.2% in September, while the core inflation rate was unchanged over the quarter at 1.7%. Outside of volatile energy prices inflationary pressures still appear absent, and core inflation remains below the Fed's 2% target.
- The Fed paused from raising interest rates following three consecutive quarters with hikes.
 Core inflation that has persistently been below the Fed's 2% target was the primary reason given to delay further tightening. The market is expecting the Fed to raise interest rates again in December based on fed fund futures prices.

	Most Recent	12 Months Prior
GDP (YoY)	2.2% 6/30/17	1.2% 6/30/16
Inflation (CPI YoY, Headline)	2.2% 9/30/17	1.5% 9/30/16
Expected Inflation (5yr-5yr forward)	2.0% 9/30/17	1.8% 9/30/16
Fed Funds Rate	1.25% 9/30/17	0.50% 9/30/16
10 Year Rate	2.3% 9/30/17	1.6% 9/30/16
U-3 Unemployment	4.2% 9/30/17	4.9% 9/30/16
U-6 Unemployment	8.3% 9/30/17	9.7% 9/30/16



U.S. economics – GDP growth

Real GDP grew by 2.2% YoY in Q2 (3.1% quarterly annualized rate), the fastest pace of expansion since Q3 2015. The economic recovery is nearly in its eighth year, but the level of growth remains low relative to history. Despite the length of the expansion, we do not see many of the typical signs that the economy is overheating.

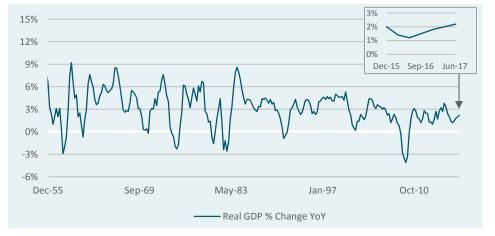
After slowing in the first quarter, consumer spending accelerated to 3.3%, and contributed 2.2% to the overall quarterly growth rate. A tight labor market and moderate wage gains should create a positive environment for consumer spending moving forward.

Business investment has picked up in recent quarters, and was the second largest contributor to GDP in Q2, while residential investment was a slight drag on growth. Trade also had a positive impact on growth, as exports increased at a quicker rate than imports.

Moderate growth is expected throughout the rest of the year – the Atlanta Fed GDP Now forecast for Q3 was 2.5% as of October 6th. Hurricanes Harvey and Irma disrupted growth in September, but the economy is likely to see a boost in Q4 once rebuilding begins.

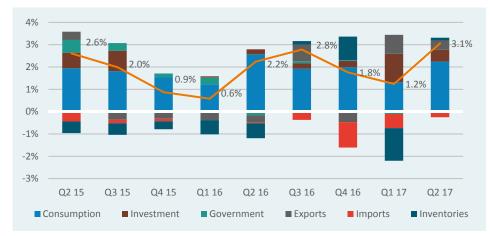
The economy experienced another quarter of moderate growth in Q2 with few signs of overheating

U.S. REAL GDP GROWTH (YOY)



Source: FRED, as of 6/30/17

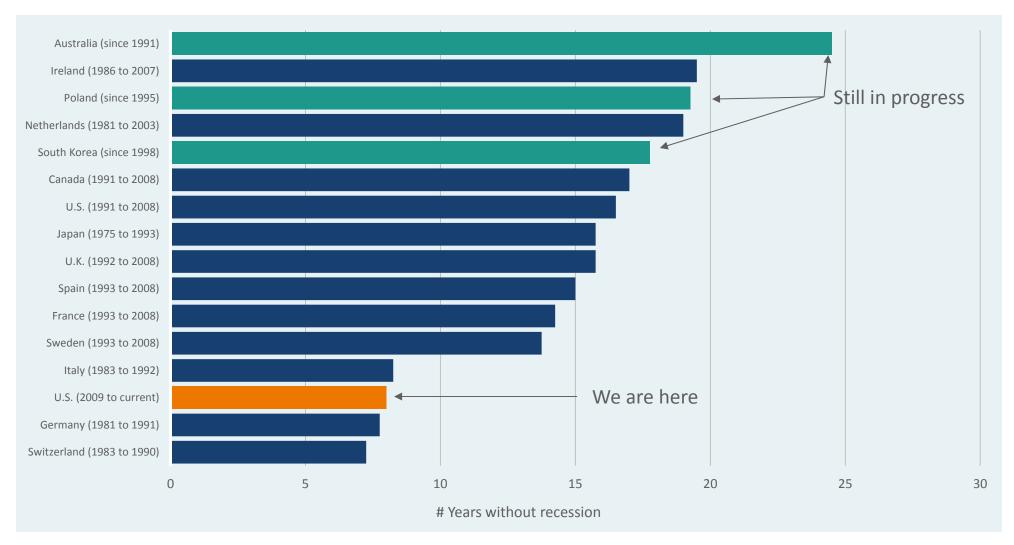
U.S. GDP COMPONENTS



Source: BEA, annualized quarterly rate, as of 6/30/17



How long can expansions continue?



Source: Australia Trade and Investment Commission



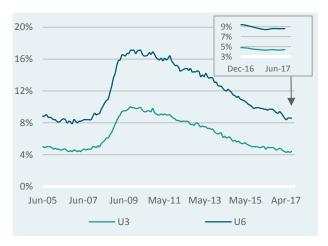
U.S. economics – Labor market

The U.S. job market tightened as unemployment dropped from 4.4 to 4.2% - the lowest level since March of 2001. Job creation data disappointed in September, though this may largely be attributed to the effects of hurricanes Harvey and Irma.

Labor growth throughout the current U.S. expansion has tended to be tilted towards lower-skill and lower-pay jobs. It is reasonable to ask whether this indicates that the recovery is weak or unbalanced. To arrive at an answer it is

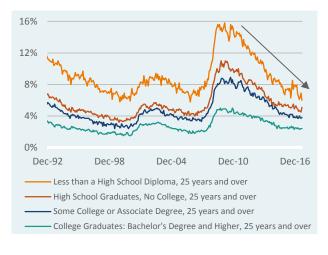
important to note that the types of jobs created during an economic recovery is partly a product of the types of jobs lost during the initial downturn. Examining unemployment by education level and age group suggests that the downturn disproportionately impacted the jobs of younger workers and those with less education. This implies that the job creation seen lately is natural and not necessarily an indication of weakness.

U.S. UNEMPLOYMENT



Source: FRED, as of 8/31/17

UNEMPLOYMENT BY EDUCATION LEVEL



Source: FRED, as of 8/31/17

UNEMPLOYMENT BY AGE GROUP



Source: FRED, as of 8/31/17



U.S. economics – The consumer

Consumer spending remained within a normal range. Savings rates, in aggregate, have declined over the past year and are now at levels consistent with past economic expansions. The fundamental picture for consumers is still positive. Low inflation, low unemployment, and moderate wage gains should provide a backdrop for further spending growth.

Total consumer debt has surpassed pre-crisis levels, fueled by student loans and auto loans. However, the

burden of debt is lower due to the lower interest rate environment.

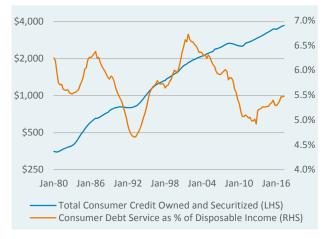
U.S. auto sales spiked in September, reversing a recent trend of weaker purchase activity. Hurricanes Irma and Harvey were estimated to have affected hundreds of thousands of vehicles, which contributed to buying activity throughout the month. However, the spike in sales will likely result in a drag on activity in future years.

CONSUMER SPENDING (YOY GROWTH)



Source: Bloomberg, as of 8/31/17

CONSUMER DEBT & DEBT BURDEN



Source: FRED, as of 4/30/17

U.S. AUTO SALES



Source: Bloomberg, as of 9/30/17



U.S. economics – Sentiment

Consumer sentiment measures are above average, reflecting Americans' overall positive view of the economy. In the preliminary reading for October, The University of Michigan Consumer Sentiment Survey unexpectedly increased from 95.1 to 101.1, the highest level since 2004, which placed it in the 91st percentile since 1978. According to the survey, the elevated level of confidence is primarily due to consumers anticipating low unemployment, low inflation, small increases in interest rates, and moderate gains in income. Consumer sentiment has been high since the election last

November, but there has yet to be a material increase in consumer spending.

Other measures of sentiment, such as the NFIB Small Business Optimism Index, remain high by historical standards, but have dropped so far this year. Small businesses are still expecting to benefit from tax reform and deregulation, although significant uncertainty remains surrounding the timing and nature of these changes.

Consumers and small businesses have a positive outlook on the economy

CONSUMER COMFORT INDEX



Source: Bloomberg, as of 9/24/17 (see Appendix)

CONSUMER SENTIMENT



Source: University of Michigan, as of 9/30/17 (see Appendix)

U.S. ECONOMIC SURPRISE



Source: Bloomberg, as of 9/29/17 (see Appendix for details)

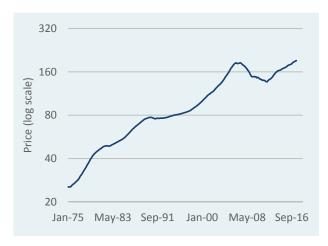


U.S. economics – Housing

U.S. home prices continued to climb higher with 5.9% growth YoY in July according to the S&P/Case-Shiller U.S. National Home Price Index. New and existing home sales have decelerated and are flat year-over-year, though not necessarily worrying given the volatility of sales activity. A surge in housing starts and permit applications is possible as areas of the south and southeast rebuild following hurricane damage.

Owning a home remains affordable relative to history. A scenario of higher interest rates and further home price appreciation would result in affordability falling towards the historical average. Materially higher interest rates would make home ownership much more expensive, given the low current level of interest rates. A 1% rise in mortgage interest rates for a \$400,000 loan results in a roughly \$4,000 rise in annual cost for homeowners.

CASE-SHILLER HOME PRICE INDEX



Source: FRED, as of 6/30/17

HOME AFFORDABILITY



HOUSING SALES



Source: National Association of Realtors, as of 6/30/17 (see appendix) Source: Bloomberg, as of 8/31/17



U.S. economics – Inflation

Headline CPI inflation was 2.2% from the previous year in September, up from 1.6% in June, driven mainly by increases in gasoline prices following hurricanes Harvey and Irma. Core inflation was unchanged at 1.7%.

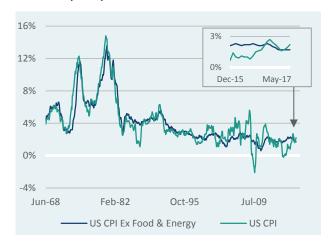
Although the Fed has belabored the "low inflation environment", inflation measures are not extreme from a historical perspective. The perception of low inflation is likely being impacted by the long duration of the current economic expansion since rising inflation typically occurs in the late cycle. Although several Fed officials have stated they

believe below target inflation is transitory, continued softness in price levels may result in a slower pace of monetary tightening.

Market based inflation expectations increased modestly throughout the quarter with the 10-year TIPS breakeven inflation rate up 10 bps to 1.83%. Expectations are still low, and investors are receiving a low inflation premium on nominal Treasuries.

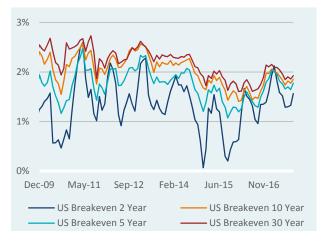
Pressures on core inflation are still low

U.S. CPI (YOY)



Source: FRED, as of 9/30/17

U.S. TIPS BREAKEVEN RATES



Source: FRED, as of 9/30/17

INFLATION EXPECTATIONS



Source: Bloomberg, as of 9/30/17



Is geopolitical risk abnormally high?

Several events over the quarter, especially increased tensions on the Korean peninsula, have led to heightened concerns over the impact of geopolitical risk on financial markets. The unique nature of each geopolitical event makes it difficult to determine whether the apparent risks are greater than past events.

The Geopolitical Risk Index (GPR) uses automated textsearch results of 11 U.S. and international newspapers to give some indication of how the current environment relates to history. While the GPR is above average, it is not abnormally high. Further, given the unpredictability of geopolitical risk and how it will affect financial markets, we do not recommend making any significant changes to portfolios.

While the concerns over a nuclear attack from North Korea have recently escalated, the threat is not a new one. Many political experts believe the probability of an attack by North Korea against the U.S. or its allies is low because it would jeopardize the existence of the current regime. Additionally, China's support of North Korea has waned in recent months after it agreed to two new rounds of sanctions through the United Nations Security Council.

GEOPOLITICAL RISK INDEX

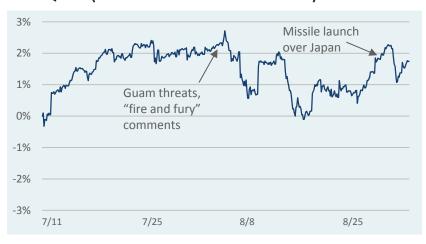


Source: The Geopolitical Risk Index - Caldarra, Iacoviello, Federal Reserve Board, as of 8/31/17



North Korea – Market reactions

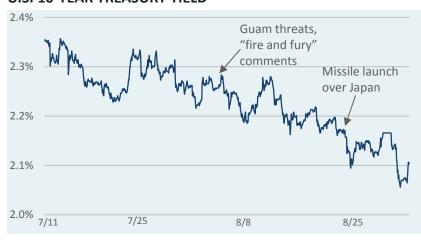
U.S. EQUITY (CUMULATIVE PRICE MOVEMENT)



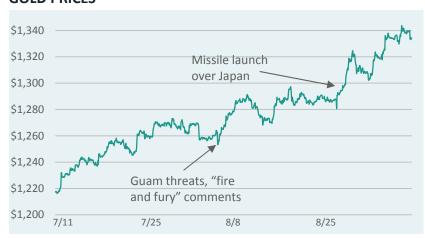
SOUTH KOREAN EQUITY (CUMULATIVE PRICE MOVEMENT)



U.S. 10-YEAR TREASURY YIELD



GOLD PRICES



Source: Bloomberg, S&P 500, KOSPI, 7/11/17-9/6/17



International economics summary

- International economic growth advanced in the second quarter in both developed and emerging markets. PMIs are above 50 (indicating expansion) in nearly every country across the world, pointing towards a continuation in the recent global growth pickup.
- The IMF raised its projections for global GDP growth 0.1% for both 2017 and 2018 to 3.6% and 3.7%, respectively. For comparison, global GDP growth was 3.2% in 2016.
- Economic conditions in emerging markets have improved. Several countries, such as Brazil and Russia, are still at the beginning stages of a recovery. Lower inflation has allowed emerging central banks to pursue looser monetary policy, which should provide a tailwind to further economic growth.

- Inflation in developed countries has yet to see much pressure outside of the U.K., and remains well below central bank targets.
- Inflation in the U.K. (headline CPI) rose 3.0% YoY in September, driven partly by a weaker pound, while wages only increased by 2.2%. The Bank of England stated that a rate hike may be necessary before the end of the year to slow price increases.
- On October 1st, Catalonia passed a referendum to declare independence from Spain, which the Spanish government declared illegal. Although the Catalan prime minister accepted the vote as a mandate to declare independence, he immediately suspended this declaration with the goal of bringing the Spanish government to the negotiating table.

Area	GDP (Real, YoY)	Inflation (CPI, YoY)	Unemployment
United States	2.2% 6/30/17	2.2 % 9/30/17	4.2% 9/30/17
Western	2.0%	1.5%	7.9% 6/30/17
Europe	6/30/17	9/30/17	
Japan	1.4% 6/30/17	0.7% 8/31/17	2.8% 8/31/17
BRICS	5.6%	2.0%	5.8%
Nations	6/30/17	6/30/17	6/30/17
Brazil	0.3%	2.5%	12.7%
	6/30/17	9/30/17	9/30/17
Russia	2.5% 6/30/17	3.0% 9/30/17	4.9% 8/31/17
India	5.7%	3.3%	8.4%
	6/30/17	9/30/17	12/31/16
China	6.9%	1.6%	4.0%
	6/30/17	9/30/17	6/30/17



International economics

Global surveys indicate a synchronized rise in global growth which may have begun to materialize in Q2. Second quarter GDP growth improved across most countries, especially in Europe and emerging markets.

Real GDP in the Eurozone was 2.3% YoY in Q2, the fastest pace of growth in more than six years. While the ECB has discussed tapering monetary stimulus beginning next year, this will likely be a slow and delicate process. Eurozone financial conditions should continue to be supportive over the next few years. Monetary policy is not expected to change in Japan for the

foreseeable future, and will continue to be a tailwind for the Japanese economy.

Developed market inflation remains low, with the exception of the U.K. The latest headline CPI reading for the Eurozone and Japan was 1.5% and 0.7%, respectively. Inflation in emerging economies has trended downwards, allowing central banks to cut interest rates to provide monetary stimulus. Many emerging markets are well behind developed markets in the current economic cycle.

INFLATION (CPI)



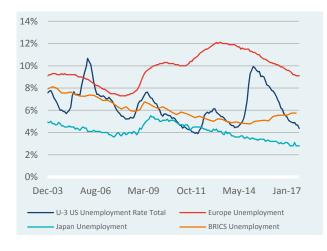
Source: Bloomberg, as of 8/31/17

REAL GDP GROWTH (YOY)



Source: Bloomberg, as of 6/30/17

UNEMPLOYMENT



Source: Bloomberg, as of 8/31/17 or most recent release



Global PMIs

PMI 1 YEAR (CROSS SECTION) - BLUE HIGH / ORANGE LOW

	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17
Manufacturing												
Global	52	52	53	53	53	53	53	53	53	53	53	53
Developed	53	53	54	54	54	54	54	54	54	54	54	55
US	52	54	55	56	58	57	55	55	58	56	59	61
UK	54	53	56	55	55	54	57	56	54	55	57	56
Eurozone	54	54	55	55	55	56	57	57	57	57	57	58
Germany	55	54	56	56	57	58	58	60	60	58	59	61
Japan	51	51	52	53	53	52	53	53	52	52	52	53
EM	51	51	51	51	51	52	51	51	51	51	52	51
Services												
Global	53	53	53	54	53	54	54	54	54	54	54	54
Developed	54	54	54	55	54	54	54	54	55	55	55	55
US	55	56	57	57	58	55	58	57	57	54	55	60
UK	55	55	56	55	53	55	56	54	53	54	53	54
Eurozone	53	54	54	54	56	56	56	56	55	55	55	56
Germany	54	55	54	53	54	56	55	55	54	53	54	56
Japan	51	52	52	52	51	53	52	53	53	52	52	51
EM	53	54	54	54	56	56	56	56	55	55	55	56

Source: Bloomberg, as of 9/30/17 – PMIs are based on survey data compiled from purchasing and supply managers. Survey questions are asked about several different components of each sector, such as new orders, employment, prices, etc. The final PMI reading is based on the percentage of respondents with a positive view on the sector. A reading above 50 indicates expansion in the sector while a reading below 50 indicates contraction. Historically, PMIs have had a relatively strong positive relationship with actual economic activity.



Fixed income rates & credit



Interest rate environment

- After bottoming out to a postelection low of 2.04% on September 7th following increased tensions with North Korea, the U.S. 10-year rose to finish the quarter slightly higher at 2.33%.
- The Fed kept interest rates
 unchanged over the quarter,
 citing concerns over the lack of
 inflation. However, Fed officials
 have communicated that they
 believe recent low inflation is
 transitory. An additional rate hike
 in December appears likely based
 on market implied probabilities.
- The Fed will begin to reduce its balance sheet in October. The central bank's plan is to runoff \$6 billion of Treasuries and \$4 billion of mortgage-backed securities per month. This will be scaled up commensurately every 3 months to \$50 billion per month. At this pace it will take more than seven years to return the balance sheet to pre-crisis levels.

- U.K. sovereign yields experienced the biggest increase among developed countries after the Bank of England acknowledged that a rate hike may be necessary by the end of the year to slow inflation.
- Very little monetary tightening is priced into short-term developed market interest rates over the next few years. Although we expect central banks to be cautious, faster than expected increases in interest rates represents a potential risk.
- Our underweight position to both U.S. and developed sovereign rates (currency hedged) was unchanged over the quarter, primarily due to the low carry. However, Treasuries still play an important role in portfolios by offering equity risk diversification.

Area	Short Term (3M)	10 Year
United States	1.02%	2.33%
Germany	(0.70%)	0.46%
France	(0.59%)	0.74%
Spain	(0.45%)	1.60%
Italy	(0.39%)	2.11%
Greece	2.02%	5.66%
U.K.	0.28%	1.37%
Japan	(0.17%)	0.07%
Australia	1.71%	2.84%
China	3.04%	3.62%
Brazil	7.46%	9.77%
Russia	7.76%	7.66%

Source: Bloomberg, as of 9/30/17



Fed monetary tightening

The market's expectation of a rate hike in December increased considerably throughout the quarter to 90%. Although core inflation remained below the official 2% target, several Fed officials have stated they believe the factors dampening inflation are transitory and prices should gradually increase along with wages. According to its own forecast, the Fed is expecting one additional hike this year, three hikes in 2018, and two more in 2019. However, market expectations are much more conservative, pricing in one more hike this year, and only two additional hikes through 2019.

During this tightening cycle the Fed has continually undelivered on projected rate increases. We believe it is reasonable to think this trend will continue since the risk of tightening too quickly outweighs the risk of moving too slowly.

Balance sheet reduction, which began in October also represents a form of gradual tightening. Based on the current plan, the balance sheet will fall by \$1.7 trillion to \$2.8 trillion at the end of 2020. According to the Fed, the runoff will continue as scheduled unless interest rates are brought back down to 0%.

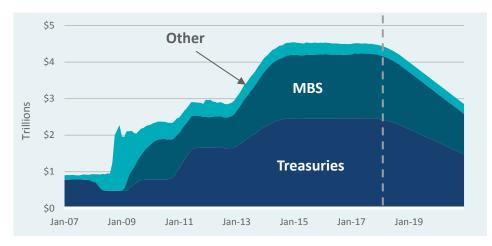
The market is expecting the Fed to move cautiously with further monetary tightening

FED RATE HIKE EXPECTATIONS



Source: Bloomberg, as of 10/6/17

FED BALANCE SHEET REDUCTION EXPECTATIONS

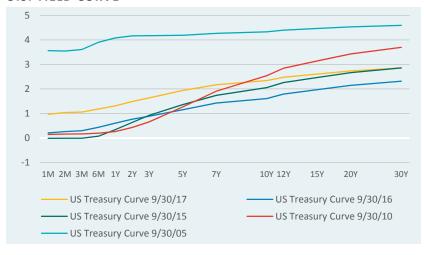


Source: Federal Reserve, as of 9/29/17, projections are based on the Fed's announced reduction plan



Yield environment

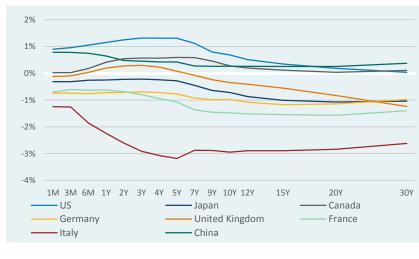
U.S. YIELD CURVE



GLOBAL GOVERNMENT YIELD CURVES



YIELD CURVE CHANGES OVER LAST FIVE YEARS



IMPLIED CHANGES OVER NEXT YEAR



Source: Bloomberg, as of 9/30/17



Credit environment

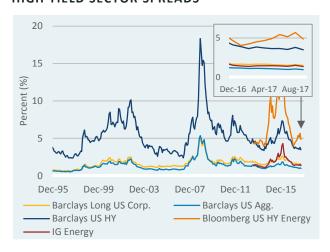
Credit spreads fell slightly over the quarter, remaining at low levels. U.S. high yield option-adjusted spreads compressed in the third quarter to 3.5%, and the asset class generated a 2.0% total return (BBgBarc U.S. Corp. High Yield Index). High yield spreads are tighter than those of bank loans on a duration neutral basis.

Credit spreads have continued to tighten close to multi-year lows, driven by strong corporate fundamentals and general macroeconomic improvement. The combination of tighter credit spreads and additional carry (greater yield) over Treasuries led credit to broadly outperform U.S. Treasuries in

Q3. High yield spreads began the year at 4.0% and have tightened by 51 bps year-to-date. Credit spreads have historically been a good indicator of future performance relative to Treasuries.

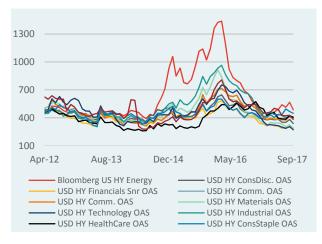
High yield energy spreads compressed over the quarter by 55 bps to 4.8% - a very moderate compression following the 2014 commodity drawdown. Year-to-date, the best performing sectors were financials and utilities. Industrials had weaker performance, most specifically consumer cyclical and the energy sector, which has been recovering from the recent commodity crisis.

HIGH YIELD SECTOR SPREADS



Source: Barclays, Bloomberg, as of 9/30/17

SPREADS



Source: Bloomberg, as of 9/30/17

Market	Credit Spread (9/30/17)	Credit Spread (1 Year Ago)
Long US Corporate	1.5%	2.0%
US Aggregate	1.0%	1.4%
US High Yield	3.5%	4.8%
US High Yield Energy	4.4%	6.1%
US Bank Loans	3.6%	3.9%

Source: Barclays, Credit Suisse, Bloomberg, as of 9/30/17



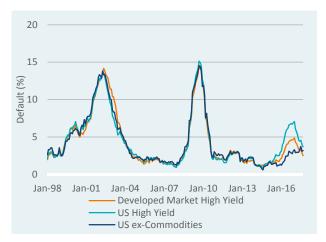
Issuance and default

Default activity continued to stabilize in U.S. and international credit markets. Only one U.S. company defaulted in September, the third consecutive month with only one or no defaults, which was the first time this occurred since May 2011. Default volume in the third quarter was the lowest since Q4 2013.

Rolling default rates are currently running below longterm averages. Active management may offer value to investors in the high yield space. The effects of commodity related defaults are subsiding

Senior loan and high yield markets stabilized further with the majority of par defaults last year coming from the energy and metals/mining sectors. The retail sector has accounted for the second most defaults.

HY DEFAULT TRENDS (ROLLING 1 YEAR)



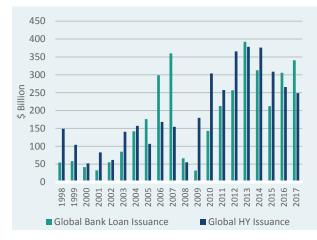
Source: BofA Merrill Lynch, as of 9/30/17

ENERGY DEFAULT TRENDS



Source: BofA Merrill Lynch, as of 9/30/17

GLOBAL ISSUANCE



Source: Bloomberg, BofA Merrill Lynch, as of 9/30/17





Equity environment

- We maintain a moderate
 overweight to equities with a
 preference for emerging markets.
 Emerging markets have
 historically delivered outsized
 economic growth and
 performance during strong global
 growth environments. These
 markets remain attractively
 valued relative to developed
 markets, though valuations rose
 over the quarter.
- U.S. equities moved upward in Q3, setting record highs.
 Performance has been fueled by earnings growth.
- The possibility of U.S. corporate tax reform has led the market to price in greater expectations for future equity earnings growth. Significant uncertainty remains around the timing and nature of the reform, and the outcome will have a material impact on equity prices in the short-term.

- Equity volatility remains unusually low. Lower volatility has historically indicated less downside risk in equity markets.
- According to FactSet as of
 October 6th, the estimated Q3
 earnings growth rate of the S&P
 500 was 2.8% YoY, a materially
 weaker figure than the 7.5%
 which was expected as of June
 30. Much of the weakness was
 caused by expected insurance
 industry losses due to hurricane
 damage. Excluding the insurance
 sector, earnings are expected to
 grow by 4.9% YoY.
- U.S. dollar weakness year-to-date has caused significant earnings differences between companies with greater international sales focus and companies that are more domestically-focused.
 Overall, U.S. dollar movement has acted as a tailwind to earnings growth.

	QTD TOTAL	. RETURN	YTD TOTAL	. RETURN	1 YEAR	
	(unhedged)	(hedged)	(unhedged)	(hedged)	(unhedged)	(hedged)
US Large Cap (Russell 1000)	4.5	%	14.2	2%	18.5	5%
US Small Cap (Russell 2000)	5.7	%	10.9	10.9%		7%
US Large Value (Russell 1000 Value)	3.1%		7.9%		15.1%	
US Large Growth (Russell 1000 Growth)	ell 1000 5.9%		20.7%		21.9%	
International Large (MSCI EAFE)	5.4%	3.7%	20.0%	12.3%	19.1%	20.5%
Eurozone (Euro Stoxx 50)	8.5%	5.2%	25.2%	13.2%	29.2%	24.9%
U.K. (FTSE 100)	4.8%	2.1%	15.7%	7.2%	14.9%	11.9%
Japan (NIKKEI 225)	2.0%	2.7%	12.1%	9.4%	13.4%	27.0%
Emerging Markets (MSCI Emerging Markets)	7.9%	7.2%	27.8%	22.1%	22.5%	19.6%

Source: Russell Investments, MSCI, STOXX, FTSE, Nikkei, as of 9/30/17



Domestic equity

U.S. equities moved upward over the quarter (S&P 500 +4.5%), reaching record highs, but underperformed international markets (MSCI EAFE +5.4%). Earnings growth remained the primary driver of robust equity performance, though Q3 earnings growth expectations have fallen due to hurricane-related insurance industry losses. The possibility of U.S. tax reform has likely contributed to a positive domestic equity outlook.

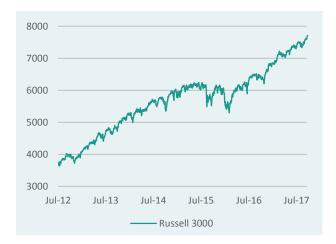
According to FactSet, as of October 6th the estimated Q3 earnings growth rate of the S&P 500 was 2.8% YoY, a

materially weaker figure than the 7.5% which was expected as of June 30. Most of the weakness was caused by insurance industry losses due to hurricane damage. Excluding this sector would result in a current estimate of 4.9% overall growth rather than 2.8%.

We maintain a neutral weight to U.S. equities

U.S. domestically-facing business in aggregate are expected to face flat sales and revenue growth, while externally-facing businesses are expected to produce strong growth. U.S. dollar depreciation and international growth have created a tailwind to the performance of externally-focused U.S. businesses.

U.S. EQUITIES



Source: Russell Investments, as of 9/29/17

S&P 500 EPS GROWTH



Source: Bloomberg, as of 9/30/17

Q3 EXPECTATIONS



Source: FactSet, as of 10/6/17



Record highs

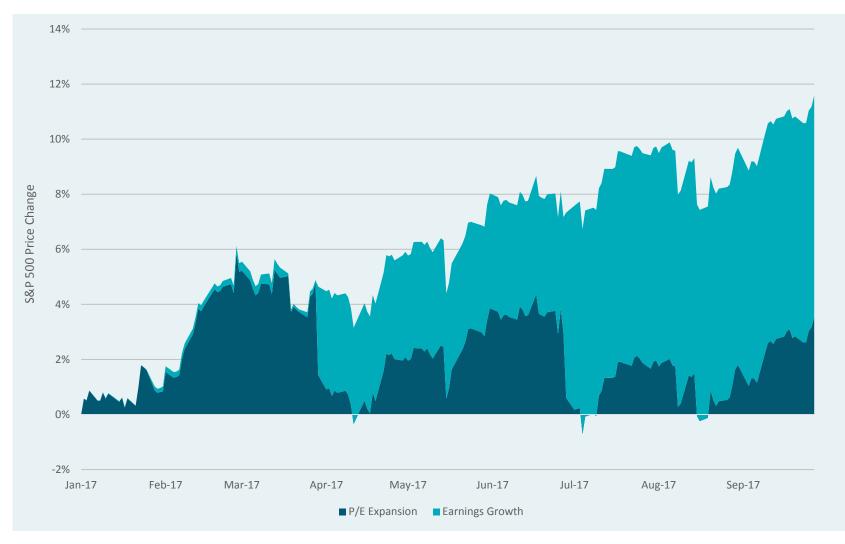


Equity market highs are reached on 5% of market trading days

Source: Verus, Bloomberg, as of 9/29/17, based on the closing price



What is driving U.S. equities?



S&P 500 price appreciation has been driven by earnings growth so far this year

Source: Verus, Bloomberg, as of 9/29/17



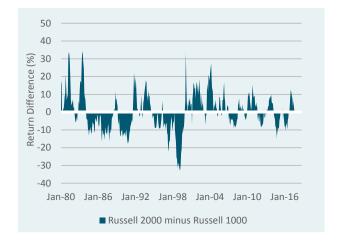
Domestic equity size and style

Large cap equities led small cap equities through July and August. However, small cap equities rallied in September (+6.2% in the month) and outperformed large cap equities over the quarter. The move in September was partially attributed to an increased focus on U.S. tax reform. If passed, tax cuts will likely provide a greater marginal benefit to smaller companies. Expectations of lower taxes and deregulation have contributed to small cap price appreciation that has outpaced earnings. The relative P/E ratio between large and small companies is at its highest level since the financial crisis.

Large cap equities were led by the technology sector, from which the strongest contributors were semiconductor and internet software companies. The top three individual contributors were Apple, Facebook and Microsoft. Small cap equities were mainly driven by producer durables companies.

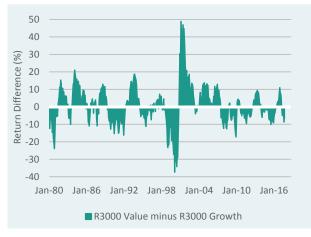
Growth outperformed value in Q3 due to a higher relative weighting to technology companies. Financial services, the most heavily weighted sector in value, returned a positive 5.0%, but still underperformed technology by 3.2%.

SMALL CAP VS LARGE CAP (YOY)



Source: Russell Investments, as of 9/30/17

VALUE VS GROWTH (YOY)



Source: Russell Investments, as of 9/30/17

U.S. LARGE VS. SMALL RELATIVE VALUATIONS



Source: Russell, Bloomberg, as of 9/30/17



International equity

International equities outperformed domestic equities during the third quarter. The MSCI ACWI ex U.S. returned 6.2% (+4.6% hedged) while the S&P 500 returned 4.5%. Consistent with the first half of 2017, emerging markets outperformed (MSCI EM +7.9% unhedged) both the EAFE Small Cap Index (+7.5%) and the broad EAFE Index (+5.4%).

Japanese equities were the largest contributors to the EAFE index in Q3, particularly companies within the industrials and consumer discretionary sectors. Despite the positive moves, Japanese equity valuations based on earnings and

sales remain attractive relative to those in Europe and the United Kingdom.

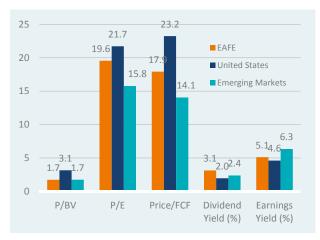
MSCI EAFE valuations have remained relatively stable in 2017 as earnings and sales growth have kept pace with price appreciation.

Currency effects added a positive 1.7% to the unhedged MSCI EAFE in Q3 (+7.6% year-to-date), as the U.S. dollar fell for a third consecutive quarter against a trade weighted basket of currencies.

GLOBAL EQUITY PERFORMANCE



VALUATIONS



Source: Bloomberg, as of 9/30/17

EFFECT OF CURRENCY (1 YEAR ROLLING)



Source: MSCI, as of 9/30/17



Source: Bloomberg, as of 9/30/17

Emerging market equity

We maintain an overweight to emerging market equities, which have historically delivered outsized economic growth and performance during stronger global growth environments.

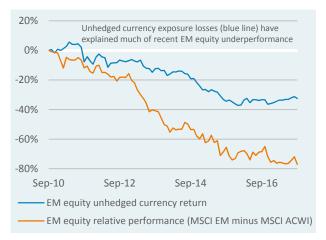
Emerging market equities have outperformed developed markets over the quarter (7.9% vs. 4.8%) and the past year (22.5% vs 18.2%), reversing an extended period of underperformance following the global financial crisis. Currency movement was a significant contributor to

emerging market underperformance during this time, and the recent reversal in currency trends has been additive to the outperformance of these markets.

Valuations have risen off of low levels, bolstering returns. These markets are no longer cheap relative to history though strong earnings growth and mean reversion of currencies could likely fuel further outsized equity gains.

Accelerating global growth should have a positive effect on emerging economies

EMERGING MARKET FX & RELATIVE PERFORMANCE (7YR CUMULATIVE)



Source: MSCI, JP Morgan EM Currency Index, as of 9/30/17

EQUITY PERFORMANCE (3YR ROLLING)



Source: Standard & Poor's, MSCI, as of 9/30/17

FORWARD P/E RATIOS



Source: Bloomberg as of 9/30/17



Emerging markets – High "growth beta"

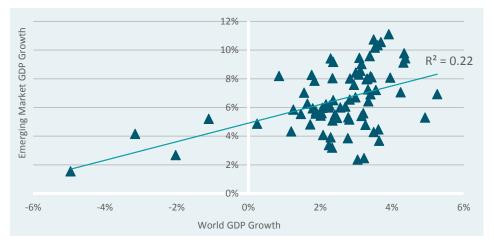
During Q3 the trend of coordinated global economic growth continued. Emerging market equities materially outperformed global equities over the quarter (7.9% MSCI EM vs. 5.2% MSCI ACWI) and year-to-date (27.8% vs. 17.3%).

Emerging markets have historically performed well during periods of global growth acceleration, in terms of both equity performance and underlying economic growth.

The relationship between emerging market equities and world economic growth has historically exhibited a beta of 9.6. This suggests that, on average, investors might expect a 1% improvement in global growth to result in emerging market equity outperformance of 9.6%.

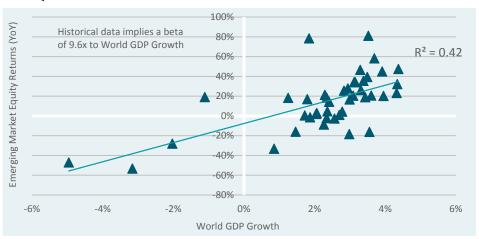
It is important to note that this relationship has also held on the downside, as emerging markets tend to produce poor returns during weak growth environments.

EM GROWTH RELATIONSHIP TO GLOBAL GROWTH



Source: Bloomberg, since 1996 – BRICS used to represent emerging market economic growth

EM EQUITY PERFORMANCE RELATIONSHIP TO GLOBAL GROWTH



Source: Bloomberg, since 1996 - MSCI



Equity valuations

Equity valuations remain elevated compared to history, although recent price appreciation has been driven by earnings growth as opposed to multiple expansion. In international developed markets (EAFE), earnings growth over the past two quarters has outpaced price appreciation, leading to a slight decline in P/E ratios. The opposite has occurred in emerging markets where strong price gains have resulted in higher valuations. Relative to developed countries, emerging equities still appear attractive from a valuation perspective but are no longer considered cheap. Other valuation measures such as price-to-sales (P/S) ratios

also indicate equity prices are rich, especially in the U.S. The P/S ratio at the end of September was 2.1, the highest level since 2000. During this cycle, sales growth has lagged earnings growth (per share), influenced by expanding profit margins and an increase in equity buybacks.

Historically, higher valuations have led to lower future returns over the medium-term, on average. However, valuations can remain elevated for long periods of time and may be partially justified given the current environment of low interest rates and inflation.

Valuations are elevated, but relative opportunities exist

TRAILING P/E RATIOS



Source: Bloomberg, as of 9/30/17

TRAILING PRICE-TO-SALES RATIOS



Source: Bloomberg, as of 9/30/17

CURRENT VALUATION METRICS



Source: Bloomberg, as of 9/30/17



Equity volatility

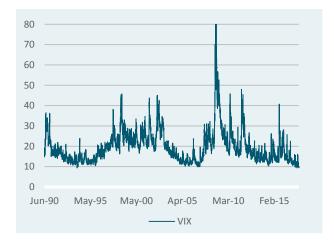
Despite a rise in geopolitical risks, including tensions on the Korean peninsula, realized volatility in equities over the quarter was extremely low, consistent with recent trends. In September, S&P 500 annualized volatility was 5%, the lowest level for a calendar month on record. While many market participants have voiced concern over complacency, low volatility generally accompanies bull markets. We continue to watch volatility trends closely, but at this time do not view the current environment as a bearish signal. For investors in strategies with specific

volatility targets, such as risk parity, it is important to be aware of rising equity exposure and leverage. A spike in volatility may lead to forced equity selling during a downturn in order to maintain the risk target.

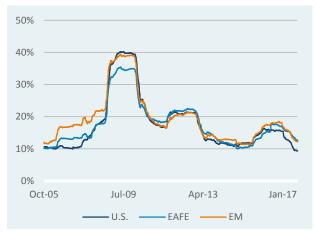
Equity volatility has trended downwards

The CBOE Skew Index, which looks at the steepness of the volatility curve, is above its historical average. This indicates investors are still paying a premium for downside protection.

U.S. IMPLIED VOLATILITY

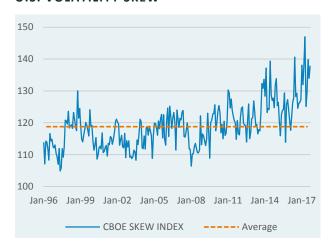


REALIZED 1-YEAR ROLLING VOLATILITY



Source: Bloomberg, as of 9/30/17

U.S. VOLATILITY SKEW

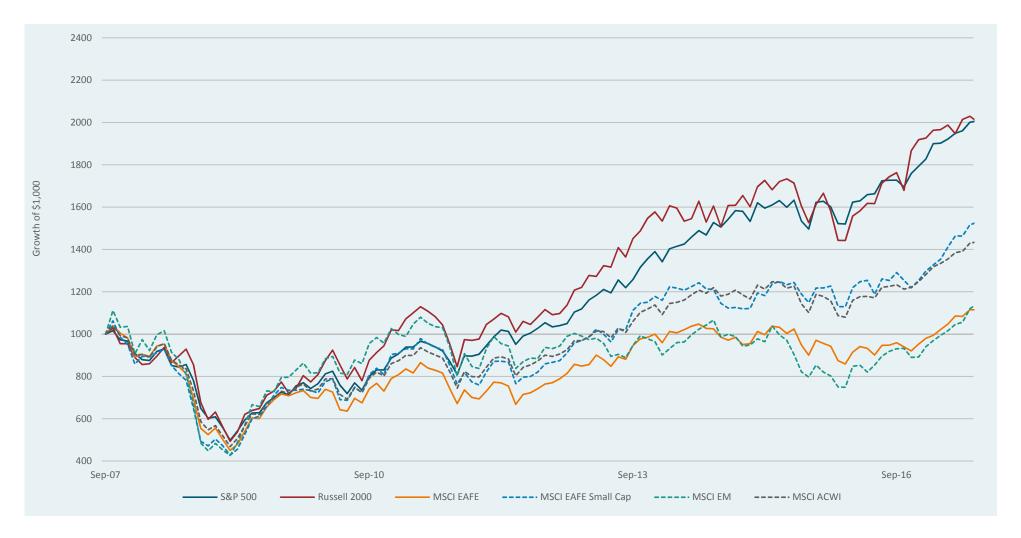


Source: CBOE, as of 9/30/17



Source: CBOE, as of 9/30/17

Long-term equity performance



Source: MPI, as of 9/30/17



Other assets

Hedge funds

In aggregate, hedge funds returned 2.2% during Q3 and 5.5% year-to-date per HFRI. Equity hedge strategies were the top performer for both periods as they gained 3.5% and 9.6%, respectively. Short biased funds stood out as the only negative sub strategy during Q3, which is typical during equity rallies. Funds with greater net-long market exposure benefited from strong year-to-date equity market returns.

Emerging market hedge funds were notable winners this year as HFRI reported performance of 4.8% for Q3 and 14.7% year-to-date. Funds focused on Latin America (+10.2% for Q3,

16.5% YTD) were particularly strong performers. Those markets rallied due in part to a combination of pro-business politicians retaining power, improving economic growth prospects and stabilizing commodity markets.

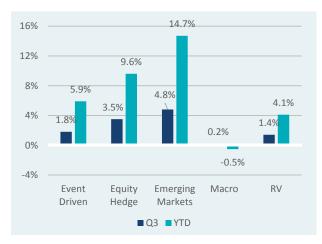
We are closely monitoring volatility levels because we understand that sudden changes in volatility regimes can negatively impact high gross leverage strategies. Our concerns are somewhat balanced due to more normal net leverage levels.

3-YEAR ROLLING STYLE PERFORMANCE



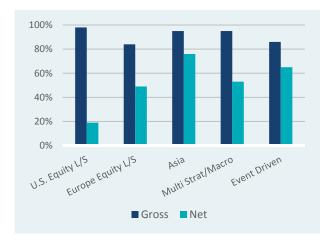
Source: HFRI, as of 9/30/17

Q3 & YTD STYLE PERFORMANCE



Source: HFRI, as of 9/30/17

LEVERAGE (PERCENTILE RANK SINCE 2010)



Source: Morgan Stanley, as of 9/30/17



Currency

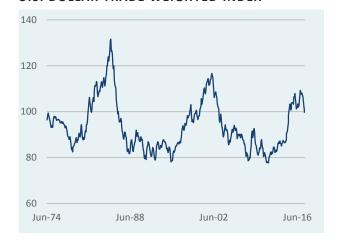
The U.S. dollar depreciated an additional 2.7% in Q3 against a trade weighted basket of developed currencies, which brought the year-to-date decline to 8.0%. The downward trend partially reversed in September after prospects of another interest rate hike in December from the Fed helped lead to the first month of dollar appreciation so far this year. The euro appreciated 3.4% against the dollar over the quarter, influenced by improving economic conditions and the possibility of ECB tightening monetary policy.

After several years of depreciation, emerging market

currencies have stabilized. Improved current account balances and economic growth conditions have provided a positive backdrop for these currencies moving forward. However, a quicker than expected rise in U.S. interest rates could represent a headwind to further appreciation.

Currency losses from unhedged exposure to developed international equities has begun to reverse due to recent dollar weakness, although currency exposure has still resulted in materially higher volatility.

U.S. DOLLAR TRADE WEIGHTED INDEX



Source: Federal Reserve, as of 9/30/17

EFFECT OF CURRENCY (1-YEAR ROLLING)



Source: MPI, as of 9/30/17

JPM EM CURRENCY INDEX



Source: JPMorgan, as of 9/30/17



Appendix

Periodic table of returns

Large Cap Equity

Large Cap Value

Large Cap Growth

Small Cap Equity

Small Cap Value

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	YTD	5-Year	10-Yea
Emerging Markets Equity	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	13.3	31.7	27.8	15.3	9.1
Large Cap Growth	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	20.7	14.3	8.5
International Equity	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	20.0	14.3	7.8
Small Cap Growth	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	16.8	13.8	7.5
Large Cap Equity	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	14.2	13.3	7.1
60/40 Global Portfolio	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	12.7	13.2	6.4
Small Cap Equity	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	10.9	10.5	5.9
Large Cap Value	-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	8.0	7.9	8.4	4.3
Small Cap Value	-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	7.1	5.7	6.3	4.0
Hedge Funds of Funds	-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	5.5	4.0	1.3
Real Estate	-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	3.3	3.8	1.3
US Bonds	-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	3.1	2.1	1.1
Cash	-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	0.6	0.2	0.4
Commodities	-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	-2.9	-10.5	-6.8
_																										
OKST																										

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 Value, Russell 1000 Value, Russell 2000 Growth, MSCI EAFE, MSCI EM, BBgBarc US Aggregate, T-Bill 90 Day, Bloomberg Commodity, NCREIF Property, HFRI FOF, MSCI ACWI, BBgBarc Global Bond. NCREIF Property Index performance data as of 6/30/17.

Commodities

Real Estate

Hedge Funds of Funds

60% MSCI ACWI/40% BBgBarc Global Bond

Small Cap Growth

US Bonds

Cash

International Equity

Emerging Markets Equity



ST

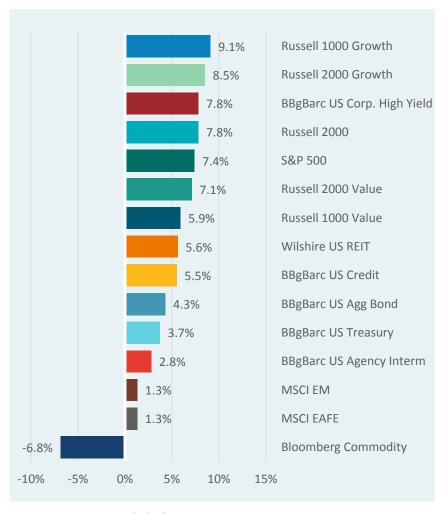
Major asset class returns

ONE YEAR ENDING SEPTEMBER



Source: Morningstar, as of 9/30/17

TEN YEARS ENDING SEPTEMBER

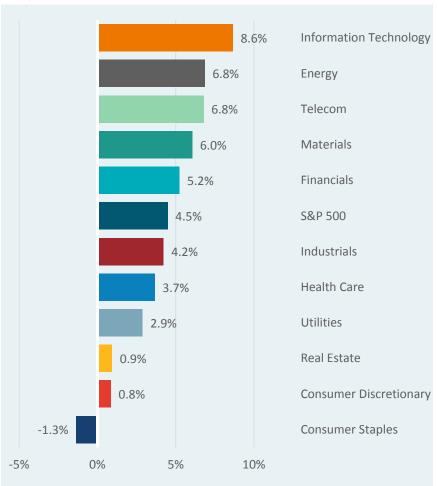


Source: Morningstar, as of 9/30/17

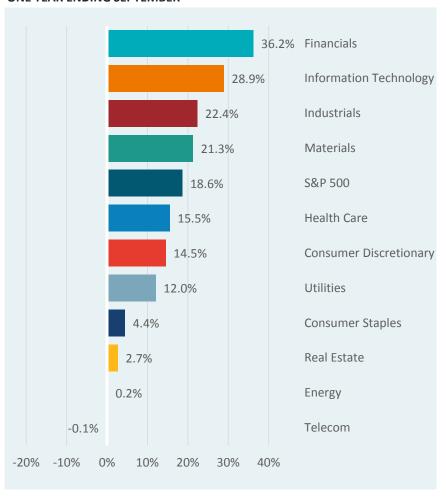


S&P 500 sector returns

3RD QUARTER



ONE YEAR ENDING SEPTEMBER



Source: Morningstar, as of 9/30/17

Source: Morningstar, as of 9/30/17



Detailed index returns

DON	/IEST	IC EC	UITY

Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
2.1	4.5	14.2	18.6	10.8	14.2	7.4
2.9	3.6	11.9	16.2	10.1	15.0	8.9
2.2	5.6	15.5	25.5	12.3	13.6	7.7
1.9	4.9	15.1	19.8	11.1	14.3	7.3
2.1	4.5	14.2	18.5	10.6	14.3	7.5
6.2	5.7	10.9	20.7	12.2	13.8	7.8
2.4	4.6	13.9	18.7	10.7	14.2	7.6
2.8	3.5	11.7	15.3	9.5	14.3	8.1
1.3	5.9	20.7	21.9	12.7	15.3	9.1
3.0	3.1	7.9	15.1	8.5	13.2	5.9
5.4	6.2	16.8	21.0	12.2	14.3	8.5
7.1	5.1	5.7	20.5	12.1	13.3	7.1
	2.1 2.9 2.2 1.9 2.1 6.2 2.4 2.8 1.3 3.0 5.4	2.1 4.5 2.9 3.6 2.2 5.6 1.9 4.9 2.1 4.5 6.2 5.7 2.4 4.6 2.8 3.5 1.3 5.9 3.0 3.1 5.4 6.2	2.1 4.5 14.2 2.9 3.6 11.9 2.2 5.6 15.5 1.9 4.9 15.1 2.1 4.5 14.2 6.2 5.7 10.9 2.4 4.6 13.9 2.8 3.5 11.7 1.3 5.9 20.7 3.0 3.1 7.9 5.4 6.2 16.8	2.1 4.5 14.2 18.6 2.9 3.6 11.9 16.2 2.2 5.6 15.5 25.5 1.9 4.9 15.1 19.8 2.1 4.5 14.2 18.5 6.2 5.7 10.9 20.7 2.4 4.6 13.9 18.7 2.8 3.5 11.7 15.3 1.3 5.9 20.7 21.9 3.0 3.1 7.9 15.1 5.4 6.2 16.8 21.0	2.1 4.5 14.2 18.6 10.8 2.9 3.6 11.9 16.2 10.1 2.2 5.6 15.5 25.5 12.3 1.9 4.9 15.1 19.8 11.1 2.1 4.5 14.2 18.5 10.6 6.2 5.7 10.9 20.7 12.2 2.4 4.6 13.9 18.7 10.7 2.8 3.5 11.7 15.3 9.5 1.3 5.9 20.7 21.9 12.7 3.0 3.1 7.9 15.1 8.5 5.4 6.2 16.8 21.0 12.2	2.1 4.5 14.2 18.6 10.8 14.2 2.9 3.6 11.9 16.2 10.1 15.0 2.2 5.6 15.5 25.5 12.3 13.6 1.9 4.9 15.1 19.8 11.1 14.3 2.1 4.5 14.2 18.5 10.6 14.3 6.2 5.7 10.9 20.7 12.2 13.8 2.4 4.6 13.9 18.7 10.7 14.2 2.8 3.5 11.7 15.3 9.5 14.3 1.3 5.9 20.7 21.9 12.7 15.3 3.0 3.1 7.9 15.1 8.5 13.2 5.4 6.2 16.8 21.0 12.2 14.3

FIXED INCOME

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Broad Index							
BBgBarc US Treasury USTIPS	(0.6)	0.9	1.7	(0.7)	1.6	0.0	3.9
BBgBarc US Treasury Bills	0.1	0.3	0.6	0.6	0.3	0.2	0.5
BBgBarc US Agg Bond	(0.5)	0.8	3.1	0.1	2.7	2.1	4.3
Duration							
BBgBarc US Treasury 1-3 Yr	(0.2)	0.2	0.7	0.2	0.8	0.6	1.7
BBgBarc US Treasury Long	(2.2)	0.6	6.0	(6.4)	4.9	2.8	6.9
BBgBarc US Treasury	(0.9)	0.4	2.3	(1.7)	2.0	1.2	3.7
Issuer							
BBgBarc US MBS	(0.2)	1.0	2.3	0.3	2.4	2.0	4.1
BBgBarc US Corp. High Yield	0.9	2.0	7.0	8.9	5.8	6.4	7.8
BBgBarc US Agency Interm	(0.3)	0.3	1.4	0.3	1.5	1.1	2.8
BBgBarc US Credit	(0.2)	1.3	5.1	2.0	3.9	3.2	5.5

INTERNATIONAL EQUITY

Broad Index							
MSCI ACWI	1.9	5.2	17.3	18.6	7.4	10.2	3.9
MSCI ACWI ex US	1.9	6.2	21.1	19.6	4.7	7.0	1.3
MSCI EAFE	2.5	5.4	20.0	19.1	5.0	8.4	1.3
MSCI EM	(0.4)	7.9	27.8	22.5	4.9	4.0	1.3
MSCI EAFE Small Cap	2.9	7.5	25.4	21.8	11.1	12.8	4.6
Style Index							
MSCI EAFE Growth	1.9	4.9	22.4	15.7	6.5	8.9	2.1
MSCI EAFE Value	3.1	5.9	17.6	22.5	3.5	7.8	0.5
Regional Index							
MSCI UK	3.3	5.2	15.7	14.6	0.8	4.9	0.7
MSCI Japan	2.0	4.0	14.3	14.1	7.7	10.6	1.7
MSCI Euro	3.9	8.0	25.9	28.4	5.6	9.9	(0.0)
MSCI EM Asia	(0.0)	7.0	31.8	23.8	8.0	7.4	2.7
MSCI EM Latin American	1.6	15.1	26.7	25.6	(0.3)	(1.9)	(8.0)

OTHER

Index							
Bloomberg Commodity	(0.1)	2.5	(2.9)	(0.3)	(10.4)	(10.5)	(6.8)
Wilshire US REIT	(0.1)	0.6	2.4	0.1	9.7	9.5	5.6
CS Leveraged Loans	0.4	1.1	3.0	5.4	4.0	4.4	4.4
Regional Index							
JPM EMBI Global Div	0.0	2.6	9.0	4.6	6.5	4.9	7.5
JPM GBI-EM Global Div	(0.3)	3.6	14.3	7.3	0.3	(0.9)	3.8
Hedge Funds							
HFRI Composite	0.5	2.1	5.7	6.9	3.3	4.7	3.1
HFRI FOF Composite	0.4	2.2	5.5	6.4	2.2	3.8	1.1
Currency (Spot)							
Euro	(0.6)	3.7	12.1	5.2	(2.2)	(1.7)	(1.8)
Pound	4.1	3.3	8.6	3.3	(6.1)	(3.6)	(4.1)
Yen	(2.2)	(0.2)	3.6	(10.0)	(0.9)	(7.1)	0.2

Source: Morningstar, as of 9/30/17



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)

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/)

Notices & disclosures

Past performance is no guarantee of future results. This report or presentation is provided for informational purposes only and is directed to institutional clients and eligible institutional counterparties only and should not be relied upon by retail investors. Nothing herein constitutes investment, legal, accounting or tax advice, or a recommendation to buy, sell or hold a security or pursue a particular investment vehicle or any trading strategy. The opinions and information expressed are current as of the date provided or cited only and are subject to change without notice. This information is obtained from sources deemed reliable, but there is no representation or warranty as to its accuracy, completeness or reliability. Verus Advisory Inc. and Verus Investors, LLC expressly disclaim any and all implied warranties or originality, accuracy, completeness, non-infringement, merchantability and fitness for a particular purpose. This report or presentation cannot be used by the recipient for advertising or sales promotion purposes.

The material may include estimates, outlooks, projections and other "forward-looking statements." Such statements can be identified by the use of terminology such as "believes," "expects," "may," "will," "should," "anticipates," or the negative of any of the foregoing or comparable terminology, or by discussion of strategy, or assumptions such as economic conditions underlying other statements. No assurance can be given that future results described or implied by any forward looking information will be achieved. Actual events may differ significantly from those presented. Investing entails risks, including possible loss of principal. Risk controls and models do not promise any level of performance or guarantee against loss of principal.

"VERUS ADVISORY™ and VERUS INVESTORS™ and any associated designs are the respective trademarks of Verus Advisory, Inc. and Verus Investors, LLC. Additional information is available upon request.



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.

Disclaimer

This report contains confidential and proprietary information and is subject to the terms and conditions of the Consulting Agreement. It is being provided for use solely by the customer. The report may not be sold or otherwise provided, in whole or in part, to any other person or entity without written permission from Verus Advisory, Inc., (hereinafter Verus) or as required by law or any regulatory authority. The information presented does not constitute a recommendation by Verus and cannot be used for advertising or sales promotion purposes. This does not constitute an offer or a solicitation of an offer to buy or sell securities, commodities or any other financial instruments or products.

The information presented has been prepared using data from third party sources that Verus believes to be reliable. While Verus exercised reasonable professional care in preparing the report, it cannot guarantee the accuracy of the information provided by third party sources. Therefore, Verus makes no representations or warranties as to the accuracy of the information presented. Verus takes no responsibility or liability (including damages) for any error, omission, or inaccuracy in the data supplied by any third party. Nothing contained herein is, or should be relied on as a promise, representation, or guarantee as to future performance or a particular outcome. Even with portfolio diversification, asset allocation, and a long-term approach, investing involves risk of loss that the investor should be prepared to bear.

The information presented may be deemed to contain forward-looking information. Examples of forward looking information include, but are not limited to, (a) projections of or statements regarding return on investment, future earnings, interest income, other income, growth prospects, capital structure and other financial terms, (b) statements of plans or objectives of management, (c) statements of future economic performance, and (d) statements of assumptions, such as economic conditions underlying other statements. Such forward-looking information can be identified by the use of forward looking terminology such as believes, expects, may, will, should, anticipates, or the negative of any of the foregoing or other variations thereon comparable terminology, or by discussion of strategy. No assurance can be given that the future results described by the forward-looking information will be achieved. Such statements are subject to risks, uncertainties, and other factors which could cause the actual results to differ materially from future results expressed or implied by such forward looking information. The findings, rankings, and opinions expressed herein are the intellectual property of Verus and are subject to change without notice. The information presented does not claim to be all-inclusive, nor does it contain all information that clients may desire for their purposes. The information presented should be read in conjunction with any other material provided by Verus, investment managers, and custodians.

Verus will make every reasonable effort to obtain and include accurate market values. However, if managers or custodians are unable to provide the reporting period's market values prior to the report issuance, Verus may use the last reported market value or make estimates based on the manager's stated or estimated returns and other information available at the time. These estimates may differ materially from the actual value. Hedge fund market values presented in this report are provided by the fund manager or custodian. Market values presented for private equity investments reflect the last reported NAV by the custodian or manager net of capital calls and distributions as of the end of the reporting period. These values are estimates and may differ materially from the investments actual value. Private equity managers report performance using an internal rate of return (IRR), which differs from the time-weighted rate of return (TWRR) calculation done by Verus. It is inappropriate to compare IRR and TWRR to each other. IRR figures reported in the illiquid alternative pages are provided by the respective managers, and Verus has not made any attempts to verify these returns. Until a partnership is liquidated (typically over 10-12 years), the IRR is only an interim estimated return. The actual IRR performance of any LP is not known until the final liquidation.

Verus receives universe data from InvestorForce, eVestment Alliance, and Morningstar. We believe this data to be robust and appropriate for peer comparison. Nevertheless, these universes may not be comprehensive of all peer investors/managers but rather of the investors/managers that comprise that database. The resulting universe composition is not static and will change over time. Returns are annualized when they cover more than one year. Investment managers may revise their data after report distribution. Verus will make the appropriate correction to the client account but may or may not disclose the change to the client based on the materiality of the change.