

# THIRD FISCAL QUARTER 2019 INVESTMENT PERFORMANCE REPORT

## VERMONT STATE EMPLOYEES RETIREMENT SYSTEM



June 25, 2019

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# MARKET ENVIRONMENT

NEPC, LLC

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# PERFORMANCE OVERVIEW

## Q1 Market Summary

Macro			Equity			Credit			Real Assets		
US Dollar	VIX	US 10-Yr	S&P 500	MSCI EAFE	MSCI EM	US Agg.	High Yield	Dollar EMD	Oil	Gold	REITS
											
1.2%	-11.7	-27 bps	13.6%	10.0%	9.9%	2.9%	7.3%	7.0%	33.3%	0.8%	16.7%

**Global equities rallied during the quarter as sentiment improved from easing US-China trade tensions and a dovish pivot by the Fed**

**The spread between the 10-year Treasury Note and 3-month Treasury Bill temporarily inverted after the Fed held interest rates constant and announced adjustments to their balance sheet normalization process**

**Spot crude oil prices rose significantly due to geopolitical concerns in major oil-producing regions**

Market segment (index representation) as follows: US Dollar (DXY Index), VIX (CBOE Volatility Index), US 10-Year (US 10-Year Treasury Yield), S&P 500 (US Equity), MSCI EAFE Index (International Developed Equity), MSCI Emerging Markets (Emerging Markets Equity), US Agg (Barclays US Aggregate Bond Index), High Yield (Barclays US High Yield Index), Dollar EMD (JPM EMBI Global Diversified Index), Crude Oil (WTI Crude Oil Spot), Gold (Gold Price Spot), and REITs (NAREIT Composite Index).



# MACRO PERFORMANCE OVERVIEW

## Q1 Macro Market Summary

The global growth outlook was revised downward – reflecting slowing growth in most major developed economies

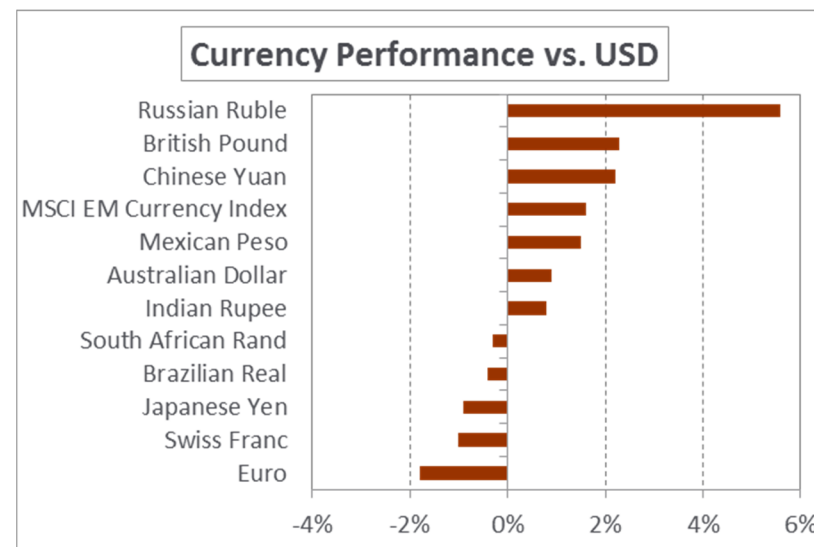
The Fed pivoted toward a more dovish policy stance signaling no additional rate hikes this year

Global bond yields declined with the 10-year German and Japanese yields ending in negative territory

	Yield 12/31/18	Yield 3/31/19	Δ
US 10-Yr	2.68%	2.42%	-0.27%
US 30-Yr	3.01%	2.82%	-0.19%
US Real 10-Yr	0.97%	0.53%	-0.44%
German 10-Yr	0.24%	-0.07%	-0.31%
Japan 10-Yr	-0.01%	-0.09%	-0.09%
China 10-Yr	3.31%	3.07%	-0.24%
EM Local Debt	6.46%	6.16%	-0.30%

Source: Bloomberg

Central Banks	Current Rate	CPI YOY	Notes from the Quarter
Federal Reserve	2.25% - 2.50%	2.2%	The Fed held its benchmark interest rate at 2.25% - 2.50% in March and signaled no additional rate hikes are likely in 2019
European Central Bank	0.0%	1.4%	The ECB maintained its current benchmark interest rate and announced plans to boost commercial lending
Bank of Japan	-0.1%	0.8%	The BoJ will continue its ultra-easy QE program with inflation remaining well below target



Source: Bloomberg





# EQUITY PERFORMANCE OVERVIEW

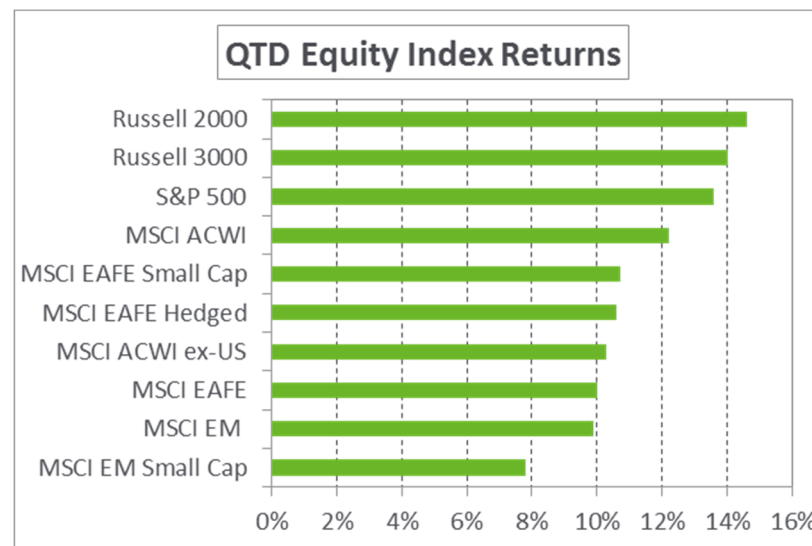
## Q1 Equity Market Summary

**Global equities made a strong comeback this quarter following a dovish pivot from the Fed**

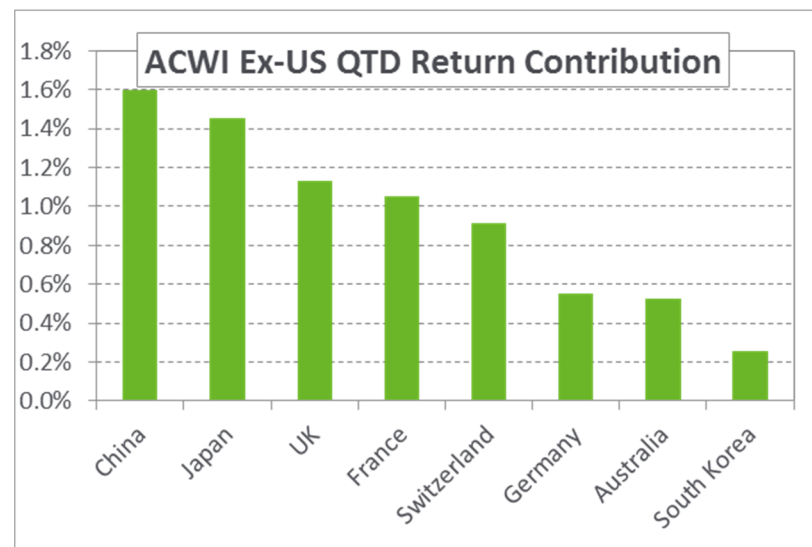
**US and Chinese equities led the way as hopes for a trade deal provided a tailwind for local equity markets**

Russell 3000 QTD Sector Return Contribution	
Information Technology	3.6%
Consumer Discretionary	2.6%
Financials	1.6%
Industrials	0.8%
Consumer Staples	1.1%
Energy	0.7%
Materials	0.4%
Health Care	1.3%
Real Estate	0.6%
Communication Services	1.9%
Utilities	0.3%

Source: Russell, Bloomberg



Source: MSCI, Russell, S&P, Bloomberg



Source: MSCI, Bloomberg. QTD top country contributors to index return



# CREDIT PERFORMANCE OVERVIEW

## Q1 Credit Market Summary

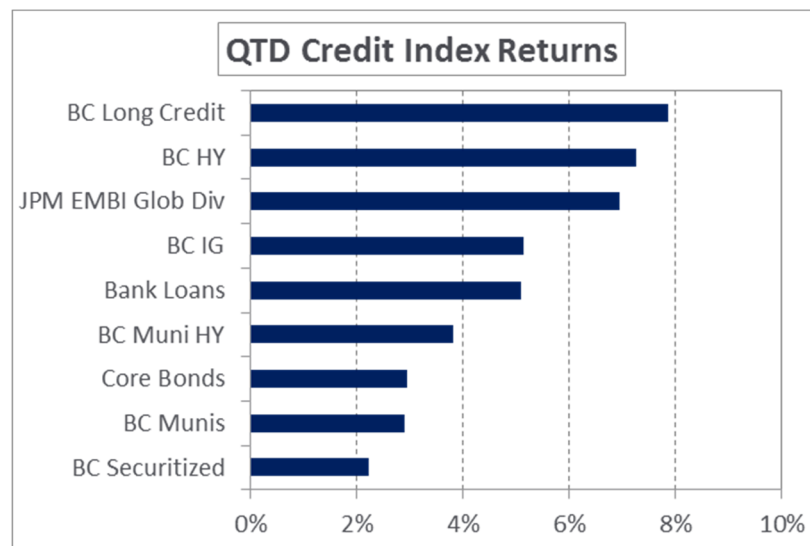
**Global yields declined significantly – reflecting concerns over the global growth outlook**

**Credit spreads broadly declined off of highs at the end of 2018**

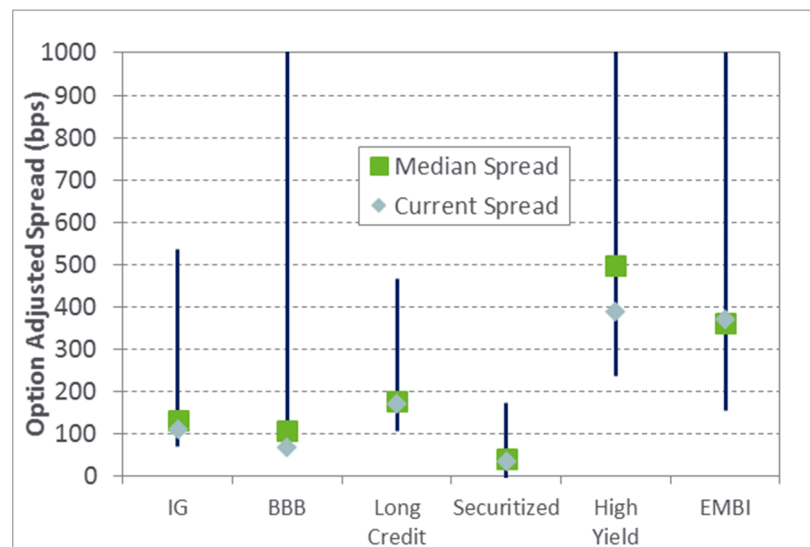
US high yield spreads experienced one of the largest movements – falling 135 basis points, supporting a return of 7.3%

Credit Spread (Basis Points)	12/31/18	3/31/19	Δ
BC IG Credit	153	119	-34
BC Long Credit	200	172	-28
BC Securitized	35	35	0
BC High Yield	526	391	-135
Muni HY	236	230	-6
JPM EMBI	435	373	-62
Bank Loans - Libor	414	354	-60

Source: Barclays, Merrill Lynch, JPM, Bloomberg, NEPC



Source: Barclays, JPM, S&P, Bloomberg



Source: Barclays, JPM, S&P, Bloomberg; Calculated since 01/31/2000



# REAL ASSETS PERFORMANCE OVERVIEW

## Q1 Real Assets Market Summary

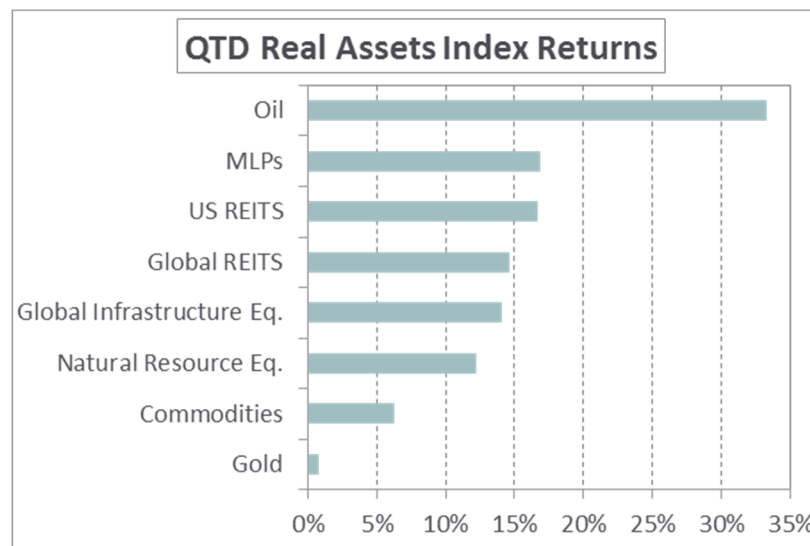
**WTI crude oil increased 33.3% as a result of OPEC production cuts and concerns surrounding Venezuela**

**Midstream energy increased 22.2% following strong earnings and a tailwind from higher oil prices**

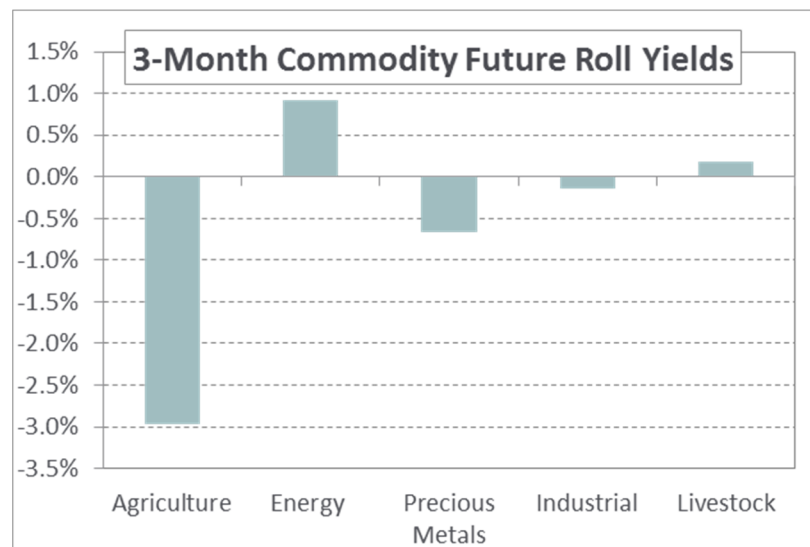
**US REITs increased 16.3% during the quarter with the Fed signaling a pause to monetary policy**

Real Asset Yields	12/31/18	3/31/19
MLPs	8.9%	8.0%
Core Real Estate	4.5%	4.5%
US REITs	4.6%	4.1%
Global REITs	3.9%	3.4%
Global Infrastructure Equities	4.6%	4.4%
Natural Resource Equities	4.5%	4.2%
US 10-Yr Breakeven Inflation	1.7%	1.9%
Commodity Index Roll Yield	-2.7%	-2.7%

Source: NCREIF, Alerian, NAREIT, S&P, Bloomberg



Source: S&P, NAREIT, Alerian, Bloomberg



Source: Bloomberg, NEPC Calculated as of 09/28/2018



# CALENDAR YEAR INDEX PERFORMANCE

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Jan	Feb	Mar	Q1	YTD
<b>S&amp;P 500</b>	26.5%	15.1%	2.1%	16.0%	32.4%	13.7%	1.4%	12.0%	21.8%	-4.4%	8.0%	3.2%	1.9%	13.6%	13.6%
<b>Russell 1000</b>	28.4%	16.1%	1.5%	16.4%	33.1%	13.2%	0.9%	12.1%	21.7%	-4.8%	8.4%	3.4%	1.7%	14.0%	14.0%
<b>Russell 2000</b>	27.2%	26.9%	-4.2%	16.3%	38.8%	4.9%	-4.4%	21.3%	14.6%	-11.0%	11.2%	5.2%	-2.1%	14.6%	14.6%
<b>Russell 2500</b>	34.4%	26.7%	-2.5%	17.9%	36.8%	7.1%	-2.9%	17.6%	16.8%	-10.0%	11.5%	4.7%	-0.8%	15.8%	15.8%
<b>MSCI EAFE</b>	31.8%	7.8%	-12.1%	17.3%	22.8%	-4.9%	-0.8%	1.0%	25.0%	-13.8%	6.6%	2.5%	0.6%	10.0%	10.0%
<b>MSCI EM</b>	78.5%	18.9%	-18.4%	18.2%	-2.6%	-2.2%	-14.9%	11.2%	37.3%	-14.6%	8.8%	0.2%	0.8%	9.9%	9.9%
<b>MSCI ACWI</b>	34.6%	12.7%	-7.3%	16.1%	22.8%	4.2%	-2.4%	7.9%	24.0%	-9.4%	7.9%	2.7%	1.3%	12.2%	12.2%
<b>Private Equity*</b>	13.7%	19.7%	7.9%	12.5%	20.6%	12.7%	9.6%	8.3%	13.7%	-	-	-	-	-	-
<b>BC TIPS</b>	11.4%	6.3%	13.6%	7.0%	-8.6%	3.6%	-1.4%	4.7%	3.0%	-1.3%	1.3%	0.0%	1.8%	3.2%	3.2%
<b>BC Municipal Bond</b>	12.9%	2.4%	10.7%	6.8%	-2.6%	9.1%	3.3%	0.2%	5.4%	1.3%	0.8%	0.5%	1.6%	2.9%	2.9%
<b>BC Muni High Yield</b>	32.7%	7.8%	9.2%	18.1%	-5.5%	13.8%	1.8%	3.0%	9.7%	4.8%	0.7%	0.5%	2.6%	3.8%	3.8%
<b>BC US Corp High Yield</b>	58.2%	15.1%	5.0%	15.8%	7.4%	2.5%	-4.5%	17.1%	7.5%	-2.1%	4.5%	1.7%	0.9%	7.3%	7.3%
<b>BC US Aggregate</b>	5.9%	6.5%	7.8%	4.2%	-2.0%	6.0%	0.5%	2.6%	3.5%	0.0%	1.1%	-0.1%	1.9%	2.9%	2.9%
<b>BC Global Aggregate</b>	2.6%	5.2%	6.4%	1.6%	-4.0%	-0.5%	-3.6%	1.6%	7.5%	-1.2%	1.5%	-0.6%	1.3%	2.2%	2.2%
<b>BC Long Treasuries</b>	-12.9%	9.4%	29.9%	3.6%	-12.7%	25.1%	-1.2%	1.3%	8.5%	-1.8%	0.7%	-1.2%	5.3%	4.7%	4.7%
<b>BC US Long Credit</b>	16.8%	10.7%	17.1%	12.7%	-6.6%	16.4%	-4.6%	10.2%	12.2%	-6.8%	3.5%	-0.1%	4.3%	7.9%	7.9%
<b>BC US STRIPS 20+ Yr</b>	-36.0%	10.9%	58.5%	3.0%	-21.0%	46.4%	-3.7%	1.4%	13.7%	-4.1%	0.6%	-1.9%	7.7%	6.3%	6.3%
<b>JPM GBI-EM Glob Div</b>	22.0%	15.7%	-1.8%	16.8%	-9.0%	-5.7%	-14.9%	9.9%	15.2%	-6.2%	5.5%	-1.1%	-1.3%	2.9%	2.9%
<b>JPM EMBI Glob Div</b>	29.8%	12.2%	7.3%	17.4%	-5.3%	7.4%	1.2%	10.2%	10.1%	-4.3%	4.4%	1.0%	1.4%	7.0%	7.0%
<b>CS Leveraged Loan</b>	44.9%	10.0%	1.8%	9.4%	6.2%	2.1%	-0.4%	9.9%	4.2%	1.1%	2.3%	1.6%	-0.1%	3.8%	3.8%
<b>CS Hedge Fund</b>	18.6%	10.9%	-2.5%	7.7%	9.7%	4.1%	-0.7%	1.2%	7.1%	-3.2%	1.8%	1.1%	-	-	2.9%
<b>BBG Commodity</b>	18.9%	16.8%	-13.3%	-1.1%	-9.5%	-17.0%	-24.7%	11.8%	1.7%	-11.2%	5.4%	1.0%	-0.2%	6.3%	6.3%
<b>Alerian MLP</b>	76.4%	35.9%	13.9%	4.8%	27.6%	4.8%	-32.6%	18.3%	-6.5%	-12.4%	12.6%	0.3%	3.4%	16.8%	16.8%
<b>FTSE NAREIT Eqy REITs</b>	28.0%	28.0%	8.3%	18.1%	2.5%	30.1%	3.2%	8.5%	5.2%	-4.6%	11.7%	0.7%	3.3%	16.3%	16.3%

Source: Bloomberg, Barclays, Alerian, Nareit, MSCI, JP Morgan, Credit Suisse, Thomson One  
 \*Private Equity return represents calendar year pooled IRR and is subject to a one quarter lag



# RETURNS FOR KEY INDICES RANKED IN ORDER OF PERFORMANCE

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
MSCI EMERGING MARKETS 32.17	MSCI EMERGING MARKETS 39.39	BC AGGREGATE 5.24	MSCI EMERGING MARKETS 78.51	RUSSELL 2000 GROWTH 29.09	BC AGGREGATE 7.84	MSCI EMERGING MARKETS 18.22	RUSSELL 2000 GROWTH 43.30	S&P 500 13.69	RUSSELL 1000 GROWTH 5.67	RUSSELL 2000 VALUE 31.74	MSCI EMERGING MARKETS 37.28	BC AGGREGATE 0.01
MSCI EAFE 26.34	RUSSELL 1000 GROWTH 11.81	RUSSELL 2000 VALUE -28.92	RUSSELL 1000 GROWTH 37.21	RUSSELL 2000 26.85	RUSSELL 1000 GROWTH 2.64	RUSSELL 2000 VALUE 18.05	RUSSELL 2000 38.82	RUSSELL 1000 VALUE 13.45	S&P 500 1.38	RUSSELL 2000 21.31	RUSSELL 1000 GROWTH 30.21	RUSSELL 1000 GROWTH -1.51
RUSSELL 1000 VALUE 22.25	MSCI EAFE 11.17	RUSSELL 2000 -33.79	RUSSELL 2000 GROWTH 34.47	RUSSELL 2000 VALUE 24.5	S&P 500 2.11	RUSSELL 1000 VALUE 17.51	RUSSELL 2000 VALUE 34.52	RUSSELL 1000 13.24	RUSSELL 1000 0.92	RUSSELL 1000 VALUE 17.34	MSCI EAFE 25.03	S&P 500 -4.38
RUSSELL 2000 VALUE 23.48	RUSSELL 2000 GROWTH 7.06	RUSSELL 1000 VALUE -36.85	MSCI EAFE 31.78	MSCI EMERGING MARKETS 18.88	RUSSELL 1000 1.50	MSCI EAFE 17.32	RUSSELL 1000 GROWTH 33.48	RUSSELL 1000 GROWTH 13.05	BC AGGREGATE 0.55	RUSSELL 1000 12.05	RUSSELL 2000 GROWTH 22.17	RUSSELL 1000 -4.78
RUSSELL 2000 18.37	BC AGGREGATE 6.97	S&P 500 -37.0	RUSSELL 1000 28.43	RUSSELL 1000 GROWTH 16.71	RUSSELL 1000 VALUE 0.39	RUSSELL 1000 16.42	RUSSELL 1000 33.11	BC AGGREGATE 5.97	MSCI EAFE -0.81	S&P 500 11.96	S&P 500 21.83	RUSSELL 1000 VALUE -8.27
S&P 500 15.8	RUSSELL 1000 5.77	RUSSELL 1000 -37.6	RUSSELL 2000 27.16	RUSSELL 1000 16.10	RUSSELL 2000 GROWTH -2.91	RUSSELL 2000 16.35	RUSSELL 1000 VALUE 32.53	RUSSELL 2000 GROWTH 5.60	RUSSELL 2000 GROWTH -1.38	RUSSELL 2000 GROWTH 11.32	RUSSELL 1000 21.69	RUSSELL 2000 GROWTH -9.31
RUSSELL 1000 15.46	S&P 500 5.49	RUSSELL 1000 GROWTH -38.44	S&P 500 26.46	RUSSELL 1000 VALUE 15.51	RUSSELL 2000 -4.18	S&P 500 16.00	S&P 500 32.39	RUSSELL 2000 4.89	RUSSELL 1000 VALUE -3.83	MSCI EMERGING MARKETS 11.19	RUSSELL 2000 14.65	RUSSELL 2000 -11.01
RUSSELL 2000 GROWTH 13.35	RUSSELL 1000 VALUE -0.17	RUSSELL 2000 GROWTH -38.54	RUSSELL 2000 VALUE 20.58	S&P 500 15.06	RUSSELL 2000 VALUE -5.50	RUSSELL 1000 GROWTH 15.26	MSCI EAFE 22.78	RUSSELL 2000 VALUE 4.22	RUSSELL 2000 -4.41	RUSSELL 1000 GROWTH 7.08	RUSSELL 1000 VALUE 13.66	RUSSELL 2000 VALUE -12.86
RUSSELL 1000 GROWTH 9.07	RUSSELL 2000 -1.56	MSCI EAFE -43.38	RUSSELL 1000 VALUE 19.69	MSCI EAFE 7.75	MSCI EAFE -12.14	RUSSELL 2000 GROWTH 14.59	BC AGGREGATE -2.02	MSCI EMERGING MARKETS -2.19	RUSSELL 2000 VALUE -7.46	BC AGGREGATE 2.65	RUSSELL 2000 VALUE 7.84	MSCI EAFE -13.79
BC AGGREGATE 4.33	RUSSELL 2000 VALUE -9.78	MSCI EMERGING MARKETS -53.33	BC AGGREGATE 5.93	BC AGGREGATE 6.54	MSCI EMERGING MARKETS -18.42	BC AGGREGATE 4.21	MSCI EMERGING MARKETS -2.60	MSCI EAFE -4.90	MSCI EMERGING MARKETS -14.93	MSCI EAFE 1.00	BC AGGREGATE 3.54	MSCI EMERGING MARKETS -14.58

QTD	1 Year	3 year	5 Year	10 Year
RUSSELL 2000 GROWTH 17.14	RUSSELL 1000 GROWTH 12.75	RUSSELL 1000 GROWTH 16.53	RUSSELL 1000 GROWTH 13.50	RUSSELL 1000 GROWTH 17.52
RUSSELL 1000 GROWTH 16.10	S&P 500 9.50	RUSSELL 2000 GROWTH 14.87	S&P 500 10.91	RUSSELL 2000 GROWTH 16.52
RUSSELL 2000 14.58	RUSSELL 1000 9.30	RUSSELL 1000 13.52	RUSSELL 1000 10.63	RUSSELL 1000 16.05
RUSSELL 1000 14.0	RUSSELL 1000 VALUE 5.67	S&P 500 13.51	RUSSELL 2000 GROWTH 8.41	S&P 500 15.92
S&P 500 13.65	BC AGGREGATE 4.48	RUSSELL 2000 12.92	RUSSELL 1000 VALUE 7.72	RUSSELL 2000 15.36
RUSSELL 1000 VALUE 11.93	RUSSELL 2000 GROWTH 3.85	RUSSELL 2000 VALUE 10.86	RUSSELL 2000 7.05	RUSSELL 1000 VALUE 14.52
RUSSELL 2000 VALUE 11.93	RUSSELL 2000 2.05	MSCI EMERGING MARKETS 10.68	RUSSELL 2000 VALUE 5.59	RUSSELL 2000 VALUE 14.12
MSCI EAFE 9.98	RUSSELL 2000 VALUE 0.17	RUSSELL 1000 VALUE 10.45	MSCI EMERGING MARKETS 3.68	MSCI EAFE 8.96
MSCI EMERGING MARKETS 9.93	MSCI EAFE -3.71	MSCI EAFE 7.27	BC AGGREGATE 2.74	MSCI EMERGING MARKETS 8.94
BC AGGREGATE 2.94	MSCI EMERGING MARKETS -7.41	BC AGGREGATE 2.03	MSCI EAFE 2.33	BC AGGREGATE 3.77



# TOTAL FUND PERFORMANCE

NEPC, LLC

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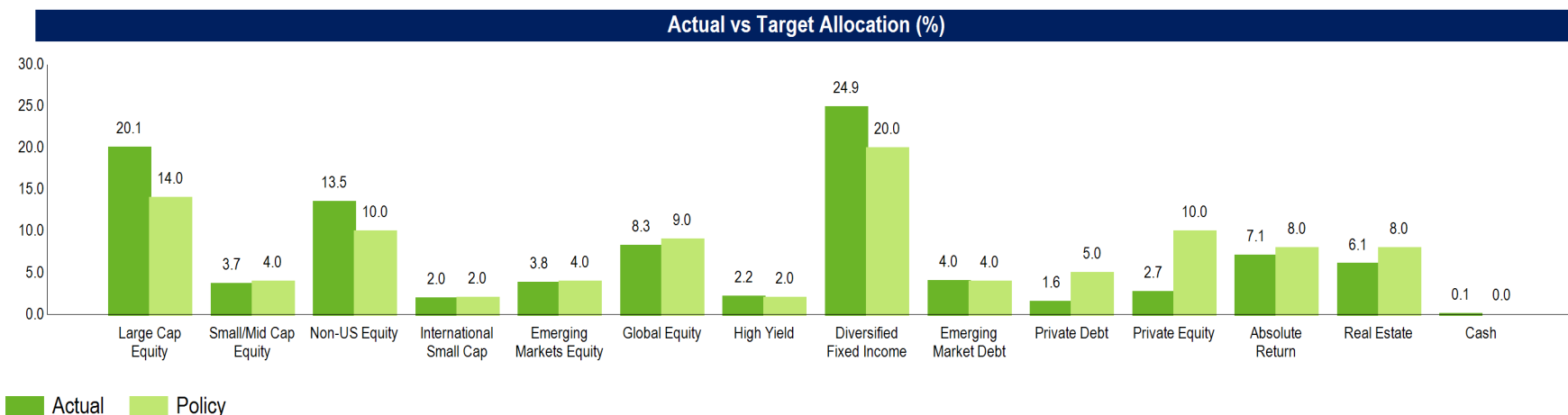
## Vermont State Employees

# TOTAL FUND PERFORMANCE SUMMARY - NET

	Market Value	3 Mo	Rank	Fiscal YTD	Rank	1 Yr	Rank	3 Yrs	Rank	5 Yrs	Rank	7 Yrs	Rank	10 Yrs	Rank
<b>Total Employees Composite</b>	<b>\$1,860,456,573</b>	<b>7.7%</b>	<b>78</b>	<b>3.0%</b>	<b>47</b>	<b>3.5%</b>	<b>71</b>	<b>8.2%</b>	<b>50</b>	<b>5.2%</b>	<b>83</b>	<b>6.1%</b>	<b>92</b>	<b>9.8%</b>	<b>37</b>
Allocation Index		7.8%	75	2.7%	59	3.3%	77	7.6%	77	4.9%	91	5.8%	95	8.7%	81
Policy Index		7.4%	85	3.4%	31	3.9%	57	7.6%	78	5.0%	86	5.9%	94	8.5%	86
InvMetrics Public DB < \$5 Billion Net Median		8.8%		2.9%		4.2%		8.2%		5.9%		7.2%		9.6%	

3 Years Ending March 31, 2019								
	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Sharpe Ratio	Rank	Sortino Ratio RF	Rank
Total Employees Composite	7.83%	66	5.60%	17	1.18	20	1.10	17
Allocation Index	7.63%	75	5.82%	23	1.10	42	1.05	28
Policy Index	7.63%	75	5.10%	6	1.26	11	1.19	9

5 Years Ending March 31, 2019								
	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Sharpe Ratio	Rank	Sortino Ratio RF	Rank
Total Employees Composite	4.97%	88	6.00%	16	0.70	66	0.94	45
Allocation Index	4.88%	90	5.99%	16	0.69	70	0.90	56
Policy Index	5.06%	86	5.49%	5	0.78	39	1.07	20

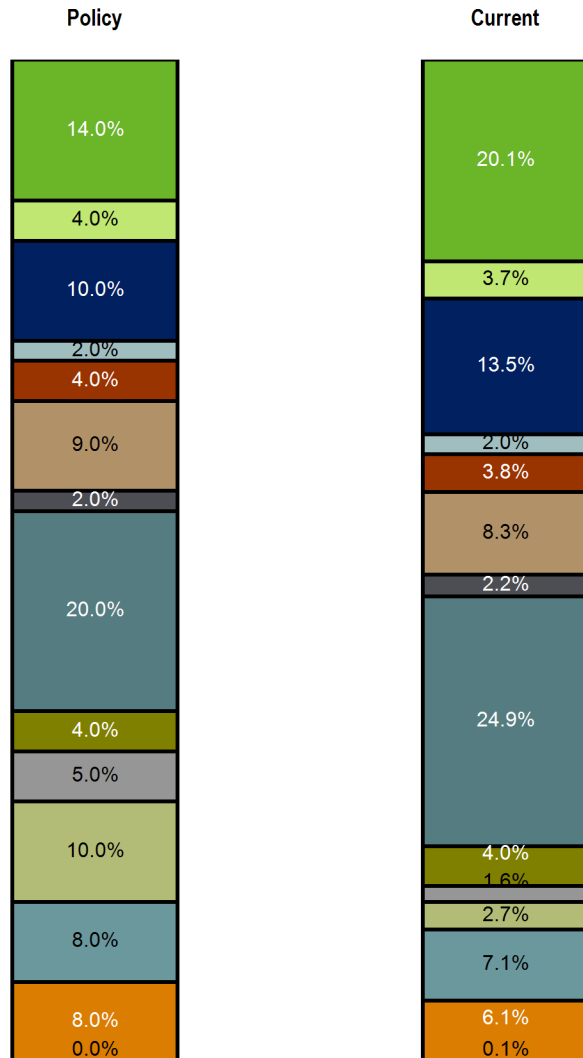


Asset class weights may not add up to 100% due to rounding



## Vermont State Employees

# TOTAL FUND ASSET ALLOCATION VS. POLICY TARGETS



Asset Allocation vs. Target				
	Current	Policy	Current	Difference*
Large Cap Equity	\$373,399,375	14.0%	20.1%	6.1%
Small/Mid Cap Equity	\$69,108,395	4.0%	3.7%	-0.3%
Non-US Equity	\$251,938,623	10.0%	13.5%	3.5%
International Small Cap	\$36,604,499	2.0%	2.0%	0.0%
Emerging Markets Equity	\$70,973,157	4.0%	3.8%	-0.2%
Global Equity	\$153,664,319	9.0%	8.3%	-0.7%
High Yield	\$40,132,990	2.0%	2.2%	0.2%
Diversified Fixed Income	\$463,333,776	20.0%	24.9%	4.9%
Emerging Market Debt	\$74,867,663	4.0%	4.0%	0.0%
Private Debt	\$29,261,699	5.0%	1.6%	-3.4%
Private Equity	\$51,013,822	10.0%	2.7%	-7.3%
Absolute Return	\$131,727,259	8.0%	7.1%	-0.9%
Real Estate	\$113,157,860	8.0%	6.1%	-1.9%
Cash	\$1,220,194	0.0%	0.1%	0.1%
<b>Total</b>	<b>\$1,860,456,573</b>	<b>100.0%</b>	<b>100.0%</b>	

Absolute Return includes Grosvenor, Pinnacle Natural Resources, L.P., and Allianz Structured Alpha





## Vermont State Employees

# TOTAL FUND PERFORMANCE DETAIL - NET

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception Date
<b>Total Employees Composite</b>	<b>1,860,456,573</b>	<b>100.0</b>	<b>100.0</b>	<b>7.7</b>	<b>78</b>	<b>3.0</b>	<b>47</b>	<b>3.5</b>	<b>71</b>	<b>8.2</b>	<b>50</b>	<b>5.2</b>	<b>83</b>	<b>9.8</b>	<b>37</b>	<b>Jan-92</b>
Allocation Index				7.8	75	2.7	59	3.3	77	7.6	77	4.9	91	8.7	81	Jan-92
Policy Index				7.4	85	3.4	31	3.9	57	7.6	78	5.0	86	8.5	86	Jan-92
InvMetrics Public DB < \$5 Billion Net Median				8.8		2.9		4.2		8.2		5.9		9.6		Jan-92
<b>Total Domestic Equity</b>	<b>442,507,771</b>	<b>23.8</b>	<b>18.0</b>	<b>14.2</b>	<b>46</b>	<b>5.4</b>	<b>26</b>	<b>9.6</b>	<b>28</b>	<b>13.3</b>	<b>34</b>	<b>10.2</b>	<b>26</b>	<b>--</b>	<b>--</b>	<b>Dec-10</b>
Russell 3000				14.0	47	4.7	31	8.8	32	13.5	31	10.4	25	16.0	39	Dec-10
eV All US Equity Net Median				13.8		1.7		5.3		11.6		8.3		15.4		Dec-10
<b>Total Large Cap Equities</b>	<b>373,399,375</b>	<b>20.1</b>	<b>14.0</b>	<b>13.9</b>	<b>39</b>	<b>5.5</b>	<b>36</b>	<b>9.0</b>	<b>38</b>	<b>13.2</b>	<b>35</b>	<b>10.5</b>	<b>32</b>	<b>17.0</b>	<b>13</b>	<b>Apr-01</b>
S&P 500				13.6	41	5.9	34	9.5	34	13.5	31	10.9	28	15.9	28	Apr-01
eV US Large Cap Equity Net Median				13.0		4.1		7.0		11.9		9.3		14.9		Apr-01
SSgA S&P 500 Cap-Wgt	300,347,670	16.1	10.0	13.6	41	5.8	34	9.4	34	13.5	31	10.9	28	--	--	Aug-10
SSgA S&P 500 Equal-Wgt	73,049,968	3.9	4.0	14.9	29	4.2	49	7.2	49	12.1	49	9.4	47	17.7	8	Dec-05
S&P 500 Equal Weighted				14.9	29	4.3	48	7.2	49	12.0	49	9.5	46	17.8	7	Dec-05
<b>Total Small/Mid Cap Equities</b>	<b>69,108,395</b>	<b>3.7</b>	<b>4.0</b>	<b>16.0</b>	<b>42</b>	<b>4.9</b>	<b>14</b>	<b>12.7</b>	<b>11</b>	<b>14.3</b>	<b>23</b>	<b>10.2</b>	<b>15</b>	<b>17.4</b>	<b>14</b>	<b>Apr-01</b>
Russell 2500				15.8	43	-1.2	49	4.5	40	12.6	41	7.8	42	16.2	32	Apr-01
eV US Small-Mid Cap Equity Net Median				15.0		-1.6		2.6		11.4		7.1		15.5		Apr-01
Champlain	69,108,395	3.7	4.0	16.0	42	4.9	14	12.7	11	16.7	16	12.1	5	--	--	Oct-09
Custom SMID Cap Equity Index				15.2	48	-3.2	63	3.3	46	12.9	36	7.7	43	16.2	33	Oct-09

Custom SMID Cap Equity Index is 50% Russell 2500 and 50% Russell 2000 starting 10/1/2017, and 100% Russell 2500 prior, corresponding to the change in strategy

Long term policy consists of: 14% S&P 500 / 4% Russell 2500 / 10% MSCI EAFE / 4% MSCI Emerging Markets / 9% MSCI ACWI / 2% BBgBarc US High Yield TR / 2% MSCI EAFE Small Cap / 20% BBgBarc US Aggregate TR / 4% JP Morgan EMBI Global Index / 5% S&P/LSTA Leveraged Loan TR / 10 % Cambridge Associates US All PE / 8% HFRI Fund of Funds Composite Index / 8% NCREIF Property Index

The Total Fund Return is based on a Modified Dietz calculation

Fiscal Year End is 6/30

## Vermont State Employees

# TOTAL FUND PERFORMANCE DETAIL - NET

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception Date
<b>Total Non US Equity</b>	<b>513,180,599</b>	<b>27.6</b>	<b>25.0</b>	<b>11.2</b>	<b>50</b>	<b>-0.7</b>	<b>15</b>	<b>-4.2</b>	<b>31</b>	<b>8.8</b>	<b>34</b>	<b>3.4</b>	<b>48</b>	<b>--</b>	<b>--</b>	<b>Apr-01</b>
MSCI ACWI ex USA				10.3	66	-1.6	26	-4.2	31	8.1	43	2.6	66	8.8	76	Apr-01
eV All ACWI ex-US Equity Net Median				11.1		-3.7		-5.9		7.7		3.3		10.6		Apr-01
<b>Total Core Non US Equity</b>	<b>251,938,623</b>	<b>13.5</b>	<b>10.0</b>	<b>9.7</b>	<b>64</b>	<b>-2.2</b>	<b>30</b>	<b>-4.4</b>	<b>41</b>	<b>8.8</b>	<b>20</b>	<b>3.5</b>	<b>36</b>	<b>9.6</b>	<b>59</b>	<b>Apr-01</b>
MSCI EAFE				10.0	53	-2.5	32	-3.7	33	7.3	43	2.3	67	9.0	74	Apr-01
eV All EAFE Equity Net Median				10.1		-4.5		-5.6		6.9		3.0		9.9		Apr-01
SSgA ACWI Ex US	124,417,721	6.7	3.0	10.4	67	-1.5	25	-4.0	33	8.3	38	2.8	62	--	--	Aug-10
MSCI ACWI ex USA				10.3	67	-1.6	25	-4.2	37	8.1	43	2.6	66	8.8	74	Aug-10
eV ACWI ex-US All Cap Equity Net Median				11.0		-3.6		-5.5		7.7		3.2		10.6		Aug-10
Acadian	63,071,886	3.4	3.5	9.2	76	-5.7	62	-6.8	58	10.7	7	5.1	18	11.2	31	Nov-05
Mondrian	64,449,016	3.5	3.5	8.7	80	0.1	10	-2.2	21	6.8	55	2.3	68	8.6	82	Oct-05
MSCI EAFE				10.0	53	-2.5	32	-3.7	33	7.3	43	2.3	67	9.0	74	Oct-05
<b>Total Global Equity</b>	<b>153,664,319</b>	<b>8.3</b>	<b>9.0</b>	<b>14.0</b>	<b>33</b>	<b>-0.5</b>	<b>66</b>	<b>-3.2</b>	<b>82</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>Feb-18</b>
MSCI ACWI				12.2	54	2.1	45	2.6	52	10.7	37	6.5	50	12.0	57	Feb-18
eV All Global Equity Net Median				12.4		1.5		2.7		9.5		6.4		12.5		Feb-18
Artisan Global Opportunities	82,952,979	4.5	4.5	16.5	11	2.1	45	--	--	--	--	--	--	--	--	Jul-18
Hosking Global Equity	70,711,340	3.8	4.5	11.2	67	-3.3	83	-6.0	91	--	--	--	--	--	--	Feb-18
MSCI ACWI				12.2	54	2.1	45	2.6	52	10.7	37	6.5	50	12.0	57	Feb-18
<b>Total International Small Cap Equity</b>	<b>36,604,499</b>	<b>2.0</b>	<b>2.0</b>	<b>11.2</b>	<b>34</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>Oct-18</b>
MSCI EAFE Small Cap				10.7	43	-7.9	29	-9.4	29	7.5	48	4.5	53	12.8	68	Oct-18
eV EAFE Small Cap Equity Net Median				10.1		-9.4		-11.9		7.3		4.7		13.9		Oct-18
SGA International Small Cap Equity	36,604,499	2.0	2.0	11.2	34	--	--	--	--	--	--	--	--	--	--	Nov-18
MSCI EAFE Small Cap				10.7	43	-7.9	29	-9.4	29	7.5	48	4.5	53	12.8	68	Nov-18
<b>Total Emerging Market Equity</b>	<b>70,973,157</b>	<b>3.8</b>	<b>4.0</b>	<b>10.7</b>	<b>45</b>	<b>6.4</b>	<b>2</b>	<b>-4.5</b>	<b>13</b>	<b>8.7</b>	<b>67</b>	<b>3.0</b>	<b>65</b>	<b>11.3</b>	<b>18</b>	<b>Feb-08</b>
MSCI Emerging Markets				9.9	57	0.6	38	-7.4	36	10.7	40	3.7	51	8.9	72	Feb-08
eV Emg Mkts Equity Net Median				10.3		-0.3		-8.6		9.9		3.7		9.8		Feb-08
Aberdeen	70,973,157	3.8	4.0	10.7	45	6.4	2	-4.5	13	8.7	67	3.0	65	11.3	18	Feb-08
MSCI Emerging Markets				9.9	57	0.6	38	-7.4	36	10.7	40	3.7	51	8.9	72	Feb-08



## Vermont State Employees

# TOTAL FUND PERFORMANCE DETAIL - NET

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception Date
<b>Total Fixed Income</b>	<b>578,334,430</b>	<b>31.1</b>	<b>26.0</b>	<b>3.5</b>	<b>39</b>	<b>3.8</b>	<b>56</b>	<b>3.6</b>	<b>68</b>	<b>4.1</b>	<b>30</b>	<b>3.6</b>	<b>31</b>	<b>--</b>	<b>--</b>	<b>Dec-10</b>
<i>BBgBarc US Aggregate TR</i>				2.9	54	4.6	30	4.5	37	2.0	63	2.7	53	3.8	60	Dec-10
<i>eV All US Fixed Inc Net Median</i>				3.1		4.0		4.2		2.5		2.8		4.4		Dec-10
<b>Total Diversified Fixed Income</b>	<b>463,333,776</b>	<b>24.9</b>	<b>20.0</b>	<b>2.9</b>	<b>54</b>	<b>3.7</b>	<b>60</b>	<b>3.9</b>	<b>60</b>	<b>2.9</b>	<b>45</b>	<b>3.3</b>	<b>38</b>	<b>5.7</b>	<b>38</b>	<b>Jul-03</b>
<i>BBgBarc US Aggregate TR</i>				2.9	54	4.6	30	4.5	37	2.0	63	2.7	53	3.8	60	Jul-03
<i>eV All US Fixed Inc Net Median</i>				3.1		4.0		4.2		2.5		2.8		4.4		Jul-03
SSgA Barclays Aggregate Index	201,611,337	10.8	8.0	2.9	72	4.7	43	4.5	42	2.0	66	--	--	--	--	Feb-15
PIMCO Core Plus	112,568,377	6.1	4.0	3.0	91	4.5	72	4.5	42	2.7	80	2.9	70	--	--	Oct-09
<i>BBgBarc US Aggregate TR</i>				2.9	93	4.6	53	4.5	43	2.0	97	2.7	78	3.8	99	Oct-09
<i>eV US Core Plus Fixed Inc Net Median</i>				3.6		4.7		4.4		3.1		3.1		5.8		Oct-09
GAM Unconstrained Bond	10,538,939	0.6	0.0	1.2	87	1.9	64	1.7	54	4.5	55	--	--	--	--	Jun-15
PIMCO Unconstrained	30,916,820	1.7	2.0	2.1	68	3.3	34	3.8	14	4.8	52	2.6	56	--	--	Jul-11
<i>PIMCO Unconstrained Custom Index</i>				4.9	16	5.4	4	4.7	9	4.5	56	--	--	--	--	Jul-11
<i>3-Month Libor Total Return USD</i>				0.7	94	2.0	63	2.6	39	1.7	89	1.1	88	0.7	99	Jul-11
<i>eV Global Unconstrained Fixed Inc Net Median</i>				2.8		2.7		1.8		4.8		2.7		5.5		Jul-11
BlackRock TIPS	107,698,303	5.8	6.0	3.2	61	1.8	41	2.6	36	1.7	44	1.9	28	--	--	Dec-09
<i>BBgBarc US TIPS TR</i>				3.2	61	1.9	36	2.7	22	1.7	41	1.9	18	3.4	46	Dec-09
<b>Total High Yield Bonds</b>	<b>40,132,990</b>	<b>2.2</b>	<b>2.0</b>	<b>4.9</b>	<b>86</b>	<b>0.5</b>	<b>98</b>	<b>1.3</b>	<b>98</b>	<b>6.5</b>	<b>74</b>	<b>3.5</b>	<b>75</b>	<b>8.8</b>	<b>84</b>	<b>Jan-05</b>
<i>BBgBarc US High Yield TR</i>				7.3	34	4.9	33	5.9	20	8.6	17	4.7	22	11.3	13	Jan-05
<i>eV US High Yield Fixed Inc Net Median</i>				6.9		4.2		5.0		7.4		4.1		10.0		Jan-05
PIMCO High Yield	40,132,990	2.2	2.0	4.9	86	--	--	--	--	--	--	--	--	--	--	Aug-18
<i>BBgBarc US High Yield TR</i>				7.3	34	4.9	33	5.9	20	8.6	17	4.7	22	11.3	13	Aug-18

PIMCO Unconstrained Custom Index is 25% HY, 25% EMD, 50% BC Agg

BlackRock TIPS Universe - eV US TIPS / Inflation Fixed Inc Net

Fiscal Year End is 6/30

## Vermont State Employees

# TOTAL FUND PERFORMANCE DETAIL - NET

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception Date
<b>Total Emerging Market Debt</b>	<b>74,867,663</b>	<b>4.0</b>	<b>4.0</b>	<b>6.9</b>	<b>20</b>	<b>6.4</b>	<b>42</b>	<b>2.3</b>	<b>33</b>	<b>6.3</b>	<b>28</b>	<b>5.0</b>	<b>15</b>	--	--	<b>Nov-09</b>
<i>JP Morgan EMBI Global Index</i>				6.6	24	7.3	15	3.5	20	5.2	54	4.8	19	8.1	44	<i>Nov-09</i>
<i>eV All Emg Mkts Fixed Inc Net Median</i>				5.4		5.7		0.1		5.3		3.4		7.8		<i>Nov-09</i>
Wellington Opportunistic EMD	74,867,663	4.0	4.0	6.9	20	6.4	42	2.3	33	6.3	28	5.0	15	--	--	Jan-10
<i>JP Morgan EMBI Global Index</i>				6.6	24	7.3	15	3.5	20	5.2	54	4.8	19	8.1	44	<i>Jan-10</i>
<b>Total Private Debt</b>	<b>29,261,699</b>	<b>1.6</b>	<b>5.0</b>	<b>3.4</b>	<b>--</b>	<b>3.8</b>	<b>--</b>	<b>5.4</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>Jan-18</b>
<i>S&amp;P/LSTA Leveraged Loan TR</i>				4.0	--	2.3	--	3.0	--	5.7	--	3.6	--	8.0	--	<i>Jan-18</i>
BlueBay Direct Lending Fund III	4,624,359	0.2	2.5	2.3	--	5.7	--	--	--	--	--	--	--	--	--	Jun-18
Benefit Street Partners	24,637,339	1.3	2.5	3.6	--	3.1	--	4.8	--	--	--	--	--	--	--	Jan-18
<i>S&amp;P/LSTA Leveraged Loan TR</i>				4.0	--	2.3	--	3.0	--	5.7	--	3.6	--	8.0	--	<i>Jan-18</i>
<b>Total Real Estate</b>	<b>113,157,860</b>	<b>6.1</b>	<b>8.0</b>	<b>0.4</b>	<b>--</b>	<b>3.7</b>	<b>--</b>	<b>5.3</b>	<b>--</b>	<b>7.0</b>	<b>--</b>	<b>9.5</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>Dec-10</b>
<i>NCREIF Property Index</i>				1.8	--	4.9	--	6.8	--	7.1	--	9.1	--	8.5	--	<i>Dec-10</i>
<b>Total Real Estate Core</b>	<b>94,179,899</b>	<b>5.1</b>	<b>4.5</b>	<b>0.5</b>	<b>--</b>	<b>3.3</b>	<b>--</b>	<b>4.9</b>	<b>--</b>	<b>5.9</b>	<b>--</b>	<b>8.9</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>May-12</b>
UBS Trumbull	94,077,246	5.1	4.5	0.5	--	3.3	--	5.0	--	5.4	--	7.7	--	7.2	--	Oct-96
<b>Total Real Estate Non-Core</b>	<b>18,977,961</b>	<b>1.0</b>	<b>3.5</b>	<b>-0.2</b>	<b>--</b>	<b>5.7</b>	<b>--</b>	<b>6.9</b>	<b>--</b>	<b>12.6</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>May-12</b>
Siguler Guff DREOF II	12,459,085	0.7	1.0	-2.0	--	2.6	--	3.9	--	12.9	--	--	--	--	--	Jun-14
Siguler Guff DREOF II Co-Investment	6,518,876	0.4	0.5	3.1	--	12.4	--	12.9	--	--	--	--	--	--	--	Nov-16
Brookfield Strategic Real Estate Partners III	0	0.0	2.0	0.0	--	0.0	--	--	--	--	--	--	--	--	--	Jun-18
<i>NCREIF Property Index</i>				1.8	--	4.9	--	6.8	--	7.1	--	9.1	--	8.5	--	<i>Jun-18</i>

Market values are final as of Q1 2019 capital statement for Benefit Street Partners, BlueBay Direct Lending Fund III, Siguler Guff DREOF II, Siguler Guff DREOF II Co-Investment and UBS Trumbull

Transwestern/Aslan III residual market value of \$102,653 is included in the Total Real Estate composite

Fiscal Year End is 6/30

## Vermont State Employees

# TOTAL FUND PERFORMANCE DETAIL - NET

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception Date
<b>Total Absolute Return</b>	<b>131,727,259</b>	<b>7.1</b>	<b>8.0</b>	<b>2.8</b>	<b>70</b>	<b>-0.4</b>	<b>58</b>	<b>2.6</b>	<b>32</b>	<b>4.5</b>	<b>59</b>	<b>1.9</b>	<b>71</b>	<b>--</b>	<b>--</b>	<b>Dec-10</b>
<i>HFRI Fund of Funds Composite Index</i>				4.6	46	-0.3	57	0.1	67	3.9	66	2.2	66	3.5	88	Dec-10
<i>eV Alt Fund of Funds - Multi-Strategy Median</i>				4.3		0.0		1.4		4.9		3.0		5.6		Dec-10
Pinnacle Natural Resources, L.P.	46,177,341	2.5	3.0	2.3	78	-0.8	47	3.8	37	--	--	--	--	--	--	Jul-16
<i>Bloomberg Commodity Index</i>				6.3	66	-5.6	73	-5.3	94	2.2	93	-8.9	78	-2.6	99	Jul-16
Grosvenor	51,958,207	2.8	3.0	2.6	75	-1.9	79	-0.4	73	4.8	54	2.4	64	--	--	Dec-10
Allianz Structured Alpha	33,591,710	1.8	2.0	3.9	56	2.5	15	6.0	10	4.2	61	6.9	14	8.5	15	Apr-08
<i>91 Day T-Bills</i>				0.6	95	1.7	24	2.1	37	1.2	95	0.8	91	0.4	99	Apr-08
<i>eV Alt Fund of Funds - Multi-Strategy Median</i>				4.3		0.0		1.4		4.9		3.0		5.6		Apr-08
<b>Total Private Equity</b>	<b>51,013,822</b>	<b>2.7</b>	<b>10.0</b>	<b>5.2</b>	<b>--</b>	<b>11.7</b>	<b>--</b>	<b>19.9</b>	<b>--</b>	<b>18.6</b>	<b>--</b>	<b>18.6</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>Dec-12</b>
<i>Cambridge Associates US All PE</i>				6.5	--	8.7	--	14.5	--	16.0	--	12.2	--	14.8	--	Dec-12
<b>Total Cash</b>	<b>1,220,194</b>	<b>0.1</b>	<b>0.0</b>													
Vermont Cash	1,220,194	0.1	0.0													

Harbourvest is based on final capital account statements for Q1 2019

As of 04/01/2016, Absolute Return includes Allianz Structured Alpha and was formerly included in the Diversified Fixed Income composite

Fiscal Year End is 6/30

# ACTIVE MANAGER RELATIVE PERFORMANCE

	Positive	Negative
QUARTER	<p><b><u>U.S. Equity</u></b></p> <ul style="list-style-type: none"> <li>Champlain (+80 bps)</li> </ul> <p><b><u>International Equity</u></b></p> <ul style="list-style-type: none"> <li>Artisan (+410 bps)</li> <li>Strategic Global Advisors (+30 bps)</li> <li>Aberdeen (+80 bps)</li> </ul> <p><b><u>Fixed Income</u></b></p> <ul style="list-style-type: none"> <li>PIMCO Core Plus (+10 bps)</li> <li>Wellington EMD (+30 bps)</li> <li>GAM Unconstrained (+50 bps)</li> </ul> <p><b><u>Absolute Return</u></b></p> <ul style="list-style-type: none"> <li>Allianz (+290 bps)</li> </ul>	<p><b><u>International Equity</u></b></p> <ul style="list-style-type: none"> <li>Acadian (-80 bps)</li> <li>Mondrian (-130 bps)</li> <li>Hosking (-110 bps)</li> </ul> <p><b><u>Fixed Income</u></b></p> <ul style="list-style-type: none"> <li>PIMCO Unconstrained (-280 bps)</li> <li>PIMCO High Yield (-240 bps)</li> </ul> <p><b><u>Absolute Return</u></b></p> <ul style="list-style-type: none"> <li>Pinnacle (-400 bps)</li> <li>Grosvenor (-200 bps)</li> </ul>
1 YEAR	<p><b><u>US Equity</u></b></p> <ul style="list-style-type: none"> <li>Champlain (+940 bps)</li> </ul> <p><b><u>International Equity</u></b></p> <ul style="list-style-type: none"> <li>Mondrian (+150 bps)</li> <li>Aberdeen (+290 bps)</li> </ul> <p><b><u>Absolute Return</u></b></p> <ul style="list-style-type: none"> <li>Pinnacle (+870 bps)</li> <li>Allianz (+220 bps)</li> </ul>	<p><b><u>International Equity</u></b></p> <ul style="list-style-type: none"> <li>Acadian (-310 bps)</li> <li>Hosking (-880 bps)</li> </ul> <p><b><u>Fixed Income</u></b></p> <ul style="list-style-type: none"> <li>PIMCO Unconstrained (-90 bps)</li> <li>GAM Unconstrained (-90 bps)</li> <li>Wellington EMD (-120 bps)</li> </ul> <p><b><u>Absolute Return</u></b></p> <ul style="list-style-type: none"> <li>Grosvenor (-60 bps)</li> </ul>

Reflects public markets and active management only  
**GREEN** indicates the managers had outperformed their respective benchmarks  
**RED** indicates the managers had underperformed their respective benchmarks  
**(+/-)** is the over/under performance relative to respective benchmarks in basis points



# NEPC'S DUE DILIGENCE MONITOR

Firm Investment Product	Manager Changes/ Announcements (Recent Quarter)	NEPC Due Diligence Committee Recommendations
BlackRock	<p>Blackrock announced a broad array of leadership realignment in what the firm termed final in a series of such changes, outlined below:</p> <ul style="list-style-type: none"> <li>• Geraldine Buckingham was named the head of Asia-Pacific, succeeding Ryan Stork, who becomes deputy chief operating office.</li> <li>• Mark Wiedman was named Head of International and of Corporate Strategy with Salim Ramji succeeding Mark as Global Head of ETF &amp; Index Investments</li> <li>• Mark McCombe becomes Chief Client Officer</li> <li>• Sarah Melvin returns to London as Head of the UK</li> <li>• Zach Buchwald succeeds Sarah as Head of US &amp; Canada Institutional Client Business</li> <li>• Edwin Conway becomes Global Head of BlackRock Alternative Investors (BAI)</li> <li>• Jim Barry becomes Chief Investment Officer for BAI</li> <li>• David Blumer will become a senior advisor to the firm</li> <li>• Richie Prager has decided to retire as of July 1, Supurna VedBrat will become Head of Global Trading</li> <li>• Patrick Olson will become Chief Product Officer</li> <li>• Claude Wade, as Global Head of Client Experience and Head of the Atlanta office</li> </ul>	<p><b>No Action</b></p>
BlueBay Asset Management Direct Lending	<p>On June 5, 2019, the Private Debt business of BlueBay Asset Management ("BlueBay" or the "Firm") announced that it has agreed to spinout from the Firm. The spinout was supported by Dyal Capital Partners ("Dyal"). The new entity will be independently owned; 60% by Private Debt management and 40% by Dyal. The Private Debt business has approximately \$14.8 billion in assets undermanagement.</p>	<p><b>No Action</b> (see NEPC memo in appendix)</p>
PIMCO Core Plus Unconstrained	<p>PIMCO and Stacy Schaus have settled their litigation out of court. PIMCO continues to believe that Ms. Schaus was treated fairly in her employment at PIMCO; both sides are bound by confidentiality.</p>	<p>Due diligence status changed from Watch to <b>No Action</b></p>



# NEPC DUE DILIGENCE LEGEND KEY

## Due Diligence Ratings (Investment Product only)

1	A high conviction investment product with a clear and economically-grounded investment thesis, and is managed by an investment team that is sufficiently resourced and incented to execute on the thesis. A 1 rating represents NEPC Research’s best ideas. Not all 1 rated products are suitable for all clients.
2	NEPC has a positive view of the strategy. Strategy has a compelling and sound investment thesis. The manager is sufficiently resourced and incented to execute on the thesis. Strengths outweigh the weaknesses, but the strategy does not meet all requirements for a 1 rating.
3	A satisfactory investment product. The strategy lacks a compelling investment thesis, however there are no significant concerns around the manager’s viability.
4	The strategy may have an unclear or ambiguous investment thesis or the manager may lack the ability to execute on the stated thesis. The strategy likely has strengths and weaknesses and the weaknesses may outweigh the strengths.
5	A strategy that lacks an investment thesis or NEPC has no confidence in the manager’s ability to execute on the thesis, and/or the investment firm may not be viable. Serious issues have been identified with an investment manager or product. This rating aligns with a Due Diligence status of Terminate for client-owned products.
Not Rated	Due diligence has not been sufficiently completed on the product or manager.

## Due Diligence Status (Firm and Product)

No Action	Informational items have surfaced; no action is recommended.
Watch	Issues have surfaced which may require increased monitoring, but which are not considered serious in the near-term. Close monitoring is appropriate until the issues are resolved.
Hold	Serious issues have surfaced which require increased monitoring. These issues could have long-term implications on the investment team’s ability to effectively execute the investment strategy.
Client Review	Very serious issues have surfaced with an investment manager. For products that have been fully vetted, the issues may be significant enough to violate the original investment thesis. Clients are advised to review their relationship with the manager.
Terminate	We have lost all confidence in the product; manager would not be recommended for searches and clients would be discouraged from using. The manager cannot be in future searches unless a client specifically requests. Current clients must be advised to replace the manager.





# INVESTMENT MANAGER – Q3 FISCAL 2019 COMMENTARY

## POSITIVE CONTRIBUTORS

	Commentary	Due Diligence Rating
<b>Champlain</b> <i>Small/Mid Cap Equity</i>	<p><b>Returned 16.0%, outperforming the custom benchmark, 50% R2000/50% R2500 by 80bps</b></p> <p><i>Contributors:</i> Strong stock selection in the consumer staples, industrial and health care sectors provided the biggest relative contributions for the quarter. Health care rebounded from the significant sell-off in the 4<sup>th</sup> quarter of 2018 and was the strongest performing sector. Veeva and Waters were the strategy’s largest relative contributors in the health care sector during the quarter. Industrial holding, Welbilt, was this sector’s largest contributor as new senior management reset expectations on margin improvement. Technology, specifically software overweight, led to modest outperformance.</p> <p><i>Detractors:</i> From an asset allocation standpoint, the biggest lag on performance for the quarter was an underweight to real estate and utilities. Stock selection in consumer discretionary was also a detractor for the quarter. In addition, the strategy’s financials lagged the benchmark due to underperformance from insurance holdings. One of the names that caused some of the underperformance was John Wiley, which had been under pressure due to transition in their educational print book publishing business.</p> <p><i>Positioning:</i> They remain consistent with the execution of their investment process which is focused on reliable, growing, and high returning businesses. As a result, they exclude what they believe to be the most risky and cyclical companies. They remain confident the majority of their holdings represent better quality and present better reward to risk. Portfolio had 116 positions.</p>	1
<b>Artisan</b> <b>Global Opportunity</b> <i>Global Equity</i>	<p><b>Returned 16.3%, outperforming the MSCI ACWI by 410bps</b></p> <p><i>Contributors:</i> For the quarter, the portfolio benefited from strong stock selection in technology, financials, consumer discretionary and health care holdings. From an individual holdings perspective, Worldpay (Financials), Techtronic (IT) and Fevertree (Consumer) were among the top Q1 contributors. Worldpay, a credit-card merchant, posted strong returns because of its exposure to digital payments and the expectation its global footprint would allow it to grow market share. Techtronic’s shares were pressured in Q4 by global trade concerns, but rebounded in Q1 with increasing visibility into a potential resolution.</p> <p><i>Detractors:</i> Lack of exposure to the real estate sector modestly detracted. Energy and materials were lags on performance due to underweights in both sectors. Among the bottom contributors in Q1 were Booking Holdings (online travel) pressured by slowing European tourist travel among Brexit concerns, and Activision Blizzard (gaming) as they undertake a reorg and rebuilding period.</p> <p><i>Positioning:</i> During the quarter, as valuations rose, they pared exposure to holdings that neared their targets. As of March 31, 2019, the portfolio had a 3-5 year forecasted weighted average earnings growth rate of 18%. The portfolio held 45 companies with 36% of portfolio capital committed to the top 10 holdings and 61% of capital committed to the top 20 positions. The portfolio’s weighted average market capitalization was \$122.7 billion.</p>	1



# INVESTMENT MANAGER – Q3 FISCAL 2019 COMMENTARY

## POSITIVE CONTRIBUTORS

	Commentary	Due Diligence Rating
<b>Strategic Global Advisor</b> <i>International Small Cap</i>	<p><b>Returned 11.0%, outperforming the MSCI EAFE Small Cap index by 30bps</b></p> <p><i>Contributors:</i> The SGA Alpha Model performed well for the quarter among non-U.S. small cap developed equities. Within the model, the growth category was the strongest contributor, followed by the quality and sentiment categories, which were modestly positive. The outperformance during the quarter was driven by stock selection, led by in materials, real estate and consumer discretionary. U.K. based steel producer and miner, Evraz PLC was the top contributor within the Materials sector. Evraz outperformed relative to peers due to its vertical integration and its exposure to vanadium, which has experienced recent price rallies. Canadian Granite Real Estate Investment Trust was a top contributor in real estate as its share price continued to benefit from share buybacks and efforts to diversify its customer base. From a country perspective stock selection was strong across a number of countries, particularly the U.K. and Japan. In Japan, indoor entertainment venue operator Round One was a strong contributor as expansion in the U.S. and same store sales growth buoyed performance.</p> <p><i>Detractors:</i> Canada was a detractor for the quarter due to an overweight to the country and currency exposure. Stock selection in the Italy was also detractors for the quarter. The valuation category was mixed, performing well in January before sharply reversing during the last two months of the quarter.</p> <p><i>Positioning:</i> For the quarter, the portfolio was overweight to the Americas due to a large overweight to Canadian securities. The portfolio continued to be underweight to Asia (specifically Japan) and utilities. The strategy held 181 holdings.</p>	<p><b>1</b></p>
<b>Aberdeen</b> <i>Emerging Market Equities</i>	<p><b>Returned 10.7%, outperforming the MSCI Emerging Markets by 80bps</b></p> <p><i>Contributors:</i> From a sector allocation perspective, communication services and financials led performance. Regionally, stock selection in China was the largest contributor to performance. Ping An Insurance had a good run throughout the quarter as market confidence in its growth and earnings outlook continued to grow. Huazhu Group, one of the largest domestic operators of mid to low-end hotels, rose on decent results and upbeat quarterly and annual forecast. Online car business, Autohome shrugged off rumors that a dealership had terminated its partnership in January to end the quarter as one of the fund's top contributors. Also aiding performance was the underweight to Korea.</p> <p><i>Detractors:</i> Despite being one of the best-performing markets in March, India was a laggard over the quarter, with Housing Development Finance Corp, Hero Motocorp and Ultratech Cement detracting from performance. Performance in Latin America was sub-par, largely due to holdings in Brazil. Shares in Vale were hit by the Brumadinho dam disaster in January. Ultrapar retreated on poor results and concerns on intensifying competitive pressure in fuel retailer Ipiranga, its core business. Stock selection in South Africa was negative, with retailers Massmart and Truworths continuing to lag amid ongoing tepid consumer sentiment.</p> <p><i>Positioning:</i> The portfolio is currently overweight to large cap names, financials and real estate and has an underweight to energy, industrials, utilities and health care. Geographically, the portfolio is overweight to Hong Kong, India, Brazil, Indonesia and Mexico.</p>	<p><b>2</b>            Rating Changed from "1" to "2" in January 2018</p>



Returns presented are net of investment management fees

# INVESTMENT MANAGER – Q3 FISCAL 2019 COMMENTARY

## POSITIVE CONTRIBUTORS

	Commentary	Due Diligence Rating
<b>Wellington</b> <i>Fixed Income</i>	<p><b>Returned 6.9%, outperforming the JPM EMBI Global Index by 30bps</b></p> <p><i>Contributors:</i> During the quarter, country allocation drove relative outperformance, with security selection, local rates positioning and currency positioning also contributing. The portfolio benefited from an underweight country allocation to China, as valuations are unattractive and tend to benefit from strong domestic support, aided performance. Positive stock selection in Mexico, specifically an underweight exposure to long-dated external sovereign debt and an overweight exposure to external quasi-sovereign debt in the oil and gas industry, enhanced performance. Positive security selection in Brazil from a lack of exposure to external sovereign debt contributed to results. An allocation to local rates in Brazil, given benign policy rate expectations and an expected fall in the real rate premia, also helped. Positioning within external quasi-sovereign debt PDVSA in Venezuela contributed to performance. An out-of-index allocation to Greece, due to their commitment to fiscal reform and EMU support, benefited results.</p> <p><i>Detractors:</i> The portfolio was hurt by underweights to credit spread duration and Costa Rica and developed market duration positioning. Overweight country allocations to Qatar, United Arab Emirates (UAE) and Morocco were also negative contributors to performance. They favor Qatar due to attractive valuations, low fiscal break-even oil prices, and large sovereign buffers. Underweight country allocation to Costa Rica hurt results. They remain underweight due to financing and liquidity problems and the passage of a fiscal reform that is unlikely to stabilize the debt-to-GDP ratio.</p> <p><i>Positioning:</i> Maintain pro-risk stance but balancing stable EM fundamentals and attractive valuations. Favor issuers in Eastern Europe and the Middle East over Asia and Latin America. Favor local market allocations primarily via currencies in Brazil and South Africa. Corporate debt more attractive as fundamentals remain healthy in Brazil and China. Average quality of portfolio was Ba1 versus the benchmark at Baa3. Yield of 6.25% versus the benchmark at 5.24%.</p>	1
<b>Allianz</b> <b>Structured Alpha</b> <i>Absolute Return</i>	<p><b>Returned 3.5%, outperforming the 91 Day T-Bill Index by 290bps</b></p> <p><i>Contributors:</i> Structured Alpha 500 benefited from realized gains on both range-bound spreads and upside directional positions, as well as from mark-to-market recovery as marked-down positions cycled through expiration. The other benefit of the strong equity market and accompanying VIX decline is that the portfolio was able to close out a number of longer-dated positions and restore the portfolio to its typical weighted-average duration of approximately six to eight weeks.</p> <p><i>Detractors:</i> The portfolio had entered the year with a slightly longer-duration profile, the result of diagonal restructuring undertaken during the severe late-December correction to manage risk as cost-effectively as possible. During this period we had extended the range-bound zones to the downside by approximately 15%, with expirations dates pushed several weeks further out in time. This restructuring had improved the portfolio's resilience in the event of further equity market declines.</p> <p><i>Positioning:</i> With some of the strikes now 20% to 25% below the post-rally index levels, the portfolio team took the opportunity to cover range-bound positions several months prior to expiration and were able to pocket 90% or more of their expected value.</p>	1



# INVESTMENT MANAGER – Q3 FISCAL 2019 COMMENTARY

## POSITIVE CONTRIBUTORS

	Commentary	Due Diligence Rating
<b>PIMCO Core Plus</b> <i>Fixed Income</i>	<p><b>Returned 3.0%, outperforming the Barclay’s Aggregate Index by 10bps</b></p> <p><i>Contributors:</i> Selection within corporate credit, particularly a preference for financials. U.S. rate strategies including duration, curve positioning, and security selection. Tactical exposure to select currencies, particularly the British pound.</p> <p><i>Detractors:</i> Non-U.S. duration strategies, including short exposure to duration in select markets and country selection in the eurozone. Positions in non-Agency MBS</p> <p><i>Positioning:</i> Underweight duration overall and have a preference for US duration over developed regions. Within credit, they find attractive opportunities in specific credits that benefit from US growth and a resurgent housing sector. Currency positioning remains tactical particularly given less conviction in the overall direction of the dollar. They remain on the intermediate portion of the curve as it continues to offer attractive characteristics while longer-term rates may rise as less accommodation from central banks and the possibility of higher inflation expectations could cause the yield curve to steepen. Effective duration was 4.56 years with a YTM of 3.32%. Average quality was AA-</p> <p>PIMCO expects world GDP growth to slow to 2.5%–3% this year from 3.3% in 2018. However, with China increasing stimulus and a trade deal between the U.S. and China in the making, we think there is a good chance that global growth will stabilize or even pick up moderately later this year. We expect inflation globally to fall to 1.5%–2% from 2.2% in 2018 due to continued below-target inflation in the U.S., Europe and Japan. Central banks have also struck more accommodative tones, with the Fed’s pivot to patience reducing the risk of monetary overkill and raising the odds that U.S. short-term rates will broadly flat-line within PIMCO’s New Neutral range of 2-3% for the foreseeable future.</p>	<b>1</b>



# INVESTMENT MANAGER – Q3 FISCAL 2019 COMMENTARY

## NEGATIVE CONTRIBUTORS

	Commentary	Due Diligence Rating
<b>Acadian</b> <i>International Equity</i>	<p><b>Returned 9.2%, trailing the MSCI EAFE by 80bps</b></p> <p><i>Detractors:</i> Over the quarter, they experienced headwinds primarily from risk factors. Their small-cap tilt detracted as did top-down positioning and stock selection. Key sources of negative active return included a combination of stock selection and underweight positions in the U.K. and France, along with an opportunistic exposure to Korea. Lufthansa declined after the German air carrier issued a cautious full-year outlook, dampened by rising operational costs. A lack of exposure to SoftBank proved costly. Pearson fell after the U.K. publishing and education company reported a drop in U.S. revenue and issued a cautious full-year outlook. Shares of French digital marketing company Criteo tumbled after U.S. tech giant Alphabet revealed plans to restrict third-party advertisements on its platforms.</p> <p><i>Contributors:</i> Stock selection in Finland was more successful, as was an opportunistic exposure to China. Neste rose after the Finnish refiner reported fourth-quarter earnings that topped consensus estimates. OMV rallied after the Austrian natural gas producer reported better-than expected Q4 earnings and announced plans to boost its 2018 dividend payout. Shares of GN Store Nord climbed after the Danish hearing aid manufacturer reported generally favorable Q4 and full-year results. Fortescue advanced after the Australian iron ore producer posted an increase in half-year revenue and issued a special dividend.</p> <p><i>Positioning:</i> The portfolio had an overweight to emerging markets, North America, Australia/New Zealand, and Middle East. Underweight to Hong Kong/Singapore, Japan, UK, and Continental Europe. By sector, they have an overweight to health care, communication services, energy, IT, and financials. Underweight to real estate, consumer discretionary, industrials, and consumer staples.</p>	1
<b>Mondrian</b> <i>International Equity</i>	<p><b>Returned 8.7%, trailing the MSCI EAFE by 130bps</b></p> <p><i>Detractors:</i> Weakened European manufacturing were negative contributors for German market while uncertainty ahead of the general election in April weighed on the Spanish market. After strong performance in Q4, Telia, the Swedish telecommunications group, lagged due to the weak Swedish krona and the company's anticipation of a more challenging competitive environment. Société Générale, the French bank, declined after full year results indicated weakness in the investment banking division in Q4. The portfolios underweight position in strong materials sectors also held back relative returns.</p> <p><i>Contributors:</i> The portfolio benefited from an overweight to Italy and Hong Kong, along with strong stock selection in Japan and the UK. An overweight to the British pound was also additive for the quarter. In Asia Pacific, portfolio absolute and relative returns benefited from the strong returns of stocks in Japan, including Takeda Pharmaceutical, Fujifilm, and Mitsubishi Electric. Additionally, WH Group, the Hong Kong based meat and packaged food group, rose 39% supported by increased optimism over US-China trade negotiations.</p> <p><i>Positioning:</i> Selective overweight positions in Europe markets and Singapore. Underweight in Australia and France. Overweight sector positioning in communication services, utilities, and energy. Underweight positioning in materials and consumer staples. Portfolio contains between 35 and 55 securities.</p>	1



Returns presented are net of investment management fees

# INVESTMENT MANAGER – Q3 FISCAL 2019 COMMENTARY

## NEGATIVE CONTRIBUTORS

	Commentary	Due Diligence Rating
<b>Hosking</b> <i>International Equity</i>	<p><b>Returned 11.1%, trailing the MSCI ACWI Index by 110bps</b></p> <p><i>Detractors:</i> The quarter began well for the portfolio, with a relative gain of close to 200 bps by the last days of January with “value” areas of the markets leading the way. It was short lived as market sentiment went into reverse gear, with the portfolio ending up behind the benchmark. The majority of the portfolio’s relative underperformance came from the country allocation which overshadowed the portfolio’s strong stock selection. Specifically, an underweight to North America proved costly, as did the portfolio’s overweight to emerging markets. Overweight to financials detracted as many of the names held were some of their biggest losses in the portfolio. Underweight healthcare and IT also detracted. The portfolio had an overweight to emerging markets (23% versus 12% in the index) which also detracted.</p> <p><i>Contributors:</i> For the quarter, materials and financials were additive. Within materials, the portfolio benefited from stock selection led by Johannesburg based platinum miner , Sibanye Gold which posted above estimate returns and favorable momentum after reducing its debt levels. The portfolio also benefited from an overweight to materials and an overweight to the Australian dollar.</p> <p><i>Positioning:</i> Portfolio activity remained below long-term average with turnover of less than 2% in the quarter. Notable sales include the Brazilian car rental company, Localiza, which was trimmed following strong gains and a surprising announcement that the business was going through a rights issue to fund organic growth. Other sales included Toyota Industries and in the context of strong recent performance, the platinum miner Sibanye. Portfolio held 496 securities.</p>	1
<b>PIMCO</b> <b>Unconstrained</b> <i>Fixed Income</i>	<p><b>Returned 2.1%, trailing the PIMCO Custom Index by 280bps</b></p> <p><i>Detractors:</i> The portfolio was hurt by falling yields in the developed markets. Despite modestly increasing intra-quarter – developed market yields broadly fell, spurred by more accommodative central banks and concerns over decelerating global growth. In the U.S., the 10-year yield declined 28bps to 2.41% – retracing the shift higher during 2018 – and the yield curve partially inverted. German, U.K., and Japanese yields also declined over the quarter. Exposures to the Euro and the Japanese Yen were also detractors for the quarter. In Europe, continued weakness in economic data and dovish ECB rhetoric pushed the euro 2.2% weaker versus the dollar.</p> <p><i>Contributors:</i> Exposures to high yield and external IG EMD was beneficial for the quarter. Global investment grade (IG) credit spreads ended the quarter 26 bps tighter at 115 bps, and the sector returned 4.35% (USD hedged), outperforming relative to like-duration global government bonds by 2.13%. Credit spreads rebounded amid expectations for more accommodative central banks and positive sentiment surrounding perceived progress on US/China trade.</p> <p><i>Positioning:</i> Maintain a defensive overall position on duration with a focus on relative value. They see value in holding U.S. duration given the attractive level of yields and potential downside protection, whilst remaining short duration in Japan, U.K., and the Eurozone. They are looking to selectively invest in corporate credit with a focus on high quality positions. They continue to diversify spread exposures, seeing value in Agency and non-Agency MBS as well as select relative value positions in EM debt. They are long a basket of higher yielding EM currencies, such as the Russian ruble and Argentine peso, while short a basket of lower yielding Asian currencies, such as the Taiwan and Singapore dollars. We are also long the U.S. dollar versus developed market currencies. Effective duration was at 0.65 years with a YTM of 4.25% and average quality of A+.</p>	1



Returns presented are net of investment management fees

# INVESTMENT MANAGER – Q3 FISCAL 2019 COMMENTARY

## NEGATIVE CONTRIBUTORS

	Commentary	Due Diligence Rating
Grosvenor Absolute Return	<p><b>Returned 2.6%, trailing the HFRI Fund of Fund Index by 200bps</b></p> <p><i>Detractors:</i> The Fund’s limited directional exposure to broader equity and fixed income markets restricted first quarter gains, as equity markets sharply reversed course. Underperformance within the fund’s relative value allocation was attributable to dedicated fixed income and currency volatility investments (hedging component), as volatility across asset classes collapsed, ultimately reaching historical low levels.</p> <p><i>Contributors:</i> The portfolio experienced positive returns across the majority of its strategies. The equity strategy allocation was the portfolio’s largest contributor, with the Fund’s longer-biased investments performing particularly well. Positive gains were also realized within the Fund’s macro, multi-strategy, credit, and quantitative allocations. Equity strategy gains were driven primarily by regional and sector-specific investments. The outliers in this area included a long-biased healthcare and biotechnology investor, a generalist directional equity manager with an emphasis on technology investments, a long/short specialist focused on Chinese equities, and a European activist fund investment focused on small- and mid-cap stocks. A core investment with a diversified macro manager significantly contributed to first quarter returns. The allocation to the diversified Grosvenor Macro Strategies Fund also contributed. An event-oriented fundamental credit manager was the strategy’s largest contributor. The Fund’s core investment with a fundamental corporate and structured credit manager further contributed to performance. Within the quantitative strategy, the Fund’s investment with GCM Grosvenor’s Quantitative Strategies Fund contributed profits, due to its non-directional quantitative exposure.</p> <p><i>Positioning:</i> GCM believes that current market factors are likely to result in continued and elevated dispersion, which is a primary facet of an improved environment and opportunity set for hedge fund strategies broadly. As a result, the team is prioritizing “difficult-to-access” hedge fund strategies which rely on unique effort and skill on the part of the investment managers, including complex situational investing, process and distressed driven strategies, relative value approaches, and fundamental and quantitative long/short strategies. This also includes strategies and sub-strategies concentrated in sectors and/or geographies which typically require niche and specific expertise in order to source high-quality investments. Moreover, they are holding larger cash positions and investing in liquid strategies in seeking to: i) allow portfolios to capitalize on opportunities that may arise due to dislocations, ii) reduce directional risk in the portfolio.</p>	1



# INVESTMENT MANAGER – Q3 FISCAL 2019 COMMENTARY

## NEGATIVE CONTRIBUTORS

	Commentary	Due Diligence Rating
<p><b>Pinnacle Natural Resources</b> Absolute Return</p>	<p><b>Returned 3.5%, trailing the Bloomberg Commodity Index by 400bps</b></p> <p><i>Detractors:</i> PNR’s agriculturals/meats exposure experienced losses. PNR’s meats exposure saw gains, which was led by the lean hogs sector. The lean hog market was lower in the first half of the quarter due to higher-than-expected levels of U.S. pork production and ongoing market access restrictions for U.S. pork in key export markets. The grains sector remained in the crosshairs of the trade dispute between the U.S. and China. Corn and soybean prices sharply fell at the end of the quarter after the USDA pegged 2019 U.S. corn plantings to be greater than market expectations and soybean stocks to be at record levels amid uncertainty caused by the U.S.-China trade war. Exposure to softs were slightly negative. Arabica and Robusta coffee prices declined due to a combination of excess global supplies, and favorable weather and currency weakness in Brazil.8 Cocoa prices posted a quarterly loss amid favorable weather conditions and signs of ample supplies as a result of higher-than-expected cocoa arrivals recorded in Ivorian ports.</p> <p><i>Contributors:</i> In Q1, the fund generated a positive net return of 2.30%, where exposure to natural gas/power strategies contributed the most to performance. Exposure to crude oil markets, base metals, and precious metals markets also benefited the Fund. Crude oil prices recovered from worries about a global oversupply in 2018 and the market posted its strongest quarterly price gain since 2009. U.S. sanctions against Iran and Venezuela as well as OPEC-led supply cuts overshadowed concerns over a slowing global economy. PNR’s natural gas/power exposure experienced gains. Henry Hub natural gas prices fell each month of Q1 2019 as the U.S. natural gas market continued to face oversupply. In the EU, gains were driven by power/coal/carbon markets. The base metals market advanced in Q1, as hopes of progress in U.S./China trade talks, low inventories and the outlook for production deficits in some metals lent support. Copper recorded its first quarterly gain since Q4 2017. By the end of the quarter, base metals gains were capped by global recession worries. Gold posted slight gains in the first quarter. The metal initially climbed as the USD retreated following a statement from the Federal Reserve that it would be pausing its monetary tightening cycle and put further interest rate rises on hold as it pointed to rising uncertainty about the economic outlook. By quarter-end, gains were offset by a stronger U.S. Dollar, lower bond yields, and a general rise in investors’ risk appetite. In PGMs, palladium continued its rally due to an ongoing supply deficit and increased demand. Platinum prices were supported by the speculation that its discount price to palladium may incentivize auto makers to start looking to replace palladium in catalytic converters with platinum.</p>	<p><b>1</b></p>





# CORRELATION MATRIX

	VPIC Investment Managers							Indices								
Manager/ Index	Acadian	Aberdeen	Artisan	Hoskings	Champlain	Mondrian	SGA Int'l SCC	S&P 500	Russell 3000	Russell 1000	60% S&P500 40% BCAgg	Russell 2000	LIBOR 3Mos	Russell 2500	BBAgg Index	GSCI Commodity
Acadian	1.000															
Aberdeen	0.738	1.000														
Artisan	0.867	0.652	1.000													
Hoskings	0.903	0.676	0.879	1.000												
Champlain	0.740	0.565	0.812	0.822	1.000											
Mondrian	0.887	0.736	0.761	0.835	0.647	1.000										
SGA Int'l SCC	0.939	0.649	0.880	0.874	0.731	0.806	1.000									
S&P 500	0.786	0.574	0.835	0.892	0.903	0.742	0.747	1.000								
Russell 3000	0.782	0.551	0.841	0.888	0.927	0.719	0.752	0.995	1.000							
Russell 1000	0.790	0.569	0.843	0.894	0.917	0.736	0.754	0.999	0.998	1.000						
60% S&P 500 40% BCAgg	0.800	0.622	0.839	0.879	0.885	0.749	0.750	0.985	0.980	0.985	1.000					
Russell 2000	0.594	0.314	0.697	0.712	0.875	0.463	0.618	0.816	0.868	0.838	0.793	1.000				
LIBOR 3Mos	-0.108	-0.019	-0.118	-0.154	-0.041	-0.061	-0.207	-0.094	-0.094	-0.094	-0.096	-0.088	1.000			
Russell 2500	0.675	0.402	0.762	0.778	0.919	0.551	0.681	0.878	0.922	0.899	0.865	0.985	-0.097	1.000		
BCAgg Index	0.034	0.244	-0.025	-0.131	-0.162	-0.005	-0.027	-0.145	-0.142	-0.136	0.027	-0.180	-0.006	-0.130	1.000	
GSCI Commodity	0.409	0.255	0.308	0.331	0.413	0.397	0.395	0.318	0.326	0.324	0.276	0.297	0.138	0.321	-0.260	1.000

**Time Period: 5.17 Years (Most Common Period as of 12/31/18)**

Notes:

Correlation data provided by eVestment and is not independently verified by NEPC  
Correlation data is based on fund composite and not VPIC specific



# **ANALYTICS DEFINITIONS**

Asset Allocation Effect - Measures VPIC's ability to effectively allocate their portfolio's assets to various asset classes. The allocation effect determines whether the overweighting or underweighting of asset classes relative to a benchmark contributes positively or negatively to the overall portfolio return. Positive allocation occurs when the portfolio is overweighted in an asset class that outperforms the benchmark. Negative allocation occurs when the portfolio is overweighted in an asset class that underperforms the benchmark and underweighted in an asset class that outperforms the benchmark.

Selection Effect - Measures VPIC's ability to select managers within a given asset class relative to a benchmark. The over or underperformance of the portfolio is weighted by the benchmark weight, therefore, selection is not affected by VPIC's allocation to the asset class. The weight of the manager in the portfolio determines the size of the effect -- the larger the manager, the larger the effect is, positive or negative.

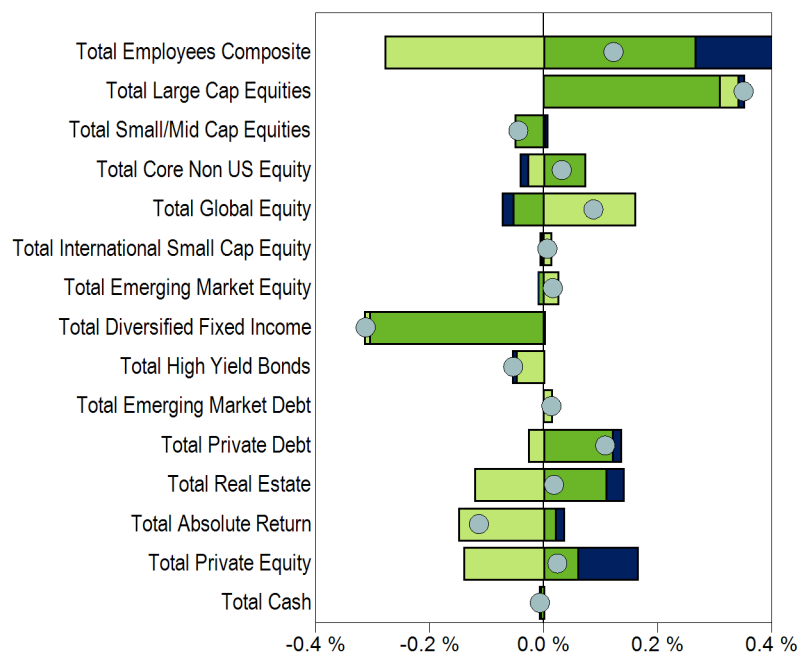
Interaction Effect - The interaction effect measures the combined impact of VPIC's manager selection and manager allocation decisions within an asset class. For example, if VPIC had superior manager selection and overweighted that particular asset class, the interaction effect is positive. If VPIC had superior manager selection, but underweighted that asset class, the interaction effect is negative. In this case, VPIC did not take advantage of the superior manager selection by allocating more assets to that asset class.



## Vermont State Employees

# TOTAL FUND ATTRIBUTION ANALYSIS - NET

### Attribution Effects Relative to Allocation Index 3 Months Ending March 31, 2019



■ Allocation Effect  
■ Selection Effect  
■ Interaction Effects  
● Total Effect

Absolute Return's Wtd. index Return is calculated using a weighting of the respective benchmarks for each underlying strategy part of the composite

### Attribution Summary 3 Months Ending March 31, 2019

	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
Total Large Cap Equities	13.9%	13.6%	0.2%	0.0%	0.3%	0.0%	0.4%
Total Small/Mid Cap Equities	16.0%	15.8%	0.1%	0.0%	0.0%	0.0%	0.0%
Total Core Non US Equity	9.7%	10.0%	-0.3%	0.0%	0.1%	0.0%	0.0%
Total Global Equity	14.0%	12.2%	1.8%	0.2%	-0.1%	0.0%	0.1%
Total International Small Cap Equity	11.2%	10.7%	0.5%	0.0%	0.0%	0.0%	0.0%
Total Emerging Market Equity	10.7%	9.9%	0.7%	0.0%	0.0%	0.0%	0.0%
Total Diversified Fixed Income	2.9%	2.9%	0.0%	0.0%	-0.3%	0.0%	-0.3%
Total High Yield Bonds	4.9%	7.3%	-2.4%	0.0%	0.0%	0.0%	-0.1%
Total Emerging Market Debt	6.9%	6.6%	0.3%	0.0%	0.0%	0.0%	0.0%
Total Private Debt	3.4%	4.0%	-0.6%	0.0%	0.1%	0.0%	0.1%
Total Real Estate	0.4%	1.8%	-1.4%	-0.1%	0.1%	0.0%	0.0%
Total Absolute Return	2.8%	4.6%	-1.8%	-0.1%	0.0%	0.0%	-0.1%
Total Private Equity	5.2%	6.5%	-1.3%	-0.1%	0.1%	0.1%	0.0%
Total Cash	0.0%	0.6%	-0.6%	0.0%	0.0%	0.0%	0.0%
<b>Total</b>	<b>7.7%</b>	<b>7.6%</b>	<b>0.1%</b>	<b>-0.3%</b>	<b>0.3%</b>	<b>0.1%</b>	<b>0.1%</b>

Note: Plan attribution calculations are returns based and the results shown reflect the composites shown. As a result, the total returns shown may vary from the calculated returns shown on the performance report

The target return shown for each composite is a custom index, based on aggregated policy indices. This policy index asset weights the underlying policy indices of each option in the plan and the respective benchmark

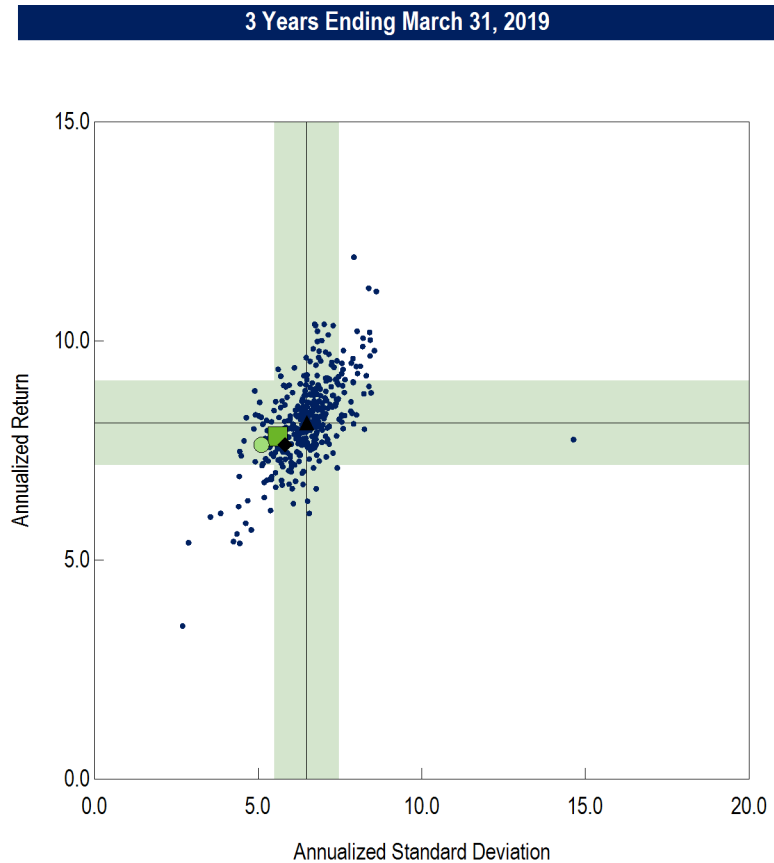
The allocation, selection, and interaction effects are calculated using the custom index described above along with the policy or target weight of each composite

May not add up due to rounding



## Vermont State Employees

# TOTAL FUND RISK/RETURN - NET



- Total Employees Composite
- ◆ Allocation Index
- Policy Index
- ▲ Universe Median
- 68% Confidence Interval
- InvMetrics Public DB < \$5 Billion Net

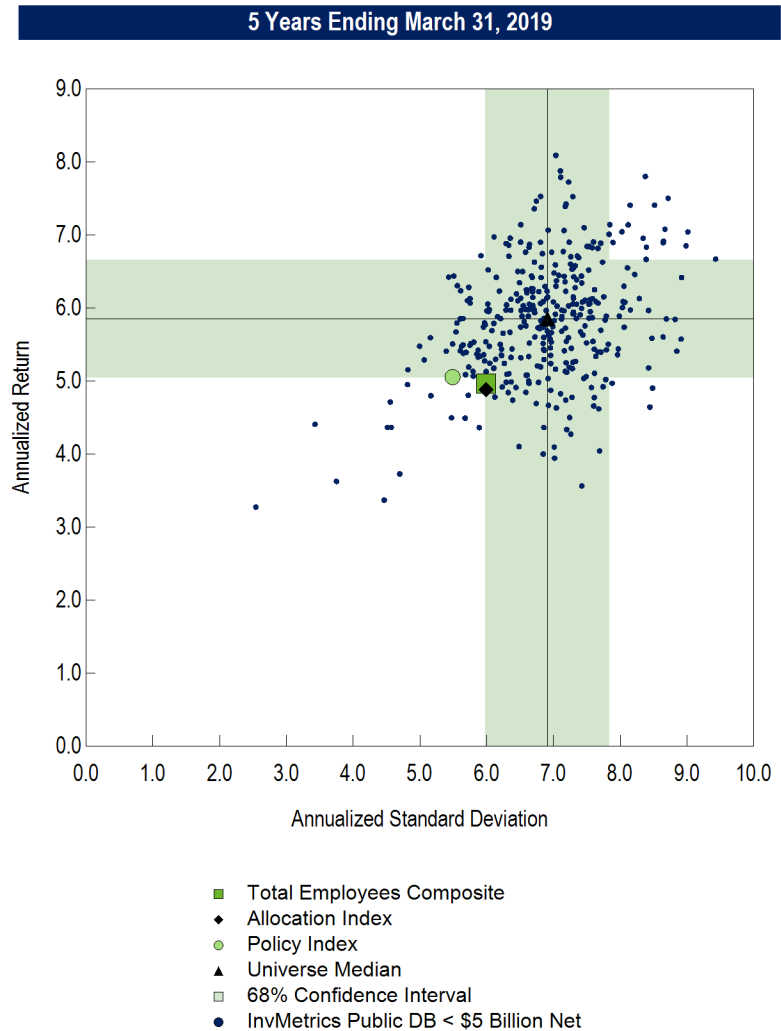
3 Years Ending March 31, 2019

	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank
Total Employees Composite	7.83%	66	5.60%	17	1.18	20
Allocation Index	7.63%	75	5.82%	23	1.10	42
S&P 500	13.51%	1	10.73%	99	1.14	27
FTSE WGBI TR	0.95%	99	5.56%	16	-0.05	99
MSCI ACWI	10.67%	1	10.01%	99	0.94	89
MSCI ACWI ex USA	8.09%	54	10.56%	99	0.65	99
InvMetrics Public DB < \$5 Billion Net Median	8.18%	--	6.48%	--	1.07	--



# Vermont State Employees

## TOTAL FUND RISK/RETURN - NET



5 Years Ending March 31, 2019

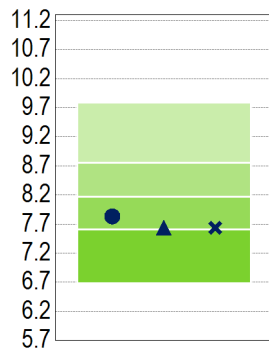
	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank
Total Employees Composite	4.97%	88	6.00%	16	0.70	66
Allocation Index	4.88%	90	5.99%	16	0.69	70
S&P 500	10.91%	1	11.19%	99	0.91	11
FTSE WGBI TR	0.59%	99	5.30%	4	-0.03	99
MSCI ACWI	6.45%	23	11.06%	99	0.51	98
MSCI ACWI ex USA	2.57%	99	12.01%	99	0.15	99
InvMetrics Public DB < \$5 Billion Net Median	5.86%	--	6.91%	--	0.74	--



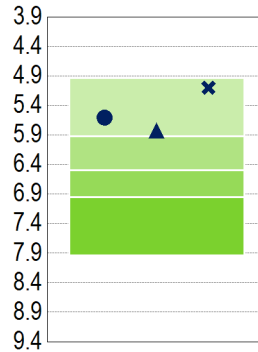
# TOTAL FUND RISK STATISTICS VS. PEER UNIVERSE - NET

## Employees Composite vs. InvMetrics Public DB < \$5 Billion Net 3 Years

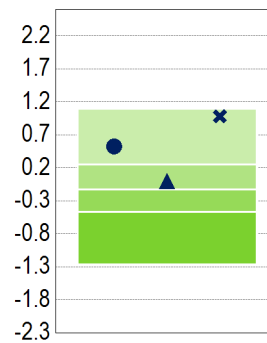
Anlzd Return      Anlzd Standard Deviation      Anlzd Alpha      Sharpe Ratio



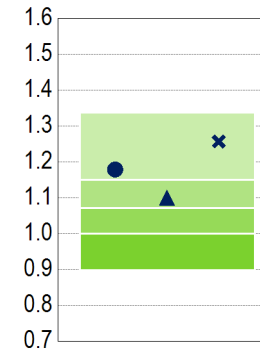
● Total Employees Composite	
Value	7.83
Rank	66
▲ Allocation Index	
Value	7.63
Rank	75
× Policy Index	
Value	7.63
Rank	75
Universe	
5th %tile	9.78
25th %tile	8.77
Median	8.18
75th %tile	7.62
95th %tile	6.69



● Total Employees Composite	
Value	5.60
Rank	17
▲ Allocation Index	
Value	5.82
Rank	23
× Policy Index	
Value	5.10
Rank	6
Universe	
5th %tile	4.94
25th %tile	5.91
Median	6.48
75th %tile	6.94
95th %tile	7.92



● Total Employees Composite	
Value	0.53
Rank	13
▲ Allocation Index	
Value	0.00
Rank	42
× Policy Index	
Value	0.98
Rank	7
Universe	
5th %tile	1.09
25th %tile	0.26
Median	-0.11
75th %tile	-0.46
95th %tile	-1.25



● Total Employees Composite	
Value	1.18
Rank	20
▲ Allocation Index	
Value	1.10
Rank	42
× Policy Index	
Value	1.26
Rank	11
Universe	
5th %tile	1.34
25th %tile	1.15
Median	1.07
75th %tile	1.00
95th %tile	0.90



# TOTAL FUND RISK STATISTICS VS. PEER UNIVERSE - NET

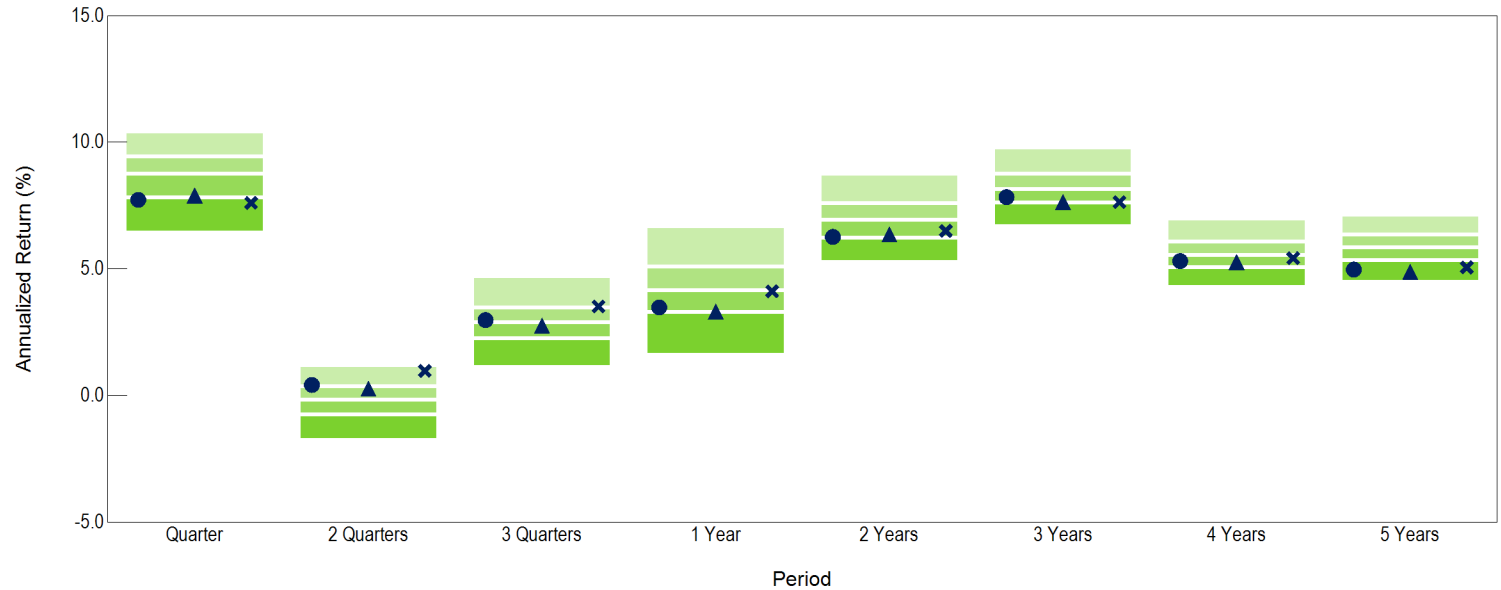
## Employees Composite vs. InvMetrics Public DB < \$5 Billion Net 5 Years



## Vermont State Employees

# TOTAL FUND RETURN SUMMARY VS. PEER UNIVERSE - NET

Total Employees Composite vs. InvMetrics Public DB < \$5 Billion Net



	Return (Rank)															
5th Percentile	10.4	1.2	4.7	6.7	8.7	9.8	7.0	7.1								
25th Percentile	9.5	0.4	3.5	5.1	7.6	8.8	6.1	6.4								
Median	8.8	-0.1	2.9	4.2	7.0	8.2	5.6	5.9								
75th Percentile	7.8	-0.7	2.3	3.3	6.3	7.6	5.1	5.4								
95th Percentile	6.4	-1.8	1.1	1.6	5.3	6.7	4.3	4.5								
# of Portfolios	525	522	522	521	512	507	478	463								
● Total Employees Composite	7.7	(79)	0.4	(24)	3.0	(47)	3.5	(71)	6.3	(75)	7.8	(66)	5.3	(64)	5.0	(88)
▲ Allocation Index	7.9	(74)	0.3	(29)	2.8	(57)	3.3	(75)	6.4	(72)	7.6	(75)	5.3	(67)	4.9	(90)
× Policy Index	7.6	(82)	1.0	(8)	3.5	(25)	4.1	(52)	6.5	(66)	7.6	(75)	5.4	(58)	5.1	(86)

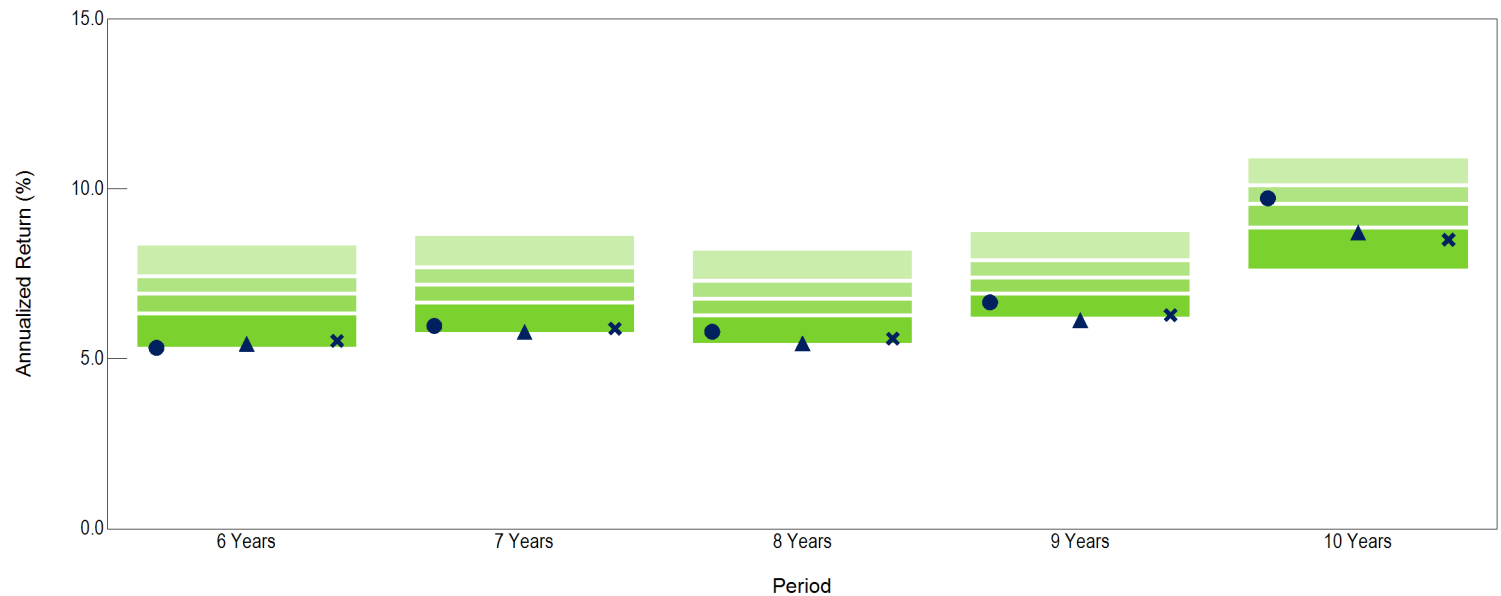




Vermont State Employees

# TOTAL FUND RETURN SUMMARY VS. PEER UNIVERSE - NET

Total Employees Composite vs. InvMetrics Public DB < \$5 Billion Net



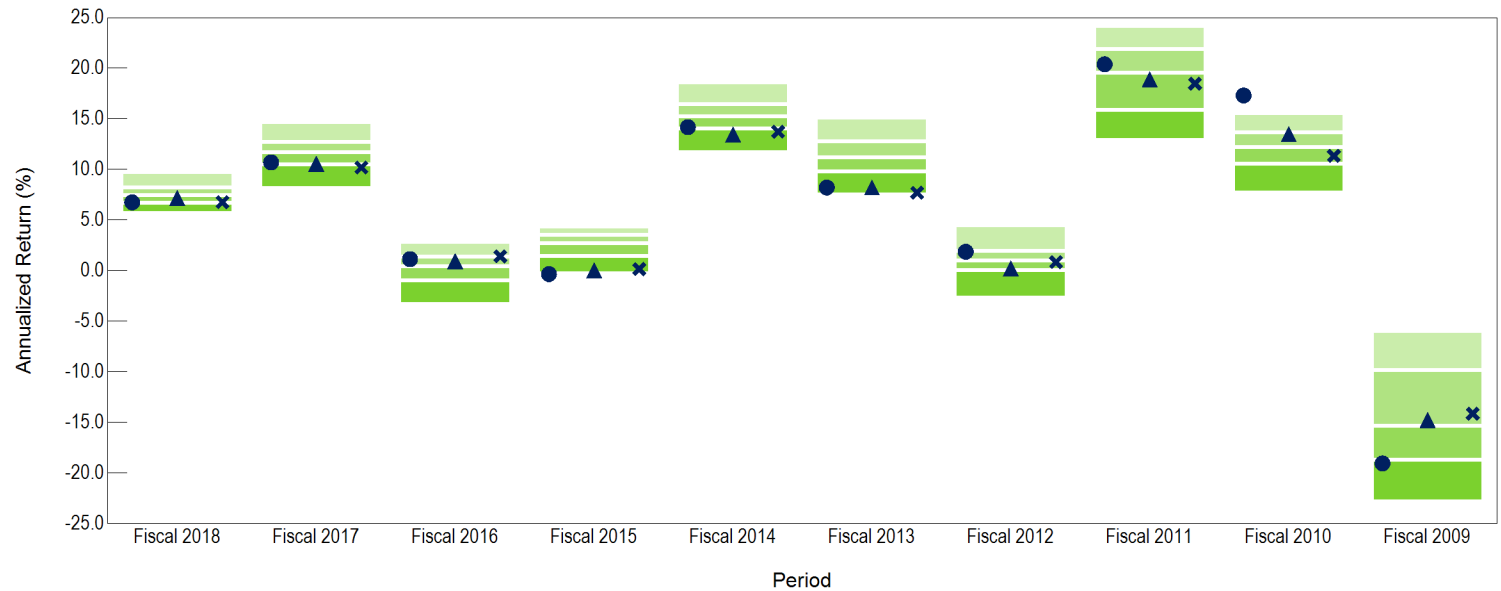
	Return (Rank)									
5th Percentile	8.4		8.7		8.2		8.8		11.0	
25th Percentile	7.4		7.7		7.3		7.9		10.1	
Median	6.9		7.2		6.8		7.4		9.6	
75th Percentile	6.4		6.7		6.3		6.9		8.9	
95th Percentile	5.3		5.7		5.4		6.2		7.6	
# of Portfolios	450		434		412		399		385	
● Total Employees Composite	5.3	(95)	6.0	(93)	5.8	(90)	6.7	(86)	9.7	(42)
▲ Allocation Index	5.4	(94)	5.8	(95)	5.5	(95)	6.1	(96)	8.7	(81)
x Policy Index	5.5	(94)	5.9	(94)	5.6	(94)	6.3	(95)	8.5	(85)



## Vermont State Employees

# TOTAL FUND RETURN SUMMARY VS. PEER UNIVERSE - NET

Total Employees Composite vs. InvMetrics Public DB < \$5 Billion Net



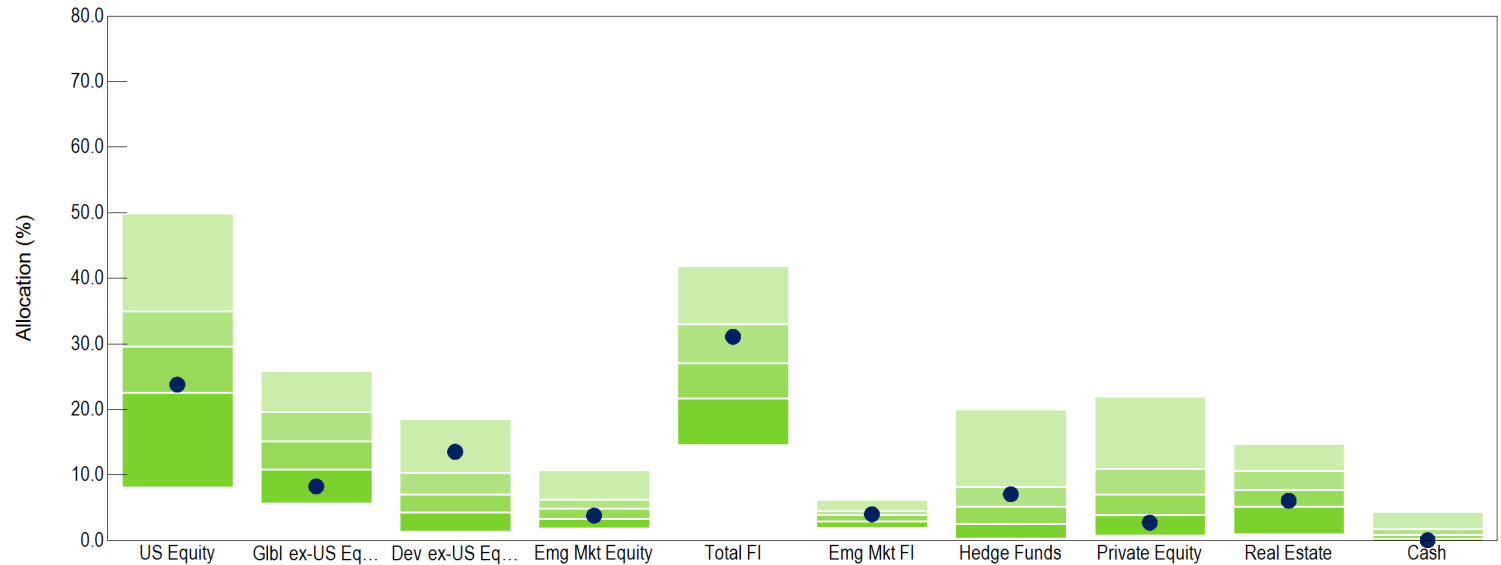
	Return (Rank)									
5th Percentile	9.7	14.7	2.8	4.4	18.6	15.1	4.5	24.2	15.5	-6.0
25th Percentile	8.3	12.8	1.4	3.6	16.5	12.8	2.0	21.9	13.7	-9.8
Median	7.5	11.7	0.5	2.7	15.3	11.2	1.0	19.6	12.3	-15.3
75th Percentile	6.7	10.6	-0.9	1.5	14.1	9.9	0.1	15.9	10.6	-18.7
95th Percentile	5.7	8.2	-3.3	-0.2	11.7	7.5	-2.6	13.0	7.7	-22.8
# of Portfolios	186	259	239	212	156	139	132	124	116	113
● Total Employees Composite	6.7 (76)	10.7 (71)	1.1 (32)	-0.3 (96)	14.2 (72)	8.2 (95)	1.9 (29)	20.4 (39)	17.3 (1)	-19.1 (78)
▲ Allocation Index	7.2 (61)	10.5 (76)	0.9 (37)	0.0 (95)	13.4 (89)	8.2 (95)	0.2 (72)	18.9 (57)	13.5 (29)	-14.8 (47)
× Policy Index	6.8 (75)	10.2 (81)	1.4 (25)	0.1 (94)	13.7 (83)	7.7 (95)	0.8 (55)	18.5 (60)	11.3 (65)	-14.1 (43)



## Vermont State Employees

# TOTAL FUND ALLOCATION VS. PEER UNIVERSE - NET

Total Employees Composite vs. InvMetrics Public DB < \$5 Billion Net  
As of March 31, 2019



	Allocation (Rank)																			
5th Percentile	49.9	25.9	18.5	10.8	41.9	6.3	20.0	21.9	14.7	4.4	-	-	-	-	-	-	-	-	-	-
25th Percentile	35.0	19.7	10.4	6.3	33.1	4.6	8.3	11.0	10.8	1.8	-	-	-	-	-	-	-	-	-	-
Median	29.7	15.2	7.1	4.9	27.2	4.0	5.3	7.1	7.9	1.0	-	-	-	-	-	-	-	-	-	-
75th Percentile	22.7	11.0	4.4	3.4	21.8	3.1	2.6	4.0	5.2	0.4	-	-	-	-	-	-	-	-	-	-
95th Percentile	8.2	5.7	1.5	2.0	14.6	2.0	0.4	0.9	1.1	0.0	-	-	-	-	-	-	-	-	-	-
# of Portfolios	148	187	94	109	228	32	74	108	149	214	-	-	-	-	-	-	-	-	-	-
• Total Employees Composite	23.8	(70)	8.3	(90)	13.5	(17)	3.8	(64)	31.1	(36)	4.0	(47)	7.1	(30)	2.7	(85)	6.1	(66)	0.1	(91)



# REAL ESTATE PERFORMANCE ANALYSIS (AS OF 12/31/2018)

Investment Name	Vintage Year	Commitment Amount	QTD	YTD	1 Year	3 Year	5 Year	Inception
Brookfield Strategic Real Estate Partners III, L.P.	2017	100,000,000						
Siguler Guff Distressed Real Estate Opportunities II	2014	40,000,000	2.36	10.41	10.41	13.72		11.32
Siguler Guff DREOF II Co-Investment	2016	15,000,000	6.32	10.18	10.18			14.47
<b>Total: State of Vermont</b>		<b>155,000,000</b>	<b>3.61</b>	<b>10.34</b>	<b>10.34</b>	<b>13.86</b>		<b>11.78</b>

Investment Name	Fund Type	Vintage Year	Commitment Amount	Paid in Capital	Capital to be Funded	Additional Fees	Cumulative Distributions	Valuation	Total Value	Net Benefit	Call Ratio	DPI Ratio	TVPI Ratio	IRR
1 Siguler Guff Distressed Real Estate Opportunities II	RE Opportunistic	2014	40,000,000	33,420,000	6,580,000	0	17,510,817	29,341,403	46,852,220	13,432,220	84%	0.52	1.40	11.32%
2 Siguler Guff DREOF II Co-Investment	RE Opportunistic	2016	15,000,000	12,322,717	2,677,283	0	583,381	15,061,704	15,645,085	3,322,368	82%	0.05	1.27	14.47%
3 Brookfield Strategic Real Estate Partners III, L.P.	RE Opportunistic	2017	100,000,000	0	100,000,000	0	0		0	0	0%	0.00	0.00	N/A
<b>Total: State of Vermont</b>			<b>155,000,000</b>	<b>45,742,717</b>	<b>109,257,283</b>	<b>0</b>	<b>18,094,198</b>	<b>44,403,107</b>	<b>62,497,305</b>	<b>16,754,588</b>	<b>30%</b>	<b>0.40</b>	<b>1.37</b>	<b>11.78%</b>



# REAL ESTATE PERFORMANCE ANALYSIS (AS OF 12/31/2018)

Investment	Index Set Name	Cumulative Contributions	Cumulative Distributions	Adjusted Valuation	Valuation ICM	Valuation Spread	IRR	IRR ICM	IRR Spread
Brookfield Strategic Real Estate Partners III, L.P.	FTSE NAREIT		0				0.00	0.00	0.00
Siguler Guff Distressed Real Estate Opportunities II	FTSE NAREIT	33,420,000	17,510,817	29,341,403	22,579,961	6,761,442	11.32	5.73	5.59
Siguler Guff DREOF II Co-Investment	FTSE NAREIT	12,322,717	583,381	15,061,704	12,790,408	2,271,296	14.47	3.98	10.49
<b>Total: State of Vermont</b>		<b>45,742,717</b>	<b>18,094,198</b>	<b>44,403,107</b>	<b>35,370,369</b>	<b>9,032,738</b>	<b>11.78</b>	<b>5.45</b>	<b>6.33</b>



# PRIVATE DEBT PERFORMANCE ANALYSIS (AS OF 12/31/2018)

Investment Name	Vintage Year	Commitment Amount	QTD	YTD	1 Year	3 Year	5 Year	Inception
Benefit Street Partners Senior Secured Opportunites Fund, LP	2017	70,000,000	-2.50	1.69	1.69			3.17
BlueBay Direct Lending Fund III	2017	70,000,000	2.58					3.59
<b>Total: State of Vermont</b>		<b>140,000,000</b>	<b>-1.52</b>	<b>2.27</b>	<b>2.27</b>			<b>3.59</b>

Investment Name	Vintage Year	Commitment Amount	Paid in Capital	Capital to be Funded	Additional Fees	Cumulative Distributions	Valuation	Total Value	Net Benefit	Call Ratio	DPI Ratio	TVPI Ratio	IRR
1 Benefit Street Partners Senior Secured Opportunites Fund, LP	2017	70,000,000	57,824,952	12,175,048	1,333,567	2,927,326	57,719,727	60,647,053	1,488,534	83%	0.05	1.03	3.17%
2 BlueBay Direct Lending Fund III	2017	70,000,000	14,708,418	55,291,582	0	196,136	14,923,651	15,119,787	411,369	21%	0.01	1.03	3.59%
<b>Total: State of Vermont</b>		<b>140,000,000</b>	<b>72,533,370</b>	<b>67,466,630</b>	<b>1,333,567</b>	<b>3,123,462</b>	<b>72,643,378</b>	<b>75,766,840</b>	<b>1,899,903</b>	<b>52%</b>	<b>0.04</b>	<b>1.03</b>	<b>3.59%</b>



# PRIVATE DEBT PERFORMANCE ANALYSIS (AS OF 12/31/2018)

Investment	Index Set Name	Cumulative Contributions	Cumulative Distributions	Adjusted Valuation	Valuation ICM	Valuation Spread	IRR	IRR ICM	IRR Spread
Benefit Street Partners Senior Secured Opportunites Fund, LP	BC US Agg Total Return Unhedged	59,158,519	2,927,326	57,719,727	56,862,110	857,617	3.17	1.34	1.83
BlueBay Direct Lending Fund III	BC US Agg Total Return Unhedged	14,708,418	196,136	14,923,651	14,799,030	124,621	3.59	2.50	1.09
<b>Total: State of Vermont</b>		<b>73,866,937</b>	<b>3,123,462</b>	<b>72,643,378</b>	<b>71,661,140</b>	<b>982,238</b>	<b>3.59</b>	<b>1.73</b>	<b>1.86</b>



# PRIVATE EQUITY PERFORMANCE ANALYSIS (AS OF 12/31/2018)

Investment Name	Vintage Year	Commitment Amount	QTD	YTD	1 Year	3 Year	5 Year	Inception
HarbourVest Partners Dover Street VIII	2012	25,000,000	-5.10	8.94	8.94	12.14	16.14	20.64
HarbourVest Partners IX-Buyout	2012	24,000,000	0.63	16.21	16.21	18.63	17.21	17.01
HarbourVest Partners IX-Credit Opportunities	2012	4,000,000	-0.76	7.98	7.98	13.16	12.08	13.84
HarbourVest Partners IX-Venture	2012	12,000,000	4.77	24.32	24.32	13.89	16.52	17.13
HarbourVest HIPEP VII	2014	15,000,000	-4.50	8.30	8.30	12.65		12.35
HarbourVest Partners X Buyout Fund	2015	45,500,000	-1.47	13.66	13.66	22.98		23.71
HarbourVest Partners X Venture Fund	2015	19,500,000	-2.37	13.89	13.89	20.67		20.20
HarbourVest Partners Dover Street IX	2016	40,000,000	-3.12	19.19	19.19			37.19
HarbourVest HIPEP VIII	2017	60,000,000	-1.70					26.84
HarbourVest Partners Co-Investment Fund V	2018	25,000,000						
HarbourVest Partners XI Buyout Fund	2018	75,000,000						
HarbourVest Partners XI Micro Buyout	2018	12,500,000						
HarbourVest Partners XI Venture Fund	2018	37,500,000						
<b>Total: State of Vermont</b>		<b>395,000,000</b>	<b>-1.41</b>	<b>16.20</b>	<b>16.20</b>	<b>17.54</b>	<b>17.99</b>	<b>19.26</b>





# PRIVATE EQUITY PERFORMANCE ANALYSIS (AS OF 12/31/2018)

Investment Name	Vintage Year	Commitment Amount	Paid in Capital	Capital to be Funded	Additional Fees	Cumulative Distributions	Valuation	Total Value	Net Benefit	Call Ratio	DPI Ratio	TVPI Ratio	IRR
1 HarbourVest HIPEP VII	2014	15,000,000	9,337,500	5,662,500	0	1,398,851	10,106,393	11,505,244	2,167,744	62%	0.15	1.23	12.35%
2 HarbourVest HIPEP VIII	2017	60,000,000	9,000,000	51,000,000	0	335,610	10,145,704	10,481,314	1,481,314	15%	0.04	1.16	26.84%
3 HarbourVest Partners Co-Investment Fund V	2018	25,000,000	0	25,000,000	0	0		0	0	0%	0.00	0.00	N/A
4 HarbourVest Partners Dover Street IX	2016	40,000,000	21,200,000	18,800,000	0	4,854,677	21,695,489	26,550,166	5,350,166	53%	0.23	1.25	37.19%
5 HarbourVest Partners Dover Street VIII	2012	25,000,000	22,500,000	2,500,000	0	24,674,817	9,917,872	34,592,689	12,092,689	90%	1.10	1.54	20.64%
6 HarbourVest Partners IX-Buyout	2012	24,000,000	18,060,000	5,940,000	47,188	12,899,920	15,785,192	28,685,112	10,577,924	75%	0.71	1.58	17.01%
7 HarbourVest Partners IX-Credit Opportunities	2012	4,000,000	2,700,000	1,300,000	10,265	1,608,311	2,321,738	3,930,049	1,219,784	68%	0.59	1.45	13.84%
8 HarbourVest Partners IX-Venture	2012	12,000,000	11,400,000	600,000	37,671	5,226,167	14,222,649	19,448,816	8,011,145	95%	0.46	1.70	17.13%
9 HarbourVest Partners X Buyout Fund	2015	45,500,000	14,105,000	31,395,000	2,787	2,856,881	15,291,812	18,148,693	4,040,906	31%	0.20	1.29	23.71%
10 HarbourVest Partners X Venture Fund	2015	19,500,000	9,993,750	9,506,250	1,672	751,439	11,657,491	12,408,930	2,413,508	51%	0.08	1.24	20.20%
11 HarbourVest Partners XI Buyout Fund	2018	75,000,000	0	75,000,000	0	0		0	0	0%	0.00	0.00	N/A
12 HarbourVest Partners XI Micro Buyout	2018	12,500,000	0	12,500,000	0	0		0	0	0%	0.00	0.00	N/A
13 HarbourVest Partners XI Venture Fund	2018	37,500,000	0	37,500,000	0	0		0	0	0%	0.00	0.00	N/A
<b>Total: State of Vermont</b>		<b>395,000,000</b>	<b>118,296,250</b>	<b>276,703,750</b>	<b>99,583</b>	<b>54,606,673</b>	<b>111,144,340</b>	<b>165,751,013</b>	<b>47,355,180</b>	<b>30%</b>	<b>0.46</b>	<b>1.40</b>	<b>19.26%</b>



# PRIVATE EQUITY PERFORMANCE ANALYSIS (AS OF 12/31/2018)

Investment	Index Set Name	Cumulative Contributions	Cumulative Distributions	Adjusted Valuation	Valuation ICM	Valuation Spread	IRR	IRR ICM	IRR Spread
HarbourVest HIPEP VII	S&P 500 Total Return	9,337,500	1,398,851	10,106,393	9,049,225	1,057,168	12.35	6.64	5.71
HarbourVest HIPEP VIII	S&P 500 Total Return	9,000,000	335,610	10,145,704	8,243,717	1,901,987	26.84	-7.54	34.38
HarbourVest Partners Co-Investment Fund V	S&P 500 Total Return		0				0.00	0.00	0.00
HarbourVest Partners Dover Street IX	S&P 500 Total Return	21,200,000	4,854,677	21,695,489	16,154,418	5,541,071	37.19	-1.42	38.61
HarbourVest Partners Dover Street VIII	S&P 500 Total Return	22,500,000	24,674,817	9,917,872	3,799,018	6,118,854	20.64	12.41	8.23
HarbourVest Partners IX-Buyout	S&P 500 Total Return	18,107,188	12,899,920	15,785,192	11,588,929	4,196,263	17.01	10.88	6.13
HarbourVest Partners IX-Credit Opportunities	S&P 500 Total Return	2,710,265	1,608,311	2,321,738	1,980,297	341,441	13.84	10.64	3.20
HarbourVest Partners IX-Venture	S&P 500 Total Return	11,437,671	5,226,167	14,222,649	10,311,502	3,911,147	17.13	10.10	7.03
HarbourVest Partners X Buyout Fund	S&P 500 Total Return	14,107,787	2,856,881	15,291,812	12,007,317	3,284,495	23.71	4.88	18.83
HarbourVest Partners X Venture Fund	S&P 500 Total Return	9,995,422	751,439	11,657,491	9,535,491	2,122,000	20.20	2.61	17.59
HarbourVest Partners XI Buyout Fund	S&P 500 Total Return		0				0.00	0.00	0.00
HarbourVest Partners XI Micro Buyout	S&P 500 Total Return		0				0.00	0.00	0.00
HarbourVest Partners XI Venture Fund	S&P 500 Total Return		0				0.00	0.00	0.00
<b>Total: State of Vermont</b>		<b>118,395,833</b>	<b>54,606,673</b>	<b>111,144,340</b>	<b>82,669,914</b>	<b>28,474,426</b>	<b>19.26</b>	<b>8.93</b>	<b>10.33</b>

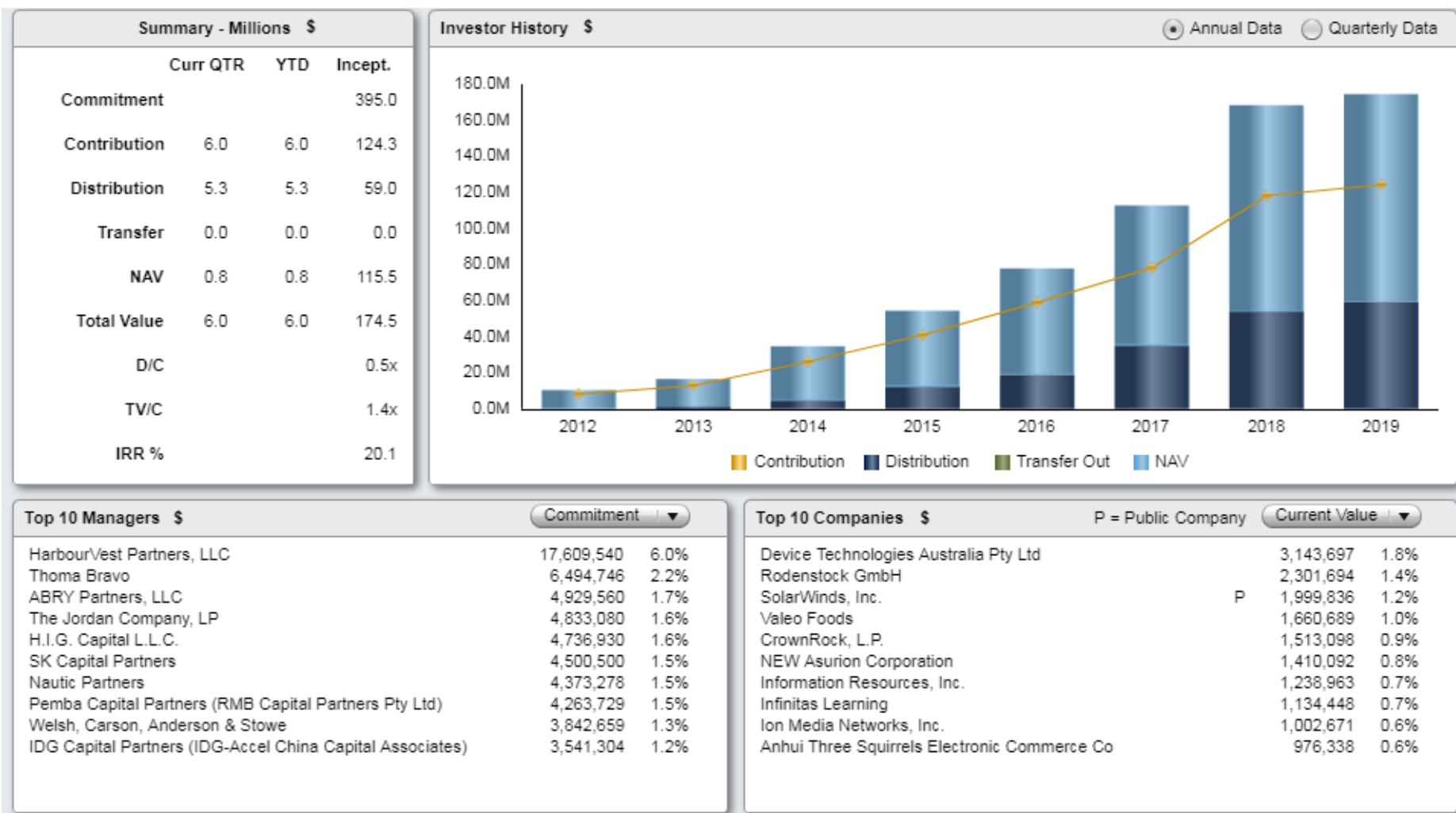


# PRIVATE EQUITY PERFORMANCE ANALYSIS (AS OF 12/31/2018)

Investment	Index Set Name	Cumulative Contributions	Cumulative Distributions	Adjusted Valuation	Valuation ICM	Valuation Spread	IRR	IRR ICM	IRR Spread
HarbourVest HIPEP VII	MSCI ACWI	9,337,500	1,398,851	10,106,393	8,155,223	1,951,170	12.35	1.35	11.00
HarbourVest HIPEP VIII	MSCI ACWI	9,000,000	335,610	10,145,704	7,933,961	2,211,743	26.84	-13.06	39.90
HarbourVest Partners Co-Investment Fund V	MSCI ACWI		0				0.00	0.00	0.00
HarbourVest Partners Dover Street IX	MSCI ACWI	21,200,000	4,854,677	21,695,489	15,486,866	6,208,623	37.19	-6.46	43.65
HarbourVest Partners Dover Street VIII	MSCI ACWI	22,500,000	24,674,817	9,917,872	630,300	9,287,572	20.64	6.70	13.94
HarbourVest Partners IX-Buyout	MSCI ACWI	18,107,188	12,899,920	15,785,192	7,808,359	7,976,833	17.01	4.54	12.47
HarbourVest Partners IX-Credit Opportunities	MSCI ACWI	2,710,265	1,608,311	2,321,738	1,433,238	888,500	13.84	4.55	9.29
HarbourVest Partners IX-Venture	MSCI ACWI	11,437,671	5,226,167	14,222,649	7,543,547	6,679,102	17.13	3.73	13.40
HarbourVest Partners X Buyout Fund	MSCI ACWI	14,107,787	2,856,881	15,291,812	11,255,204	4,036,608	23.71	0.03	23.68
HarbourVest Partners X Venture Fund	MSCI ACWI	9,995,422	751,439	11,657,491	8,902,623	2,754,868	20.20	-3.12	23.32
HarbourVest Partners XI Buyout Fund	MSCI ACWI		0				0.00	0.00	0.00
HarbourVest Partners XI Micro Buyout	MSCI ACWI		0				0.00	0.00	0.00
HarbourVest Partners XI Venture Fund	MSCI ACWI		0				0.00	0.00	0.00
<b>Total: State of Vermont</b>		<b>118,395,833</b>	<b>54,606,673</b>	<b>111,144,340</b>	<b>69,149,321</b>	<b>41,995,019</b>	<b>19.26</b>	<b>2.65</b>	<b>16.61</b>



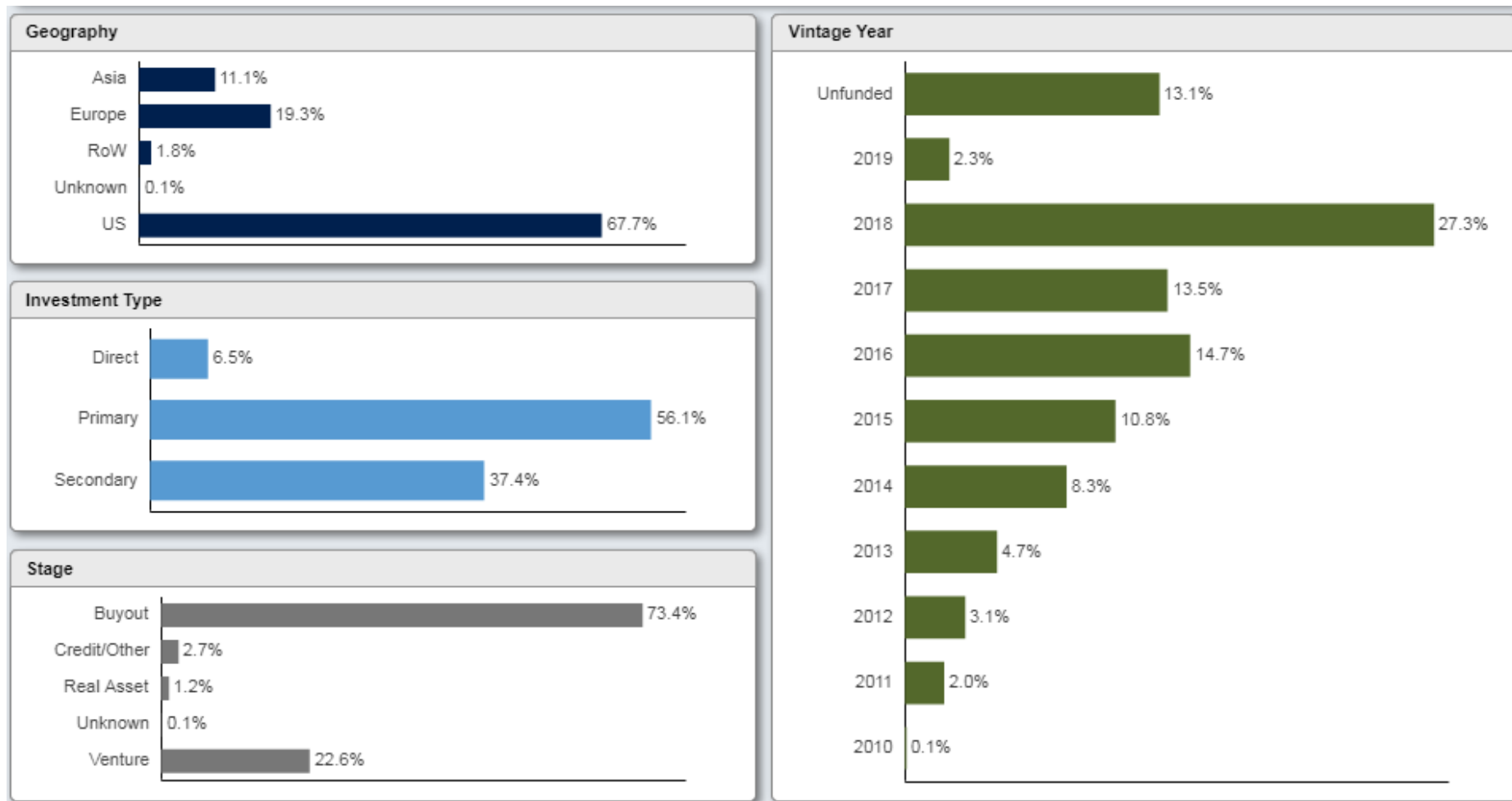
# PRIVATE EQUITY INVESTMENT PORTFOLIO SUMMARY AS OF 3/31/2018



Note:  
Data provided by HarbourVest and has not been independently verified by NEPC



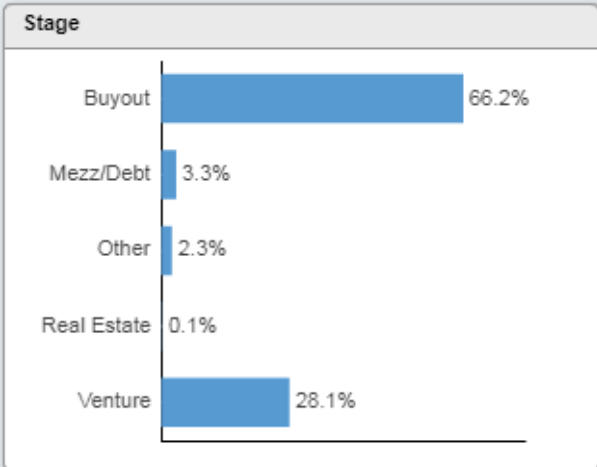
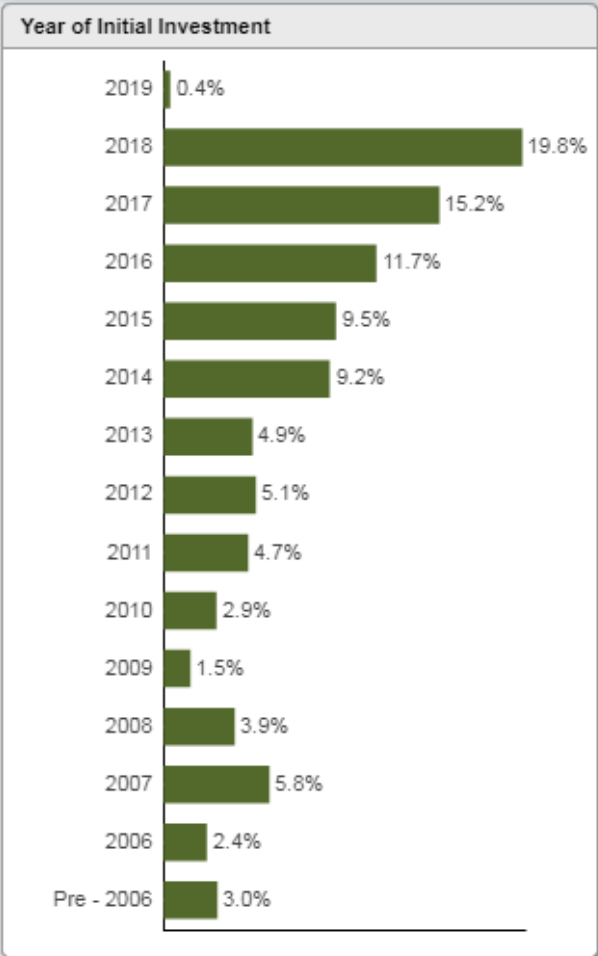
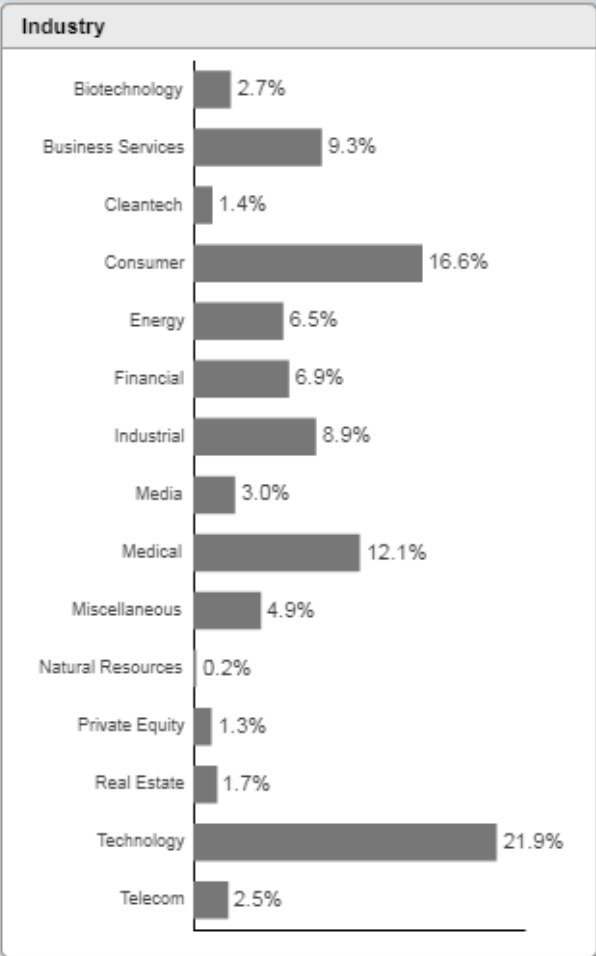
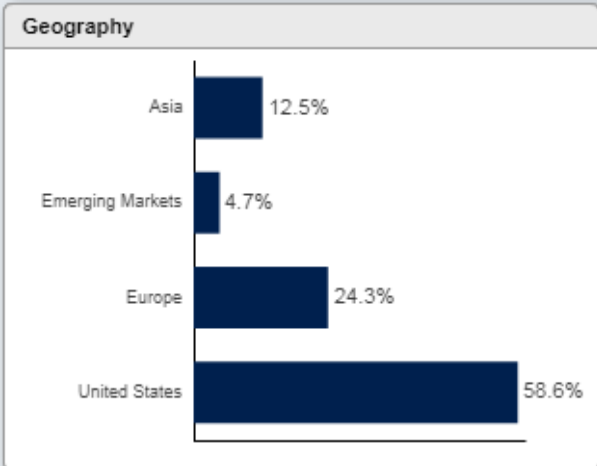
# PRIVATE EQUITY INVESTMENT DIVERSIFICATION AS OF 3/31/2018



Note:  
Data provided by HarbourVest and has not been independently verified by NEPC



# PRIVATE EQUITY COMPANY DIVERSIFICATION AS OF 3/31/2018



Note:  
Data provided by HarbourVest and has not been independently verified by NEPC



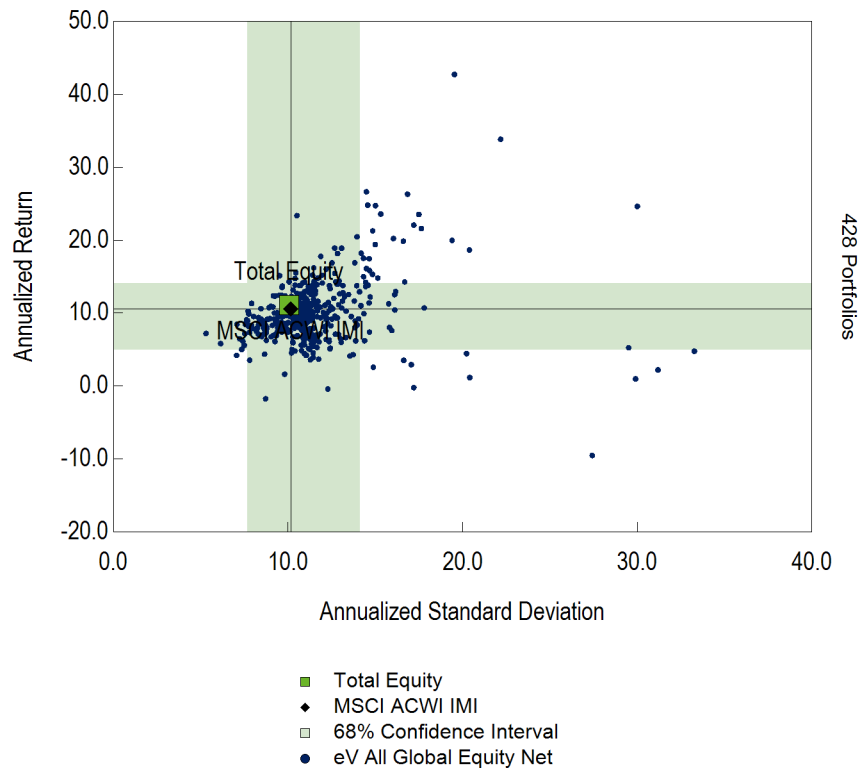
# MANAGER PAGES

NEPC, LLC

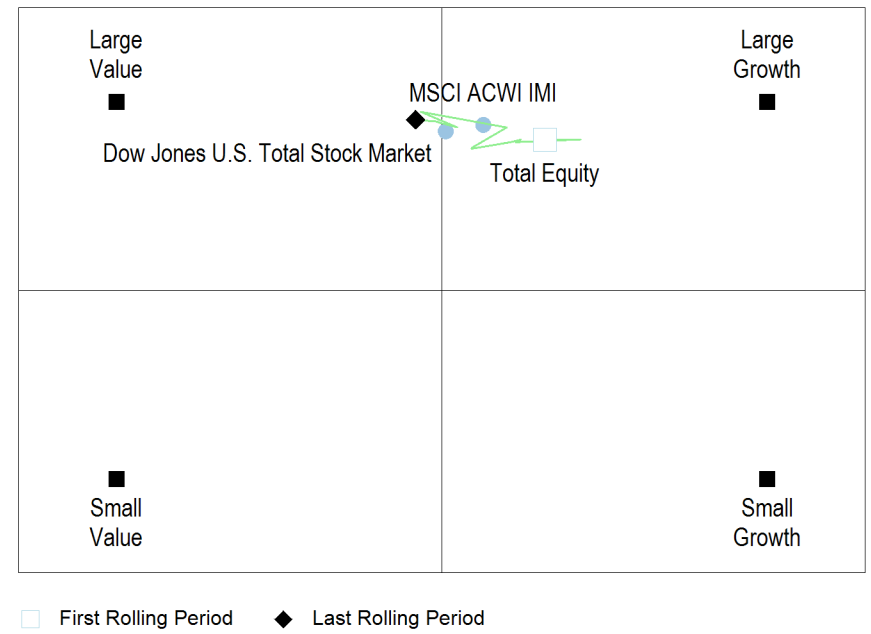
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# TOTAL EQUITY COMPOSITE

Annualized Return vs. Annualized Standard Deviation  
3 Years Ending March 31, 2019

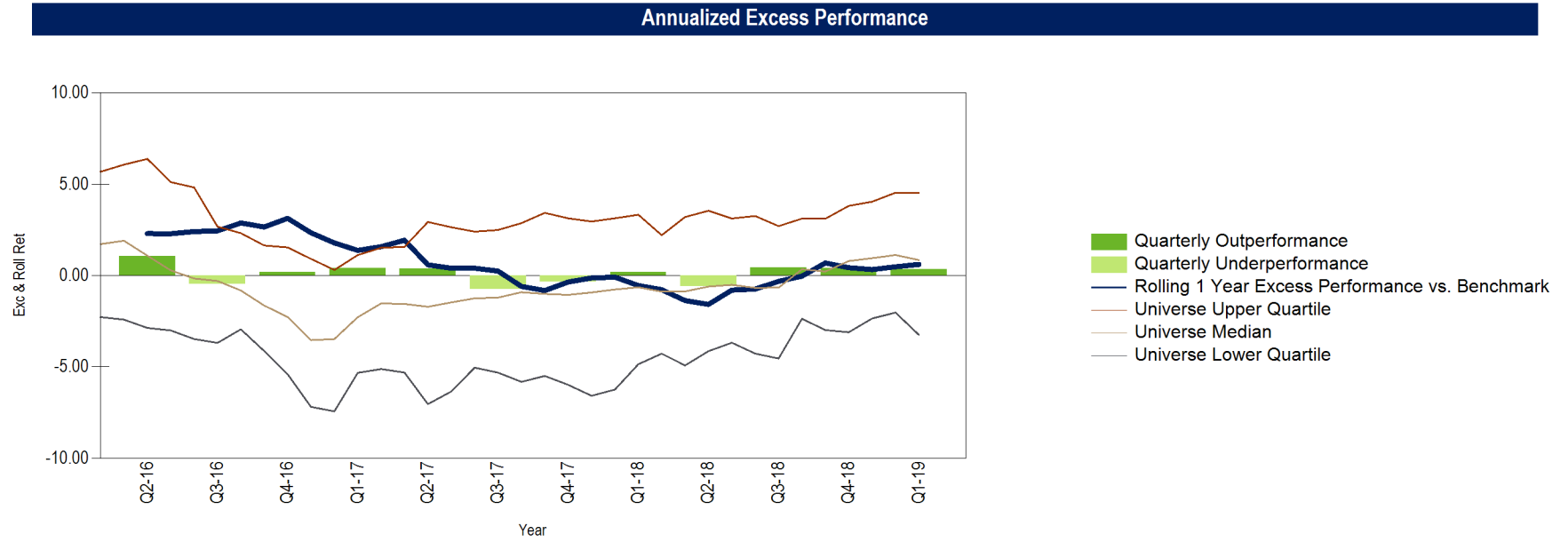


U.S. Effective Style Map  
3 Years Ending March 31, 2019





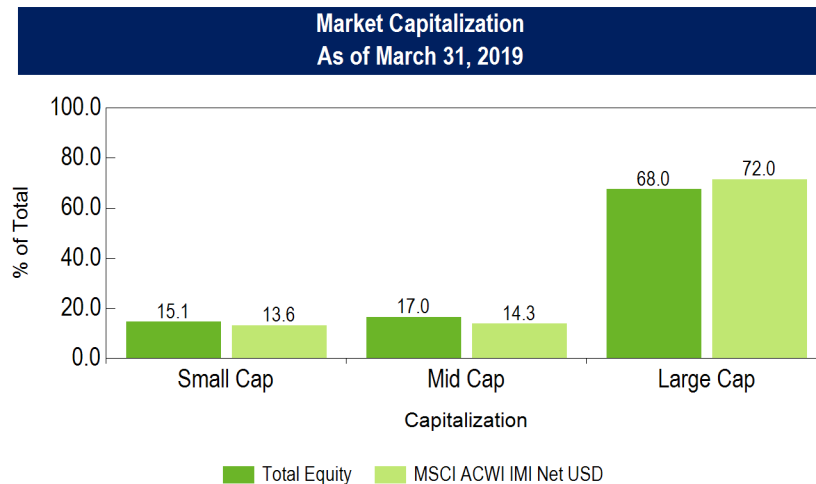
# TOTAL EQUITY COMPOSITE



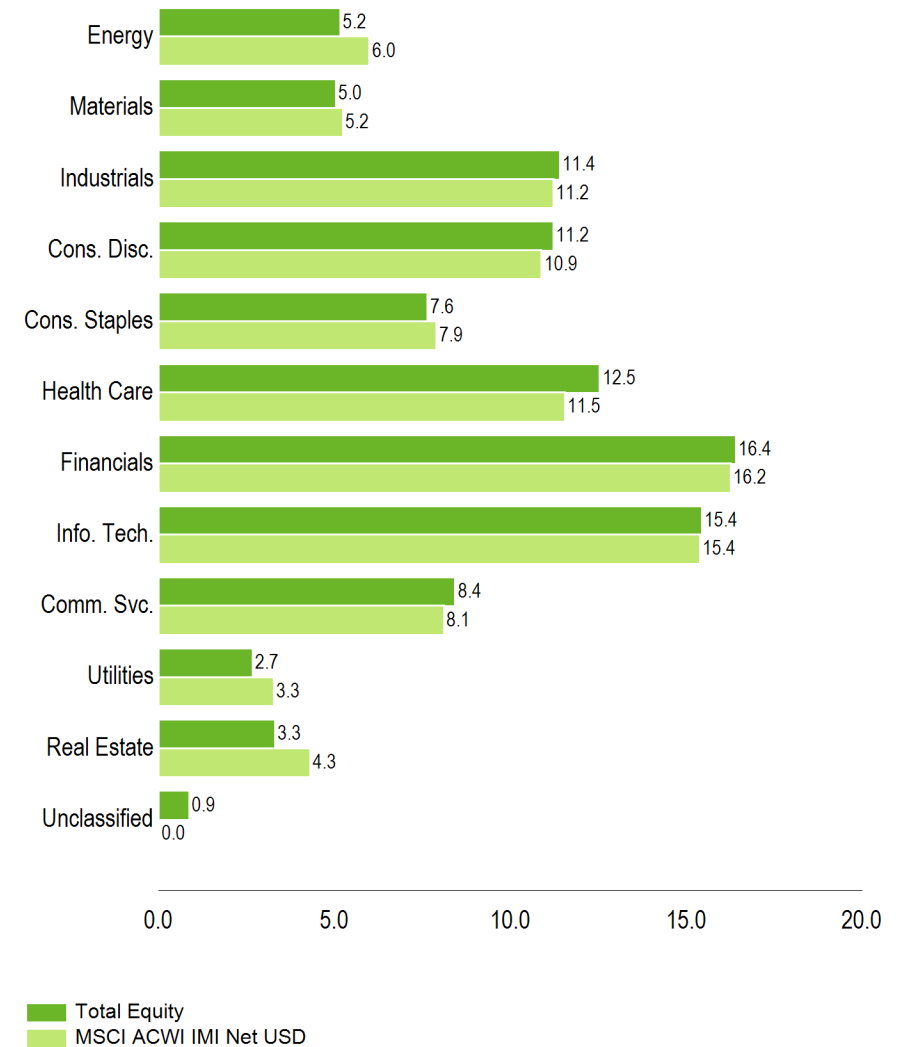
# TOTAL EQUITY COMPOSITE

Characteristics		
	Portfolio	MSCI ACWI IMI Net USD
Number of Holdings	3,497	8,659
Weighted Avg. Market Cap. (\$B)	106.77	122.66
Median Market Cap. (\$B)	9.24	1.77
Price To Earnings	17.26	17.06
Price To Book	2.83	2.75
Price To Sales	1.44	1.45
Return on Equity (%)	19.75	18.50
Yield (%)	2.26	2.49
Beta	0.98	1.00
R-Squared	0.99	1.00

	Portfolio Q1-19	Index Q1-19
<b>Region Weighting</b>		
Americas	60.20	59.31
Europe	18.45	19.59
Asia/Pacific	20.21	19.94
Other	1.15	1.15



## Sector Allocation (%) vs MSCI ACWI IMI Net USD



# TOTAL EQUITY COMPOSITE

Top Ten Holdings	
MICROSOFT	1.4%
AMAZON.COM	1.4%
APPLE	1.2%
TENCENT HOLDINGS	0.9%
BANK OF AMERICA	0.8%
VISA 'A'	0.8%
ALPHABET A	0.7%
ALPHABET 'C'	0.6%
BERKSHIRE HATHAWAY 'B'	0.6%
IHS MARKIT	0.6%

Top Positive Contributors		
	Relative Contribution %	Return %
IHS MARKIT	0.1%	13.4%
TECHTRONIC INDS.	0.1%	26.5%
KWEICHOW MOUTAI 'A'	0.1%	47.9%
WORLDPAY A	0.1%	48.5%
VISA 'A'	0.1%	18.6%
SAMSUNG ELTN.PREF.	0.1%	12.2%
VEEVA SYSTEMS CL.A	0.1%	42.0%
FEVERTREE DRINKS	0.1%	40.5%
LLOYDS BANKING GROUP	0.0%	22.6%
FORTIVE	0.0%	24.1%

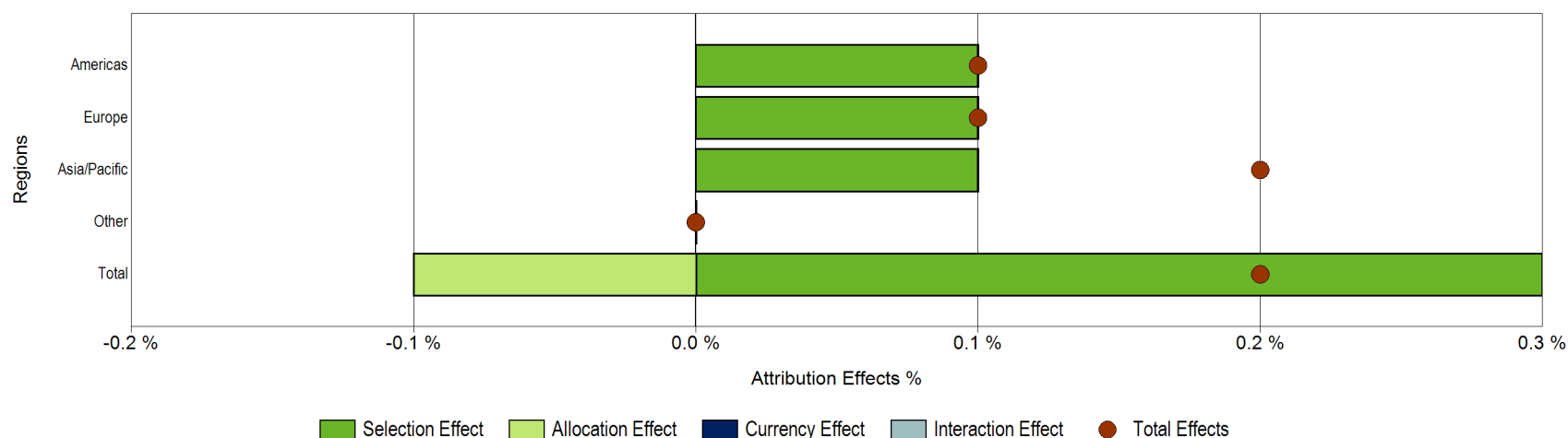
Top Negative Contributors		
	Relative Contribution %	Return %
APPLE	-0.1%	20.9%
ALIBABA GROUP HLDG.SPN. ADR 1:1	-0.1%	33.1%
NESTLE 'R'	-0.1%	17.7%
MICROSOFT	-0.1%	16.6%
FACEBOOK CLASS A	-0.1%	27.2%
BRITISH AMERICAN TOBACCO	0.0%	32.8%
SOFTBANK GROUP	0.0%	46.1%
EXXON MOBIL	0.0%	19.8%
SAMSUNG ELECTRONICS	0.0%	13.4%
CISCO SYSTEMS	0.0%	25.6%

	Equity Sector Attribution							Returns		Sector Weights	
	Total Effects	Selection Effect	Attribution Effects			Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark	
			Allocation Effect								
Energy	0.0%	0.1%	0.0%		0.0%	15.0%	14.7%	5.4%	5.9%		
Materials	0.1%	0.1%	0.0%		0.0%	12.7%	11.0%	4.7%	5.2%		
Industrials	-0.1%	-0.1%	0.0%		0.0%	12.8%	13.6%	11.5%	11.1%		
Consumer Discretionary	0.0%	0.0%	0.0%		0.0%	13.2%	13.0%	10.3%	10.9%		
Consumer Staples	0.1%	0.1%	0.0%		0.0%	11.9%	11.1%	7.9%	8.0%		
Health Care	0.2%	0.3%	0.0%		0.0%	11.3%	9.2%	12.7%	11.9%		
Financials	0.1%	0.1%	0.0%		0.0%	9.0%	8.4%	16.8%	16.9%		
Information Technology	0.0%	0.0%	0.0%		0.0%	19.6%	19.2%	14.6%	14.6%		
Communication Services	-0.1%	-0.1%	0.0%		0.0%	10.3%	11.6%	8.7%	8.0%		
Utilities	0.1%	0.0%	0.0%		0.0%	11.4%	10.1%	2.7%	3.3%		
Real Estate	0.0%	0.0%	0.0%		0.0%	15.8%	15.7%	3.3%	4.2%		
Cash	-0.2%	0.0%	-0.2%		0.0%	0.6%	--	1.4%	0.0%		
<b>Portfolio</b>	<b>0.2%</b>	<b>=</b>	<b>0.4%</b>	<b>+</b>	<b>-0.2%</b>	<b>+</b>	<b>0.0%</b>	<b>12.7%</b>	<b>12.5%</b>	<b>100.0%</b>	<b>100.0%</b>



# TOTAL EQUITY COMPOSITE

Total Equity Performance Attribution vs. MSCI ACWI IMI Net USD  
Quarter Ending March 31, 2019



	Returns and Weights				Attribution Effects				
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	Total Effects
<b>Totals</b>									
Americas	14.3%	14.1%	59.4%	58.1%	0.1%	0.0%	0.0%	0.0%	0.1%
Europe	11.6%	11.1%	18.3%	20.0%	0.1%	0.0%	0.0%	0.0%	0.1%
Asia/Pacific	10.3%	9.6%	19.6%	20.6%	0.1%	0.0%	0.0%	0.0%	0.2%
Other	4.0%	4.9%	1.2%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Cash	0.6%	--	1.4%	0.0%	0.0%	-0.2%	0.0%	0.0%	-0.2%
<b>Total</b>	<b>12.7%</b>	<b>12.5%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>0.3%</b>	<b>-0.1%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.2%</b>
<b>Totals</b>									
Developed	13.4%	12.9%	87.2%	88.3%	0.5%	0.0%	0.0%	0.0%	0.5%
Emerging*	8.7%	9.7%	11.3%	11.7%	-0.1%	0.0%	0.0%	0.0%	-0.1%
Frontier**	-6.4%	--	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cash	0.6%	--	1.4%	0.0%	0.0%	-0.2%	0.0%	0.0%	-0.2%



# TOTAL EQUITY COMPOSITE

Country Allocation				
	Manager	Index	Manager	Index
	Allocation (USD)	Allocation (USD)	Return (USD)	Return (USD)
<b>Americas</b>				
Brazil*	1.5%	0.9%	5.8%	8.1%
Canada	1.9%	3.0%	12.9%	15.4%
Chile*	0.2%	0.1%	1.5%	4.6%
Colombia*	0.0%	0.0%	28.1%	25.4%
Mexico*	0.6%	0.3%	7.9%	6.3%
Peru*	0.0%	0.0%	8.0%	10.5%
United States	55.2%	53.7%	14.7%	14.2%
<b>Total-Americas</b>	<b>59.4%</b>	<b>58.1%</b>	<b>14.3%</b>	<b>14.1%</b>
<b>Europe</b>				
Austria	0.2%	0.1%	10.9%	8.6%
Belgium	0.3%	0.3%	10.5%	15.1%
Czech Republic*	0.0%	0.0%	3.8%	4.8%
Denmark	0.6%	0.6%	9.7%	12.8%
Finland	0.3%	0.4%	19.9%	9.5%
France	2.0%	3.1%	9.1%	10.8%
Germany	1.9%	2.6%	7.3%	7.7%
Greece*	0.1%	0.0%	0.3%	16.0%
Hungary*	0.1%	0.0%	3.8%	5.7%
Ireland	0.2%	0.2%	2.9%	11.2%
Italy	1.0%	0.8%	12.8%	14.4%
Luxembourg	0.1%	0.0%	20.9%	12.5%
Netherlands	1.6%	1.0%	11.1%	13.3%
Norway	0.3%	0.3%	9.1%	8.7%
Poland*	0.1%	0.1%	-0.7%	-0.1%
Portugal	0.0%	0.1%	10.9%	8.6%
Russia*	0.4%	0.4%	16.2%	12.3%
Spain	1.1%	1.0%	6.7%	6.9%
Sweden	0.8%	1.0%	4.9%	8.2%
Switzerland	2.1%	2.6%	14.3%	13.3%
United Kingdom	5.3%	5.4%	15.3%	12.4%
<b>Total-Europe</b>	<b>18.3%</b>	<b>20.0%</b>	<b>11.6%</b>	<b>11.1%</b>

Country Allocation				
	Manager	Index	Manager	Index
	Allocation (USD)	Allocation (USD)	Return (USD)	Return (USD)
<b>AsiaPacific</b>				
Australia	1.5%	2.2%	8.6%	11.8%
China*	1.6%	3.3%	36.1%	17.8%
Hong Kong	3.2%	1.1%	17.7%	15.2%
India*	1.7%	1.2%	2.4%	6.6%
Indonesia*	0.5%	0.3%	2.4%	4.1%
Japan	6.7%	8.0%	6.3%	6.8%
Korea*	1.4%	1.7%	6.8%	4.4%
Malaysia*	0.3%	0.3%	-2.6%	2.0%
New Zealand	0.0%	0.1%	1.3%	14.3%
Pakistan*	0.0%	0.0%	16.4%	4.8%
Philippines*	0.4%	0.1%	2.6%	8.2%
Singapore	0.9%	0.4%	3.9%	8.3%
Sri Lanka**	0.0%	0.0%	0.2%	1.8%
Taiwan*	1.0%	1.4%	11.1%	9.6%
Thailand*	0.4%	0.3%	7.5%	7.9%
<b>Total-AsiaPacific</b>	<b>19.6%</b>	<b>20.5%</b>	<b>13.4%</b>	<b>9.6%</b>
<b>Other</b>				
Egypt*	0.0%	0.0%	10.6%	17.3%
Israel	0.2%	0.2%	8.5%	12.0%
Qatar*	0.0%	0.1%	3.7%	-2.3%
South Africa*	0.7%	0.7%	3.7%	4.1%
Turkey*	0.2%	0.1%	-13.2%	-2.7%
United Arab Emirates*	0.0%	0.1%	3.3%	7.8%
<b>Total-Other</b>	<b>1.2%</b>	<b>1.3%</b>	<b>-0.8%</b>	<b>4.9%</b>
<b>Totals</b>				
Developed	87.3%	88.3%	19.0%	12.8%
Emerging*	11.3%	11.7%	9.6%	9.7%
Frontier**	0.0%	0.0%	0.2%	--
Cash	1.4%		0.2%	



# TOTAL EQUITY COMPOSITE

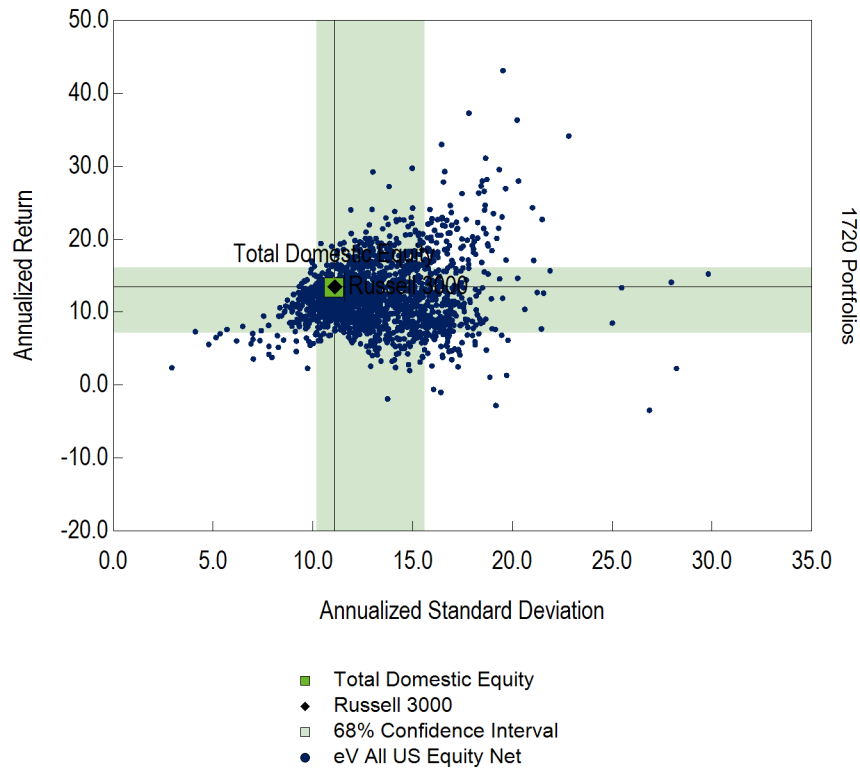
Total Equity Performance Attribution									
Versus MSCI ACWI IMI Net USD - Quarter Ending March 31, 2019									
Returns and Weights					Attribution Effects				
Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	Total Effects	
<b>Europe</b>									
Austria	10.8%	8.6%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Belgium	7.0%	15.0%	0.3%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Czech Republic*	6.6%	4.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Denmark	6.2%	12.9%	0.6%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%
Finland	9.7%	9.5%	0.4%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%
France	5.9%	10.8%	2.0%	3.1%	0.0%	0.0%	0.1%	0.0%	0.0%
Germany	7.2%	7.7%	1.9%	2.6%	0.0%	0.1%	0.1%	0.0%	0.1%
Greece*	4.3%	16.4%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Hungary*	-3.1%	5.7%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Ireland	5.1%	11.5%	0.3%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Italy	8.3%	14.5%	1.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%
Luxembourg	30.0%	12.5%	0.1%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%
Netherlands	7.4%	13.4%	1.6%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Norway	9.8%	8.7%	0.3%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Poland*	0.1%	-0.1%	0.1%	0.1%	0.0%	-0.1%	0.0%	0.0%	-0.1%
Portugal	13.4%	8.6%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Russia*	25.0%	12.4%	0.4%	0.4%	0.1%	-0.1%	0.0%	0.3%	0.2%
Spain	6.6%	6.9%	1.1%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%
Sweden	3.1%	8.2%	0.8%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Switzerland	6.1%	13.3%	2.1%	2.5%	0.0%	-0.1%	0.0%	0.0%	0.0%
United Kingdom	9.7%	12.4%	5.3%	5.4%	0.1%	0.0%	0.0%	0.0%	0.1%
<b>Americas</b>									
Brazil*	4.7%	8.0%	1.5%	0.9%	0.0%	-0.8%	-0.3%	-0.6%	-1.7%
Canada	13.1%	15.4%	1.9%	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Chile*	1.2%	4.6%	0.2%	0.1%	0.0%	-0.2%	0.0%	-0.1%	-0.3%
Colombia*	12.9%	25.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Mexico*	8.3%	6.3%	0.6%	0.3%	0.0%	-0.3%	-0.1%	0.0%	-0.4%
Peru*	7.4%	10.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
United States	34.6%	14.2%	55.1%	53.9%	10.4%	-0.2%	0.0%	-9.9%	0.3%

Total Equity Performance Attribution									
Versus MSCI ACWI IMI Net USD - Quarter Ending March 31, 2019									
Returns and Weights					Attribution Effects				
Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	Total Effects	
<b>AsiaPacific</b>									
Australia	8.6%	11.8%	1.5%	2.2%	0.0%	0.0%	0.0%	0.0%	0.0%
China*	36.1%	17.8%	1.6%	3.3%	0.5%	0.1%	0.0%	1.4%	2.1%
Hong Kong	17.7%	15.2%	3.2%	1.1%	0.0%	0.4%	0.0%	0.2%	0.6%
India*	2.4%	6.6%	1.7%	1.2%	-0.1%	0.2%	0.4%	-0.3%	0.3%
Indonesia*	2.4%	4.1%	0.5%	0.3%	0.0%	-0.5%	-0.1%	0.0%	-0.6%
Japan	6.3%	6.8%	6.7%	8.0%	0.0%	0.2%	0.1%	0.0%	0.4%
Korea*	6.8%	4.4%	1.4%	1.7%	0.0%	-0.5%	-0.1%	-0.1%	-0.7%
Malaysia*	-2.6%	2.0%	0.3%	0.3%	0.0%	-0.1%	0.0%	-0.1%	-0.1%
New Zealand	1.3%	14.3%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Pakistan*	16.4%	4.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Philippines*	2.6%	8.2%	0.4%	0.1%	0.0%	-0.2%	0.0%	-0.1%	-0.3%
Singapore	3.9%	8.3%	0.9%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Sri Lanka**	0.2%	1.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Taiwan*	11.1%	9.6%	1.0%	1.4%	0.0%	0.1%	0.0%	0.1%	0.3%
Thailand*	7.5%	7.9%	0.4%	0.3%	0.0%	-0.1%	0.0%	0.0%	-0.2%
<b>Other</b>									
Egypt*	10.6%	17.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Israel	8.5%	12.0%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Qatar*	3.7%	-2.3%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
South Africa*	3.7%	4.1%	0.7%	0.7%	0.0%	-0.1%	-0.2%	0.0%	-0.4%
Turkey*	-13.2%	-2.7%	0.2%	0.1%	0.0%	-0.2%	-0.1%	-0.1%	-0.3%
United Arab Emirates*	3.3%	7.8%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Totals</b>									
Developed	19.0%	12.8%	87.3%	88.3%	4.8%	-0.2%	0.5%	-3.4%	1.7%
Emerging*	9.6%	9.7%	11.3%	11.7%	-0.1%	-1.5%	-0.7%	0.1%	-2.2%
Frontier**	0.2%	--	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cash	0.2%	--	1.4%	0.0%	0.0%	-0.1%	0.0%	0.0%	-0.1%

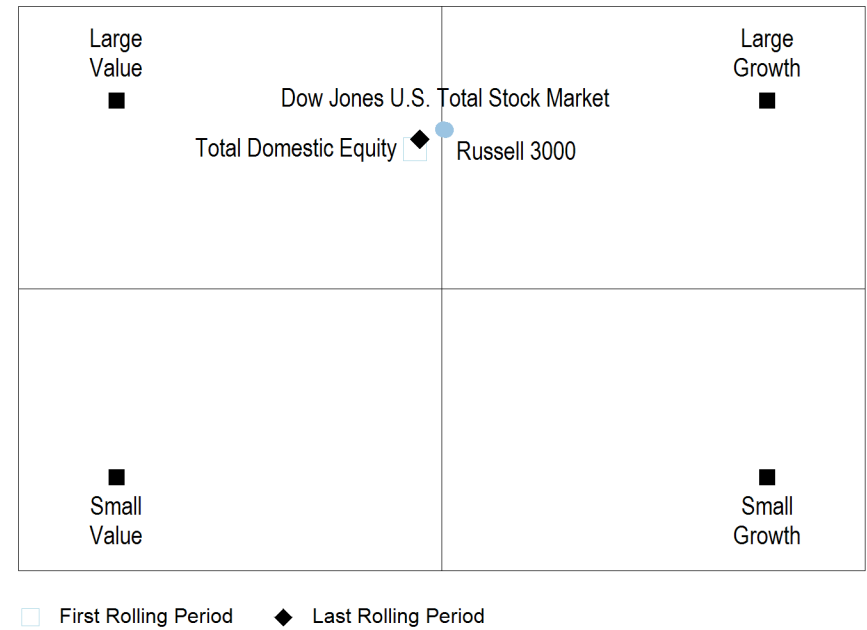


# TOTAL DOMESTIC EQUITY

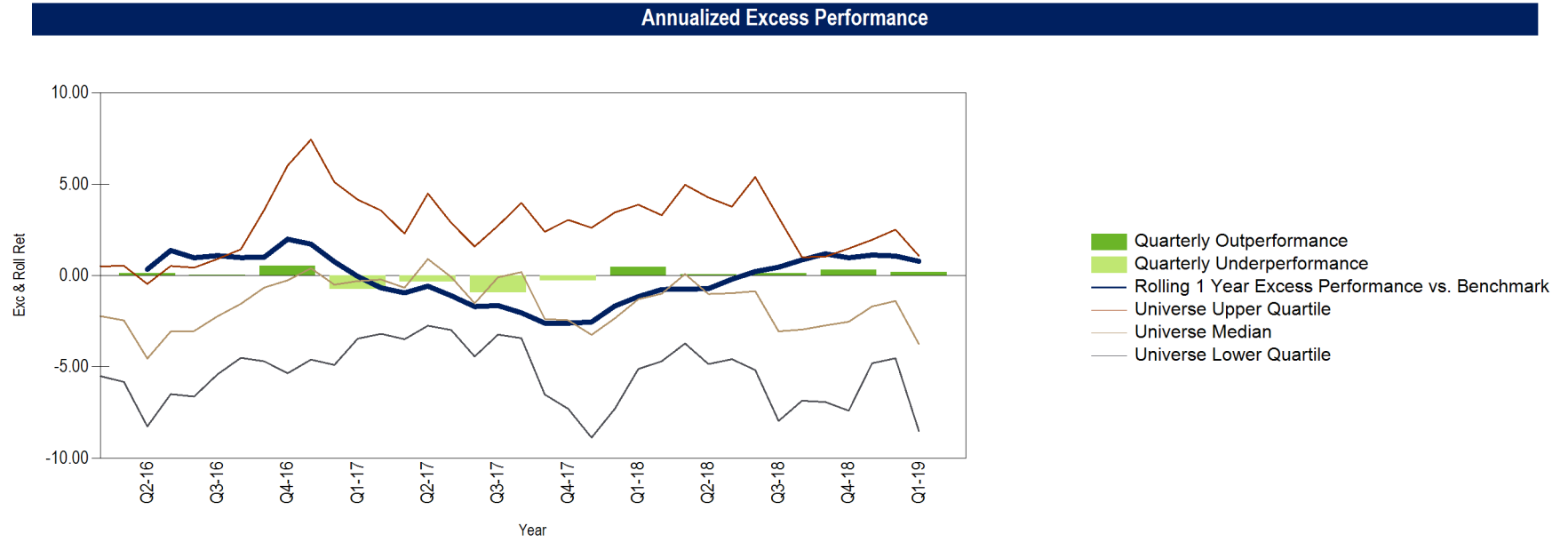
Annualized Return vs. Annualized Standard Deviation  
3 Years Ending March 31, 2019



U.S. Effective Style Map  
3 Years Ending March 31, 2019



# TOTAL DOMESTIC EQUITY

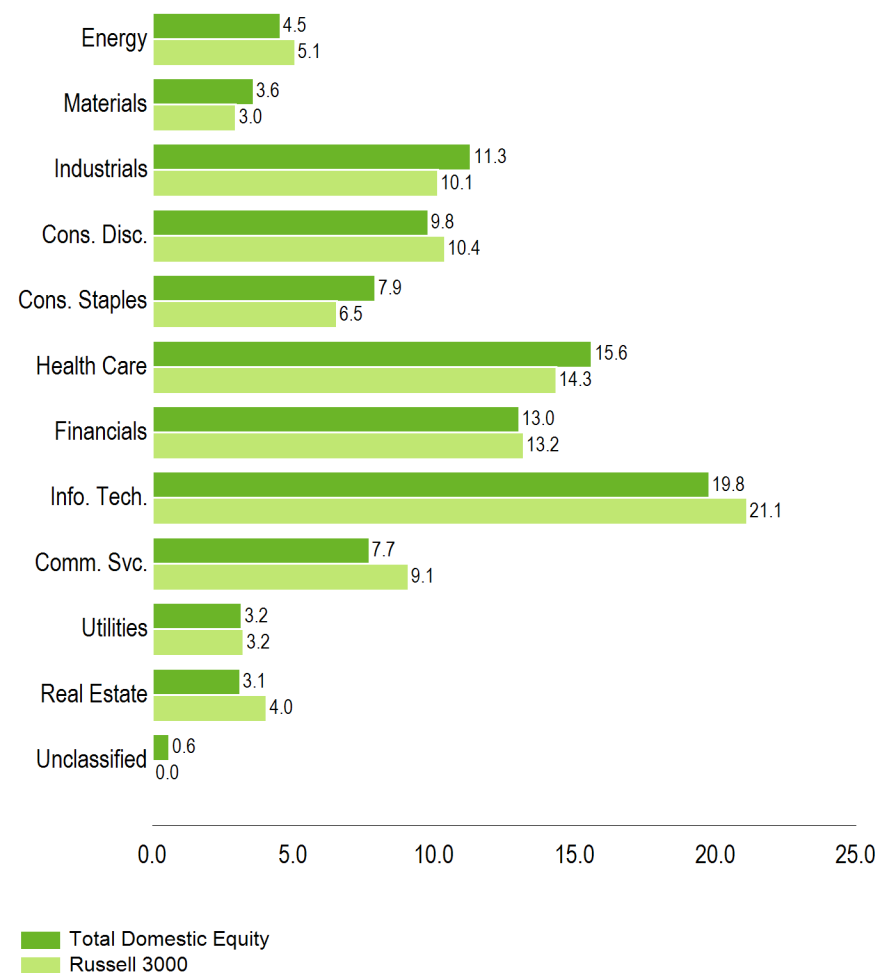




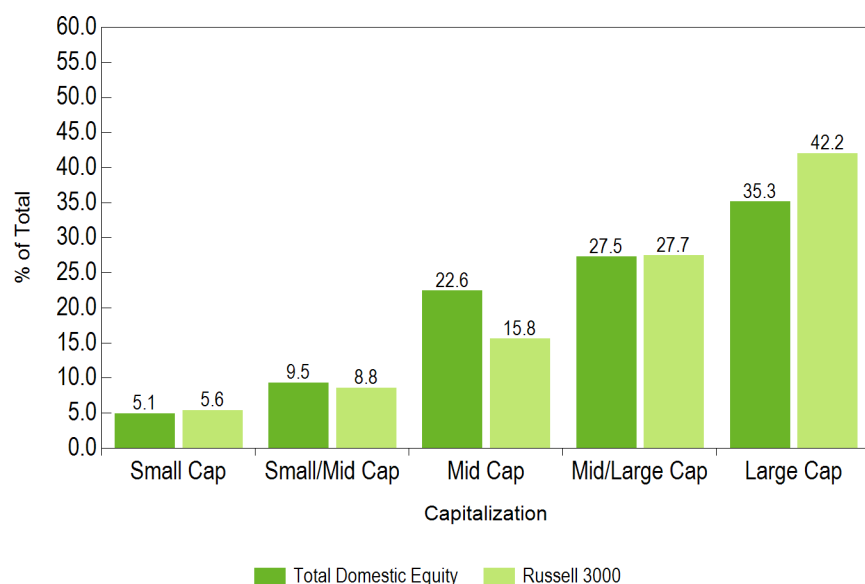
# TOTAL DOMESTIC EQUITY

Characteristics		
	Portfolio	Russell 3000
Number of Holdings	611	2,977
Weighted Avg. Market Cap. (\$B)	150.45	178.56
Median Market Cap. (\$B)	18.70	1.62
Price To Earnings	20.62	20.16
Price To Book	3.37	3.30
Price To Sales	1.99	1.87
Return on Equity (%)	23.09	21.77
Yield (%)	1.83	1.91
Beta	0.99	1.00
R-Squared	0.99	1.00

## Sector Allocation (%) vs Russell 3000



## Market Capitalization As of March 31, 2019



# TOTAL DOMESTIC EQUITY

Top Ten Holdings	
MICROSOFT	2.6%
APPLE	2.4%
AMAZON.COM	2.1%
FACEBOOK CLASS A	1.1%
BERKSHIRE HATHAWAY 'B'	1.1%
JOHNSON & JOHNSON	1.1%
ALPHABET 'C'	1.0%
ALPHABET A	1.0%
EXXON MOBIL	1.0%
JP MORGAN CHASE & CO.	1.0%

Top Positive Contributors		
	Relative Contribution %	Return %
INTEGRA LFSC.HDG.	0.1%	23.5%
OKTA CL.A	0.1%	29.7%
PURE STORAGE CL.A	0.1%	35.5%
WATERS	0.1%	33.4%
TREEHOUSE FOODS	0.1%	27.3%
ULTA BEAUTY	0.1%	42.4%
BLACKBAUD	0.1%	27.0%
WELBILT	0.1%	47.4%
CATALENT	0.1%	30.2%
DENTSPLY SIRONA	0.1%	33.5%

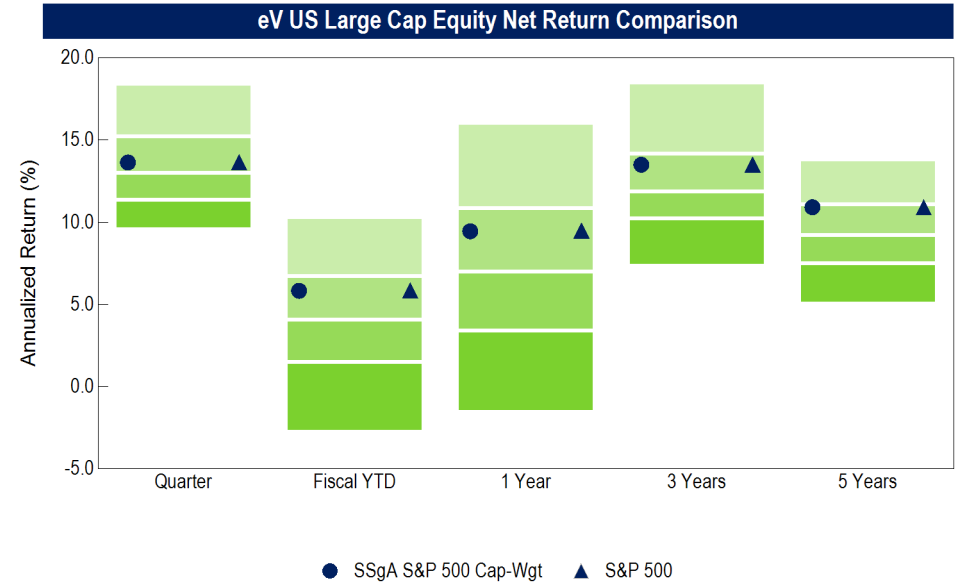
Top Negative Contributors		
	Relative Contribution %	Return %
APPLE	-0.1%	20.9%
MICROSOFT	-0.1%	16.6%
AMAZON.COM	-0.1%	18.6%
FACEBOOK CLASS A	-0.1%	27.2%
LINDE	0.0%	13.3%
EXXON MOBIL	0.0%	19.8%
CISCO SYSTEMS	0.0%	25.6%
ALPHABET 'C'	0.0%	13.3%
SERVICENOW	0.0%	38.4%
ALPHABET A	0.0%	12.6%

	Equity Sector Attribution										
	Total Effects	Selection Effect	Attribution Effects			Returns		Sector Weights			
			Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark			
Energy	0.0%	0.0%	0.0%	0.0%	0.0%	16.7%	16.7%	4.5%	5.0%		
Materials	0.0%	0.0%	0.0%	0.0%	0.0%	11.3%	11.4%	3.4%	2.7%		
Industrials	0.1%	0.1%	0.0%	0.0%	0.0%	17.4%	16.7%	11.1%	10.0%		
Consumer Discretionary	0.1%	0.1%	0.0%	0.0%	0.0%	15.5%	14.7%	9.8%	10.4%		
Consumer Staples	0.1%	0.1%	0.0%	0.0%	0.0%	12.7%	11.7%	7.8%	6.7%		
Health Care	0.3%	0.3%	-0.1%	0.0%	0.0%	10.4%	8.1%	16.0%	15.1%		
Financials	0.0%	0.0%	0.0%	0.0%	0.0%	8.7%	8.8%	13.7%	13.9%		
Information Technology	-0.1%	-0.1%	0.0%	0.0%	0.0%	20.4%	20.8%	19.3%	20.0%		
Communication Services	-0.1%	-0.1%	0.0%	0.0%	0.0%	13.2%	14.3%	7.6%	8.9%		
Utilities	0.0%	0.0%	0.0%	0.0%	0.0%	11.6%	11.4%	3.1%	3.3%		
Real Estate	0.0%	0.0%	0.0%	0.0%	0.0%	17.3%	17.3%	3.0%	3.9%		
Cash	-0.1%	0.0%	-0.1%	0.0%	0.0%	0.6%	--	0.7%	0.0%		
<b>Portfolio</b>	<b>0.2%</b>	<b>=</b>	<b>0.4%</b>	<b>+</b>	<b>-0.3%</b>	<b>+</b>	<b>0.0%</b>	<b>14.2%</b>	<b>14.1%</b>	<b>100.0%</b>	<b>100.0%</b>

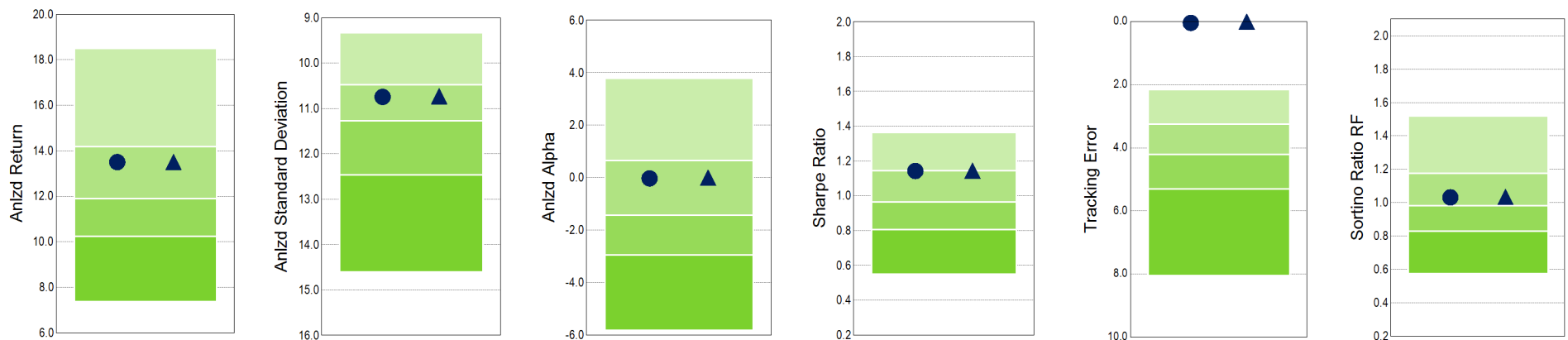


# SSGA S&P 500 CAP-WGT

Using a replication process, we purchase each security for the Strategy in the same capitalization weight as it appears in the S&P 500 Index. Replication results in low turnover, accurate tracking, and low costs. SSgA's internal liquidity has allowed the firm to acquire many of the benchmark constituents for free. These free trading opportunities have allowed SSgA to gradually reduce security-level misweights while avoiding the open market. This process has resulted in portfolios that look and behave like the benchmark, and do so at a very low cost. SSgA's passive equity process objective is to remain fully invested in the equity market at all times. To accomplish this, it holds a small amount of unleveraged exchange-traded S&P 500® futures contracts to maintain full exposure. SSgA tends to hold approximately 1-3% of the strategy's value in suitable CFTC approved index futures contracts. This position in futures also allows the firm to accommodate cash flows into and out of the portfolio on a daily basis and to equitize dividend receivables to achieve closer tracking.

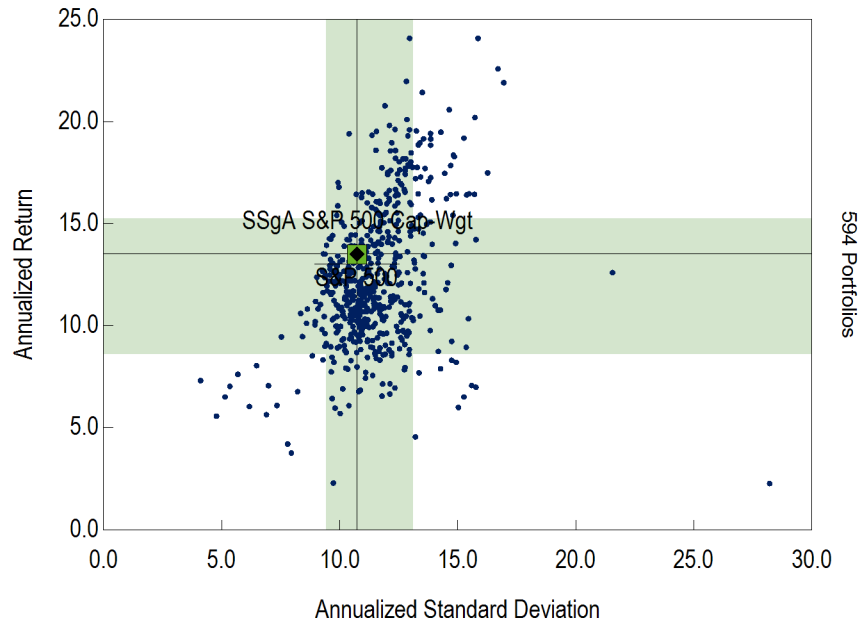


## 3 Year Risk Statistics



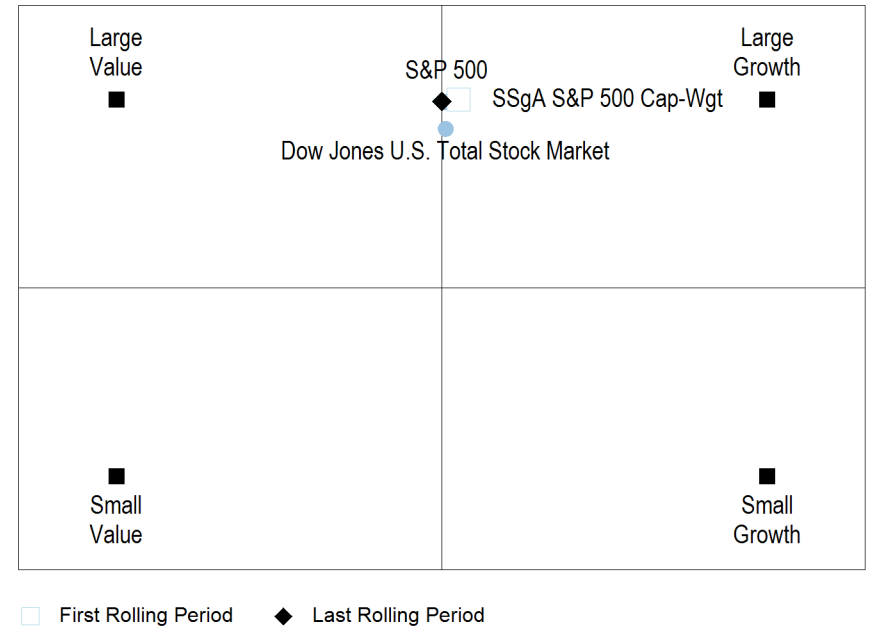
# SSGA S&P 500 CAP-WGT

Annualized Return vs. Annualized Standard Deviation  
3 Years Ending March 31, 2019



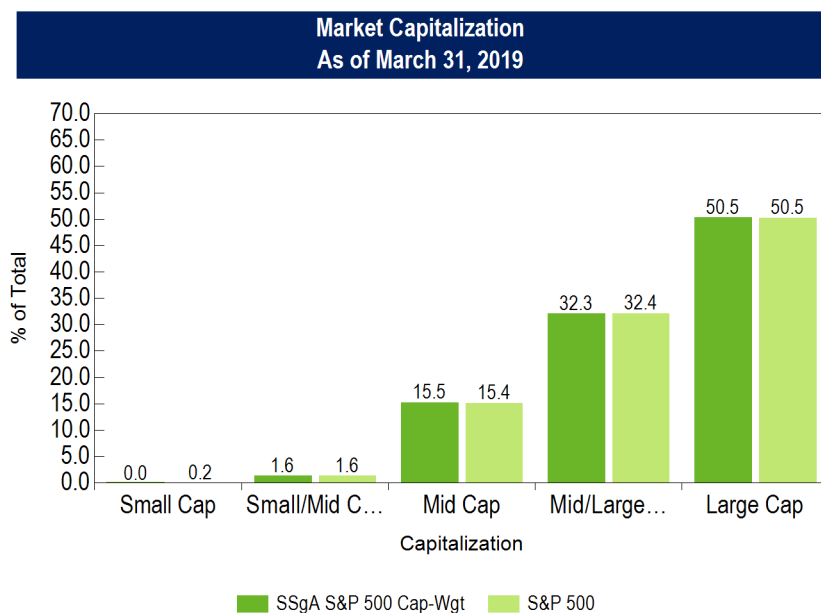
- SSGA S&P 500 Cap-Wgt
- ◆ S&P 500
- 68% Confidence Interval
- eV US Large Cap Equity Net

U.S. Effective Style Map  
3 Years Ending March 31, 2019

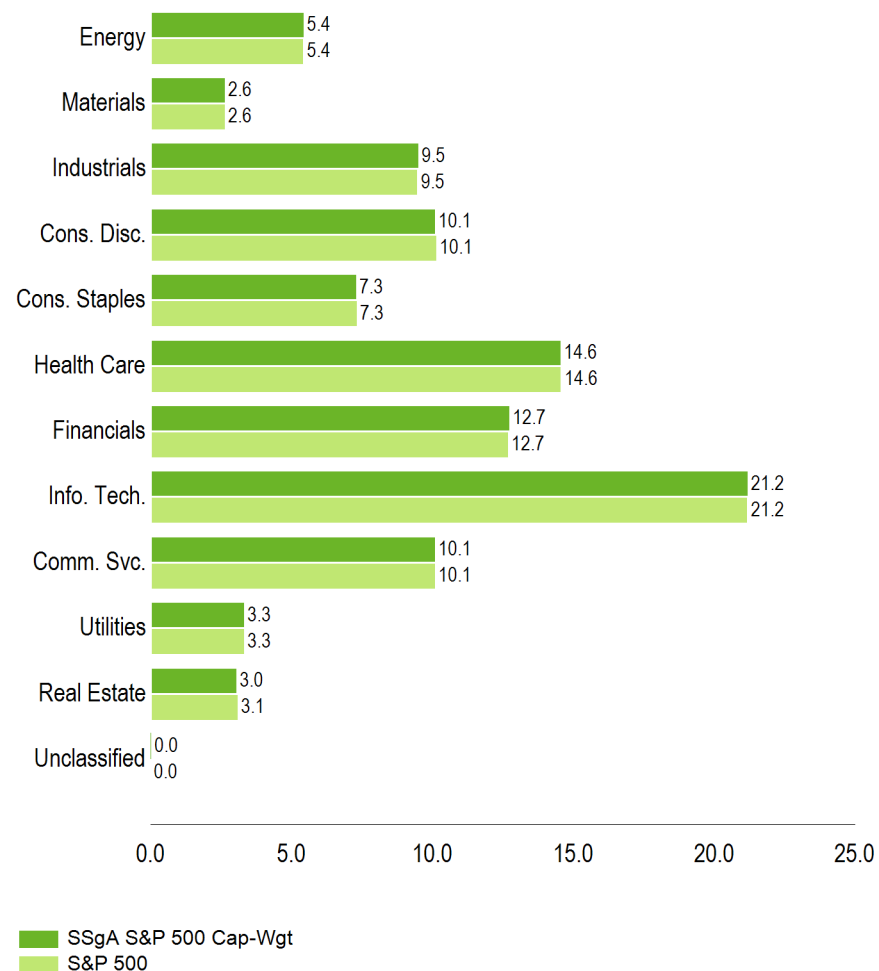


# SSGA S&P 500 CAP-WGT

Characteristics		
	Portfolio	S&P 500
Number of Holdings	505	505
Weighted Avg. Market Cap. (\$B)	211.54	211.45
Median Market Cap. (\$B)	21.17	21.17
Price To Earnings	20.20	20.23
Price To Book	3.48	3.48
Price To Sales	2.09	2.09
Return on Equity (%)	26.31	26.28
Yield (%)	2.00	2.00
Beta	1.00	1.00
R-Squared	1.00	1.00



## Sector Allocation (%) vs S&P 500



# SSGA S&P 500 CAP-WGT

Characteristics		
	Portfolio	S&P 500
Number of Holdings	505	505
Weighted Avg. Market Cap. (\$B)	211.5	211.5
Median Market Cap. (\$B)	21.2	21.2
Price To Earnings	20.2	20.2
Price To Book	3.5	3.5
Price To Sales	2.1	2.1
Return on Equity (%)	26.3	26.3
Yield (%)	2.0	2.0
Beta	1.0	1.0
R-Squared	1.0	1.0

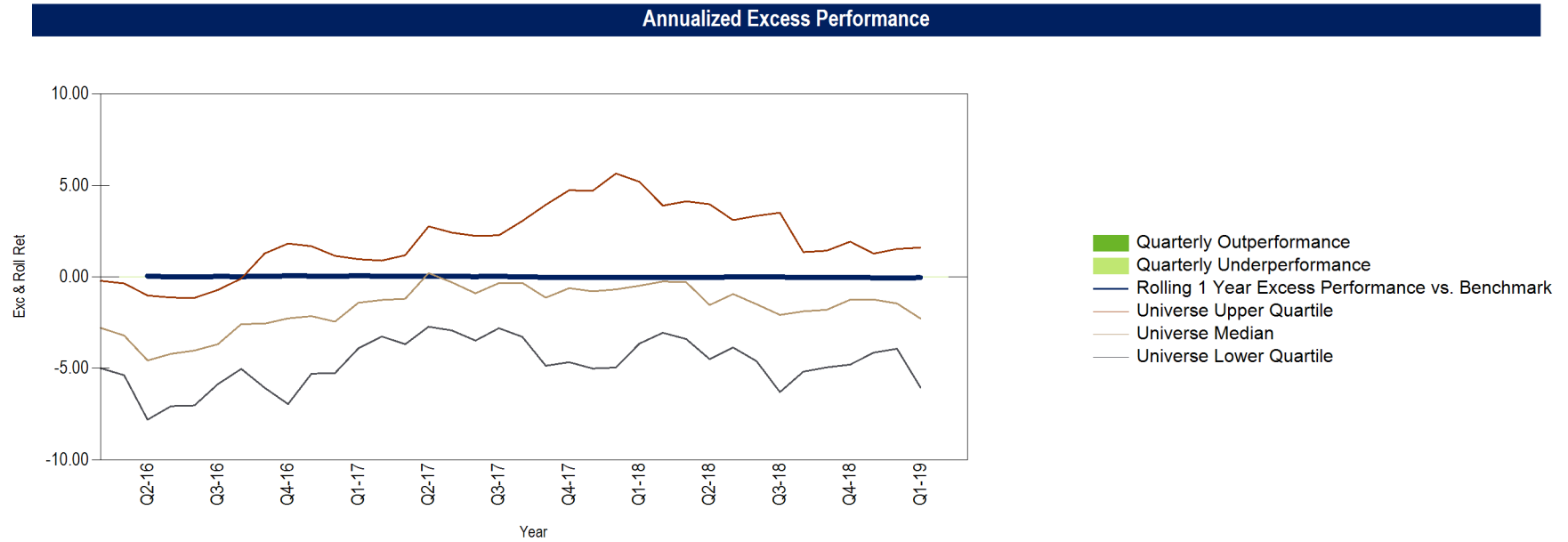
Top Positive Contributors		
	Relative Contribution %	Return %
FIRST REPUBLIC BANK (FRC)	0.0%	15.8%
MICRON TECHNOLOGY (MU)	0.0%	30.3%
EBAY (EBAY)	0.0%	32.8%
DEVON ENERGY (DVN)	0.0%	40.4%
BROADCOM (AVGO)	0.0%	19.3%
ALTRIA GROUP (MO)	0.0%	17.9%
CIGNA (CI)	0.0%	-15.3%
TJX (TJX)	0.0%	19.4%
UNITED TECHNOLOGIES (UTX)	0.0%	21.8%
AUTOZONE (AZO)	0.0%	22.2%

Top Negative Contributors		
	Relative Contribution %	Return %
LINDE (LIN)	-0.1%	13.3%
APPLE (AAPL)	0.0%	20.9%
MICROSOFT (MSFT)	0.0%	16.6%
AMAZON.COM (AMZN)	0.0%	18.6%
FACEBOOK CLASS A (FB)	0.0%	27.2%
PHILIP MORRIS INTL. (PM)	0.0%	34.1%
ALPHABET 'C' (GOOG)	0.0%	13.3%
CELGENE (CELG)	0.0%	47.2%
EXXON MOBIL (XOM)	0.0%	19.8%
NVIDIA (NVDA)	0.0%	34.6%

SSgA S&P 500 Cap-Wgt Performance Attribution vs. S&P 500											
	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%	16.4%	16.4%	5.3%	5.3%			
Materials	0.0%	0.0%	0.0%	0.0%	9.7%	9.7%	2.3%	2.3%			
Industrials	0.0%	0.0%	0.0%	0.0%	17.2%	17.2%	9.2%	9.3%			
Consumer Discretionary	0.0%	0.0%	0.0%	0.0%	15.7%	15.7%	9.9%	10.0%			
Consumer Staples	0.0%	0.0%	0.0%	0.0%	12.0%	12.0%	7.4%	7.5%			
Health Care	0.0%	0.0%	0.0%	0.0%	6.5%	6.5%	15.5%	15.7%			
Financials	0.0%	0.0%	0.0%	0.0%	8.6%	8.5%	13.4%	13.4%			
Information Technology	0.0%	0.0%	0.0%	0.0%	19.8%	19.9%	20.1%	20.3%			
Communication Services	0.0%	0.0%	0.0%	0.0%	14.4%	14.4%	9.8%	9.9%			
Utilities	0.0%	0.0%	0.0%	0.0%	11.6%	11.6%	3.3%	3.3%			
Real Estate	0.0%	0.0%	0.0%	0.0%	17.6%	17.6%	2.9%	3.0%			
Cash	0.0%	0.0%	0.0%	0.0%	0.6%	--	0.8%	0.0%			
<b>Portfolio</b>	<b>-0.1%</b>	<b>=</b>	<b>0.0%</b>	<b>+</b>	<b>-0.1%</b>	<b>+</b>	<b>0.0%</b>	<b>13.6%</b>	<b>13.7%</b>	<b>100.0%</b>	<b>100.0%</b>

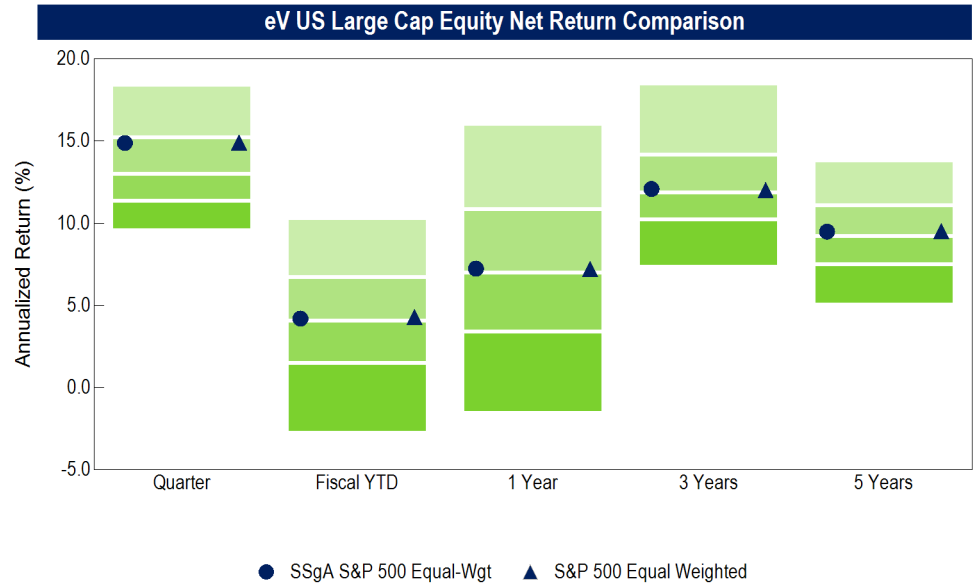


# SSGA S&P 500 CAP-WGT

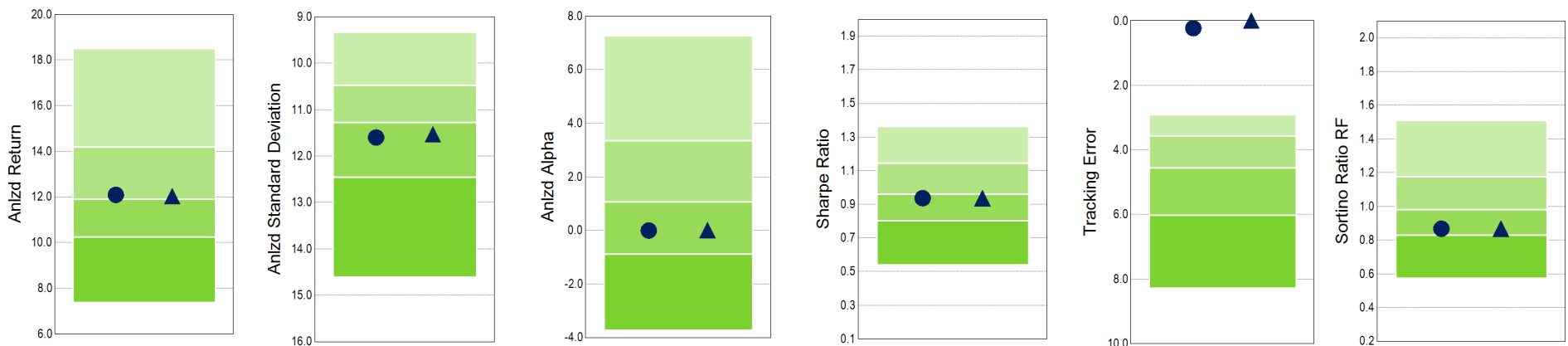


# SSGA S&P 500 EQUAL-WGT

The Strategy is managed using a "passive" or "indexing" investment approach, by which SSgA attempts to match, before expenses, the performance of the Index. SSgA will typically attempt to invest in the securities comprising the Index, in the same proportions as they are represented in the Index. In some cases, it may not be possible or practicable to purchase all of the securities comprising the Index, or to hold them in the same weightings as they represent in the Index. In those circumstances, SSgA may employ a sampling or optimization technique to construct the portfolio in question. From time to time securities are added to or removed from the Index. SSgA may sell securities that are represented in the Index, or purchase securities that are not yet represented in the Index, in anticipation of their removal from or addition to the Index. The Strategy may at times purchase or sell futures contracts on the Index, or options on those futures, or engage in other transactions involving the use of derivatives, in lieu of investment directly in the securities making up the Index or to enhance the Strategy's replication of the Index return. The Strategy's return may not match the return of the Index.



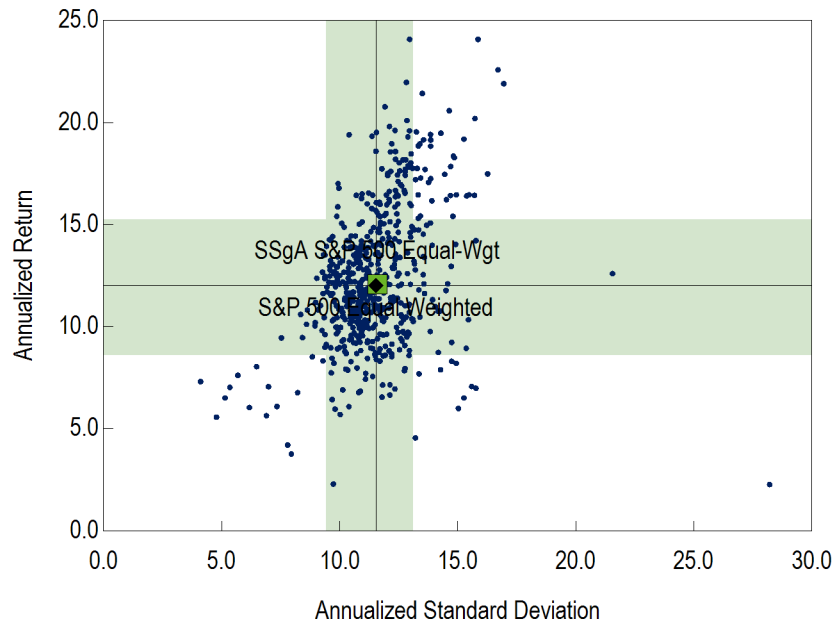
## 3 Year Risk Statistics





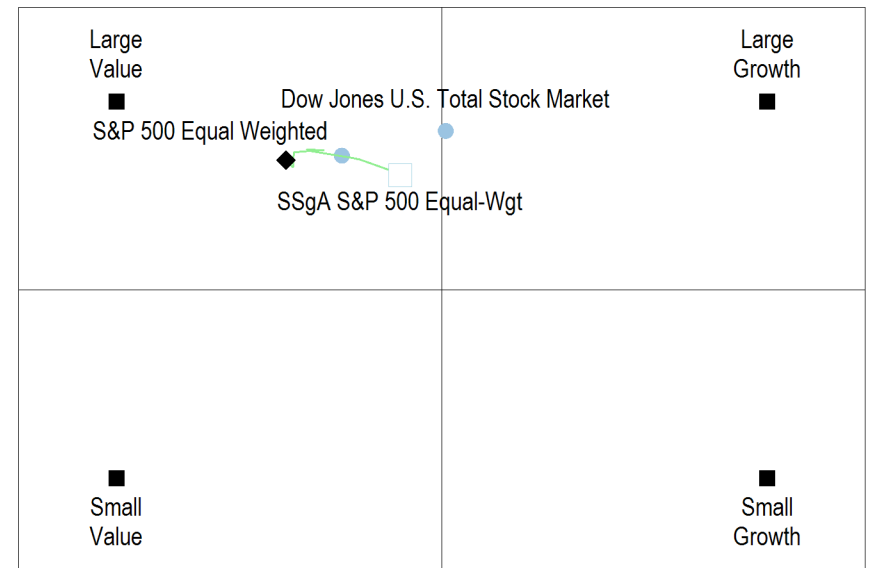
# SSGA S&P 500 EQUAL-WGT

Annualized Return vs. Annualized Standard Deviation  
3 Years Ending March 31, 2019



- SSGA S&P 500 Equal-Wgt
- ◆ S&P 500 Equal Weighted
- 68% Confidence Interval
- eV US Large Cap Equity Net

U.S. Effective Style Map  
3 Years Ending March 31, 2019



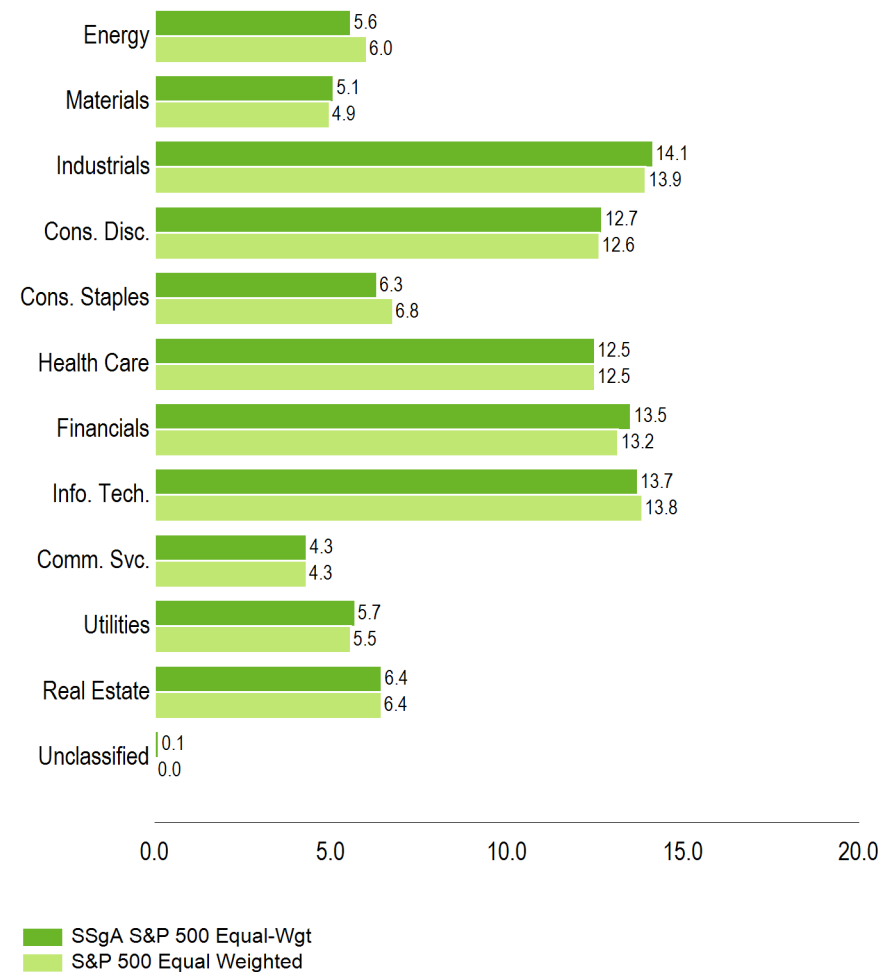
- First Rolling Period
- ◆ Last Rolling Period



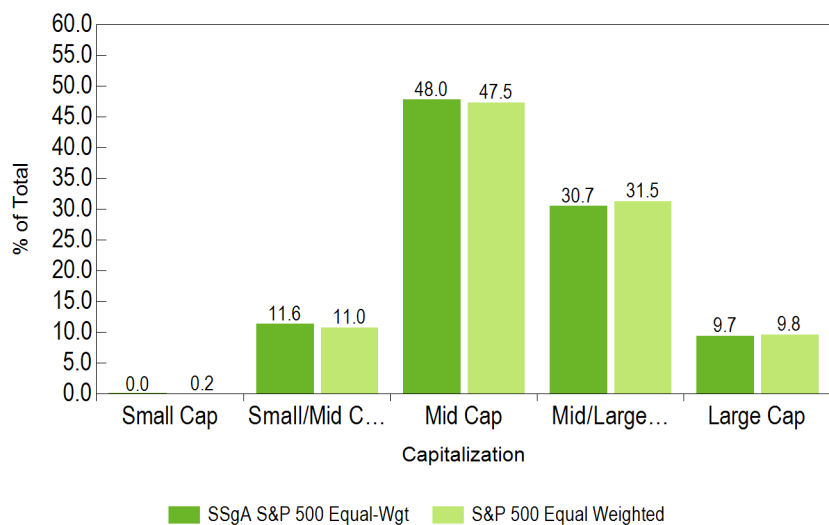
# SSGA S&P 500 EQUAL-WGT

Characteristics		
	Portfolio	S&P 500 Equal Weighted
Number of Holdings	503	505
Weighted Avg. Market Cap. (\$B)	47.85	48.56
Median Market Cap. (\$B)	21.06	21.17
Price To Earnings	18.68	18.79
Price To Book	2.96	2.97
Price To Sales	1.58	1.59
Return on Equity (%)	21.97	21.91
Yield (%)	2.03	2.04
Beta	1.01	1.00
R-Squared	1.00	1.00

## Sector Allocation (%) vs S&P 500 Equal Weighted



## Market Capitalization As of March 31, 2019



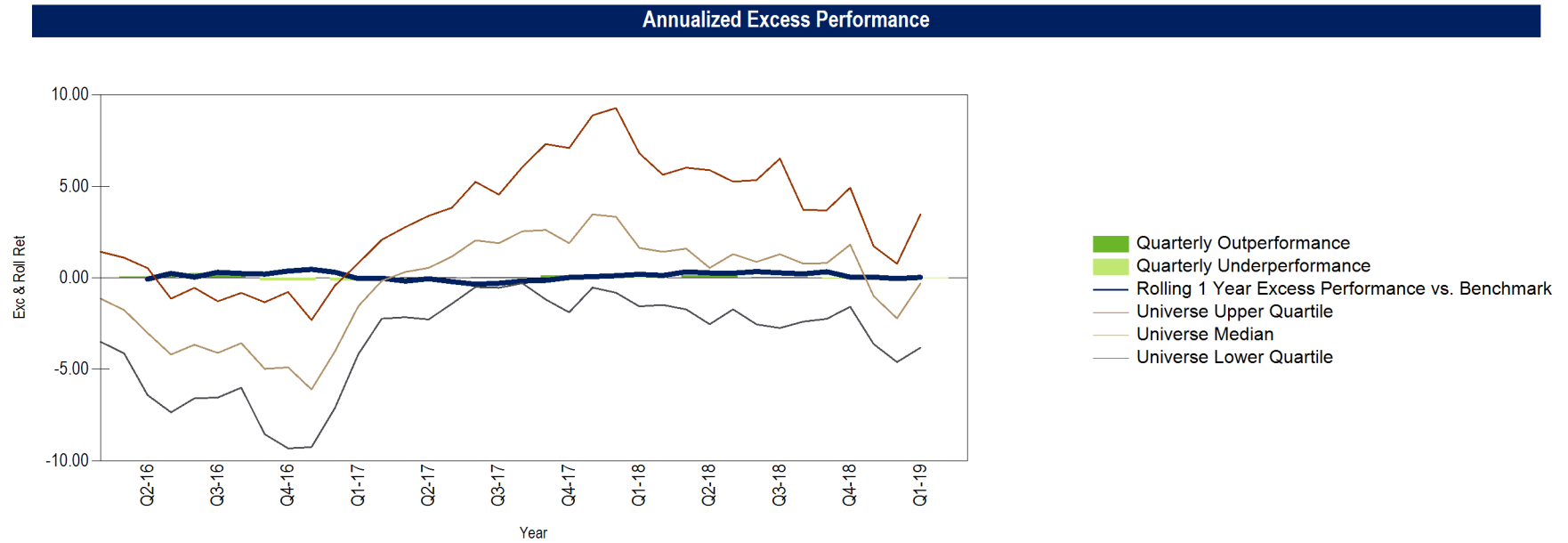
# SSGA S&P 500 EQUAL-WGT

Characteristics	S&P 500		Top Positive Contributors			Top Negative Contributors		
	Portfolio	Equal Weighted		Relative Contribution %	Return %		Relative Contribution %	Return %
Number of Holdings	503	505	FIRST REPUBLIC BANK (FRC)	0.0%	15.8%	DOMINION ENERGY (D)	0.0%	8.6%
Weighted Avg. Market Cap. (\$B)	47.9	48.6	XEROX (XRX)	0.0%	63.1%	GENERAL ELECTRIC (GE)	0.0%	37.4%
Median Market Cap. (\$B)	21.1	21.2	HESS (HES)	0.0%	49.4%	ULTA BEAUTY (ULTA)	0.0%	42.4%
Price To Earnings	18.7	18.8	CONAGRA BRANDS (CAG)	0.0%	31.2%	PVH (PVH)	0.0%	31.2%
Price To Book	3.0	3.0	COTY CL.A (COTY)	0.0%	77.3%	GENERAL MILLS (GIS)	0.0%	34.5%
Price To Sales	1.6	1.6	PERRIGO (PRGO)	0.0%	24.8%	FLEETCOR TECHNOLOGIES (FLT)	0.0%	32.8%
Return on Equity (%)	22.0	21.9	DISH NETWORK 'A' (DISH)	0.0%	26.9%	CAPRI HOLDINGS (CPRI)	0.0%	20.6%
Yield (%)	2.0	2.0	MATTEL (MAT)	0.0%	30.1%	QUANTA SERVICES (PWR)	0.0%	25.4%
Beta	1.0	1.0	AES (AES)	0.0%	26.1%	SEAGATE TECH. (STX)	0.0%	25.8%
R-Squared	1.0	1.0	KIMCO REALTY (KIM)	0.0%	26.3%	DENTSPLY SIRONA (XRAY)	0.0%	33.5%

SSgA S&P 500 Equal-Wgt Performance Attribution vs. S&P 500 Equal Weighted											
	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%	18.0%	17.8%	5.5%	5.7%			
Materials	0.0%	0.0%	0.0%	0.0%	12.4%	12.2%	5.1%	4.9%			
Industrials	0.0%	0.0%	0.0%	0.0%	16.9%	16.9%	13.9%	14.0%			
Consumer Discretionary	0.0%	0.0%	0.0%	0.0%	16.0%	16.0%	12.8%	13.0%			
Consumer Staples	-0.1%	0.0%	0.0%	0.0%	12.8%	13.4%	6.2%	6.5%			
Health Care	0.0%	0.0%	0.0%	0.0%	11.7%	11.6%	12.4%	12.3%			
Financials	0.0%	0.0%	0.0%	0.0%	11.6%	11.5%	13.8%	13.9%			
Information Technology	0.0%	0.0%	0.0%	0.0%	21.4%	21.3%	13.9%	13.8%			
Communication Services	0.0%	0.0%	0.0%	0.0%	10.1%	10.0%	4.2%	4.1%			
Utilities	0.0%	0.0%	0.0%	0.0%	11.6%	11.4%	5.6%	5.5%			
Real Estate	0.0%	0.0%	0.0%	0.0%	16.9%	16.9%	6.5%	6.3%			
Cash	0.0%	0.0%	0.0%	0.0%	0.6%	--	0.2%	0.0%			
<b>Portfolio</b>	<b>0.0%</b>	<b>=</b>	<b>0.0%</b>	<b>+</b>	<b>0.0%</b>	<b>+</b>	<b>0.0%</b>	<b>15.0%</b>	<b>15.0%</b>	<b>100.0%</b>	<b>100.0%</b>

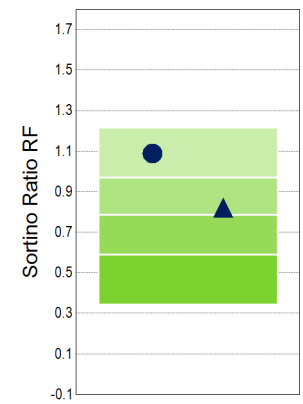
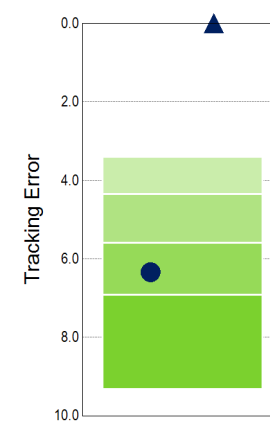
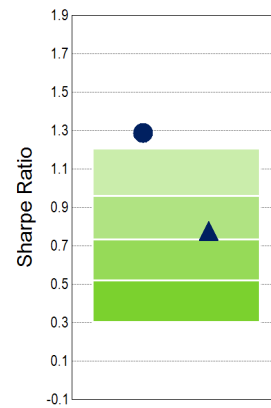
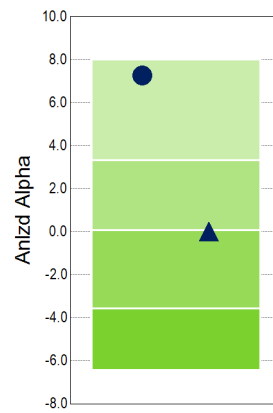
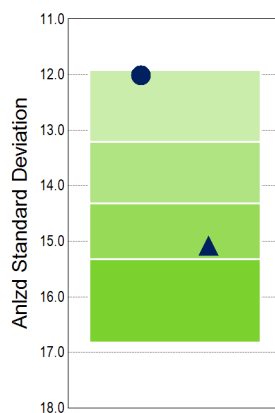
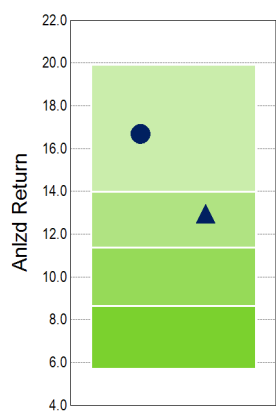
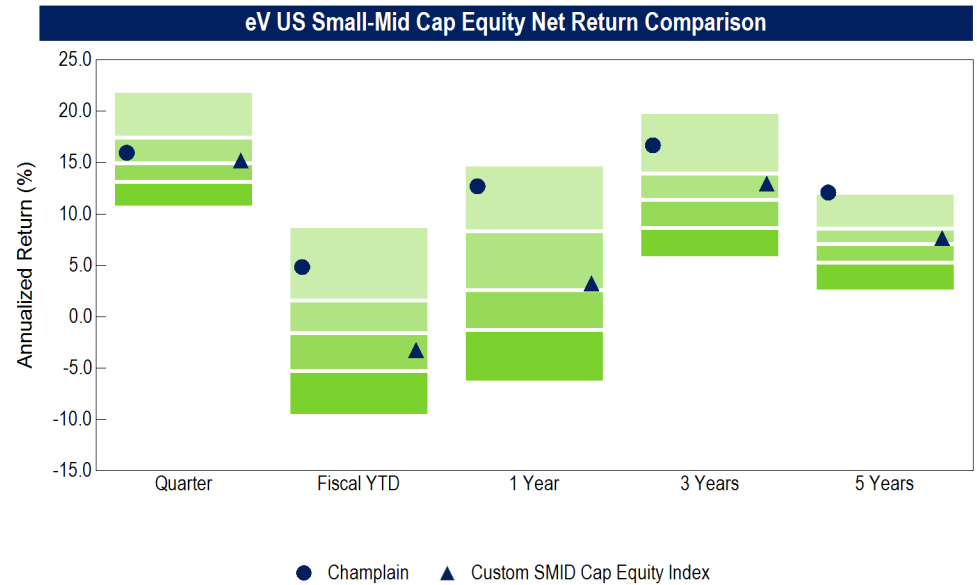


# SSGA S&P 500 EQUAL-WGT



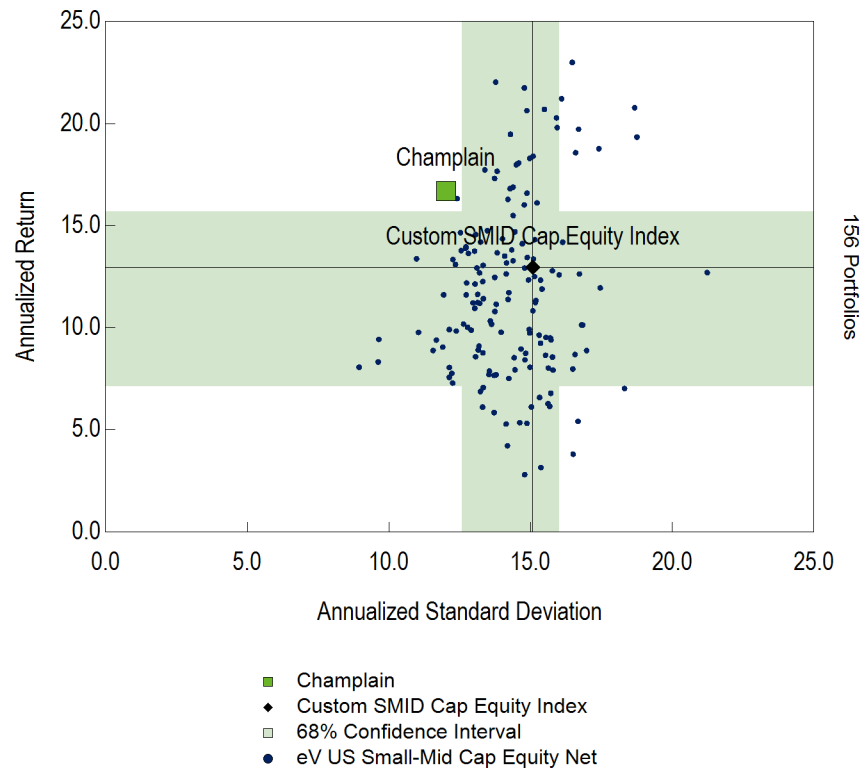
# CHAMPLAIN

Champlain employs a fundamental, bottom-up approach to investing in equity assets. They believe that superior companies purchased at attractive valuations have the highest probability to wealth creation. Champlain seeks strong businesses with credible and sincere management and aims to buy shares of their stock at discounts to fair or intrinsic value. Portfolio construction applies sector weight guidelines and position size rules to manage risk. The portfolio will have some exposure to at least seven out of the eight largest sectors of the S&P 400, with a maximum weighting on 25% in any one sector. Individual positions will not represent more than 2% of the respective companies' outstanding shares and are limited to no more than 5% of assets under management. The portfolio typically holds 50-75 securities with average position sizes of 2%. The strategy's minimum market cap is \$1.5 billion at purchase and a maximum market cap of \$15 billion. In general, no more than 10% of portfolio in stocks with a market cap below \$2B and no more than 5% of portfolio in companies with market cap above \$20B.

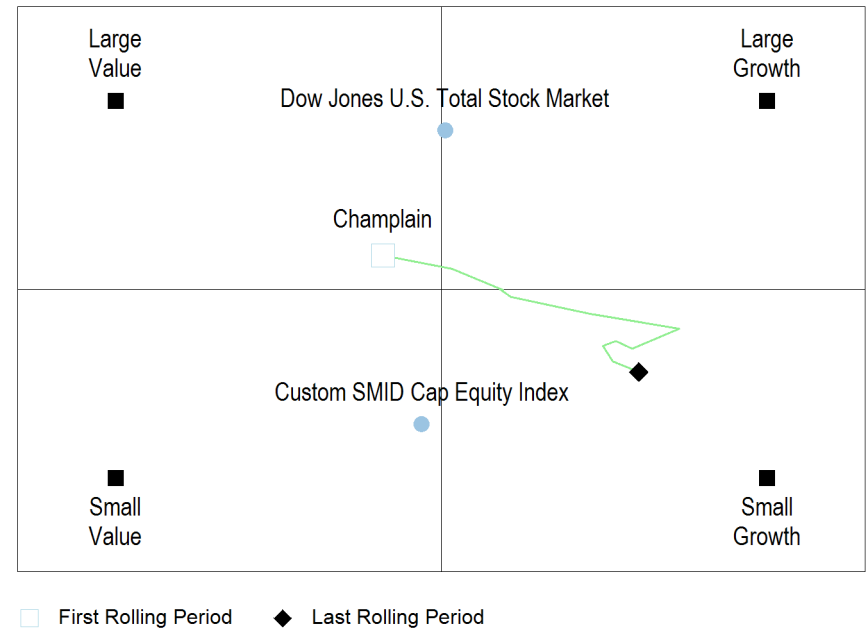


# CHAMPLAIN

Annualized Return vs. Annualized Standard Deviation  
3 Years Ending March 31, 2019



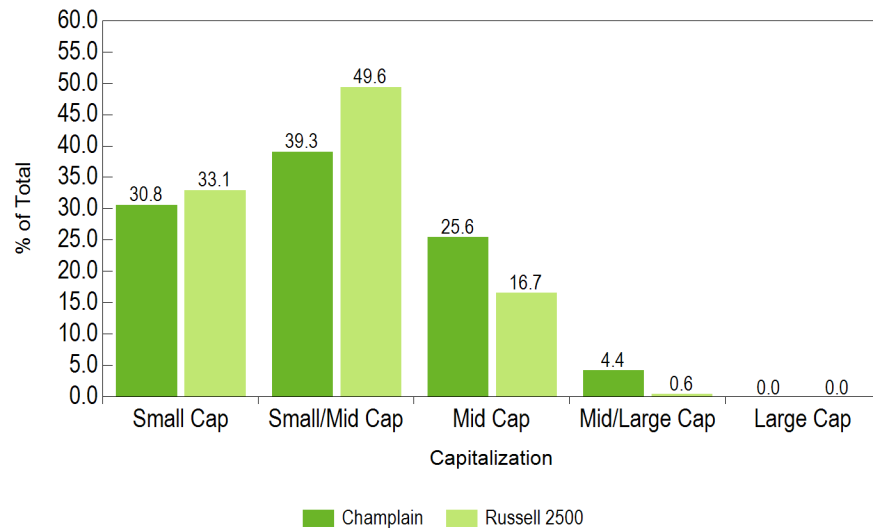
U.S. Effective Style Map  
3 Years Ending March 31, 2019



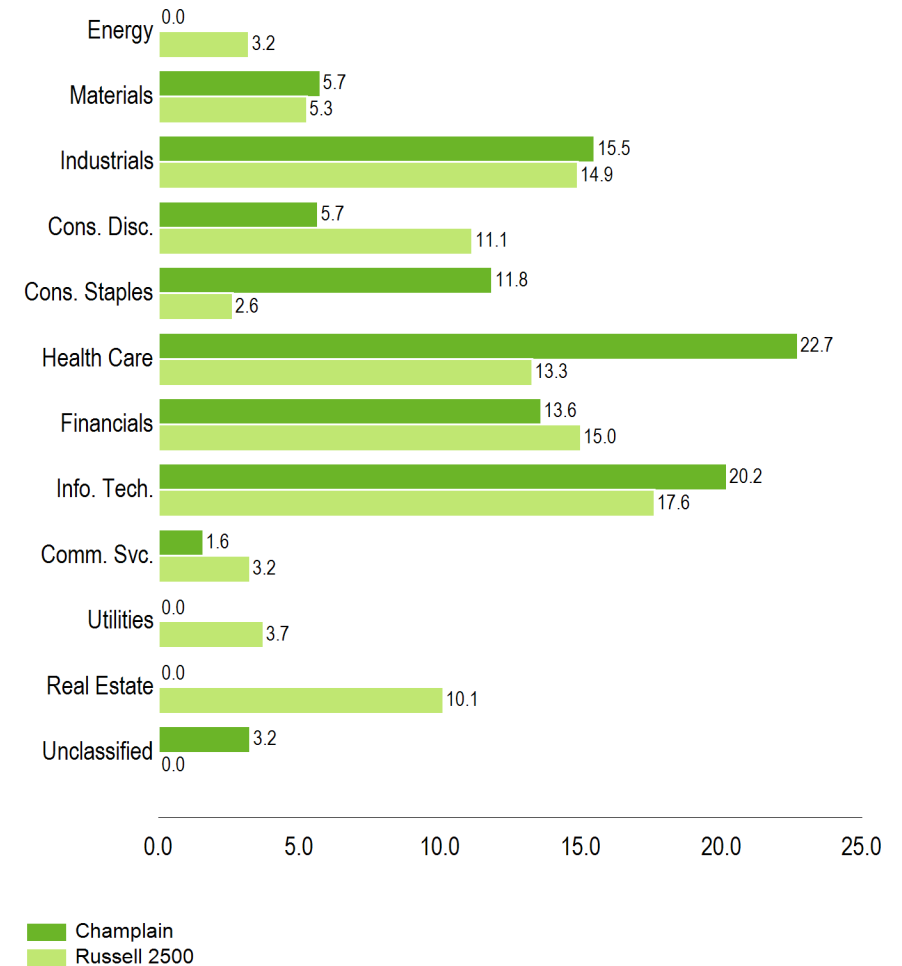
# CHAMPLAIN

Characteristics		
	Portfolio	Russell 2500
Number of Holdings	117	2,474
Weighted Avg. Market Cap. (\$B)	8.31	5.30
Median Market Cap. (\$B)	4.11	1.11
Price To Earnings	26.66	19.57
Price To Book	3.43	2.63
Price To Sales	2.28	1.32
Return on Equity (%)	9.04	9.57
Yield (%)	0.91	1.60
Beta	0.79	1.00
R-Squared	0.87	1.00

## Market Capitalization As of March 31, 2019



## Sector Allocation (%) vs Russell 2500



# CHAMPLAIN

Characteristics		
	Portfolio	Russell 2500
Number of Holdings	117	2,474
Weighted Avg. Market Cap. (\$B)	8.3	5.3
Median Market Cap. (\$B)	4.1	1.1
Price To Earnings	26.7	19.6
Price To Book	3.4	2.6
Price To Sales	2.3	1.3
Return on Equity (%)	9.0	9.6
Yield (%)	0.9	1.6
Beta	0.8	1.0
R-Squared	0.9	1.0

Top Positive Contributors		
	Relative Contribution %	Return %
INTEGRA LFSC.HDG. (IART)	0.6%	23.5%
OKTA CL.A (OKTA)	0.5%	29.7%
PURE STORAGE CL.A (PSTG)	0.5%	35.5%
TREEHOUSE FOODS (THS)	0.5%	27.3%
WATERS (WAT)	0.4%	33.4%
BLACKBAUD (BLKB)	0.4%	27.0%
WELBILT (WBT)	0.4%	47.4%
ULTA BEAUTY (ULTA)	0.4%	42.4%
PALO ALTO NETWORKS (PANW)	0.4%	29.0%
CATALENT (CTLT)	0.3%	30.2%

Top Negative Contributors		
	Relative Contribution %	Return %
B & G FOODS (BGS)	-0.1%	-13.9%
WILEY JOHN & SONS 'A' (JW.A)	-0.1%	-5.9%
NUTANIX CL.A (NTNX)	-0.1%	-9.3%
HELEN OF TROY (HELE)	-0.1%	-11.6%
AVANOS MEDICAL (AVNS)	-0.1%	-4.7%
INTL.FLAVORS & FRAG. (IFF)	0.0%	-3.5%
EL POLLO LOCO HDG. (LOCO)	0.0%	-14.2%
PRESTIGE CONSUMER HEALTHCARE (PBH)	0.0%	-3.1%
BARNES GROUP (B)	0.0%	-3.9%
VALVOLINE (VVV)	0.0%	-3.5%

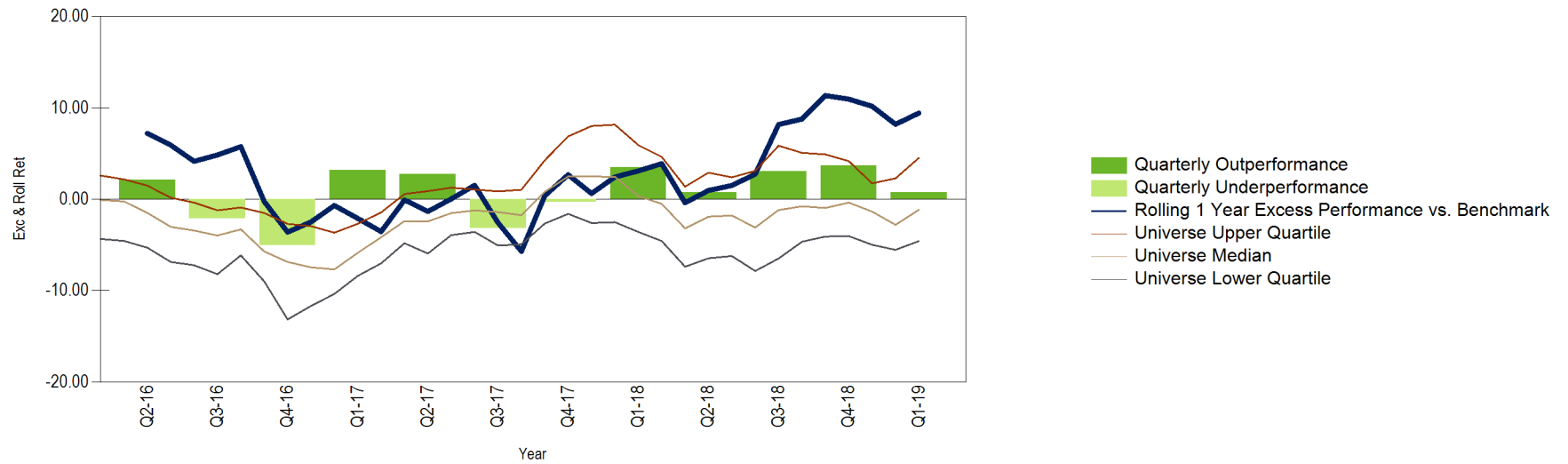
Champlain Performance Attribution vs. Russell 2500									
	Attribution Effects				Returns		Sector Weights		
	Total Effects	Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark	
Energy	-0.6%	--	-0.6%	--	--	18.2%	0.0%	3.1%	
Materials	0.0%	-0.2%	0.1%	0.0%	13.0%	15.9%	6.1%	5.3%	
Industrials	0.6%	0.5%	0.1%	0.0%	18.3%	15.0%	15.9%	15.1%	
Consumer Discretionary	-0.6%	0.1%	-0.7%	-0.1%	13.5%	12.3%	5.9%	11.6%	
Consumer Staples	1.4%	0.2%	0.6%	0.6%	14.6%	6.9%	11.2%	2.8%	
Health Care	2.2%	0.3%	1.7%	0.2%	21.2%	18.9%	21.8%	12.8%	
Financials	-0.6%	-0.6%	-0.1%	0.0%	6.4%	10.1%	15.0%	15.8%	
Information Technology	0.6%	-0.5%	1.3%	-0.2%	22.0%	25.2%	21.2%	16.1%	
Communication Services	-0.6%	-0.7%	-0.2%	0.3%	-5.9%	13.9%	2.0%	3.3%	
Utilities	-0.4%	--	-0.4%	--	--	10.6%	0.0%	3.9%	
Real Estate	-1.7%	--	-1.7%	--	--	16.7%	0.0%	10.1%	
Cash	0.0%	0.0%	0.0%	0.0%	0.6%	--	0.9%	0.0%	
<b>Portfolio</b>	<b>0.3%</b>	<b>=</b>	<b>-0.8%</b>	<b>+</b>	<b>0.2%</b>	<b>+</b>	<b>0.9%</b>	<b>16.3%</b>	<b>15.9%</b>
								<b>100.0%</b>	<b>100.0%</b>





# CHAMPLAIN

Annualized Excess Performance

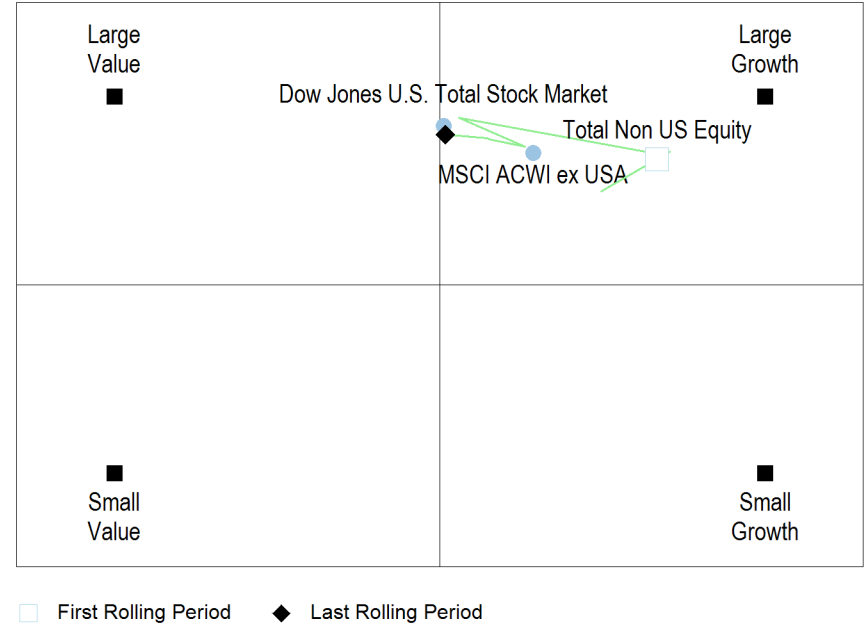


# TOTAL NON US EQUITY

Annualized Return vs. Annualized Standard Deviation  
3 Years Ending March 31, 2019



U.S. Effective Style Map  
3 Years Ending March 31, 2019

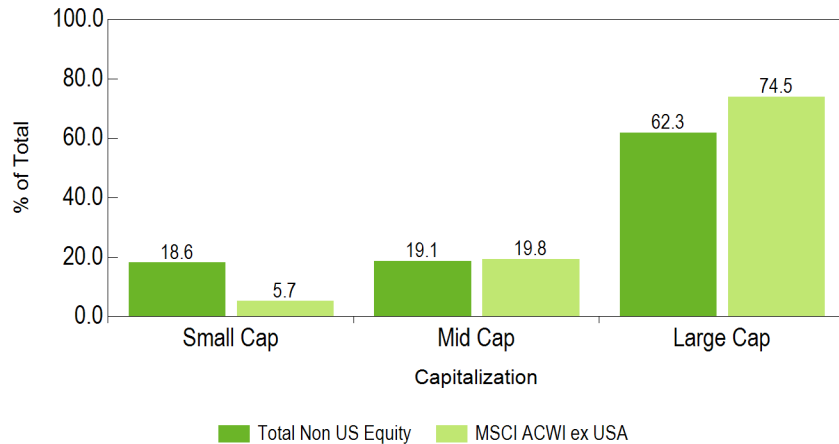


# TOTAL NON US EQUITY

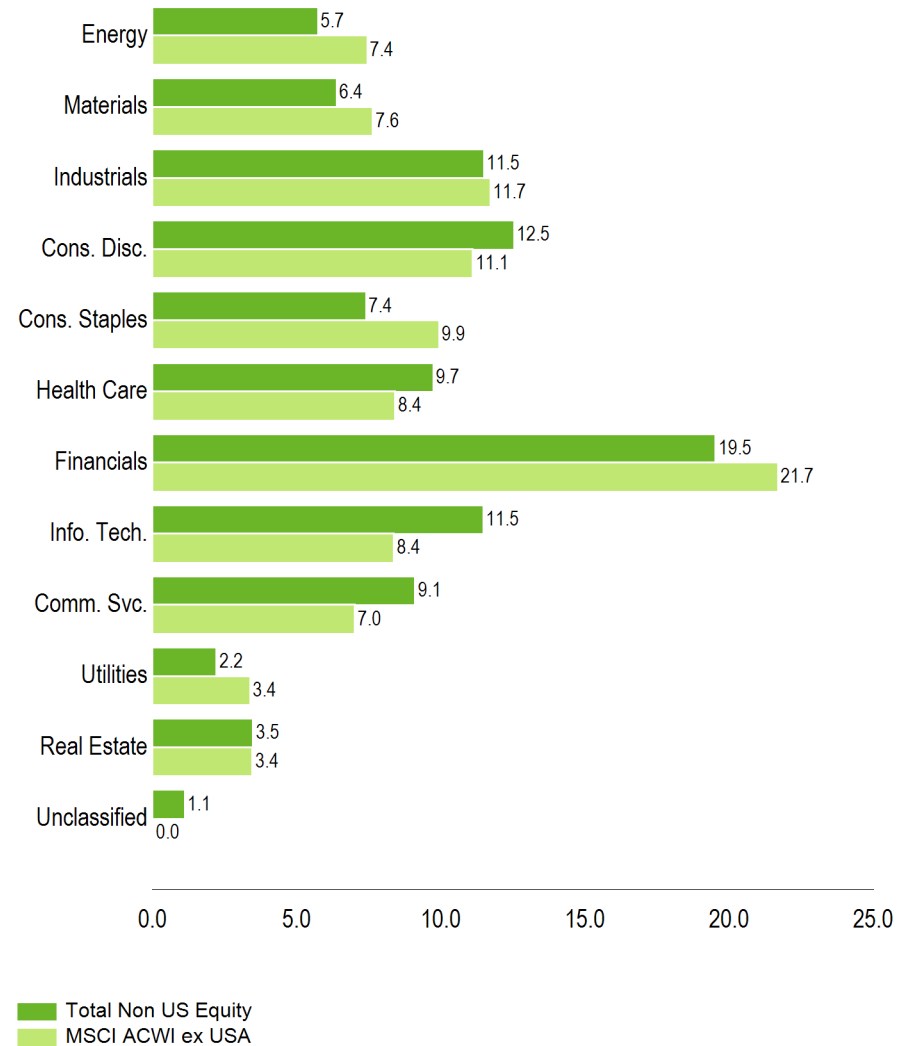
Characteristics		
	Portfolio	MSCI ACWI ex USA
Number of Holdings	2,982	2,145
Weighted Avg. Market Cap. (\$B)	66.16	64.41
Median Market Cap. (\$B)	6.76	7.67
Price To Earnings	15.06	14.55
Price To Book	2.44	2.24
Price To Sales	1.15	1.18
Return on Equity (%)	17.35	15.45
Yield (%)	2.66	3.21
Beta	1.01	1.00
R-Squared	0.95	1.00

	Portfolio Q1-19	Index Q1-19
Region Weighting		
Americas	23.81	10.41
Europe	35.24	43.56
Asia/Pacific	38.74	43.61
Other	2.20	2.42

## Market Capitalization As of March 31, 2019



## Sector Allocation (%) vs MSCI ACWI ex USA



# TOTAL NON US EQUITY

Top Ten Holdings	
TENCENT HOLDINGS	1.7%
IHS MARKIT	1.1%
TAIWAN SEMICON.MNFG.	1.0%
BANK OF AMERICA	0.9%
SAMSUNG ELTN.PREF.	0.9%
VISA 'A'	0.7%
ASTRAZENECA	0.7%
AMAZON.COM	0.7%
ROYAL DUTCH SHELL A	0.7%
TECHTRONIC INDS.	0.7%

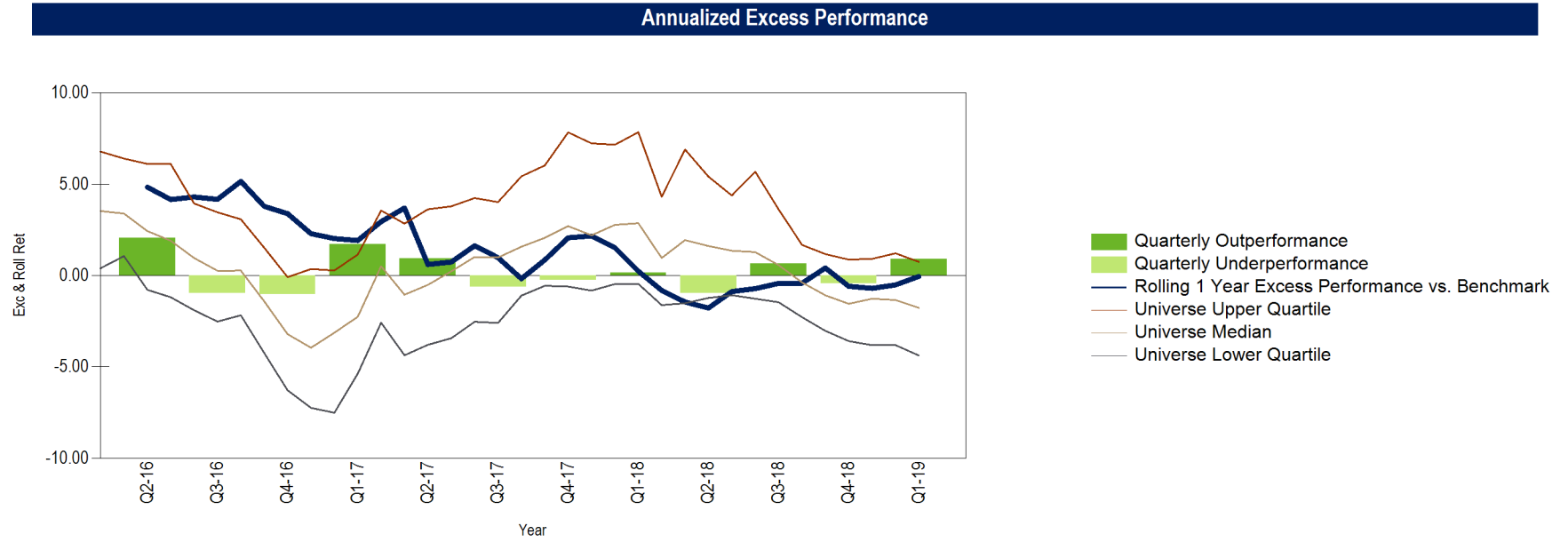
Top Positive Contributors		
	Relative Contribution %	Return %
WORLDPAY A	0.2%	48.5%
VISA 'A'	0.2%	18.6%
IHS MARKIT	0.1%	13.4%
TECHTRONIC INDS.	0.1%	26.5%
KWEICHOW MOUTAI 'A'	0.1%	47.9%
FEVERTREE DRINKS	0.1%	40.5%
SAMSUNG ELTN.PREF.	0.1%	12.2%
BANK OF AMERICA	0.1%	12.6%
AMAZON.COM	0.1%	18.6%
PROGRESSIVE OHIO	0.1%	24.1%

Top Negative Contributors		
	Relative Contribution %	Return %
ALIBABA GROUP HLDG.SPN. ADR 1:1	-0.2%	33.1%
NESTLE 'R'	-0.2%	17.7%
BRITISH AMERICAN TOBACCO	-0.1%	32.8%
SOFTBANK GROUP	-0.1%	46.1%
SAMSUNG ELECTRONICS	-0.1%	13.4%
AIRBUS	-0.1%	37.9%
LVMH	-0.1%	24.7%
NOVARTIS 'R'	-0.1%	16.4%
ROCHE HOLDING	-0.1%	15.1%
BHP GROUP	-0.1%	20.8%

	Equity Sector Attribution								Returns		Sector Weights	
	Total Effects	Selection Effect	Attribution Effects		Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark			
			Allocation Effect									
Energy	0.1%	0.2%	0.0%	-0.1%		13.9%	12.5%	6.2%	7.3%			
Materials	0.1%	0.1%	0.0%	0.0%		13.5%	11.5%	6.0%	7.6%			
Industrials	-0.2%	-0.2%	0.0%	0.0%		8.8%	10.3%	12.0%	11.7%			
Consumer Discretionary	0.0%	0.0%	0.0%	0.0%		11.2%	11.2%	10.9%	11.1%			
Consumer Staples	0.0%	0.0%	0.0%	0.0%		11.1%	11.2%	8.0%	9.8%			
Health Care	0.1%	0.1%	0.0%	0.0%		12.8%	11.4%	9.6%	8.4%			
Financials	0.4%	0.3%	0.1%	0.0%		9.2%	7.8%	19.6%	22.1%			
Information Technology	0.5%	0.3%	0.1%	0.1%		18.1%	14.6%	10.3%	8.0%			
Communication Services	0.0%	0.1%	-0.1%	0.0%		8.2%	6.8%	9.7%	7.1%			
Utilities	0.1%	0.1%	0.0%	0.0%		11.2%	8.4%	2.2%	3.4%			
Real Estate	0.0%	0.0%	0.0%	0.0%		14.5%	14.8%	3.5%	3.3%			
Cash	-0.2%	0.0%	-0.2%	0.0%		0.6%	--	2.1%	0.0%			
<b>Portfolio</b>	<b>0.8%</b>	<b>=</b>	<b>0.9%</b>	<b>+</b>	<b>-0.1%</b>	<b>+</b>	<b>0.1%</b>	<b>11.3%</b>	<b>10.4%</b>	<b>100.0%</b>	<b>100.0%</b>	

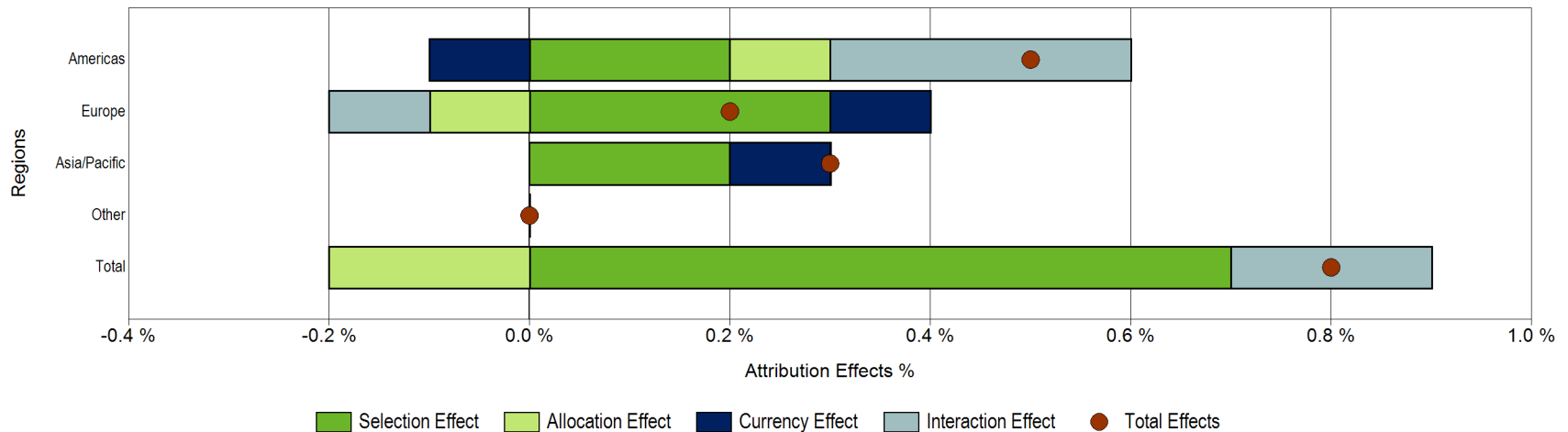


# TOTAL NON US EQUITY



# TOTAL NON US EQUITY

Total Non US Equity Performance Attribution vs. MSCI ACWI ex USA  
Quarter Ending March 31, 2019



	Returns and Weights				Attribution Effects				
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	Total Effects
<b>Totals</b>									
Americas	14.1%	13.1%	22.6%	9.6%	0.2%	0.1%	-0.1%	0.3%	0.5%
Europe	11.6%	10.9%	35.2%	43.6%	0.3%	-0.1%	0.1%	-0.1%	0.2%
Asia/Pacific	10.3%	9.8%	37.8%	44.0%	0.2%	0.0%	0.1%	0.0%	0.3%
Other	4.0%	4.4%	2.3%	2.7%	0.0%	0.0%	0.0%	0.0%	0.0%
Cash	0.6%	--	2.1%	0.0%	0.0%	-0.2%	0.0%	0.0%	-0.2%
<b>Total</b>	<b>11.3%</b>	<b>10.4%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>0.7%</b>	<b>-0.2%</b>	<b>0.0%</b>	<b>0.2%</b>	<b>0.8%</b>
<b>Totals</b>									
Developed	12.3%	10.6%	76.1%	74.0%	1.2%	0.0%	0.0%	0.0%	1.3%
Emerging*	8.7%	10.0%	21.8%	26.0%	-0.4%	0.0%	0.0%	0.1%	-0.3%
Frontier**	-6.4%	--	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cash	0.6%	--	2.1%	0.0%	0.0%	-0.2%	0.0%	0.0%	-0.2%



# TOTAL NON US EQUITY

Country Allocation				
	Manager	Index	Manager	Index
	Allocation (USD)	Allocation (USD)	Return (USD)	Return (USD)
<b>Americas</b>				
Brazil*	2.8%	1.9%	5.8%	8.2%
Canada	3.4%	6.5%	13.8%	15.6%
Chile*	0.3%	0.3%	1.5%	4.3%
Colombia*	0.1%	0.1%	28.1%	24.8%
Mexico*	1.1%	0.7%	7.9%	5.6%
Peru*	0.0%	0.1%	8.0%	11.1%
United States	14.9%	0.0%	16.4%	13.7%
<b>Total-Americas</b>	<b>22.6%</b>	<b>9.6%</b>	<b>14.1%</b>	<b>13.1%</b>
<b>Europe</b>				
Austria	0.3%	0.2%	10.9%	8.6%
Belgium	0.5%	0.6%	10.5%	16.2%
Czech Republic*	0.0%	0.0%	3.8%	3.8%
Denmark	1.2%	1.2%	9.7%	13.2%
Finland	0.6%	0.7%	19.9%	8.4%
France	3.9%	7.5%	8.9%	10.8%
Germany	3.6%	5.9%	7.3%	7.1%
Greece*	0.2%	0.1%	0.3%	12.9%
Hungary*	0.1%	0.1%	3.8%	6.0%
Ireland	0.4%	0.4%	2.9%	11.6%
Italy	1.9%	1.5%	12.8%	14.7%
Luxembourg	0.2%	0.0%	20.9%	10.4%
Netherlands	3.0%	2.3%	11.1%	13.6%
Norway	0.5%	0.5%	9.1%	7.2%
Poland*	0.2%	0.3%	-0.7%	-0.6%
Portugal	0.1%	0.1%	10.9%	10.2%
Russia*	0.7%	0.9%	16.2%	12.5%
Spain	2.1%	2.1%	6.7%	6.8%
Sweden	1.5%	1.8%	4.9%	7.9%
Switzerland	4.0%	5.9%	14.3%	13.6%
United Kingdom	10.2%	11.5%	15.3%	11.9%
<b>Total-Europe</b>	<b>35.2%</b>	<b>43.6%</b>	<b>11.6%</b>	<b>10.9%</b>

Country Allocation				
	Manager	Index	Manager	Index
	Allocation (USD)	Allocation (USD)	Return (USD)	Return (USD)
<b>AsiaPacific</b>				
Australia	2.9%	4.7%	8.6%	11.5%
China*	3.1%	7.9%	36.1%	17.9%
Hong Kong	6.1%	2.6%	17.7%	15.6%
India*	3.4%	2.4%	2.4%	7.1%
Indonesia*	1.0%	0.6%	2.4%	4.2%
Japan	12.8%	16.6%	6.3%	6.7%
Korea*	2.8%	3.6%	6.8%	4.7%
Malaysia*	0.6%	0.6%	-2.6%	0.4%
New Zealand	0.1%	0.2%	1.3%	16.7%
Pakistan*	0.0%	0.0%	16.4%	8.5%
Philippines*	0.8%	0.3%	2.6%	7.9%
Singapore	1.7%	0.9%	3.9%	6.2%
Sri Lanka**	0.0%	0.0%	0.2%	1.8%
Taiwan*	1.8%	3.0%	11.1%	9.0%
Thailand*	0.8%	0.6%	7.5%	7.5%
<b>Total-AsiaPacific</b>	<b>37.8%</b>	<b>44.1%</b>	<b>13.4%</b>	<b>9.7%</b>
<b>Other</b>				
Egypt*	0.0%	0.0%	10.6%	16.6%
Israel	0.4%	0.4%	8.5%	10.7%
Qatar*	0.1%	0.3%	3.7%	-3.6%
South Africa*	1.4%	1.6%	3.7%	4.3%
Turkey*	0.4%	0.2%	-13.2%	-3.1%
United Arab Emirates*	0.1%	0.2%	3.3%	8.7%
<b>Total-Other</b>	<b>2.3%</b>	<b>2.7%</b>	<b>-0.8%</b>	<b>4.4%</b>
<b>Totals</b>				
Developed	76.2%	74.0%	18.8%	10.6%
Emerging*	21.7%	26.0%	9.6%	9.9%
Frontier**	0.0%	0.0%	0.2%	--
Cash	2.1%		0.2%	



# TOTAL NON US EQUITY

International Equity Performance Attribution									
Versus MSCI ACWI ex USA - Quarter Ending March 31, 2019									
Returns and Weights					Attribution Effects				
Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	Total Effects	
<b>Europe</b>									
Austria	10.8%	8.5%	0.3%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Belgium	7.0%	16.2%	0.5%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%
Czech Republic*	6.6%	3.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Denmark	6.2%	13.2%	1.2%	1.2%	0.0%	-0.1%	0.0%	0.0%	0.0%
Finland	9.7%	8.4%	0.7%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%
France	5.7%	10.8%	3.9%	7.5%	0.0%	-0.2%	0.2%	0.0%	0.0%
Germany	7.3%	7.1%	3.6%	5.9%	0.0%	0.1%	0.1%	0.0%	0.2%
Greece*	4.3%	13.3%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Hungary*	-3.1%	6.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Ireland	5.5%	11.6%	0.4%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Italy	8.3%	14.8%	1.9%	1.5%	0.0%	-0.1%	0.0%	0.0%	0.0%
Luxembourg	30.0%	10.4%	0.2%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%
Netherlands	7.4%	13.6%	3.0%	2.3%	0.0%	-0.1%	0.1%	0.0%	0.0%
Norway	9.8%	7.2%	0.5%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%
Poland*	0.1%	-0.6%	0.2%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Portugal	13.4%	10.2%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Russia*	25.0%	12.5%	0.7%	0.9%	0.2%	-0.1%	0.0%	0.2%	0.2%
Spain	6.6%	6.9%	2.1%	2.1%	0.0%	0.0%	0.1%	0.0%	0.1%
Sweden	3.1%	7.9%	1.6%	1.8%	-0.1%	0.0%	0.1%	0.0%	0.0%
Switzerland	6.1%	13.6%	4.0%	5.9%	0.0%	-0.2%	0.0%	0.0%	-0.2%
United Kingdom	9.7%	11.9%	10.1%	11.5%	0.3%	-0.1%	0.0%	0.0%	0.2%
<b>Americas</b>									
Brazil*	4.7%	8.0%	2.8%	2.0%	-0.1%	-0.6%	-0.3%	-0.5%	-1.5%
Canada	13.4%	15.6%	3.4%	6.5%	0.0%	-0.1%	0.0%	0.0%	-0.1%
Chile*	1.2%	4.3%	0.3%	0.3%	0.0%	-0.1%	0.0%	-0.1%	-0.2%
Colombia*	12.9%	24.8%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Mexico*	8.3%	5.6%	1.1%	0.7%	0.0%	-0.3%	0.0%	0.0%	-0.3%
Peru*	7.4%	11.2%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
United States	36.7%	2.8%	14.9%	0.0%	0.0%	0.2%	0.0%	0.9%	1.0%

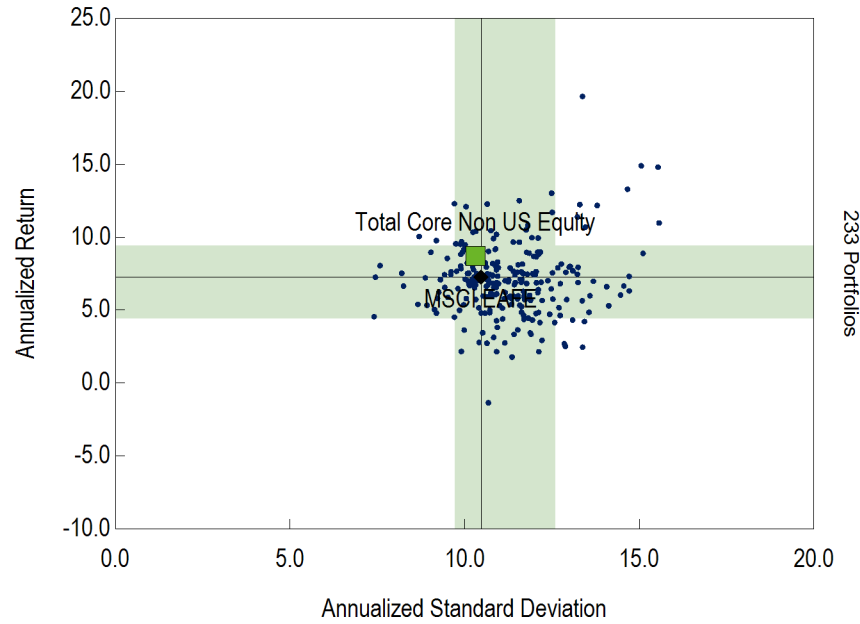
International Equity Performance Attribution									
Versus MSCI ACWI ex USA - Quarter Ending March 31, 2019									
Returns and Weights					Attribution Effects				
Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	Total Effects	
<b>AsiaPacific</b>									
Australia	8.6%	11.5%	2.9%	4.7%	0.1%	-0.1%	0.1%	0.0%	0.0%
China*	36.1%	17.9%	3.1%	7.9%	1.3%	-0.2%	0.0%	0.7%	1.8%
Hong Kong	17.7%	15.6%	6.1%	2.6%	0.1%	0.5%	0.0%	0.2%	0.7%
India*	2.4%	7.1%	3.4%	2.4%	-0.1%	0.2%	0.3%	-0.2%	0.2%
Indonesia*	2.4%	4.2%	1.0%	0.6%	0.0%	-0.4%	-0.1%	-0.1%	-0.5%
Japan	6.3%	6.7%	12.8%	16.6%	0.0%	0.4%	0.3%	0.0%	0.7%
Korea*	6.8%	4.7%	2.8%	3.6%	0.1%	-0.4%	-0.1%	0.0%	-0.5%
Malaysia*	-2.6%	0.4%	0.6%	0.6%	0.0%	0.0%	0.0%	0.0%	-0.1%
New Zealand	1.3%	16.7%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Pakistan*	16.4%	8.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Philippines*	2.6%	7.9%	0.8%	0.3%	0.0%	-0.1%	0.0%	-0.1%	-0.3%
Singapore	3.9%	6.2%	1.7%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%
Sri Lanka**	0.2%	1.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Taiwan*	11.1%	9.0%	1.8%	3.0%	0.1%	0.1%	0.0%	0.1%	0.3%
Thailand*	7.5%	7.5%	0.8%	0.6%	0.0%	-0.1%	0.0%	0.0%	-0.1%
<b>Other</b>									
Egypt*	10.6%	16.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Israel	8.5%	10.7%	0.4%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Qatar*	3.7%	-3.6%	0.1%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
South Africa*	3.7%	4.3%	1.4%	1.6%	0.0%	-0.1%	-0.2%	0.0%	-0.3%
Turkey*	-13.2%	-3.1%	0.4%	0.2%	0.0%	-0.1%	-0.1%	-0.1%	-0.3%
United Arab Emirates*	3.3%	8.7%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Totals</b>									
Developed	18.8%	10.6%	76.2%	74.0%	4.9%	-0.4%	1.0%	-2.7%	2.8%
Emerging*	9.6%	9.9%	21.7%	26.0%	-0.2%	-1.1%	-0.6%	0.2%	-1.6%
Frontier**	0.2%	--	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cash	0.2%	--	2.1%	0.0%	0.0%	-0.1%	0.0%	0.0%	-0.1%





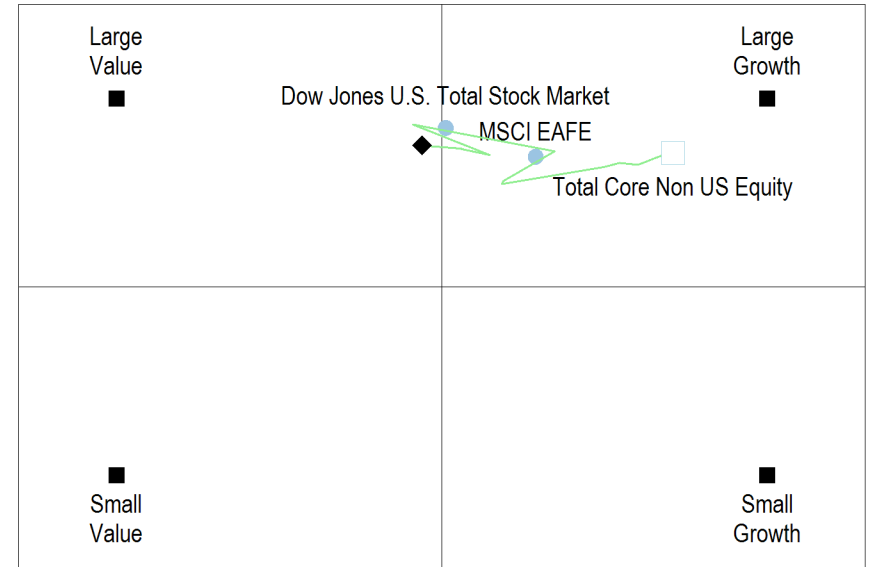
# TOTAL CORE NON US EQUITY

Annualized Return vs. Annualized Standard Deviation  
3 Years Ending March 31, 2019



- Total Core Non US Equity
- ◆ MSCI EAFE
- 68% Confidence Interval
- eV All EAFE Equity Net

U.S. Effective Style Map  
3 Years Ending March 31, 2019



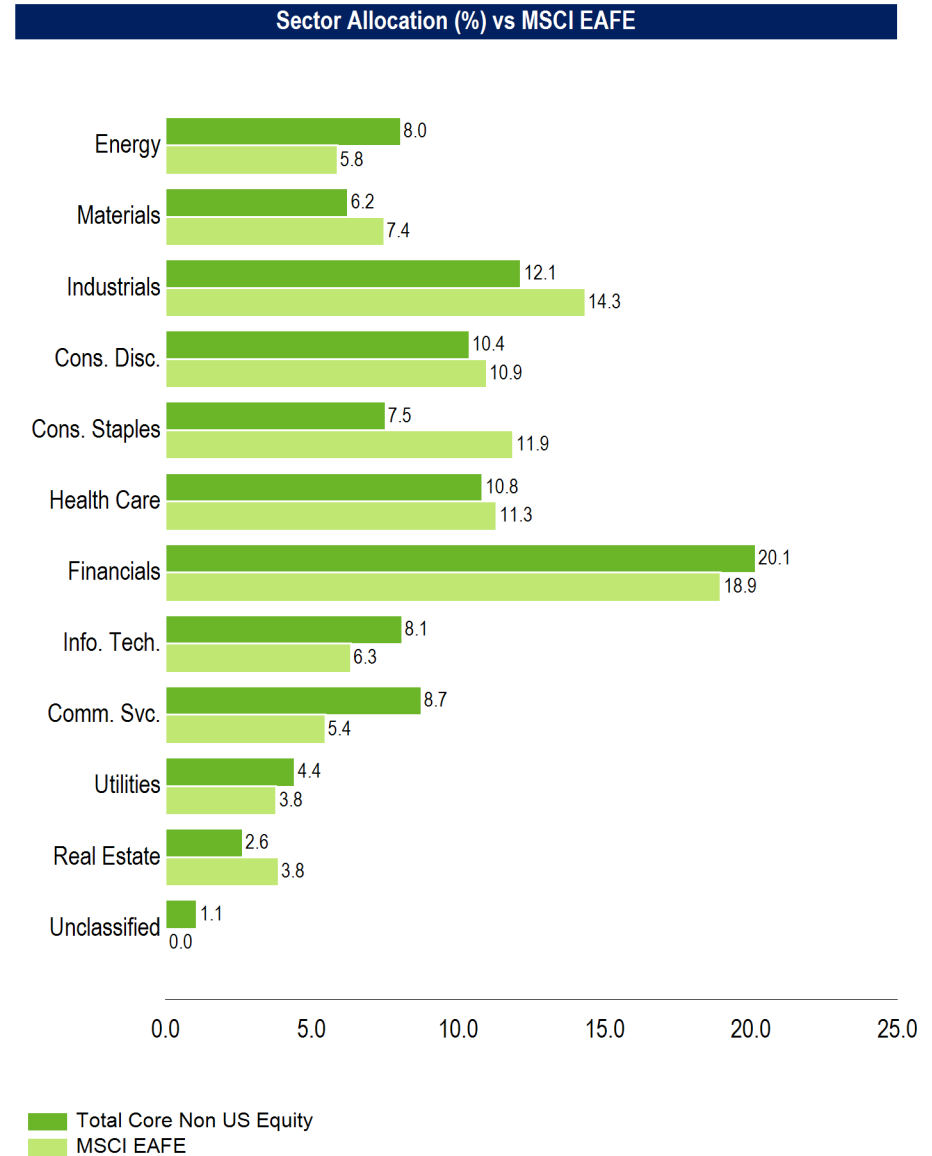
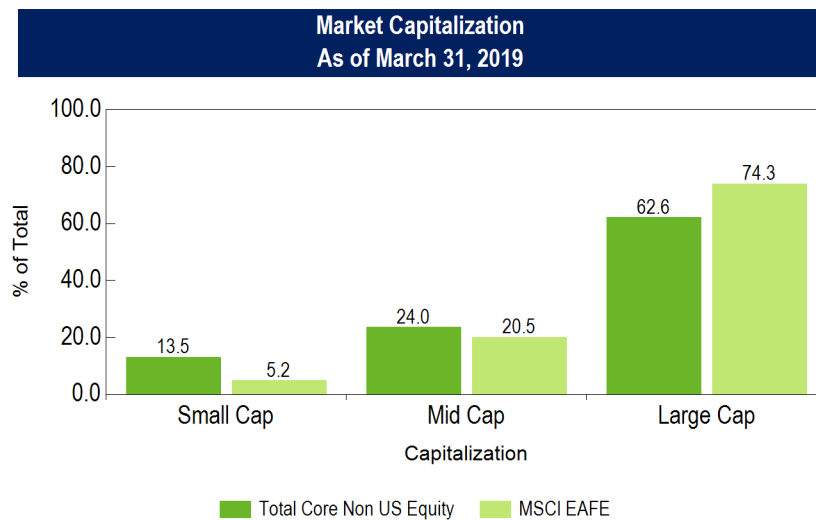
- First Rolling Period
- ◆ Last Rolling Period



# TOTAL CORE NON US EQUITY

Characteristics		
	Portfolio	MSCI EAFE
Number of Holdings	2,513	920
Weighted Avg. Market Cap. (\$B)	53.84	58.76
Median Market Cap. (\$B)	6.95	10.12
Price To Earnings	13.70	15.08
Price To Book	2.01	2.22
Price To Sales	0.93	1.14
Return on Equity (%)	14.62	14.52
Yield (%)	3.42	3.42
Beta	0.97	1.00
R-Squared	0.97	1.00

	Portfolio Q1-19	Index Q1-19
Region Weighting		
Americas	7.78	0.52
Europe	47.62	62.54
Asia/Pacific	42.59	36.53
Other	2.02	0.41



# TOTAL CORE NON US EQUITY

Top Ten Holdings	
ROYAL DUTCH SHELL A	1.4%
ENEL	1.3%
NOVARTIS 'R'	1.1%
ROCHE HOLDING	1.1%
SANOFI	1.0%
IBERDROLA	0.9%
TAKEDA PHARMACEUTICAL	0.9%
ENI	0.9%
ALLIANZ	0.9%
FUJITSU	0.9%

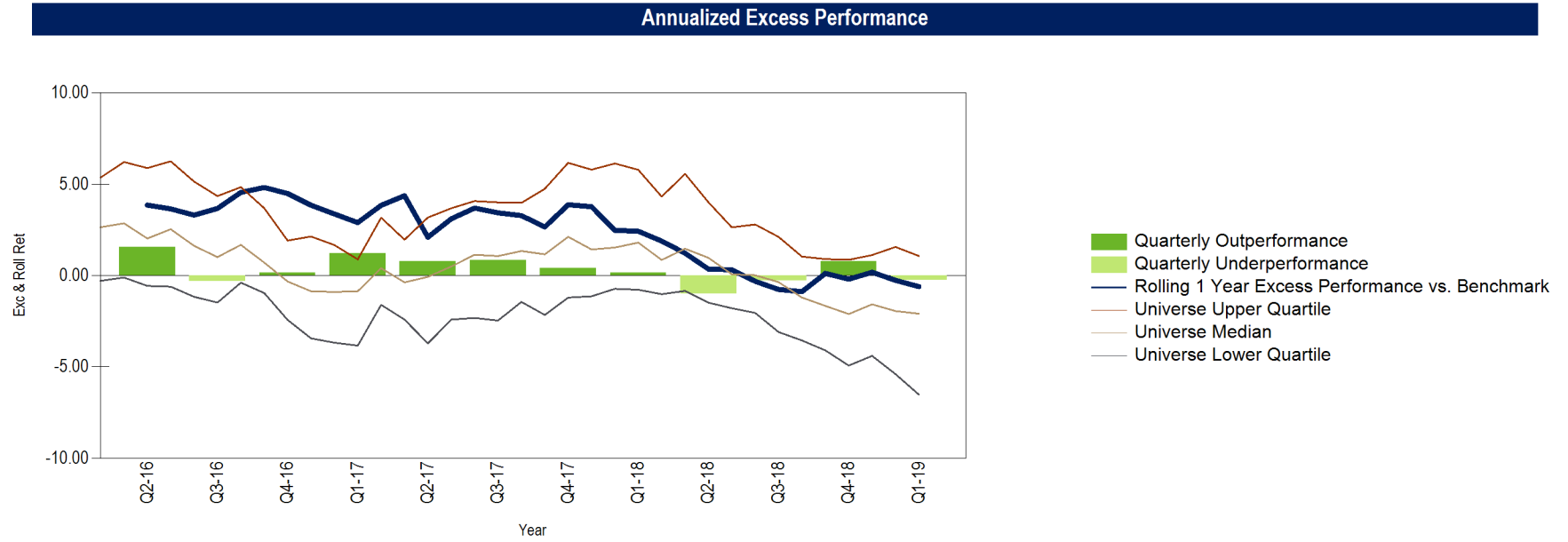
Top Positive Contributors		
	Relative Contribution %	Return %
ALIBABA GROUP HLDG.SPN. ADR 1:1	0.2%	33.1%
WH GROUP (SZS)	0.2%	40.2%
FUJITSU	0.1%	16.8%
ROYAL DUTCH SHELL A	0.1%	8.8%
TESCO	0.1%	24.9%
LLOYDS BANKING GROUP	0.1%	22.6%
NESTE	0.1%	38.5%
TENCENT HOLDINGS	0.1%	14.7%
TAKEDA PHARMACEUTICAL	0.1%	23.3%
ALLIANZ	0.1%	10.9%

Top Negative Contributors		
	Relative Contribution %	Return %
NESTLE 'R'	-0.2%	17.7%
BRITISH AMERICAN TOBACCO	-0.1%	32.8%
SOFTBANK GROUP	-0.1%	46.1%
AIRBUS	-0.1%	37.9%
LVMH	-0.1%	24.7%
AIA GROUP	-0.1%	19.9%
RIO TINTO	-0.1%	31.8%
BHP GROUP	-0.1%	20.8%
DIAGEO	-0.1%	15.9%
NOVO NORDISK 'B'	-0.1%	16.6%

	Equity Sector Attribution						Returns		Sector Weights		
	Total Effects	Selection Effect	Attribution Effects		Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark		
			Allocation Effect								
Energy	0.2%	0.2%	0.0%		0.1%	13.5%	10.6%	8.4%	5.9%		
Materials	-0.1%	0.0%	-0.1%		0.0%	13.2%	13.4%	5.3%	7.4%		
Industrials	-0.4%	-0.5%	0.0%		0.1%	7.7%	10.6%	12.7%	14.3%		
Consumer Discretionary	0.2%	0.2%	0.0%		0.0%	9.5%	7.4%	10.0%	11.2%		
Consumer Staples	-0.1%	-0.1%	-0.1%		0.1%	11.7%	12.4%	8.0%	11.6%		
Health Care	0.0%	0.0%	0.0%		0.0%	11.5%	11.6%	10.7%	11.2%		
Financials	0.2%	0.1%	0.0%		0.1%	8.2%	7.0%	20.3%	19.5%		
Information Technology	0.0%	-0.1%	0.1%		0.0%	14.7%	15.3%	7.5%	6.0%		
Communication Services	-0.3%	0.0%	-0.2%		0.0%	4.1%	4.8%	8.7%	5.6%		
Utilities	0.1%	0.1%	0.0%		0.0%	11.6%	9.2%	4.2%	3.8%		
Real Estate	-0.1%	-0.1%	0.0%		0.0%	12.9%	14.5%	2.7%	3.7%		
Cash	-0.2%	0.0%	-0.2%		0.0%	0.6%	--	1.5%	0.0%		
<b>Portfolio</b>	<b>-0.3%</b>	<b>=</b>	<b>-0.2%</b>	<b>+</b>	<b>-0.4%</b>	<b>+</b>	<b>0.4%</b>	<b>9.9%</b>	<b>10.1%</b>	<b>100.0%</b>	<b>100.0%</b>



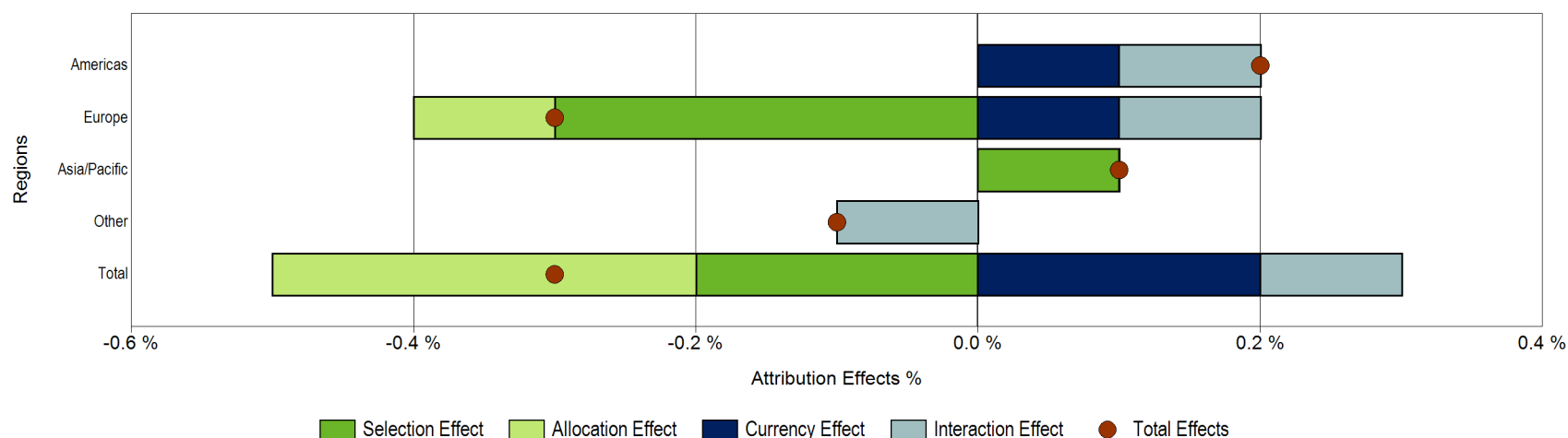
# TOTAL CORE NON US EQUITY



# TOTAL CORE NON US EQUITY

## Total Core Non US Equity Performance Attribution vs. MSCI EAFE

Quarter Ending March 31, 2019



	Returns and Weights				Attribution Effects				
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	Total Effects
<b>Totals</b>									
Americas	13.7%	--	6.9%	0.0%	0.0%	0.0%	0.1%	0.1%	0.2%
Europe	10.4%	11.0%	49.9%	62.4%	-0.3%	-0.1%	0.1%	0.1%	-0.3%
Asia/Pacific	9.1%	8.7%	39.9%	37.0%	0.1%	0.0%	0.0%	0.0%	0.1%
Other	5.2%	10.7%	1.8%	0.5%	0.0%	0.0%	0.0%	-0.1%	-0.1%
Cash	0.6%	--	1.5%	0.0%	0.0%	-0.2%	0.0%	0.0%	-0.2%
<b>Total</b>	<b>9.9%</b>	<b>10.1%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>-0.2%</b>	<b>-0.3%</b>	<b>0.2%</b>	<b>0.1%</b>	<b>-0.3%</b>
<b>Totals</b>									
Developed	10.2%	10.1%	85.2%	100.0%	0.0%	0.0%	0.2%	0.0%	0.2%
Emerging*	8.5%	--	13.3%	0.0%	0.0%	0.0%	0.0%	-0.3%	-0.3%
Cash	0.6%	--	1.5%	0.0%	0.0%	-0.2%	0.0%	0.0%	-0.2%



# TOTAL CORE NON US EQUITY

Country Allocation				
	Manager	Index	Manager	Index
	Allocation (USD)	Allocation (USD)	Return (USD)	Return (USD)
<b>Americas</b>				
Brazil*	1.2%	0.0%	10.3%	8.1%
Canada	4.5%	0.0%	14.4%	15.4%
Chile*	0.2%	0.0%	4.3%	4.1%
Colombia*	0.1%	0.0%	26.6%	24.8%
Mexico*	0.5%	0.0%	5.2%	5.5%
Peru*	0.1%	0.0%	8.0%	11.0%
United States	0.5%	0.0%	25.2%	13.7%
<b>Total-Americas</b>	<b>6.9%</b>	<b>0.0%</b>	<b>13.7%</b>	<b>--</b>
<b>Europe</b>				
Austria	0.6%	0.2%	11.8%	8.6%
Belgium	0.7%	0.9%	10.9%	16.2%
Czech Republic*	0.0%	0.0%	3.8%	3.8%
Denmark	1.5%	1.8%	12.5%	13.2%
Finland	0.9%	1.0%	21.0%	8.4%
France	6.7%	11.0%	9.7%	10.8%
Germany	6.0%	8.8%	6.3%	7.1%
Greece*	0.1%	0.0%	2.5%	12.8%
Hungary*	0.0%	0.0%	6.0%	6.0%
Ireland	0.5%	0.5%	6.2%	11.6%
Italy	2.8%	2.3%	13.5%	14.7%
Luxembourg	0.1%	0.0%	1.2%	10.1%
Netherlands	4.6%	3.4%	9.4%	13.6%
Norway	0.5%	0.7%	7.0%	7.2%
Poland*	0.2%	0.0%	-0.1%	-0.6%
Portugal	0.1%	0.2%	10.2%	10.2%
Russia*	0.1%	0.0%	8.5%	12.5%
Spain	3.6%	3.1%	6.4%	6.8%
Sweden	2.2%	2.7%	3.4%	7.9%
Switzerland	5.9%	8.7%	12.7%	13.6%
United Kingdom	12.8%	17.0%	13.2%	11.9%
<b>Total-Europe</b>	<b>49.9%</b>	<b>62.4%</b>	<b>10.4%</b>	<b>11.0%</b>

Country Allocation				
	Manager	Index	Manager	Index
	Allocation (USD)	Allocation (USD)	Return (USD)	Return (USD)
<b>AsiaPacific</b>				
Australia	4.3%	7.0%	8.2%	11.5%
China*	2.4%	0.0%	12.8%	11.1%
Hong Kong	4.9%	3.9%	8.4%	15.6%
India*	1.3%	0.0%	-1.9%	-1.9%
Indonesia*	0.3%	0.0%	8.6%	8.6%
Japan	18.5%	24.6%	6.5%	6.7%
Korea*	2.5%	0.0%	9.3%	10.3%
Malaysia*	0.4%	0.0%	1.6%	1.4%
New Zealand	0.2%	0.2%	1.3%	16.7%
Pakistan*	0.0%	0.0%	16.4%	16.4%
Philippines*	0.2%	0.0%	8.6%	8.6%
Singapore	2.5%	1.4%	4.4%	6.2%
Taiwan*	2.0%	0.0%	1.9%	1.7%
Thailand*	0.4%	0.0%	8.3%	9.7%
<b>Total-AsiaPacific</b>	<b>39.8%</b>	<b>37.0%</b>	<b>6.8%</b>	<b>8.6%</b>
<b>Other</b>				
Egypt*	0.0%	0.0%	10.6%	10.6%
Israel	0.5%	0.5%	9.9%	10.7%
Qatar*	0.2%	0.0%	3.7%	3.7%
South Africa*	1.0%	0.0%	12.6%	12.2%
Turkey*	0.1%	0.0%	17.9%	18.0%
United Arab Emirates*	0.1%	0.0%	3.3%	3.3%
<b>Total-Other</b>	<b>1.8%</b>	<b>0.5%</b>	<b>10.8%</b>	<b>10.7%</b>
<b>Totals</b>				
Developed	85.3%	100.0%	7.3%	10.1%
Emerging*	13.2%	0.0%	8.5%	--
Cash	1.5%		0.2%	



# TOTAL CORE NON US EQUITY

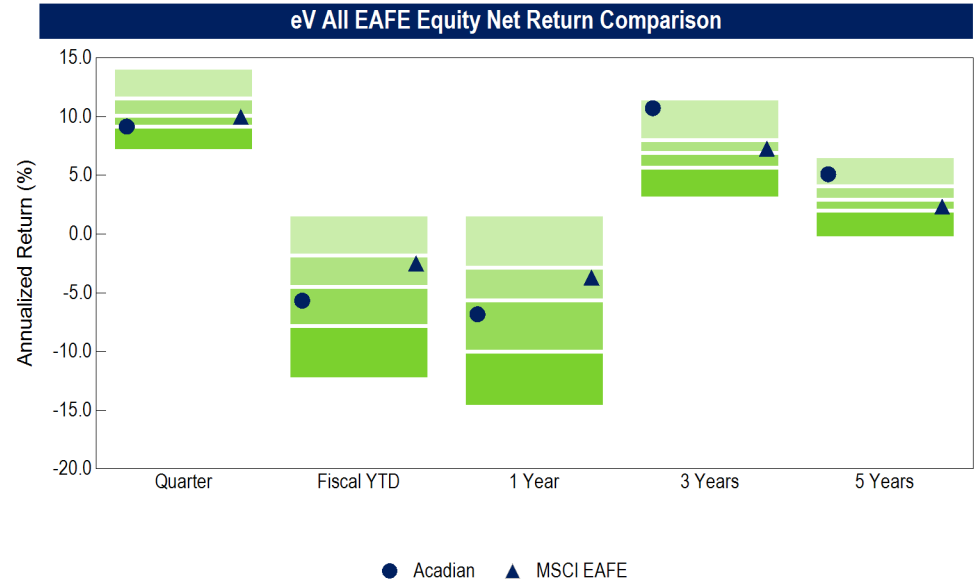
International Equity Performance Attribution Versus MSCI EAFE - Quarter Ending March 31, 2019									
	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
<b>Europe</b>									
Austria	10.7%	8.5%	0.6%	0.2%	0.0%	0.0%	0.0%	0.0%	-0.1%
Belgium	7.8%	16.2%	0.7%	0.9%	0.1%	0.0%	0.0%	0.0%	0.1%
Czech Republic*	6.6%	6.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Denmark	4.6%	13.2%	1.5%	1.8%	-0.1%	0.0%	0.0%	0.0%	-0.1%
Finland	9.9%	8.4%	1.2%	1.0%	-0.1%	0.0%	0.0%	0.0%	-0.1%
France	5.9%	10.8%	6.7%	11.0%	0.0%	0.0%	0.1%	0.0%	0.1%
Germany	6.7%	7.1%	6.0%	8.8%	0.0%	0.1%	0.0%	0.0%	0.1%
Greece*	4.5%	5.6%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Hungary*	5.6%	5.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Ireland	7.0%	11.6%	0.5%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%
Italy	9.5%	14.8%	2.8%	2.3%	-0.1%	-0.1%	0.0%	0.0%	-0.2%
Luxembourg	9.6%	6.6%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Netherlands	6.4%	13.6%	4.6%	3.4%	0.1%	-0.1%	-0.1%	0.0%	0.1%
Norway	8.4%	7.2%	0.5%	0.7%	-0.1%	0.0%	0.0%	0.0%	0.0%
Poland*	5.7%	5.3%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Portugal	5.0%	10.2%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Russia*	11.5%	13.9%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Spain	5.8%	6.9%	3.6%	3.1%	0.1%	0.0%	0.0%	0.0%	0.1%
Sweden	0.9%	7.9%	2.2%	2.7%	0.5%	0.0%	-0.1%	-0.1%	0.4%
Switzerland	5.4%	13.6%	5.8%	8.7%	0.3%	0.2%	-0.1%	-0.1%	0.2%
United Kingdom	9.0%	11.9%	12.7%	17.0%	-1.3%	-0.3%	0.6%	0.3%	-0.7%
<b>Americas</b>									
Brazil*	19.2%	17.8%	1.2%	0.0%	0.0%	-0.2%	-0.3%	-0.1%	-0.6%
Canada	13.1%	13.0%	4.5%	0.0%	0.0%	-0.6%	-0.8%	0.0%	-1.3%
Chile*	12.2%	12.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Colombia*	12.4%	13.5%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Mexico*	9.4%	9.8%	0.5%	0.0%	0.0%	0.0%	-0.1%	0.0%	-0.1%
Peru*	7.4%	7.7%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
United States	11.0%	8.2%	0.6%	0.0%	0.0%	-0.1%	0.0%	-0.1%	-0.1%

International Equity Performance Attribution Versus MSCI EAFE - Quarter Ending March 31, 2019									
	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
<b>AsiaPacific</b>									
Australia	8.2%	11.5%	4.3%	7.0%	-0.3%	-0.2%	0.4%	0.1%	0.0%
China*	12.8%	11.1%	2.4%	0.0%	0.0%	-0.5%	0.0%	-0.1%	-0.7%
Hong Kong	8.4%	15.6%	4.9%	3.9%	-0.1%	-0.1%	0.0%	0.0%	-0.2%
India*	-1.9%	-1.9%	1.3%	0.0%	0.0%	0.3%	0.1%	0.0%	0.4%
Indonesia*	8.6%	8.6%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Japan	6.5%	6.7%	18.5%	24.6%	-0.3%	0.0%	0.2%	0.1%	-0.1%
Korea*	9.3%	10.3%	2.5%	0.0%	0.0%	-0.4%	0.0%	0.1%	-0.4%
Malaysia*	1.6%	1.4%	0.4%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%
New Zealand	1.3%	16.7%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Pakistan*	16.4%	16.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Philippines*	8.6%	8.6%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Singapore	4.4%	6.2%	2.5%	1.4%	0.1%	0.1%	0.0%	0.1%	0.1%
Taiwan*	1.9%	1.7%	2.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.3%
Thailand*	8.3%	9.7%	0.4%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%
<b>Other</b>									
Egypt*	10.6%	10.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Israel	9.9%	10.7%	0.5%	0.5%	0.1%	0.0%	0.0%	0.0%	0.1%
Qatar*	3.7%	3.7%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
South Africa*	12.6%	12.2%	1.0%	0.0%	0.0%	0.1%	-0.3%	0.0%	-0.3%
Turkey*	17.9%	18.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
United Arab Emirates*	3.3%	3.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Totals</b>									
Developed	7.3%	10.1%	85.3%	100.0%	-2.2%	0.0%	0.3%	0.3%	-1.6%
Emerging*	8.5%	--	13.2%	0.0%	0.0%	0.0%	-0.8%	-0.7%	-1.5%
Cash	0.2%	--	1.5%	0.0%	0.0%	0.3%	0.0%	0.0%	0.3%

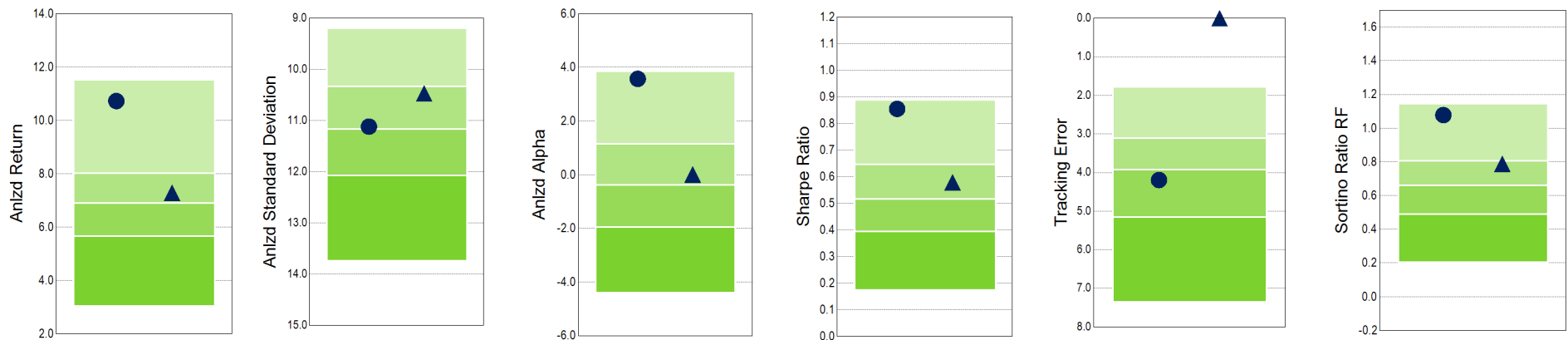


# ACADIAN

Acadian believes that the larger the pool of potential investments, the greater the potential opportunity an active manager has to add value. They believe that stocks and markets have many attributes that are related to potential outperformance, and that a successful investment approach must be multi-faceted and highly adaptable. They believe that objectivity is crucial to investment success. Acadian's quantitative process and extensive database allows them to apply their valuation techniques to over 40,000 stocks worldwide. They do not limit the universe other than to employ screens based on invest-ability and availability of data. For example, they only evaluate stocks that have sufficient daily trading volume to be appropriate for institutional investment. Other than these practical considerations, they consider our investment universe to encompass all institutionally investable stocks in the world.



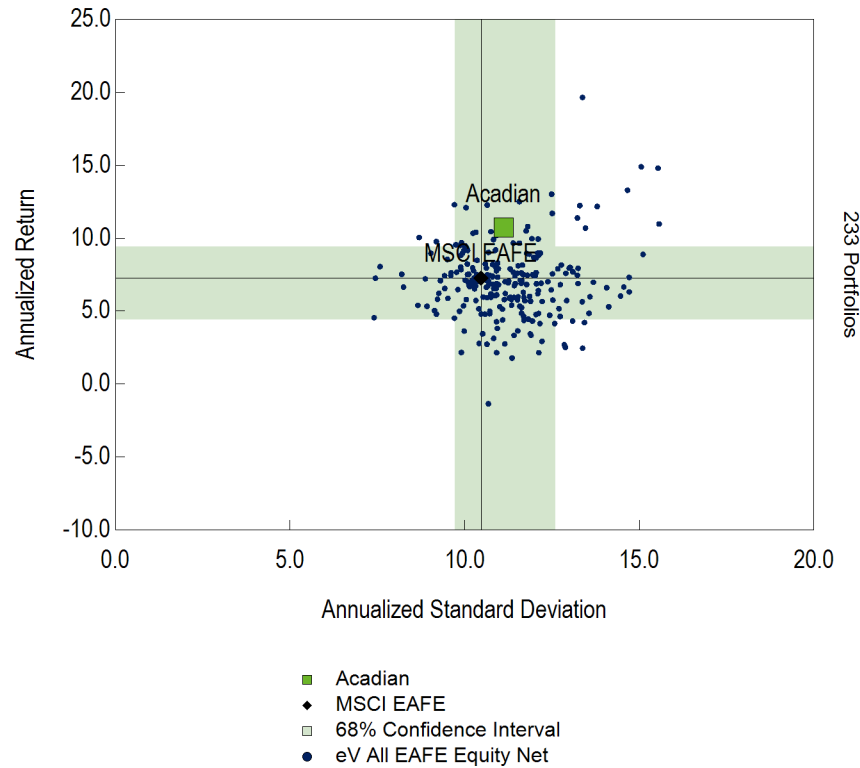
## 3 Year Risk Statistics



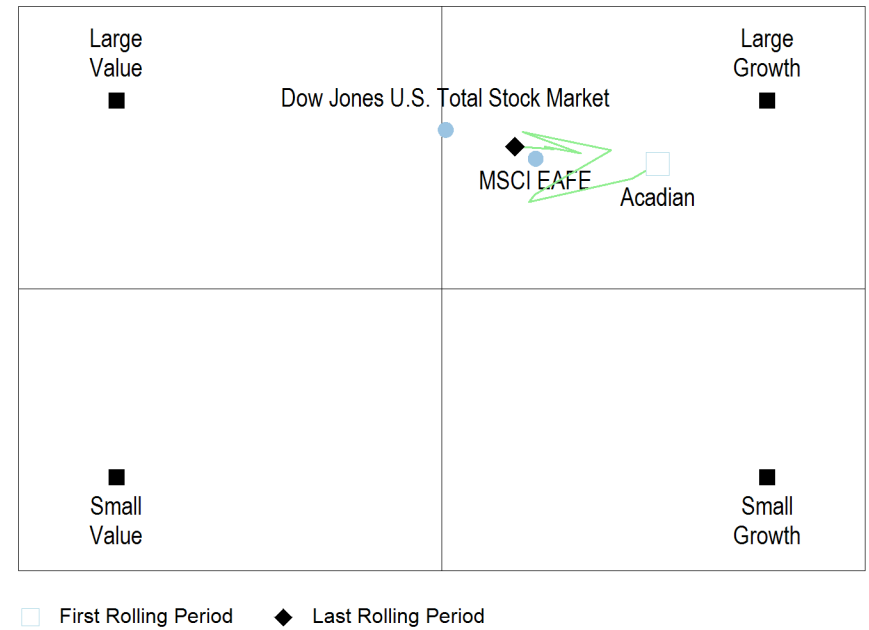


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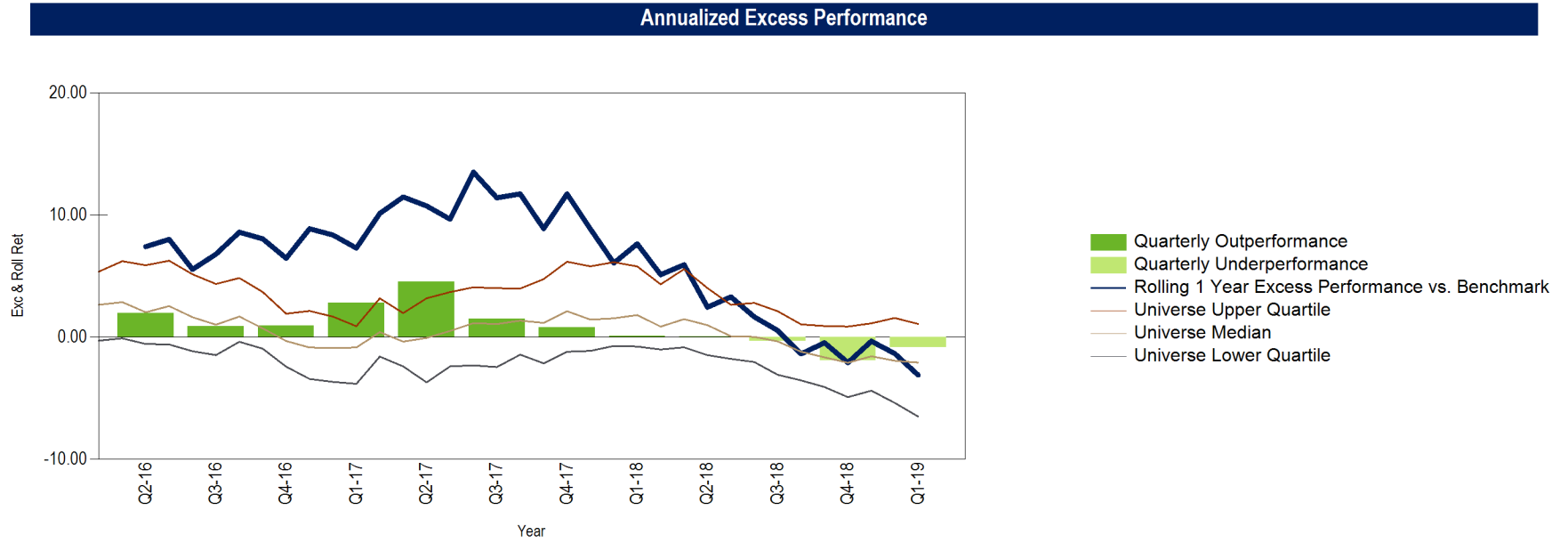
Annualized Return vs. Annualized Standard Deviation  
3 Years Ending March 31, 2019



U.S. Effective Style Map  
3 Years Ending March 31, 2019



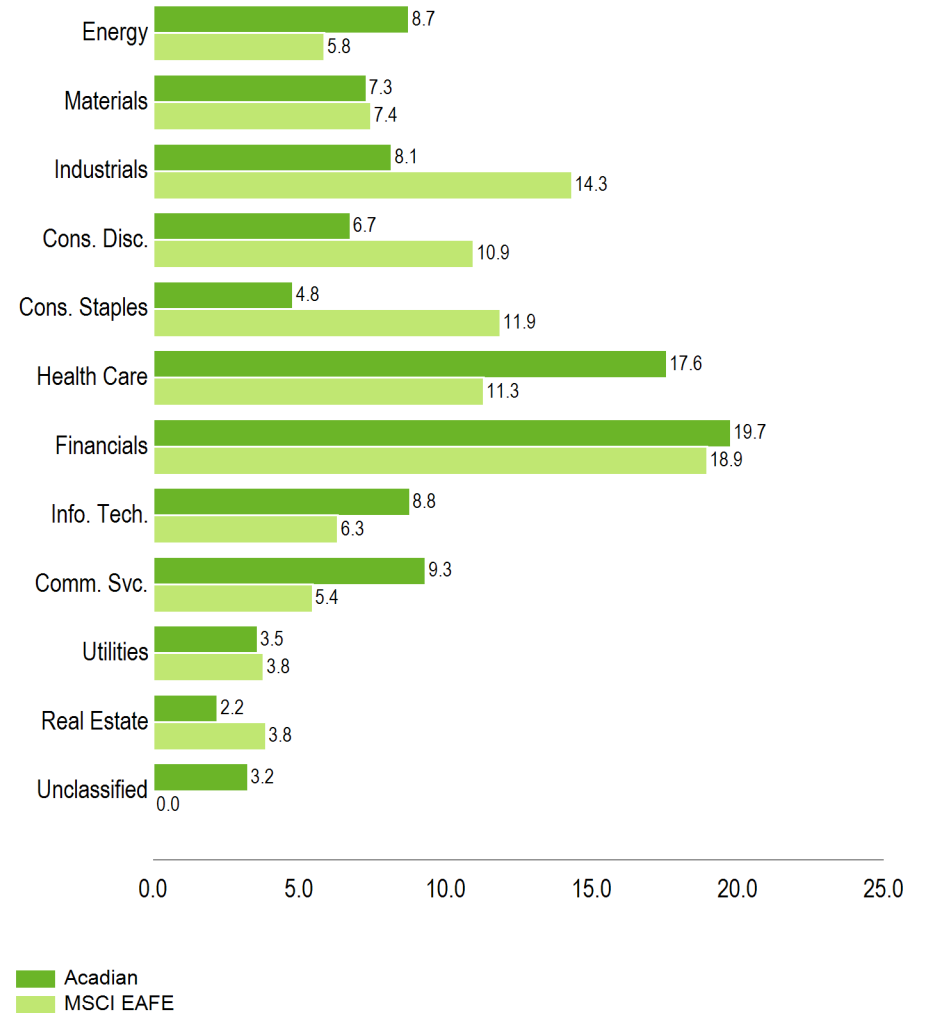
# ACADIAN



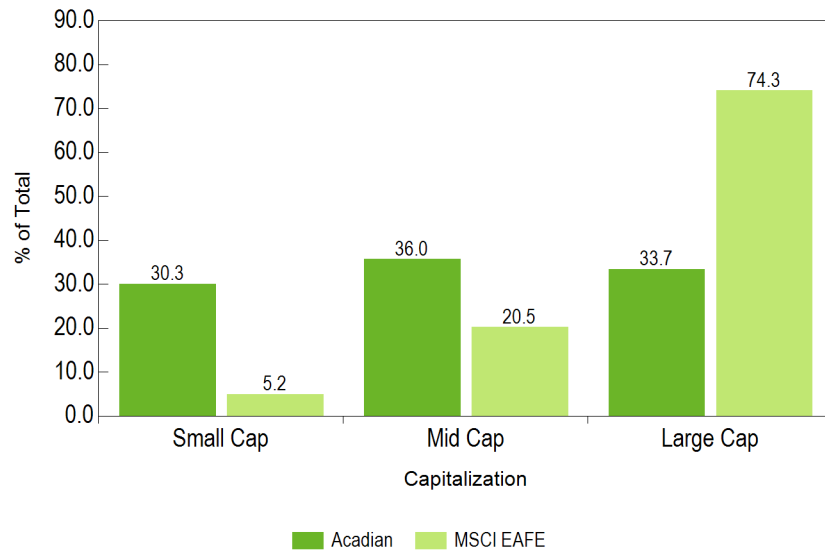
# ACADIAN

Characteristics		
	Portfolio	MSCI EAFE
Number of Holdings	420	920
Weighted Avg. Market Cap. (\$B)	27.72	58.76
Median Market Cap. (\$B)	1.20	10.12
Price To Earnings	11.85	15.08
Price To Book	2.03	2.22
Price To Sales	0.73	1.14
Return on Equity (%)	17.13	14.52
Yield (%)	3.15	3.42
Beta	0.98	1.00
R-Squared	0.86	1.00

## Sector Allocation (%) vs MSCI EAFE



## Market Capitalization As of March 31, 2019



# ACADIAN

Characteristics		
	Portfolio	MSCI EAFE
Number of Holdings	420	920
Weighted Avg. Market Cap. (\$B)	27.7	58.8
Median Market Cap. (\$B)	1.2	10.1
Price To Earnings	11.8	15.1
Price To Book	2.0	2.2
Price To Sales	0.7	1.1
Return on Equity (%)	17.1	14.5
Yield (%)	3.2	3.4
Beta	1.0	1.0
R-Squared	0.9	1.0

Top Positive Contributors		
	Relative Contribution %	Return %
NESTE (M:NEST)	0.5%	38.5%
EVRAZ (UKIR:EVR)	0.3%	39.0%
SWISS LIFE HOLDING (S:SLHN)	0.3%	14.6%
FUJITSU (J:FT@N)	0.3%	16.8%
OMV (O:OMV)	0.3%	24.2%
BP SPN.ADR 1:6 (BP)	0.3%	17.0%
ACS ACTIV.CONSTR.Y SERV. (E:ACS)	0.3%	15.2%
ROYAL DUTCH SHELL A (H:RDSA)	0.3%	8.8%
GN STORE NORD (DK:GSN)	0.3%	25.2%
SARTORIUS STEDIM BIOTECH (F:DIM)	0.3%	27.6%

Top Negative Contributors		
	Relative Contribution %	Return %
KT ADR 2:1 (KT)	-0.2%	-12.5%
INTL.CONS.AIRL.GP. (UKIR:IAG)	-0.1%	-15.2%
PLUS500 (UKIR:PLUS)	-0.1%	-40.6%
RAIFFEISEN BANK INTL. (O:RAI)	-0.1%	-11.5%
ENEL (I:ENEL)	-0.1%	14.1%
IBERDROLA (E:IBE)	0.0%	12.0%
BT GROUP (UKIR:BT.A)	0.0%	-4.2%
EDION (J:EDIO)	0.0%	-10.2%
DAIICHI SANKYO (J:D@SA)	0.0%	45.1%
TOKYU CONSTRUCTION (J:TKYC)	0.0%	-15.9%

Acadian Performance Attribution vs. MSCI EAFE									
	Attribution Effects				Returns		Sector Weights		
	Total Effects	Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark	
Energy	1.3%	0.5%	0.5%	0.3%	18.1%	10.6%	10.5%	5.9%	
Materials	0.0%	0.4%	-0.3%	-0.1%	20.7%	13.4%	5.0%	7.4%	
Industrials	-1.0%	-1.0%	-0.3%	0.2%	4.2%	10.6%	11.8%	14.3%	
Consumer Discretionary	0.0%	0.3%	-0.3%	0.0%	10.6%	7.4%	7.9%	11.2%	
Consumer Staples	-1.1%	-0.8%	-0.7%	0.4%	4.9%	12.4%	6.2%	11.6%	
Health Care	0.6%	0.1%	0.7%	-0.2%	11.3%	11.6%	17.1%	11.2%	
Financials	0.4%	0.1%	0.1%	0.1%	8.2%	7.0%	21.1%	19.5%	
Information Technology	0.4%	-0.1%	0.6%	-0.1%	14.4%	15.3%	9.4%	6.0%	
Communication Services	-0.1%	-0.2%	0.1%	0.0%	2.1%	4.8%	6.9%	5.6%	
Utilities	-0.3%	0.4%	-0.4%	-0.4%	22.1%	9.2%	0.3%	3.8%	
Real Estate	-0.3%	-0.3%	-0.1%	0.0%	7.2%	14.5%	3.2%	3.7%	
Cash	0.0%	0.0%	0.0%	0.0%	0.6%	--	0.7%	0.0%	
<b>Portfolio</b>	<b>-0.1%</b>	<b>=</b>	<b>-0.4%</b>	<b>+</b>	<b>0.0%</b>	<b>+</b>	<b>0.4%</b>	<b>10.0%</b>	<b>10.1%</b>
					<b>100.0%</b>	<b>101.1%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>



# ACADIAN

Country Allocation				
	Manager	Index	Manager	Index
	Allocation (USD)	Allocation (USD)	Return (USD)	Return (USD)
<b>Americas</b>				
Brazil*	0.7%	0.0%	24.4%	8.1%
Canada	5.2%	0.0%	10.6%	15.4%
Colombia*	0.3%	0.0%	28.4%	24.8%
Mexico*	0.5%	0.0%	3.9%	5.5%
United States	1.1%	0.0%	25.3%	13.7%
<b>Total-Americas</b>	<b>7.7%</b>	<b>0.0%</b>	<b>14.3%</b>	<b>--</b>
<b>Europe</b>				
Austria	2.3%	0.2%	12.4%	8.6%
Belgium	1.8%	0.9%	6.1%	16.2%
Denmark	2.0%	1.8%	14.8%	13.2%
Finland	2.5%	1.0%	29.9%	8.4%
France	6.4%	11.0%	13.1%	10.8%
Germany	3.7%	8.8%	1.5%	7.1%
Greece*	0.3%	0.0%	-3.2%	12.8%
Ireland	1.7%	0.5%	5.7%	11.6%
Italy	1.9%	2.3%	12.2%	14.7%
Luxembourg	0.3%	0.0%	0.4%	10.1%
Netherlands	9.5%	3.4%	8.7%	13.6%
Norway	1.0%	0.7%	6.8%	7.2%
Poland*	0.0%	0.0%	23.1%	-0.6%
Spain	3.4%	3.1%	5.5%	6.8%
Sweden	1.8%	2.7%	8.9%	7.9%
Switzerland	5.7%	8.7%	15.3%	13.6%
United Kingdom	9.0%	17.0%	15.4%	11.9%
<b>Total-Europe</b>	<b>53.2%</b>	<b>62.4%</b>	<b>11.6%</b>	<b>11.0%</b>

Country Allocation				
	Manager	Index	Manager	Index
	Allocation (USD)	Allocation (USD)	Return (USD)	Return (USD)
<b>AsiaPacific</b>				
Australia	7.0%	7.0%	9.3%	11.5%
China*	0.7%	0.0%	9.6%	11.1%
Hong Kong	0.9%	3.9%	10.7%	15.6%
Japan	22.0%	24.6%	4.9%	6.7%
Korea*	3.1%	0.0%	6.7%	10.3%
Malaysia*	0.3%	0.0%	2.9%	1.4%
New Zealand	0.3%	0.2%	-3.9%	16.7%
Singapore	1.1%	1.4%	9.2%	6.2%
Taiwan*	0.4%	0.0%	5.6%	1.7%
Thailand*	0.3%	0.0%	11.5%	9.7%
<b>Total-AsiaPacific</b>	<b>36.0%</b>	<b>37.0%</b>	<b>6.3%</b>	<b>8.6%</b>
<b>Other</b>				
Israel	1.4%	0.5%	8.8%	10.7%
South Africa*	0.7%	0.0%	14.0%	12.2%
<b>Total-Other</b>	<b>2.1%</b>	<b>0.5%</b>	<b>10.5%</b>	<b>10.7%</b>
<b>Totals</b>				
Developed	92.3%	100.0%	8.4%	10.1%
Emerging*	7.1%	0.0%	10.2%	--
Cash	0.6%		0.2%	



# ACADIAN

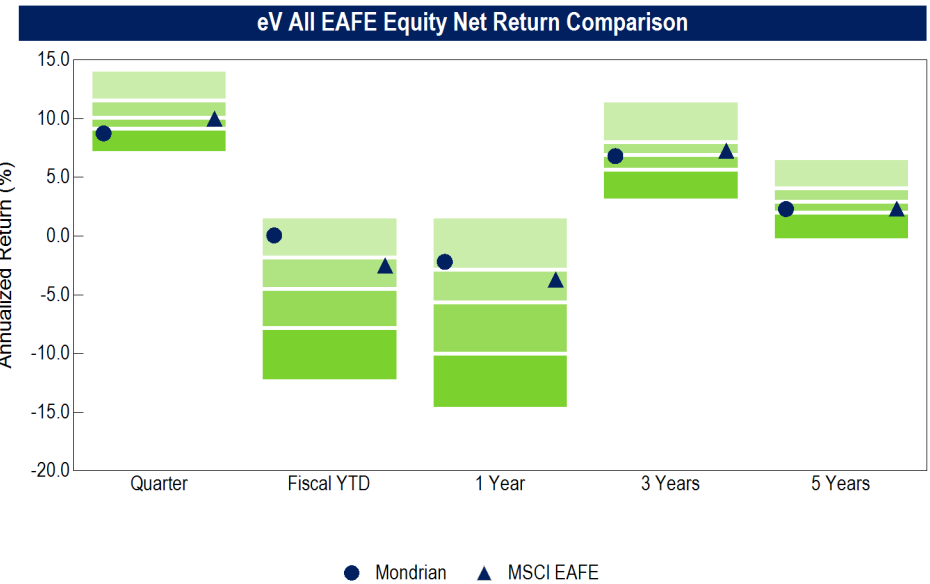
International Equity Performance Attribution Versus MSCI EAFE - Quarter Ending March 31, 2019									
Returns and Weights					Attribution Effects				Total Effects
Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect		
<b>Europe</b>									
Austria	11.0%	8.5%	2.2%	0.2%	0.0%	-0.1%	0.0%	0.0%	-0.1%
Belgium	6.1%	16.2%	1.8%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%
Denmark	9.3%	13.2%	2.0%	1.8%	-0.1%	0.0%	0.0%	0.0%	-0.1%
Finland	10.6%	8.4%	4.0%	1.0%	0.0%	-0.1%	0.0%	-0.1%	-0.2%
France	11.3%	10.8%	6.2%	11.0%	-0.6%	0.0%	0.0%	0.2%	-0.3%
Germany	8.7%	7.1%	3.6%	8.8%	-0.2%	0.0%	0.0%	0.1%	0.0%
Greece*	4.0%	5.6%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Ireland	8.3%	11.6%	1.7%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%
Italy	18.4%	14.8%	1.8%	2.3%	-0.2%	0.0%	0.0%	0.0%	-0.2%
Luxembourg	12.3%	6.6%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Netherlands	6.9%	13.6%	9.2%	3.4%	0.0%	-0.1%	0.0%	0.0%	-0.1%
Norway	10.8%	7.2%	1.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%
Poland*	24.9%	5.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Portugal	--	10.2%	0.0%	0.2%	--	0.0%	0.0%	--	0.0%
Spain	7.3%	6.9%	3.3%	3.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Sweden	8.2%	7.9%	1.8%	2.7%	-0.1%	0.0%	0.0%	0.0%	0.0%
Switzerland	7.0%	13.6%	5.6%	8.7%	-0.1%	0.0%	0.0%	0.0%	0.0%
United Kingdom	9.9%	11.9%	8.8%	17.0%	-0.5%	-0.1%	0.3%	0.3%	-0.1%
<b>Americas</b>									
Brazil*	30.2%	17.8%	0.7%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.2%
Canada	13.1%	13.0%	5.1%	0.0%	0.0%	-0.1%	-0.2%	0.0%	-0.4%
Colombia*	11.3%	13.5%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Mexico*	7.7%	9.8%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
United States	10.1%	8.2%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%

International Equity Performance Attribution Versus MSCI EAFE - Quarter Ending March 31, 2019									
Returns and Weights					Attribution Effects				Total Effects
Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect		
<b>AsiaPacific</b>									
Australia	9.3%	11.5%	7.0%	7.0%	-0.1%	0.0%	0.0%	0.0%	-0.1%
China*	9.6%	11.1%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Hong Kong	10.7%	15.6%	0.9%	3.9%	-0.1%	0.1%	0.0%	0.1%	0.0%
Japan	4.9%	6.7%	22.0%	24.6%	0.3%	0.0%	0.0%	0.0%	0.3%
Korea*	6.7%	10.3%	3.1%	0.0%	0.0%	-0.1%	0.0%	0.1%	0.0%
Malaysia*	2.9%	1.4%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
New Zealand	-3.9%	16.7%	0.3%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Singapore	9.2%	6.2%	1.1%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Taiwan*	5.6%	1.7%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Thailand*	11.5%	9.7%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Other</b>									
Israel	8.8%	10.7%	1.4%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%
South Africa*	14.0%	12.2%	0.7%	0.0%	0.0%	0.0%	-0.1%	0.0%	-0.1%
<b>Totals</b>									
Developed	8.4%	10.1%	92.3%	100.0%	-1.5%	0.0%	0.0%	0.1%	-1.4%
Emerging*	10.2%	--	7.1%	0.0%	0.0%	0.0%	-0.1%	-0.2%	-0.3%
Cash	0.2%	--	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

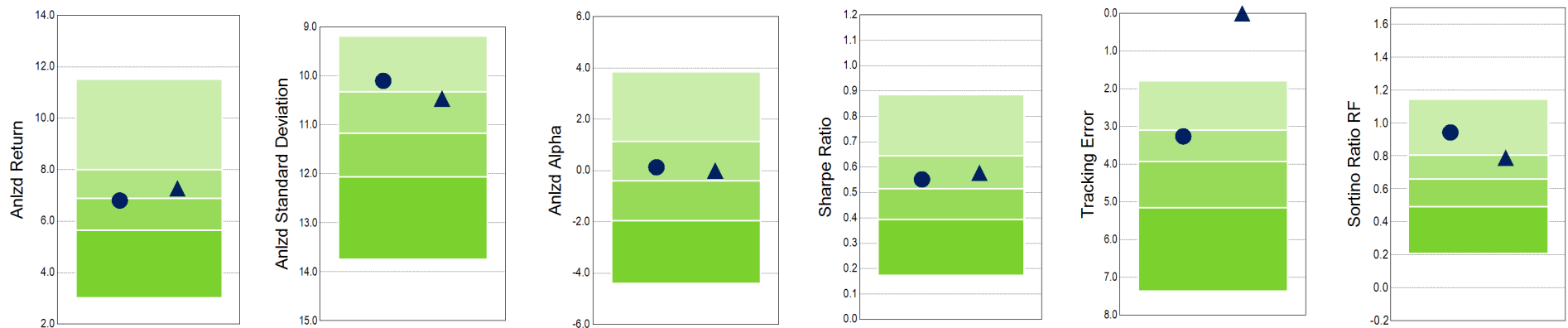


# MONDRIAN

The firm is an active value-oriented defensive manager. The firm's value driven investment philosophy is based on the belief that investments need to be evaluated in terms of their fundamental long-term value. The firm believes that the value of a company lies in its future income stream as dividends represent the most direct form of cash flow to a shareholder. The firm uses an inflation adjusted dividend discount model to derive the underlying value of a company. This methodology is applied consistently to individual securities across all markets and industries. The universe spans markets covered in the MSCI Indices and those developing markets with adequate investor protection and good repatriation procedures. The firm will then narrow the universe to a list of more than 1000 securities on the basis of value criteria, and then further reduce this to a shorter list of approximately 250 securities annually, for detailed fundamental analysis. The screens include basic value characteristics such as price to book, price to cash flow ratio, price to earnings ratio, and yield, as well as liquidity considerations. A focus list of approximately 80 securities is then created from that list of approximately 250 through fundamental research and deliberations of the Equity Strategy Committee. It is this list of securities on which more detailed fundamental analysis and financial modeling is carried out utilizing the dividend discount model, which is based on an evaluation of a company's future income stream, which is then discounted in real terms.

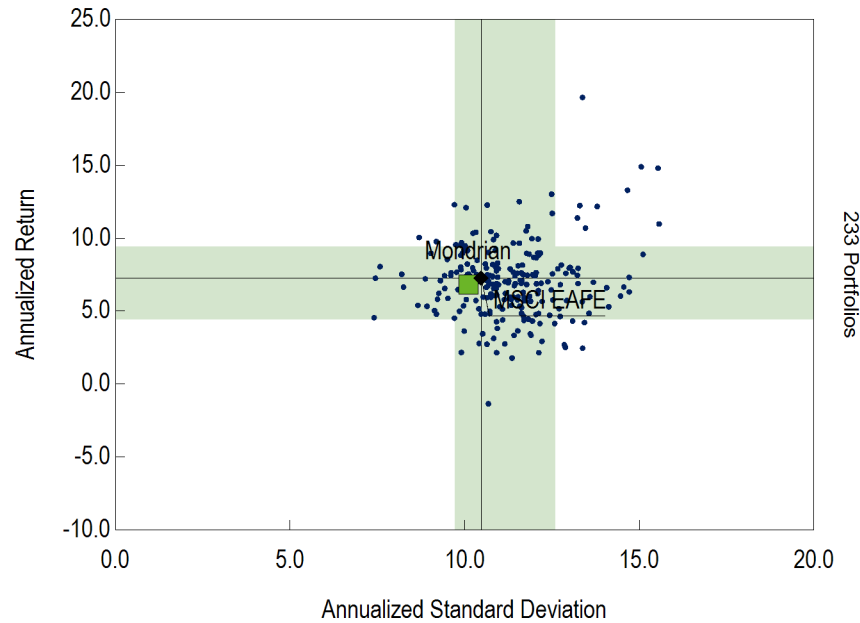


## 3 Year Risk Statistics



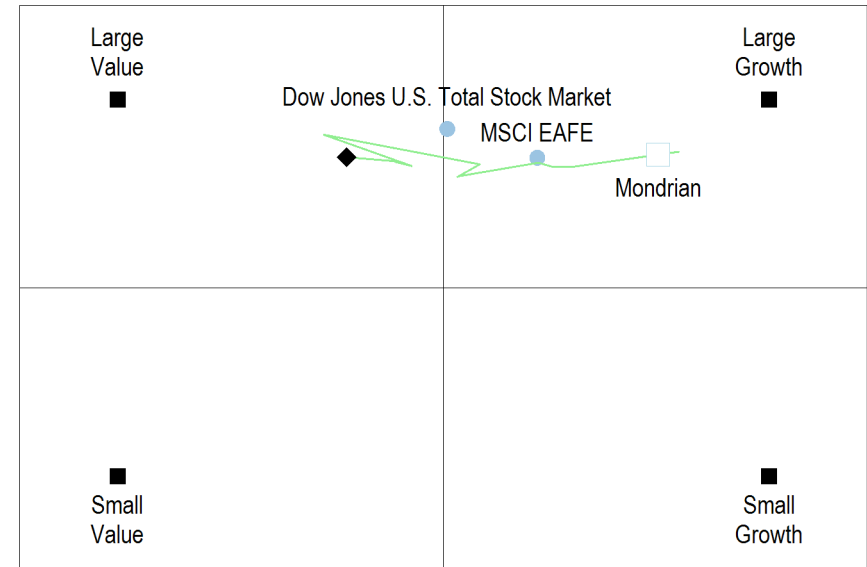
# MONDRIAN

Annualized Return vs. Annualized Standard Deviation  
3 Years Ending March 31, 2019



- Mondrian
- ◆ MSCI EAFE
- 68% Confidence Interval
- eV All EAFE Equity Net

U.S. Effective Style Map  
3 Years Ending March 31, 2019



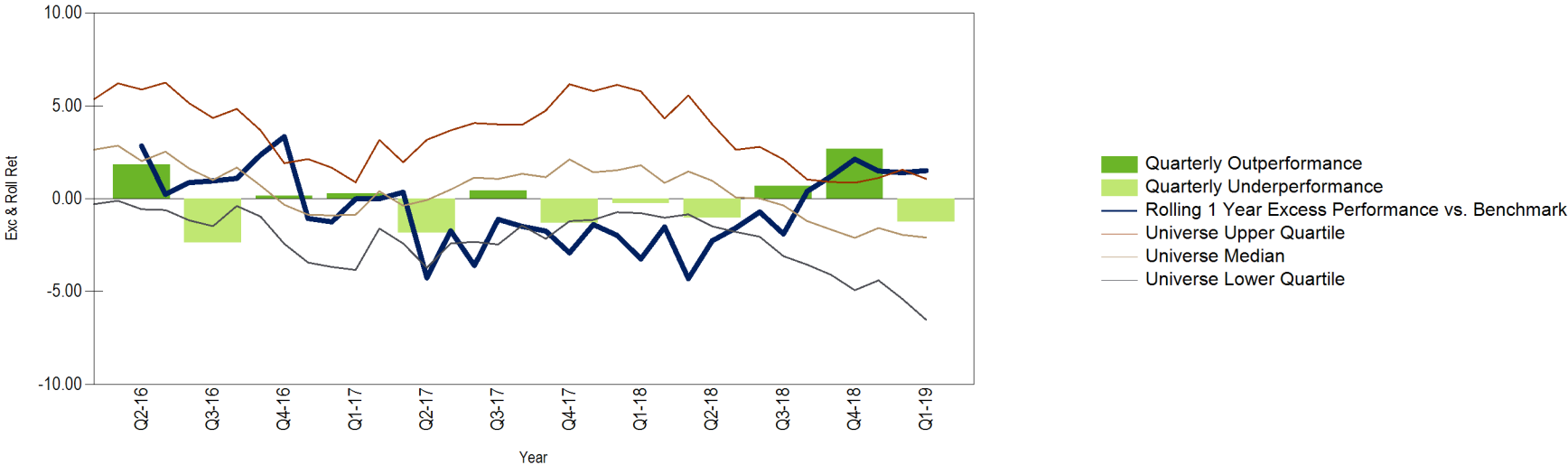
- First Rolling Period
- ◆ Last Rolling Period





# MONDRIAN

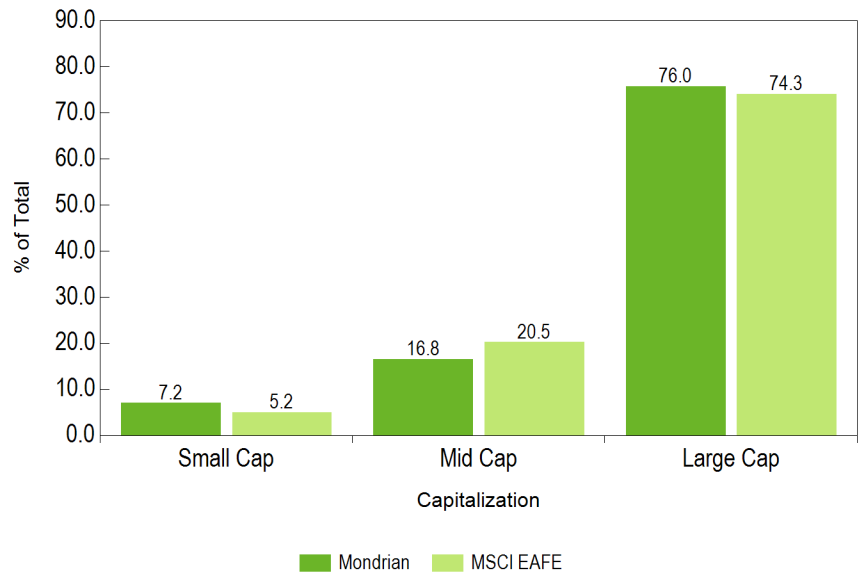
Annualized Excess Performance



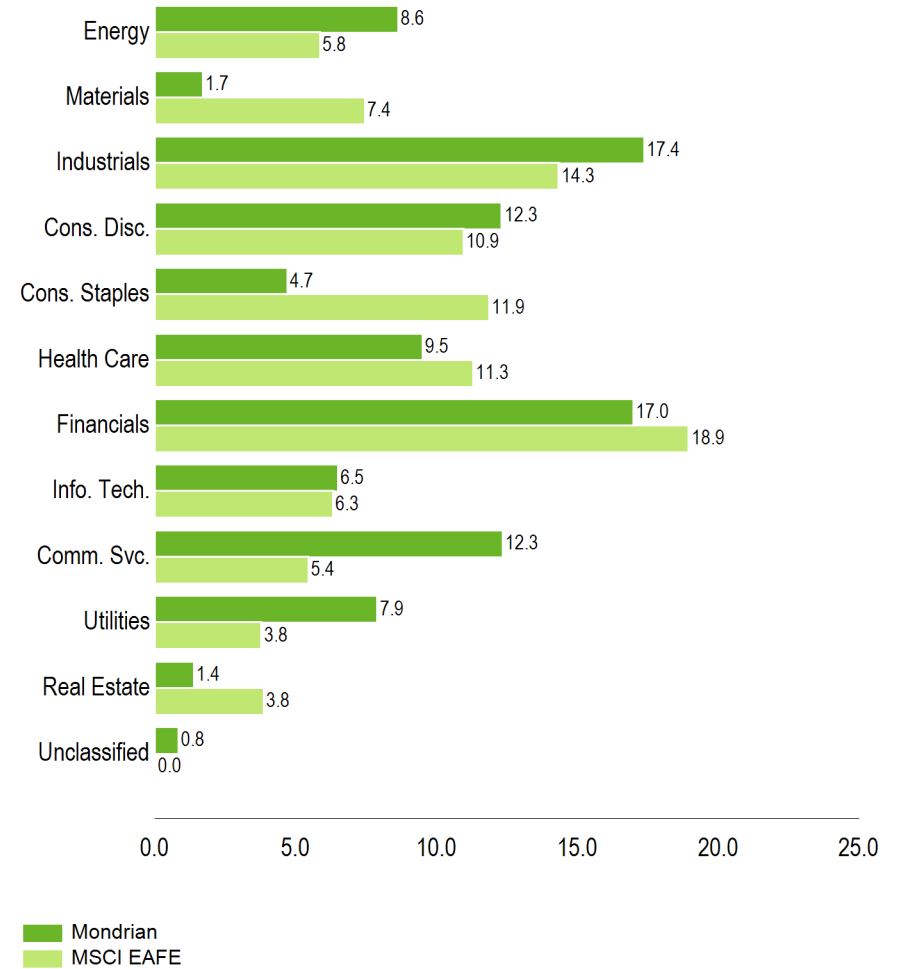
# MONDRIAN

Characteristics		
	Portfolio	MSCI EAFE
Number of Holdings	54	920
Weighted Avg. Market Cap. (\$B)	54.84	58.76
Median Market Cap. (\$B)	31.53	10.12
Price To Earnings	13.44	15.08
Price To Book	1.59	2.22
Price To Sales	0.76	1.14
Return on Equity (%)	10.24	14.52
Yield (%)	4.25	3.42
Beta	0.92	1.00
R-Squared	0.90	1.00

## Market Capitalization As of March 31, 2019



## Sector Allocation (%) vs MSCI EAFE



# MONDRIAN

Characteristics		
	Portfolio	MSCI EAFE
Number of Holdings	54	920
Weighted Avg. Market Cap. (\$B)	54.8	58.8
Median Market Cap. (\$B)	31.5	10.1
Price To Earnings	13.4	15.1
Price To Book	1.6	2.2
Price To Sales	0.8	1.1
Return on Equity (%)	10.2	14.5
Yield (%)	4.3	3.4
Beta	0.9	1.0
R-Squared	0.9	1.0

Top Positive Contributors		
	Relative Contribution %	Return %
WH GROUP (SZS) (K:HHPLZ)	0.6%	40.2%
LLOYDS BANKING GROUP (UKIR:LLOY)	0.5%	22.6%
TAKEDA PHARMACEUTICAL (J:TA@N)	0.5%	23.3%
TESCO (UKIR:TSCO)	0.5%	24.9%
ENEL (I:ENEL)	0.4%	14.1%
FUJIFILM HOLDINGS (J:FP@N)	0.4%	17.8%
QBE INSURANCE GROUP (A:QBEX)	0.3%	25.7%
IBERDROLA (E:IBE)	0.3%	12.0%
ENI (I:ENI)	0.3%	12.6%
CK HUTCHISON (HSC) HOLDINGS (K:CHGKS)	0.3%	10.4%

Top Negative Contributors		
	Relative Contribution %	Return %
TELIA COMPANY (W:TEL)	-0.1%	-4.5%
COCA-COLA BOTTLERS JAPAN HOLDINGS (J:KITK)	-0.1%	-15.2%
ROYAL DUTCH SHELL A(LON) (UKIR:RDSA)	-0.1%	8.6%
JARDINE MATHESON HDG. (T:JMST)	-0.1%	-8.6%
G4S (UKIR:GFS)	-0.1%	-4.7%
SOCIETE GENERALE (F:SGE)	-0.1%	-9.0%
ISUZU MOTORS (J:IM@N)	0.0%	-5.8%
WPP (UKIR:WPP)	0.0%	-2.0%
BMW (D:BMW)	0.0%	-3.9%
KYOCERA (J:CQ@N)	0.0%	18.1%

Mondrian Performance Attribution vs. MSCI EAFE											
	Attribution Effects				Returns		Sector Weights				
	Total Effects	Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark			
Energy	0.4%	0.0%	0.4%	0.0%	10.8%	10.6%	9.7%	5.9%			
Materials	-0.9%	-0.2%	-0.8%	0.2%	8.8%	13.4%	1.2%	7.4%			
Industrials	-0.6%	-0.8%	0.2%	0.0%	5.9%	10.6%	15.6%	14.3%			
Consumer Discretionary	-0.2%	-0.2%	0.0%	0.0%	5.8%	7.4%	10.8%	11.2%			
Consumer Staples	-0.3%	0.7%	-0.7%	-0.3%	19.4%	12.4%	6.0%	11.6%			
Health Care	0.0%	0.0%	-0.1%	0.0%	12.1%	11.6%	10.6%	11.2%			
Financials	0.3%	0.5%	-0.2%	0.0%	9.9%	7.0%	16.5%	19.5%			
Information Technology	-0.1%	0.0%	-0.2%	0.1%	15.6%	15.3%	4.9%	6.0%			
Communication Services	-0.2%	-0.2%	0.4%	-0.4%	0.6%	4.8%	12.4%	5.6%			
Utilities	0.9%	0.2%	0.6%	0.2%	13.6%	9.2%	9.3%	3.8%			
Real Estate	-0.4%	-0.1%	-0.4%	0.1%	13.9%	14.5%	1.1%	3.7%			
Cash	0.0%	0.0%	0.0%	0.0%	0.6%	--	1.8%	0.0%			
<b>Portfolio</b>	<b>-1.1%</b>	<b>=</b>	<b>0.0%</b>	<b>+</b>	<b>-1.0%</b>	<b>+</b>	<b>-0.1%</b>	<b>9.0%</b>	<b>10.1%</b>	<b>100.0%</b>	<b>100.0%</b>



# MONDRIAN

Country Allocation				
	Manager	Index	Manager	Index
	Allocation (USD)	Allocation (USD)	Return (USD)	Return (USD)
<b>Europe</b>				
Denmark	1.7%	1.8%	9.2%	13.2%
France	5.9%	11.0%	3.0%	10.8%
Germany	8.6%	8.8%	7.2%	7.1%
Italy	6.3%	2.3%	13.4%	14.7%
Netherlands	3.9%	3.4%	7.5%	13.6%
Spain	6.7%	3.1%	6.5%	6.8%
Sweden	3.2%	2.7%	-4.5%	7.9%
Switzerland	6.2%	8.7%	9.0%	13.6%
United Kingdom	20.2%	17.0%	13.2%	11.9%
<b>Total-Europe</b>	<b>62.9%</b>	<b>62.4%</b>	<b>9.0%</b>	<b>11.0%</b>

Country Allocation				
	Manager	Index	Manager	Index
	Allocation (USD)	Allocation (USD)	Return (USD)	Return (USD)
<b>AsiaPacific</b>				
Australia	1.4%	7.0%	25.7%	11.5%
Hong Kong	6.7%	3.9%	15.7%	15.6%
Japan	19.3%	24.6%	8.4%	6.8%
Singapore	6.5%	1.4%	3.1%	6.2%
Taiwan*	1.4%	0.0%	11.0%	9.0%
<b>Total-AsiaPacific</b>	<b>35.4%</b>	<b>37.0%</b>	<b>9.6%</b>	<b>8.7%</b>
<b>Totals</b>				
Developed	96.8%	100.0%	9.2%	10.1%
Emerging*	1.4%	0.0%	11.0%	--
Cash	1.8%		0.6%	



# MONDRIAN

## International Equity Performance Attribution Versus MSCI EAFE - Quarter Ending March 31, 2019

	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
<b>Europe</b>									
Austria	--	8.5%	0.0%	0.2%	--	-0.1%	0.0%	--	-0.1%
Belgium	--	16.2%	0.0%	0.9%	--	-0.4%	0.0%	--	-0.4%
Denmark	1.5%	13.2%	1.7%	1.8%	-0.3%	0.0%	0.0%	0.0%	-0.3%
Finland	--	8.4%	0.0%	1.0%	--	-0.2%	0.0%	--	-0.3%
France	1.3%	10.8%	5.9%	11.0%	-4.9%	0.0%	-0.2%	2.3%	-2.8%
Germany	5.5%	7.1%	8.6%	8.8%	-1.1%	0.0%	0.0%	0.0%	-1.1%
Ireland	--	11.6%	0.0%	0.5%	--	0.0%	0.0%	--	0.0%
Italy	7.8%	14.8%	6.3%	2.3%	-0.2%	1.1%	0.2%	-0.3%	0.7%
Netherlands	5.4%	13.6%	3.9%	3.4%	-0.6%	0.1%	0.0%	-0.1%	-0.6%
Norway	--	7.2%	0.0%	0.7%	--	0.1%	-0.2%	--	-0.1%
Portugal	--	10.2%	0.0%	0.2%	--	0.0%	0.0%	--	0.0%
Spain	4.7%	6.9%	6.7%	3.1%	-0.6%	0.2%	0.1%	-0.7%	-0.8%
Sweden	-8.1%	7.9%	3.2%	2.7%	-3.7%	0.1%	0.0%	-0.7%	-4.4%
Switzerland	2.9%	13.6%	6.2%	8.7%	-2.8%	-0.3%	0.2%	0.8%	-2.2%
United Kingdom	10.5%	11.9%	20.2%	17.0%	5.5%	-0.6%	1.3%	1.1%	7.3%

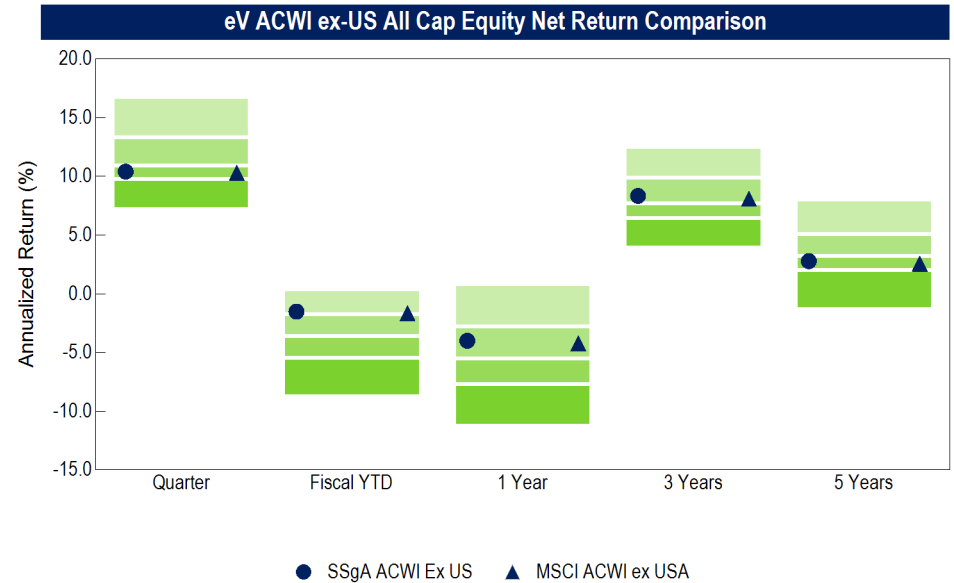
## International Equity Performance Attribution Versus MSCI EAFE - Quarter Ending March 31, 2019

	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
<b>AsiaPacific</b>									
Australia	10.0%	11.5%	1.4%	7.0%	1.8%	1.1%	-2.0%	-1.5%	-0.6%
Hong Kong	8.0%	15.6%	6.7%	3.9%	0.1%	0.7%	-0.1%	0.1%	0.8%
Japan	8.5%	6.7%	19.3%	24.6%	5.4%	0.1%	-0.4%	-1.2%	4.0%
New Zealand	--	16.7%	0.0%	0.2%	--	0.1%	-0.1%	--	0.0%
Singapore	3.4%	6.2%	6.5%	1.4%	-0.3%	-0.6%	0.6%	-1.1%	-1.4%
Taiwan*	1.9%	1.7%	1.4%	0.0%	0.0%	-0.5%	0.0%	0.0%	-0.5%
<b>Other</b>									
Israel	--	10.7%	0.0%	0.5%	--	-0.3%	-0.1%	--	-0.4%
<b>Totals</b>									
Developed	6.4%	10.1%	96.8%	100.0%	-1.7%	0.0%	-0.8%	0.1%	-2.5%
Emerging*	1.9%	--	1.4%	0.0%	0.0%	0.0%	0.0%	-0.5%	-0.5%
Cash	0.2%	--	1.8%	0.0%	0.0%	-0.9%	0.0%	0.0%	-0.9%

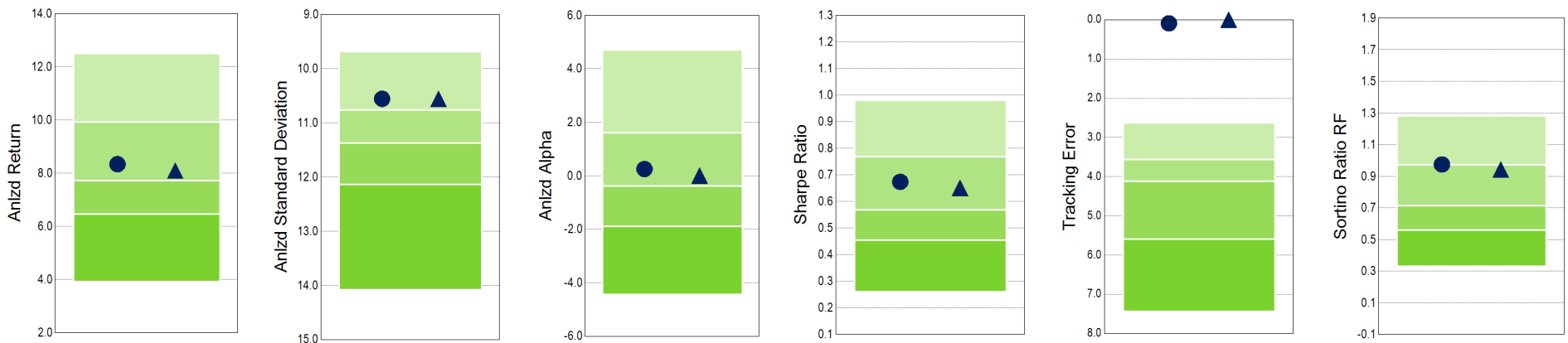


# SSGA ACWI EX US

The MSCI ACWI ex US Index Strategy tends to hold each security that is held in the benchmark index, but the strategy will not be perfectly weighted in every index constituent on a daily basis. Holding securities in the perfect weights would require increased trading and therefore would incur costs. Thus, there will be securities in the fund that are either over- or under-weighted relative to the benchmark. The individual security mis-weights are very minimal, usually within 1 basis point. However, in aggregate, these small mis-weights can add up and result in tracking error if the mis-weighted securities' performance is volatile. SSgA seek to replicate the index by attempting to hold every security in the fund in its appropriate index weight. SSgA trade only when there is a change to the Index, when we have participant cash flows, or when we receive significant dividend income into the fund.

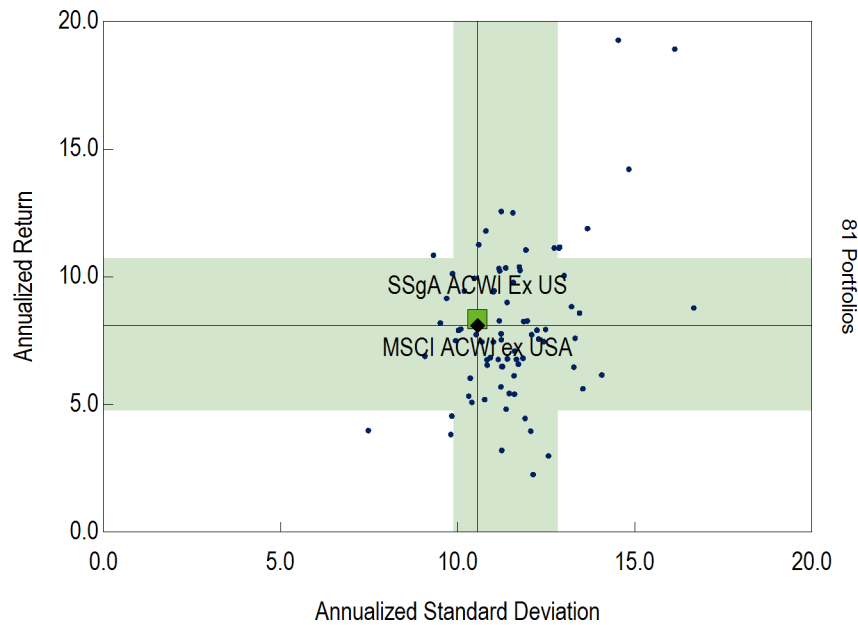


## 3 Year Risk Statistics



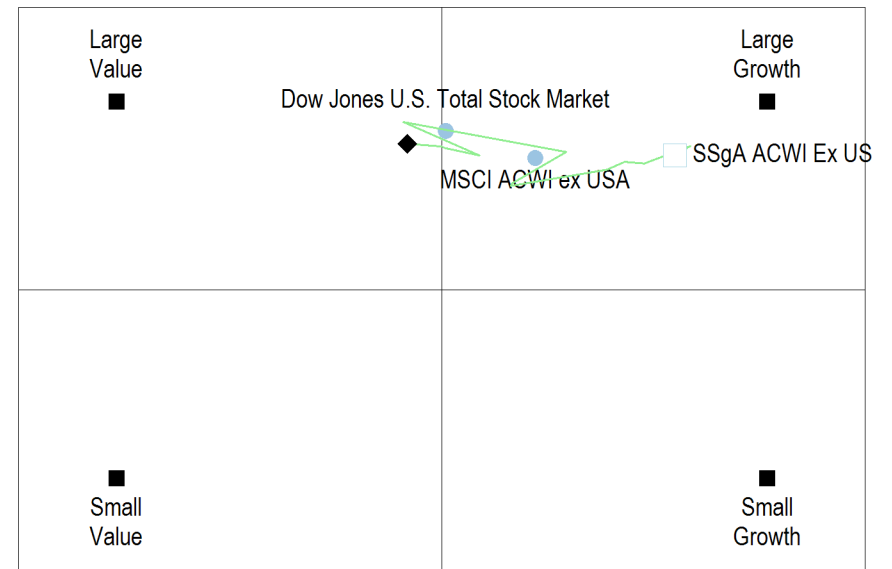
# SSGA ACWI EX US

Annualized Return vs. Annualized Standard Deviation  
3 Years Ending March 31, 2019



- SSGA ACWI Ex US
- ◆ MSCI ACWI ex USA
- 68% Confidence Interval
- eV ACWI ex-US All Cap Equity Net

U.S. Effective Style Map  
3 Years Ending March 31, 2019



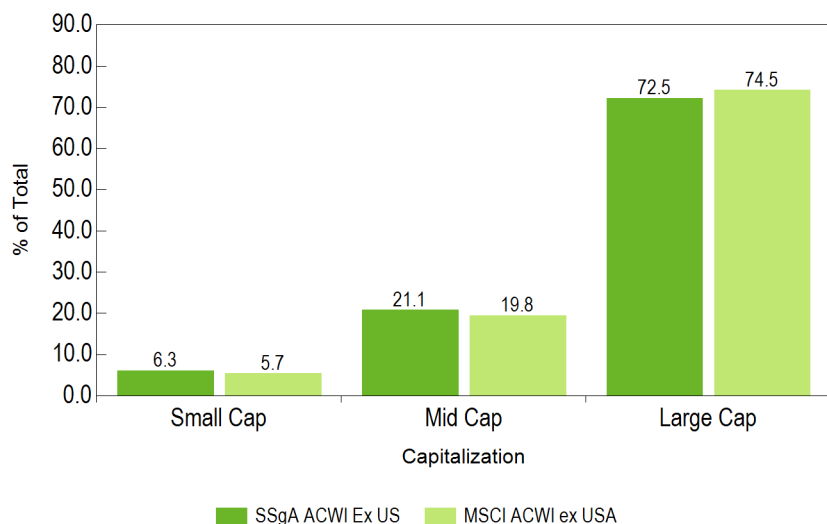
- First Rolling Period
- ◆ Last Rolling Period



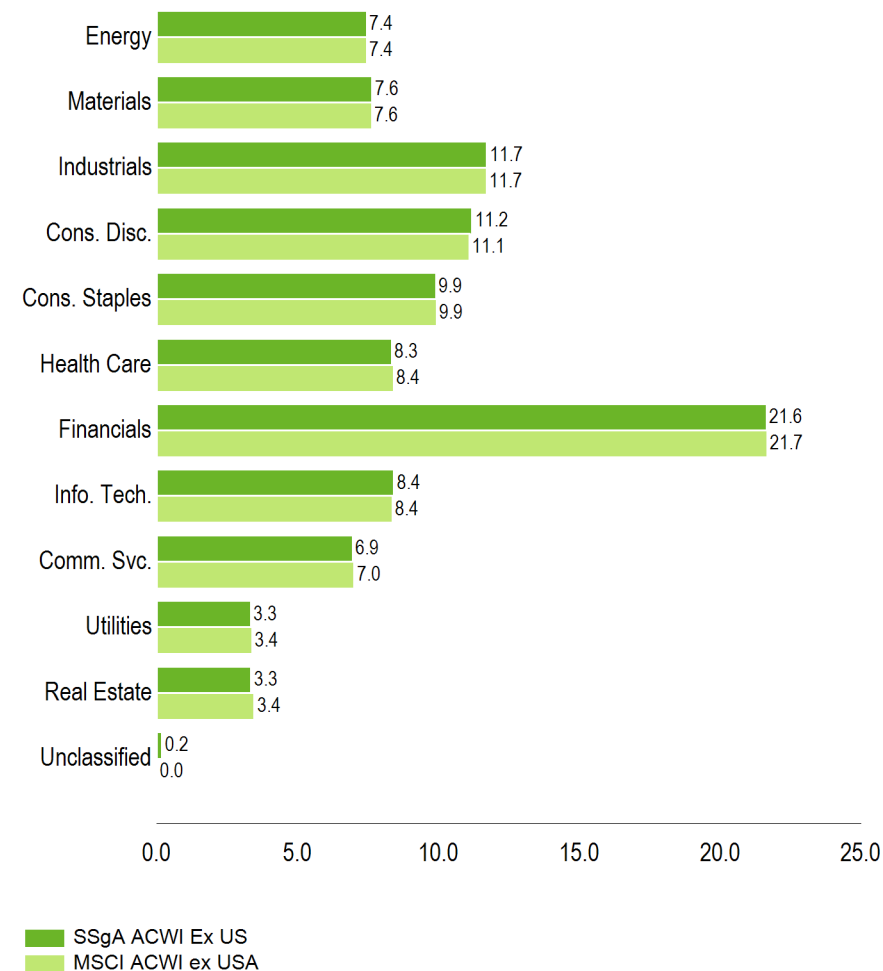
# SSGA ACWI EX US

Characteristics		
	Portfolio	MSCI ACWI ex USA
Number of Holdings	2,167	2,145
Weighted Avg. Market Cap. (\$B)	64.68	64.41
Median Market Cap. (\$B)	7.64	7.67
Price To Earnings	14.58	14.55
Price To Book	2.24	2.24
Price To Sales	1.18	1.18
Return on Equity (%)	15.50	15.45
Yield (%)	3.18	3.21
Beta	1.00	1.00
R-Squared	1.00	1.00

## Market Capitalization As of March 31, 2019

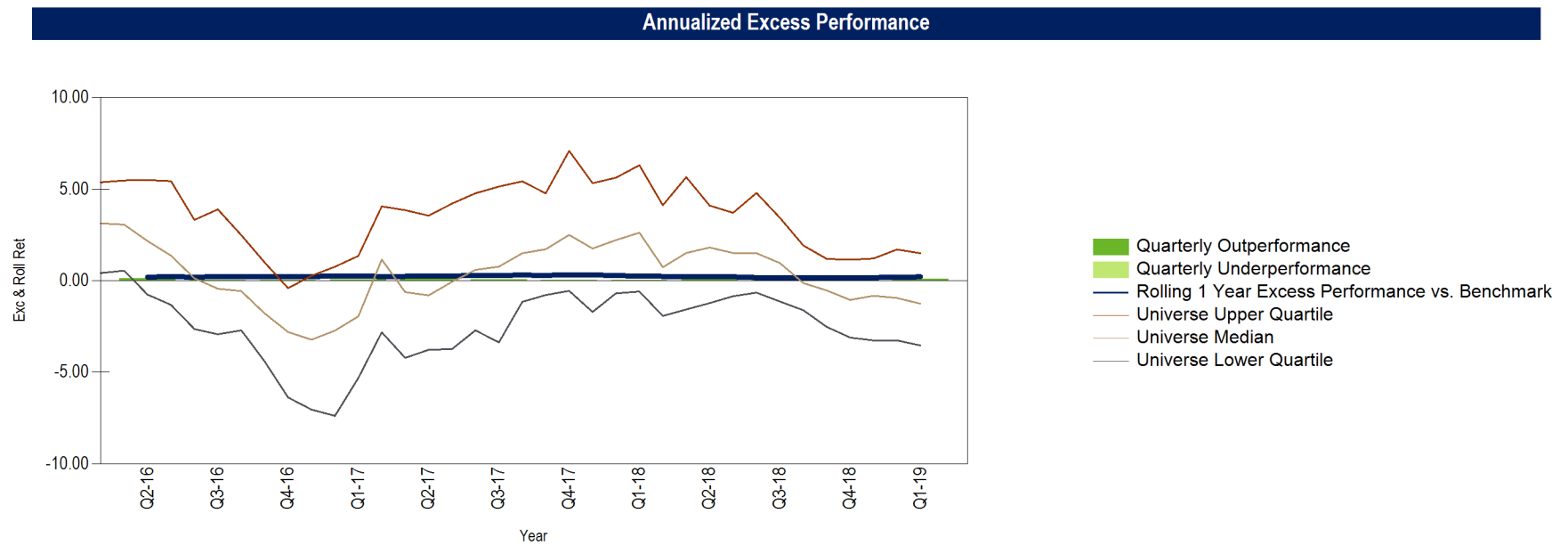


## Sector Allocation (%) vs MSCI ACWI ex USA





# SSGA ACWI EX US



# SSGA ACWI EX US

Characteristics	Portfolio	MSCI ACWI ex USA
Number of Holdings	2,167	2,145
Weighted Avg. Market Cap. (\$B)	64.7	64.4
Median Market Cap. (\$B)	7.6	7.7
Price To Earnings	14.6	14.6
Price To Book	2.2	2.2
Price To Sales	1.2	1.2
Return on Equity (%)	15.5	15.5
Yield (%)	3.2	3.2
Beta	1.0	1.0
R-Squared	1.0	1.0

Top Positive Contributors	Relative Contribution %	Return %
SAP (D:SAP)	0.1%	15.9%
ALLIANZ (D:ALV)	0.0%	10.9%
ADIDAS (D:ADS)	0.0%	16.4%
DAIMLER (D:DAI)	0.0%	12.0%
DEUTSCHE POST (D:DPW)	0.0%	19.2%
BASF (D:BAS)	0.0%	6.7%
FRESENIUS MED.CARE (D:FME)	0.0%	25.3%
FRESENIUS (D:FRE)	0.0%	16.0%
VONOVIA (D:VNA)	0.0%	14.4%
MUENCHENER RUCK. (D:MUV2)	0.0%	9.1%

Top Negative Contributors	Relative Contribution %	Return %
OIL COMPANY LUKOIL (RS:LKO)	0.0%	24.5%
SBERBANK OF RUSSIA (RS:SBE)	0.0%	21.5%
BAYER (D:BAYN)	0.0%	-6.9%
BRITISH AMERICAN TOBACCO (UKIR:BATS)	0.0%	32.8%
WIRECARD (D:WDI)	0.0%	-17.6%
TATNEFT (RS:TAT)	0.0%	11.4%
ALIBABA GROUP HLDG.SPN. ADR 1:1 (BABA)	0.0%	33.1%
NESTLE 'R' (S:NESN)	0.0%	17.7%
MICRO FOCUS INTL. (UKIR:MCRO)	0.0%	51.3%
THYSSENKRUPP (D:TKA)	0.0%	-18.3%

SSgA ACWI Ex US Performance Attribution vs. MSCI ACWI ex USA										
	Attribution Effects				Returns		Sector Weights			
	Total Effects	Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark		
Energy	-0.1%	0.0%	-0.1%	0.0%	12.5%	12.5%	6.9%	7.3%		
Materials	0.0%	0.0%	0.0%	0.0%	11.5%	11.5%	7.5%	7.6%		
Industrials	0.0%	0.0%	0.0%	0.0%	10.3%	10.3%	11.6%	11.7%		
Consumer Discretionary	-0.1%	0.0%	-0.1%	0.0%	11.0%	11.2%	10.5%	11.1%		
Consumer Staples	0.0%	0.0%	0.0%	0.0%	11.1%	11.2%	9.7%	9.8%		
Health Care	0.0%	0.0%	0.0%	0.0%	11.3%	11.4%	8.2%	8.4%		
Financials	-0.1%	0.0%	0.0%	0.0%	7.5%	7.8%	21.8%	22.1%		
Information Technology	0.0%	0.0%	0.0%	0.0%	14.5%	14.6%	8.0%	8.0%		
Communication Services	0.1%	0.1%	0.0%	0.0%	7.6%	6.8%	7.6%	7.1%		
Utilities	0.0%	0.0%	0.0%	0.0%	8.5%	8.4%	3.3%	3.4%		
Real Estate	0.0%	0.0%	0.0%	0.0%	15.0%	14.8%	3.3%	3.3%		
Cash	0.0%	0.0%	0.0%	0.0%	0.6%	--	1.7%	0.0%		
<b>Portfolio</b>	<b>-0.2%</b>	<b>=</b>	<b>0.0%</b>	<b>+</b>	<b>-0.2%</b>	<b>+</b>	<b>-0.1%</b>	<b>10.2%</b>	<b>10.4%</b>	<b>100.0%</b>



# SSGA ACWI EX US

Country Allocation				
	Manager	Index	Manager	Index
	Allocation (USD)	Allocation (USD)	Return (USD)	Return (USD)
<b>Americas</b>				
Brazil*	1.9%	1.9%	8.2%	8.2%
Canada	6.5%	6.5%	15.6%	15.6%
Chile*	0.3%	0.3%	4.3%	4.3%
Colombia*	0.1%	0.1%	24.8%	24.8%
Mexico*	0.7%	0.7%	5.6%	5.6%
Peru*	0.1%	0.1%	8.0%	11.1%
United States	0.4%	0.0%	25.0%	13.7%
<b>Total-Americas</b>	<b>10.1%</b>	<b>9.6%</b>	<b>13.5%</b>	<b>13.1%</b>
<b>Europe</b>				
Austria	0.2%	0.2%	8.6%	8.6%
Belgium	0.7%	0.6%	16.2%	16.2%
Czech Republic*	0.0%	0.0%	3.8%	3.8%
Denmark	1.2%	1.2%	13.2%	13.2%
Finland	0.7%	0.7%	8.4%	8.4%
France	7.2%	7.5%	11.3%	10.8%
Germany	5.7%	5.9%	6.9%	7.1%
Greece*	0.1%	0.1%	12.7%	12.9%
Hungary*	0.1%	0.1%	6.0%	6.0%
Ireland	0.3%	0.4%	7.6%	11.6%
Italy	1.5%	1.5%	14.4%	14.7%
Luxembourg	0.1%	0.0%	2.0%	10.4%
Netherlands	2.9%	2.3%	11.7%	13.6%
Norway	0.5%	0.5%	7.2%	7.2%
Poland*	0.3%	0.3%	-0.6%	-0.6%
Portugal	0.1%	0.1%	10.2%	10.2%
Russia*	0.3%	0.9%	8.5%	12.5%
Spain	2.1%	2.1%	6.8%	6.8%
Sweden	1.8%	1.8%	8.1%	7.9%
Switzerland	5.8%	5.9%	13.6%	13.6%
United Kingdom	10.6%	11.5%	12.4%	11.9%
<b>Total-Europe</b>	<b>42.1%</b>	<b>43.6%</b>	<b>10.9%</b>	<b>10.9%</b>

Country Allocation				
	Manager	Index	Manager	Index
	Allocation (USD)	Allocation (USD)	Return (USD)	Return (USD)
<b>AsiaPacific</b>				
Australia	4.5%	4.7%	11.2%	11.5%
China*	4.3%	7.9%	18.7%	18.0%
Hong Kong	5.7%	2.6%	16.2%	15.6%
India*	2.5%	2.4%	7.1%	7.1%
Indonesia*	0.6%	0.6%	4.3%	4.3%
Japan	16.6%	16.6%	6.8%	6.8%
Korea*	3.6%	3.6%	4.8%	4.8%
Malaysia*	0.6%	0.6%	0.3%	0.3%
New Zealand	0.2%	0.2%	16.9%	16.8%
Pakistan*	0.0%	0.0%	8.4%	8.5%
Philippines*	0.3%	0.3%	7.9%	7.9%
Singapore	1.1%	0.9%	5.1%	6.2%
Taiwan*	3.0%	3.0%	9.0%	9.0%
Thailand*	0.6%	0.6%	6.3%	7.5%
<b>Total-AsiaPacific</b>	<b>43.6%</b>	<b>44.0%</b>	<b>9.6%</b>	<b>9.8%</b>
<b>Other</b>				
Egypt*	0.0%	0.0%	16.5%	16.6%
Israel	0.3%	0.4%	5.7%	10.7%
Qatar*	0.3%	0.3%	-3.5%	-3.5%
South Africa*	1.6%	1.6%	4.4%	4.5%
Turkey*	0.2%	0.2%	-3.0%	-3.0%
United Arab Emirates*	0.2%	0.2%	8.6%	8.6%
<b>Total-Other</b>	<b>2.5%</b>	<b>2.7%</b>	<b>3.6%</b>	<b>4.4%</b>
<b>Totals</b>				
Developed	76.6%	74.0%	10.9%	10.6%
Emerging*	21.7%	26.0%	8.6%	10.0%
Cash	1.7%		0.6%	



# SSGA ACWI EX US

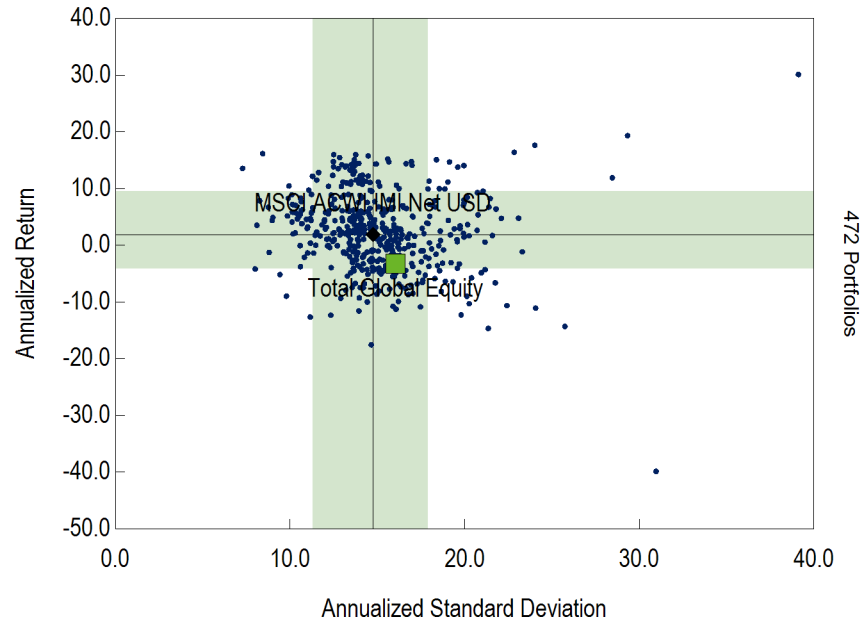
International Equity Performance Attribution									
Versus MSCI ACWI ex USA - Quarter Ending March 31, 2019									
Returns and Weights					Attribution Effects				Total Effects
Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect		
<b>Europe</b>									
Austria	8.9%	8.5%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Belgium	9.8%	16.2%	0.6%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%
Czech Republic*	6.6%	3.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Denmark	3.4%	13.2%	1.2%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Finland	8.3%	8.4%	0.7%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%
France	5.8%	10.8%	7.2%	7.5%	0.0%	0.0%	0.0%	0.0%	0.0%
Germany	7.0%	7.1%	5.8%	5.9%	0.0%	0.0%	0.0%	0.0%	0.0%
Greece*	5.5%	13.3%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Hungary*	5.6%	6.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Ireland	3.3%	11.6%	0.2%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Italy	8.3%	14.8%	1.5%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%
Luxembourg	6.9%	7.6%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Netherlands	6.5%	13.6%	2.9%	2.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Norway	6.4%	7.2%	0.5%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%
Poland*	5.3%	-0.6%	0.3%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Portugal	5.0%	10.2%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Russia*	11.5%	12.5%	0.3%	0.9%	0.0%	0.0%	-0.1%	0.0%	-0.1%
Spain	6.6%	6.9%	2.1%	2.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Sweden	5.8%	7.9%	1.8%	1.8%	0.0%	0.0%	0.0%	0.0%	0.0%
Switzerland	6.2%	13.6%	5.7%	5.9%	0.0%	0.0%	0.0%	0.0%	0.0%
United Kingdom	7.2%	11.9%	10.5%	11.5%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Americas</b>									
Brazil*	17.6%	8.0%	1.9%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Canada	13.1%	15.6%	6.4%	6.5%	0.0%	0.0%	0.0%	0.0%	0.0%
Chile*	12.2%	4.3%	0.3%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Colombia*	13.5%	24.8%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Mexico*	9.8%	5.6%	0.7%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%
Peru*	7.4%	11.2%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
United States	11.9%	-0.4%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

International Equity Performance Attribution									
Versus MSCI ACWI ex USA - Quarter Ending March 31, 2019									
Returns and Weights					Attribution Effects				Total Effects
Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect		
<b>AsiaPacific</b>									
Australia	7.3%	11.5%	4.6%	4.7%	0.0%	0.0%	0.0%	0.0%	0.0%
China*	13.0%	17.9%	4.3%	7.9%	0.2%	-0.2%	0.0%	-0.1%	-0.1%
Hong Kong	8.5%	15.6%	5.7%	2.6%	0.0%	0.1%	0.0%	0.0%	0.1%
India*	-1.9%	7.1%	2.5%	2.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Indonesia*	8.6%	4.2%	0.6%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%
Japan	6.2%	6.7%	16.6%	16.6%	0.0%	0.0%	0.0%	0.0%	0.0%
Korea*	10.3%	4.7%	3.6%	3.6%	0.0%	0.0%	0.0%	0.0%	0.0%
Malaysia*	1.4%	0.4%	0.6%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%
New Zealand	5.8%	16.7%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Pakistan*	16.4%	8.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Philippines*	8.6%	7.9%	0.3%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Singapore	5.3%	6.2%	1.1%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%
Taiwan*	1.7%	9.0%	2.9%	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Thailand*	7.5%	7.5%	0.6%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Other</b>									
Egypt*	10.6%	16.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Israel	12.2%	10.7%	0.3%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Qatar*	3.7%	-3.6%	0.3%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
South Africa*	12.3%	4.3%	1.6%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%
Turkey*	17.9%	-3.1%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
United Arab Emirates*	3.3%	8.7%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Totals</b>									
Developed	7.3%	10.6%	76.7%	74.0%	0.1%	0.0%	0.0%	0.0%	0.1%
Emerging*	8.5%	9.9%	21.6%	26.0%	-0.1%	0.0%	-0.1%	0.0%	-0.2%
Cash	0.2%	--	1.7%	0.0%	0.0%	-0.1%	0.0%	0.0%	-0.1%



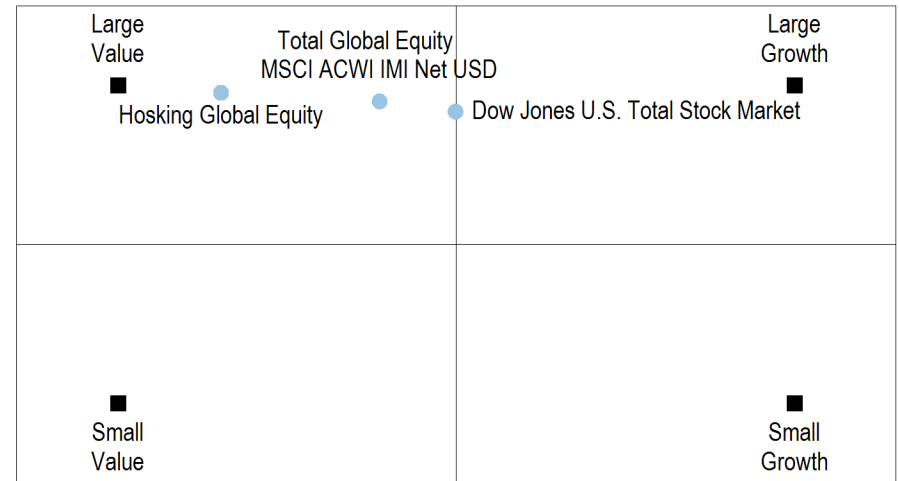
# TOTAL GLOBAL EQUITY

Annualized Return vs. Annualized Standard Deviation  
1 Year Ending March 31, 2019



- Total Global Equity
- ◆ MSCI ACWI IMI Net USD
- 68% Confidence Interval
- eV All Global Equity Net

U.S. Effective Style Map  
1 Year Ending March 31, 2019



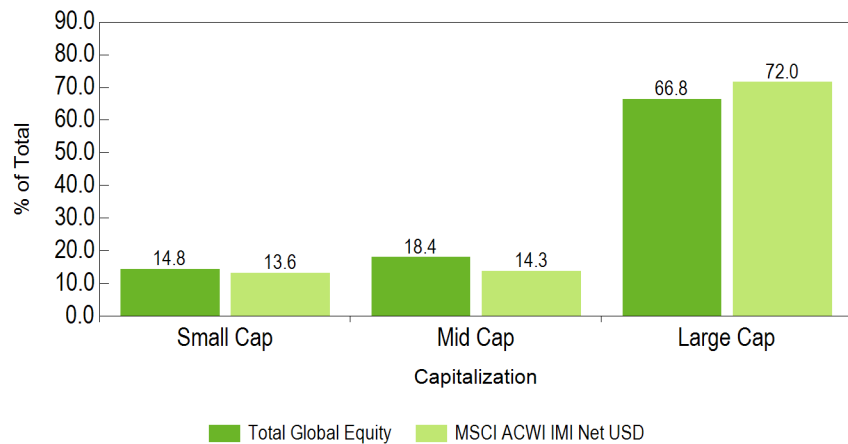
# TOTAL GLOBAL EQUITY

Characteristics		
	Portfolio	MSCI ACWI IMI Net USD
Number of Holdings	530	8,659
Weighted Avg. Market Cap. (\$B)	96.26	122.66
Median Market Cap. (\$B)	9.04	1.77
Price To Earnings	19.29	17.06
Price To Book	3.18	2.75
Price To Sales	1.52	1.45
Return on Equity (%)	19.25	18.50
Yield (%)	1.58	2.49
Beta		1.00

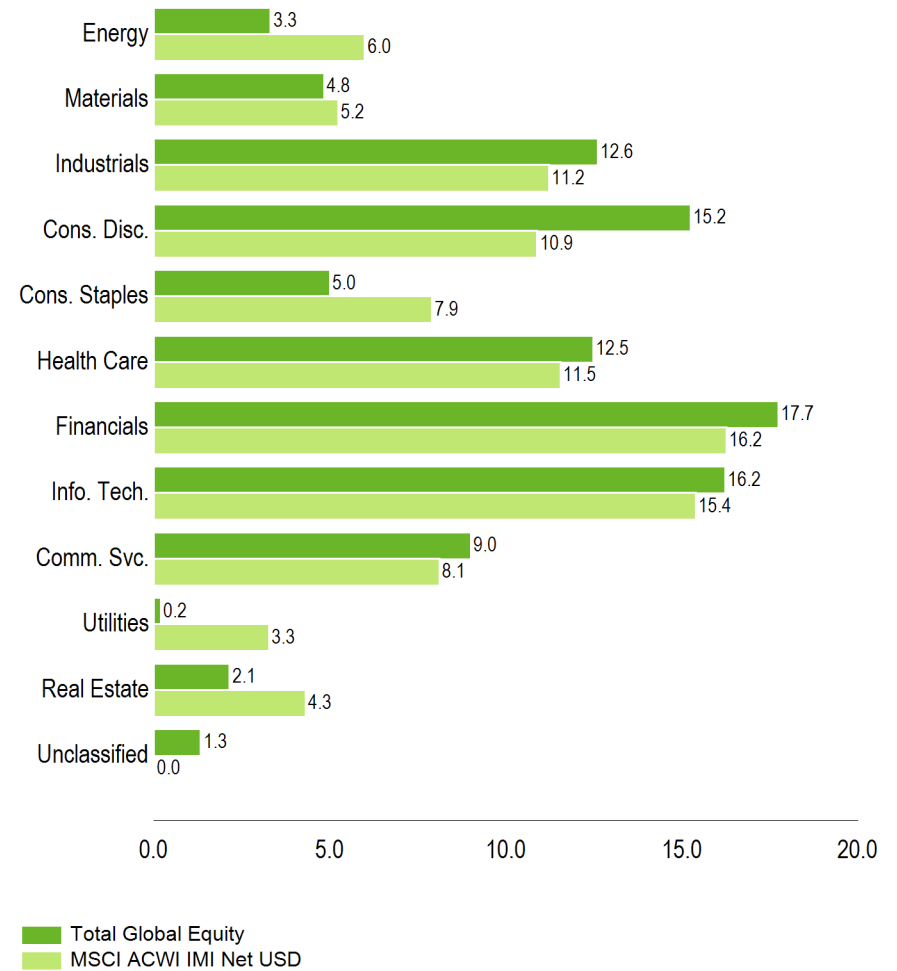
  

	Portfolio Q1-19	Index Q1-19
Region Weighting		
Americas	53.80	59.31
Europe	26.79	19.59
Asia/Pacific	17.79	19.94
Other	1.62	1.15

## Market Capitalization As of March 31, 2019



## Sector Allocation (%) vs MSCI ACWI IMI Net USD



# TOTAL GLOBAL EQUITY

Top Ten Holdings	
IHS MARKIT	3.5%
BANK OF AMERICA	3.1%
VISA 'A'	2.4%
AMAZON.COM	2.2%
TECHTRONIC INDS.	2.2%
ASTRAZENECA	2.0%
WORLDPAY A	1.8%
BOSTON SCIENTIFIC	1.8%
ANTHEM	1.7%
TENCENT HOLDINGS	1.6%

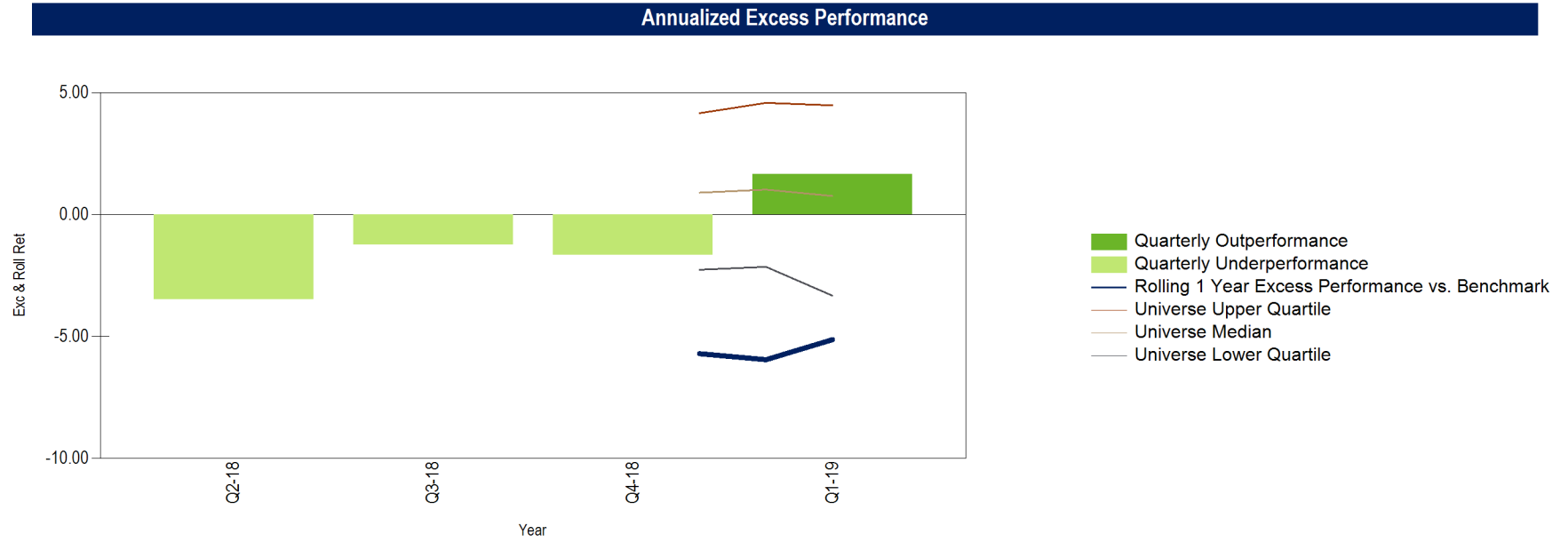
Top Positive Contributors		
	Relative Contribution %	Return %
WORLDPAY A	0.5%	48.5%
TECHTRONIC INDS.	0.5%	26.5%
IHS MARKIT	0.5%	13.4%
VISA 'A'	0.4%	18.6%
FEVERTREE DRINKS	0.4%	40.5%
PROGRESSIVE OHIO	0.3%	24.1%
GENESIS HEALTHCARE 'A'	0.3%	22.0%
TEMENOS N	0.3%	23.2%
PAGSEGURO DIGITAL A	0.3%	59.4%
BANK OF AMERICA	0.3%	12.6%

Top Negative Contributors		
	Relative Contribution %	Return %
MICROSOFT	-0.2%	16.6%
ALIBABA GROUP HLDG.SPN. ADR 1:1	-0.1%	33.1%
TENCENT HOLDINGS	-0.1%	14.7%
INTEL	-0.1%	15.1%
BRITISH AMERICAN TOBACCO	-0.1%	32.8%
PHILIP MORRIS INTL.	0.0%	34.1%
MONTAUK HOLDINGS	0.0%	-45.9%
ROCHE HOLDING	0.0%	15.1%
JARDINE MATHESON HDG.	0.0%	-8.6%
BROADCOM	0.0%	19.3%

Equity Sector Attribution											
	Attribution Effects				Returns			Sector Weights			
	Total Effects	Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark			
Energy	-0.1%	-0.1%	0.0%	0.0%	12.1%	14.7%	3.8%	5.9%			
Materials	0.4%	0.5%	0.0%	0.0%	20.4%	11.0%	4.7%	5.2%			
Industrials	-0.4%	-0.4%	0.0%	0.0%	10.3%	13.6%	12.3%	11.1%			
Consumer Discretionary	0.3%	0.2%	0.0%	0.1%	15.0%	13.0%	13.0%	10.9%			
Consumer Staples	0.2%	0.2%	0.0%	0.0%	14.8%	11.1%	5.7%	8.0%			
Health Care	0.7%	0.7%	0.0%	0.0%	15.2%	9.2%	12.4%	11.9%			
Financials	0.5%	0.5%	0.0%	0.0%	11.7%	8.4%	17.1%	16.9%			
Information Technology	0.6%	0.7%	-0.1%	-0.1%	24.1%	19.2%	13.8%	14.6%			
Communication Services	-0.3%	-0.2%	0.0%	-0.1%	8.6%	11.6%	10.3%	8.0%			
Utilities	0.0%	-0.6%	0.1%	0.5%	-6.9%	10.1%	0.2%	3.3%			
Real Estate	-0.1%	0.0%	-0.1%	0.0%	15.8%	15.7%	2.3%	4.2%			
Cash	-0.5%	0.0%	-0.5%	0.0%	0.6%	--	4.5%	0.0%			
<b>Portfolio</b>	<b>1.4%</b>	<b>=</b>	<b>1.5%</b>	<b>+</b>	<b>-0.6%</b>	<b>+</b>	<b>0.5%</b>	<b>13.9%</b>	<b>12.5%</b>	<b>100.0%</b>	<b>100.0%</b>



# TOTAL GLOBAL EQUITY





# TOTAL GLOBAL EQUITY

Total Global Equity Performance Attribution vs. MSCI ACWI IMI Net USD  
Quarter Ending March 31, 2019



	Returns and Weights				Attribution Effects				
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	Total Effects
<b>Totals</b>									
Americas	15.5%	14.1%	53.3%	58.1%	0.8%	-0.1%	-0.1%	-0.1%	0.6%
Europe	14.7%	11.1%	21.3%	20.0%	0.6%	0.0%	0.2%	0.0%	0.7%
Asia/Pacific	12.1%	9.6%	19.0%	20.6%	0.5%	0.0%	0.0%	0.0%	0.5%
Other	10.5%	4.9%	1.9%	1.3%	0.1%	0.0%	0.0%	0.0%	0.1%
Cash	0.6%	--	4.5%	0.0%	0.0%	-0.5%	0.0%	0.0%	-0.5%
<b>Total</b>	<b>13.9%</b>	<b>12.5%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>1.9%</b>	<b>-0.6%</b>	<b>0.1%</b>	<b>0.0%</b>	<b>1.4%</b>
<b>Totals</b>									
Developed	15.3%	12.9%	82.1%	88.3%	2.1%	0.0%	0.1%	-0.1%	2.0%
Emerging*	9.7%	9.7%	13.3%	11.7%	0.0%	0.0%	0.0%	0.0%	0.0%
Frontier**	-6.4%	--	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cash	0.6%	--	4.5%	0.0%	0.0%	-0.5%	0.0%	0.0%	-0.5%



# TOTAL GLOBAL EQUITY

Country Allocation				
	Manager	Index	Manager	Index
	Allocation (USD)	Allocation (USD)	Return (USD)	Return (USD)
<b>Americas</b>				
Brazil*	2.0%	0.9%	7.1%	8.1%
Canada	1.2%	3.0%	10.6%	15.4%
Colombia*	0.1%	0.0%	32.0%	25.4%
Mexico*	0.5%	0.3%	3.4%	6.3%
United States	49.6%	53.7%	16.0%	14.2%
<b>Total-Americas</b>	<b>53.3%</b>	<b>58.1%</b>	<b>15.5%</b>	<b>14.1%</b>
<b>Europe</b>				
Austria	0.1%	0.1%	10.8%	8.6%
Belgium	0.6%	0.3%	9.7%	15.1%
Denmark	0.7%	0.6%	5.9%	12.8%
Finland	0.2%	0.4%	9.4%	9.5%
France	0.9%	3.1%	5.2%	10.8%
Germany	0.7%	2.6%	8.8%	7.7%
Greece*	0.4%	0.0%	-0.5%	16.0%
Hungary*	0.1%	0.0%	9.3%	5.7%
Ireland	0.3%	0.2%	-4.9%	11.2%
Italy	1.1%	0.8%	2.9%	14.4%
Luxembourg	0.2%	0.0%	18.5%	12.5%
Netherlands	1.4%	1.0%	19.1%	13.3%
Norway	0.1%	0.3%	3.1%	8.7%
Russia*	1.2%	0.4%	9.5%	12.3%
Spain	0.6%	1.0%	4.1%	6.9%
Sweden	0.3%	1.0%	8.6%	8.2%
Switzerland	3.1%	2.6%	20.8%	13.3%
United Kingdom	9.1%	5.4%	18.9%	12.4%
<b>Total-Europe</b>	<b>21.3%</b>	<b>20.0%</b>	<b>14.7%</b>	<b>11.1%</b>

Country Allocation				
	Manager	Index	Manager	Index
	Allocation (USD)	Allocation (USD)	Return (USD)	Return (USD)
<b>AsiaPacific</b>				
Australia	1.4%	2.2%	9.0%	11.8%
China*	1.0%	3.3%	13.8%	17.8%
Hong Kong	4.5%	1.1%	9.1%	15.2%
India*	2.4%	1.2%	-5.5%	6.6%
Indonesia*	0.0%	0.3%	67.4%	4.1%
Japan	4.9%	8.0%	6.9%	6.8%
Korea*	1.2%	1.7%	17.0%	4.4%
Malaysia*	0.6%	0.3%	4.8%	2.0%
Philippines*	0.5%	0.1%	10.0%	8.2%
Singapore	1.0%	0.4%	0.8%	8.3%
Sri Lanka**	0.1%	0.0%	0.2%	1.8%
Taiwan*	0.5%	1.4%	1.5%	9.6%
Thailand*	0.8%	0.3%	5.7%	7.9%
<b>Total-AsiaPacific</b>	<b>19.0%</b>	<b>20.5%</b>	<b>6.5%</b>	<b>9.6%</b>
<b>Other</b>				
South Africa*	1.3%	0.7%	13.9%	4.1%
Turkey*	0.6%	0.1%	16.5%	-2.7%
<b>Total-Other</b>	<b>1.9%</b>	<b>1.3%</b>	<b>14.7%</b>	<b>4.9%</b>
<b>Totals</b>				
Developed	82.1%	88.3%	9.6%	12.8%
Emerging*	13.3%	11.7%	8.8%	9.7%
Frontier**	0.1%	0.0%	0.2%	--
Cash	4.5%		0.2%	



# TOTAL GLOBAL EQUITY

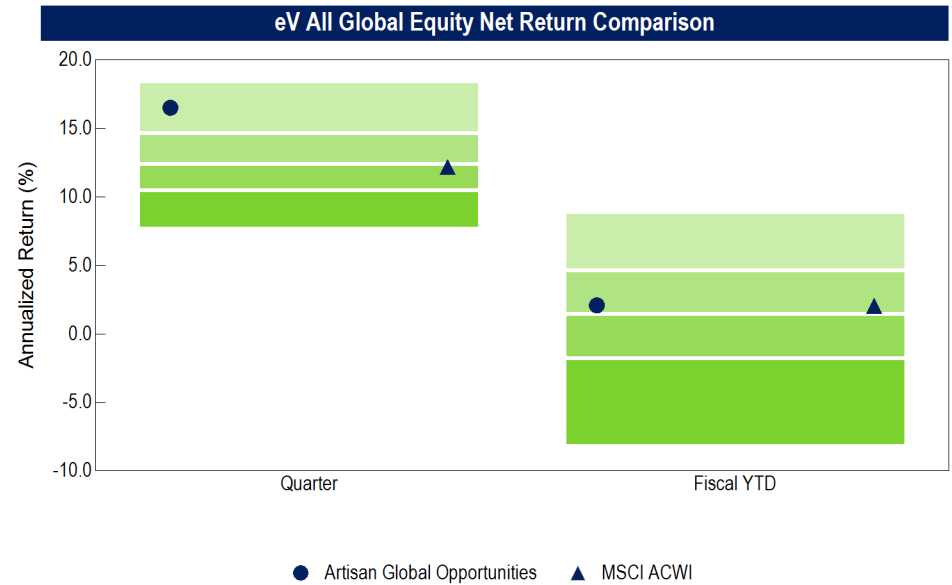
Global Equity Performance Attribution									
Versus MSCI ACWI IMI Net USD - Quarter Ending March 31, 2019									
Returns and Weights					Attribution Effects				
Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	Total Effects	
<b>Europe</b>									
Austria	5.0%	8.6%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Belgium	5.2%	15.0%	0.6%	0.3%	0.1%	0.0%	0.0%	0.0%	0.1%
Czech Republic*	--	4.8%	0.0%	0.0%	--	0.0%	0.0%	--	0.0%
Denmark	7.8%	12.9%	0.7%	0.6%	-0.1%	0.0%	0.0%	0.0%	-0.1%
Finland	10.7%	9.5%	0.2%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%
France	7.3%	10.8%	0.9%	3.1%	-0.2%	-0.2%	0.0%	0.1%	-0.2%
Germany	7.7%	7.7%	0.7%	2.6%	-0.1%	-0.1%	0.0%	0.0%	0.0%
Greece*	4.3%	16.4%	0.4%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%
Hungary*	2.6%	5.7%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Ireland	2.5%	11.5%	0.3%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Italy	0.5%	14.5%	1.1%	0.8%	0.2%	0.0%	0.0%	0.1%	0.3%
Luxembourg	15.8%	8.2%	0.2%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.1%
Netherlands	11.4%	13.4%	1.4%	1.0%	-0.2%	0.0%	0.0%	-0.1%	-0.2%
Norway	4.9%	8.7%	0.1%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Poland*	--	-0.1%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Portugal	--	8.6%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Russia*	11.7%	12.4%	1.2%	0.4%	0.0%	0.0%	0.0%	0.0%	-0.1%
Spain	7.4%	6.9%	0.6%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%
Sweden	2.4%	8.2%	0.3%	1.0%	0.1%	0.0%	-0.1%	-0.1%	0.0%
Switzerland	6.7%	13.3%	3.1%	2.5%	0.0%	0.0%	0.0%	0.0%	0.0%
United Kingdom	10.1%	12.4%	9.2%	5.4%	-0.7%	0.5%	-0.2%	-0.5%	-0.9%
<b>Americas</b>									
Brazil*	15.8%	8.0%	2.0%	0.9%	-0.1%	-0.1%	0.1%	-0.1%	-0.3%
Canada	10.3%	15.4%	1.2%	3.0%	0.3%	0.1%	0.3%	-0.2%	0.5%
Chile*	--	4.6%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Colombia*	14.4%	25.5%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Mexico*	10.4%	6.3%	0.5%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Peru*	--	10.6%	0.0%	0.0%	--	0.0%	0.0%	--	0.0%
United States	10.6%	14.2%	49.6%	53.9%	-4.0%	0.2%	0.0%	0.3%	-3.5%

Global Equity Performance Attribution									
Versus MSCI ACWI IMI Net USD - Quarter Ending March 31, 2019									
Returns and Weights					Attribution Effects				
Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	Total Effects	
<b>AsiaPacific</b>									
Australia	9.0%	11.8%	1.4%	2.2%	-0.1%	-0.1%	0.1%	0.0%	-0.1%
China*	13.8%	17.8%	1.0%	3.3%	-0.4%	0.3%	0.0%	0.2%	0.2%
Hong Kong	9.1%	15.2%	4.5%	1.1%	-0.1%	0.0%	0.0%	-0.2%	-0.3%
India*	-5.5%	6.6%	2.4%	1.2%	0.2%	0.4%	0.0%	0.2%	0.7%
Indonesia*	67.4%	4.1%	0.0%	0.3%	-0.6%	0.0%	0.0%	0.6%	0.0%
Japan	6.9%	6.8%	4.9%	8.0%	-0.2%	-0.3%	0.1%	0.1%	-0.3%
Korea*	17.0%	4.4%	1.2%	1.7%	-0.5%	0.0%	0.0%	0.1%	-0.3%
Malaysia*	4.8%	2.0%	0.6%	0.3%	0.0%	0.1%	0.0%	0.0%	0.0%
New Zealand	--	14.3%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Pakistan*	--	4.8%	0.0%	0.0%	--	0.0%	0.0%	--	0.0%
Philippines*	10.0%	8.2%	0.5%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Singapore	0.8%	8.3%	1.0%	0.4%	0.1%	0.0%	0.0%	0.1%	0.2%
Sri Lanka**	0.2%	1.8%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Taiwan*	1.5%	9.6%	0.5%	1.4%	0.0%	-0.2%	0.0%	0.0%	-0.2%
Thailand*	5.7%	7.9%	0.8%	0.3%	0.0%	0.0%	-0.1%	0.1%	0.1%
<b>Other</b>									
Egypt*	--	17.3%	0.0%	0.0%	--	0.0%	0.0%	--	0.0%
Israel	--	12.0%	0.0%	0.2%	--	0.0%	0.0%	--	0.0%
Qatar*	--	-2.3%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
South Africa*	13.9%	4.1%	1.3%	0.7%	0.0%	0.1%	-0.2%	0.0%	-0.2%
Turkey*	16.5%	-2.7%	0.6%	0.1%	0.0%	-0.1%	-0.1%	0.0%	-0.2%
United Arab Emirates*	--	7.8%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
<b>Totals</b>									
Developed	9.6%	12.8%	82.1%	88.3%	-5.2%	0.0%	0.4%	0.4%	-4.4%
Emerging*	8.8%	9.7%	13.3%	11.7%	0.0%	0.0%	-0.3%	0.0%	-0.3%
Frontier**	0.2%	--	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cash	0.2%	--	4.5%	0.0%	0.0%	1.2%	0.0%	0.0%	1.2%

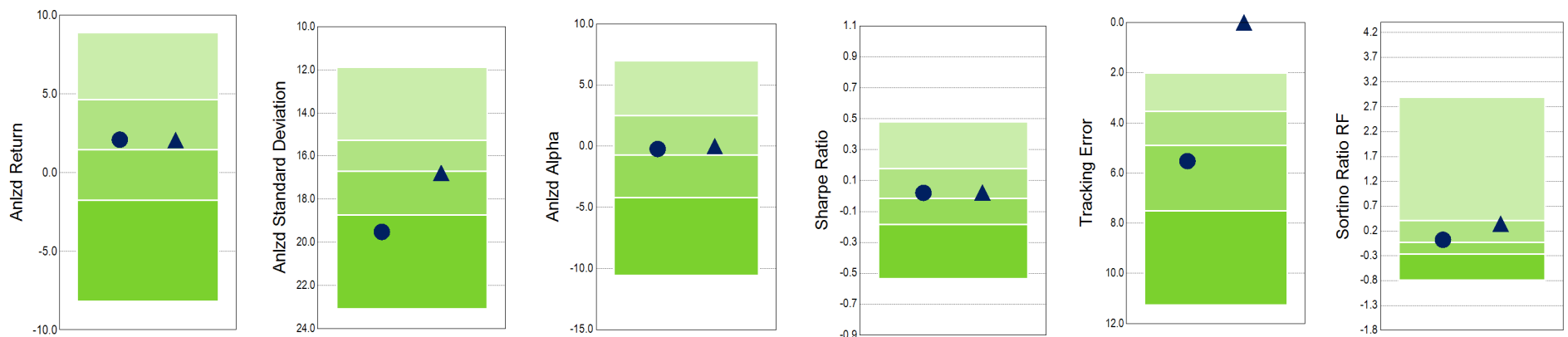


# ARTISAN GLOBAL OPPORTUNITIES

Artisan's Global Opportunities strategy employs a fundamental investment process to construct a diversified global equity portfolio of companies across a broad capitalization range. The team attempts to identify companies that possess franchise characteristics that are selling at attractive valuations and benefiting from an accelerating profit cycle. Artisan's Growth investment team attempts to identify companies that possess franchise characteristics that are selling at attractive valuations, and benefiting from an accelerating profit cycle. The team believes selecting stocks exhibiting franchise characteristics, attractive valuations and accelerating profit cycles, and allowing stocks to progress through the three stages of capital allocation (Garden, Crop, Harvest® investing), increases the likelihood of delivering upside participation with downside protection.

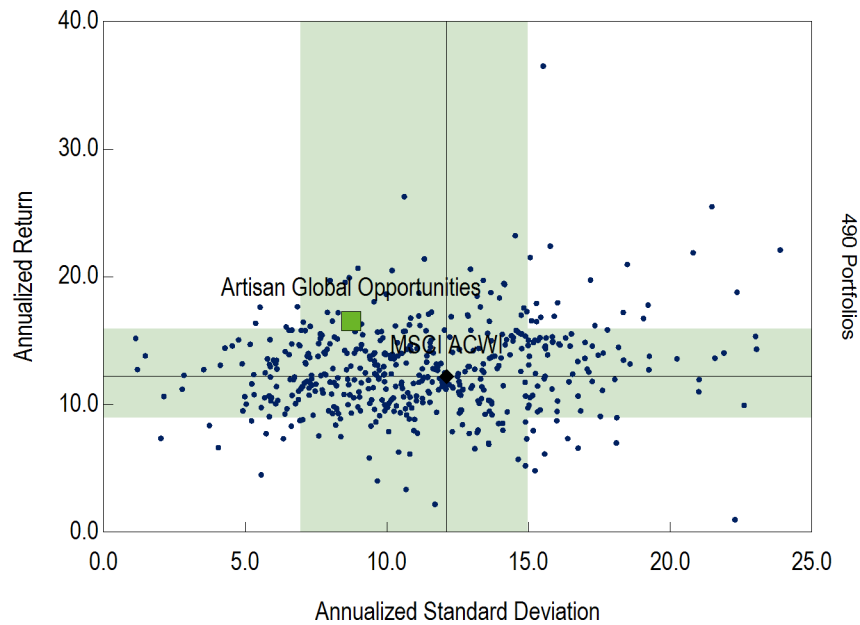


## 3 Month Risk Statistics



# ARTISAN GLOBAL OPPORTUNITIES

Annualized Return vs. Annualized Standard Deviation  
3 Months Ending March 31, 2019

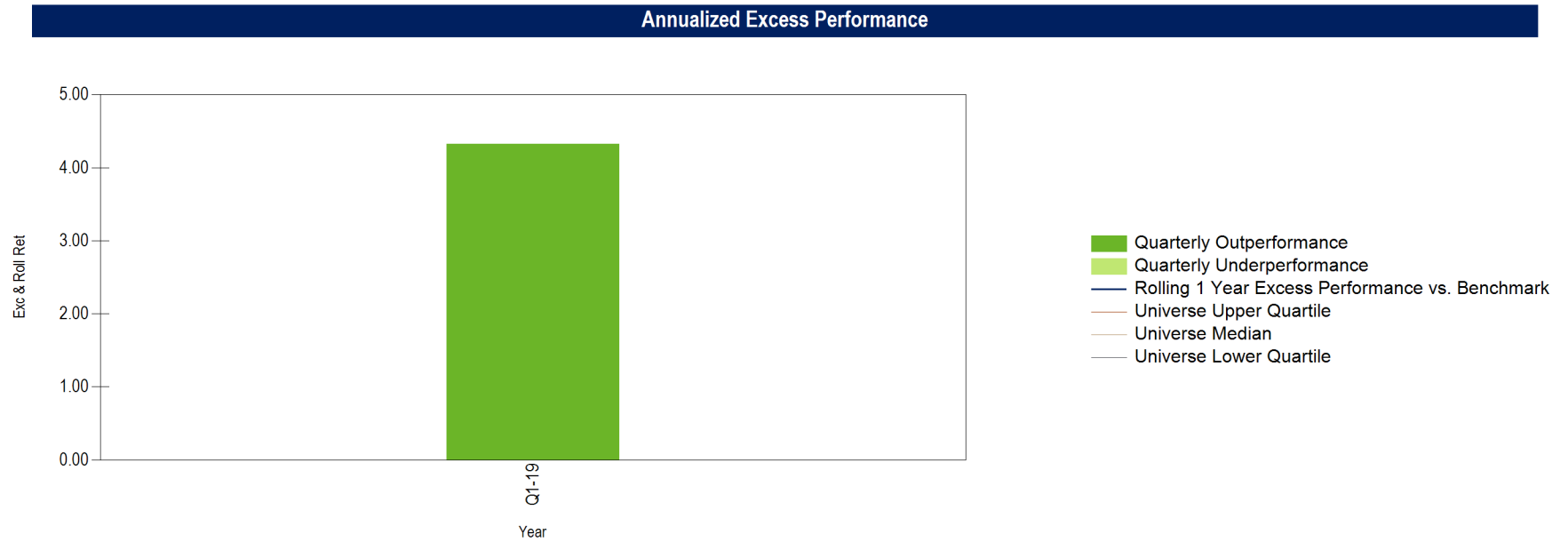


- Artisan Global Opportunities
- ◆ MSCI ACWI
- 68% Confidence Interval
- eV All Global Equity Net

U.S. Effective Style Map  
3 Months Ending March 31, 2019



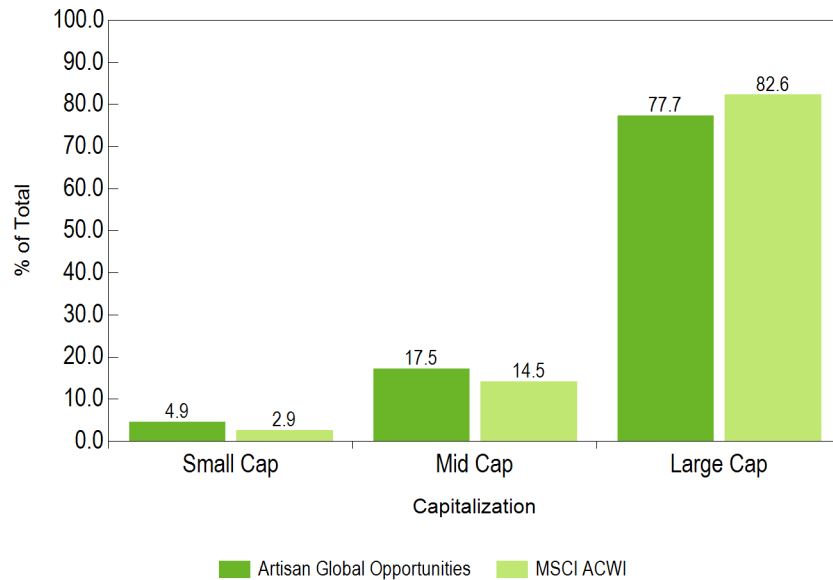
# ARTISAN GLOBAL OPPORTUNITIES



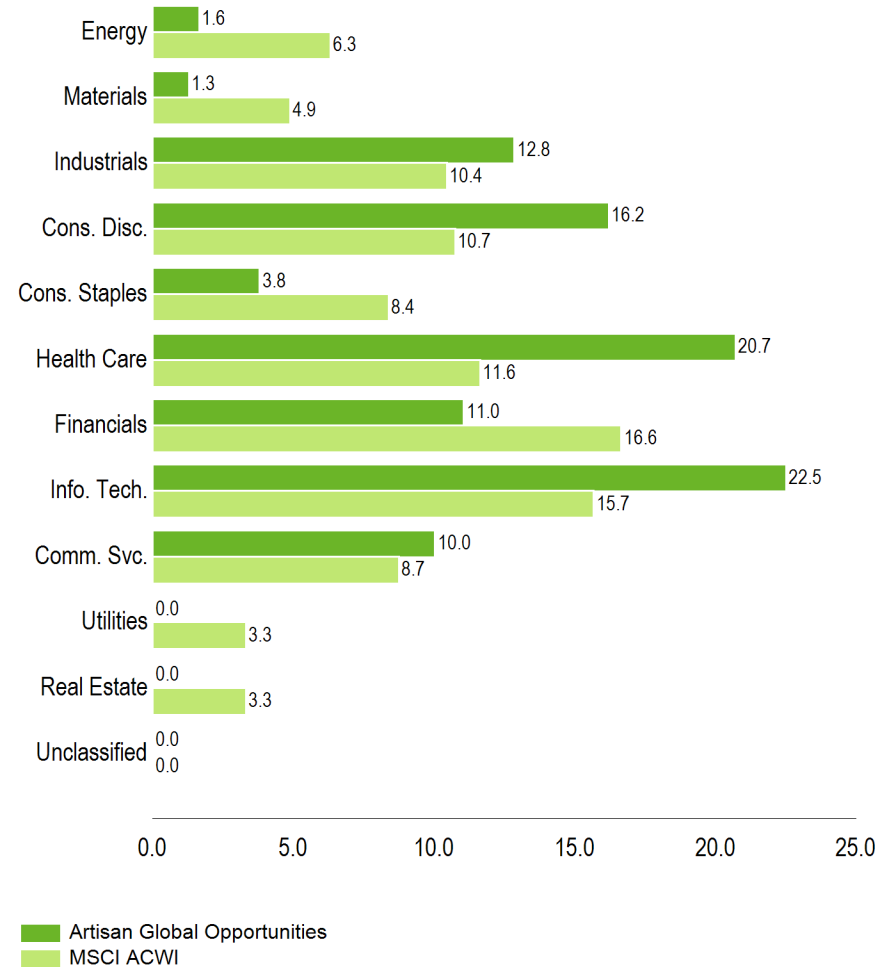
# ARTISAN GLOBAL OPPORTUNITIES

Characteristics		
	Portfolio	MSCI ACWI
Number of Holdings	45	2,768
Weighted Avg. Market Cap. (\$B)	106.47	140.13
Median Market Cap. (\$B)	28.07	9.41
Price To Earnings	31.44	17.12
Price To Book	4.60	2.82
Price To Sales	2.96	1.54
Return on Equity (%)	22.24	20.08
Yield (%)	0.96	2.53
Beta		1.00
R-Squared		1.00

## Market Capitalization As of March 31, 2019



## Sector Allocation (%) vs MSCI ACWI



# ARTISAN GLOBAL OPPORTUNITIES

Characteristics		
	Portfolio	MSCI ACWI
Number of Holdings	45	2,768
Weighted Avg. Market Cap. (\$B)	106.5	140.1
Median Market Cap. (\$B)	28.1	9.4
Price To Earnings	31.4	17.1
Price To Book	4.6	2.8
Price To Sales	3.0	1.5
Return on Equity (%)	22.2	20.1
Yield (%)	1.0	2.5
Beta		1.0
R-Squared		1.0

Top Positive Contributors		
	Relative Contribution %	Return %
WORLDPAY A (WP)	1.0%	48.5%
TECHTRONIC INDS. (K:TRON)	0.9%	26.5%
IHS MARKIT (INFO)	0.9%	13.4%
VISA 'A' (V)	0.9%	18.6%
FEVERTREE DRINKS (UKIR:FEVR)	0.7%	40.5%
PROGRESSIVE OHIO (PGR)	0.6%	24.1%
GENESIS HEALTHCARE 'A' (GEN)	0.6%	22.0%
TEMENOS N (S:TEMN)	0.5%	23.2%
PAGSEGURO DIGITAL A (PAGS)	0.5%	59.4%
LONZA GROUP (S:LONN)	0.5%	20.0%

Top Negative Contributors		
	Relative Contribution %	Return %
MICROSOFT (MSFT)	-0.3%	16.6%
AMAZON.COM (AMZN)	-0.1%	18.6%
TENCENT HOLDINGS (K:TCNT)	-0.1%	14.7%
ASTRAZENECA (UKIR:AZN)	0.0%	9.4%
ALEXION PHARMS. (ALXN)	0.0%	38.8%
ACTIVISION BLIZZARD (ATVI)	0.0%	-1.4%
AMADEUS IT GROUP (E:AMS)	0.0%	16.0%
VIVENDI (F:EX@F)	0.0%	19.2%
APTIV (APTIV)	0.0%	29.5%
LONDON STOCK EX.GROUP (UKIR:LSE)	0.0%	19.7%

Artisan Global Opportunities Performance Attribution vs. MSCI ACWI											
	Total Effects	Attribution Effects				Returns		Sector Weights			
		Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark			
Energy	-0.5%	0.1%	-0.5%	-0.1%	16.0%	14.3%	2.7%	6.2%			
Materials	-0.4%	0.1%	-0.4%	-0.1%	11.6%	11.1%	1.1%	4.8%			
Industrials	0.4%	0.1%	0.2%	0.0%	15.4%	13.9%	11.9%	10.3%			
Consumer Discretionary	0.8%	0.6%	0.1%	0.1%	19.1%	13.3%	11.7%	10.7%			
Consumer Staples	0.0%	0.6%	-0.4%	-0.1%	19.5%	11.5%	5.2%	8.5%			
Health Care	2.3%	0.9%	0.8%	0.7%	15.6%	8.2%	21.3%	12.1%			
Financials	0.0%	1.3%	-0.7%	-0.6%	15.7%	8.3%	9.2%	17.3%			
Information Technology	2.2%	1.2%	0.7%	0.3%	26.8%	18.9%	18.6%	14.9%			
Communication Services	0.0%	-0.3%	0.4%	-0.1%	8.0%	11.5%	11.9%	8.6%			
Utilities	-0.3%	--	-0.3%	--	--	10.1%	0.0%	3.4%			
Real Estate	-0.5%	--	-0.5%	--	--	16.3%	0.0%	3.2%			
Cash	0.0%	0.0%	0.0%	0.0%	0.6%	--	6.4%	0.0%			
<b>Portfolio</b>	<b>4.0%</b>	<b>=</b>	<b>4.6%</b>	<b>+</b>	<b>-0.5%</b>	<b>+</b>	<b>0.0%</b>	<b>16.4%</b>	<b>12.4%</b>	<b>100.0%</b>	<b>100.0%</b>





# ARTISAN GLOBAL OPPORTUNITIES

Country Allocation				
	Manager	Index	Manager	Index
	Allocation (USD)	Allocation (USD)	Return (USD)	Return (USD)
<b>Americas</b>				
Brazil*	2.5%	0.9%	1.2%	8.2%
United States	58.0%	54.2%	18.2%	14.0%
<b>Total-Americas</b>	<b>60.5%</b>	<b>58.6%</b>	<b>17.6%</b>	<b>13.9%</b>
<b>Europe</b>				
Belgium	1.1%	0.3%	11.6%	16.2%
Denmark	0.5%	0.5%	11.7%	13.2%
Netherlands	2.5%	1.1%	20.8%	13.6%
Switzerland	5.4%	2.7%	21.5%	13.6%
United Kingdom	6.8%	5.3%	19.1%	11.9%
<b>Total-Europe</b>	<b>16.3%</b>	<b>20.0%</b>	<b>19.4%</b>	<b>10.9%</b>

Country Allocation				
	Manager	Index	Manager	Index
	Allocation (USD)	Allocation (USD)	Return (USD)	Return (USD)
<b>AsiaPacific</b>				
Australia	2.1%	2.2%	3.0%	11.5%
Hong Kong	5.5%	1.2%	24.0%	15.6%
India*	2.8%	1.1%	11.9%	7.1%
Japan	6.3%	7.6%	14.2%	6.8%
<b>Total-AsiaPacific</b>	<b>16.7%</b>	<b>20.2%</b>	<b>15.6%</b>	<b>9.8%</b>
<b>Totals</b>				
Developed	88.2%	88.1%	18.2%	12.7%
Emerging*	5.3%	11.9%	6.9%	10.0%
Cash	6.5%		0.6%	



# ARTISAN GLOBAL OPPORTUNITIES

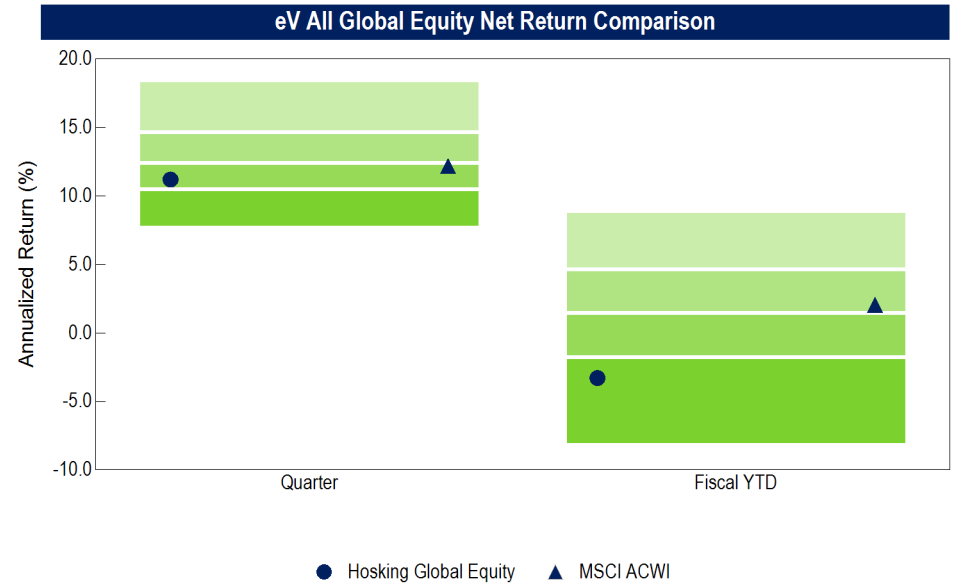
International Equity Performance Attribution Versus MSCI ACWI - Quarter Ending March 31, 2019									
	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
<b>Europe</b>									
Austria	--	8.5%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Belgium	6.1%	16.2%	1.1%	0.3%	0.0%	-0.1%	0.0%	0.1%	0.1%
Czech Republic*	--	3.8%	0.0%	0.0%	--	0.0%	0.0%	--	0.0%
Denmark	9.7%	13.2%	0.5%	0.5%	-0.1%	0.0%	0.0%	0.0%	-0.1%
Finland	--	8.4%	0.0%	0.3%	--	0.0%	0.0%	--	0.0%
France	--	10.8%	0.0%	3.4%	--	-0.2%	0.1%	--	-0.2%
Germany	--	7.1%	0.0%	2.7%	--	-0.1%	0.0%	--	-0.1%
Greece*	--	13.3%	0.0%	0.0%	--	0.0%	0.0%	--	0.0%
Hungary*	--	6.0%	0.0%	0.0%	--	0.0%	0.0%	--	0.0%
Ireland	--	11.6%	0.0%	0.2%	--	0.0%	0.0%	--	0.0%
Italy	--	14.8%	0.0%	0.7%	--	0.0%	0.0%	--	0.0%
Netherlands	12.5%	13.6%	2.5%	1.1%	-0.2%	0.0%	0.0%	-0.3%	-0.5%
Norway	--	7.2%	0.0%	0.2%	--	0.0%	0.0%	--	0.0%
Poland*	--	-0.6%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Portugal	--	10.2%	0.0%	0.0%	--	0.0%	0.0%	--	0.0%
Russia*	--	12.5%	0.0%	0.4%	--	0.0%	0.1%	--	0.1%
Spain	--	6.9%	0.0%	1.0%	--	0.0%	0.0%	--	0.0%
Sweden	--	7.9%	0.0%	0.8%	--	0.0%	-0.1%	--	0.0%
Switzerland	7.2%	13.6%	5.4%	2.7%	-0.1%	0.0%	0.1%	-0.1%	-0.1%
United Kingdom	5.3%	11.9%	6.8%	5.2%	0.0%	0.2%	0.2%	0.0%	0.5%
<b>Americas</b>									
Brazil*	12.3%	8.0%	2.5%	0.9%	-0.1%	-0.2%	0.2%	-0.1%	-0.1%
Canada	--	15.6%	0.0%	3.0%	--	0.2%	0.5%	--	0.7%
Chile*	--	4.3%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Colombia*	--	24.8%	0.0%	0.0%	--	0.0%	0.0%	--	0.0%
Mexico*	--	5.6%	0.0%	0.3%	--	0.0%	0.0%	--	0.0%
Peru*	--	11.2%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
United States	11.0%	14.0%	58.0%	54.3%	-5.6%	-0.1%	0.0%	-0.4%	-6.2%

International Equity Performance Attribution Versus MSCI ACWI - Quarter Ending March 31, 2019									
	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
<b>AsiaPacific</b>									
Australia	8.1%	11.5%	2.1%	2.1%	-0.1%	0.0%	0.0%	0.0%	-0.1%
China*	--	17.9%	0.0%	3.6%	--	0.5%	0.0%	--	0.5%
Hong Kong	9.7%	15.6%	5.5%	1.2%	-0.1%	-0.1%	0.0%	-0.3%	-0.5%
India*	-5.2%	7.1%	2.8%	1.1%	0.2%	0.5%	-0.1%	0.3%	0.9%
Indonesia*	--	4.2%	0.0%	0.3%	--	0.0%	0.0%	--	0.0%
Japan	7.2%	6.7%	6.3%	7.6%	-0.3%	-0.1%	0.0%	0.1%	-0.3%
Korea*	--	4.7%	0.0%	1.6%	--	0.2%	0.0%	--	0.2%
Malaysia*	--	0.4%	0.0%	0.3%	--	-0.1%	0.0%	--	-0.1%
New Zealand	--	16.7%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Pakistan*	--	8.5%	0.0%	0.0%	--	0.0%	0.0%	--	0.0%
Philippines*	--	7.9%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Singapore	--	6.2%	0.0%	0.4%	--	0.0%	0.0%	--	0.0%
Taiwan*	--	9.0%	0.0%	1.4%	--	-0.3%	0.0%	--	-0.3%
Thailand*	--	7.5%	0.0%	0.3%	--	0.0%	0.0%	--	0.0%
<b>Other</b>									
Egypt*	--	16.6%	0.0%	0.0%	--	0.0%	0.0%	--	0.0%
Israel	--	10.7%	0.0%	0.2%	--	0.0%	0.0%	--	0.0%
Qatar*	--	-3.6%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
South Africa*	--	4.3%	0.0%	0.7%	--	-0.1%	0.2%	--	0.1%
Turkey*	--	-3.1%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
United Arab Emirates*	--	8.7%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
<b>Totals</b>									
Developed	9.8%	12.7%	88.2%	88.1%	-7.8%	0.0%	1.0%	0.0%	-6.8%
Emerging*	3.0%	9.9%	5.3%	11.9%	1.9%	0.0%	0.7%	-1.1%	1.5%
Cash	0.2%	--	6.5%	0.0%	0.0%	1.8%	0.0%	0.0%	1.8%

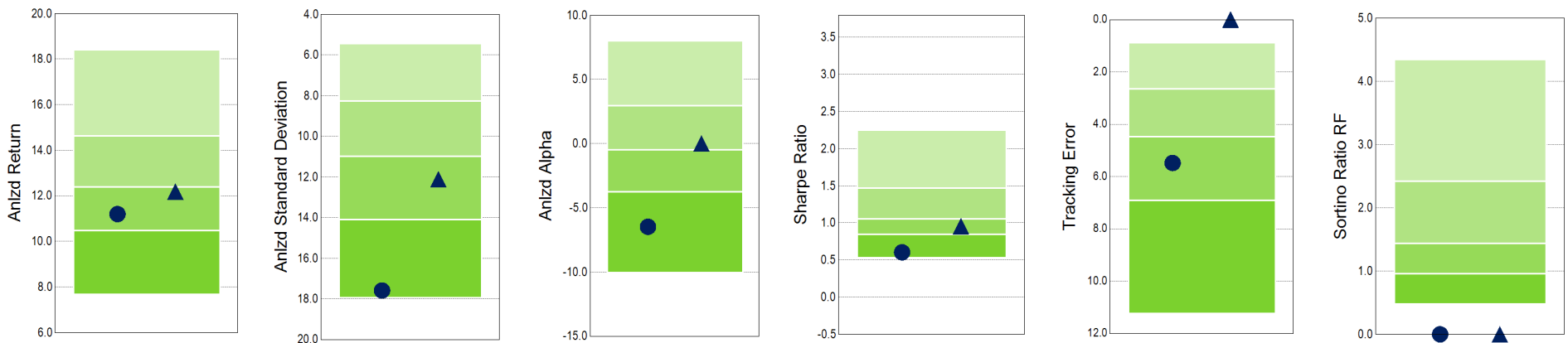


# HOSKING GLOBAL EQUITY

Hosking Partners' investment philosophy is an evolved variant of the 'Capital Cycle' approach. Each of portfolio managers constructs their own global portfolio, with the firm's portfolio being the aggregate of these sub-portfolios. Just as the 'Capital Cycle' drew them towards industries which were consolidating and, in consequence, improving profitability, so the more recently adopted 'filters' reinforce the selection of companies with latent profit and valuation improvement potential. For instance in addition to industrial consolidation, they favour firms with inside ownership (and attendant less liquid capital structures), and those that are suppressing profits or which are for whatever reason out of favour. They use the filters alone or in combinations. Many of the picks are contrarian and often impute to the portfolio a value-bias. However growth companies can also qualify for inclusion thus diluting the value orientation.

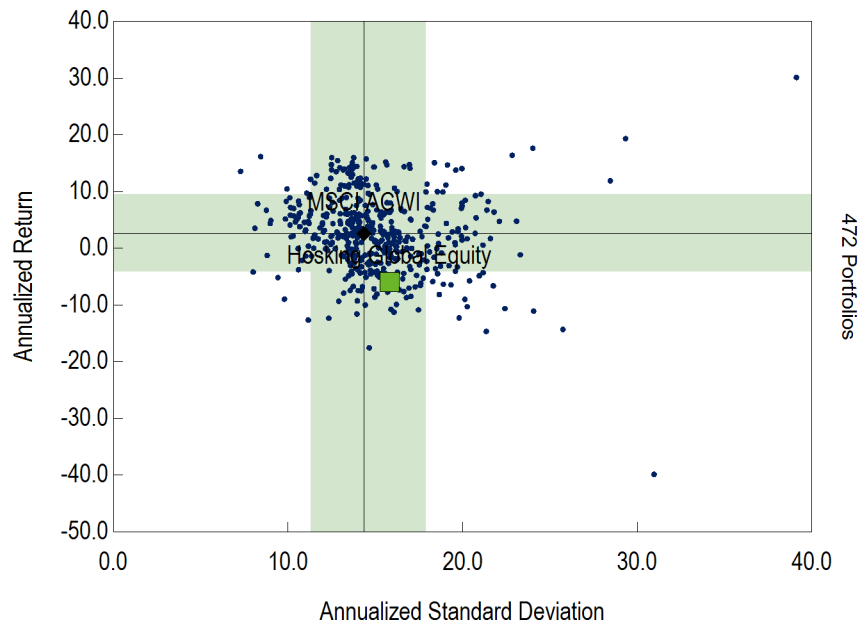


## 3 Month Risk Statistics



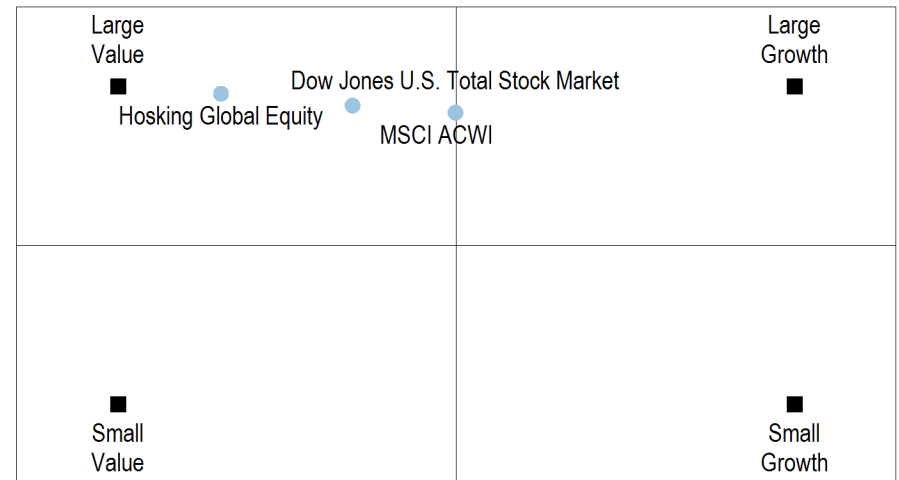
# HOSKING GLOBAL EQUITY

Annualized Return vs. Annualized Standard Deviation  
1 Year Ending March 31, 2019

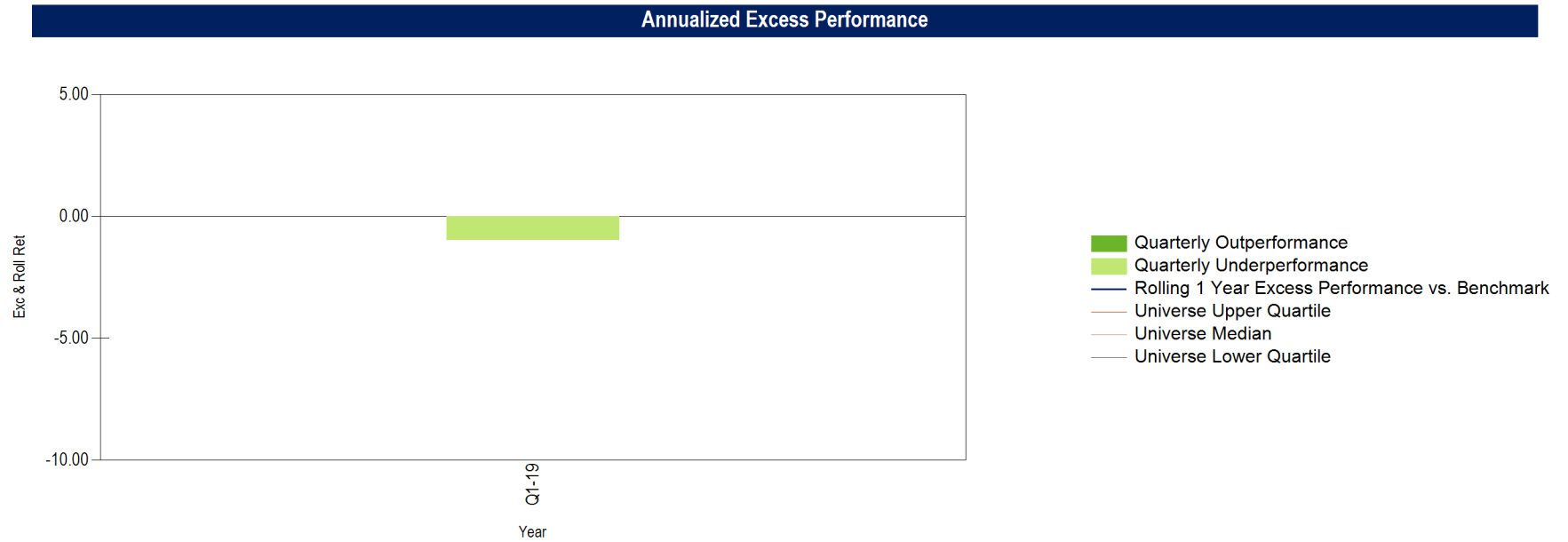


- Hosking Global Equity
- ◆ MSCI ACWI
- 68% Confidence Interval
- eV All Global Equity Net

U.S. Effective Style Map  
1 Year Ending March 31, 2019

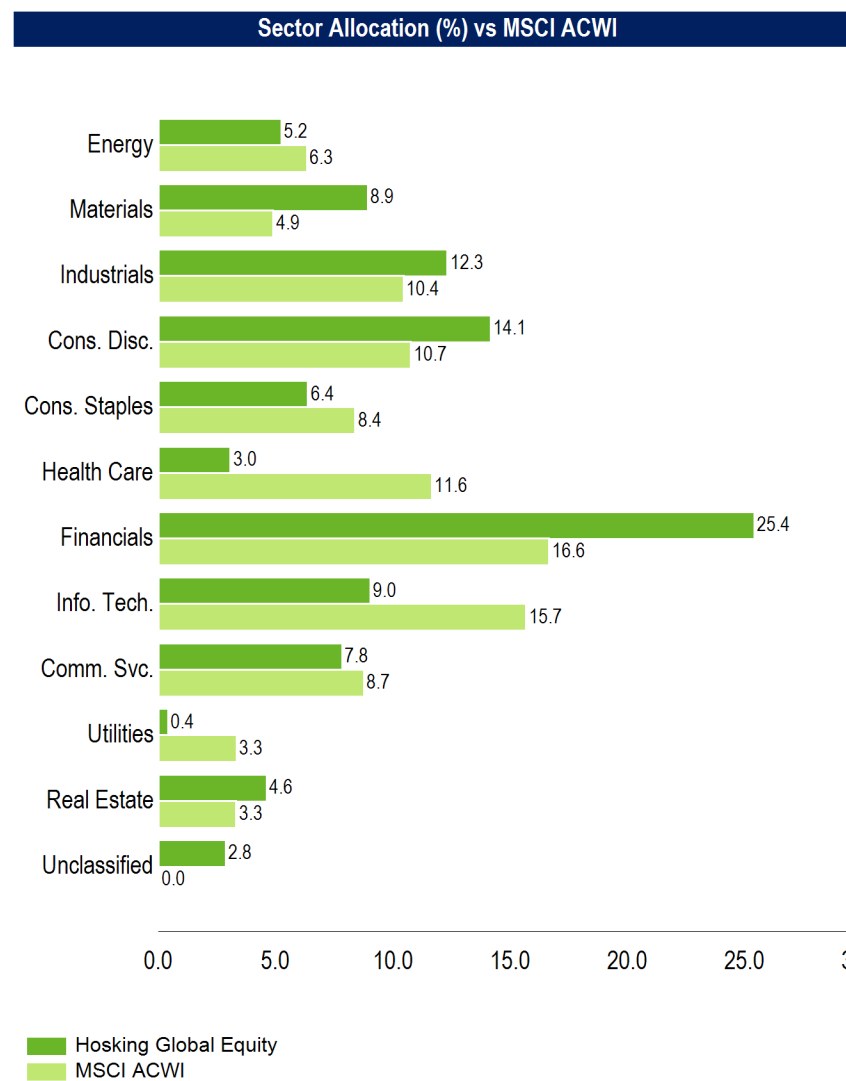
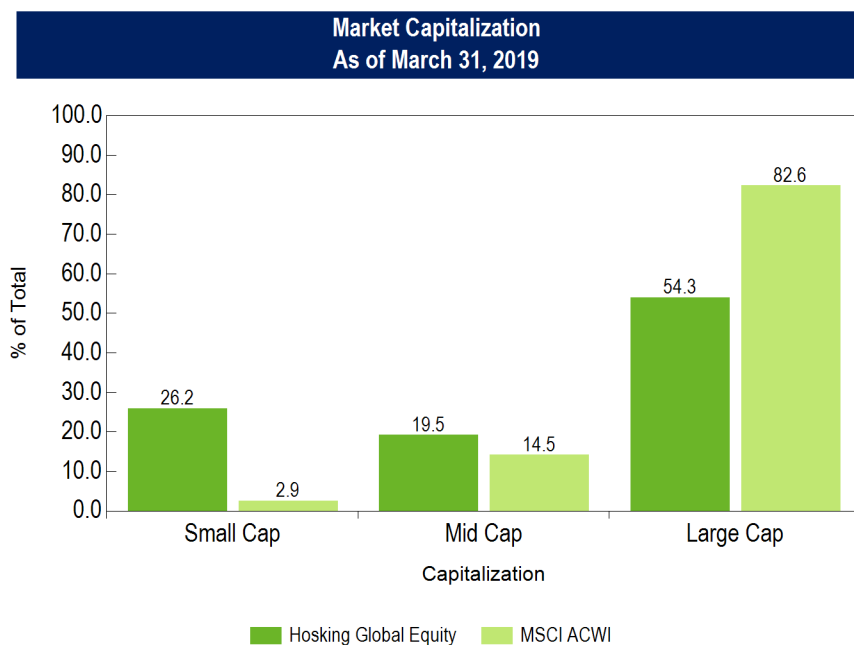


# HOSKING GLOBAL EQUITY



# HOSKING GLOBAL EQUITY

Characteristics		
	Portfolio	MSCI ACWI
Number of Holdings	493	2,768
Weighted Avg. Market Cap. (\$B)	84.17	140.13
Median Market Cap. (\$B)	7.81	9.41
Price To Earnings	13.36	17.12
Price To Book	2.28	2.82
Price To Sales	0.97	1.54
Return on Equity (%)	16.05	20.08
Yield (%)	2.31	2.53
Beta		1.00
R-Squared		1.00



# HOSKING GLOBAL EQUITY

Characteristics		
	Portfolio	MSCI ACWI
Number of Holdings	493	2,768
Weighted Avg. Market Cap. (\$B)	84.2	140.1
Median Market Cap. (\$B)	7.8	9.4
Price To Earnings	13.4	17.1
Price To Book	2.3	2.8
Price To Sales	1.0	1.5
Return on Equity (%)	16.1	20.1
Yield (%)	2.3	2.5
Beta		1.0
R-Squared		1.0

Top Positive Contributors		
	Relative Contribution %	Return %
SIBANYE GOLD (R:SGLJ)	0.4%	56.6%
PAYPAL HOLDINGS (PYPL)	0.3%	23.5%
LLOYDS BANKING GROUP (UKIR:LLOY)	0.3%	22.6%
CBRE GROUP CLASS A (CBRE)	0.2%	23.5%
CITIGROUP (C)	0.2%	20.4%
AMAZON.COM (AMZN)	0.2%	18.6%
COSTCO WHOLESALE (COST)	0.2%	19.2%
ANGLO AMERICAN (UKIR:AAL)	0.2%	22.6%
TESCO (UKIR:TSCO)	0.2%	24.9%
JD.COM 'A' ADR 1:2 (JD)	0.2%	44.1%

Top Negative Contributors		
	Relative Contribution %	Return %
MICROSOFT (MSFT)	-0.2%	16.6%
ALIBABA GROUP HLDG.SPN. ADR 1:1 (BABA)	-0.1%	33.1%
MONTAUK HOLDINGS (R:MNKJ)	-0.1%	-45.9%
ALPHABET A (GOOGL)	-0.1%	12.6%
JARDINE MATHESON HDG. (T:JMST)	-0.1%	-8.6%
TENCENT HOLDINGS (K:TCNT)	-0.1%	14.7%
BRITISH AMERICAN TOBACCO (UKIR:BATS)	-0.1%	32.8%
BIM BIRLESIK MAGAZALAR (TK:BMI)	-0.1%	-17.5%
INTEL (INTC)	-0.1%	15.1%
DISCOVERY (R:DSYJ)	0.0%	-14.0%

Hosking Global Equity Performance Attribution vs. MSCI ACWI											
	Attribution Effects					Returns		Sector Weights			
	Total Effects	Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark			
Energy	-0.4%	-0.3%	-0.2%	0.0%	9.9%	14.3%	4.9%	6.2%			
Materials	1.3%	0.5%	0.4%	0.4%	21.6%	11.1%	8.4%	4.8%			
Industrials	-0.8%	-0.9%	0.4%	-0.2%	5.3%	13.9%	12.8%	10.3%			
Consumer Discretionary	0.2%	-0.2%	0.5%	-0.1%	11.5%	13.3%	14.4%	10.7%			
Consumer Staples	-0.3%	-0.1%	-0.3%	0.0%	10.6%	11.5%	6.2%	8.5%			
Health Care	-0.6%	0.6%	-0.8%	-0.4%	12.4%	8.2%	3.1%	12.1%			
Financials	1.1%	0.3%	0.7%	0.2%	10.2%	8.3%	25.4%	17.3%			
Information Technology	-1.2%	0.0%	-1.2%	0.0%	18.3%	18.9%	8.7%	14.9%			
Communication Services	-0.2%	-0.2%	0.0%	0.0%	9.3%	11.5%	8.5%	8.6%			
Utilities	-0.4%	-0.6%	-0.3%	0.5%	-6.9%	10.1%	0.5%	3.4%			
Real Estate	0.2%	0.0%	0.2%	0.0%	15.8%	16.3%	4.6%	3.2%			
Cash	0.0%	0.0%	0.0%	0.0%	0.6%	--	2.5%	0.0%			
<b>Portfolio</b>	<b>-1.0%</b>	<b>=</b>	<b>-1.0%</b>	<b>+</b>	<b>-0.5%</b>	<b>+</b>	<b>0.5%</b>	<b>11.4%</b>	<b>12.4%</b>	<b>100.0%</b>	<b>100.0%</b>



# HOSKING GLOBAL EQUITY

Country Allocation				
	Manager	Index	Manager	Index
	Allocation (USD)	Allocation (USD)	Return (USD)	Return (USD)
<b>Americas</b>				
Brazil*	1.6%	0.9%	16.5%	8.2%
Canada	2.3%	3.0%	10.6%	15.6%
Colombia*	0.2%	0.0%	32.0%	24.8%
Mexico*	0.9%	0.3%	3.4%	5.6%
United States	41.1%	54.2%	12.9%	14.0%
<b>Total-Americas</b>	<b>46.1%</b>	<b>58.6%</b>	<b>12.8%</b>	<b>13.9%</b>
<b>Europe</b>				
Austria	0.1%	0.1%	10.8%	8.6%
Belgium	0.2%	0.3%	-2.4%	16.2%
Denmark	0.8%	0.5%	2.1%	13.2%
Finland	0.3%	0.3%	9.4%	8.4%
France	1.7%	3.4%	5.2%	10.8%
Germany	1.5%	2.7%	8.8%	7.1%
Greece*	0.9%	0.0%	-0.5%	12.9%
Hungary*	0.3%	0.0%	9.3%	6.0%
Ireland	0.6%	0.2%	-4.9%	11.6%
Italy	2.3%	0.7%	2.9%	14.7%
Luxembourg	0.4%	0.0%	18.5%	12.4%
Netherlands	0.4%	1.1%	7.9%	13.6%
Norway	0.2%	0.2%	3.1%	7.2%
Russia*	2.4%	0.4%	9.5%	12.5%
Spain	1.2%	1.0%	4.1%	6.8%
Sweden	0.7%	0.8%	8.6%	7.9%
Switzerland	0.8%	2.7%	16.1%	13.6%
United Kingdom	11.5%	5.3%	18.8%	11.9%
<b>Total-Europe</b>	<b>26.3%</b>	<b>20.0%</b>	<b>11.7%</b>	<b>10.9%</b>

Country Allocation				
	Manager	Index	Manager	Index
	Allocation (USD)	Allocation (USD)	Return (USD)	Return (USD)
<b>AsiaPacific</b>				
Australia	0.6%	2.2%	10.2%	11.5%
China*	2.0%	3.6%	22.6%	18.0%
Hong Kong	3.5%	1.2%	15.4%	15.6%
India*	2.0%	1.1%	10.8%	7.1%
Indonesia*	0.0%	0.3%	49.8%	4.3%
Japan	3.6%	7.6%	5.1%	6.8%
Korea*	2.4%	1.6%	11.8%	4.8%
Malaysia*	1.3%	0.3%	2.0%	0.3%
Philippines*	1.1%	0.1%	6.5%	7.9%
Singapore	2.0%	0.4%	-2.2%	6.2%
Sri Lanka**	0.2%	0.0%	-6.4%	2.5%
Taiwan*	0.9%	1.4%	10.4%	9.0%
Thailand*	1.7%	0.3%	5.4%	7.5%
<b>Total-AsiaPacific</b>	<b>21.4%</b>	<b>20.2%</b>	<b>9.3%</b>	<b>9.8%</b>
<b>Other</b>				
South Africa*	2.6%	0.7%	17.2%	4.5%
Turkey*	1.1%	0.1%	-5.6%	-3.0%
<b>Total-Other</b>	<b>3.8%</b>	<b>1.2%</b>	<b>10.5%</b>	<b>4.4%</b>
<b>Totals</b>				
Developed	75.9%	88.1%	12.0%	12.7%
Emerging*	21.4%	11.9%	10.5%	10.0%
Frontier**	0.2%	0.0%	-6.4%	--
Cash	2.5%		0.6%	





# HOSKING GLOBAL EQUITY

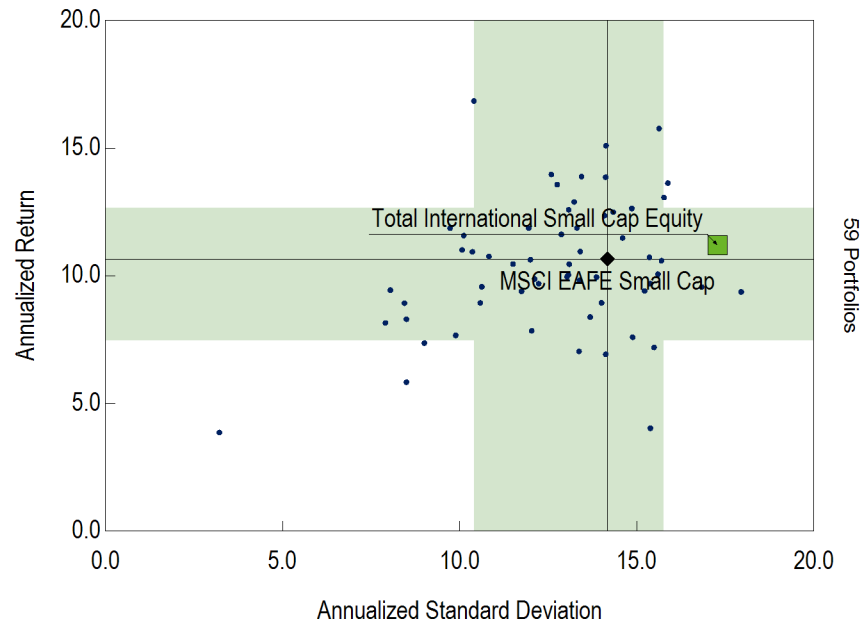
International Equity Performance Attribution Versus MSCI ACWI - Quarter Ending March 31, 2019									
	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
<b>Europe</b>									
Austria	5.0%	8.5%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Belgium	-0.3%	16.2%	0.2%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%
Czech Republic*	--	3.8%	0.0%	0.0%	--	0.0%	0.0%	--	0.0%
Denmark	6.5%	13.2%	0.8%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%
Finland	10.7%	8.4%	0.3%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
France	7.3%	10.8%	1.7%	3.4%	-0.1%	-0.1%	0.0%	0.1%	-0.1%
Germany	7.7%	7.1%	1.5%	2.7%	-0.1%	0.0%	0.0%	0.0%	0.0%
Greece*	4.3%	13.3%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Hungary*	2.6%	6.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Ireland	2.5%	11.6%	0.6%	0.2%	0.0%	0.0%	0.0%	0.0%	0.1%
Italy	0.5%	14.8%	2.3%	0.7%	0.1%	0.0%	0.0%	0.3%	0.4%
Luxembourg	15.8%	7.9%	0.4%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.1%
Netherlands	4.3%	13.6%	0.4%	1.1%	0.1%	0.0%	0.0%	0.0%	0.0%
Norway	4.9%	7.2%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Poland*	--	-0.6%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Portugal	--	10.2%	0.0%	0.0%	--	0.0%	0.0%	--	0.0%
Russia*	11.7%	12.5%	2.4%	0.4%	0.0%	0.0%	-0.1%	-0.1%	-0.2%
Spain	7.4%	6.9%	1.2%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Sweden	2.4%	7.9%	0.7%	0.8%	0.1%	0.0%	0.0%	0.0%	0.0%
Switzerland	3.8%	13.6%	0.8%	2.7%	0.1%	0.0%	0.0%	-0.1%	0.0%
United Kingdom	13.0%	11.9%	11.6%	5.2%	-0.7%	0.5%	-0.4%	-0.9%	-1.5%
<b>Americas</b>									
Brazil*	21.4%	8.0%	1.6%	0.9%	-0.1%	0.0%	-0.1%	-0.1%	-0.3%
Canada	10.3%	15.6%	2.3%	3.0%	0.2%	0.0%	0.1%	0.0%	0.2%
Chile*	--	4.3%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Colombia*	14.4%	24.8%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Mexico*	10.4%	5.6%	0.9%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Peru*	--	11.2%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
United States	10.2%	14.0%	41.0%	54.3%	-2.4%	0.3%	0.0%	0.6%	-1.5%

International Equity Performance Attribution Versus MSCI ACWI - Quarter Ending March 31, 2019									
	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
<b>AsiaPacific</b>									
Australia	11.7%	11.5%	0.6%	2.1%	-0.2%	-0.1%	0.1%	0.1%	-0.1%
China*	13.8%	17.9%	2.0%	3.6%	-0.2%	0.1%	0.0%	0.1%	0.0%
Hong Kong	8.1%	15.6%	3.5%	1.2%	0.0%	0.0%	0.0%	0.0%	-0.1%
India*	-6.1%	7.1%	2.0%	1.1%	0.1%	0.1%	0.0%	0.1%	0.4%
Indonesia*	67.4%	4.2%	0.0%	0.3%	-0.3%	0.0%	0.0%	0.3%	0.0%
Japan	6.2%	6.7%	3.6%	7.6%	0.0%	-0.2%	0.1%	0.0%	-0.1%
Korea*	17.0%	4.7%	2.4%	1.6%	-0.2%	0.0%	0.0%	-0.1%	-0.4%
Malaysia*	4.8%	0.4%	1.2%	0.3%	0.0%	0.1%	0.0%	-0.1%	0.0%
New Zealand	--	16.7%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Pakistan*	--	8.5%	0.0%	0.0%	--	0.0%	0.0%	--	0.0%
Philippines*	10.0%	7.9%	1.1%	0.1%	0.0%	0.0%	0.0%	0.0%	-0.1%
Singapore	0.8%	6.2%	1.9%	0.4%	0.0%	0.1%	0.0%	0.1%	0.3%
Sri Lanka**	0.2%	1.8%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Taiwan*	1.5%	9.0%	0.9%	1.4%	0.0%	-0.1%	0.0%	0.0%	-0.1%
Thailand*	5.7%	7.5%	1.7%	0.3%	0.0%	0.1%	-0.1%	0.1%	0.1%
<b>Other</b>									
Egypt*	--	16.6%	0.0%	0.0%	--	0.0%	0.0%	--	0.0%
Israel	--	10.7%	0.0%	0.2%	--	0.0%	0.0%	--	0.0%
Qatar*	--	-3.6%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
South Africa*	13.9%	4.3%	2.6%	0.7%	0.0%	0.2%	-0.4%	-0.1%	-0.3%
Turkey*	16.5%	-3.1%	1.1%	0.1%	0.0%	-0.2%	-0.1%	0.0%	-0.2%
United Arab Emirates*	--	8.7%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
<b>Totals</b>									
Developed	9.4%	12.7%	75.9%	88.1%	-2.7%	0.0%	-0.2%	0.4%	-2.5%
Emerging*	10.2%	9.9%	21.4%	11.9%	-0.2%	0.0%	-0.7%	-0.1%	-1.0%
Frontier**	0.2%	--	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cash	0.2%	--	2.5%	0.0%	0.0%	0.4%	0.0%	0.0%	0.4%



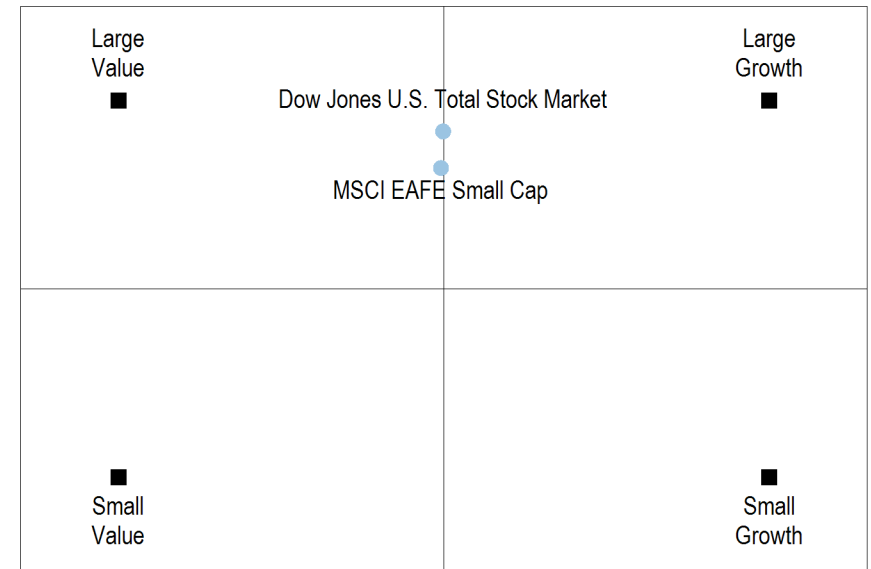
# TOTAL INTERNATIONAL SMALL CAP

Annualized Return vs. Annualized Standard Deviation  
3 Months Ending March 31, 2019



- Total International Small Cap Equity
- ◆ MSCI EAFE Small Cap
- 68% Confidence Interval
- eV EAFE Small Cap Equity Net

U.S. Effective Style Map  
1 Year Ending March 31, 2019



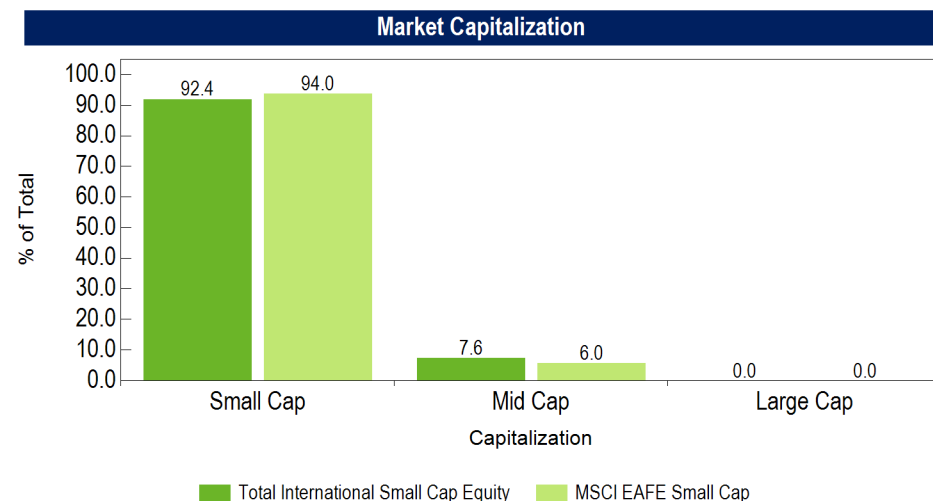
- First Rolling Period
- ◆ Last Rolling Period



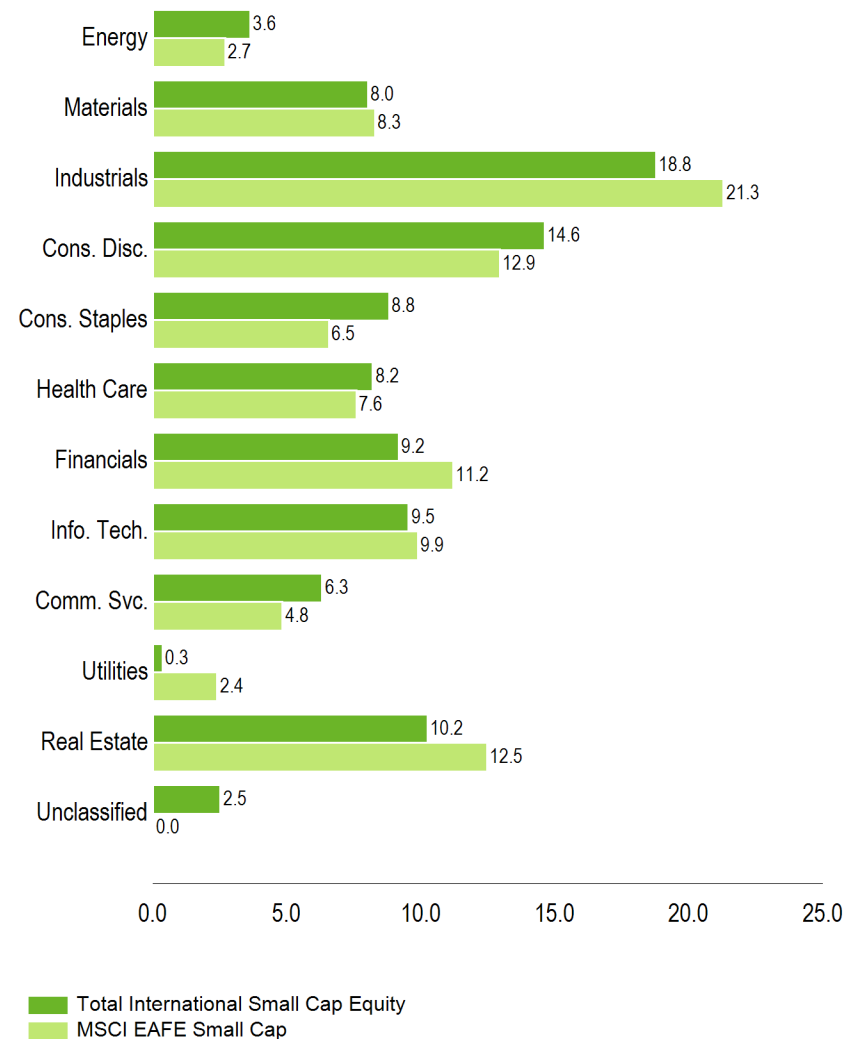
# TOTAL INTERNATIONAL SMALL CAP

Characteristics		
	Portfolio	MSCI EAFE Small Cap
Number of Holdings	168	2,326
Weighted Avg. Market Cap. (\$B)	2.81	2.63
Median Market Cap. (\$B)	1.78	1.02
Price To Earnings	9.94	15.23
Price To Book	2.13	2.15
Price To Sales	0.99	0.99
Return on Equity (%)	23.50	12.85
Yield (%)	3.23	2.90
Beta		1.00
R-Squared		1.00

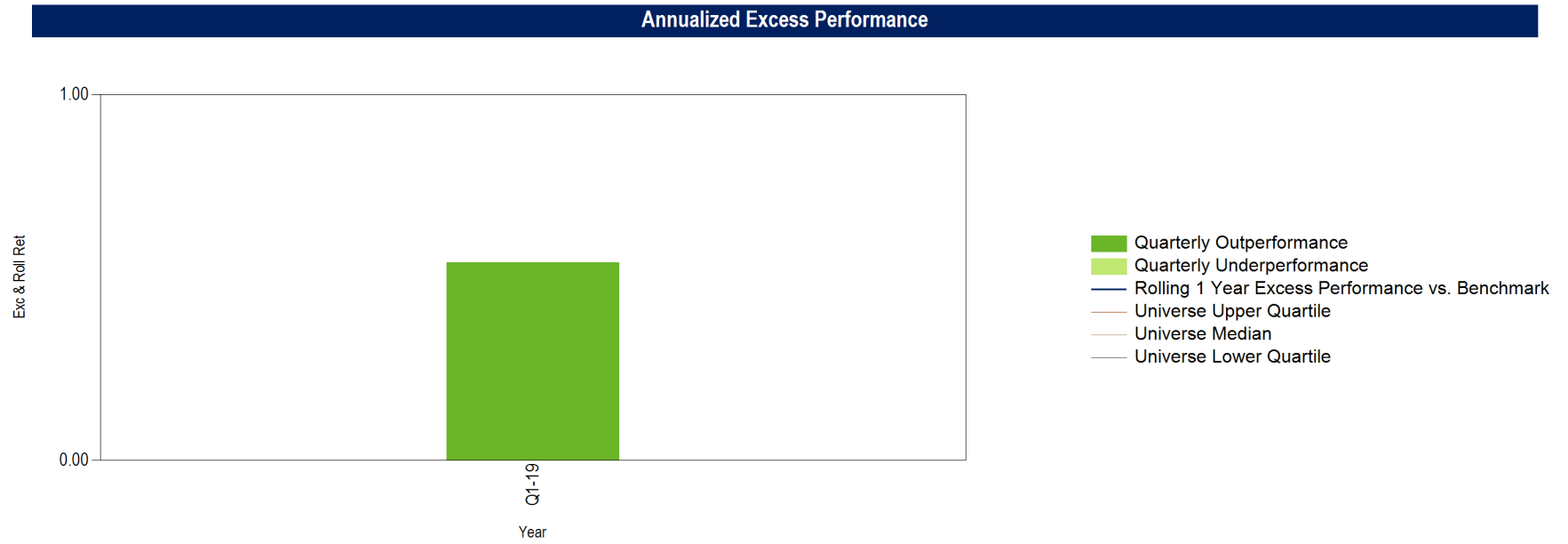
Region Weighting		
	Portfolio Q1-19	Index Q1-19
Americas	12.61	0.74
Europe	46.80	54.96
Asia/Pacific	39.53	42.61
Other	1.06	1.69



## Sector Allocation (%) vs MSCI EAFE Small Cap



# TOTAL INTERNATIONAL SMALL CAP



# TOTAL INTERNATIONAL SMALL CAP

Top Ten Holdings	
SOJITZ	2.1%
ROUND ONE	1.7%
TATE & LYLE	1.5%
EVRAZ	1.5%
GRANITE REIT.TST.UNITS	1.5%
IPSEN	1.4%
GENWORTH MI CANADA	1.4%
CIE AUTOMOTIVE	1.4%
DREAM GLOBAL REIT.	1.4%
LEG IMMOBILIEN	1.4%

Top Positive Contributors		
	Relative Contribution %	Return %
EVRAZ	0.4%	39.0%
DNO	0.3%	55.1%
GRANITE REIT.TST.UNITS	0.3%	24.1%
MELLANOX TECHS.	0.3%	28.1%
KYOWA EXEO	0.3%	19.0%
PAREX RESOURCES	0.3%	30.8%
COGECO COMMS.SBVTG.SHRE.	0.3%	33.6%
HASEKO	0.2%	25.5%
DREAM GLOBAL REIT.	0.2%	23.5%
HI-P INTERNATIONAL	0.2%	74.0%

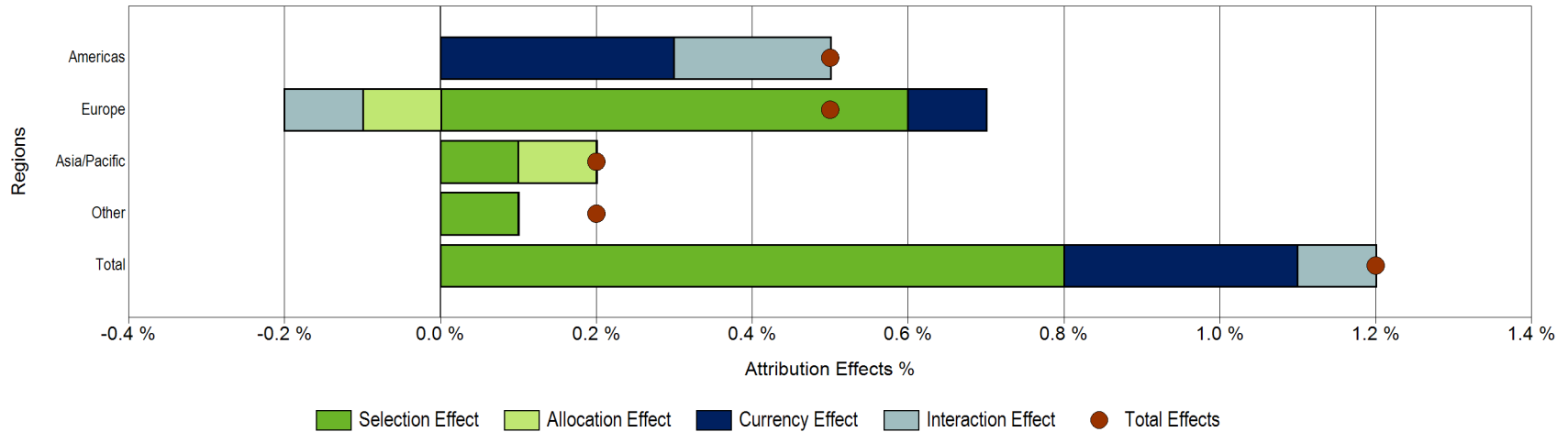
Top Negative Contributors		
	Relative Contribution %	Return %
BEST WORLD INTL. SUSP - SUSP.10/05/19	-0.1%	-17.0%
TNSC.'A' SBVTG.	-0.1%	-9.2%
TRIGANO	-0.1%	-13.4%
KYUDENKO	-0.1%	-16.3%
PENTA-OCEAN CONSTRUCTION	-0.1%	-13.6%
CATENA MEDIA	-0.1%	-37.1%
BOBST GROUP	-0.1%	-12.7%
SWISSQUOTE 'R'	0.0%	-20.6%
ARATA	0.0%	-12.4%
KANAMOTO	0.0%	-6.0%

Equity Sector Attribution											
	Total Effects	Selection Effect	Attribution Effects				Returns		Sector Weights		
			Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark			
Energy	0.2%	0.0%	0.2%	0.0%	19.5%	19.9%	4.6%	2.4%			
Materials	0.7%	0.6%	0.0%	0.1%	16.5%	7.7%	8.4%	8.5%			
Industrials	-0.6%	-0.6%	0.0%	0.0%	8.2%	10.8%	22.5%	21.4%			
Consumer Discretionary	0.3%	0.3%	0.0%	0.0%	13.2%	10.6%	11.5%	13.1%			
Consumer Staples	-0.2%	-0.1%	-0.1%	0.0%	5.0%	6.0%	8.9%	7.0%			
Health Care	-0.6%	-0.6%	0.0%	0.1%	5.8%	13.8%	7.0%	7.6%			
Financials	0.5%	0.5%	0.1%	0.0%	10.5%	5.9%	9.8%	11.6%			
Information Technology	-0.3%	-0.2%	-0.1%	0.0%	16.7%	19.2%	8.3%	9.1%			
Communication Services	0.4%	0.2%	0.1%	0.1%	17.4%	12.8%	7.5%	4.7%			
Utilities	0.1%	0.3%	0.1%	-0.2%	18.2%	7.8%	0.7%	2.4%			
Real Estate	0.6%	0.6%	0.0%	0.0%	17.9%	11.6%	10.3%	12.2%			
Cash	-0.1%	0.0%	-0.1%	0.0%	0.6%	--	0.5%	0.0%			
<b>Portfolio</b>	<b>1.2%</b>	<b>=</b>	<b>1.1%</b>	<b>+</b>	<b>0.1%</b>	<b>+</b>	<b>0.0%</b>	<b>12.2%</b>	<b>10.9%</b>	<b>100.0%</b>	<b>100.0%</b>



# TOTAL INTERNATIONAL SMALL CAP

Total International Small Cap Equity Performance Attribution vs. MSCI EAFE Small Cap  
Quarter Ending March 31, 2019



	Returns and Weights				Attribution Effects				
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	Total Effects
<b>Totals</b>									
Americas	15.1%	--	12.6%	0.0%	0.0%	0.0%	0.3%	0.2%	0.5%
Europe	13.4%	12.3%	47.5%	54.6%	0.6%	-0.1%	0.1%	-0.1%	0.5%
Asia/Pacific	9.2%	9.2%	37.4%	43.8%	0.1%	0.1%	0.0%	0.0%	0.2%
Other	22.5%	15.1%	1.9%	1.6%	0.1%	0.0%	0.0%	0.0%	0.2%
Cash	0.6%	--	0.5%	0.0%	0.0%	-0.1%	0.0%	0.0%	-0.1%
<b>Total</b>	<b>12.2%</b>	<b>10.9%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>0.8%</b>	<b>0.0%</b>	<b>0.3%</b>	<b>0.1%</b>	<b>1.2%</b>
<b>Totals</b>									
Developed	12.0%	10.9%	97.9%	100.0%	0.8%	0.0%	0.3%	0.0%	1.1%
Emerging*	24.3%	--	1.5%	0.0%	0.0%	0.0%	0.0%	0.2%	0.2%
Cash	0.6%	--	0.5%	0.0%	0.0%	-0.1%	0.0%	0.0%	-0.1%



# TOTAL INTERNATIONAL SMALL CAP

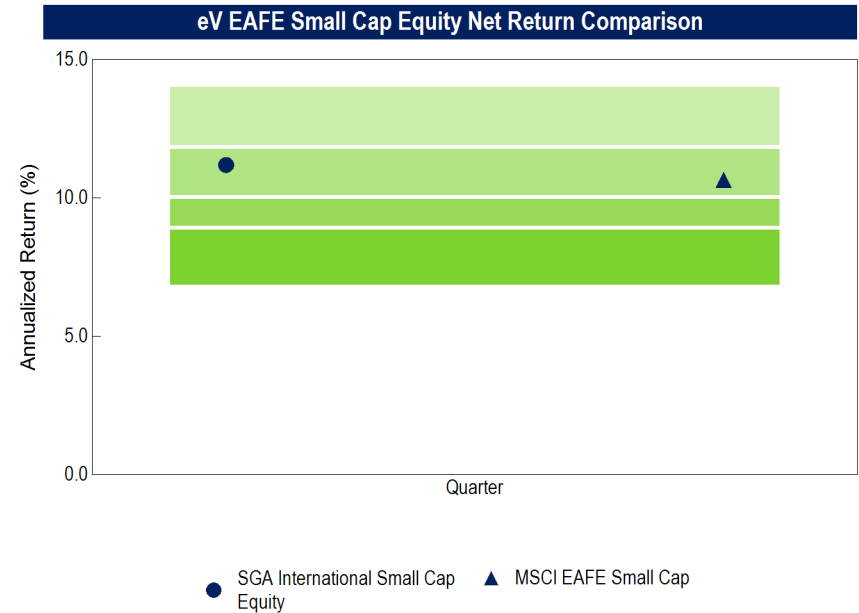
Country Allocation				
	Manager	Index	Manager	Index
	Allocation (USD)	Allocation (USD)	Return (USD)	Return (USD)
<b>Americas</b>				
Brazil*	0.3%	0.0%	63.0%	8.2%
Canada	10.6%	0.0%	13.5%	15.6%
Mexico*	0.6%	0.0%	20.3%	5.6%
United States	1.2%	0.0%	15.7%	14.0%
<b>Total-Americas</b>	<b>12.6%</b>	<b>0.0%</b>	<b>15.1%</b>	<b>--</b>
<b>Europe</b>				
Austria	0.3%	0.9%	-2.4%	8.7%
Denmark	3.3%	1.8%	4.3%	10.6%
Finland	0.7%	1.5%	19.4%	14.1%
France	3.9%	3.3%	2.6%	11.1%
Germany	4.5%	5.7%	14.4%	13.1%
Ireland	0.3%	0.5%	-1.6%	8.6%
Italy	2.2%	3.6%	27.1%	13.3%
Netherlands	4.0%	2.6%	12.9%	11.4%
Norway	2.8%	2.2%	12.4%	11.8%
Portugal	0.6%	0.4%	11.3%	4.9%
Spain	2.0%	2.5%	13.6%	7.4%
Sweden	4.9%	5.5%	8.4%	9.2%
Switzerland	2.5%	4.4%	9.0%	9.8%
United Kingdom	15.5%	17.9%	18.8%	14.9%
<b>Total-Europe</b>	<b>47.5%</b>	<b>54.6%</b>	<b>13.4%</b>	<b>12.3%</b>

Country Allocation				
	Manager	Index	Manager	Index
	Allocation (USD)	Allocation (USD)	Return (USD)	Return (USD)
<b>AsiaPacific</b>				
Australia	4.7%	7.2%	10.3%	13.8%
China*	0.9%	0.0%	14.3%	11.1%
Hong Kong	1.3%	2.0%	11.2%	11.0%
Indonesia*	0.4%	0.0%	15.9%	8.6%
Japan	28.4%	31.5%	5.2%	7.2%
Singapore	1.7%	1.8%	6.0%	17.9%
<b>Total-AsiaPacific</b>	<b>37.3%</b>	<b>43.6%</b>	<b>6.4%</b>	<b>9.0%</b>
<b>Other</b>				
Israel	1.9%	1.7%	6.3%	14.5%
<b>Total-Other</b>	<b>1.9%</b>	<b>1.7%</b>	<b>6.3%</b>	<b>14.5%</b>
<b>Totals</b>				
Developed	97.4%	100.0%	9.6%	10.9%
Emerging*	2.1%	0.0%	19.1%	--
Cash	0.5%		0.2%	

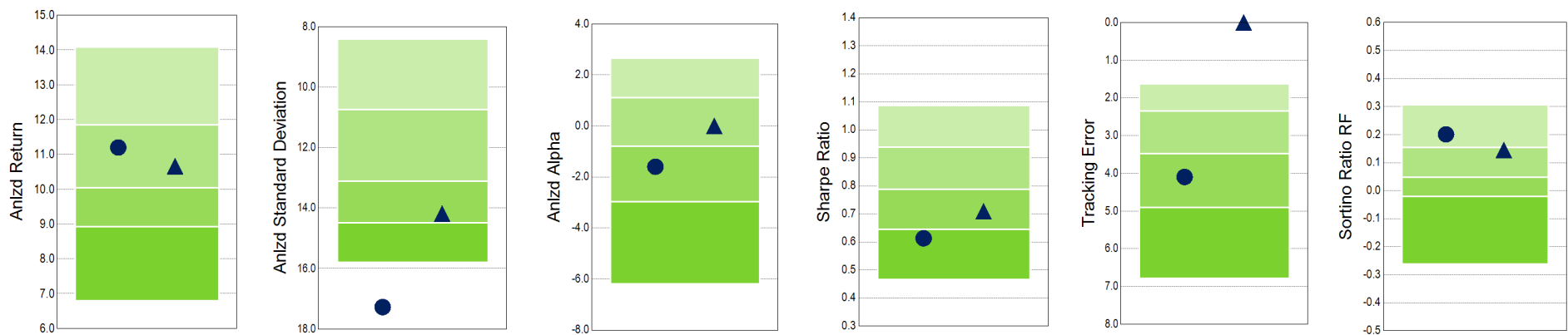


# SGA INTERNATIONAL SMALL CAP EQUITY

SGA utilizes a bottom-up stock selection process. The firm's proprietary quantitative models estimate expected performance and stock specific risk across multiple dimensions for each stock in the appropriate universe. The firm's proprietary stock selection model includes a blend of Growth, Value, Sentiment, and Quality factors to capture market mispricings due to anomalies or inefficiencies created by human behavioral mistakes. SGA expects these inefficiencies to persist as long as humans continue to participate in equity markets. The stock selection and risk model outputs are combined daily by a proprietary optimization model. This process produces potential trades relative to the current portfolio. In this way, a fully built systematic investment process is used as a screen for new ideas and to prioritize the work of our fundamental analysis team. Fundamental analysis is focused on information that is outside of the model and can be used to approve a stock and make it eligible for inclusion in the portfolio or to preclude a stock from inclusion in the final optimization at the time of portfolio rebalancing (typically once every six to eight weeks or as deemed appropriate by the portfolio management team). This approach ensures a continual flow of best ideas.



## 3 Month Risk Statistics

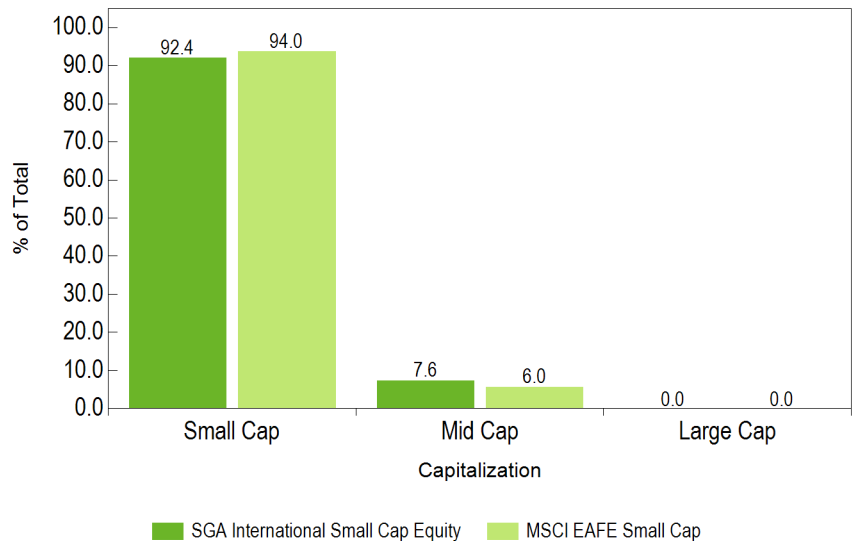




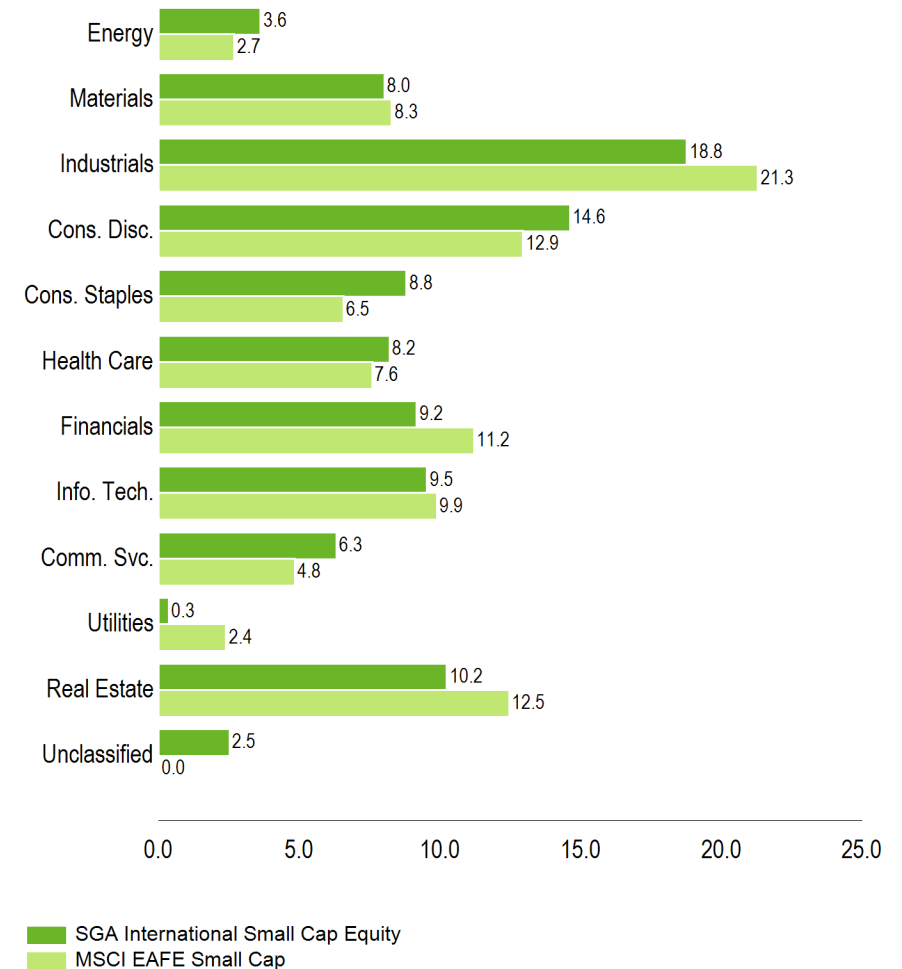
# SGA INTERNATIONAL SMALL CAP EQUITY

Characteristics		
	Portfolio	MSCI EAFE Small Cap
Number of Holdings	168	2,326
Weighted Avg. Market Cap. (\$B)	2.81	2.63
Median Market Cap. (\$B)	1.78	1.02
Price To Earnings	9.94	15.23
Price To Book	2.13	2.15
Price To Sales	0.99	0.99
Return on Equity (%)	23.50	12.85
Yield (%)	3.23	2.90
Beta		1.00
R-Squared		1.00

## Market Capitalization As of March 31, 2019



## Sector Allocation (%) vs MSCI EAFE Small Cap



# SGA INTERNATIONAL SMALL CAP EQUITY

Characteristics	Portfolio	MSCI EAFE Small Cap
	Number of Holdings	168
Weighted Avg. Market Cap. (\$B)	2.8	2.6
Median Market Cap. (\$B)	1.8	1.0
Price To Earnings	9.9	15.2
Price To Book	2.1	2.1
Price To Sales	1.0	1.0
Return on Equity (%)	23.5	12.9
Yield (%)	3.2	2.9
Beta		1.0
R-Squared		1.0

Top Positive Contributors	Relative Contribution %	Return %
	EVRAZ (UKIR:EVR)	0.4%
DNO (N:DNO)	0.3%	55.1%
GRANITE REIT.TST.UNITS (C:GRT.UN)	0.3%	24.1%
MELLANOX TECHS. (MLNX)	0.3%	28.1%
KYOWA EXEO (J:KYEX)	0.3%	19.0%
PAREX RESOURCES (C:PXT)	0.3%	30.8%
COGECO COMMS.SBVTG.SHRE. (C:CCA)	0.3%	33.6%
HASEKO (J:AQ@N)	0.2%	25.5%
DREAM GLOBAL REIT. (C:DRG.UN)	0.2%	23.5%
HI-P INTERNATIONAL (T:HIPP)	0.2%	74.0%

Top Negative Contributors	Relative Contribution %	Return %
	BEST WORLD INTL. SUSP - SUSP.10/05/19 (T:BST)	-0.1%
TNSC.'A' SBVTG. (C:TCLA)	-0.1%	-9.2%
TRIGANO (F:TRI)	-0.1%	-13.4%
KYUDENKO (J:KYDN)	-0.1%	-16.3%
PENTA-OCEAN CONSTRUCTION (J:BL@N)	-0.1%	-13.6%
CATENA MEDIA (W:CTM)	-0.1%	-37.1%
BOBST GROUP (S:BOBNN)	-0.1%	-12.7%
SWISSQUOTE 'R' (S:SQN)	0.0%	-20.6%
ARATA (J:ARAT)	0.0%	-12.4%
KANAMOTO (J:KAMT)	0.0%	-6.0%

## SGA International Small Cap Equity Performance Attribution vs. MSCI EAFE Small Cap

	Attribution Effects				Returns		Sector Weights		
	Total Effects	Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark	
Energy	0.4%	0.0%	0.4%	0.0%	19.5%	19.9%	4.6%	2.4%	
Materials	0.7%	0.6%	0.0%	0.1%	16.5%	7.7%	8.4%	8.5%	
Industrials	-0.5%	-0.6%	0.1%	0.0%	8.2%	10.8%	22.5%	21.4%	
Consumer Discretionary	0.1%	0.3%	-0.2%	0.0%	13.2%	10.6%	11.5%	13.1%	
Consumer Staples	0.0%	-0.1%	0.1%	0.0%	5.0%	6.0%	8.9%	7.0%	
Health Care	-0.6%	-0.6%	-0.1%	0.1%	5.8%	13.8%	7.0%	7.6%	
Financials	0.3%	0.5%	-0.1%	0.0%	10.5%	5.9%	9.8%	11.6%	
Information Technology	-0.4%	-0.2%	-0.2%	0.0%	16.7%	19.2%	8.3%	9.1%	
Communication Services	0.7%	0.2%	0.4%	0.1%	17.4%	12.8%	7.5%	4.7%	
Utilities	-0.1%	0.3%	-0.1%	-0.2%	18.2%	7.8%	0.7%	2.4%	
Real Estate	0.4%	0.6%	-0.2%	0.0%	17.9%	11.6%	10.3%	12.2%	
Cash	0.0%	0.0%	0.0%	0.0%	0.6%	--	0.5%	0.0%	
<b>Portfolio</b>	<b>1.2%</b>	<b>=</b>	<b>1.1%</b>	<b>+</b>	<b>0.1%</b>	<b>+</b>	<b>0.0%</b>	<b>12.2%</b>	<b>10.9%</b>
								<b>100.0%</b>	<b>100.0%</b>



# SGA INTERNATIONAL SMALL CAP EQUITY

Country Allocation				
	Manager	Index	Manager	Index
	Allocation (USD)	Allocation (USD)	Return (USD)	Return (USD)
<b>Americas</b>				
Brazil*	0.3%	0.0%	63.0%	8.2%
Canada	10.6%	0.0%	13.5%	15.6%
Mexico*	0.6%	0.0%	20.3%	5.6%
United States	1.2%	0.0%	15.7%	14.0%
<b>Total-Americas</b>	<b>12.6%</b>	<b>0.0%</b>	<b>15.1%</b>	<b>--</b>
<b>Europe</b>				
Austria	0.3%	0.9%	-2.4%	8.7%
Denmark	3.3%	1.8%	4.3%	10.6%
Finland	0.7%	1.5%	19.4%	14.1%
France	3.9%	3.3%	2.6%	11.1%
Germany	4.5%	5.7%	14.4%	13.1%
Ireland	0.3%	0.5%	-1.6%	8.6%
Italy	2.2%	3.6%	27.1%	13.3%
Netherlands	4.0%	2.6%	12.9%	11.4%
Norway	2.8%	2.2%	12.4%	11.8%
Portugal	0.6%	0.4%	11.3%	4.9%
Spain	2.0%	2.5%	13.6%	7.4%
Sweden	4.9%	5.5%	8.4%	9.2%
Switzerland	2.5%	4.4%	9.0%	9.8%
United Kingdom	15.5%	17.9%	18.8%	14.9%
<b>Total-Europe</b>	<b>47.5%</b>	<b>54.6%</b>	<b>13.4%</b>	<b>12.3%</b>

Country Allocation				
	Manager	Index	Manager	Index
	Allocation (USD)	Allocation (USD)	Return (USD)	Return (USD)
<b>AsiaPacific</b>				
Australia	4.8%	7.2%	12.2%	13.8%
China*	0.3%	0.0%	6.3%	18.0%
Hong Kong	1.3%	2.0%	14.8%	11.3%
Indonesia*	0.4%	0.0%	19.3%	4.3%
Japan	28.9%	31.7%	8.1%	7.2%
Singapore	1.7%	1.8%	15.0%	21.0%
<b>Total-AsiaPacific</b>	<b>37.4%</b>	<b>43.8%</b>	<b>9.2%</b>	<b>9.2%</b>
<b>Other</b>				
Israel	1.9%	1.6%	22.5%	15.1%
<b>Total-Other</b>	<b>1.9%</b>	<b>1.6%</b>	<b>22.5%</b>	<b>15.1%</b>
<b>Totals</b>				
Developed	97.9%	100.0%	12.0%	10.9%
Emerging*	1.5%	0.0%	24.3%	--
Cash	0.5%		0.6%	



# SGA INTERNATIONAL SMALL CAP EQUITY

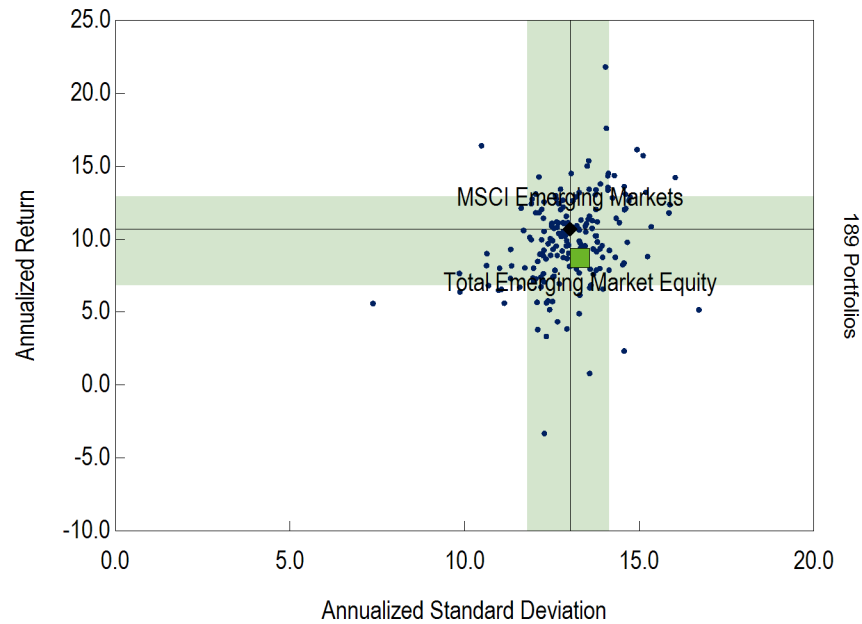
International Equity Performance Attribution Versus MSCI EAFE Small Cap - Quarter Ending March 31, 2019									
	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
<b>Europe</b>									
Austria	17.3%	8.8%	0.3%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%
Belgium	--	11.6%	0.0%	1.9%	--	0.0%	0.0%	--	0.0%
Denmark	9.8%	10.7%	3.2%	1.7%	0.0%	0.0%	0.0%	0.0%	0.0%
Finland	6.5%	14.1%	0.7%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%
France	2.4%	11.1%	3.8%	3.3%	0.1%	0.0%	0.0%	0.0%	0.2%
Germany	12.4%	13.2%	4.4%	5.6%	0.0%	0.0%	0.0%	0.0%	0.0%
Ireland	1.8%	10.5%	0.3%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%
Italy	14.5%	13.5%	2.2%	3.6%	-0.2%	0.0%	0.0%	0.1%	-0.1%
Netherlands	9.6%	11.6%	3.9%	2.6%	0.0%	0.0%	0.0%	0.0%	-0.1%
Norway	12.2%	11.6%	2.8%	2.2%	0.0%	0.0%	0.0%	0.0%	-0.1%
Portugal	19.2%	4.9%	0.5%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Spain	14.9%	7.3%	2.0%	2.5%	-0.1%	0.0%	0.0%	0.0%	-0.1%
Sweden	8.9%	9.0%	5.4%	5.5%	-0.1%	0.0%	0.0%	0.0%	-0.1%
Switzerland	12.8%	9.8%	2.4%	4.4%	-0.1%	0.0%	0.0%	0.1%	0.0%
United Kingdom	12.9%	14.7%	15.3%	18.0%	-0.2%	0.0%	0.1%	0.0%	-0.1%
<b>Americas</b>									
Brazil*	37.1%	17.6%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%
Canada	15.4%	13.1%	10.6%	0.0%	0.0%	-0.1%	-0.3%	-0.2%	-0.6%
Mexico*	20.3%	9.8%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%
United States	10.9%	8.2%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

International Equity Performance Attribution Versus MSCI EAFE Small Cap - Quarter Ending March 31, 2019									
	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
<b>AsiaPacific</b>									
Australia	10.3%	13.8%	4.7%	7.2%	0.0%	0.0%	0.1%	0.0%	0.0%
China*	14.3%	11.1%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Hong Kong	11.2%	11.0%	1.3%	2.0%	-0.1%	0.0%	0.0%	0.0%	-0.1%
Indonesia*	15.9%	8.6%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Japan	5.2%	7.2%	28.4%	31.5%	0.1%	0.0%	0.0%	0.0%	0.0%
New Zealand	--	11.1%	0.0%	1.0%	--	0.0%	0.0%	--	0.0%
Singapore	6.0%	17.9%	1.7%	1.8%	0.1%	0.0%	0.0%	0.0%	0.1%
<b>Other</b>									
Israel	6.3%	14.5%	1.9%	1.7%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Totals</b>									
Developed	9.6%	10.9%	97.4%	100.0%	-0.8%	0.0%	-0.2%	0.0%	-0.9%
Emerging*	19.1%	--	2.1%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.2%
Cash	0.2%	--	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%



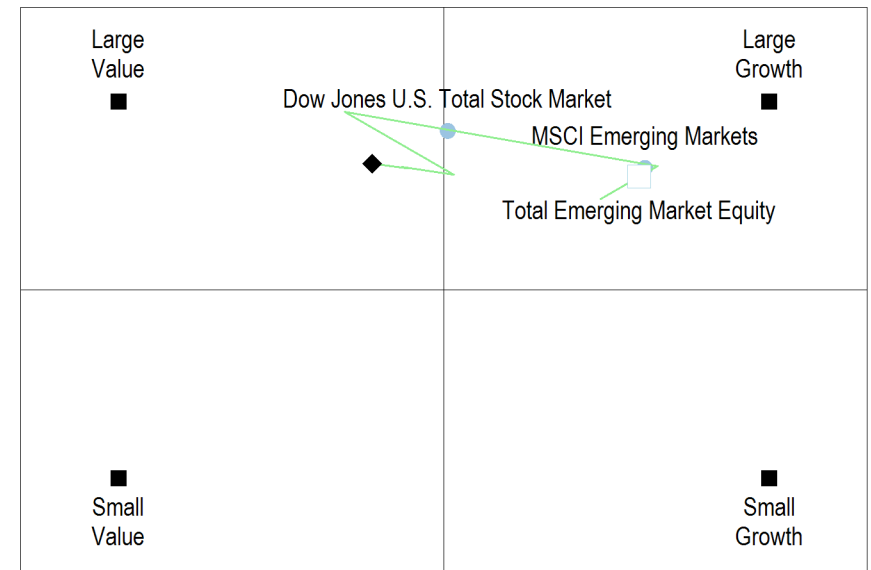
# TOTAL EMERGING MARKET EQUITY

Annualized Return vs. Annualized Standard Deviation  
3 Years Ending March 31, 2019



- Total Emerging Market Equity
- ◆ MSCI Emerging Markets
- 68% Confidence Interval
- eV Emg Mkts Equity Net

U.S. Effective Style Map  
3 Years Ending March 31, 2019



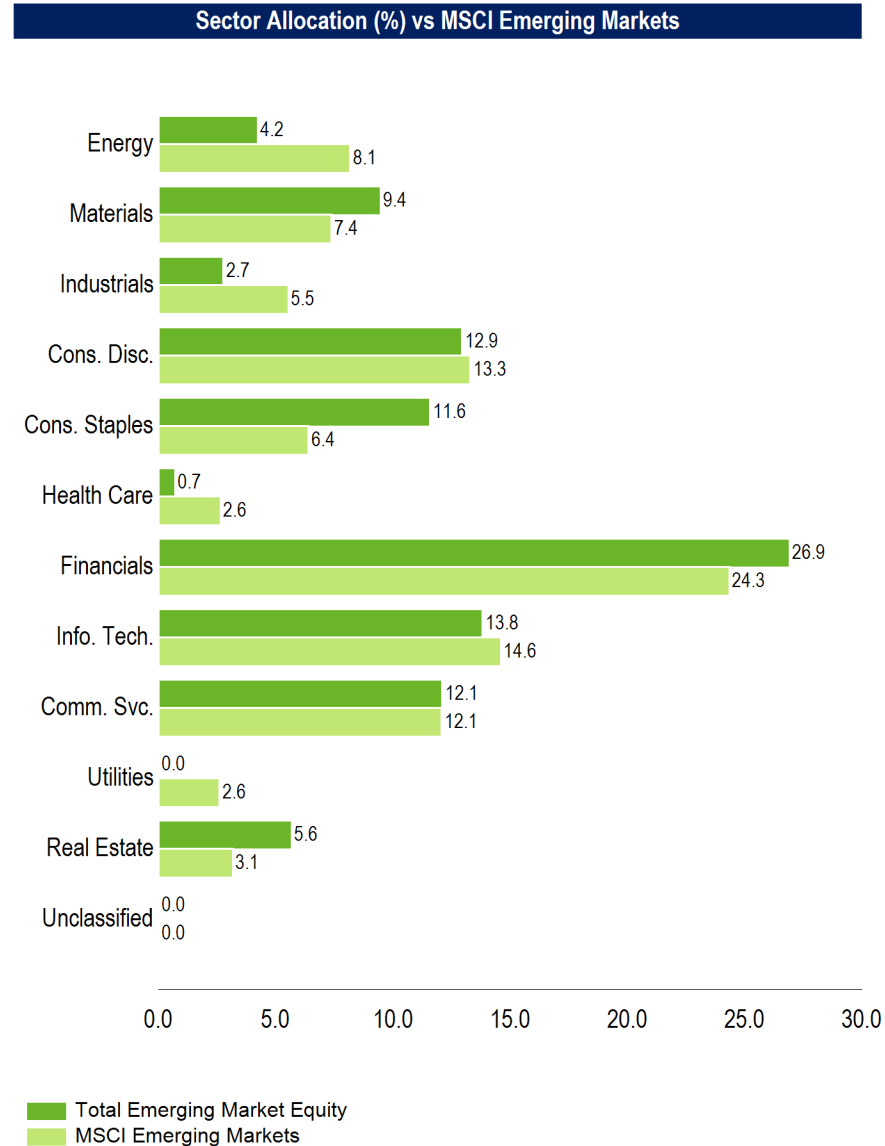
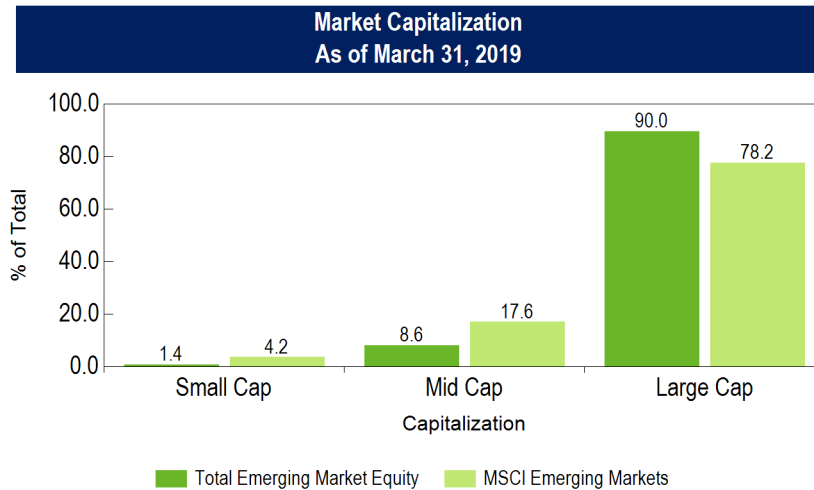
- First Rolling Period
- ◆ Last Rolling Period



# TOTAL EMERGING MARKET EQUITY

Characteristics		
	Portfolio	MSCI Emerging Markets
Number of Holdings	62	1,133
Weighted Avg. Market Cap. (\$B)	76.84	84.88
Median Market Cap. (\$B)	17.82	5.81
Price To Earnings	18.24	13.30
Price To Book	3.21	2.41
Price To Sales	2.16	1.25
Return on Equity (%)	20.52	17.82
Yield (%)	2.10	2.68
Beta	0.97	1.00
R-Squared	0.90	1.00

	Portfolio Q1-19	Index Q1-19
Region Weighting		
Americas	19.55	12.48
Europe	4.46	5.88
Asia/Pacific	71.21	73.39
Other	4.77	8.24



# TOTAL EMERGING MARKET EQUITY

Top Ten Holdings	
TENCENT HOLDINGS	6.3%
TAIWAN SEMICON.MNFG.	5.1%
SAMSUNG ELTN.PREF.	5.1%
HOUSING DEVELOPMENT FINANCE CORPORATION	3.7%
PING AN INSURANCE (GROUP) OF CHINA 'H'	3.7%
BNC.BRADESCO PF.SPN.ADR 1:1	3.6%
AIA GROUP	2.7%
KWEICHOW MOUTAI 'A'	2.6%
PJSC LUKOIL SPON (LON) ADR	2.6%
VALE ON ADR 1:1	2.5%

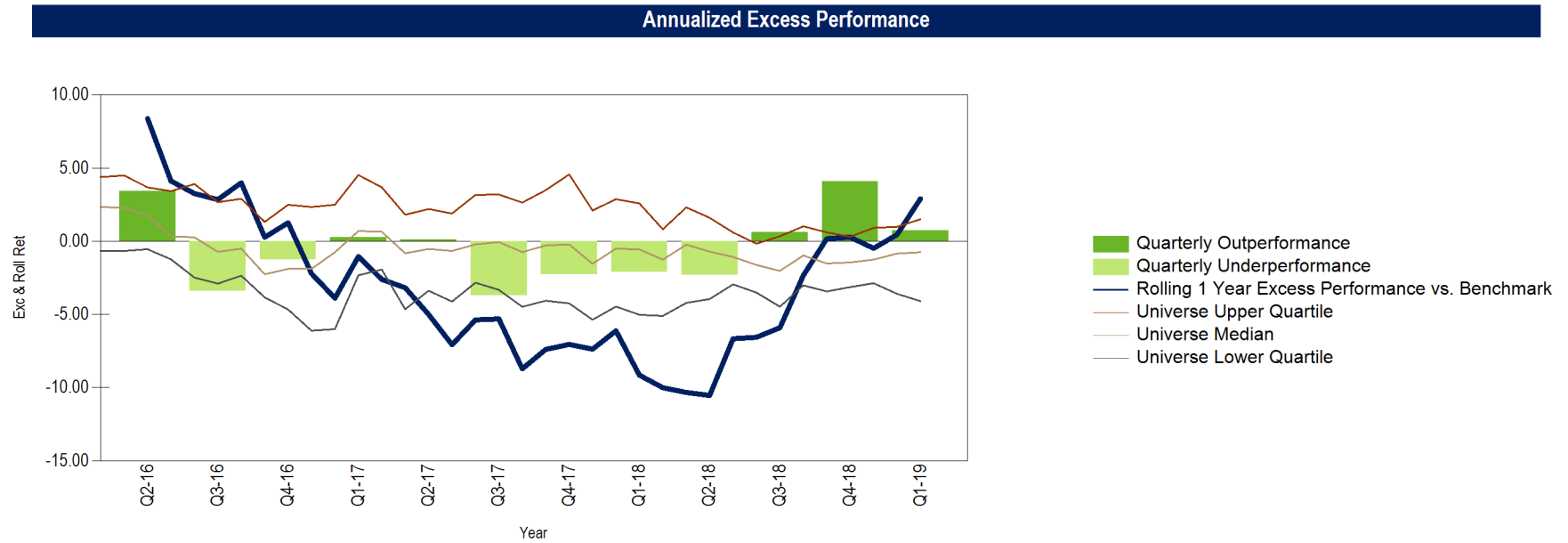
Top Positive Contributors		
	Relative Contribution %	Return %
KWEICHOW MOUTAI 'A'	1.0%	47.9%
SAMSUNG ELTN.PREF.	0.6%	12.2%
PJSC LUKOIL SPON (LON) ADR	0.6%	25.3%
AIA GROUP	0.5%	19.9%
PING AN INSURANCE (GROUP) OF CHINA 'H'	0.5%	26.8%
YUM CHINA HOLDINGS	0.4%	34.3%
AUTOHOME CL.A ADR 1:1	0.4%	34.4%
HUAZHU GROUP ADR 1:1	0.4%	47.2%
HANGZHOU HIK VIS.DIG. TECH.'A'	0.4%	39.1%
SHANGHAI INTL.ARPT.'A'	0.4%	25.1%

Top Negative Contributors		
	Relative Contribution %	Return %
ASTRA INTERNATIONAL	-0.2%	-10.1%
BIM BIRLESIK MAGAZALAR	-0.2%	-17.5%
MASSMART	-0.2%	-22.2%
BANK OF THE PHILP.ISLE.	-0.2%	-9.4%
TRUWORTHS INTL.	-0.1%	-18.7%
HERO MOTOCORP	-0.1%	-15.5%
PETROLEO BRASILEIRO PN	-0.1%	23.2%
NASPERS	-0.1%	18.5%
ULTRAPAR PARTICIPOES ON	-0.1%	-10.8%
HINDUSTAN UNILEVER	-0.1%	-5.5%

Equity Sector Attribution											
	Total Effects	Selection Effect	Attribution Effects			Returns		Sector Weights			
			Allocation Effect	Interaction Effects		Portfolio	Benchmark	Portfolio	Benchmark		
Energy	0.1%	0.5%	0.0%	-0.4%		17.0%	12.3%	4.1%	8.0%		
Materials	-0.2%	-0.1%	-0.1%	0.0%		5.8%	6.8%	10.1%	7.6%		
Industrials	0.5%	0.5%	0.1%	-0.2%		16.9%	5.2%	2.9%	5.7%		
Consumer Discretionary	-1.6%	-1.9%	-0.3%	0.5%		5.6%	19.9%	9.2%	12.4%		
Consumer Staples	0.1%	0.2%	-0.3%	0.2%		8.4%	5.4%	12.0%	6.7%		
Health Care	0.3%	0.7%	0.1%	-0.5%		29.4%	3.6%	0.8%	2.8%		
Financials	0.3%	0.2%	-0.1%	0.1%		8.5%	7.3%	27.6%	24.7%		
Information Technology	0.0%	0.0%	0.0%	0.0%		12.8%	12.6%	14.2%	14.3%		
Communication Services	0.8%	0.7%	0.0%	0.1%		14.6%	8.8%	13.5%	12.1%		
Utilities	0.2%	--	0.2%	--		--	4.3%	0.0%	2.7%		
Real Estate	0.0%	-0.1%	0.1%	-0.1%		12.7%	15.5%	5.5%	3.0%		
Cash	0.0%	--	--	--		--	--	0.0%	0.0%		
<b>Portfolio</b>	<b>0.4%</b>	<b>=</b>	<b>0.9%</b>	<b>+</b>	<b>-0.2%</b>	<b>+</b>	<b>-0.2%</b>	<b>10.4%</b>	<b>10.0%</b>	<b>100.0%</b>	<b>100.0%</b>



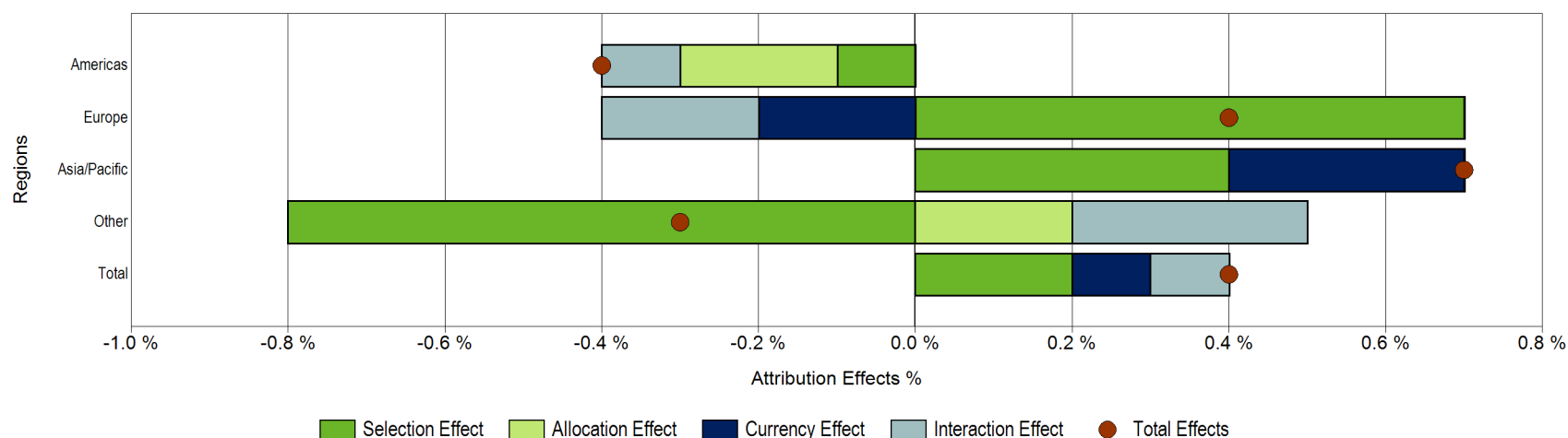
# TOTAL EMERGING MARKET EQUITY





# TOTAL EMERGING MARKET EQUITY

Total Emerging Market Equity Performance Attribution vs. MSCI Emerging Markets  
Quarter Ending March 31, 2019



	Returns and Weights				Attribution Effects				
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	Total Effects
<b>Totals</b>									
Americas	6.7%	7.9%	20.6%	12.2%	-0.1%	-0.2%	0.0%	-0.1%	-0.4%
Europe	18.7%	8.9%	4.3%	5.6%	0.7%	0.0%	-0.2%	-0.2%	0.4%
Asia/Pacific	12.2%	11.2%	70.0%	73.3%	0.4%	0.0%	0.3%	0.0%	0.7%
Other	-6.5%	3.4%	5.1%	8.9%	-0.8%	0.2%	0.0%	0.3%	-0.3%
<b>Total</b>	<b>10.4%</b>	<b>10.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>0.2%</b>	<b>0.0%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>0.4%</b>
<b>Totals</b>									
Developed	19.9%	--	18.7%	0.0%	0.0%	0.0%	-0.1%	1.9%	1.9%
Emerging*	8.2%	10.0%	81.3%	100.0%	-2.0%	0.0%	0.2%	0.4%	-1.4%



# TOTAL EMERGING MARKET EQUITY

Country Allocation				
	Manager	Index	Manager	Index
	Allocation (USD)	Allocation (USD)	Return (USD)	Return (USD)
<b>Americas</b>				
Brazil*	11.9%	7.5%	3.1%	8.2%
Chile*	1.9%	1.1%	0.6%	4.3%
Mexico*	5.2%	2.8%	8.9%	5.6%
United States	1.6%	0.0%	34.3%	13.7%
<b>Total-Americas</b>	<b>20.6%</b>	<b>12.2%</b>	<b>6.7%</b>	<b>7.9%</b>
<b>Europe</b>				
Hungary*	0.3%	0.3%	-1.6%	6.0%
Luxembourg	0.8%	0.0%	32.5%	10.0%
Poland*	0.9%	1.3%	-1.1%	-0.6%
Russia*	2.3%	3.6%	25.3%	12.5%
<b>Total-Europe</b>	<b>4.3%</b>	<b>5.6%</b>	<b>18.7%</b>	<b>8.9%</b>

Country Allocation				
	Manager	Index	Manager	Index
	Allocation (USD)	Allocation (USD)	Return (USD)	Return (USD)
<b>AsiaPacific</b>				
China*	11.0%	30.3%	34.1%	17.9%
Hong Kong	16.3%	0.0%	18.1%	15.6%
India*	14.7%	9.4%	1.7%	7.1%
Indonesia*	5.8%	2.3%	2.1%	4.2%
Korea*	8.4%	13.8%	8.9%	4.7%
Malaysia*	1.5%	2.4%	-3.9%	0.4%
Philippines*	4.0%	1.1%	1.0%	7.9%
Taiwan*	5.3%	11.4%	8.6%	9.0%
Thailand*	2.9%	2.4%	9.3%	7.5%
<b>Total-AsiaPacific</b>	<b>70.0%</b>	<b>73.3%</b>	<b>12.5%</b>	<b>11.1%</b>
<b>Other</b>				
South Africa*	3.9%	6.2%	-2.0%	4.3%
Turkey*	1.2%	0.6%	-17.5%	-3.1%
<b>Total-Other</b>	<b>5.1%</b>	<b>8.8%</b>	<b>-5.6%</b>	<b>3.4%</b>
<b>Totals</b>				
Developed	18.7%	0.0%	20.1%	--
Emerging*	81.3%	100.0%	8.5%	9.9%



# TOTAL EMERGING MARKET EQUITY

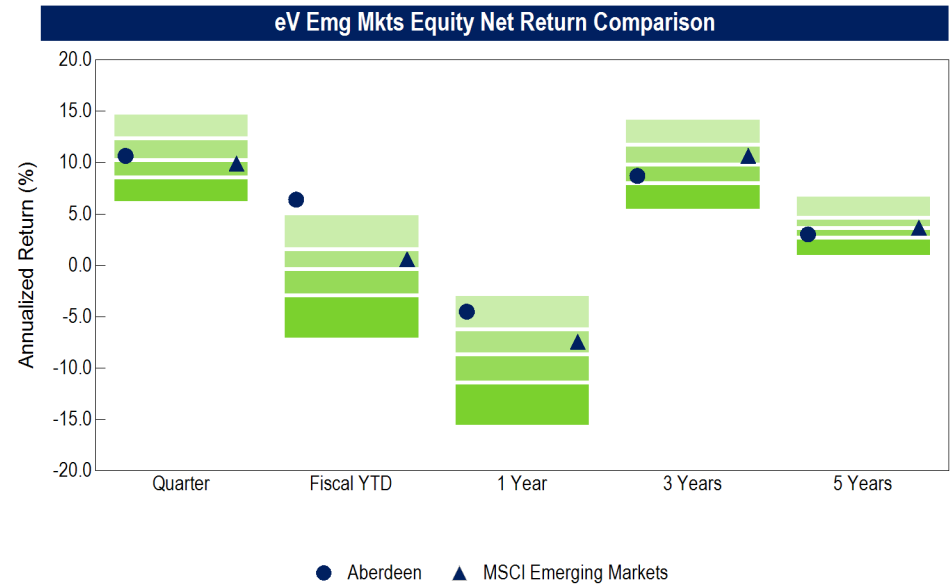
International Equity Performance Attribution Versus MSCI Emerging Markets - Quarter Ending March 31, 2019									
	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
<b>Europe</b>									
Czech Republic*	--	3.8%	0.0%	0.2%	--	0.0%	0.0%	--	0.0%
Greece*	--	13.3%	0.0%	0.2%	--	0.0%	0.0%	--	0.0%
Hungary*	0.5%	6.0%	0.3%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Luxembourg	32.5%	9.9%	0.8%	0.0%	0.0%	0.0%	0.0%	0.2%	0.2%
Poland*	-1.1%	-0.6%	0.9%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Russia*	25.3%	12.5%	2.3%	3.6%	0.6%	0.0%	-0.2%	-0.2%	0.3%
<b>Americas</b>									
Brazil*	3.1%	8.0%	11.9%	7.5%	-0.4%	-0.1%	0.0%	-0.2%	-0.7%
Chile*	0.6%	4.3%	1.9%	1.1%	0.0%	-0.1%	0.0%	0.0%	-0.1%
Colombia*	--	24.8%	0.0%	0.4%	--	-0.1%	0.0%	--	-0.1%
Mexico*	9.0%	5.6%	5.2%	2.8%	0.1%	-0.2%	0.0%	0.1%	0.1%
Peru*	--	11.2%	0.0%	0.4%	--	0.0%	0.0%	--	0.0%
United States	34.3%	2.8%	1.6%	0.0%	0.0%	-0.1%	0.0%	0.5%	0.4%

International Equity Performance Attribution Versus MSCI Emerging Markets - Quarter Ending March 31, 2019									
	Returns and Weights				Attribution Effects				Total Effects
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	
<b>AsiaPacific</b>									
China*	34.1%	17.9%	11.0%	30.3%	4.4%	-1.6%	0.2%	-2.7%	0.3%
Hong Kong	18.1%	15.6%	16.3%	0.0%	0.0%	1.0%	0.0%	0.4%	1.3%
India*	1.7%	7.1%	14.7%	9.4%	-0.5%	-0.2%	0.1%	-0.3%	-0.9%
Indonesia*	2.1%	4.2%	5.8%	2.3%	0.0%	-0.2%	0.0%	-0.1%	-0.3%
Korea*	8.9%	4.7%	8.4%	13.8%	0.6%	0.2%	0.1%	-0.3%	0.7%
Malaysia*	-3.9%	0.4%	1.5%	2.4%	-0.1%	0.1%	0.0%	0.0%	0.0%
Pakistan*	--	8.5%	0.0%	0.0%	--	0.0%	0.0%	--	0.0%
Philippines*	1.0%	7.9%	4.0%	1.1%	-0.1%	0.0%	0.0%	-0.2%	-0.3%
Taiwan*	8.6%	9.0%	5.3%	11.4%	0.0%	0.1%	0.0%	0.0%	0.1%
Thailand*	9.3%	7.5%	2.9%	2.4%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Other</b>									
Egypt*	--	16.6%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Qatar*	--	-3.6%	0.0%	1.1%	--	0.1%	0.0%	--	0.1%
South Africa*	-2.0%	4.3%	3.9%	6.2%	-0.4%	0.1%	0.0%	0.2%	-0.2%
Turkey*	-17.5%	-3.1%	1.2%	0.6%	-0.1%	0.0%	0.0%	-0.1%	-0.3%
United Arab Emirates*	--	8.7%	0.0%	0.8%	--	0.0%	0.0%	--	0.0%
<b>Totals</b>									
Developed	20.1%	--	18.7%	0.0%	0.0%	0.0%	0.0%	2.0%	1.9%
Emerging*	8.5%	9.9%	81.3%	100.0%	-1.7%	0.0%	0.2%	0.3%	-1.2%

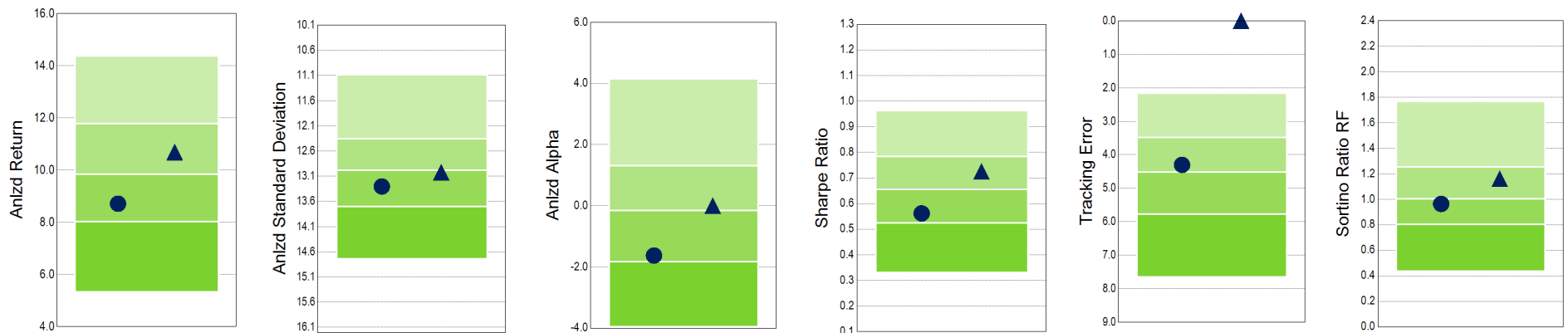


# ABERDEEN

Aberdeen believes, given the inefficiency of markets, that competitive long-term returns are achieved by identifying high quality stocks at attractive valuations and holding for the long term. It is their belief that sound fundamentals drive stock prices over time. They employ a fundamental bottom-up investment approach based upon a rigorous and disciplined proprietary research effort which originates with direct company due diligence visits. Portfolios are constructed to maximize their level of exposure to the most attractive companies filtered from the stock selection process. They run a representative or model' unconstrained portfolio that contains approximately 30 - 70 stocks at any given time. Once a stock has received unanimous approval by the team, the senior investment team members then decide which portfolio category it should enter (i.e. country, regional, Global Emerging Markets) and at what weighting. The Head of Global Emerging Markets then has responsibility to ensure that the decision is implemented.

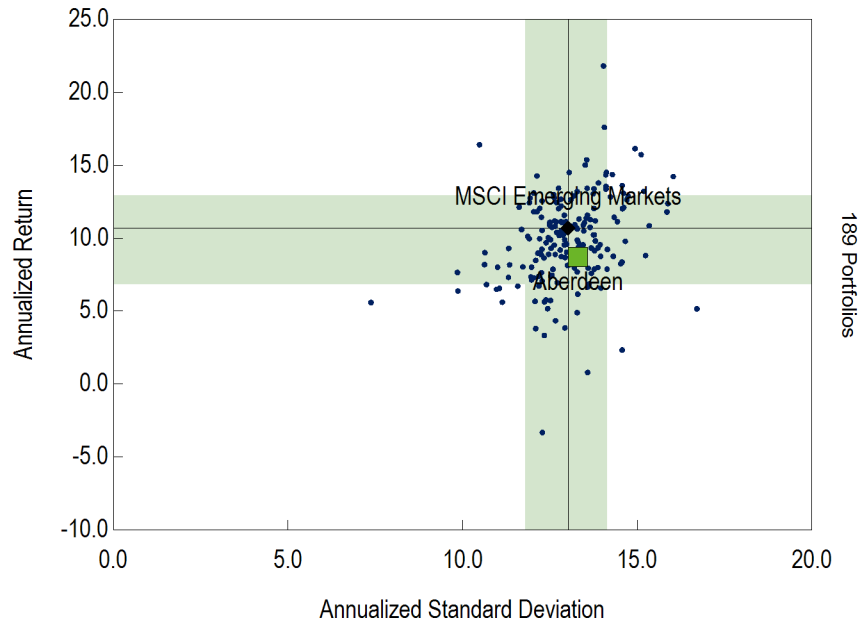


## 3 Year Risk Statistics



# ABERDEEN

Annualized Return vs. Annualized Standard Deviation  
3 Years Ending March 31, 2019



- Aberdeen
- ◆ MSCI Emerging Markets
- ▭ 68% Confidence Interval
- eV Emg Mkts Equity Net

U.S. Effective Style Map  
3 Years Ending March 31, 2019



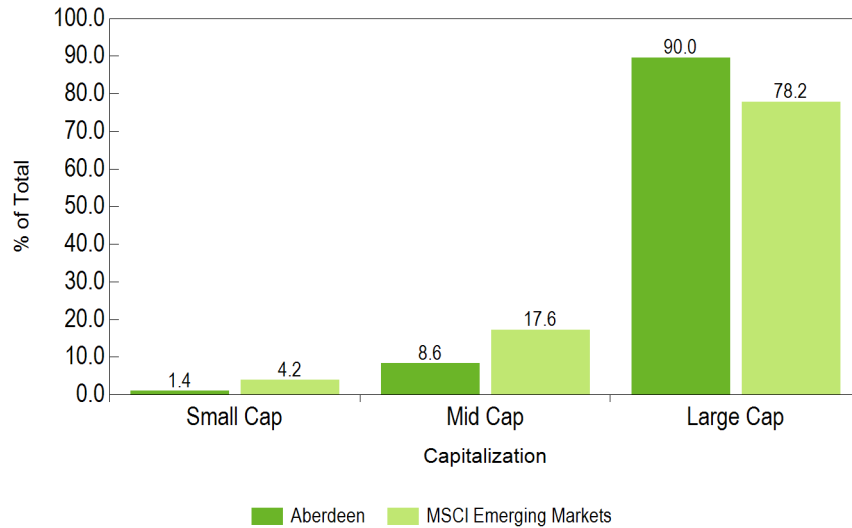
- First Rolling Period
- ◆ Last Rolling Period

# ABERDEEN

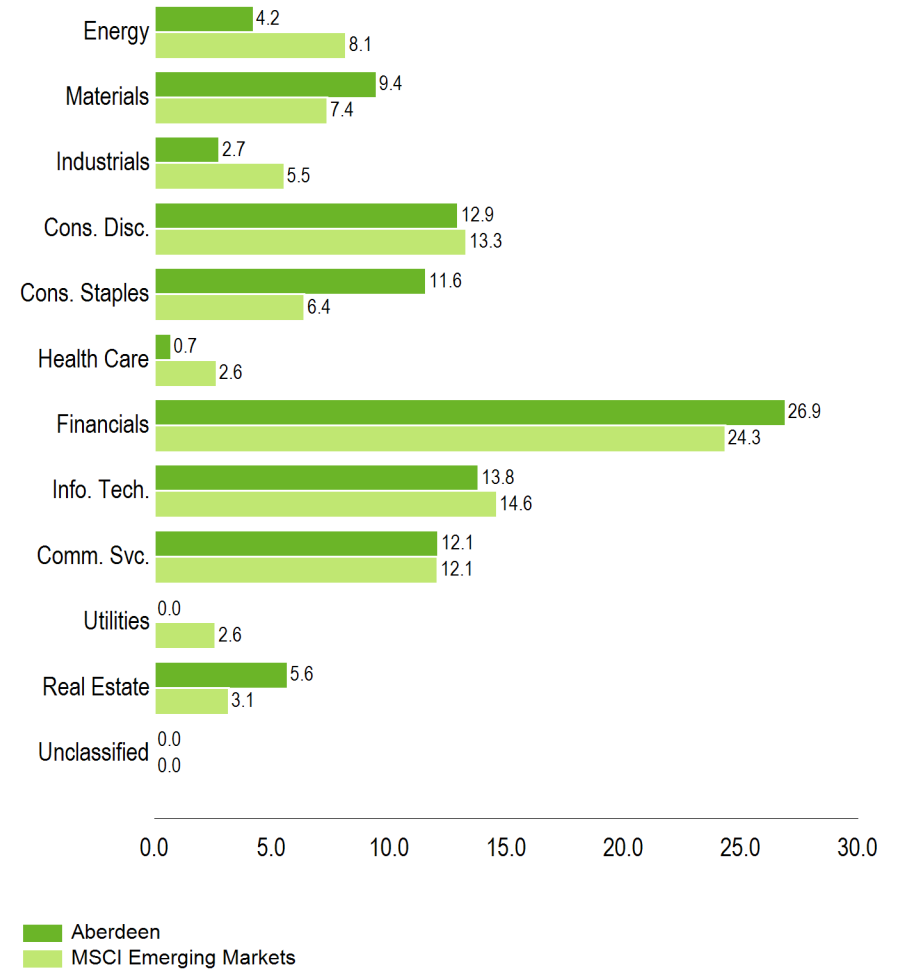
## Characteristics

	Portfolio	MSCI Emerging Markets
Number of Holdings	62	1,133
Weighted Avg. Market Cap. (\$B)	76.84	84.88
Median Market Cap. (\$B)	17.82	5.81
Price To Earnings	18.24	13.30
Price To Book	3.21	2.41
Price To Sales	2.16	1.25
Return on Equity (%)	20.52	17.82
Yield (%)	2.10	2.68
Beta	0.97	1.00
R-Squared	0.90	1.00

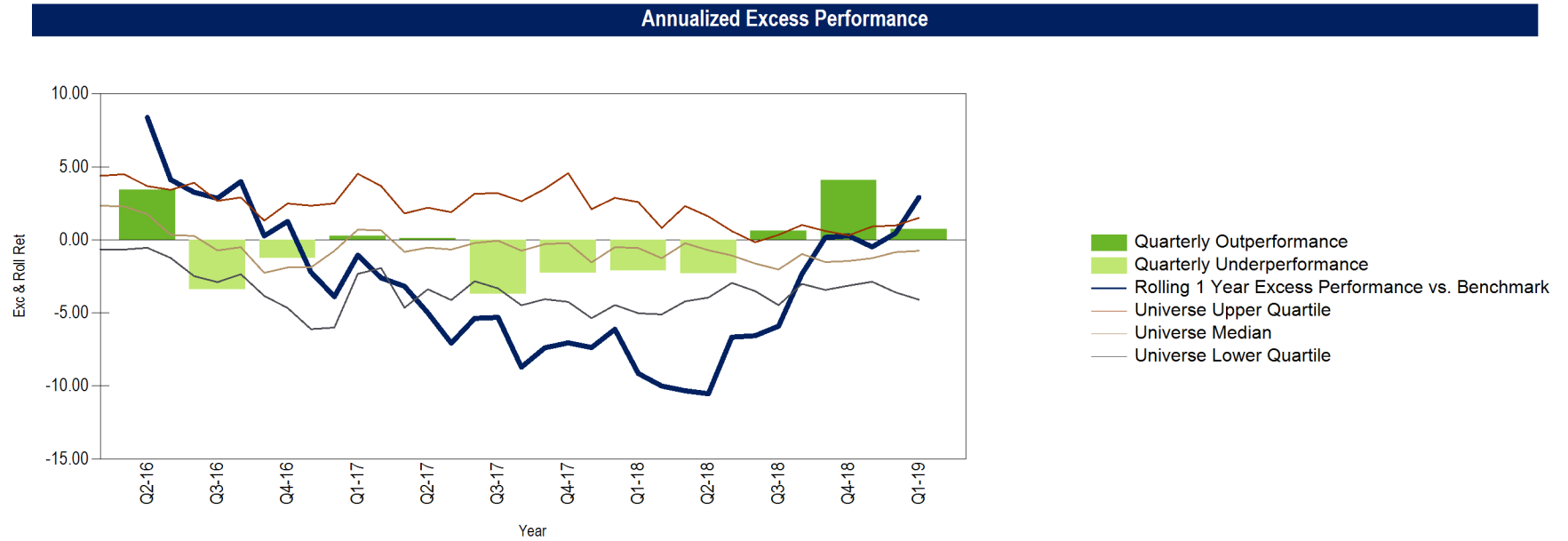
## Market Capitalization As of March 31, 2019



## Sector Allocation (%) vs MSCI Emerging Markets



# ABERDEEN



# ABERDEEN

Characteristics	MSCI	
	Portfolio	Emerging Markets
Number of Holdings	62	1,133
Weighted Avg. Market Cap. (\$B)	76.8	84.9
Median Market Cap. (\$B)	17.8	5.8
Price To Earnings	18.2	13.3
Price To Book	3.2	2.4
Price To Sales	2.2	1.3
Return on Equity (%)	20.5	17.8
Yield (%)	2.1	2.7
Beta	1.0	1.0
R-Squared	0.9	1.0

Top Positive Contributors	Relative	
	Contribution %	Return %
KWEICHOW MOUTAI 'A' (CN:KCM)	1.0%	47.9%
SAMSUNG ELTN.PREF. (KO:SEP)	0.6%	12.2%
PJSC LUKOIL SPON (LON) ADR (UKIR:LKOD)	0.6%	25.3%
AIA GROUP (K:AGP)	0.5%	19.9%
PING AN INSURANCE (GROUP) OF CHINA 'H' (K:PING)	0.5%	26.8%
YUM CHINA HOLDINGS (YUMC)	0.4%	34.3%
AUTOHOME CL.A ADR 1:1 (ATHM)	0.4%	34.4%
HUAZHU GROUP ADR 1:1 (HTHT)	0.4%	47.2%
HANGZHOU HIK VIS.DIG. TECH.'A' (CN:HVD)	0.4%	39.1%
SHANGHAI INTL.ARPT.'A' (CN:HIA)	0.4%	25.1%

Top Negative Contributors	Relative	
	Contribution %	Return %
ASTRA INTERNATIONAL (ID:ATA)	-0.2%	-10.1%
BIM BIRLESIK MAGAZALAR (TK:BMI)	-0.2%	-17.5%
MASSMART (R:MSMJ)	-0.2%	-22.2%
BANK OF THE PHILP.ISLE. (PH:BPI)	-0.2%	-9.4%
TRUWORTHS INTL. (R:TRUJ)	-0.1%	-18.7%
HERO MOTOCORP (IN:HER)	-0.1%	-15.5%
PETROLEO BRASILEIRO PN (BR:POB)	-0.1%	23.2%
NASPERS (R:NPNJ)	-0.1%	18.5%
ULTRAPAR PARTICIPOES ON (BR:U3G)	-0.1%	-10.8%
HINDUSTAN UNILEVER (IN:HDL)	-0.1%	-5.5%

Aberdeen Performance Attribution vs. MSCI Emerging Markets									
	Attribution Effects				Returns		Sector Weights		
	Total Effects	Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark	
Energy	-0.3%	0.5%	-0.4%	-0.4%	17.0%	12.3%	4.1%	8.0%	
Materials	0.1%	-0.1%	0.2%	0.0%	5.8%	6.8%	10.1%	7.6%	
Industrials	0.2%	0.5%	-0.2%	-0.2%	16.9%	5.2%	2.9%	5.7%	
Consumer Discretionary	-2.0%	-1.9%	-0.6%	0.5%	5.6%	19.9%	9.2%	12.4%	
Consumer Staples	0.6%	0.2%	0.3%	0.2%	8.4%	5.4%	12.0%	6.7%	
Health Care	0.1%	0.7%	-0.1%	-0.5%	29.4%	3.6%	0.8%	2.8%	
Financials	0.6%	0.2%	0.2%	0.1%	8.5%	7.3%	27.6%	24.7%	
Information Technology	0.0%	0.0%	0.0%	0.0%	12.8%	12.6%	14.2%	14.3%	
Communication Services	0.9%	0.7%	0.1%	0.1%	14.6%	8.8%	13.5%	12.1%	
Utilities	-0.1%	--	-0.1%	--	--	4.3%	0.0%	2.7%	
Real Estate	0.2%	-0.1%	0.4%	-0.1%	12.7%	15.5%	5.5%	3.0%	
Cash	0.0%	--	--	--	--	--	0.0%	0.0%	
<b>Portfolio</b>	<b>0.4%</b>	<b>=</b>	<b>0.9%</b>	<b>+</b>	<b>-0.2%</b>	<b>+</b>	<b>-0.2%</b>	<b>10.4%</b>	<b>10.0%</b>
								<b>100.0%</b>	<b>100.0%</b>





# ABERDEEN

Country Allocation				
	Manager	Index	Manager	Index
	Allocation (USD)	Allocation (USD)	Return (USD)	Return (USD)
<b>Americas</b>				
Brazil*	11.9%	7.5%	3.1%	8.2%
Chile*	1.9%	1.1%	0.6%	4.3%
Mexico*	5.2%	2.8%	8.9%	5.6%
United States	1.6%	0.0%	34.3%	13.7%
<b>Total-Americas</b>	<b>20.6%</b>	<b>12.2%</b>	<b>6.7%</b>	<b>7.9%</b>
<b>Europe</b>				
Hungary*	0.3%	0.3%	-1.6%	6.0%
Luxembourg	0.8%	0.0%	32.5%	10.0%
Poland*	0.9%	1.3%	-1.1%	-0.6%
Russia*	2.3%	3.6%	25.3%	12.5%
<b>Total-Europe</b>	<b>4.3%</b>	<b>5.6%</b>	<b>18.7%</b>	<b>8.9%</b>

Country Allocation				
	Manager	Index	Manager	Index
	Allocation (USD)	Allocation (USD)	Return (USD)	Return (USD)
<b>AsiaPacific</b>				
China*	11.0%	30.4%	34.2%	18.0%
Hong Kong	16.3%	0.0%	17.9%	15.6%
India*	14.7%	9.4%	1.8%	7.1%
Indonesia*	5.8%	2.3%	2.2%	4.3%
Korea*	8.4%	13.7%	9.0%	4.8%
Malaysia*	1.5%	2.4%	-3.9%	0.3%
Philippines*	4.0%	1.1%	0.7%	7.9%
Taiwan*	5.3%	11.5%	8.6%	9.0%
Thailand*	2.9%	2.4%	9.4%	7.5%
<b>Total-AsiaPacific</b>	<b>70.0%</b>	<b>73.3%</b>	<b>12.2%</b>	<b>11.2%</b>
<b>Other</b>				
South Africa*	3.9%	6.3%	-3.1%	4.5%
Turkey*	1.2%	0.6%	-17.5%	-3.0%
<b>Total-Other</b>	<b>5.1%</b>	<b>8.9%</b>	<b>-6.5%</b>	<b>3.4%</b>
<b>Totals</b>				
Developed	18.7%	0.0%	19.9%	--
Emerging*	81.3%	100.0%	8.2%	10.0%



# ABERDEEN

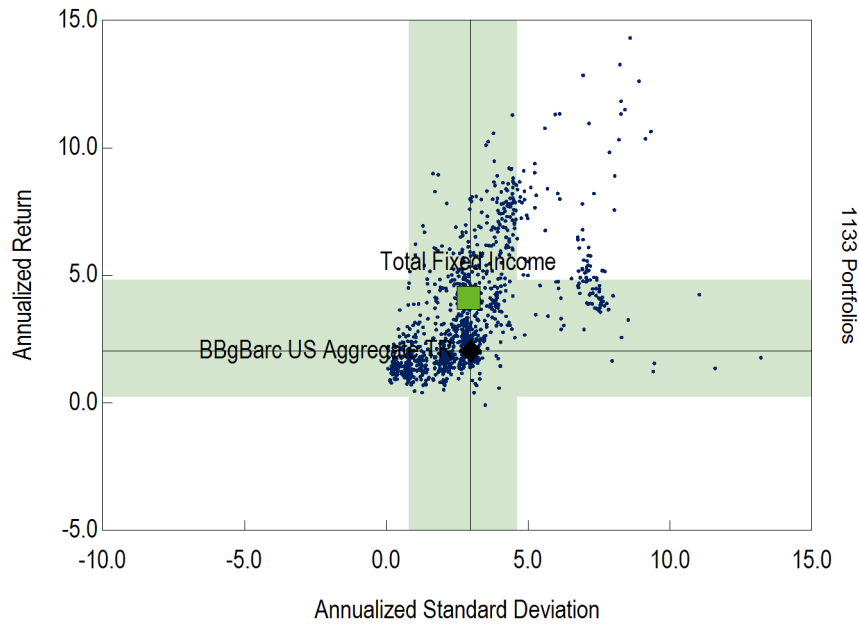
International Equity Performance Attribution Versus MSCI Emerging Markets - Quarter Ending March 31, 2019									
Returns and Weights					Attribution Effects				Total Effects
Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect		
<b>Europe</b>									
Czech Republic*	--	3.8%	0.0%	0.2%	--	0.0%	0.0%	--	0.0%
Greece*	--	13.3%	0.0%	0.2%	--	0.0%	0.0%	--	0.0%
Hungary*	0.5%	6.0%	0.3%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Luxembourg	32.5%	9.9%	0.8%	0.0%	0.0%	0.0%	0.0%	0.2%	0.2%
Poland*	-1.1%	-0.6%	0.9%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Russia*	25.3%	12.5%	2.3%	3.6%	0.6%	0.0%	-0.2%	-0.2%	0.3%
<b>Americas</b>									
Brazil*	3.1%	8.0%	11.9%	7.5%	-0.4%	-0.1%	0.0%	-0.2%	-0.7%
Chile*	0.6%	4.3%	1.9%	1.1%	0.0%	-0.1%	0.0%	0.0%	-0.1%
Colombia*	--	24.8%	0.0%	0.4%	--	-0.1%	0.0%	--	-0.1%
Mexico*	9.0%	5.6%	5.2%	2.8%	0.1%	-0.2%	0.0%	0.1%	0.1%
Peru*	--	11.2%	0.0%	0.4%	--	0.0%	0.0%	--	0.0%
United States	34.3%	2.8%	1.6%	0.0%	0.0%	-0.1%	0.0%	0.5%	0.4%

International Equity Performance Attribution Versus MSCI Emerging Markets - Quarter Ending March 31, 2019									
Returns and Weights					Attribution Effects				Total Effects
Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect		
<b>AsiaPacific</b>									
China*	34.1%	17.9%	11.0%	30.3%	4.4%	-1.6%	0.2%	-2.7%	0.3%
Hong Kong	18.1%	15.6%	16.3%	0.0%	0.0%	1.0%	0.0%	0.4%	1.3%
India*	1.7%	7.1%	14.7%	9.4%	-0.5%	-0.2%	0.1%	-0.3%	-0.9%
Indonesia*	2.1%	4.2%	5.8%	2.3%	0.0%	-0.2%	0.0%	-0.1%	-0.3%
Korea*	8.9%	4.7%	8.4%	13.8%	0.6%	0.2%	0.1%	-0.3%	0.7%
Malaysia*	-3.9%	0.4%	1.5%	2.4%	-0.1%	0.1%	0.0%	0.0%	0.0%
Pakistan*	--	8.5%	0.0%	0.0%	--	0.0%	0.0%	--	0.0%
Philippines*	1.0%	7.9%	4.0%	1.1%	-0.1%	0.0%	0.0%	-0.2%	-0.3%
Taiwan*	8.6%	9.0%	5.3%	11.4%	0.0%	0.1%	0.0%	0.0%	0.1%
Thailand*	9.3%	7.5%	2.9%	2.4%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Other</b>									
Egypt*	--	16.6%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Qatar*	--	-3.6%	0.0%	1.1%	--	0.1%	0.0%	--	0.1%
South Africa*	-2.0%	4.3%	3.9%	6.2%	-0.4%	0.1%	0.0%	0.2%	-0.2%
Turkey*	-17.5%	-3.1%	1.2%	0.6%	-0.1%	0.0%	0.0%	-0.1%	-0.3%
United Arab Emirates*	--	8.7%	0.0%	0.8%	--	0.0%	0.0%	--	0.0%
<b>Totals</b>									
Developed	20.1%	--	18.7%	0.0%	0.0%	0.0%	0.0%	2.0%	1.9%
Emerging*	8.5%	9.9%	81.3%	100.0%	-1.7%	0.0%	0.2%	0.3%	-1.2%



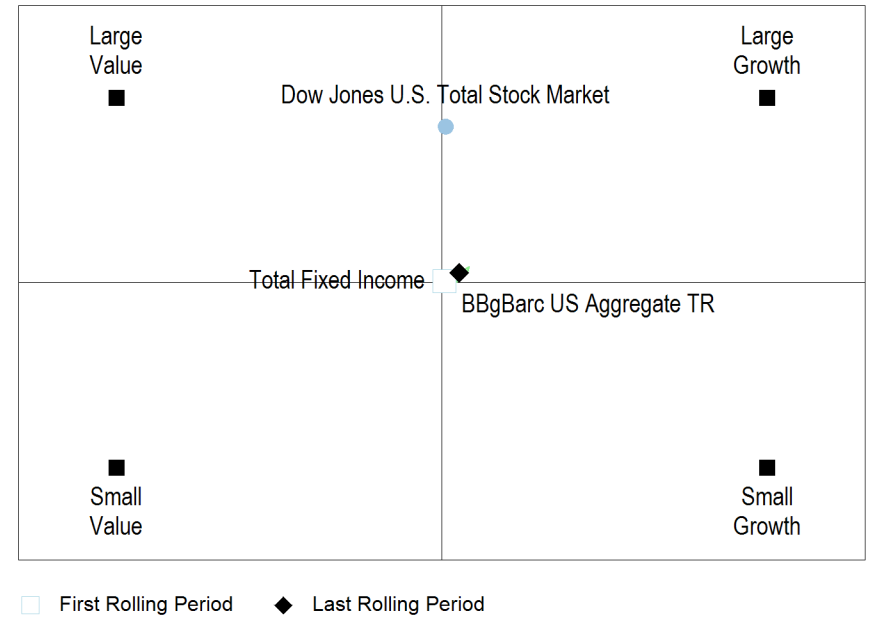
# TOTAL FIXED INCOME COMPOSITE

Annualized Return vs. Annualized Standard Deviation  
3 Years Ending March 31, 2019

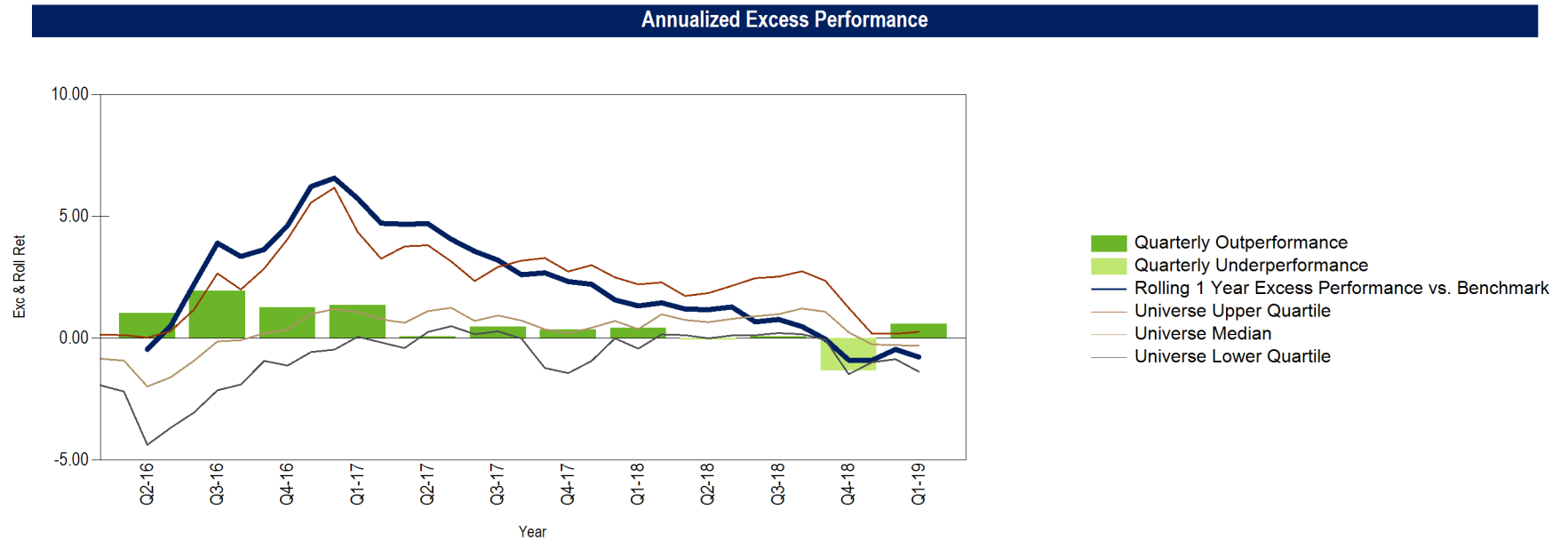


- Total Fixed Income
- ◆ BBgBarc US Aggregate TR
- 68% Confidence Interval
- eV All US Fixed Inc Net

U.S. Effective Style Map  
3 Years Ending March 31, 2019

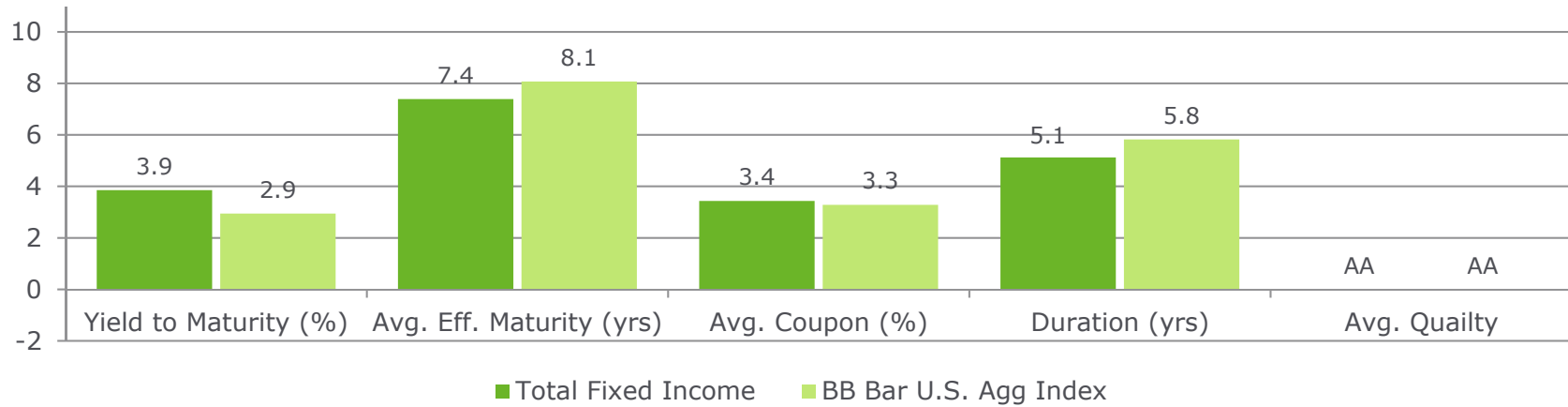


# TOTAL FIXED INCOME COMPOSITE

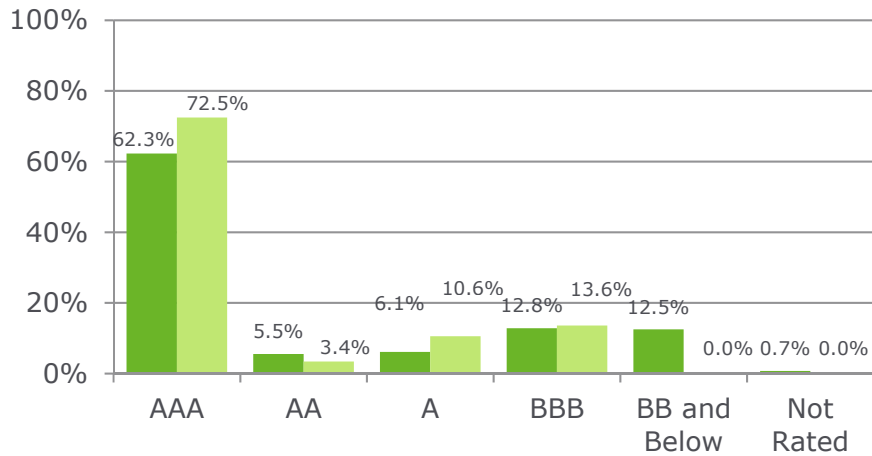


# TOTAL FIXED INCOME

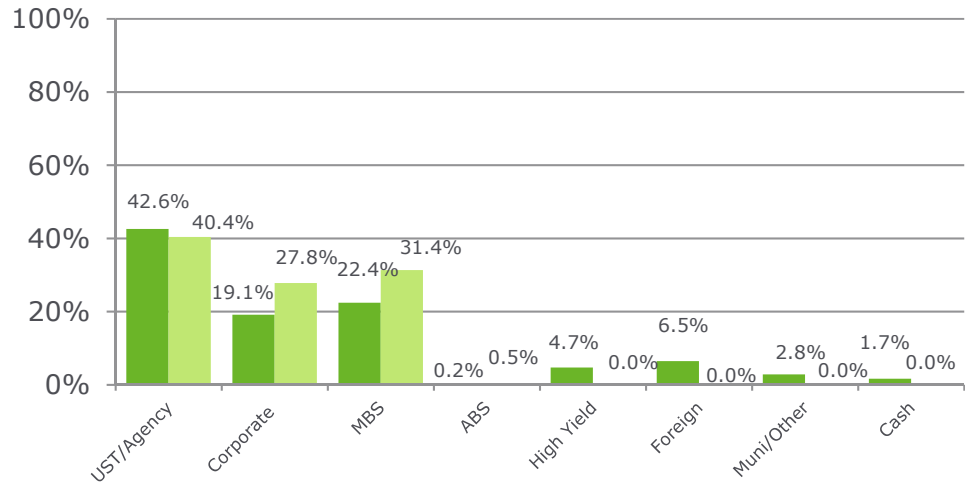
## Characteristics



## Quality Rating

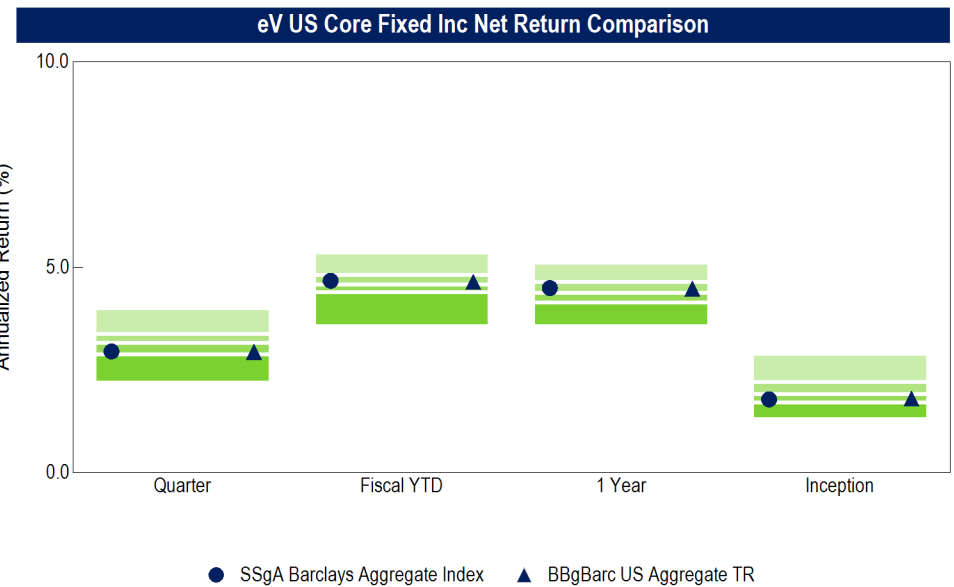


## Sectors

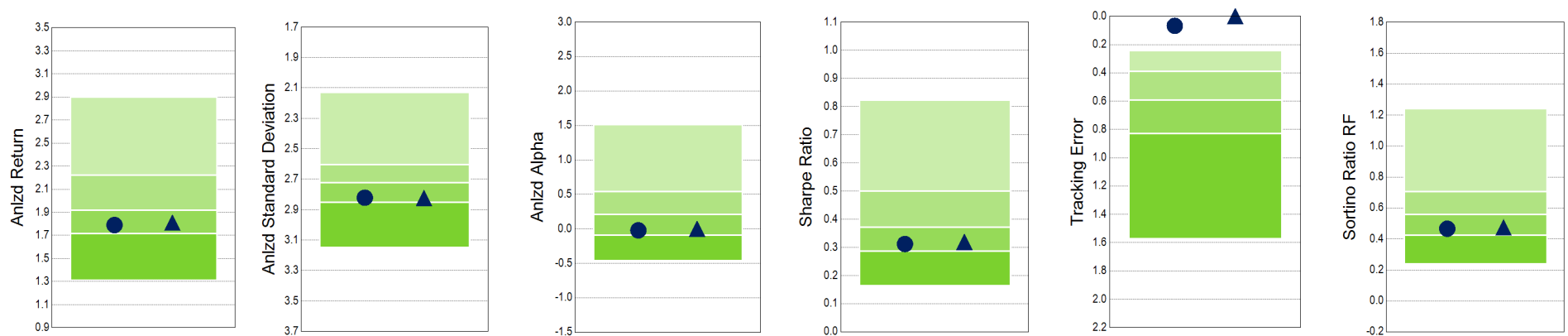


# SSGA BARCLAYS AGGREGATE INDEX

The Strategy is managed using a "passive" or "indexing" investment approach, by which SSgA attempts to match, before expenses, the performance of the Index. SSgA will typically attempt to invest in the securities comprising the Index, in the same proportions as they are represented in the Index. In some cases, it may not be possible or practicable to purchase all of the securities comprising the Index, or to hold them in the same weightings as they represent in the Index. In those circumstances, SSgA may employ a sampling or optimization technique to construct the portfolio in question. From time to time securities are added to or removed from the Index. SSgA may sell securities that are represented in the Index, or purchase securities that are not yet represented in the Index, in anticipation of their removal from or addition to the Index. The Strategy may at times purchase or sell futures contracts on the Index, or options on those futures, or engage in other transactions involving the use of derivatives, in lieu of investment directly in the securities making up the Index or to enhance the Strategy's replication of the Index return. The Strategy's return may not match the return of the Index.

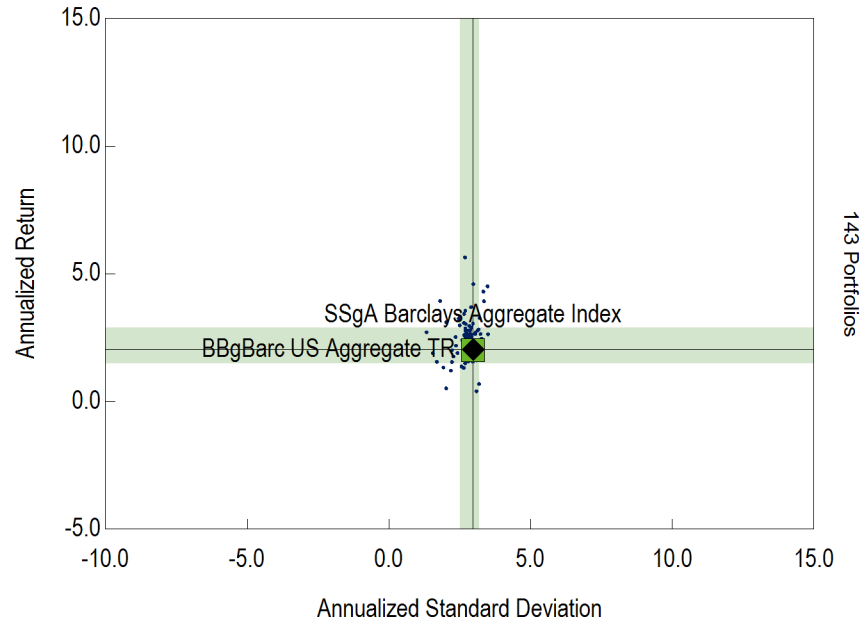


## Since Inception Risk Statistics



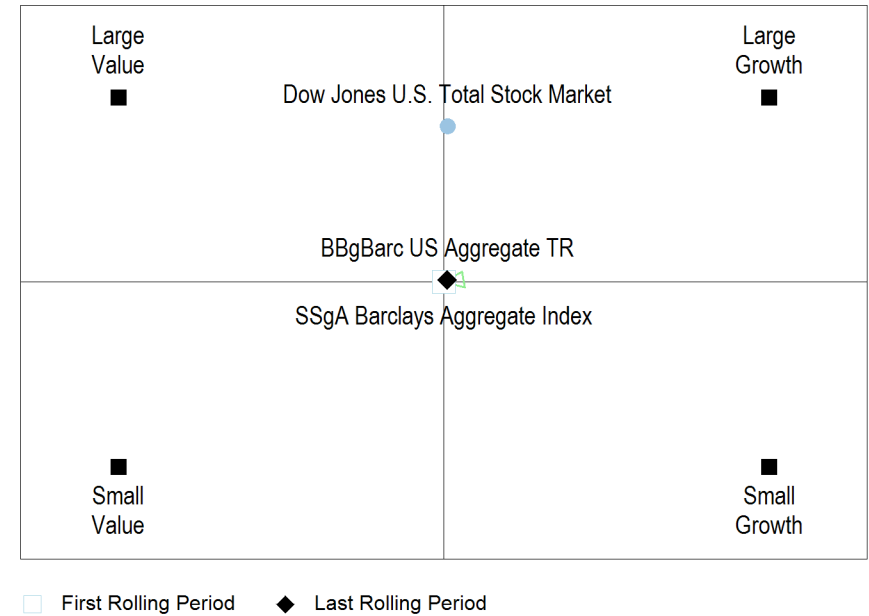
# SSGA BARCLAYS AGGREGATE INDEX

Annualized Return vs. Annualized Standard Deviation  
3 Years Ending March 31, 2019

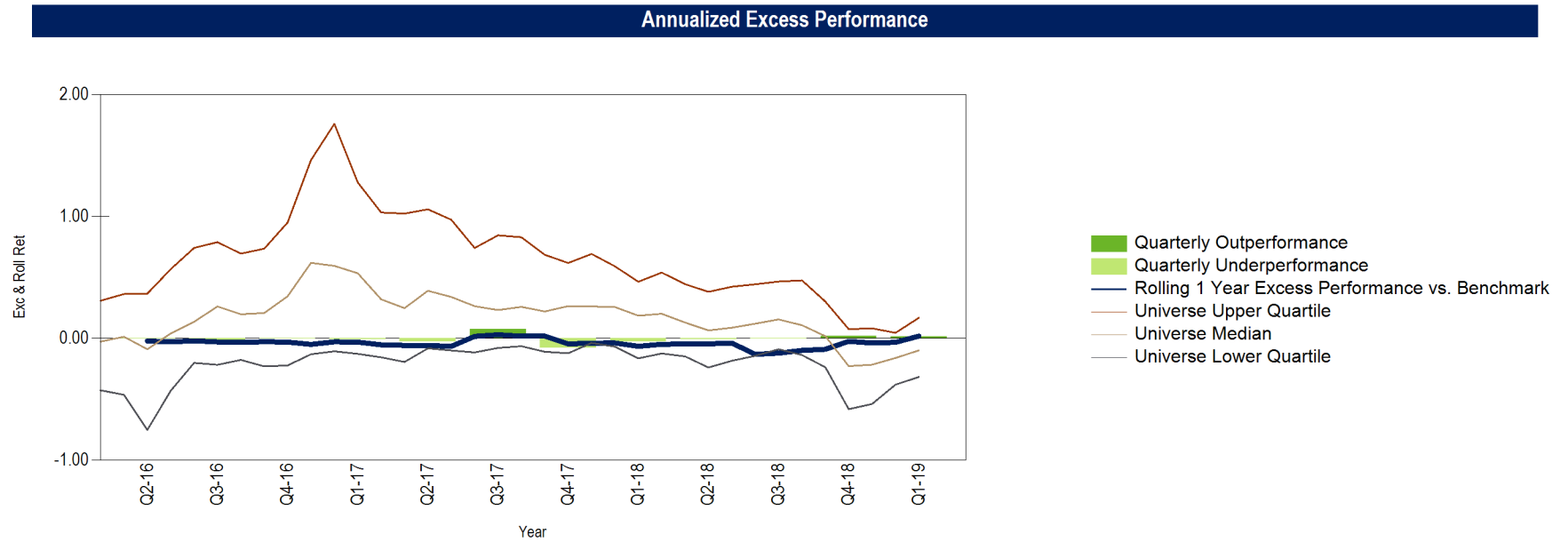


- SSGA Barclays Aggregate Index
- ◆ BBgBarc US Aggregate TR
- 68% Confidence Interval
- eV US Core Fixed Inc Net

U.S. Effective Style Map  
3 Years Ending March 31, 2019



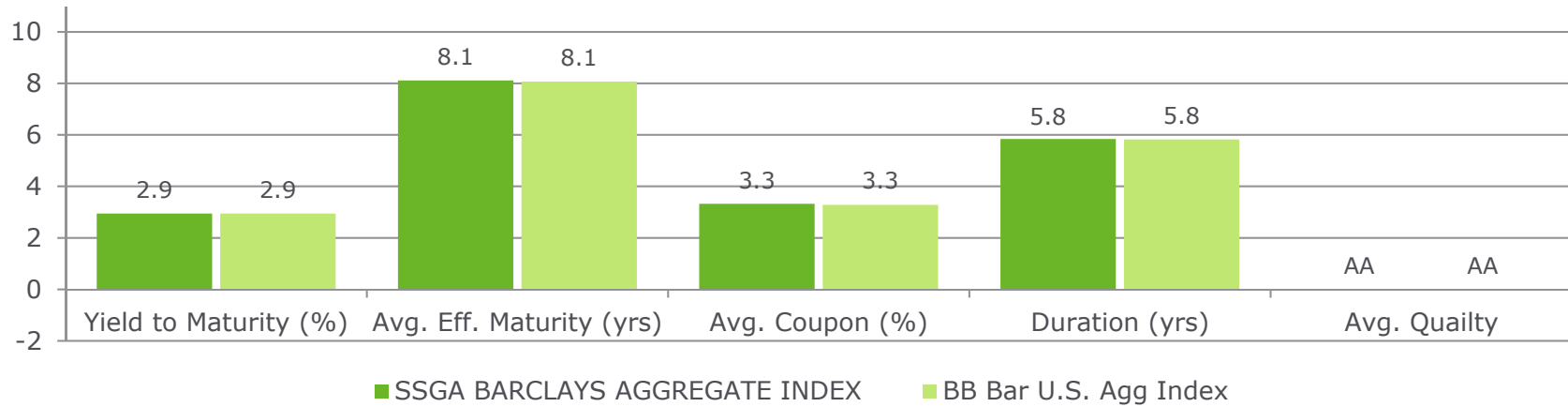
# SSGA BARCLAYS AGGREGATE INDEX



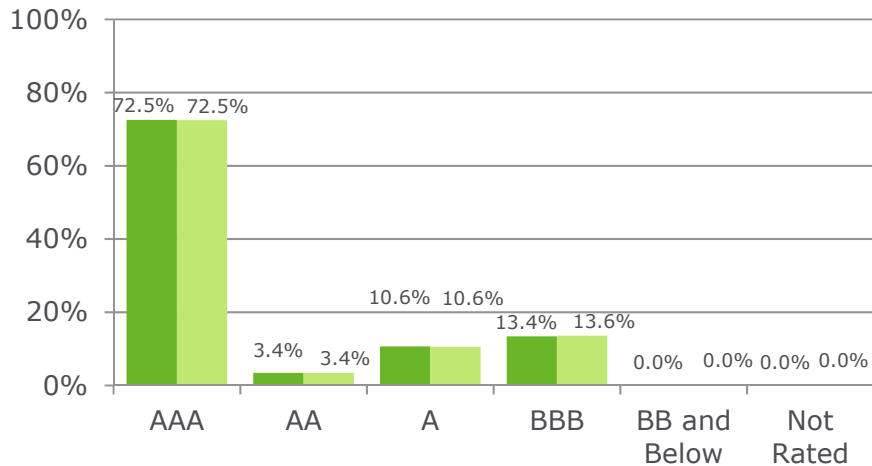


# SSGA BARCLAYS AGGREGATE INDEX

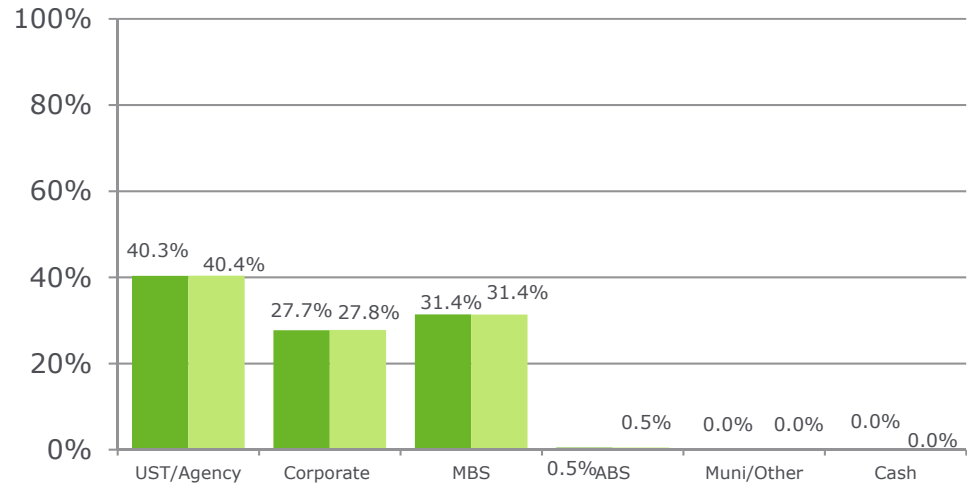
## Characteristics



## Quality Rating

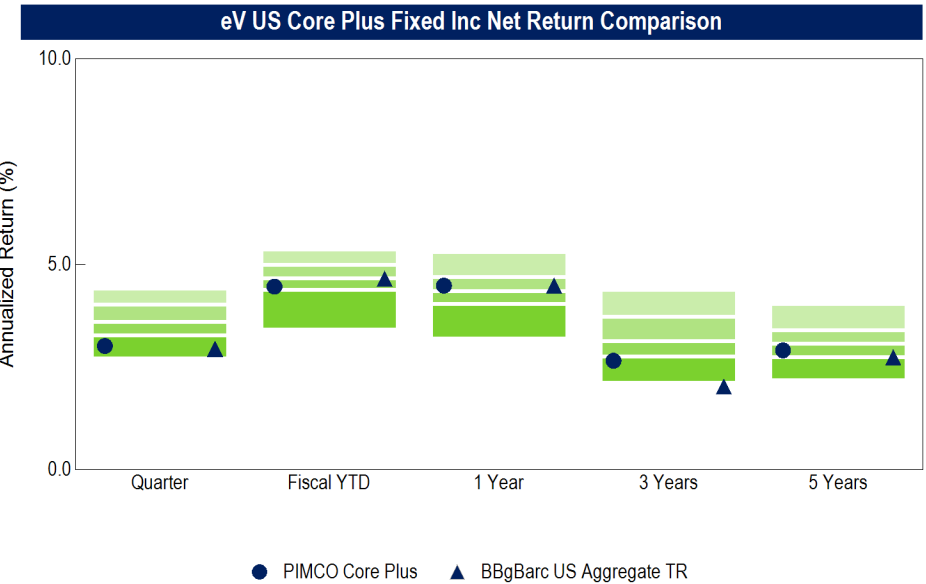


## Sectors

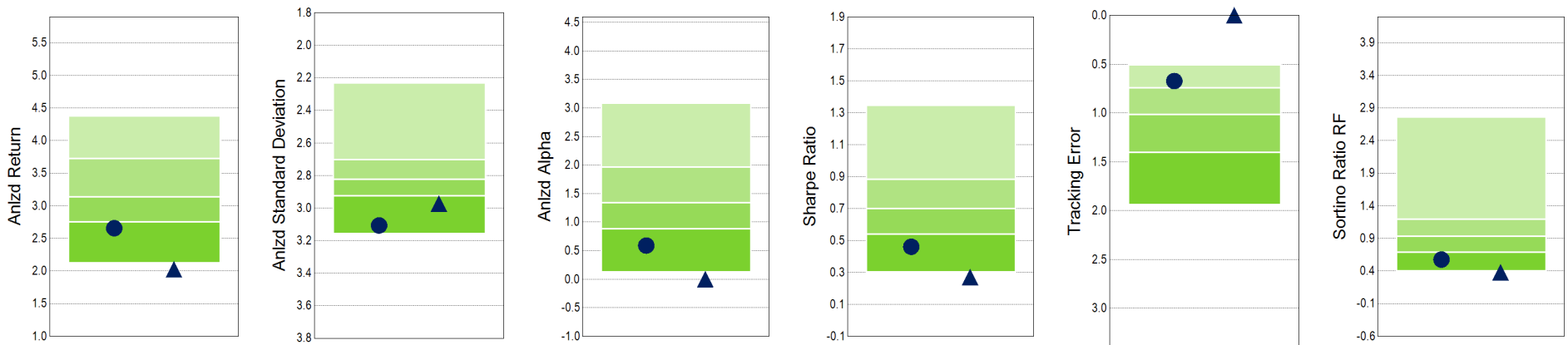


# PIMCO CORE PLUS

PIMCO's investment process expects to generate above-benchmark returns by building diversified, risk-averse portfolios based upon their long-term secular outlook. This is achieved by analyzing fundamental global trends in such areas as political factors, inflation, volatility, growth, and currency, amongst others. The three to five-year secular outlook is the core element of their decision-making process, and serves as a framework for portfolio implementation. In applying the secular outlook to the portfolio, such tools as duration position, yield curve posture and sector allocation are expressed to best represent the firm's view on the macro-economic environment. Bottom-up analysis of specific securities is also an important part of the firm's philosophy. Bonds are evaluated on a rich/cheap basis and fundamental research determines strong portfolio candidates.

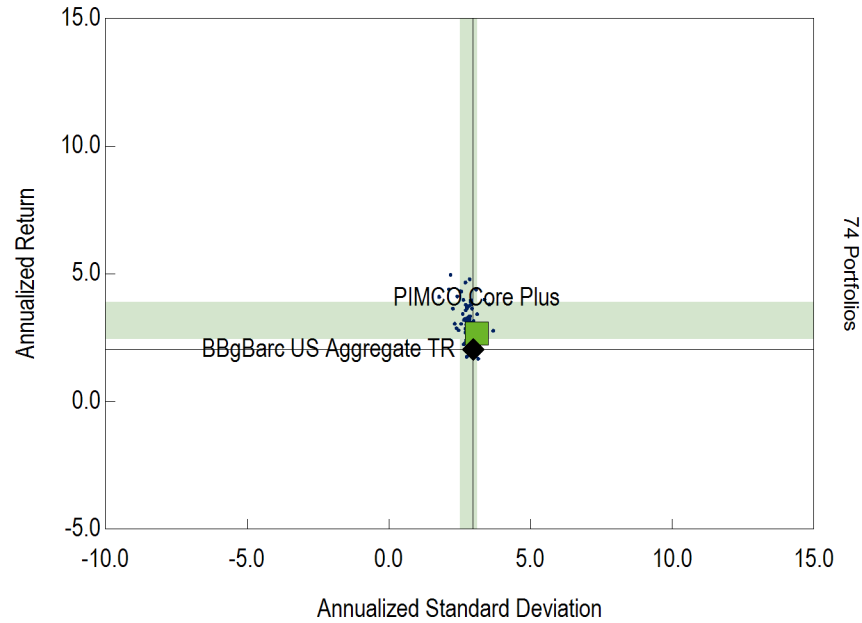


## 3 Year Risk Statistics



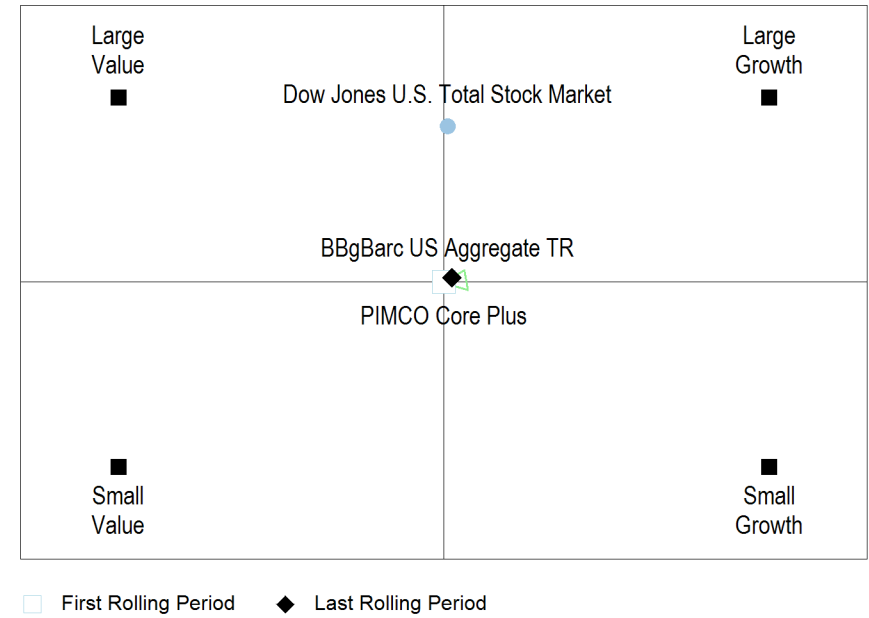
# PIMCO CORE PLUS

Annualized Return vs. Annualized Standard Deviation  
3 Years Ending March 31, 2019

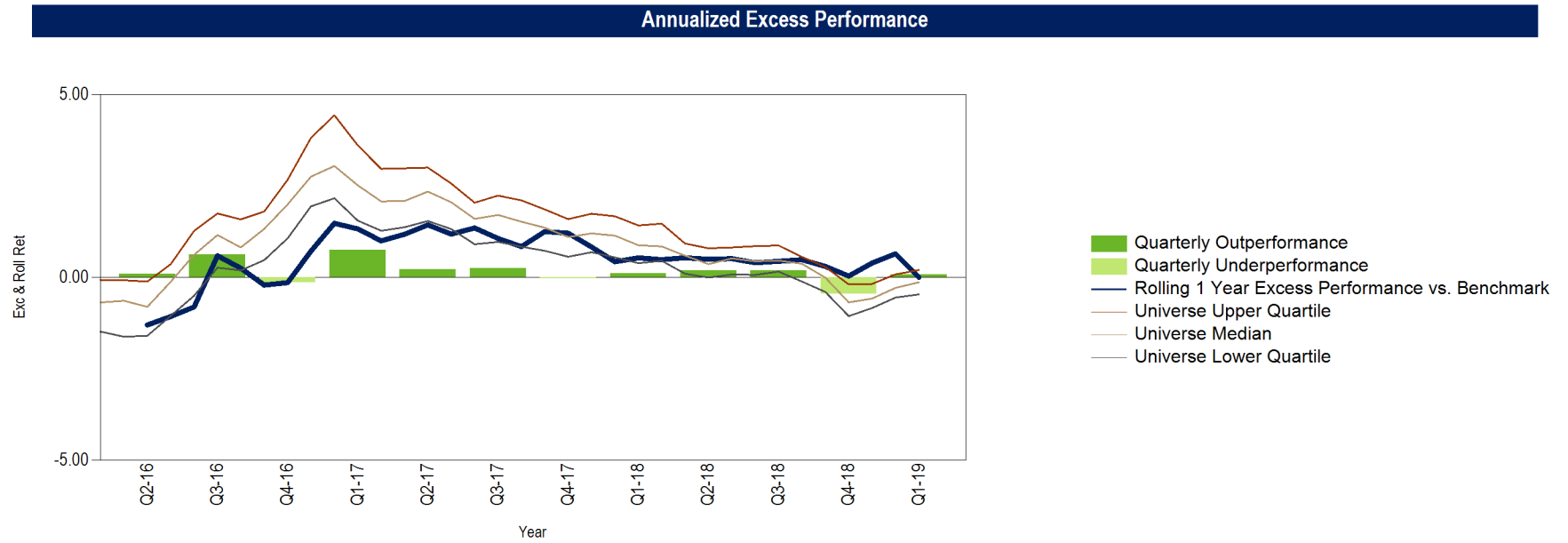


- PIMCO Core Plus
- ◆ BbgBarc US Aggregate TR
- 68% Confidence Interval
- eV US Core Plus Fixed Inc Net

U.S. Effective Style Map  
3 Years Ending March 31, 2019

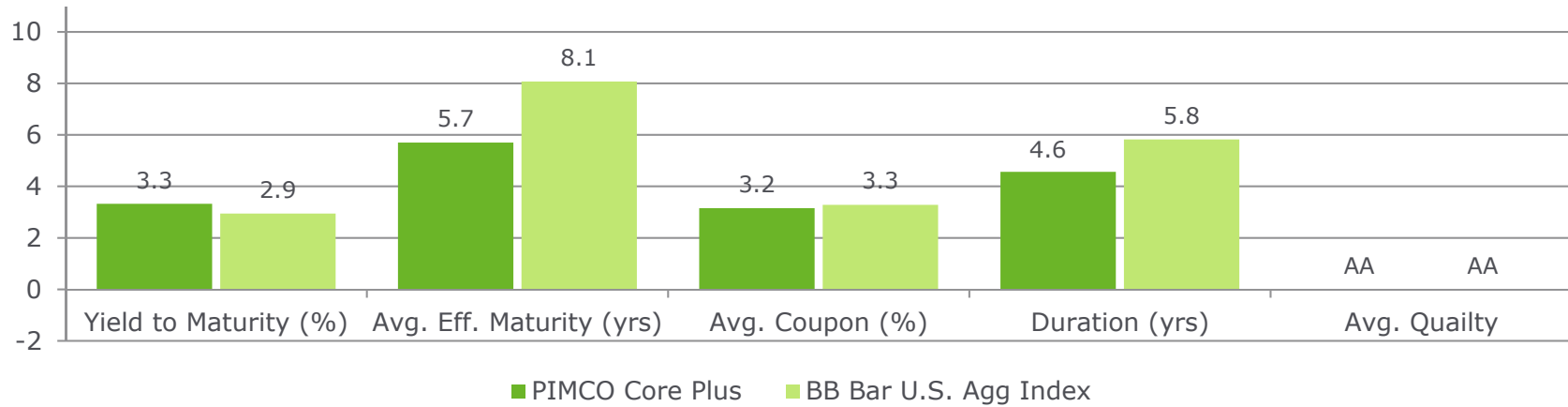


# PIMCO CORE PLUS

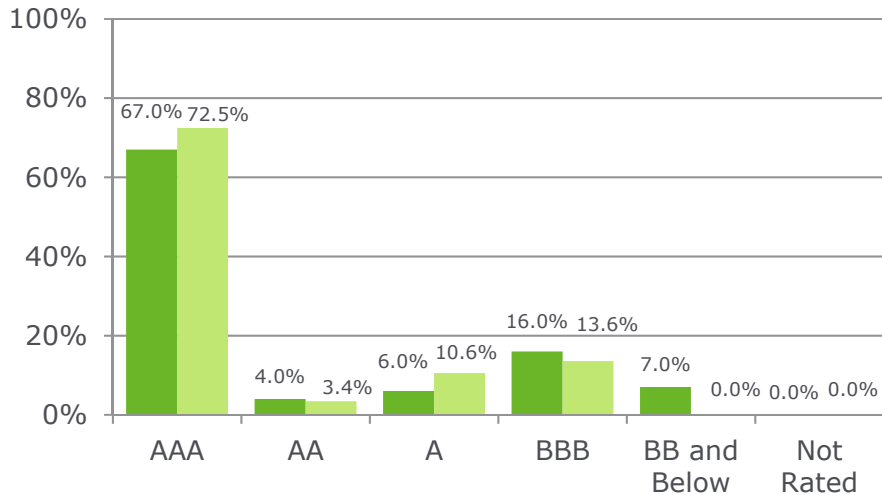


# PIMCO CORE PLUS

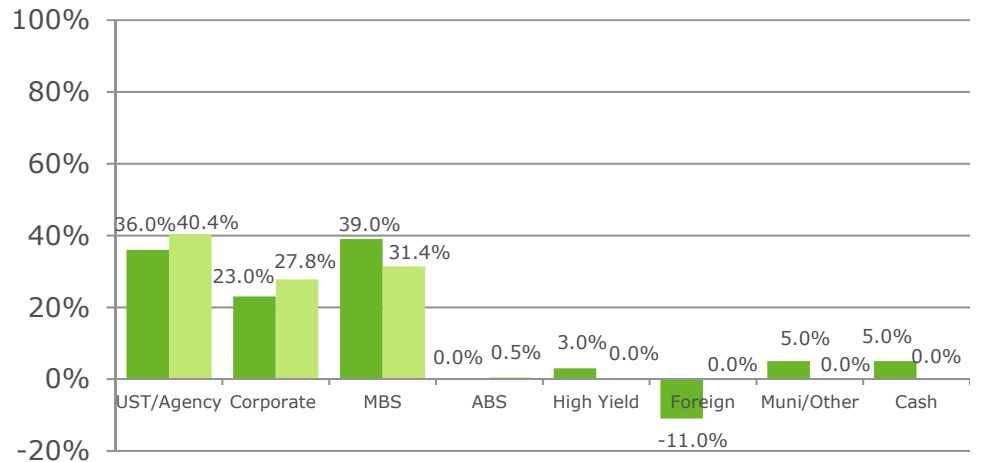
## Characteristics



## Quality Rating

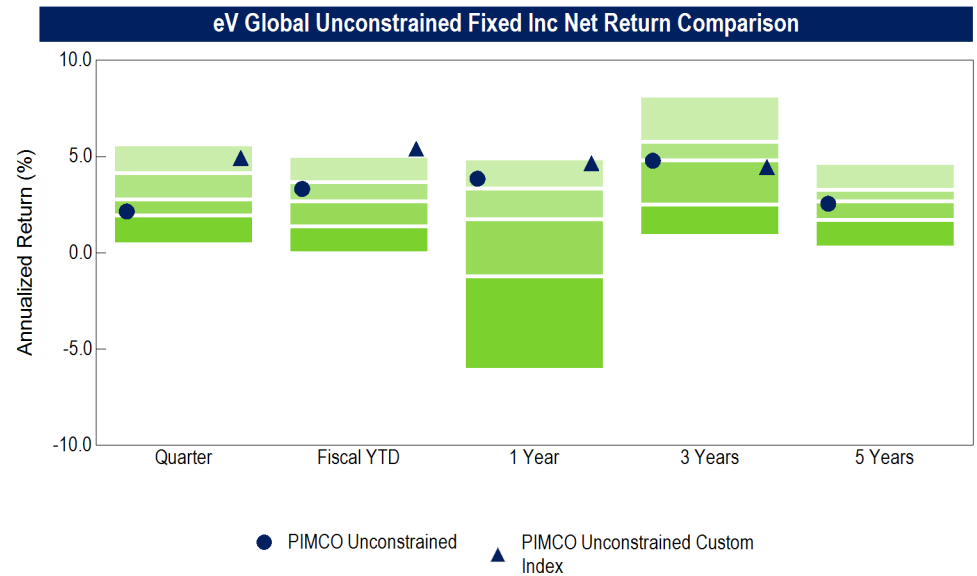


## Sectors

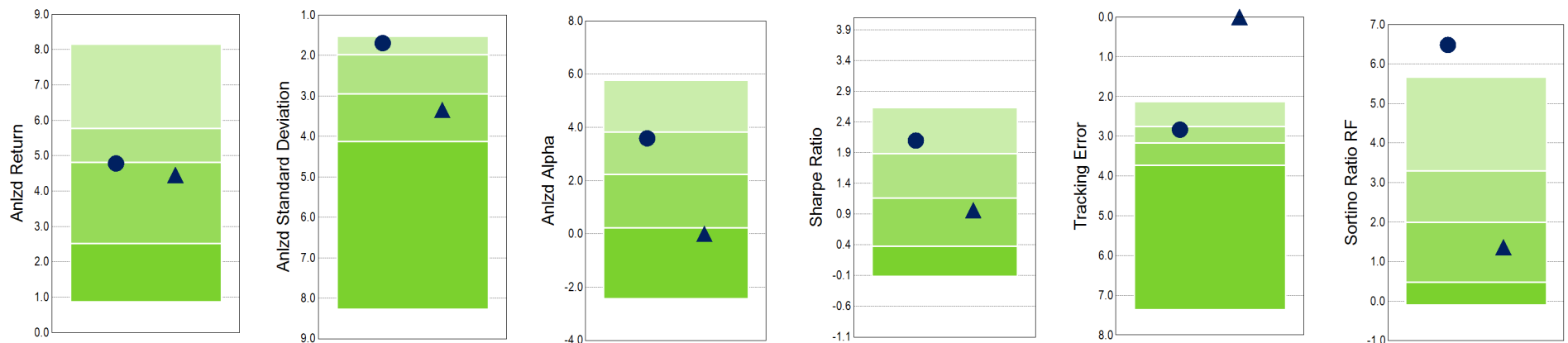


# PIMCO UNCONSTRAINED

The PIMCO Unconstrained Bond Strategy is an absolute return-oriented, investment grade quality fixed income strategy that embodies PIMCO's secular thinking, global themes, and integrated investment process without the constraints of a benchmark or significant sector/instrument limitations. The strategy is designed to offer the traditional benefits of a core bond portfolio - seeks maximum long-term return consistent with capital preservation and prudent management- but with higher potential alpha and the potential to mitigate downside risk to a greater degree than what is reasonably possible from traditional active fixed income management approaches as the strategy allows for more manager discretion to adjust duration exposure, allocate across sectors and otherwise express the firm's active views. The strategy is governed by PIMCO's investment philosophy and unique, disciplined secular investment process, which focuses on long-term economic, social and political trends that may have lasting impacts on investment returns.

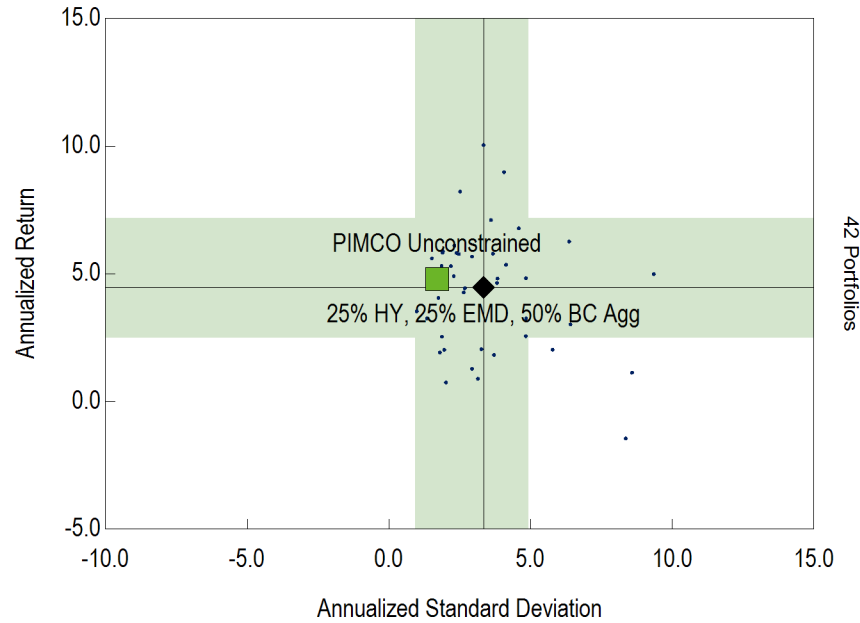


## 3 Year Risk Statistics

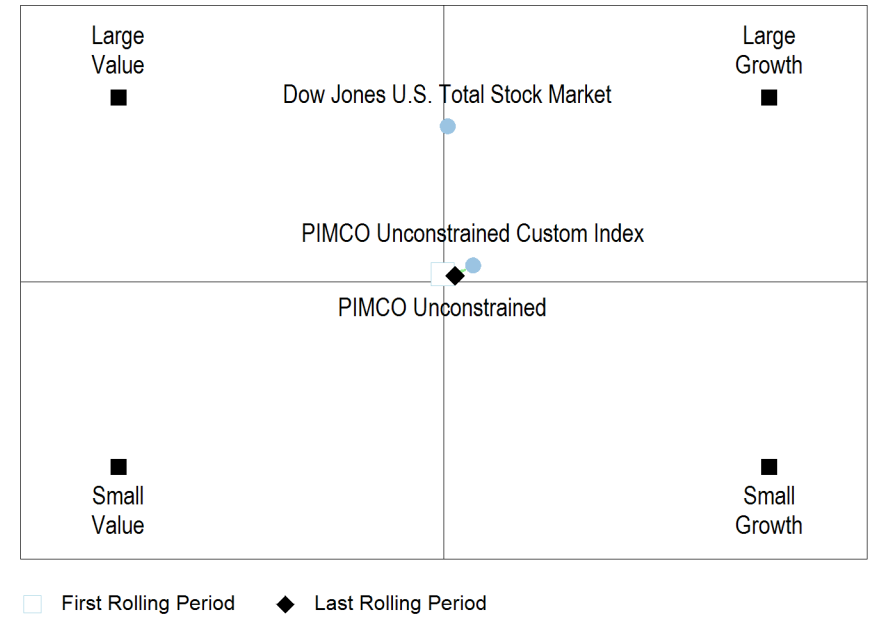


# PIMCO UNCONSTRAINED

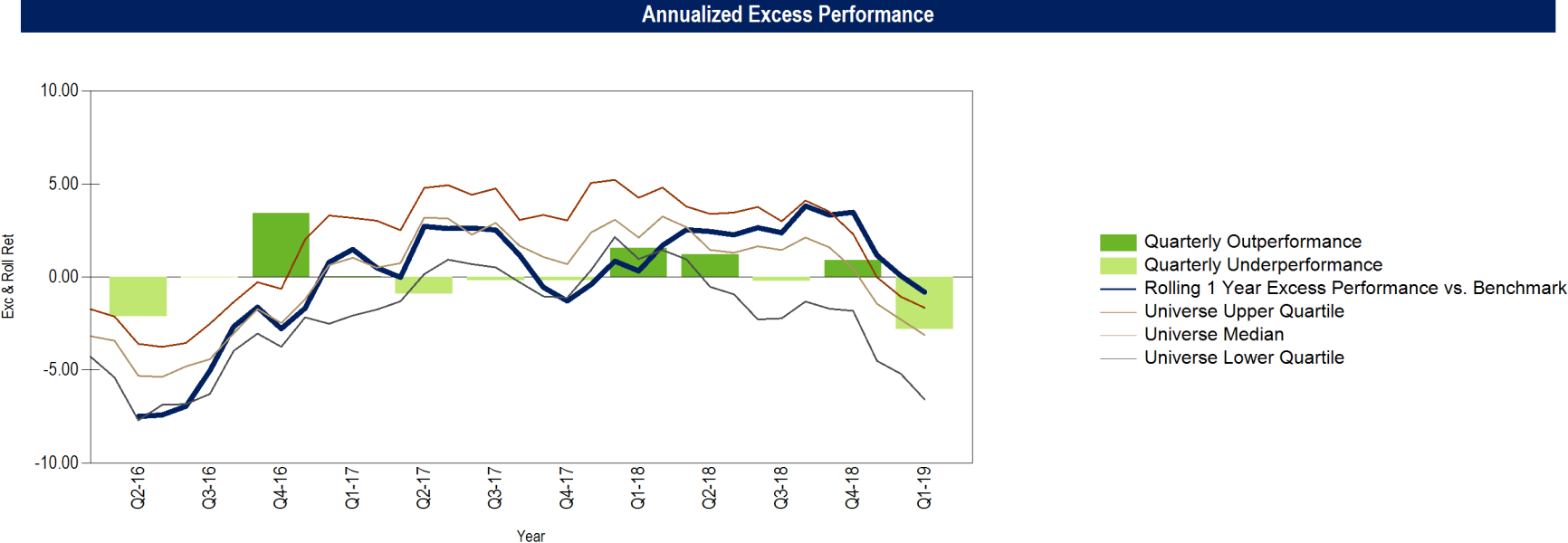
Annualized Return vs. Annualized Standard Deviation  
3 Years Ending March 31, 2019



U.S. Effective Style Map  
3 Years Ending March 31, 2019



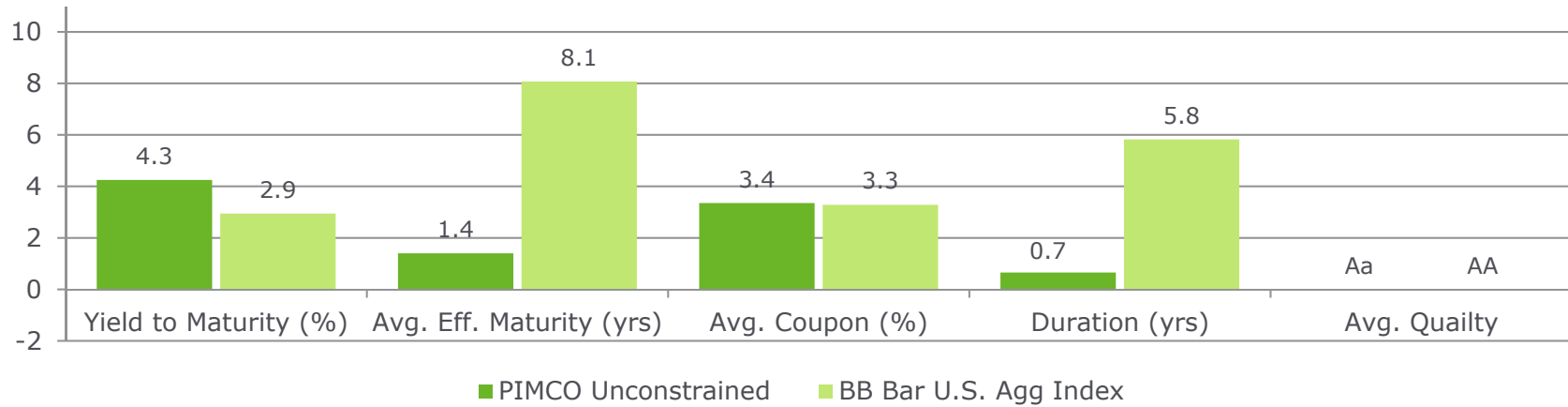
# PIMCO UNCONSTRAINED



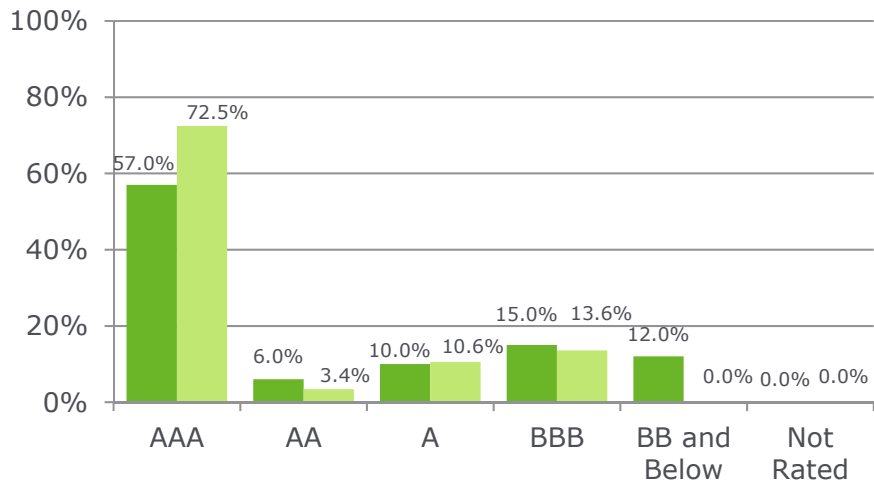


# PIMCO UNCONSTRAINED

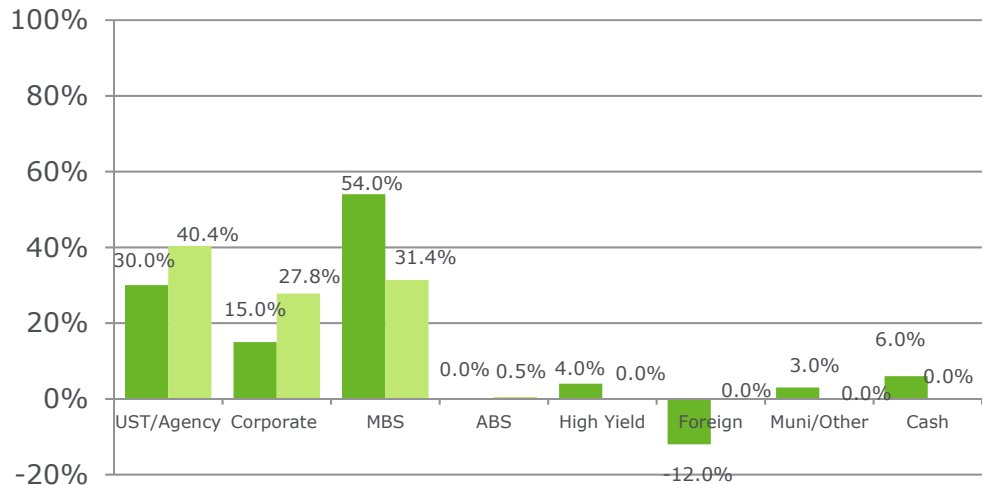
## Characteristics



## Quality Rating

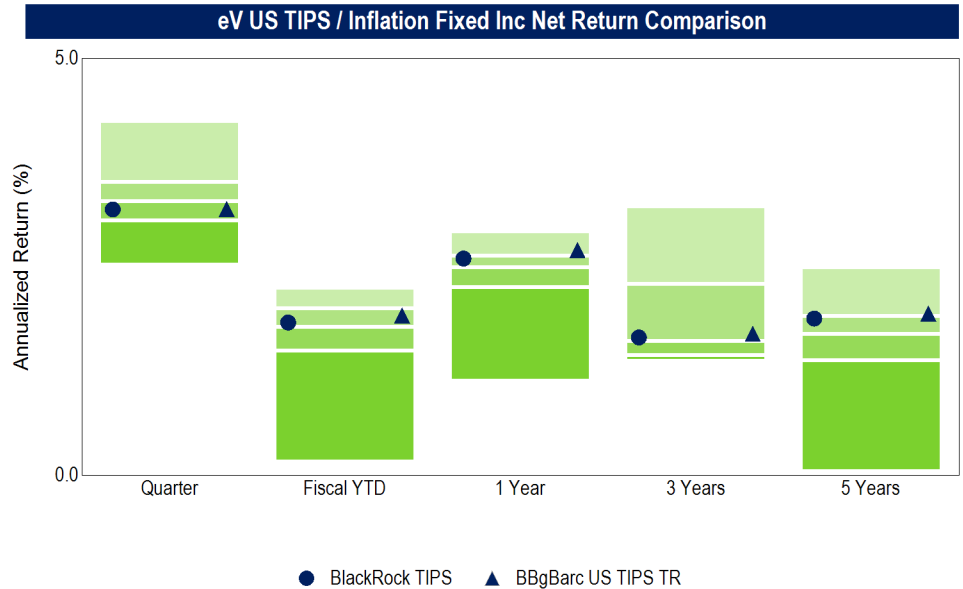


## Sectors

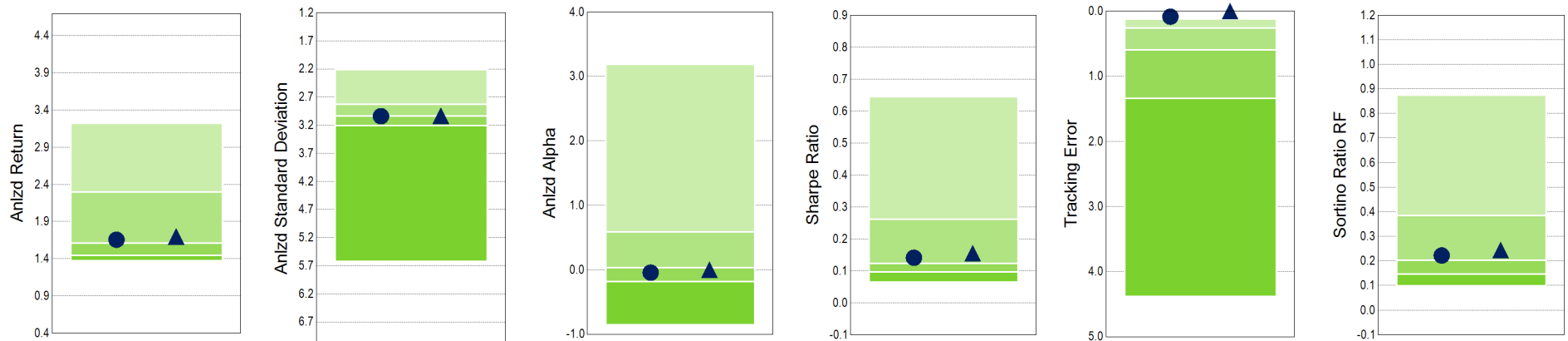


# BLACKROCK TIPS

In the management of an inflation-linked bond portfolio, BlackRock will utilize multiple strategies to outperform the index. These include: duration and yield curve positioning, technical supply/demand anomalies related primarily to the ILB auction cycle, seasonal factors related to non-seasonally adjusted inflation-linked indices, break-even spread between ILBs and nominal securities, and, if applicable, sector and country allocation. The team compares nominal yields with real yields and factor in their views on inflation. If the yield spread is less than the inflation rate, then ILBs are considered to trade cheaply to nominal bonds and have greater relative value. The portfolio currently holds about 31 positions, out of 27-29 issues in the benchmark. Turnover is moderate, at around 100-150%.

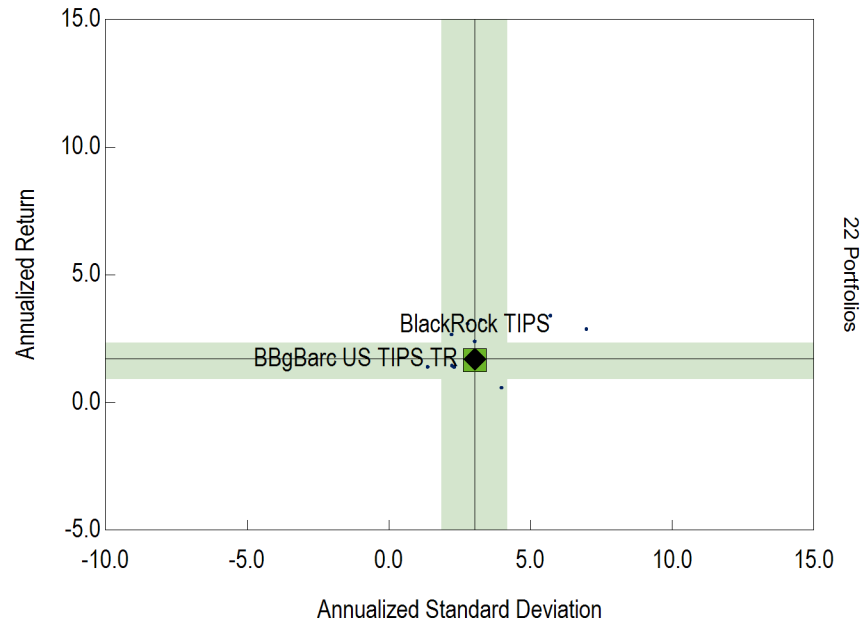


## 3 Year Risk Statistics



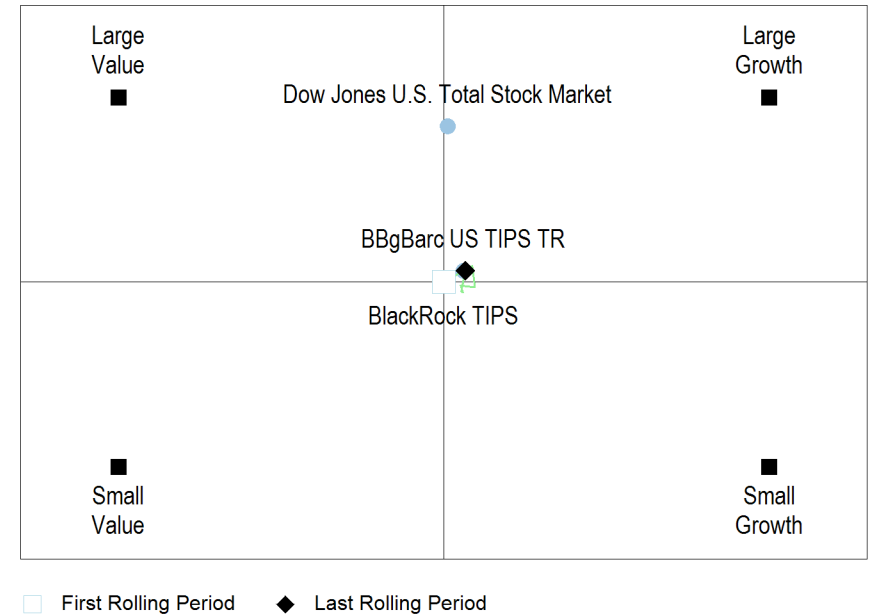
# BLACKROCK TIPS

Annualized Return vs. Annualized Standard Deviation  
3 Years Ending March 31, 2019



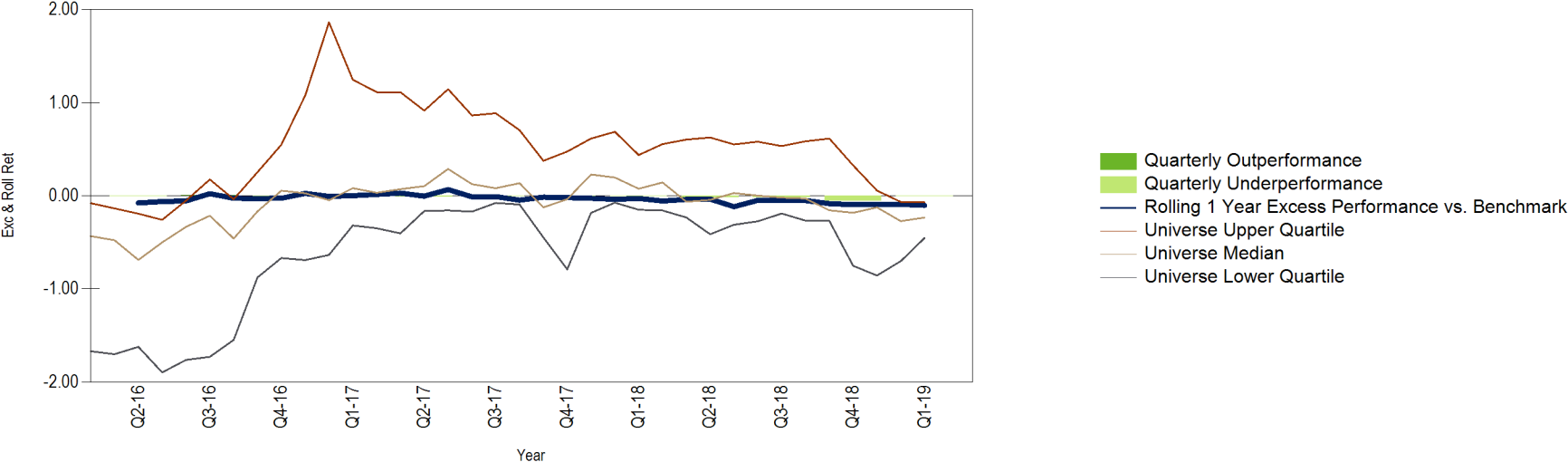
- BlackRock TIPS
- ◆ BBgBarc US TIPS TR
- 68% Confidence Interval
- eV US TIPS / Inflation Fixed Inc Net

U.S. Effective Style Map  
3 Years Ending March 31, 2019



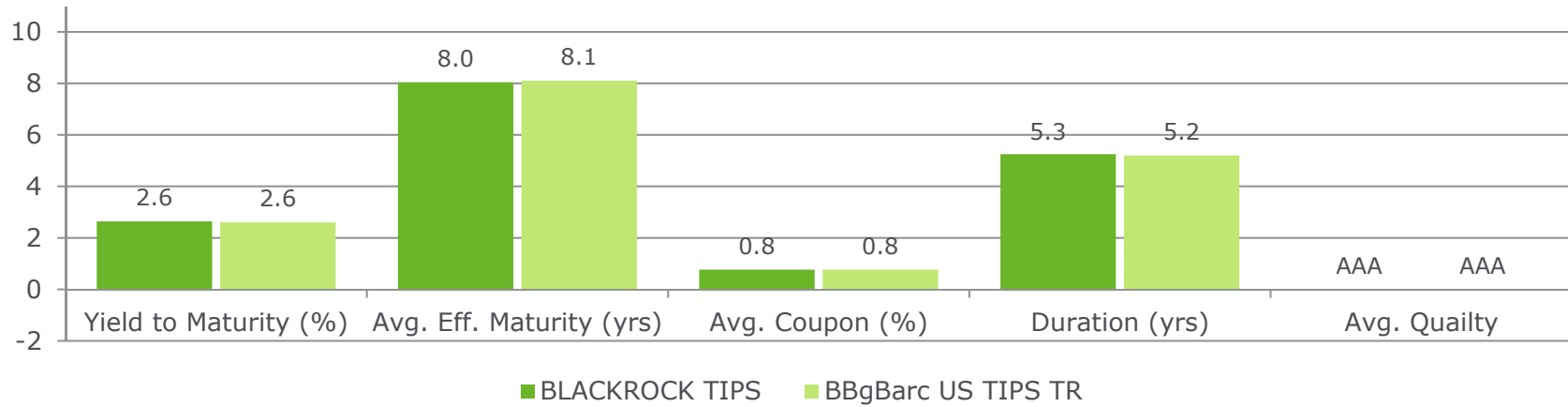
# BLACKROCK TIPS

## Annualized Excess Performance



# BLACKROCK TIPS

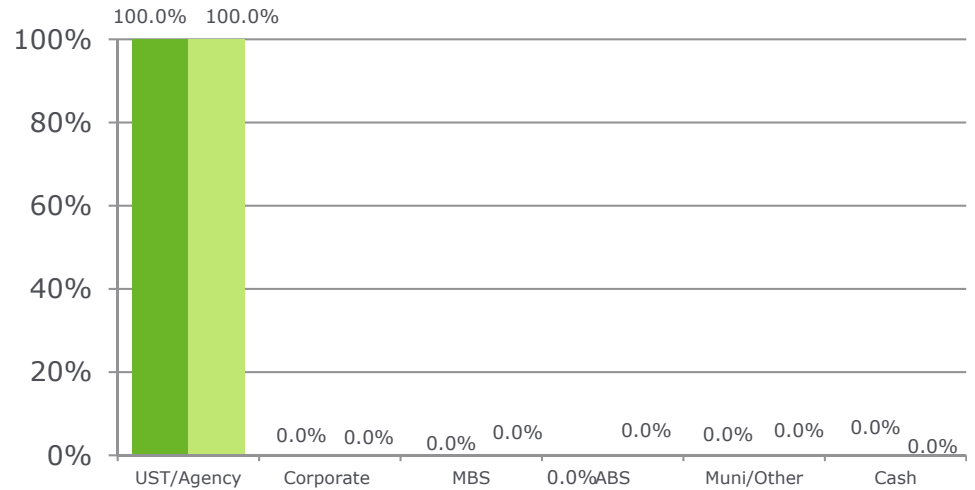
## Characteristics



## Quality Rating

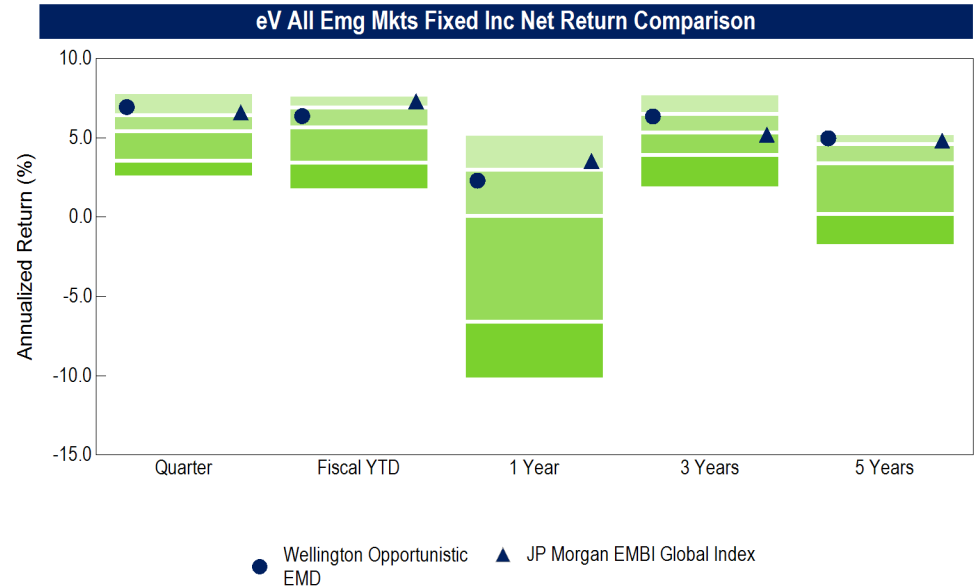


## Sectors

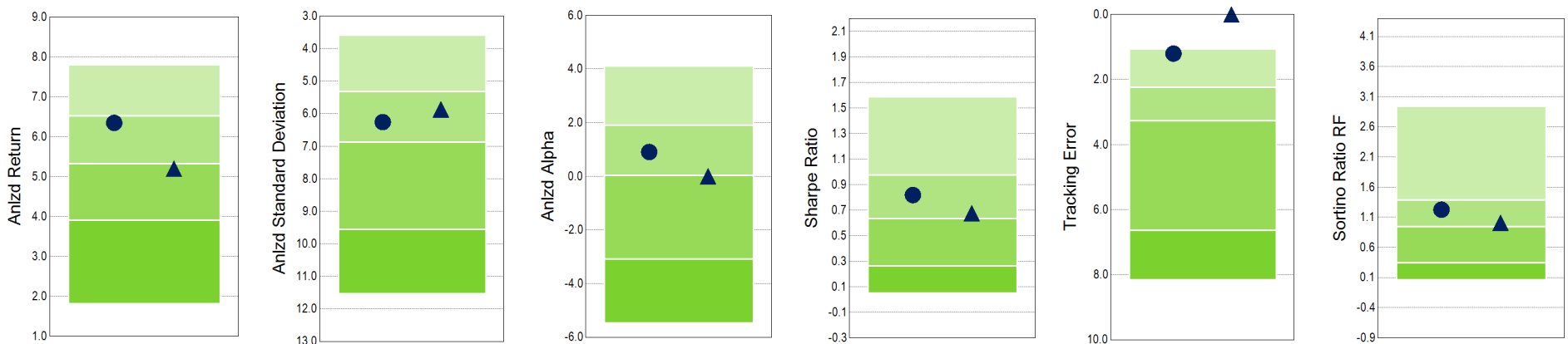


# WELLINGTON OPPORTUNISTIC EMD

Wellington Opportunistic Emerging Markets Debt is a “best ideas” investment approach that seeks to generate attractive returns relative to an emerging markets debt benchmark, independent of traditional benchmark constraints. Blended Opportunistic Emerging Markets Debt approach will seek to take advantage of investment opportunities across the emerging markets fixed income spectrum, including hard and local currency-denominated sovereign, quasi-sovereign, and corporate debt, and their derivatives. Currencies will be used to both manage risk and enhance return. The portfolio is managed in a benchmark aware style; while the team is mindful of benchmark exposures, we may deviate considerably from the benchmark if we believe it to be justified by fundamental, valuation, and/or technical considerations.

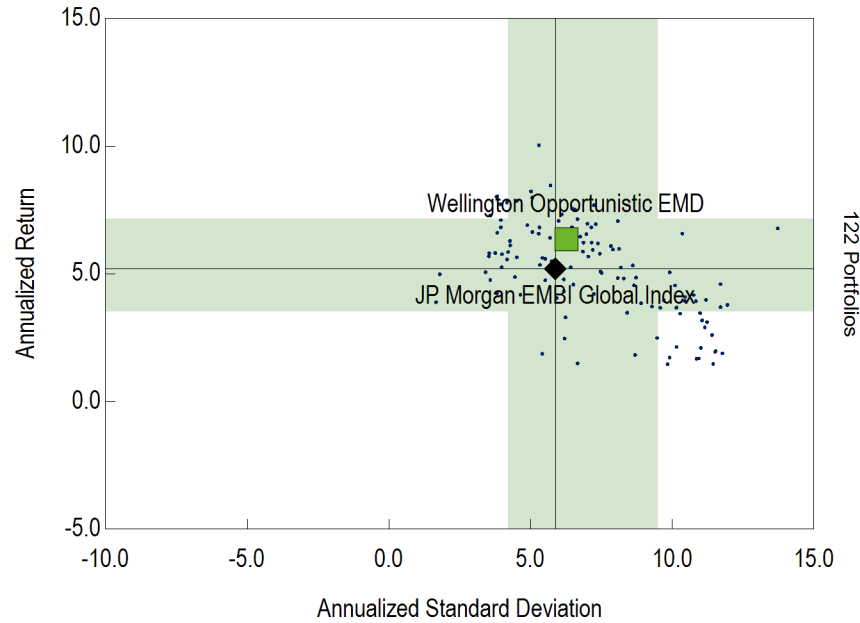


## 3 Year Risk Statistics



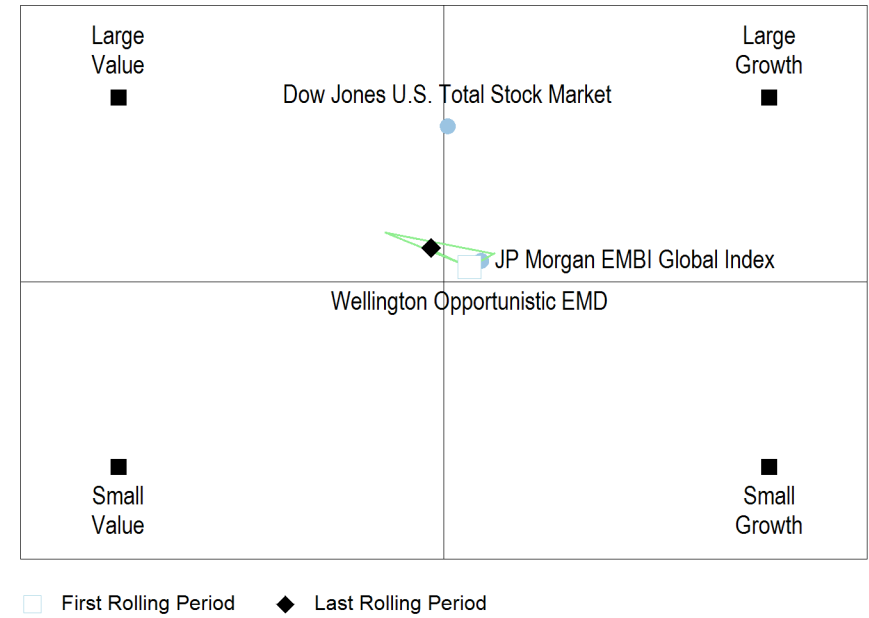
# WELLINGTON OPPORTUNISTIC EMD

Annualized Return vs. Annualized Standard Deviation  
3 Years Ending March 31, 2019

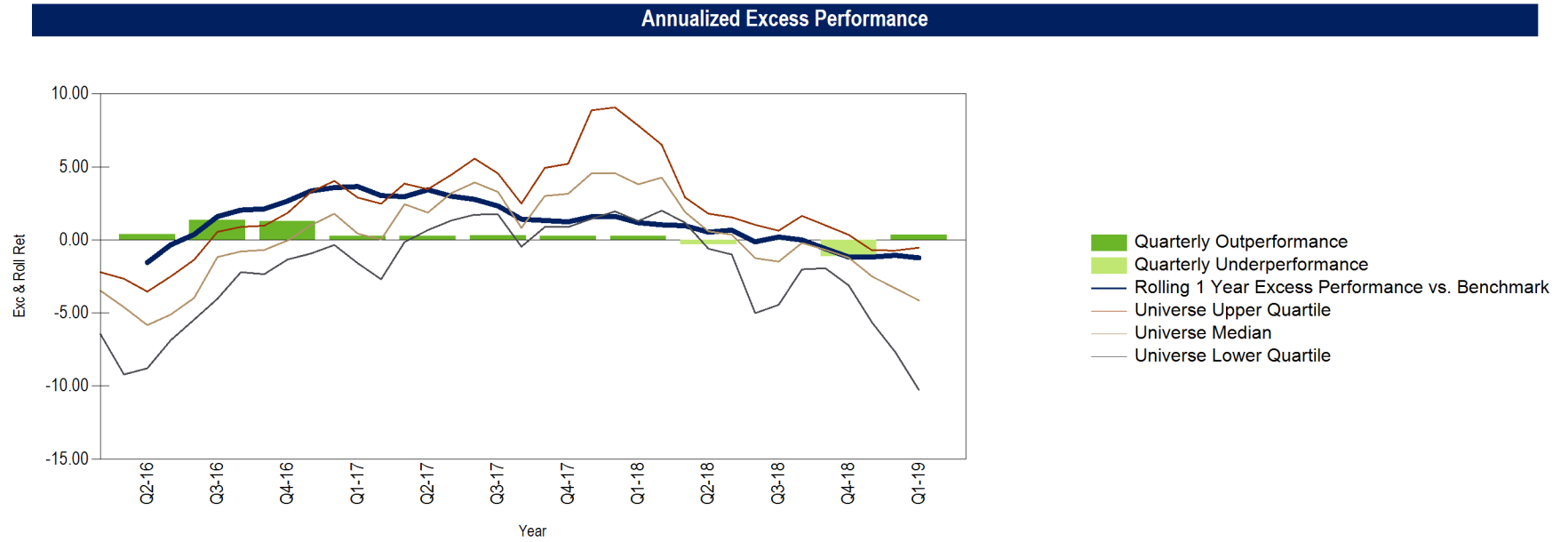


- Wellington Opportunistic EMD
- ◆ JP Morgan EMBI Global Index
- 68% Confidence Interval
- eV All Emg Mkts Fixed Inc Net

U.S. Effective Style Map  
3 Years Ending March 31, 2019



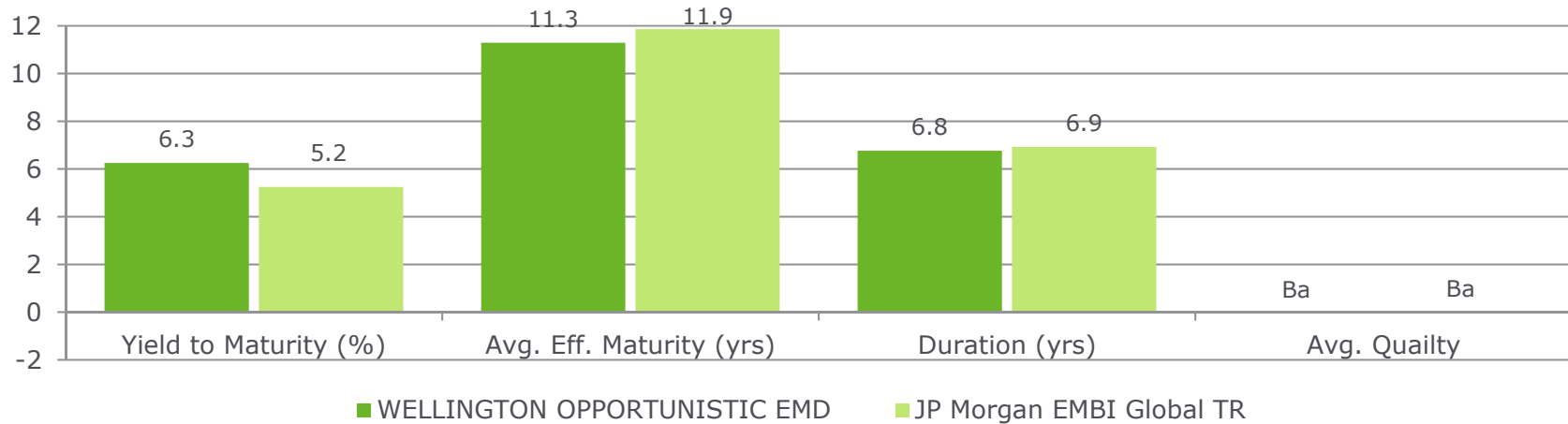
# WELLINGTON OPPORTUNISTIC EMD



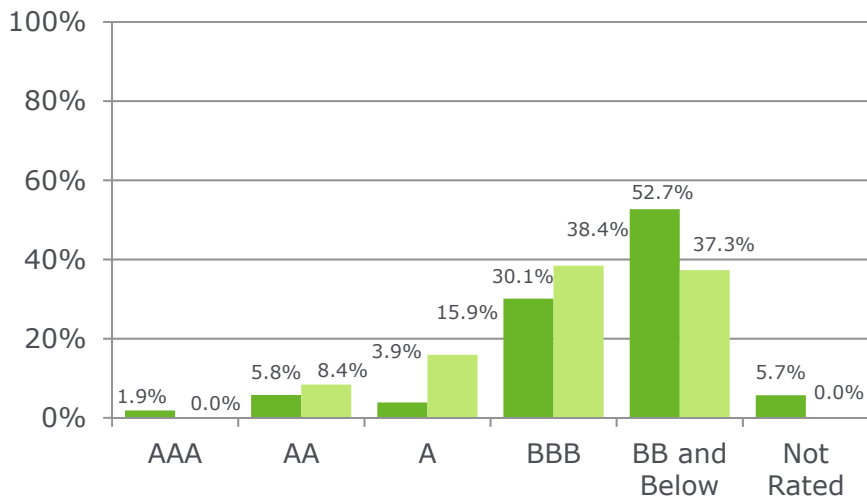


# WELLINGTON OPPORTUNISTIC EMD

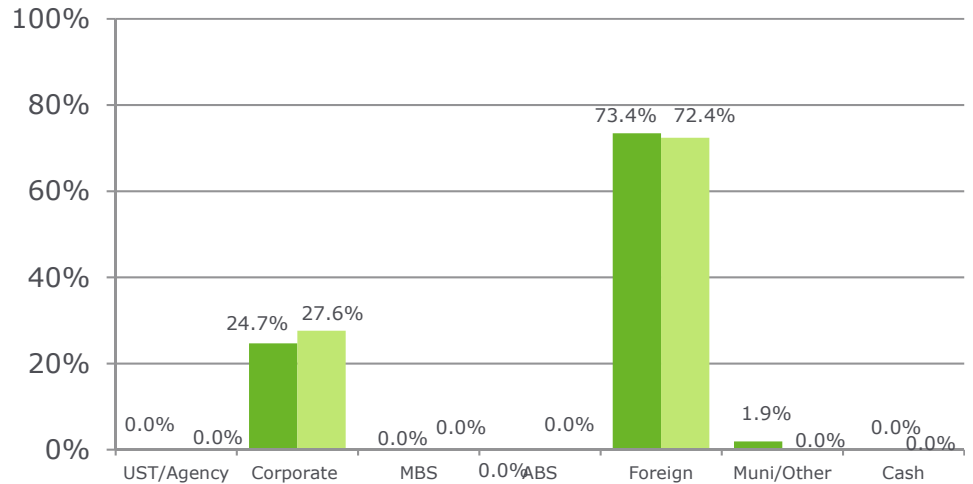
## Characteristics



## Quality Rating

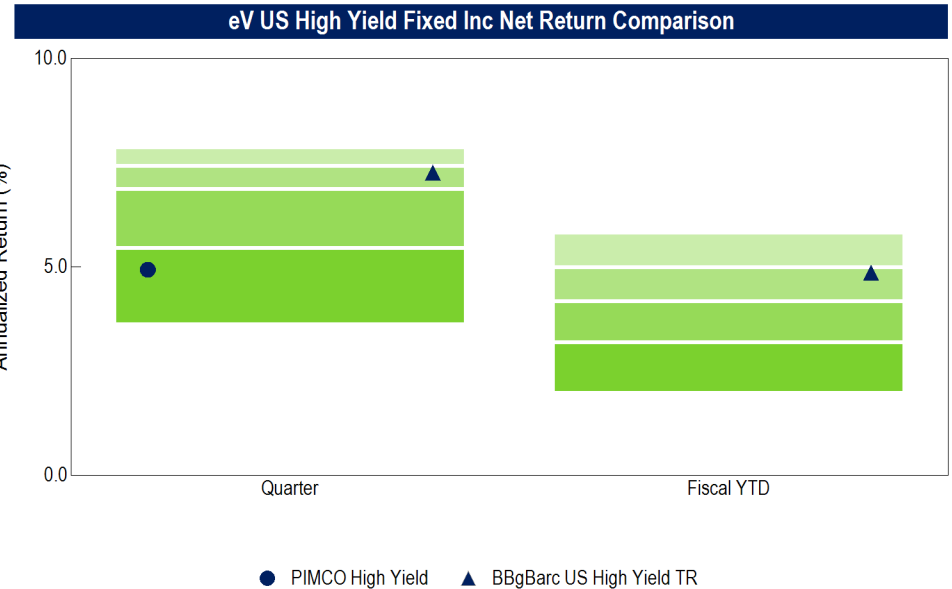


## Sectors

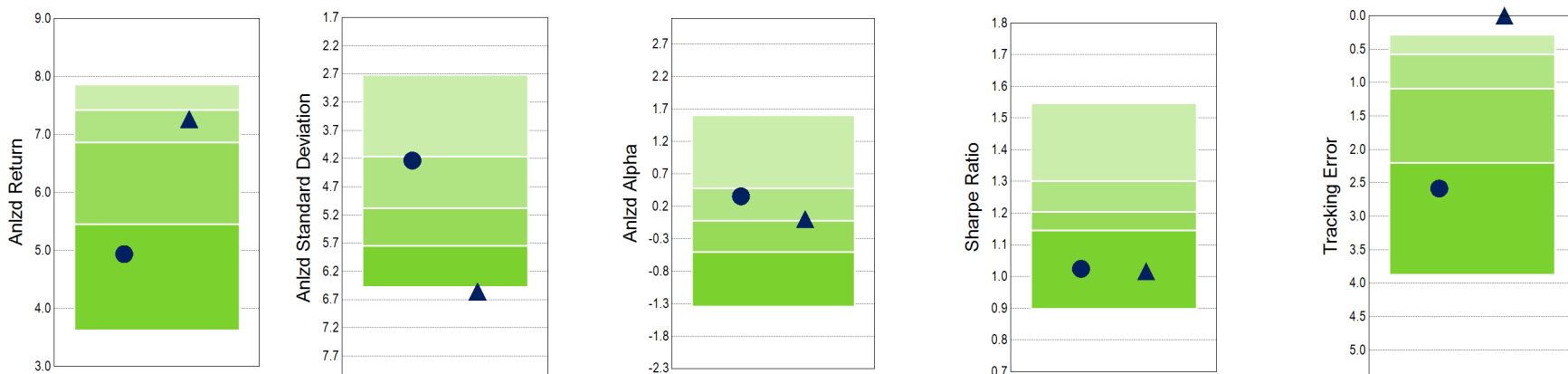


# PIMCO HIGH YIELD

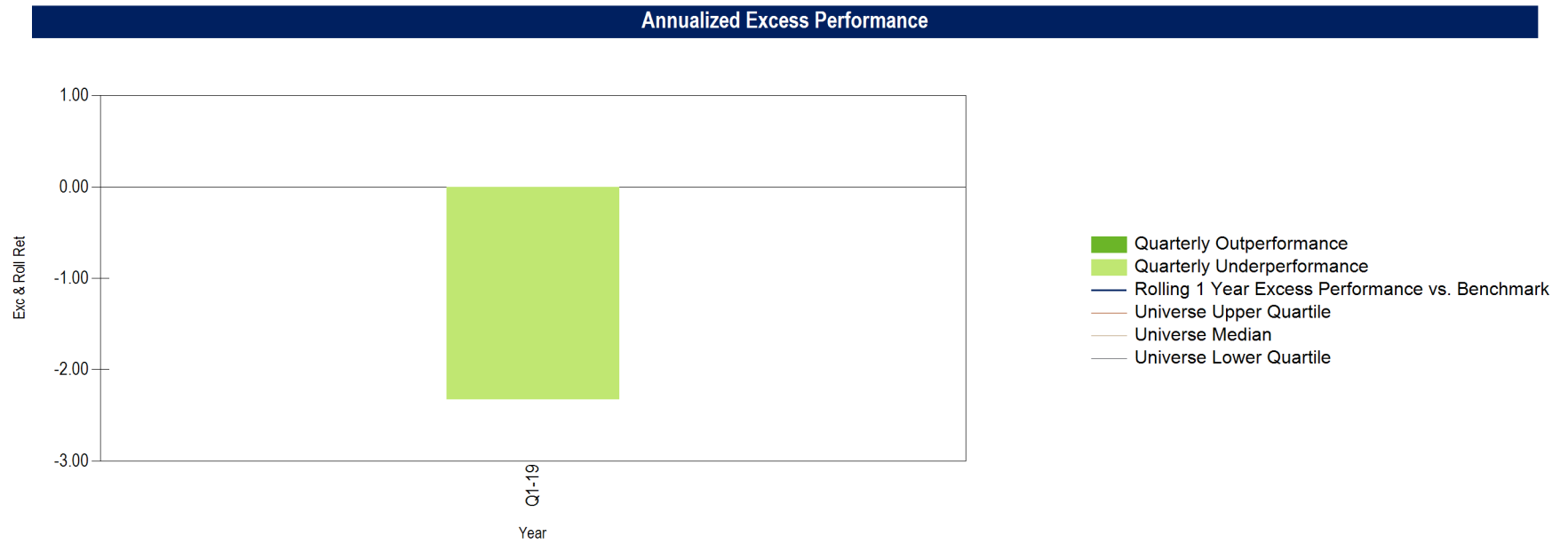
PIMCO's approach to the high yield market is consistent with the firm's conservative, yet innovative, approach to fixed income markets in general. The philosophy for high yield embodies five key principles: 1) bottom-up credit research incorporating a top-down economic framework; 2) a total return approach to investing that incorporates returns from yields and capital gains; 3) a focus on credits that exhibit the most attractive risk/return profile; 4) issuer and industry diversification, which seeks to limit risk; and 5) expertise in most regions and credit sectors across the world, which allows PIMCO to better evaluate relative value from a full credit opportunity set. The High Yield portfolio focuses on the upper tier of the U.S. dollar denominated speculative grade bond market. The strategy is actively managed to maximize total return potential while minimizing any increase in risk relative to the market benchmark. The strategy looks to benefit from PIMCO's investment process, which combines our global top-down views on the macroeconomic environment with proprietary local bottom-up analysis of credit quality and market factors including supply, demand and liquidity by our global credit analysts.



## 3 Month Risk Statistics

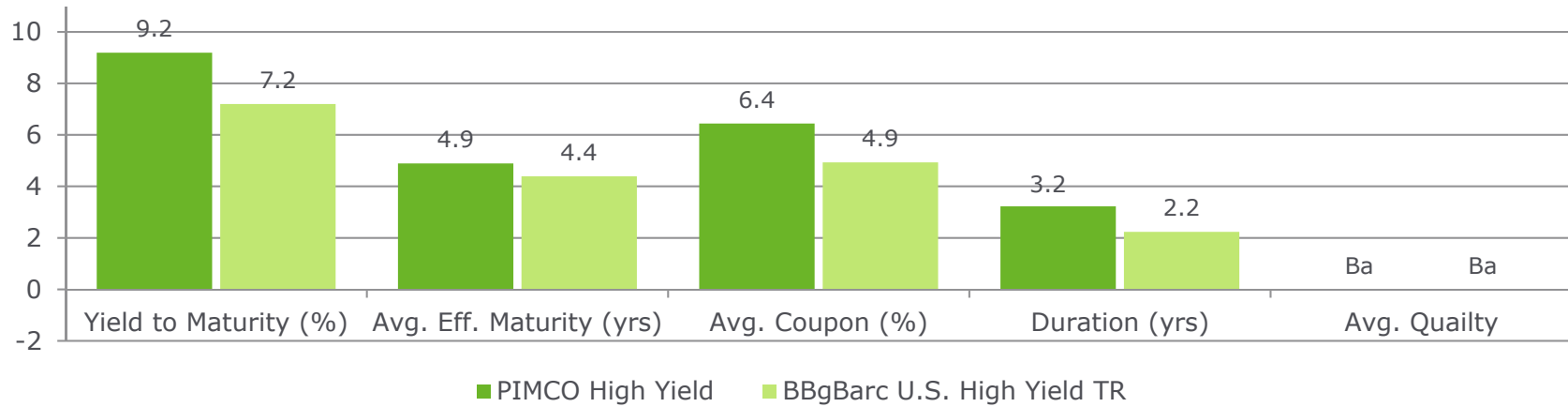


# PIMCO HIGH YIELD

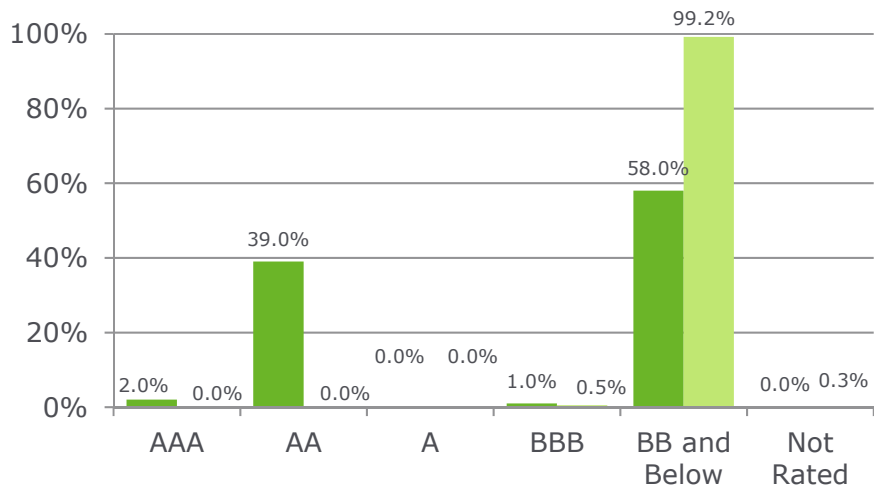


# PIMCO HIGH YIELD

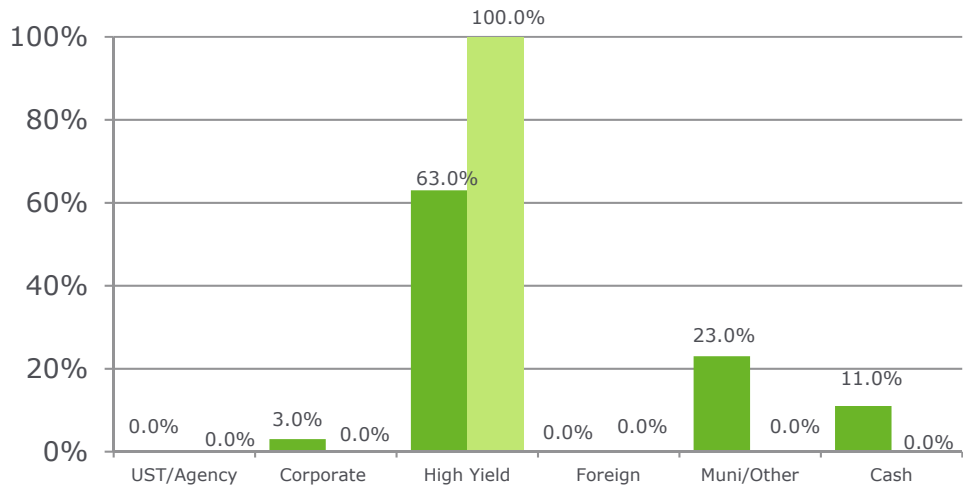
## Characteristics



## Quality Rating



## Sectors



# APPENDIX

NEPC, LLC

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### **Information Disclaimer**

- Past performance is no guarantee of future results.
- All investments carry some level of risk. Diversification and other asset allocation techniques are not guaranteed to ensure profit or protect against losses.
- NEPC's source for portfolio pricing, calculation of accruals, and transaction information is the plan's custodian bank. Information on market indices and security characteristics is received from other sources external to NEPC. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within.
- Some index returns displayed in this report or used in calculation of a policy, allocation or custom benchmark may be preliminary and subject to change.
- This report is provided as a management aid for the client's internal use only. Information contained in this report does not constitute a recommendation by NEPC.
- This report may contain confidential or proprietary information and may not be copied or redistributed to any party not legally entitled to receive it.

### **Reporting Methodology**

- The client's custodian bank is NEPC's preferred data source unless otherwise directed. NEPC generally reconciles custodian data to manager data. If the custodian cannot provide accurate data, manager data may be used.
- Trailing time period returns are determined by geometrically linking the holding period returns, from the first full month after inception to the report date. Rates of return are annualized when the time period is longer than a year. Performance is presented gross and/or net of manager fees as indicated on each page.
- For managers funded in the middle of a month, the "since inception" return will start with the first full month, although actual inception dates and cash flows are taken into account in all Composite calculations.
- This report may contain forward-looking statements that are based on NEPC's estimates, opinions and beliefs, but NEPC cannot guarantee that any plan will achieve its targeted return or meet other goals.

