FIRST FISCAL QUARTER 2019 INVESTMENT PERFORMANCE ANALYSIS

VERMONT PENSION INVESTMENT COMMITTEE



November 27, 2018

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MARKET ENVIRONMENT

NEPC, LLC -

PERFORMANCE OVERVIEW

Q3 Market Summary

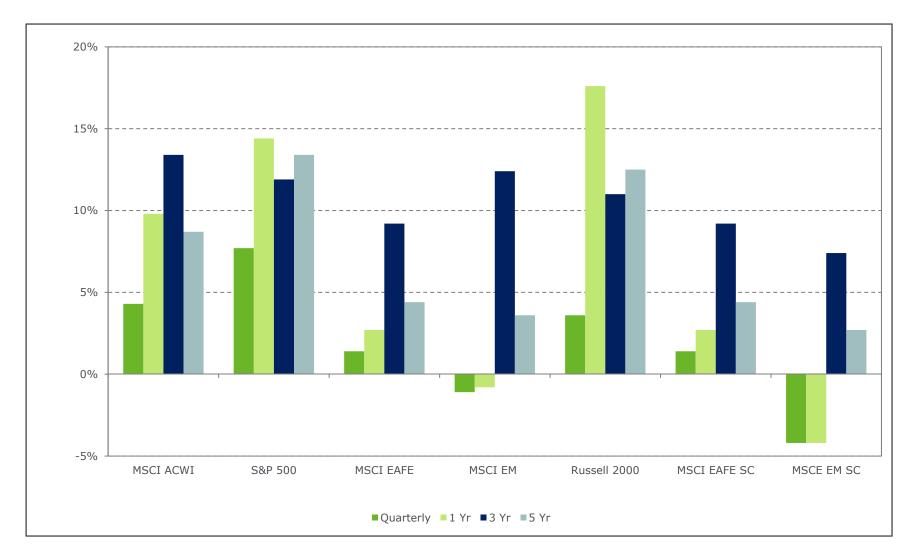
	Macro			Equity			Credit		Re	ets	
US Dollar	VIX	US 10-Yr	S&P 500	MSCI EAFE	MSCI EM	US Agg.	High Yield	Dollar EMD	Oil	Gold	REITS
0.7%	-4.0	20 bps	7.7%	1.4%	-1.1%	0.0%	2.4%	1.9%	-1.2%	-4.8%	0.7%

- US equities increased during the quarter, supported by strong macroeconomic data and a tight labor market
- Emerging market equities broadly declined with ongoing currency weakness and trade tensions weighing on sentiment
- The Federal Reserve hiked rates for the third time this year and is expected to hike rates again in December

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 Emerging Market Bond Index), Crude Oil (WTI Crude Oil Spot), Gold (Gold Price Spot), and REITs (NAREIT Composite Index).



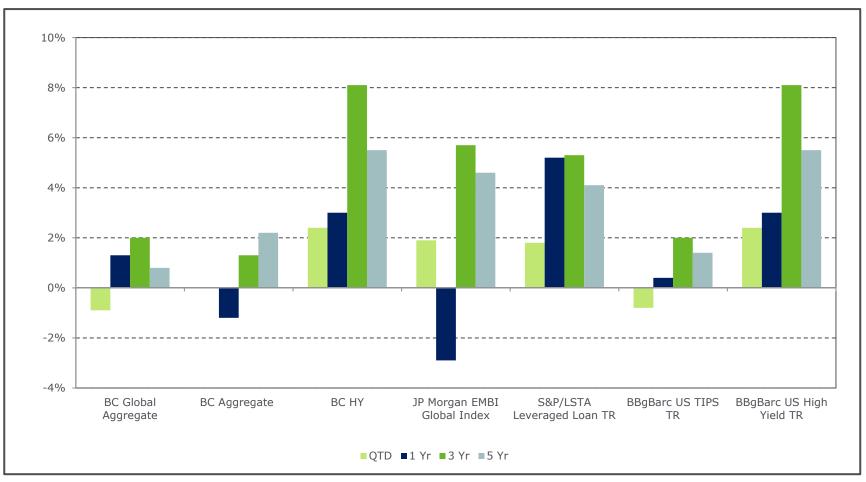
Q3 EQUITY INDEX RETURNS





Source: Bloomberg

Q3 CREDIT INDEX RETURNS



Source: Barclays, S&P, JPM, Bloomberg



RETURNS FOR KEY INDICES RANKED IN ORDER OF PERFORMANCE

2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
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
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 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
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 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
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 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 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 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
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

QTD	1 Year	3 year	5 Year	10 Year
RUSSELL	RUSSELL	RUSSELL	RUSSELL	RUSSELL
1000	1000	1000	1000	1000
GROWTH	GROWTH	GROWTH	GROWTH	GROWTH
9.17	26.30	20.55	16.58	14.31
	RUSSELL	RUSSELL		RUSSELL
S&P 500	2000	2000	S&P 500	2000
7.71	GROWTH	GROWTH	13.95	GROWTH
	21.06	17.98		12.65
RUSSELL			RUSSELL	RUSSELL
1000	S&P 500	S&P 500	1000	1000
7.42	17.91	17.31	13.67	12.09
			RUSSELL	
RUSSELL	RUSSELL	RUSSELL		C0 D F00
1000 VALUE	1000	2000	2000 CDOWTH	S&P 500
5.70	17.76	17.12	GROWTH 12.14	11.97
RUSSELL				
2000	RUSSELL	RUSSELL	RUSSELL	RUSSELL
GROWTH	2000	1000	2000	2000
5.52	15.24	17.07	11.07	11.11
	DUCCELL	DUCCELL	DUCCELL	DUCCELL
RUSSELL	RUSSELL	RUSSELL	RUSSELL	RUSSELL
2000 3.58	1000 VALUE 9.45	2000 VALUE	1000 VALUE	1000 VALUE
3.58	9.45	16.12	10.72	9.79
RUSSELL	RUSSELL	RUSSELL	RUSSELL	RUSSELL
2000 VALUE	2000 VALUE	1000 VALUE	2000 VALUE	2000 VALUE
1.60	9.33	13.55	9.92	9.52
		-5.55		
MCCI FAFF	MCCI EAFE	MSCI	MCCI EAFE	MSCI
MSCI EAFE	MSCI EAFE	EMERGING	MSCI EAFE	EMERGING
1.35	2.74	MARKETS	4.42	MARKETS
	MSCI	12.36	MSCI	5.40
BC	MSCI EMERGING	MSCI EAFE	MISCI EMERGING	MSCI EAFE
AGGREGATE	MARKETS	9.23	MARKETS	5.38
0.02	-0.81	9.23	3.61	3.30
MSCI	0.02		-	
EMERGING	BC	BC	BC	BC
MARKETS	AGGREGATE	AGGREGATE	AGGREGATE	AGGREGATE
-1.09	-1.22	1.31	2.16	3.77



TOTAL FUND PERFORMANCE

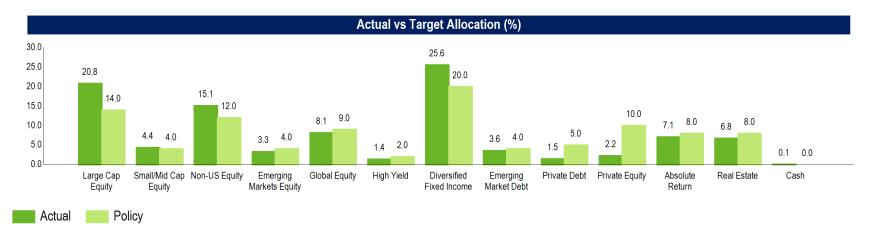
NEPC, LLC —

TOTAL FUND PERFORMANCE SUMMARY - NET

	Market Value	3 Mo	Rank	YTD	Rank	Fiscal YTD	Rank	1 Yr	Rank	3 Yrs	Rank	5 Yrs	Rank	7 Yrs	Rank	10 Yrs	Rank
Total Teachers Composite	\$1,943,705,131	2.6%	54	3.8%	35	2.6%	54	7.4%	38	9.3%	52	6.3%	82	7.6%	86	6.8%	72
Allocation Index		2.5%	58	2.6%	75	2.5%	58	6.3%	68	8.7%	77	5.8%	89	7.2%	95	6.3%	92
Policy Index		2.5%	58	2.7%	70	2.5%	58	6.0%	76	8.6%	80	6.0%	89	7.3%	95	6.1%	94
InvMetrics Public DB < \$5 Billion Net Median		2.7%		3.3%		2.7%		7.0%		9.3%		7.0%		8.9%		7.2%	

3 Years Ending September 30, 2018										
	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Sharpe Ratio	Rank	Sortino Ratio	Rank		
Total Teachers Composite	9.30%	52	4.73%	13	1.78	16	3.40	3		
Allocation Index	8.71%	77	4.77%	15	1.65	39	2.72	14		
Policy Index	8.59%	80	4.54%	9	1.70	29	2.80	10		

5 Years Ending September 30, 2018								
	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Sharpe Ratio	Rank	Sortino Ratio	Rank
Total Teachers Composite	6.28%	82	5.12%	17	1.12	67	2.00	32
Allocation Index	5.83%	89	4.99%	13	1.06	78	1.81	60
Policy Index	5.96%	89	4.77%	7	1.14	63	1.97	35

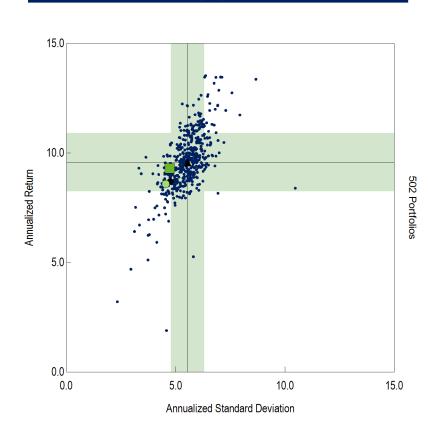


Asset class weights may not add up to 100% due to rounding



TOTAL FUND RISK/RETURN - NET

3 Years Ending September 30, 2018

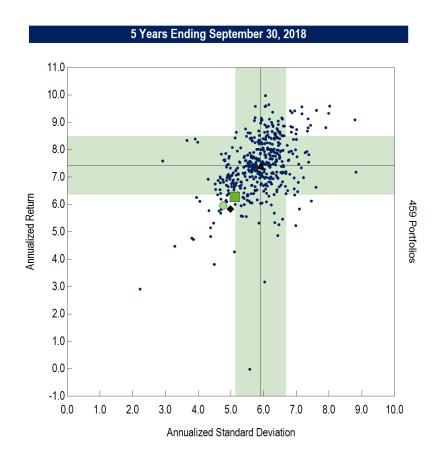


	3 Years E	Ending Sept	ember 30, 20	018		
	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank
Total Teachers Composite	9.3%	52	4.7%	13	1.8	16
Allocation Index	8.7%	77	4.8%	15	1.6	39
S&P 500	17.3%	1	9.2%	99	1.8	15
FTSE WGBI TR	1.7%	99	5.9%	71	0.1	99
MSCI ACWI	13.4%	1	9.4%	99	1.3	95
MSCI ACWI ex USA	10.0%	23	10.9%	99	0.8	99
InvMetrics Public DB < \$5 Billion Net Median	9.3%		5.5%		1.6	

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



TOTAL FUND RISK/RETURN - NET

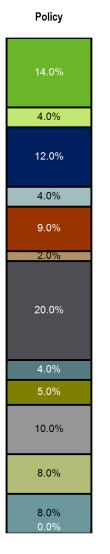


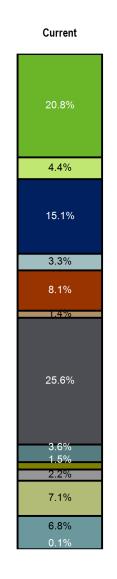
	5 Years Ending September 30, 2018										
	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank					
Total Teachers Composite	6.3%	82	5.1%	17	1.1	67					
Allocation Index	5.8%	89	5.0%	13	1.1	78					
S&P 500	13.9%	1	9.6%	99	1.4	9					
FTSE WGBI TR	0.2%	99	5.2%	20	-0.1	99					
MSCI ACWI	8.7%	3	9.8%	99	0.8	97					
MSCI ACWI ex USA	4.1%	99	11.2%	99	0.3	99					
InvMetrics Public DB < \$5 Billion Net Median	7.0%		5.9%		1.2						

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



TOTAL FUND ASSET ALLOCATION VS. POLICY TARGETS





	Asset Allocation vs. Target			
	Current	Policy	Current	Difference*
Large Cap Equity	\$404,830,225	14.0%	20.8%	6.8%
Small/Mid Cap Equity	\$84,890,148	4.0%	4.4%	0.4%
Non-US Equity	\$292,887,229	12.0%	15.1%	3.1%
Emerging Markets Equity	\$65,019,525	4.0%	3.3%	-0.7%
Global Equity	\$157,853,837	9.0%	8.1%	-0.9%
High Yield	\$27,651,790	2.0%	1.4%	-0.6%
Diversified Fixed Income	\$496,999,454	20.0%	25.6%	5.6%
Emerging Market Debt	\$69,668,944	4.0%	3.6%	-0.4%
Private Debt	\$28,198,032	5.0%	1.5%	-3.5%
Private Equity	\$43,675,165	10.0%	2.2%	-7.8%
Absolute Return	\$138,021,381	8.0%	7.1%	-0.9%
Real Estate	\$131,120,014	8.0%	6.8%	-1.2%
Cash	\$1,041,477	0.0%	0.1%	0.1%
Total	\$1,943,705,131	100.0%	100.0%	

^{*}Difference between Policy and Current Allocation



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

ACTIVE MANAGER RELATIVE PERFORMANCE

	Positive	
TER	 U.S. Equity Champlain Small/Mid Cap (+310) Non U.S. Equity Mondrian International (+70) Aberdeen Emerging Markets (+60) 	Non U.S. Equity Acadian International (-40) Hosking Global (-270) Artisan Global (-80) Acadian (-40)
QUARTER	 Fixed Income PIMCO Core Plus (+20) Absolute Return Pinnacle Nat'l Resources (+320) Grosvenor Fund of Hedge Funds (+40) Allianz Structured Alpha (+150) 	 Fixed Income PIMCO Unconstrained (-20) GAM Unconstrained (-140) Guggenheim High Yield (-110) Wellington EM Debt (-10)
	Positive	Nogotivo
	rositive	Negative

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



INVESTMENT MANAGER - Q1 FISCAL 2019 COMMENTARY - POSITIVE CONTRIBUTORS

	Commentary	Due Diligence Rating
Champlain Small/Mid Cap Equity	Returned 7.2%, outperforming the custom benchmark, 50% R2000/50% R2500, by 330bps Contributors: The overweight and stock selection in health care holdings meaningfully outperformed the benchmark for the quarter and year to date. Gains in Veeva, Bio-Techne, and NuVasive led the quarter. Stock selection in technology and overweight in software accounted for the majority of the outperformance for the sector. Cloud computing holdings have gained with the fundamentals reflecting growth as customer adoption increases. Within industrials, last quarters largest detractor, John Bean Tech (JBT) was this quarters strongest contributor as the company's quarterly results confirmed any weakness in first quarter was a one time event. Strong stock selection in Consumer Discretionary as Tractor Supply and Ulta Beauty holdings were back in favor. Detractors: Overweight and stock selection in Consumer Staples as Campbell Soup owner, Third Point suggests changes to the Campbell Soup recipe. No exposure to Utilities as this sector performed well in the third quarter. Positioning: Trimmed consumer holdings that have appreciated as investors have sought safe harbor. Added to industrial holdings that have been sold off as investors anticipate the next recession. Taking advantage of the decline in the technology sector to add selectively to the cloud-based software holdings. While valuations alone warrant selective adds in the software industry, IBM's intention to acquire Red Hat, Inc. (RHT) will create a meaningful return of capital; and they want to redeploy at least some of that capital back into the industry as opportunities present themselves.	1
Mondrian International Equity	Contributors: Stock selection in Asia Pacific was the driver of positive relative returns, in particular, the position in Fujifilm, CK Hutchinson, and China Mobile. There has been some speculation that the company's two rivals could be combined to accelerate the commercialization of 5G. TSMC, a Taiwanese semiconductor manufacturer, also generated strong returns after a US competitor halted nanometer chip development, reinforcing TSMC's leadership in this space. Overweight in telecom and energy sectors as earnings mostly exceeded expectations and oil prices rose as demand was robust and supply tightened. Underweight in the weak real estate, which declined following a rise in bond yields. Underweight Japanese Yen and Australian dollar. Detractors: In the context of Brexit-related uncertainty, the portfolio's positions in domestically-oriented UK stocks detracted. They have added to exposures to take advantage of attractive valuations. Underweight position in Japan detracted as the equity market was supported by yen weakness. Overweight position in Italy as plans from the new Italian government to raise public spending created uncertainty. They have taken the opportunity to add to positions in selected European banks where recent share price weakness led to attractive valuations. Underweight in Swiss frank also detracted.	1



Returns presented are net of investment management fees

INVESTMENT MANAGER - Q1 FISCAL 2019 COMMENTARY - POSITIVE CONTRIBUTORS

	Commentary	Due Diligence Rating
Aberdeen <i>Emerging Market Equity</i>	Returned -0.50%, outperforming the MSCI Emerging Markets by 60bps Contributors: Asset allocation and stock selection contributed to returns. The light positioning in China proved beneficial as the market sold off on concerns over Beijing's trade concerns with the US. Holdings in Indonesia with Indocement and Astra International rebounded from previous weakness. Mexico's recovery benefited their holdings, particularly the airport operator, Asur, and the banking and financial services provider, Banorte. Lack of exposure to Alibaba, which fell more than 11% over the quarter, had benefited relative to the benchmark. Detractors: Negative stock selection in India as there were signs of distress in the financial sector. Specifically, the Indian lender, Kotak Mahindra Bank, on concerns over the default by the non-banking financial company IL&FS. Underweight to energy as oil prices continued to rally. Positioning: Remain underweight in China, where companies fall short on quality and corporate governance. Underweight in Taiwan as the export-oriented economy has a market that offers a narrow selection of companies, the bulk in the tech sector. Underweight in Korea as the well-known brands such as Samsung and Hyundai dominate and can make the business landscape less competitive. Overweight in Hong Kong as it offers companies that have diversified businesses and added advantage of better standards over China. Overweight India as the market has many high-quality companies and the economic growth rate is among the best in Asia. Overweight Brazil as the economy offers a deep market of quality companies at attractive valuations.	Rating Changed from "1" to "2" in January 2018
PIMCO Core Plus Fixed-Income	Returned 0.20%, outperforming the Barclays Aggregate Bond Index by 20bps Contributors: Contributions from interest rate strategies more than offset detractions from currency and spread sector strategies. Developed market interest rate strategies, particularly country selection in Europe. Positions in non-Agency MBS. Local rate exposure in Brazil. Detractors: Underweight investment-grade corporate credit. Tactical exposure to select high carry EM currencies. Positions in Agency MBS. Positioning: Underweight duration overall and have a preference for US duration over other developed regions. The intermediate portion of the curve offers more attractive characteristics while longer term rates may rise as the Fed continues to reduce accommodation. Attractive opportunities in credits that benefit from US growth and the housing sector, specifically banks and select financial companies. Tactical with currency positioning, particularly given less conviction in the overall direction of the dollar. Select high carry EM FX may be attractive as diversifying risk exposure.	1



Returns presented are net of investment management fees

INVESTMENT MANAGER - Q1 FISCAL 2019 COMMENTARY - POSITIVE CONTRIBUTORS

	Commentary	Due Diligence Rating
	Returned 1.2%, outperforming the Bloomberg Commodity Index by 320bps	
	<u>Contributors</u> : Exposure to European strategies contributed the most to performance, driven by positions in power, gas, coal, and carbon markets. Exposure to U.S. natural gas markets with higher prices, driven by low U.S. gas stockpiles, warm-weather related demand, and nuclear power plant outages. PNR's exposure to precious metals and platinum group metals (PGMs) contributed to the portfolio. With the exception of palladium, the precious metals market was lower in the quarter.	
Pinnacle Natural Resources (PNR) Absolute Return	<u>Detractors</u> : Exposure to oil markets detracted the most from the Fund's performance. Modest losses were also seen in base metals and agricultural/meats exposure. PNR experienced losses in the grains complex. In Q3, abundant supplies, a stronger U.S. Dollar, and the ongoing talks of tariffs and retaliatory measures between the U.S. and China continued to weigh on the agricultural sector. Industrial metals detracted as they were weaker on global trade uncertainty with the U.SChina trade dispute weighing on the demand outlook.	1
	<u>Positioning</u> : As of end of the quarter, gross and net exposure were 6.8X and 1.5X, respectively. Exposure to FX/Rates/Index detracted from performance. As of October 1, 2018, PNR had a total of 17 active underlying investments. The Fund redeemed a natural gas focused managed account and added an investment to a physical natural gas and power company.	



INVESTMENT MANAGER - Q1 FISCAL 2019 COMMENTARY - POSITIVE CONTRIBUTORS

	Commentary	Due Diligence Rating
Grosvenor Absolute Return	Returned 0.6%, outperforming the HFRI Fund of Funds Composite Index by 40 bps Contributors: The Fund's macro, relative value, and credit strategies were notable positive drivers of returns, with modest additional contribution from its multi-strategy and quantitative allocations. A positive multi-strategy performer included a diversified relative value manager which invests primarily in fixed income securities that was energy-heavy benefited. Positive outliers in the Fund's equity strategy included investments with a European-focused, small- and midcap equity activist, a long-biased healthcare/biotechnology sector specialist, and a pair of core, market-neutral equity investors. The Fund's dedicated emerging markets debt allocation and an event-driven, long-biased credit fund were also accretive to returns. Detractors: The equity strategy component was a minor detractor, and was marked by significant dispersion at the underlying fund level. Material detractors in the third quarter were a China-focused low-net specialist, a long-biased U.S. financials specialist, and a Europe-oriented event-driven manager. Negative performers included the Fund's dedicated long-volatility investments and an Asia-focused discretionary macro investor. Positioning: Based on their cautious view, they have a 'barbelled' investment approach, emphasizing lower sensitivity to broader markets. Global volatility and geopolitical turmoil have begun to provide opportunities into which they are deploying capital, seeking to take advantage of expected future dislocation. An example of such an investment is with a macro hedge fund which aims to hedge against mispriced Italian risk premia, as well as other European assets which may face contagion risk stemming from ongoing political turmoil in Italy.	1
Allianz Structured Alpha 500 Absolute Return	Contributors: The benign environment enabled a hold to all of their range-bound spreads to expiration, with no restructuring of any portfolio positions. In the quarter they were able to capitalize on the S&P 500 index's ascent by realizing substantial gains on upside directional spreads. These gains, combined with some positive mark-to-market recovery at the beginning of July, enabled the portfolio to perform ahead of target despite a low quarterly average VIX level of 13. Detractors: A rising market can dampen return potential as it keeps implied volatility levels down. Positioning: With a 2-point increase in the year-over-year average VIX (from 11 to 13), they were able to build range-bound spread profit zones approximately 1.5% wider, allowing for more statistical safety in the event of an equity-market decline.	1



Returns presented are net of investment management fees

INVESTMENT MANAGER - Q1 FISCAL 2019 COMMENTARY - DETRACTORS

	Commentary	Due Diligence Rating
GAM Unconstrained Unconstrained Fixed Income	NEPC has been conducting bi-weekly update calls with GAM to receive updates on the orderly liquidation of the Unconstrained Bond Fund. GAM has made significant progress liquidating the Fund's holdings, including many of the Fund's illiquid positions, and to date has distributed approximately 66% of the total fund value. The firm has indicated that they intend to make another distribution in late November or early December following the settlement of a sale transaction of one of the illiquid holdings. The firm has continued to liquidate security positions and close out derivative contracts used for hedging throughout October. The largest illiquid positions remaining in the portfolio are the Liberty Industries PPA (Power Purchase Agreement) bonds. GAM has indicated that the renewable energy certification tied to the bonds' underlying assets has progressed as planned and they believe that the completion of this process later this year will enable the issuer to refinance the bonds at more favorable rates, which will enable GAM to exit the position at or near the current price sometime in December or January 2019. Because the Liberty Industries bonds are denominated in Pound Sterling (GBP), GAM has left a GBP to US Dollar (USD) currency hedge in place to prevent currency losses on the position. As part of NEPC's ongoing monitoring of the liquidation we have contacted the GAM Fund's third-party valuation vendor, State Street Bank, to confirm that contract and pricing policies related to the Fund conform with industry standards and that there have been no conflicts between the valuations provided by State Street and GAM's internal pricing of the Fund holdings. GAM disclosed updated information on the firm's assets-under-management as part of its 3rd quarter earnings announcement. The firm has seen the total assets managed by its investment management business drop from approximately \$85 billion to \$67 billion during the third quarter, while the assets in its other units have been more stable. On November 6th GAM fur	Terminate Rating changed from "1" to terminate in August 2018



INVESTMENT MANAGER - Q1 FISCAL 2019 COMMENTARY - DETRACTORS

	Commentary	Due Diligence Rating
	Returned 1.0%, underperforming the MSCI EAFE by 40bps	
	<u>Detractors</u> : Small-cap tilt was a headwind in most markets. The underperformance of small caps was most acute in the U.S. A modest exposure to volatility also detracted. Exposure to Turkey adversely impacted their emerging market portion of their strategy. Holdings such as Tencent, Alibaba, and Naspers lagged.	
Acadian <i>International Equity</i>	<u>Contributors</u> : Positive stock selection across most market segments. Growth and momentum continued to deliver strong payoffs. Quality remains positive especially within small-caps. Value offered some support as payoffs to price to intrinsic asset value turned positive in July. More nuanced factors such as short interest and peer momentum also added value highlighting the strength of both traditional and proprietary factors. Factor returns did vary somewhat across regions. Value was particularly strong in emerging markets as previous leaders with elevated valuations such as	1
	<u>Positioning</u> : Positive on healthcare, energy, and software, driven by positive momentum, whereas automobiles, real estate, and utilities are viewed negatively. Italy and Canada, where valuations remain attractive, are viewed as strongly positive. Portugal leads their ranking supported by valuations and an additional boost from quality. Russia remains at the top of their standings supported by strong value scores. Other top countries include Israel, Austria, and Japan. UK, Ireland, and Belgium, have less encouraging outlooks. Hong Kong remains as a bottom scored country.	



INVESTMENT MANAGER - Q1 FISCAL 2019 COMMENTARY - DETRACTORS

	Commentary	Due Diligence Rating
	Returned 0.9%, trailing the 3-Month Libor benchmark by 20bps	
PIMCO	<u>Contributors</u> : Country selection in the eurozone, short exposure to Japanese and UK interest rates, as well as interest rate strategies in Argentina and Brazil all contributed to performance. Exposure to investment-grade and high yield corporate credits contributed to performance as spreads continued to tighten. Non-Agency mortgage-backed security selection and sector exposure benefitted. Exposure to USD-denominated emerging market debt contributed to performance as the asset class posted positive returns in the quarter.	
Unconstrained Fixed Income	<u>Detractors</u> : Exposure to U.S. interest rates detracted as yields rose across the curve in quarter. Exposure to high carry emerging market currencies, primarily the Argentina peso and Turkish lira, detracted from performance as those currencies continued to depreciate despite positive policy developments towards the end of the quarter.	1
	<u>Positioning</u> : Retain a defensive position on duration with a focus of relative value. See value in being long US duration while remaining short duration in Japan, UK, and the Eurozone. Selectively investing in corporate credit with a focus on high quality positions. Favor long positions in higher yield EM currencies, such as the Russian ruble, Argentine peso, and Turkish lira, versus lower yielding Asian currencies such as Taiwanese and Singapore dollars. Favor US dollar versus developed market currencies as well.	



INVESTMENT MANAGER - Q1 FISCAL 2019 COMMENTARY - DETRACTORS

	Commentary	Due Diligence Rating
	Returned 1.6%, underperforming the MSCI ACWI Index by 270 bps.	
	<u>Detractors</u> : The portfolio's largest overweight sectors have been financials, materials and consumer discretionary, all of which underperformed in the quarter. The underweight to technology stocks, particularly not owning Apple, was a strong drag as was the overweight to emerging markets, notably Russia. Underperformance experienced so far this year is driven by their two largest overweight areas – financials and emerging markets. Underweight North America and overweight Europe 6% detracted.	
Hosking Global Equity	<u>Contributors</u> : Amazon was the largest positive contributor. Not owning Facebook, holdings in Belmond, MBK, Delta Air Lines, Motor Oil, not owning Tencent and the holding in TSMC, all benefited. Following a challenging run, some of the long-held positions to US airlines, including Delta and American, were also positives.	1
	<u>Positioning</u> : The portfolio saw historically low turnover with purchases reflecting a continuation towards areas of the market that remain out of favor. The Amazon position continued to be trimmed. The case for financials remain as banks have expanding net interest margins and have been cost cutting, helping book value per share growth exceed the US stock market. With US shares looking relatively expensive, Emerging Markets continues to remain a better place as inflation rates, current account deficits, and debt coverage ratios are well-contained and most currencies are floating.	
	Returned 3.5%, underperforming the MSCI ACWI Index by 80 bps	
	<u>Contributors</u> : Though positive on an absolute basis, our portfolio trailed the MSCI AC World in the quarter. Relative weakness was concentrated among our energy and consumer discretionary holdings.	
Artisan Global Equity	<u>Detractors</u> : Our health care, technology and communication services holdings were beneficial in the quarter.	1
	<u>Positioning</u> : Despite rising uncertainty, there remain interesting investing opportunities globally—with many trading at valuations that still look reasonable to us given the opportunity ahead of them. Regardless of the direction markets take in the coming quarters, we will adhere to our disciplined approach, which over the course of our team's history, has proved sufficiently resilient to withstand a variety of investing environments.	



Returns presented are net of investment management fees

INVESTMENT MANAGER - Q1 FISCAL 2019 COMMENTARY - DETRACTORS

	Commentary	Due Diligence Rating
	Returned 1.8%, underperforming the JP Morgan EMBI Global Index by 10 bps	
Wellington Opportunistic Emerging Market Debt	Detractors: Negative security selection in Argentina, specifically an allocation to EUR-denominated sovereign debt. An allocation to local rates in Russia, due to an undervalued and moderate economic recovery with inflation closer to target but manageable, weighed on results. A lack of exposure to Pakistan hurt results. They are cautious on Pakistan due to negative fundamental trends, including declining reserves due to a dependency on external financing, weak fiscal performance due to low revenue collection, and a widening current account deficit due to excessive reliance on oil prices. Negative security selection in Romania, specifically an allocation to EUR-denominated sovereign debt, detracted from results. A slight overweight country allocation to Zambia, due to attractive valuations, hurt performance. Contributors: Overweight Azerbaijan given attractive valuations and expected credit quality improvement on the back of fiscal, banking, and current account consolidation. Overweight Sri Lanka due to the reform momentum supported by an IMF. Overweight Senegal given the govt's continuous commitment to the IMF program and to fiscal consolidation. Underweight Turkey and remain cautious given the country's low savings rate, its large current account deficit, which limits its growth potential and is structurally negative, and a shortage of reserves that leaves the central bank exposed to external shocks.	1
	<u>Positioning</u> : Risk posture shifted to neutral - balancing improved EM fundamentals and attractive valuations against tightening global liquidity, trade protectionism risks and select EM country struggles. Favor select frontier markets with strong reform stories and/or IMF, commodity price support. Favor Gulf Cooperation Council (GCC) countries with reform momentum and attractive valuations relative to credit quality. Favor Central and Eastern European countries with improving fundamentals not recognized by markets. Underweight investment grade countries in Latin America where valuations are tight. Underweight much of Asia due to tight valuations. Favor issuers in Eastern Europe and the Middle East over Asia and Latin America. Positive on Russia and cautious on Turkey, Brazil, and Mexico. Constructive on Argentina. Favor currency in Mexico Peso, Peruvian sol, Czech koruna, Polish zloty, S. African rand and Turkish lira.	



NEPC'S DUE DILIGENCE MONITOR

Manager / Fund	Manager Changes/ Announcements (Recent Quarter)	NEPC Due Diligence Committee Recommendations
GAM Unconstrained Fixed Income	Other: Fund Winding Down 8/2018	Terminate Rating changed from "1" to terminate in August 2018
Acadian Asset Management LLC Non-U.S. All-Cap Equity	Loss of Personnel: Acadian names new Director of Implementation 9/2018	No Action

	NEPC Due Diligence Status Key
No Action	Informational items have surfaced; no action is recommended.
Watch	Issues have surfaced to be concerned over; manager can participate in future searches, but current and prospective clients must be made aware of the issues.
Hold	Serious issues have surfaced to be concerned over; manager cannot be in future searches unless a client specifically requests, but current and prospective clients must be made aware of the issues.
Client Review	Very serious issues have surfaced with a manager; manager cannot be in future searches unless a client specifically requests. Current clients must be advised to review 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.



NEPC'S QUARTERLY DUE DILIGENCE DETAIL

Investment Option	Commentary
GAM Unconstrained Fixed Income	Liquidation Update NEPC has been conducting bi-weekly update calls with GAM to receive updates on the orderly liquidation of the Unconstrained Bond Fund. GAM has made significant progress liquidating the Fund's holdings, including many of the Fund's Illiquid positions, and to date has distributed approximately 66% of the total fund value. The firm has indicated that they intend to make another distribution in late November or early December following the settlement of a sale transaction of one of the illiquid holdings. The firm has continued to liquidate security positions and close out derivative contracts used for hedging throughout October. The largest illiquid positions remaining in the portfolio are the Liberty Industries PPA (Power Purchase Agreement) bonds. GAM has indicated that the renewable energy certification tied to the bonds' underlying assets has progressed as planned and they believe that the completion of this process later this year will enable the issue to refinance the bonds at more favorable rates, which will enable GAM to exit the position at or near the current price sometime in December or January 2019. Because the Liberty Industries bonds are denominated in Pound Sterling (GBP), GAM has left a GBP to US Dollar (USD) currency hedge in place to prevent currency losses on the position. As part of NEPC's ongoing monitoring of the liquidation we have contacted the GAM Fund's third-party valuation vendor, State Street Bank, to confirm that contract and pricing policies related to the Fund conform with industry standards and that there have been no conflicts between the valuations provided by State Street and GAM's internal pricing of the Fund holdings. GAM disclosed updated information on the firm's assets-under-management as part of its 3rd quarter earnings announcement. The firm has seen the total assets managed by its investment management business drop from approximately \$85 billion to \$67 billion during the third quarter, while the assets in its other units have been more stable. On N
Acadian Asset Management LLC Non-U.S. All-Cap Equity	Acadian Asset Management notified NEPC Research that Director of Long/Short Equities Alex Voitenok has been promoted to Director of Implementation effective September 1, 2018. Mr. Voitenok will lead Acadian's Portfolio Construction and Trading Team. Mr. Voitenok's promotion is the result of Mauricio Karchmer's departure in December 2017. Michael Gleason, Senior Vice President and Portfolio Manager, will assume a leadership role on the Long/Short Team in a joint capacity with Mr. Voitenok as Co-Directors in the interim. Effective 2019, Mr. Gleason will become sole Director of Long/Short Equities Strategy. NEPC Research is comfortable with this transition given the broad and experienced team structure at Acadian. The implementation team has 12 members and Acadian had been searching for Mr. Karchmer's replacement since January 2018. NEPC research recommends NO ACTION.



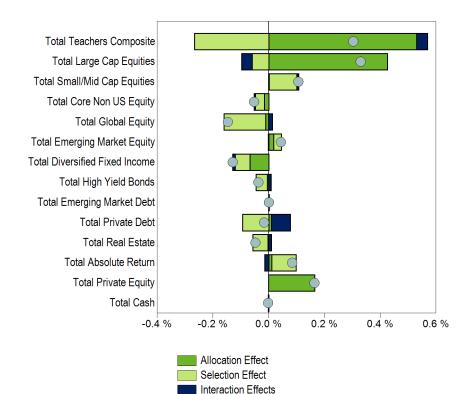
NEPC'S QUARTERLY DUE DILIGENCE DETAIL

Investment Option	Commentary	NEPC Rating
	NEPC has been conducting bi-weekly update calls with GAM to receive updates on the orderly liquidation of the Unconstrained Bond Fund. GAM has made significant progress liquidating the Fund's holdings, including many of the Fund's illiquid positions, and to date has distributed approximately 66% of the total fund value. The firm has indicated that they intend to make another distribution in late November or early December following the settlement of a sale transaction of one of the illiquid holdings. The firm has continued to liquidate security positions and close out derivative contracts used for hedging throughout October. The largest illiquid positions remaining in the portfolio are the Liberty Industries PPA (Power Purchase Agreement) bonds. GAM has indicated that the renewable energy certification tied to the bonds' underlying assets has progressed as planned and they believe that the completion of this process later this year will enable the issuer to refinance the bonds at more favorable rates, which will enable GAM to exit the position at or near the current price sometime in December or January 2019. Because the Liberty Industries bonds are denominated in Pound Sterling (GBP), GAM has left a GBP to US Dollar (USD) currency hedge in place to prevent currency losses on the position. As part of NEPC's ongoing monitoring of the liquidation we have contacted the GAM Fund's third-party valuation vendor, State Street Bank, to confirm that contract and pricing policies related to the Fund conform with industry standards and that there have been no conflicts between the valuations provided by State Street and GAM's internal pricing of the Fund holdings. GAM disclosed updated information on the firm's assets-under-management as part of its 3rd quarter earnings announcement. The firm has seen the total assets managed by its investment management business drop from approximately \$85 billion to \$67 billion during the third quarter, while the assets in its other units have been more stable. On November 6th GAM fur	



TOTAL FUND ATTRIBUTION ANALYSIS - NET

Attribution Effects Relative to Allocation Index 3 Months Ending September 30, 2018



Actual Return Return Return Effect Effect Effects Effects Total Large Cap Equities 7.3% 7.7% -0.4% -0.1% 0.4% 0.0% 0.3% Total Small/Mid Cap Equities 7.2% 4.7% 2.5% 0.1% 0.0% 0.0% 0.1% Total Core Non US Equity 1.1% 1.4% -0.3% 0.0% 0.0% 0.0% -0.1% Total Global Equity 2.6% 4.3% -1.7% -0.1% 0.0% 0.0% 0.0% -0.1% Total Emerging Market Equity -0.5% -1.1% 0.6% 0.0% 0.0% 0.0% 0.0% 0.0% Total Diversified Fixed Income -0.2% 0.0% -0.3% -0.1% -0.1% 0.0% -0.1%<			Attribut	ion Summa	ıry			
Actual Return Actual Return Return Excess Selection Selection Allocation Interaction Total Seffects Total Large Cap Equities 7.3% 7.7% -0.4% -0.1% 0.4% 0.0% 0.3% Total Small/Mid Cap Equities 7.2% 4.7% 2.5% 0.1% 0.0% 0.0% 0.1% Total Core Non US Equity 1.1% 1.4% -0.3% 0.0% 0.0% 0.0% -0.1% Total Global Equity 2.6% 4.3% -1.7% -0.1% 0.0% 0.0% -0.1% Total Emerging Market Equity -0.5% -1.1% 0.6% 0.0% 0.0% 0.0% 0.0% Total Diversified Fixed Income -0.2% 0.0% -0.3% -0.1% -0.1% 0.0% -0.1% Total High Yield Bonds 0.4% 2.4% -2.0% 0.0% 0.0% 0.0% 0.0% Total Emerging Market Debt 1.8% 1.9% 0.0% 0.0% 0.0% 0.0% 0.0% Total Private Debt 1.8%		3 Mc	nths Endin	g Septemb	er 30, 2018			
Total Small/Mid Cap Equities 7.2% 4.7% 2.5% 0.1% 0.0% 0.0% 0.1% Total Core Non US Equity 1.1% 1.4% -0.3% 0.0% 0.0% 0.0% -0.1% Total Global Equity 2.6% 4.3% -1.7% -0.1% 0.0% 0.0% -0.1% Total Emerging Market Equity -0.5% -1.1% 0.6% 0.0% 0.0% 0.0% 0.0% Total Diversified Fixed Income -0.2% 0.0% -0.3% -0.1% -0.1% 0.0% -0.1% Total High Yield Bonds 0.4% 2.4% -2.0% 0.0% 0.0% 0.0% 0.0% 0.0% Total Emerging Market Debt 1.8% 1.9% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% Total Private Debt 1.8% 1.8% -1.8% -0.1% 0.0% 0.0% 0.0% Total Real Estate 1.0% 1.7% -0.7% -0.1% 0.0% 0.0% 0.0% Total Private Equity		Actual						Total Effects
Equities 7.2% 4.7% 2.5% 0.1% 0.0% 0.0% 0.1% Total Core Non US Equity 1.1% 1.4% -0.3% 0.0% 0.0% 0.0% -0.1% Total Global Equity 2.6% 4.3% -1.7% -0.1% 0.0% 0.0% -0.1% Total Emerging Market Equity -0.5% -1.1% 0.6% 0.0% 0.0% 0.0% 0.0% 0.0% Total Diversified Fixed Income -0.2% 0.0% -0.3% -0.1% -0.1% 0.0% -0.1% -0.1% -0.1% -0.1% -0.1% -0.1% -0.1% -0.1% -0.0% -0.1% -0.1% -0.1% -0.1% -0.1% -0.1% -0.1% -0.1% -0.0% 0.0	Total Large Cap Equities	7.3%	7.7%	-0.4%	-0.1%	0.4%	0.0%	0.3%
Total Global Equity 2.6% 4.3% -1.7% -0.1% 0.0% 0.0% -0.1% Total Emerging Market Equity -0.5% -1.1% 0.6% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% -0.1% 0.0% -0.1% 0.0% -0.1% 0.0% -0.1% 0.0% -0.1% 0.0% <	·	7.2%	4.7%	2.5%	0.1%	0.0%	0.0%	0.1%
Total Emerging Market Equity -0.5% -1.1% 0.6% 0.0% 0.0% 0.0% 0.0% Total Diversified Fixed Income -0.2% 0.0% -0.3% -0.1% -0.1% 0.0% -0.1% Total High Yield Bonds 0.4% 2.4% -2.0% 0.0% 0.0% 0.0% 0.0% 0.0% Total Emerging Market Debt 1.8% 1.9% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% Total Private Debt 1.8% 1.8% -1.8% -0.1% 0.0% 0.1% 0.0% Total Real Estate 1.0% 1.7% -0.7% -0.1% 0.0% 0.0% 0.0% Total Absolute Return 1.3% 0.2% 1.1% 0.1% 0.0% 0.0% 0.1% Total Private Equity 4.6% 3.8% 0.8% 0.1% -0.1% -0.1% -0.1% -0.1% -0.1% -0.1% -0.1% -0.1% -0.1% -0.1% -0.1% -0.1% -0.1% -0.1% -0.1% <	Total Core Non US Equity	1.1%	1.4%	-0.3%	0.0%	0.0%	0.0%	-0.1%
Equity -0.5% -1.1% 0.6% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% -0.1% 0.0% -0.1% 0.0%	Total Global Equity	2.6%	4.3%	-1.7%	-0.1%	0.0%	0.0%	-0.1%
Total High Yield Bonds 0.4% 2.4% -2.0% 0.0% 0.0% 0.0% 0.0% 0.0%		-0.5%	-1.1%	0.6%	0.0%	0.0%	0.0%	0.0%
Total Emerging Market Debt 1.8% 1.9% 0.0% 0.1% 0.1% 0.0% 0.1% 0.1% 0.1% 0.1% 0.1% 0.1% 0.1% 0.1% 0.1% 0.1% 0.1% 0.1% 0.1% 0.0% 0.1% <th< td=""><td></td><td>-0.2%</td><td>0.0%</td><td>-0.3%</td><td>-0.1%</td><td>-0.1%</td><td>0.0%</td><td>-0.1%</td></th<>		-0.2%	0.0%	-0.3%	-0.1%	-0.1%	0.0%	-0.1%
Debt 1.8% 1.9% 0.0% 0.1% 0.0% 0.0% 0.1% 0.1% 0.0% 0.1% 0.1% 0.0% 0.1% 0.0% 0.1% 0.0% <th< td=""><td>Total High Yield Bonds</td><td>0.4%</td><td>2.4%</td><td>-2.0%</td><td>0.0%</td><td>0.0%</td><td>0.0%</td><td>0.0%</td></th<>	Total High Yield Bonds	0.4%	2.4%	-2.0%	0.0%	0.0%	0.0%	0.0%
Total Real Estate 1.0% 1.7% -0.7% -0.1% 0.0% 0.0% 0.0% Total Absolute Return 1.3% 0.2% 1.1% 0.1% 0.0% 0.0% 0.1% Total Private Equity 4.6% 3.8% 0.8% 0.1% -0.1% -0.1% -0.1% -0.1% Total Cash 0.0% 0.5% -0.5% 0.0% 0.0% 0.0% 0.0% 0.0%	0 0	1.8%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Absolute Return 1.3% 0.2% 1.1% 0.1% 0.0% 0.0% 0.1% Total Private Equity 4.6% 3.8% 0.8% 0.1% -0.1%<	Total Private Debt	1.8%	1.8%	-1.8%	-0.1%	0.0%	0.1%	0.0%
Total Private Equity 4.6% 3.8% 0.8% 0.1% -0.1% -0.1% -0.1% Total Cash 0.0% 0.5% -0.5% 0.0% 0.0% 0.0% 0.0%	Total Real Estate	1.0%	1.7%	-0.7%	-0.1%	0.0%	0.0%	0.0%
Total Cash 0.0% 0.5% -0.5% 0.0% 0.0% 0.0% 0.0%	Total Absolute Return	1.3%	0.2%	1.1%	0.1%	0.0%	0.0%	0.1%
	Total Private Equity	4.6%	3.8%	0.8%	0.1%	-0.1%	-0.1%	-0.1%
Total 2.6% 2.5% 0.2% -0.1% 0.2% 0.0% 0.2%	Total Cash	0.0%	0.5%	-0.5%	0.0%	0.0%	0.0%	0.0%
	Total	2.6%	2.5%	0.2%	-0.1%	0.2%	0.0%	0.2%

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 policyindex 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 alongwith the policy or target weight of each composite

May not add up due to rounding

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

Total Effect



ANALYTICS DEFINITIONS

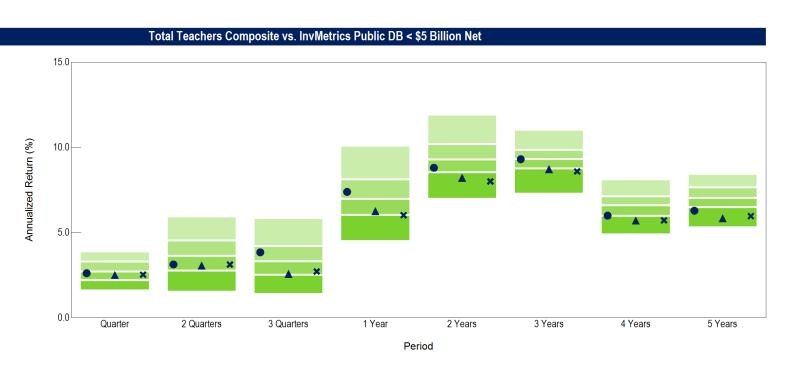
Asset Allocation Effect - Measures VPIC's ability to effectively allocate their portfolio's assets to various asset classes. The allocation effect determines whether the overweighting or underweighting of asset classes relative to a benchmark contributes positively or negatively to the overall portfolio 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.



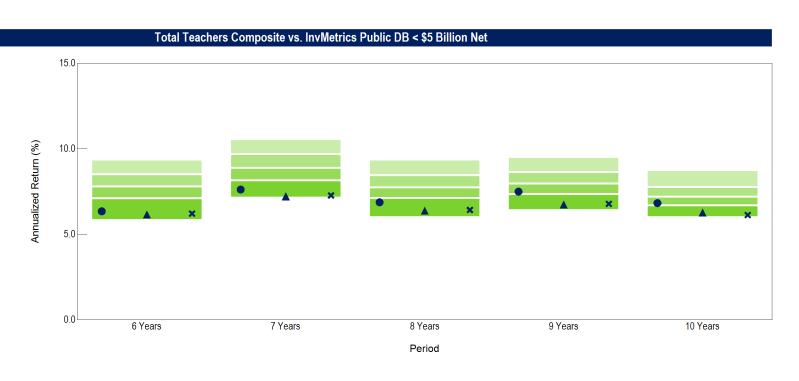
TOTAL FUND RETURN SUMMARY VS. PEER UNIVERSE - NET



		Return (Rank															
	5th Percentile	3.9		5.9		5.8		10.1		11.9		11.0		8.1		8.4	
	25th Percentile	3.3		4.5		4.2		8.1		10.2		9.9		7.1		7.7	
	Median	2.7		3.6		3.3		7.0		9.3		9.3		6.6		7.0	
	75th Percentile	2.2		2.8		2.5		6.1		8.5		8.8		6.0		6.5	
	95th Percentile	1.6		1.5		1.4		4.5		7.0		7.3		4.9		5.3	
	# of Portfolios	229		228		228		227		218		212		208		195	
•	Total Teachers Composite	2.6	(54)	3.1	(63)	3.8	(35)	7.4	(38)	8.8	(68)	9.3	(52)	6.0	(75)	6.3	(82)
•	Allocation Index	2.5	(58)	3.1	(65)	2.6	(75)	6.3	(68)	8.2	(83)	8.7	(77)	5.7	(85)	5.8	(89)
×	Policy Index	2.5	(58)	3.1	(63)	2.7	(70)	6.0	(76)	8.0	(87)	8.6	(80)	5.7	(85)	6.0	(89)



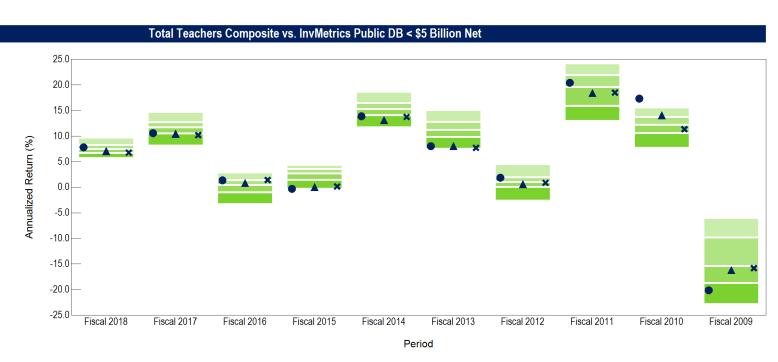
TOTAL FUND RETURN SUMMARY VS. PEER UNIVERSE - NET



		Return (Rank)								
	5th Percentile	9.4		10.6		9.4	9.5		8.7	
	25th Percentile	8.5		9.7		8.5	8.7		7.8	
	Median	7.8		8.9		7.7	8.0		7.2	
	75th Percentile	7.1		8.2		7.1	7.4		6.7	
	95th Percentile	5.9		7.2		6.0	6.4		6.0	
	# of Portfolios	189		176		164	154		147	
•	Total Teachers Composite	6.3	(90)	7.6	(86)	6.9 (83)	7.5	(70)	6.8	(72)
•	Allocation Index	6.2	(92)	7.2	(95)	6.4 (94)	6.7	(93)	6.3	(92)
×	Policy Index	6.2	(91)	7.3	(95)	6.4 (94)	6.8	(92)	6.1	(94)



TOTAL FUND RETURN SUMMARY VS. PEER UNIVERSE - 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 Teachers Composite	7.8 (40)) 10.6 (75)	1.3 (27)	-0.3 (96)	13.9 (82)	8.0 (95)	1.9 (29)	20.4 (39)	17.3 (1) -20.1 (85)
▲ Allocation Index	7.1 (67	7) 10.4 (78)	0.8 (38)	0.0 (95)	13.1 (91)	8.0 (95)	0.6 (62)	18.4 (62)	14.0 (18) -16.2 (56)
× Policy Index	6.8 (75	5) 10.2 (81)	1.4 (25)	0.1 (94)	13.7 (83)	7.7 (95)	0.9 (55)	18.5 (60)	11.3 (65) -15.8 (54)



TOTAL FUND PERFORMANCE DETAIL - NET

					Ending September 30, 2018													
	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%) F	Rank	Fiscal YTD F (%)	Rank	YTD (%)	Rank	1 Yr (%) F	Rank	3 Yrs (%) F	Rank	5 Yrs (%)	Rank	10 Yrs (%) F	Rank	Inception Date
Total Teachers Composite	1,943,743,131	100.0	100.0	2.6	54	2.6	54	3.8	35	7.4	38	9.3	52	6.3	82	6.8	72	Mar-92
Allocation Index				2.5	58	2.5	58	2.5	78	6.3	68	8.7	77	5.8	89	6.3	92	Mar-92
Policy Index				2.5	58	2.5	58	2.3	81	6.0	76	8.6	80	6.0	89	6.1	94	Mar-92
InvestorForce Public DB < \$5 Billion Net Median				2.7		2.7		3.3		7.0		9.3		7.0		7.2		Mar-92
Total Domestic Equity	489,721,763	25.2	18.0	7.3	29	7.3	29	11.3	35	18.0	34	17.0	30	13.2	26			Jul-13
Russell 3000				7.1	31	7.1	31	10.6	39	17.6	36	17.1	30	13.5	23	12.0	41	Jul-13
eV All US Equity Net Median				5.6		5.6		8.4		14.6		15.1		11.6		11.5		Jul-13
Total Large Cap Equities	404,831,615	20.8	14.0	7.3	37	7.3	37	10.0	39	17.1	39	16.9	29	13.6	31	12.7	24	Apr-01
S&P 500				7.7	30	7.7	30	10.6	35	17.9	36	17.3	25	13.9	27	12.0	37	Apr-01
eV US Large Cap Equity Net Median				6.7		6.7		8.3		15.3		15.1		12.2		11.2		Apr-01
SSgA S&P 500 Cap-Wgt	326,898,435	16.8	10.0	7.7	30	7.7	30	10.6	35	17.9	36	17.3	25	14.0	27			Sep-10
SSgA S&P 500 Equal-Wgt	77,931,790	4.0	4.0	5.4	73	5.4	73	7.4	57	14.2	58	15.5	43	12.5	46	13.1	19	Dec-05
S&P 500 Equal Weighted				5.4	74	5.4	74	7.3	58	13.9	60	15.4	45	12.5	46	13.1	19	Dec-05
Total Small/Mid Cap Equities	84,890,148	4.4	4.0	7.2	24	7.2	24	19.1	14	23.4	23	18.3	19	13.1	13	12.8	27	Apr-01
Russell 2500				4.7	51	4.7	51	10.4	46	16.2	46	16.1	38	11.4	37	12.0	42	Apr-01
eV US Small-Mid Cap Equity Net Median				4.7		4.7		9.0		14.9		14.8		10.6		11.7		Apr-01
Champlain	84,890,148	4.4	4.0	7.2	24	7.2	24	19.1	14	23.9	22	20.7	7	14.9	3			Oct-09
Custom SMID Cap Equity Index				4.1	57	4.1	57	11.0	45	15.7	47	17.2	25	11.6	31	12.1	40	Oct-09

Long term policy consists of: 14% S&P 500 / 4% Russell 2500 / 12% MSCI EAFE / 4% MSCI Emerging Markets / 9% MSCI ACWI / 2% BBgBarc US High Yield TR / 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

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 Fiscal Year End is 6/30



TOTAL FUND PERFORMANCE DETAIL - NET

					Ending September 30, 2018													
	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD F (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%) F	Rank	Inception Date
Total Non US Equity	515,760,590	26.6	25.0	1.4	20	1.4	20	-3.3	66	1.3	62	11.5	39	5.2	58			Apr-01
MSCI ACWI ex USA				0.7	33	0.7	33	-3.1	60	1.8	57	10.0	57	4.1	75	5.2	81	Apr-01
eV All ACWI ex-US Equity Net Median				0.2		0.2		-2.4		2.4		10.4		5.6		6.8		Apr-01
Total Core Non US Equity	292,887,229	15.1	12.0	1.1	42	1.1	42	-2.5	58	2.0	53	11.2	26	6.3	32	6.0	66	Apr-01
MSCI EAFE				1.4	35	1.4	35	-1.4	44	2.7	46	9.2	56	4.4	71	5.4	82	Apr-01
eV All EAFE Equity Net Median				0.8		0.8		-2.1		2.4		9.5		5.4		6.5		Apr-01
SSgA ACWI Ex US	172,156,391	8.9	5.0	0.7	39	0.7	39	-2.9	61	1.9	64	10.2	46	4.3	70			Sep-10
MSCI ACWI ex USA				0.7	40	0.7	40	-3.1	66	1.8	64	10.0	47	4.1	73	5.2	75	Sep-10
eV ACWI ex-US All Cap Equity Net Median				0.4		0.4		-2.2		2.6		9.8		5.9		6.8		Sep-10
Acadian	57,216,718	2.9	3.5	1.0	43	1.0	43	-1.7	46	3.3	42	15.2	6	9.2	9	7.3	35	Nov-05
Mondrian	63,514,119	3.3	3.5	2.0	17	2.0	17	-2.0	50	8.0	66	8.5	70	4.8	65	5.2	85	Jan-93
MSCI EAFE				1.4	35	1.4	35	-1.4	44	2.7	46	9.2	56	4.4	71	5.4	82	Jan-93
Total Global Equity	157,853,837	8.1	9.0	2.6	65	2.6	65		-		-							Feb-18
MSCI ACWI				4.3	38	4.3	38	3.8	48	9.8	45	13.4	37	8.7	51	8.2	59	Feb-18
eV All Global Equity Net Median				3.6		3.6		3.6		9.0		12.4		8.7		8.6		Feb-18
Artisan Global Opportunities	82,840,293	4.3	4.5	3.5	51	3.5	51											Jul-18
Hosking Global Equity	75,013,543	3.9	4.5	1.6	75	1.6	75		-		-							Feb-18
MSCI ACWI				4.3	38	4.3	38	3.8	48	9.8	45	13.4	37	8.7	51	8.2	59	Feb-18
Total Emerging Market Equity	65,019,525	3.3	4.0	-0.5	23	-0.5	23	-11.3	73	-6.7	81	9.3	75	1.8	86	7.2	27	Feb-08
MSCI Emerging Markets				-1.1	29	-1.1	29	-7.7	24	-0.8	26	12.4	34	3.6	52	5.4	63	Feb-08
eV Emg Mkts Equity Net Median				-2.8		-2.8		-9.5		-3.2		11.2		3.7		6.0		Feb-08
Aberdeen	65,019,525	3.3	4.0	-0.5	23	-0.5	23	-11.3	73	-6.7	81	9.3	75	1.8	86	7.2	27	Feb-08
MSCI Emerging Markets				-1.1	29	-1.1	29	-7.7	24	-0.8	26	12.4	34	3.6	52	5.4	63	Feb-08



TOTAL FUND PERFORMANCE DETAIL - NET

					Ending September 30, 2018													
	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%) F	Rank	Fiscal YTD F (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%) F	Rank	Inception Date
Total Fixed Income	594,320,189	30.6	26.0	0.1	76	0.1	76	-1.2	72	-0.5	59	3.9	29	3.3	39			Jul-13
BBgBarc US Aggregate TR eV All US Fixed Inc Net Median				0.0 0.4	78	0.0 0.4	78	-1.6 -0.3	80	-1.2 -0.1	83	1.3 2.0	68	2.2 2.4	58	3.8 4.3	60	Jul-13 Jul-13
Total Diversified Fixed Income	496,999,454	25.6	20.0	-0.2	90	-0.2	90	-1.0	68	-0.3	54	2.5	42	2.7	45	4.9	41	Jul-03
BBgBarc US Aggregate TR eV All US Fixed Inc Net Median				0.0 0.4	78	0.0 0.4	78	-1.6 -0.3	80	-1.2 -0.1	83	1.3 2.0	68	2.2 2.4	58	3.8 4.3	60	Jul-03 Jul-03
SSgA Barclays Aggregate Index PIMCO Core Plus	217,929,361 114,723,035	11.2 5.9	8.0 4.0	0.0 0.2	77 72	0.0 0.2	77 72	-1.6 -1.3	67 59	-1.3 -1.0	77 73	1.3 1.9	74 77	 2.2	 84	 		Feb-15 Nov-09
BBgBarc US Aggregate TR eV US Core Plus Fixed Inc Net Median	·			0.0 0.3	86	0.0 0.3	86	-1.6 -1.2	77	-1.2 -0.7	79	1.3 2.3	96	2.2 2.8	87	3.8 5.2	99	Nov-09 Nov-09
GAM Unconstrained Bond PIMCO Unconstrained	14,400,024 38,755,616	0.7 2.0	0.0 2.0	-0.8 0.9	87 45	-0.8 0.9	87 45	-0.3 1.6	56 30	-0.9 1.8	65 43	3.8 4.1	64 58	2.1	 82			Jun-15 Jul-11
PIMCO Unconstrained Custom Index 3-Month Libor Total Return USD	00,100,010			1.1 0.6	35 57	1.1 0.6	35 57	-1.0 1.7	62 26	-0.6 2.1	62 34	1.3	 97	0.9	 95	 0.7	 99	Jul-11 Jul-11
eV Global Unconstrained Fixed Inc Net Median				0.8		0.8		0.5		0.9		4.4		2.8		4.4		Jul-11
BlackRock TIPS	111,191,418	5.7	6.0	-0.8	65	-0.8	65	-0.9	47	0.4	53	2.0	48	1.3	40			Dec-09
BBgBarc US TIPS TR				-0.8	63	-0.8	63	-0.8	45	0.4	40	2.0	47	1.4	37	3.3	52	Dec-09
Total High Yield Bonds	27,651,790	1.4	2.0	0.4	98	0.4	98	0.5	95	1.3	88	6.3	66	4.7	59	7.8	68	May-06
BBgBarc US High Yield TR eV US High Yield Fixed Inc Net Median				2.4 2.1	20	2.4 2.1	20	2.6 2.0	26	3.0 2.6	33	8.1 6.8	14	5.5 4.8	21	9.5 8.3	11	May-06 May-06
Guggenheim PIMCO High Yield	1,017,978 26,620,758	0.1 1.4		1.3		1.3		1.3		2.3		7.0						Dec-13

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

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

KDP residual Market Value: \$13,054

PIMCO High Yield was funded by Guggenheim on 08/27/2018 therefore 3 month performance is unavailable



TOTAL FUND PERFORMANCE DETAIL - NET

										Ending September 30, 2018								
	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%) F	Rank	Fiscal YTD F (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%) I	Rank	5 Yrs (%) F	Rank	10 Yrs (%) R	lank	Inception Date
Total Emerging Market Debt	69,668,944	3.6	4.0	1.8	18	1.8	18	-3.5	28	-2.7	34	7.0	19	5.0	15			Nov-09
JP Morgan EMBI Global Index				1.9	18	1.9	18	-3.5	27	-2.9	36	5.7	47	4.6	21	7.3	34	Nov-09
eV All Emg Mkts Fixed Inc Net Median				1.0		1.0		-5.3		-4.4		5.6		3.3		6.5		Nov-09
Wellington Opportunistic EMD	69,668,944	3.6	4.0	1.8	18	1.8	18	-3.5	28	-2.7	34	7.0	19	5.0	15			Jan-10
JP Morgan EMBI Global Index				1.9	18	1.9	18	-3.5	27	-2.9	36	5.7	47	4.6	21	7.3	34	Jan-10
Total Private Debt	28,198,032	1.5	5.0	0.0		0.0		4.1	-	-								Jan-18
S&P/LSTA Leveraged Loan TR				1.8		1.8		4.0		5.2		5.3		4.1		6.1		Jan-18
BlueBay Direct Lending Fund III	4,875,072	0.3	2.5	0.0		0.0			-									Jul-18
Benefit Street Partners	23,322,960	1.2	2.5	0.0		0.0		4.2										Jan-18
S&P/LSTA Leveraged Loan TR				1.8		1.8		4.0		5.2		5.3		4.1		6.1		Jan-18
Total Real Estate	131,120,014	6.8	8.0	1.0		1.0		4.9	-	8.1		7.9		10.0				May-12
NCREIF Property Index				1.7		1.7		5.3		7.2		7.8		9.6		6.4		May-12
Total Real Estate Core	108,903,850	5.6	4.5	1.2		1.2		4.6	-	6.8		7.0		9.6				May-12
UBS Trumbull	108,775,403	5.6	4.5	1.2		1.2		4.6		6.8		6.9		8.4		4.9		Oct-96
Total Real Estate Non-Core	22,216,164	1.1	3.5	0.0		0.0		6.6	-	14.7		13.0						May-12
Siguler Guff DREOF II	16,073,386	0.8	1.0	0.0		0.0		8.4		17.8		14.4						Jun-14
Siguler Guff DREOF II Co-Investment	6,142,778	0.3	0.5	0.0		0.0		2.2		6.6								Nov-16
Brookfield Strategic Real Estate Partners III	0	0.0	2.0	0.0		0.0		-										Jun-18
NCREIF Property Index				1.7		1.7		5.3		7.2		7.8		9.6		6.4		Jun-18

Market values are final as of Q2 2018 capital statements and cash adjusted to date for Benefit Street Partners, BlueBay Direct Lending Fund III, Siguler Guff DREOF II, and Siguler Guff DREOF II Co-Investment

Market value is final as of Q3 2018 capital statement for UBS Trumbull

Transwestern/Aslan III residual market value of \$128,447 is included in the Total Real Estate composite



TOTAL FUND PERFORMANCE DETAIL - NET

						Ending September 30, 2018												
	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%) F	Rank	Fiscal YTD F (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%) F	Rank	Inception Date
Total Absolute Return	138,021,381	7.1	8.0	1.3	32	1.3	32	5.5	20	7.7	21	3.7	57	3.4	67			Dec-10
HFRI Fund of Funds Composite Index				0.2	68	0.2	68	0.9	73	3.0	70	3.3	63	3.2	74	2.5	89	Dec-10
eV Alt Fund of Funds - Multi-Strategy Median				0.8		0.8		2.7		4.1		3.9		4.3		4.6		Dec-10
Pinnacle Natural Resources, L.P.	47,737,116	2.5	3.0	1.2	21	1.2	21	8.8	3	11.3	7							Jul-16
Bloomberg Commodity Index				-2.0	82	-2.0	82	-2.0	77	2.6	74	-0.1	99	-7.2	72	-6.2	99	Jul-16
Grosvenor	56,451,045	2.9	3.0	0.6	56	0.6	56	3.9	37	6.4	27	4.3	43	4.1	58			Dec-10
Allianz Structured Alpha	33,833,220	1.7	2.0	2.4	10	2.4	10	3.6	42	5.1	38	6.7	16	7.5	12	8.0	9	Apr-08
91 Day T-Bills				0.5	61	0.5	61	1.3	68	1.6	81	0.9	93	0.5	97	0.3	99	Apr-08
eV Alt Fund of Funds - Multi-Strategy Median				0.8		0.8		2.7		4.1		3.9		4.3		4.6		Apr-08
Total Private Equity	43,675,165	2.2	10.0	0.0		0.0		15.6	-	17.9		15.5		17.0				Dec-12
Cambridge Associates US All PE				0.0		0.0		8.7		14.2		13.2		12.7		11.7		Dec-12
Total Cash	1,041,477	0.1	0.0															
Vermont Cash	1,041,477	0.1	0.0															

Allianz Structured Alpha was included Diversified Fixed income composite prior to 04/01/2016

Absolute Return composite formerly shown as Hedge Funds composite. As of 04/01/2016, Absolute Return includes Allianz Structured Alpha Harbourvest values based on final Capital Account Statements for Q2 2018 and cash adjusted to date

Pinnacle Natural Resources, L.P. September 2018 market value is reflected by the manager



REAL ESTATE PERFORMANCE ANALYSIS (AS OF 6/30/2018)

Investment Name	Vintage	Commitment	QTD	YTD	1 Year	3 Year	5 Year	Inception
	Year	Amount						
Transwestern Aslan Realty Partnership III	2005	5,000,000			-7.10	10.94	5.98	-15.27
Siguler Guff Distressed Real Estate Opportunities II	2014	40,000,000	1.28	5.60	17.57	13.35		11.59
Siguler Guff DREOF II Co-Investment	2016	15,000,000	0.41	0.99	13.67			12.99
Brookfield Strategic Real Estate Partners III, L.P.	2017	100,000,000						
Total: State of Vermont		160,000,000	1.02	4.31	16.57	13.29	11.62	5.87



REAL ESTATE PERFORMANCE ANALYSIS (AS OF 6/30/2018)

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 Transwestern Aslan Re Partnership III	alty RE Value Add	2005	5,000,000	5,000,000	0	0	1,446,198	0	1,446,198	-3,553,802	100%	0.29	0.29	-15.27%
2 Siguler Guff Distressed Estate Opportunities II		2014	40,000,000	32,620,000	7,380,000	0	11,425,153	33,212,936	44,638,089	12,018,089	82%	0.35	1.37	11.59%
3 Siguler Guff DREOF II Investment	Co- RE Opportunistic	2016	15,000,000	11,910,217	3,089,783	0	0	13,989,474	13,989,474	2,079,257	79%	0.00	1.17	12.99%
4 Brookfield Strategic Re Estate Partners III, L.P		2017	100,000,000	0	100,000,000	0	0		0	0	0%	0.00	0.00	N/A
Total: State of Vermo	ont		160,000,000	49,530,217	110,469,783	0	12,871,351	47,202,410	60,073,761	10,543,544	31%	0.26	1.21	5.87%



PRIVATE DEBT PERFORMANCE ANALYSIS (AS OF 6/30/2018)

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	0.81	2.66			4.47
BlueBay Direct Lending Fund III	2017	70,000,000	-12.37				-1.30
Total: State of Vermont		140,000,000	0.73	2.55			4.35



PRIVATE DEBT PERFORMANCE ANALYSIS (AS OF 6/30/2018)

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
Benefit Street Partners Senior Secured Opportunites Fund, LP	2017	70,000,000	54,533,364	15,466,636	1,333,567	2,185,992	55,451,835	57,637,827	1,770,896	78%	0.04	1.03	4.479
2 BlueBay Direct Lending Fund III	2017	70,000,000	3,063,645	66,936,355	0	0	3,023,898	3,023,898	-39,747	4%	0.00	0.99	-1.309
Total: State of Vermont		140,000,000	57,597,009	82,402,991	1,333,567	2,185,992	58,475,733	60,661,725	1,731,149	41%	0.04	1.03	4.35%



PRIVATE EQUITY PERFORMANCE ANALYSIS (AS OF 6/30/2018)

Investment Name	Vintage Year	Commitment Amount	QTD	YTD	1 Year	3 Year	5 Year	Inception
HarbourVest Partners Dover Street VIII	2012	25,000,000	8.65	9.66	19.70	12.71	18.32	22.16
HarbourVest Partners IX-Buyout	2012	24,000,000	6.12	9.91	22.63	18.24	18.10	17.59
HarbourVest Partners IX-Credit Opportunities	2012	4,000,000	3.27	5.95	19.02	12.84	13.32	14.97
HarbourVest Partners IX-Venture	2012	12,000,000	6.60	11.71	21.75	11.89	16.57	16.43
HarbourVest HIPEP VII	2014	15,000,000	4.68	10.25	22.44	16.80		16.90
HarbourVest Partners X Buyout Fund	2015	45,500,000	6.74	12.35	28.05			32.43
HarbourVest Partners X Venture Fund	2015	19,500,000	4.38	10.65	26.06			27.42
HarbourVest Partners Dover Street IX	2016	40,000,000	11.77	20.32	37.86			66.30
HarbourVest HIPEP VIII	2017	60,000,000	13.45					30.50
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						
Total: State of Vermont	-	395,000,000	7.41	13.35	26.14	18.84	20.49	21.42

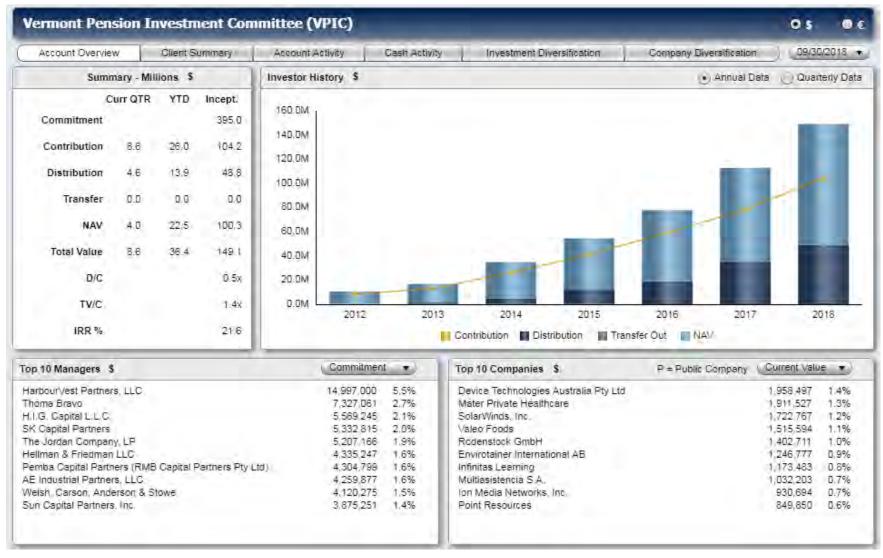


PRIVATE EQUITY PERFORMANCE ANALYSIS (AS OF 6/30/2018)

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
HarbourVest Partners IX- Venture	Venture	2012	12,000,000	11,400,000	600,000	37,671	4,630,980	13,345,224	17,976,204	6,538,533	95%	0.40	1.57	16.43%
2 HarbourVest Partners IX- Buyout	Buyouts	2012	24,000,000	18,060,000	5,940,000	47,188	10,504,392	17,268,610	27,773,002	9,665,814	75%	0.58	1.53	17.59%
3 HarbourVest Partners Dover Street VIII	Secondaries	2012	25,000,000	22,125,000	2,875,000	0	22,377,702	11,991,533	34,369,235	12,244,235	89%	1.01	1.55	22.16%
4 HarbourVest Partners IX- Credit Opportunities	Distressed	2012	4,000,000	2,700,000	1,300,000	10,265	1,396,905	2,488,868	3,885,773	1,175,508	68%	0.52	1.43	14.97%
5 HarbourVest HIPEP VII	Fund of Funds	2014	15,000,000	7,837,500	7,162,500	0	858,585	9,260,916	10,119,501	2,282,001	52%	0.11	1.29	16.90%
6 HarbourVest Partners X Venture Fund	Venture	2015	19,500,000	7,458,750	12,041,250	1,672	369,019	9,110,745	9,479,764	2,019,342	38%	0.05	1.27	27.42%
7 HarbourVest Partners X Buyout Fund	Buyouts	2015	45,500,000	8,190,000	37,310,000	2,787	850,805	11,098,285	11,949,090	3,756,303	18%	0.10	1.46	32.43%
8 HarbourVest Partners Dover Street IX	Secondaries	2016	40,000,000	12,800,000	27,200,000	0	3,221,854	14,584,439	17,806,293	5,006,293	32%	0.25	1.39	66.30%
9 HarbourVest HIPEP VIII	Fund of Funds	2017	60,000,000	5,100,000	54,900,000	0	0	6,655,698	6,655,698	1,555,698	9%	0.00	1.31	30.50%
10 HarbourVest Partners XI Venture Fund	Venture	2018	37,500,000	0	37,500,000	0	0		0	0	0%	0.00	0.00	N/A
11 HarbourVest Partners XI Buyout Fund	Buyouts	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	Buyouts	2018	12,500,000	0	12,500,000	0	0		0	0	0%	0.00	0.00	N/A
13 HarbourVest Partners Co- Investment Fund V	Co-Investment	2018	25,000,000	0	25,000,000	0	0		0	0	0%	0.00	0.00	N/A
Total: State of Vermont			395,000,000	95,671,250	299,328,750	99,583	44,210,242	95,804,318	140,014,560	44,243,727	24%	0.46	1.46	21.42%



PRIVATE EQUITY INVESTMENT PORTFOLIO SUMMARY AS OF 9/30/2018





Note:

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

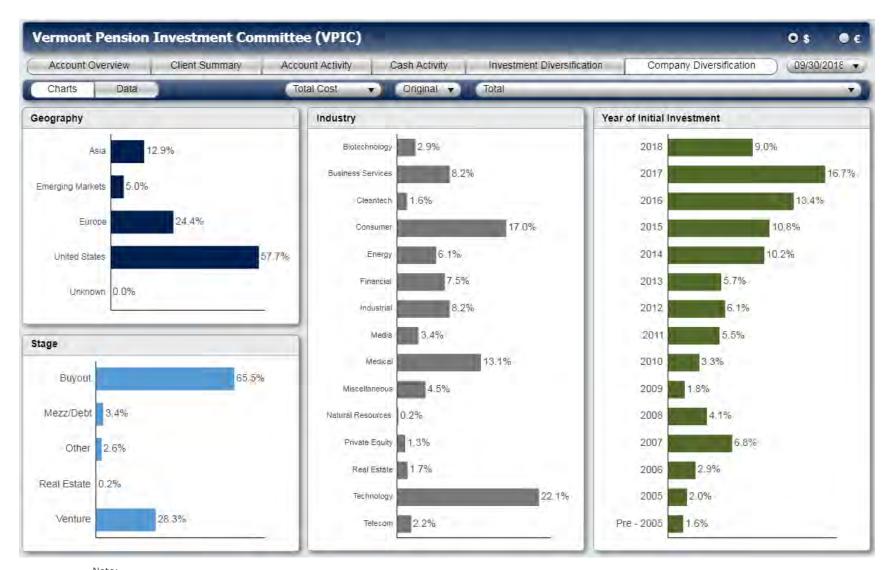
PRIVATE EQUITY INVESTMENT DIVERSIFICATION AS OF 9/30/2018





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

PRIVATE EQUITY COMPANY DIVERSIFICATION AS OF 9/30/2018





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

Investment	Index Set Name	Cumulative Contributions	Cumulative Distributions	Adjusted Valuation	Valuation ICM	Valuation Spread	IRR	IRR ICM	IRR Spread	Kaplan- Schoar PME
HarbourVest HIPEP VII	MSCI ACWI	7,837,500	858,585	9,260,916	8,064,006	1,196,910	16.90	8.51	8.39	1.13
HarbourVest HIPEP VIII	MSCI ACWI	5,100,000	0	6,655,698	5,067,102	1,588,596	30.50	-0.65	31.15	1.31
HarbourVest Partners Co- Investment Fund V	MSCI ACWI		0				0.00	0.00	0.00	0.00
HarbourVest Partners Dover Street IX	MSCI ACWI	12,800,000	3,221,854	14,584,439	10,165,613	4,418,826	66.30	8.06	58.24	1.33
HarbourVest Partners Dover Street VIII	MSCI ACWI	22,125,000	22,377,702	11,991,533	2,696,777	9,294,756	22.16	7.14	15.02	1.33
HarbourVest Partners IX-Buyout	MSCI ACWI	18,107,188	10,504,392	17,268,610	10,657,532	6,611,078	17.59	6.75	10.84	1.30
HarbourVest Partners IX-Credit Opportunities	MSCI ACWI	2,710,265	1,396,905	2,488,868	1,802,667	686,201	14.97	7.16	7.81	1.20
HarbourVest Partners IX-Venture	MSCI ACWI	11,437,671	4,630,980	13,345,224	8,969,454	4,375,770	16.43	6.47	9.96	1.31
HarbourVest Partners X Buyout Fund	MSCI ACWI	8,192,787	850,805	11,098,285	8,509,093	2,589,192	32.43	10.88	21.55	1.28
HarbourVest Partners X Venture Fund	MSCI ACWI	7,460,422	369,019	9,110,745	7,692,195	1,418,550	27.42	8.57	18.85	1.18
HarbourVest Partners XI Buyout Fund	MSCI ACWI		0				0.00	0.00	0.00	0.00
HarbourVest Partners XI Micro Buyout	MSCI ACWI		0				0.00	0.00	0.00	0.00
HarbourVest Partners XI Venture Fund	MSCI ACWI		0				0.00	0.00	0.00	0.00
Total: State of Vermont		95,770,833	44,210,242	95,804,318	63,624,440	32,179,878	21.42	7.24	14.18	1.29

Investment	Index Set Name	Cumulative Contributions	Cumulative Distributions	Adjusted Valuation	Valuation ICM	Valuation Spread	IRR	IRR ICM	IRR Spread	Kaplan- Schoar PME
HarbourVest HIPEP VII	S&P 500 Total Return	7,837,500	858,585	9,260,916	8,758,813	502,103	16.90	13.49	3.41	1.05
HarbourVest HIPEP VIII	S&P 500 Total Return	5,100,000	0	6,655,698	5,270,715	1,384,983	30.50	3.35	27.15	1.26
HarbourVest Partners Co- Investment Fund V	S&P 500 Total Return		0				0.00	0.00	0.00	0.00
HarbourVest Partners Dover Street IX	S&P 500 Total Return	12,800,000	3,221,854	14,584,439	10,538,812	4,045,627	66.30	13.14	53.16	1.29
HarbourVest Partners Dover Street VIII	S&P 500 Total Return	22,125,000	22,377,702	11,991,533	6,003,054	5,988,479	22.16	13.40	8.76	1.18
HarbourVest Partners IX-Buyout	S&P 500 Total Return	18,107,188	10,504,392	17,268,610	14,357,752	2,910,858	17.59	13.28	4.31	1.11
HarbourVest Partners IX-Credit Opportunities	S&P 500 Total Return	2,710,265	1,396,905	2,488,868	2,330,871	157,997	14.97	13.34	1.63	1.04
HarbourVest Partners IX-Venture	S&P 500 Total Return	11,437,671	4,630,980	13,345,224	11,656,307	1,688,917	16.43	12.96	3.47	1.10
HarbourVest Partners X Buyout Fund	S&P 500 Total Return	8,192,787	850,805	11,098,285	9,043,548	2,054,737	32.43	15.59	16.84	1.21
HarbourVest Partners X Venture Fund	S&P 500 Total Return	7,460,422	369,019	9,110,745	8,121,969	988,776	27.42	14.47	12.95	1.12
HarbourVest Partners XI Buyout Fund	S&P 500 Total Return		0				0.00	0.00	0.00	0.00
HarbourVest Partners XI Micro Buyout	S&P 500 Total Return		0				0.00	0.00	0.00	0.00
HarbourVest Partners XI Venture Fund	S&P 500 Total Return		0				0.00	0.00	0.00	0.00
Total: State of Vermont		95,770,833	44,210,242	95,804,318	76,081,841	19,722,477	21.42	13.41	8.01	1.15

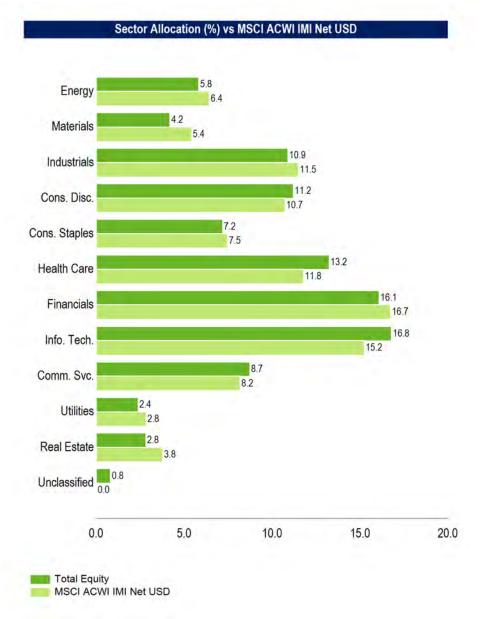
Investment	Index Set Name	Cumulative Contributions	Cumulative Distributions	Adjusted Valuation	Valuation ICM	Valuation Spread	IRR	IRR ICM	IRR Spread	Kaplan- Schoar PME
Beneift Street Partners Senior Secured Opportunites Fund, LP	BC US Agg Total Return Unhedged	55,866,931	2,185,992	55,451,835	53,429,105	2,022,730	4.47	-0.63	5.10	1.04
BlueBay Direct Lending Fund III	BC US Agg Total Return Unhedged	3,063,645	0	3,023,898	3,073,446	-49,548	-1.30	0.32	-1.62	0.98
Total: State of Vermont		58,930,576	2,185,992	58,475,733	56,502,551	1,973,182	4.35	-0.61	4.96	1.03

Investment	Index Set Name	Cumulative Contributions	Cumulative Distributions	Adjusted Valuation	Valuation ICM	Valuation Spread	IRR	IRR ICM	IRR Spread	Kaplan- Schoar PME
Brookfield Strategic Real Estate Partners III, L.P.	FTSE NAREIT		0				0.00	0.00	0.00	0.00
Siguler Guff Distressed Real Estate Opportunities II	FTSE NAREIT	32,620,000	11,425,153	33,212,936	28,715,609	4,497,327	11.59	7.62	3.97	1.11
Siguler Guff DREOF II Co- Investment	FTSE NAREIT	11,910,217	0	13,989,474	13,462,475	526,999	12.99	9.77	3.22	1.04
Total: State of Vermont		44,530,217	11,425,153	47,202,410	42,178,085	5,024,325	11.76	7.90	3.86	1.09

Characteristics	5	
	Portfolio	MSCI ACWI IMI Net USD
Number of Holdings	1,549	8,870
Weighted Avg. Market Cap. (\$B)	124.50	129.37
Median Market Cap. (\$B)	13.80	1.79
Price To Earnings	28.82	21.47
Price To Book	5.15	3.57
Price To Sales	3.89	3.17
Return on Equity (%)	20.19	17.49
	Portfolio	Index

	200	
Portfolio		Index
Q3-18		Q3-18
0.80		3.07
68.41		54.78
9.48		14.34
3.82		5.33
4.42		4.97
3.92		7.94
9.04		9.23
0.12		0.35
	0.80 68.41 9.48 3.82 4.42 3.92 9.04	Q3-18 0.80 68.41 9.48 3.82 4.42 3.92 9.04







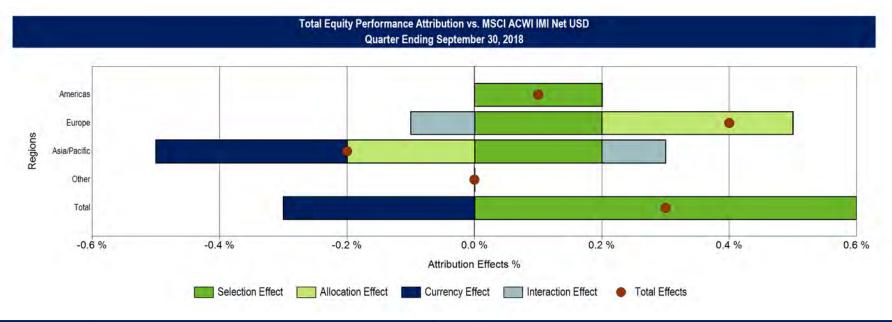
Top Ten Holdings								
APPLE	1.7%							
AMAZON.COM	1.6%							
MICROSOFT	1.5%							
VISA 'A'	1.1%							
BANK OF AMERICA	1.0%							
ALPHABET A	0.9%							
BERKSHIRE HATHAWAY 'B'	0.8%							
ALPHABET 'C'	0.7%							
IHS MARKIT	0.7%							
TENCENT HOLDINGS	0.7%							

Top Positive Contributors					
	Relative				
	Contribution %	Return %			
BANK CENTRAL ASIA	0.1%	8.1%			
ASTRA INTERNATIONAL	0.1%	7.1%			
ICT.TUNGGAL PRAKARSA	0.1%	30.3%			
BANK RAKYAT INDONESIA	0.1%	6.7%			
VISA 'A'	0.1%	13.5%			
CHAROEN POKPHAND INDO.	0.1%	32.6%			
OKTA CL.A	0.0%	39.7%			
NUVASIVE	0.0%	36.2%			
ALIBABA GROUP HLDG.SPN. ADR 1:1	0.0%	-11.2%			
BOSTON SCIENTIFIC	0.0%	17.7%			

Top Negative Cont	Top Negative Contributors						
	Relative						
	Contribution %	Return %					
APPLE	-0.1%	22.4%					
TELEKOMUNIKASI INDONESIA	-0.1%	-6.7%					
MICROSOFT	-0.1%	16.4%					
SK HYNIX	0.0%	-14.3%					
BANK MANDIRI	0.0%	-5.6%					
NESTLE 'R'	0.0%	8.2%					
JD.COM 'A' ADR 1:2	0.0%	-33.0%					
MATAHARI DEPARTMENT SOE.	0.0%	-24.3%					
SOFTBANK GROUP	0.0%	40.6%					
AMAZON.COM	0.0%	17.8%					

			Equity Se	ector Attribution				
			Attribution Effects		Returns	5	Sector Wei	ghts
	Total	Selection	Allocation	Interaction				
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	0.0%	-0.1%	0.0%	0.0%	1.5%	2.6%	5.7%	6.4%
Materials	0.2%	0.2%	0.0%	0.0%	2.9%	-0.1%	4.8%	5.6%
Industrials	0.1%	0.1%	0.0%	0.0%	6.3%	5.4%	10.3%	11.3%
Consumer Discretionary	0.1%	0.2%	0.0%	0.0%	3.6%	2.5%	13.2%	12.6%
Consumer Staples	-0.1%	0.0%	0.0%	-0.1%	0.6%	1.9%	8.3%	7.7%
Health Care	0.1%	0.2%	0.0%	0.0%	12.2%	10.6%	10.7%	11.1%
Financials	0.0%	0.2%	0.0%	-0.1%	2.7%	2.3%	18.6%	16.9%
Information Technology	0.0%	0.0%	0.0%	0.0%	6.0%	5.8%	19.5%	18.9%
Communication Services	-0.1%	-0.1%	0.0%	0.0%	1.6%	5.2%	3.2%	2.6%
Utilities	0.0%	0.0%	0.0%	0.0%	0.1%	0.9%	2.4%	2.9%
Real Estate	0.0%	-0.1%	0.1%	0.0%	-2.4%	-1.0%	2.8%	4.0%
Cash	0.0%	0.0%	0.0%	0.0%	0.5%		0.7%	0.0%
Portfolio	0.3% =	0.6% +	0.0% +	-0.3%	4.4%	4.0%	100.0%	100.0%





Returns and Weights						Attribution Effects			
	Manager	Index	Manager	Index	Selection	Allocation	Currency	Interaction	Total
	Return	Return	Weight	Weight	Effect	Effect	Effect	Effect	Effects
Totals									
Americas	6.9%	6.7%	57.5%	57.9%	0.2%	0.0%	0.0%	0.0%	0.1%
Europe	1.3%	0.6%	12.3%	20.4%	0.2%	0.3%	0.0%	-0.1%	0.4%
Asia/Pacific	0.9%	0.3%	28.8%	20.5%	0.2%	-0.2%	-0.3%	0.1%	-0.2%
Other	-5.9%	-3.2%	0.8%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Cash	0.5%		0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	4.4%	4.0%	100.0%	100.0%	0.6%	0.0%	-0.3%	0.0%	0.3%
Totals									
Developed	5.4%	4.7%	76.8%	88.8%	0.6%	-0.1%	0.1%	-0.1%	0.5%
Emerging*	1.0%	-1.3%	22.6%	11.2%	0.4%	-0.5%	-0.4%	0.4%	-0.1%
Frontier**	-20.0%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cash	0.5%		0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%



	Country Allocation							
	Manager	Index	Manager	Index				
	Allocation (USD)	Allocation (USD)	Return (USD)	Return (USD)				
Americas								
Brazil*	0.8%	0.6%	4.3%	5.2%				
Canada	0.7%	3.1%	5.1%	0.8%				
Chile*	0.4%	0.1%	-3.2%	-1.5%				
Colombia*	0.5%	0.1%	-2.7%	-3.6%				
Mexico*	0.5%	0.3%	16.6%	7.5%				
Peru*	0.0%	0.0%	-1.0%	-2.2%				
United States	54.6%	53.6%	7.0%	7.1%				
Total-Americas	57.5%	57.9%	6.9%	6.7%				
Europe								
Austria	0.2%	0.1%	-1.7%	0.8%				
Belgium	0.1%	0.4%	1.9%	-4.1%				
Czech Republic*	0.0%	0.0%	4.0%	3.5%				
Denmark	0.5%	0.5%	0.8%	1.5%				
Finland	0.2%	0.4%	4.4%	2.0%				
France	1.1%	3.2%	3.4%	2.5%				
Germany	1.3%	2.8%	1.5%	-0.6%				
Greece*	0.1%	0.0%	22.0%	-12.5%				
Hungary*	0.1%	0.0%	2.5%	4.1%				
Ireland	0.2%	0.2%	8.8%	-5.1%				
Italy	0.8%	0.8%	-1.4%	-3.4%				
Luxembourg	0.1%	0.0%	-8.9%	4.0%				
Netherlands	1.0%	1.1%	-2.0%	-1.5%				
Norway	0.1%	0.3%	12.7%	6.3%				
Poland*	0.1%	0.1%	2.7%	9.6%				
Portugal	0.0%	0.1%	-5.3%	-1.6%				
Russia*	0.4%	0.4%	-2.1%	6.6%				
Spain	0.8%	1.0%	2.8%	-2.2%				
Sweden	0.6%	0.9%	5.0%	6.1%				
Switzerland	1.0%	2.3%	12.6%	6.4%				
United Kingdom	3.8%	5.8%	-2.3%	-2.0%				
Total-Europe	12.3%	20.4%	1.3%	0.6%				

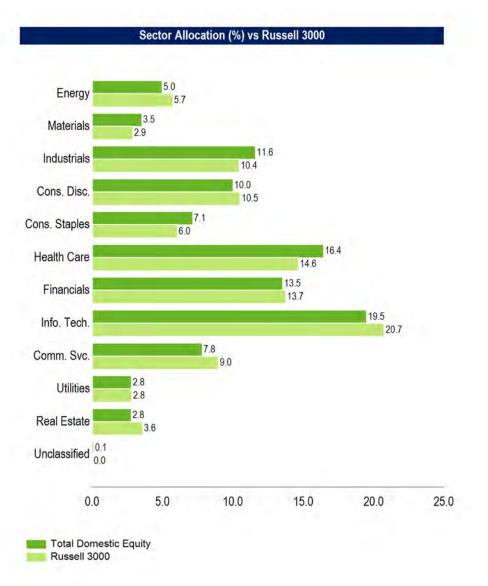
	Country A	Allocation		
	Manager		Manager	Index
	Allocation (USD)	Allocation (USD)	Return (USD)	Return (USD)
AsiaPacific				
Australia	0.9%	2.2%	2.9%	-0.8%
China*	0.9%	3.4%	-5.8%	-7.5%
Hong Kong	2.5%	1.1%	-6.0%	-1.5%
India*	1.5%	1.1%	-6.3%	-4.4%
Indonesia*	8.8%	0.2%	7.4%	0.5%
Japan	5.7%	8.2%	-0.1%	3.0%
Korea*	6.2%	1.7%	-1.8%	0.5%
Malaysia*	0.3%	0.3%	6.8%	3.2%
New Zealand	0.0%	0.1%	-4.0%	2.2%
Pakistan*	0.0%	0.0%	1.8%	-4.2%
Philippines*	0.3%	0.1%	-1.7%	0.2%
Singapore	0.7%	0.4%	4.0%	2.0%
Sri Lanka**	0.0%	0.0%	-1.4%	-3.1%
Taiwan*	0.6%	1.4%	19.0%	5.0%
Thailand*	0.3%	0.3%	17.0%	15.0%
Total-AsiaPacific	28.8%	20.5%	-1.8%	0.2%
Other				
Egypt*	0.0%	0.0%	-3.3%	-11.1%
Israel	0.0%	0.2%	4.4%	8.6%
Qatar*	0.0%	0.1%	10.4%	10.4%
South Africa*	0.5%	0.7%	-10.5%	-6.7%
Turkey*	0.2%	0.1%	-11.6%	-20.7%
United Arab Emirates*	0.0%	0.1%	3.6%	0.8%
Total-Other	0.7%	1.2%	-11.0%	-3.3%
Totals				
Developed	76.8%	88.8%	-1.0%	4.7%
Emerging*	22.5%	11.2%	-1.0%	-1.4%
Frontier**	0.0%	0.0%	-1.4%	-
Cash	0.7%		0.2%	



DOMESTIC EQUITY COMPOSITE

Characteristics		
	Portfolio	Russell 3000
Number of Holdings	609	3,024
Weighted Avg. Market Cap. (\$B)	162.74	190.97
Median Market Cap. (\$B)	19.86	1.79
Price To Earnings	31.02	24.08
Price To Book	6.57	4.88
Price To Sales	4.18	4.05
Return on Equity (%)	21.54	20.19
Yield (%)	1.70	1.76
Beta	1.00	1.00
R-Squared	0.99	1.00







DOMESTIC EQUITY COMPOSITE

Top Ten Holdings					
APPLE	2.9%				
MICROSOFT	2.4%				
AMAZON.COM	2.3%				
BERKSHIRE HATHAWAY 'B'	1.1%				
FACEBOOK CLASS A	1.1%				
JP MORGAN CHASE & CO.	1.1%				
JOHNSON & JOHNSON	1.0%				
ALPHABET 'C'	1.0%				
EXXON MOBIL	1.0%				
ALPHABET A	1.0%				

Top Positive Contributors					
	Relative				
	Contribution %	Return %			
FACEBOOK CLASS A	0.2%	-15.4%			
BANK CENTRAL ASIA	0.1%	8.1%			
TAIWAN SEMICON.MNFG.	0.1%	21.1%			
GENERAL ELECTRIC	0.0%	-16.3%			
ASTRA INTERNATIONAL	0.0%	7.1%			
ICT.TUNGGAL PRAKARSA	0.0%	30.3%			
BANK RAKYAT INDONESIA	0.0%	6.7%			
CHAROEN POKPHAND INDO.	0.0%	32.6%			
LONZA GROUP	0.0%	29.2%			
NUVASIVE	0.0%	36.2%			

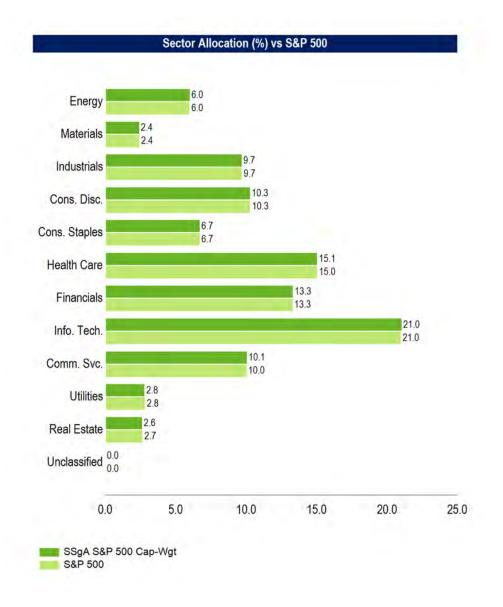
Top Negative Contributors							
	Relative						
	Contribution %	Return %					
APPLE	-0.5%	22.4%					
MICROSOFT	-0.3%	16.4%					
AMAZON.COM	-0.3%	17.8%					
BERKSHIRE HATHAWAY 'B'	-0.1%	14.7%					
JOHNSON & JOHNSON	-0.1%	14.6%					
PFIZER	-0.1%	22.5%					
JP MORGAN CHASE & CO.	-0.1%	8.9%					
TENCENT HOLDINGS	-0.1%	-17.7%					
CISCO SYSTEMS	-0.1%	13.9%					
MERCK & COMPANY	-0.1%	17.7%					

			Equity So	ector Attribution				
			Attribution Effects		Returns	S	Sector Wei	ights
	Total	Selection	Allocation	Interaction				
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	0.1%	0.1%	0.0%	0.0%	1.4%	0.6%	5.7%	5.9%
Materials	0.0%	0.1%	-0.1%	0.0%	2.9%	0.1%	4.7%	3.1%
Industrials	-0.3%	-0.2%	0.0%	0.0%	6.3%	9.1%	10.2%	10.3%
Consumer Discretionary	-0.4%	-0.3%	0.0%	-0.1%	3.6%	6.6%	13.0%	13.1%
Consumer Staples	-0.4%	-0.2%	0.0%	-0.2%	0.6%	5.3%	8.2%	6.2%
Health Care	-0.4%	-0.2%	-0.2%	0.0%	12.2%	13.7%	10.6%	13.8%
Financials	-0.3%	0.0%	-0.1%	-0.2%	2.7%	3.7%	18.3%	14.2%
Information Technology	-0.8%	-0.8%	-0.1%	0.1%	6.0%	9.3%	19.3%	24.8%
Communication Services	-0.2%	-0.1%	0.0%	-0.1%	1.6%	7.9%	3.1%	1.8%
Utilities	0.0%	-0.1%	0.0%	0.0%	0.1%	2.5%	2.3%	2.9%
Real Estate	0.0%	-0.1%	0.1%	0.0%	-2.4%	0.4%	2.7%	3.8%
Cash	-0.1%	0.0%	-0.1%	0.0%	0.5%		1.9%	0.0%
Portfolio	-2.8% =	-1.7% +	· -0.6% +	· -0.5%	4.3%	7.1%	100.0%	100.0%



Characteristics		
	Portfolio	S&P 500
Number of Holdings	506	505
Weighted Avg. Market Cap. (\$B)	228.86	228.05
Median Market Cap. (\$B)	21.45	21.50
Price To Earnings	32.55	24.49
Price To Book	6.78	5.27
Price To Sales	4.28	4.10
Return on Equity (%)	24.56	22.82
Yield (%)	1.88	1.88
Beta	1.00	1.00
R-Squared	1.00	1.00







Top Ten Holdings	
APPLE	4.2%
MICROSOFT	3.6%
AMAZON.COM	3.4%
BERKSHIRE HATHAWAY 'B'	1.7%
FACEBOOK CLASS A	1.6%
JP MORGAN CHASE & CO.	1.5%
JOHNSON & JOHNSON	1.5%
ALPHABET 'C'	1.5%
ALPHABET A	1.5%
EXXON MOBIL	1.5%

Top Positive Contributors			
	Relative		
	Contribution %	Return %	
MERCK & COMPANY	0.0%	17.7%	
FACEBOOK CLASS A	0.0%	-15.4%	
ALTRIA GROUP	0.0%	7.6%	
COCA COLA	0.0%	6.2%	
PHILIP MORRIS INTL.	0.0%	2.4%	
KIMBERLY-CLARK	0.0%	8.8%	
AUTOMATIC DATA PROC.	0.0%	12.8%	
HP	0.0%	14.2%	
ROYAL CARIBBEAN CRUISES	0.0%	26.1%	
US BANCORP	0.0%	6.3%	

Top Negative Contributors			
	Relative		
	Contribution %	Return %	
APPLE	0.0%	22.4%	
MICROSOFT	0.0%	16.4%	
AMAZON.COM	0.0%	17.8%	
GENERAL ELECTRIC	0.0%	-16.3%	
BERKSHIRE HATHAWAY 'B'	0.0%	14.7%	
PFIZER	0.0%	22.5%	
JOHNSON & JOHNSON	0.0%	14.6%	
VISA 'A'	0.0%	13.5%	
JP MORGAN CHASE & CO.	0.0%	8.9%	
SCHLUMBERGER	0.0%	-8.4%	

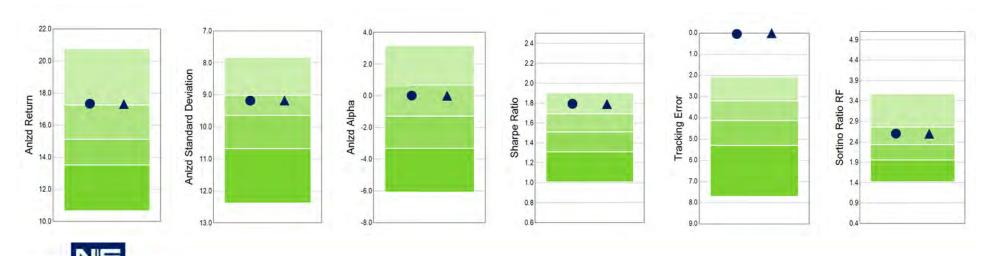
Equity Sector Attribution								
	Attribution Effects				Returns		Sector Wei	ghts
	Total	Selection	Allocation	on Interaction				
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	0.0%	0.0%	0.0%	0.0%	0.5%	0.5%	6.3%	6.3%
Materials	0.0%	0.0%	0.0%	0.0%	0.4%	0.3%	2.6%	2.6%
Industrials	0.0%	0.0%	0.0%	0.0%	10.1%	10.1%	9.5%	9.5%
Consumer Discretionary	0.0%	0.0%	0.0%	0.0%	8.3%	8.3%	12.9%	12.9%
Consumer Staples	0.0%	0.0%	0.0%	0.0%	5.9%	5.9%	7.0%	7.0%
Health Care	0.0%	0.0%	0.0%	0.0%	14.5%	14.5%	14.1%	14.1%
Financials	0.0%	0.0%	0.0%	0.0%	4.4%	4.4%	13.8%	13.8%
Information Technology	0.0%	0.0%	0.0%	0.0%	9.1%	9.1%	26.0%	26.0%
Communication Services	0.0%	0.0%	0.0%	0.0%	7.1%	7.1%	2.0%	2.0%
Utilities	0.0%	0.0%	0.0%	0.0%	2.4%	2.4%	3.0%	3.0%
Real Estate	0.0%	0.0%	0.0%	0.0%	0.7%	0.7%	2.8%	2.8%
Cash	0.0%						0.0%	0.0%
Portfolio	0.0% =	0.0% +	0.0% +	0.0%	7.7%	7.7%	100.0%	100.0%



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



Characteristics		
	Portfolio	S&P 500
Number of Holdings	506	505
Weighted Avg. Market Cap. (\$B)	228.9	228.1
Median Market Cap. (\$B)	21.5	21.5
Price To Earnings	32.6	24.5
Price To Book	6.8	5.3
Price To Sales	4.3	4.1
Return on Equity (%)	24.6	22.8
Yield (%)	1.9	1.9
Beta	1.0	1.0
R-Squared	1.0	1.0

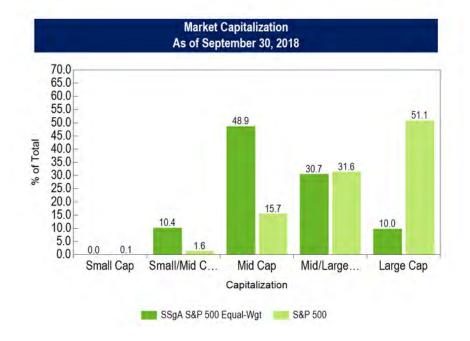
Top Positive Contributors			
	Relative		
	Contribution %	Return %	
MERCK & COMPANY (MRK)	0.0%	17.7%	
FACEBOOK CLASS A (FB)	0.0%	-15.4%	
ALTRIA GROUP (MO)	0.0%	7.6%	
COCA COLA (KO)	0.0%	6.2%	
PHILIP MORRIS INTL. (PM)	0.0%	2.4%	
KIMBERLY-CLARK (KMB)	0.0%	8.8%	
AUTOMATIC DATA PROC. (ADP)	0.0%	12.8%	
HP (HPQ)	0.0%	14.2%	
ROYAL CARIBBEAN CRUISES (RCL)	0.0%	26.1%	
US BANCORP (USB)	0.0%	6.3%	

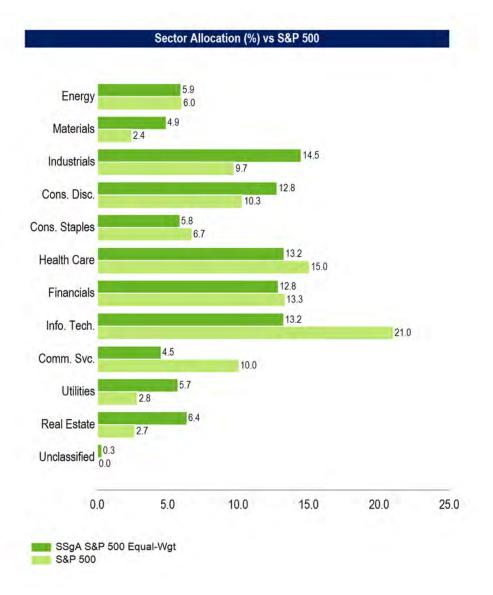
Top Negative Contributors			
	Relative		
	Contribution %	Return %	
APPLE (AAPL)	0.0%	22.4%	
MICROSOFT (MSFT)	0.0%	16.4%	
AMAZON.COM (AMZN)	0.0%	17.8%	
GENERAL ELECTRIC (GE)	0.0%	-16.3%	
BERKSHIRE HATHAWAY 'B' (BRK.B)	0.0%	14.7%	
PFIZER (PFE)	0.0%	22.5%	
JOHNSON & JOHNSON (JNJ)	0.0%	14.6%	
VISA 'A' (V)	0.0%	13.5%	
JP MORGAN CHASE & CO. (JPM)	0.0%	8.9%	
SCHLUMBERGER (SLB)	0.0%	-8.4%	

SSgA S&P 500 Cap-Wgt Performance Attribution vs. S&P 500								
	Attribution Effects			Returns		Sector Weights		
	Total	Selection	Allocation	Interaction				
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	0.0%	0.0%	0.0%	0.0%	0.5%	0.5%	6.3%	6.3%
Materials	0.0%	0.0%	0.0%	0.0%	0.4%	0.3%	2.6%	2.6%
Industrials	0.0%	0.0%	0.0%	0.0%	10.1%	10.1%	9.5%	9.5%
Consumer Discretionary	0.0%	0.0%	0.0%	0.0%	8.3%	8.3%	12.9%	12.9%
Consumer Staples	0.0%	0.0%	0.0%	0.0%	5.9%	5.9%	7.0%	7.0%
Health Care	0.0%	0.0%	0.0%	0.0%	14.5%	14.5%	14.1%	14.1%
Financials	0.0%	0.0%	0.0%	0.0%	4.4%	4.4%	13.8%	13.8%
Information Technology	0.0%	0.0%	0.0%	0.0%	9.1%	9.1%	26.0%	26.0%
Communication Services	0.0%	0.0%	0.0%	0.0%	7.1%	7.1%	2.0%	2.0%
Utilities	0.0%	0.0%	0.0%	0.0%	2.4%	2.4%	3.0%	3.0%
Real Estate	0.0%	0.0%	0.0%	0.0%	0.7%	0.7%	2.8%	2.8%
Cash	0.0%						0.0%	0.0%
Portfolio	0.0% =	0.0% +	0.0%	+ 0.0%	7.7%	7.7%	100.0%	100.0%



Characteristics					
	Portfolio	S&P 500			
Number of Holdings	500	505			
Weighted Avg. Market Cap. (\$B)	50.30	228.05			
Median Market Cap. (\$B)	21.27	21.50			
Price To Earnings	27.63	24.49			
Price To Book	5.01	5.27			
Price To Sales	3.62	4.10			
Return on Equity (%)	21.04	22.82			
Yield (%)	1.88	1.88			
Beta	0.99	1.00			
R-Squared	0.91	1.00			







Top Ten Holdings	
ALEXION PHARMS.	0.2%
FOOT LOCKER	0.2%
VIACOM 'B'	0.2%
ANDEAVOR	0.2%
ABBOTT LABORATORIES	0.2%
CONCHO RESOURCES	0.2%
NRG ENERGY	0.2%
EXPRESS SCRIPTS HOLDING	0.2%
CHARTER COMMS.CL.A	0.2%
ROYAL CARIBBEAN CRUISES	0.2%

Top Positive Contributors			
	Relative		
	Contribution %	Return %	
FACEBOOK CLASS A	0.3%	-15.4%	
ADVANCED MICRO DEVICES	0.1%	106.1%	
FLOWSERVE	0.1%	35.8%	
PERKINELMER	0.1%	32.9%	
GENERAL ELECTRIC	0.1%	-16.3%	
ARCONIC	0.1%	29.8%	
NEKTAR THERAPEUTICS	0.0%	24.8%	
CF INDUSTRIES HDG.	0.0%	23.4%	
WELLS FARGO & CO	0.0%	-4.5%	
JACOBS ENGR.	0.0%	21.0%	

_				
	Top Negative Contributors			
	R	lelative		
	Contr	ibution %	Return %	
F	APPLE	-0.8%	22.4%	
Ν	MICROSOFT	-0.5%	16.4%	
F	AMAZON.COM	-0.5%	17.8%	
E	BERKSHIRE HATHAWAY 'B'	-0.2%	14.7%	
J	JOHNSON & JOHNSON	-0.2%	14.6%	
F	PFIZER	-0.2%	22.5%	
J	JP MORGAN CHASE & CO.	-0.1%	8.9%	
١	/ISA 'A'	-0.1%	13.5%	
F	ALPHABET 'C'	-0.1%	7.0%	
(CISCO SYSTEMS	-0.1%	13.9%	

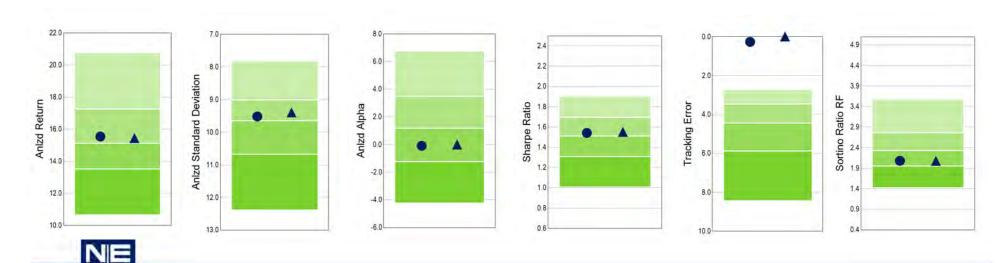
Equity Sector Attribution									
		Attribution Effects			Return	Returns		Sector Weights	
	Total	Selection	Allocation	Interaction					
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark	
Energy	0.0%	0.0%	0.0%	0.0%	-0.1%	0.5%	6.0%	6.3%	
Materials	-0.1%	0.0%	-0.2%	0.0%	1.2%	0.3%	4.9%	2.6%	
Industrials	0.2%	0.0%	0.1%	0.0%	10.4%	10.1%	14.0%	9.5%	
Consumer Discretionary	-0.7%	-0.6%	0.0%	-0.1%	3.8%	8.3%	15.4%	12.9%	
Consumer Staples	-0.1%	-0.2%	0.0%	0.0%	3.4%	5.9%	6.1%	7.0%	
Health Care	-0.3%	-0.2%	-0.1%	0.0%	12.9%	14.5%	12.7%	14.1%	
Financials	-0.3%	-0.3%	0.0%	0.0%	2.3%	4.4%	13.2%	13.8%	
Information Technology	-0.4%	-0.5%	-0.2%	0.2%	7.2%	9.1%	14.4%	26.0%	
Communication Services	0.0%	0.1%	0.0%	0.0%	10.0%	7.1%	0.6%	2.0%	
Utilities	-0.1%	0.0%	-0.2%	0.0%	3.0%	2.4%	6.0%	3.0%	
Real Estate	-0.3%	0.0%	-0.3%	0.0%	0.5%	0.7%	6.6%	2.8%	
Cash	0.0%	0.0%	0.0%	0.0%	0.5%		0.1%	0.0%	
Portfolio	-2.2% =	-1.7% +	0.7%	+ 0.2%	5.6%	7.7%	100.0%	100.0%	



The Strategy is managed using a "passive" or "indexing" investment approach, by which SSqA attempts to match, before expenses, the performance of the Index. SSqA 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



Characteristics		
	Portfolio	S&P 500
Number of Holdings	500	505
Weighted Avg. Market Cap. (\$B)	50.3	228.1
Median Market Cap. (\$B)	21.3	21.5
Price To Earnings	27.6	24.5
Price To Book	5.0	5.3
Price To Sales	3.6	4.1
Return on Equity (%)	21.0	22.8
Yield (%)	1.9	1.9
Beta	1.0	1.0
R-Squared	0.9	1.0

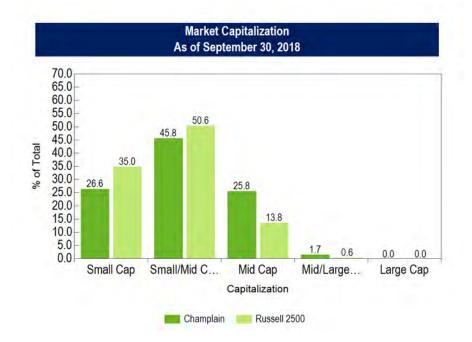
Top Positive Contributors						
	Relative					
	Contribution %	Return %				
FACEBOOK CLASS A (FB)	0.3%	-15.4%				
ADVANCED MICRO DEVICES (AMD)	0.1%	106.1%				
FLOWSERVE (FLS)	0.1%	35.8%				
PERKINELMER (PKI)	0.1%	32.9%				
GENERAL ELECTRIC (GE)	0.1%	-16.3%				
ARCONIC (ARNC)	0.1%	29.8%				
NEKTAR THERAPEUTICS (NKTR)	0.0%	24.8%				
CF INDUSTRIES HDG. (CF)	0.0%	23.4%				
WELLS FARGO & CO (WFC)	0.0%	-4.5%				
JACOBS ENGR. (JEC)	0.0%	21.0%				

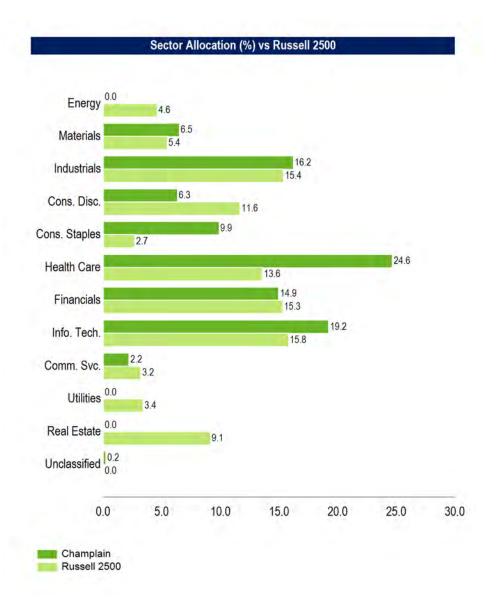
Top Negative Contributors							
	Relative						
	Contribution %	Return %					
APPLE (AAPL)	-0.8%	22.4%					
MICROSOFT (MSFT)	-0.5%	16.4%					
AMAZON.COM (AMZN)	-0.5%	17.8%					
BERKSHIRE HATHAWAY 'B' (BRK.B)	-0.2%	14.7%					
JOHNSON & JOHNSON (JNJ)	-0.2%	14.6%					
PFIZER (PFE)	-0.2%	22.5%					
JP MORGAN CHASE & CO. (JPM)	-0.1%	8.9%					
VISA 'A' (V)	-0.1%	13.5%					
ALPHABET 'C' (GOOG)	-0.1%	7.0%					
CISCO SYSTEMS (CSCO)	-0.1%	13.9%					

SSgA S&P 500 Equal-Wgt Performance Attribution vs. S&P 500								
		Attribution Effects			Returns		Sector Weights	
	Total	Selection	Allocation	Interaction	5 ""		5 4 5	
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	0.0%	0.0%	0.0%	0.0%	-0.1%	0.5%	6.0%	6.3%
Materials	0.1%	0.0%	0.0%	0.0%	1.2%	0.3%	4.9%	2.6%
Industrials	0.5%	0.0%	0.5%	0.0%	10.4%	10.1%	14.0%	9.5%
Consumer Discretionary	-0.5%	-0.6%	0.2%	-0.1%	3.8%	8.3%	15.4%	12.9%
Consumer Staples	-0.2%	-0.2%	0.0%	0.0%	3.4%	5.9%	6.1%	7.0%
Health Care	-0.4%	-0.2%	-0.2%	0.0%	12.9%	14.5%	12.7%	14.1%
Financials	-0.3%	-0.3%	0.0%	0.0%	2.3%	4.4%	13.2%	13.8%
Information Technology	-1.3%	-0.5%	-1.1%	0.2%	7.2%	9.1%	14.4%	26.0%
Communication Services	-0.1%	0.1%	-0.1%	0.0%	10.0%	7.1%	0.6%	2.0%
Utilities	0.1%	0.0%	0.1%	0.0%	3.0%	2.4%	6.0%	3.0%
Real Estate	0.0%	0.0%	0.0%	0.0%	0.5%	0.7%	6.6%	2.8%
Cash	0.0%	0.0%	0.0%	0.0%	0.5%		0.1%	0.0%
Portfolio	-2.2% =	-1.7% +	-0.7% +	0.2%	5.6%	7.7%	100.0%	100.0%



Characteristics		
	Portfolio	Russell 2500
Number of Holdings	111	2,521
Weighted Avg. Market Cap. (\$B)	7.98	5.25
Median Market Cap. (\$B)	4.84	1.29
Price To Earnings	28.08	19.50
Price To Book	7.08	3.67
Price To Sales	4.19	3.32
Return on Equity (%)	10.26	11.73
Yield (%)	0.84	1.30
Beta	0.73	1.00
R-Squared	0.80	1.00







Top Ten Holdings	
INTEGRA LFSC.HDG.	3.2%
BLACKBAUD	2.3%
RITCHIE BROS.AUCTIONEERS (NYS)	2.3%
WILEY JOHN & SONS 'A'	2.2%
NUVASIVE	2.1%
OKTA CL.A	1.9%
PURE STORAGE CL.A	1.8%
CATALENT	1.6%
SPLUNK	1.6%
EVEREST RE GP.	1.5%

Top Positive Con		
	Contribution %	Return %
NUVASIVE	0.6%	36.2%
OKTA CL.A	0.6%	39.7%
JOHN BEAN TECHNOLOGIES	0.3%	34.3%
SPLUNK	0.3%	22.0%
HELEN OF TROY	0.3%	33.0%
OMNICELL	0.3%	37.1%
VEEVA SYSTEMS CL.A	0.2%	41.6%
WORKDAY CLASS A	0.2%	20.5%
TELADOC HEALTH	0.2%	48.8%
ADV.AUTO PARTS	0.2%	24.1%

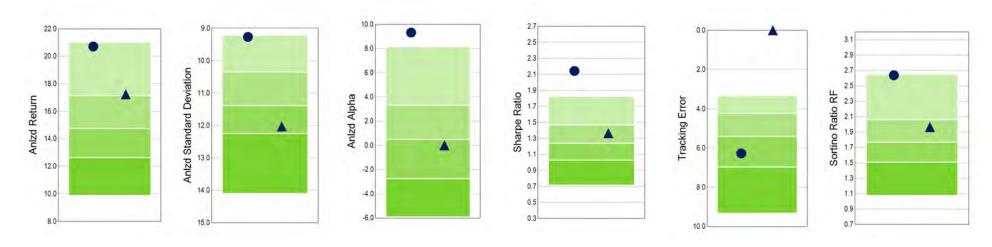
Top Negative Cont	ributors Relative	
	Contribution %	Return %
LOGMEIN	-0.2%	-13.4%
MEDIDATA SOLUTIONS	-0.1%	-9.0%
TREEHOUSE FOODS	-0.1%	-8.9%
SUPERNUS PHARMACEUTICALS	-0.1%	-15.9%
DENTSPLY SIRONA	-0.1%	-13.6%
HOSTESS BRANDS CL.A	-0.1%	-18.6%
FLOWERS FOODS	-0.1%	-9.6%
ELF BEAUTY	-0.1%	-16.5%
WELBILT	-0.1%	-6.4%
MOLSON COORS BREWING 'B'	-0.1%	-9.1%

Equity Sector Attribution									
		Attribution Effects			F	Returns		Sector Weights	
	Total	Selection	Allocation	Interaction					
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark	
Energy	0.2%		0.2%			0.5%	0.0%	4.7%	
Materials	0.3%	0.3%	0.0%	0.0%	6.4%	0.7%	5.5%	5.7%	
Industrials	0.1%	0.1%	0.0%	0.0%	7.2%	6.8%	15.4%	15.3%	
Consumer Discretionary	1.0%	1.4%	0.1%	-0.6%	12.8%	2.1%	7.8%	13.4%	
Consumer Staples	-0.7%	-0.1%	-0.5%	-0.2%	-3.3%	-1.3%	10.5%	2.8%	
Health Care	1.0%	0.2%	0.6%	0.2%	11.8%	10.4%	23.9%	12.7%	
Financials	0.4%	0.4%	0.1%	-0.1%	3.5%	1.0%	13.6%	15.9%	
Information Technology	-0.1%	-0.2%	0.2%	0.0%	9.3%	10.6%	19.0%	15.9%	
Communication Services	0.0%		0.0%			12.6%	0.0%	0.6%	
Utilities	0.0%		0.0%			4.3%	0.0%	3.4%	
Real Estate	0.4%		0.4%			0.2%	0.0%	9.5%	
Cash	-0.2%	0.0%	-0.2%	0.0%	0.5%		4.4%	0.0%	
Portfolio	2.4%	= 2.1%	+ 1.0%	+ -0.7%	7.2%	4.7%	100.0%	100.0%	



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 quidelines 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.







Characteristics						
	Portfolio	Russell 2500				
Number of Holdings	111	2,521				
Weighted Avg. Market Cap. (\$B)	8.0	5.3				
Median Market Cap. (\$B)	4.8	1.3				
Price To Earnings	28.1	19.5				
Price To Book	7.1	3.7				
Price To Sales	4.2	3.3				
Return on Equity (%)	10.3	11.7				
Yield (%)	8.0	1.3				
Beta	0.7	1.0				
R-Squared	0.8	1.0				

Top Positive Contributors							
	Relative						
	Contributio n %	Return %					
NUVASIVE (NUVA)	0.6%	36.2%					
OKTA CL.A (OKTA)	0.6%	39.7%					
JOHN BEAN TECHNOLOGIES (JBT)	0.3%	34.3%					
SPLUNK (SPLK)	0.3%	22.0%					
HELEN OF TROY (HELE)	0.3%	33.0%					
OMNICELL (OMCL)	0.3%	37.1%					
VEEVA SYSTEMS CL.A (VEEV)	0.2%	41.6%					
WORKDAY CLASS A (WDAY)	0.2%	20.5%					
TELADOC HEALTH (TDOC)	0.2%	48.8%					
ADV.AUTO PARTS (AAP)	0.2%	24.1%					

Top Negative Contributors						
	Relative					
	Contribution %	Return %				
LOGMEIN (LOGM)	-0.2%	-13.4%				
MEDIDATA SOLUTIONS (MDSO)	-0.1%	-9.0%				
TREEHOUSE FOODS (THS)	-0.1%	-8.9%				
SUPERNUS PHARMACEUTICALS (SUPN)	-0.1%	-15.9%				
DENTSPLY SIRONA (XRAY)	-0.1%	-13.6%				
HOSTESS BRANDS CL.A (TWNK)	-0.1%	-18.6%				
FLOWERS FOODS (FLO)	-0.1%	-9.6%				
ELF BEAUTY (ELF)	-0.1%	-16.5%				
WELBILT (WBT)	-0.1%	-6.4%				
MOLSON COORS BREWING 'B' (TAP)	-0.1%	-9.1%				

Champlain Performance Attribution vs. Russell 2500								
			Attribution Effects		R	eturns	Secto	or Weights
	Total Effects	Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	0.0%		0.0%			0.5%	0.0%	4.7%
Materials	0.3%	0.3%	0.0%	0.0%	6.4%	0.7%	5.5%	5.7%
Industrials	0.1%	0.1%	0.0%	0.0%	7.2%	6.8%	15.4%	15.3%
Consumer Discretionary	0.7%	1.4%	-0.1%	-0.6%	12.8%	2.1%	7.8%	13.4%
Consumer Staples	-0.3%	-0.1%	-0.1%	-0.2%	-3.3%	-1.3%	10.5%	2.8%
Health Care	1.5%	0.2%	1.2%	0.2%	11.8%	10.4%	23.9%	12.7%
Financials	0.3%	0.4%	0.0%	-0.1%	3.5%	1.0%	13.6%	15.9%
Information Technology	0.1%	-0.2%	0.3%	0.0%	9.3%	10.6%	19.0%	15.9%
Communication Services	-0.1%		-0.1%			12.6%	0.0%	0.6%
Utilities	-0.1%		-0.1%			4.3%	0.0%	3.4%
Real Estate	0.0%		0.0%			0.2%	0.0%	9.5%
Cash	0.0%	0.0%	0.0%	0.0%	0.5%	-	4.4%	0.0%
Portfolio	2.4%	= 2.1%	+ 1.0%	+ -0.7%	7.2%	4.7%	100.0%	100.0%



	Characteristics		
		Portfolio	MSCI ACWI ex USA
Number of Holdings		1,035	2,166
Weighted Avg. Market Cap. (\$B)		67.72	62.23
Median Market Cap. (\$B)		5.99	7.68
Price To Earnings		25.47	18.84
Price To Book		3.85	2.62
Price To Sales		3.45	2.40
Return on Equity (%)		18.24	15.63
Yield (%)		2.32	3.00
	Portfolio		Index
	Q3-18		Q3-18
Region Weighting			
North America ex U.S.	1.37		6.61
United States	23.48		0.42
Europe Ex U.K.	23.06		32.18
United Kingdom	9.33		11.48

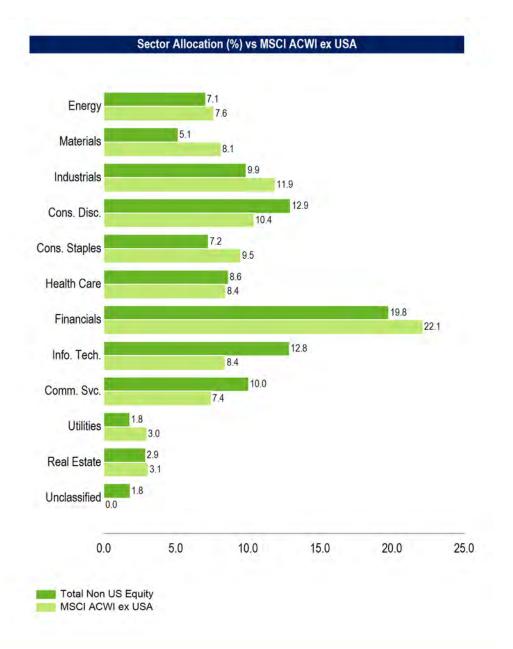
10.81

9.57

22.08

0.30







Pacific Basin Ex Japan

Emerging Markets

Japan

Other

11.10

16.66

20.95

0.60

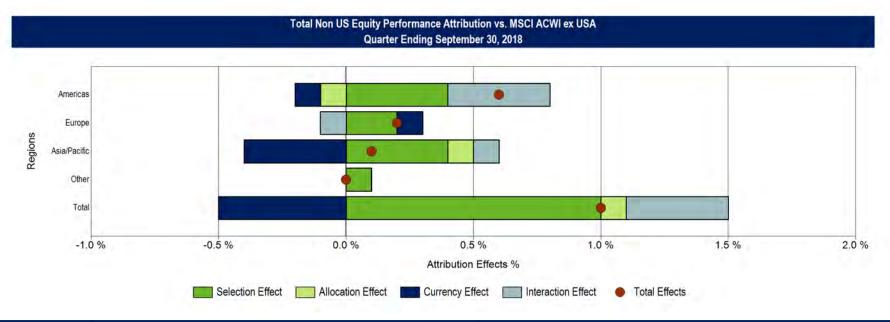
Top Ten Holdings	
TENCENT HOLDINGS	1.7%
VISA 'A'	1.7%
IHS MARKIT	1.6%
SAMSUNG ELTN.PREF.	1.5%
BANK OF AMERICA	1.3%
ROYAL DUTCH SHELL	1.1%
TAIWAN SEMICON.MNFG.	1.0%
TECHTRONIC INDS.	0.9%
LLOYDS BANKING GROUP	0.8%
ANTHEM	0.8%

eturn %
8.1%
13.5%
7.1%
-11.2%
30.3%
6.7%
32.6%
17.8%
17.7%
34.0%
13.5 7.1 -11.2 30.3 6.7 32.6 17.8

Top Negative Cont	ributors	
	Relative	
	Contribution %	Return %
TELEKOMUNIKASI INDONESIA	-0.1%	-6.7%
NESTLE 'R'	-0.1%	8.2%
SOFTBANK GROUP	-0.1%	40.6%
SK HYNIX	-0.1%	-14.3%
BANK MANDIRI	-0.1%	-5.6%
ROCHE HOLDING	-0.1%	9.6%
NOVARTIS 'R'	-0.1%	14.0%
MATAHARI DEPARTMENT SOE.	-0.1%	-24.3%
JD.COM 'A' ADR 1:2	-0.1%	-33.0%
INDAH KIAT PULP & PAPER	-0.1%	-9.8%

			Equity Se	ector Attribution				
			Attribution Effects		Return	s	Sector Wei	ghts
	Total	Selection	Allocation	Interaction				
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	-0.2%	-0.1%	0.0%	0.0%	2.4%	4.5%	6.3%	7.4%
Materials	0.2%	0.3%	0.0%	-0.1%	3.3%	0.5%	5.9%	8.2%
Industrials	0.0%	0.0%	-0.1%	0.0%	2.9%	2.8%	9.3%	11.6%
Consumer Discretionary	0.3%	0.3%	-0.1%	0.0%	0.1%	-2.6%	13.8%	11.3%
Consumer Staples	-0.1%	0.1%	0.0%	-0.2%	-1.3%	-0.5%	9.0%	9.7%
Health Care	0.3%	0.4%	-0.1%	-0.1%	9.1%	4.4%	6.3%	8.1%
Financials	0.1%	0.3%	0.0%	-0.2%	2.0%	1.6%	23.0%	21.8%
Information Technology	0.6%	0.5%	-0.2%	0.2%	2.3%	-2.4%	16.6%	11.9%
Communication Services	-0.2%	-0.1%	0.0%	-0.1%	0.0%	3.6%	4.8%	3.7%
Utilities	0.0%	-0.1%	0.0%	0.0%	-3.3%	-0.9%	1.9%	3.0%
Real Estate	0.0%	-0.1%	0.0%	0.0%	-5.5%	-3.5%	2.6%	3.2%
Cash	0.0%	0.0%	0.0%	0.0%	0.5%		0.5%	0.0%
Portfolio	1.0% =	1.6% +	-0.3% +	-0.3%	1.7%	0.8%	100.0%	100.0%





Returns and Weights					Attri	bution Effects			
	Manager	Index	Manager	Index	Selection	Allocation	Currency	Interaction	Total
	Return	Return	Weight	Weight	Effect	Effect	Effect	Effect	Effects
Totals									
Americas	5.0%	2.0%	20.1%	9.3%	0.4%	-0.1%	-0.1%	0.4%	0.6%
Europe	1.3%	1.0%	23.2%	44.4%	0.2%	0.0%	0.1%	-0.1%	0.2%
Asia/Pacific	0.9%	0.6%	54.8%	43.7%	0.4%	0.1%	-0.4%	0.1%	0.1%
Other	-5.9%	-4.3%	1.4%	2.5%	0.1%	0.0%	0.0%	0.0%	0.0%
Cash	0.5%		0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	1.7%	0.8%	100.0%	100.0%	1.0%	0.1%	-0.5%	0.4%	1.0%
Totals									
Developed	2.3%	1.3%	56.6%	75.1%	0.7%	-0.1%	0.2%	-0.2%	0.6%
Emerging*	1.0%	-0.9%	42.9%	24.9%	0.8%	-0.3%	-0.7%	0.5%	0.4%
Frontier**	-20.0%		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cash	0.5%		0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%



Country Allocation						
	Manager	Index	Manager	Index		
	Allocation (USD) Allo	ocation (USD)	Return (USD)	Return (USD)		
Americas						
Brazil*	1.6%	1.5%	4.3%	6.2%		
Canada	1.0%	6.6%	4.7%	0.9%		
Chile*	0.7%	0.3%	-3.2%	-1.9%		
Colombia*	0.9%	0.1%	-2.7%	-2.4%		
Mexico*	0.9%	0.7%	16.6%	6.9%		
Peru*	0.0%	0.1%	-1.0%	-2.1%		
United States	15.0%	0.0%	5.2%	7.4%		
Total-Americas	20.1%	9.3%	5.0%	2.0%		
Europe						
Austria	0.3%	0.2%	-1.7%	0.4%		
Belgium	0.2%	0.7%	1.9%	-5.2%		
Czech Republic*	0.0%	0.0%	4.0%	4.0%		
Denmark	0.9%	1.1%	0.8%	2.4%		
Finland	0.3%	0.7%	4.4%	3.2%		
France	2.0%	7.5%	3.5%	2.9%		
Germany	2.4%	6.5%	1.4%	-0.6%		
Greece*	0.1%	0.1%	22.0%	-18.1%		
Hungary*	0.2%	0.1%	2.5%	4.7%		
Ireland	0.3%	0.4%	8.8%	-5.3%		
Italy	1.5%	1.6%	-1.4%	-4.2%		
Luxembourg	0.1%	0.0%	-8.9%	0.8%		
Netherlands	1.8%	2.4%	-2.0%	-1.6%		
Norway	0.1%	0.5%	12.7%	6.9%		
Poland*	0.1%	0.3%	2.7%	11.0%		
Portugal	0.0%	0.1%	-5.3%	-0.4%		
Russia*	0.8%	0.9%	-2.1%	7.2%		
Spain	1.6%	2.1%	2.8%	-2.4%		
Sweden	1.1%	1.6%	5.0%	6.5%		
Switzerland	2.0%	5.3%	12.6%	7.3%		
United Kingdom	7.2%	12.4%	-2.3%	-1.6%		
Total-Europe	23.2%	44.4%	1.3%	1.0%		

	Country A	Allocation		
	Manager		Manager	Index
	Allocation (USD)	Allocation (USD)	Return (USD)	Return (USD)
AsiaPacific				
Australia	1.7%	4.8%	2.9%	-0.8%
China*	1.8%	8.1%	-5.8%	-7.3%
Hong Kong	4.7%	2.5%	-6.0%	-0.9%
India*	2.9%	2.1%	-6.3%	-2.3%
Indonesia*	16.6%	0.5%	7.4%	2.0%
Japan	10.8%	16.7%	-0.1%	3.7%
Korea*	11.8%	3.6%	-1.8%	0.3%
Malaysia*	0.5%	0.6%	6.8%	3.8%
New Zealand	0.1%	0.1%	-4.0%	2.6%
Pakistan*	0.0%		1.8%	-4.8%
Philippines*	0.6%	0.2%	-1.7%	1.1%
Singapore	1.3%	0.9%	4.0%	2.2%
Sri Lanka**	0.0%	0.0%	-1.4%	-3.1%
Taiwan*	1.2%	2.9%	19.0%	7.1%
Thailand*	0.7%	0.6%	17.0%	13.7%
Total-AsiaPacific	54.7%	43.6%	-1.8%	0.5%
Other				
Egypt*	0.0%	0.0%	-3.3%	-7.5%
Israel	0.1%	0.4%	4.4%	5.1%
Qatar*	0.0%	0.2%	10.4%	11.5%
South Africa*	1.0%	1.6%	-10.5%	-7.1%
Turkey*	0.3%	0.2%	-11.6%	-20.3%
United Arab Emirates*	0.0%	0.2%	3.6%	1.4%
Total-Other	1.4%	2.5%	-11.0%	-4.4%
Totals				
Developed	56.7%	75.2%	-1.5%	1.4%
Emerging*	42.7%	24.8%	-1.0%	-1.0%
Frontier**	0.0%	0.0%	-1.4%	-
Cash	0.5%		0.2%	



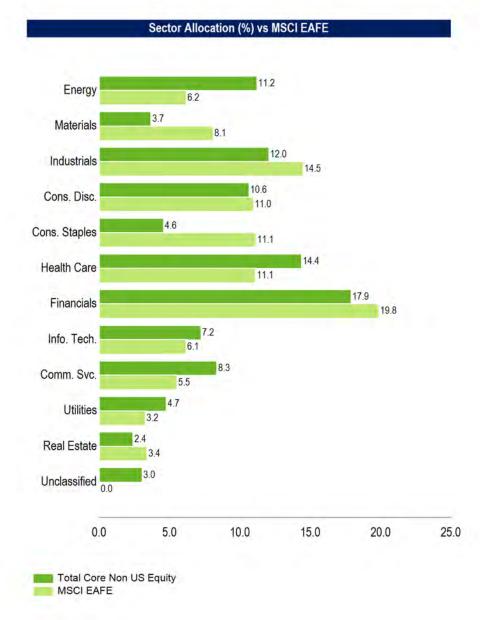
TOTAL CORE NON US EQUITY

5.70

0.39

	Characteristics		
		Portfolio	MSCI EAFE
Number of Holdings		499	924
Weighted Avg. Market Cap. (\$B)		44.73	57.76
Median Market Cap. (\$B)		2.57	10.81
Price To Earnings		15.89	19.02
Price To Book		2.40	2.62
Price To Sales		1.63	2.32
Return on Equity (%)		15.21	14.72
Yield (%)		3.43	3.14
	Portfolio		Index
	Q3-18		Q3-18
Region Weighting			
North America ex U.S.	2.45		-
United States	0.41		0.41
Europe Ex U.K.	44.75		46.66
United Kingdom	15.43		16.62
Pacific Basin Ex Japan	11.96		11.61
Japan	18.91		24.22







Emerging Markets

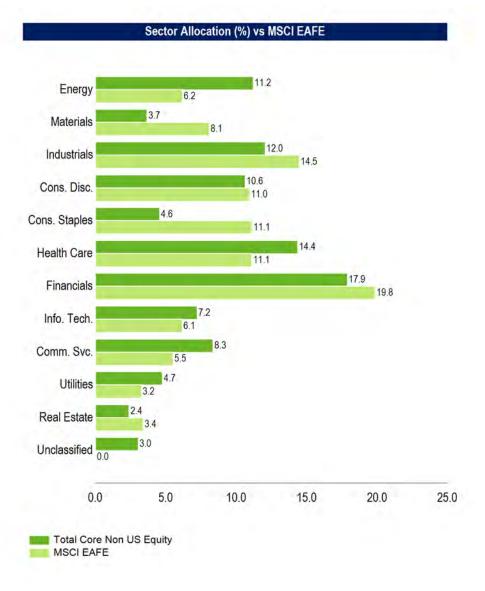
Other

0.49

TOTAL CORE NON US EQUITY

Characteristics		
	Portfolio	MSCI EAFE
Number of Holdings	499	924
Weighted Avg. Market Cap. (\$B)	44.73	57.76
Median Market Cap. (\$B)	2.57	10.81
Price To Earnings	15.89	19.02
Price To Book	2.40	2.62
Price To Sales	1.63	2.32
Return on Equity (%)	15.21	14.72
Yield (%)	3.43	3.14
Beta	0.93	1.00
R-Squared	0.97	1.00







TOTAL CORE NON US EQUITY

Top Ten Holdings	
ROYAL DUTCH SHELL	3.1%
SANOFI	1.9%
BP	1.8%
ENI	1.7%
KONINKLIJKE AHOLD DELHAIZE	1.7%
UNITED OVERSEAS BANK	1.6%
ENEL	1.6%
CK HUTCHISON (HSC) HOLDINGS	1.6%
LLOYDS BANKING GROUP	1.5%
ALLIANZ	1.5%

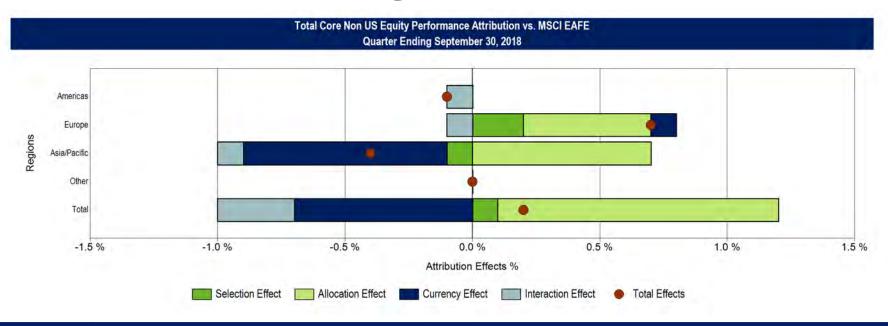
Top Positive Cont		
	Relative Contribution %	Return %
BANK CENTRAL ASIA	0.3%	8.1%
BANK RAKYAT INDONESIA	0.2%	6.7%
ASTRA INTERNATIONAL	0.2%	7.1%
CHAROEN POKPHAND INDO.	0.2%	32.6%
ICT.TUNGGAL PRAKARSA	0.2%	30.3%
SEMEN INDONESIA (PERSERO)	0.1%	34.0%
ECOPETROL	0.1%	31.8%
TAIWAN SEMICON.MNFG.	0.1%	21.1%
WOOD GROUP (JOHN)	0.1%	22.8%
HSBC HOLDINGS	0.1%	-5.9%

Top Negative Contributors					
	Contribution %	Return %			
TELEKOMUNIKASI INDONESIA	-0.2%	-6.7%			
SK HYNIX	-0.2%	-14.3%			
BANK MANDIRI	-0.1%	-5.6%			
NESTLE 'R'	-0.1%	8.2%			
SOFTBANK GROUP	-0.1%	40.6%			
MATAHARI DEPARTMENT SOE.	-0.1%	-24.3%			
ROCHE HOLDING	-0.1%	9.6%			
INDAH KIAT PULP & PAPER	-0.1%	-9.8%			
NOVARTIS 'R'	-0.1%	14.0%			
INDOFOOD SUKSES MAKMUR	-0.1%	-14.7%			

			Equity Se	ector Attribution				
			Attribution Effects		Returns	5	Sector Wei	ghts
	Total	Selection	Allocation	Interaction				
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	0.1%	0.1%	0.0%	0.0%	4.9%	3.5%	7.6%	6.1%
Materials	0.2%	0.3%	0.0%	-0.1%	2.7%	0.5%	5.7%	8.2%
Industrials	-0.1%	-0.1%	-0.1%	0.1%	1.7%	2.5%	9.6%	14.2%
Consumer Discretionary	0.1%	0.2%	0.0%	-0.1%	0.3%	-0.3%	12.7%	12.4%
Consumer Staples	-0.1%	0.0%	0.0%	-0.1%	-1.6%	-0.1%	8.7%	11.4%
Health Care	0.0%	0.2%	-0.1%	-0.1%	7.1%	5.6%	7.1%	10.6%
Financials	0.5%	0.8%	0.0%	-0.2%	3.3%	0.8%	23.5%	19.7%
Information Technology	-0.1%	0.0%	0.0%	0.0%	0.8%	0.4%	12.8%	6.8%
Communication Services	-0.3%	-0.1%	0.1%	-0.2%	-0.7%	4.2%	7.1%	3.7%
Utilities	-0.1%	-0.1%	0.0%	0.0%	-3.6%	-0.6%	3.2%	3.3%
Real Estate	-0.1%	-0.3%	0.1%	0.1%	-10.8%	-3.0%	2.0%	3.6%
Cash	0.0%	0.0%	0.0%	0.0%	0.5%	-	0.2%	0.0%
Portfolio	0.2% =	0.9% +	0.0% +	-0.7%	1.6%	1.4%	100.0%	100.0%



TOTAL CORE NON US EQUITY



Returns and Weights						Attril	bution Effects		
	Manager	Index	Manager	Index	Selection	Allocation	Currency	Interaction	Total
	Return	Return	Weight	Weight	Effect	Effect	Effect	Effect	Effects
Totals									
Americas	0.6%		3.8%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.1%
Europe	1.1%	0.8%	25.9%	62.9%	0.2%	0.5%	0.1%	-0.1%	0.7%
Asia/Pacific	1.8%	2.3%	69.7%	36.6%	-0.1%	0.7%	-0.8%	-0.1%	-0.4%
Other	-2.5%	5.0%	0.5%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%
Cash	0.5%		0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	1.6%	1.4%	100.0%	100.0%	0.1%	1.1%	-0.7%	-0.3%	0.2%
Totals									
Developed	2.0%	1.4%	48.2%	100.0%	0.7%	0.0%	0.5%	-0.4%	0.8%
Emerging*	1.2%		51.6%	0.0%	0.0%	0.0%	-1.2%	0.5%	-0.6%
Cash	0.5%		0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%



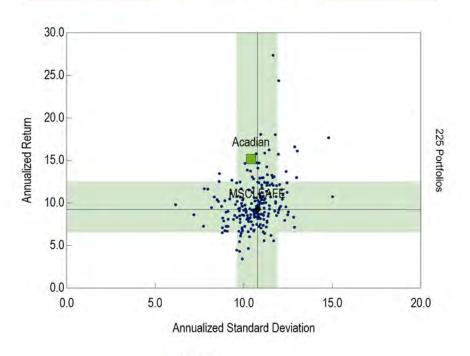
TOTAL CORE NON US EQUITY

	Country Allocation					
	Manager	Index	Manager	Index		
	Allocation (USD) All	location (USD)	Return (USD)	Return (USD)		
Americas						
Brazil*	0.0%	0.0%	-2.9%	6.1%		
Canada	1.2%	0.0%	7.1%	0.8%		
Chile*	0.8%	0.0%	-1.9%	-2.0%		
Colombia*	1.6%	0.0%	-2.5%	-2.5%		
Mexico*	0.1%	0.0%	7.7%	6.9%		
Peru*	0.0%	0.0%	-1.0%	-2.1%		
United States	0.1%	0.0%	-23.0%	7.4%		
Total-Americas	3.8%	0.0%	0.6%			
Europe						
Austria	0.5%	0.2%	-1.8%	0.4%		
Belgium	0.1%	1.1%	8.8%	-5.2%		
Czech Republic*	0.0%	0.0%	4.0%	4.0%		
Denmark	0.7%	1.7%	-2.2%	2.4%		
Finland	0.6%	1.0%	3.9%	3.2%		
France	2.7%	11.0%	3.0%	2.9%		
Germany	3.3%	9.4%	1.0%	-0.6%		
Greece*	0.0%	0.0%	29.7%	-17.6%		
Hungary*	0.1%	0.0%	4.6%	4.6%		
Ireland	0.4%	0.6%	16.0%	-5.3%		
Italy	2.0%	2.4%	-1.2%	-4.2%		
Luxembourg	0.1%	0.0%	-12.6%	1.4%		
Netherlands	1.8%	3.4%	0.8%	-1.6%		
Norway	0.2%	0.7%	16.1%	6.9%		
Poland*	0.0%	0.0%	8.1%	10.6%		
Portugal	0.0%	0.2%	-17.5%	-0.4%		
Russia*	0.0%	0.0%	11.0%	6.2%		
Spain	1.9%	3.1%	-1.6%	-2.4%		
Sweden	1.8%	2.3%	5.6%	6.5%		
Switzerland	2.0%	7.7%	10.8%	7.3%		
United Kingdom	7.6%	18.0%	-2.9%	-1.6%		
Total-Europe	25.9%	62.9%	1.1%	0.8%		

	Country Allocation					
	Manager	Index	Manager	Index		
	Allocation (USD)	Allocation (USD)	Return (USD)	Return (USD)		
AsiaPacific						
Australia	1.9%	7.0%	4.0%	-0.8%		
China*	0.3%	0.0%	6.8%	-2.5%		
Hong Kong	1.5%	3.6%	1.3%	-0.9%		
India*	0.6%	0.0%	6.5%	6.5%		
Indonesia*	28.3%	0.0%	2.8%	2.7%		
Japan	15.9%	24.3%	0.5%	3.7%		
Korea*	17.9%	0.0%	-1.5%	-1.5%		
Malaysia*	0.2%	0.0%	2.3%	4.7%		
New Zealand	0.1%	0.2%	-4.0%	2.6%		
Pakistan*	0.0%	0.0%	1.8%	1.8%		
Philippines*	0.1%	0.0%	7.5%	7.5%		
Singapore	1.8%	1.3%	3.5%	2.2%		
Taiwan*	0.8%	0.0%	8.5%	5.1%		
Thailand*	0.1%	0.0%	7.4%	7.8%		
Total-AsiaPacific	69.6%	36.5%	1.3%	2.3%		
Other						
Egypt*	0.0%	0.0%	-3.3%	-3.3%		
Israel	0.1%	0.5%	4.4%	5.1%		
Qatar*	0.0%	0.0%	10.4%	11.6%		
South Africa*	0.3%	0.0%	7.6%	5.1%		
Turkey*	0.0%	0.0%	-10.0%	-7.2%		
United Arab Emirates*	0.0%	0.0%	3.6%	5.2%		
Total-Other	0.5%	0.5%	6.1%	5.1%		
Totals						
Developed	48.5%	100.0%	2.5%	1.4%		
Emerging*	51.3%	0.0%	1.4%			
Cash	0.2%		0.2%			

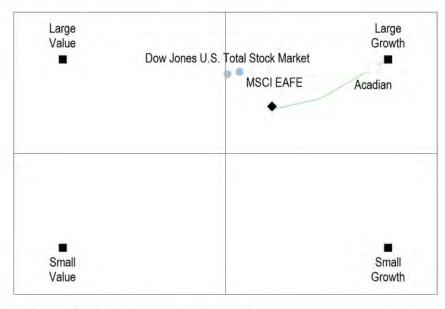


Annualized Return vs. Annualized Standard Deviation 3 Years Ending September 30, 2018



- Acadian
- MSCI EAFE
- 68% Confidence Interval
- eV All EAFE Equity Net

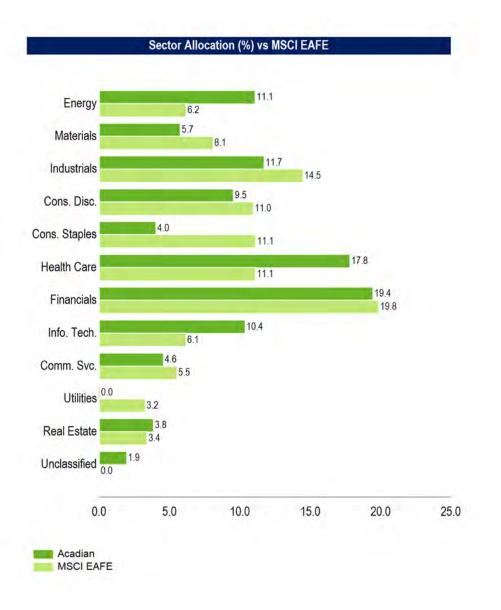
U.S. Effective Style Map 3 Years Ending September 30, 2018





Characteristics		
	Portfolio	MSCI EAFE
Number of Holdings	395	924
Weighted Avg. Market Cap. (\$B)	27.89	57.76
Median Market Cap. (\$B)	1.29	10.81
Price To Earnings	18.73	19.02
Price To Book	3.17	2.62
Price To Sales	1.89	2.32
Return on Equity (%)	19.62	14.72
Yield (%)	2.62	3.14
Beta	0.89	1.00
R-Squared	0.86	1.00







Top Ten Holdings					
ROYAL DUTCH SHELL	3.7%				
ICON	2.3%				
ROYAL BANK OF CANADA	2.2%				
SWISS LIFE HOLDING	2.0%				
FUJITSU	1.9%				
ACS ACTIV.CONSTR.Y SERV.	1.8%				
PHILIPS ELTN.KONINKLIJKE	1.8%				
BP SPN.ADR 1:6	1.8%				
ARISTOCRAT LEISURE	1.7%				
CANADIAN IMP.BK.COM.	1.6%				

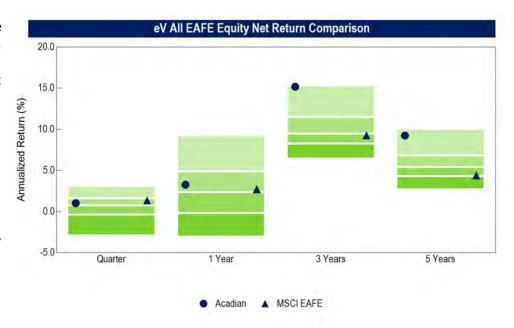
Top Positive Contributors					
	Contribution %	Return %			
PEUGEOT	0.4%	18.1%			
ICON	0.4%	16.0%			
SWEDISH ORPHAN BIOVITRUM	0.3%	33.8%			
FUJITSU	0.3%	18.5%			
FUJI SOFT	0.2%	19.9%			
SWISS LIFE HOLDING	0.2%	9.6%			
ROYAL BANK OF CANADA	0.2%	7.4%			
LONZA GROUP	0.1%	29.2%			
CANADIAN IMP.BK.COM.	0.1%	8.9%			
KT ADR 2:1	0.1%	11.8%			

Top Negative Contributors						
	Relative					
	Contribution %	Return %				
DAITO TST.CONSTRUCTION	-0.3%	-19.3%				
STMICROELECTRONICS	-0.2%	-18.2%				
INDIVIOR	-0.2%	-52.5%				
ARISTOCRAT LEISURE	-0.2%	-9.9%				
SK HYNIX	-0.2%	-14.3%				
DAIWA HOUSE INDUSTRY	-0.2%	-11.7%				
H LUNDBECK	-0.1%	-12.1%				
LG ELECTRONICS	-0.1%	-14.1%				
ZENKOKU HOSHO	-0.1%	-11.9%				
51JOB SPN.ADR 1:1	-0.1%	-21.1%				

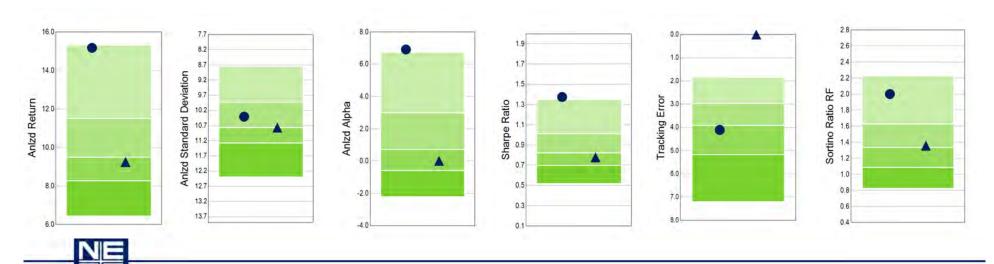
			Equity Se	ctor Attribution				
			Attribution Effects		Return	S	Sector Wei	ghts
	Total	Selection	Allocation	Interaction				
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	-0.1%	-0.1%	0.1%	-0.1%	2.4%	3.5%	11.7%	6.1%
Materials	0.1%	0.1%	0.0%	0.0%	1.5%	0.5%	6.1%	8.2%
Industrials	-0.6%	-0.6%	0.0%	0.1%	-1.8%	2.5%	13.5%	14.2%
Consumer Discretionary	-0.3%	-0.3%	0.0%	0.0%	-2.4%	-0.3%	13.7%	12.4%
Consumer Staples	0.1%	-0.2%	0.1%	0.2%	-2.7%	-0.1%	3.4%	11.4%
Health Care	0.3%	0.2%	0.0%	0.0%	7.4%	5.6%	11.8%	10.6%
Financials	0.6%	0.4%	0.0%	0.2%	3.7%	0.8%	20.3%	19.7%
Information Technology	-0.2%	0.0%	0.0%	-0.1%	0.2%	0.4%	13.1%	6.8%
Communication Services	0.0%	0.1%	-0.1%	0.0%	8.2%	4.2%	1.4%	3.7%
Utilities	0.1%	-0.2%	0.1%	0.2%	-5.7%	-0.6%	0.0%	3.3%
Real Estate	-0.6%	-0.3%	-0.1%	-0.2%	-12.9%	-3.0%	5.1%	3.6%
Cash	0.0%						0.0%	0.0%
Portfolio	-0.5% =	-1.0% +	0.2% +	0.3%	0.8%	1.4%	100.0%	100.0%



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



Characteristics		
	Portfolio	MSCI EAFE
Number of Holdings	395	924
Weighted Avg. Market Cap. (\$B)	27.9	57.8
Median Market Cap. (\$B)	1.3	10.8
Price To Earnings	18.7	19.0
Price To Book	3.2	2.6
Price To Sales	1.9	2.3
Return on Equity (%)	19.6	14.7
Yield (%)	2.6	3.1
Beta	0.9	1.0
R-Squared	0.9	1.0

Top Positive Contributors						
		Relative				
		Contribution %	Return %			
	PEUGEOT (F:PGT)	0.4%	18.1%			
	ICON (ICLR)	0.4%	16.0%			
	SWEDISH ORPHAN BIOVITRUM (W:SOBI)	0.3%	33.8%			
	FUJITSU (J:FT@N)	0.3%	18.5%			
	FUJI SOFT (J:FUST)	0.2%	19.9%			
	SWISS LIFE HOLDING (S:SLHN)	0.2%	9.6%			
	ROYAL BANK OF CANADA (C:RY)	0.2%	7.4%			
	LONZA GROUP (S:LONN)	0.1%	29.2%			
	CANADIAN IMP.BK.COM. (C:CM)	0.1%	8.9%			
	KT ADR 2:1 (KT)	0.1%	11.8%			

Top Negative Contributors						
	Relative					
	Contribution %	Return %				
DAITO TST.CONSTRUCTION (J:DITC)	-0.3%	-19.3%				
STMICROELECTRONICS (F:STM)	-0.2%	-18.2%				
INDIVIOR (UKIR:INDV)	-0.2%	-52.5%				
ARISTOCRAT LEISURE (A:ALLX)	-0.2%	-9.9%				
SK HYNIX (KO:HYI)	-0.2%	-14.3%				
DAIWA HOUSE INDUSTRY (J:DH@N)	-0.2%	-11.7%				
H LUNDBECK (DK:LUN)	-0.1%	-12.1%				
LG ELECTRONICS (KO:JHD)	-0.1%	-14.1%				
ZENKOKU HOSHO (J:ZENH)	-0.1%	-11.9%				
51JOB SPN.ADR 1:1 (JOBS)	-0.1%	-21.1%				

Acadian Performance Attribution vs. MSCI EAFE								
		,	Attribution Effects Returns		ns	Sector Weights		
	Total	Selection	Allocation	Interaction				
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	0.1%	-0.1%	0.3%	-0.1%	2.4%	3.5%	11.7%	6.1%
Materials	0.1%	0.1%	0.0%	0.0%	1.5%	0.5%	6.1%	8.2%
Industrials	-0.6%	-0.6%	0.0%	0.1%	-1.8%	2.5%	13.5%	14.2%
Consumer Discretionary	-0.3%	-0.3%	0.0%	0.0%	-2.4%	-0.3%	13.7%	12.4%
Consumer Staples	-0.1%	-0.2%	-0.1%	0.2%	-2.7%	-0.1%	3.4%	11.4%
Health Care	0.3%	0.2%	0.1%	0.0%	7.4%	5.6%	11.8%	10.6%
Financials	0.6%	0.4%	0.0%	0.2%	3.7%	0.8%	20.3%	19.7%
Information Technology	0.0%	0.0%	0.1%	-0.1%	0.2%	0.4%	13.1%	6.8%
Communication Services	0.0%	0.1%	-0.1%	0.0%	8.2%	4.2%	1.4%	3.7%
Utilities	0.0%	-0.2%	0.0%	0.2%	-5.7%	-0.6%	0.0%	3.3%
Real Estate	-0.5%	-0.3%	0.0%	-0.2%	-12.9%	-3.0%	5.1%	3.6%
Cash	0.0%						0.0%	0.0%
Portfolio	-0.5% =	-1.0% +	0.2% +	- 0.3%	0.8%	1.4%	100.0%	100.0%



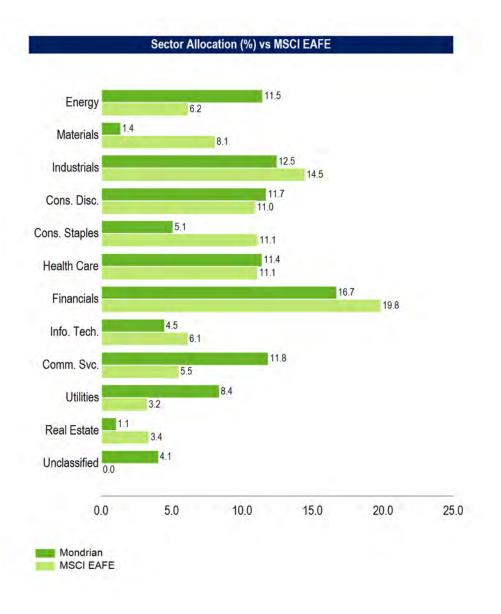
Country Allocation					
	Manager	Index	Manager	Index	
	Allocation (USD)	Allocation (USD)	Return (USD)	Return (USD)	
Americas					
Brazil*	0.1%	0.0%	-13.4%	6.1%	
Canada	6.1%	0.0%	7.3%	0.8%	
Mexico*	0.2%	0.0%	9.0%	6.9%	
United States	0.3%	0.0%	-23.4%	7.4%	
Total-Americas	6.7%	0.0%	5.5%		
Europe					
Austria	2.5%	0.2%	-1.8%	0.4%	
Belgium	0.4%	1.1%	9.4%	-5.2%	
Denmark	1.3%	1.7%	-10.9%	2.4%	
Finland	2.8%	1.0%	3.9%	3.2%	
France	6.8%	11.0%	0.5%	2.9%	
Germany	6.1%	9.4%	-2.4%	-0.6%	
Greece*	0.2%	0.0%	30.1%	-17.6%	
Ireland	2.3%	0.6%	16.0%	-5.3%	
Italy	3.0%	2.4%	-3.4%	-4.2%	
Luxembourg	0.3%	0.0%	-13.0%	1.4%	
Netherlands	6.7%	3.4%	2.8%	-1.6%	
Norway	0.9%	0.7%	17.1%	6.9%	
Poland*	0.0%	0.0%	3.6%	10.6%	
Portugal	0.1%	0.2%	-17.7%	-0.4%	
Spain	3.5%	3.1%	2.7%	-2.4%	
Sweden	4.4%	2.3%	7.4%	6.5%	
Switzerland	3.3%	7.7%	12.7%	7.3%	
United Kingdom	8.1%	18.0%	-0.9%	-1.6%	
Total-Europe	52.6%	62.9%	2.3%	0.8%	

Country Allocation						
	Manager	Index	Manager	Index		
	Allocation (USD)	Allocation (USD)	Return (USD)	Return (USD)		
AsiaPacific						
Australia	8.0%	7.0%	4.0%	-0.8%		
China*	0.9%	0.0%	9.4%	-2.5%		
Hong Kong	0.5%	3.6%	6.8%	-0.9%		
Indonesia*	0.0%	0.0%	-0.6%	2.7%		
Japan	21.3%	24.3%	0.0%	3.7%		
Korea*	3.9%	0.0%	-1.5%	-1.5%		
Malaysia*	1.1%	0.0%	2.2%	4.7%		
New Zealand	0.6%	0.2%	-4.0%	2.6%		
Singapore	1.8%	1.3%	1.7%	2.2%		
Taiwan*	0.5%	0.0%	3.4%	5.1%		
Thailand*	0.3%	0.0%	7.0%	7.8%		
Total-AsiaPacific	38.9%	36.5%	1.2%	2.3%		
Other						
Israel	0.7%	0.5%	4.5%	5.1%		
South Africa*	1.2%	0.0%	8.8%	5.1%		
Turkey*	0.1%	0.0%	-11.1%	-7.2%		
Total-Other	1.9%	0.5%	6.6%	5.1%		
Totals						
Developed	91.6%	100.0%	3.0%	1.4%		
Emerging*	8.4%	0.0%	2.5%			



Characteristics		
	Portfolio	MSCI EAFE
Number of Holdings	57	924
Weighted Avg. Market Cap. (\$B)	60.20	57.76
Median Market Cap. (\$B)	34.35	10.81
Price To Earnings	13.34	19.02
Price To Book	1.63	2.62
Price To Sales	1.33	2.32
Return on Equity (%)	11.27	14.72
Yield (%)	4.17	3.14
Beta	0.92	1.00
R-Squared	0.89	1.00







Top Ten Holdings					
SANOFI	3.6%				
ENI	3.2%				
UNITED OVERSEAS BANK	3.1%				
ENEL	3.1%				
CK HUTCHISON (HSC) HOLDINGS	3.0%				
LLOYDS BANKING GROUP	2.9%				
TELIA COMPANY	2.9%				
HONDA MOTOR	2.8%				
TESCO	2.6%				
IBERDROLA	2.6%				

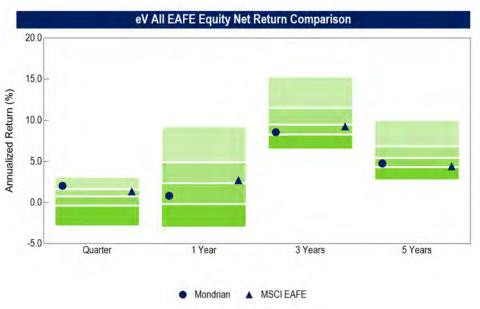
Top Positive Contributors						
	Relative					
	Contribution %	Return %				
WOOD GROUP (JOHN)	0.4%	22.8%				
TAIWAN SEMICON.MNFG.	0.3%	21.1%				
SANOFI	0.3%	10.9%				
CHINA MOBILE	0.3%	13.7%				
FUJIFILM HOLDINGS	0.3%	16.2%				
CK HUTCHISON HOLDINGS	0.3%	9.8%				
ALLIANZ	0.2%	7.8%				
ABB LTD N	0.2%	8.6%				
QBE INSURANCE GROUP	0.2%	14.1%				
TOKIO MARINE HOLDINGS	0.1%	7.5%				
QBE INSURANCE GROUP	0.2%	14.1%				

Top Negative Contributors						
	Relative					
	Contribution %	Return %				
KINGFISHER	-0.3%	-14.2%				
TESCO	-0.2%	-7.7%				
SSE	-0.2%	-12.1%				
G4S	-0.2%	-9.3%				
ENEL	-0.1%	-5.2%				
WPP	-0.1%	-6.9%				
LLOYDS BANKING GROUP	-0.1%	-5.5%				
TELEFONICA	-0.1%	-6.8%				
WH GROUP	-0.1%	-12.8%				
KONINKLIJKE AHOLD DELHAIZE	-0.1%	-4.2%				

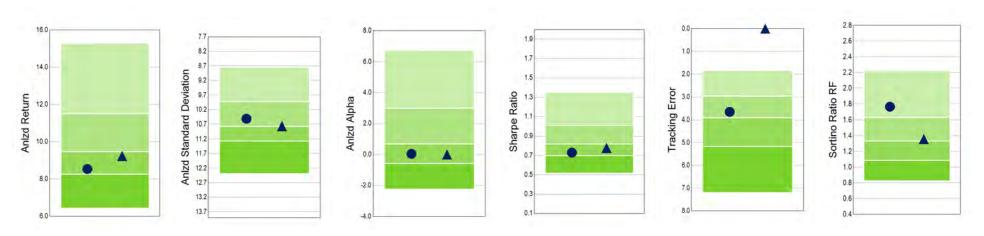
			Equity Se	ector Attribution				
		I	Attribution Effects		Return	S	Sector Wei	ghts
	Total	Selection	Allocation	Interaction				
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	0.2%	0.1%	0.1%	0.0%	5.1%	3.5%	11.5%	6.1%
Materials	0.2%	0.3%	0.1%	-0.1%	4.3%	0.5%	1.3%	8.2%
Industrials	0.0%	-0.1%	0.0%	0.1%	2.7%	2.5%	14.4%	14.2%
Consumer Discretionary	0.0%	0.1%	0.0%	-0.1%	-0.2%	-0.3%	13.7%	12.4%
Consumer Staples	-0.4%	-0.7%	0.1%	0.3%	-6.7%	-0.1%	7.5%	11.4%
Health Care	0.2%	0.2%	0.0%	0.0%	6.9%	5.6%	10.9%	10.6%
Financials	0.5%	0.6%	0.0%	-0.1%	3.9%	0.8%	14.9%	19.7%
Information Technology	0.8%	1.0%	0.0%	-0.2%	14.8%	0.4%	5.1%	6.8%
Communication Services	0.0%	-0.1%	0.2%	-0.1%	3.4%	4.2%	9.8%	3.7%
Utilities	-0.7%	-0.2%	-0.1%	-0.4%	-6.1%	-0.6%	9.1%	3.3%
Real Estate	0.2%	0.2%	0.1%	-0.1%	2.6%	-3.0%	1.0%	3.6%
Cash	0.0%	0.0%	0.0%	0.0%	0.5%	-	0.8%	0.0%
Portfolio	1.0% =	1.2% +	0.5% +	-0.7%	2.4%	1.4%	100.0%	100.0%



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





Characteristics		
	Portfolio	MSCI EAFE
Number of Holdings	57	924
Weighted Avg. Market Cap. (\$B)	60.2	57.8
Median Market Cap. (\$B)	34.4	10.8
Price To Earnings	13.3	19.0
Price To Book	1.6	2.6
Price To Sales	1.3	2.3
Return on Equity (%)	11.3	14.7
Yield (%)	4.2	3.1
Beta	0.9	1.0
R-Squared	0.9	1.0

Top Positive Conti	Top Positive Contributors					
	Relative					
	Contribution %	Return %				
WOOD GROUP (JOHN) (UKIR:WG.)	0.4%	22.8%				
TAIWAN SEMICON.MNFG. (TW:TSM)	0.3%	21.1%				
SANOFI (F:SQ@F)	0.3%	10.9%				
CHINA MOBILE (K:CHT)	0.3%	13.7%				
FUJIFILM HOLDINGS (J:FP@N)	0.3%	16.2%				
CK HUTCHISON HOLDINGS (K:CHGK)	0.3%	9.8%				
ALLIANZ (D:ALV)	0.2%	7.8%				
ABB LTD N (S:ABBN)	0.2%	8.6%				
QBE INSURANCE GROUP (A:QBEX)	0.2%	14.1%				
TOKIO MARINE HOLDINGS (J:MIHO)	0.1%	7.5%				

Top Negative Contributors						
	Relative					
	Contributio n %	Return %				
KINGFISHER (UKIR:KGF)	-0.3%	-14.2%				
TESCO (UKIR:TSCO)	-0.2%	-7.7%				
SSE (UKIR:SSE)	-0.2%	-12.1%				
G4S (UKIR:GFS)	-0.2%	-9.3%				
ENEL (I:ENEL)	-0.1%	-5.2%				
WPP (UKIR:WPP)	-0.1%	-6.9%				
LLOYDS BANKING GROUP (UKIR:LLOY)	-0.1%	-5.5%				
TELEFONICA (E:TEF)	-0.1%	-6.8%				
WH GROUP (K:HHPL)	-0.1%	-12.8%				
KONINKLIJKE AHOLD DELHAIZE (H:AD)	-0.1%	-4.2%				

Mondrian Performance Attribution vs. MSCI EAFE								
		Į.	Attribution Effects		Return	ıs	Sector We	ights
	Total	Selection	Allocation	Interaction				
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	0.4%	0.1%	0.2%	0.0%	5.1%	3.5%	11.5%	6.1%
Materials	0.0%	0.3%	-0.1%	-0.1%	4.3%	0.5%	1.3%	8.2%
Industrials	0.0%	-0.1%	0.0%	0.1%	2.7%	2.5%	14.4%	14.2%
Consumer Discretionary	0.0%	0.1%	0.0%	-0.1%	-0.2%	-0.3%	13.7%	12.4%
Consumer Staples	-0.5%	-0.7%	0.0%	0.3%	-6.7%	-0.1%	7.5%	11.4%
Health Care	0.2%	0.2%	0.0%	0.0%	6.9%	5.6%	10.9%	10.6%
Financials	0.4%	0.6%	-0.1%	-0.1%	3.9%	0.8%	14.9%	19.7%
Information Technology	0.7%	1.0%	0.0%	-0.2%	14.8%	0.4%	5.1%	6.8%
Communication Services	0.2%	-0.1%	0.3%	-0.1%	3.4%	4.2%	9.8%	3.7%
Utilities	-0.5%	-0.2%	0.0%	-0.4%	-6.1%	-0.6%	9.1%	3.3%
Real Estate	0.1%	0.2%	0.0%	-0.1%	2.6%	-3.0%	1.0%	3.6%
Cash	0.0%	0.0%	0.0%	0.0%	0.5%	-	0.8%	0.0%
Portfolio	1.0% =	1.2% +	0.5% +	-0.7%	2.4%	1.4%	100.0%	100.0%



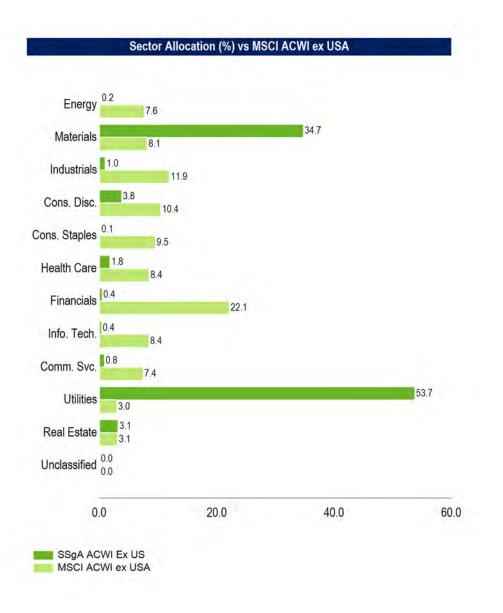
Country Allocation							
	Manager	Index	Manager	Index			
	Allocation (USD)	Allocation (USD)	Return (USD)	Return (USD)			
Europe							
Denmark	2.0%	1.7%	2.4%	2.4%			
France	5.9%	11.0%	5.6%	2.9%			
Germany	9.1%	9.4%	3.1%	-0.6%			
Italy	6.4%	2.4%	-0.4%	-4.2%			
Netherlands	2.4%	3.4%	-4.2%	-1.6%			
Spain	5.2%	3.1%	-4.1%	-2.4%			
Sweden	3.9%	2.3%	3.8%	6.5%			
Switzerland	6.1%	7.7%	9.9%	7.3%			
United Kingdom	26.3%	18.0%	-3.4%	-1.6%			
Total-Europe	67.2%	62.9%	0.2%	0.8%			

Country Allocation						
	Manager	Index	Manager	Index		
	Allocation (USD)	Allocation (USD)	Return (USD)	Return (USD)		
AsiaPacific						
Australia	1.3%	7.0%	14.1%	-0.9%		
Hong Kong	5.5%	3.7%	8.0%	-0.9%		
Japan	17.5%	24.4%	6.1%	3.7%		
Singapore	6.2%	1.3%	3.6%	2.2%		
Taiwan*	1.6%	0.0%	21.1%	6.5%		
Total-AsiaPacific	32.0%	36.6%	7.0%	2.3%		
Totals						
Developed	97.7%	100.0%	2.1%	1.4%		
Emerging*	1.6%	0.0%	21.1%			
Cash	0.8%		0.5%			



Characteristics		
	Portfolio	MSCI ACWI ex USA
Number of Holdings	55	2,166
Weighted Avg. Market Cap. (\$B)	11.04	62.23
Median Market Cap. (\$B)	8.46	7.68
Price To Earnings	18.21	18.84
Price To Book	1.42	2.62
Price To Sales	2.52	2.40
Return on Equity (%)	9.44	15.63
Yield (%)	2.92	3.00
Beta	1.00	1.00
R-Squared	1.00	1.00







Top Ten Holdings	
INTERCONEXION ELECTRICA	43.4%
INVERSIONES ARGOS	34.7%
COLBUN MACHICURA	8.0%
DAIWA HOUSE REIT INV.	3.1%
NTPC	2.4%
CIPLA	1.6%
ALIBABA GROUP HLDG.SPN. ADR 1:1	1.4%
BHARAT FORGE	0.9%
CHENG SHIN RUB.INDS.	0.7%
SIEMENS	0.5%

Top Positive Contributors					
	Relative				
	Contribution %	Return %			
BANK CENTRAL ASIA	0.6%	8.1%			
BANK RAKYAT INDONESIA	0.4%	6.7%			
ASTRA INTERNATIONAL	0.3%	7.1%			
CHAROEN POKPHAND INDO.	0.3%	32.6%			
ICT.TUNGGAL PRAKARSA	0.3%	30.3%			
SEMEN INDONESIA (PERSERO)	0.2%	34.0%			
TENCENT HOLDINGS	0.2%	-17.7%			
ECOPETROL	0.2%	31.8%			
ALIBABA GROUP HLDG.SPN. ADR 1:1	0.1%	-11.2%			
GUDANG GARAM	0.1%	9.9%			

Top Negative Contributors					
	Relative				
	Contribution %	Return %			
TELEKOMUNIKASI INDONESIA	-0.4%	-6.7%			
BANK MANDIRI	-0.2%	-5.6%			
SK HYNIX	-0.2%	-14.3%			
MATAHARI DEPARTMENT SOE.	-0.2%	-24.3%			
INDAH KIAT PULP & PAPER	-0.2%	-9.8%			
INDOFOOD SUKSES MAKMUR	-0.1%	-14.7%			
TAIWAN SEMICON.MNFG.	-0.1%	21.1%			
BUMI SERPONG DAMAI	-0.1%	-29.0%			
NOVARTIS 'R'	-0.1%	14.0%			
NESTLE 'R'	-0.1%	8.2%			

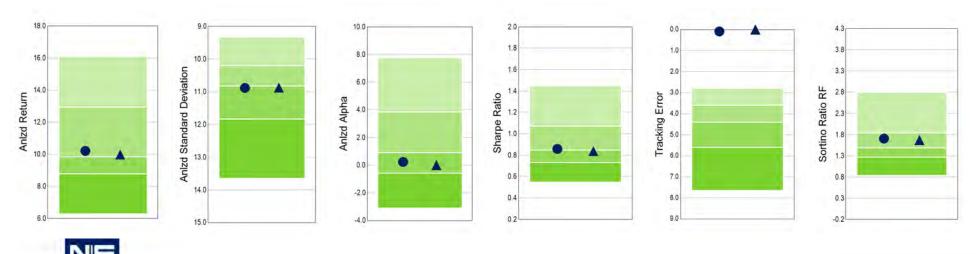
Equity Sector Attribution								
			Attribution Effects		Ret	urns	Secto	r Weights
	Total	Selection	Allocation	Interaction				
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	0.0%	0.3%	-0.1%	-0.2%	6.9%	4.5%	4.6%	7.4%
Materials	0.2%	0.3%	0.0%	-0.1%	2.9%	0.5%	7.3%	8.2%
Industrials	0.0%	0.1%	-0.1%	0.0%	3.4%	2.8%	6.5%	11.6%
Consumer Discretionary	0.5%	0.6%	0.0%	-0.1%	1.5%	-2.6%	11.9%	11.3%
Consumer Staples	0.0%	0.2%	0.0%	-0.2%	-0.1%	-0.5%	11.0%	9.7%
Health Care	0.0%	0.3%	-0.1%	-0.2%	7.1%	4.4%	3.9%	8.1%
Financials	0.4%	0.9%	0.0%	-0.5%	3.1%	1.6%	27.9%	21.8%
Information Technology	0.1%	0.1%	-0.1%	0.1%	-0.8%	-2.4%	15.7%	11.9%
Communication Services	-0.5%	-0.2%	0.1%	-0.4%	-3.3%	3.6%	7.9%	3.7%
Utilities	0.1%	0.1%	0.0%	-0.1%	0.8%	-0.9%	1.9%	3.0%
Real Estate	0.0%	-0.2%	0.1%	0.1%	-12.0%	-3.5%	1.4%	3.2%
Cash	0.0%	-					0.0%	0.0%
Portfolio	0.8% =	2.6% +	-0.3%	+ -1.6%	1.5%	0.8%	100.0%	100.0%



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





Characteristics						
	Portfolio	MSCI ACWI ex USA				
Number of Holdings	55	2,166				
Weighted Avg. Market Cap. (\$B)	11.0	62.2				
Median Market Cap. (\$B)	8.5	7.7				
Price To Earnings	18.2	18.8				
Price To Book	1.4	2.6				
Price To Sales	2.5	2.4				
Return on Equity (%)	9.4	15.6				
Yield (%)	2.9	3.0				
Beta	1.0	1.0				
R-Squared	1.0	1.0				

Top Positive Contributors					
	Relative				
	Contribution %	Return %			
BANK CENTRAL ASIA (ID:BCA)	0.6%	8.1%			
BANK RAKYAT INDONESIA (ID:BRI)	0.4%	6.7%			
ASTRA INTERNATIONAL (ID:ATA)	0.3%	7.1%			
CHAROEN POKPHAND INDO. (ID:POP)	0.3%	32.6%			
ICT.TUNGGAL PRAKARSA (ID:INC)	0.3%	30.3%			
SEMEN INDONESIA (PERSERO) (ID:GSK)	0.2%	34.0%			
TENCENT HOLDINGS (K:TCNT)	0.2%	-17.7%			
ECOPETROL (CB:ECO)	0.2%	31.8%			
ALIBABA GROUP HLDG.SPN. ADR 1:1 (BABA)	0.1%	-11.2%			
GUDANG GARAM (ID:GUD)	0.1%	9.9%			

Top Negative Contributors							
	Relative						
	Contribution %	Return %					
TELEKOMUNIKASI INDONESIA (ID:RLK)	-0.4%	-6.7%					
BANK MANDIRI (ID:BKM)	-0.2%	-5.6%					
SK HYNIX (KO:HYI)	-0.2%	-14.3%					
MATAHARI DEPARTMENT SOE. (ID:MDS)	-0.2%	-24.3%					
INDAH KIAT PULP & PAPER (ID:IKP)	-0.2%	-9.8%					
INDOFOOD SUKSES MAKMUR (ID:IFO)	-0.1%	-14.7%					
TAIWAN SEMICON.MNFG. (TW:TSM)	-0.1%	21.1%					
BUMI SERPONG DAMAI (ID:BSX)	-0.1%	-29.0%					
NOVARTIS 'R' (S:NOVN)	-0.1%	14.0%					
NESTLE 'R' (S:NESN)	-0.1%	8.2%					

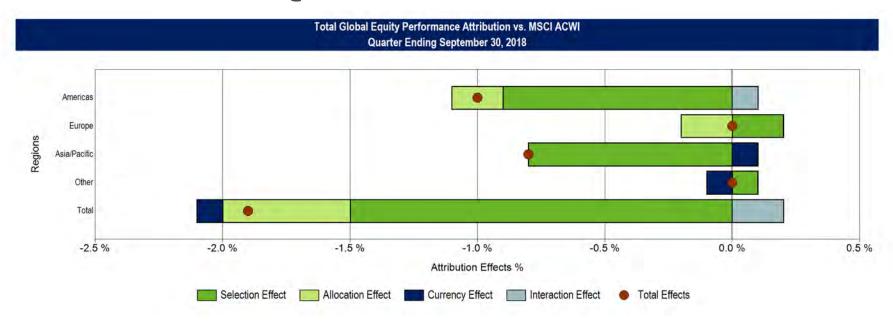
		SSgA ACV	VI Ex US Perform	ance Attribution v	s. MSCI ACWI ex	USA		
			Attribution Effects		R	eturns	Secto	or Weights
	Total	Selection	Allocation	Interaction				
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	0.0%	0.3%	-0.2%	-0.2%	6.9%	4.5%	4.6%	7.4%
Materials	0.2%	0.3%	0.0%	-0.1%	2.9%	0.5%	7.3%	8.2%
Industrials	-0.1%	0.1%	-0.2%	0.0%	3.4%	2.8%	6.5%	11.6%
Consumer Discretionary	0.5%	0.6%	0.0%	-0.1%	1.5%	-2.6%	11.9%	11.3%
Consumer Staples	0.0%	0.2%	0.0%	-0.2%	-0.1%	-0.5%	11.0%	9.7%
Health Care	-0.1%	0.3%	-0.2%	-0.2%	7.1%	4.4%	3.9%	8.1%
Financials	0.5%	0.9%	0.1%	-0.5%	3.1%	1.6%	27.9%	21.8%
Information Technology	0.2%	0.1%	-0.1%	0.1%	-0.8%	-2.4%	15.7%	11.9%
Communication Services	-0.4%	-0.2%	0.2%	-0.4%	-3.3%	3.6%	7.9%	3.7%
Utilities	0.0%	0.1%	0.0%	-0.1%	0.8%	-0.9%	1.9%	3.0%
Real Estate	-0.1%	-0.2%	0.0%	0.1%	-12.0%	-3.5%	1.4%	3.2%
Cash	0.0%						0.0%	0.0%
Portfolio	0.8%	= 2.6%	+ -0.3%	+ -1.6%	1.5%	0.8%	100.0%	100.0%



Country Allocation							
	Manager	Index	Manager	Index			
	Allocation (USD)	Allocation (USD)	Return (USD)	Return (USD)			
Americas							
Brazil*	0.0%	1.5%	6.2%	6.2%			
Canada	0.1%	6.6%	0.8%	0.9%			
Chile*	1.3%	0.3%	-1.9%	-1.9%			
Colombia*	2.7%	0.1%	-2.5%	-2.4%			
Mexico*	0.1%	0.7%	6.9%	6.9%			
Peru*	0.0%	0.1%	-1.0%	-2.1%			
United States	0.0%	0.0%	-9.1%	7.4%			
Total-Americas	4.3%	9.3%	-1.9%	2.0%			
Europe							
Austria	0.0%	0.2%	0.4%	0.4%			
Belgium	0.0%	0.7%	-5.2%	-5.2%			
Czech Republic*	0.0%	0.0%	4.0%	4.0%			
Denmark	0.1%	1.1%	2.4%	2.4%			
Finland	0.0%	0.7%	3.2%	3.2%			
France	0.0%	7.5%	3.0%	2.9%			
Germany	0.0%	6.5%	-0.7%	-0.6%			
Greece*	0.0%	0.1%	-18.1%	-18.1%			
Hungary*	0.1%	0.1%	4.6%	4.7%			
Ireland	0.0%	0.4%	-4.2%	-5.3%			
Italy	0.0%	1.6%	-4.1%	-4.2%			
Luxembourg	0.0%	0.0%	2.2%	0.8%			
Netherlands	0.0%	2.4%	0.2%	-1.6%			
Norway	0.0%	0.5%	6.9%	6.9%			
Poland*	0.0%	0.3%	11.0%	11.0%			
Portugal	0.0%	0.1%	-0.4%	-0.4%			
Russia*	0.0%	0.9%	11.0%	7.2%			
Spain	0.0%	2.1%	-2.4%	-2.4%			
Sweden	0.1%	1.6%	6.6%	6.5%			
Switzerland	0.0%	5.3%	7.3%	7.3%			
United Kingdom	0.1%	12.4%	-0.9%	-1.6%			
Total-Europe	0.6%	44.4%	3.5%	1.0%			

Country A	Illocation		
Manager	Index	Manager	Index
Allocation (USD)	Allocation (USD)	Return (USD)	Return (USD)
0.0%	4.8%	-0.9%	-0.9%
0.2%	8.1%	0.7%	-7.3%
0.3%	2.5%	-6.5%	-0.9%
1.1%	2.1%	-2.3%	-2.3%
49.2%	0.5%	2.0%	2.0%
13.4%	16.7%	3.7%	3.7%
29.8%	3.7%	0.4%	0.4%
0.0%	0.6%	3.8%	3.8%
0.0%	0.1%	2.6%	2.6%
0.0%	0.0%	-4.7%	-4.7%
0.1%	0.2%	1.1%	1.0%
0.0%	0.9%	2.6%	2.2%
0.7%	2.9%	7.1%	7.2%
0.1%	0.6%	11.1%	13.7%
94.9%	43.7%	1.7%	0.6%
0.0%	0.0%	-7.5%	-7.5%
0.0%	0.4%	6.9%	5.0%
0.0%	0.2%	11.5%	11.5%
0.2%	1.6%	-7.9%	-7.1%
0.0%	0.2%	-20.5%	-20.5%
0.0%	0.2%	2.8%	1.2%
0.2%	2.5%	-7.0%	-4.3%
14.3%	75.1%	3.4%	1.3%
85.7%	24.9%	1.2%	-0.9%
	Manager Allocation (USD) 0.0% 0.2% 0.3% 1.1% 49.2% 13.4% 29.8% 0.0% 0.0% 0.1% 0.0% 0.1% 0.0% 0.1% 0.0% 0.2% 0.0% 0.0% 1.4.3%	Allocation (USD) Allocation (USD) 0.0% 4.8% 0.2% 8.1% 0.3% 2.5% 1.1% 2.1% 49.2% 0.5% 13.4% 16.7% 29.8% 3.7% 0.0% 0.6% 0.0% 0.1% 0.0% 0.0% 0.1% 0.2% 0.1% 0.6% 94.9% 43.7% 0.0% 0.6% 94.9% 43.7%	Manager Allocation (USD) Index Return (USD) 0.0% 4.8% -0.9% 0.2% 8.1% 0.7% 0.3% 2.5% -6.5% 1.1% 2.1% -2.3% 49.2% 0.5% 2.0% 13.4% 16.7% 3.7% 29.8% 3.7% 0.4% 0.0% 0.6% 3.8% 0.0% 0.1% 2.6% 0.0% 0.0% -4.7% 0.1% 0.2% 1.1% 0.0% 0.9% 2.6% 0.7% 2.9% 7.1% 0.1% 0.6% 11.1% 94.9% 43.7% 1.7% 0.0% 0.4% 6.9% 0.0% 0.4% 6.9% 0.0% 0.2% 11.5% 0.0% 0.2% -20.5% 0.0% 0.2% -20.5% 0.0% 0.2% -20.5% 0.0% 0.2% 2.8% 0.2% 2.5%





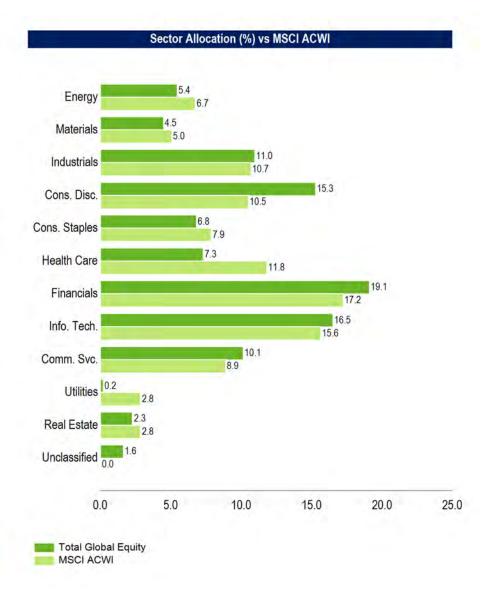
				Attribution Effects					
	Manager	Index	Manager	Index	Selection	Allocation	Currency	Interaction	Total
	Return	Return	Weight	Weight	Effect	Effect	Effect	Effect	Effects
Totals									
Americas	5.5%	7.1%	49.8%	58.3%	-0.9%	-0.2%	0.0%	0.1%	-1.0%
Europe	1.7%	1.0%	25.6%	20.4%	0.2%	-0.2%	0.0%	0.0%	0.0%
Asia/Pacific	-2.9%	0.6%	21.4%	20.1%	-0.8%	0.0%	0.1%	0.0%	-0.8%
Other	-1.1%	-4.3%	1.7%	1.2%	0.1%	0.0%	-0.1%	0.0%	0.0%
Cash	0.5%		1.4%	0.0%	0.0%	-0.1%	0.0%	0.0%	-0.1%
Total	2.5%	4.4%	100.0%	100.0%	-1.5%	-0.5%	-0.1%	0.2%	-1.9%
Totals									
Developed	3.4%	5.1%	86.9%	88.6%	-1.5%	0.0%	0.0%	0.0%	-1.5%
Emerging*	-3.9%	-0.9%	11.6%	11.4%	-0.3%	0.0%	-0.1%	0.0%	-0.3%
Frontier**	-20.0%		0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cash	0.5%		1.4%	0.0%	0.0%	-0.1%	0.0%	0.0%	-0.1%



Characteristics		
	Portfolio	MSCI ACWI
Number of Holdings	537	2,791
Weighted Avg. Market Cap. (\$B)	84.65	148.68
Median Market Cap. (\$B)	8.80	9.59
Price To Earnings	33.92	21.71
Price To Book	5.25	3.84
Price To Sales	4.28	3.19
Return on Equity (%)	19.07	18.57
Yield (%)	1.47	2.37
Pç	ortfolio	Index

	Portfolio	Index
	Q3-18	Q3-18
Region Weighting		
North America ex U.S.	1.08	3.02
United States	50.98	55.11
Europe Ex U.K.	15.53	14.51
United Kingdom	8.18	5.17
Pacific Basin Ex Japan	7.77	5.00
Japan	6.17	7.50
Emerging Markets	9.93	9.43
Other	0.36	0.27







Тор	Ten Holdings
VISA 'A'	3.7%
IHS MARKIT	3.6%
BANK OF AMERICA	2.9%
TECHTRONIC INDS.	2.0%
ANTHEM	1.8%
BOSTON SCIENTIFIC	1.8%
AMAZON.COM	1.6%
PIONEER NTRL.RES.	1.5%
TEMENOS N	1.5%
ALPHABET A	1.5%

Top Positive Contributors					
	Relative				
	Contribution %	Return %			
VISA 'A'	0.4%	13.5%			
BOSTON SCIENTIFIC	0.3%	17.7%			
LONZA GROUP	0.2%	29.2%			
ATLASSIAN 'A'	0.2%	53.8%			
ANTHEM	0.2%	15.5%			
AMADEUS IT GROUP	0.2%	17.8%			
TECHTRONIC INDS.	0.2%	15.5%			
PROGRESSIVE OHIO	0.2%	20.1%			
IHS MARKIT	0.2%	4.6%			
NINTENDO	0.1%	12.6%			

Top Negative Cor	ntributors	
	Relative	
	Contribution %	Return %
JD.COM 'A' ADR 1:2	-0.3%	-33.0%
MICROSOFT	-0.2%	16.4%
NOBLE ENERGY	-0.2%	-11.3%
SANDS CHINA	-0.2%	-15.3%
STATE STREET	-0.1%	-9.5%
TENCENT HOLDINGS	-0.1%	-17.7%
HDFC BANK ADR 1:3	-0.1%	-10.4%
APTIV	-0.1%	-8.2%
INTERTEK GROUP	-0.1%	-13.7%
PIONEER NTRL.RES.	-0.1%	-7.9%

			Equity Se	ector Attribution				
			Attribution Effects		Returns	5	Sector Wei	ghts
	Total	Selection	Allocation	Interaction				
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	-0.3%	-0.5%	0.0%	0.1%	-3.9%	2.6%	5.3%	6.8%
Materials	-0.1%	-0.1%	0.0%	0.0%	-2.5%	0.4%	4.8%	5.2%
Industrials	-0.3%	-0.2%	0.0%	-0.1%	3.6%	6.0%	11.4%	10.5%
Consumer Discretionary	-0.5%	-0.3%	-0.1%	-0.1%	0.7%	3.1%	17.8%	12.4%
Consumer Staples	-0.1%	-0.1%	0.0%	-0.1%	0.1%	2.3%	7.3%	8.1%
Health Care	-0.1%	0.3%	-0.3%	-0.1%	13.7%	11.0%	7.0%	11.1%
Financials	-0.6%	-0.4%	-0.1%	-0.1%	0.0%	2.6%	20.8%	17.4%
Information Technology	0.0%	0.0%	0.0%	0.0%	6.2%	6.2%	20.6%	19.7%
Communication Services	0.0%	0.1%	0.0%	0.0%	8.7%	5.2%	1.2%	2.8%
Utilities	0.1%	0.2%	0.1%	-0.2%	6.0%	0.8%	0.2%	3.0%
Real Estate	0.0%	-0.1%	0.0%	0.0%	-3.3%	-1.5%	2.3%	3.0%
Cash	-0.1%	0.0%	-0.1%	0.0%	0.5%		1.4%	0.0%
Portfolio	-1.9% =	-1.1% +	-0.2% +	-0.5%	2.5%	4.4%	100.0%	100.0%



Country Allocation								
	Manager	Index	Manager	Index				
	Allocation (USD)	Allocation (USD)	Return (USD)	Return (USD)				
Americas								
Brazil*	0.5%	0.6%	11.8%	5.2%				
Canada	1.1%	3.1%	-0.3%	0.8%				
Colombia*	0.1%	0.1%	-12.6%	-3.6%				
Mexico*	0.5%	0.3%	6.1%	7.5%				
United States	47.7%	53.6%	5.5%	7.1%				
Total-Americas	49.8%	57.9%	5.5%	6.7%				
Europe								
Austria	0.1%	0.1%	-0.4%	0.8%				
Belgium	0.4%	0.4%	-0.5%	-4.1%				
Denmark	1.5%	0.5%	3.5%	1.5%				
Finland	0.1%	0.4%	10.7%	2.0%				
France	1.5%	3.2%	5.1%	2.5%				
Germany	1.9%	2.8%	2.6%	-0.6%				
Greece*	0.3%	0.0%	20.5%	-12.5%				
Hungary*	0.1%	0.0%	2.3%	4.1%				
Ireland	0.3%	0.2%	-10.3%	-5.1%				
Italy	1.3%	0.8%	-2.1%	-3.4%				
Luxembourg	0.2%	0.0%	-7.0%	4.0%				
Netherlands	2.5%	1.1%	-5.7%	-1.5%				
Norway	0.1%	0.3%	3.6%	6.3%				
Russia*	1.3%	0.4%	-6.3%	6.6%				
Spain	1.8%	1.0%	11.0%	-2.2%				
Sweden	0.3%	0.9%	-1.7%	6.1%				
Switzerland	2.6%	2.3%	15.3%	6.4%				
United Kingdom	9.3%	5.8%	-1.4%	-2.0%				
Total-Europe	25.6%	20.4%	1.7%	0.6%				

Country Allocation				
	Manager	Index	Manager	Index
	Allocation (USD)		Return (USD)	Return (USD)
AsiaPacific		, (°°°)	, , , , , , , , , , , , , , , , , , , ,	()
Australia	2.2%	2.2%	0.9%	-0.8%
China*	1.8%	3.4%	-4.1%	-7.5%
Hong Kong	5.2%	1.1%	-3.2%	-1.5%
India*	1.9%	1.1%	3.5%	-4.4%
Indonesia*	0.0%	0.2%	9.7%	0.5%
Japan	6.0%	8.2%	-3.0%	3.0%
Korea*	1.2%	1.7%	1.1%	0.5%
Malaysia*	0.6%	0.3%	5.1%	3.2%
Philippines*	0.4%	0.1%	7.2%	0.2%
Singapore	0.8%	0.4%	6.3%	2.0%
Sri Lanka**	0.1%	0.0%	-1.4%	-3.1%
Taiwan*	0.4%	1.4%	11.8%	5.0%
Thailand*	0.8%	0.3%	2.2%	15.0%
Total-AsiaPacific	21.4%	20.5%	-0.7%	0.2%
Other				
South Africa*	1.4%	0.7%	5.1%	-6.7%
Turkey*	0.3%	0.1%	-1.5%	-20.7%
Total-Other	1.7%	1.2%	3.8%	-3.3%
Totals				
Developed	86.9%	88.8%	2.8%	4.7%
Emerging*	11.6%	11.2%	3.0%	-1.4%
Frontier**	0.1%	0.0%	-1.4%	-
Cash	1.4%		0.2%	



Characteristics		
	Portfolio	MSCI ACWI
Number of Holdings	493	2,791
Weighted Avg. Market Cap. (\$B)	89.3	148.7
Median Market Cap. (\$B)	7.6	9.6
Price To Earnings	24.7	21.7
Price To Book	3.1	3.8
Price To Sales	2.5	3.2
Return on Equity (%)	17.0	18.6
Yield (%)	2.1	2.4
Beta		1.0

Top Positive Contributors			
	Relative		
	Contribution %	Return %	
AMAZON.COM (AMZN)	0.3%	17.8%	
BELMOND 'A' (BEL)	0.2%	63.7%	
DELTA AIR LINES (DAL)	0.2%	17.5%	
MOTOR OIL (G:MOH)	0.2%	30.1%	
TAIWAN SEMICON.SPN.ADR 1:5 (TSM)	0.2%	20.8%	
COSTCO WHOLESALE (COST)	0.1%	12.7%	
CITIGROUP (C)	0.1%	7.9%	
UNITED CONTINENTAL HOLDINGS (UAL)	0.1%	27.7%	
LIVANOVA (LIVN)	0.1%	24.2%	
SMARTONE TELECOM.HDG. (K:SMAR)	0.1%	29.0%	

Top Negative Contr	ibutors	
	Relative	
	Contribution %	Return %
MICROSOFT (MSFT)	-0.2%	16.4%
JD.COM 'A' ADR 1:2 (JD)	-0.1%	-33.0%
CBRE GROUP CLASS A (CBRE)	-0.1%	-7.6%
TINGYI CYMN.ISLE.HLDG. (K:CAYM)	-0.1%	-20.8%
SQUARE ENIX HOLDINGS (J:ENIX)	-0.1%	-15.6%
SCORPIO TANKERS (STNG)	-0.1%	-28.1%
ANTOFAGASTA (UKIR:ANTO)	-0.1%	-14.1%
SBERBANK OF RUSSIA (LON) ADR (UKIR:SBER)	-0.1%	-12.2%
VIPSHOP HOLDINGS ADR 5:1 (VIPS)	-0.1%	-42.5%
SK HYNIX (KO:HYI)	-0.1%	-14.3%

		Hosking G	lobal Equity Perfo	rmance Attributio	n vs. MSCI ACWI			
		A	Attribution Effects		Return	ıs	Sector We	eights
	Total Effects	Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark
	Ellects	Ellect	Ellect	Ellecis	PULIUIIU	Deficilitation	POLIIOIIO	Delicilliark
Energy	0.0%	0.0%	-0.1%	0.0%	3.5%	2.6%	4.7%	6.8%
Materials	-0.1%	-0.1%	0.0%	-0.1%	-1.3%	0.4%	7.9%	5.2%
Industrials	-0.2%	-0.1%	0.1%	-0.2%	3.5%	6.0%	12.2%	10.5%
Consumer Discretionary	0.1%	-0.1%	0.2%	0.0%	2.6%	3.1%	17.8%	12.4%
Consumer Staples	-0.3%	-0.2%	-0.1%	0.1%	-1.2%	2.3%	5.6%	8.1%
Health Care	-1.0%	-0.4%	-0.9%	0.3%	8.0%	11.0%	2.8%	11.1%
Financials	-0.2%	-0.2%	0.3%	-0.2%	1.0%	2.6%	26.0%	17.4%
Information Technology	-1.0%	-0.8%	-0.5%	0.3%	2.1%	6.2%	12.5%	19.7%
Communication Services	0.1%	0.1%	0.0%	0.0%	8.7%	5.2%	2.4%	2.8%
Utilities	0.0%	0.2%	0.0%	-0.2%	6.0%	0.8%	0.4%	3.0%
Real Estate	-0.1%	-0.1%	0.0%	0.0%	-3.3%	-1.5%	4.8%	3.0%
Cash	0.0%	0.0%	0.0%	0.0%	0.5%		2.9%	0.0%
Portfolio	-2.7% =	-1.7% +	-1.0% +	0.0%	1.7%	4.4%	100.0%	100.0%



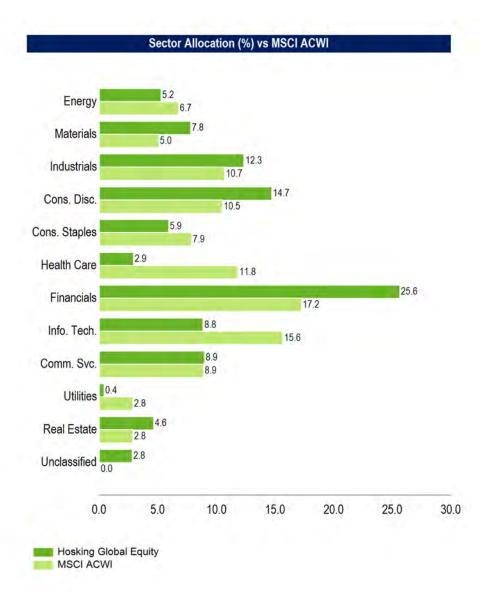
Country Allocation				
	Manager	Index	Manager	Index
	Allocation (USD)	Allocation (USD)	Return (USD)	Return (USD)
Americas				
Brazil*	1.1%	0.7%	11.8%	6.2%
Canada	2.2%	3.1%	-0.3%	0.9%
Colombia*	0.2%	0.1%	-12.6%	-2.4%
Mexico*	1.0%	0.3%	6.1%	6.9%
United States	44.0%	54.0%	5.7%	7.5%
Total-Americas	48.3%	58.3%	5.5%	7.1%
Europe				
Austria	0.1%	0.1%	-0.4%	0.4%
Belgium	0.2%	0.3%	5.5%	-5.2%
Denmark	0.8%	0.5%	7.8%	2.4%
Finland	0.2%	0.3%	10.7%	3.2%
France	1.2%	3.5%	5.2%	2.9%
Germany	1.4%	3.0%	-2.9%	-0.6%
Greece*	0.7%	0.0%	20.5%	-18.1%
Hungary*	0.2%	0.0%	2.3%	4.7%
Ireland	0.6%	0.2%	-10.3%	-5.3%
Italy	2.6%	0.8%	-2.1%	-4.2%
Luxembourg	0.4%	0.0%	-7.0%	4.4%
Netherlands	0.3%	1.1%	3.0%	-1.6%
Norway	0.3%	0.2%	3.6%	6.9%
Russia*	2.7%	0.4%	-6.3%	7.2%
Spain	1.2%	1.0%	-3.6%	-2.4%
Sweden	0.6%	0.7%	-1.7%	6.5%
Switzerland	0.6%	2.4%	12.9%	7.3%
United Kingdom	11.6%	5.7%	-3.7%	-1.6%
Total-Europe	25.6%	20.4%	-1.8%	1.0%

Country Allocation				
	Manager	Index	Manager	Index
	Allocation (USD)	Allocation (USD)	Return (USD)	Return (USD)
AsiaPacific				
Australia	0.8%	2.2%	-2.8%	-0.9%
China*	2.1%	3.7%	-16.0%	-7.3%
Hong Kong	3.5%	1.2%	-3.2%	-0.9%
India*	1.4%	1.0%	-15.1%	-2.3%
Indonesia*	0.0%	0.2%	-7.8%	2.0%
Japan	3.8%	7.7%	0.3%	3.7%
Korea*	2.4%	1.7%	-2.0%	0.4%
Malaysia*	1.2%	0.3%	1.8%	3.8%
Philippines*	0.8%	0.1%	5.5%	1.0%
Singapore	1.7%	0.4%	-1.0%	2.2%
Sri Lanka**	0.2%	0.0%	-20.0%	-13.6%
Taiwan*	0.8%	1.3%	18.5%	7.2%
Thailand*	1.6%	0.3%	8.2%	13.7%
Total-AsiaPacific	20.5%	20.1%	-2.1%	0.6%
Other				
South Africa*	2.0%	0.7%	-1.0%	-7.1%
Turkey*	0.7%	0.1%	-9.2%	-20.5%
Total-Other	2.6%	1.2%	-3.1%	-4.3%
Totals				
Developed	78.1%	88.6%	2.5%	5.1%
Emerging*	18.8%	11.4%	-1.0%	-0.9%
Frontier**	0.2%	0.0%	-20.0%	
Cash	2.9%		0.5%	

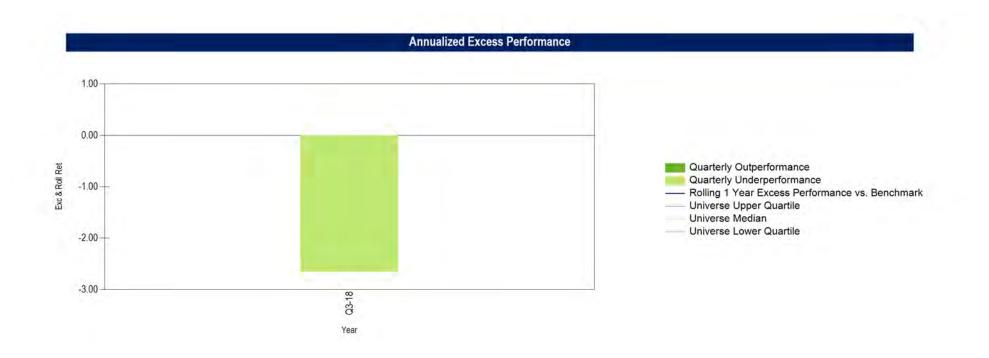


Characteristics		
	Portfolio	MSCI ACWI
Number of Holdings	493	2,791
Weighted Avg. Market Cap. (\$B)	89.30	148.68
Median Market Cap. (\$B)	7.62	9.59
Price To Earnings	24.73	21.71
Price To Book	3.08	3.84
Price To Sales	2.52	3.19
Return on Equity (%)	17.04	18.57
Yield (%)	2.07	2.37
Beta		1.00

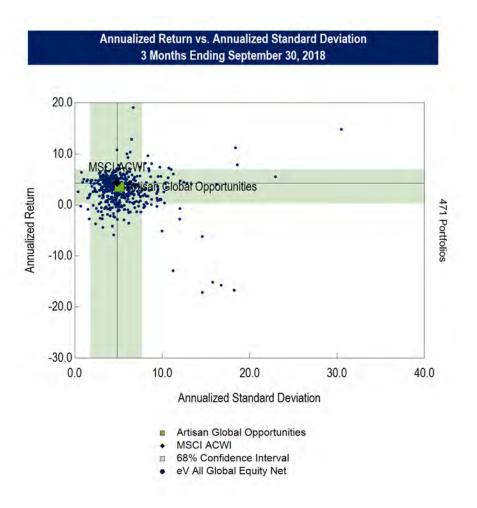








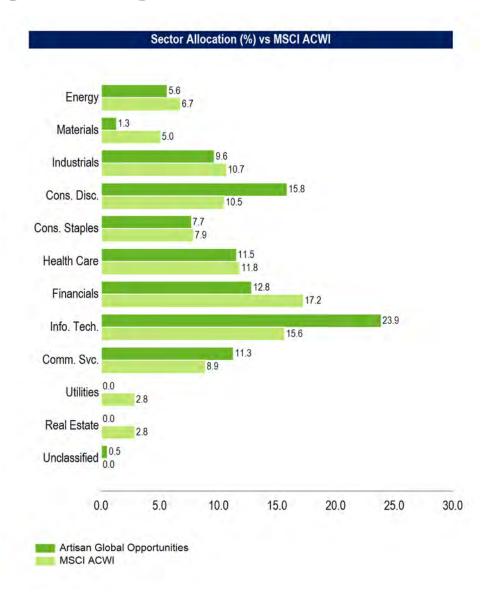






Characteristics		
	Portfolio	MSCI ACWI
Number of Holdings	49	2,791
Weighted Avg. Market Cap. (\$B)	80.36	148.68
Median Market Cap. (\$B)	31.79	9.59
Price To Earnings	42.29	21.71
Price To Book	7.68	3.84
Price To Sales	6.31	3.19
Return on Equity (%)	20.88	18.57
Yield (%)	0.90	2.37
Beta		1.00
R-Squared		1.00







Top Ten Holding	gs
VISA 'A'	7.3%
IHS MARKIT	7.1%
TECHTRONIC INDS.	3.9%
BANK OF AMERICA	3.8%
BOSTON SCIENTIFIC	3.5%
ANTHEM	3.2%
PIONEER NTRL.RES.	3.0%
TEMENOS N	3.0%
SHISEIDO	2.9%
ALPHABET A	2.8%

Top Positive Contr	ibutors	
	Relative	
	Contribution %	Return %
VISA 'A'	0.8%	13.5%
BOSTON SCIENTIFIC	0.5%	17.7%
LONZA GROUP	0.5%	29.2%
ATLASSIAN 'A'	0.4%	53.8%
AMADEUS IT GROUP	0.4%	17.8%
ANTHEM	0.4%	15.5%
TECHTRONIC INDS.	0.4%	15.5%
PROGRESSIVE OHIO	0.3%	20.1%
IHS MARKIT	0.3%	4.6%
NINTENDO	0.3%	12.6%

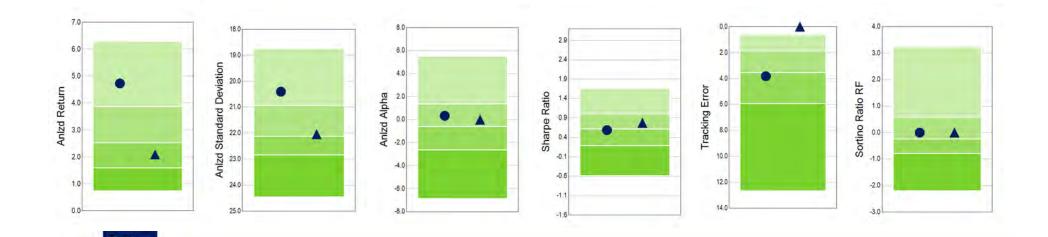
Top Negative Contributors			
	Relative		
	Contribution %	Return %	
JD.COM 'A' ADR 1:2	-0.5%	-33.0%	
TENCENT HOLDINGS	-0.3%	-17.7%	
NOBLE ENERGY	-0.3%	-11.3%	
SANDS CHINA	-0.3%	-15.3%	
STATE STREET	-0.3%	-9.5%	
HDFC BANK ADR 1:3	-0.2%	-10.4%	
APTIV	-0.2%	-8.2%	
INTERTEK GROUP	-0.2%	-13.7%	
PIONEER NTRL.RES.	-0.2%	-7.9%	
ING GROEP	-0.1%	-8.0%	

			Equity	Sector Attribution				
			Attribution Effects		Re	turns	Secto	r Weights
	Total	Selection	Allocation	Interaction				
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	-0.7%	-0.9%	0.0%	0.2%	-9.6%	2.6%	5.8%	6.8%
Materials	0.0%	-0.4%	0.1%	0.2%	-7.1%	0.4%	1.9%	5.2%
Industrials	-0.3%	-0.3%	0.0%	0.0%	3.6%	6.0%	10.6%	10.5%
Consumer Discretionary	-0.8%	-0.6%	-0.1%	-0.2%	-1.1%	3.1%	17.8%	12.4%
Consumer Staples	-0.1%	0.0%	0.0%	-0.2%	0.9%	2.3%	8.8%	8.1%
Health Care	0.5%	0.4%	0.0%	0.0%	15.1%	11.0%	11.1%	11.1%
Financials	-0.6%	-0.7%	0.0%	0.1%	-1.5%	2.6%	15.8%	17.4%
Information Technology	0.6%	0.4%	0.1%	0.1%	8.0%	6.2%	28.3%	19.7%
Communication Services	0.0%		0.0%			5.2%	0.0%	2.8%
Utilities	0.1%		0.1%			0.8%	0.0%	3.0%
Real Estate	0.2%		0.2%			-1.5%	0.0%	3.0%
Cash	0.0%	0.0%	0.0%	0.0%	0.5%		0.0%	0.0%
Portfolio	-1.1% =	-2.0% +	0.5%	+ 0.4%	3.3%	4.4%	100.0%	100.0%



Artisans Global Opportunities strategy employs a fundamental investment process to construct a diversified global equity portfolio of companies across a broad capitalization range. The investment process focuses on two distinct areas security selection and capital allocation. Security Selection Artisans Growth investment team attempts to identify companies that possess franchise characteristics that are selling at attractive valuations, and benefiting from an accelerating profit cycle. Franchise Characteristics. These are characteristics that the team believes help to protect a companys stream of cash flow from the effects of competition. The team looks for companies with at least two of the following characteristics: low cost production capability, possession of a proprietary asset, dominant market share or a defensible brand name. Attractive Valuations. Through its own fundamental research, the team estimates the amount a private market buyer would pay to buy the entire company (the companys intrinsic value or private market value) and considers whether to purchase a stock if it sells at a discount to that estimate.







Characteristics		
	Portfolio	MSCI ACWI
Number of Holdings	49	2,791
Weighted Avg. Market Cap. (\$B)	80.4	148.7
Median Market Cap. (\$B)	31.8	9.6
Price To Earnings	42.3	21.7
Price To Book	7.7	3.8
Price To Sales	6.3	3.2
Return on Equity (%)	20.9	18.6
Yield (%)	0.9	2.4
Beta		1.0

Top Positive Contr	Top Positive Contributors					
	Relative					
	Contribution %	Return %				
VISA 'A' (V)	0.8%	13.5%				
BOSTON SCIENTIFIC (BSX)	0.5%	17.7%				
LONZA GROUP (S:LONN)	0.5%	29.2%				
ATLASSIAN 'A' (TEAM)	0.4%	53.8%				
AMADEUS IT GROUP (E:AMS)	0.4%	17.8%				
ANTHEM (ANTM)	0.4%	15.5%				
TECHTRONIC INDS. (K:TRON)	0.4%	15.5%				
PROGRESSIVE OHIO (PGR)	0.3%	20.1%				
IHS MARKIT (INFO)	0.3%	4.6%				
NINTENDO (J:NNDO)	0.3%	12.6%				

Top Negative Contr	ibutors	
	Relative	
	Contribution %	Return %
JD.COM 'A' ADR 1:2 (JD)	-0.5%	-33.0%
TENCENT HOLDINGS (K:TCNT)	-0.3%	-17.7%
NOBLE ENERGY (NBL)	-0.3%	-11.3%
SANDS CHINA (K:SNDC)	-0.3%	-15.3%
STATE STREET (STT)	-0.3%	-9.5%
HDFC BANK ADR 1:3 (HDB)	-0.2%	-10.4%
APTIV (APTV)	-0.2%	-8.2%
INTERTEK GROUP (UKIR:ITRK)	-0.2%	-13.7%
PIONEER NTRL.RES. (PXD)	-0.2%	-7.9%
ING GROEP (H:INGA)	-0.1%	-8.0%

		Artisan Globa	ıl Opportunities P	Performance Attribu	ution vs. MSCI AC	:WI		
	Attribution Effects				Returns		Sector Weights	
	Total Effects	Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	-0.7%	-0.9%	0.0%	0.2%	-9.6%	2.6%	5.8%	6.8%
Materials	-0.2%	-0.4%	0.0%	0.2%	-7.1%	0.4%	1.9%	5.2%
Industrials	-0.2%	-0.3%	0.0%	0.0%	3.6%	6.0%	10.6%	10.5%
Consumer Discretionary	-0.6%	-0.6%	0.2%	-0.2%	-1.1%	3.1%	17.8%	12.4%
Consumer Staples	-0.1%	0.0%	0.0%	-0.2%	0.9%	2.3%	8.8%	8.1%
Health Care	0.4%	0.4%	0.0%	0.0%	15.1%	11.0%	11.1%	11.1%
Financials	-0.7%	-0.7%	0.0%	0.1%	-1.5%	2.6%	15.8%	17.4%
Information Technology	1.0%	0.4%	0.5%	0.1%	8.0%	6.2%	28.3%	19.7%
Communication Services	-0.1%		-0.2%			5.2%	0.0%	2.8%
Utilities	0.0%		0.0%			0.8%	0.0%	3.0%
Real Estate	0.0%		0.0%			-1.5%	0.0%	3.0%
Cash	0.0%	0.0%	0.0%	0.0%	0.5%		0.0%	0.0%
Portfolio	-1.1% =	-2.0% +	- 0.5%	+ 0.4%	3.3%	4.4%	100.0%	100.0%



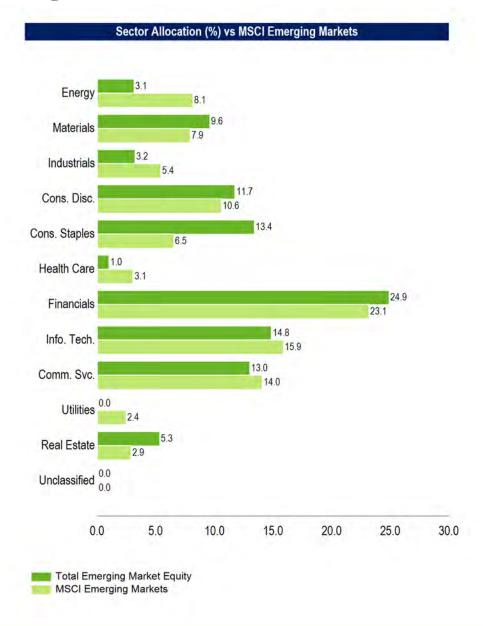
Country Allocation							
	Manager	Index	Manager	Index			
	Allocation (USD) Alloc	cation (USD)	Return (USD)	Return (USD)			
Americas							
United States	51.2%	54.0%	5.4%	7.5%			
Total-Americas	51.2%	58.3%	5.4%	7.1%			
Europe							
Belgium	0.6%	0.3%	-2.0%	-5.2%			
Denmark	2.2%	0.5%	1.9%	2.4%			
France	1.9%	3.5%	5.0%	2.9%			
Germany	2.3%	3.0%	5.7%	-0.6%			
Netherlands	4.5%	1.1%	-6.3%	-1.6%			
Spain	2.4%	1.0%	17.8%	-2.4%			
Switzerland	4.5%	2.4%	15.6%	7.3%			
United Kingdom	7.2%	5.7%	2.2%	-1.6%			
Total-Europe	25.6%	20.4%	4.9%	1.0%			

	Country Allocation								
	Manager	Index	Manager	Index					
	Allocation (USD)	Allocation (USD)	Return (USD)	Return (USD)					
AsiaPacific									
Australia	3.5%	2.2%	-4.0%	-0.9%					
China*	1.5%	3.7%	-33.0%	-7.3%					
Hong Kong	6.9%	1.2%	-5.4%	-0.9%					
India*	2.4%	1.0%	-10.4%	-2.3%					
Japan	8.1%	7.7%	5.7%	3.7%					
Total-AsiaPacific	22.3%	20.1%	-3.5%	0.6%					
Other									
South Africa*	0.9%	0.7%	4.7%	-7.1%					
Total-Other	0.9%	1.2%	4.7%	-4.3%					
Totals									
Developed	95.2%	88.6%	4.2%	5.1%					
Emerging*	4.8%	11.4%	-14.7%	-0.9%					
Cash	0.0%		0.5%						



	Characteristics		
		Portfolio	MSCI Emerging Markets
Number of Holdings		65	1,151
Weighted Avg. Market Cap. (\$B)		70.04	79.27
Median Market Cap. (\$B)		15.38	5.31
Price To Earnings		23.77	18.58
Price To Book		4.44	3.09
Price To Sales		5.10	2.52
Return on Equity (%)		22.09	17.71
Yield (%)		2.29	2.65
	Portfolio		Index
	Q3-18		Q3-18
Region Weighting			
North America ex U.S.			
United States	1.63		0.57
Europe Ex U.K.	-		0.35
United Kingdom	0.49		0.21
Pacific Basin Ex Japan	15.88		12.67
Japan			
Emerging Markets	81.99		85.14
Other			1.07







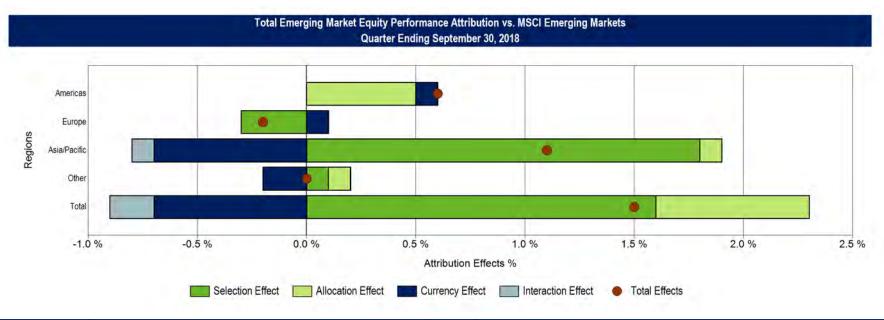
Top Ten Holdings	
TENCENT HOLDINGS	6.4%
SAMSUNG ELTN.PREF.	6.3%
TAIWAN SEMICON.MNFG.	5.1%
HOUSING DEVELOPMENT FINANCE CORPORATION	3.3%
PING AN INSURANCE (GROUP) OF CHINA 'H'	2.8%
VALE ON ADR 1:1	2.7%
AIA GROUP	2.6%
BNC.BRADESCO PF.SPN.ADR 1:1	2.6%
KWEICHOW MOUTAI 'A'	2.4%
ASTRA INTERNATIONAL	2.3%

Top Positive Contr	ibutors	
	Relative	
	Contribution %	Return %
VALE ON ADR 1:1	0.5%	18.7%
GRUPO AEROPORTUARIO DEL SURESTE 'B'	0.3%	27.5%
TAIWAN SEMICON.MNFG.	0.3%	21.1%
SIAM CEMENT FB	0.3%	19.1%
GPO FINANCE BANORTE	0.3%	21.5%
NASPERS	0.3%	-15.0%
PJSC LUKOIL SPON (LON) ADR	0.3%	15.5%
FOM.ECO.MEXNO.SAB DE CV SPN.ADR 1:10	0.3%	12.7%
ICT.TUNGGAL PRAKARSA	0.2%	30.3%
SIAM COML. BANK FB	0.2%	22.8%

Top Negative Contributors						
	Relative					
	Contribution %	Return %				
HANGZHOU HIK VIS.DIG. TECH.'A'	-0.4%	-25.5%				
HOUSING DEVELOPMENT FINANCE CORPORATION	-0.3%	-12.4%				
KOTAK MAHINDRA BANK	-0.3%	-19.6%				
MTN GROUP (OTC)	-0.3%	-24.3%				
TENCENT HOLDINGS	-0.3%	-17.7%				
ULTRAPAR PARTICIPOES ON	-0.2%	-20.7%				
HERO MOTOCORP	-0.2%	-19.3%				
MAGNIT	-0.2%	-17.8%				
AMOREPACIFIC GROUP	-0.1%	-24.1%				
YUM CHINA HOLDINGS	-0.1%	-8.5%				
HOUSING DEVELOPMENT FINANCE CORPORATION KOTAK MAHINDRA BANK MTN GROUP (OTC) TENCENT HOLDINGS ULTRAPAR PARTICIPOES ON HERO MOTOCORP MAGNIT AMOREPACIFIC GROUP	-0.4% -0.3% -0.3% -0.3% -0.2% -0.2% -0.2% -0.1%	-12.4% -19.6% -24.3% -17.7% -20.7% -19.3% -17.8% -24.1%				

			Equity S	ector Attribution				
		,	Attribution Effects		Return	s	Sector Wei	ghts
	Total	Selection	Allocation	Interaction				
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	-1.0%	-1.1%	-0.7%	0.8%	1.0%	14.5%	3.1%	7.2%
Materials	0.8%	0.6%	0.1%	0.1%	12.5%	4.6%	9.2%	7.6%
Industrials	0.3%	0.5%	-0.1%	-0.2%	15.0%	2.7%	2.8%	5.2%
Consumer Discretionary	0.7%	0.8%	0.1%	-0.2%	-3.9%	-10.3%	9.2%	9.8%
Consumer Staples	-0.2%	0.3%	-0.1%	-0.4%	-2.4%	-2.6%	14.5%	6.6%
Health Care	0.2%	0.1%	0.1%	0.0%	-2.6%	-7.0%	1.4%	3.2%
Financials	-0.2%	-0.2%	0.1%	-0.1%	0.7%	1.5%	26.3%	22.8%
Information Technology	0.7%	0.7%	0.2%	-0.2%	-2.1%	-4.5%	24.2%	28.0%
Communication Services	-0.1%	-0.1%	0.0%	0.1%	0.0%	1.9%	3.4%	4.3%
Utilities	0.0%		0.0%			-1.9%	0.0%	2.4%
Real Estate	0.2%	0.2%	-0.2%	0.2%	0.5%	-5.5%	6.0%	2.9%
Cash	0.0%						0.0%	0.0%
Portfolio	1.5% =	1.8% +	-0.5% -	+ 0.2%	0.6%	-0.9%	100.0%	100.0%





	Returns and Weights				Attribution Effects				
	Manager	Index	Manager	Index	Selection	Allocation	Currency	Interaction	Total
	Return	Return	Weight	Weight	Effect	Effect	Effect	Effect	Effects
Totals									
Americas	5.7%	4.8%	20.3%	10.8%	0.0%	0.5%	0.1%	0.0%	0.6%
Europe	2.3%	6.3%	5.2%	5.3%	-0.3%	0.0%	0.1%	0.0%	-0.2%
Asia/Pacific	-0.2%	-1.7%	69.7%	75.1%	1.8%	0.1%	-0.7%	-0.1%	1.1%
Other	-11.6%	-5.9%	4.9%	8.8%	0.1%	0.1%	-0.2%	0.0%	0.0%
Total	0.6%	-0.9%	100.0%	100.0%	1.6%	0.7%	-0.7%	-0.2%	1.5%
Totals									
Developed	-5.9%		19.8%	0.0%	0.0%	0.0%	0.0%	-1.2%	-1.2%
Emerging*	2.1%	-0.9%	80.2%	100.0%	4.2%	0.0%	-0.7%	-0.8%	2.7%



Country Allocation							
	Manager	Index	Manager	Index			
	Allocation (USD) Alle	ocation (USD)	Return (USD)	Return (USD)			
Americas							
Brazil*	10.9%	5.9%	3.6%	6.2%			
Chile*	2.1%	1.1%	-5.4%	-1.9%			
Mexico*	5.3%	2.9%	19.6%	6.9%			
United States	2.0%	0.0%	-8.5%	7.4%			
Total-Americas	20.3%	10.8%	5.7%	4.8%			
Europe							
Hungary*	0.9%	0.3%	1.6%	4.7%			
Poland*	1.1%	1.1%	2.5%	11.0%			
Portugal	0.2%	0.0%	2.0%	-0.6%			
Russia*	3.1%	3.4%	2.4%	7.2%			
Total-Europe	5.2%	5.3%	2.3%	6.3%			

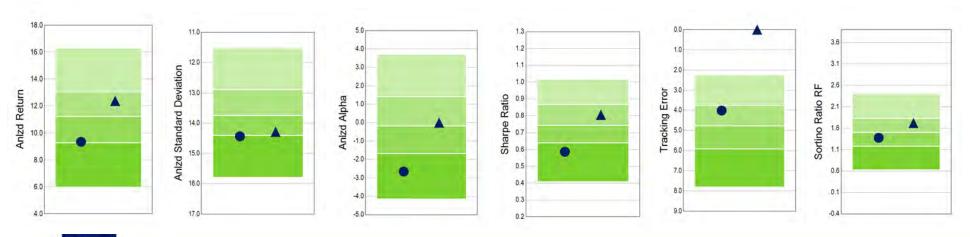
Country Allocation						
	Manager	Index	Manager	Index		
	Allocation (USD) A	Allocation (USD)	Return (USD)	Return (USD)		
AsiaPacific						
China*	8.6%	32.7%	-5.9%	-7.3%		
Hong Kong	17.5%	0.0%	-6.7%	-0.9%		
India*	15.2%	8.6%	-6.3%	-2.3%		
Indonesia*	4.9%	1.9%	11.4%	2.0%		
Korea*	10.4%	14.7%	-1.3%	0.3%		
Malaysia*	1.5%	2.3%	5.8%	3.8%		
Philippines*	3.8%	0.9%	-1.2%	1.1%		
Taiwan*	5.1%	11.6%	21.1%	7.1%		
Thailand*	2.7%	2.2%	20.4%	13.7%		
Total-AsiaPacific	69.7%	75.1%	-0.8%	-1.7%		
Other						
South Africa*	3.1%	6.3%	-9.5%	-7.1%		
Turkey*	1.8%	0.8%	-13.2%	-20.3%		
Total-Other	4.9%	8.7%	-12.2%	-6.0%		
Totals						
Developed	19.8%	0.0%	-6.9%			
Emerging*	80.2%	100.0%	1.9%	-1.0%		



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.



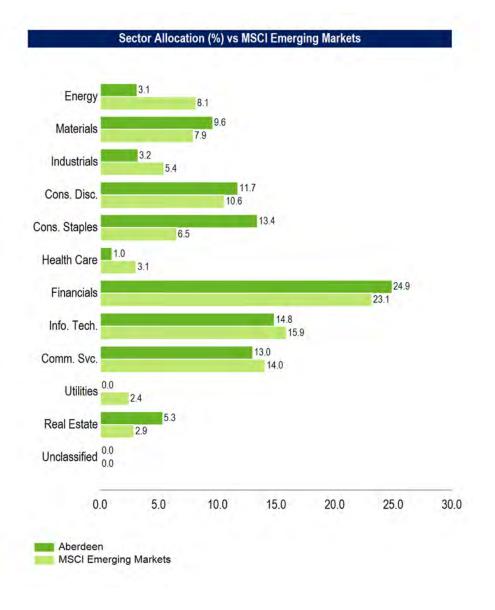
3 Year Risk Statistics





Characteristics		
	Portfolio	MSCI Emerging Markets
Number of Holdings	65	1,151
Weighted Avg. Market Cap. (\$B)	70.04	79.27
Median Market Cap. (\$B)	15.38	5.31
Price To Earnings	23.77	18.58
Price To Book	4.44	3.09
Price To Sales	5.10	2.52
Return on Equity (%)	22.09	17.71
Yield (%)	2.29	2.65
Beta	0.97	1.00
R-Squared	0.92	1.00







Characteristics		
	Portfolio	MSCI Emerging Markets
Number of Holdings	65	1,151
Weighted Avg. Market Cap. (\$B)	70.0	79.3
Median Market Cap. (\$B)	15.4	5.3
Price To Earnings	23.8	18.6
Price To Book	4.4	3.1
Price To Sales	5.1	2.5
Return on Equity (%)	22.1	17.7
Yield (%)	2.3	2.7
Beta	1.0	1.0
R-Squared	0.9	1.0

Top Positive Contr	ibutors	
	Relative	
	Contribution %	Return %
VALE ON ADR 1:1 (VALE)	0.5%	18.7%
GRUPO AEROPORTUARIO DEL SURESTE 'B' (MX:AUS)	0.3%	27.5%
TAIWAN SEMICON.MNFG. (TW:TSM)	0.3%	21.1%
SIAM CEMENT FB (Q:SCQF)	0.3%	19.1%
GPO FINANCE BANORTE (MX:GTB)	0.3%	21.5%
NASPERS (R:NPNJ)	0.3%	-15.0%
PJSC LUKOIL SPON (LON) ADR (UKIR:LKOD)	0.3%	15.5%
FOM.ECO.MEXNO.SAB DE CV SPN.ADR 1:10 (FMX)	0.3%	12.7%
ICT.TUNGGAL PRAKARSA (ID:INC)	0.2%	30.3%
SIAM COML. BANK FB (Q:SBBF)	0.2%	22.8%
L D C AGULO	110015	

Top Negative Contri	Relative	
	Contribution %	Return %
HANGZHOU HIK VIS.DIG. TECH.'A' (CN:HVD)	-0.4%	-25.5%
HOUSING DEVELOPMENT FINANCE CORPORATION (IN:HDF)	-0.3%	-12.4%
KOTAK MAHINDRA BANK (IN:KOK)	-0.3%	-19.6%
MTN GROUP (OTC) (MTNOF)	-0.3%	-24.3%
TENCENT HOLDINGS (K:TCNT)	-0.3%	-17.7%
ULTRAPAR PARTICIPOES ON (BR:U3G)	-0.2%	-20.7%
HERO MOTOCORP (IN:HER)	-0.2%	-19.3%
MAGNIT (RS:MGN)	-0.2%	-17.8%
AMOREPACIFIC GROUP (KO:PHM)	-0.1%	-24.1%
YUM CHINA HOLDINGS (YUMC)	-0.1%	-8.5%

	Aberdeen Performance Attribution vs. MSCI Emerging Markets							
	Attribution Effects				Retur	Returns		eights
	Total	Selection	Allocation	Interaction				
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	-1.0%	-1.1%	-0.7%	0.8%	1.0%	14.5%	3.1%	7.2%
Materials	0.8%	0.6%	0.1%	0.1%	12.5%	4.6%	9.2%	7.6%
Industrials	0.3%	0.5%	-0.1%	-0.2%	15.0%	2.7%	2.8%	5.2%
Consumer Discretionary	0.6%	0.8%	0.1%	-0.2%	-3.9%	-10.3%	9.2%	9.8%
Consumer Staples	-0.2%	0.3%	-0.1%	-0.4%	-2.4%	-2.6%	14.5%	6.6%
Health Care	0.2%	0.1%	0.1%	0.0%	-2.6%	-7.0%	1.4%	3.2%
Financials	-0.2%	-0.2%	0.1%	-0.1%	0.7%	1.5%	26.3%	22.8%
Information Technology	0.7%	0.7%	0.2%	-0.2%	-2.1%	-4.5%	24.2%	28.0%
Communication Services	-0.1%	-0.1%	0.0%	0.1%	0.0%	1.9%	3.4%	4.3%
Utilities	0.0%		0.0%			-1.9%	0.0%	2.4%
Real Estate	0.2%	0.2%	-0.2%	0.2%	0.5%	-5.5%	6.0%	2.9%
Cash	0.0%	-					0.0%	0.0%
Portfolio	1.5% =	1.8% +	-0.5%	+ 0.2%	0.6%	-0.9%	100.0%	100.0%



Top Ten Holdings	
TENCENT HOLDINGS	6.4%
SAMSUNG ELTN.PREF.	6.3%
TAIWAN SEMICON.MNFG.	5.1%
HOUSING DEVELOPMENT FINANCE CORPORATION	3.3%
PING AN INSURANCE (GROUP) OF CHINA 'H'	2.8%
VALE ON ADR 1:1	2.7%
AIA GROUP	2.6%
BNC.BRADESCO PF.SPN.ADR 1:1	2.6%
KWEICHOW MOUTAI 'A'	2.4%
ASTRA INTERNATIONAL	2.3%

Top Positive Contr	ibutors	
	Relative	
	Contribution %	Return %
VALE ON ADR 1:1	0.5%	18.7%
GRUPO AEROPORTUARIO DEL SURESTE 'B'	0.3%	27.5%
TAIWAN SEMICON.MNFG.	0.3%	21.1%
SIAM CEMENT FB	0.3%	19.1%
GPO FINANCE BANORTE	0.3%	21.5%
NASPERS	0.3%	-15.0%
PJSC LUKOIL SPON (LON) ADR	0.3%	15.5%
FOM.ECO.MEXNO.SAB DE CV SPN.ADR 1:10	0.3%	12.7%
ICT.TUNGGAL PRAKARSA	0.2%	30.3%
SIAM COML. BANK FB	0.2%	22.8%

Top Negative Contributors						
	Relative					
	Contribution %	Return %				
HANGZHOU HIK VIS.DIG. TECH.'A'	-0.4%	-25.5%				
HOUSING DEVELOPMENT FINANCE CORPORATION	-0.3%	-12.4%				
KOTAK MAHINDRA BANK	-0.3%	-19.6%				
MTN GROUP (OTC)	-0.3%	-24.3%				
TENCENT HOLDINGS	-0.3%	-17.7%				
ULTRAPAR PARTICIPOES ON	-0.2%	-20.7%				
HERO MOTOCORP	-0.2%	-19.3%				
MAGNIT	-0.2%	-17.8%				
AMOREPACIFIC GROUP	-0.1%	-24.1%				
YUM CHINA HOLDINGS	-0.1%	-8.5%				

			Equity	Sector Attribution				
			Attribution Effects		Re	eturns	Secto	or Weights
	Total	Selection	Allocation	Interaction				
	Effects	Effect	Effect	Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	-1.0%	-1.1%	-0.7%	0.8%	1.0%	14.5%	3.1%	7.2%
Materials	0.8%	0.6%	0.1%	0.1%	12.5%	4.6%	9.2%	7.6%
Industrials	0.3%	0.5%	-0.1%	-0.2%	15.0%	2.7%	2.8%	5.2%
Consumer Discretionary	0.7%	0.8%	0.1%	-0.2%	-3.9%	-10.3%	9.2%	9.8%
Consumer Staples	-0.2%	0.3%	-0.1%	-0.4%	-2.4%	-2.6%	14.5%	6.6%
Health Care	0.2%	0.1%	0.1%	0.0%	-2.6%	-7.0%	1.4%	3.2%
Financials	-0.2%	-0.2%	0.1%	-0.1%	0.7%	1.5%	26.3%	22.8%
Information Technology	0.7%	0.7%	0.2%	-0.2%	-2.1%	-4.5%	24.2%	28.0%
Communication Services	-0.1%	-0.1%	0.0%	0.1%	0.0%	1.9%	3.4%	4.3%
Utilities	0.0%		0.0%			-1.9%	0.0%	2.4%
Real Estate	0.2%	0.2%	-0.2%	0.2%	0.5%	-5.5%	6.0%	2.9%
Cash	0.0%				-		0.0%	0.0%
Portfolio	1.5% =	1.8% +	-0.5%	+ 0.2%	0.6%	-0.9%	100.0%	100.0%



Country Allocation						
	Manager	Index	Manager	Index		
	Allocation (USD) Alloc	ation (USD)	Return (USD)	Return (USD)		
Americas						
Brazil*	10.9%	5.9%	3.6%	6.2%		
Chile*	2.1%	1.1%	-5.4%	-1.9%		
Mexico*	5.3%	2.9%	19.6%	6.9%		
United States	2.0%	0.0%	-8.5%	7.4%		
Total-Americas	20.3%	10.8%	5.7%	4.8%		
Europe						
Hungary*	0.9%	0.3%	1.6%	4.7%		
Poland*	1.1%	1.1%	2.5%	11.0%		
Portugal	0.2%	0.0%	2.0%	-0.6%		
Russia*	3.1%	3.4%	2.4%	7.2%		
Total-Europe	5.2%	5.3%	2.3%	6.3%		

Country Allocation						
	Manager		Manager	Index		
	Allocation (USD)	Allocation (USD)	Return (USD)	Return (USD)		
AsiaPacific						
China*	8.6%	32.7%	-3.7%	-7.3%		
Hong Kong	17.5%	0.0%	-5.7%	-0.9%		
India*	15.2%	8.6%	-6.2%	-2.3%		
Indonesia*	4.9%	1.9%	11.7%	2.0%		
Korea*	10.4%	14.7%	-1.3%	0.4%		
Malaysia*	1.5%	2.3%	5.8%	3.8%		
Philippines*	3.8%	0.9%	-1.0%	1.0%		
Taiwan*	5.1%	11.6%	21.1%	7.2%		
Thailand*	2.7%	2.2%	20.4%	13.7%		
Total-AsiaPacific	69.7%	75.1%	-0.2%	-1.7%		
Other						
South Africa*	3.1%	6.3%	-9.9%	-7.1%		
Turkey*	1.8%	0.8%	-14.5%	-20.5%		
Total-Other	4.9%	8.8%	-11.6%	-5.9%		
Totals						
Developed	19.8%	0.0%	-5.9%			
Emerging*	80.2%	100.0%	2.1%	-0.9%		



APPENDIX

NEPC, LLC —

INFORMATION DISCLAIMER

- Past performance is no guarantee of future results.
- The goal of this report is to provide a basis for substantiating asset allocation recommendations. The opinions presented herein represent the good faith views of NEPC as of the date of this report and are subject to change at any time.
- Information on market indices was provided by 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.
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