



**PERSPECTIVES
THAT DRIVE
ENTERPRISE
SUCCESS**



PERIOD ENDING: MARCH 31, 2018

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

TAB I

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

1st quarter summary

THE ECONOMIC CLIMATE

- The U.S. economy is expected to grow at around 2.2% in Q1. Economists expect a slightly quicker rate of growth throughout the year. We believe that this *middle-of-the-road* expansion – characterized as not too fast and not too slow – may allow the U.S. economy to continue expanding for longer than expected.
- The U.S. has enacted a 25% tariff on steel and a 10% tariff on aluminum, which went into effect on March 23rd. The U.S. also engaged with China over allegations of asymmetrical trade policies and intellectual property theft.

PORTFOLIO IMPACTS

- Global economic growth has improved – low inflation, strong employment, and accommodative foreign central bank policies have been supportive of equity prices. In the U.S., monetary tightening has yet to have a major impact on equities.
- Concerns over increasing trade protectionism weighed on financial markets. The tariffs placed on steel and aluminum are not likely to have a material impact on asset prices, but escalating tensions and retaliatory measures could have a negative impact on global growth.

THE INVESTMENT CLIMATE

- Excitement and optimism over tax cuts helped lead equities higher to begin the year. However, markets stumbled in February – falling roughly 10%. Equities recovered much of the losses throughout the quarter, but then fell back to their lows at the end of March.
- 2018 is expected to be a banner year for U.S. corporate profits. Earnings for the calendar year are forecast to grow 17.3%, with 7.3% revenue growth. These 2018 expectations may already be priced in.
- February’s market correction appeared isolated to the equity markets. “Risk-off” selling that often accompanies market drawdowns was not apparent – credit spreads, U.S. Treasuries, and gold, reacted minimally.

ASSET ALLOCATION ISSUES

- Upward price momentum in equities has diminished following the February market correction. Investor sentiment is less positive, but the global economic and earnings backdrop remains intact. We believe a neutral or mild risk overweight is warranted in this environment.
- Equity volatility spiked in February, ending the period of extreme calm that investors experienced since the beginning of 2017. The VIX Index averaged 20.7 during the last two months of the quarter.

Changing market dynamics suggest a neutral or mild risk overweight may be warranted

U.S. economics summary

- Economic growth remained near expansion highs in the fourth quarter. U.S. real GDP growth was 2.6% from the previous year. Consumer spending and investment pushed the economy ahead, while falling exports were a drag on growth.
- The U.S. enacted a 25% tariff on steel and 10% tariff on aluminum, which went into effect March 23rd. The U.S. has engaged with China over allegations of asymmetrical trade policies and intellectual property theft, creating concerns over the risks of a trade war.
- Additions to U.S. payrolls averaged 202,000 per month in the first quarter, above the expansion average.
- In recent years, the U.S. has seen discouraged and part-time workers drawn back to full-time employment. This effect can be

quantified by the shrinking difference between U-6 and U-3 unemployment figures. The difference between these two measures fell to 3.9%, matching expansion lows.

- Core CPI inflation moved from 1.8% to 2.1% YoY during the quarter, the highest rate in more than a year. Prices jumped in March primarily due to the low base effect from an unexpected drop in wireless telecom prices one year ago.
- The Fed raised interest rates on March 21st to 1.50-1.75%. Comments made during the March meeting suggest the FOMC expects continued moderate economic activity, spending, and business investment. Unsurprisingly, the Committee stated that the U.S. inflation rate is expected to stabilize at the 2% target over the near-term.

	Most Recent	12 Months Prior
GDP (YoY)	2.6% <i>12/31/17</i>	1.8% <i>12/31/16</i>
Inflation (CPI YoY, Core)	2.1% <i>3/31/18</i>	2.0% <i>3/31/17</i>
Expected Inflation (5yr-5yr forward)	2.2% <i>3/31/18</i>	2.2% <i>3/31/17</i>
Fed Funds Target Range	1.50 – 1.75% <i>3/31/18</i>	0.75 – 1.00% <i>3/31/17</i>
10 Year Rate	2.8% <i>3/31/18</i>	2.4% <i>3/31/17</i>
U-3 Unemployment	4.1% <i>3/31/18</i>	4.5% <i>3/31/17</i>
U-6 Unemployment	8.0% <i>3/31/18</i>	8.8% <i>3/31/17</i>

International economics summary

- International economic growth was strong across countries in the fourth quarter, but a combination of recent economic data coming in below expectations and trade concerns created risks to the synchronized global growth narrative.
- The U.S. implemented 25% and 10% tariffs on steel and aluminum imports, respectively. When the tariffs were initially announced the White House pushed for all countries to be subject to them. However, many countries, such as Canada and Mexico, were given exemptions to allow for ongoing negotiations.
- In April, concerns over trade shifted to escalating tensions between the U.S. and China.
- The Eurozone experienced above-trend growth in the fourth quarter at 2.7% YoY, driven by contributions from household spending and fixed capital investment.
- Economic data out of the Eurozone consistently missed expectations in the first quarter. Industrial production was particularly disappointing – the year-over-year rate fell from 5.2% in December to 2.9% in February.
- Global PMIs remained above 50, indicating expansion in the manufacturing sector, although several countries experienced a decline. The Eurozone PMI fell from 60.8 to 56.6 during the quarter.
- The populist Five Star Movement performed better than expected in the Italian general election in March, winning the most seats of any party. However, no party won a majority in Parliament, resulting in the need to form a coalition government. Increasing support for populist governments (i.e. Hungary and Poland) across Europe remains a risk to investors.

Area	GDP (Real, YoY)	Inflation (CPI, YoY)	Unemployment
United States	2.5% <i>12/31/17</i>	2.4% <i>3/31/18</i>	4.1% <i>3/31/18</i>
Western Europe	2.5% <i>12/31/17</i>	1.3% <i>3/31/18</i>	7.4% <i>12/31/17</i>
Japan	2.0% <i>12/31/17</i>	1.5% <i>2/28/18</i>	2.5% <i>2/28/18</i>
BRICS Nations	6.2% <i>12/31/17</i>	2.6% <i>3/31/18</i>	5.6% <i>12/31/17</i>
Brazil	2.1% <i>12/31/17</i>	2.7% <i>3/31/18</i>	12.4% <i>3/31/18</i>
Russia	0.9% <i>12/31/17</i>	2.4% <i>3/31/18</i>	5.0% <i>2/28/18</i>
India	7.2% <i>12/31/17</i>	4.4% <i>2/28/18</i>	8.8% <i>12/31/17</i>
China	6.8% <i>12/31/17</i>	2.1% <i>3/31/18</i>	3.9% <i>12/31/17</i>

Equity environment

- We maintain an overweight position to equities primarily due to enthusiasm for emerging markets. Though the February market correction dampened investor excitement, it is helpful to remind ourselves that 10% equity drawdowns are fairly common.
- Upward price momentum in equities has diminished following the February market correction. Investor sentiment is less positive, but the global economic and earnings backdrop remains intact.
- 2018 is expected to be a banner year for U.S. corporate profits. Earnings for the year are forecast to grow 17.3%, with revenue growth of 7.3% according to Factset - a rare and impressive year for U.S. businesses. A continuation of this trend would be supportive of equity performance.
- Equity valuations (price-to-earnings multiples) fell to more attractive levels in Q1 due to the combination of lower equity prices and strong earnings growth.
- Equity volatility has remained extremely low since the beginning of 2017. However, the equity drawdown and volatility spike in February appears to have ended this period of calm. Investors might expect a more normal volatility environment going forward.
- Currency movement has contributed to volatility and great return disparity for investors with unhedged investments in international assets. A hedging program could allow investors to reduce or eliminate uncompensated currency risk.

	QTD TOTAL RETURN		YTD TOTAL RETURN		1 YEAR TOTAL RETURN	
	(unhedged)	(hedged)	(unhedged)	(hedged)	(unhedged)	(hedged)
US Large Cap (Russell 1000)	(2.0%)		(2.0%)		12.4%	
US Small Cap (Russell 2000)	(1.1%)		(1.1%)		10.5%	
US Large Value (Russell 1000 Value)	(4.0%)		(4.0%)		5.6%	
US Large Growth (Russell 1000 Growth)	(0.1%)		(0.1%)		19.3%	
International Large (MSCI EAFE)	(1.6%)	(3.8%)	(1.6%)	(3.8%)	14.4%	7.1%
Eurozone (Euro Stoxx 50)	(0.5%)	(3.2%)	(0.5%)	(3.2%)	18.0%	0.3%
U.K. (FTSE 100)	(3.8%)	(6.9%)	(3.8%)	(6.9%)	11.9%	1.2%
Japan (NIKKEI 225)	0.6%	(5.3%)	0.6%	(5.3%)	20.9%	15.2%
Emerging Markets (MSCI Emerging Markets)	1.2%	0.4%	1.2%	0.4%	23.1%	20.4%

Source: Russell Investments, MSCI, STOXX, FTSE, Nikkei, as of 3/31/18

Domestic equity

U.S. equities delivered a loss in Q1 (Russell 1000 -2.0%) - a change of pace from steady and strong gains in 2017. Equity indexes around the world fell between 8-12% in early February as the recent bull run was interrupted. Since the selloff, most markets have been rangebound but relatively flat overall. Volatility seems to have returned to the markets as sizable day-to-day swings have been the norm.

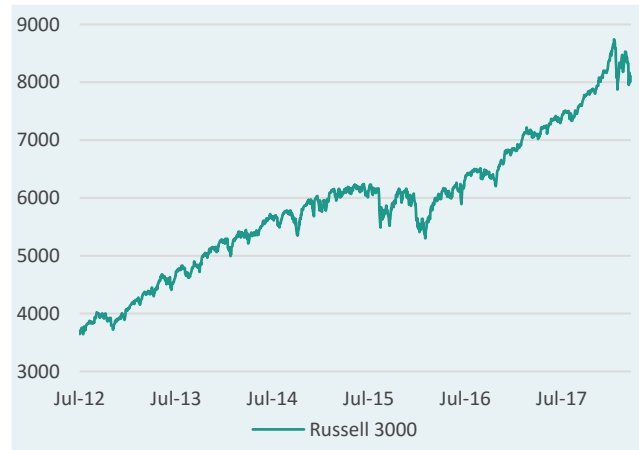
While large price movements tend to naturally cause

investor fear, it is not apparent that the attractive macro picture has changed – i.e. positive economic growth, very strong earnings gains, and healthy sentiment. Equity prices typically follow growth and corporate profit trends over the medium and long-term term, which likely provides some support against larger downside equity movement.

However, the February selloff has dampened recent positive upward price momentum. Momentum is now more neutral as market prices flatten out.

Fundamentals appear unchanged despite falling prices

U.S. EQUITIES



Source: Russell Investments, as of 3/31/18

EARNINGS GROWTH



Source: S&P 500, as of 3/31/18

S&P 500 PRICE & EARNINGS



Source: Bloomberg, as of 3/31/18

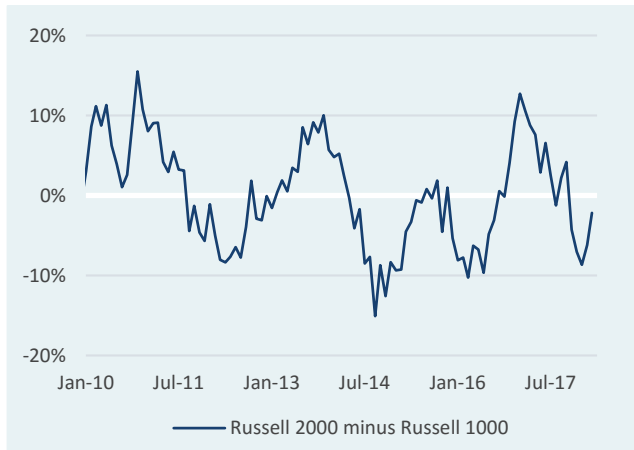
Domestic equity size & style

Large cap equities (Russell 1000 -2.0%) lagged small cap equities (Russell 2000 -1.1%) during the quarter. Value stocks delivered exceptionally poor performance in Q1 (Russell 1000 Value -4.0% vs. Russell 1000 Growth -0.1%), dragged down by the energy and materials sectors, which are heavily tilted towards value. Despite a sell-off in mega-cap tech stocks in March due mainly to company-specific issues, such as a data breach at Facebook and President Trump targeting Amazon over its relationship with the U.S. Postal Service, tech was still the best performing sector in the first quarter.

Traditional style factors – small cap and value in particular – have hit a rough patch since the 2008-2009 global financial crisis. It may be helpful to remember that these periods do occur. In fact, there are multiple points in history where the equity small-cap and value premiums delivered negative returns over more than a 10 year period.

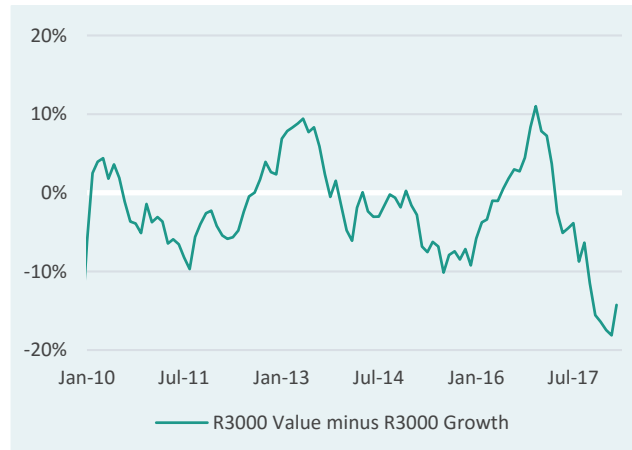
In U.S. equities, value has continued to underperform in recent years, while momentum delivered outperformance alongside the bull market rally.

SMALL CAP VS LARGE CAP (YOY)



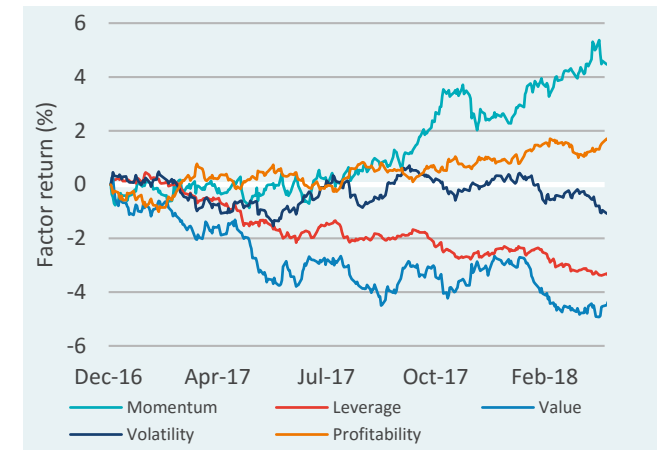
Source: FTSE, as of 3/31/18

VALUE VS GROWTH (YOY)



Source: FTSE, as of 3/31/18

BLOOMBERG FACTOR PERFORMANCE



Source: Bloomberg, as of 3/31/18

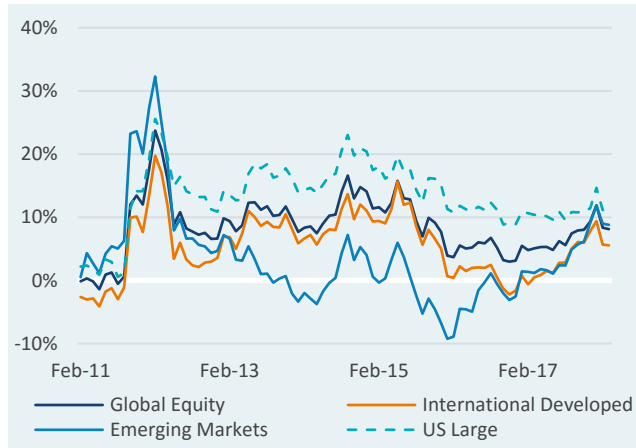
International developed equity

Unhedged International equities were in line with U.S. equities during Q1, delivering slightly negative performance. The MSCI EAFE Index returned -1.5%. Positive currency returns masked underperformance of local developed market equities. On a hedged basis, the MSCI EAFE Index posted a -3.8% return. Looking forward, accelerating corporate earnings, and more attractive valuations following the February fall in equity prices, may be supportive for another positive year in 2018. Forward one year earnings growth is expected to be around 15%.

Along with the U.S., most developed markets also experienced an approximate 10% drawdown in February, but were not as quick to recover. Most regional benchmarks finished the quarter still 7-10% below recent peaks.

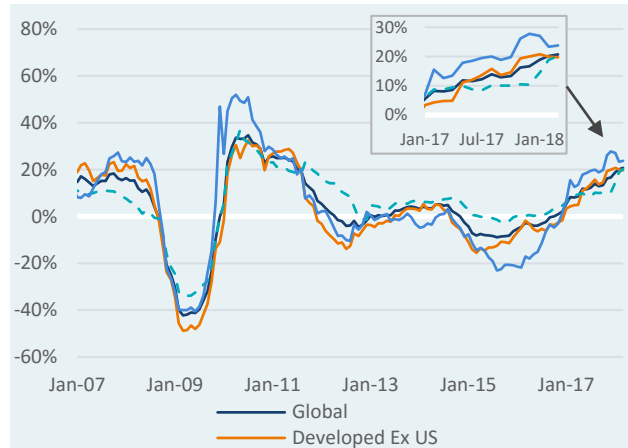
Trailing P/E ratios for the EAFE Index have moved to below average, providing a possible value opportunity. However, downside risks to these markets, including political issues and reliance on central bank support may be a justification for low valuations.

EQUITY PERFORMANCE (3-YEAR ROLLING)



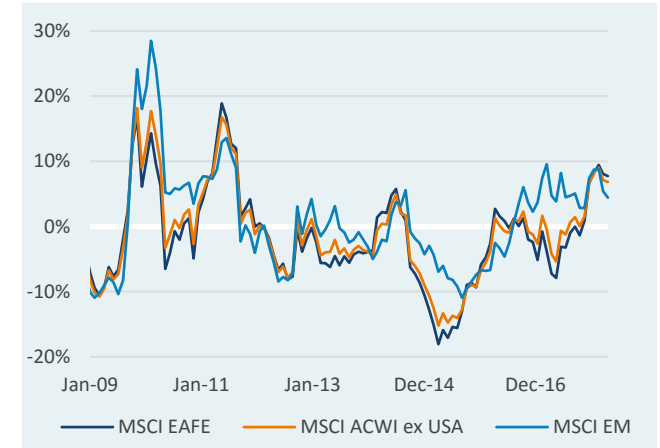
Source: Bloomberg, as of 3/31/18

EARNINGS GROWTH (YOY)



Source: MSCI, as of 3/31/18 – YoY growth in forward earnings

EFFECT OF CURRENCY (1-YEAR ROLLING)



Source: MSCI, as of 3/31/18

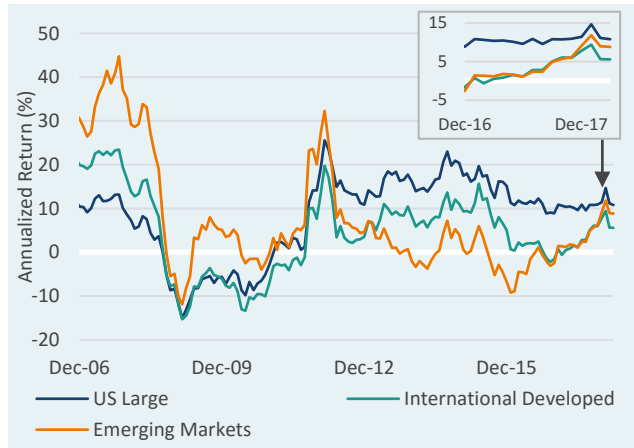
Emerging market equity

We maintain an overweight to emerging market equities. Emerging market equities have exhibited more modest valuations relative to developed markets such as the U.S., while these economies in aggregate continue to outpace developed economies by a wide margin. Furthermore, emerging market currencies remain depressed relative to history. Cheaper valuations, much stronger economic growth, and a currency tailwind may bode well for future performance.

Emerging economies have led the way over the past year in terms of economic growth, earnings, and equity performance. Emerging market equities have delivered positive performance year-to-date despite the February sell-off (MSCI Emerging Markets +1.2%) while developed markets were in negative territory to end the first quarter.

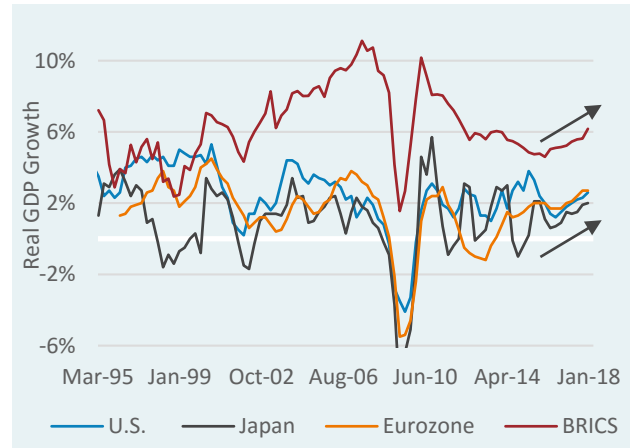
Coordinated global growth has helped propel emerging market equities forward

EQUITY PERFORMANCE (3YR ROLLING)



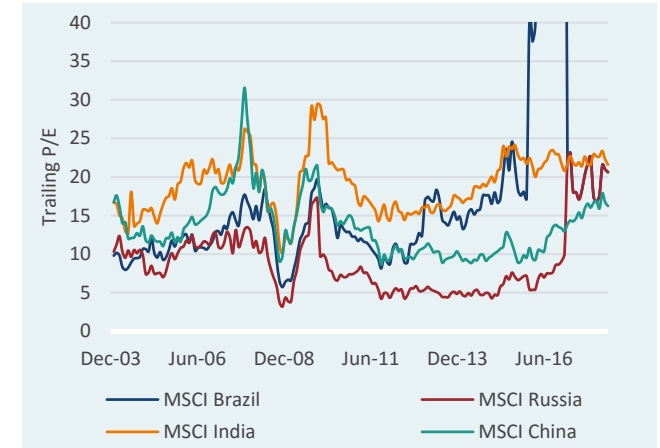
Source: Standard & Poor's, MSCI, as of 3/31/18

ECONOMIC MOMENTUM



Source: Bloomberg, as of 12/31/18

BRIC VALUATIONS



Source: MSCI, as of 3/31/18

Interest rate environment

- The Fed raised interest rates by 25 bps to a target range of 1.50% - 1.75% in March, as expected. In his first public comments since taking over as Fed chairman, Jerome Powell's views appeared to support a continuation of gradual monetary tightening.
- According to the Fed dot plot, officials are expecting two additional rate hikes this year, on par with market pricing.
- Long-term Treasury yields rose at the beginning of the year, likely influenced by increasing growth and inflation expectations. The 10-year yield peaked at 2.95% in late February, up 55 bps from year-end. Yields failed to hold these levels, however, and finished the quarter at 2.74%.
- Short-term borrowing costs continued to rise during the quarter, especially in debt tied to Libor. The 3-month USD Libor rate

moved steadily higher from 1.7% to 2.3%. Much of this increase was likely mechanical due to record high Treasury bill issuance and repatriation of foreign profits.

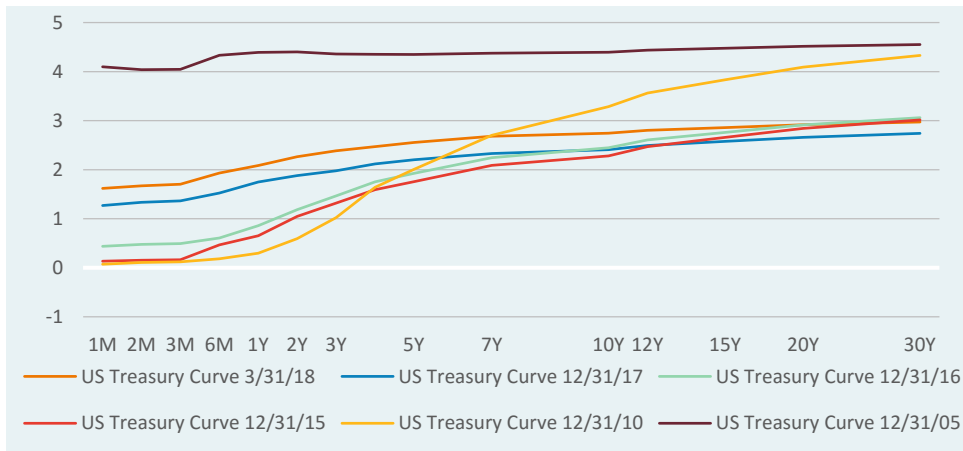
- Sovereign yields in developed Europe also ticked up in January, coinciding with yield increases in U.S. Treasuries, but came back down in the last two months of the quarter. German 10-year yields peaked at a two year high of 0.77% in early February before finishing the quarter at 0.50%.
- Developed international central banks remain accommodative compared to the Fed, but they have increasingly hinted towards policy normalization. The ECB is likely next in line to begin monetary tightening by ending asset purchases and raising rates sometime next year. The BOJ has yet to provide any details on ending its stimulus program, but officials have noted internal discussions have begun.

Area	Short Term (3M)	10 Year
United States	1.70%	2.74%
Germany	(0.75%)	0.50%
France	(0.58%)	0.72%
Spain	(0.50%)	1.16%
Italy	(0.43%)	1.79%
Greece	1.31%	4.32%
U.K.	0.49%	1.35%
Japan	(0.17%)	0.04%
Australia	2.03%	2.60%
China	3.12%	3.77%
Brazil	6.31%	9.50%
Russia	6.01%	7.16%

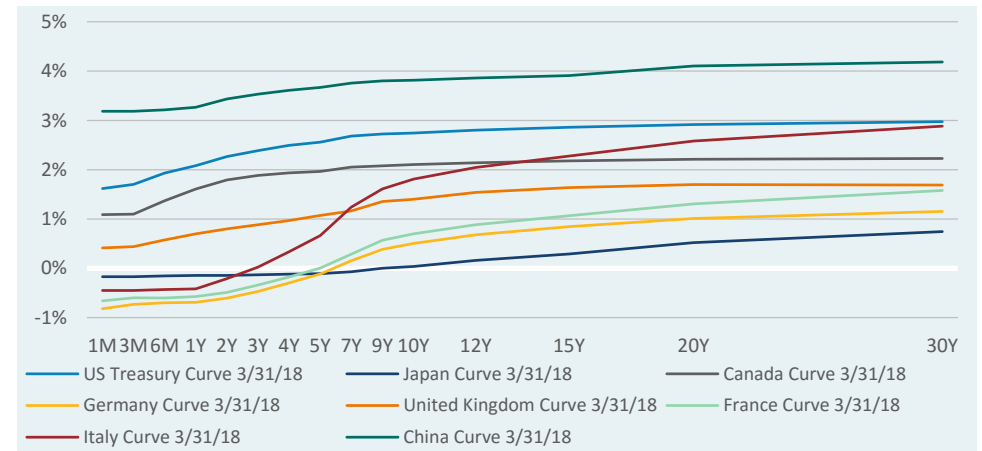
Source: Bloomberg, as of 3/31/18

Yield environment

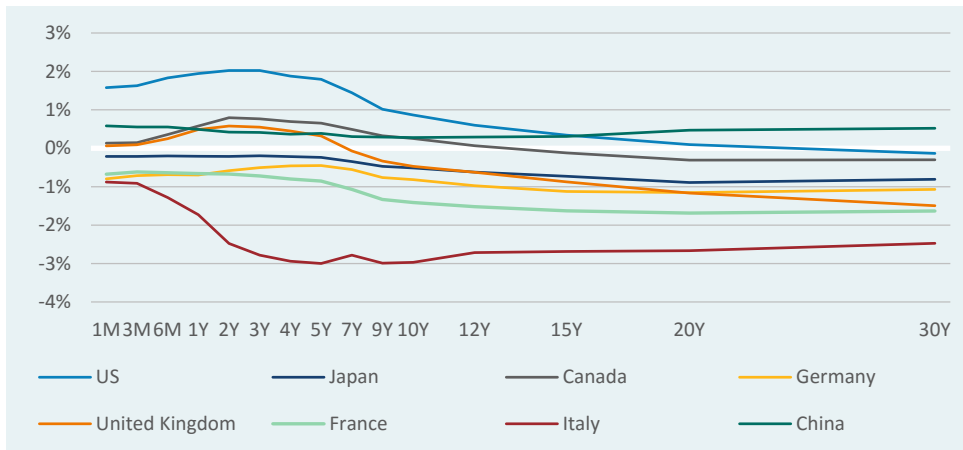
U.S. YIELD CURVE



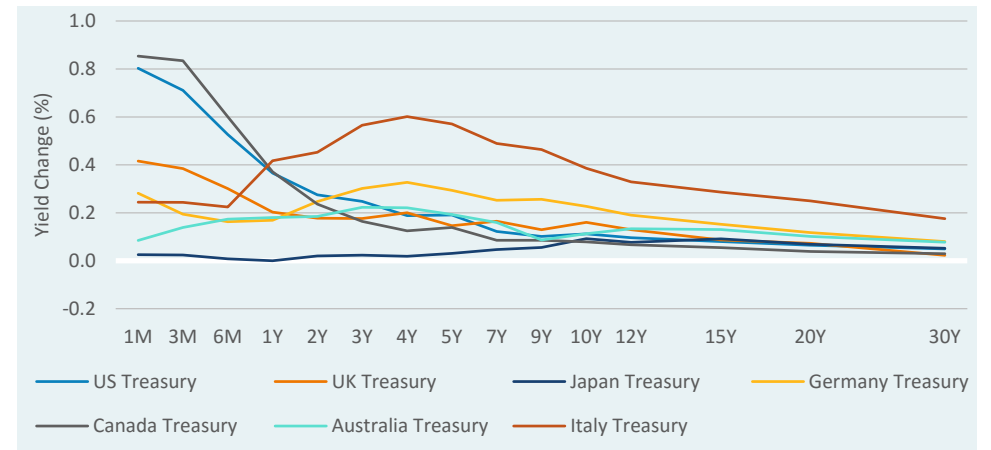
GLOBAL GOVERNMENT YIELD CURVES



YIELD CURVE CHANGES OVER LAST FIVE YEARS



IMPLIED CHANGES OVER NEXT YEAR



Source: Bloomberg, as of 3/31/18

Currency

The U.S. dollar declined further to begin the quarter, but recovered slightly over the past two months. The broad U.S. trade weighted index fell 1.9% in the first quarter. This index was down 8.5% since peaking at the end of 2016.

Dollar depreciation has occurred despite widening short-term interest rate differentials between the U.S. and the rest of the developed world. Typically, higher interest rate differentials result in currency appreciation as investors take advantage of the yield, at least in the short-term.

Based on purchasing power parity (PPP), the dollar is overvalued against the currencies with the biggest weights in international equity benchmarks: the euro, yen, and pound.

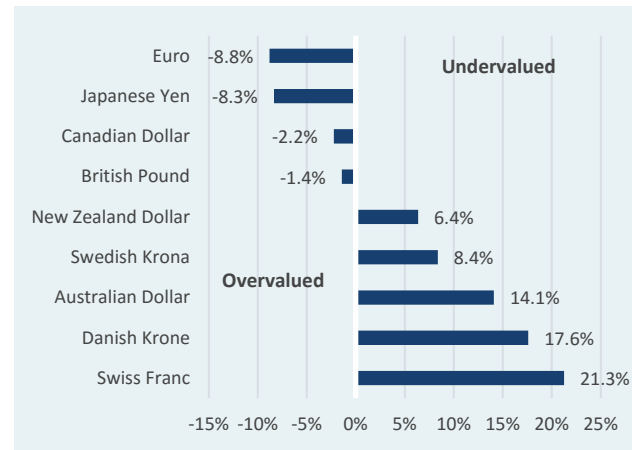
Unhedged foreign currency exposure added to equity returns over the past year, especially in developed markets. Although currency exposure has been positive lately, it has historically tended to experience large swings that add volatility to portfolios.

U.S. DOLLAR TRADE WEIGHTED INDEX



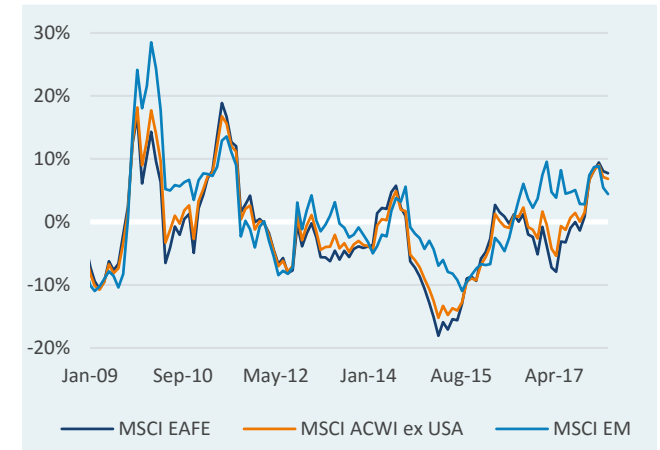
Source: Federal Reserve, as of 3/28/18

CURRENCY VALUATIONS VS USD (PPP)



Source: OECD, as of 3/31/2018 (see appendix)

EFFECT OF CURRENCY (1-YR ROLLING)



Source: MSCI, as of 3/31/18

- The Total Fund, net of manager fees, returned -0.5% in the first quarter of 2018 and ranked 79th percentile among other public plans greater than \$1 billion (median of -0.1%). It beat the policy index return of -0.7%. The Total Fund ex Overlay was -0.5% for the quarter. The Total Fund one-year return of 8.8% lagged the policy index, 10.0%, and ranked in 93rd percentile of its peer universe. The three-year return of 6.5% (50th percentile) was in line with the median among large public plans (6.5%).
- First quarter results were enhanced by the following factors:
 1. Brigade Capital gained 1.1% beating the Bloomberg Barclays Intermediate High Yield index (-1.5%). The outperformance came from a strong January, with positive stock selection in both high yield and leveraged loans.
- First quarter results were hindered by the following factors:
 1. QMA lost -0.8% in the quarter underperforming the Russell 2000 (-0.1%). QMA's value factor, which was a headwind in 2017, continued to cause underperformance in the first quarter of 2018.

Total Fund Performance Summary (Net of Fees)

Period Ending: March 31, 2018

	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	2 Yrs (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Total Fund **	-0.5	79	6.1	93	8.8	93	10.4	71	6.5	50	7.8	37	6.0	48
<i>Policy Index¹</i>	-0.7	90	7.0	57	10.0	52	11.0	46	6.9	31	8.1	27	6.6	15
<i>Allocation Index</i>	-0.5	81	7.0	56	10.1	51	10.9	57	6.9	35	8.0	28	--	--
<i>InvestorForce Public DB > \$1B Net Median</i>	-0.1		7.1		10.1		10.9		6.5		7.7		5.9	
Total Fund ex Overlay	-0.5	78	6.1	92	8.8	93	10.3	73	6.5	53	7.8	43	5.9	52
<i>Policy Index¹</i>	-0.7	90	7.0	57	10.0	52	11.0	46	6.9	31	8.1	27	6.6	15
<i>Allocation Index</i>	-0.5	81	7.0	56	10.1	51	10.9	57	6.9	35	8.0	28	--	--
<i>InvestorForce Public DB > \$1B Net Median</i>	-0.1		7.1		10.1		10.9		6.5		7.7		5.9	
Public Equity	-0.8	79	9.8	69	14.6	57	14.7	79	8.6	61	10.3	57	6.7	79
<i>Blended Public Equity Index²</i>	-0.8	79	10.7	36	15.5	35	16.1	31	9.0	33	10.5	51	7.5	42
<i>InvestorForce All DB Total Eq Net Median</i>	-0.4		10.2		14.8		15.5		8.8		10.6		7.3	
US Equity	-0.7	67	10.6	41	13.8	49	15.5	65	9.7	53	12.5	54	8.9	69
<i>Blended US Equity Index²</i>	-0.6	63	10.5	49	13.8	47	16.1	39	9.9	44	12.8	36	9.7	26
<i>Russell 3000</i>	-0.6	63	10.5	49	13.8	47	15.9	48	10.2	30	13.0	25	9.6	29
<i>InvestorForce All DB US Eq Net Median</i>	-0.5		10.5		13.7		15.9		9.8		12.6		9.3	
Large Cap Equity	-0.6	45	11.1	43	14.5	45	16.5	32	11.1	20	13.5	29	9.2	48
<i>Russell 1000</i>	-0.7	46	10.6	49	14.0	48	15.7	40	10.4	29	13.2	34	9.6	40
<i>eV US Large Cap Equity Net Median</i>	-0.9		10.4		13.4		14.9		9.1		12.3		9.2	
<i>BlackRock Russell 1000^{***}</i>	-0.7	46	10.6	52	14.0	50	--	--	--	--	--	--	--	--
<i>DE Shaw</i>	-0.4	37	13.8	13	16.8	20	18.9	6	12.4	3	14.7	4	--	--
<i>Russell 1000</i>	-0.7	45	10.6	51	14.0	50	15.7	33	10.4	22	13.2	28	9.6	33
<i>eV US Large Cap Core Equity Net Median</i>	-0.8		10.6		13.9		14.7		9.3		12.3		9.1	

* 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 10/1/17, Policy Index is 21% Russell 3000/19% MSCI ACWI ex US IMI NI/ 14% BBgBarc Aggregate/ 2% BBgBarc TIPS/ 7% BBgBarc BA Intermediate HY / 8% NCREIF NFI ODCE/ 7% Russell 3000 + 3% 8% (60% MSCI World/40% BBgBarc Global Aggregate)/ 6% Libor +4%/ 8% (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.

Total Fund
Performance Summary (Net of Fees)

Period Ending: March 31, 2018

	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	2 Yrs (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Small Cap Equity	-0.8	53	7.3	66	9.3	61	14.5	76	6.0	83	9.4	84	8.2	90
<i>Russell 2000</i>	-0.1	44	9.1	47	11.8	47	18.8	36	8.4	52	11.5	50	9.8	59
<i>eV US Small Cap Equity Net Median</i>	-0.5		8.7		11.0		17.3		8.5		11.5		10.2	
QMA US Small Cap	-0.8	56	7.3	76	9.3	69	--	--	--	--	--	--	--	--
<i>Russell 2000</i>	-0.1	39	9.1	45	11.8	44	18.8	22	8.4	53	11.5	56	9.8	60
<i>eV US Small Cap Core Equity Net Median</i>	-0.5		8.7		11.2		17.4		8.6		11.9		10.2	
International Equity	-0.9	77	8.9	81	15.6	80	13.4	82	6.6	59	6.4	58	2.1	84
<i>MSCI ACWI ex US IMI ²</i>	-1.1	81	10.7	44	17.4	51	15.5	52	7.2	37	6.7	48	3.3	44
<i>MSCI EAFE Gross</i>	-1.4	90	8.4	86	15.3	82	13.8	80	6.0	70	7.0	37	3.2	50
<i>InvestorForce All DB ex-US Eq Net Median</i>	-0.4		10.5		17.4		15.5		6.8		6.6		3.2	
Developed Markets	-1.2	74	8.2	82	15.3	65	13.1	73	6.4	49	6.8	62	2.3	81
<i>MSCI ACWI ex USA Gross</i>	-1.1	64	10.4	28	17.0	39	15.4	26	6.7	43	6.4	70	3.2	49
<i>InvestorForce All DB Dev Mkt ex-US Eq Net Median</i>	-0.4		9.6		16.2		14.0		6.4		7.2		3.0	
Baillie Gifford	-0.8	91	9.3	91	18.8	89	14.5	81	7.8	72	8.2	65	--	--
<i>MSCI ACWI ex US ²</i>	-1.1	94	10.4	84	17.0	96	15.4	70	6.7	92	7.3	83	--	--
<i>MSCI ACWI ex US Growth ²</i>	-0.8	92	11.7	80	20.3	77	15.1	74	7.7	78	8.0	69	--	--
<i>eV ACWI ex-US Growth Equity Net Median</i>	1.1		15.2		24.5		17.1		9.3		8.7		5.4	
BlackRock EAFE Index	-1.6	69	8.2	69	15.0	71	13.6	54	5.9	67	--	--	--	--
<i>MSCI EAFE</i>	-1.5	66	8.2	69	14.8	72	13.2	58	5.6	72	6.5	76	2.7	89
<i>MSCI EAFE Gross</i>	-1.4	61	8.4	65	15.3	68	13.8	50	6.0	65	7.0	70	3.2	71
<i>eV EAFE Core Equity Net Median</i>	-1.0		9.9		16.8		13.8		6.8		7.7		3.9	
Mondrian	-1.3	51	7.7	59	12.2	67	11.8	67	5.1	65	5.8	74	2.8	68
<i>MSCI ACWI ex USA Value Gross</i>	-1.4	55	9.2	40	13.9	43	15.6	45	5.6	62	5.5	84	2.7	69
<i>MSCI ACWI ex USA Gross</i>	-1.1	44	10.4	20	17.0	16	15.4	48	6.7	39	6.4	68	3.2	49
<i>eV ACWI ex-US Value Equity Net Median</i>	-1.3		8.4		13.5		15.0		6.5		6.9		3.1	

2. See Appendix for Benchmark History.

Total Fund
Performance Summary (Net of Fees)

Period Ending: March 31, 2018

	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	2 Yrs (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Emerging Markets	1.4	59	14.0	63	17.8	80	16.2	85	7.5	73	3.7	68	--	--
MSCI Emerging Markets Gross	1.5	59	17.8	20	25.4	13	21.5	33	9.2	31	5.4	22	3.4	30
InvestorForce All DB Emg Mkt Eq Net Median	1.7		15.8		20.8		19.3		8.5		4.3		3.1	
Parametric Core	1.4	51	14.0	72	17.8	86	16.2	84	--	--	--	--	--	--
MSCI Emerging Markets Gross	1.5	50	17.8	44	25.4	38	21.5	43	9.2	49	5.4	50	3.4	61
eV Emg Mkts Equity Net Median	1.4		17.0		24.2		20.6		9.0		5.3		3.8	
Fixed Income	-0.3	26	1.3	30	2.8	48	5.7	7	3.4	13	3.1	28	5.3	26
Blended Fixed Income Index ²	-1.1	66	0.6	61	2.5	56	2.7	61	2.5	41	2.1	57	4.0	73
InvestorForce All DB Total Fix Inc Net Median	-0.9		0.8		2.7		3.1		2.2		2.3		4.7	
Core Fixed	-1.0	--	0.4	--	2.1	--	3.0	--	2.1	--	2.6	--	4.6	--
BBgBarc US Aggregate TR	-1.5	--	-0.2	--	1.2	--	0.8	--	1.2	--	1.8	--	3.6	--
BlackRock Intermediate Govt	-0.7	17	-0.7	65	0.1	61	--	--	--	--	--	--	--	--
BBgBarc US Govt Int TR	-0.7	25	-0.8	72	-0.1	76	-0.4	68	0.5	67	0.7	67	2.2	77
eV US Government Fixed Inc Net Median	-0.9		-0.5		0.7		-0.1		0.6		1.0		2.8	
FIAM Bond	-1.3	36	0.2	23	1.5	40	2.0	17	1.8	18	2.4	16	4.7	16
BBgBarc US Aggregate TR	-1.5	56	-0.2	61	1.2	66	0.8	71	1.2	71	1.8	62	3.6	80
Western TRU	-0.7	6	2.5	1	5.8	1	7.0	1	--	--	--	--	--	--
3-Month Libor Total Return USD	0.5	1	1.2	4	1.5	39	1.2	51	0.9	89	0.7	99	0.7	99
BBgBarc US Aggregate TR	-1.5	56	-0.2	61	1.2	66	0.8	71	1.2	71	1.8	62	3.6	80
eV US Core Fixed Inc Net Median	-1.4		-0.1		1.4		1.2		1.4		1.9		4.1	
Opportunistic Credit	1.1	--	3.7	--	6.2	--	11.6	--	6.6	--	6.8	--	--	--
BBgBarc BA Intermediate HY	-1.5	--	0.4	--	2.9	--	6.4	--	4.3	--	3.6	--	--	--
Angelo Gordon Opportunistic **	5.7	--	14.3	--	19.1	--	15.6	--	10.8	--	--	--	--	--
Angelo Gordon STAR **	7.5	--	15.8	--	22.2	--	17.5	--	11.5	--	12.7	--	--	--
BBgBarc US Aggregate TR	-1.5	--	-0.2	--	1.2	--	0.8	--	1.2	--	1.8	--	3.6	--

** Preliminary return as of 3/31/2018.

2. See Appendix for Benchmark History.

Total Fund
Performance Summary (Net of Fees)

Period Ending: March 31, 2018

	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	2 Yrs (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Beach Point Select	1.1	4	5.1	5	7.1	6	11.5	9	8.3	1	--	--	--	--
BBgBarc BA Intermediate HY ²	-1.5	88	0.4	93	2.9	79	6.4	82	4.3	60	3.6	86	--	--
eV US High Yield Fixed Inc Net Median	-0.7		1.5		3.6		8.6		4.5		4.4		7.4	
Brigade Capital	1.1	5	2.8	22	4.7	22	13.8	3	5.2	24	4.4	54	--	--
BBgBarc BA Intermediate HY ²	-1.5	88	0.4	93	2.9	79	6.4	82	4.3	60	3.6	86	--	--
50% Barclays HY/ 50% Bank Loan	0.4	16	2.7	22	4.2	30	8.5	52	4.8	45	4.6	40	--	--
eV US High Yield Fixed Inc Net Median	-0.7		1.5		3.6		8.6		4.5		4.4		7.4	
PIMCO Diversified ^{**}	-0.6	49	--	--	--	--	--	--	--	--	--	--	--	--
Blended PIMCO Diversified Index ²	-1.3	78	1.3	67	3.4	58	5.9	88	4.3	58	4.2	62	6.7	75
BBgBarc BA Intermediate HY	-1.5	88	0.4	93	2.9	79	6.4	82	4.3	60	3.6	86	--	--
eV US High Yield Fixed Inc Net Median	-0.7		1.5		3.6		8.6		4.5		4.4		7.4	
Franklin Templeton	2.0	14	1.9	69	0.9	98	6.9	28	3.0	60	2.0	67	--	--
BBgBarc Multiverse TR	1.3	27	4.3	26	7.0	27	2.9	76	3.4	51	1.7	76	2.8	80
eV All Global Fixed Inc Net Median	0.3		2.8		4.9		5.1		3.4		2.9		4.3	
Private Credit	1.8	--	4.5	--	6.6	--	--	--	--	--	--	--	--	--
Cliffwater Direct Lending Index	2.0	--	6.1	--	8.3	--	10.2	--	8.3	--	9.3	--	9.6	--
TCP Direct Lending VIII [*]	1.5	3	4.8	6	6.8	7	--	--	--	--	--	--	--	--
White Oak Yield ^{* **}	2.2	2	1.9	39	--	--	--	--	--	--	--	--	--	--
Cliffwater Direct Lending Index [*]	2.0	2	6.1	2	8.3	3	10.2	26	8.3	1	9.3	1	9.6	1
eV US High Yield Fixed Inc Net Median	-0.7		1.5		3.6		8.6		4.5		4.4		7.4	
Risk Parity	-1.4	--	6.9	--	8.5	--	9.1	--	4.1	--	4.3	--	--	--
Blended Risk Parity Index ²	-0.7	--	6.2	--	9.2	--	10.1	--	6.9	--	8.7	--	--	--
AQR GRP, 10% Volatility	-1.2	--	8.1	--	9.7	--	10.0	--	3.4	--	3.0	--	--	--

* Preliminary return as of 3/31/2018.

** Funded August 2017.

*** Funded June 2017.

2. See Appendix for Benchmark History.

Total Fund
Performance Summary (Net of Fees)

Period Ending: March 31, 2018

	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	2 Yrs (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
PanAgora	-1.6	--	5.8	--	7.5	--	8.2	--	4.7	--	--	--	--	--
Blended Risk Parity Index ²	-0.7	--	6.2	--	9.2	--	10.1	--	6.9	--	8.7	--	--	--
Blended RP Secondary Index ²	-0.9	--	6.2	--	8.7	--	8.8	--	5.5	--	7.0	--	--	--
Alternatives	0.7	--	3.9	--	5.8	--	9.7	--	7.7	--	6.2	--	--	--
Alternatives Allocation Index ²	0.8	--	8.8	--	11.2	--	12.2	--	7.7	--	6.7	--	--	--
Blended Alternatives Index	0.8	--	9.0	--	11.5	--	12.6	--	7.9	--	8.0	--	--	--
Private Equity **	4.8	20	7.0	73	11.3	67	17.0	17	15.8	15	16.6	11	--	--
Russell 3000 +3%	0.2	81	13.3	17	16.8	36	18.9	9	13.2	24	16.0	13	12.7	1
Russell 3000 +3% 1Q Lag	7.1	9	16.6	7	24.1	10	19.9	9	14.1	20	18.6	6	11.7	5
InvestorForce All DB Private Eq Net Median	2.6		9.5		13.5		11.5		10.6		11.3		8.0	
Hedge Fund/Absolute Return	-3.1	98	1.1	86	0.5	93	2.1	92	3.3	25	5.7	14	--	--
Libor 1 month +4%	1.3	22	4.0	48	5.4	43	5.0	70	4.7	9	4.5	33	--	--
InvestorForce All DB Hedge Funds Net Median	0.1		3.9		5.0		6.3		2.2		3.8		2.7	
AQR DELTA XN	-3.9	90	1.3	77	0.1	83	2.1	77	3.6	49	5.8	44	--	--
Aberdeen Standard GARS	-1.9	78	0.3	85	1.1	77	1.5	80	--	--	--	--	--	--
Libor 1 month +4%	1.3	33	4.0	53	5.4	50	5.0	62	4.7	43	4.5	54	--	--
eV Alt All Multi-Strategy Median	0.3		4.3		5.3		6.6		3.4		4.9		5.9	
Inflation Hedge	-0.3	--	4.7	--	5.2	--	7.2	--	--	--	--	--	--	--
Blended Inflation Pool Index ²	-0.5	--	5.7	--	6.3	--	7.2	--	--	--	--	--	--	--
Real Estate	2.2	5	6.0	5	7.9	10	9.0	3	10.2	3	11.3	2	5.0	3
NCREIF ODCE	2.2	4	6.3	5	8.1	5	8.2	14	10.0	4	11.4	2	5.5	3
InvestorForce All DB Real Estate Pub Net Median	1.7		4.7		6.5		6.5		8.2		9.8		4.0	
Invesco	2.3	--	6.0	--	8.0	--	9.0	--	10.1	--	11.2	--	5.0	--
NCREIF ODCE	2.2	--	6.3	--	8.1	--	8.2	--	10.0	--	11.4	--	5.5	--

** Returns are one-quarter lag.

2. See Appendix for Benchmark History.

Total Fund
Performance Summary (Net of Fees)

Period Ending: March 31, 2018

	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	2 Yrs (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Invesco US Val IV	2.4	--	9.9	--	11.7	--	10.6	--	--	--	--	--	--	--
NCREIF ODCE	2.2	--	6.3	--	8.1	--	8.2	--	10.0	--	11.4	--	5.5	--
NCREIF CEVA 1Q Lag - NET	3.4	--	9.3	--	10.8	--	10.3	--	13.1	--	--	--	--	--
PGIM RE US Debt Fund ***	0.9	--	--	--	--	--	--	--	--	--	--	--	--	--
NCREIF ODCE	2.2	--	6.3	--	8.1	--	8.2	--	10.0	--	11.4	--	5.5	--
Private Real Asset * **	-1.9	--	-7.3	--	-10.2	--	-2.6	--	9.8	--	--	--	--	--
Blended Real Asset Index ²	-3.2	--	6.2	--	5.9	--	7.0	--	6.3	--	--	--	--	--
Blended Private Real Asset Index ^{*2}	6.6	--	11.9	--	16.2	--	14.7	--	7.4	--	--	--	--	--
Liquid Pool	-2.9	--	7.2	--	7.4	--	--	--	--	--	--	--	--	--
Blended Real Asset Index ²	-3.2	--	6.2	--	5.9	--	7.0	--	6.3	--	--	--	--	--
SSgA Custom Real Asset	-2.9	--	7.2	--	7.4	--	--	--	--	--	--	--	--	--
Blended Real Asset Index ²	-3.2	--	6.2	--	5.9	--	7.0	--	6.3	--	--	--	--	--
TIPS	-0.3	--	1.7	--	1.0	--	1.8	--	1.6	--	-0.4	--	--	--
BBgBarc US TIPS TR	-0.8	--	1.3	--	0.9	--	1.2	--	1.3	--	0.0	--	2.9	--
Brown Brothers Harriman	-0.3	9	1.7	28	1.0	41	1.8	28	1.6	20	-0.4	78	--	--
BBgBarc US TIPS TR	-0.8	46	1.3	53	0.9	56	1.2	45	1.3	36	0.0	37	2.9	52
eV US TIPS / Inflation Fixed Inc Net Median	-0.8	--	1.3	--	1.0	--	1.1	--	1.2	--	0.0	--	2.9	--
Cash	0.2	--	0.7	--	0.9	--	0.9	--	1.0	--	0.8	--	0.5	--
91 Day T-Bills	0.4	--	0.9	--	1.2	--	0.8	--	0.5	--	0.3	--	0.3	--
General Account	0.4	--	1.7	--	2.0	--	1.5	--	1.7	--	1.1	--	0.9	--
Treasury & LAIF	2.2	--	2.7	--	3.1	--	1.8	--	1.5	--	1.3	--	0.7	--
91 Day T-Bills	0.4	--	0.9	--	1.2	--	0.8	--	0.5	--	0.3	--	0.3	--

* Preliminary return as of 3/31/2018.

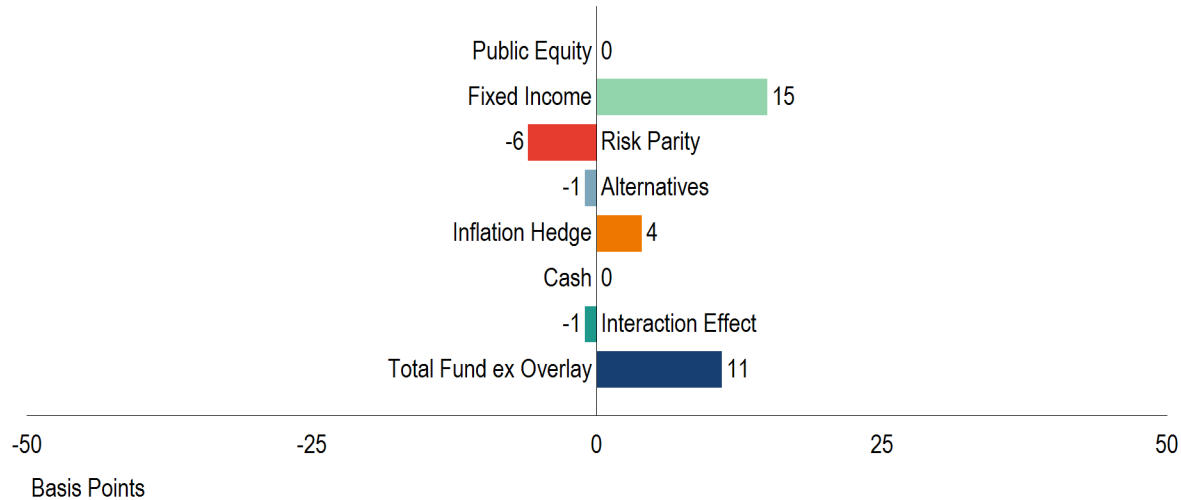
** Returns are one-quarter lag.

*** Funded July 2017.

2. See Appendix for Benchmark History.

Total Fund ex Overlay
Performance Attribution

Period Ending: March 31, 2018

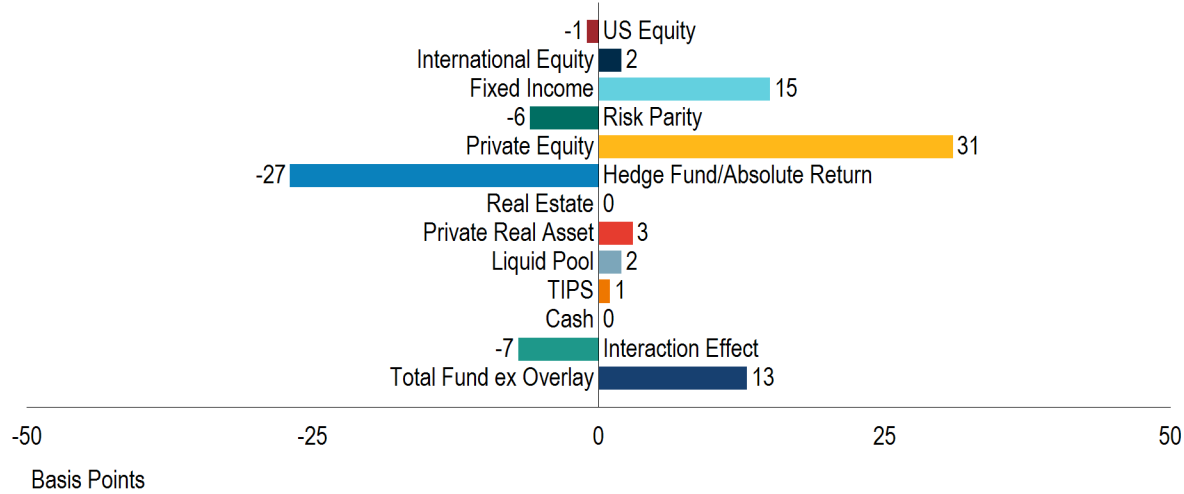


	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
Public Equity	-0.79%	-0.79%	0.00%	0.00%	-0.01%	0.00%	-0.01%
Fixed Income	-0.34%	-1.07%	0.74%	0.15%	-0.02%	-0.01%	0.13%
Risk Parity	-1.41%	-0.67%	-0.74%	-0.06%	0.00%	0.00%	-0.05%
Alternatives	0.69%	0.77%	-0.08%	-0.01%	-0.02%	0.00%	-0.03%
Inflation Hedge	-0.33%	-0.53%	0.21%	0.04%	-0.01%	-0.01%	0.02%
Cash	0.18%	0.38%	-0.20%	0.00%	0.06%	0.00%	0.05%
Total	-0.44%	-0.55%	0.11%	0.12%	0.00%	-0.01%	0.11%

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

Total Fund ex Overlay
Performance Attribution

Period Ending: March 31, 2018

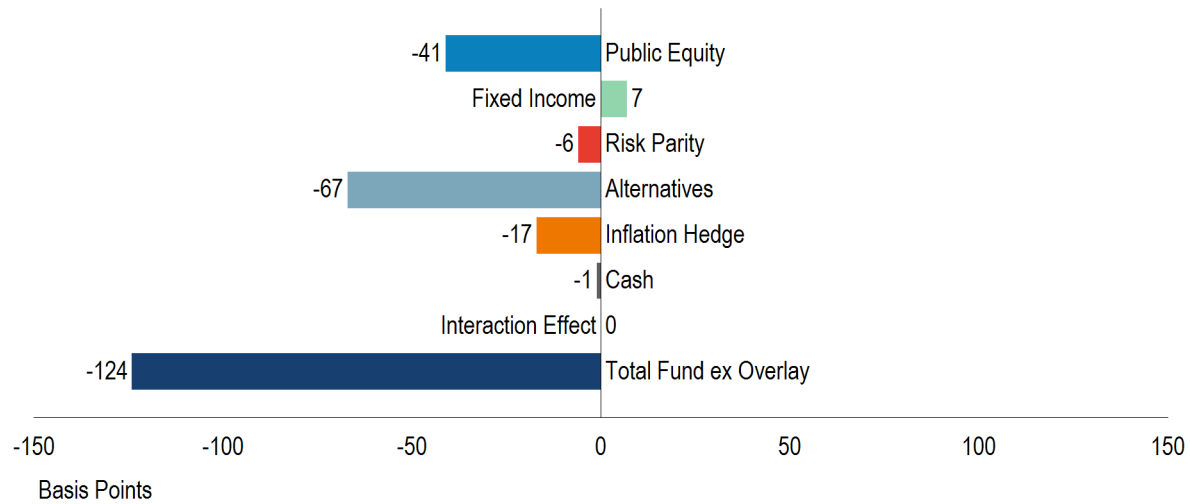


	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
US Equity	-0.66%	-0.64%	-0.02%	-0.01%	0.00%	0.00%	-0.01%
International Equity	-0.93%	-1.06%	0.13%	0.02%	-0.01%	0.00%	0.02%
Fixed Income	-0.34%	-1.07%	0.74%	0.15%	-0.02%	-0.01%	0.13%
Risk Parity	-1.41%	-0.67%	-0.74%	-0.06%	0.00%	0.00%	-0.06%
Private Equity	4.80%	0.22%	4.58%	0.31%	-0.01%	-0.06%	0.24%
Hedge Fund/Absolute Return	-3.13%	1.29%	-4.42%	-0.27%	0.00%	0.00%	-0.27%
Real Estate	2.17%	2.20%	-0.03%	0.00%	-0.04%	0.00%	-0.04%
Private Real Asset	-1.92%	-3.23%	1.31%	0.03%	0.02%	-0.01%	0.03%
Liquid Pool	-2.90%	-3.23%	0.33%	0.02%	0.00%	0.00%	0.02%
TIPS	-0.28%	-0.79%	0.51%	0.01%	0.00%	0.00%	0.01%
Cash	0.18%	0.38%	-0.20%	0.00%	0.06%	0.00%	0.05%
Total	-0.44%	-0.57%	0.13%	0.21%	-0.01%	-0.07%	0.13%

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

Total Fund ex Overlay
Performance Attribution (1 Year)

Period Ending: March 31, 2018

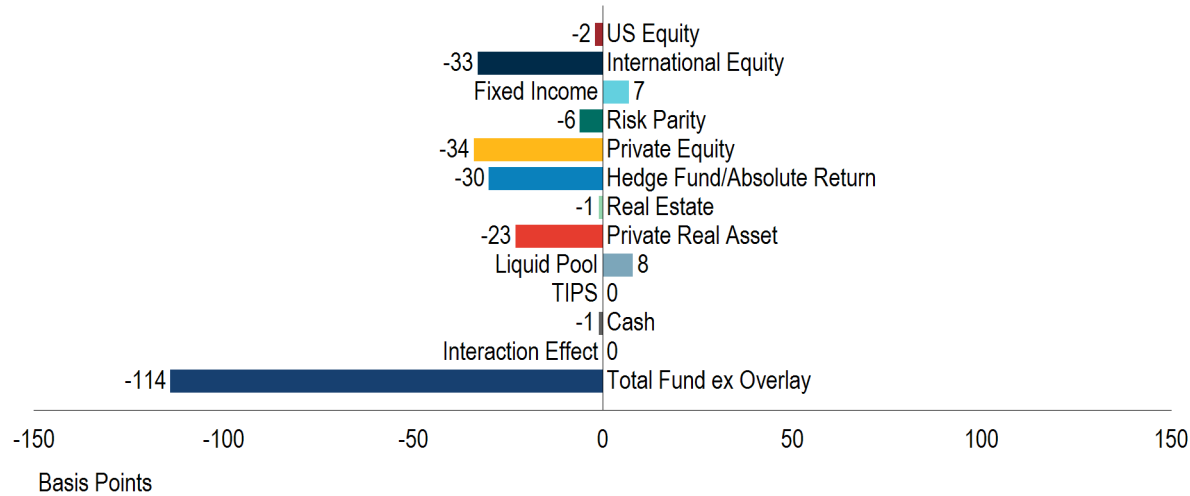


	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
Public Equity	14.56%	15.54%	-0.98%	-0.41%	0.00%	0.00%	-0.41%
Fixed Income	2.77%	2.50%	0.27%	0.07%	0.00%	0.00%	0.07%
Risk Parity	8.50%	9.20%	-0.70%	-0.06%	0.00%	0.00%	-0.06%
Alternatives	5.77%	11.46%	-5.69%	-0.67%	0.00%	0.00%	-0.67%
Inflation Hedge	5.22%	6.31%	-1.09%	-0.17%	0.00%	0.00%	-0.17%
Cash	0.90%	1.16%	-0.27%	-0.01%	0.00%	0.00%	-0.01%
Total	8.87%	10.11%	-1.24%	-1.24%	0.00%	0.00%	-1.24%

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

Total Fund ex Overlay
Performance Attribution (1 Year)

Period Ending: March 31, 2018



	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
US Equity	13.76%	13.81%	-0.06%	-0.02%	0.00%	0.00%	-0.02%
International Equity	15.63%	17.43%	-1.80%	-0.33%	0.00%	0.00%	-0.33%
Fixed Income	2.77%	2.50%	0.27%	0.07%	0.00%	0.00%	0.07%
Risk Parity	8.50%	9.20%	-0.70%	-0.06%	0.00%	0.00%	-0.06%
Private Equity	11.32%	16.81%	-5.49%	-0.34%	0.00%	0.00%	-0.34%
Hedge Fund/Absolute Return	0.48%	5.36%	-4.88%	-0.30%	0.00%	0.00%	-0.30%
Real Estate	7.92%	8.07%	-0.15%	-0.01%	0.00%	0.00%	-0.01%
Private Real Asset	-10.24%	5.94%	-16.19%	-0.23%	0.00%	0.00%	-0.23%
Liquid Pool	7.44%	5.94%	1.50%	0.08%	0.00%	0.00%	0.08%
TIPS	1.03%	0.92%	0.11%	0.00%	0.00%	0.00%	0.00%
Cash	0.90%	1.16%	-0.27%	-0.01%	0.00%	0.00%	-0.01%
Total	8.87%	10.01%	-1.14%	-1.14%	0.00%	0.00%	-1.14%

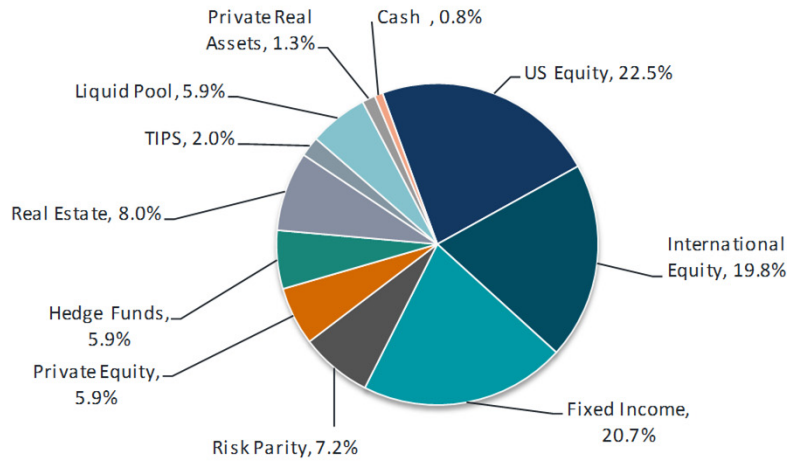
Attribution does not include the impact of the Parametric Minneapolis strategy.
* Interaction Effects include Residual Effects.

Total Fund

Asset Allocation Analysis

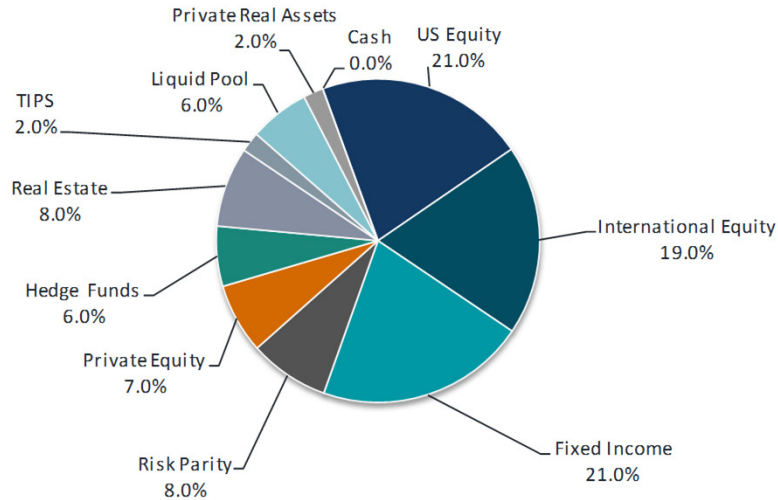
Period Ending: March 31, 2018

Current w/Overlay



ASSET ALLOCATION	MARKET VALUE		
	W/OVERLAY	W/OVERLAY	W/O OVERLAY
US Equity	974,751,392	22.5%	22.2%
International Equity	857,322,259	19.8%	19.6%
Fixed Income	896,477,189	20.7%	20.5%
Risk Parity	311,764,287	7.2%	7.2%
Private Equity	254,246,384	5.9%	5.9%
Hedge Funds	254,250,431	5.9%	5.9%
Real Estate	345,766,757	8.0%	8.0%
TIPS	87,208,248	2.0%	2.0%
Liquid Pool	256,163,006	5.9%	5.9%
Private Real Assets	57,821,752	1.3%	1.3%
Cash	35,132,767	0.8%	1.5%
TOTAL	4,330,904,472	100.0%	100.0%

Target



ASSET ALLOCATION	W/OVERLAY	TARGET	DIFF
US Equity	22.5%	21.0%	1.5%
International Equity	19.8%	19.0%	0.8%
Fixed Income	20.7%	21.0%	-0.3%
Risk Parity	7.2%	8.0%	-0.8%
Private Equity	5.9%	7.0%	-1.1%
Hedge Funds	5.9%	6.0%	-0.1%
Real Estate	8.0%	8.0%	0.0%
TIPS	2.0%	2.0%	0.0%
Liquid Pool	5.9%	6.0%	-0.1%
Private Real Assets	1.3%	2.0%	-0.7%
Cash	0.8%	0.0%	0.8%
TOTAL	100.0%	100.0%	0.0%

Statistics Summary

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	6.5%	50	6.1%	61	1.0	56	-0.4	80	1.0%	41
Policy Index	6.9%	31	6.6%	82	1.0	58	--	--	0.0%	1
InvestorForce Public DB > \$1B Net Median	6.5%	--	5.8%	--	1.0	--	0.0	--	1.1%	--

Statistics Summary

5 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	7.8%	37	6.1%	63	1.2	44	-0.2	75	1.0%	29
Policy Index	8.1%	27	6.5%	82	1.2	51	--	--	0.0%	1
InvestorForce Public DB > \$1B Net Median	7.7%	--	5.8%	--	1.2	--	0.0	--	1.1%	--

Statistics Summary

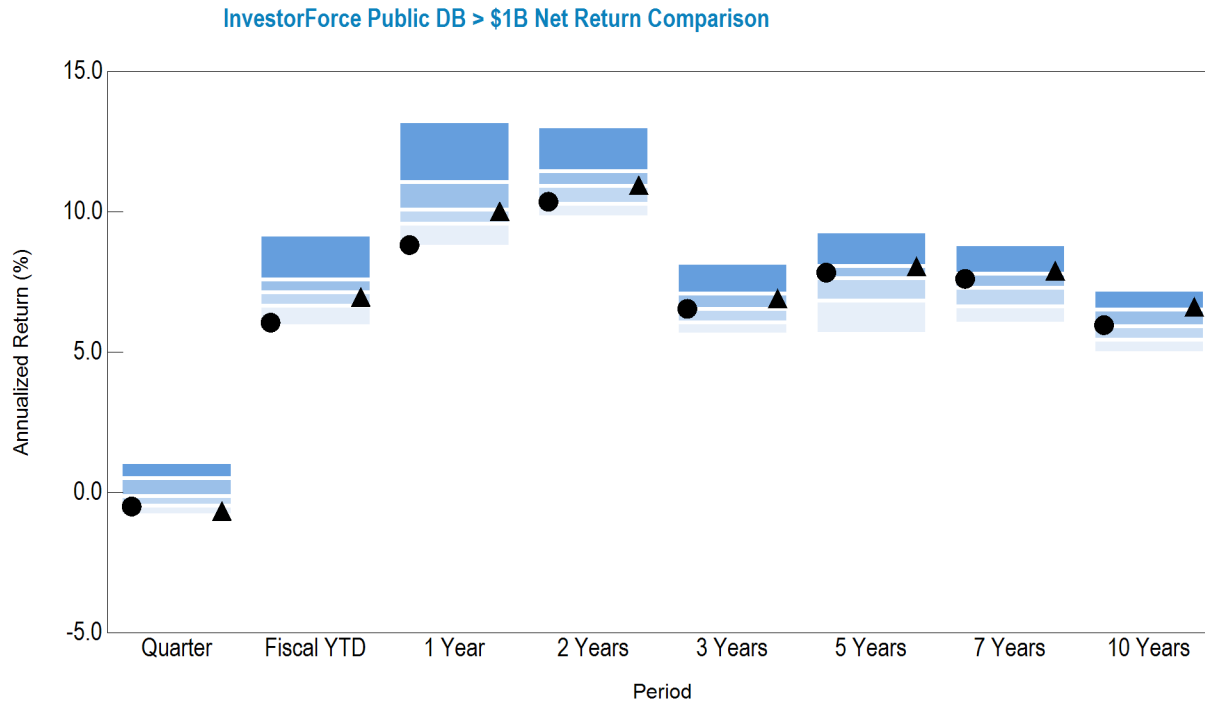
3 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Cash	1.0%	0.4%	1.3	1.2	0.4%
91 Day T-Bills	0.5%	0.1%	0.0	--	0.0%
General Account	1.7%	0.6%	1.9	1.9	0.6%
91 Day T-Bills	0.5%	0.1%	0.0	--	0.0%
Treasury & LAIF	1.5%	1.0%	1.0	1.0	0.9%
91 Day T-Bills	0.5%	0.1%	0.0	--	0.0%

Statistics Summary

5 Years

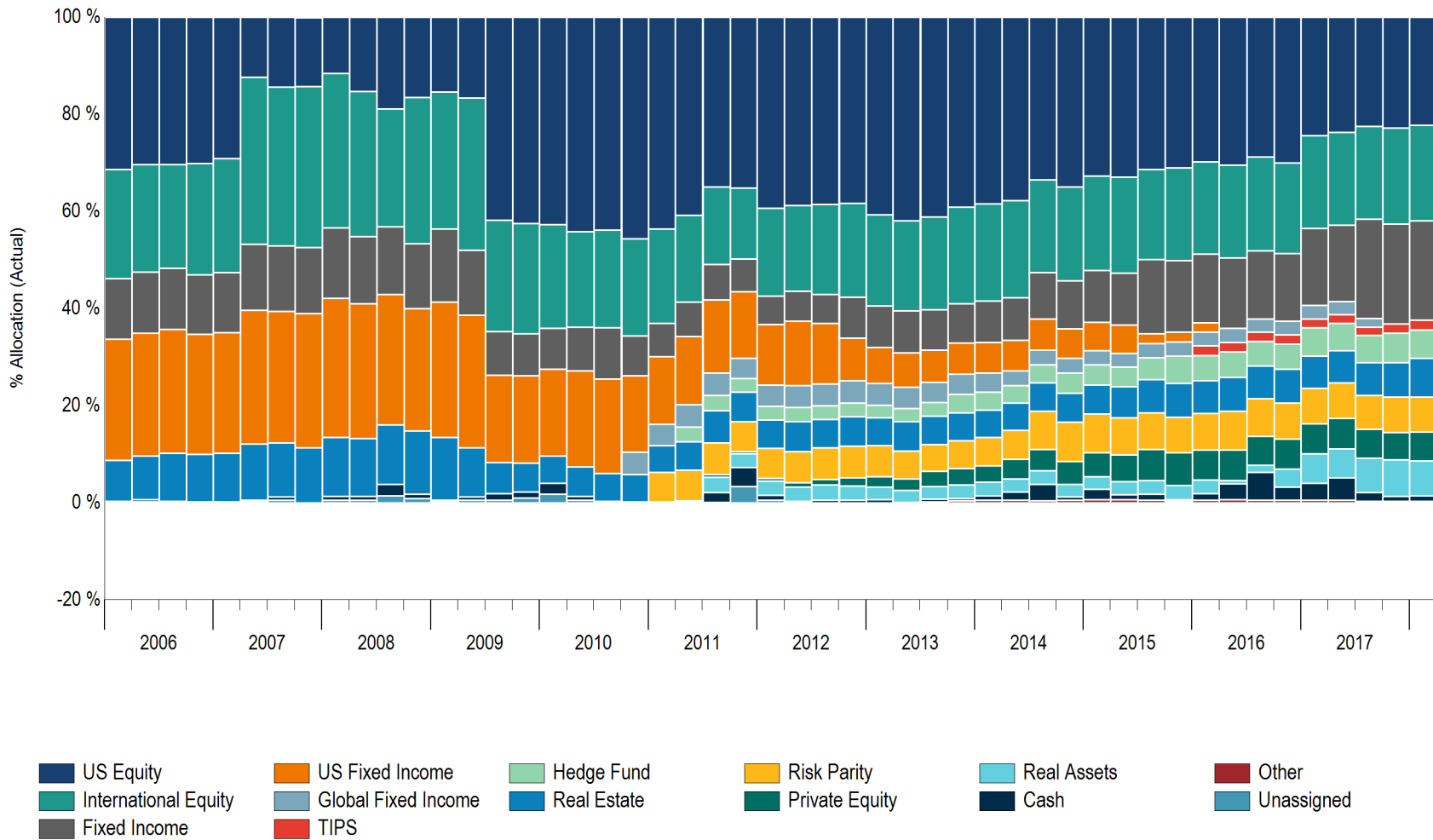
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Cash	0.8%	0.3%	1.5	1.4	0.3%
91 Day T-Bills	0.3%	0.1%	0.0	--	0.0%
General Account	1.1%	0.5%	1.6	1.7	0.5%
91 Day T-Bills	0.3%	0.1%	0.0	--	0.0%
Treasury & LAIF	1.3%	0.8%	1.1	1.2	0.8%
91 Day T-Bills	0.3%	0.1%	0.0	--	0.0%

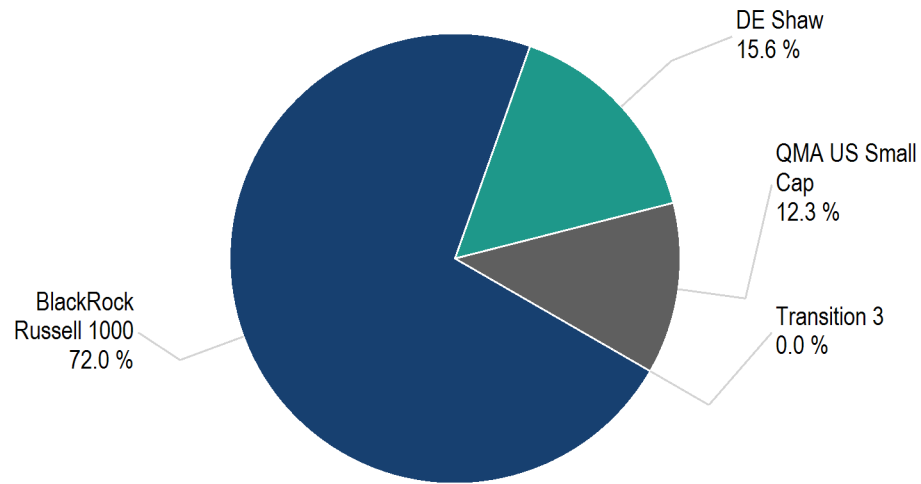


	Return (Rank)							
	Quarter	Fiscal YTD	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
5th Percentile	1.1	9.2	13.2	13.0	8.2	9.3	8.9	7.2
25th Percentile	0.5	7.6	11.1	11.5	7.1	8.1	7.8	6.5
Median	-0.1	7.1	10.1	10.9	6.5	7.7	7.3	5.9
75th Percentile	-0.5	6.7	9.6	10.3	6.1	6.8	6.7	5.5
95th Percentile	-0.8	5.9	8.8	9.8	5.6	5.7	6.0	5.0
# of Portfolios	40	39	39	39	39	39	38	35
● Total Fund	-0.5 (79)	6.1 (93)	8.8 (93)	10.4 (71)	6.5 (50)	7.8 (37)	7.6 (36)	6.0 (48)
▲ Policy Index	-0.7 (90)	7.0 (57)	10.0 (52)	11.0 (46)	6.9 (31)	8.1 (27)	7.9 (22)	6.6 (15)

Total Fund
Asset Allocation History

Period Ending: March 31, 2018





	Actual \$	Actual %	Manager Contribution to Excess Return %
BlackRock Russell 1000	\$693,918,140	72.0%	0.0%
DE Shaw	\$150,711,952	15.6%	0.0%
QMA US Small Cap	\$118,879,558	12.3%	-0.1%
Transition Account	\$10,412	0.0%	0.0%
Actual vs. Policy Weight Difference			0.0%
Total	\$963,520,062	100.0%	0.0%

Statistics Summary

3 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
US Equity	9.7%	10.2%	0.9	-0.3	0.7%
Blended US Equity Index	9.9%	10.4%	0.9	--	0.0%
Russell 3000	10.2%	10.4%	0.9	0.5	0.6%

Statistics Summary

3 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Large Cap Equity	11.1%	10.2%	1.0	0.6	1.2%
Russell 1000	10.4%	10.3%	1.0	--	0.0%
DE Shaw	12.4%	10.4%	1.1	0.8	2.3%
Russell 1000	10.4%	10.3%	1.0	--	0.0%
Small Cap Equity	6.0%	13.4%	0.4	-0.9	2.8%
Russell 2000	8.4%	13.9%	0.6	--	0.0%

Statistics Summary

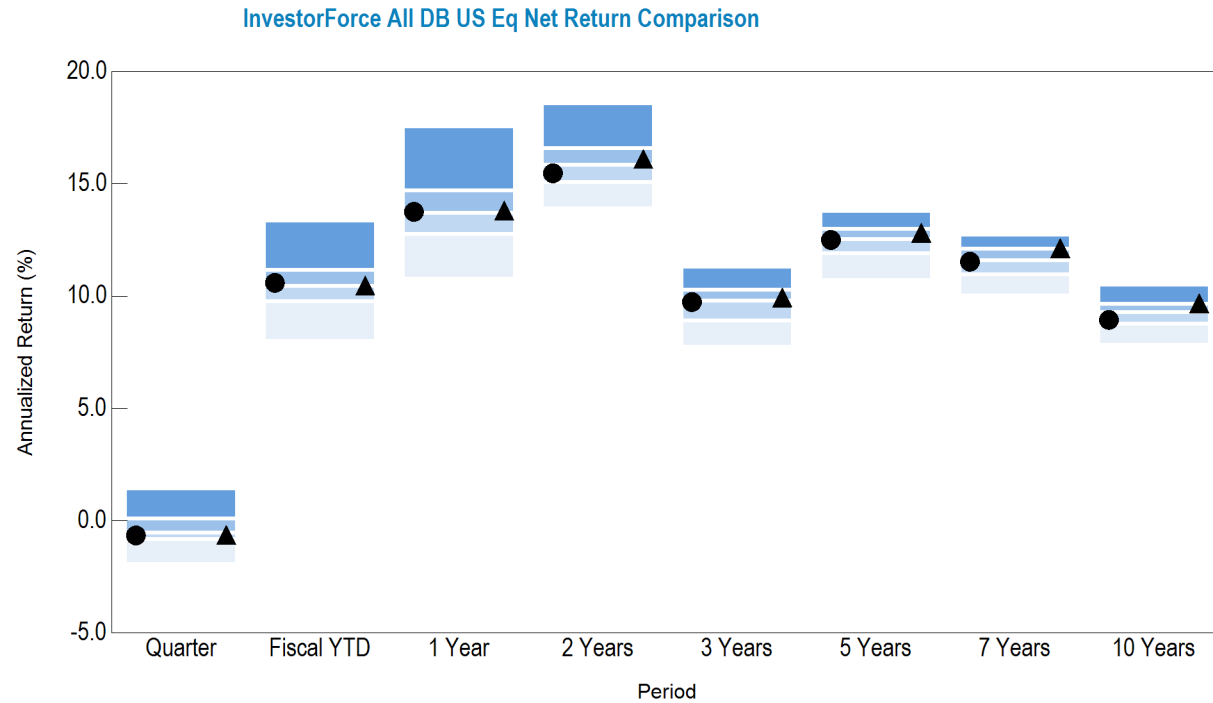
5 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
US Equity	12.5%	10.0%	1.2	-0.4	0.8%
Blended US Equity Index	12.8%	10.2%	1.2	--	0.0%
Russell 3000	13.0%	10.0%	1.3	0.3	0.8%

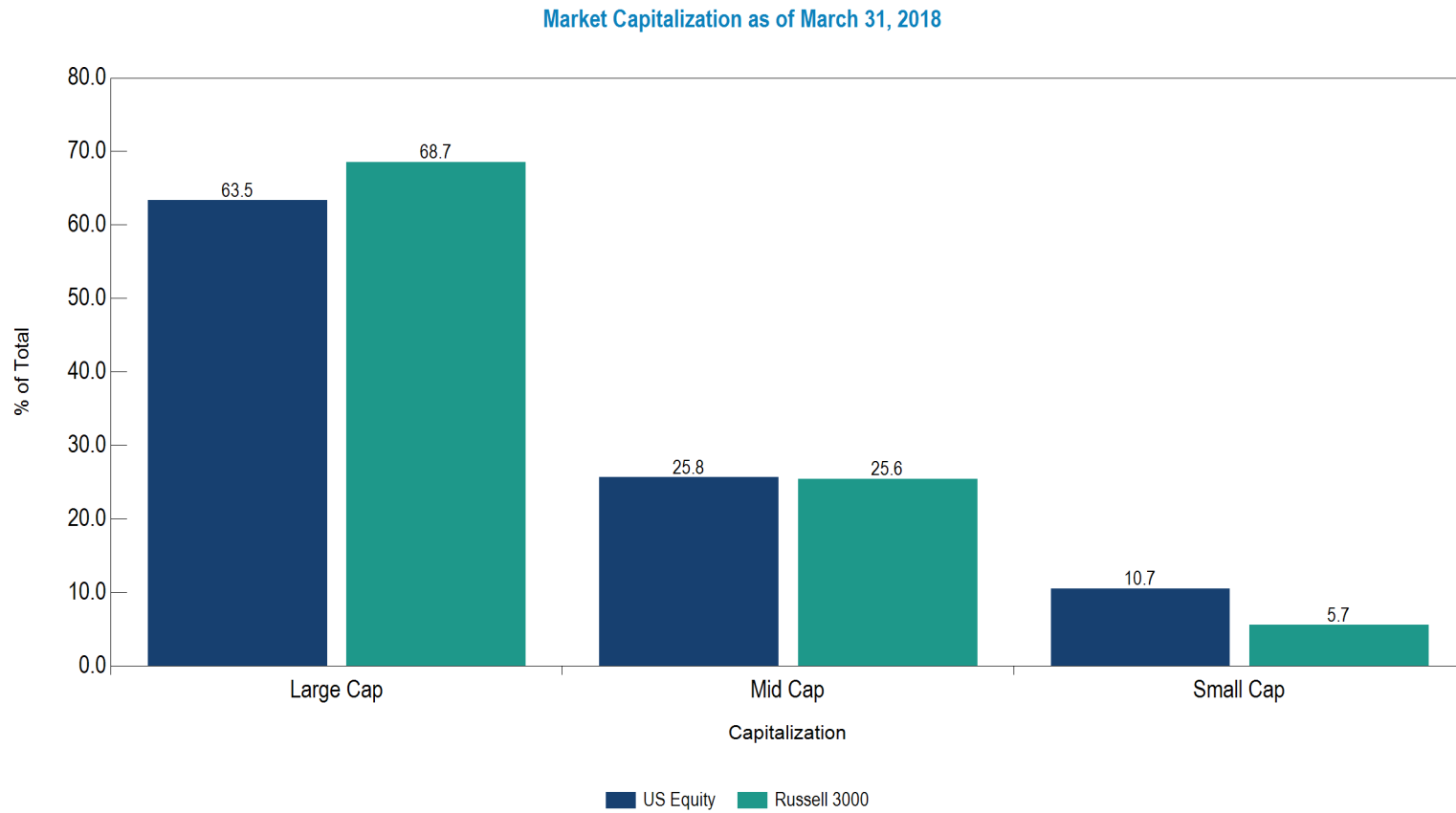
Statistics Summary

5 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Large Cap Equity	13.5%	9.8%	1.3	0.3	1.1%
Russell 1000	13.2%	9.9%	1.3	--	0.0%
DE Shaw	14.7%	10.1%	1.4	0.7	2.2%
Russell 1000	13.2%	9.9%	1.3	--	0.0%
Small Cap Equity	9.4%	13.3%	0.7	-0.8	2.6%
Russell 2000	11.5%	13.8%	0.8	--	0.0%



	Return (Rank)							
	Quarter	Fiscal YTD	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
5th Percentile	1.4	13.3	17.5	18.6	11.3	13.8	12.7	10.5
25th Percentile	0.1	11.2	14.7	16.6	10.3	13.0	12.1	9.7
Median	-0.5	10.5	13.7	15.9	9.8	12.6	11.6	9.3
75th Percentile	-0.8	9.8	12.8	15.1	8.9	11.9	11.0	8.8
95th Percentile	-1.9	8.0	10.8	13.9	7.7	10.7	10.1	7.8
# of Portfolios	531	526	525	516	507	453	374	297
● US Equity	-0.7 (67)	10.6 (41)	13.8 (49)	15.5 (65)	9.7 (53)	12.5 (54)	11.5 (55)	8.9 (69)
▲ Blended US Equity Index	-0.6 (63)	10.5 (49)	13.8 (47)	16.1 (39)	9.9 (44)	12.8 (36)	12.1 (24)	9.7 (26)



See appendix for the market capitalization breakpoints.

Characteristics

	Portfolio	Russell 3000
Number of Holdings	2,694	2,958
Weighted Avg. Market Cap. (\$B)	138.4	152.0
Median Market Cap. (\$B)	2.8	1.7
Price To Earnings	26.3	23.5
Price To Book	4.8	4.3
Price To Sales	4.0	4.0
Return on Equity (%)	22.7	19.0
Yield (%)	1.8	1.8
Beta (holdings; domestic)	1.1	1.0

Top Holdings

APPLE	3.4%
MICROSOFT	2.0%
AMAZON.COM	1.7%
ALPHABET 'C'	1.2%
BERKSHIRE HATHAWAY 'B'	1.1%
JP MORGAN CHASE & CO.	1.1%
FACEBOOK CLASS A	1.1%
ALPHABET A	1.1%
JOHNSON & JOHNSON	1.0%
BANK OF AMERICA	1.0%

Best Performers

	Return %
NII HOLDINGS (NIHD)	397.3%
DURECT (DRRX)	132.2%
CHEMOCENTRYX (CCXI)	128.6%
PFENEX (PFNX)	125.6%
ATARA BIOTHERAPEUTICS (ATRA)	115.5%
ENDOCYTE (ECYT)	112.4%
IOVANCE BIOTHERAPEUTICS (IOVA)	111.3%
TANDEM DIABETES CARE (TNDM)	110.2%
GENESIS HEALTHCARE 'A' (GEN)	97.9%
CAMBIUM LEARNING GROUP (ABCD)	97.2%

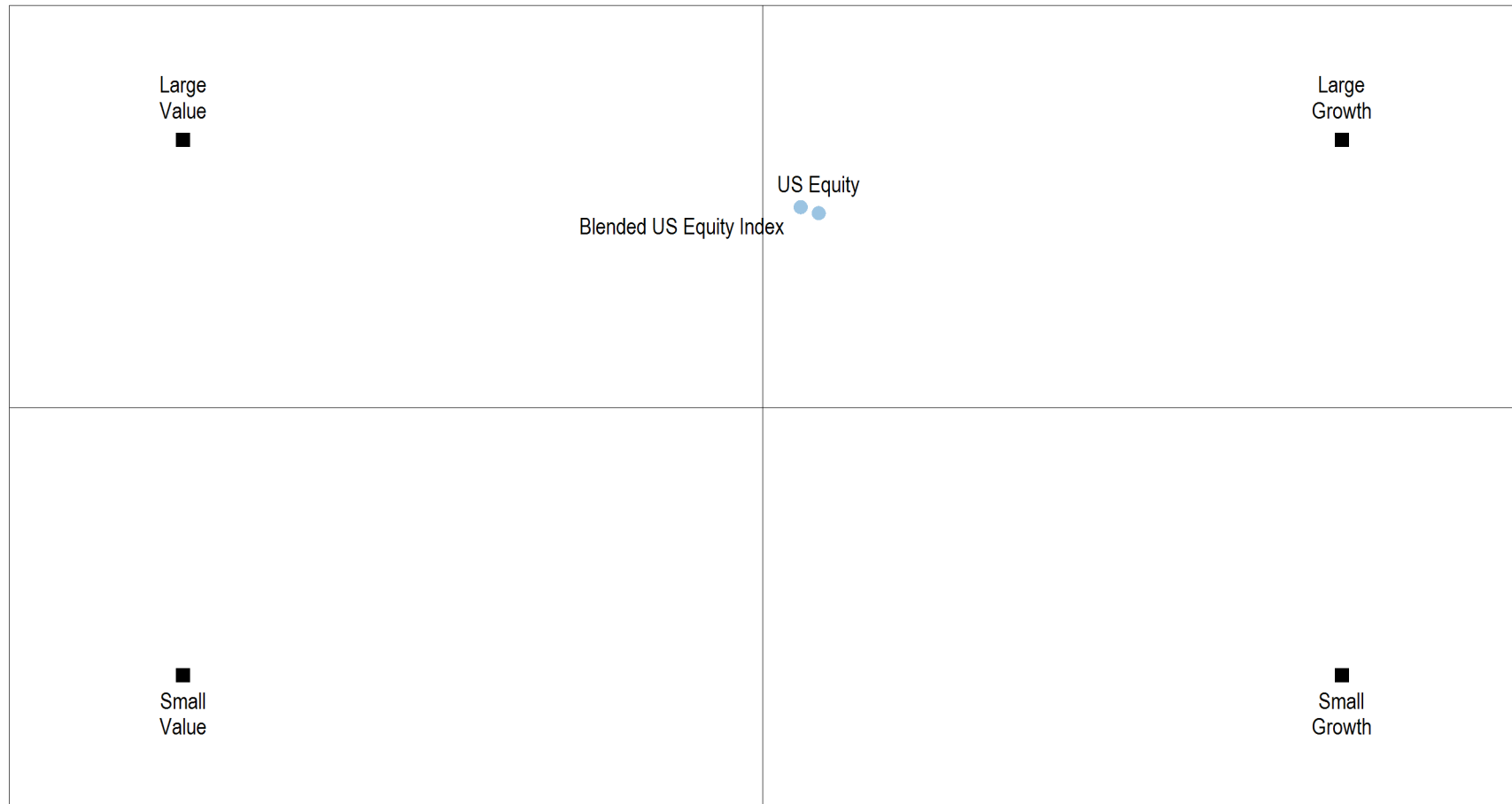
Worst Performers

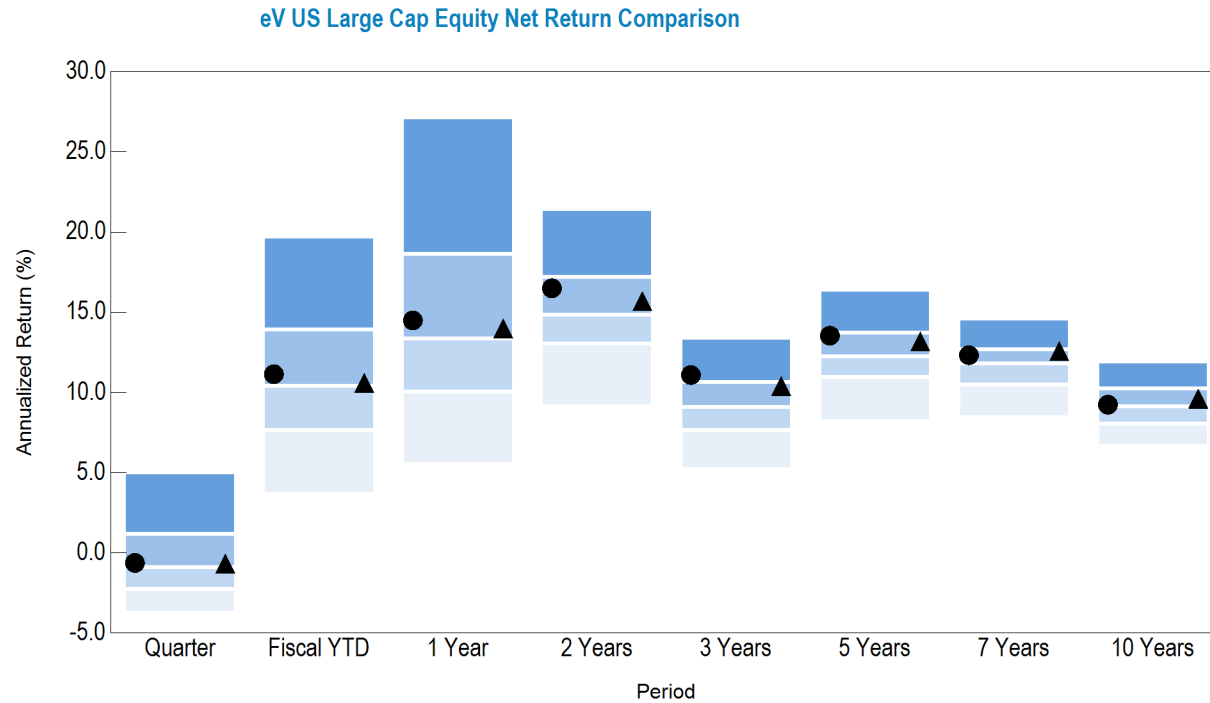
	Return %
COBALT INTL.ENERGY (CIE)	-95.5%
EDGE THERAPEUTICS (EDGE)	-87.4%
AXOVANT SCIENCES (AXON)	-74.8%
DERMIRA (DERM)	-71.3%
LONGFIN CL.A (LFIN)	-69.3%
ASCENT CAP.GP.SR.A (ASCMA)	-68.0%
ROADRUNNER TRSP.SYSTEMS (RRTS)	-67.1%
AUTOWEB (AUTO)	-66.9%
WESTMORELAND COAL (WLBA)	-66.1%
WILLBROS GROUP (WGRP)	-61.1%

US Equity Performance Attribution vs. Russell 3000

	Attribution Effects				Returns		Sector Weights				
	Total Effects	Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark			
Energy	0.0%	0.0%	0.0%	0.0%	-5.8%	-6.0%	5.5%	5.8%			
Materials	0.0%	0.0%	0.0%	0.0%	-5.2%	-5.3%	3.7%	3.5%			
Industrials	0.0%	0.0%	0.0%	0.0%	-1.6%	-1.8%	11.7%	11.0%			
Consumer Discretionary	-0.1%	-0.1%	0.0%	0.0%	1.3%	2.0%	12.2%	12.4%			
Consumer Staples	0.0%	0.0%	0.0%	0.0%	-6.8%	-6.8%	6.8%	7.3%			
Health Care	0.0%	0.0%	0.0%	0.0%	-0.6%	-0.5%	13.7%	13.3%			
Financials	0.1%	0.1%	0.0%	0.0%	0.4%	-0.4%	14.5%	15.2%			
Information Technology	0.0%	0.0%	0.1%	0.0%	3.8%	4.0%	23.9%	22.8%			
Telecommunication Services	0.0%	0.0%	0.0%	0.0%	-7.5%	-7.3%	1.5%	1.9%			
Utilities	0.0%	0.0%	0.0%	0.0%	-4.0%	-3.4%	2.6%	3.0%			
Real Estate	0.0%	0.0%	0.0%	0.0%	-5.0%	-6.2%	4.0%	3.9%			
Cash	0.0%	--	--	--	--	--	0.0%	0.0%			
Unclassified	0.0%	0.0%	0.0%	0.0%	-1.0%	--	0.1%	0.0%			
Portfolio	0.1%	=	0.0%	+	0.1%	+	0.0%	-0.5%	-0.7%	100.0%	100.0%

U.S. Effective Style Map





	Return (Rank)							
	Quarter	Fiscal YTD	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
5th Percentile	5.0	19.7	27.1	21.4	13.4	16.4	14.6	11.9
25th Percentile	1.2	13.9	18.7	17.2	10.7	13.8	12.7	10.3
Median	-0.9	10.4	13.4	14.9	9.1	12.3	11.8	9.2
75th Percentile	-2.3	7.7	10.1	13.1	7.7	11.0	10.5	8.1
95th Percentile	-3.7	3.7	5.6	9.2	5.2	8.2	8.5	6.7
# of Portfolios	585	583	583	575	566	528	477	429
● Large Cap Equity	-0.6 (45)	11.1 (43)	14.5 (45)	16.5 (32)	11.1 (20)	13.5 (29)	12.3 (35)	9.2 (48)
▲ Russell 1000	-0.7 (46)	10.6 (49)	14.0 (48)	15.7 (40)	10.4 (29)	13.2 (34)	12.6 (29)	9.6 (40)

Characteristics

	Portfolio	Russell 1000
Number of Holdings	2,615	975
Weighted Avg. Market Cap. (\$B)	157.6	164.4
Median Market Cap. (\$B)	3.4	10.1
Price To Earnings	26.0	24.2
Price To Book	5.0	4.6
Price To Sales	4.1	4.2
Return on Equity (%)	23.9	20.0
Yield (%)	1.8	1.9
Beta (holdings; domestic)	1.0	1.0

Top Holdings

APPLE	3.9%
MICROSOFT	2.2%
AMAZON.COM	1.9%
ALPHABET 'C'	1.4%
BERKSHIRE HATHAWAY 'B'	1.3%
JP MORGAN CHASE & CO.	1.2%
FACEBOOK CLASS A	1.2%
ALPHABET A	1.2%
JOHNSON & JOHNSON	1.2%
BANK OF AMERICA	1.1%

Best Performers

	Return %
NII HOLDINGS (NIHD)	397.3%
DURECT (DRRX)	132.2%
CHEMOCENTRYX (CCXI)	128.6%
PFENEX (PFNX)	125.6%
ATARA BIOTHERAPEUTICS (ATRA)	115.5%
ENDOCYTE (ECYT)	112.4%
IOVANCE BIOTHERAPEUTICS (IOVA)	111.3%
TANDEM DIABETES CARE (TNDM)	110.2%
GENESIS HEALTHCARE 'A' (GEN)	97.9%
CAMBIUM LEARNING GROUP (ABCD)	97.2%

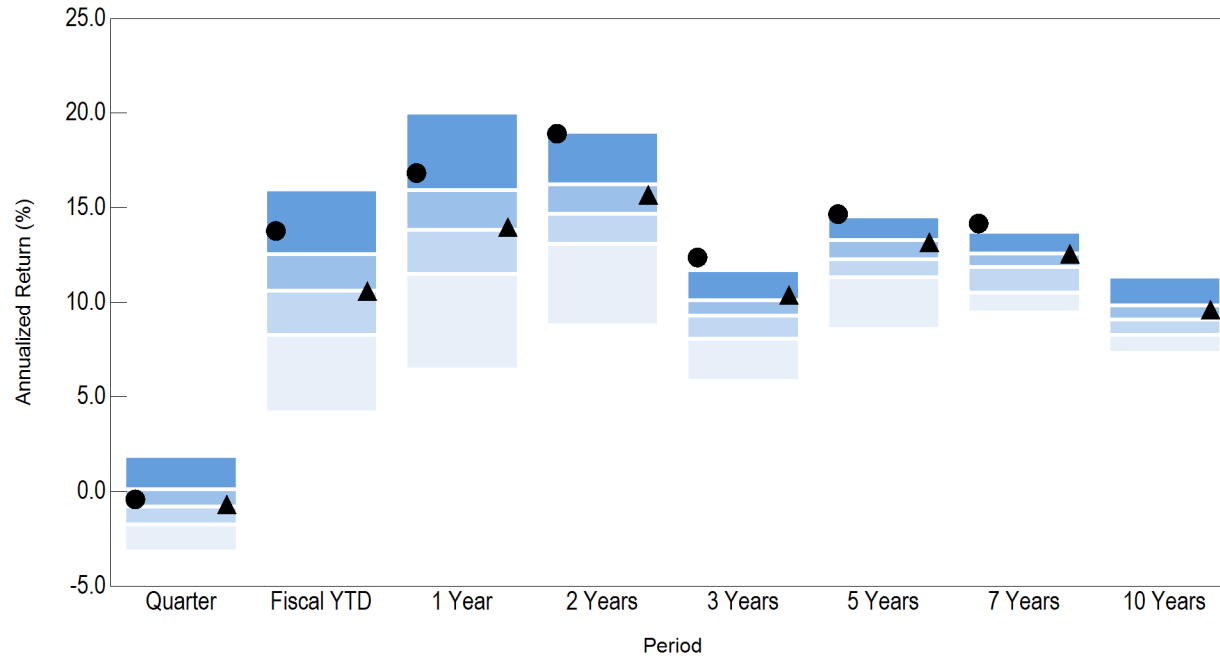
Worst Performers

	Return %
COBALT INTL.ENERGY (CIE)	-95.5%
EDGE THERAPEUTICS (EDGE)	-87.4%
AXOVANT SCIENCES (AXON)	-74.8%
DERMIRA (DERM)	-71.3%
LONGFIN CL.A (LFIN)	-69.3%
ASCENT CAP.GP.SR.A (ASCMA)	-68.0%
ROADRUNNER TRSP.SYSTEMS (RRTS)	-67.1%
AUTOWEB (AUTO)	-66.9%
WESTMORELAND COAL (WLBA)	-66.1%
WILLBROS GROUP (WGRP)	-61.1%

Large Cap Equity Performance Attribution vs. Russell 1000

	Attribution Effects				Returns		Sector Weights				
	Total Effects	Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark			
Energy	0.0%	0.0%	0.0%	0.0%	-5.3%	-5.8%	5.9%	5.9%			
Materials	0.0%	0.0%	0.0%	0.0%	-5.5%	-5.5%	3.4%	3.4%			
Industrials	0.0%	0.0%	0.0%	0.0%	-1.8%	-1.7%	11.0%	10.6%			
Consumer Discretionary	-0.1%	0.0%	0.0%	0.0%	2.0%	2.4%	12.1%	12.4%			
Consumer Staples	0.0%	0.0%	0.0%	0.0%	-6.8%	-6.8%	7.5%	7.7%			
Health Care	0.0%	0.0%	0.0%	0.0%	-1.3%	-1.2%	13.4%	13.1%			
Financials	0.1%	0.1%	0.0%	0.0%	-0.1%	-0.5%	13.9%	14.9%			
Information Technology	0.0%	-0.1%	0.1%	0.0%	3.5%	3.9%	24.8%	23.3%			
Telecommunication Services	0.0%	0.0%	0.0%	0.0%	-7.6%	-7.4%	1.6%	2.0%			
Utilities	0.0%	0.0%	0.0%	0.0%	-2.9%	-3.1%	2.6%	2.9%			
Real Estate	0.0%	0.0%	0.0%	0.0%	-5.2%	-5.9%	3.5%	3.6%			
Cash	0.0%	--	--	--	--	--	0.0%	0.0%			
Unclassified	0.0%	0.0%	0.0%	0.0%	-1.0%	--	0.1%	0.0%			
Portfolio	0.1%	=	0.0%	+	0.1%	+	0.0%	-0.7%	-0.7%	100.0%	100.0%

eV US Large Cap Core Equity Net Return Comparison



	Quarter	Fiscal YTD	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
Return (Rank)								
5th Percentile	1.9	16.0	20.0	19.0	11.7	14.5	13.7	11.3
25th Percentile	0.1	12.6	16.0	16.2	10.1	13.3	12.6	9.9
Median	-0.8	10.6	13.9	14.7	9.3	12.3	11.9	9.1
75th Percentile	-1.7	8.3	11.5	13.1	8.1	11.4	10.5	8.3
95th Percentile	-3.2	4.2	6.5	8.8	5.9	8.6	9.5	7.3
# of Portfolios	183	181	181	179	174	159	144	124
● DE Shaw	-0.4 (37)	13.8 (13)	16.8 (20)	18.9 (6)	12.4 (3)	14.7 (4)	14.2 (4)	-- (--)
▲ Russell 1000	-0.7 (45)	10.6 (51)	14.0 (50)	15.7 (33)	10.4 (22)	13.2 (28)	12.6 (26)	9.6 (33)

Characteristics

	Portfolio	Russell 1000
Number of Holdings	975	975
Weighted Avg. Market Cap. (\$B)	164.4	164.4
Median Market Cap. (\$B)	10.2	10.1
Price To Earnings	26.3	24.2
Price To Book	5.2	4.6
Price To Sales	4.2	4.2
Return on Equity (%)	24.0	20.0
Yield (%)	1.9	1.9
Beta (holdings; domestic)	1.0	1.0

Top Holdings

APPLE	3.4%
MICROSOFT	2.7%
AMAZON.COM	2.3%
BERKSHIRE HATHAWAY 'B'	1.5%
JP MORGAN CHASE & CO.	1.5%
FACEBOOK CLASS A	1.5%
JOHNSON & JOHNSON	1.4%
EXXON MOBIL	1.3%
ALPHABET 'C'	1.2%
ALPHABET A	1.2%

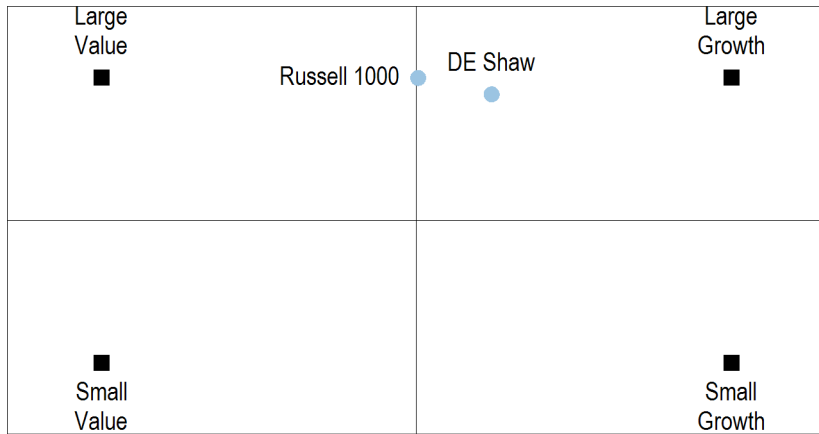
Best Performers

	Return %
XL GROUP (XL)	57.8%
ABIOMED (ABMD)	55.3%
NETFLIX (NFLX)	53.9%
VALIDUS HOLDINGS (VR)	44.6%
HERBALIFE NUTRITION (HLF)	43.9%
AGIOS PHARMACEUTICALS (AGIO)	43.0%
MATCH GROUP (MTCH)	41.9%
SQUARE CL.A (SQ)	41.9%
DST SYS. (DST)	34.8%
ZEBRA TECHNOLOGIES 'A' (ZBRA)	34.1%

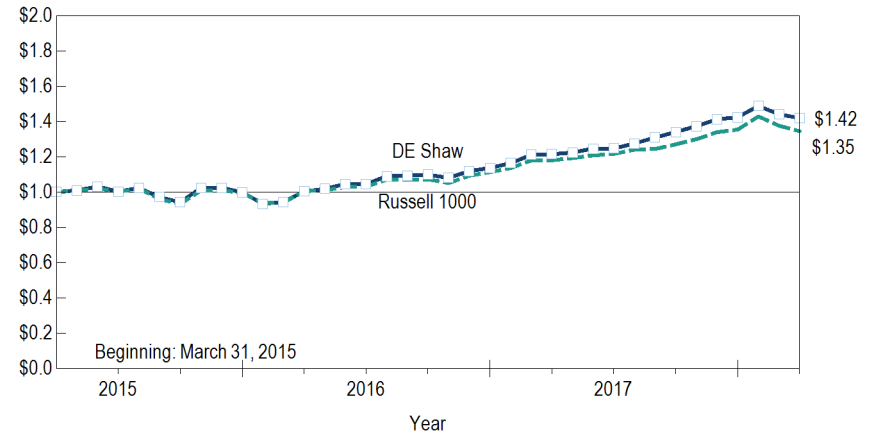
Worst Performers

	Return %
COLONY NORTHSTAR CL.A (CLNS)	-49.8%
WEATHERFORD INTL. (WFT)	-45.1%
AKORN (AKRX)	-41.9%
UNIVERSAL DISPLAY (OLED)	-41.5%
MACQUARIE INFRASTRUCTURE (MIC)	-40.3%
PATTERSON COMPANIES (PDCO)	-38.0%
MALLINCKRODT (MNK)	-35.8%
L BRANDS (LB)	-35.8%
OPKO HEALTH (OPK)	-35.3%
COHERENT (COHR)	-33.6%

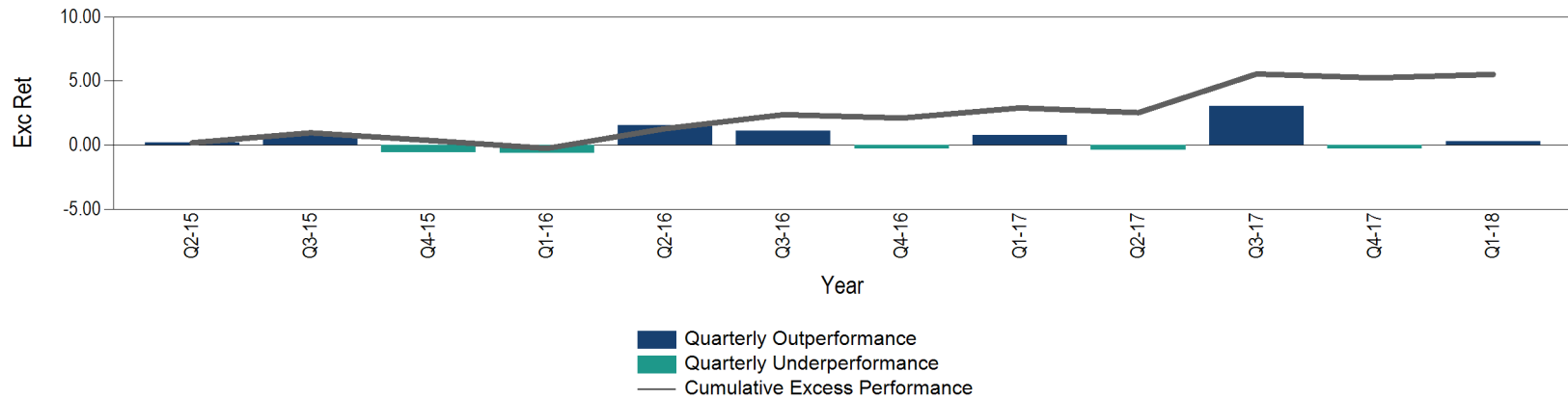
U.S. Effective Style Map

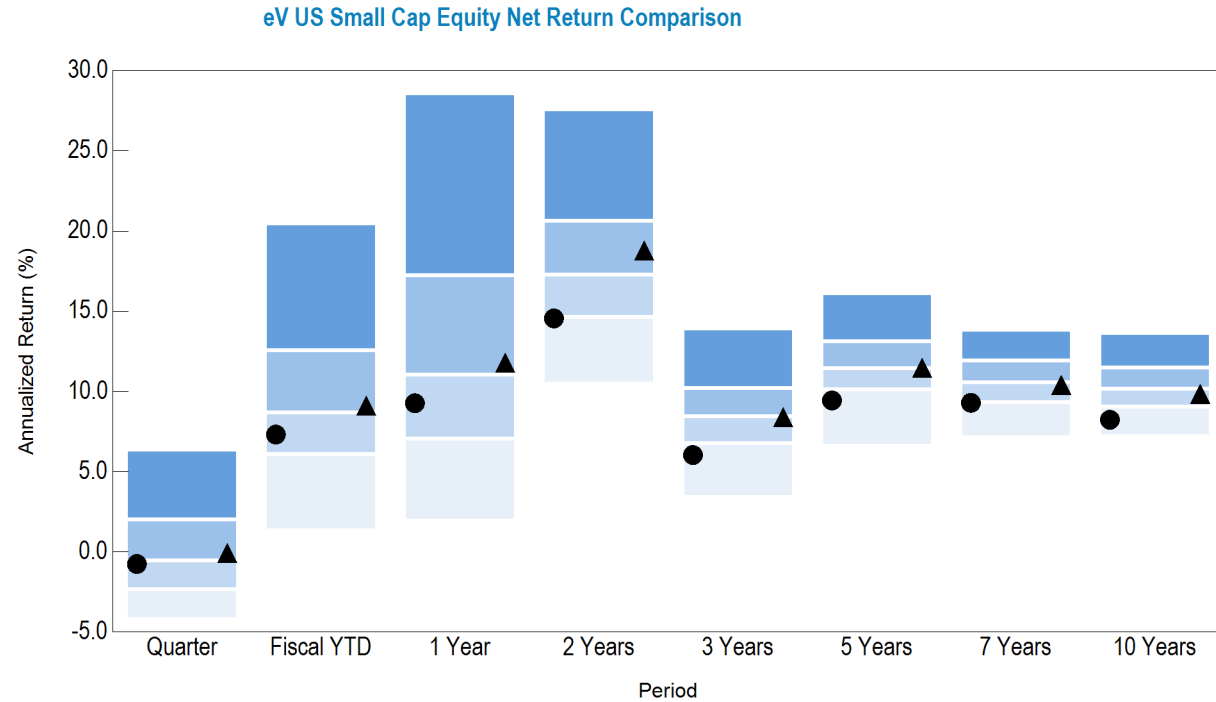


Growth of a Dollar



Quarterly and Cumulative Excess Performance





	Quarter	Fiscal YTD	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
Return (Rank)	6.3	20.5	28.6	27.6	13.9	16.1	13.8	13.6
5th Percentile	2.0	12.6	17.3	20.6	10.2	13.1	12.0	11.5
25th Percentile	-0.5	8.7	11.0	17.3	8.5	11.5	10.6	10.2
Median	-2.3	6.1	7.1	14.7	6.8	10.2	9.4	9.0
75th Percentile	-4.2	1.3	2.0	10.5	3.4	6.6	7.2	7.2
95th Percentile								
# of Portfolios	404	403	403	397	383	359	337	294
● Small Cap Equity	-0.8 (53)	7.3 (66)	9.3 (61)	14.5 (76)	6.0 (83)	9.4 (84)	9.3 (78)	8.2 (90)
▲ Russell 2000	-0.1 (44)	9.1 (47)	11.8 (47)	18.8 (36)	8.4 (52)	11.5 (50)	10.4 (57)	9.8 (59)

Characteristics

	Portfolio	Russell 2000
Number of Holdings	383	1,983
Weighted Avg. Market Cap. (\$B)	2.3	2.5
Median Market Cap. (\$B)	1.2	0.8
Price To Earnings	28.2	16.8
Price To Book	3.5	3.1
Price To Sales	2.7	3.2
Return on Equity (%)	14.7	8.3
Yield (%)	1.3	1.1
Beta (holdings; domestic)	1.2	1.2

Top Holdings

MKS INSTRUMENTS	1.0%
GRAND CANYON EDUCATION	0.9%
ETSY	0.9%
CATALENT	0.9%
LOUISIANA PACIFIC	0.9%
TEXAS ROADHOUSE	0.8%
MASIMO	0.8%
HAEMONETICS	0.8%
WINTRUST FINANCIAL	0.8%
EMCOR GROUP	0.8%

Best Performers

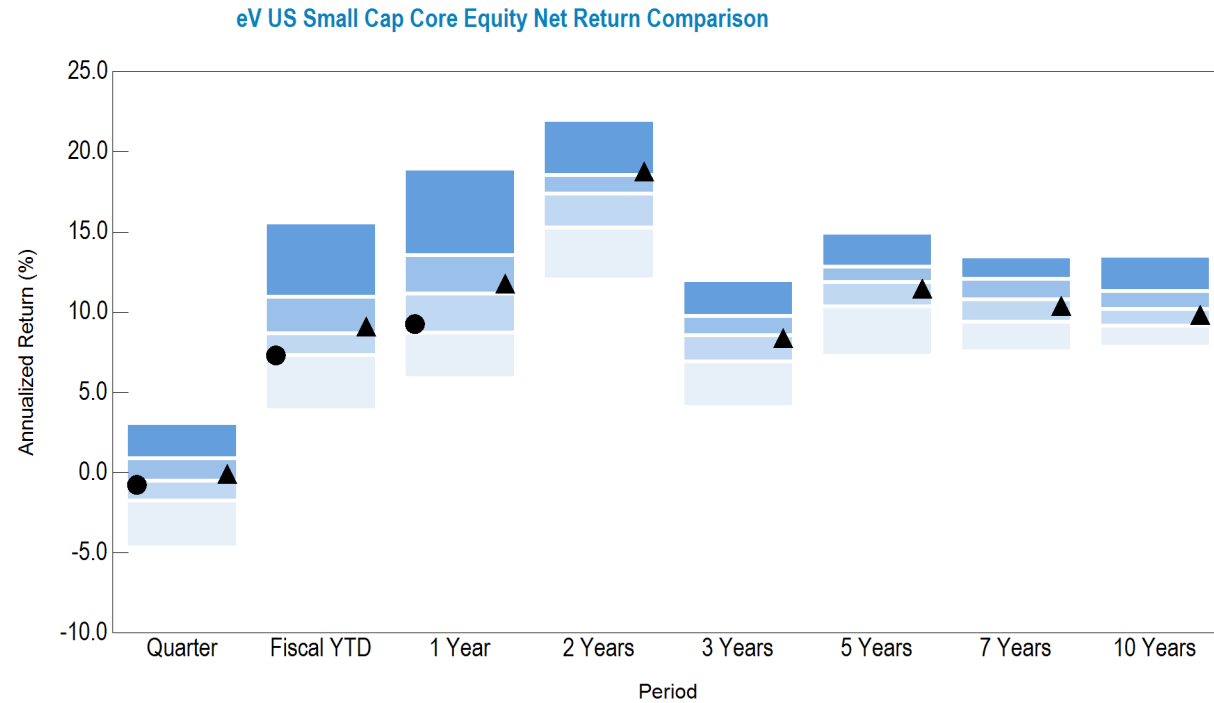
	Return %
CASA SYSTEMS (CASA)	65.2%
QUINSTREET (QNST)	52.4%
AMAG PHARMACEUTICALS (AMAG)	52.1%
SMART GLOBAL HOLDINGS (SGH)	47.9%
ENOVA INTERNATIONAL (ENVA)	45.1%
LIVEPERSON (LPSN)	42.2%
KARYOPHARM THERAPEUTICS (KPTI)	39.8%
WESCO AIRCRAFT HOLDINGS (WAIR)	38.5%
ENANTA PHARMACEUTICALS (ENTA)	37.9%
ETSY (ETSY)	37.2%

Worst Performers

	Return %
ROADRUNNER TRSP.SYSTEMS (RRTS)	-67.1%
PROTAGONIST THERAPEUTICS (PTGX)	-58.7%
FTD COMPANIES (FTD)	-49.4%
NUTRISYSTEM (NTRI)	-48.4%
J JILL (JILL)	-43.3%
IDT 'B' (IDT)	-40.4%
CATALYST PHARMACEUTICAL PARTNERS (CPRX)	-38.9%
OFFICE DEPOT (ODP)	-38.6%
SPARTANNASH (SPTN)	-34.9%
PACIFIC ETHANOL (PEIX)	-34.1%

Small Cap Equity Performance Attribution vs. Russell 2000

	Total Effects	Attribution Effects			Returns		Sector Weights				
		Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark			
Energy	0.1%	-0.2%	0.2%	0.1%	-14.7%	-10.5%	2.3%	3.8%			
Materials	-0.1%	0.0%	0.0%	0.0%	-3.8%	-3.0%	5.3%	4.5%			
Industrials	0.2%	0.2%	0.0%	0.0%	-0.9%	-2.5%	15.8%	15.8%			
Consumer Discretionary	-0.1%	-0.1%	0.0%	0.0%	-3.1%	-2.7%	13.2%	12.5%			
Consumer Staples	0.0%	0.0%	0.0%	0.0%	-7.2%	-5.9%	2.2%	2.5%			
Health Care	-0.4%	-0.4%	0.0%	0.0%	3.5%	6.2%	15.1%	15.4%			
Financials	0.3%	0.3%	0.0%	0.0%	2.6%	0.8%	18.0%	17.9%			
Information Technology	0.1%	0.0%	0.1%	0.0%	7.0%	6.7%	17.7%	16.6%			
Telecommunication Services	0.0%	0.0%	0.0%	0.0%	-2.8%	-5.2%	0.4%	0.6%			
Utilities	-0.1%	-0.2%	0.0%	0.0%	-11.2%	-6.4%	2.9%	3.6%			
Real Estate	0.2%	0.3%	0.0%	0.0%	-4.4%	-8.1%	7.1%	6.8%			
Cash	0.0%	0.0%	0.0%	0.0%	0.4%	--	0.0%	0.0%			
Portfolio	0.3%	=	0.0%	+	0.2%	+	0.1%	0.3%	0.0%	100.0%	100.0%



	Quarter	Fiscal YTD	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
5th Percentile	3.1	15.6	18.9	22.0	12.0	14.9	13.5	13.5
25th Percentile	0.9	11.0	13.6	18.6	9.8	12.9	12.1	11.3
Median	-0.5	8.7	11.2	17.4	8.6	11.9	10.8	10.2
75th Percentile	-1.7	7.4	8.7	15.3	6.9	10.4	9.4	9.2
95th Percentile	-4.7	3.9	5.9	12.0	4.1	7.3	7.6	7.9
# of Portfolios	102	101	101	100	99	95	85	69
● QMA US Small Cap	-0.8 (56)	7.3 (76)	9.3 (69)	-- (--)	-- (--)	-- (--)	-- (--)	-- (--)
▲ Russell 2000	-0.1 (39)	9.1 (45)	11.8 (44)	18.8 (22)	8.4 (53)	11.5 (56)	10.4 (59)	9.8 (60)

Characteristics

	Portfolio	Russell 2000
Number of Holdings	383	1,983
Weighted Avg. Market Cap. (\$B)	2.3	2.5
Median Market Cap. (\$B)	1.2	0.8
Price To Earnings	28.2	16.8
Price To Book	3.5	3.1
Price To Sales	2.7	3.2
Return on Equity (%)	14.7	8.3
Yield (%)	1.3	1.1
Beta (holdings; domestic)	1.2	1.2

Top Holdings

MKS INSTRUMENTS	1.0%
GRAND CANYON EDUCATION	0.9%
ETSY	0.9%
CATALENT	0.9%
LOUISIANA PACIFIC	0.9%
TEXAS ROADHOUSE	0.8%
MASIMO	0.8%
HAEMONETICS	0.8%
WINTRUST FINANCIAL	0.8%
EMCOR GROUP	0.8%

Best Performers

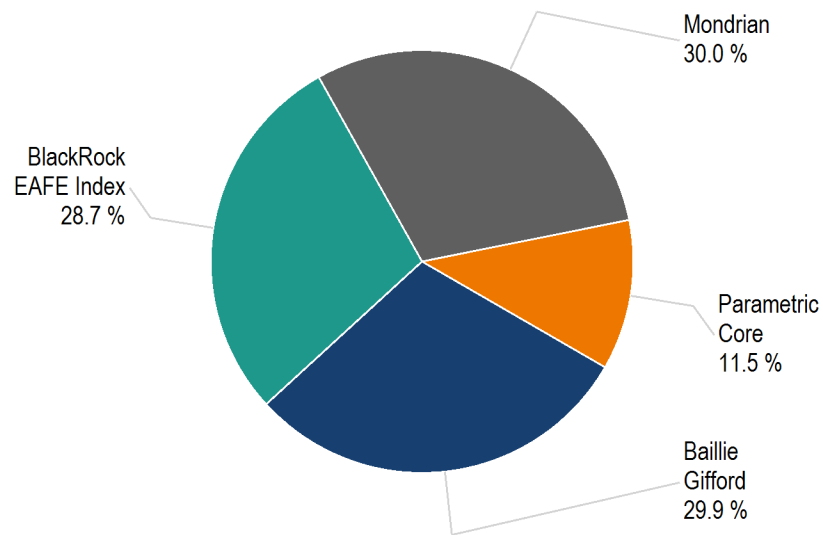
	Return %
CASA SYSTEMS (CASA)	65.2%
QUINSTREET (QNST)	52.4%
AMAG PHARMACEUTICALS (AMAG)	52.1%
SMART GLOBAL HOLDINGS (SGH)	47.9%
ENOVA INTERNATIONAL (ENVA)	45.1%
LIVEPERSON (LPSN)	42.2%
KARYOPHARM THERAPEUTICS (KPTI)	39.8%
WESCO AIRCRAFT HOLDINGS (WAIR)	38.5%
ENANTA PHARMACEUTICALS (ENTA)	37.9%
ETSY (ETSY)	37.2%

Worst Performers

	Return %
ROADRUNNER TRSP.SYSTEMS (RRTS)	-67.1%
PROTAGONIST THERAPEUTICS (PTGX)	-58.7%
FTD COMPANIES (FTD)	-49.4%
NUTRISYSTEM (NTRI)	-48.4%
J JILL (JILL)	-43.3%
IDT 'B' (IDT)	-40.4%
CATALYST PHARMACEUTICAL PARTNERS (CPRX)	-38.9%
OFFICE DEPOT (ODP)	-38.6%
SPARTANNASH (SPTN)	-34.9%
PACIFIC ETHANOL (PEIX)	-34.1%

QMA US Small Cap Performance Attribution vs. Russell 2000

	Attribution Effects				Returns		Sector Weights				
	Total Effects	Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark			
Energy	0.1%	-0.2%	0.2%	0.1%	-14.7%	-10.5%	2.3%	3.8%			
Materials	-0.1%	0.0%	0.0%	0.0%	-3.8%	-3.0%	5.3%	4.5%			
Industrials	0.2%	0.2%	0.0%	0.0%	-0.9%	-2.5%	15.8%	15.8%			
Consumer Discretionary	-0.1%	-0.1%	0.0%	0.0%	-3.1%	-2.7%	13.2%	12.5%			
Consumer Staples	0.0%	0.0%	0.0%	0.0%	-7.2%	-5.9%	2.2%	2.5%			
Health Care	-0.4%	-0.4%	0.0%	0.0%	3.5%	6.2%	15.1%	15.4%			
Financials	0.3%	0.3%	0.0%	0.0%	2.6%	0.8%	18.0%	17.9%			
Information Technology	0.1%	0.0%	0.1%	0.0%	7.0%	6.7%	17.7%	16.6%			
Telecommunication Services	0.0%	0.0%	0.0%	0.0%	-2.8%	-5.2%	0.4%	0.6%			
Utilities	-0.1%	-0.2%	0.0%	0.0%	-11.2%	-6.4%	2.9%	3.6%			
Real Estate	0.2%	0.3%	0.0%	0.0%	-4.4%	-8.1%	7.1%	6.8%			
Cash	0.0%	0.0%	0.0%	0.0%	0.4%	--	0.0%	0.0%			
Portfolio	0.3%	=	0.0%	+	0.2%	+	0.1%	0.3%	0.0%	100.0%	100.0%



	Actual \$	Actual %	Manager Contribution to Excess Return %
Baillie Gifford	\$253,831,627	29.9%	0.1%
BlackRock EAFE Index	\$243,968,185	28.7%	0.0%
Mondrian	\$254,714,534	30.0%	0.0%
Parametric Core	\$97,346,069	11.5%	0.0%
Actual vs. Policy Weight Difference			0.1%
Total	\$849,860,414	100.0%	0.1%

Statistics Summary

3 Years

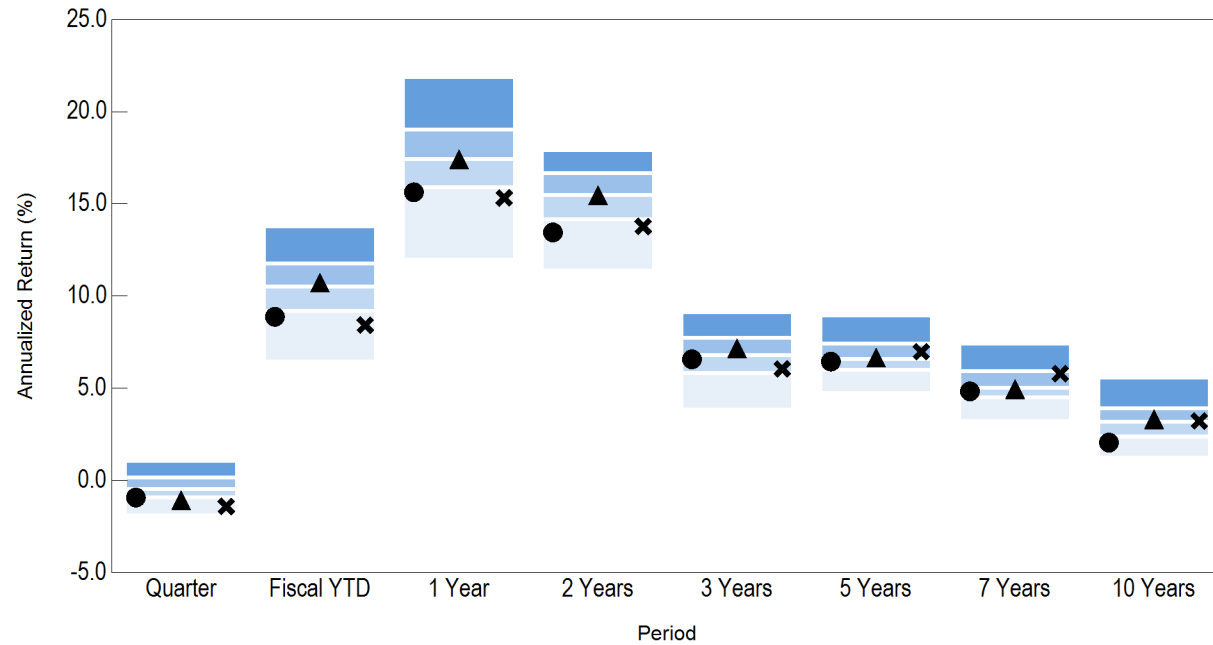
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
International Equity	6.6%	12.2%	0.5	-0.3	1.8%
MSCI ACWI ex US IMI	7.2%	12.4%	0.5	--	0.0%
Developed Markets	6.4%	12.2%	0.5	-0.1	2.3%
MSCI ACWI ex USA Gross	6.7%	12.5%	0.5	--	0.0%
Baillie Gifford	7.8%	13.5%	0.5	0.3	4.1%
MSCI ACWI ex US	6.7%	12.5%	0.5	--	0.0%
BlackRock EAFE Index	5.9%	12.3%	0.4	2.1	0.1%
MSCI EAFE	5.6%	12.3%	0.4	--	0.0%
Mondrian	5.1%	11.8%	0.4	-0.1	5.0%
MSCI ACWI ex USA Value Gross	5.6%	13.3%	0.4	--	0.0%
Emerging Markets	7.5%	14.7%	0.5	-0.4	3.9%
MSCI Emerging Markets Gross	9.2%	16.5%	0.5	--	0.0%

Statistics Summary

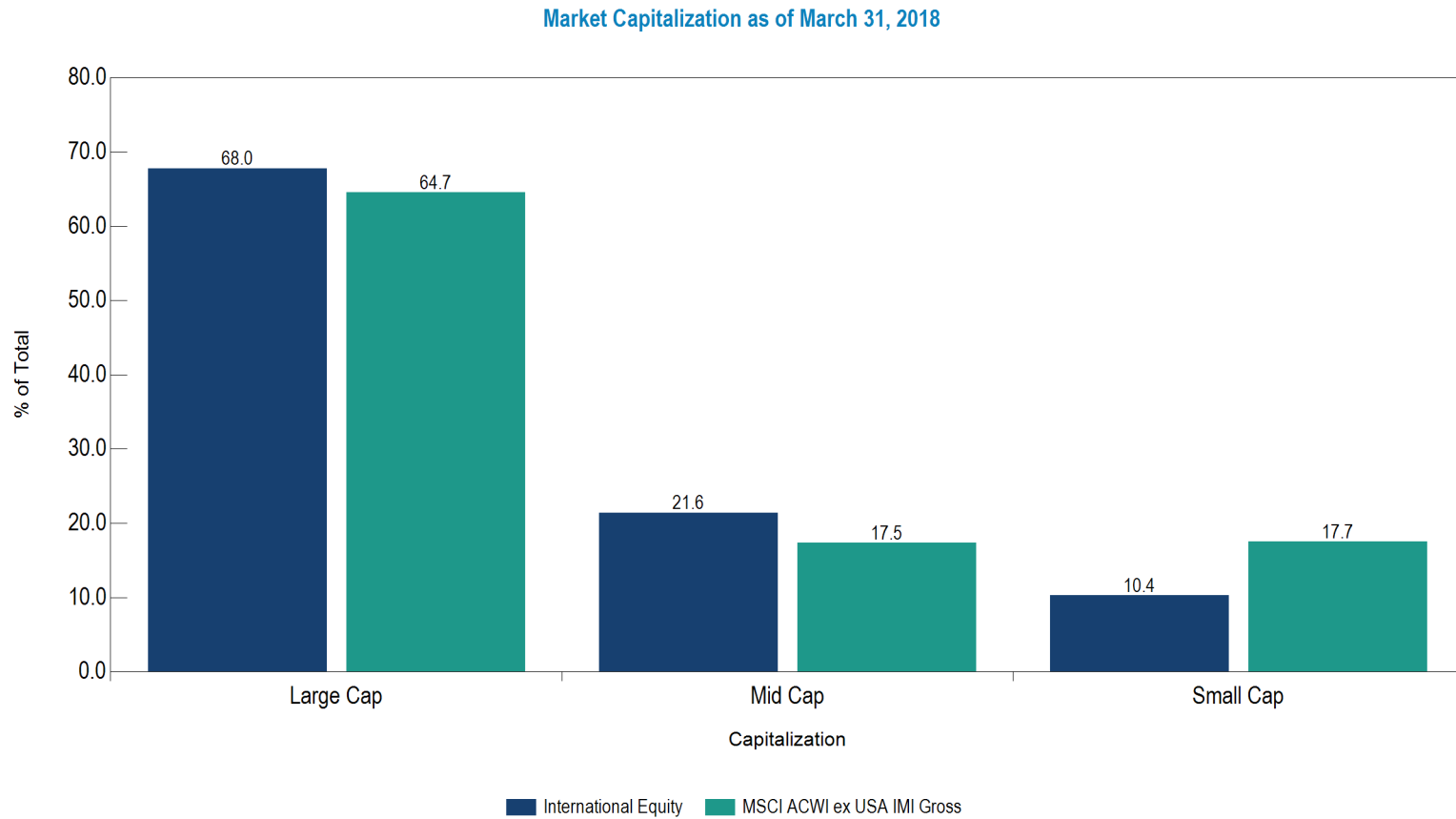
5 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
International Equity	6.4%	11.6%	0.5	-0.1	1.7%
MSCI ACWI ex US IMI	6.7%	11.8%	0.5	--	0.0%
Developed Markets	6.8%	11.6%	0.6	0.2	2.0%
MSCI ACWI ex USA Gross	6.4%	11.9%	0.5	--	0.0%
Baillie Gifford	8.2%	12.7%	0.6	0.2	3.9%
MSCI ACWI ex US	7.3%	12.0%	0.6	--	0.0%
Mondrian	5.8%	11.5%	0.5	0.1	4.5%
MSCI ACWI ex USA Value Gross	5.5%	12.7%	0.4	--	0.0%
Emerging Markets	3.7%	13.6%	0.2	-0.4	3.9%
MSCI Emerging Markets Gross	5.4%	15.0%	0.3	--	0.0%

InvestorForce All DB ex-US Eq Net Return Comparison



	Return (Rank)							
	Quarter	Fiscal YTD	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
5th Percentile	1.1	13.8	21.9	17.9	9.1	8.9	7.4	5.6
25th Percentile	0.2	11.8	19.0	16.7	7.8	7.5	5.9	3.9
Median	-0.4	10.5	17.4	15.5	6.8	6.6	5.0	3.2
75th Percentile	-0.9	9.2	15.9	14.2	5.9	6.0	4.5	2.4
95th Percentile	-1.9	6.5	12.0	11.4	3.9	4.8	3.2	1.2
# of Portfolios	354	352	348	343	335	296	244	188
● International Equity	-0.9 (77)	8.9 (81)	15.6 (80)	13.4 (82)	6.6 (59)	6.4 (58)	4.8 (60)	2.1 (84)
▲ MSCI ACWI ex US IMI	-1.1 (81)	10.7 (44)	17.4 (51)	15.5 (52)	7.2 (37)	6.7 (48)	4.9 (55)	3.3 (44)
✕ MSCI EAFE Gross	-1.4 (90)	8.4 (86)	15.3 (82)	13.8 (80)	6.0 (70)	7.0 (37)	5.8 (30)	3.2 (50)



See appendix for the market capitalization breakpoints.

Characteristics

	Portfolio	MSCI ACWI ex USA IMI Gross
Number of Holdings	2,133	6,193
Weighted Avg. Market Cap. (\$B)	49.9	55.9
Median Market Cap. (\$B)	7.1	1.5
Price To Earnings	21.2	18.8
Price To Book	3.5	2.5
Price To Sales	3.0	2.3
Return on Equity (%)	17.8	15.2
Yield (%)	2.9	2.9
Beta (holdings; global)	1.1	1.0

Top Holdings

UNITED OVERSEAS BANK	1.4%
SANOFI	0.9%
NASPERS	0.9%
BP	0.9%
TAIWAN SEMICON.SPN.ADR 1:5	0.9%
HONDA MOTOR	0.9%
ALIBABA GROUP HLDG.SPN. ADR 1:1	0.8%
ENEL	0.8%
NOVARTIS 'R'	0.8%
DAIMLER	0.8%

Best Performers

	Return %
DAEWOO SHIPBLDG.& MAR. ENGR. (KO:OSM)	99.4%
SUZANO PAPEL E CELULOSE ON (BR:SUZ)	78.1%
SWANCOR HOLDING (TW:SWC)	57.6%
NESTLE (MALAYSIA) (L:NEST)	56.6%
ELSWEDY ELECTRIC (EG:SWD)	54.5%
MEDY-TOX (KO:MEY)	51.6%
GKN (UKIR:GKN)	50.3%
VESTEL ELNK.SANVETC. (TK:VES)	47.6%
SIX OF OCT.DEV.& INV. (EG:SOD)	46.3%
CIFI HOLDINGS (GROUP) (K:CIHG)	44.9%

Worst Performers

	Return %
RESILIENT PR.INC.FD. (R:RESJ)	-63.8%
CAPITA (UKIR:CPI)	-62.7%
MICRO FOCUS INTL. (UKIR:MCRO)	-59.0%
KINGSTON FINANCIAL GROUP (K:STIM)	-53.4%
ADANI POWER (IN:ANW)	-44.4%
HOUSING DEV.&INFR. (IN:IHD)	-42.4%
RELIANCE COMMUNICATIONS (IN:RCN)	-41.1%
BRF BRASIL FOODS ON (BR:DG3)	-37.7%
CAPITALAND MALAYSIA MALL TRUST (L:CAPI)	-36.3%
DATATEC (R:DTCJ)	-35.4%

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

	Attribution Effects				Returns		Sector Weights				
	Total Effects	Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark			
Energy	0.1%	0.1%	0.0%	0.1%	0.1%	-1.9%	5.6%	6.3%			
Materials	0.1%	0.1%	0.0%	-0.1%	-1.3%	-2.9%	5.8%	8.5%			
Industrials	-0.2%	-0.2%	0.0%	-0.1%	-3.3%	-1.5%	13.2%	13.0%			
Consumer Discretionary	0.0%	-0.1%	0.0%	0.1%	-1.5%	-1.1%	15.0%	12.0%			
Consumer Staples	0.4%	0.3%	0.0%	0.2%	1.2%	-2.4%	11.7%	9.2%			
Health Care	-0.1%	-0.1%	0.0%	0.0%	-0.6%	0.9%	8.5%	7.6%			
Financials	0.1%	0.1%	0.0%	0.1%	-0.2%	-0.9%	18.7%	21.4%			
Information Technology	-0.1%	0.0%	0.0%	0.0%	1.7%	1.8%	10.2%	11.5%			
Telecommunication Services	0.0%	0.1%	0.0%	0.0%	-2.9%	-4.1%	4.7%	3.6%			
Utilities	0.0%	0.0%	0.0%	0.0%	-0.2%	0.9%	3.8%	2.9%			
Real Estate	-0.1%	0.0%	0.0%	0.0%	-0.7%	-0.2%	2.4%	4.0%			
Cash	0.0%	0.0%	0.0%	0.0%	0.4%	--	0.4%	0.0%			
Unclassified	0.0%	--	--	--	--	--	0.0%	0.0%			
Portfolio	0.3%	=	0.2%	+	-0.1%	+	0.2%	-0.7%	-1.0%	100.0%	100.0%

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

	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
Europe									
Austria	2.3%	2.7%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Belgium	0.6%	0.7%	0.3%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%
Czech Republic*	6.0%	5.8%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Denmark	-4.3%	-0.4%	2.5%	1.2%	0.0%	0.0%	0.0%	0.0%	-0.1%
Finland	1.6%	6.9%	0.6%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%
France	-0.6%	0.4%	4.9%	6.6%	-0.1%	0.0%	0.0%	0.0%	-0.1%
Germany	-0.2%	-3.2%	7.0%	6.4%	0.2%	0.0%	0.0%	0.0%	0.2%
Greece*	-3.1%	-4.3%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Hungary*	-5.3%	-0.9%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Ireland	-6.5%	-3.1%	0.1%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Italy	4.2%	4.8%	2.0%	1.8%	0.0%	0.0%	0.0%	0.0%	0.0%
Luxembourg	-0.3%	-1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Netherlands	2.3%	0.9%	2.6%	2.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Norway	2.4%	2.8%	0.2%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%
Poland*	-7.6%	-8.4%	0.4%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Portugal	-5.6%	2.4%	0.5%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Russia*	4.8%	9.3%	1.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%
Spain	-4.6%	-1.1%	2.9%	2.2%	-0.1%	0.0%	0.0%	0.0%	-0.1%
Sweden	-0.3%	-2.0%	3.3%	2.1%	0.0%	0.0%	0.0%	0.0%	0.1%
Switzerland	-3.7%	-3.7%	5.3%	5.2%	0.0%	0.0%	0.0%	0.0%	0.0%
United Kingdom	-3.5%	-3.5%	13.8%	12.2%	0.0%	-0.1%	0.1%	0.0%	0.0%

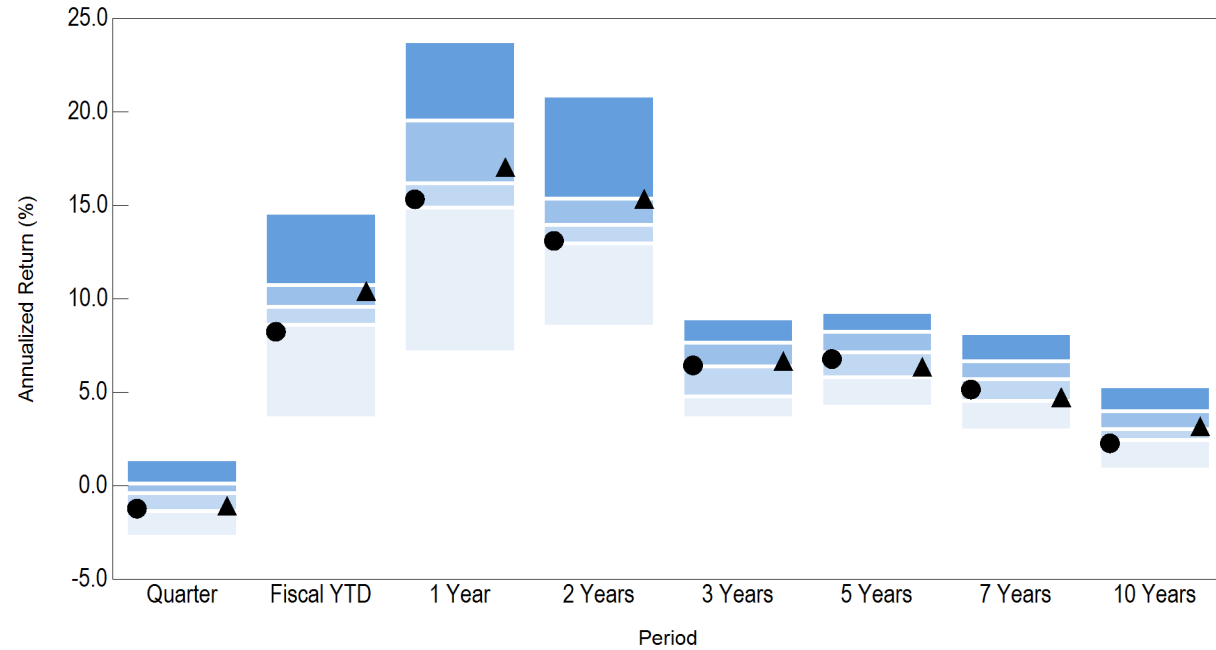
Int'l Equity Performance Attribution vs. MSCI ACWI ex USA IMI Gross

	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
AsiaPacific									
Australia	-3.1%	-5.8%	4.0%	4.8%	0.1%	0.0%	0.0%	0.0%	0.1%
China*	2.1%	2.0%	3.4%	7.0%	0.0%	-0.2%	0.0%	0.0%	-0.2%
Hong Kong	-2.6%	-1.3%	4.2%	2.3%	0.0%	0.0%	0.0%	0.0%	0.0%
India*	-4.8%	-7.9%	2.7%	2.3%	0.1%	0.0%	0.0%	0.0%	0.1%
Indonesia*	-3.8%	-5.4%	0.5%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%
Japan	0.8%	1.1%	16.5%	17.4%	0.0%	0.0%	-0.1%	0.0%	-0.1%
Korea*	-3.6%	-0.4%	2.7%	3.8%	-0.1%	0.0%	0.0%	0.0%	-0.1%
Malaysia*	8.8%	7.1%	1.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.1%
New Zealand	-4.9%	1.1%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Pakistan*	8.4%	8.8%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Philippines*	-5.4%	-10.5%	0.6%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Singapore	1.3%	3.1%	3.0%	0.9%	0.0%	0.1%	0.0%	0.0%	0.1%
Taiwan*	5.7%	4.9%	2.6%	2.9%	0.0%	0.0%	0.0%	0.0%	0.0%
Thailand*	5.8%	7.0%	0.6%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%
Americas									
Brazil*	5.7%	11.7%	2.0%	1.6%	-0.1%	0.1%	0.0%	0.0%	-0.1%
Canada	2.1%	-7.3%	0.8%	6.5%	0.6%	0.1%	0.2%	-0.5%	0.3%
Chile*	1.2%	1.0%	0.4%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Colombia*	5.8%	3.9%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Mexico*	2.5%	1.6%	1.1%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%
Peru*	6.8%	9.5%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
United States	-0.4%	-0.8%	0.9%	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				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
Other									
Egypt*	19.8%	16.6%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Israel	-5.5%	-3.5%	0.1%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Kazakhstan**	6.2%	18.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Kuwait**	1.3%	8.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Qatar*	7.5%	4.4%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Romania**	26.6%	19.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
South Africa*	-3.2%	-3.4%	2.7%	1.7%	0.0%	0.0%	0.0%	0.0%	0.0%
Turkey*	-6.4%	-3.4%	0.6%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
United Arab Emirates*	10.2%	-0.6%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Totals									
Americas	3.3%	-2.8%	5.6%	9.3%	0.4%	-0.1%	0.2%	-0.1%	0.3%
Europe	-1.7%	-1.5%	48.0%	44.3%	-0.1%	0.0%	0.0%	0.0%	-0.1%
Asia/Pacific	0.1%	0.1%	41.8%	43.7%	0.0%	0.0%	0.0%	0.0%	-0.1%
Other	-1.5%	-2.6%	4.1%	2.7%	0.0%	0.0%	0.0%	0.0%	0.0%
Cash	0.4%	--	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	-0.7%	-1.0%	100.0%	100.0%	0.3%	-0.1%	0.2%	-0.1%	0.3%
Totals									
Developed	-1.2%	-1.7%	75.7%	75.5%	0.2%	0.0%	0.2%	0.0%	0.4%
Emerging*	0.9%	1.3%	23.8%	24.5%	-0.1%	0.0%	0.0%	0.0%	-0.1%
Frontier**	11.0%	--	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cash	0.4%	--	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

InvestorForce All DB Dev Mkt ex-US Eq Net Return Comparison



	Quarter	Fiscal YTD	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
Return (Rank)								
5th Percentile	1.4	14.6	23.8	20.9	8.9	9.3	8.2	5.3
25th Percentile	0.1	10.8	19.6	15.4	7.7	8.3	6.7	4.0
Median	-0.4	9.6	16.2	14.0	6.4	7.2	5.7	3.0
75th Percentile	-1.3	8.6	14.9	13.0	4.8	5.8	4.6	2.5
95th Percentile	-2.7	3.6	7.2	8.5	3.6	4.2	3.0	0.9
# of Portfolios	140	139	138	133	131	112	88	64
● Developed Markets	-1.2 (74)	8.2 (82)	15.3 (65)	13.1 (73)	6.4 (49)	6.8 (62)	5.2 (67)	2.3 (81)
▲ MSCI ACWI ex USA Gross	-1.1 (64)	10.4 (28)	17.0 (39)	15.4 (26)	6.7 (43)	6.4 (70)	4.7 (73)	3.2 (49)

Characteristics

	Portfolio	MSCI ACWI ex USA Gross
Number of Holdings	1,055	1,864
Weighted Avg. Market Cap. (\$B)	53.0	65.0
Median Market Cap. (\$B)	12.0	8.5
Price To Earnings	21.2	18.6
Price To Book	3.5	2.5
Price To Sales	3.0	2.3
Return on Equity (%)	17.8	15.4
Yield (%)	2.9	3.0
Beta (holdings; global)	1.1	1.1

Top Holdings

UNITED OVERSEAS BANK	1.6%
SANOFI	1.1%
BP	1.0%
TAIWAN SEMICON.SPN.ADR 1:5	1.0%
HONDA MOTOR	1.0%
ENEL	1.0%
NOVARTIS 'R'	0.9%
NASPERS	0.9%
ALIBABA GROUP HLDG.SPN. ADR 1:1	0.9%
DAIMLER	0.9%

Best Performers

	Return %
SUZANO PAPEL E CELULOSE ON (BR:SUZ)	78.1%
GKN (UKIR:GKN)	50.3%
SARTORIUS PREF. (D:SRT3)	44.6%
SKY (UKIR:SKY)	35.6%
ITAUSA INVESTIMENTOS ITAU PN (BR:IS4)	34.9%
KOSE (J:OSEC)	34.5%
TDC (DK:TDC)	34.5%
ONO PHARM. (J:PS@N)	33.7%
SHISEIDO (J:SHDO)	32.5%
WILLIAM DEMANT HLDG. (DK:WDH)	32.2%

Worst Performers

	Return %
CAPITA (UKIR:CPI)	-62.7%
MICRO FOCUS INTL. (UKIR:MCRO)	-59.0%
KINGSTON FINANCIAL GROUP (K:STIM)	-53.4%
SURUGA BANK (J:SURB)	-35.2%
PJSC MAGNIT GDR (REG S) (UKIR:MGNT)	-32.6%
HENNES & MAURITZ 'B' (W:HMBF)	-27.7%
DEUTSCHE BANK (D:DBK)	-26.9%
HUTCHISON PORT HDG.TRUST (T:HPHH)	-26.0%
KROTON EDUCACIONAL ON (BR:KRO)	-25.7%
MINTH GROUP (K:MINT)	-24.5%

Developed Markets Performance Attribution vs. MSCI ACWI ex USA Gross

	Attribution Effects				Returns		Sector Weights				
	Total Effects	Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark			
Energy	0.0%	-0.1%	0.0%	0.1%	-1.2%	-1.6%	5.1%	6.8%			
Materials	0.0%	0.1%	0.0%	-0.1%	-1.8%	-2.8%	4.9%	8.0%			
Industrials	-0.3%	-0.2%	0.0%	-0.1%	-3.7%	-1.5%	13.7%	11.9%			
Consumer Discretionary	0.0%	-0.1%	0.0%	0.2%	-1.3%	-1.1%	15.6%	11.4%			
Consumer Staples	0.5%	0.3%	0.0%	0.2%	1.3%	-2.7%	11.9%	9.6%			
Health Care	0.0%	-0.1%	0.0%	0.0%	-0.9%	0.0%	8.9%	7.7%			
Financials	0.0%	0.0%	0.0%	0.1%	-0.5%	-1.0%	19.2%	23.2%			
Information Technology	-0.1%	-0.1%	0.0%	0.0%	1.7%	1.7%	10.5%	11.5%			
Telecommunication Services	0.0%	0.1%	0.0%	0.0%	-2.9%	-4.0%	4.2%	4.0%			
Utilities	0.0%	-0.1%	0.0%	0.0%	-0.7%	1.4%	3.5%	2.9%			
Real Estate	0.0%	0.0%	0.0%	0.0%	-0.8%	-1.3%	2.0%	3.1%			
Cash	0.0%	0.0%	0.0%	0.0%	0.4%	--	0.5%	0.0%			
Unclassified	0.0%	--	--	--	--	--	0.0%	0.0%			
Portfolio	0.2%	=	-0.1%	+	-0.1%	+	0.4%	-0.9%	-1.1%	100.0%	100.0%

Developed Markets Performance Attribution vs. MSCI ACWI ex USA Gross

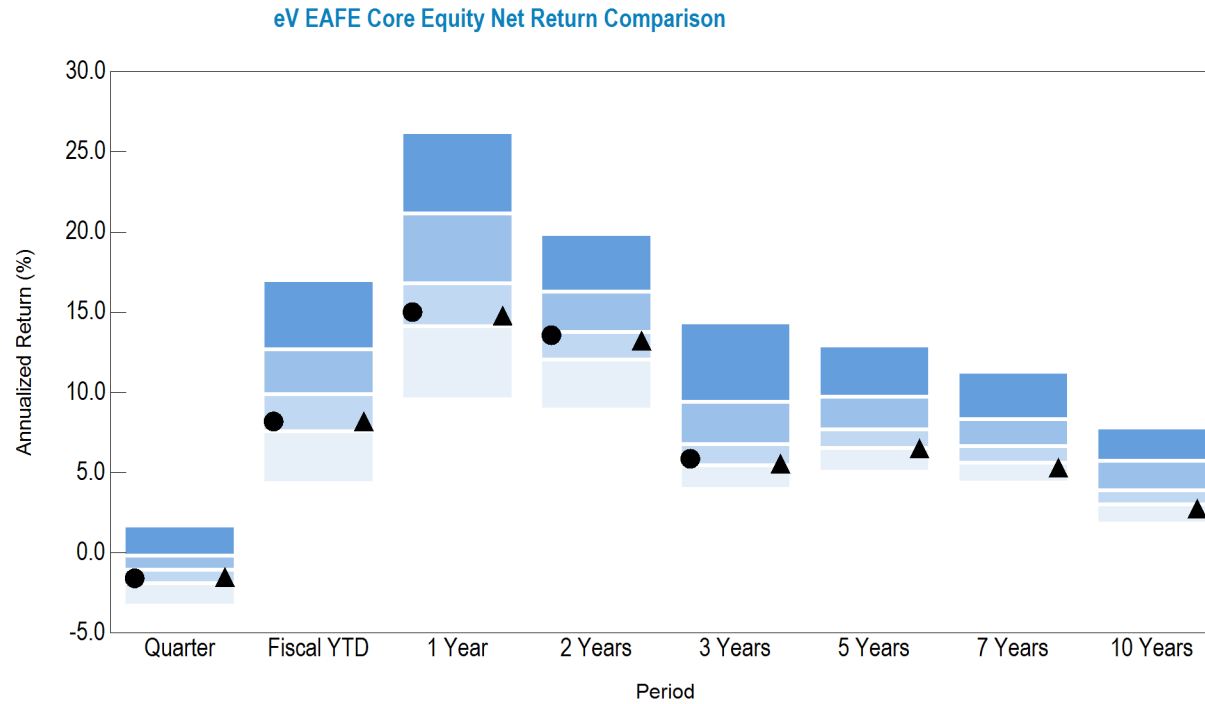
	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
Europe									
Austria	2.3%	2.2%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Belgium	0.6%	0.6%	0.4%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%
Czech Republic*	--	6.4%	0.0%	0.0%	--	0.0%	0.0%	--	0.0%
Denmark	-4.3%	-1.1%	2.8%	1.3%	0.0%	0.0%	0.0%	0.0%	-0.1%
Finland	1.6%	8.6%	0.7%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%
France	-0.6%	0.5%	5.5%	7.2%	-0.1%	0.0%	0.0%	0.0%	-0.1%
Germany	-0.2%	-3.5%	7.9%	6.8%	0.2%	0.0%	0.0%	0.0%	0.3%
Greece*	--	-6.7%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Hungary*	--	-1.0%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Ireland	-6.5%	-5.7%	0.1%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Italy	4.2%	5.5%	2.2%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%
Luxembourg	0.0%	-1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Netherlands	2.3%	1.0%	2.9%	2.5%	0.0%	0.0%	0.0%	0.0%	0.1%
Norway	2.4%	2.4%	0.2%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%
Poland*	--	-8.2%	0.0%	0.3%	--	0.0%	0.0%	--	0.0%
Portugal	-5.6%	3.1%	0.5%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Russia*	1.0%	9.5%	0.5%	0.8%	-0.1%	0.0%	0.0%	0.0%	-0.1%
Spain	-4.6%	-1.7%	3.3%	2.2%	-0.1%	0.0%	0.0%	0.0%	-0.1%
Sweden	-0.3%	-1.8%	3.7%	1.9%	0.0%	0.1%	0.0%	0.0%	0.1%
Switzerland	-3.7%	-3.9%	6.0%	5.5%	0.0%	0.0%	0.0%	0.0%	0.0%
United Kingdom	-3.5%	-3.8%	15.5%	12.1%	0.0%	-0.1%	0.1%	0.0%	0.0%

Developed Markets Performance Attribution vs. MSCI ACWI ex USA Gross

	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
AsiaPacific									
Australia	-3.1%	-6.1%	4.5%	4.8%	0.1%	0.0%	0.0%	0.0%	0.1%
China*	2.2%	1.8%	3.1%	7.4%	0.0%	-0.2%	0.0%	0.0%	-0.2%
Hong Kong	-3.7%	-1.4%	3.9%	2.5%	-0.1%	0.0%	0.0%	0.0%	-0.1%
India*	-2.3%	-6.9%	2.1%	2.2%	0.1%	0.0%	0.0%	0.0%	0.1%
Indonesia*	-2.5%	-7.0%	0.1%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%
Japan	0.8%	0.8%	18.5%	16.6%	0.0%	0.0%	0.1%	0.0%	0.1%
Korea*	-5.2%	-0.9%	2.1%	3.8%	-0.2%	0.0%	0.0%	0.1%	-0.1%
Malaysia*	11.9%	8.7%	0.7%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%
New Zealand	-4.9%	-4.9%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Pakistan*	--	11.7%	0.0%	0.0%	--	0.0%	0.0%	--	0.0%
Philippines*	-2.0%	-11.4%	0.2%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Singapore	1.4%	2.9%	3.3%	0.9%	0.0%	0.1%	0.0%	0.0%	0.1%
Taiwan*	6.6%	5.6%	2.0%	2.8%	0.1%	-0.1%	0.0%	0.0%	0.0%
Thailand*	0.0%	9.1%	0.2%	0.6%	0.0%	0.0%	0.0%	0.0%	-0.1%
Americas									
Brazil*	6.3%	12.5%	1.4%	1.7%	-0.1%	0.0%	0.0%	0.0%	-0.1%
Canada	2.1%	-7.2%	0.9%	6.4%	0.6%	0.1%	0.2%	-0.5%	0.3%
Chile*	--	1.6%	0.0%	0.3%	--	0.0%	0.0%	--	0.0%
Colombia*	--	4.9%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Mexico*	2.9%	0.9%	0.4%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%
Peru*	9.5%	10.4%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
United States	-2.1%	-0.8%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Developed Markets Performance Attribution vs. MSCI ACWI ex USA Gross

	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
Other									
Egypt*	--	12.1%	0.0%	0.0%	--	0.0%	0.0%	--	0.0%
Israel	-5.5%	-5.3%	0.1%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Kazakhstan**	6.2%	18.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Qatar*	10.8%	4.6%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Romania**	26.6%	19.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
South Africa*	-4.2%	-4.0%	2.1%	1.8%	0.0%	0.0%	0.0%	0.0%	0.0%
Turkey*	-9.6%	-4.8%	0.3%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
United Arab Emirates*	21.5%	-0.8%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Totals									
Americas	3.0%	-2.4%	3.6%	9.4%	0.4%	-0.1%	0.1%	-0.2%	0.2%
Europe	-1.8%	-1.7%	52.3%	44.9%	0.0%	-0.1%	0.1%	0.0%	0.0%
Asia/Pacific	0.1%	-0.1%	40.9%	43.1%	-0.1%	0.0%	0.1%	0.0%	0.0%
Other	-2.9%	-3.4%	2.8%	2.7%	0.0%	0.0%	0.0%	0.0%	0.0%
Cash	0.4%	--	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	-0.9%	-1.1%	100.0%	100.0%	0.2%	-0.2%	0.4%	-0.2%	0.2%
Totals									
Developed	-1.2%	-1.9%	83.9%	75.2%	0.3%	-0.1%	0.4%	0.0%	0.7%
Emerging*	1.0%	1.4%	15.6%	24.8%	-0.1%	-0.3%	0.0%	0.1%	-0.5%
Frontier**	17.8%	--	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cash	0.4%	--	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%



	Return (Rank)							
	Quarter	Fiscal YTD	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
5th Percentile	1.7	17.0	26.2	19.9	14.3	12.9	11.3	7.8
25th Percentile	-0.2	12.7	21.2	16.3	9.4	9.8	8.3	5.8
Median	-1.0	9.9	16.8	13.8	6.8	7.7	6.7	3.9
75th Percentile	-1.9	7.6	14.1	12.1	5.5	6.6	5.6	3.0
95th Percentile	-3.3	4.3	9.6	8.9	4.0	5.1	4.4	1.8
# of Portfolios	137	135	135	133	126	106	91	79
● BlackRock EAFE Index	-1.6 (69)	8.2 (69)	15.0 (71)	13.6 (54)	5.9 (67)	-- (--)	-- (--)	-- (--)
▲ MSCI EAFE	-1.5 (66)	8.2 (69)	14.8 (72)	13.2 (58)	5.6 (72)	6.5 (76)	5.3 (82)	2.7 (89)

Characteristics

	Portfolio	MSCI EAFE
Number of Holdings	928	926
Weighted Avg. Market Cap. (\$B)	56.8	56.9
Median Market Cap. (\$B)	11.2	11.2
Price To Earnings	19.0	18.1
Price To Book	2.8	2.5
Price To Sales	2.5	2.2
Return on Equity (%)	16.6	14.2
Yield (%)	3.2	3.2
Beta (holdings; global)	1.1	1.1

Top Holdings

NESTLE 'R'	1.7%
HSBC HOLDINGS	1.3%
NOVARTIS 'R'	1.2%
TOYOTA MOTOR	1.1%
ROCHE HOLDING	1.1%
ROYAL DUTCH SHELL A	1.0%
TOTAL	0.9%
BP	0.9%
BRITISH AMERICAN TOBACCO	0.9%
ROYAL DUTCH SHELL B	0.8%

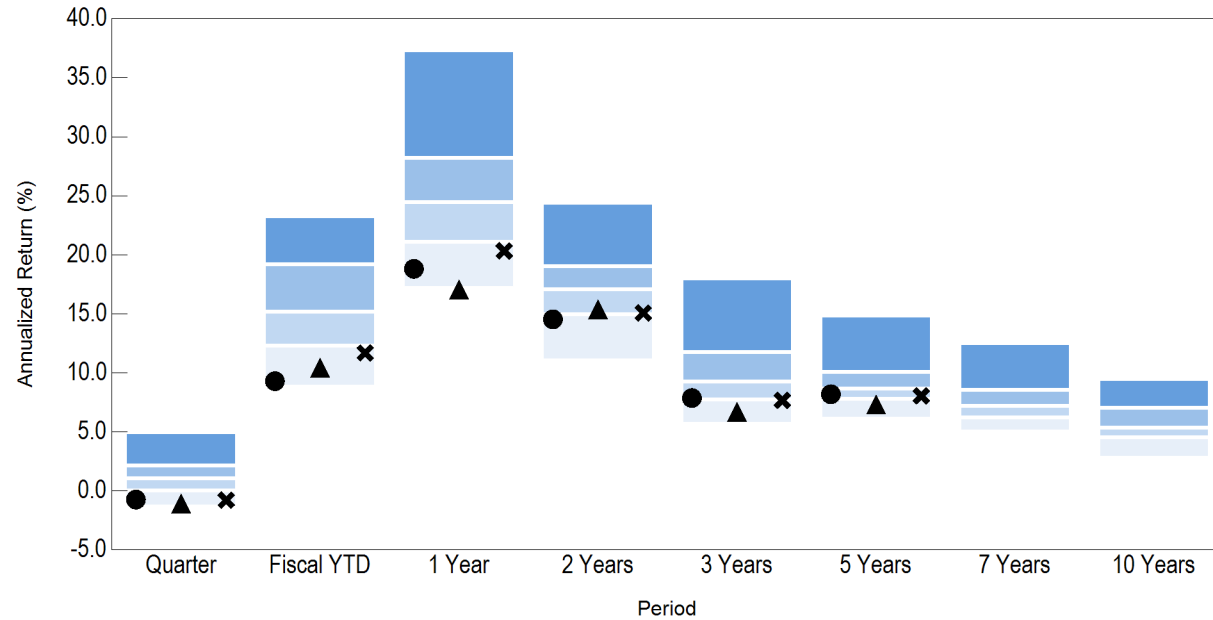
Best Performers

	Return %
GKN (UKIR:GKN)	50.3%
SKY (UKIR:SKY)	35.6%
KOSE (J:OSEC)	34.5%
TDC (DK:TDC)	34.5%
ONO PHARM. (J:PS@N)	33.7%
SHISEIDO (J:SHDO)	32.5%
WILLIAM DEMANT HLDG. (DK:WDH)	32.2%
OTSUKA (J:OTSK)	31.4%
IPSEN (F:IPN)	29.8%
SEGA SAMMY HDG. (J:SESA)	29.2%

Worst Performers

	Return %
CAPITA (UKIR:CPI)	-62.7%
MICRO FOCUS INTL. (UKIR:MCRO)	-59.0%
KINGSTON FINANCIAL GROUP (K:STIM)	-53.4%
SURUGA BANK (J:SURB)	-35.2%
HENNES & MAURITZ 'B' (W:HMBF)	-27.7%
DEUTSCHE BANK (D:DBK)	-26.9%
HUTCHISON PORT HDG.TRUST (T:HPHH)	-26.0%
MINTH GROUP (K:MINT)	-24.5%
INGENICO GROUP (F:INGE)	-24.2%
SEIKO EPSON (J:SEEP)	-23.4%

eV ACWI ex-US Growth Equity Net Return Comparison



	Return (Rank)							
	Quarter	Fiscal YTD	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
5th Percentile	4.9	23.2	37.3	24.4	18.0	14.8	12.5	9.5
25th Percentile	2.2	19.2	28.2	19.0	11.8	10.1	8.6	7.0
Median	1.1	15.2	24.5	17.1	9.3	8.7	7.2	5.4
75th Percentile	0.1	12.3	21.1	15.0	7.7	7.8	6.2	4.6
95th Percentile	-1.3	8.8	17.2	11.1	5.7	6.1	5.1	2.8
# of Portfolios	70	70	70	70	67	56	50	43
● Baillie Gifford	-0.8 (91)	9.3 (91)	18.8 (89)	14.5 (81)	7.8 (72)	8.2 (65)	-- (--)	-- (--)
▲ MSCI ACWI ex US	-1.1 (94)	10.4 (84)	17.0 (96)	15.4 (70)	6.7 (92)	7.3 (83)	-- (--)	-- (--)
✕ MSCI ACWI ex US Growth	-0.8 (92)	11.7 (80)	20.3 (77)	15.1 (74)	7.7 (78)	8.0 (69)	-- (--)	-- (--)

Characteristics

	Portfolio	MSCI ACWI ex USA Gross
Number of Holdings	86	1,864
Weighted Avg. Market Cap. (\$B)	47.7	65.0
Median Market Cap. (\$B)	14.1	8.5
Price To Earnings	31.8	18.6
Price To Book	6.7	2.5
Price To Sales	4.6	2.3
Return on Equity (%)	24.1	15.4
Yield (%)	1.6	3.0
Beta (holdings; global)	1.1	1.1

Top Holdings

TAIWAN SEMICON.SPN.ADR 1:5	3.0%
NASPERS	2.8%
ALIBABA GROUP HLDG.SPN. ADR 1:1	2.7%
HARGREAVES LANSDOWN	2.4%
SHISEIDO	2.3%
ATLAS COPCO 'B'	2.3%
COCHLEAR	2.2%
ZALANDO	2.0%
UNITED OVERSEAS BANK	2.0%
NOVOZYMES	2.0%

Best Performers

	Return %
SARTORIUS PREF. (D:SRT3)	44.6%
SHISEIDO (J:SHDO)	32.5%
SHOPIFY 'A' (NYS) (SHOP)	23.4%
PUBLIC BANK (L:PBOM)	22.6%
ADIDAS (D:ADS)	20.3%
PIGEON (J:PIGC)	19.6%
MAKEMYTRIP (MMYT)	16.2%
ADVANTEST (J:AB@N)	13.8%
ASML HOLDING (H:ASML)	13.0%
KAO (J:KA@N)	11.0%

Worst Performers

	Return %
CAPITA (UKIR:CPI)	-62.7%
SURUGA BANK (J:SURB)	-35.2%
PJSC MAGNIT GDR (REG S) (UKIR:MGNT)	-32.6%
RAIA DROGASIL ON (BR:DR3)	-18.5%
JUPITER FUND MANAGEMENT (UKIR:JUP)	-18.2%
DISTRIBUIDORA INTNAC.DE ALIMENTACION (E:DIA)	-18.0%
WOOD GROUP (JOHN) (UKIR:WG.)	-13.8%
NASPERS (R:NPNJ)	-12.4%
THAI BEVERAGE PUBLIC (T:THBE)	-11.7%
INDITEX (E:IND)	-10.3%

Baillie Gifford Performance Attribution vs. MSCI ACWI ex USA Gross

	Total Effects	Attribution Effects			Returns		Sector Weights				
		Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark			
Energy	-0.1%	-1.0%	0.0%	0.9%	-13.8%	-1.8%	0.5%	6.7%			
Materials	-0.1%	-0.1%	0.1%	0.0%	-4.2%	-2.9%	3.8%	8.1%			
Industrials	-0.4%	-0.2%	0.0%	-0.2%	-4.5%	-1.5%	14.3%	11.9%			
Consumer Discretionary	0.2%	0.0%	-0.1%	0.2%	-1.1%	-1.1%	19.4%	11.3%			
Consumer Staples	1.1%	0.5%	-0.2%	0.7%	3.1%	-2.7%	18.2%	9.5%			
Health Care	0.0%	0.1%	0.0%	-0.1%	0.2%	0.0%	7.6%	7.6%			
Financials	-0.5%	-0.6%	0.0%	0.1%	-3.1%	-1.0%	17.6%	23.1%			
Information Technology	0.5%	0.2%	0.2%	0.2%	3.4%	1.7%	16.6%	11.5%			
Telecommunication Services	0.0%	-0.2%	0.1%	0.1%	-5.3%	-4.0%	0.9%	4.0%			
Utilities	-0.1%	--	-0.1%	--	--	1.4%	0.0%	2.9%			
Real Estate	-0.1%	--	0.0%	--	--	-1.2%	0.0%	3.2%			
Cash	0.1%	0.0%	0.1%	0.0%	0.4%	--	1.2%	0.0%			
Portfolio	0.6%	=	-1.2%	+	0.1%	+	1.8%	-0.5%	-1.1%	100.0%	100.0%

Baillie Gifford Performance Attribution vs. MSCI ACWI ex USA Gross

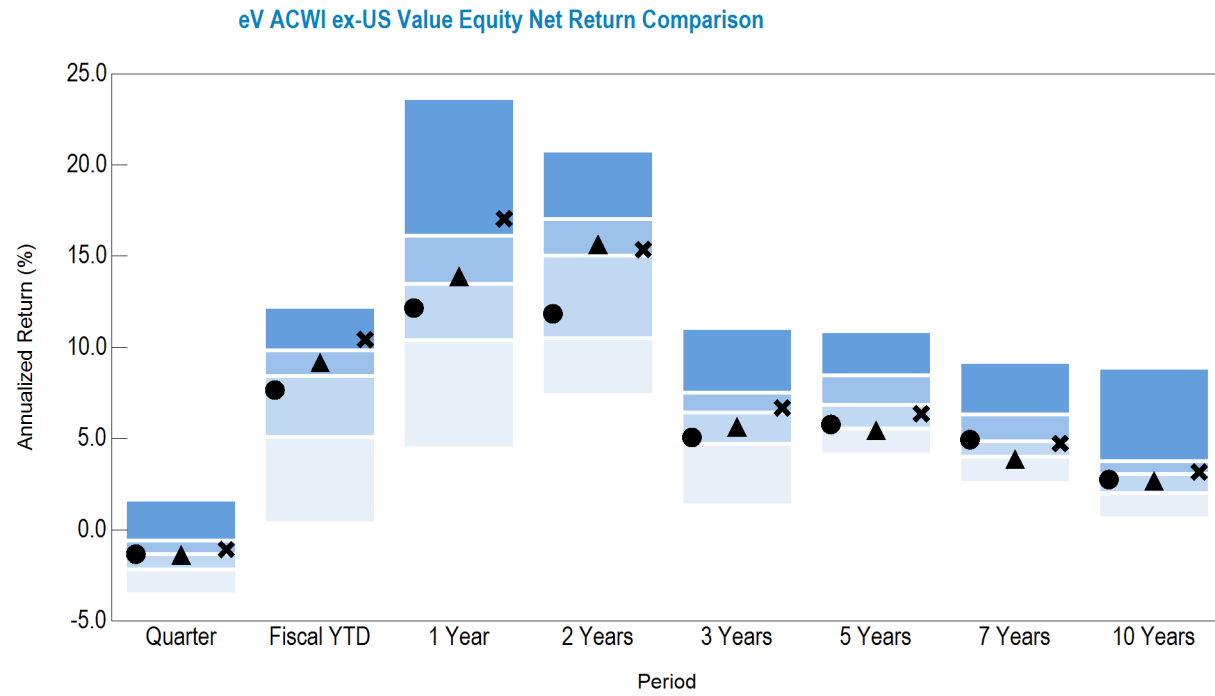
	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
Europe									
Austria	--	2.2%	0.0%	0.2%	--	0.0%	0.0%	--	0.0%
Belgium	--	0.5%	0.0%	0.8%	--	0.0%	0.0%	--	0.0%
Czech Republic*	--	6.4%	0.0%	0.0%	--	0.0%	0.0%	--	0.0%
Denmark	-5.3%	-1.1%	5.5%	1.3%	-0.1%	0.0%	0.1%	-0.2%	-0.1%
Finland	-3.7%	8.7%	1.2%	0.6%	-0.1%	0.1%	0.0%	-0.1%	-0.1%
France	1.6%	0.5%	1.5%	7.3%	0.1%	-0.1%	-0.1%	-0.1%	-0.2%
Germany	10.7%	-3.5%	5.1%	6.7%	0.9%	0.0%	0.0%	-0.2%	0.7%
Greece*	--	-6.7%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Hungary*	--	-1.1%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Ireland	--	-5.7%	0.0%	0.3%	--	0.0%	0.0%	--	0.0%
Italy	--	5.4%	0.0%	1.6%	--	-0.1%	0.0%	--	-0.1%
Netherlands	13.0%	1.0%	0.9%	2.5%	0.3%	0.0%	0.0%	-0.2%	0.0%
Norway	--	2.3%	0.0%	0.5%	--	0.0%	0.0%	--	0.0%
Poland*	--	-8.2%	0.0%	0.3%	--	0.0%	0.0%	--	0.0%
Portugal	-6.4%	3.1%	1.5%	0.1%	0.0%	0.1%	0.0%	-0.1%	0.0%
Russia*	-32.6%	9.4%	0.4%	0.8%	-0.4%	-0.1%	0.0%	0.2%	-0.2%
Spain	-12.1%	-1.7%	2.8%	2.2%	-0.2%	0.0%	0.0%	-0.1%	-0.3%
Sweden	-1.3%	-1.8%	5.1%	1.8%	0.0%	0.1%	-0.1%	0.0%	0.1%
Switzerland	-5.3%	-3.9%	4.4%	5.5%	-0.1%	0.0%	0.0%	0.0%	-0.1%
United Kingdom	-5.3%	-4.0%	13.5%	12.1%	-0.2%	-0.1%	0.1%	0.0%	-0.2%

Baillie Gifford Performance Attribution vs. MSCI ACWI ex USA Gross

	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
AsiaPacific									
Australia	2.0%	-6.1%	5.6%	4.8%	0.4%	0.0%	0.0%	0.1%	0.4%
China*	1.3%	1.8%	7.1%	7.4%	-0.1%	0.0%	0.0%	0.0%	-0.1%
Hong Kong	-2.0%	-1.4%	1.9%	2.5%	0.0%	0.0%	0.0%	0.0%	0.0%
India*	-0.9%	-6.9%	2.8%	2.2%	0.1%	0.0%	0.0%	0.0%	0.1%
Indonesia*	--	-7.1%	0.0%	0.6%	--	0.0%	0.0%	--	0.0%
Japan	3.9%	0.8%	17.7%	16.6%	0.5%	0.0%	0.0%	0.0%	0.5%
Korea*	-2.6%	-0.9%	3.0%	3.8%	-0.1%	0.0%	0.0%	0.0%	-0.1%
Malaysia*	22.6%	8.7%	0.9%	0.6%	0.1%	0.0%	0.0%	0.0%	0.2%
New Zealand	--	-4.9%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Pakistan*	--	11.6%	0.0%	0.0%	--	0.0%	0.0%	--	0.0%
Philippines*	0.4%	-11.4%	0.4%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Singapore	0.3%	2.7%	3.9%	0.9%	0.0%	0.1%	0.0%	-0.1%	0.1%
Taiwan*	7.2%	5.7%	3.6%	2.8%	0.1%	0.1%	-0.1%	0.0%	0.1%
Thailand*	--	9.0%	0.0%	0.6%	--	0.0%	0.0%	--	-0.1%
Americas									
Brazil*	-18.5%	12.4%	1.2%	1.7%	-0.6%	-0.1%	0.0%	0.2%	-0.5%
Canada	5.5%	-7.2%	1.6%	6.6%	0.8%	0.1%	0.1%	-0.6%	0.4%
Chile*	--	1.6%	0.0%	0.3%	--	0.0%	0.0%	--	0.0%
Colombia*	--	4.9%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Mexico*	3.3%	0.9%	0.6%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%
Peru*	--	10.3%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
United States	-2.5%	-0.8%	2.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%

Baillie Gifford Performance Attribution vs. MSCI ACWI ex USA Gross

	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
Other									
Egypt*	--	12.0%	0.0%	0.0%	--	0.0%	0.0%	--	0.0%
Israel	--	-5.3%	0.0%	0.3%	--	0.0%	0.0%	--	0.0%
Qatar*	--	4.5%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
South Africa*	-6.5%	-4.0%	4.6%	1.8%	0.0%	-0.1%	0.1%	-0.1%	-0.1%
Turkey*	--	-4.8%	0.0%	0.3%	--	0.0%	0.0%	--	0.0%
United Arab Emirates*	--	-0.8%	0.0%	0.2%	--	0.0%	0.0%	--	0.0%
Totals									
Americas	-3.2%	-2.5%	5.5%	9.5%	-0.2%	-0.1%	0.1%	0.1%	-0.1%
Europe	-2.9%	-1.7%	41.8%	44.9%	-0.4%	0.0%	-0.2%	0.0%	-0.6%
Asia/Pacific	2.6%	0.0%	46.9%	42.9%	1.2%	0.0%	0.0%	0.1%	1.3%
Other	-6.5%	-3.4%	4.6%	2.7%	-0.1%	-0.1%	0.1%	-0.1%	-0.2%
Cash	0.4%	--	1.2%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%
Total	-0.5%	-1.1%	100.0%	100.0%	0.4%	0.1%	0.1%	0.1%	0.6%
Totals									
Developed	-0.5%	-1.9%	74.1%	75.2%	1.1%	0.0%	0.0%	0.0%	1.1%
Emerging*	-0.7%	1.4%	24.7%	24.8%	-0.6%	0.0%	0.1%	0.0%	-0.6%
Cash	0.4%	--	1.2%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%



	Return (Rank)							
	Quarter	Fiscal YTD	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
5th Percentile	1.6	12.2	23.7	20.8	11.0	10.9	9.2	8.9
25th Percentile	-0.6	9.9	16.1	17.1	7.6	8.5	6.4	3.8
Median	-1.3	8.4	13.5	15.0	6.5	6.9	4.9	3.1
75th Percentile	-2.1	5.1	10.4	10.5	4.7	5.6	4.0	2.0
95th Percentile	-3.5	0.4	4.5	7.4	1.4	4.1	2.6	0.7
# of Portfolios	36	36	36	35	32	25	19	16
● Mondrian	-1.3 (51)	7.7 (59)	12.2 (67)	11.8 (67)	5.1 (65)	5.8 (74)	4.9 (50)	2.8 (68)
▲ MSCI ACWI ex USA Value Gross	-1.4 (55)	9.2 (40)	13.9 (43)	15.6 (45)	5.6 (62)	5.5 (84)	3.9 (77)	2.7 (69)
✕ MSCI ACWI ex USA Gross	-1.1 (44)	10.4 (20)	17.0 (16)	15.4 (48)	6.7 (39)	6.4 (68)	4.7 (53)	3.2 (49)

Characteristics

	Portfolio	MSCI ACWI ex USA Value Gross
Number of Holdings	141	1,075
Weighted Avg. Market Cap. (\$B)	54.7	57.0
Median Market Cap. (\$B)	20.2	7.5
Price To Earnings	13.4	13.8
Price To Book	1.8	1.5
Price To Sales	1.7	1.6
Return on Equity (%)	13.0	12.0
Yield (%)	4.0	4.0
Beta (holdings: global)	1.0	1.1

Top Holdings

SANOFI	2.5%
ENEL	2.5%
TESCO	2.5%
UNITED OVERSEAS BANK	2.5%
HONDA MOTOR	2.5%
ENI	2.3%
LLOYDS BANKING GROUP	2.2%
TELIA COMPANY	2.2%
DAIMLER	2.1%
BP	2.1%

Best Performers

	Return %
SUZANO PAPEL E CELULOSE ON (BR:SUZ)	78.1%
ITAUSA INVESTIMENTOS ITAU PN (BR:IS4)	34.9%
CSPC PHARMACEUTICAL GP. (K:CPHA)	31.6%
ROMGAZ GDR REGS (UKIR:SNGR)	26.6%
ITAU UNIBANCO BANCO HLDG.ADR 1:1 (ITUB)	25.4%
FIRST ABU DHABI BANK (AD:NBA)	21.5%
LUKOIL OAO SPN.ADR 1:1 (LUKOY)	20.1%
NOVATEK MICROELS. (TW:NOV)	18.7%
OTSUKA HOLDINGS (J:OTHD)	14.1%
MALAYAN BANKING (L:MALY)	13.2%

Worst Performers

	Return %
KROTON EDUCACIONAL ON (BR:KRO)	-25.7%
TONGDA GROUP HOLDINGS (K:TGDA)	-24.5%
CMPH.COCS. RODOVIARIAS ON (BR:CCR)	-22.8%
TURKIYE HALK BANKASI (TK:HLB)	-20.5%
BAJAJ AUTO (IN:BHG)	-19.4%
LUPIN (IN:LUP)	-18.6%
KANGWON LAND (KO:KWL)	-18.6%
WOOD GROUP (JOHN) (UKIR:WG.)	-13.8%
KOREA ELECTRIC POWER (KO:KAW)	-13.5%
TAKEDA PHARMACEUTICAL (J:TA@N)	-12.8%

Mondrian Performance Attribution vs. MSCI ACWI ex USA Value Gross

	Attribution Effects				Returns		Sector Weights				
	Total Effects	Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark			
Energy	-0.2%	-0.2%	0.0%	0.1%	-1.5%	-0.4%	9.5%	10.8%			
Materials	-0.1%	-0.2%	0.0%	0.1%	-5.3%	-1.9%	3.0%	7.6%			
Industrials	-0.5%	-0.2%	-0.1%	-0.2%	-5.4%	-1.5%	12.2%	8.3%			
Consumer Discretionary	-0.3%	-0.3%	0.0%	0.1%	-3.6%	-0.8%	15.1%	9.5%			
Consumer Staples	0.7%	0.3%	-0.1%	0.4%	5.5%	-5.1%	6.3%	3.4%			
Health Care	-0.2%	-0.2%	0.1%	-0.1%	-2.7%	0.4%	9.0%	5.1%			
Financials	0.5%	1.3%	0.0%	-0.8%	2.6%	-1.5%	18.7%	36.1%			
Information Technology	0.2%	0.2%	-0.1%	0.1%	-0.3%	-3.9%	8.4%	3.8%			
Telecommunication Services	0.2%	0.3%	0.0%	-0.1%	-1.4%	-4.0%	7.9%	6.3%			
Utilities	-0.1%	-0.1%	0.1%	-0.1%	-2.2%	1.2%	7.2%	4.7%			
Real Estate	-0.1%	0.0%	0.0%	-0.1%	-1.4%	0.3%	2.7%	4.4%			
Cash	0.1%	0.0%	0.1%	0.0%	0.3%	--	0.0%	0.0%			
Unclassified	0.0%	--	--	--	--	--	0.0%	0.0%			
Portfolio	0.2%	=	0.8%	+	-0.1%	+	-0.5%	-1.2%	-1.4%	100.0%	100.0%

Mondrian Performance Attribution vs. MSCI ACWI ex USA Value Gross

	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
Europe									
Austria	--	1.3%	0.0%	0.3%	--	0.0%	0.0%	--	0.0%
Belgium	--	2.3%	0.0%	0.5%	--	0.0%	0.0%	--	0.0%
Czech Republic*	--	6.7%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Denmark	-4.8%	1.6%	1.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Finland	--	9.9%	0.0%	0.7%	--	-0.1%	0.0%	--	-0.1%
France	-3.7%	-0.9%	4.8%	7.0%	-0.2%	0.0%	-0.1%	0.1%	-0.2%
Germany	-3.1%	-3.8%	8.9%	6.4%	0.0%	-0.1%	0.1%	0.0%	0.0%
Greece*	--	-7.0%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Hungary*	--	1.7%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Ireland	--	-1.0%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Italy	3.5%	6.7%	4.3%	2.5%	-0.1%	0.1%	0.0%	-0.1%	0.0%
Netherlands	2.7%	-2.4%	3.5%	1.4%	0.1%	0.0%	0.1%	0.1%	0.2%
Norway	--	6.8%	0.0%	0.6%	--	0.0%	0.0%	--	-0.1%
Poland*	--	-12.4%	0.0%	0.3%	--	0.0%	0.0%	--	0.0%
Portugal	--	7.0%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Russia*	14.2%	12.3%	1.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%
Spain	-1.5%	-1.1%	3.9%	3.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Sweden	2.3%	-3.0%	3.2%	1.2%	0.1%	0.1%	0.0%	0.1%	0.2%
Switzerland	-2.3%	-1.8%	5.5%	4.8%	0.0%	0.0%	0.0%	0.0%	0.0%
United Kingdom	-2.0%	-3.9%	17.5%	14.0%	0.3%	-0.1%	0.1%	0.1%	0.3%

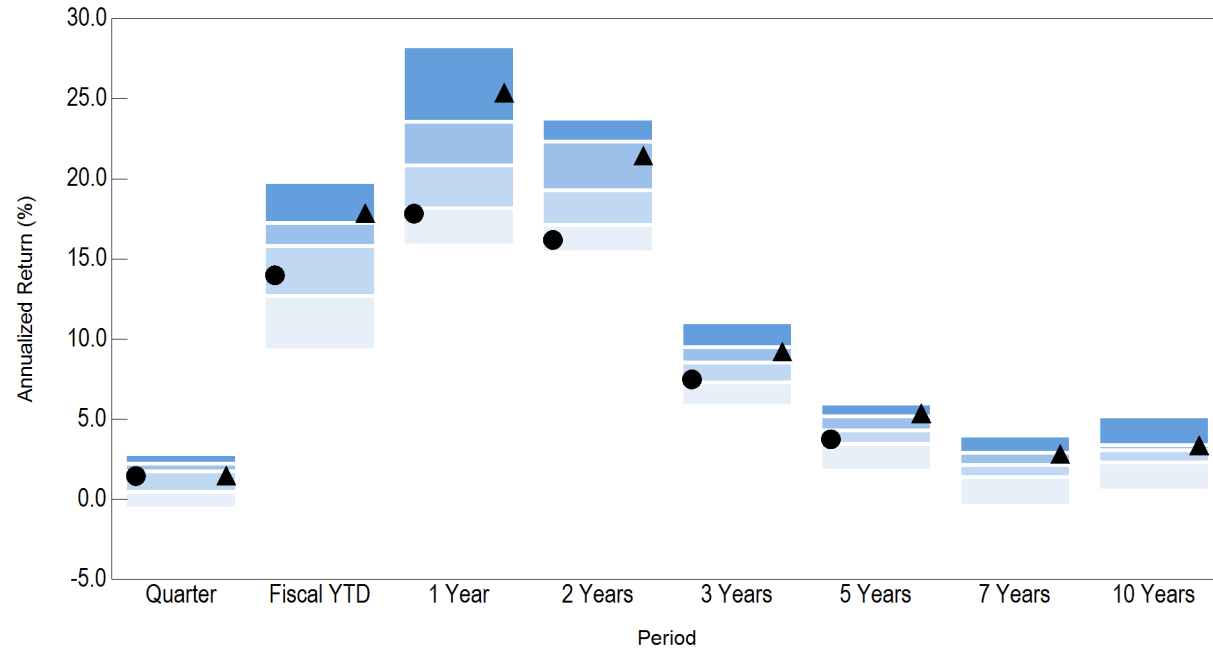
Mondrian Performance Attribution vs. MSCI ACWI ex USA Value Gross

	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
AsiaPacific									
Australia	-11.2%	-8.3%	1.0%	4.6%	-0.1%	0.1%	0.1%	0.1%	0.2%
China*	5.0%	1.3%	2.1%	7.3%	0.2%	-0.3%	0.1%	-0.1%	-0.2%
Hong Kong	-4.9%	-1.7%	5.1%	2.4%	-0.1%	0.1%	0.0%	-0.1%	-0.1%
India*	-3.5%	-7.6%	3.4%	2.1%	0.1%	0.0%	0.0%	0.1%	0.1%
Indonesia*	-2.5%	-7.9%	0.4%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%
Japan	-3.3%	-0.6%	13.9%	16.7%	-0.4%	0.1%	-0.2%	0.1%	-0.5%
Korea*	-7.5%	-3.6%	3.3%	3.8%	-0.1%	0.0%	0.0%	0.0%	-0.1%
Malaysia*	3.9%	5.8%	1.2%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%
New Zealand	--	-6.8%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Pakistan*	--	11.0%	0.0%	0.0%	--	0.0%	0.0%	--	0.0%
Philippines*	-5.7%	-13.5%	0.3%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Singapore	2.1%	-0.3%	4.6%	0.9%	0.0%	0.0%	0.1%	0.1%	0.2%
Taiwan*	5.7%	3.8%	2.3%	2.9%	0.1%	0.0%	0.0%	0.0%	0.0%
Thailand*	0.0%	14.3%	0.7%	0.6%	-0.1%	0.0%	0.0%	0.0%	-0.1%
Americas									
Brazil*	16.4%	19.5%	2.9%	1.8%	-0.1%	0.3%	0.0%	0.0%	0.2%
Canada	-2.7%	-7.5%	1.1%	6.4%	0.3%	0.1%	0.1%	-0.3%	0.3%
Chile*	--	1.2%	0.0%	0.3%	--	0.0%	0.0%	--	0.0%
Colombia*	--	5.6%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Mexico*	2.5%	2.8%	0.5%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%
Peru*	9.5%	9.1%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%

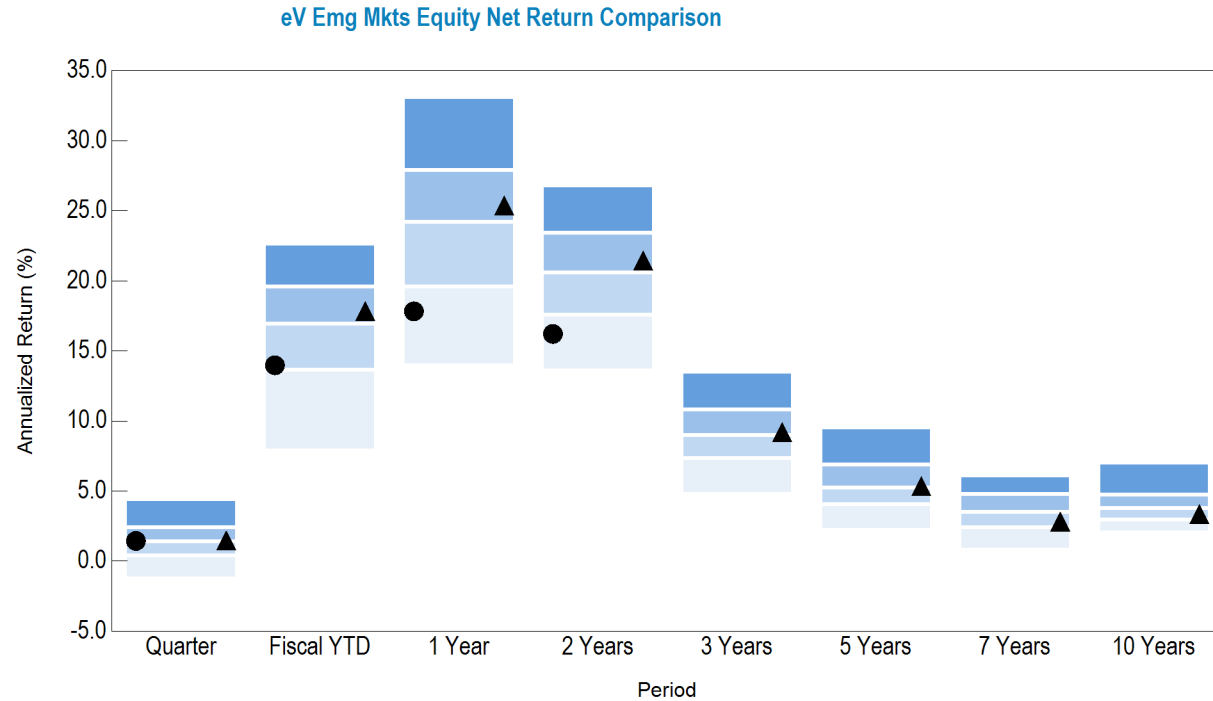
Mondrian Performance Attribution vs. MSCI ACWI ex USA Value Gross

	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
Other									
Egypt*	--	15.4%	0.0%	0.0%	--	0.0%	0.0%	--	0.0%
Israel	--	-7.5%	0.0%	0.4%	--	0.0%	0.0%	--	0.0%
Kazakhstan**	6.2%	-1.4%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Qatar*	10.8%	4.0%	0.4%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Romania**	26.6%	-1.4%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
South Africa*	2.3%	1.4%	1.6%	1.8%	0.0%	0.0%	0.0%	0.0%	0.0%
Turkey*	-9.6%	-6.3%	0.8%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
United Arab Emirates*	21.5%	3.8%	0.3%	0.2%	0.0%	0.0%	0.0%	0.0%	0.1%
Totals									
Americas	10.2%	-1.0%	4.8%	9.4%	0.9%	-0.2%	0.1%	-0.5%	0.4%
Europe	-1.0%	-1.5%	53.8%	45.0%	0.3%	-0.1%	0.1%	0.1%	0.4%
Asia/Pacific	-2.2%	-1.4%	38.3%	42.9%	-0.5%	0.0%	0.0%	0.0%	-0.4%
Other	2.5%	-0.1%	3.2%	2.7%	0.1%	0.0%	0.0%	0.0%	0.1%
Cash	--	--	0.0%	0.0%	--	0.0%	0.0%	--	0.0%
Total	-0.8%	-1.4%	100.0%	100.0%	0.9%	-0.2%	0.2%	-0.3%	0.6%
Totals									
Developed	-1.9%	-2.4%	78.3%	75.2%	0.2%	0.0%	0.2%	0.0%	0.4%
Emerging*	2.9%	1.7%	21.5%	24.8%	0.3%	-0.1%	0.0%	0.0%	0.1%
Frontier**	17.8%	--	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

InvestorForce All DB Emg Mkt Eq Net Return Comparison



	Return (Rank)							
	Quarter	Fiscal YTD	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
5th Percentile	2.8	19.8	28.3	23.8	11.0	6.0	4.0	5.1
25th Percentile	2.2	17.3	23.6	22.3	9.5	5.2	2.9	3.4
Median	1.7	15.8	20.8	19.3	8.5	4.3	2.1	3.1
75th Percentile	0.5	12.7	18.2	17.2	7.3	3.5	1.4	2.3
95th Percentile	-0.6	9.3	15.9	15.4	5.8	1.8	-0.4	0.5
# of Portfolios	81	79	78	77	74	63	39	12
● Emerging Markets	1.4 (59)	14.0 (63)	17.8 (80)	16.2 (85)	7.5 (73)	3.7 (68)	-- (--)	-- (--)
▲ MSCI Emerging Markets Gross	1.5 (59)	17.8 (20)	25.4 (13)	21.5 (33)	9.2 (31)	5.4 (22)	2.8 (27)	3.4 (30)



	Return (Rank)											
5th Percentile	4.4	22.6	33.1	26.8	13.5	9.5	6.1	7.0				
25th Percentile	2.4	19.6	27.9	23.5	10.8	6.9	4.8	4.8				
Median	1.4	17.0	24.2	20.6	9.0	5.3	3.5	3.8				
75th Percentile	0.4	13.7	19.6	17.6	7.4	4.1	2.4	3.0				
95th Percentile	-1.2	7.9	14.0	13.6	4.8	2.2	0.8	2.1				
# of Portfolios	188	187	185	180	169	139	97	63				
● Parametric Core	1.4 (51)	14.0 (72)	17.8 (86)	16.2 (84)	-- (--)	-- (--)	-- (--)	-- (--)				
▲ MSCI Emerging Markets Gross	1.5 (50)	17.8 (44)	25.4 (38)	21.5 (43)	9.2 (49)	5.4 (50)	2.8 (68)	3.4 (61)				

Characteristics

	Portfolio	MSCI Emerging Markets Gross
Number of Holdings	1,155	847
Weighted Avg. Market Cap. (\$B)	24.6	91.9
Median Market Cap. (\$B)	3.4	5.9
Price To Earnings	20.6	20.3
Price To Book	3.1	2.7
Price To Sales	2.8	2.5
Return on Equity (%)	17.3	19.0
Yield (%)	2.9	2.3
Beta (holdings; global)	0.9	1.0

Top Holdings

SBERBANK OF RUSSIA	1.2%
AMERICA MOVIL SAB DE CV SPN.ADR 'L' 1:20	1.0%
NASPERS	0.8%
CREDICORP	0.7%
CHINA MOBILE	0.7%
PETROLEO BRASILEIRO ADR 1:2	0.6%
LUKOIL OAO SPN.ADR 1:1	0.6%
OAO GAZPROM SPN.ADR 1:2	0.6%
SAMSUNG ELECTRONICS SUSP - SUSP.30/04/18	0.6%
YANDEX	0.6%

Best Performers

	Return %
DAEWOO SHIPBLDG.& MAR. ENGR. (KO:OSM)	99.4%
SUZANO PAPEL E CELULOSE ON (BR:SUZ)	78.1%
SWANCOR HOLDING (TW:SWC)	57.6%
NESTLE (MALAYSIA) (L:NEST)	56.6%
ELSWEDY ELECTRIC (EG:SWD)	54.5%
MEDY-TOX (KO:MEY)	51.6%
VESTEL ELNK.SANVETC. (TK:VES)	47.6%
SIX OF OCT.DEV.& INV. (EG:SOD)	46.3%
CIFI HOLDINGS (GROUP) (K:CIHG)	44.9%
IRPC FB (Q:CIF)	43.9%

Worst Performers

	Return %
RESILIENT PR.INC.FD. (R:RESJ)	-63.8%
ADANI POWER (IN:ANW)	-44.4%
HOUSING DEV.&INFR. (IN:IHD)	-42.4%
RELIANCE COMMUNICATIONS (IN:RCN)	-41.1%
BRF BRASIL FOODS ON (BR:DG3)	-37.7%
CAPITALLAND MALAYSIA MALL TRUST (L:CAP1)	-36.3%
DATATEC (R:DTCJ)	-35.4%
GLOBETRONICS TECHNOLOGY (L:GLTE)	-34.9%
EOH (R:EOHJ)	-33.4%
IDEA CELLULAR (IN:ILC)	-31.3%

Parametric Core Performance Attribution vs. MSCI Emerging Markets Gross

	Attribution Effects				Returns		Sector Weights				
	Total Effects	Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark			
Energy	0.0%	-0.1%	0.2%	0.0%	5.9%	7.6%	9.4%	6.8%			
Materials	-0.1%	0.0%	-0.1%	0.0%	0.1%	0.7%	12.7%	7.4%			
Industrials	0.1%	0.1%	-0.1%	0.1%	1.1%	-0.7%	9.5%	5.3%			
Consumer Discretionary	0.2%	0.2%	0.1%	0.0%	-4.6%	-6.1%	9.5%	10.2%			
Consumer Staples	0.0%	0.1%	-0.1%	0.1%	0.1%	-0.7%	10.0%	6.5%			
Health Care	0.0%	-0.1%	0.2%	-0.1%	3.1%	7.1%	5.9%	2.7%			
Financials	-0.4%	-0.3%	-0.2%	0.1%	3.5%	4.3%	15.1%	23.5%			
Information Technology	-0.2%	-0.1%	-0.1%	0.0%	2.0%	1.9%	7.3%	27.7%			
Telecommunication Services	-0.1%	0.1%	-0.2%	0.0%	-3.1%	-3.6%	8.8%	4.8%			
Utilities	0.0%	0.0%	0.1%	0.0%	2.0%	3.3%	6.3%	2.4%			
Real Estate	0.0%	0.0%	-0.1%	0.1%	-0.2%	-1.8%	5.3%	2.8%			
Cash	0.0%	0.0%	0.0%	0.0%	0.4%	--	0.1%	0.0%			
Unclassified	0.0%	--	--	--	--	--	0.0%	0.0%			
Portfolio	-0.5%	=	-0.3%	+	-0.4%	+	0.3%	1.0%	1.4%	100.0%	100.0%

Parametric Core Performance Attribution vs. MSCI Emerging Markets Gross

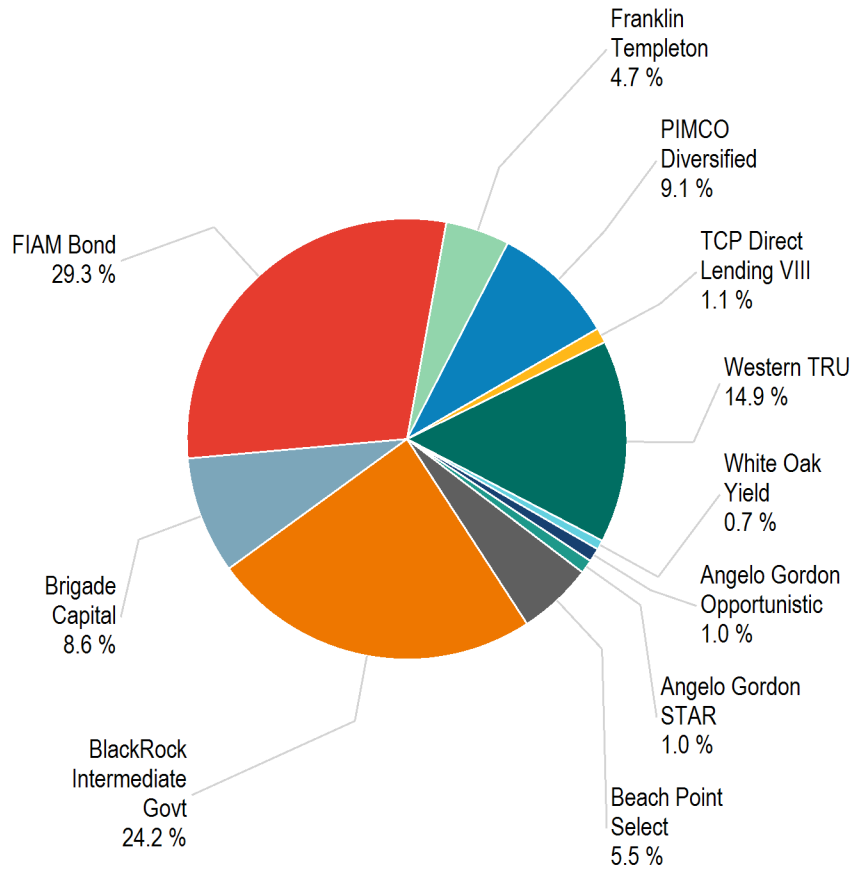
	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
Europe									
Czech Republic*	6.0%	6.4%	0.8%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Greece*	-3.1%	-6.7%	1.6%	0.3%	0.0%	-0.1%	0.0%	0.0%	0.0%
Hungary*	-5.3%	-1.0%	1.0%	0.3%	0.0%	0.0%	0.0%	0.0%	-0.1%
Luxembourg	-1.6%	1.4%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Netherlands	-27.2%	1.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Poland*	-7.6%	-8.2%	3.4%	1.3%	0.0%	-0.2%	0.0%	0.0%	-0.2%
Russia*	7.4%	9.5%	5.7%	3.3%	-0.1%	0.2%	0.0%	0.0%	0.1%
United Kingdom	-2.1%	-3.9%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
AsiaPacific									
China*	1.9%	1.8%	5.8%	29.8%	0.0%	-0.3%	0.1%	0.0%	-0.3%
Hong Kong	2.3%	-1.4%	6.6%	0.0%	0.0%	-0.1%	0.0%	0.2%	0.1%
India*	-10.2%	-6.9%	7.5%	8.7%	-0.3%	0.1%	0.1%	0.0%	-0.2%
Indonesia*	-4.2%	-7.0%	3.3%	2.2%	0.1%	-0.1%	0.0%	0.0%	0.0%
Korea*	0.6%	-0.9%	6.9%	15.5%	0.2%	0.2%	0.0%	-0.1%	0.2%
Malaysia*	3.9%	8.7%	3.6%	2.3%	-0.1%	0.0%	0.1%	-0.1%	-0.1%
Pakistan*	8.4%	11.7%	1.5%	0.1%	0.0%	0.2%	-0.1%	0.0%	0.1%
Philippines*	-7.2%	-11.4%	3.6%	1.1%	0.0%	-0.2%	-0.1%	0.1%	-0.1%
Singapore	-11.3%	2.8%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Taiwan*	3.7%	5.6%	7.1%	11.2%	-0.2%	-0.1%	-0.1%	0.1%	-0.3%
Thailand*	9.0%	9.1%	3.3%	2.3%	0.0%	0.0%	0.0%	0.0%	0.1%
Americas									
Brazil*	4.6%	12.5%	7.0%	6.9%	-0.5%	0.0%	0.0%	0.0%	-0.5%
Chile*	1.2%	1.6%	3.6%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Colombia*	5.8%	4.9%	1.8%	0.4%	0.0%	0.0%	0.1%	0.0%	0.1%
Mexico*	2.4%	0.9%	6.6%	2.9%	0.1%	-0.2%	0.1%	0.1%	0.1%
Peru*	5.6%	10.4%	1.5%	0.4%	0.0%	0.1%	0.0%	-0.1%	0.0%
United States	8.8%	-0.8%	1.3%	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				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
Other									
Egypt*	19.8%	12.1%	0.9%	0.1%	0.0%	0.1%	0.0%	0.1%	0.2%
Kuwait**	1.3%	8.1%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Qatar*	5.6%	4.6%	1.9%	0.6%	0.0%	0.1%	0.0%	0.0%	0.1%
South Africa*	-1.0%	-4.0%	7.5%	7.1%	0.2%	0.0%	0.0%	0.0%	0.2%
Turkey*	-4.4%	-4.8%	3.5%	1.1%	0.0%	0.0%	-0.1%	0.0%	-0.1%
United Arab Emirates*	2.0%	-0.8%	1.3%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%
Totals									
Americas	3.8%	8.2%	22.0%	11.8%	-0.5%	0.6%	0.2%	-0.5%	-0.2%
Europe	0.7%	3.5%	12.9%	5.5%	-0.2%	0.1%	0.1%	-0.2%	-0.2%
Asia/Pacific	-0.1%	0.8%	49.6%	73.2%	-0.6%	0.0%	-0.1%	0.2%	-0.5%
Other	0.5%	-3.2%	15.4%	9.5%	0.5%	-0.4%	-0.1%	0.3%	0.3%
Cash	0.4%	--	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	1.0%	1.4%	100.0%	100.0%	-0.8%	0.4%	0.1%	-0.2%	-0.5%
Totals									
Developed	2.6%	--	8.6%	0.0%	0.0%	0.0%	0.0%	0.2%	0.2%
Emerging*	0.8%	1.4%	91.0%	100.0%	-0.9%	0.0%	0.2%	0.1%	-0.6%
Frontier**	1.3%	--	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cash	0.4%	--	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Fixed Income
 Manager Allocation Analysis

Period Ending: March 31, 2018



	Actual \$	Actual %	Manager Contribution to Excess Return %
Angelo Gordon Opportunistic	\$8,487,000	1.0%	0.1%
Angelo Gordon STAR	\$8,442,000	1.0%	0.1%
Beach Point Select	\$48,968,531	5.5%	0.1%
BlackRock Intermediate Govt	\$214,570,889	24.2%	0.0%
Brigade Capital	\$76,148,517	8.6%	0.2%
FIAM Bond	\$260,074,986	29.3%	0.0%
Franklin Templeton	\$41,862,663	4.7%	0.0%
PIMCO Diversified	\$80,366,762	9.1%	0.1%
TCP Direct Lending VIII	\$10,050,988	1.1%	0.0%
Western Asset TRU	\$132,335,123	14.9%	-0.2%
White Oak Yield	\$5,773,724	0.7%	0.0%
Actual vs. Policy Weight Difference			0.2%
Total	\$887,081,183	100.0%	0.7%

Statistics Summary

3 Years

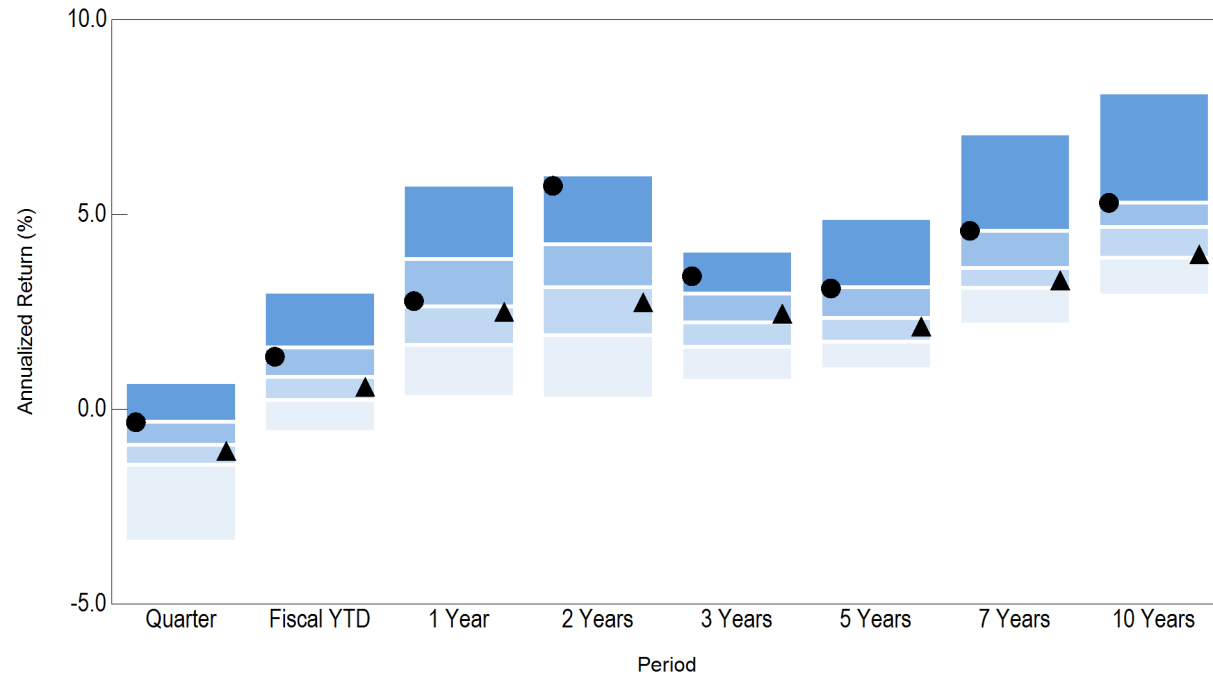
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Fixed Income	3.4%	2.8%	1.0	0.5	2.0%
Blended Fixed Income Index	2.5%	2.8%	0.7	--	0.0%
Core Fixed	2.1%	2.7%	0.6	0.5	1.8%
BBgBarc US Aggregate TR	1.2%	2.7%	0.2	--	0.0%
FIAM Bond	1.8%	2.9%	0.5	0.7	0.9%
BBgBarc US Aggregate TR	1.2%	2.7%	0.2	--	0.0%
Opportunistic Credit	6.6%	3.8%	1.6	0.8	3.0%
BBgBarc BA Intermediate HY	4.3%	4.3%	0.9	--	0.0%
Angelo Gordon Opportunistic	10.8%	7.2%	1.4	1.3	7.5%
BBgBarc US Aggregate TR	1.2%	2.7%	0.2	--	0.0%
Angelo Gordon STAR	11.5%	7.0%	1.6	1.4	7.5%
BBgBarc US Aggregate TR	1.2%	2.7%	0.2	--	0.0%
Brigade Capital	5.2%	7.2%	0.6	0.2	4.4%
BBgBarc BA Intermediate HY	4.3%	4.3%	0.9	--	0.0%
Franklin Templeton	3.0%	6.4%	0.4	0.0	8.2%
BBgBarc Multiverse TR	3.4%	4.8%	0.6	--	0.0%

Statistics Summary

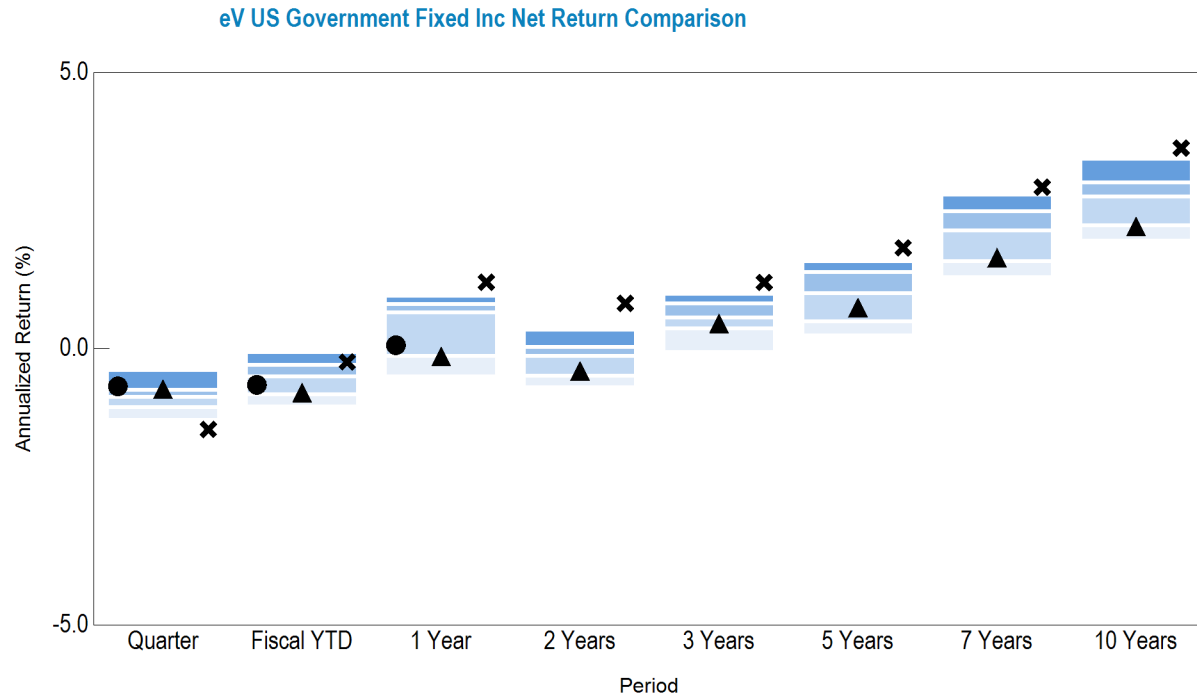
5 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Fixed Income	3.1%	3.1%	0.9	0.5	1.8%
Blended Fixed Income Index	2.1%	3.2%	0.6	--	0.0%
Core Fixed	2.6%	3.0%	0.7	0.5	1.4%
BBgBarc US Aggregate TR	1.8%	2.9%	0.5	--	0.0%
FIAM Bond	2.4%	3.1%	0.7	0.7	0.8%
BBgBarc US Aggregate TR	1.8%	2.9%	0.5	--	0.0%
Opportunistic Credit	6.8%	3.5%	1.8	0.9	3.8%
BBgBarc BA Intermediate HY	3.6%	4.7%	0.7	--	0.0%
Angelo Gordon STAR	12.7%	6.7%	1.8	1.4	7.7%
BBgBarc US Aggregate TR	1.8%	2.9%	0.5	--	0.0%
Brigade Capital	4.4%	6.2%	0.7	0.2	4.1%
BBgBarc BA Intermediate HY	3.6%	4.7%	0.7	--	0.0%
Franklin Templeton	2.0%	6.2%	0.3	0.1	6.9%
BBgBarc Multiverse TR	1.7%	4.7%	0.3	--	0.0%

InvestorForce All DB Total Fix Inc Net Return Comparison



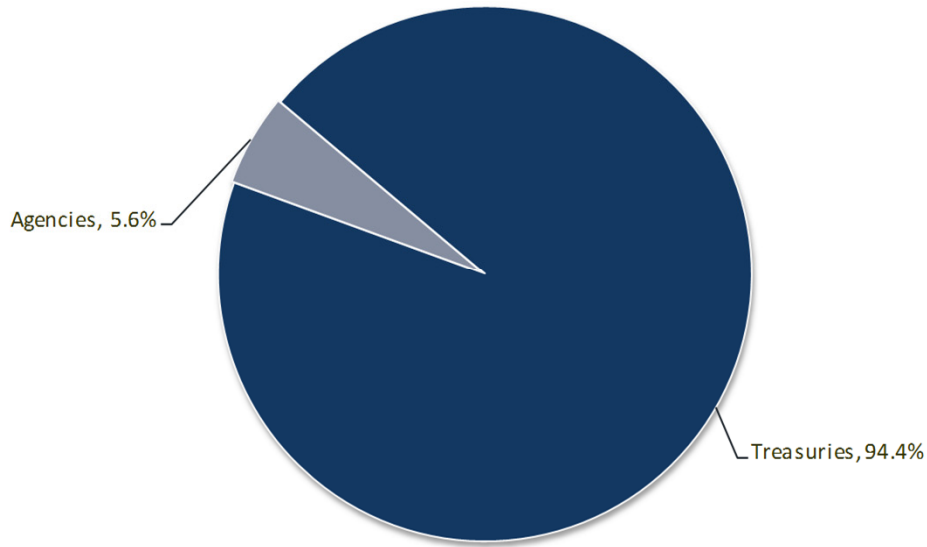
	Return (Rank)							
	Quarter	Fiscal YTD	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
5th Percentile	0.7	3.0	5.8	6.0	4.1	4.9	7.1	8.1
25th Percentile	-0.3	1.6	3.9	4.2	3.0	3.1	4.6	5.3
Median	-0.9	0.8	2.7	3.1	2.2	2.3	3.6	4.7
75th Percentile	-1.4	0.2	1.7	1.9	1.6	1.7	3.1	3.9
95th Percentile	-3.4	-0.6	0.3	0.3	0.7	1.0	2.2	2.9
# of Portfolios	267	264	264	257	251	232	202	162
● Fixed Income	-0.3 (26)	1.3 (30)	2.8 (48)	5.7 (7)	3.4 (13)	3.1 (28)	4.6 (27)	5.3 (26)
▲ Blended Fixed Income Index	-1.1 (66)	0.6 (61)	2.5 (56)	2.7 (61)	2.5 (41)	2.1 (57)	3.3 (64)	4.0 (73)



	Return (Rank)															
	Quarter		Fiscal YTD		1 Year		2 Years		3 Years		5 Years		7 Years		10 Years	
5th Percentile	-0.4	-0.1	1.0	0.3	1.0	1.6	2.8	3.4								
25th Percentile	-0.7	-0.3	0.8	0.0	0.8	1.4	2.5	3.0								
Median	-0.9	-0.5	0.7	-0.1	0.6	1.0	2.2	2.8								
75th Percentile	-1.1	-0.8	-0.1	-0.5	0.4	0.5	1.6	2.2								
95th Percentile	-1.3	-1.0	-0.5	-0.7	-0.1	0.2	1.3	2.0								
# of Portfolios	12	12	11	11	11	11	11	11								
● BlackRock Intermediate Govt	-0.7 (17)	-0.7 (65)	0.1 (61)	-- (--)	-- (--)	-- (--)	-- (--)	-- (--)								
▲ BBgBarc US Govt Int TR	-0.7 (25)	-0.8 (72)	-0.1 (76)	-0.4 (68)	0.5 (67)	0.7 (67)	1.6 (69)	2.2 (77)								
✕ BBgBarc US Aggregate TR	-1.5 (99)	-0.2 (15)	1.2 (1)	0.8 (1)	1.2 (1)	1.8 (1)	2.9 (2)	3.6 (1)								

BlackRock Intermediate Govt Market Duration Pool
 Bond Sector Allocation

Period Ending: March 31, 2018



Sector	Account Weight	BBgBarc Intermediate	
		Govt Weight	Difference
Treasuries	94.4%	95.5%	-1.1%
Agencies	5.6%	4.5%	1.1%
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	0.0%	0.0%	0.0%
TOTAL	100.0%	100.0%	0.0%

BlackRock Intermediate Govt Market Duration Pool
 Bond Summary Statistics

Period Ending: March 31, 2018

Portfolio Characteristics		Portfolio
Total Number of Securities		368
Total Market Value	\$	214,570,889
Current Coupon		2.09
Yield to Maturity		2.47
Average Life		4.07
Duration		3.78
Quality		AA+

BBgBarc Intermediate Govt	
Current Coupon	1.96
Yield to Maturity	2.47
Average Life	4.07
Duration	3.79
Quality	AA+

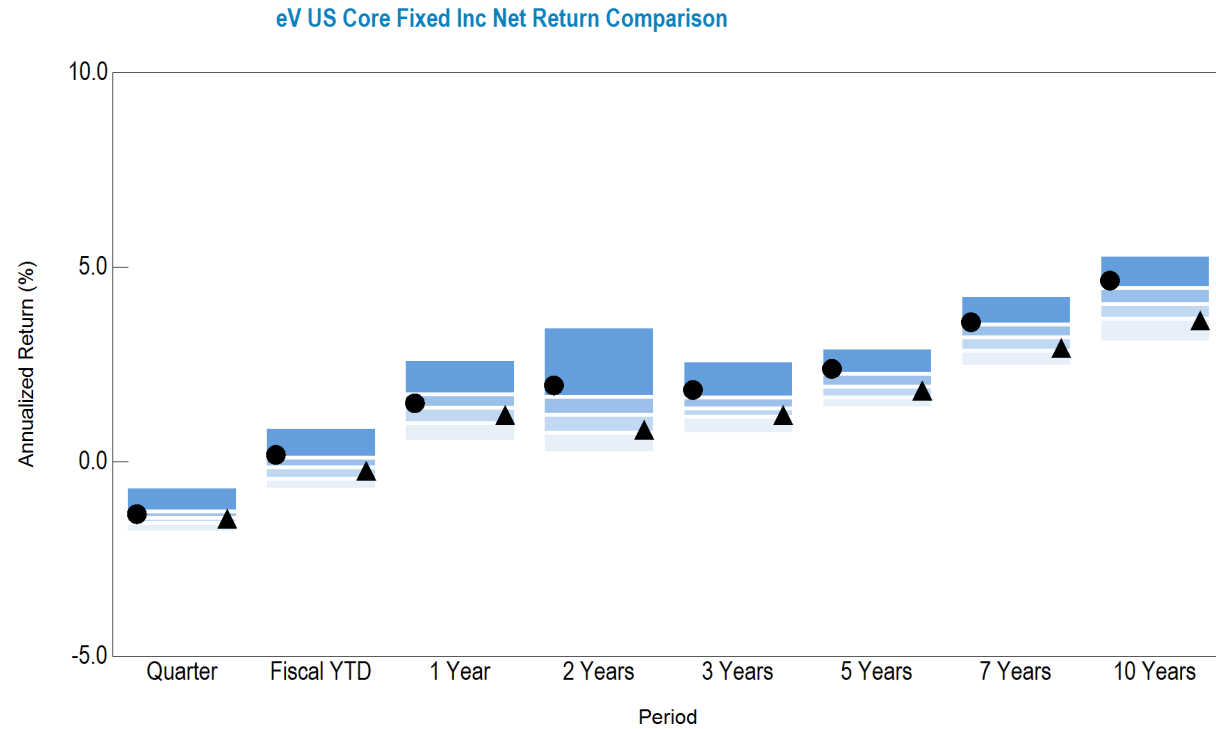
Yield to Maturity	
Range	% Held
0.0 - 5.0	100.0
5.0 - 7.0	0.0
7.0 - 9.0	0.0
9.0 - 11.0	0.0
11.0 - 13.0	0.0
13.0+	0.0
Unclassified	0.0

Average Life	
Range	% Held
0.0 - 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 - 2.0	20.6
2.0 - 4.0	41.9
4.0 - 6.0	18.5
6.0 - 8.0	15.4
8.0+	3.6
Unclassified	0.0

Quality	
Range	% Held
Govt (10)	0.0
Aaa (10)	98.9
Aa (9)	1.1
A (8)	0.0
Baa (7)	0.0
Below Baa (6-1)	0.0
Other	0.0

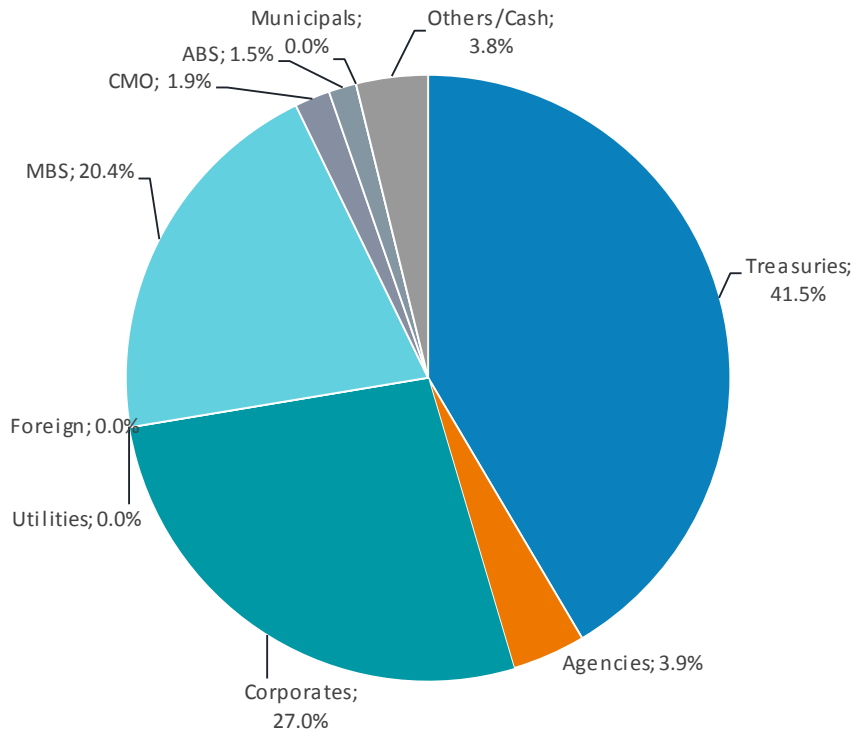
Coupon	
Range	% Held
0.0 - 5.0	100.0
5.0 - 7.0	0.0
7.0 - 9.0	0.0
9.0 - 10.0	0.0
10.0+	0.0
Unclassified	0.0



	Return (Rank)							
	Quarter	Fiscal YTD	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
5th Percentile	-0.6	0.9	2.6	3.5	2.6	2.9	4.3	5.3
25th Percentile	-1.3	0.1	1.7	1.7	1.7	2.3	3.5	4.5
Median	-1.4	-0.1	1.4	1.2	1.4	1.9	3.2	4.1
75th Percentile	-1.6	-0.4	1.0	0.8	1.2	1.7	2.9	3.7
95th Percentile	-1.8	-0.7	0.5	0.2	0.7	1.4	2.4	3.1
# of Portfolios	144	140	137	134	133	131	123	109
● FIAM Bond	-1.3 (36)	0.2 (23)	1.5 (40)	2.0 (17)	1.8 (18)	2.4 (16)	3.6 (23)	4.7 (16)
▲ BBgBarc US Aggregate TR	-1.5 (56)	-0.2 (61)	1.2 (66)	0.8 (71)	1.2 (71)	1.8 (62)	2.9 (70)	3.6 (80)

FIAM Bond Market Duration Pool
Bond Sector Allocation

Period Ending: March 31, 2018



Sector	Account Weight	BBgBarc Aggregate	
		Weight	Difference
Treasuries	41.5%	37.0%	4.5%
Agencies	3.9%	6.9%	-3.0%
Corporates	27.0%	25.5%	1.5%
Utilities	0.0%	0.0%	0.0%
Foreign	0.0%	0.0%	0.0%
MBS	20.4%	28.2%	-7.8%
CMO	1.9%	0.0%	1.9%
ABS	1.5%	2.4%	-0.9%
Municipals	0.0%	0.0%	0.0%
Others/Cash	3.8%	0.0%	3.8%
TOTAL	100.0%	100.0%	0.0%

FIAM Bond Market Duration Pool
Bond Summary Statistics

Period Ending: March 31, 2018

Portfolio Characteristics		
	Portfolio	
Total Number of Securities		827
Total Market Value	\$	260,074,986
Current Coupon		3.03
Yield to Maturity		3.06
Average Life		8.32
Duration		5.83
Quality		AA

BBgBarc Aggregate	
	3.14
	3.11
	8.14
	5.98
	AA

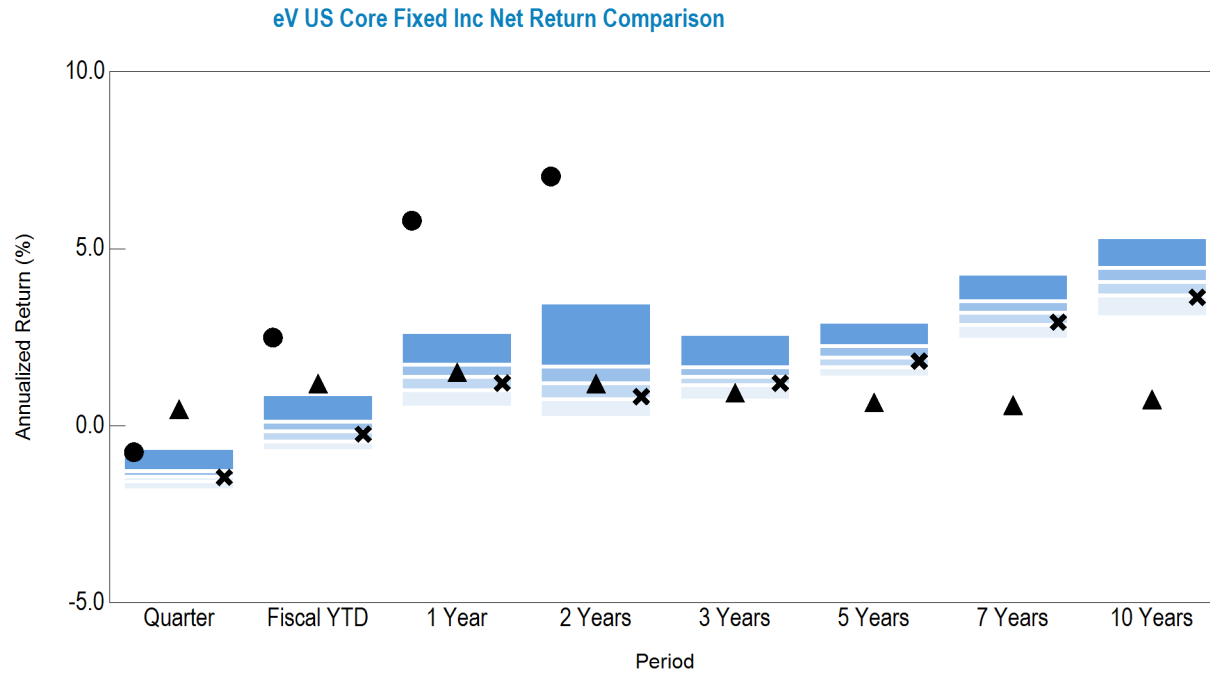
Yield to Maturity	
Range	% Held
0.0 - 5.0	96.0
5.0 - 7.0	4.0
7.0 - 9.0	0.1
9.0 - 11.0	0.1
11.0 - 13.0	0.0
13.0+	-0.1
Unclassified	0.0

Average Life	
Range	% Held
0.0 - 1.0	1.6
1.0 - 3.0	7.9
3.0 - 5.0	26.6
5.0 - 10.0	44.2
10.0 - 20.0	3.5
20.0+	16.3
Unclassified	0.0

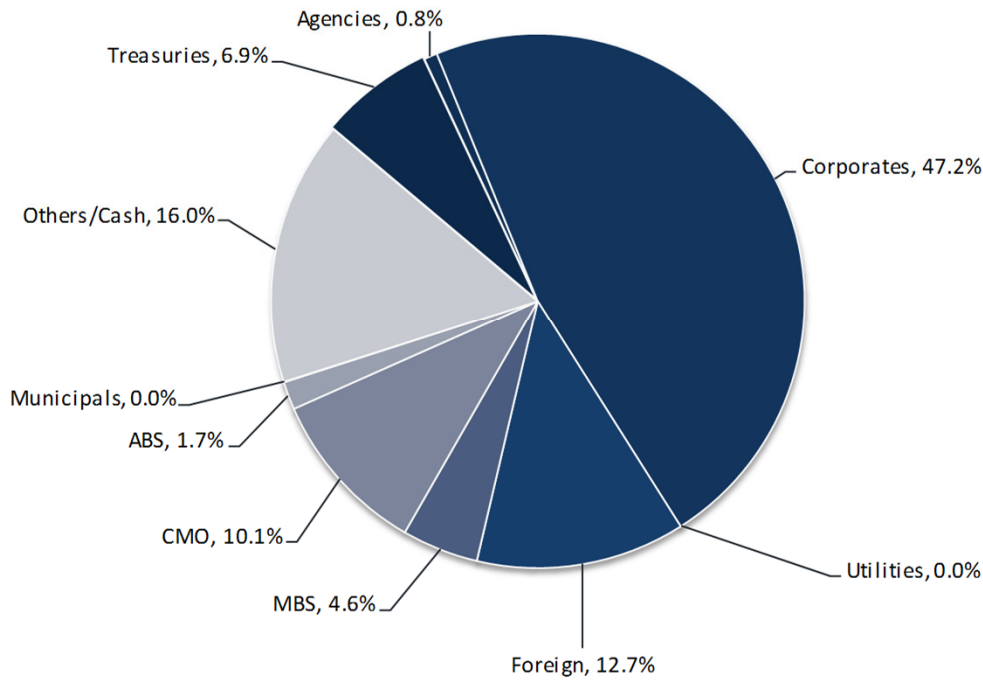
Duration	
Range	% Held
0.0 - 1.0	1.5
1.0 - 3.0	9.8
3.0 - 5.0	37.1
5.0 - 7.0	28.5
7.0 - 10.0	4.8
10.0+	18.4
Unclassified	0.0

Quality	
Range	% Held
Govt (10)	64.7
Aaa (10)	0.4
Aa (9)	0.7
A (8)	12.0
Baa (7)	16.4
Below Baa (6-1)	1.5
Other	4.2

Coupon	
Range	% Held
0.0 - 5.0	84.6
5.0 - 7.0	8.4
7.0 - 9.0	1.7
9.0 - 11.0	0.0
11.0 - 13.0	0.0
13.0+	5.3
Unclassified	0.0



	Return (Rank)							
	Quarter	Fiscal YTD	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
5th Percentile	-0.6	0.9	2.6	3.5	2.6	2.9	4.3	5.3
25th Percentile	-1.3	0.1	1.7	1.7	1.7	2.3	3.5	4.5
Median	-1.4	-0.1	1.4	1.2	1.4	1.9	3.2	4.1
75th Percentile	-1.6	-0.4	1.0	0.8	1.2	1.7	2.9	3.7
95th Percentile	-1.8	-0.7	0.5	0.2	0.7	1.4	2.4	3.1
# of Portfolios	144	140	137	134	133	131	123	109
● Western TRU	-0.7 (6)	2.5 (1)	5.8 (1)	7.0 (1)	-- (--)	-- (--)	-- (--)	-- (--)
▲ 3-Month Libor Total Return USD	0.5 (1)	1.2 (4)	1.5 (39)	1.2 (51)	0.9 (89)	0.7 (99)	0.6 (99)	0.7 (99)
✕ BBgBarc US Aggregate TR	-1.5 (56)	-0.2 (61)	1.2 (66)	0.8 (71)	1.2 (71)	1.8 (62)	2.9 (70)	3.6 (80)



Sector	Account Weight	BBgBarc Aggregate	
		Weight	Difference
Treasuries	6.9%	37.0%	-30.1%
Agencies	0.8%	6.9%	-6.1%
Corporates	47.2%	25.5%	21.7%
Utilities	0.0%	0.0%	0.0%
Foreign	12.7%	0.0%	12.7%
MBS	4.6%	28.2%	-23.6%
CMO	10.1%	0.0%	10.1%
ABS	1.7%	2.4%	-0.7%
Municipals	0.0%	0.0%	0.0%
Others/Cash	16.0%	0.0%	16.0%
TOTAL	100.0%	100.0%	0.0%

Portfolio Characteristics		Portfolio	BBgBarc Aggregate
Total Number of Securities		5,283	
Total Market Value	\$	132,335,123	
Current Coupon		5.13	3.14
Yield to Maturity		5.18	3.11
Average Life		10.12	8.14
Duration		3.59	5.98
Quality		BBB+	AA

Yield to Maturity	
Range	% Held
0.0 - 5.0	59.6
5.0 - 7.0	25.1
7.0 - 9.0	4.9
9.0 - 11.0	2.1
11.0 - 13.0	0.4
13.0+	1.9
Unclassified	6.0

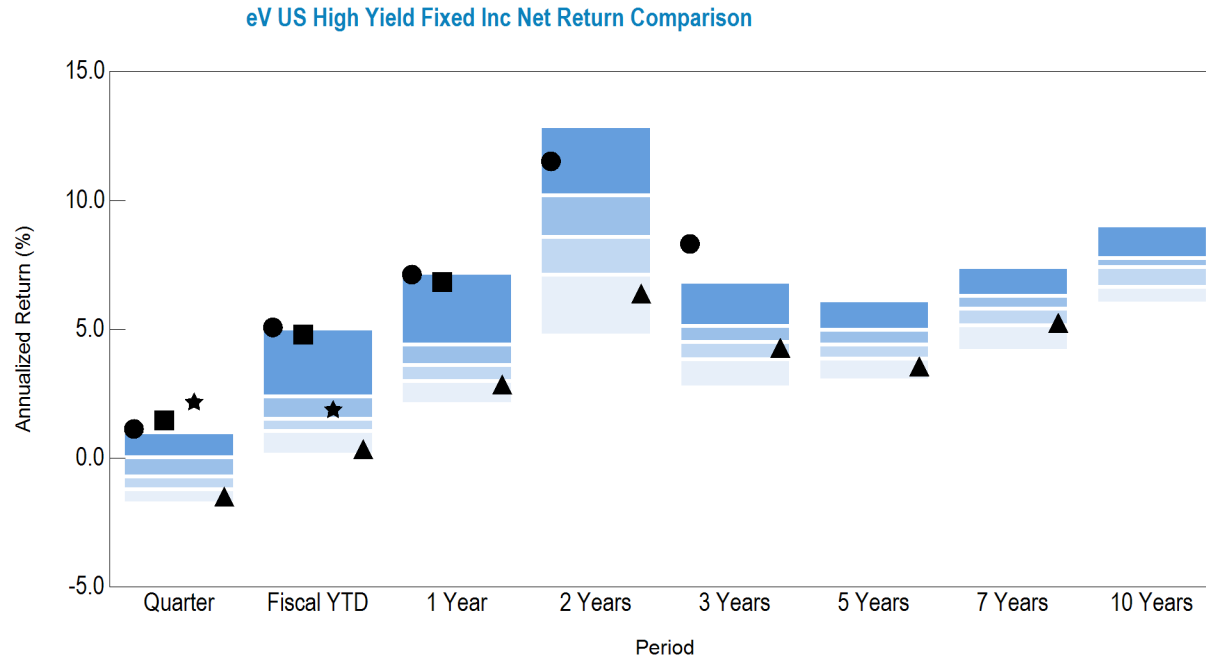
Average Life	
Range	% Held
0.0 - 1.0	25.2
1.0 - 3.0	13.2
3.0 - 5.0	17.5
5.0 - 10.0	15.2
10.0 - 20.0	14.1
20.0+	10.3
Unclassified	4.5

Duration	
Range	% Held
< 1.0	38.6
1.0 - 3.0	17.4
3.0 - 5.0	10.9
5.0 - 7.0	15.8
7.0 - 10.0	2.0
10.0+	11.2
Unclassified	4.0

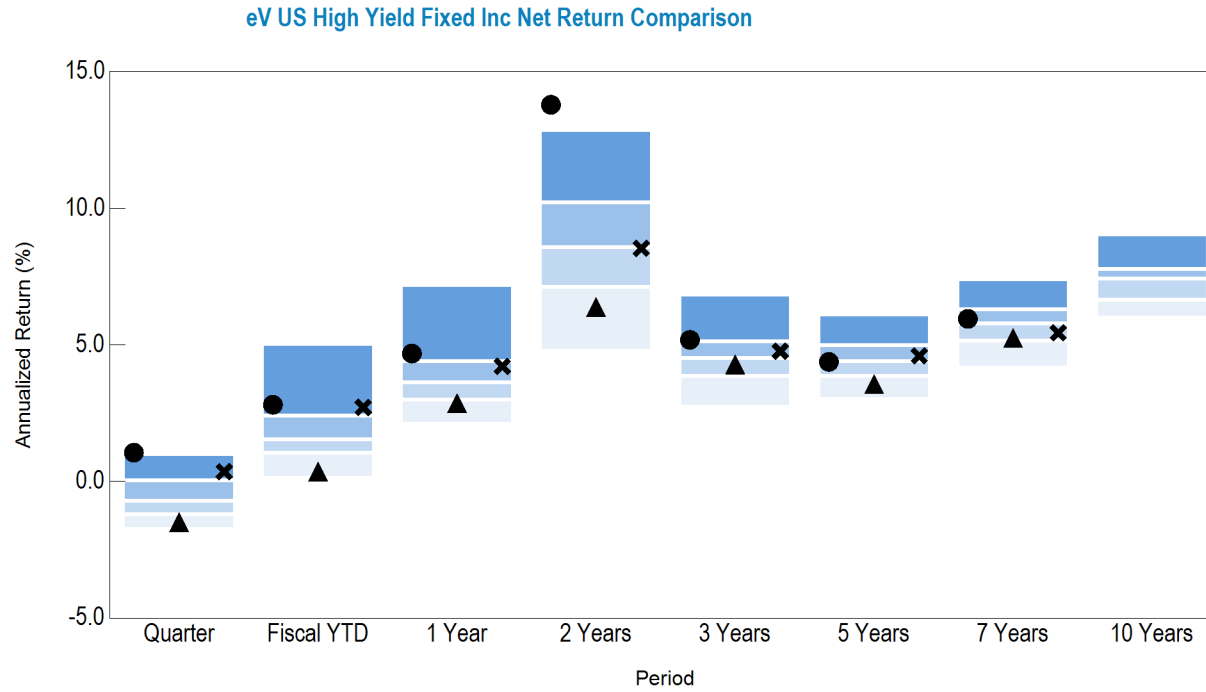
Quality	
Range	% Held
Govt* (10)	3.0
Aaa (10)	13.1
Aa (9)	10.0
A (8)	11.0
Baa (7)	18.9
Below Baa (6-1)	37.5
Other	6.5

Coupon	
Range	% Held
0.0 - 5.0	63.2
5.0 - 7.0	24.2
7.0 - 9.0	10.0
9.0 - 10.0	0.9
10.0+	2.5
Unclassified	-0.8

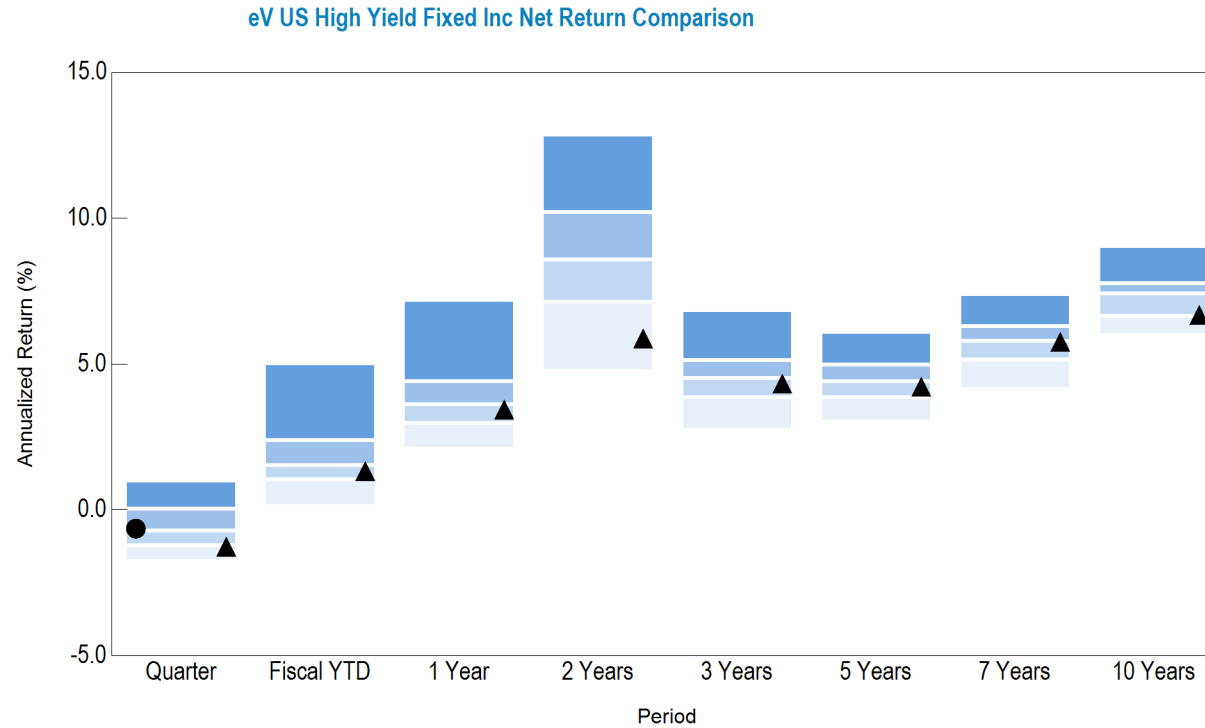
*Govt is specifically U.S Govt securities



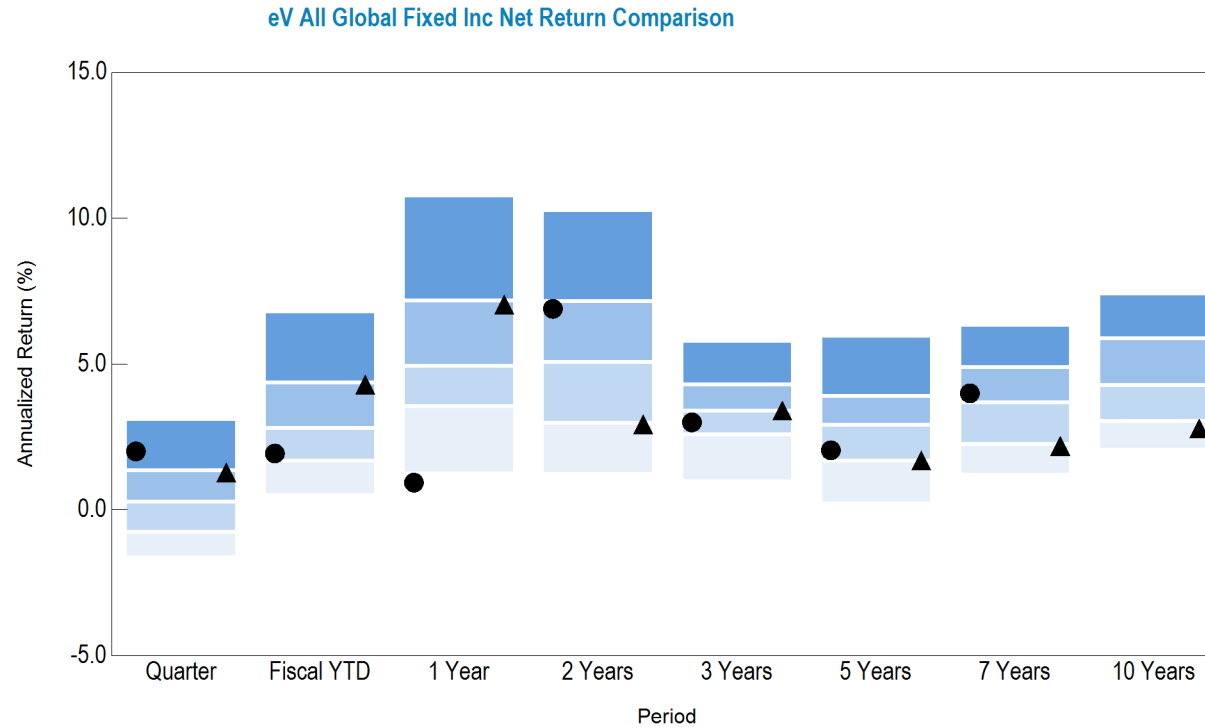
	Return (Rank)															
	Quarter		Fiscal YTD		1 Year		2 Years		3 Years		5 Years		7 Years		10 Years	
5th Percentile	1.0	5.0	7.2	12.9	6.8	6.1	7.4	9.0								
25th Percentile	0.0	2.4	4.4	10.2	5.1	5.0	6.3	7.8								
Median	-0.7	1.5	3.6	8.6	4.5	4.4	5.8	7.4								
75th Percentile	-1.2	1.1	3.0	7.1	3.9	3.9	5.2	6.7								
95th Percentile	-1.7	0.1	2.1	4.8	2.8	3.0	4.2	6.0								
# of Portfolios	124	123	123	118	114	96	86	62								
● Beach Point Select	1.1	(4)	5.1	(5)	7.1	(6)	11.5	(9)	8.3	(1)	--	(--)	--	(--)	--	(--)
■ TCP Direct Lending VIII	1.5	(3)	4.8	(6)	6.8	(7)	--	(--)	--	(--)	--	(--)	--	(--)	--	(--)
★ White Oak Yield	2.2	(2)	1.9	(39)	--	(--)	--	(--)	--	(--)	--	(--)	--	(--)	--	(--)
▲ BBgBarc BA Intermediate HY	-1.5	(88)	0.4	(93)	2.9	(79)	6.4	(82)	4.3	(60)	3.6	(86)	5.3	(73)	--	(--)



	Return (Rank)							
	Quarter	Fiscal YTD	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
5th Percentile	1.0	5.0	7.2	12.9	6.8	6.1	7.4	9.0
25th Percentile	0.0	2.4	4.4	10.2	5.1	5.0	6.3	7.8
Median	-0.7	1.5	3.6	8.6	4.5	4.4	5.8	7.4
75th Percentile	-1.2	1.1	3.0	7.1	3.9	3.9	5.2	6.7
95th Percentile	-1.7	0.1	2.1	4.8	2.8	3.0	4.2	6.0
# of Portfolios	124	123	123	118	114	96	86	62
● Brigade Capital	1.1 (5)	2.8 (22)	4.7 (22)	13.8 (3)	5.2 (24)	4.4 (54)	6.0 (40)	-- (--)
▲ BBgBarc BA Intermediate HY	-1.5 (88)	0.4 (93)	2.9 (79)	6.4 (82)	4.3 (60)	3.6 (86)	5.3 (73)	-- (--)
✕ 50% Barclays HY/ 50% Bank Loan	0.4 (16)	2.7 (22)	4.2 (30)	8.5 (52)	4.8 (45)	4.6 (40)	5.4 (67)	-- (--)



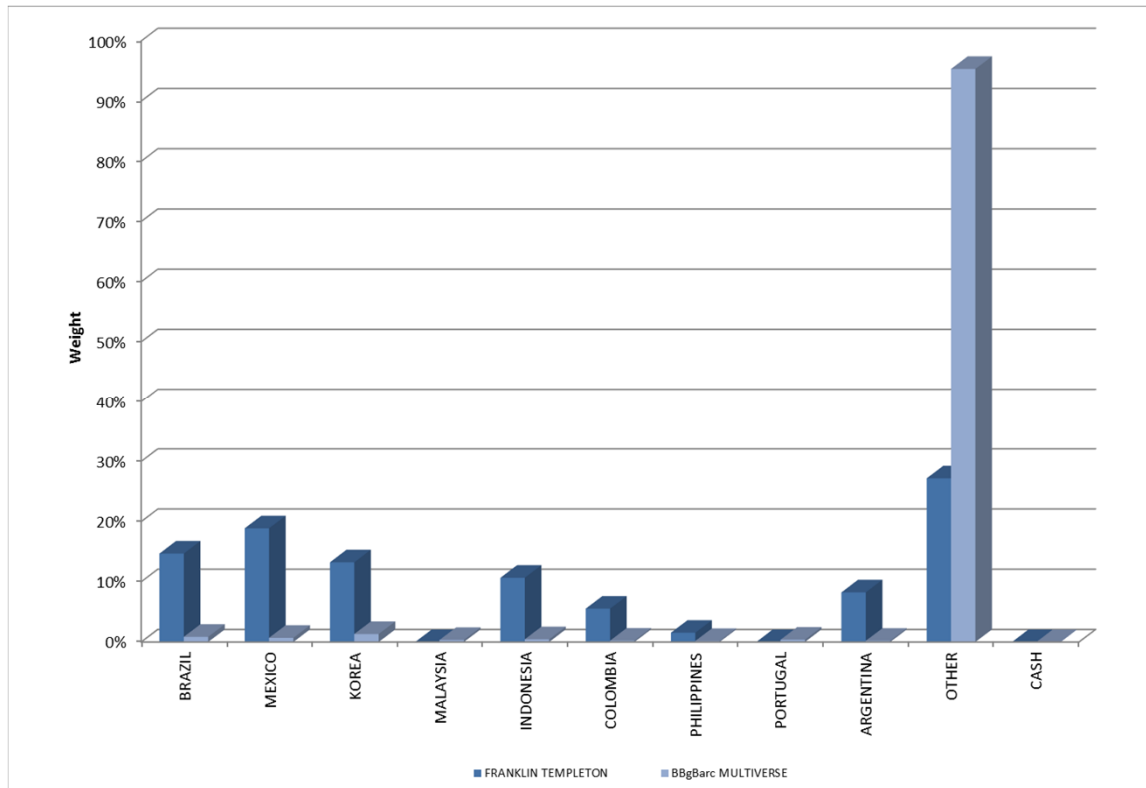
	Return (Rank)							
	Quarter	Fiscal YTD	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
5th Percentile	1.0	5.0	7.2	12.9	6.8	6.1	7.4	9.0
25th Percentile	0.0	2.4	4.4	10.2	5.1	5.0	6.3	7.8
Median	-0.7	1.5	3.6	8.6	4.5	4.4	5.8	7.4
75th Percentile	-1.2	1.1	3.0	7.1	3.9	3.9	5.2	6.7
95th Percentile	-1.7	0.1	2.1	4.8	2.8	3.0	4.2	6.0
# of Portfolios	124	123	123	118	114	96	86	62
● PIMCO Diversified	-0.6 (49)	-- (--)	-- (--)	-- (--)	-- (--)	-- (--)	-- (--)	-- (--)
▲ Blended PIMCO Diversified Index	-1.3 (78)	1.3 (67)	3.4 (58)	5.9 (88)	4.3 (58)	4.2 (62)	5.8 (52)	6.7 (75)



	Return (Rank)							
5th Percentile	3.1	6.8	10.8	10.3	5.8	6.0	6.3	7.4
25th Percentile	1.4	4.4	7.2	7.2	4.3	3.9	4.9	5.9
Median	0.3	2.8	4.9	5.1	3.4	2.9	3.7	4.3
75th Percentile	-0.7	1.7	3.6	3.0	2.6	1.7	2.3	3.1
95th Percentile	-1.6	0.5	1.3	1.2	1.0	0.2	1.2	2.1
# of Portfolios	217	215	214	206	194	173	137	93
● Franklin Templeton	2.0 (14)	1.9 (69)	0.9 (98)	6.9 (28)	3.0 (60)	2.0 (67)	4.0 (41)	-- (--)
▲ BBgBarc Multiverse TR	1.3 (27)	4.3 (26)	7.0 (27)	2.9 (76)	3.4 (51)	1.7 (76)	2.2 (78)	2.8 (80)

Franklin Templeton
Portfolio Country Weights

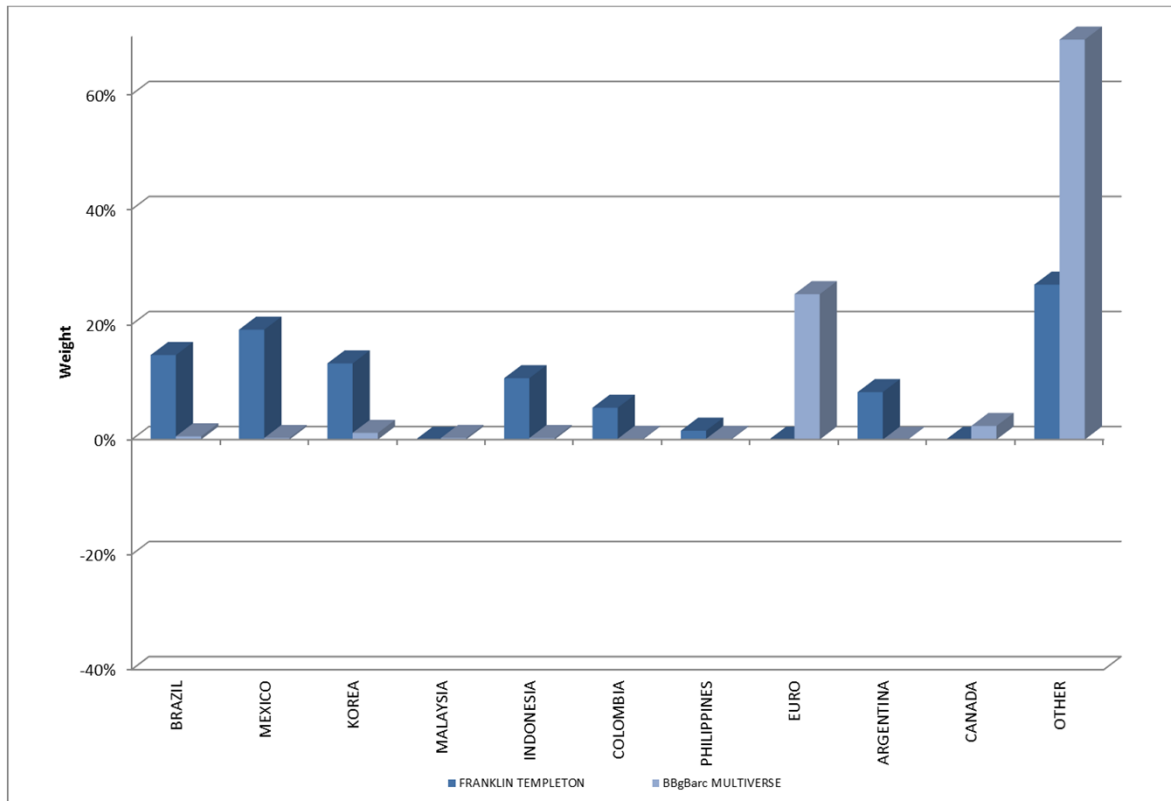
Period Ending: March 31, 2018



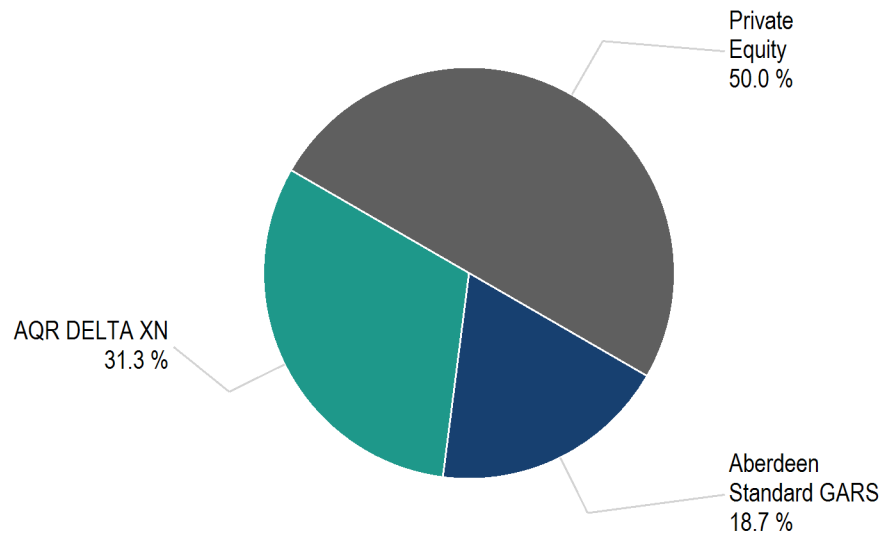
COUNTRY	MARKET VALUE	FRANKLIN TEMPLETON	BBgBarc MULTIVERSE	DIFF
BRAZIL	\$ 6,150	14.7%	0.9%	+13.8%
MEXICO	\$ 7,904	18.9%	0.7%	+18.2%
KOREA	\$ 5,543	13.2%	1.3%	+11.9%
MALAYSIA	\$ -	0.0%	0.3%	-0.3%
INDONESIA	\$ 4,467	10.7%	0.5%	+10.2%
COLOMBIA	\$ 2,319	5.5%	0.2%	+5.3%
PHILIPPINES	\$ 645	1.5%	0.2%	+1.4%
PORTUGAL	\$ -	0.0%	0.4%	-0.4%
ARGENTINA	\$ 3,454	8.3%	0.2%	+8.1%
OTHER	\$ 11,382	27.2%	95.4%	-68.2%
CASH	\$ -	0.0%	0.0%	0.0%
	\$ 41,863	100.0%	100.0%	0.0%

Franklin Templeton
Portfolio Currency Exposures

Period Ending: March 31, 2018



CURRENCY	MARKET VALUE	FRANKLIN TEMPLETON	BbgBarc MULTIVERSE	DIFF
BRAZIL	\$ 6,150	14.7%	0.6%	+14.1%
MEXICO	\$ 8,000	19.1%	0.3%	+18.8%
KOREA	\$ 5,543	13.2%	1.2%	+12.1%
MALAYSIA	\$ -	0.0%	0.3%	-0.3%
INDONESIA	\$ 4,467	10.7%	0.3%	+10.4%
COLOMBIA	\$ 2,319	5.5%	0.1%	+5.4%
PHILIPPINES	\$ 645	1.5%	0.1%	+1.4%
EURO	\$ 8	0.0%	25.3%	-25.3%
ARGENTINA	\$ 3,454	8.3%	0.0%	+8.3%
CANADA	\$ -	0.0%	2.4%	-2.4%
OTHER	\$ 11,278	26.9%	69.6%	-42.6%
	\$ 41,863	100.0%	100.0%	0.0%



	Actual \$	Actual %	Manager Contribution to Excess Return %
Aberdeen Standard GARS	\$95,232,079	18.7%	-0.6%
AQR DELTA XN	\$159,018,352	31.3%	-1.7%
Private Equity	\$254,246,384	50.0%	2.2%
Actual vs. Policy Weight Difference			-0.1%
Total	\$508,496,815	100.0%	-0.1%

Statistics Summary

3 Years

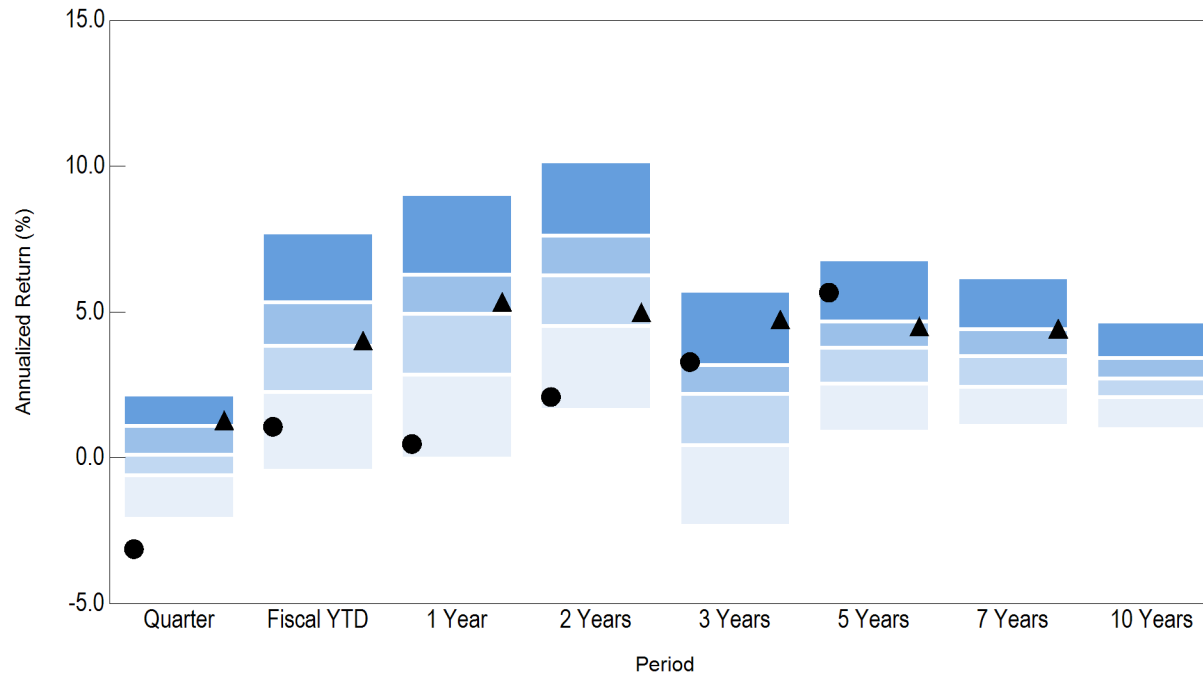
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Alternatives	7.7%	5.4%	1.3	0.0	6.1%
Alternatives Allocation Index	7.7%	5.4%	1.3	--	0.0%
Private Equity	15.8%	9.5%	1.6	0.2	12.5%
Russell 3000 +3%	13.2%	10.1%	1.3	--	0.0%
Hedge Fund/Absolute Return	3.3%	4.8%	0.6	-0.3	4.8%
Libor 1 month +4%	4.7%	0.2%	27.5	--	0.0%
AQR DELTA XN	3.6%	5.4%	0.6	-0.2	5.4%
Libor 1 month +4%	4.7%	0.2%	27.5	--	0.0%

Statistics Summary

5 Years

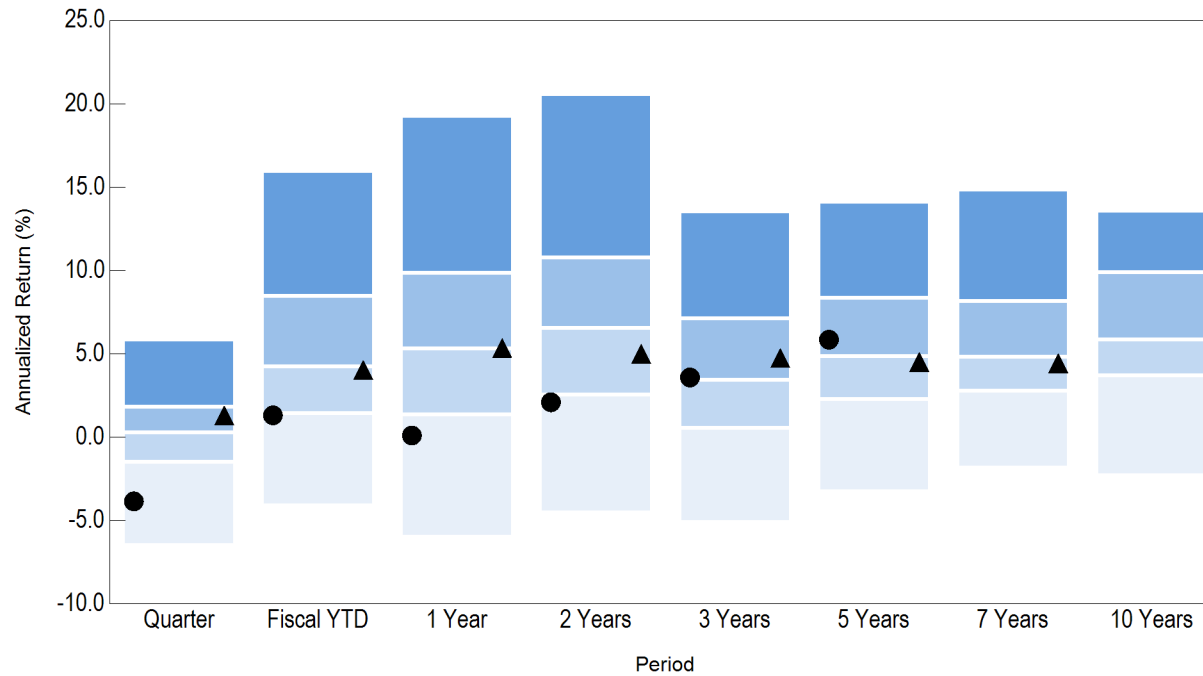
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Alternatives	6.2%	5.4%	1.1	-0.1	6.1%
Alternatives Allocation Index	6.7%	5.4%	1.2	--	0.0%
Private Equity	16.6%	9.3%	1.7	0.0	12.8%
Russell 3000 +3%	16.0%	9.8%	1.6	--	0.0%
Hedge Fund/Absolute Return	5.7%	5.0%	1.1	0.2	5.0%
Libor 1 month +4%	4.5%	0.2%	27.5	--	0.0%
AQR DELTA XN	5.8%	5.3%	1.0	0.2	5.3%
Libor 1 month +4%	4.5%	0.2%	27.5	--	0.0%

InvestorForce All DB Hedge Funds Net Return Comparison

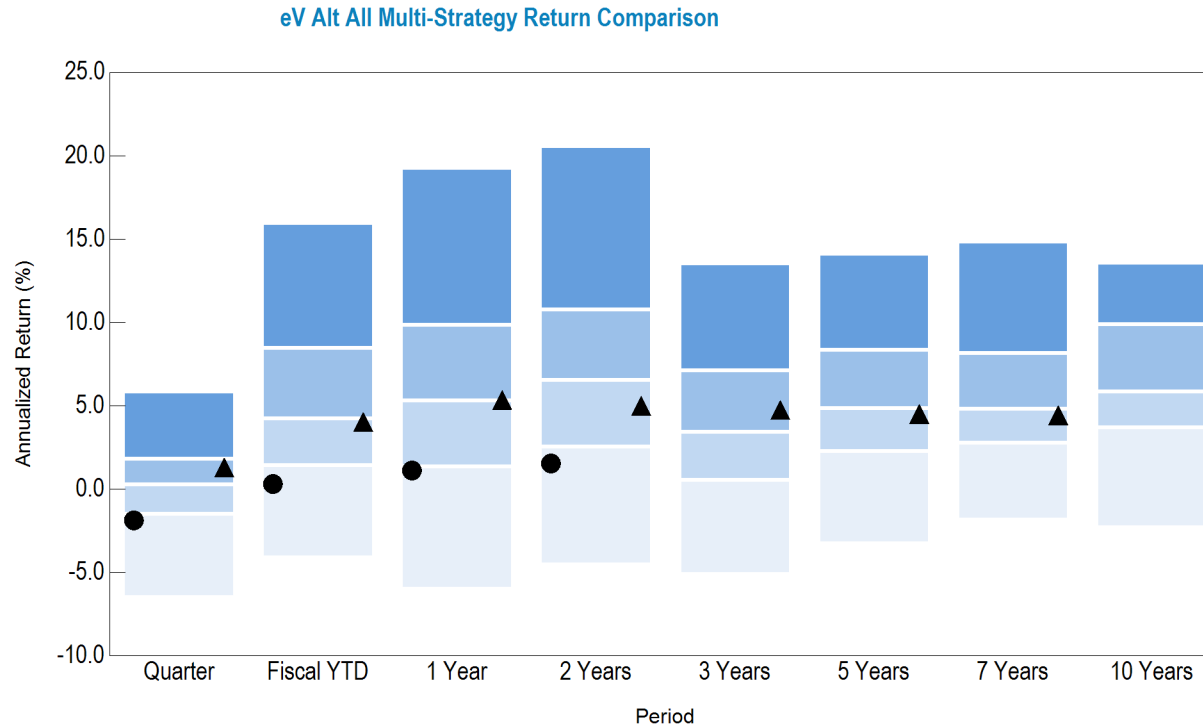


	Return (Rank)							
5th Percentile	2.2	7.7	9.0	10.2	5.7	6.8	6.2	4.7
25th Percentile	1.1	5.3	6.3	7.6	3.2	4.7	4.4	3.4
Median	0.1	3.9	5.0	6.3	2.2	3.8	3.5	2.7
75th Percentile	-0.6	2.3	2.9	4.5	0.4	2.6	2.4	2.1
95th Percentile	-2.1	-0.4	0.0	1.7	-2.3	0.9	1.1	1.0
# of Portfolios	197	197	197	191	184	170	147	78
● Hedge Fund/Absolute Return	-3.1 (98)	1.1 (86)	0.5 (93)	2.1 (92)	3.3 (25)	5.7 (14)	-- (--)	-- (--)
▲ Libor 1 month +4%	1.3 (22)	4.0 (48)	5.4 (43)	5.0 (70)	4.7 (9)	4.5 (33)	4.4 (25)	-- (--)

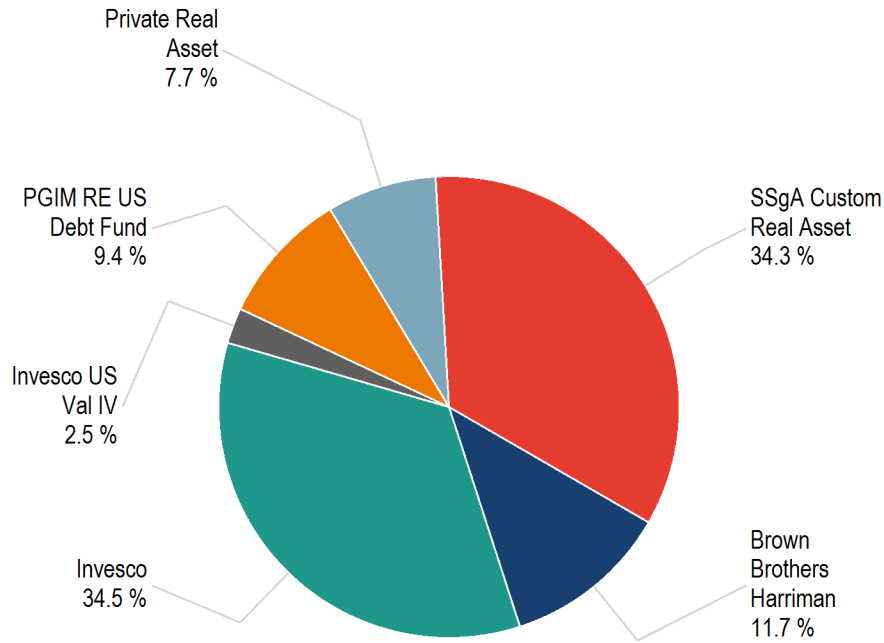
eV Alt All Multi-Strategy Return Comparison



	Return (Rank)							
5th Percentile	5.9	15.9	19.3	20.6	13.5	14.1	14.8	13.6
25th Percentile	1.9	8.5	9.9	10.8	7.1	8.4	8.2	9.9
Median	0.3	4.3	5.3	6.6	3.4	4.9	4.8	5.9
75th Percentile	-1.5	1.5	1.4	2.6	0.6	2.3	2.8	3.7
95th Percentile	-6.4	-4.1	-6.0	-4.5	-5.1	-3.2	-1.8	-2.3
# of Portfolios	284	276	270	253	228	183	150	98
● AQR DELTA XN	-3.9 (90)	1.3 (77)	0.1 (83)	2.1 (77)	3.6 (49)	5.8 (44)	-- (--)	-- (--)
▲ Libor 1 month +4%	1.3 (33)	4.0 (53)	5.4 (50)	5.0 (62)	4.7 (43)	4.5 (54)	4.4 (53)	-- (--)



	Return (Rank)							
	Quarter	Fiscal YTD	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
5th Percentile	5.9	15.9	19.3	20.6	13.5	14.1	14.8	13.6
25th Percentile	1.9	8.5	9.9	10.8	7.1	8.4	8.2	9.9
Median	0.3	4.3	5.3	6.6	3.4	4.9	4.8	5.9
75th Percentile	-1.5	1.5	1.4	2.6	0.6	2.3	2.8	3.7
95th Percentile	-6.4	-4.1	-6.0	-4.5	-5.1	-3.2	-1.8	-2.3
# of Portfolios	284	276	270	253	228	183	150	98
● Aberdeen Standard GARS	-1.9 (78)	0.3 (85)	1.1 (77)	1.5 (80)	-- (--)	-- (--)	-- (--)	-- (--)
▲ Libor 1 month +4%	1.3 (33)	4.0 (53)	5.4 (50)	5.0 (62)	4.7 (43)	4.5 (54)	4.4 (53)	-- (--)



	Actual \$	Actual %	Manager Contribution to Excess Return %
Brown Brother Harriman	\$87,208,248	11.7%	0.1%
Invesco	\$257,493,951	34.5%	0.0%
Invesco US Val IV	\$18,306,647	2.5%	0.0%
PGIM RE US Debt Fund	\$69,966,159	9.4%	-0.1%
Private Real Asset	\$57,821,752	7.7%	0.1%
SSgA Custom Real Asset	\$256,163,006	34.3%	0.1%
Actual vs. Policy Weight Difference			-0.1%
Total	\$746,959,763	100.0%	0.2%

Statistics Summary

3 Years

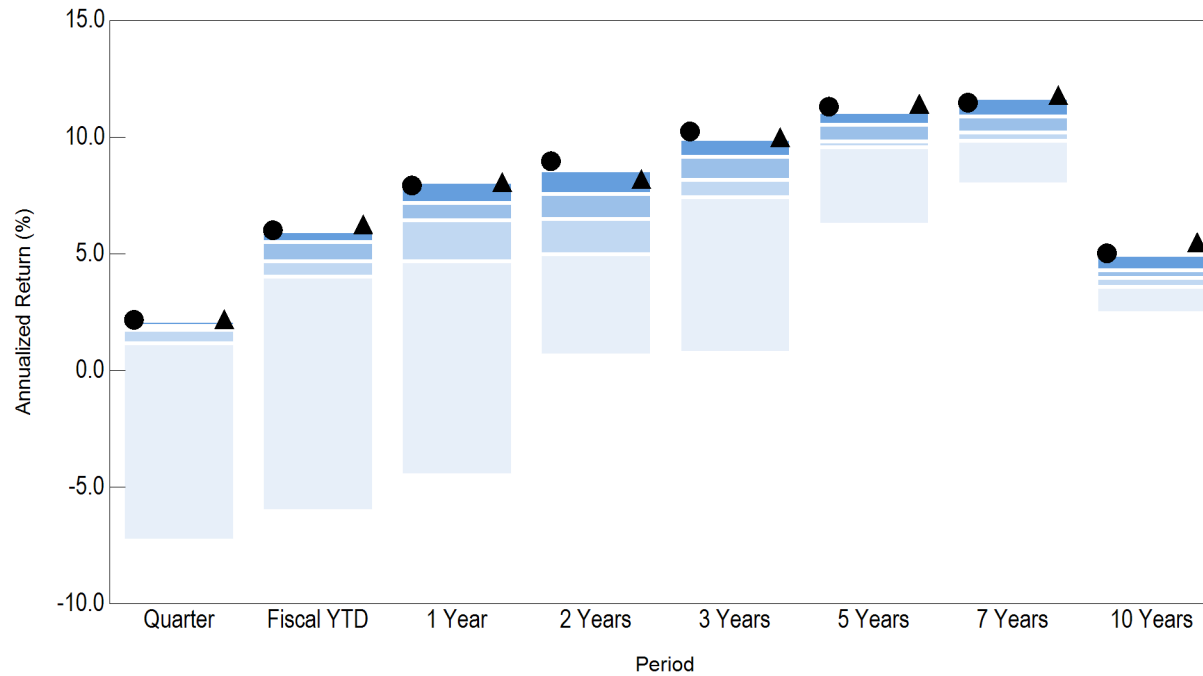
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Real Estate	10.24%	4.60%	2.11	0.17	1.44%
NCREIF ODCE	9.99%	4.25%	2.22	--	0.00%
Invesco	10.13%	4.57%	2.10	0.09	1.53%
NCREIF ODCE	9.99%	4.25%	2.22	--	0.00%
Private Real Asset	9.78%	26.88%	0.34	0.13	27.17%
Blended Real Asset Index	6.34%	4.83%	1.20	--	0.00%
TIPS	1.60%	2.30%	0.46	0.24	1.25%
BBgBarc US TIPS TR	1.30%	3.08%	0.24	--	0.00%
Brown Brothers Harriman	1.60%	2.30%	0.46	0.24	1.25%
BBgBarc US TIPS TR	1.30%	3.08%	0.24	--	0.00%

Statistics Summary

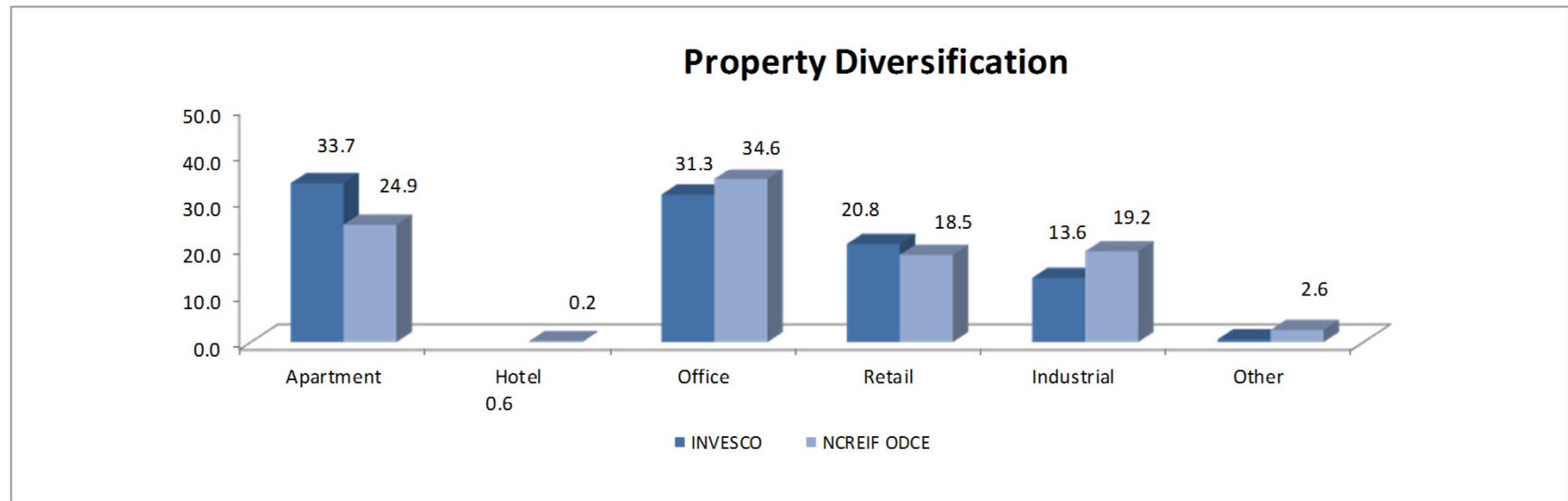
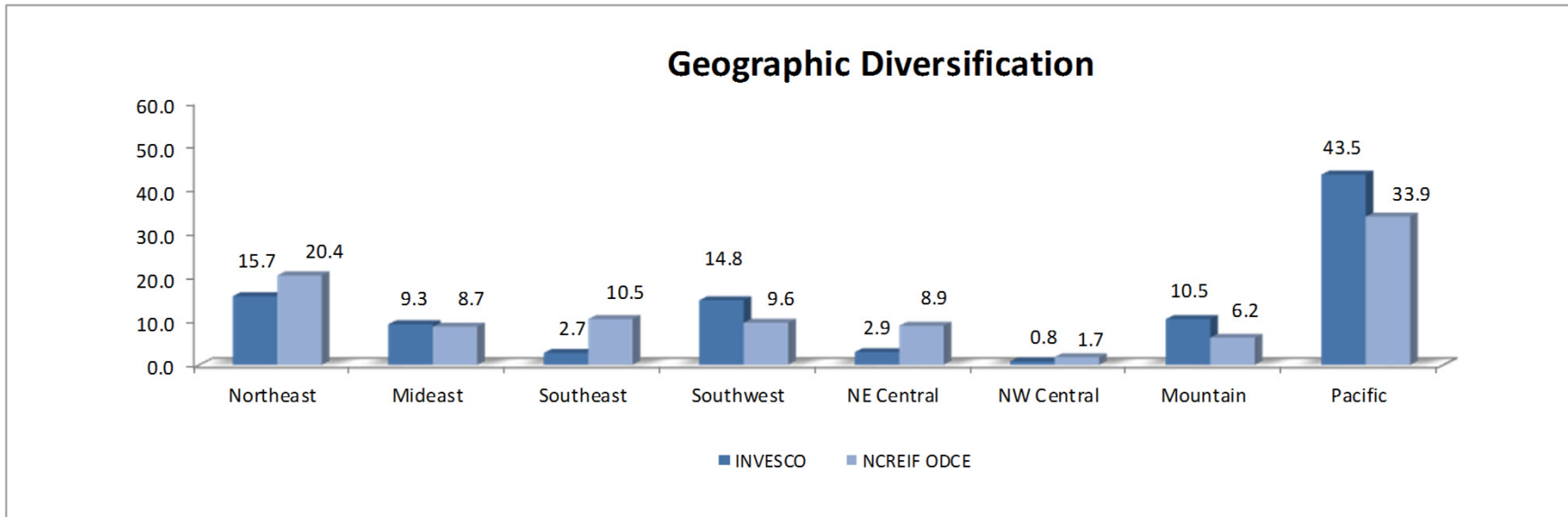
5 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error Rank
Real Estate	11.30%	4.92%	2.23	-0.09	32
NCREIF ODCE	11.42%	4.75%	2.33	--	1
Invesco	11.23%	4.90%	2.23	-0.13	--
NCREIF ODCE	11.42%	4.75%	2.33	--	--
TIPS	-0.36%	3.87%	-0.18	-0.31	--
BBgBarc US TIPS TR	0.05%	4.51%	-0.07	--	--
Brown Brothers Harriman	-0.36%	3.87%	-0.18	-0.31	61
BBgBarc US TIPS TR	0.05%	4.51%	-0.07	--	1

InvestorForce All DB Real Estate Pub Net Return Comparison



	Return (Rank)							
	Quarter	Fiscal YTD	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
5th Percentile	2.1	6.0	8.1	8.6	9.9	11.1	11.7	4.9
25th Percentile	1.9	5.5	7.2	7.6	9.2	10.5	10.9	4.3
Median	1.7	4.7	6.5	6.5	8.2	9.8	10.2	4.0
75th Percentile	1.2	4.0	4.7	5.0	7.5	9.6	9.9	3.6
95th Percentile	-7.3	-6.0	-4.5	0.7	0.8	6.3	8.0	2.5
# of Portfolios	60	60	60	59	57	50	43	37
● Real Estate	2.2 (5)	6.0 (5)	7.9 (10)	9.0 (3)	10.2 (3)	11.3 (2)	11.5 (9)	5.0 (3)
▲ NCREIF ODCE	2.2 (4)	6.3 (5)	8.1 (5)	8.2 (14)	10.0 (4)	11.4 (2)	11.8 (2)	5.5 (3)



INVESCO Core Real Estate
Real Estate Valuation Analysis

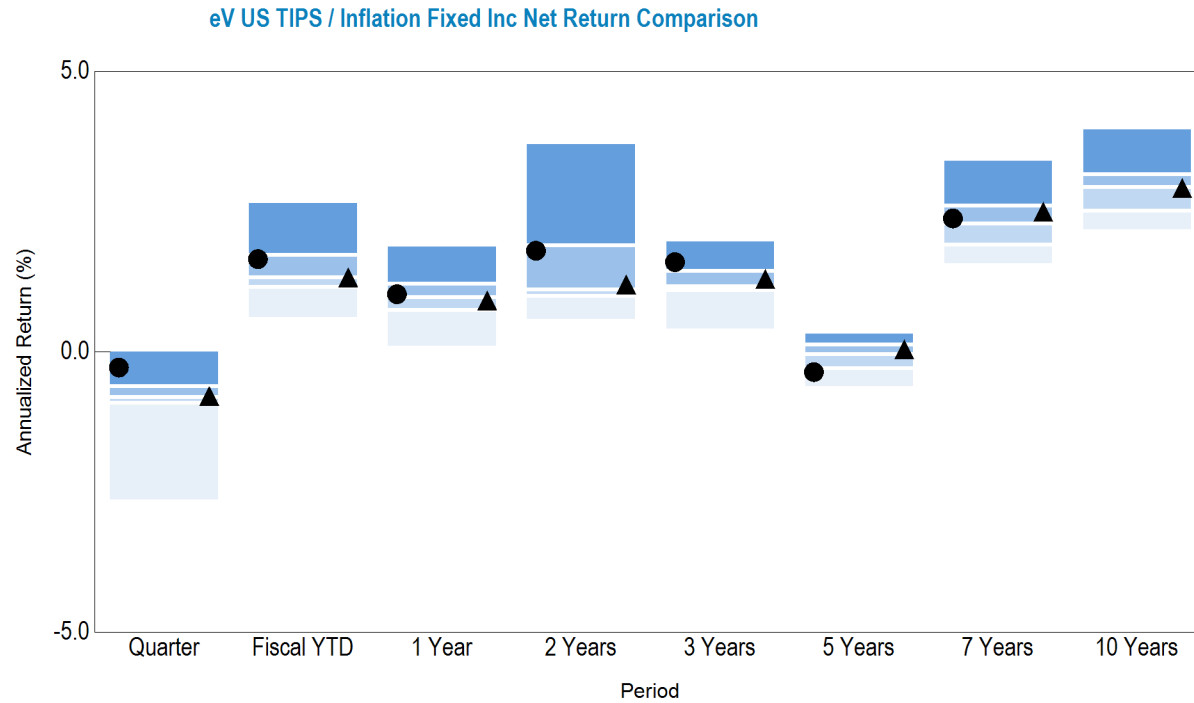
Period Ending: March 31, 2018

Property Name	MSA	Prior Quarter Carry Value	Current Quarter Carry Value	Net Market Value	Date Added to Fund	Last Valuation Date	SamCERA ownership as of 03/31/2018 2.76%
APARTMENTS							
Stoneridge Apartments	Pleasanton, CA	\$237,000,000	\$238,000,000	\$238,000,000	4Q06	March-18	\$6,559,665
Instrata Pentagon City	Arlington, VA	\$152,000,000	\$152,000,000	\$152,000,000	3Q10	March-18	\$4,189,366
Ladd Tower	Portland, OR	\$136,000,000	\$133,000,000	\$76,382,713	4Q10	March-18	\$2,105,231
Legacy Fountain Plaza	San Jose, CA	\$157,966,912	\$158,969,725	\$158,969,725	1Q11	March-18	\$4,381,463
Instrata Gramercy (fka The Elektra)	New York, NY	\$172,300,000	\$172,500,000	\$100,201,217	1Q11	March-18	\$2,761,707
Instrata Brooklyn Heights (fka 75 Clinton Street)	Brooklyn, NY	\$69,200,000	\$68,500,000	\$68,500,000	1Q12	March-18	\$1,887,971
The Artisan Laguna Beach	Orange County, CA	\$165,000,000	\$164,000,000	\$102,728,393	3Q12	March-18	\$2,831,361
The GoodWynn	Atlanta, GA	\$98,400,000	\$98,200,000	\$98,200,000	4Q12	March-18	\$2,706,551
Instrata Hell's Kitchen	New York, NY	\$194,000,000	\$194,000,000	\$194,000,000	1Q13	March-18	\$5,346,953
Sunset Vine Tower	Los Angeles, CA	\$98,000,000	\$102,000,000	\$102,000,000	2Q13	March-18	\$2,811,285
Instrata Ashton Uptown	Dallas, TX	\$122,000,000	\$122,000,000	\$65,082,917	4Q13	March-18	\$1,793,790
206 Bell	Seattle, WA	\$48,700,000	\$48,500,000	\$48,500,000	4Q13	March-18	\$1,336,738
Cadence Union Station	Denver, CO	\$90,100,000	\$90,600,000	\$53,646,801	1Q14	March-18	\$1,478,593
Joseph Arnold Lofts	Seattle, WA	\$71,600,000	\$71,300,000	\$37,214,292	2Q14	March-18	\$1,025,686
Verve	Denver, CO	\$108,000,000	\$108,000,000	\$108,000,000	3Q14	March-18	\$2,976,655
Broadstone Little Italy	San Diego CA	\$121,000,000	\$121,000,000	\$68,044,021	3Q14	March-18	\$1,875,403
33 Tehama	San Francisco, CA	\$272,513,101	\$290,440,459	\$179,031,733	3Q14	March-18	\$4,934,404
The Parker	Portland, OR	\$66,000,000	\$66,000,000	\$34,513,946	1Q15	March-18	\$951,260
Legacy West Apartments	Plano, TX	\$113,950,008	\$114,944,403	\$83,460,904	1Q15	March-18	\$2,300,317
The Royce	Irvine, CA	\$161,950,335	\$179,275,326	\$102,893,317	2Q15	March-18	\$2,835,906
Wheaton 121	Wheaton, IL	\$77,000,000	\$77,100,000	\$77,100,000	2Q15	March-18	\$2,125,001
Jefferson Marketplace	Washington, DC	\$154,000,000	\$154,000,000	\$84,038,061	4Q15	March-18	\$2,316,225
Retreat at Park Meadows	Littleton, CO	\$137,000,000	\$147,000,000	\$147,000,000	4Q15	March-18	\$4,051,558
North Water Apartments	Chicago, IL	\$265,000,000	\$265,000,000	\$265,000,000	1Q16	March-18	\$7,303,828
2270 Broadway	Oakland, CA	\$26,873,390	\$27,925,453	\$27,925,453	1Q16	March-18	\$769,671
Runway at Playa Vista Apartments	Playa Vista, CA	\$163,770,012	\$163,770,000	\$100,302,500	1Q16	March-18	\$2,764,499
Clayton Lane Apartments	Denver, CO	\$36,716,851	\$37,489,843	\$37,489,843	1Q16	March-18	\$1,033,281
Biscayne 27	Miami, FL	\$50,493,109	\$57,823,573	\$51,875,321	2Q16	March-18	\$1,429,768
Flats 8300	Washington DC	\$236,000,000	\$236,000,000	\$132,500,000	2Q16	March-18	\$3,651,914
407 1st Ave	New York, NY	\$195,600,000	\$196,800,000	\$196,800,000	4Q16	March-18	\$5,424,126
5250 Park	Miami, FL	\$13,940,141	\$18,295,297	\$17,919,593	2Q17	March-18	\$493,893
The Mason	Pleasanton, CA	\$100,000,000	\$100,000,000	\$100,000,000	3Q17	March-18	\$2,756,162
		\$4,112,073,859	\$4,174,434,079	\$3,309,320,750			\$91,210,227
INDUSTRIAL							
Arjons Industrial Park	San Diego CA	\$42,700,000	\$42,100,000	\$42,100,000	2Q04	March-18	\$1,160,344
Gateway Business Park	Dallas TX	\$13,000,000	\$13,300,000	\$13,300,000	2Q04	March-18	\$366,569
Hayward Industrial	Oakland CA	\$187,600,000	\$192,400,000	\$192,400,000	3Q04-3Q07	March-18	\$5,302,855
Oakesdale Commerce Center	Seattle - Belle - Eve WA	\$55,700,000	\$58,100,000	\$58,100,000	1Q06	March-18	\$1,601,330
South Bay Industrial	Los Angeles, CA	\$56,300,000	\$58,000,000	\$58,000,000	4Q06	March-18	\$1,598,574
Steeplechase Portfolio	Capitol Heights, MD	\$97,200,000	\$99,500,000	\$99,500,000	1Q11	March-18	\$2,742,381
Airport Trade Center Portfolio	Dallas, TX	\$130,900,000	\$131,200,000	\$131,200,000	1Q11	March-18	\$3,616,084
IE Logistics	San Bernardino, CA	\$147,500,000	\$151,000,000	\$151,000,000	3Q11	March-18	\$4,161,804
Railhead Industrial	Dallas, TX	\$62,500,000	\$65,300,000	\$65,300,000	4Q11	March-18	\$1,799,774
Empire Gateway aka Chino South Logistics Center	Chino, CA	\$275,000,000	\$280,000,000	\$280,000,000	4Q12	March-18	\$7,717,252
SFO Logistics Center	San Francisco, CA	\$146,000,000	\$147,000,000	\$147,000,000	4Q13	March-18	\$4,051,558
Miami Industrial Portfolio	Various, FL	\$82,288,400	\$84,011,472	\$57,092,131	1Q16	March-18	\$1,573,551
Miami Industrial Portfolio - Fedex	Hollywood, FL	\$36,981,581	\$42,600,000	\$28,120,004	1Q16	March-18	\$775,033
OMP Burbank	Los Angeles, CA	\$74,234,521	\$74,360,605	\$74,360,605	2Q16	March-18	\$2,049,498
US Storage	Compton, CA	\$7,630,467	\$7,992,682	\$7,992,682	4Q17	March-18	\$220,291
Pacific Commons	Freemont, CA	\$160,128,073	\$150,062,415	\$133,472,469	1Q17	March-18	\$3,678,717
Gateway 80 Business Park	Fairfield, CA	\$0	\$100,000,000	\$100,000,000	1Q18	Acq 1Q18	\$2,756,162
Baranof - Walden Park	San Marcos, TX	\$0	\$10,860,901	\$10,860,901	1Q18	Acq 1Q18	\$299,344
Baranof - Ranch Road 620	San Marcos, TX	\$0	\$9,020,071	\$9,020,071	1Q18	Acq 1Q18	\$248,608
Baranof - Glenwood Avenue	Raleigh, NC	\$0	\$9,059,741	\$9,059,741	1Q18	Acq 1Q18	\$249,701
Baranof - 1-84 & 60th	Vancouver, WA	\$0	\$19,561,445	\$19,561,445	1Q18	Acq 1Q18	\$539,145
Baranof - Fishers Landing Vancouver	Vancouver, WA	\$0	\$15,249,371	\$15,249,371	1Q18	Acq 1Q18	\$420,297
		\$1,575,663,042	\$1,760,678,703	\$1,702,689,420			\$46,928,872

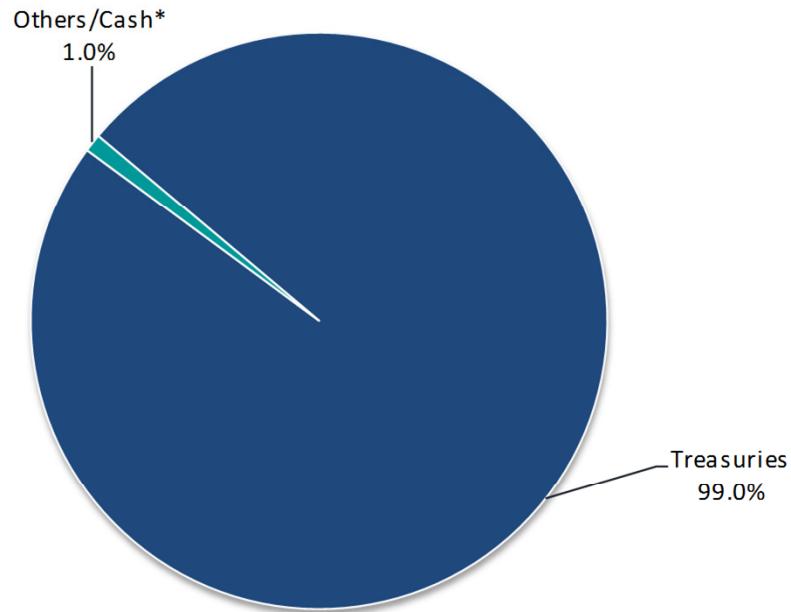
INVESCO Core Real Estate
Real Estate Valuation Analysis

Period Ending: March 31, 2018

OFFICE							
55 Cambridge Parkway	Boston MA - NH	\$291,000,000	\$306,000,000	\$306,000,000	4Q06	March-18	\$8,433,854
1111 Pennsylvania Avenue	Washington, D.C.	\$327,000,000	\$343,000,000	\$343,000,000	4Q10	March-18	\$9,453,634
1800 Larimer	Denver, CO	\$327,000,000	\$329,000,000	\$329,000,000	1Q11	March-18	\$9,067,772
Hillview Office	San Jose, CA	\$80,100,000	\$79,100,000	\$79,100,000	3Q12	March-18	\$2,180,124
Williams Tower	Houston, TX	\$594,000,000	\$598,000,000	\$415,060,308	1Q13	March-18	\$11,439,733
Westlake Park Place	Westlake Village, CA	\$112,000,000	\$109,000,000	\$109,000,000	4Q13	March-18	\$3,004,216
101 Second	San Francisco, CA	\$415,000,000	\$415,000,000	\$415,000,000	1Q14	March-18	\$11,438,071
Energy Crossing II	Houston, TX	\$103,700,000	\$104,000,000	\$104,000,000	2Q14	March-18	\$2,866,408
1776 Wilson Blvd.	Arlington, VA	\$90,400,000	\$90,100,000	\$90,100,000	3Q14	March-18	\$2,483,302
631 Howard	San Francisco, CA	\$92,000,000	\$94,000,000	\$94,000,000	3Q14	March-18	\$2,590,792
Barton Oaks	Austin, TX	\$91,500,000	\$92,900,000	\$92,900,000	3Q14	March-18	\$2,560,474
Hercules East and South Campus	Los Angeles, CA	\$176,532,387	\$181,123,239	\$181,123,239	3Q14	March-18	\$4,992,049
The Reserve	Playa Vista, CA	\$371,739,709	\$379,040,898	\$379,040,898	1Q15	March-18	\$10,446,980
Fort Point Portfolio	Boston, MA	\$239,421,743	\$245,357,819	\$245,357,819	2Q15	March-18	\$6,762,458
Legacy West Office	Plano, TX	\$87,182,740	\$97,319,895	\$46,911,204	1Q15	March-18	\$1,292,949
1101 Westlake	Seattle, WA	\$127,000,000	\$128,000,000	\$128,000,000	3Q15	March-18	\$3,527,887
PearlWest	Boulder, CO	\$120,000,000	\$121,000,000	\$121,000,000	4Q16	March-18	\$3,334,956
The Mark 302	Santa Monica, CA	\$0	\$49,898,678	\$49,898,678	1Q18	Acq 1Q18	\$1,375,288
		\$3,768,576,579	\$3,877,840,529	\$3,606,632,737			\$99,404,626
RETAIL							
Chandler Pavilion	Phoenix - Mesa AZ	\$23,900,000	\$23,900,000	\$23,900,000	2Q04	March-18	\$658,723
Cityline at Tenley	Washington, D.C.	\$65,000,000	\$65,000,000	\$65,000,000	4Q05	March-18	\$1,791,505
Ridgehaven Shopping Center	Minnetonka, MN	\$42,300,000	\$42,300,000	\$42,300,000	4Q05	March-18	\$1,165,856
The Beacon Garage (units)	San Francisco, CA	\$36,069,106	\$36,215,385	\$36,215,385	1Q06	March-18	\$998,155
The Beacon Office (210 King)	San Francisco, CA	\$25,500,000	\$25,500,000	\$25,500,000	1Q15	March-18	\$702,821
Hawthorne Plaza	Overland Park, KS	\$51,525,000	\$51,900,000	\$51,900,000	4Q07	March-18	\$1,430,448
The Loop	Boston MA - NH	\$89,000,000	\$89,000,000	\$89,000,000	1Q08	March-18	\$2,452,984
Westbank Market	Austin, TX	\$61,700,000	\$62,900,000	\$62,900,000	3Q10	March-18	\$1,733,626
910 Lincoln Road	Miami, FL	\$34,300,000	\$34,700,000	\$34,700,000	4Q10	March-18	\$1,733,626
Lake Pointe Village	Houston, TX	\$83,650,000	\$83,850,000	\$83,850,000	4Q11	March-18	\$956,388
Safeway Kapahulu	Hawaii	\$94,900,000	\$94,900,000	\$58,972,049	4Q11	March-18	\$1,625,365
Safeway Burlingame	San Francisco, CA	\$58,700,000	\$58,800,000	\$36,270,901	4Q11	March-18	\$999,685
Shamrock Plaza	Oakland, CA	\$40,600,000	\$40,600,000	\$24,471,903	4Q11	March-18	\$674,485
Pavilions Marketplace	West Hollywood, CA	\$69,900,000	\$70,200,000	\$45,712,502	1Q12	March-18	\$1,259,910
130 Prince	New York, NY	\$217,000,000	\$217,000,000	\$217,000,000	2Q12	March-18	\$5,980,871
Safeway Pleasanton	Pleasanton, CA	\$83,200,000	\$83,000,000	\$83,000,000	4Q12	March-18	\$2,287,614
Liberty Wharf	Boston, MA	\$97,100,000	\$97,200,000	\$67,453,045	4Q12	March-18	\$1,859,115
Shops at Legacy	Plano, TX	\$117,547,410	\$117,561,046	\$117,561,046	3Q13	March-18	\$3,240,172
Pasadena Commons	Pasadena, CA	\$61,200,000	\$61,900,000	\$61,900,000	4Q14	March-18	\$1,706,064
Rush Street Retail	Chicago, IL	\$16,700,000	\$16,900,000	\$16,900,000	4Q14	March-18	\$465,791
Legacy West Retail	Plano, TX	\$191,902,109	\$198,740,004	\$148,331,313	1Q15	March-18	\$4,088,251
Legacy West Land	Plano, TX	\$917,929	\$917,929	\$917,929	2Q17	March-18	\$25,300
131-137 Spring Street	New York, NY	\$235,667,973	\$228,000,000	\$115,200,000	3Q15	March-18	\$3,175,098
Runway at Playa Vista - Retail	Playa Vista, CA	\$122,960,009	\$127,200,000	\$64,792,500	1Q16	March-18	\$1,785,786
139 Spring	New York, NY	\$126,924,800	\$126,924,800	\$126,924,800	1Q16	March-18	\$3,498,253
Clayton Lane	Denver, CO	\$141,644,611	\$145,484,260	\$99,576,093	1Q16	March-18	\$2,744,478
4th & Colorado	Santa Monica, CA	\$13,280,000	\$13,280,000	\$13,280,000	1Q16	March-18	\$366,018
Legacy West - Block H	Plano, TX	\$4,832,913	\$5,188,070	\$5,188,070	4Q17	March-18	\$142,992
Shops at Crystals	Las Vegas, NV	\$290,250,000	\$292,750,000	\$156,057,242	2Q16	March-18	\$4,301,190
		\$2,566,602,754	\$2,580,496,109	\$2,043,459,393			\$55,743,627
Portfolio Total		\$12,022,916,234	\$12,393,449,420	\$10,662,102,300			\$293,287,353



	Return (Rank)							
	Quarter	Fiscal YTD	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
5th Percentile	0.0	2.7	1.9	3.7	2.0	0.4	3.4	4.0
25th Percentile	-0.6	1.7	1.2	1.9	1.5	0.1	2.6	3.2
Median	-0.8	1.3	1.0	1.1	1.2	0.0	2.3	2.9
75th Percentile	-0.9	1.2	0.8	1.0	1.1	-0.3	1.9	2.5
95th Percentile	-2.7	0.6	0.1	0.6	0.4	-0.6	1.6	2.2
# of Portfolios	20	20	20	20	19	17	15	11
● Brown Brothers Harriman	-0.3 (9)	1.7 (28)	1.0 (41)	1.8 (28)	1.6 (20)	-0.4 (78)	2.4 (40)	-- (--)
▲ BBgBarc US TIPS TR	-0.8 (46)	1.3 (53)	0.9 (56)	1.2 (45)	1.3 (36)	0.0 (37)	2.5 (31)	2.9 (52)



Sector	Account Weight	BBgBarc TIPS	
		Index	Difference
Treasuries	99.0%	100.0%	-1.0%
Agencies	0.0%	0.0%	0.0%
Corporates	0.0%	0.0%	0.0%
Utilities	0.0%	0.0%	0.0%
Foreign	0.0%	0.0%	0.0%
MBS	0.0%	0.0%	0.0%
CMO	0.0%	0.0%	0.0%
ABS	0.0%	0.0%	0.0%
Municipals	0.0%	0.0%	0.0%
Others/Cash*	1.0%	0.0%	1.0%
TOTAL	100.0%	100.0%	0.0%

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

Portfolio Characteristics		
	Portfolio	
Total Number of Securities		10
Total Market Value	\$	87,208,248
Current Coupon		1.08
Yield to Maturity		0.47
Average Life		
Duration		7.10
Quality		AAA

BBgBarc TIPS	
Total Number of Securities	39
Total Market Value	N/A
Current Coupon	0.76
Yield to Maturity	0.51
Average Life	
Duration	7.51
Quality	AAA

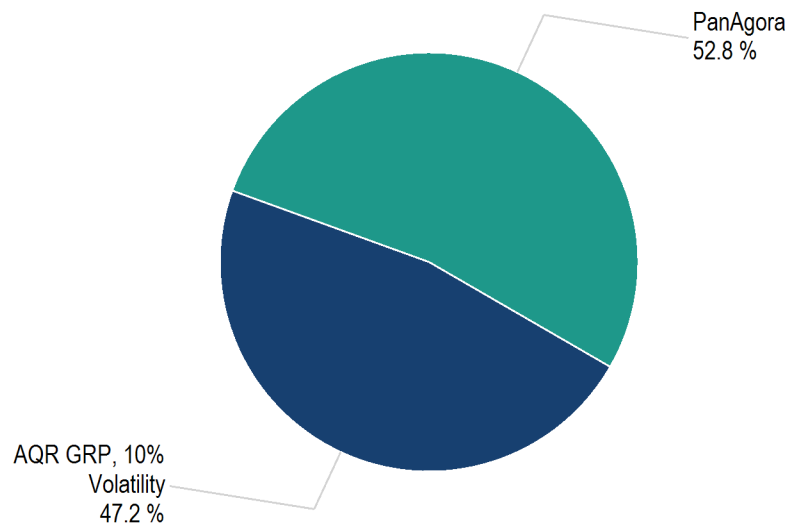
Yield to Maturity	
Range	% Held
0.0 - 5.0	100.0
5.0 - 7.0	0.0
7.0 - 9.0	0.0
9.0 - 11.0	0.0
11.0 - 13.0	0.0
13.0+	0.0
Unclassified	0.0

Average Life	
Range	% Held
0.0 - 3.0	19.8
3.0 - 5.0	12.9
5.0 - 10.0	54.5
10.0- 15.0	4.8
15.0+	8.1
Unclassified	0.0

Duration	
Range	% Held
0.0 - 3.0	19.8
3.0 - 5.0	12.9
5.0 - 10.0	54.5
10.0- 15.0	4.8
15.0+	8.1
Unclassified	0.0

Quality	
Range	% Held
Govt (10)	98.9
Aaa (10)	0.0
Aa (9)	0.0
A (8)	0.0
Baa (7)	0.0
Below Baa (6-1)	0.0
Other	1.1

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	\$147,207,772	47.2%	-0.3%
PanAgora	\$164,556,515	52.8%	-0.5%
Actual vs. Policy Weight Difference			0.0%
Total	\$311,764,287	100.0%	-0.7%

Statistics Summary

3 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Risk Parity	4.1%	7.8%	0.5	-0.5	6.1%
Blended Risk Parity Index	6.9%	6.2%	1.0	--	0.0%
AQR GRP, 10% Volatility	3.4%	7.7%	0.4	-0.6	5.9%
Blended Risk Parity Index	6.9%	6.2%	1.0	--	0.0%
PanAgora	4.7%	8.4%	0.5	-0.3	6.9%
Blended Risk Parity Index	6.9%	6.2%	1.0	--	0.0%

Statistics Summary

5 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Risk Parity	4.3%	8.7%	0.5	-0.6	6.9%
Blended Risk Parity Index	8.7%	6.0%	1.4	--	0.0%
AQR GRP, 10% Volatility	3.0%	8.7%	0.3	-0.8	6.7%
Blended Risk Parity Index	8.7%	6.0%	1.4	--	0.0%

Total Fund
Performance Summary (Gross of Fees)

Period Ending: March 31, 2018

	3 Mo (%)	Fiscal YTD (%)	1 Yr (%)	2 Yrs (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Total Fund	-0.5	6.2	9.0	10.6	6.8	8.1	6.3
<i>Policy Index</i>	-0.7	7.0	10.0	11.0	6.9	8.1	6.6
<i>Allocation Index</i>	-0.5	7.0	10.1	10.9	6.9	8.0	--
Total Fund ex Overlay	-0.4	6.2	9.0	10.6	6.7	8.0	6.2
<i>Policy Index</i>	-0.7	7.0	10.0	11.0	6.9	8.1	6.6
<i>Allocation Index</i>	-0.5	7.0	10.1	10.9	6.9	8.0	--
Public Equity	-0.7	10.0	14.8	15.1	8.9	10.7	7.0
<i>Blended Public Equity Index</i>	-0.8	10.7	15.5	16.1	9.0	10.5	7.5
US Equity	-0.6	10.7	13.9	15.7	10.0	12.8	9.3
<i>Blended US Equity Index</i>	-0.6	10.5	13.8	16.1	9.9	12.8	9.7
<i>Russell 3000</i>	-0.6	10.5	13.8	15.9	10.2	13.0	9.6
Large Cap Equity	-0.6	11.2	14.6	16.7	11.3	13.7	9.5
<i>Russell 1000</i>	-0.7	10.6	14.0	15.7	10.4	13.2	9.6
<i>BlackRock Russell 1000</i>	-0.7	10.6	14.0	--	--	--	--
<i>DE Shaw</i>	-0.3	14.1	17.3	19.6	13.1	15.3	--
<i>Russell 1000</i>	-0.7	10.6	14.0	15.7	10.4	13.2	9.6
Small Cap Equity	-0.5	7.9	9.8	15.3	6.8	10.2	9.0
<i>Russell 2000</i>	-0.1	9.1	11.8	18.8	8.4	11.5	9.8
<i>QMA US Small Cap</i>	-0.5	7.9	9.8	--	--	--	--
<i>Russell 2000</i>	-0.1	9.1	11.8	18.8	8.4	11.5	9.8
International Equity	-0.9	9.1	16.0	13.8	7.0	6.8	2.4
<i>MSCI ACWI ex US IMI</i>	-1.1	10.7	17.4	15.5	7.2	6.7	3.3
<i>MSCI EAFE Gross</i>	-1.4	8.4	15.3	13.8	6.0	7.0	3.2
Developed Markets	-1.2	8.5	15.7	13.5	6.8	7.2	2.6
<i>MSCI ACWI ex USA Gross</i>	-1.1	10.4	17.0	15.4	6.7	6.4	3.2
<i>Baillie Gifford</i>	-0.6	9.6	19.3	15.0	8.3	8.6	--
<i>MSCI ACWI ex US</i>	-1.1	10.4	17.0	15.4	6.7	7.3	--
<i>MSCI ACWI ex US Growth</i>	-0.8	11.7	20.3	15.1	7.7	8.0	--

Total Fund
Performance Summary (Gross of Fees)

Period Ending: March 31, 2018

	3 Mo (%)	Fiscal YTD (%)	1 Yr (%)	2 Yrs (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
BlackRock EAFE Index	-1.6	8.2	15.1	13.6	5.9	--	--
<i>MSCI EAFE</i>	-1.5	8.2	14.8	13.2	5.6	6.5	2.7
<i>MSCI EAFE Gross</i>	-1.4	8.4	15.3	13.8	6.0	7.0	3.2
Mondrian	-1.2	8.0	12.6	12.3	5.5	6.1	3.0
<i>MSCI ACWI ex USA Value Gross</i>	-1.4	9.2	13.9	15.6	5.6	5.5	2.7
<i>MSCI ACWI ex USA Gross</i>	-1.1	10.4	17.0	15.4	6.7	6.4	3.2
Emerging Markets	1.5	14.2	18.1	16.5	7.9	4.3	--
<i>MSCI Emerging Markets Gross</i>	1.5	17.8	25.4	21.5	9.2	5.4	3.4
Parametric Core	1.5	14.2	18.1	16.5	--	--	--
<i>MSCI Emerging Markets Gross</i>	1.5	17.8	25.4	21.5	9.2	5.4	3.4
Fixed Income	-0.3	1.4	2.9	6.0	3.7	3.4	5.6
<i>Blended Fixed Income Index</i>	-1.1	0.6	2.5	2.7	2.5	2.1	4.0
Core Fixed	-1.0	0.6	2.3	3.3	2.4	2.8	4.8
<i>BBgBarc US Aggregate TR</i>	-1.5	-0.2	1.2	0.8	1.2	1.8	3.6
BlackRock Intermediate Govt	-0.7	-0.6	0.1	--	--	--	--
<i>BBgBarc US Govt Int TR</i>	-0.7	-0.8	-0.1	-0.4	0.5	0.7	2.2
FIAM Bond	-1.3	0.3	1.6	2.1	2.0	2.5	4.8
<i>BBgBarc US Aggregate TR</i>	-1.5	-0.2	1.2	0.8	1.2	1.8	3.6
Western TRU	-0.7	2.9	6.6	7.7	--	--	--
<i>3-Month Libor Total Return USD</i>	0.5	1.2	1.5	1.2	0.9	0.7	0.7
<i>BBgBarc US Aggregate TR</i>	-1.5	-0.2	1.2	0.8	1.2	1.8	3.6
Opportunistic Credit	1.1	3.7	6.2	12.0	7.2	7.5	--
<i>BBgBarc BA Intermediate HY</i>	-1.5	0.4	2.9	6.4	4.3	3.6	--
Angelo Gordon Opportunistic	5.7	14.3	19.1	16.1	11.5	--	--
Angelo Gordon STAR	7.5	15.8	22.2	18.3	12.5	13.9	--
<i>BBgBarc US Aggregate TR</i>	-1.5	-0.2	1.2	0.8	1.2	1.8	3.6
Beach Point Select	1.1	5.1	7.1	11.9	8.9	--	--
<i>BBgBarc BA Intermediate HY</i>	-1.5	0.4	2.9	6.4	4.3	3.6	--

Total Fund
Performance Summary (Gross of Fees)

Period Ending: March 31, 2018

	3 Mo (%)	Fiscal YTD (%)	1 Yr (%)	2 Yrs (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Brigade Capital	1.1	2.8	4.7	14.1	5.7	4.9	--
<i>BBgBarc BA Intermediate HY</i>	-1.5	0.4	2.9	6.4	4.3	3.6	--
<i>50% Barclays HY/ 50% Bank Loan</i>	0.4	2.7	4.2	8.5	4.8	4.6	--
PIMCO Diversified	-0.6	--	--	--	--	--	--
<i>Blended PIMCO Diversified Index</i>	-1.3	1.3	3.4	5.9	4.3	4.2	6.7
<i>BBgBarc BA Intermediate HY</i>	-1.5	0.4	2.9	6.4	4.3	3.6	--
Franklin Templeton	2.0	1.9	0.9	6.9	3.0	2.1	--
<i>BBgBarc Multiverse TR</i>	1.3	4.3	7.0	2.9	3.4	1.7	2.8
Private Credit	1.8	4.5	6.6	--	--	--	--
<i>Cliffwater Direct Lending Index</i>	2.0	6.1	8.3	10.2	8.3	9.3	9.6
TCP Direct Lending VIII	1.5	4.8	6.8	--	--	--	--
White Oak Yield	2.2	1.9	--	--	--	--	--
<i>Cliffwater Direct Lending Index</i>	2.0	6.1	8.3	10.2	8.3	9.3	9.6
Risk Parity	-1.4	6.9	8.5	9.1	4.1	4.4	--
<i>Blended Risk Parity Index</i>	-0.7	6.2	9.2	10.1	6.9	8.7	--
AQR GRP, 10% Volatility	-1.2	8.1	9.7	10.0	3.4	3.0	--
PanAgora	-1.6	5.8	7.5	8.2	4.7	--	--
<i>Blended Risk Parity Index</i>	-0.7	6.2	9.2	10.1	6.9	8.7	--
<i>Blended RP Secondary Index</i>	-0.9	6.2	8.7	8.8	5.5	7.0	--
Alternatives	0.7	3.9	5.8	9.7	7.7	6.2	--
<i>Alternatives Allocation Index</i>	0.8	8.8	11.2	12.2	7.7	6.7	--
<i>Blended Alternatives Index</i>	0.8	9.0	11.5	12.6	7.9	8.0	--
Private Equity	4.8	7.0	11.3	17.0	15.8	16.6	--
<i>Russell 3000 +3%</i>	0.2	13.3	16.8	18.9	13.2	16.0	12.7
<i>Russell 3000 +3% 1Q Lag</i>	7.1	16.6	24.1	19.9	14.1	18.6	11.7
Hedge Fund/Absolute Return	-3.1	1.1	0.5	2.1	3.3	5.7	--
<i>Libor 1 month +4%</i>	1.3	4.0	5.4	5.0	4.7	4.5	--
AQR DELTA XN	-3.9	1.3	0.1	2.1	3.6	5.8	--

Total Fund
Performance Summary (Gross of Fees)

Period Ending: March 31, 2018

	3 Mo (%)	Fiscal YTD (%)	1 Yr (%)	2 Yrs (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Aberdeen Standard GARS	-1.9	0.3	1.1	1.5	--	--	--
<i>Libor 1 month +4%</i>	1.3	4.0	5.4	5.0	4.7	4.5	--
Inflation Hedge	-0.3	4.9	5.5	7.5	--	--	--
<i>Blended Inflation Pool Index</i>	-0.5	5.7	6.3	7.2	--	--	--
Real Estate	2.3	6.3	8.3	9.4	10.6	11.7	5.4
<i>NCREIF ODCE</i>	2.2	6.3	8.1	8.2	10.0	11.4	5.5
Invesco	2.4	6.3	8.3	9.4	10.5	11.6	5.4
<i>NCREIF ODCE</i>	2.2	6.3	8.1	8.2	10.0	11.4	5.5
Invesco US Val IV	2.7	10.6	12.7	11.7	--	--	--
<i>NCREIF ODCE</i>	2.2	6.3	8.1	8.2	10.0	11.4	5.5
<i>NCREIF CEVA 1Q Lag - NET</i>	3.4	9.3	10.8	10.3	13.1	--	--
PGIM RE US Debt Fund	1.1	--	--	--	--	--	--
<i>NCREIF ODCE</i>	2.2	6.3	8.1	8.2	10.0	11.4	5.5
Private Real Asset	-1.9	-7.3	-10.2	-2.6	11.3	--	--
<i>Blended Real Asset Index</i>	-3.2	6.2	5.9	7.0	6.3	--	--
<i>Blended Private Real Asset Index</i>	6.6	11.9	16.2	14.7	7.4	--	--
Liquid Pool	-2.9	7.4	7.6	--	--	--	--
<i>Blended Real Asset Index</i>	-3.2	6.2	5.9	7.0	6.3	--	--
SSgA Custom Real Asset	-2.9	7.4	7.6	--	--	--	--
<i>Blended Real Asset Index</i>	-3.2	6.2	5.9	7.0	6.3	--	--
TIPS	-0.2	1.8	1.2	2.0	1.8	-0.2	--
<i>BBgBarc US TIPS TR</i>	-0.8	1.3	0.9	1.2	1.3	0.0	2.9
Brown Brothers Harriman	-0.2	1.8	1.2	2.0	1.8	-0.2	--
<i>BBgBarc US TIPS TR</i>	-0.8	1.3	0.9	1.2	1.3	0.0	2.9
Cash	0.2	0.7	0.9	0.9	1.0	0.8	0.5
<i>91 Day T-Bills</i>	0.4	0.9	1.2	0.8	0.5	0.3	0.3
General Account	0.4	1.7	2.0	1.5	1.7	1.1	0.9
Treasury & LAIF	2.2	2.7	3.1	1.8	1.5	1.3	0.7
<i>91 Day T-Bills</i>	0.4	0.9	1.2	0.8	0.5	0.3	0.3

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.

Policy Index and Benchmark History

Period Ending: March 31, 2018

Total Plan Policy Index	As of																	
	10/1/17	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%	0.0%	0.0%	0.0%	0.0%	0.0%
60/40 MSCI World/BBgBarc Global Aggregate (RP)	8.0%	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%	0.0%
60/40 Russell 3000/BBgBarc US Aggregate (RP)	0.0%	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%	0.0%
BBgBarc Aggregate	14.0%	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%	21.0%
BBgBarc BA Intermediate HY	7.0%	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%	0.0%
BBgBarc BBB	0.0%	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%	0.0%
BBgBarc Credit BAA	0.0%	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%	0.0%
BBgBarc Multiverse	0.0%	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%	0.0%
BBgBarc TIPS	2.0%	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%	0.0%
Bloomberg Commodity	0.0%	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%	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%	0.0%	0.0%	5.0%	9.0%	9.0%
CPI + 5% (RA)	0.0%	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%	0.0%
Blended Real Asset	8.0%	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%	0.0%
Libor +4% (HF)	6.0%	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%	0.0%
MSCI ACWI ex-US	0.0%	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%	0.0%
MSCI ACWI ex-US IMI	0.0%	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%	0.0%
MSCI ACWI ex-US IMI (Net)	19.0%	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%	0.0%	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%	0.0%	0.0%	20.0%	20.0%	20.0%
NCREIF ODCE	8.0%	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%	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%	0.0%	6.0%	6.0%	0.0%	0.0%	0.0%	0.0%
Russell 1000	0.0%	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%	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%	0.0%	0.0%	5.0%	5.0%	0.0%
Russell 2000	0.0%	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%	15.0%
Russell 3000	21.0%	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%	0.0%
Russell 3000 +3% (PE)	7.0%	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%	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%	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%	100.0%	100.0%

Policy Index and Benchmark History

Period Ending: March 31, 2018

Total Equity Benchmark	As of:										
	2/1/17	10/1/16	9/1/16	1/1/16	1/1/14	10/1/10	5/1/07	6/1/00	3/1/99	9/1/98	1/1/96
MSCI ACWI ex-US	0.0%	0.0%	0.0%	0.0%	0.0%	34.0%	31.3%	23.1%	0.0%	0.0%	0.0%
MSCI ACWI ex-US IMI	45.2%	40.4%	41.7%	41.7%	40.0%	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%	32.3%	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%	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:			
	10/1/17	1/1/14	6/1/00	1/1/96
MSCI ACWI ex US	0.0%	0.0%	100.0%	0.0%
MSCI ACWI ex US IMI	0.0%	100.0%	0.0%	0.0%
MSCI ACWI ex US IMI (Net)	100.0%	0.0%	0.0%	0.0%
MSCI EAFE	0.0%	0.0%	0.0%	100.0%
	100.0%	100.0%	100.0%	100.0%

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%
BBgBarc TIPS	0.0%	0.0%	0.0%	10.0%	10.0%	14.0%	15.0%	13.6%	0.0%	0.0%	0.0%
Citigroup non-US WGBl	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	16.7%	30.0%
	100.0%	100.0%	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%

Policy Index and Benchmark History

Period Ending: March 31, 2018

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:
	10/1/10
Russell 3000 +3%	100.0%
	100.0%

Hedge Fund Benchmark	As of:
	10/1/10
Libor +4%	100.0%
	100.0%

Inflation Hedge	As of:		
	2/1/17	10/1/16	4/1/16
BBgBarc TIPS	12.50%	14.3%	14.3%
Bloomberg Commodity	0.00%	0.0%	21.4%
CPI + 5% (RA)	0.00%	0.0%	14.3%
Bloomberg Roll Select Commodity	14.87%	12.1%	0.0%
S&P Global Large-MidCap Commodity and Resource	14.44%	11.8%	0.0%
S&P Global Infrastructure	14.44%	11.8%	0.0%
NCREIF ODCE	43.75%	50.0%	50.0%
	100.0%	100.0%	100.0%

Real Asset Benchmark	As of:	
	10/1/16	1/1/14
Bloomberg Roll Select Commodity	34.00%	0.0%
S&P Global Large-MidCap Commodity and Resource	33.00%	0.0%
S&P Global Infrastructure	33.00%	0.0%
CPI + 5%	0.00%	100.0%
	100.0%	100.0%

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%
	100.0%	100.0%	100.0%

Policy Index and Benchmark History

Period Ending: March 31, 2018

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%

Baillie Gifford Secondary Benchmark	As of:	
	1/1/14	5/1/12
MSCI ACWI ex-US Growth	100.0%	0.0%
MSCI EAFE Growth	0.0%	100.0%
	100.0%	100.0%

Brigade Secondary Benchmark	As of:	
	8/1/10	
BBgBarc High Yield	50.0%	
Credit Suisse Leveraged Loans	50.0%	
	100.0%	

AQR GRP, 10% Volatility	As of:	
	1/1/17	3/1/11
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%

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%

PIMCO Diversified	As of:	
	9/1/17	
JPMorgan EMBI Global	33.3%	
ICE BofAMLBB-BRatedDvlpdMktsHYHdgdUSD	33.3%	
Global Agg Credit Ex EM USD hedged	33.4%	
	100.0%	

Fee Schedule

Period Ending: March 31, 2018

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:	0.10% per annum
Thereafter:	0.085% per annum

Parametric

On All Assets:	0.30% per annum
----------------	-----------------

PIMCO Diversified

On All Assets:	0.75% per annum
----------------	-----------------

QMA

First \$50 million:	0.55% per annum
Thereafter:	0.50% per annum

Western Asset Management

On All Assets:	0.25% per annum
Performance Fee:	20.00%

Mondrian Investment Partners

Assets Below \$190 million

First \$20 million:	1.00% per annum
Thereafter:	0.33% per annum

Assets Above \$190 million

First \$50 million:	1.00% per annum
Next \$150 million:	0.19% per annum
Thereafter:	0.33% per annum

Name	Primary Benchmark	Rule 1	Rule 2	Rule 3
DE Shaw	Russell 1000	✓	✓	✓
QMA US Small Cap	Russell 2000	--	--	--
Baillie Gifford	MSCI ACWI ex US	✓	✗	✓
Mondrian	MSCI ACWI ex USA Value Gross	✓	✗	✓
Parametric Core	MSCI Emerging Markets Gross	--	--	--
FIAM Bond	BBgBarc US Aggregate TR	✓	✓	✓
Western TRU	3-Month Libor Total Return USD	--	--	--
Angelo Gordon Opportunistic	BBgBarc US Aggregate TR	--	--	--
Angelo Gordon STAR	BBgBarc US Aggregate TR	✓	--	✓
Beach Point Select	BBgBarc BA Intermediate HY	--	--	--
Brigade Capital	BBgBarc BA Intermediate HY	✓	✗	✗
PIMCO Diversified	Blended PIMCO Diversified Index	--	--	--
Franklin Templeton	BBgBarc Multiverse TR	--	--	--
TCP Direct Lending VIII	Cliffwater Direct Lending Index	--	--	--
White Oak Yield	Cliffwater Direct Lending Index	--	--	--
AQR DELTA XN	Libor 1 month +4%	✓	✓	✗
Aberdeen Standard GARS	Libor 1 month +4%	--	--	--

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	✓	✓	✓
QMA US Small Cap	Russell 2000	--	--	--
Baillie Gifford	MSCI ACWI ex US	✓	✗	✓
Mondrian	MSCI ACWI ex USA Value Gross	✓	✗	✓
Parametric Core	MSCI Emerging Markets Gross	--	--	--
FIAM Bond	BBgBarc US Aggregate TR	✓	✓	✓
Western TRU	3-Month Libor Total Return USD	--	--	--
Angelo Gordon Opportunistic	BBgBarc US Aggregate TR	--	--	--
Angelo Gordon STAR	BBgBarc US Aggregate TR	✓	--	✓
Beach Point Select	BBgBarc BA Intermediate HY	--	--	--
Brigade Capital	BBgBarc BA Intermediate HY	✓	✓	✗
PIMCO Diversified	Blended PIMCO Diversified Index	--	--	--
Franklin Templeton	BBgBarc Multiverse TR	--	--	--
TCP Direct Lending VIII	Cliffwater Direct Lending Index	--	--	--
White Oak Yield	Cliffwater Direct Lending Index	--	--	--
AQR DELTA XN	Libor 1 month +4%	✓	✓	✗
Aberdeen Standard GARS	Libor 1 month +4%	--	--	--

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

Manager Performance Comparison (Gross of Fees)

Period Ending: March 31, 2018

	Jan	Feb	Mar	1st Qtr. 2018	Difference	4th Qtr. 2017	Difference	3rd Qtr. 2017	Difference	2nd Qtr. 2017	Difference	1st Qtr. 2017	Difference
Verus	5.49%	-3.67%	-2.27%	-0.69%		6.58%		4.49%		3.07%		5.46%	
BlackRock Russell 1000	5.49%	-3.67%	-2.27%	-0.69%	0.00%	6.59%	0.00%	4.49%	0.00%	3.07%	0.00%	5.46%	0.00%
Russell 1000 Index	5.49%	-4.64%	-1.77%	-1.19%		4.90%		4.48%		3.07%		6.02%	
Verus	4.49%	-3.09%	-1.57%	-0.32%		6.38%		7.60%		2.79%		7.02%	
D.E. Shaw	4.49%	-3.08%	-1.56%	-0.31%	-0.01%	6.39%	-0.01%	7.60%	0.00%	2.79%	0.00%	7.02%	0.00%
Russell 1000 Index	5.49%	-4.64%	-1.77%	-1.19%		4.90%		4.48%		3.07%		6.02%	
Verus	2.75%	-3.92%	0.77%	-0.51%		2.34%		5.94%		1.82%		2.46%	
QMA US Small Cap (Net)	2.75%	-3.92%	0.77%	-0.51%	0.00%	2.34%	0.00%	5.95%	-0.01%	1.82%	0.00%	2.46%	0.00%
Russell 2000 Index	2.61%	-3.87%	1.29%	-0.08%		3.34%		5.67%		2.46%		2.47%	
Verus	5.74%	-4.16%	-1.96%	-0.65%		4.95%		5.14%		8.83%		10.12%	
Baillie Gifford	5.75%	-4.20%	-1.98%	-0.70%	0.05%	4.92%	0.03%	5.12%	0.02%	8.80%	0.03%	10.07%	0.01%
MSCI ACWI ex US	5.58%	-4.70%	-1.69%	-1.08%		5.06%		6.25%		5.99%		7.98%	
MSCI ACWI ex US Growth	5.22%	-4.46%	-1.31%	-0.80%		5.81%		6.39%		7.74%		9.22%	
Verus	5.02%	-4.49%	-1.88%	-1.59%		4.26%		5.47%		6.32%		7.38%	
BlackRock EAFE Equity	5.02%	-4.49%	-1.88%	-1.59%	0.00%	4.26%	0.00%	5.47%	0.00%	6.32%	0.00%	7.38%	0.00%
MSCI EAFE (Net)	5.02%	-4.51%	-1.80%	-1.53%		4.23%		5.40%		6.12%		7.25%	
MSCI EAFE (Gross)	5.02%	-4.50%	-1.70%	-1.41%		4.27%		5.47%		6.37%		7.39%	
Verus	5.44%	-4.64%	-1.77%	-1.24%		4.06%		5.05%		4.26%		8.23%	
Mondrian(Net)	5.45%	-4.65%	-1.76%	-1.22%	-0.02%	4.02%	0.04%	5.08%	-0.03%	4.29%	-0.03%	8.23%	0.00%
MSCI ACWI -ex US Value Index	5.95%	-4.93%	-2.07%	-1.36%		4.31%		6.11%		4.33%		6.82%	
MSCI ACWI -ex US	5.58%	-4.70%	-1.69%	-1.08%		5.06%		6.25%		5.99%		7.98%	
Verus	6.93%	-4.05%	-1.06%	1.51%		5.24%		6.91%		3.44%		10.39%	
Parametric Core	6.95%	-4.04%	-1.05%	1.56%	-0.05%	5.30%	-0.06%	6.96%	-0.05%	3.47%	-0.03%	10.44%	0.00%
MSCI EM Market Index	8.34%	-4.60%	-1.83%	1.47%		7.50%		8.04%		6.38%		11.49%	

Manager Performance Comparison (Gross of Fees)

Period Ending: March 31, 2018

	Jan	Feb	Mar	1st Qtr. 2018	Difference	4th Qtr. 2017	Difference	3rd Qtr. 2017	Difference	2nd Qtr. 2017	Difference	1st Qtr. 2017	Difference
Verus	-0.94%	-0.27%	0.54%	-0.67%		-0.36%		0.40%		0.73%		0.34%	
BlackRock Intermediate Govt	-0.94%	-0.27%	0.54%	-0.67%	0.00%	-0.35%	-0.01%	0.41%	-0.01%	0.73%	0.00%	0.34%	0.00%
BBgBarc US Govt Int Index	-0.95%	-0.29%	0.52%	-0.73%		-0.41%		0.85%		1.45%		0.82%	
Verus	-0.97%	-0.93%	0.60%	-1.31%		0.47%		1.13%		1.36%		1.24%	
FIAM Bond	-0.97%	-0.94%	0.60%	-1.31%	0.00%	0.48%	-0.01%	1.13%	0.00%	1.36%	0.00%	1.24%	0.00%
BBgBarc US Aggregate Index	-1.15%	-0.95%	0.64%	-1.46%		0.39%		0.85%		1.45%		0.82%	
Verus	0.74%	-1.47%	0.05%	-0.69%		1.51%		2.09%		3.54%		2.25%	
Western TRU	0.74%	-1.47%	0.05%	-0.69%	0.00%	1.51%	0.00%	2.09%	0.00%	3.54%	0.00%	2.25%	0.00%
3-Month Libor Total Return USD Index	0.15%	0.16%	0.15%	0.46%		0.39%		0.34%		0.31%		0.27%	
BBgBarc US Aggregate Index	-1.15%	-0.95%	0.64%	-1.46%		0.39%		0.85%		1.45%		0.82%	
Verus (Net)				5.70%		11.05%		-0.59%		4.18%		4.34%	
Angelo Gordon Opportunistic				5.70%	0.00%	11.05%	0.00%	-0.59%	0.00%	4.18%	0.00%	4.34%	0.00%
BBgBarc US Aggregate Index				-1.46%		0.39%		0.85%		1.45%		0.82%	
Verus (Net)				7.54%		3.13%		4.96%		6.13%		4.58%	
Angelo Gordon STAR Fund (Net)				7.54%	0.00%	3.13%	0.00%	4.96%	0.00%	6.13%	0.00%	4.58%	0.00%
BBgBarc US Aggregate Index				-1.46%		0.39%		0.85%		1.45%		0.82%	
Verus	1.56%	-0.09%	-0.34%	1.14%		1.79%		2.07%		1.95%		2.45%	
Beach Point Select (Net)	1.56%	-0.09%	-0.34%	1.14%	0.00%	1.79%	0.00%	2.07%	0.00%	1.95%	0.00%	2.45%	0.00%
BBgBarc BA Intermediate HY	-0.06%	-0.97%	-0.47%	-1.49%		0.15%		1.72%		2.50%		1.76%	
Verus	1.73%	-0.43%	-0.23%	1.05%		0.33%		1.40%		1.83%		3.84%	
Brigade Capital (Net)	1.73%	-0.43%	-0.26%	1.03%	0.02%	0.28%	0.05%	1.44%	-0.04%	1.77%	0.06%	3.77%	0.01%
BBgBarc BA Intermediate HY	-0.06%	-0.97%	-0.47%	-1.49%		0.15%		1.72%		2.50%		1.76%	
50% BBgBarc HY/ 50% Bank Loan	0.84%	-0.34%	-0.14%	0.36%		0.82%		1.52%		1.46%		1.95%	
Verus	-0.38%	-0.96%	0.70%	-0.64%		0.82%							
PIMCO Diversified	-0.38%	-0.96%	0.70%	-0.64%	0.00%	0.82%	0.00%						
Blended PIMCO Diversified Index	-0.15%	-1.21%	0.10%	-1.26%		0.75%							
BBgBarc BA Intermediate HY	-0.06%	-0.97%	-0.47%	-1.49%		0.15%							
Verus	1.58%	-0.60%	1.03%	2.01%		-1.31%		1.25%		-0.98%		5.27%	
Franklin Templeton Investments	1.58%	-0.60%	1.03%	2.01%	0.00%	-1.32%	0.01%	1.25%	0.00%	-0.98%	0.00%	5.27%	0.00%
BBgBarc Multiverse Index	1.23%	-0.93%	1.00%	1.29%		1.06%		1.88%		2.64%		1.90%	
Verus				1.46%		4.67%		2.69%		2.65%		2.06%	
TCP Direct Lending VIII				1.46%	0.00%	4.67%	0.00%	2.69%	0.00%	2.65%	0.00%	2.06%	0.00%
Cliffwater Direct Lending Index				2.02%		1.97%		1.72%		2.50%		1.76%	

Manager Performance Comparison (Gross of Fees)

Period Ending: March 31, 2018

	Jan	Feb	Mar	1st Qtr. 2018	Difference	4th Qtr. 2017	Difference	3rd Qtr. 2017	Difference	2nd Qtr. 2017	Difference	1st Qtr. 2017	Difference
Verus				2.17%		0.51%		-4.64%					
White Oak Yield				2.17%	0.00%	0.51%	0.00%	-4.64%	0.00%				
Cliffwater Direct Lending Index				2.02%		1.97%		1.72%					
Verus	0.67%	-3.03%	1.19%	-1.21%		4.72%		4.47%		1.46%		4.57%	
AQR GRP, 10% Volatility (Net)	0.67%	-3.03%	1.19%	-1.21%	0.00%	4.72%	0.00%	4.47%	0.00%	1.46%	0.00%	4.57%	0.00%
60% R3000/ 40% BBgBarc Agg	2.88%	-2.58%	-0.90%	-0.67%		3.61%		3.21%		2.39%		3.76%	
60% MSCI World/ 40% BBgBarc Glb	2.70%	-2.59%	-0.95%	-0.91%		3.93%		3.08%		2.80%		3.98%	
Verus	-0.03%	-2.78%	1.27%	-1.58%		4.38%		2.98%		1.60%		4.16%	
PanAgora (Net)	-0.03%	-2.78%	1.27%	-1.58%	0.00%	4.38%	0.00%	2.98%	0.00%	1.60%	0.00%	4.16%	0.00%
60% R3000/ 40% BBgBarc Agg	2.88%	-2.58%	-0.90%	-0.67%		3.61%		3.21%		2.39%		3.76%	
60% MSCI World/ 40% BBgBarc Glb	2.70%	-2.59%	-0.95%	-0.91%		3.93%		3.08%		2.80%		3.98%	
Verus	1.21%	-4.06%	-0.99%	-3.86%		1.33%		3.99%		-1.19%		1.42%	
AQR DELTA XN (Net)	1.21%	-4.06%	-0.99%	-3.86%	0.00%	1.33%	0.00%	3.99%	0.00%	-1.19%	0.00%	1.43%	0.00%
Labor + 4%	0.38%	0.44%	0.47%	1.29%		1.46%		1.22%		1.29%		1.11%	
Verus	1.46%	-2.07%	-1.24%	-1.88%		1.87%		0.34%		0.81%		0.59%	
Aberdeen Standard GARS (Net)	1.46%	-2.07%	-1.24%	-1.88%	0.00%	1.87%	0.00%	0.34%	0.00%	0.81%	0.00%	0.59%	0.00%
Labor + 4%	0.38%	0.44%	0.47%	1.29%		1.46%		1.22%		1.29%		1.11%	
Verus				2.42%		2.29%		1.48%		1.88%		2.55%	
INVESCO Real Estate				2.46%	-0.04%	2.26%	0.00%	1.46%	0.02%	1.88%	0.00%	2.54%	0.00%
NCREIF NFI ODCE Index				2.20%		2.07%		1.87%		1.70%		1.77%	
Verus				2.67%		2.09%		5.56%		1.85%		2.90%	
Invesco US Val IV				2.67%	0.00%	2.09%	0.00%	5.56%	0.00%	1.85%	0.00%	2.90%	0.00%
NCREIF NFI ODCE Index				2.20%		2.07%		1.87%		1.70%		1.77%	
NCREIF CEVA 1Q Lag - NET				3.41%		3.00%		2.61%		1.36%		2.75%	
Verus				1.09%		2.52%		-0.84%					
PGIM RE US Debt Fund				1.09%	0.00%	2.52%	0.00%	-0.84%	0.00%				
NCREIF NFI ODCE Index				2.20%		2.07%		1.87%					
Verus	-0.45%	-0.61%	0.82%	-0.25%		1.25%		0.76%		-0.58%		1.13%	
Brown Brothers Harriman	-0.45%	-0.62%	0.81%	-0.27%	0.02%	1.26%	0.00%	0.76%	0.00%	-0.60%	0.02%	1.13%	0.00%
BBgBarc U.S Tips	-0.86%	-0.97%	1.05%	-0.79%		1.26%		0.86%		-0.40%		1.26%	

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
03/31/2018	17.921	10.888	5.334	3.023	0
12/31/2017	17.679	9.979	5.011	2.793	0
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)

**Investable Market Index (Large+Mid+Small)

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
3/31/2018	16.392	8.196	6.106	3.053	0
12/31/2017	16.392	8.196	6.106	3.053	0
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.

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.

Market Capitalization Breakpoints

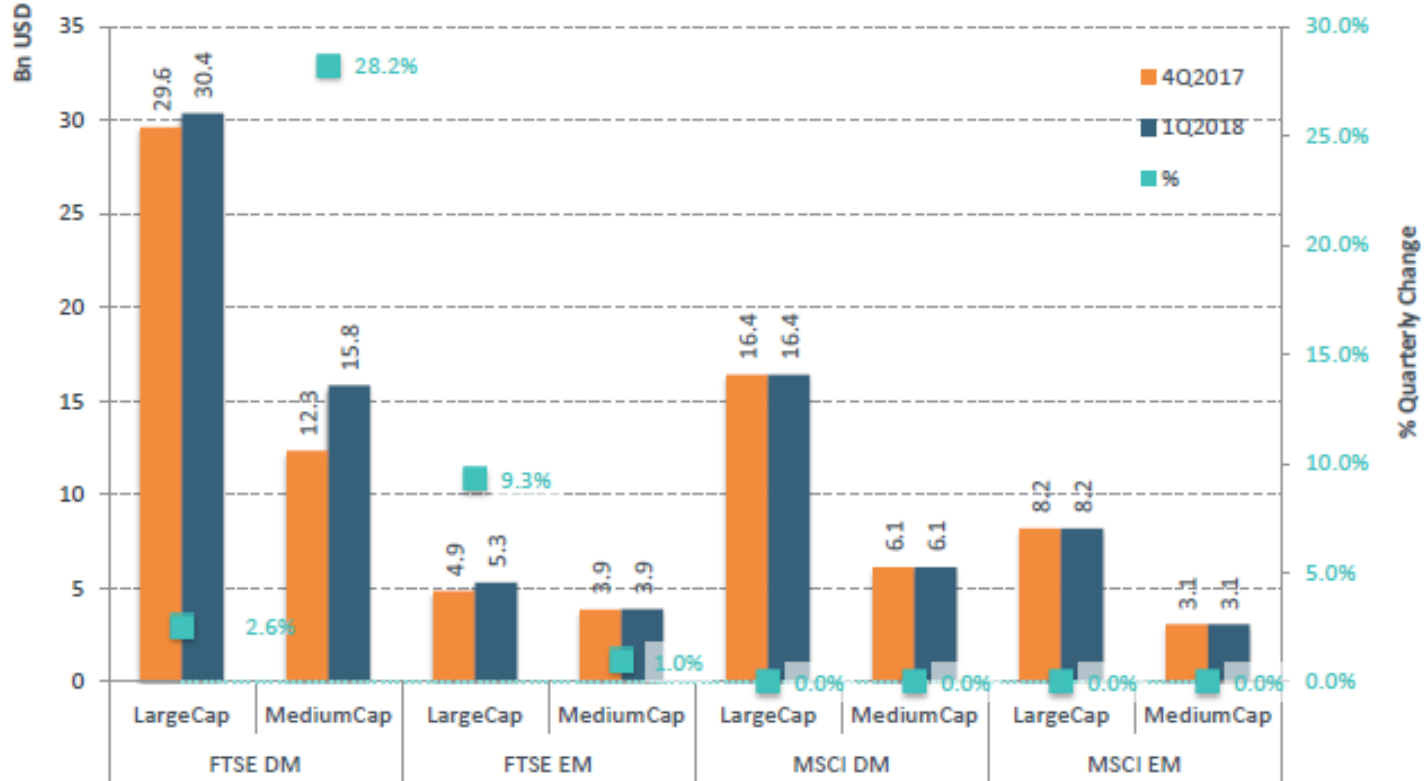
Period Ending: March 31, 2018

As Of	Large Cap	Medium Large Cap	Medium Cap	Medium Small Cap	Small Cap
3/31/2018	101.922	26.399	8.890	2.958	0
12/31/2017	95.036	26.237	8.819	3.021	0
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
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	7.15	2.71	0
6/30/2013	68.47	19.36	6.48	2.46	0
3/31/2013	64.31	18.64	6.39	2.39	0
12/31/2012	58.45	16.8	5.75	2.13	0
9/30/2012	57.06	16.48	5.49	2.08	0
6/30/2012	55.65	16.13	5.14	1.99	0
3/31/2012	57.58	16.43	5.55	2.13	0
12/31/2011	51.97	14.66	4.93	1.93	0
9/30/2011	45.35	13.88	4.38	1.66	0
6/30/2011	54.25	15.95	5.66	2.16	0
3/31/2011	52.22	15.69	5.7	2.16	0
12/31/2010	49.54	14.8	5.16	2.04	0
9/30/2010	42.83	13.13	4.64	1.8	0
6/30/2010	39.95	11.58	4.1	1.59	0

Numbers are billions USD

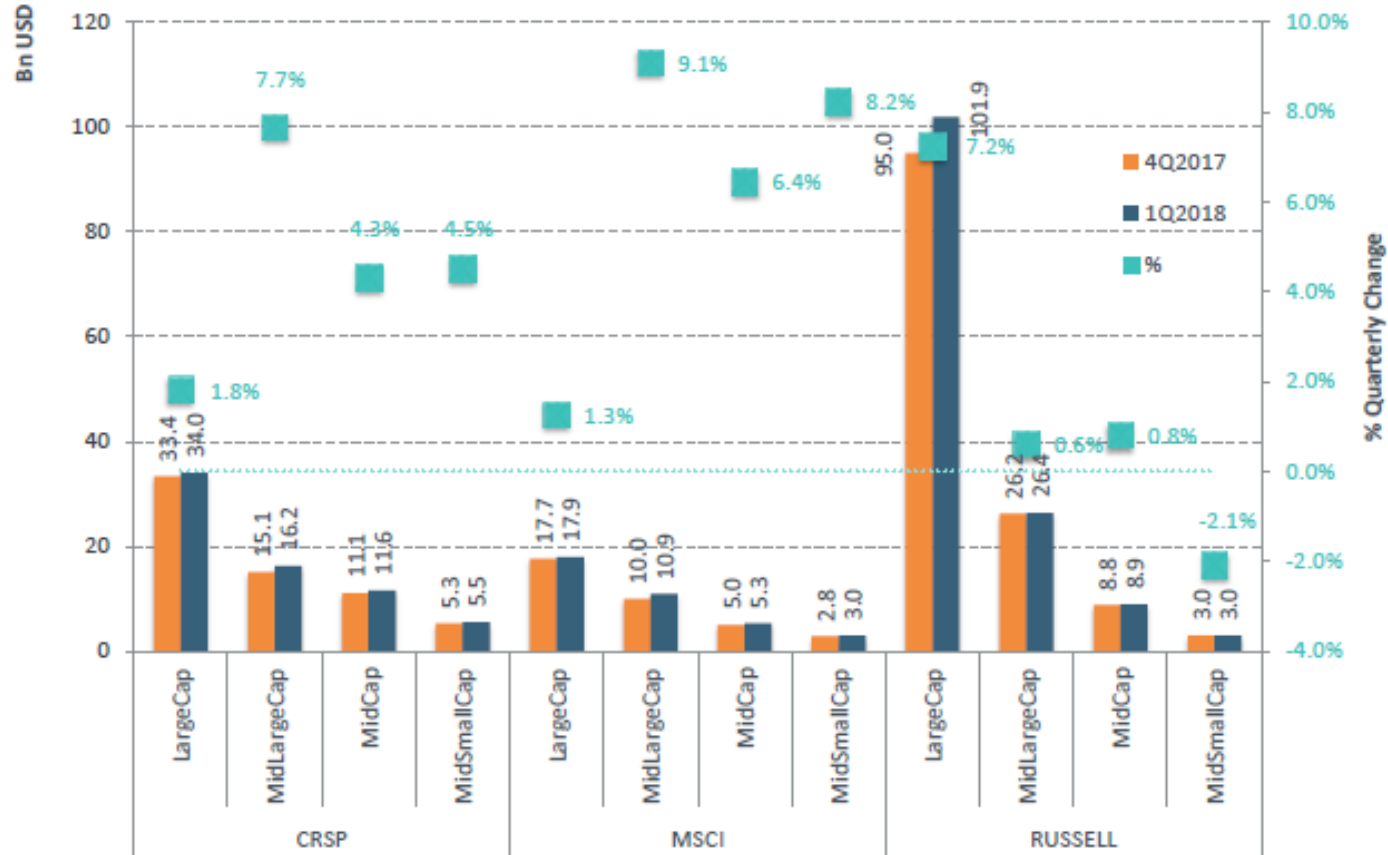
BREAKPOINT TRENDS

1Q2018 DEVELOPED AND EMERGING MARKET BREAKPOINT CHANGES



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

1Q2018 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.



**PERSPECTIVES
THAT DRIVE
ENTERPRISE
SUCCESS**

2ND QUARTER 2018
Investment Landscape

Table of Contents



VERUSINVESTMENTS.COM

SEATTLE 206-622-3700

LOS ANGELES 310-297-1777

SAN FRANCISCO 415-362-3484

Economic environment 6

Fixed income rates & credit 20

Equity 27

Other assets 39

Appendix 42

1st quarter summary

THE ECONOMIC CLIMATE

- The U.S. economy is expected to grow at around 2.2% in Q1. Economists expect a slightly quicker rate of growth throughout the year. We believe that this *middle-of-the-road* expansion – characterized as not too fast and not too slow – may allow the U.S. economy to continue expanding for longer than expected. [p. 8](#)
- The U.S. has enacted a 25% tariff on steel and a 10% tariff on aluminum, which went into effect on March 23rd. The U.S. also engaged with China over allegations of asymmetrical trade policies and intellectual property theft. [p. 18, 19](#)

PORTFOLIO IMPACTS

- Global economic growth has improved – low inflation, strong employment, and accommodative foreign central bank policies have been supportive of equity prices. In the U.S., monetary tightening has yet to have a major impact on equities. [p. 17](#)
- Concerns over increasing trade protectionism weighed on financial markets. The tariffs placed on steel and aluminum are not likely to have a material impact on asset prices, but escalating tensions and retaliatory measures could have a negative impact on global growth. [p. 18, 19](#)

THE INVESTMENT CLIMATE

- Excitement and optimism over tax cuts helped lead equities higher to begin the year. However, markets stumbled in February – falling roughly 10%. Equities recovered much of the losses throughout the quarter, but then fell back to their lows at the end of March. [p. 29](#)
- 2018 is expected to be a banner year for U.S. corporate profits. Earnings for the calendar year are forecast to grow 17.3%, with 7.3% revenue growth. These 2018 expectations may already be priced in. [p. 29](#)
- February’s market correction appeared isolated to the equity markets. “Risk-off” selling that often accompanies market drawdowns was not apparent – credit spreads, U.S. Treasuries, and gold, reacted minimally. [p. 28](#)

ASSET ALLOCATION ISSUES

- Upward price momentum in equities has diminished following the February market correction. Investor sentiment is less positive, but the global economic and earnings backdrop remains intact. We believe a neutral or mild risk overweight is warranted in this environment. [p. 32](#)
- Equity volatility spiked in February, ending the period of extreme calm that investors experienced since the beginning of 2017. The VIX Index averaged 20.7 during the last two months of the quarter. [p. 35, 36](#)

Changing market dynamics suggest a neutral or mild risk overweight may be warranted

What drove the market in Q1?

“Record high increase in S&P 500 EPS estimates for Q1 2018”

CHANGE IN EPS ESTIMATE DURING THE QUARTER (NET)

Q4 16	Q1 17	Q2 17	Q3 17	Q4 17	Q1 18
-2%	-4%	-2%	-4%	0%	+7%

Article Source: FactSet, March 29th, 2018

“U.S. stocks sell off on concerns about trade”

U.S. TRADE DEFICIT BY COUNTRY (\$ BILLIONS)

China	Japan	Germany	Italy	S. Korea	India
-375	-69	-64	-32	-23	-23

Article Source: WSJ, March 23rd, 2018

“Volatility index spikes by largest-ever [one day] amount”

VIX Index (Average)

Oct	Nov	Dec	Jan	Feb	Mar
10.1	10.5	10.2	11.1	22.5	19.0

Article Source: Bloomberg, February 5th, 2018

“U.S. Treasury yields rise to a new 4-year high as inflation concerns drag on”

U.S. 10-Year Treasury Yield

Oct	Nov	Dec	Jan	Feb	Mar
2.38%	2.41%	2.41%	2.71%	2.86%	2.74%

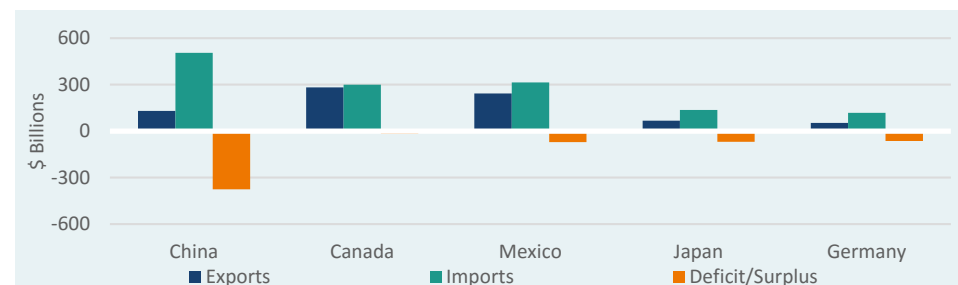
Article Source: USA Today, February 12th, 2018

S&P 500 PRICE INDEX AND Q1 EPS ESTIMATES (INDEXED TO 100)



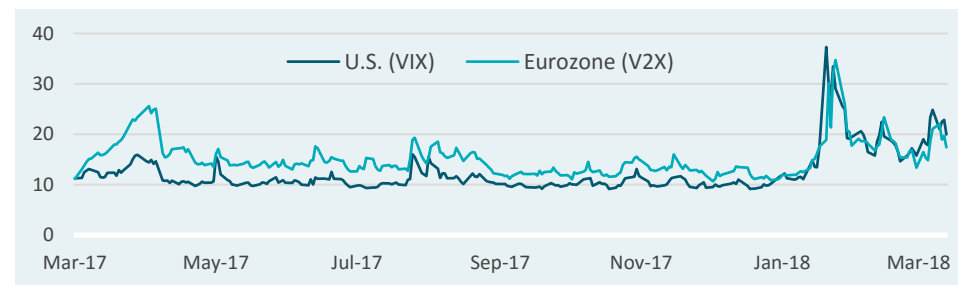
Source: Bloomberg, as of 3/29/18

U.S. TRADE DEFICIT BY COUNTRY



Source: U.S. Census Bureau, 2017

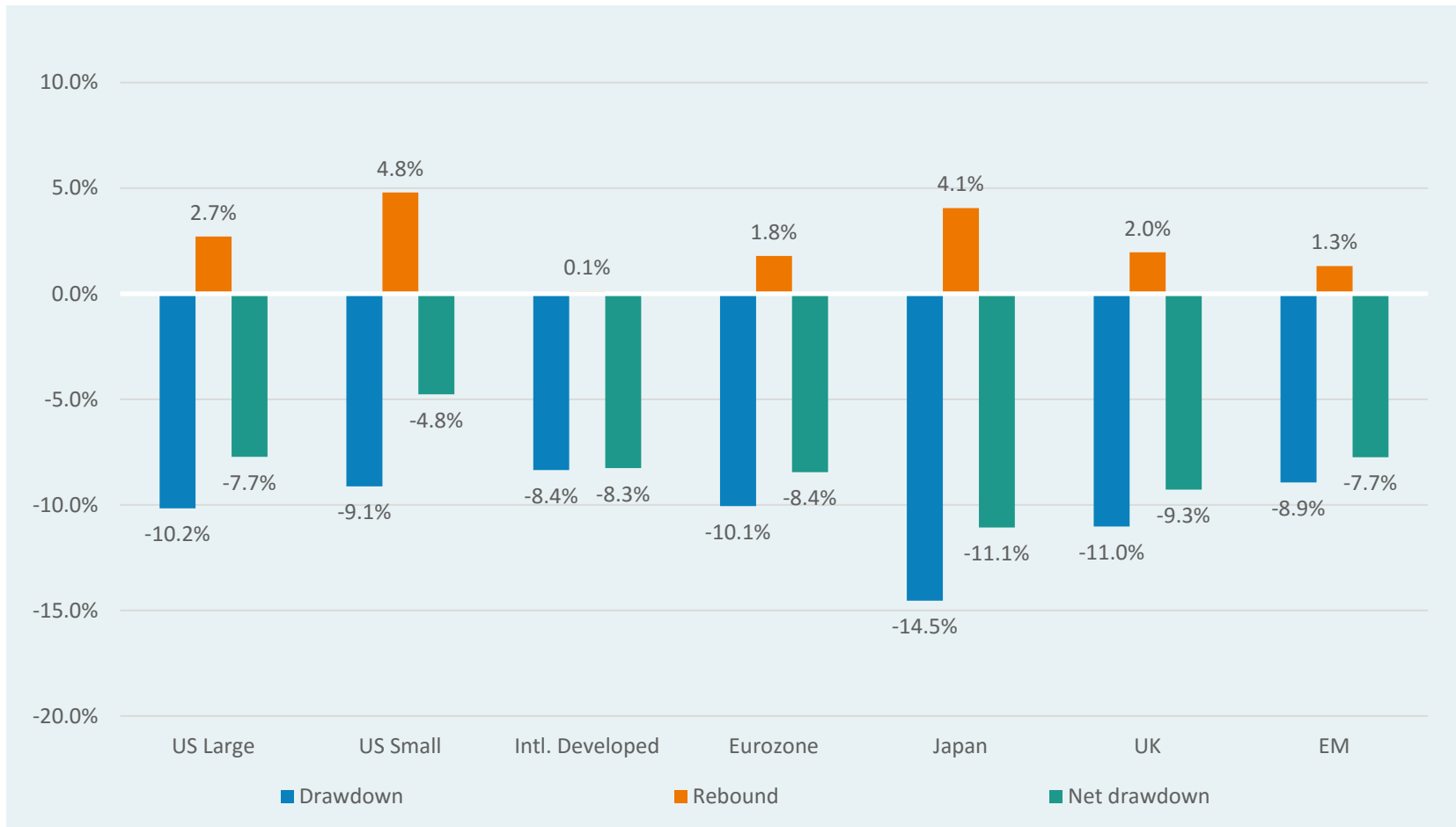
IMPLIED VOLATILITY



Source: Bloomberg, as of 3/29/18

The return of volatility

PEAK TO TROUGH (LOCAL RETURNS)



Timeframe includes the February drawdown and subsequent "bottom" of each market, then recovery through 3/31/18

Economic environment

U.S. economics summary

- Economic growth remained near expansion highs in the fourth quarter. U.S. real GDP growth was 2.6% from the previous year. Consumer spending and investment pushed the economy ahead, while falling exports were a drag on growth.
- The U.S. enacted a 25% tariff on steel and 10% tariff on aluminum, which went into effect March 23rd. The U.S. has engaged with China over allegations of asymmetrical trade policies and intellectual property theft, creating concerns over the risks of a trade war.
- Additions to U.S. payrolls averaged 202,000 per month in the first quarter, above the expansion average.
- In recent years, the U.S. has seen discouraged and part-time workers drawn back to full-time employment. This effect can be

quantified by the shrinking difference between U-6 and U-3 unemployment figures. The difference between these two measures fell to 3.9%, matching expansion lows.

- Core CPI inflation moved from 1.8% to 2.1% YoY during the quarter, the highest rate in more than a year. Prices jumped in March primarily due to the low base effect from an unexpected drop in wireless telecom prices one year ago.
- The Fed raised interest rates on March 21st to 1.50-1.75%. Comments made during the March meeting suggest the FOMC expects continued moderate economic activity, spending, and business investment. Unsurprisingly, the Committee stated that the U.S. inflation rate is expected to stabilize at the 2% target over the near-term.

	Most Recent	12 Months Prior
GDP (YoY)	2.6% <i>12/31/17</i>	1.8% <i>12/31/16</i>
Inflation (CPI YoY, Core)	2.1% <i>3/31/18</i>	2.0% <i>3/31/17</i>
Expected Inflation (5yr-5yr forward)	2.2% <i>3/31/18</i>	2.2% <i>3/31/17</i>
Fed Funds Target Range	1.50 – 1.75% <i>3/31/18</i>	0.75 – 1.00% <i>3/31/17</i>
10 Year Rate	2.8% <i>3/31/18</i>	2.4% <i>3/31/17</i>
U-3 Unemployment	4.1% <i>3/31/18</i>	4.5% <i>3/31/17</i>
U-6 Unemployment	8.0% <i>3/31/18</i>	8.8% <i>3/31/17</i>

GDP growth

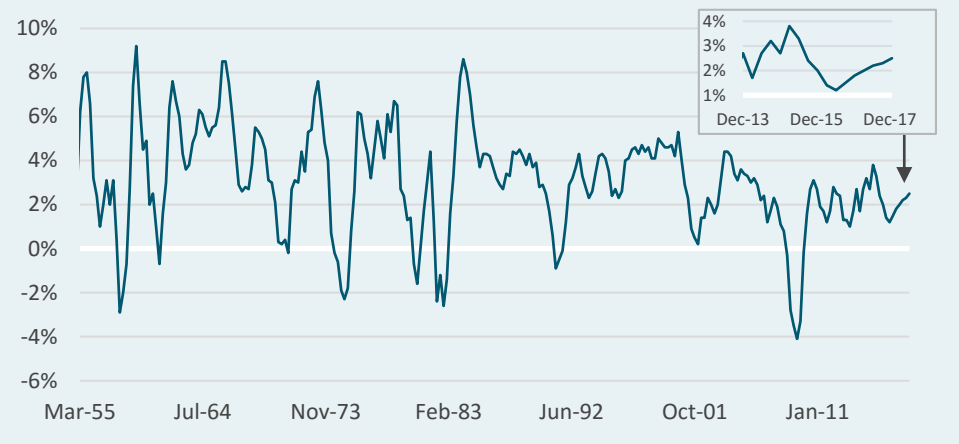
Economic growth accelerated further in the fourth quarter of 2017. Real GDP increased 2.6% from the previous year (2.9% annualized quarterly rate), driven by consumer spending. The pace of growth was faster than the expansion average of 2.2%. Consumer spending contributed 2.8% to the quarterly growth rate, partly due to a strong holiday retail season. Corporate capex spending slowed in Q4, but was still the second largest contributor to the overall growth rate at 1.3%. As discussed last quarter, changes to the tax code could reinforce the current positive trend in fixed business investment.

The economy is expected to experience slower but still moderate growth in the first quarter – the consensus estimate is 2.2%, according to Bloomberg. First quarter growth has underwhelmed the past few years, which may occur again this year. However, expectations for 2018 calendar growth remain robust at 2.8%.

The economy experienced above-trend growth in 2017

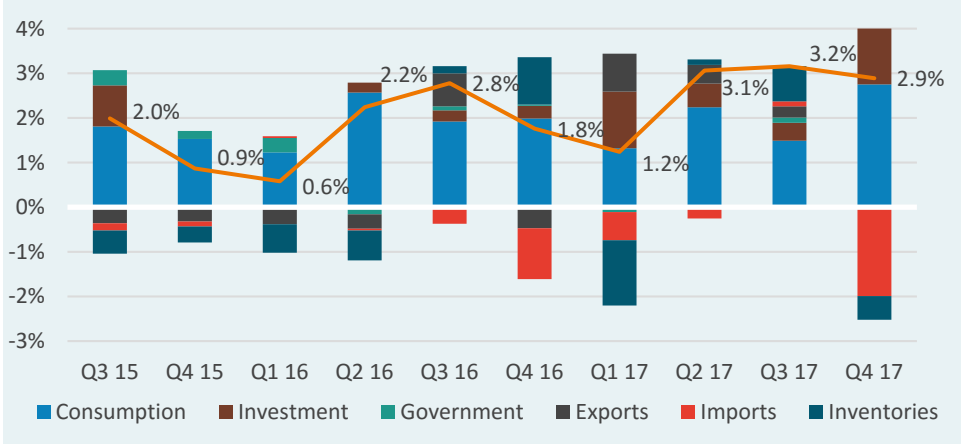
While we continue to see mild pressures building, such as firming inflation, rising interest rates, and tightening in the labor market, there do not appear to be clear signs of economic overheating.

U.S. REAL GDP GROWTH (YOY)



Source: Bloomberg, as of 12/31/17

U.S. GDP COMPONENTS



Source: BEA, annualized quarterly rate, as of 12/31/17

Inflation

Core CPI inflation moved from 1.8% to 2.1% YoY during the quarter, the highest rate in more than a year. Prices jumped in March primarily due to the low base effect from an unexpected drop in wireless telecom prices one year ago.

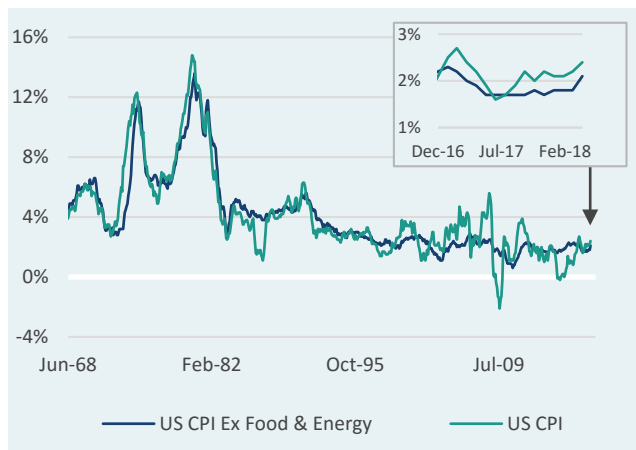
Market inflation expectations have recovered a bit since the deflation scare in 2015 that coincided with an energy driven slump in inflation figures. The 10-year TIPS breakeven inflation rate moved marginally from 2.0% to 2.1%. Investors expect inflation to stay relatively muted

over the longer-term – recent mild rises in inflation may not be indicative of a trend.

While inflation does not actually appear to be bubbling up in most global economies, it is interesting to note that investors are generally expecting higher inflation. Sentiment has transitioned from fear of deflation to fear of inflation, which has broad implications for the markets – central bank confidence in raising rates, and pricing across the fixed income markets, to name a few.

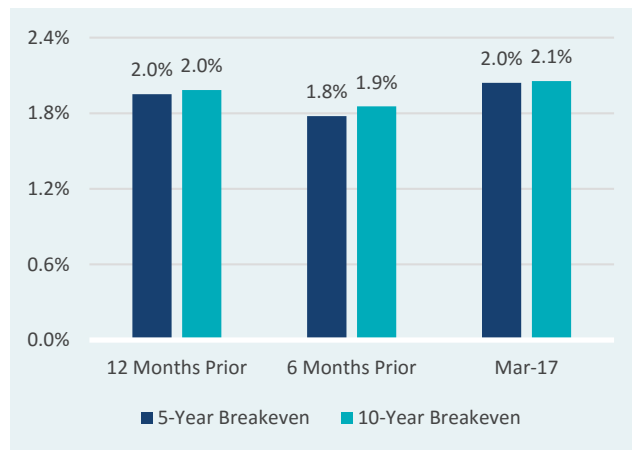
Fears of rising inflation emerged during the quarter

U.S. CPI (YOY)



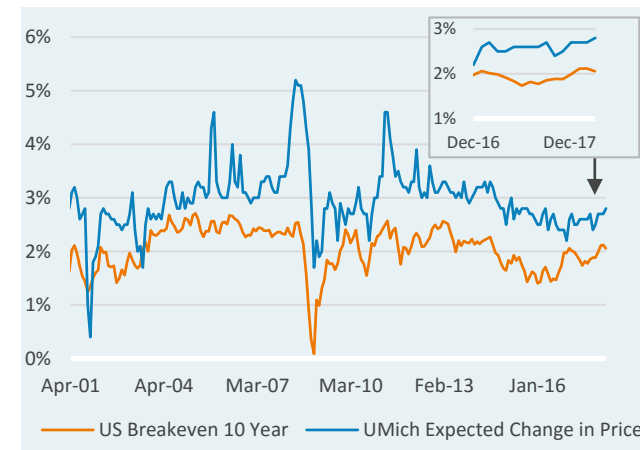
Source: FRED, as of 3/31/18

U.S. TIPS BREAKEVEN RATES



Source: Bloomberg, as of 3/31/18

INFLATION EXPECTATIONS



Source: Bloomberg, as of 3/31/18

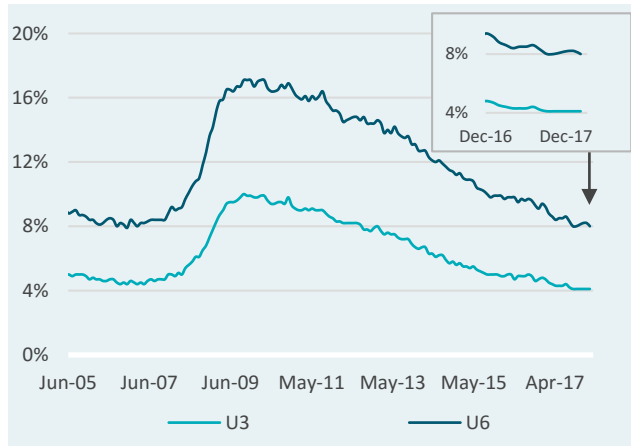
Labor market

Conditions in the U.S. labor market tightened slightly in Q1. Unemployment kept steady at 4.1%, while the unemployment rate that includes discouraged and part time workers fell to 8.0% from 8.2%. In Q1, 202,000 jobs were created per month - slightly stronger than the expansion average.

As we have discussed in recent years, continued labor market slack, not captured in the popular U-3 unemployment figure, has contributed to slower wage gains. Another key contributor to modest wage gains has been weak improvements in business productivity.

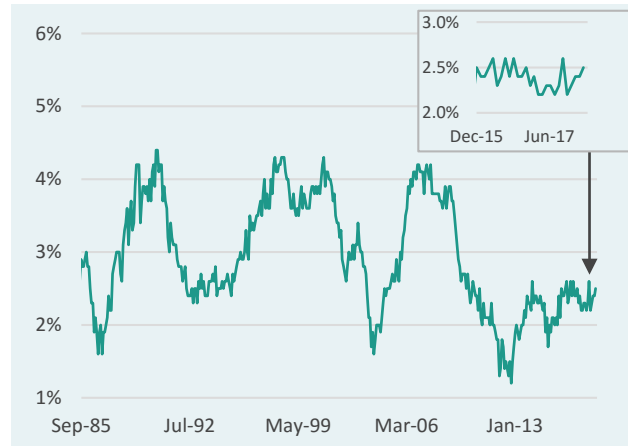
The degree to which U.S. businesses are able to become more efficient has an impact on U.S. employee wages through time. Efficiency is also referred to as *productivity*. As businesses realize productivity gains they are able to pass on some of these gains to employees in the form of higher wages, since output per employee has increased. If businesses are not becoming more productive, this makes it difficult to sustainably raise employee pay. In the current economic expansion, businesses have realized minimal productivity growth, which is likely a contributor to tepid wage growth.

UNEMPLOYMENT RATE



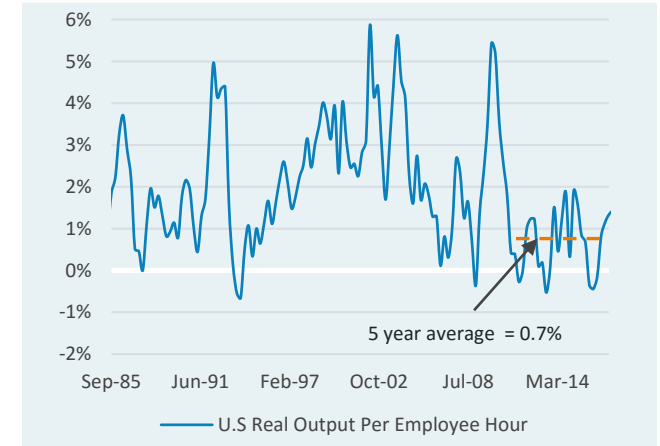
Source: FRED, as of 3/31/18

AVERAGE HOURLY EARNINGS (YOY)



Source: Bloomberg, as 2/28/18

U.S. PRODUCTIVITY GROWTH



Source: FRED, as of 12/31/17

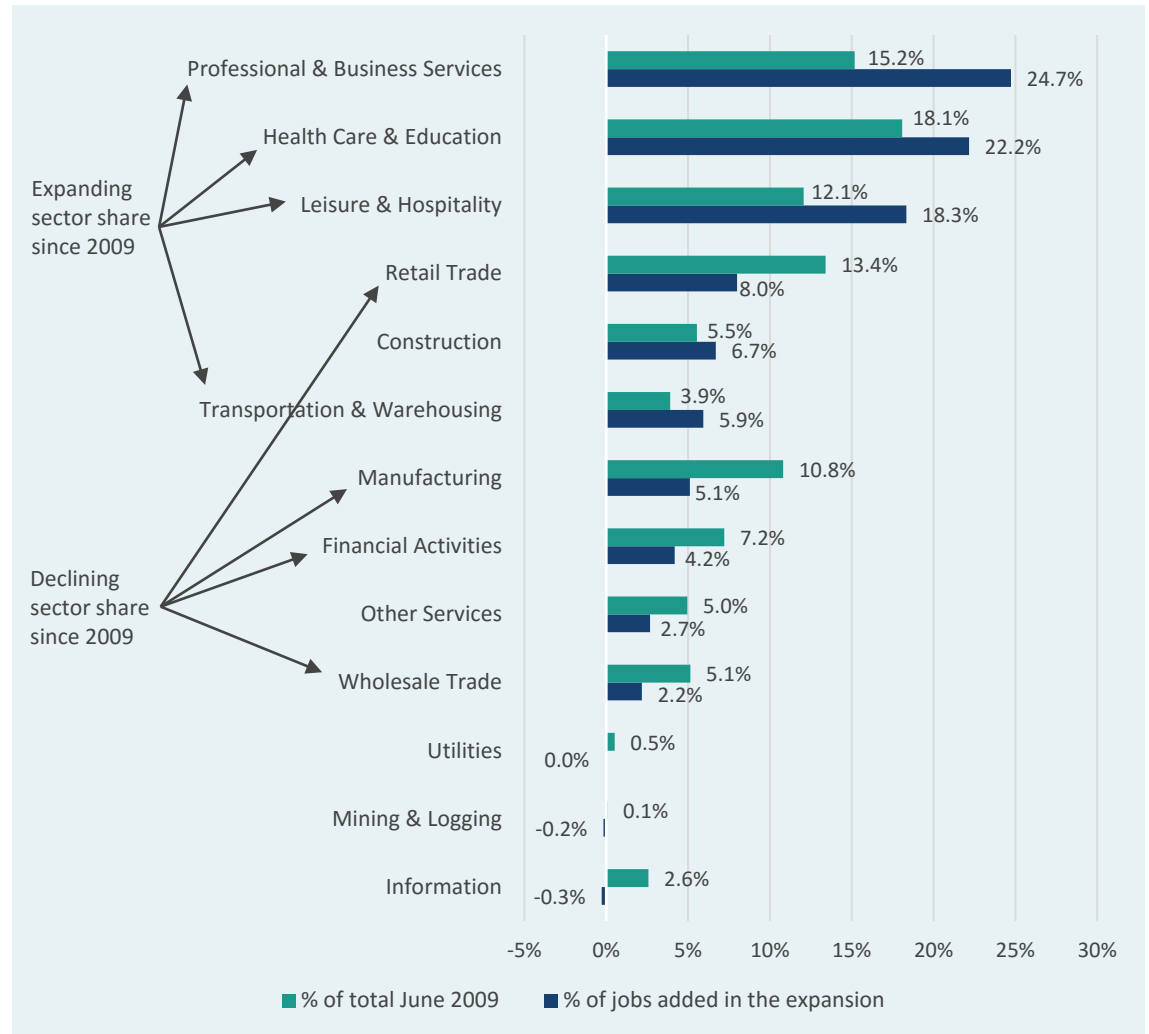
Job creation since the financial crisis

Since the end of the global financial crisis, the U.S. has added more than 17 million workers to the labor force and the unemployment rate has fallen from 9.9% to 4.1%. During this time the composition of the workforce has changed.

Three broad sectors have experienced outsized gains in employment compared to their sizes in June of 2009: Professional and Business Services, Health Care & Education, and Leisure & Hospitality.

Disproportionate gains in the last two sectors have led some to question the quality of jobs that are being added because they are typically low paid positions. On average, Leisure & Hospitality jobs receive \$15.74 per hour, compared to the national average of \$26.75. The changing sector composition is likely one of many structural factors (i.e. globalization and automation) limiting wage growth in the current cycle.

This exercise also created a useful lens to view recent employment trends in terms of the cyclicality of each sector. Manufacturing and construction have historically been the most cyclical sectors and are both growing above trend over the past year, indicating a recent pickup in hiring. This data confirms acceleration in manufacturing surveys, such as PMIs.



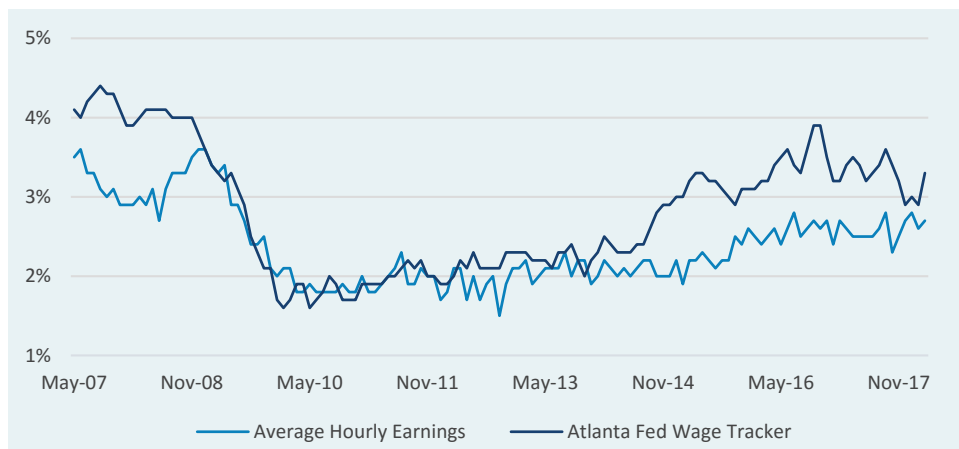
Source: FRED, as of 2/28/18

Wages

Muted wage growth has been heavily scrutinized during the expansion due to its historically strong relationship with the unemployment rate. Although wage growth has accelerated over the past few years, we have yet to experience a material rise in wages that would be consistent with a tight labor market. The broad unemployment rate (U-6, 8.0%) implies wage growth of around 4.5% versus actual wage growth of 3.3% based on a historical regression analysis. Much like our view on overall inflation, we believe cyclical forces may place modest upward pressures on wages, but at a gradual pace.

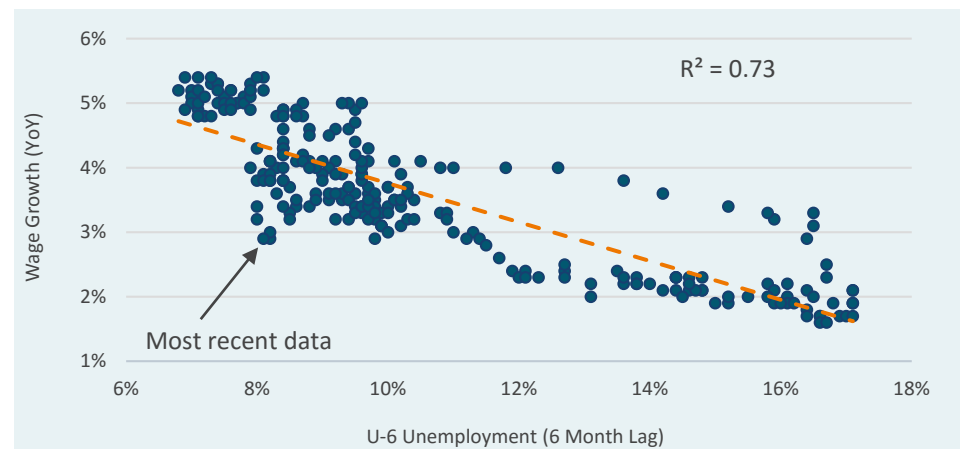
An interesting development during the quarter was a shift in the market narrative surrounding wage growth. In January, a positive surprise in average hourly earnings (mainly caused by a fall in aggregate hours worked during the month) sparked concerns that a faster rate of growth might result in quicker-than-expected monetary tightening. The surprise coincided with a material increase in Treasury yields, although many factors likely influenced these moves. Earlier in the expansion, many market participants voiced concerns that low wage growth was a potential indicator of economic weakness.

WAGE GROWTH (YOY)



Source: Bloomberg, Atlanta Fed, as of 3/31/18 (see appendix)

RELATIONSHIP BETWEEN WAGES AND UNEMPLOYMENT



Source: Bloomberg, Atlanta Fed, Verus, as of 3/31/18

The consumer

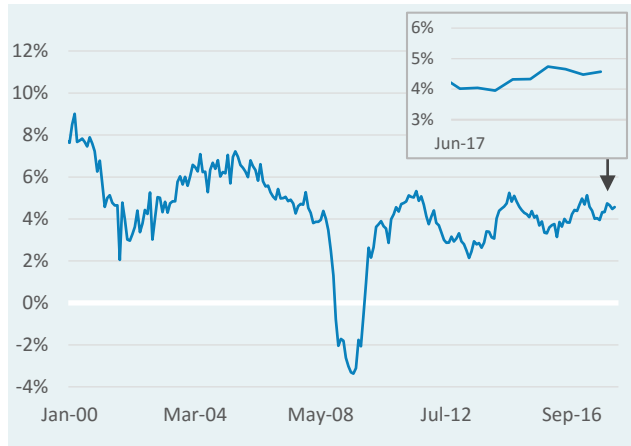
The U.S. continues to be in a *middle-of-the-road* expansion – characterized as not too fast and not too slow. Moderate improvements in wages and employment, conservative spending and borrowing trends, and rising wealth, indicate a sustainable environment going forward for the American consumer.

Current U.S. spending trends appear in-line, or a bit more conservative, than previous economic expansions. Behavior may be partly explained by a more timid pace of employee

wage growth, as well as not-too-distant memories of hardships experienced during the U.S. housing bubble.

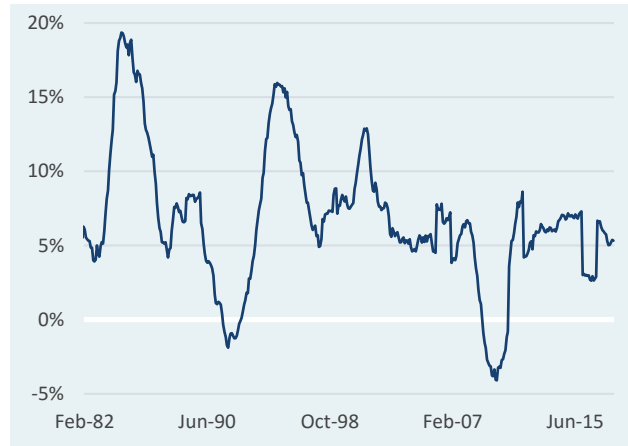
If interest rates continue to rise, this will likely act as a headwind to consumer spending as it becomes more expensive to borrow. Historically, spending patterns tend to ebb and flow through the economic cycle largely through the use of credit (i.e. credit cards, auto loans, home loans).

CONSUMER SPENDING (YOY GROWTH)



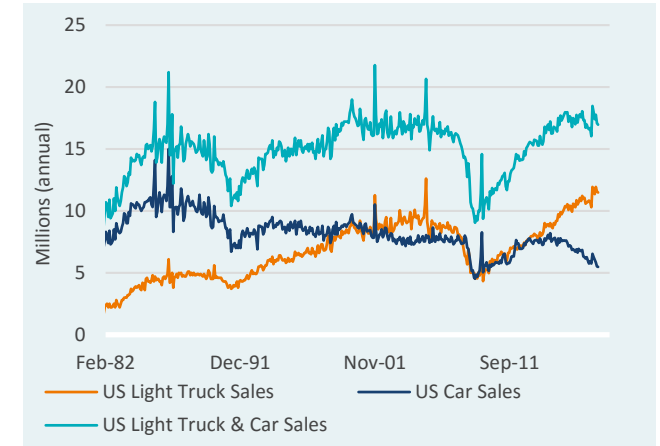
Source: Bloomberg, as of 2/28/18

CONSUMER CREDIT GROWTH (YOY)



Source: FRED, as of 1/31/18

AUTO SALES



Source: Bloomberg, as of 2/28/18

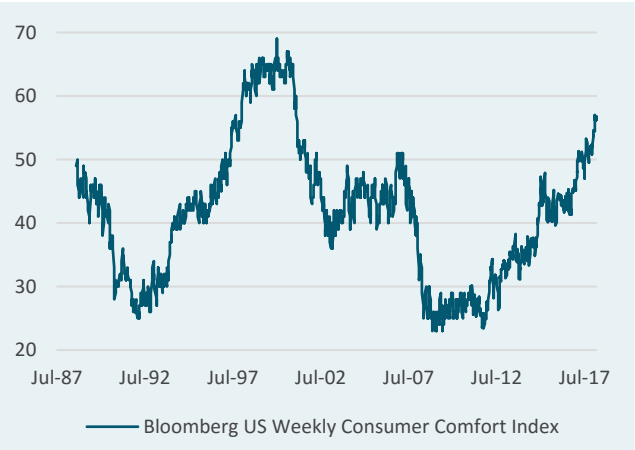
Sentiment

Consumer and business sentiment surveys further improved over the quarter and are now at or above levels of the latest 2001-2007 U.S. economic cycle. The University of Michigan Consumer Sentiment Index now sits at 101.4, which places it in the 91st percentile relative to its own history, since 1978. Consumers’ perception of current economic conditions (employment and wage prospects) are at their highest level since the late 1990s. The Bloomberg Consumer Comfort Index has risen to levels last seen in 2001.

The NFIB Small Business Optimism Index was 107.4 at the end of the quarter – near a record high, although there was a significant drop in businesses’ expectations for the economy. The net number of firms that expect the economy to improve fell from 43% to 32% in March, but this figure was still near historical highs.

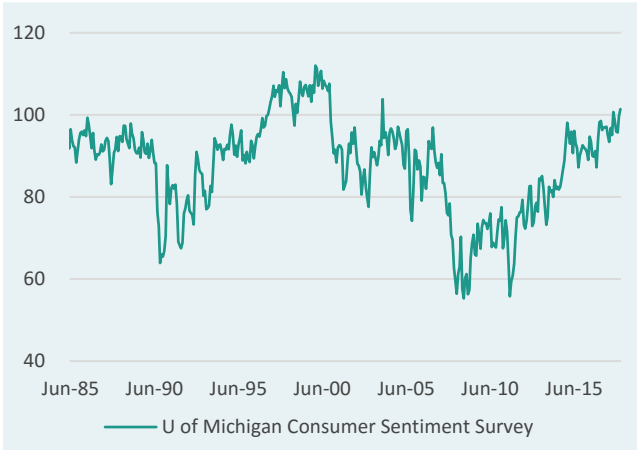
Consumers and small businesses have a positive outlook on the U.S. economy

CONSUMER COMFORT INDEX



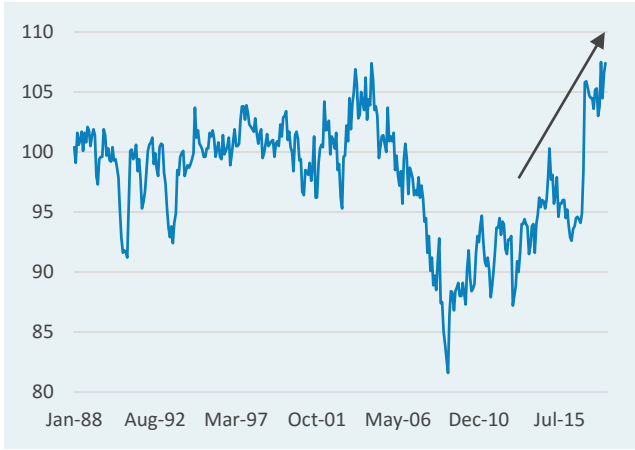
Source: Bloomberg, as of 3/25/18 (see Appendix)

CONSUMER SENTIMENT



Source: University of Michigan, as of 3/31/18 (see Appendix)

NFIB SMALL BUSINESS OPTIMISM INDEX



Source: NFIB, as of 2/28/18 (see Appendix)

Housing

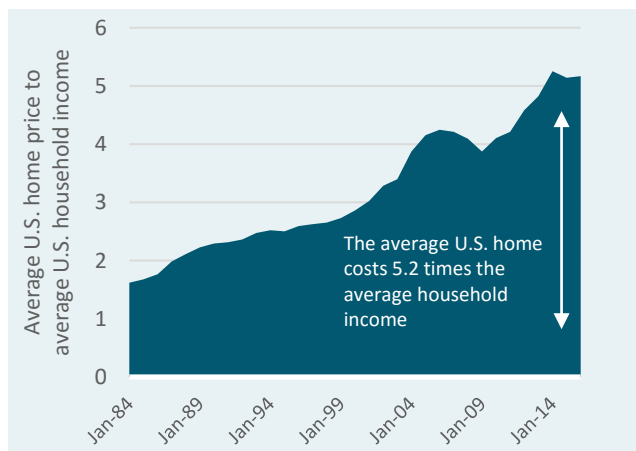
U.S. home prices rose 6.2% YoY, as of January, according to the Case-Shiller National Home Price Index.

Following the U.S. 2008 housing crisis, a combination of lower home prices and ultra-low interest rates made home ownership very affordable. These conditions eventually helped to bring back demand for homes and supported a rise in prices. Today, the price of an American home has returned to, and surpassed, pre-crisis levels. The average U.S. home costs more than 5 times the average household income, which has made purchasing a home increasingly difficult.

This affordability problem could be compounded further if interest rates rise and push mortgage interest rates upward.

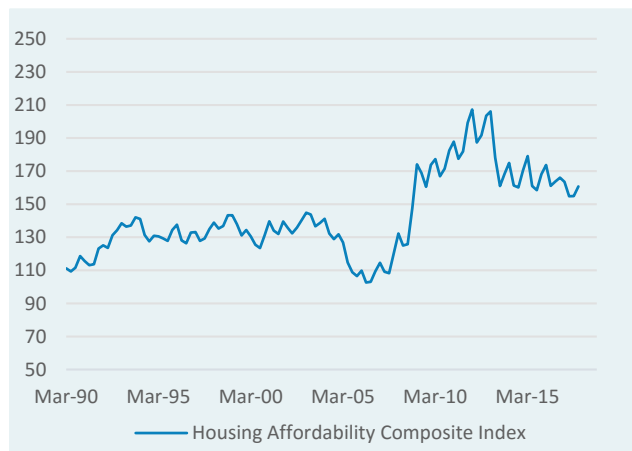
Rising home prices have lopsided effects on consumers. Higher prices add to the wealth of existing homeowners and land owners initially, but also lead to higher property taxes. For prospective homeowners, higher prices translate to a larger required down payment, greater mortgage payments, higher property taxes, and therefore a greater overall drag on standard of living.

HOME PRICE RELATIVE TO HOUSEHOLD INCOME



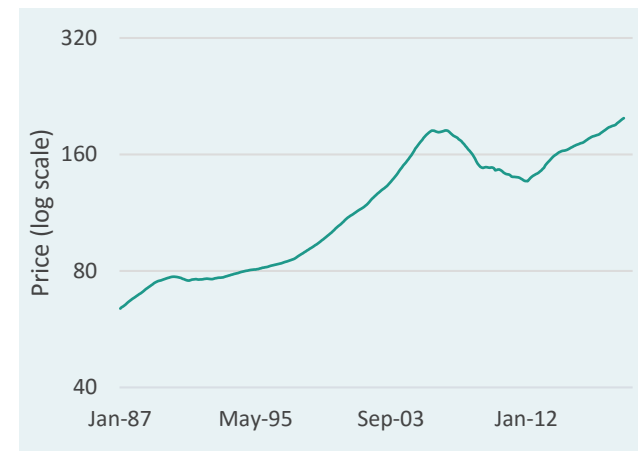
Source: FRED, 2016 census data

HOUSING AFFORDABILITY



Source: National Association of Realtors, as of 12/31/17

U.S. HOME PRICE INDEX



Source: Case-Shiller National Home Price Index, as of 2/28/18

International economics summary

- International economic growth was strong across countries in the fourth quarter, but a combination of recent economic data coming in below expectations and trade concerns created risks to the synchronized global growth narrative.
- The U.S. implemented 25% and 10% tariffs on steel and aluminum imports, respectively. When the tariffs were initially announced the White House pushed for all countries to be subject to them. However, many countries, such as Canada and Mexico, were given exemptions to allow for ongoing negotiations.
- In April, concerns over trade shifted to escalating tensions between the U.S. and China.
- The Eurozone experienced above-trend growth in the fourth quarter at 2.7% YoY, driven by contributions from household spending and fixed capital investment.
- Economic data out of the Eurozone consistently missed expectations in the first quarter. Industrial production was particularly disappointing – the year-over-year rate fell from 5.2% in December to 2.9% in February.
- Global PMIs remained above 50, indicating expansion in the manufacturing sector, although several countries experienced a decline. The Eurozone PMI fell from 60.8 to 56.6 during the quarter.
- The populist Five Star Movement performed better than expected in the Italian general election in March, winning the most seats of any party. However, no party won a majority in Parliament, resulting in the need to form a coalition government. Increasing support for populist governments (i.e. Hungary and Poland) across Europe remains a risk to investors.

Area	GDP (Real, YoY)	Inflation (CPI, YoY)	Unemployment
United States	2.5% <i>12/31/17</i>	2.4% <i>3/31/18</i>	4.1% <i>3/31/18</i>
Western Europe	2.5% <i>12/31/17</i>	1.3% <i>3/31/18</i>	7.4% <i>12/31/17</i>
Japan	2.0% <i>12/31/17</i>	1.5% <i>2/28/18</i>	2.5% <i>2/28/18</i>
BRICS Nations	6.2% <i>12/31/17</i>	2.6% <i>3/31/18</i>	5.6% <i>12/31/17</i>
Brazil	2.1% <i>12/31/17</i>	2.7% <i>3/31/18</i>	12.4% <i>3/31/18</i>
Russia	0.9% <i>12/31/17</i>	2.4% <i>3/31/18</i>	5.0% <i>2/28/18</i>
India	7.2% <i>12/31/17</i>	4.4% <i>2/28/18</i>	8.8% <i>12/31/17</i>
China	6.8% <i>12/31/17</i>	2.1% <i>3/31/18</i>	3.9% <i>12/31/17</i>

International economics

International economic growth continued its upward trend, particularly in emerging countries, where a weaker dollar, higher commodity prices, and stronger external demand has been supportive. Additionally, inflation in emerging economies decelerated to 3.0% in 2017, allowing central banks to cut interest rates. Collectively, the BRICS countries grew by 6.2% in the fourth quarter, the fastest pace since 2012.

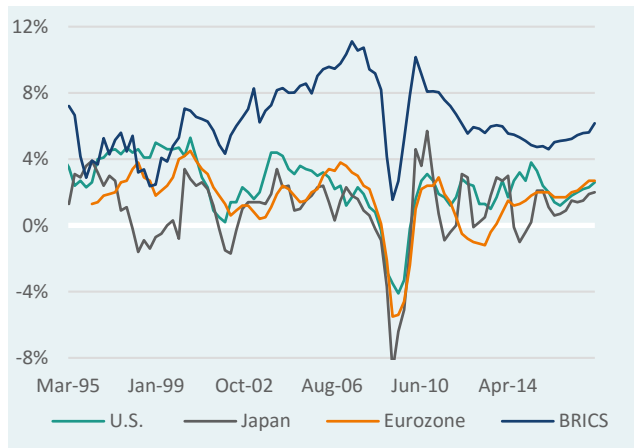
The narrative on international developed economies did not materially change during the quarter – growth accelerated,

inflation remained low, and central banks provided support, but contemplated exit strategies. While inflation is starting to show modest signs of life in the U.S., the Eurozone and Japan are still experiencing inflation well below 2%. In February, year-over-year core CPI growth was 1.0% in both economies.

The European Central Bank continues to express plans to end asset purchases in September and begin raising interest rates sometime next year. The pace of interest rate hikes will likely be heavily dependent on inflation and market reaction to tightening.

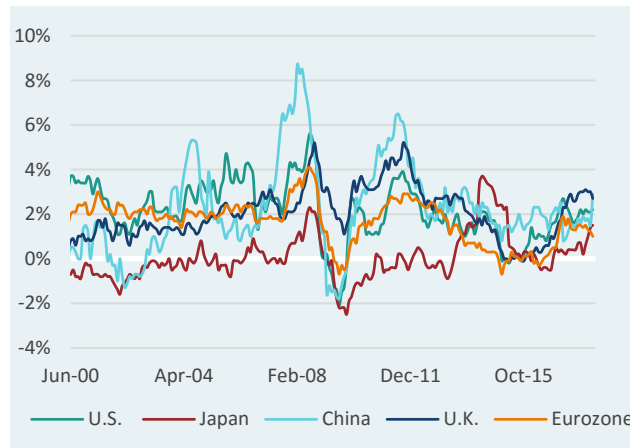
Economic growth improved, especially in emerging markets

REAL GDP GROWTH (YOY)



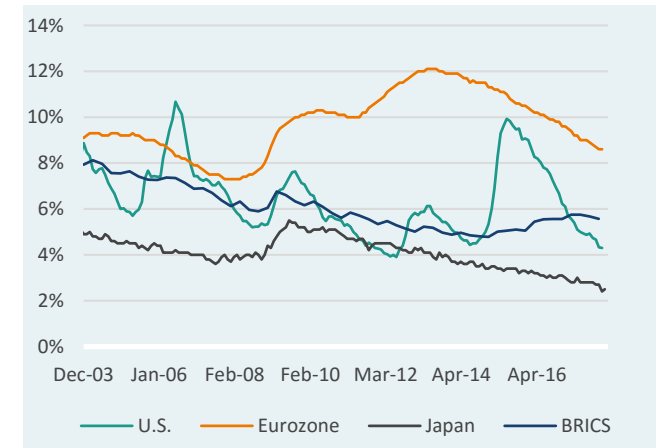
Source: Bloomberg, as of 12/31/17

INFLATION (CPI)



Source: Bloomberg, as of 2/28/18

UNEMPLOYMENT



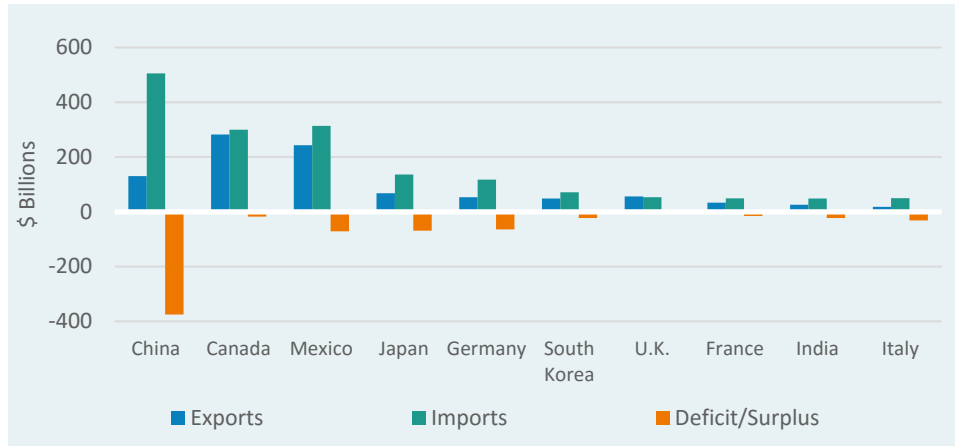
Source: Bloomberg, as of 1/31/18 or most recent release

International trade

The U.S. has enacted a 25% tariff on steel and 10% tariff on aluminum, which went into effect March 23rd, though many U.S. trade partners have been exempted. The U.S. is engaged with China over the significant U.S.-China trade deficit, allegations of China's asymmetrical trade barriers, and the long-term issue of theft of U.S. intellectual property by Chinese companies. The actions of the U.S. administration have stoked fears of a global trade war. While it is broadly agreed that tariffs have a net negative impact on global growth, many hold the view that the U.S. should address these long-running trade issues with China. The motivations and strategy behind the U.S. administration's actions are not yet fully known, but it should not be assumed that the outcome of this process will be negative for the U.S. or the global economy.

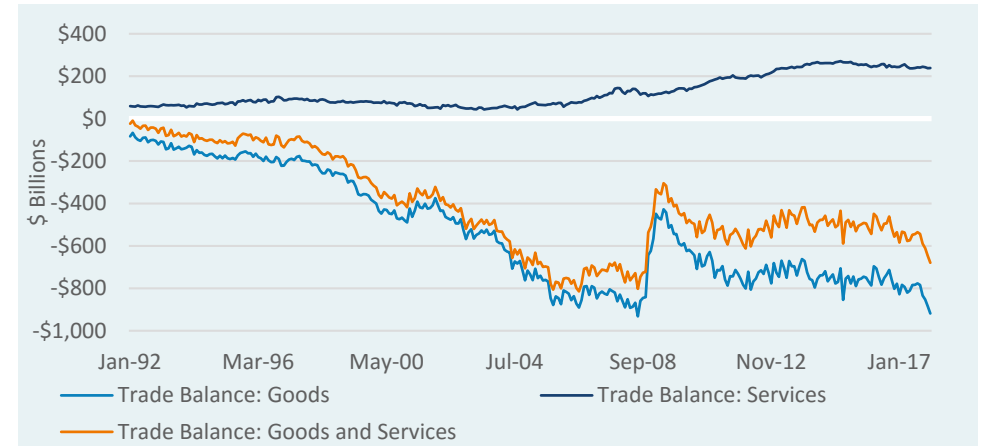
Steel and aluminum represent a small portion of total U.S. imports. On a standalone basis, the economic impact of these tariffs will likely be small. The risk of escalation seems to be the market's primary concern. China-U.S. trade amounts to approximately \$650 Billion annually.

U.S. TRADE BALANCE



Source: U.S. Census Bureau, 2017

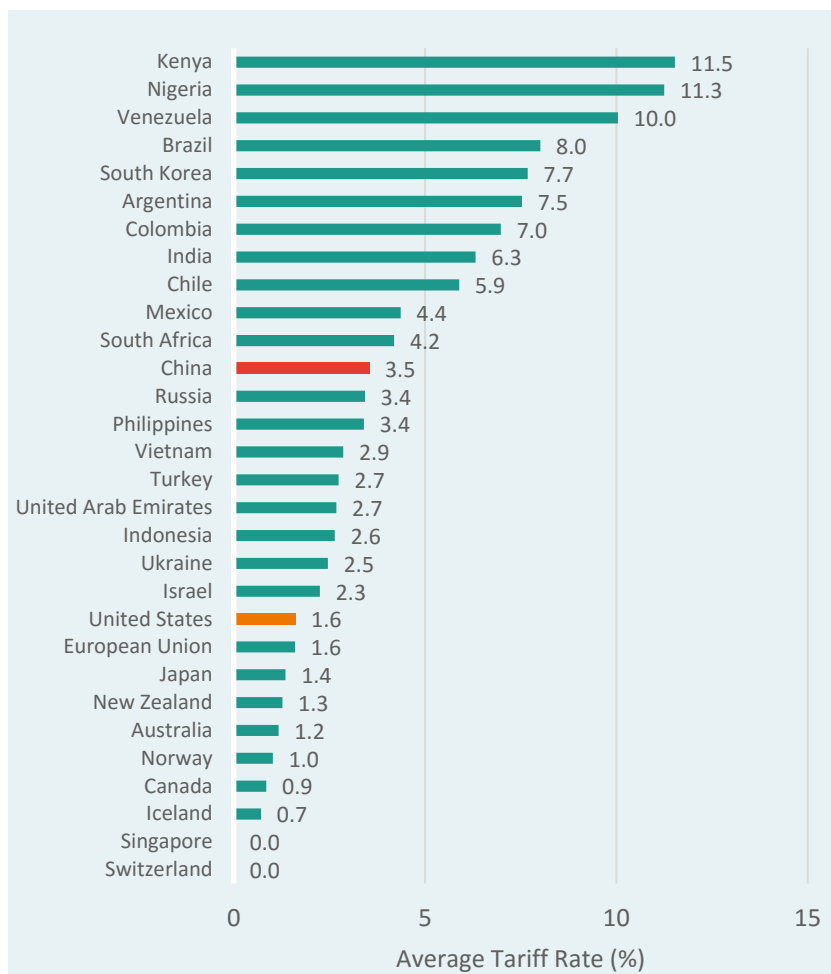
U.S. TRADE – GOODS & SERVICES (ANNUALIZED)



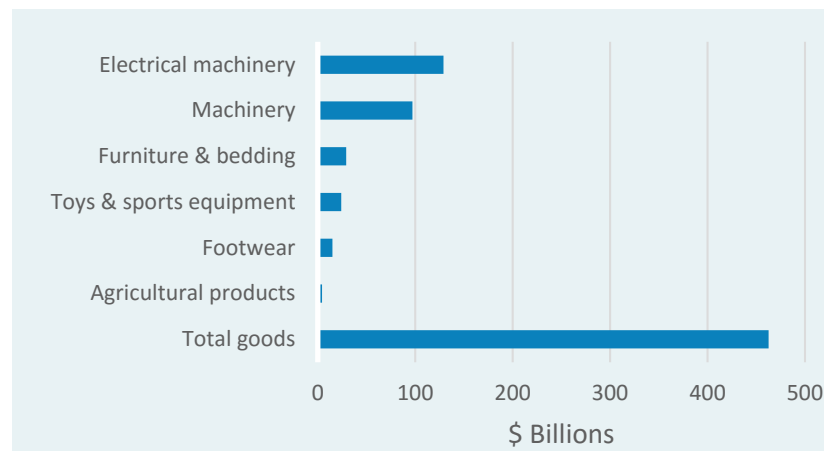
Source: FRED

International trade

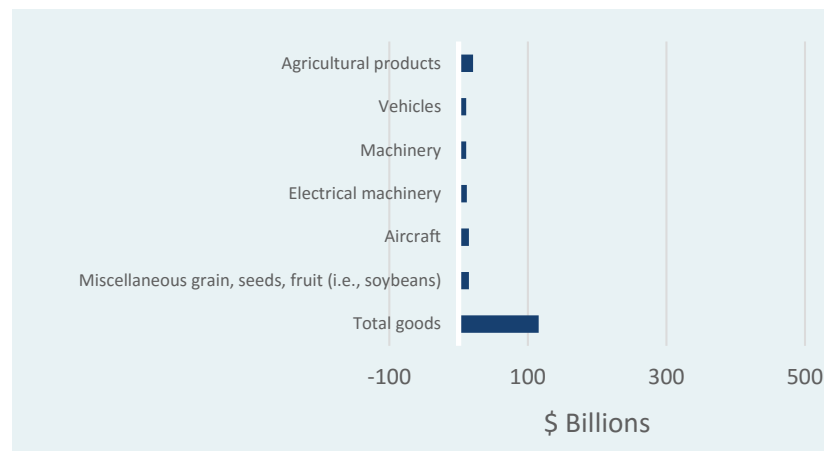
GLOBAL TARIFFS



CHINA EXPORTS TO U.S.



U.S. EXPORTS TO CHINA



Source: World Trade Organization, 2016

Fixed income rates & credit

Interest rate environment

- The Fed raised interest rates by 25 bps to a target range of 1.50% - 1.75% in March, as expected. In his first public comments since taking over as Fed chairman, Jerome Powell's views appeared to support a continuation of gradual monetary tightening.
- According to the Fed dot plot, officials are expecting two additional rate hikes this year, on par with market pricing.
- Long-term Treasury yields rose at the beginning of the year, likely influenced by increasing growth and inflation expectations. The 10-year yield peaked at 2.95% in late February, up 55 bps from year-end. Yields failed to hold these levels, however, and finished the quarter at 2.74%.
- Short-term borrowing costs continued to rise during the quarter, especially in debt tied to Libor. The 3-month USD Libor rate moved steadily higher from 1.7% to 2.3%. Much of this increase was likely mechanical due to record high Treasury bill issuance and repatriation of foreign profits.
- Sovereign yields in developed Europe also ticked up in January, coinciding with yield increases in U.S. Treasuries, but came back down in the last two months of the quarter. German 10-year yields peaked at a two year high of 0.77% in early February before finishing the quarter at 0.50%.
- Developed international central banks remain accommodative compared to the Fed, but they have increasingly hinted towards policy normalization. The ECB is likely next in line to begin monetary tightening by ending asset purchases and raising rates sometime next year. The BOJ has yet to provide any details on ending its stimulus program, but officials have noted internal discussions have begun.

Area	Short Term (3M)	10 Year
United States	1.70%	2.74%
Germany	(0.75%)	0.50%
France	(0.58%)	0.72%
Spain	(0.50%)	1.16%
Italy	(0.43%)	1.79%
Greece	1.31%	4.32%
U.K.	0.49%	1.35%
Japan	(0.17%)	0.04%
Australia	2.03%	2.60%
China	3.12%	3.77%
Brazil	6.31%	9.50%
Russia	6.01%	7.16%

Source: Bloomberg, as of 3/31/18

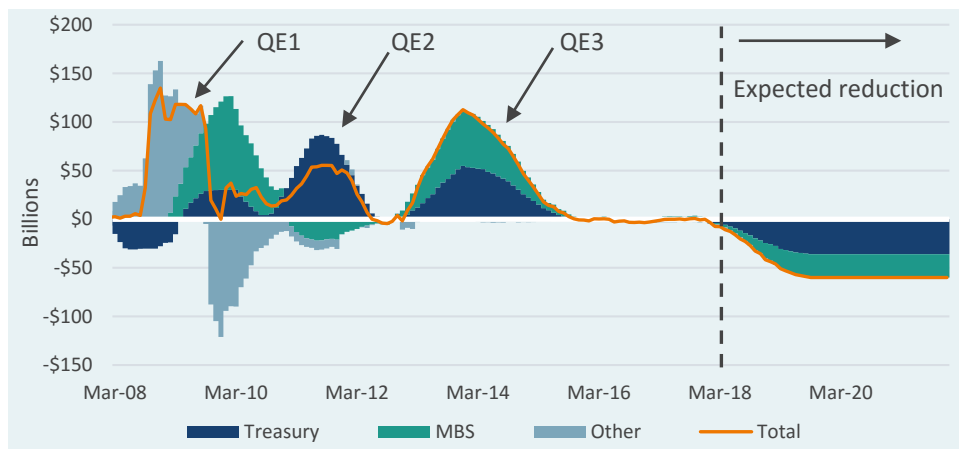
Fed tightening

In Jerome Powell's first meeting as chairman, the Fed hiked interest rates by 25 bps to a target range of 1.50% - 1.75%, as expected. The Fed's forecast for future hikes shifted up slightly based on the dot plot, but Powell's messaging appeared to be similar to the precedent set by Yellen – slow and gradual rate increases coinciding with firming inflation that will eventually reach the 2% target. Markets priced in 25 bps of additional tightening for 2018 during the quarter, and pricing is now on par with Fed expectations of two more rate rises this year. The balance sheet reduction has gone as planned, but we are likely too early in the process to gain insight into its market impact.

The Fed has intentionally tightened slowly, and markets have been able to digest the 150 bps of rate increases thus far. This is consistent with the beginning of past Fed tightening cycles where economic fundamentals were strong. As we move further down this path, additional increases in discount rates will have an increasing impact on the economy and risk assets. However, we believe the Fed will continue to be patient, barring a material change in the inflation environment.

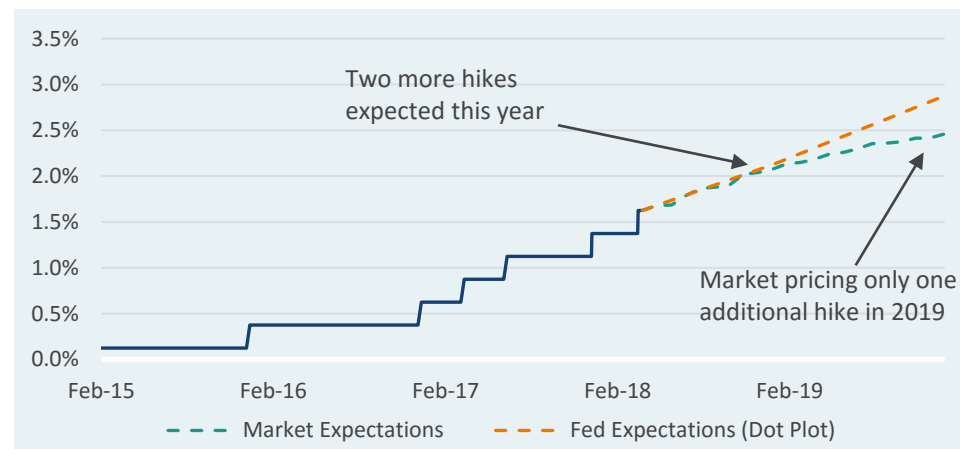
Fed tightening has gone as expected

FED BALANCE SHEET FLOW (12-MONTH CHANGE)



Source: Federal Reserve, as of 3/31/18

FED FUND EXPECTATIONS



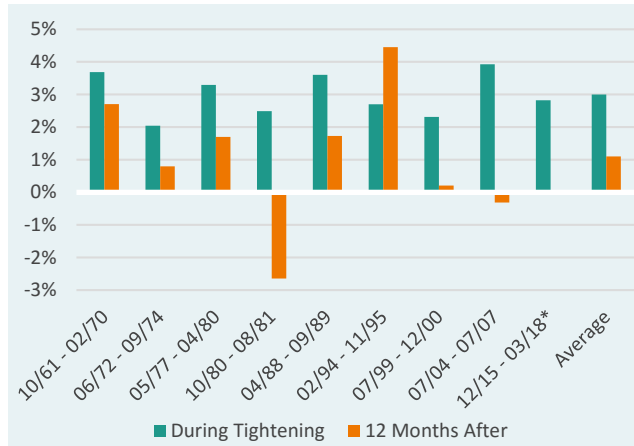
Source: Bloomberg, Federal Reserve as of 3/31/18

The history of monetary tightening

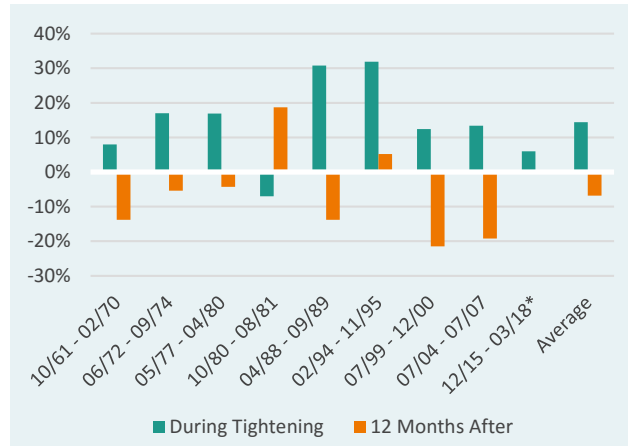
The difficulty of assessing the potential effect of monetary tightening lies in the fact that there are relatively few historical observations to analyze. Since 1959, the Fed has only tightened policy nine times, including the current period which began in December of 2015. There are also unique circumstances in each period, such as the balance sheet reduction coinciding with interest rate increases in this cycle. We looked at three variables: GDP growth, equity earnings growth, and equity performance to get a better understanding of how Fed tightening has historically impacted the economy and financial markets.

As one might expect, GDP growth has been stronger during Fed tightening than in the 12 months following. The same relationship has occurred with equity earnings. This is most likely because the Fed is reacting to underlying economic data rather than driving it. When the economy heats up, the Fed hikes interest rates to avoid overheating, and then stops when things turn over. Equity returns reveal a much more interesting, but muddier picture. On average, equity returns have been higher in the 12 months after tightening than during, although in three of the eight previous periods, equities have experienced a 10% correction.

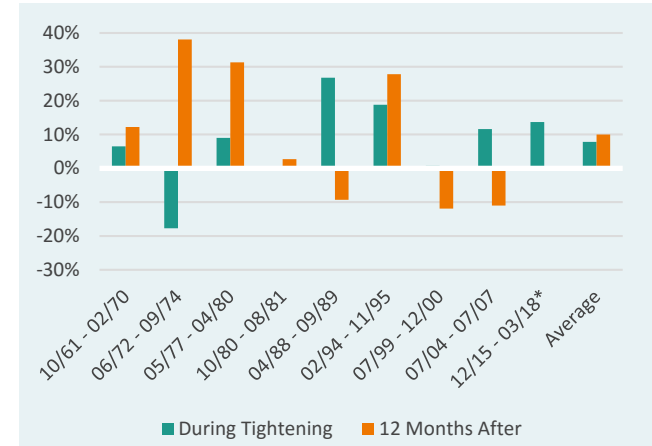
REAL GDP GROWTH



S&P 500 EARNINGS GROWTH



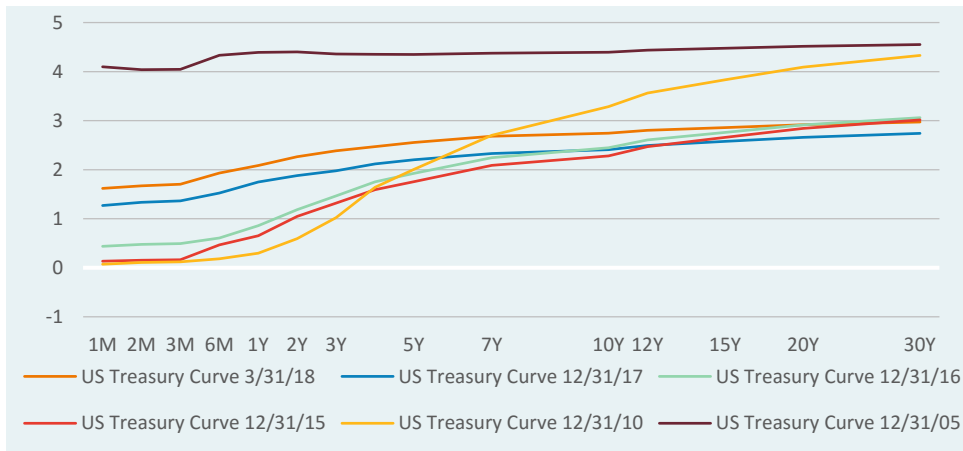
S&P 500 PERFORMANCE



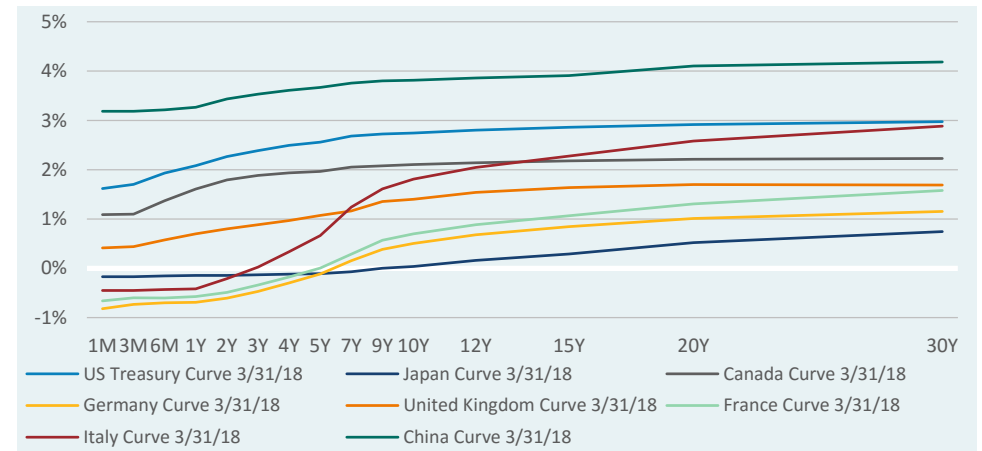
Source: Bloomberg, Verus, analysis started in 1959, all growth calculations are annualized using monthly (earnings/equity performance) or quarterly (GDP) data

Yield environment

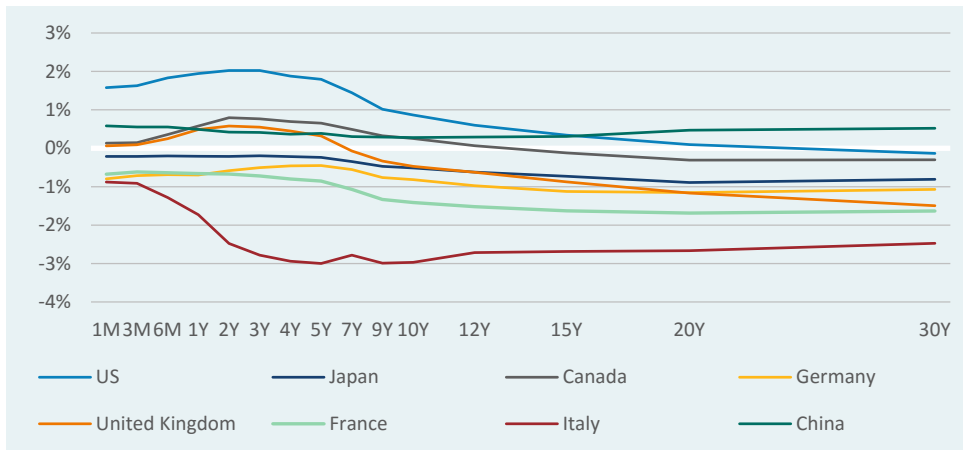
U.S. YIELD CURVE



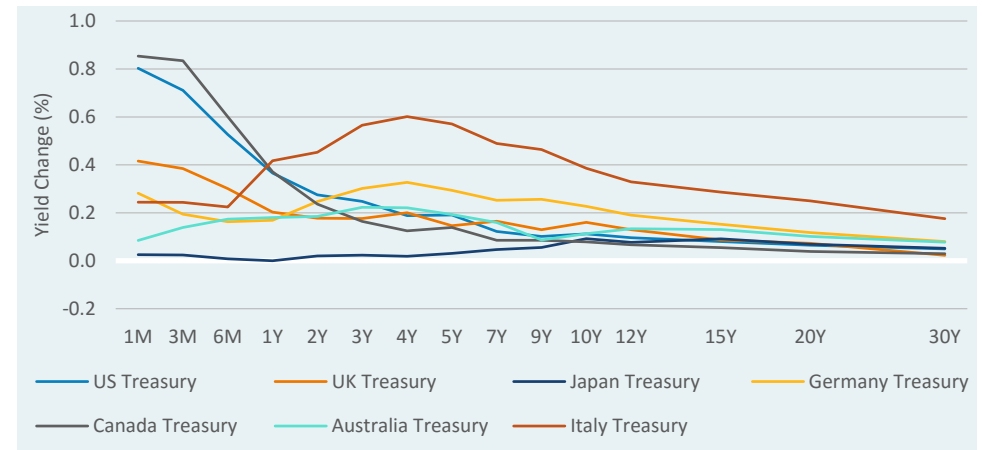
GLOBAL GOVERNMENT YIELD CURVES



YIELD CURVE CHANGES OVER LAST FIVE YEARS



IMPLIED CHANGES OVER NEXT YEAR



Source: Bloomberg, as of 3/31/18

Credit environment

Credit spreads in both leveraged loans and high yield have continued to be tight, sitting well below their historic averages. Leveraged loan prices were relatively immune to equity volatility in February. Loans have outperformed high yield year-to-date with an absolute return of 1.6%, driven by strong issuance and demand. LIBOR has steadily risen since 2016, surpassing the LIBOR floors that exist in senior loans, causing them to be fully floating-rate instruments.

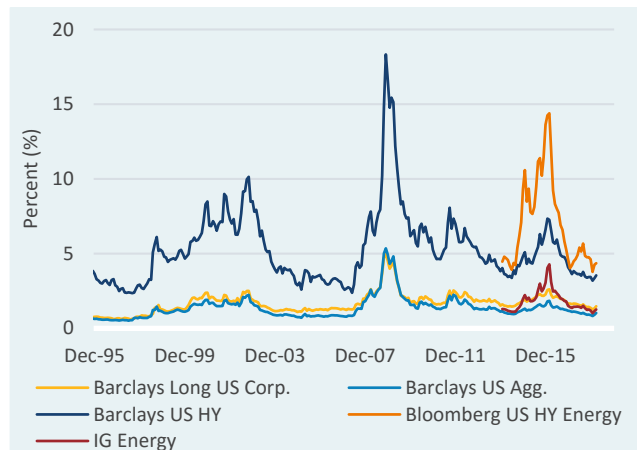
U.S. high yield option-adjusted spreads widened slightly in the

first quarter to 3.5%, with the asset class generating a -0.9% total return for the quarter. Tight credit spreads in both high yield and loans have been driven by strong corporate fundamentals, manageable debt maturities and general macroeconomic improvement. Credit spreads have historically been a good indicator of future performance relative to Treasuries.

Based on low interest rates and tight spreads, we recommend an underweight to U.S. investment and high yield credit.

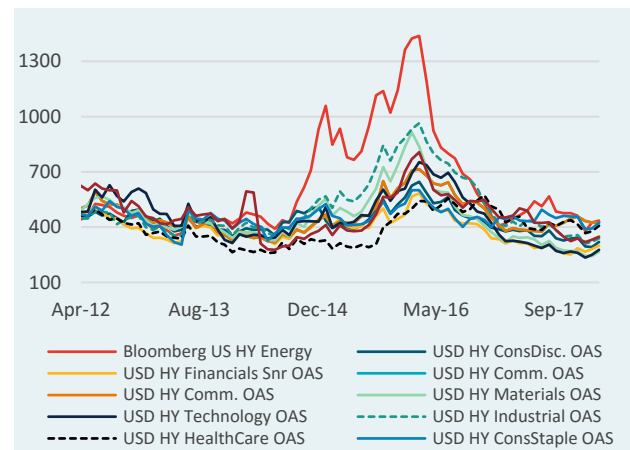
Credit spreads are tight across the capital structure

SPREADS



Source: Barclays, Bloomberg, as of 3/31/18

HIGH YIELD SECTOR SPREADS (BPS)



Source: Bloomberg, as of 3/31/18

Market	Credit Spread (3/31/18)	Credit Spread (1 Year Ago)
Long US Corporate	1.5%	1.1%
US Aggregate	1.0%	1.1%
US High Yield	3.5%	3.8%
US Bank Loans	3.5%	3.8%

Source: Barclays, Credit Suisse, Bloomberg, as of 3/31/18

Issuance and default

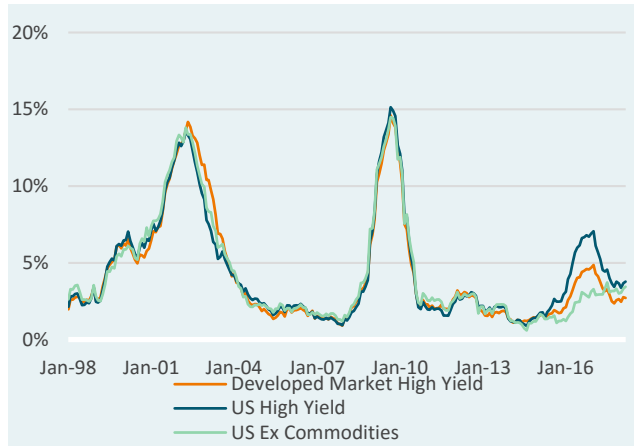
Default activity remains low and stable in the U.S. and international credit markets. The par-weighted U.S. default rate remains below its long-term average of 3.0-3.5% and is currently at 2.4%. In the first quarter, 27% of total defaults have been in the retail sector, followed by energy and broadcasting.

Issuance in bonds and loans both increased in 2017. New issue spreads continue to compress with strong demand supported by significant retail and institutional inflows into the both high yield and senior loan asset class, as well as CLO formation.

Default volume remains below long-term averages

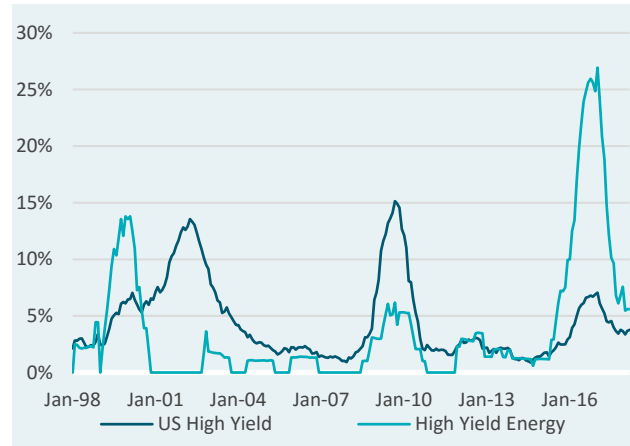
Senior loan and high yield markets are recovering from a wave of defaults that were generated from energy and metals/mining sectors in 2015-2016. Recovery rates for high yield bonds have vastly improved since year-end 2016.

HY DEFAULT TRENDS (ROLLING 1 YEAR)



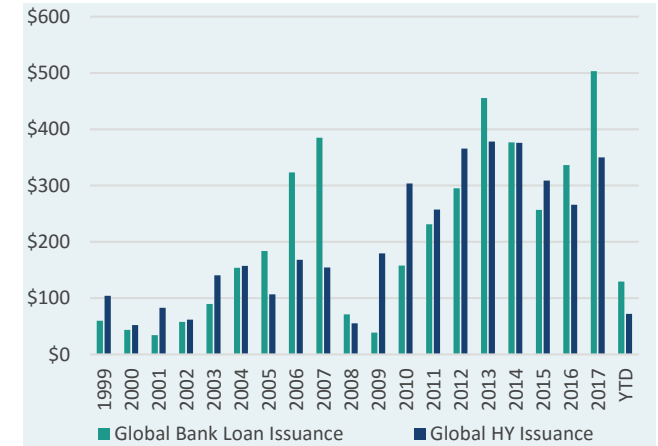
Source: BofA Merrill Lynch, as of 3/31/18

ENERGY DEFAULT TRENDS



Source: BofA Merrill Lynch, as of 3/31/18

GLOBAL ISSUANCE (BILLIONS)



Source: Bloomberg, BofA Merrill Lynch, as of 3/31/18

Equity

Equity environment

- We maintain an overweight position to equities primarily due to enthusiasm for emerging markets. Though the February market correction dampened investor excitement, it is helpful to remind ourselves that 10% equity drawdowns are fairly common.
- Upward price momentum in equities has diminished following the February market correction. Investor sentiment is less positive, but the global economic and earnings backdrop remains intact.
- 2018 is expected to be a banner year for U.S. corporate profits. Earnings for the year are forecast to grow 17.3%, with revenue growth of 7.3% according to Factset - a rare and impressive year for U.S. businesses. A continuation of this trend would be supportive of equity performance.
- Equity valuations (price-to-earnings multiples) fell to more attractive levels in Q1 due to the combination of lower equity prices and strong earnings growth.
- Equity volatility has remained extremely low since the beginning of 2017. However, the equity drawdown and volatility spike in February appears to have ended this period of calm. Investors might expect a more normal volatility environment going forward.
- Currency movement has contributed to volatility and great return disparity for investors with unhedged investments in international assets. A hedging program could allow investors to reduce or eliminate uncompensated currency risk.

	QTD TOTAL RETURN		YTD TOTAL RETURN		1 YEAR TOTAL RETURN	
	(unhedged)	(hedged)	(unhedged)	(hedged)	(unhedged)	(hedged)
US Large Cap (Russell 1000)	(2.0%)		(2.0%)		12.4%	
US Small Cap (Russell 2000)	(1.1%)		(1.1%)		10.5%	
US Large Value (Russell 1000 Value)	(4.0%)		(4.0%)		5.6%	
US Large Growth (Russell 1000 Growth)	(0.1%)		(0.1%)		19.3%	
International Large (MSCI EAFE)	(1.6%)	(3.8%)	(1.6%)	(3.8%)	14.4%	7.1%
Eurozone (Euro Stoxx 50)	(0.5%)	(3.2%)	(0.5%)	(3.2%)	18.0%	0.3%
U.K. (FTSE 100)	(3.8%)	(6.9%)	(3.8%)	(6.9%)	11.9%	1.2%
Japan (NIKKEI 225)	0.6%	(5.3%)	0.6%	(5.3%)	20.9%	15.2%
Emerging Markets (MSCI Emerging Markets)	1.2%	0.4%	1.2%	0.4%	23.1%	20.4%

Source: Russell Investments, MSCI, STOXX, FTSE, Nikkei, as of 3/31/18

Domestic equity

U.S. equities delivered a loss in Q1 (Russell 1000 -2.0%) - a change of pace from steady and strong gains in 2017. Equity indexes around the world fell between 8-12% in early February as the recent bull run was interrupted. Since the selloff, most markets have been rangebound but relatively flat overall. Volatility seems to have returned to the markets as sizable day-to-day swings have been the norm.

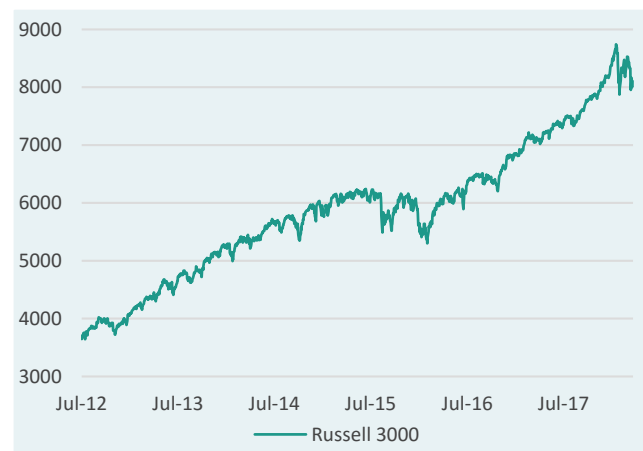
While large price movements tend to naturally cause

investor fear, it is not apparent that the attractive macro picture has changed – i.e. positive economic growth, very strong earnings gains, and healthy sentiment. Equity prices typically follow growth and corporate profit trends over the medium and long-term term, which likely provides some support against larger downside equity movement.

However, the February selloff has dampened recent positive upward price momentum. Momentum is now more neutral as market prices flatten out.

Fundamentals appear unchanged despite falling prices

U.S. EQUITIES



Source: Russell Investments, as of 3/31/18

EARNINGS GROWTH



Source: S&P 500, as of 3/31/18

S&P 500 PRICE & EARNINGS



Source: Bloomberg, as of 3/31/18

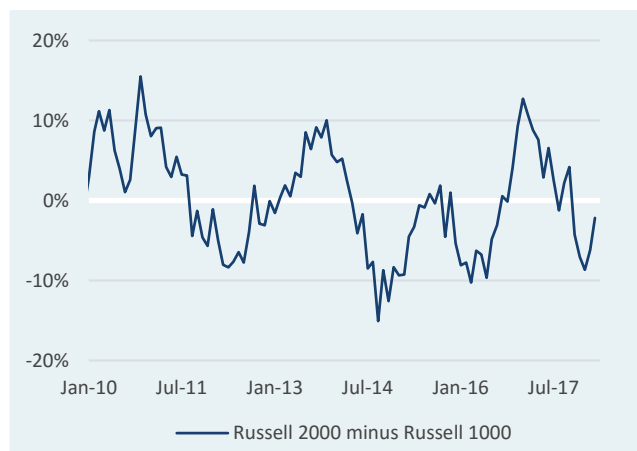
Domestic equity size & style

Large cap equities (Russell 1000 -2.0%) lagged small cap equities (Russell 2000 -1.1%) during the quarter. Value stocks delivered exceptionally poor performance in Q1 (Russell 1000 Value -4.0% vs. Russell 1000 Growth -0.1%), dragged down by the energy and materials sectors, which are heavily tilted towards value. Despite a sell-off in mega-cap tech stocks in March due mainly to company-specific issues, such as a data breach at Facebook and President Trump targeting Amazon over its relationship with the U.S. Postal Service, tech was still the best performing sector in the first quarter.

Traditional style factors – small cap and value in particular – have hit a rough patch since the 2008-2009 global financial crisis. It may be helpful to remember that these periods do occur. In fact, there are multiple points in history where the equity small-cap and value premiums delivered negative returns over more than a 10 year period.

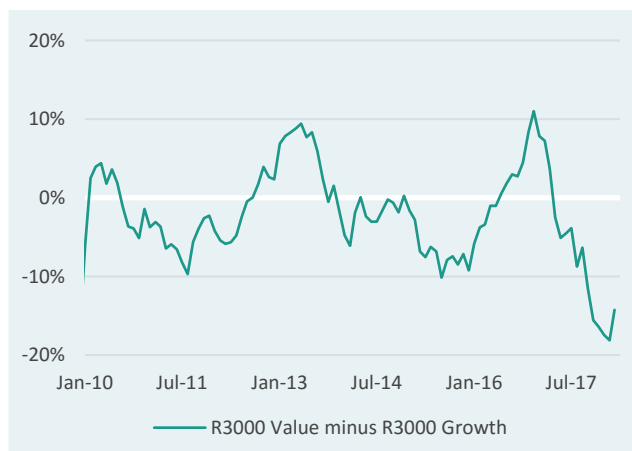
In U.S. equities, value has continued to underperform in recent years, while momentum delivered outperformance alongside the bull market rally.

SMALL CAP VS LARGE CAP (YOY)



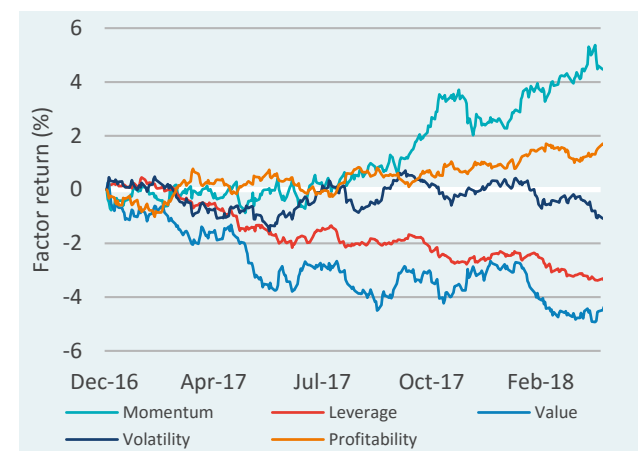
Source: FTSE, as of 3/31/18

VALUE VS GROWTH (YOY)



Source: FTSE, as of 3/31/18

BLOOMBERG FACTOR PERFORMANCE



Source: Bloomberg, as of 3/31/18

Hard times for value investing

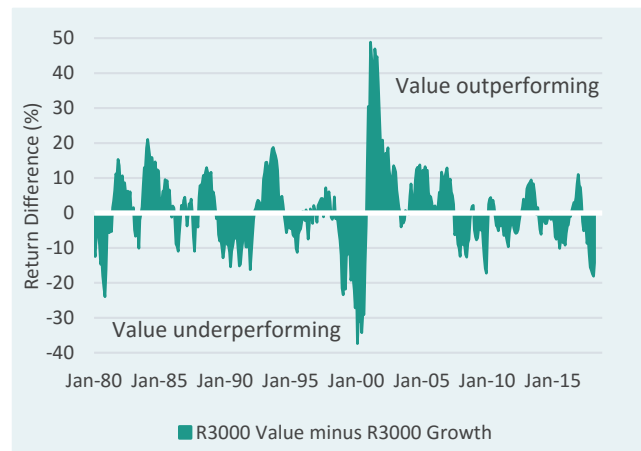
Value equities have underperformed growth equities over the past 10 years. This has occurred only two other times since the 1920's - both periods were followed by a rapid bounce-back in value performance. Is a turning point on the horizon?

Value stocks are concentrated in the financial sector, and growth stocks are concentrated in the technology sector. The global financial crisis led to extreme underperformance of financial stocks, which hurt value. At the same time, technology stocks have fared exceptionally well. These two effects compounded value's underperformance.

The current price difference between value and growth stocks is near the historical average, which is notably different from the most recent bout of value underperformance – the 2001 tech bubble. At that time, growth stocks were anomalously expensive relative to value stocks, which helped explain how value stocks roared back to life after the tech bubble burst.

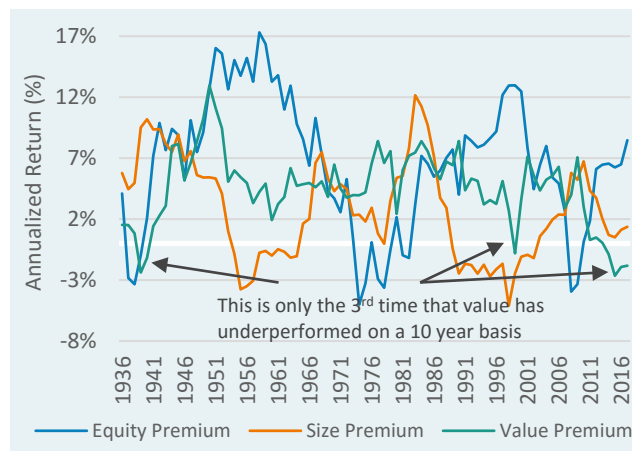
We do not yet see a catalyst for a value comeback. Prices are fairly normal, and the economic environment is positive (growth often performs well during later stages of economic expansions). We recommend that value investors stay the course. Timing factors over the short term is and will always be difficult.

U.S. VALUE PERFORMANCE (1YR ROLLING)



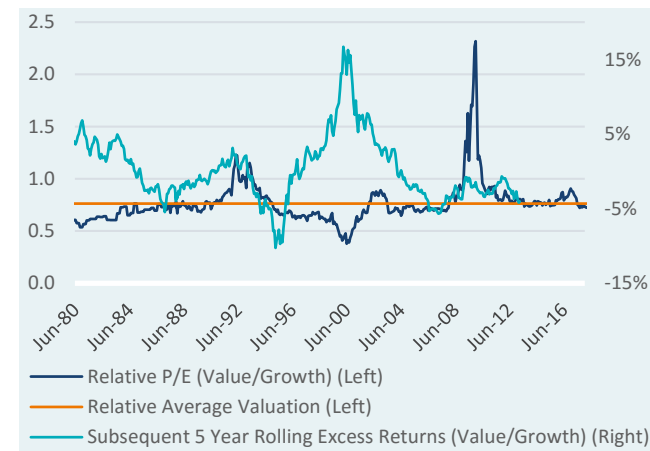
Source: FTSE, as of 3/31/18

U.S. VALUE PERFORMANCE (10YR ROLLING)



Source: Fama French Library, as of 2/28/18

VALUE VS GROWTH - P/E MULTIPLES



Source: FTSE Russell, Bloomberg, as of 3/31/18

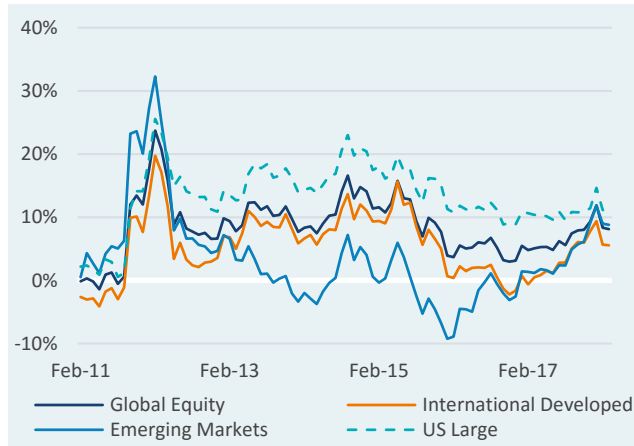
International developed equity

Unhedged International equities were in line with U.S. equities during Q1, delivering slightly negative performance. The MSCI EAFE Index returned -1.5%. Positive currency returns masked underperformance of local developed market equities. On a hedged basis, the MSCI EAFE Index posted a -3.8% return. Looking forward, accelerating corporate earnings, and more attractive valuations following the February fall in equity prices, may be supportive for another positive year in 2018. Forward one year earnings growth is expected to be around 15%.

Along with the U.S., most developed markets also experienced an approximate 10% drawdown in February, but were not as quick to recover. Most regional benchmarks finished the quarter still 7-10% below recent peaks.

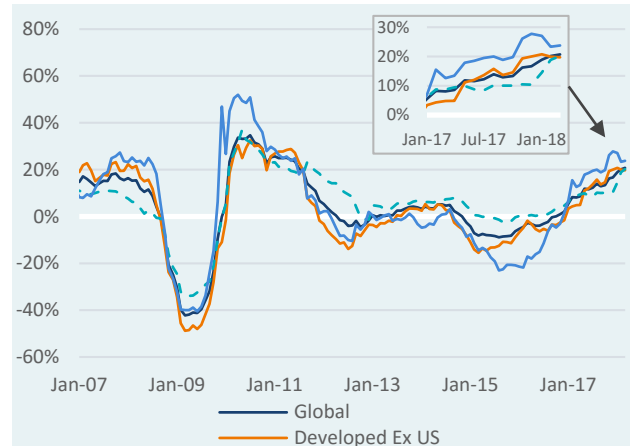
Trailing P/E ratios for the EAFE Index have moved to below average, providing a possible value opportunity. However, downside risks to these markets, including political issues and reliance on central bank support may be a justification for low valuations.

EQUITY PERFORMANCE (3-YEAR ROLLING)



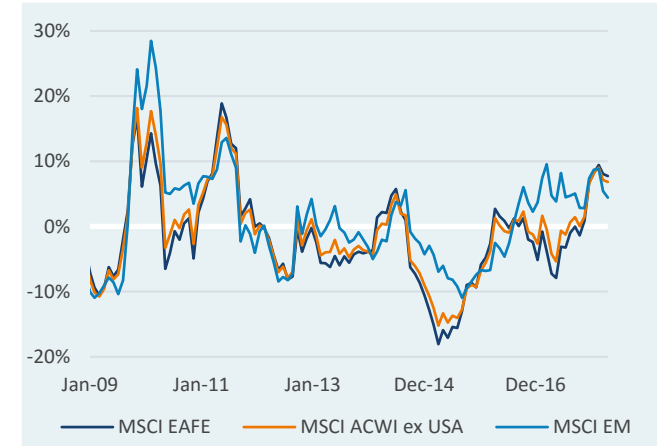
Source: Bloomberg, as of 3/31/18

EARNINGS GROWTH (YOY)



Source: MSCI, as of 3/31/18 – YoY growth in forward earnings

EFFECT OF CURRENCY (1-YEAR ROLLING)



Source: MSCI, as of 3/31/18

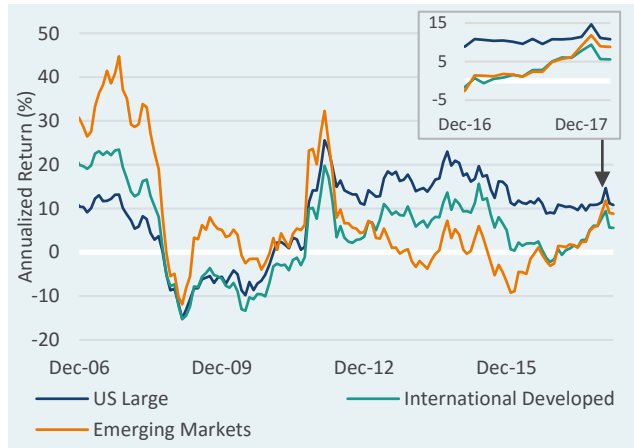
Emerging market equity

We maintain an overweight to emerging market equities. Emerging market equities have exhibited more modest valuations relative to developed markets such as the U.S., while these economies in aggregate continue to outpace developed economies by a wide margin. Furthermore, emerging market currencies remain depressed relative to history. Cheaper valuations, much stronger economic growth, and a currency tailwind may bode well for future performance.

Emerging economies have led the way over the past year in terms of economic growth, earnings, and equity performance. Emerging market equities have delivered positive performance year-to-date despite the February sell-off (MSCI Emerging Markets +1.2%) while developed markets were in negative territory to end the first quarter.

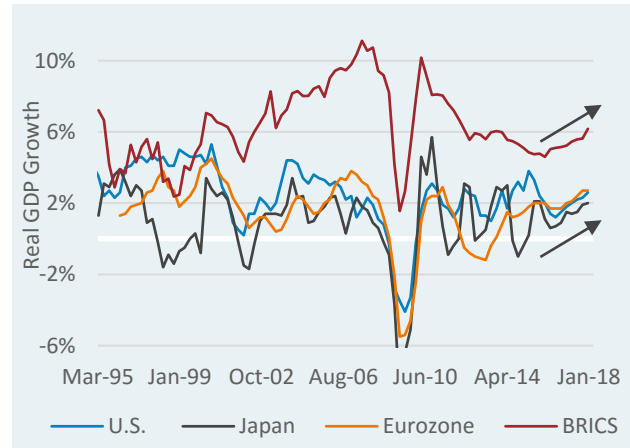
Coordinated global growth has helped propel emerging market equities forward

EQUITY PERFORMANCE (3YR ROLLING)



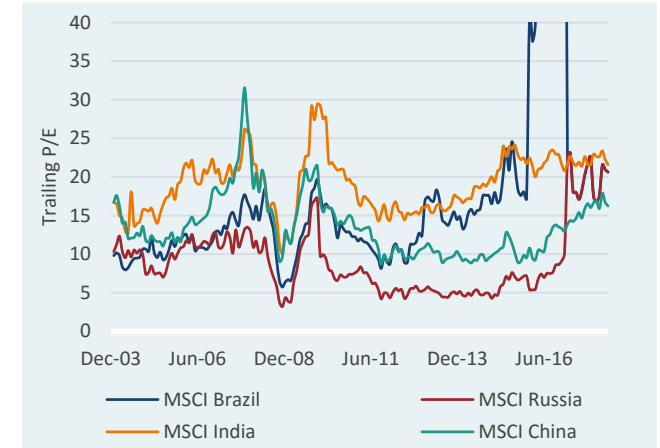
Source: Standard & Poor's, MSCI, as of 3/31/18

ECONOMIC MOMENTUM



Source: Bloomberg, as of 12/31/18

BRIC VALUATIONS



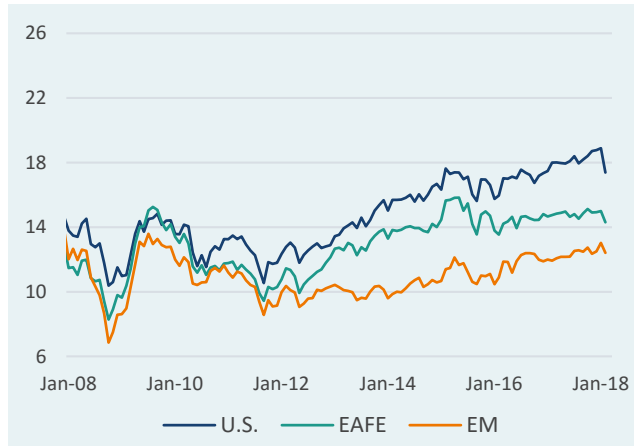
Source: MSCI, as of 3/31/18

Equity valuations

Equity valuations fell over the quarter due to both a decrease in price and an increase in earnings. International developed equities experienced the biggest contraction in valuations and the trailing P/E ratio (16.5) is now below the median multiple since 1995 (20.0). Price-to-earnings multiples also came down in the U.S., although they remain above average. The trailing 12-month P/E ratio for the S&P 500 Index was 21.3 at the end of March, compared to the 30-year median value of 18.3. After strong price gains over the past year, emerging market equity valuation metrics are near their long-term averages.

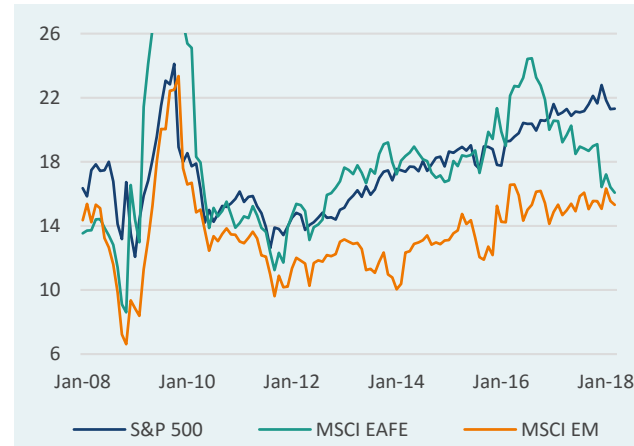
Although most equity markets experienced a 10% correction during the quarter, momentum in earnings growth remained strong. A continuation of this trend may result in further normalization of valuations without a significant drop in equity prices.

FORWARD P/E RATIOS



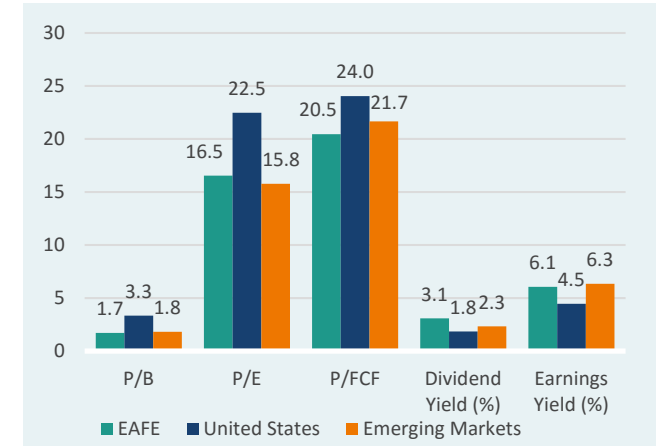
Source: MSCI, as of 3/31/2018

TRAILING P/E RATIOS



Source: Bloomberg, as of 3/31/18

VALUATION METRICS



Source: Bloomberg, as of 3/31/18 - trailing P/E

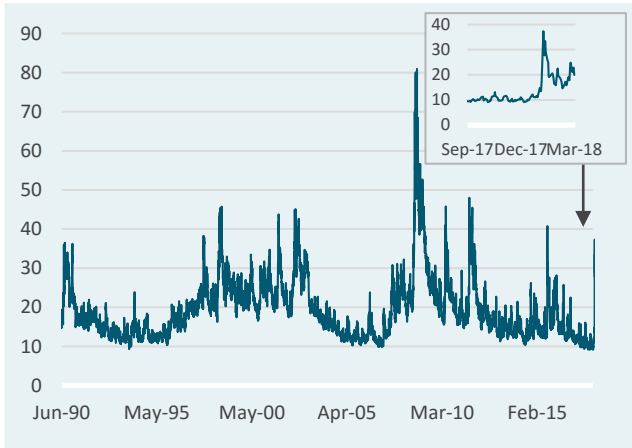
Equity volatility

Volatility in U.S. equities spiked in February and stayed elevated. The VIX Index of implied volatility on the S&P 500 Index registered its largest one-day increase on February 5th, jumping from 17.3 to 37.3. The well-documented period of low volatility that markets experienced in 2017 was broken rather suddenly. Volatility remained high with the VIX averaging 20.7 in the last two month of the quarter, compared to 11.0 during the previous 12 months. The increase in volatility was a U.S. focused event, rather than a global phenomenon – volatility was relatively benign in international developed and emerging markets.

One of the likely drivers of the spike in volatility that occurred in February was the unwinding of the “short vol” trade. The low volatility environment that began in 2016 created an opportunity to profit from selling volatility in the futures market, which is similar to selling insurance. Speculators selling volatility receive a premium for taking on risk from those looking to hedge, and are able to capture this premium when volatility remains low. When volatility increases, however, losses can be catastrophic. An index tracking this strategy lost 96% of its value during one day of trading, which likely reinforced the increase in volatility.

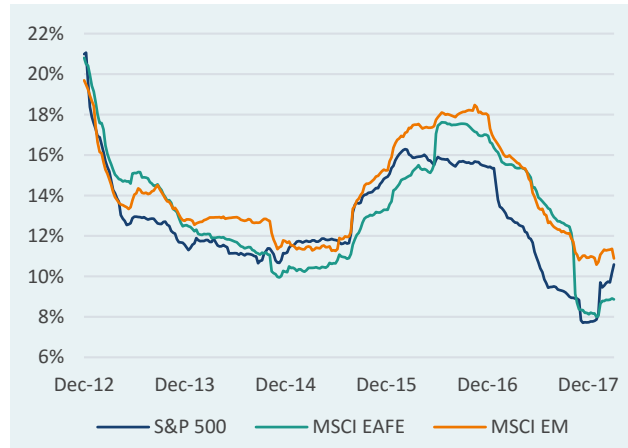
Equity volatility spiked in February and remained at heightened levels

U.S. IMPLIED VOLATILITY (VIX)



Source: CBOE, as of 3/31/18

REALIZED 1-YEAR ROLLING VOLATILITY



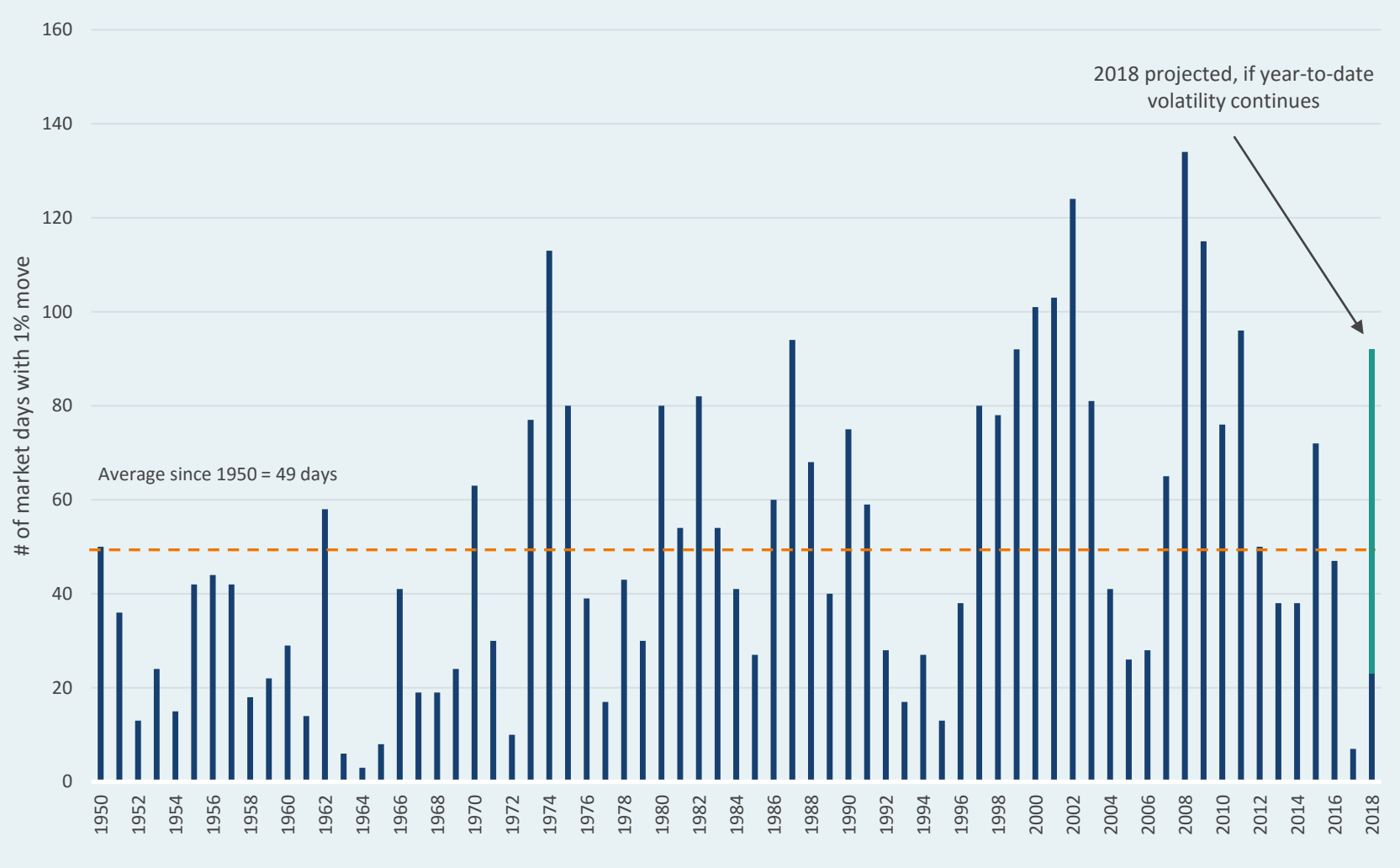
Source: Bloomberg, as of 3/31/18

S&P INVERSE VIX FUTURES INDEX



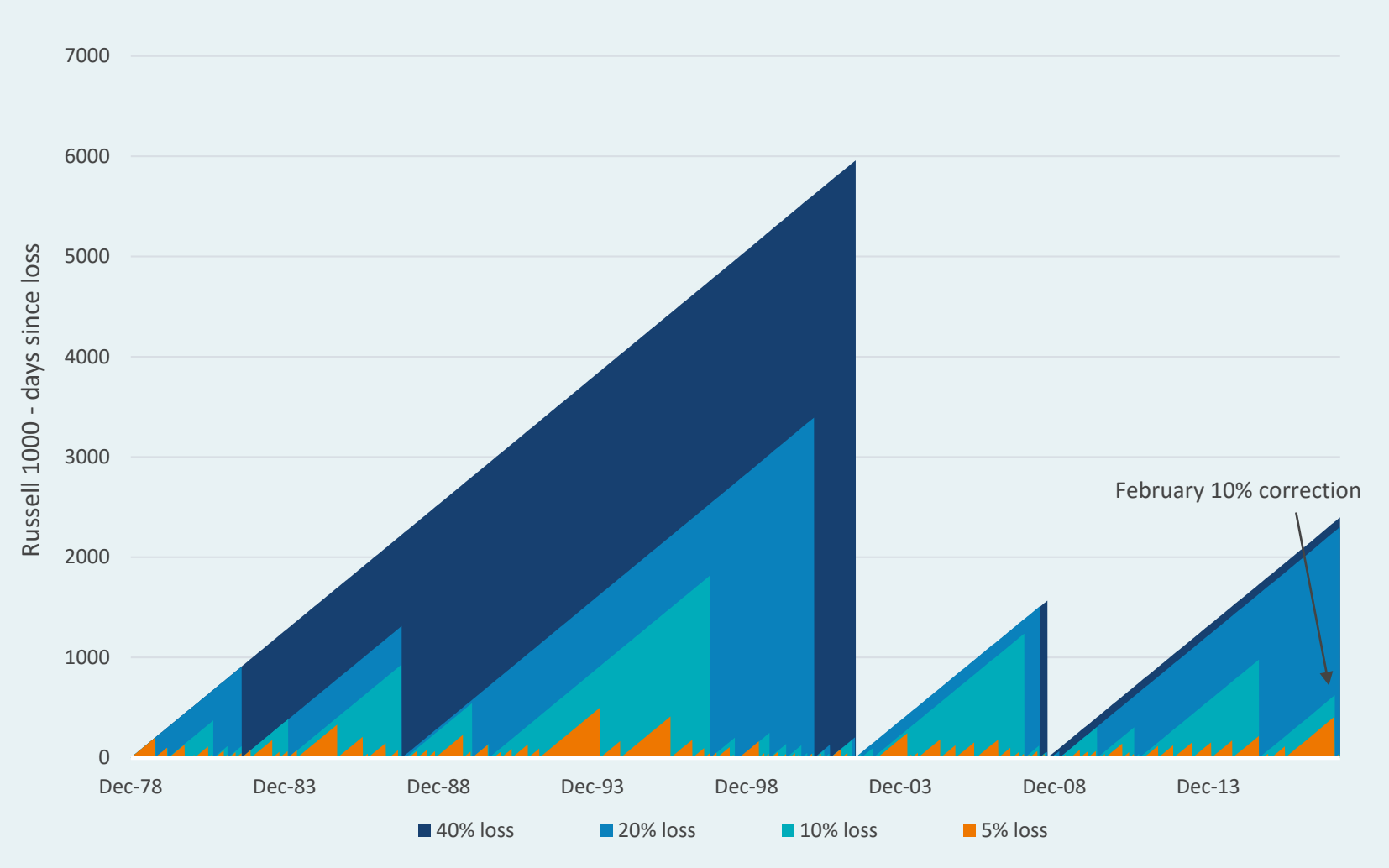
Source: Bloomberg, as of 3/31/18

Equity volatility



Source: S&P 500, as of 3/31/18

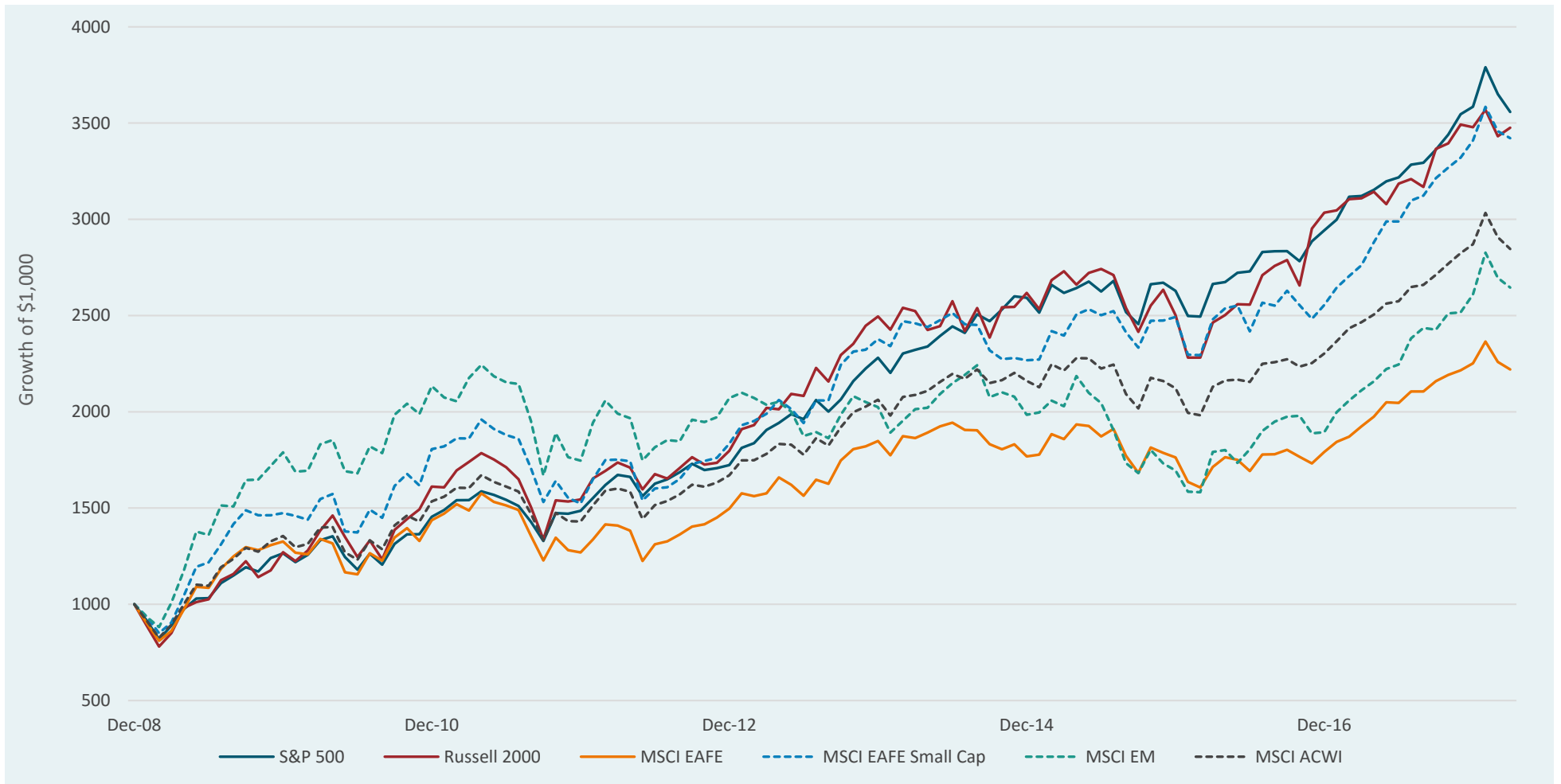
Expect the unexpected



Equities experienced a 10% correction for the first time in more than two years

Source: FTSE Russell, Bloomberg, as of 4/11/18

Long-term equity performance



Source: MPI, as of 3/31/18

Other assets

Opportunity in MLPs

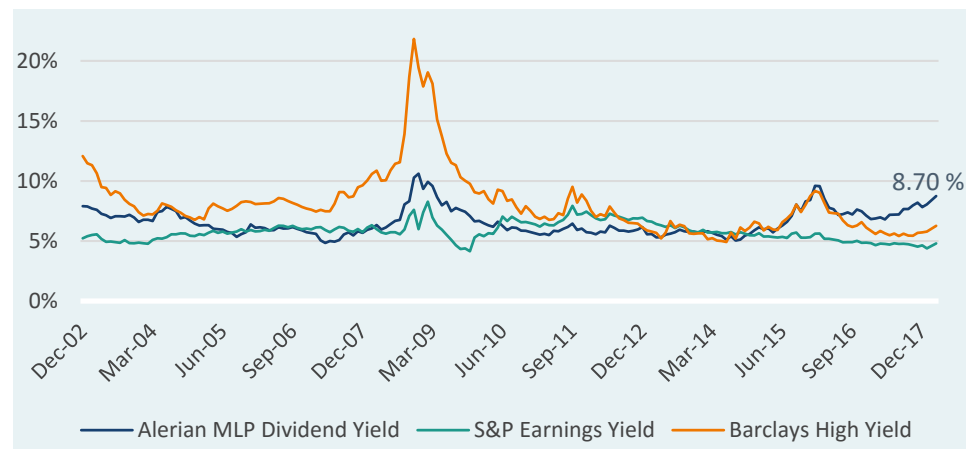
MLP valuations look attractive across a number of historical metrics, including enterprise value-to-EBITDA and price-to-distributable cash flow. We believe there is opportunity to allocate to MLPs for a short to medium holding period (2-4 years).

MLP yields have steadily climbed since mid-2016 on the back of a sell-off in the sector and recovery in distributions following the energy price collapse. Balance sheets across the industry are in better shape today than

before the oil crisis. Debt-to-cash flow levels have improved since peaking at 6.4x in 2015. Furthermore, the U.S. is expected to surpass Russia in 2018 to be the largest oil producer in the world, which is important because midstream companies grow through volume increases rather than commodity price appreciation.

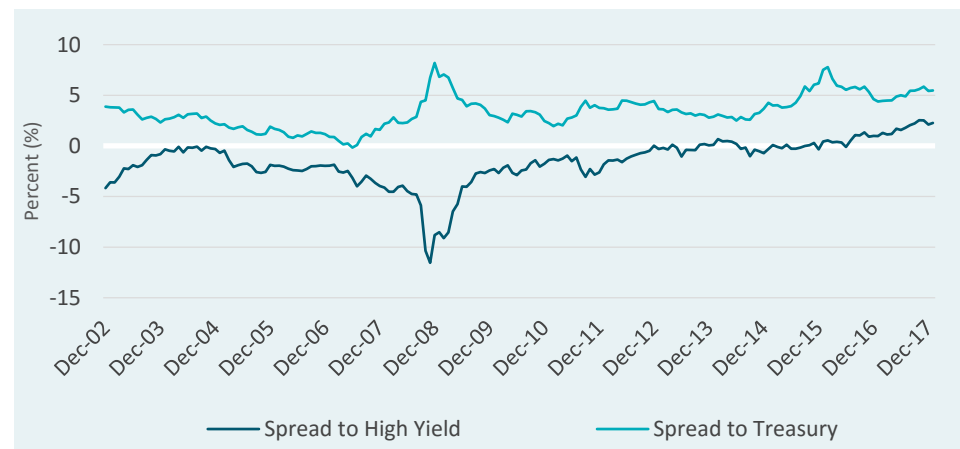
A decision to invest in MLPs, however, is one that should be considered carefully, and after detailed analysis, as it remains a specialist asset class.

MLP YIELDS



Source: Bloomberg, as of 12/31/17

MLP SPREADS VS HIGH YIELD AND TREASURY RATES



Source: Bloomberg, as of 12/31/17

Currency

The U.S. dollar declined further to begin the quarter, but recovered slightly over the past two months. The broad U.S. trade weighted index fell 1.9% in the first quarter. This index was down 8.5% since peaking at the end of 2016.

Dollar depreciation has occurred despite widening short-term interest rate differentials between the U.S. and the rest of the developed world. Typically, higher interest rate differentials result in currency appreciation as investors take advantage of the yield, at least in the short-term.

Based on purchasing power parity (PPP), the dollar is overvalued against the currencies with the biggest weights in international equity benchmarks: the euro, yen, and pound.

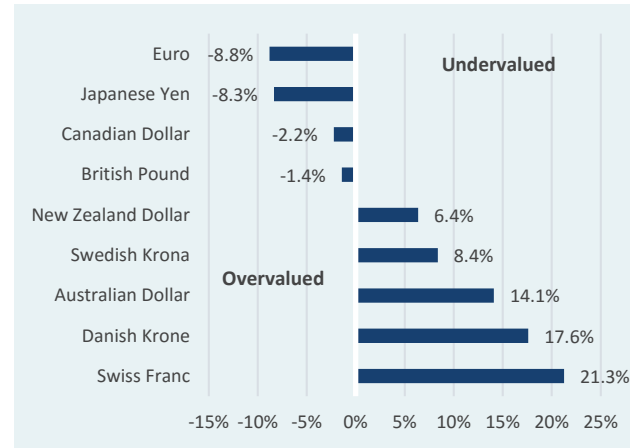
Unhedged foreign currency exposure added to equity returns over the past year, especially in developed markets. Although currency exposure has been positive lately, it has historically tended to experience large swings that add volatility to portfolios.

U.S. DOLLAR TRADE WEIGHTED INDEX



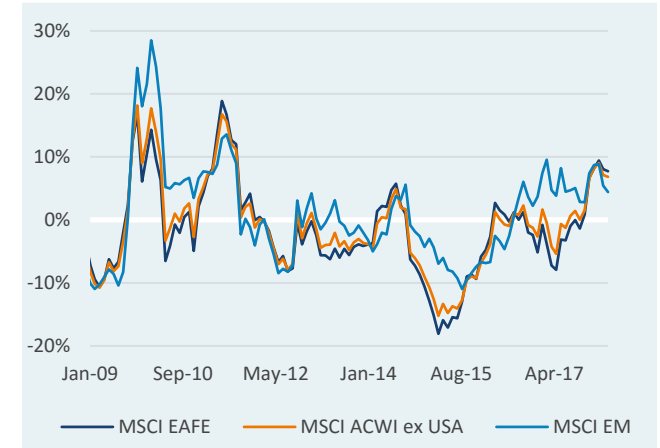
Source: Federal Reserve, as of 3/28/18

CURRENCY VALUATIONS VS USD (PPP)



Source: OECD, as of 3/31/2018 (see appendix)

EFFECT OF CURRENCY (1-YR ROLLING)



Source: MSCI, as of 3/31/18

Appendix

Periodic table of returns

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	YTD	5-Year	10-Year
Small Cap Growth	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	37.3	2.3	15.5	11.3
Emerging Markets Equity	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	30.2	1.4	13.2	11.0
Large Cap Growth	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	25.0	1.4	12.9	9.8
Hedge Funds of Funds	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	22.2	0.9	11.5	9.6
Cash	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	21.7	0.4	10.8	8.6
60/40 Global Portfolio	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	17.1	0.0	10.2	7.8
Real Estate	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	14.6	0.0	10.0	6.1
Small Cap Equity	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	13.7	-0.1	6.5	4.7
Commodities	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	7.8	-0.4	6.2	3.6
Large Cap Equity	-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	7.7	-0.7	5.0	3.0
US Bonds	-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	5.1	-1.5	3.5	2.7
International Equity	-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	3.5	-1.5	1.8	1.6
Small Cap Value	-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	1.7	-2.6	0.3	0.3
Large Cap Value	-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	0.9	-2.8	-8.3	-7.7

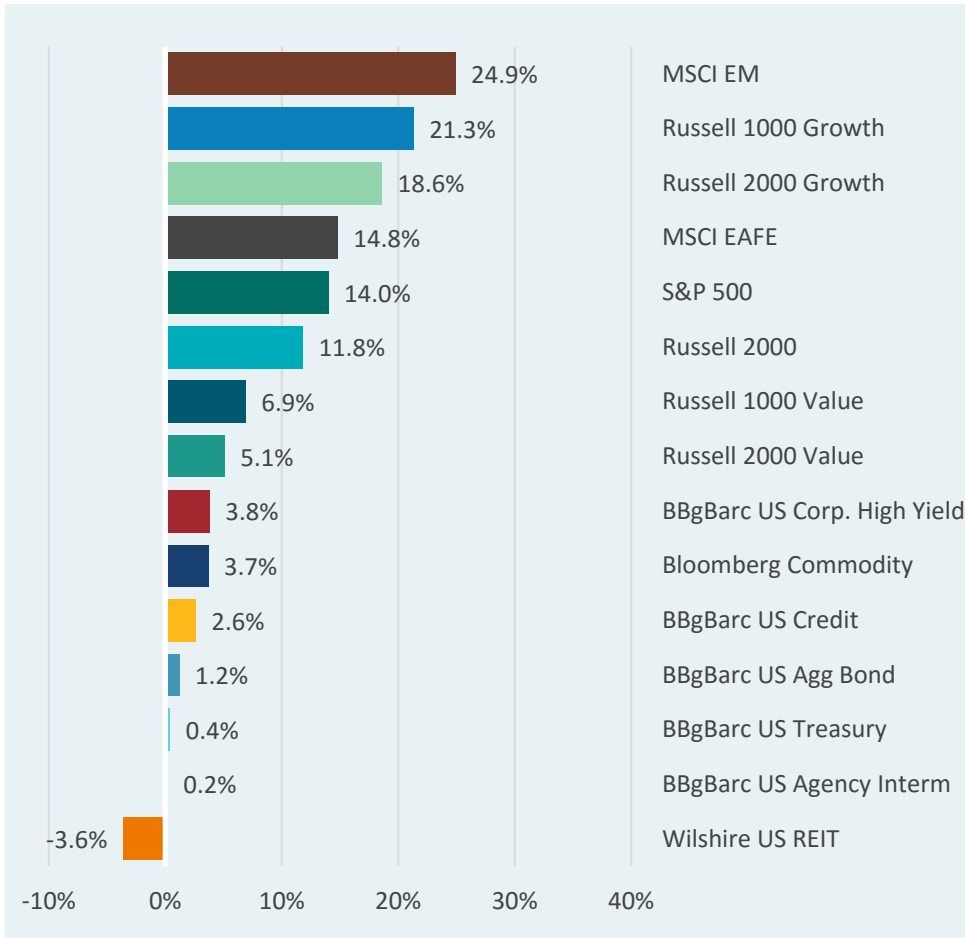
WORST

 Large Cap Equity	 Small Cap Growth	 Commodities
 Large Cap Value	 International Equity	 Real Estate
 Large Cap Growth	 Emerging Markets Equity	 Hedge Funds of Funds
 Small Cap Equity	 US Bonds	 60% MSCI ACWI/40% BBgBarc Global Bond
 Small Cap Value	 Cash	

Source Data: Morningstar, Inc., Hedge Fund Research, Inc. (HFR), National Council of Real Estate Investment Fiduciaries (NCREIF). Indices used: Russell 1000, Russell 1000 Value, Russell 1000 Growth, Russell 2000, Russell 2000 Value, Russell 2000 Growth, MSCI EAFE, MSCI EM, 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 12/31/17.

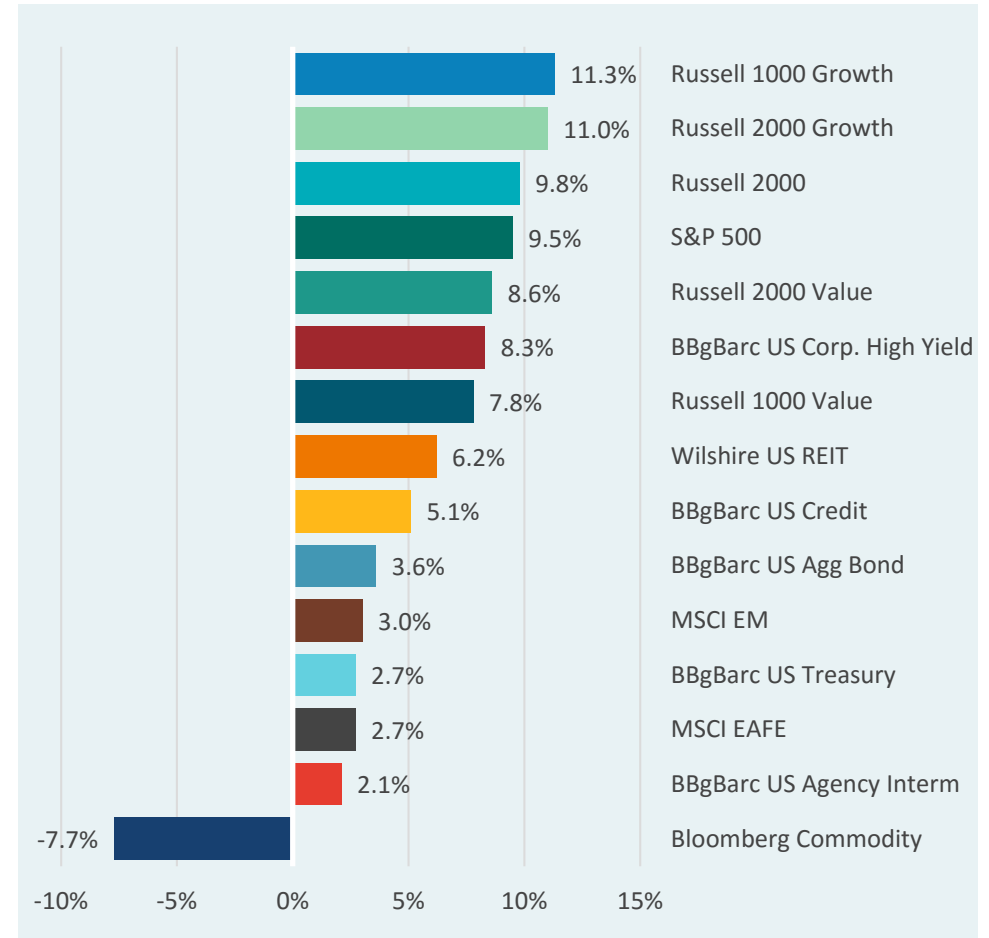
Major asset class returns

ONE YEAR ENDING MARCH



Source: Morningstar, as of 3/31/18

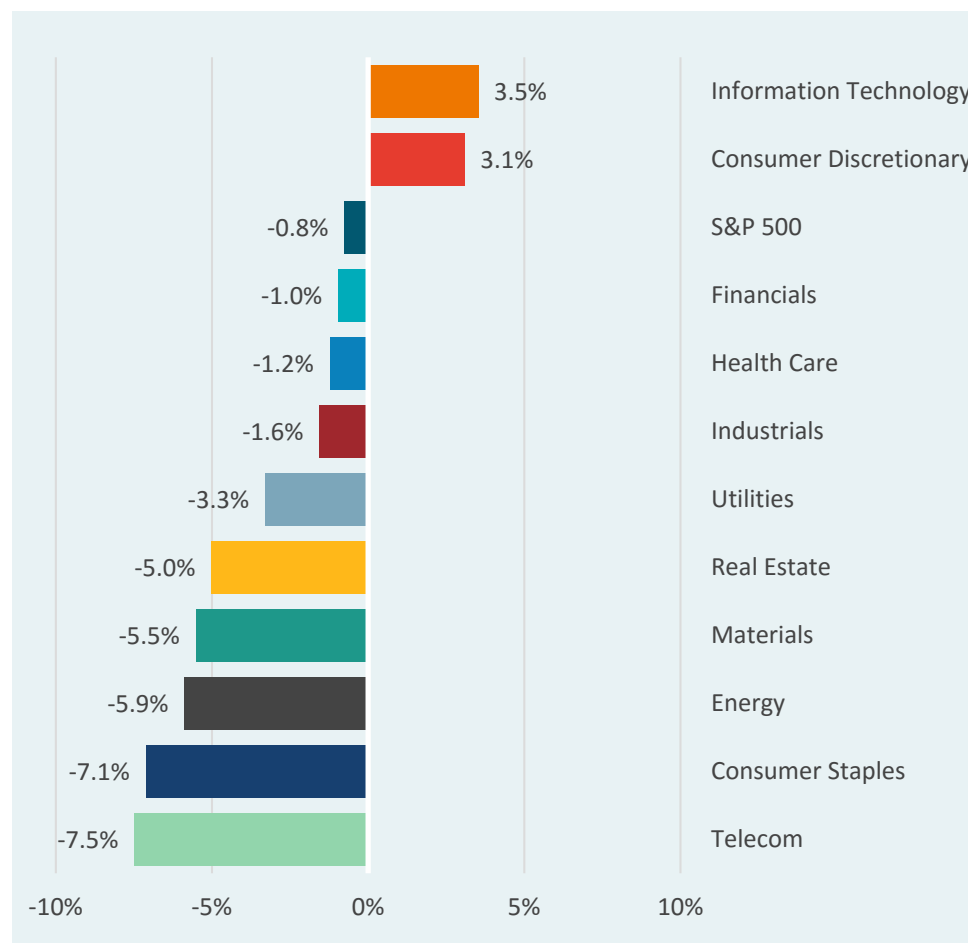
TEN YEARS ENDING MARCH



Source: Morningstar, as of 3/31/18

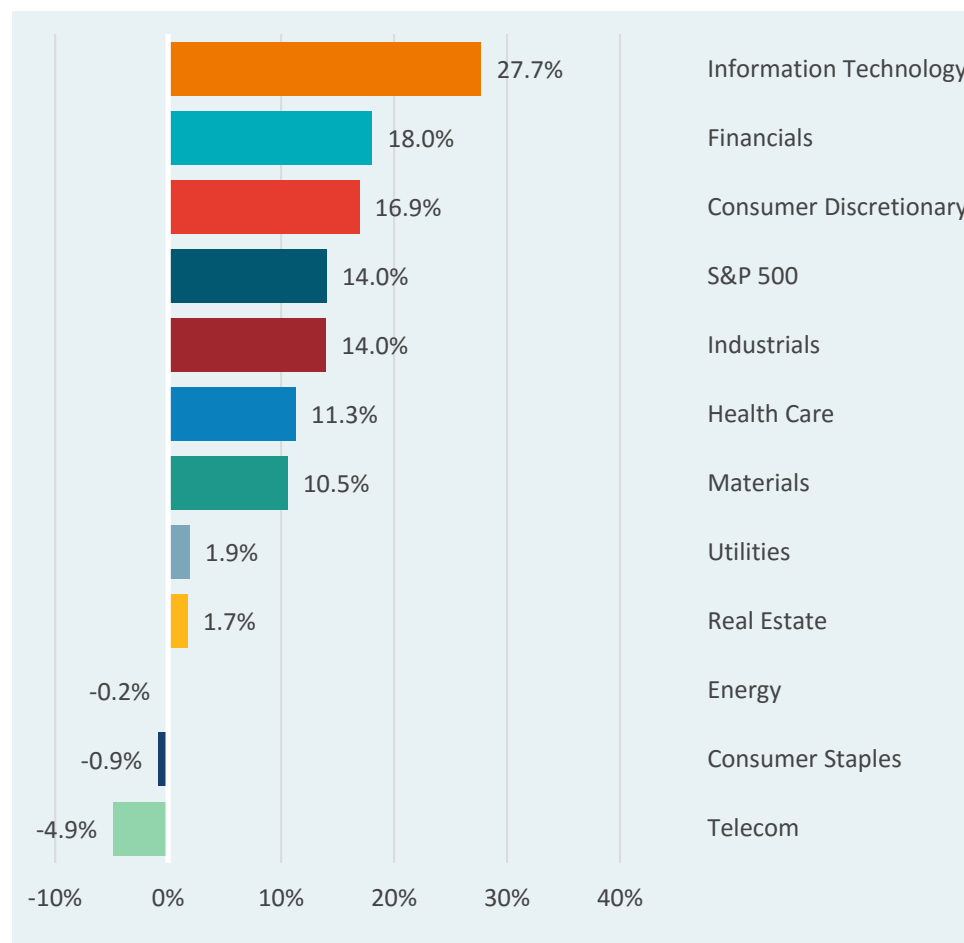
S&P 500 sector returns

1ST QUARTER



Source: Morningstar, as of 3/31/18

ONE YEAR ENDING MARCH



Source: Morningstar, as of 3/31/18

Detailed index returns

DOMESTIC EQUITY

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Core Index							
S&P 500	(2.5)	(0.8)	(0.8)	14.0	10.8	13.3	9.5
S&P 500 Equal Weighted	(0.9)	(1.0)	(1.0)	11.7	9.1	12.9	11.0
DJ Industrial Average	(3.6)	(2.0)	(2.0)	19.4	13.5	13.3	9.9
Russell Top 200	(3.2)	(0.8)	(0.8)	14.7	11.4	13.6	9.4
Russell 1000	(2.3)	(0.7)	(0.7)	14.0	10.4	13.2	9.6
Russell 2000	1.3	(0.1)	(0.1)	11.8	8.4	11.5	9.8
Russell 3000	(2.0)	(0.6)	(0.6)	13.8	10.2	13.0	9.6
Russell Mid Cap	0.1	(0.5)	(0.5)	12.2	8.0	12.1	10.2
Style Index							
Russell 1000 Growth	(2.7)	1.4	1.4	21.3	12.9	15.5	11.3
Russell 1000 Value	(1.8)	(2.8)	(2.8)	6.9	7.9	10.8	7.8
Russell 2000 Growth	1.3	2.3	2.3	18.6	8.8	12.9	11.0
Russell 2000 Value	1.2	(2.6)	(2.6)	5.1	7.9	10.0	8.6

INTERNATIONAL EQUITY

Broad Index							
MSCI ACWI	(2.1)	(1.0)	(1.0)	14.8	8.1	9.2	5.6
MSCI ACWI ex US	(1.8)	(1.2)	(1.2)	16.5	6.2	5.9	2.7
MSCI EAFE	(1.8)	(1.5)	(1.5)	14.8	5.6	6.5	2.7
MSCI EM	(1.9)	1.4	1.4	24.9	8.8	5.0	3.0
MSCI EAFE Small Cap	(1.1)	0.2	0.2	23.5	12.3	11.1	6.5
Style Index							
MSCI EAFE Growth	(1.2)	(1.0)	(1.0)	17.5	6.7	7.1	3.4
MSCI EAFE Value	(2.4)	(2.0)	(2.0)	12.2	4.3	5.8	2.0
Regional Index							
MSCI UK	(0.3)	(3.9)	(3.9)	11.9	3.1	3.9	2.3
MSCI Japan	(2.1)	0.8	0.8	19.6	8.4	8.9	4.1
MSCI Euro	(1.2)	(0.4)	(0.4)	16.1	5.7	8.1	0.7
MSCI EM Asia	(1.4)	0.8	0.8	27.0	9.4	8.4	5.2
MSCI EM Latin American	(1.0)	8.0	8.0	19.3	10.1	(1.9)	(0.8)

FIXED INCOME

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Broad Index							
BBgBarc US TIPS	1.1	(0.8)	(0.8)	0.9	1.3	0.0	2.9
BBgBarc US Treasury Bills	0.1	0.3	0.3	1.0	0.5	0.3	0.4
BBgBarc US Agg Bond	0.6	(1.5)	(1.5)	1.2	1.2	1.8	3.6
Duration							
BBgBarc US Treasury 1-3 Yr	0.2	(0.2)	(0.2)	(0.0)	0.4	0.5	1.1
BBgBarc US Treasury Long	3.0	(3.3)	(3.3)	3.5	0.4	3.3	5.8
BBgBarc US Treasury	0.9	(1.2)	(1.2)	0.4	0.4	1.1	2.7
Issuer							
BBgBarc US MBS	0.6	(1.2)	(1.2)	0.8	1.1	1.8	3.5
BBgBarc US Corp. High Yield	(0.6)	(0.9)	(0.9)	3.8	5.2	5.0	8.3
BBgBarc US Agency Interm	0.3	(0.4)	(0.4)	0.2	0.7	0.9	2.1
BBgBarc US Credit	0.3	(2.1)	(2.1)	2.6	2.2	2.8	5.1

OTHER

Index							
Bloomberg Commodity	(0.6)	(0.4)	(0.4)	3.7	(3.2)	(8.3)	(7.7)
Wilshire US REIT	4.1	(7.5)	(7.5)	(3.6)	1.0	6.1	6.2
CS Leveraged Loans	0.3	1.6	1.6	4.6	4.3	4.2	5.4
Regional Index							
JPM EMBI Global Div	0.3	(1.7)	(1.7)	4.3	5.8	4.7	7.0
JPM GBI-EM Global Div	1.0	4.4	4.4	13.0	5.4	(0.7)	3.8
Hedge Funds							
HFRI Composite	(0.7)	0.1	0.1	4.6	2.0	3.9	3.6
HFRI FOF Composite	(0.0)	0.9	0.9	6.2	2.1	3.5	1.6
Currency (Spot)							
Euro	0.8	2.4	2.4	15.0	4.6	(0.9)	(2.5)
Pound	1.8	3.7	3.7	12.2	(1.9)	(1.6)	(3.4)
Yen	0.3	5.9	5.9	4.8	4.1	(2.4)	(0.7)

Source: Morningstar, as of 3/31/18

Definitions

Atlanta Fed Wage Tracker – a measure of the nominal wage growth of individuals. It is constructed using microdata from the Current Population Survey (CPS), and is the median percent change in the hourly wage of individuals observed 12 months apart. (www.frbatlanta.org)

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.lanqerresearch.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/>)

OECD Purchasing Power Parity – the rates of currency conversion that equalize the purchasing power of different currencies by eliminating the differences in price levels between countries. In their simplest form, PPPs show the ratio of prices in national currencies of the same good or service in different countries. (www.OECD.org)

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. 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 any associated designs are the respective trademarks of Verus Advisory, Inc. 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)].

Benchmark 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.