



## City of Fort Lauderdale



### Investment Performance Review For the Quarter Ended September 30, 2018

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## Executive Summary

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The City of Ft. Lauderdale OPEB Trust (the “OPEB”) portfolio gained 2.85% (net of mutual fund fees) in the 3rd quarter of 2018, in line with its policy benchmark return of 2.91%. Over the prior 12-months, the portfolio returned 8.14%, underperforming its 8.84% benchmark return by 0.70%. In dollar terms, the portfolio earned \$742,639 in return on investment over the quarter, and gained \$910,350 year-to-date.

In general, positive domestic equity returns were driven by a U.S. economy continuing to expand, with real gross domestic product (GDP) growth for the quarter projected to be 4.1%, and unemployment declining to 3.7% as of September. The S&P 500 Index (S&P) posted a positive return of 7.7% for the quarter, which is the best quarter performance since the first quarter of 2013. Non-US developed equity dragged behind US equity with a return of 1.4% as measured by the MSCI EAFE Index, largely due to geopolitical instability and the lingering haze of ongoing global trade tensions. Emerging markets (EM) measured by the MSCI EM Index lost -1.1% for the quarter mostly driven by the Turkish currency and debt crisis.

Risks we continue to monitor closely include the effects of the Fed rate hikes, and escalating trade tensions with China. The Fed has pegged 3% as the neutral rate, so we can expect to see the Fed raise rates in December and possibly two to four times in 2019. Essentially, the OPEB portfolio continues to be invested in compliance with its investment policy statement guidelines with a focus on the long-term preservation and growth of purchasing power to meet the OPEB’s annual target return of 7.0%.



# Executive Summary

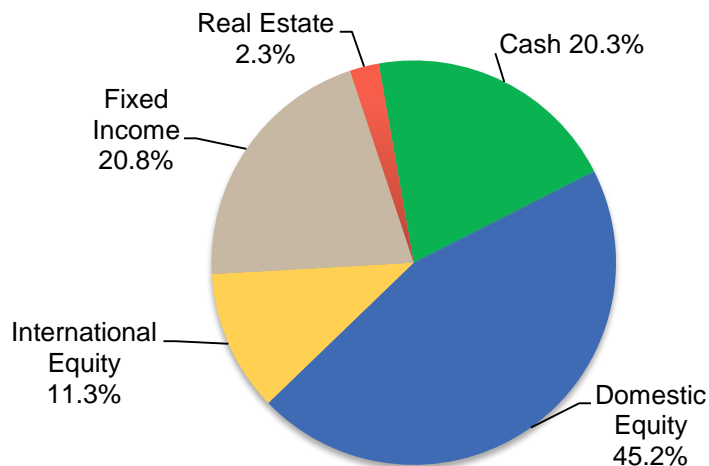
## Current Asset Allocation

Asset Class	Market Value	Pct (%)
Cash	\$5,424,342	20.3%
Domestic Equity	12,066,426	45.2%
International Equity	3,018,646	11.3%
Fixed Income	5,546,741	20.8%
Alternative Investments	621,022	2.3%
<b>Total</b>	<b>\$26,677,176</b>	<b>100.0%</b>

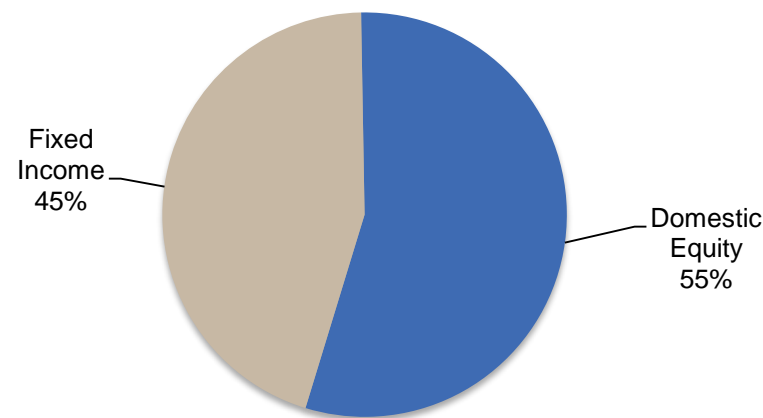
## Target Asset Allocation

Asset Class	Market Value	Pct (%)
Cash	\$0	0%
Domestic Equity	14,672,447	55%
International Equity	\$0	0%
Fixed Income	12,004,729	45%
Alternative Investments	\$0	0%
<b>Total</b>	<b>\$26,677,176</b>	<b>100%</b>

## Current Asset Allocation



## Target Asset Allocation



## Markets & Economy



## QUARTERLY MARKET SUMMARY

## Market Index Performance

As of September 30, 2018

	QTD	YTD	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
<b>DOMESTIC EQUITY</b>								
S&P 500 Index	7.71%	10.56%	17.91%	18.26%	17.31%	13.95%	16.91%	11.97%
Russell 3000 Index	7.12%	10.57%	17.58%	18.14%	17.07%	13.46%	16.86%	12.01%
Russell 1000 Value Index	5.70%	3.92%	9.45%	12.25%	13.55%	10.72%	15.02%	9.79%
Russell 1000 Growth Index	9.17%	17.09%	26.30%	24.10%	20.55%	16.58%	18.69%	14.31%
Russell Midcap Index	5.00%	7.46%	13.98%	14.65%	14.52%	11.65%	16.09%	12.31%
Russell 2500 Index	4.70%	10.41%	16.19%	16.99%	16.13%	11.37%	16.49%	12.02%
Russell 2000 Index	3.58%	11.51%	15.24%	17.96%	17.12%	11.07%	16.43%	11.11%
Russell 2000 Value Index	1.60%	7.14%	9.33%	14.80%	16.12%	9.91%	15.26%	9.52%
Russell 2000 Growth Index	5.52%	15.76%	21.06%	21.02%	17.98%	12.14%	17.52%	12.65%
<b>INTERNATIONAL EQUITY</b>								
MSCI EAFE (net)	1.35%	-1.43%	2.74%	10.62%	9.23%	4.42%	8.30%	5.38%
MSCI AC World Index (net)	4.28%	3.83%	9.77%	14.13%	13.40%	8.67%	11.62%	8.19%
MSCI AC World ex-U.S. (net)	0.71%	-3.09%	1.76%	10.33%	9.97%	4.12%	7.25%	5.18%
MSCI AC World ex-U.S. Small Cap (net)	-1.51%	-4.41%	1.86%	10.19%	11.24%	6.14%	9.05%	8.73%
MSCI EM (net)	-1.09%	-7.68%	-0.81%	10.21%	12.36%	3.61%	5.03%	5.40%
<b>ALTERNATIVES</b>								
FTSE NAREIT Equity REIT Index	0.79%	1.81%	3.35%	2.00%	7.64%	9.16%	11.75%	7.44%
FTSE EPRA/NAREIT Developed Index	-0.15%	0.76%	4.62%	3.06%	7.16%	6.34%	10.17%	6.88%
Bloomberg Commodity Index Total Return	-2.02%	-2.03%	2.59%	1.14%	-0.11%	-7.18%	-6.48%	-6.24%
<b>FIXED INCOME</b>								
Bloomberg Barclays U.S. Aggregate	0.02%	-1.60%	-1.22%	-0.57%	1.31%	2.16%	2.02%	3.77%
Bloomberg Barclays U.S. Government/Credit	0.06%	-1.85%	-1.37%	-0.69%	1.45%	2.23%	2.10%	3.95%
Bloomberg Barclays Intermediate U.S. Gov/Credit	0.21%	-0.76%	-0.96%	-0.37%	0.91%	1.52%	1.63%	3.22%
Bloomberg Barclays U.S. Treasury: 1-3 Year	0.19%	0.24%	-0.04%	0.10%	0.36%	0.56%	0.53%	1.10%
Bloomberg Barclays U.S.-Corp: High Yield	2.40%	2.57%	3.05%	5.92%	8.15%	5.54%	7.64%	9.46%
Credit Suisse Leveraged Loan Index	1.93%	4.36%	5.58%	5.47%	5.43%	4.35%	5.45%	5.84%
ICE BofAML Global HY Constrained (USD)	2.03%	0.50%	1.27%	5.47%	7.86%	4.78%	7.42%	9.24%
Bloomberg Barclays Global Aggregate ex-USD	-1.74%	-3.02%	-1.44%	-1.93%	2.41%	-0.33%	-0.06%	2.20%
JPM EMBI Global Diversified	2.30%	-3.04%	-1.92%	1.29%	6.04%	5.38%	5.87%	7.55%
<b>CASH EQUIVALENT</b>								
90-Day U.S. Treasury Bill	0.49%	1.30%	1.59%	1.11%	0.80%	0.50%	0.37%	0.32%

Source: Investment Metrics. Returns are expressed as percentages. Please refer to the last page of this document for important disclosures relating to this material.

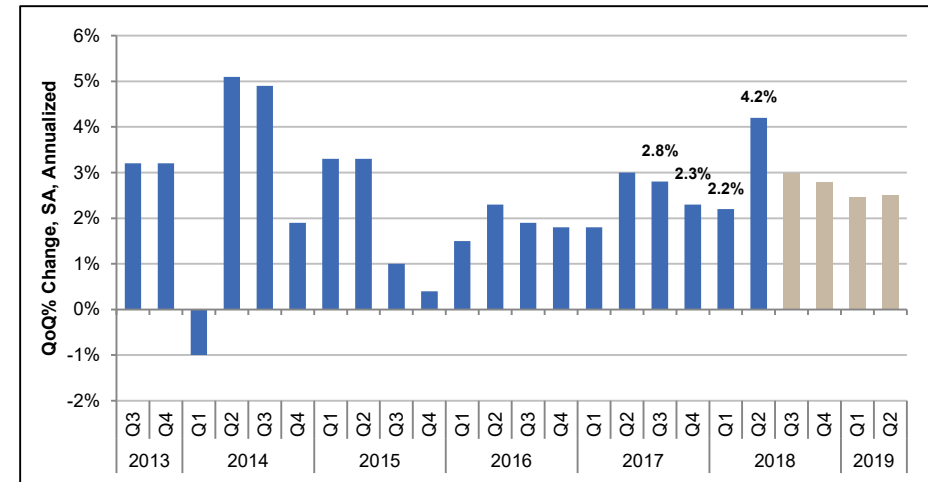


## THE ECONOMY

- Real gross domestic product (GDP) for the third quarter of 2018 is projected to be 4.1% by the Federal Reserve Bank of Atlanta (Atlanta Fed) GDPNow forecast. The forecast is based on many factors including manufacturing, trade, home sales and inflation estimates. This is down slightly from the second quarter's real GDP growth of 4.2%.
- The unemployment rate continued to decline in the third quarter to 3.7%, as of the end of September. Total nonfarm payroll employment increased by 134,000 in September. Last year at this time, the unemployment rate was 4.2%. The U.S. labor force participation rate remained flat at 62.7%.
- September's year-over-year (YoY) inflation rate came in at 2.3%, slightly below expectations of 2.4%. Core inflation, which excludes food and energy, was stable at 2.2%, the same as in August but below forecasts of 2.3%. Disposable personal income (DPI) increased 0.3%, while personal consumption expenditures (PCE) increased by 0.1% in both July and August. The September Purchasing Managers Index (PMI) registered 59.8%, a decrease of 1.5% from the August reading of 61.3%. Overall, the U.S. economy is exhibiting signs of strong growth and stabilization.
- Global growth for 2018 and 2019 is still projected at 3.9%. China's GDP increased by 6.8% during the third quarter, meeting expectations. Global trade tensions with the U.S. are expected to take a small toll on global growth through 2019.

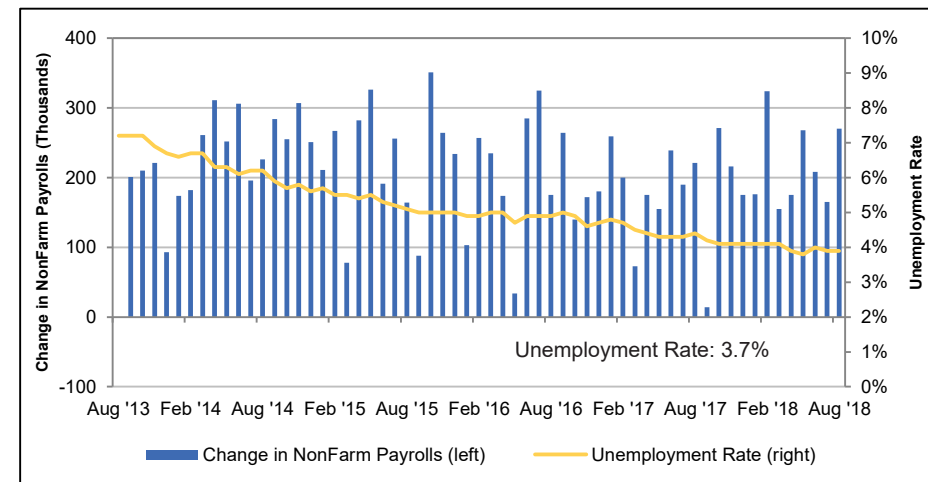
### U.S. Real GDP Growth

(Seasonally Adjusted)



Source: Bloomberg. Blue bars indicate actual numbers; taupe bars indicate forecasted estimates.

### Change in NonFarm Payrolls



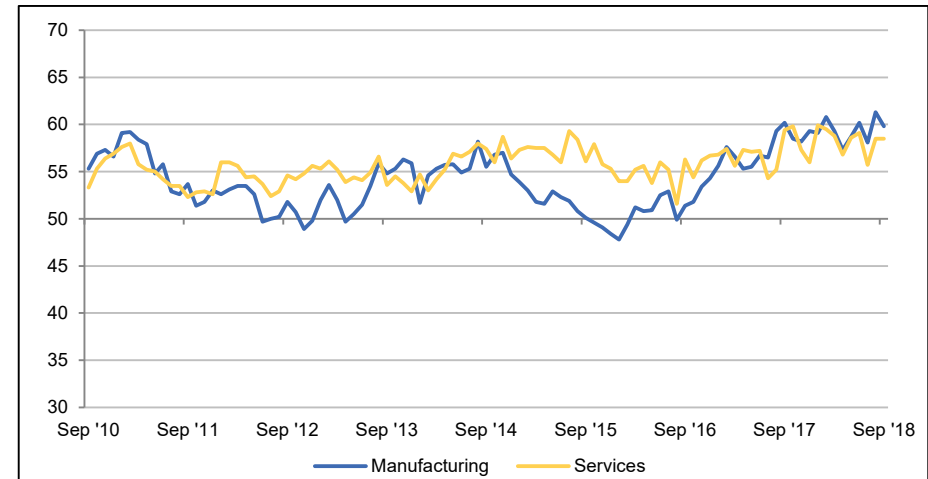
Source: Bloomberg.



## WHAT WE'RE WATCHING

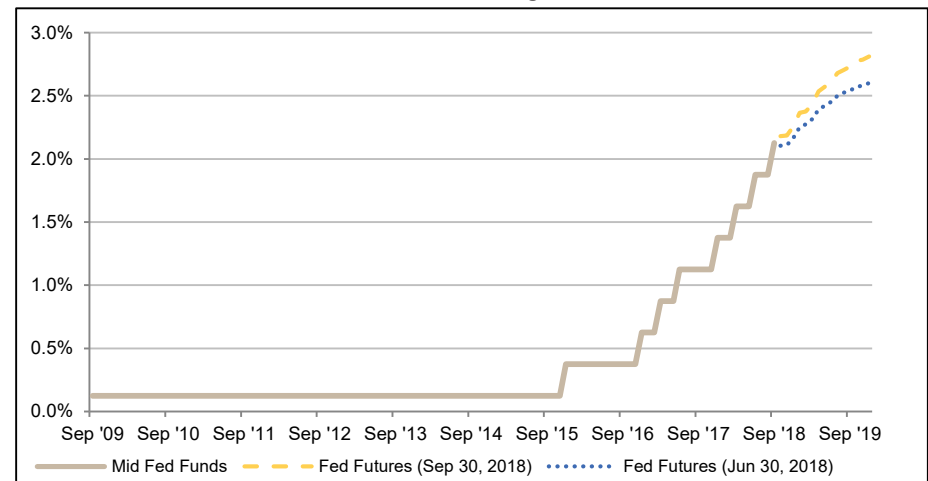
- The U.S. Treasury yield curve has been steepening recently after a long period of flattening. A rationale cited is the increased cost of U.S. dollar (USD) hedging for foreign buyers leading to a decrease in demand for U.S. bonds. The front end is expected to keep rising as the market anticipates a 71.5% chance of a December rate hike by the Federal Reserve (Fed).
- The U.S.-China trade war escalated on September 17 when President Trump announced the U.S. would impose 10% tariffs on \$200 billion worth of goods starting on September 24 and was prepared to tax all imports. These tariffs will rise to 25% on January 1, 2019. China retaliated with new tariffs on \$60 billion worth of U.S. goods. Trade tensions are expected to escalate further with no timeline for resolution.
- On October 1, it was announced the U.S., Mexico and Canada had struck a deal to replace the North American Free Trade Agreement (NAFTA) with the United States–Mexico–Canada Agreement (USMCA). This replacement was more of an adjustment with big implications for the North American automobile and dairy markets, in particular. USMCA requires automobiles to have 75% of their components made in either Mexico, Canada or the U.S., and it also stipulates that 40-45% of those parts must be made by workers who earn at least \$16 an hour. Furthermore, Canada will set new quotas on U.S. dairy that will give American dairy farmers access to up to 3.6% of Canada's dairy market.
- Notably, the Fed ended an era of accommodative monetary policy by removing the term "accommodative" from its policy statement released after its September meeting. At the September meeting, the Fed also raised rates for the third time in 2018, targeting a range of 2-2.25%. The Fed has pegged 3% as the neutral rate, so we can expect to see the Fed raise rates in December and two more times in the first two quarters of 2019.

ISM Manufacturing &amp; Services PMI



Source: Bloomberg.

Federal Funds Target Rate



Source: Bloomberg.





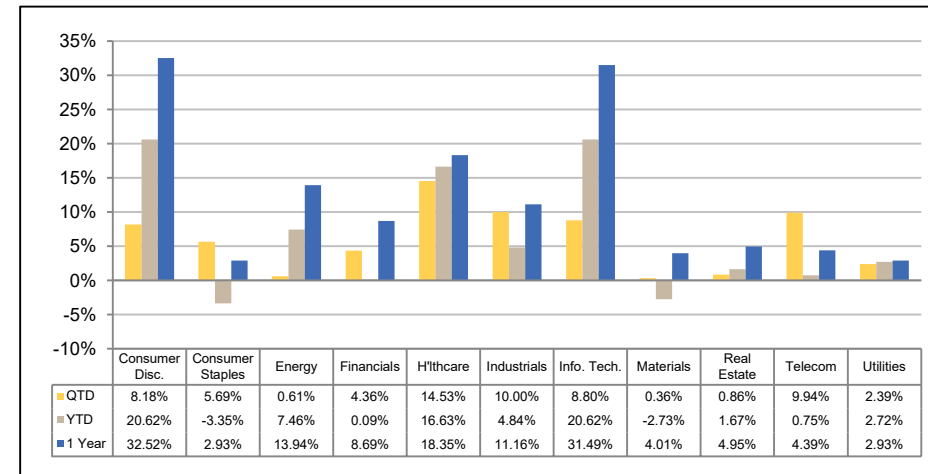
## QUARTERLY MARKET SUMMARY

## DOMESTIC EQUITY

- Domestic equity indices posted a strong quarter in third-quarter 2018, with large-caps outperforming mid- and small-caps. Large-caps, represented by Russell 1000 Index returned 7.4%, while mid-caps (represented by Russell Midcap Index) returned 5.0% and small-caps (represented by Russell 2000 Index) returned 3.6%. This quarter saw a reversal in the trend of small-caps outperforming large-caps, but small-caps continue to outperform large-caps on a year-to-date (YTD) basis.
- The S&P 500 Index (S&P) posted a positive return of 7.7% for the quarter, which is the best quarter performance since the first quarter of 2013. The resolution of trade agreements with Mexico and Canada and strong earnings growth helped propel the market higher.
- Earnings growth continued to be strong in the second quarter of 2018. According to FactSet Earnings Insight (as of October 5, 2018), for second-quarter 2018, earnings growth and revenue growth for the S&P came in at 25.0% and 10.1%, respectively. The expected earnings growth for the third quarter is at 19.1%, with the expected earnings growth for the full year of 2018 at 20.3%, according to FactSet Earnings Insight (as of October 5, 2018).
- During the quarter, growth stocks continued to outperform value stocks across all market capitalizations, continuing the trend evidenced on a YTD basis. Growth stocks (represented by Russell 1000 Growth Index) returned 9.2%, while the Russell 1000 Value Index returned 5.7% for the quarter.
- As of September 21, 2018, S&P and MSCI have restructured Global Industry Classification Standards (GICS) to change the composition of Telecom and rename it Communication Services. For the S&P, 16 Consumer Discretionary stocks (22% of the sector) and seven Information Technology (Info. Tech.) stocks (20% of the sector), will be reclassified as Communication Services. As a result, within the S&P, Communication Services now constitutes close to 10% of the Index compared with 2% of the Telecom sector (prior to reclassification).
- All sectors within the S&P generated positive returns for the quarter, with Healthcare (+14.5%) and Industrials (+10.0%) being the best performers.

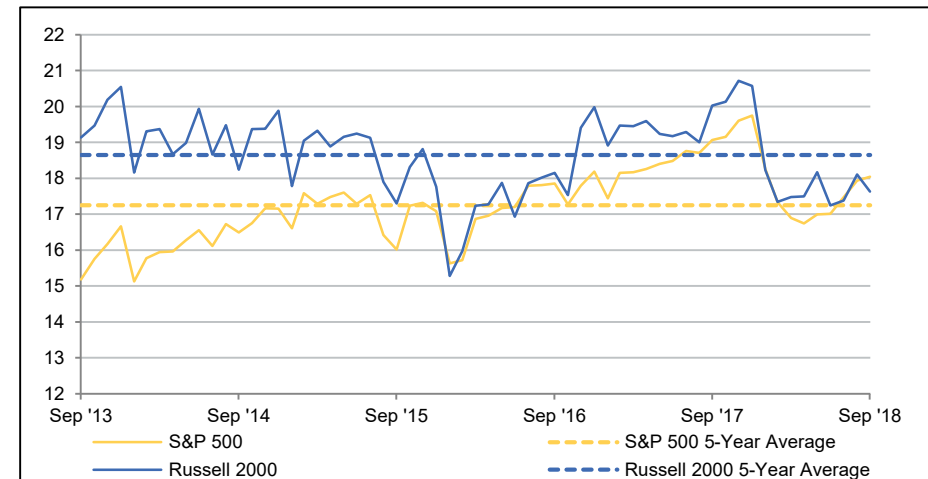
S&amp;P 500 Index Performance by Sector

Periods Ended September 30, 2018



Source: Bloomberg.

P/E Ratios of Major Stock Indices\*



Source: Bloomberg.

\*P/E ratios are calculated based on one-year forward estimates and adjusted to include only positive earnings results for consistency.



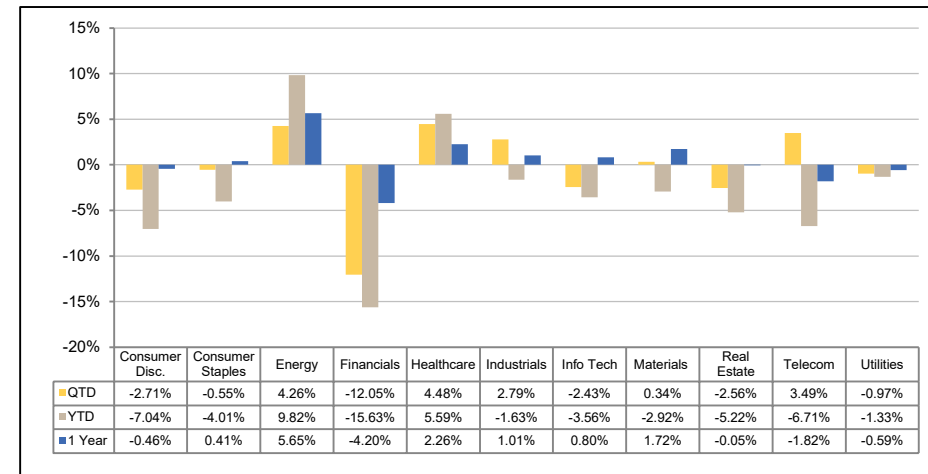
## QUARTERLY MARKET SUMMARY

## NON-U.S. EQUITY

- Developed markets outside of North America, as measured by the MSCI EAFE Index, rose 1.4% in the third quarter. These results continued to lag behind those of the U.S., owing to geopolitical instability and the lingering haze of ongoing global trade tensions.
- European equities posted positive returns in the third quarter. Energy-rich Norway was among the strongest performers, benefitting from rising oil prices. In contrast, Italy struggled, in part due to concerns surrounding its political situation and rumblings once again that it may be considering a departure from the European Union (EU), allowing the country to go back to issuing its own currency in hopes of increasing its relative competitiveness within the region.
- Emerging markets (EM), as represented by the MSCI Emerging Markets Index, returned -1.1% in the third quarter. Turkey continued to drag down results for the quarter, though it rebounded sharply in September, having increased short-term interest rates by 6.25%, hoping to stave off further erosion in the lira. Mexico delivered strong results for the period, after a renewed trade agreement with the U.S. brought some needed stability to the relationship with its largest trading partner.
- Japanese Prime Minister Shinzo Abe was reelected for a third term as leader of Japan's governing Liberal Democratic Party, putting him one step closer to becoming the longest-serving prime minister in Japan's history. He will need to remain in office until November 2019 to hit that milestone.
- While the U.S. trade war with China continued, within North America the trade deal formerly known as NAFTA was reborn as USMCA. While not an entirely new agreement, it adds considerable changes with regard to treatment of automobiles, environmental standards and intellectual property protections, as well as a provision that allows U.S. dairy farmers to increase their penetration into Canada's lucrative bagged-milk market.

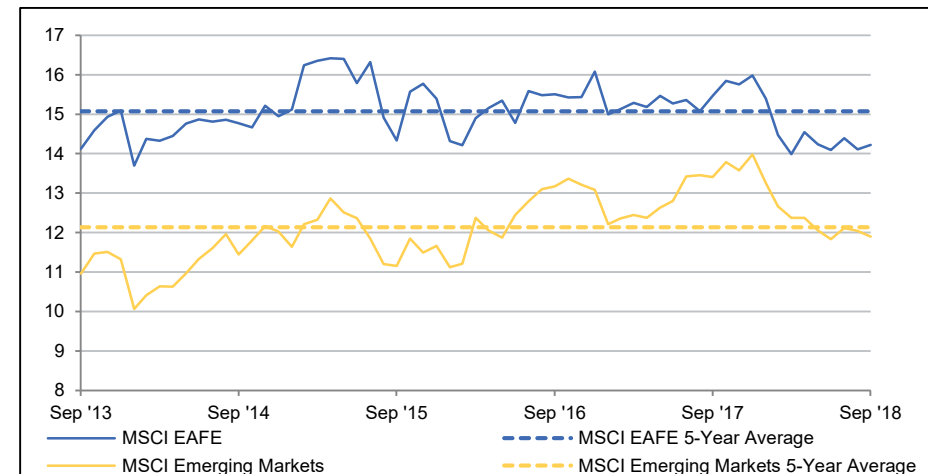
## MSCI ACWI ex-U.S. Sectors

Periods Ended September 30, 2018



Source: Bloomberg.

## P/E Ratios of MSCI Equity Indices\*



Source: Bloomberg.

\*P/E ratios are calculated based on one-year forward estimates and adjusted to include only positive earnings results for consistency.

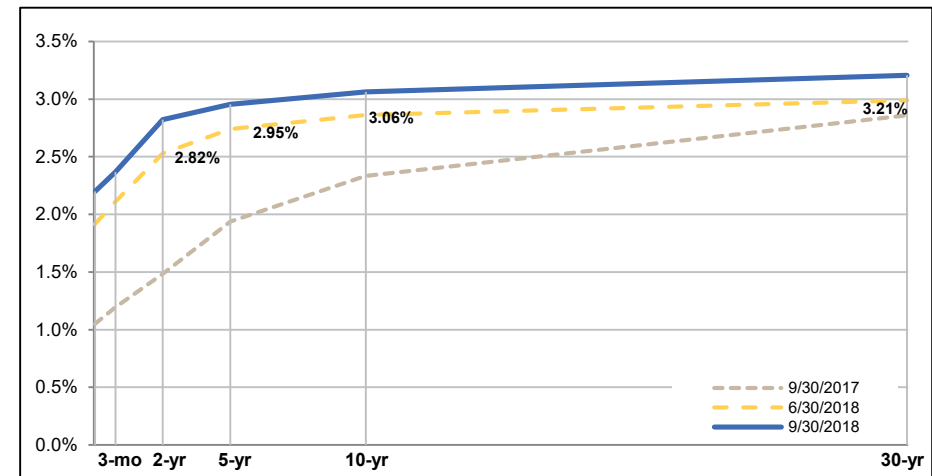


## QUARTERLY MARKET SUMMARY

## FIXED INCOME

- The U.S. bond market, represented by the Bloomberg Barclays U.S. Aggregate Index, returned 0.02% in the third quarter.
- During the quarter, rates across the yield curve shifted upward, with more movement on the front end in anticipation of the Federal Open Market Committee (FOMC) decision effective on September 27. Intermediate rates represented by the five- and 10-year Treasury increased 19 and 20 basis points (bps), respectively.
- Long-term Treasury yields rose during the quarter, with the 30-year bond ending September at a yield of 3.21%. Reasons for the selloff on the intermediate-to-long parts of the curve include the robust pace of U.S. growth, a decrease in foreign demand as the USD hedging cost rises and an increase in speculative shorts.
- Investment-grade (IG) corporate spreads declined during the quarter. The Bloomberg Barclays U.S. Corporate Index rose 97 bps (after falling 98 bps the prior quarter). High-yield (HY) bonds, as represented by the Bloomberg Barclays U.S. Corporate High Yield (HY) Index continued to be a strong sector, rising 2.40%. Spreads remain very tight, particularly in the HY space.
- The fixed-rate mortgage market, as measured by the Bloomberg Barclays U.S. Mortgage-Backed Securities (MBS) Index, declined 0.12%, while the Bloomberg Barclays U.S. CMBS Index (measuring commercial MBS) gained 0.55%.
- Global bond markets continued to experience bouts of volatility due to the strength of the USD. However, USD-denominated assets from EM countries were generally positive during the quarter, while their sovereign local-market bonds, as represented by the JP Morgan GBI-EM indices, remained in negative territory.

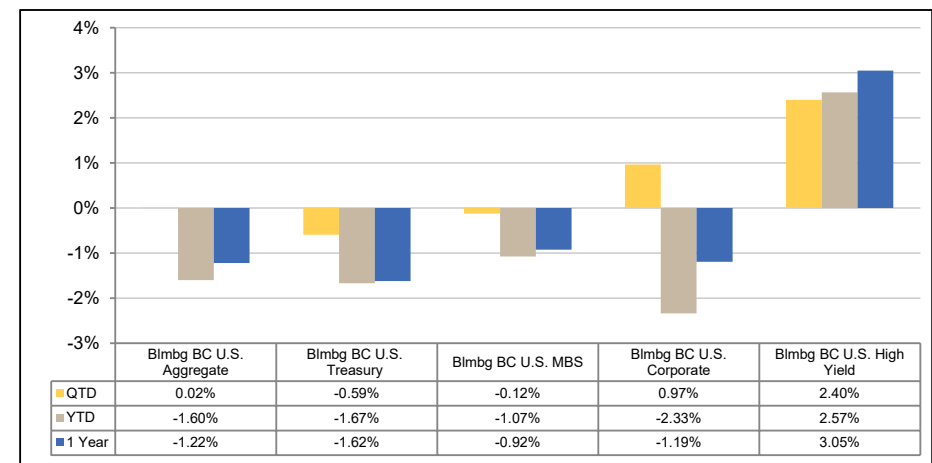
U.S. Treasury Yield Curve



Source: Bloomberg.

Returns for Fixed-Income Segments

Periods Ended September 30, 2018



Source: Bloomberg. "Bimbg BC" is Bloomberg Barclays.



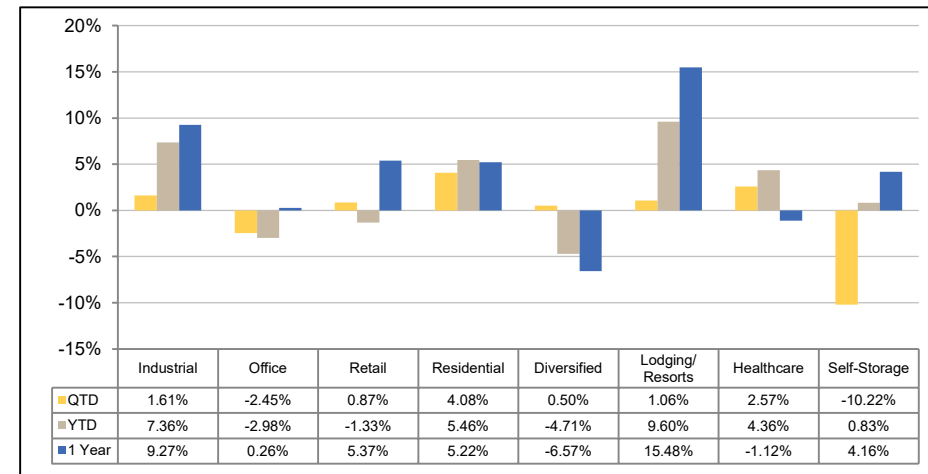
## QUARTERLY MARKET SUMMARY

## ALTERNATIVES

- Real estate investment trusts (REITs), as measured by the FTSE Nareit All Equity REITs Index, returned 0.79% in the third quarter. The sector increases were led by Residential and Healthcare, with returns of 4.08% and 2.57%, respectively. Office and Self-Storage were the only sectors to generate losses in the third quarter, with returns of -2.45% and -10.22%, respectively.
- Private real estate, as measured by the NCREIF Property Index of 7,672 commercial properties nationwide worth a combined total of \$581 billion, generated a total return of 1.81% in the third quarter, up slightly from 1.70% last quarter. The total return consisted of a 1.14% income return and 0.67% capital appreciation. Industrial properties, which are primarily Warehouse, continue to be the strongest performer, with a return of 3.58% for the quarter. A distant second was Hotel at 1.95%, followed by Office and Apartment, which were tied at 1.54%. Retail recovered nicely from 0.72% last quarter to 1.32% for the current quarter.
- Hedge funds generated modest returns overall in the third quarter. The HFRX Global Hedge Fund Index returned 0.39%. The HFRX Macro/CTA Index generated a return of 0.65%, followed by HFRX Relative Value Arbitrage Index with a third-quarter return of 0.39%. The HFRX Equity Hedge and HFRX Event Driven indices lagged, with returns of -1.15% and -1.08%, respectively.
- Private equity fundraising remained strong in the third quarter with 214 private equity funds reaching final close, raising a total of \$121 billion. North America-focused funds dominated fundraising, with 126 funds securing \$82 billion. More than half (55%) of capital raised in the third quarter was secured by the 10 largest vehicles that closed this quarter. Private equity dry powder has continued to climb, reaching \$1.14 trillion as at September 2018.
- Commodity futures, represented by the Bloomberg Commodity Index of 19 raw materials futures, fell 2.53% in the third quarter. Overall, the Index has declined 3.36% in 2018. Recent weakening can be attributed to the strong USD. The U.S. Dollar Index (DXY), a measure of the value of the U.S. dollar relative to a basket of foreign currencies, has increased 0.70% in the third quarter and has increased 3.96% YTD. Gold spot prices ended the quarter at \$1,196 per ounce, down from \$1,255 per ounce at the end of the second quarter. West Texas Intermediate (WTI) Crude Oil spot prices were \$73.25, down from \$74.15 at the end of the second quarter.

## FTSE Nareit Sectors

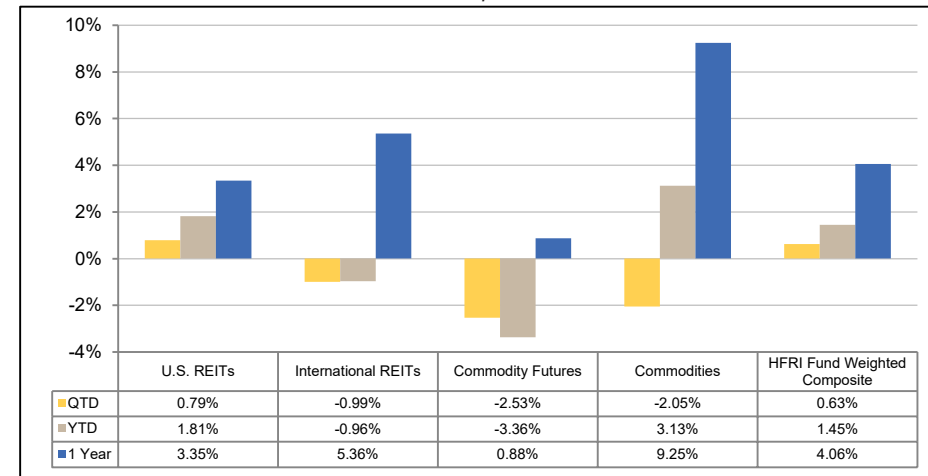
Periods Ended September 30, 2018



Source: Bloomberg.

## Returns for Alternative Assets

Periods Ended September 30, 2018



Sources: Bloomberg and Hedge Fund Research, Inc.



**Total Fund**



## Asset Allocation &amp; Performance

	Allocation		Performance(%)			
	Market Value (\$)	%	Current Quarter	Year To Date	Trailing 12-months	Fiscal Year To Date
<b>Total Fund</b>	<b>26,677,176</b>	<b>100.00</b>	<b>2.85</b>	<b>3.86</b>	<b>8.14</b>	<b>8.14</b>
<b>Blended Benchmark</b>			<b>3.89</b>	<b>5.02</b>	<b>8.84</b>	<b>8.84</b>
<b>Domestic Equity</b>	<b>12,066,426</b>	<b>45.23</b>	<b>6.90</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
Fidelity 500 Index Fund	4,947,861	18.55	7.71	N/A	N/A	N/A
Vanguard 500 Index Fund	4,947,709	18.55	7.70	N/A	N/A	N/A
<i>S&amp;P 500</i>			7.71	10.56	17.91	17.91
Vanguard Mid-Cap Value Index Fund	683,605	2.56	3.10	N/A	N/A	N/A
<i>Russell Midcap Value Index</i>			3.30	3.13	8.81	8.81
Vanguard Mid-Cap Growth Index Fund	750,992	2.82	6.22	N/A	N/A	N/A
<i>Russell Midcap Growth Index</i>			7.57	13.38	21.10	21.10
Vanguard Small Cap Index Fund	736,259	2.76	4.77	N/A	N/A	N/A
<i>Russell 2000 Index</i>			3.58	11.51	15.24	15.24
<b>International Equity</b>	<b>3,018,646</b>	<b>11.32</b>	<b>-0.04</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
Vanguard Developed Markets Index Fund	1,273,318	4.77	1.09	N/A	N/A	N/A
<i>MSCI EAFE (net)</i>			1.35	-1.43	2.74	2.74
iShares MSCI EAFE Small-Cap ETF	1,245,600	4.67	-0.73	N/A	N/A	N/A
<i>MSCI EAFE Small Cap (net)</i>			-0.88	-2.19	3.73	3.73
Fidelity Emerging Markets Index Fund	499,728	1.87	-1.13	N/A	N/A	N/A
<i>MSCI EM (net)</i>			-1.09	-7.68	-0.81	-0.81
<b>Real Estate</b>	<b>621,022</b>	<b>2.33</b>	<b>0.52</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
Vanguard Real Estate Index Fund	621,022	2.33	0.52	N/A	N/A	N/A
<i>FTSE NAREIT Equity REIT Index</i>			0.79	1.81	3.35	3.35
<b>Fixed Income</b>	<b>5,546,741</b>	<b>20.79</b>	<b>0.67</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
U.S. Government Securities	3,800,250	14.25	0.34	N/A	N/A	N/A
<i>Blmbg. Barc. U.S. Treasury: 1-3 Year</i>			0.19	0.24	-0.04	-0.04
Vanguard Short-Term Corporate Bond Index Fund	1,250,072	4.69	0.68	N/A	N/A	N/A
<i>Blmbg. Barc. U.S. Corporate 1-5 Year Index</i>			0.71	0.19	0.11	0.11
Vanguard High-Yield Corporate Fund	496,418	1.86	2.67	N/A	N/A	N/A
<i>Blmbg. Barc. U.S. Corp: High Yield</i>			2.40	2.57	3.05	3.05
<b>Cash Equivalent</b>	<b>5,424,342</b>	<b>20.33</b>	<b>0.35</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
U.S. Treasury Bill	5,396,147	20.23	0.32	N/A	N/A	N/A
Wells Fargo 100% Treasury Money Market	28,169	0.11	N/A	N/A	N/A	N/A
Wells Fargo Bank Deposit Account	26	0.00	N/A	N/A	N/A	N/A

Returns are net of mutual fund fees and are expressed as percentages.

Asset class level returns may vary from individual underlying manager returns due to cash flows.

The actuarial Expected Rate of Return is 7%.



## Financial Reconciliation

Current Quarter				
	Market Value As of 07/01/2018	Net Flows	Return On Investment	Market Value As of 09/30/2018
Total Fund	25,937,587	(3,050)	742,639	26,677,176

YTD				
	Market Value As of 01/01/2018	Net Flows	Return On Investment	Market Value As of 09/30/2018
Total Fund	16,481,808	9,285,018	910,350	26,677,176



Benchmark Allocation	Weight (%)
Oct-2017	
Russell 3000 Index	55.0
Blmbg. Barc. U.S. Aggregate	45.0

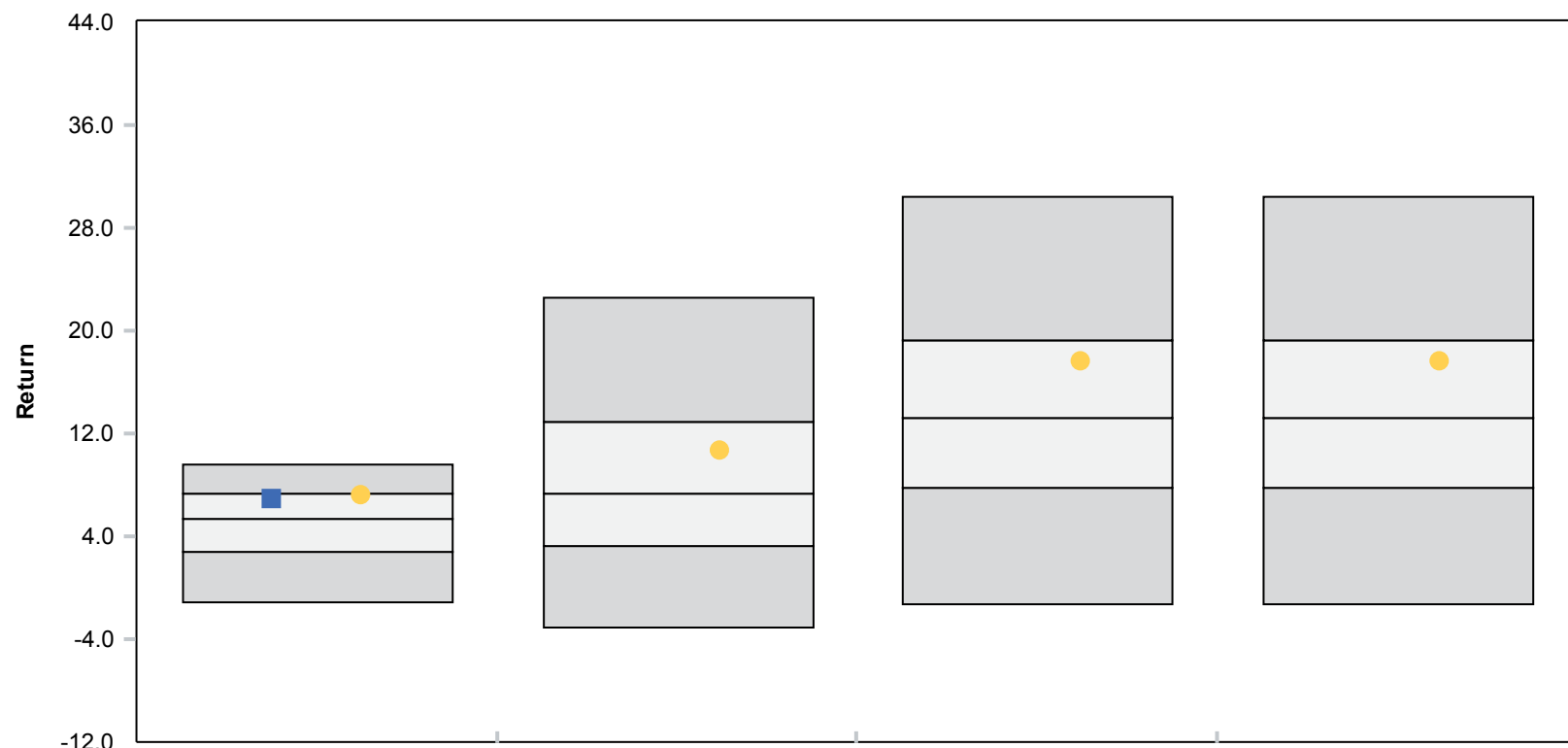




## **Investment Manager Review**



IM U.S. Equity (MF)



■ Domestic Equity  
● Russell 3000 Index

	Current Quarter	Year To Date	Trailing 12-months	Fiscal Year To Date
Domestic Equity	6.90 (32)	N/A	N/A	N/A
Russell 3000 Index	7.12 (29)	10.57 (34)	17.58 (31)	17.58 (31)
5th Percentile	9.65	22.54	30.49	30.49
1st Quartile	7.36	12.85	19.23	19.23
Median	5.33	7.32	13.28	13.28
3rd Quartile	2.80	3.31	7.82	7.82
95th Percentile	-1.17	-3.08	-1.26	-1.26
Population	9,552	9,336	9,162	9,162

Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.  
Returns are net of fees and are expressed as percentages.



## Domestic Equity vs. Russell 3000 Index

<b>Portfolio Characteristics</b>		
	<b>Portfolio</b>	<b>Benchmark</b>
Wtd. Avg. Mkt. Cap (\$M)	201,922	204,454
Median Mkt. Cap (\$M)	3,808	1,831
Price/Earnings ratio	21.36	21.13
Price/Book ratio	3.43	3.41
5 Yr. EPS Growth Rate (%)	11.50	11.77
Current Yield (%)	1.82	1.79
Number of Stocks	1,989	3,024

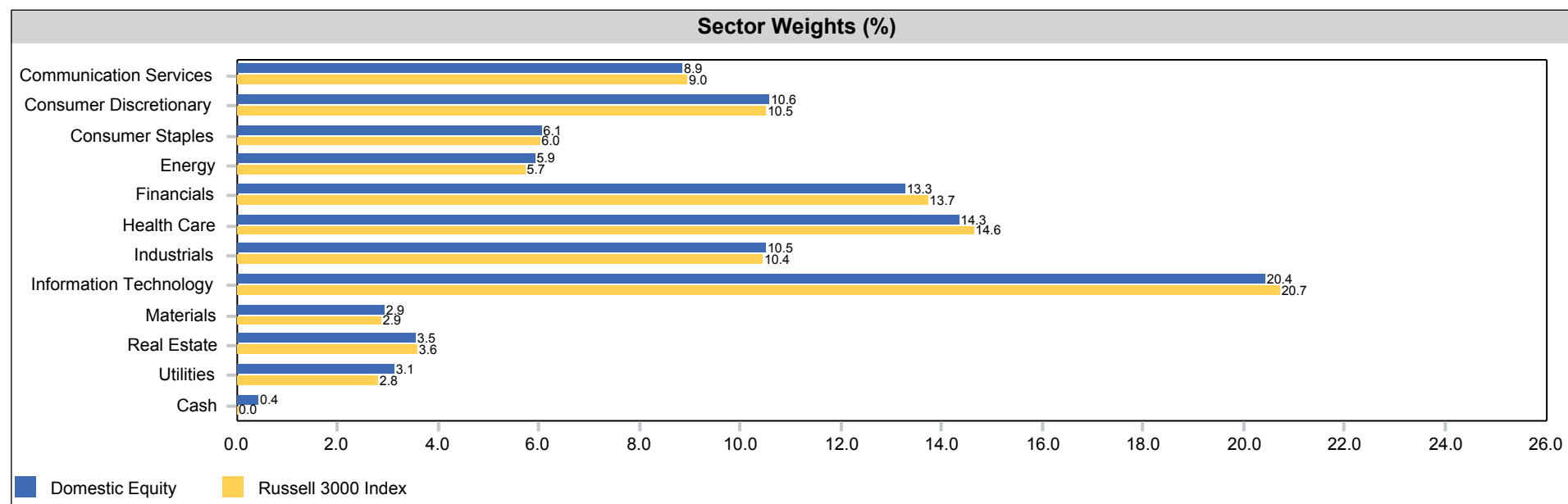
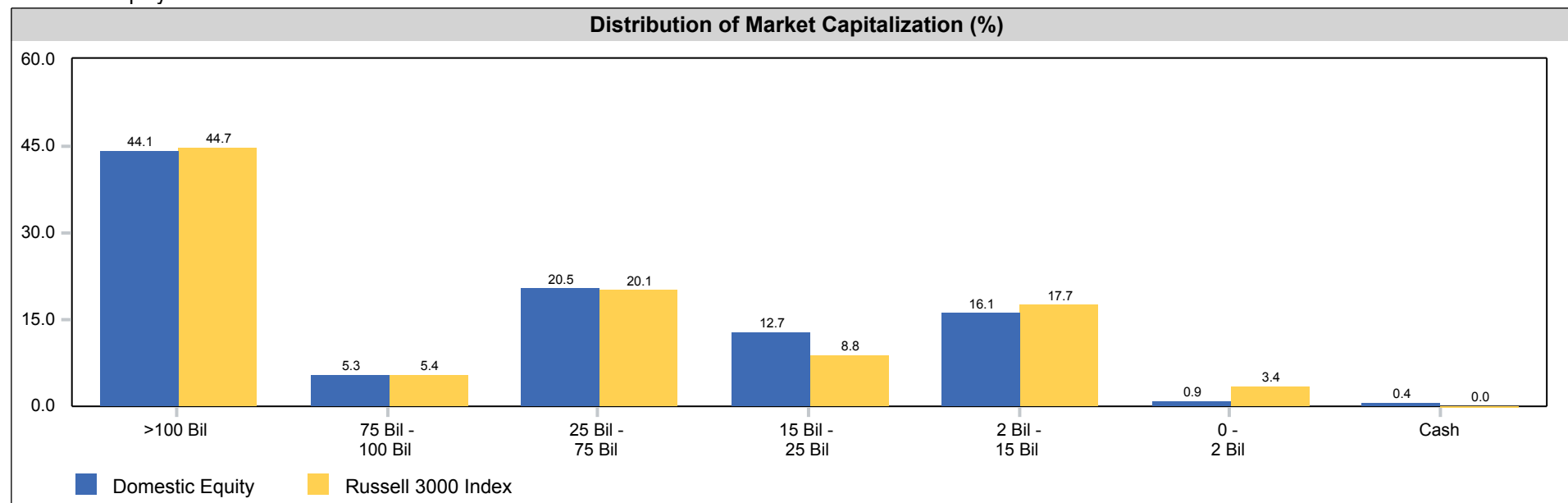
<b>Top Ten Equity Holdings</b>				
	<b>Portfolio Weight (%)</b>	<b>Benchmark Weight (%)</b>	<b>Active Weight (%)</b>	<b>Quarterly Return (%)</b>
Apple Inc	3.44	3.67	-0.23	22.38
Microsoft Corp	2.92	2.92	0.00	16.43
Amazon.com Inc	2.73	2.74	-0.01	17.84
Berkshire Hathaway Inc	1.36	1.40	-0.04	14.71
Facebook Inc	1.32	1.32	0.00	-15.37
JPMorgan Chase & Co	1.26	1.27	-0.01	8.88
Johnson & Johnson	1.23	1.25	-0.02	14.63
Alphabet Inc	1.22	1.22	0.00	6.98
Alphabet Inc	1.20	1.21	-0.01	6.90
Exxon Mobil Corp	1.20	1.21	-0.01	3.83
% of Portfolio	17.88	18.21	-0.33	

<b>Ten Best Performers</b>				
	<b>Portfolio Weight (%)</b>	<b>Benchmark Weight (%)</b>	<b>Active Weight (%)</b>	<b>Quarterly Return (%)</b>
Reata Pharmaceuticals Inc	0.00	0.01	-0.01	133.80
Advanced Micro Devices Inc	0.16	0.09	0.07	106.07
Tandem Diabetes Care Inc	0.00	0.01	-0.01	94.55
Intelsat SA	0.00	0.00	0.00	80.07
Endo International plc	0.01	0.01	0.00	78.47
Roku Inc	0.01	0.01	0.00	71.35
NovoCure Ltd	0.01	0.01	0.00	67.41
Liveramp Holdings Inc	0.01	0.01	0.00	64.98
MongoDB Inc	0.00	0.00	0.00	64.32
Belmond Ltd	0.00	0.01	-0.01	63.68
% of Portfolio	0.20	0.16	0.04	

<b>Ten Worst Performers</b>				
	<b>Portfolio Weight (%)</b>	<b>Benchmark Weight (%)</b>	<b>Active Weight (%)</b>	<b>Quarterly Return (%)</b>
Endologix Inc	0.00	0.00	0.00	-66.25
Longfin Corp	0.00	0.00	0.00	-65.52
Lannett Co Inc.	0.00	0.00	0.00	-65.07
Maiden Holdings Ltd	0.00	0.00	0.00	-62.58
Diebold Nixdorf Inc	0.00	0.00	0.00	-62.34
Sears Holdings Corp	0.00	0.00	0.00	-59.16
Covia Holdings Corp	0.00	0.00	0.00	-51.67
Blue Apron Holdings Inc	0.00	0.00	0.00	-48.66
Scientific Games Corp	0.00	0.00	0.00	-48.32
Radius Health Inc	0.00	0.00	0.00	-39.60
% of Portfolio	0.00	0.00	0.00	



## Domestic Equity vs. Russell 3000 Index



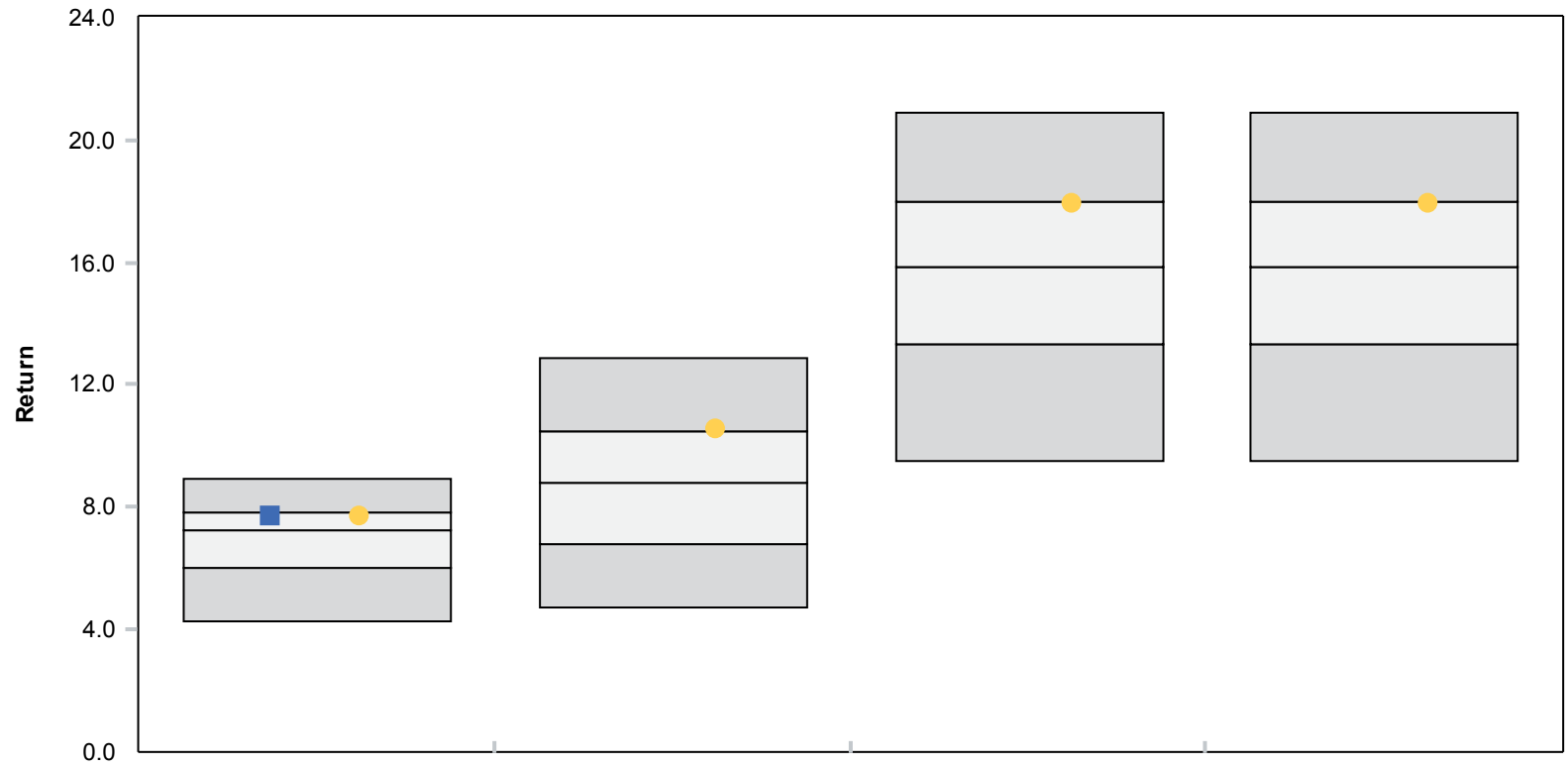
Domestic Equity vs. Russell 3000 Index

Buy-and-Hold Portfolio	6.97
Portfolio Trading	-0.07
Actual Return	6.90
Benchmark Return	7.12
Actual Active Return	-0.22
Stock Selection	-0.06
Sector Selection	-0.07
Interaction	0.00
Total Selection	-0.13
Portfolio Trading	-0.07
Benchmark Trading	0.02
Active Trading Impact	-0.09
Buy & Hold Active Return	-0.22

	Allocation-07/01/2018		Performance-1 Quarter Ending September 30, 2018		Attribution			
	Portfolio	Benchmark	Portfolio	Benchmark	Stock	Sector	Interaction	Total
Communication Services	8.91	9.39	1.16	1.69	-0.05	0.03	0.00	-0.02
Consumer Discretionary	10.65	10.46	7.24	7.21	0.00	0.00	0.00	0.00
Consumer Staples	6.00	6.22	4.86	5.07	-0.01	0.00	0.00	-0.01
Energy	6.25	6.02	0.72	0.70	0.00	-0.01	0.00	-0.01
Financials	13.82	14.26	3.72	3.73	0.00	0.01	0.00	0.01
Health Care	13.26	13.77	13.65	13.62	0.00	-0.03	0.00	-0.03
Industrials	10.62	10.24	9.45	9.12	0.03	0.01	0.00	0.04
Information Technology	19.57	19.82	11.96	12.11	-0.03	-0.01	0.00	-0.04
Materials	3.34	3.07	-0.59	0.05	-0.02	-0.02	0.00	-0.04
Real Estate	4.12	3.84	0.46	0.42	0.00	-0.02	0.00	-0.02
Utilities	3.35	2.92	2.69	2.54	0.00	-0.02	0.00	-0.01
Other	0.00	0.00	13.24	0.00	0.00	0.00	0.00	0.00
Cash	0.09	0.00	0.00	0.00	0.00	-0.01	0.00	-0.01
Total	100.00	100.00	6.97	7.10	-0.06	-0.07	0.00	-0.13



IM U.S. Large Cap Core Equity (MF)



■ Fidelity 500 Index Fund

● S&P 500

5th Percentile

8.95

12.86

20.88

20.88

1st Quartile

7.83

10.48

17.97

17.97

Median

7.24

8.78

15.84

15.84

3rd Quartile

6.00

6.81

13.35

13.35

95th Percentile

4.27

4.69

9.51

9.51

Population

781

762

735

735

Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.  
Returns are net of fees and are expressed as percentages.



Fidelity 500 Index Fund vs. S&amp;P 500

<b>Portfolio Characteristics</b>		
	<b>Portfolio</b>	<b>Benchmark</b>
Wtd. Avg. Mkt. Cap (\$M)	243,923	244,412
Median Mkt. Cap (\$M)	21,789	21,789
Price/Earnings ratio	21.51	21.51
Price/Book ratio	3.55	3.55
5 Yr. EPS Growth Rate (%)	11.20	11.20
Current Yield (%)	1.89	1.89
Number of Stocks	508	505

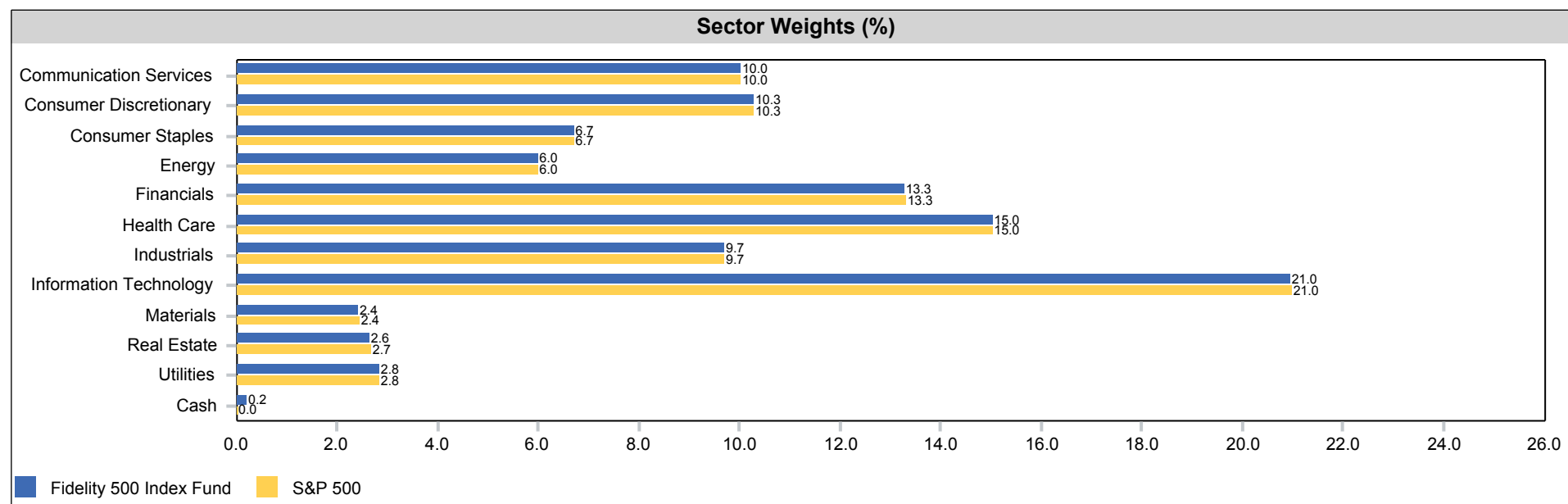
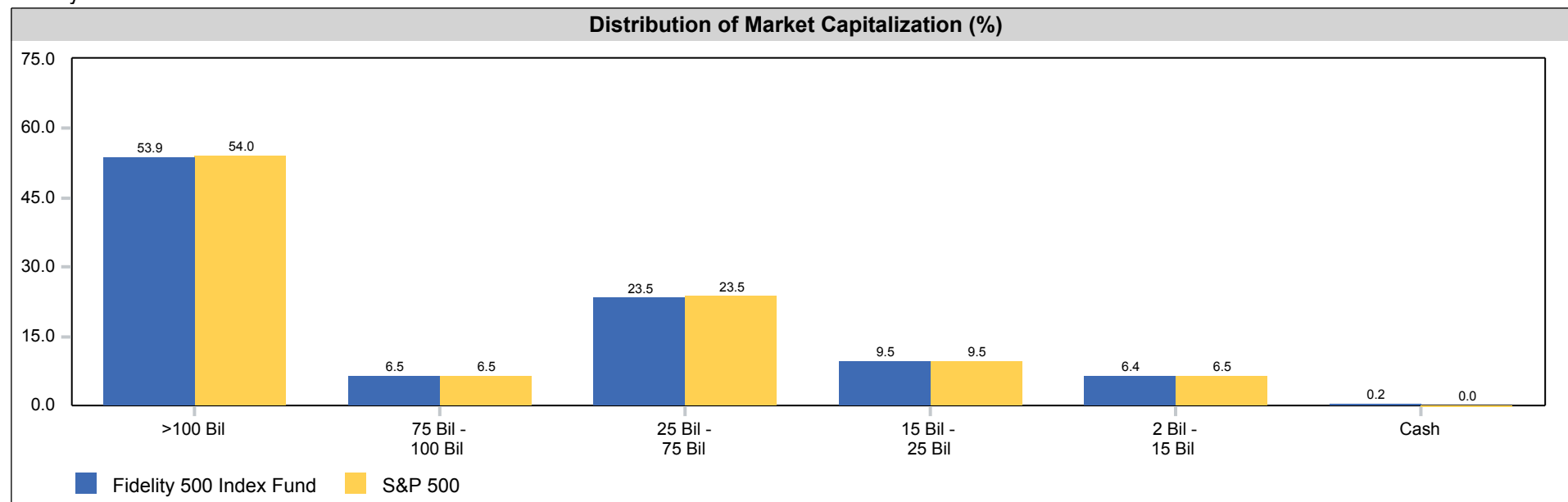
<b>Top Ten Equity Holdings</b>				
	<b>Portfolio Weight (%)</b>	<b>Benchmark Weight (%)</b>	<b>Active Weight (%)</b>	<b>Quarterly Return (%)</b>
Apple Inc	4.21	4.21	0.00	22.38
Microsoft Corp	3.56	3.57	-0.01	16.43
Amazon.com Inc	3.33	3.34	-0.01	17.84
Berkshire Hathaway Inc	1.69	1.70	-0.01	14.71
Facebook Inc	1.61	1.61	0.00	-15.37
JPMorgan Chase & Co	1.54	1.54	0.00	8.88
Johnson & Johnson	1.51	1.51	0.00	14.63
Alphabet Inc	1.49	1.50	-0.01	6.98
Alphabet Inc	1.47	1.47	0.00	6.90
Exxon Mobil Corp	1.46	1.46	0.00	3.83
% of Portfolio	21.87	21.91	-0.04	

<b>Ten Best Performers</b>				
	<b>Portfolio Weight (%)</b>	<b>Benchmark Weight (%)</b>	<b>Active Weight (%)</b>	<b>Quarterly Return (%)</b>
Advanced Micro Devices Inc	0.11	0.11	0.00	106.07
HCA Healthcare Inc	0.15	0.15	0.00	35.95
Flowserve Corp.	0.03	0.03	0.00	35.83
PerkinElmer Inc.	0.04	0.04	0.00	32.95
Illumina Inc	0.22	0.22	0.00	31.43
WellCare Health Plans Inc	0.07	0.07	0.00	30.15
Iqvia Holdings Inc	0.09	0.09	0.00	29.97
Arconic Inc	0.04	0.04	0.00	29.76
QUALCOMM Inc.	0.41	0.41	0.00	29.49
Corning Inc	0.12	0.12	0.00	29.01
% of Portfolio	1.28	1.28	0.00	

<b>Ten Worst Performers</b>				
	<b>Portfolio Weight (%)</b>	<b>Benchmark Weight (%)</b>	<b>Active Weight (%)</b>	<b>Quarterly Return (%)</b>
Twitter Inc	0.08	0.08	0.00	-34.83
IPG Photonics Corp	0.02	0.02	0.00	-29.26
Western Digital Corp	0.07	0.07	0.00	-23.73
Wynn Resorts Ltd	0.05	0.05	0.00	-23.66
Newell Brands Inc	0.04	0.04	0.00	-20.46
EQT Corp	0.05	0.05	0.00	-19.80
Newmont Mining Corp	0.07	0.07	0.00	-19.54
Freeport-McMoRan Inc	0.08	0.08	0.00	-19.35
Martin Marietta Materials Inc.	0.05	0.05	0.00	-18.33
Mohawk Industries Inc.	0.05	0.05	0.00	-18.16
% of Portfolio	0.56	0.56	0.00	



## Fidelity 500 Index Fund vs. S&amp;P 500





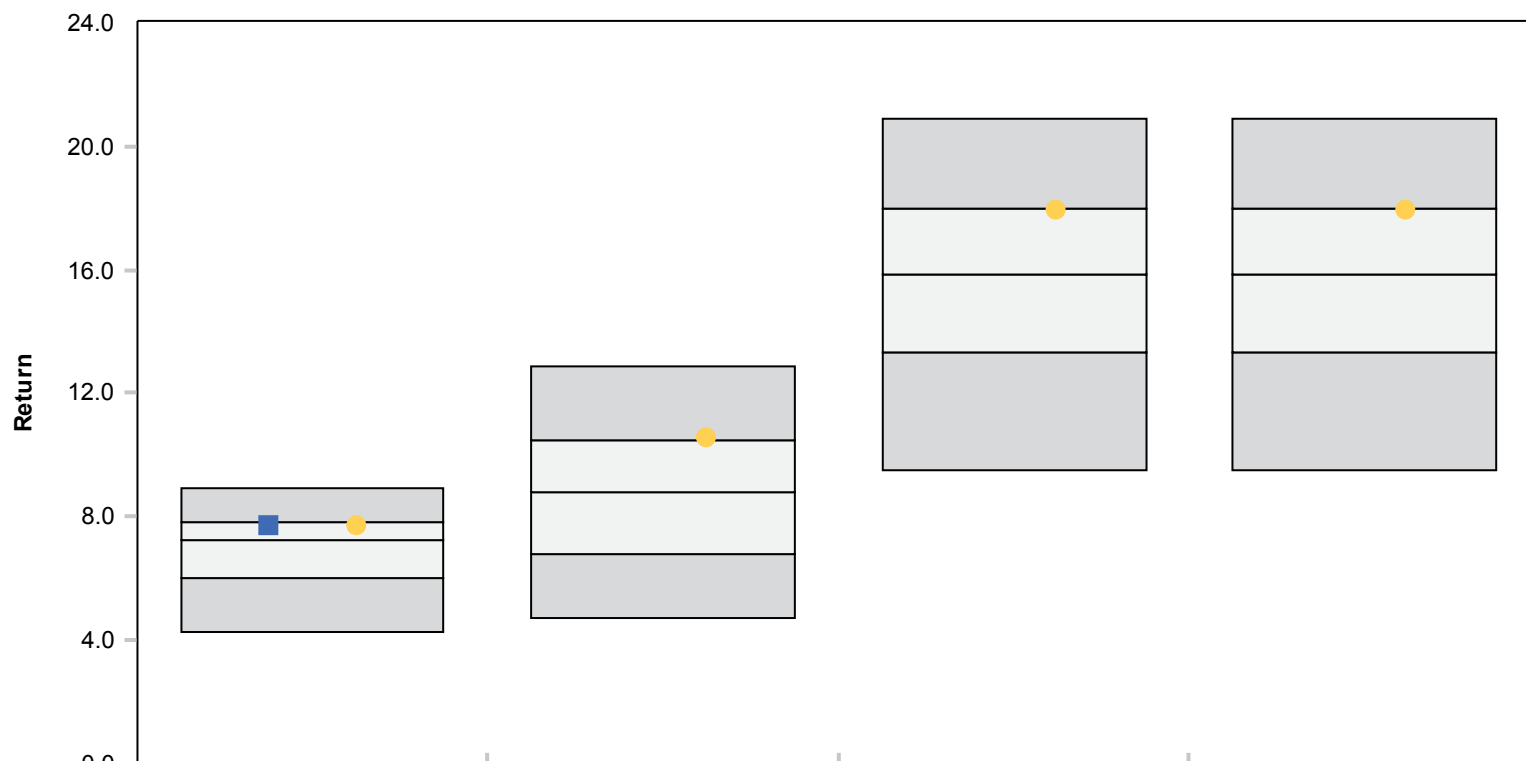
Fidelity 500 Index Fund vs. S&amp;P 500

Buy-and-Hold Portfolio	7.69
Portfolio Trading	0.01
Actual Return	7.71
Benchmark Return	7.71
Actual Active Return	-0.01
Stock Selection	0.00
Sector Selection	-0.02
Interaction	0.00
Total Selection	-0.02
Portfolio Trading	0.01
Benchmark Trading	0.00
Active Trading Impact	0.01
Buy & Hold Active Return	-0.01

	Allocation-07/01/2018		Performance-1 Quarter Ending September 30, 2018		Attribution			
	Portfolio	Benchmark	Portfolio	Benchmark	Stock	Sector	Interaction	Total
Communication Services	10.57	10.59	1.08	1.08	0.00	0.00	0.00	0.00
Consumer Discretionary	10.02	10.04	9.32	9.32	0.00	0.00	0.00	0.00
Consumer Staples	6.94	6.96	5.62	5.62	0.00	0.00	0.00	0.00
Energy	6.32	6.34	0.73	0.73	0.00	0.00	0.00	0.00
Financials	13.81	13.84	4.36	4.36	0.00	0.00	0.00	0.00
Health Care	14.04	14.07	14.45	14.45	0.00	0.00	0.00	0.00
Industrials	9.49	9.51	10.10	10.10	0.00	0.00	0.00	0.00
Information Technology	20.19	20.23	12.49	12.49	0.00	0.00	0.00	0.00
Materials	2.60	2.60	0.33	0.33	0.00	0.00	0.00	0.00
Real Estate	2.85	2.86	0.65	0.65	0.00	0.00	0.00	0.00
Utilities	2.94	2.95	2.38	2.38	0.00	0.00	0.00	0.00
Cash	0.24	0.00	0.00	0.00	0.00	-0.02	0.00	-0.02
Total	100.00	100.00	7.69	7.71	0.00	-0.02	0.00	-0.02



IM U.S. Large Cap Core Equity (MF)



■ Vanguard 500 Index Fund

● S&P 500

5th Percentile

8.95

12.86

20.88

20.88

1st Quartile

7.83

10.48

17.97

17.97

Median

7.24

8.78

15.84

15.84

3rd Quartile

6.00

6.81

13.35

13.35

95th Percentile

4.27

4.69

9.51

9.51

Population

781

762

735

735

Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.  
Returns are net of fees and are expressed as percentages.



Vanguard 500 Index Fund vs. S&amp;P 500

<b>Portfolio Characteristics</b>		
	<b>Portfolio</b>	<b>Benchmark</b>
Wtd. Avg. Mkt. Cap (\$M)	243,067	244,412
Median Mkt. Cap (\$M)	21,626	21,789
Price/Earnings ratio	21.52	21.51
Price/Book ratio	3.55	3.55
5 Yr. EPS Growth Rate (%)	11.20	11.20
Current Yield (%)	1.89	1.89
Number of Stocks	510	505

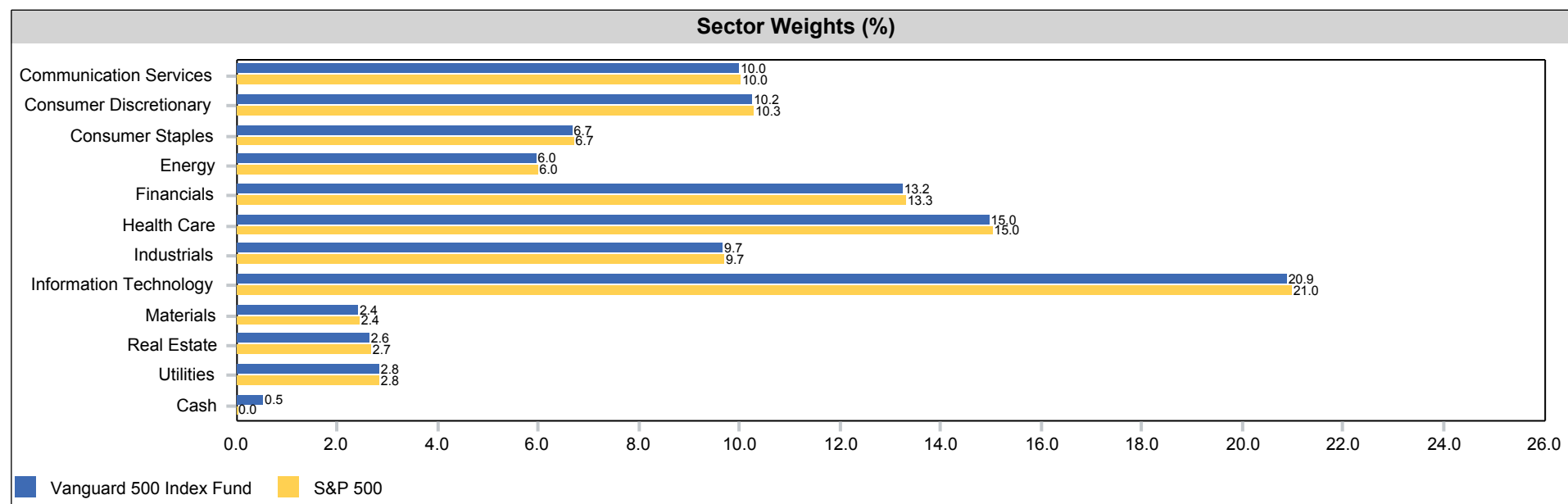
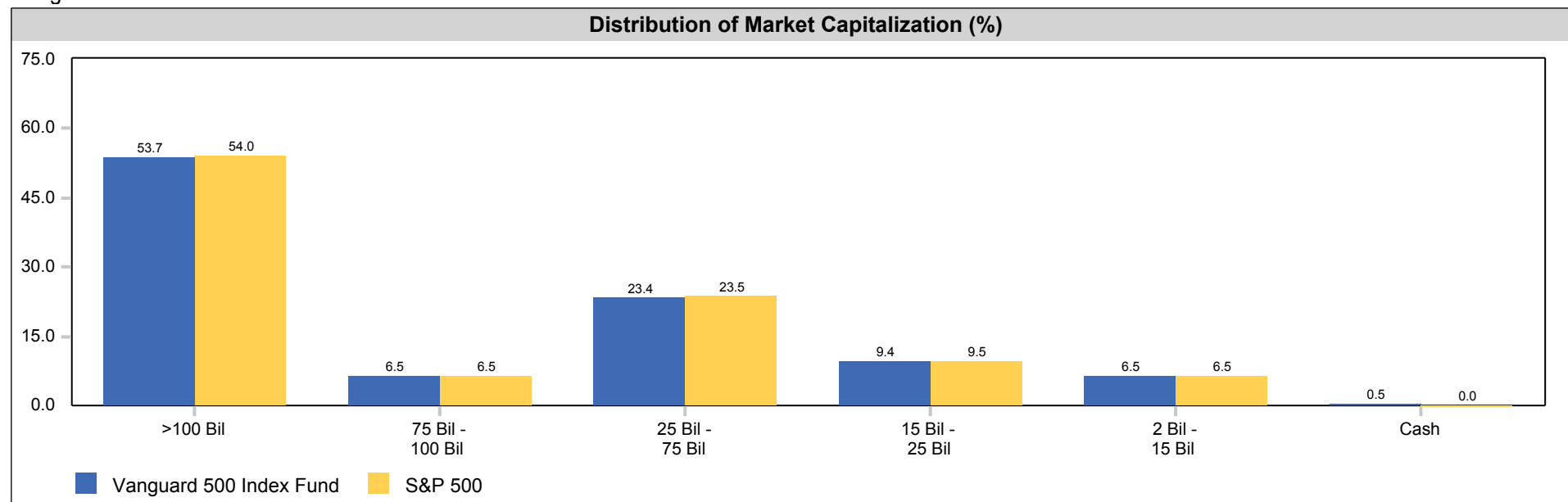
<b>Top Ten Equity Holdings</b>				
	<b>Portfolio Weight (%)</b>	<b>Benchmark Weight (%)</b>	<b>Active Weight (%)</b>	<b>Quarterly Return (%)</b>
Apple Inc	4.19	4.21	-0.02	22.38
Microsoft Corp	3.55	3.57	-0.02	16.43
Amazon.com Inc	3.32	3.34	-0.02	17.84
Berkshire Hathaway Inc	1.62	1.70	-0.08	14.71
Facebook Inc	1.60	1.61	-0.01	-15.37
JPMorgan Chase & Co	1.53	1.54	-0.01	8.88
Johnson & Johnson	1.50	1.51	-0.01	14.63
Alphabet Inc	1.49	1.50	-0.01	6.98
Alphabet Inc	1.46	1.47	-0.01	6.90
Exxon Mobil Corp	1.46	1.46	0.00	3.83
% of Portfolio	21.72	21.91	-0.19	

<b>Ten Best Performers</b>				
	<b>Portfolio Weight (%)</b>	<b>Benchmark Weight (%)</b>	<b>Active Weight (%)</b>	<b>Quarterly Return (%)</b>
Advanced Micro Devices Inc	0.11	0.11	0.00	106.07
HCA Healthcare Inc	0.15	0.15	0.00	35.95
Flowserve Corp.	0.03	0.03	0.00	35.83
PerkinElmer Inc.	0.04	0.04	0.00	32.95
Illumina Inc	0.22	0.22	0.00	31.43
WellCare Health Plans Inc	0.06	0.07	-0.01	30.15
Iqvia Holdings Inc	0.09	0.09	0.00	29.97
Arconic Inc	0.04	0.04	0.00	29.76
QUALCOMM Inc.	0.41	0.41	0.00	29.49
Corning Inc	0.12	0.12	0.00	29.01
% of Portfolio	1.27	1.28	-0.01	

<b>Ten Worst Performers</b>				
	<b>Portfolio Weight (%)</b>	<b>Benchmark Weight (%)</b>	<b>Active Weight (%)</b>	<b>Quarterly Return (%)</b>
Twitter Inc	0.08	0.08	0.00	-34.83
IPG Photonics Corp	0.02	0.02	0.00	-29.26
Western Digital Corp	0.07	0.07	0.00	-23.73
Wynn Resorts Ltd	0.05	0.05	0.00	-23.66
Newell Brands Inc	0.04	0.04	0.00	-20.46
EQT Corp	0.05	0.05	0.00	-19.80
Newmont Mining Corp	0.07	0.07	0.00	-19.54
Freeport-McMoRan Inc	0.08	0.08	0.00	-19.35
Martin Marietta Materials Inc.	0.05	0.05	0.00	-18.33
Mohawk Industries Inc.	0.04	0.05	-0.01	-18.16
% of Portfolio	0.55	0.56	-0.01	



## Vanguard 500 Index Fund vs. S&amp;P 500



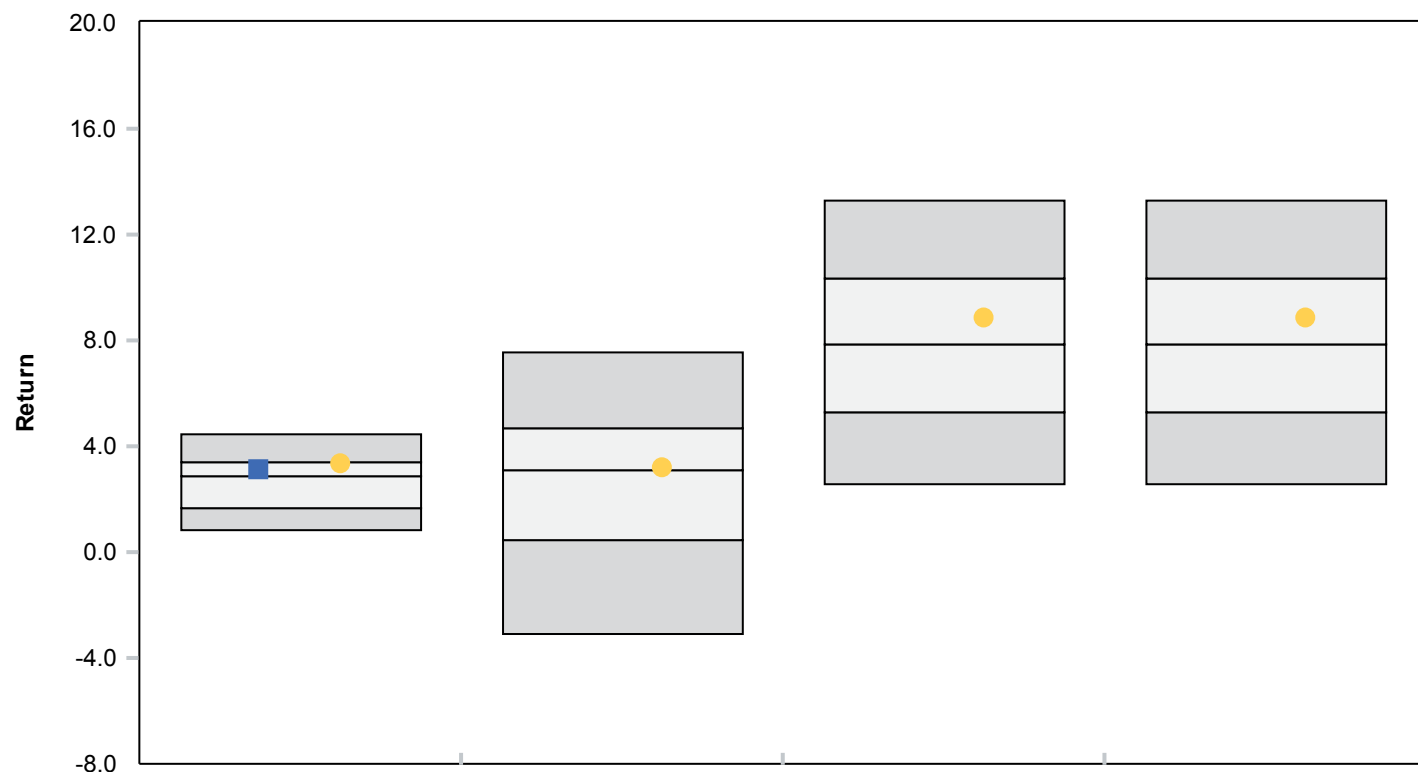
Vanguard 500 Index Fund vs. S&amp;P 500

Buy-and-Hold Portfolio	7.71
Portfolio Trading	-0.01
Actual Return	7.70
Benchmark Return	7.71
Actual Active Return	-0.01
Stock Selection	0.00
Sector Selection	0.00
Interaction	0.00
Total Selection	0.00
Portfolio Trading	-0.01
Benchmark Trading	0.00
Active Trading Impact	-0.01
Buy & Hold Active Return	-0.01

	Allocation-07/01/2018		Performance-1 Quarter Ending September 30, 2018		Attribution			
	Portfolio	Benchmark	Portfolio	Benchmark	Stock	Sector	Interaction	Total
Communication Services	10.60	10.59	1.08	1.08	0.00	0.00	0.00	0.00
Consumer Discretionary	10.05	10.04	9.32	9.32	0.00	0.00	0.00	0.00
Consumer Staples	6.87	6.96	5.70	5.62	0.01	0.00	0.00	0.01
Energy	6.34	6.34	0.73	0.73	0.00	0.00	0.00	0.00
Financials	13.85	13.84	4.35	4.36	0.00	0.00	0.00	0.00
Health Care	14.08	14.07	14.45	14.45	0.00	0.00	0.00	0.00
Industrials	9.57	9.51	10.00	10.10	-0.01	0.00	0.00	-0.01
Information Technology	20.23	20.23	12.50	12.49	0.00	0.00	0.00	0.00
Materials	2.61	2.60	0.34	0.33	0.00	0.00	0.00	0.00
Real Estate	2.86	2.86	0.65	0.65	0.00	0.00	0.00	0.00
Utilities	2.95	2.95	2.38	2.38	0.00	0.00	0.00	0.00
Total	100.00	100.00	7.71	7.71	0.00	0.00	0.00	0.00



IM U.S. Mid Cap Value Equity (MF)



■ Vanguard Mid-Cap Value Index Fund

● Russell Midcap Value Index

5th Percentile

1st Quartile

Median

3rd Quartile

95th Percentile

Population

3.10 (35)

3.30 (28)

4.49

3.43

2.87

1.66

0.82

185

Year  
To  
Date

N/A

3.13 (50)

7.58

4.66

3.11

0.43

-3.13

181

Trailing  
12-months

N/A

8.81 (40)

13.29

10.31

7.84

5.26

2.55

175

Fiscal Year  
To Date

N/A

8.81 (40)

13.29

10.31

7.84

5.26

2.55

175

Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.  
Returns are net of fees and are expressed as percentages.



## Vanguard Mid-Cap Value Index Fund vs. Russell Midcap Value Index

<b>Portfolio Characteristics</b>		
	<b>Portfolio</b>	<b>Benchmark</b>
Wtd. Avg. Mkt. Cap (\$M)	14,235	14,887
Median Mkt. Cap (\$M)	12,506	8,009
Price/Earnings ratio	15.61	16.91
Price/Book ratio	2.25	2.17
5 Yr. EPS Growth Rate (%)	6.88	10.45
Current Yield (%)	2.31	2.21
Number of Stocks	205	594

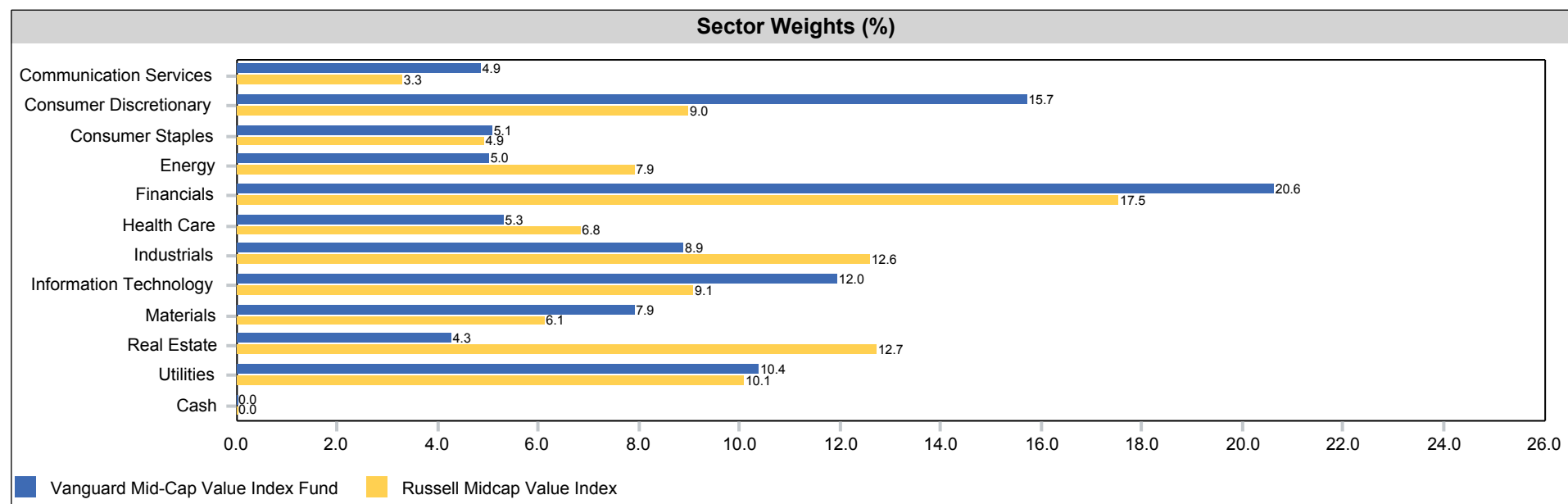
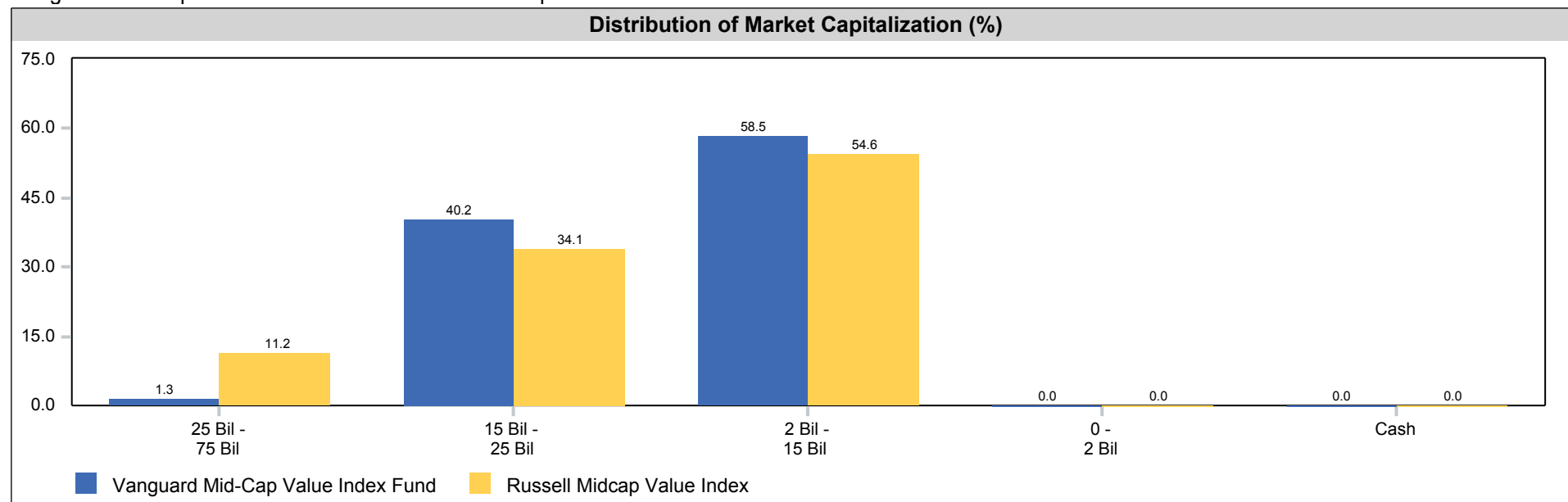
<b>Top Ten Equity Holdings</b>				
	<b>Portfolio Weight (%)</b>	<b>Benchmark Weight (%)</b>	<b>Active Weight (%)</b>	<b>Quarterly Return (%)</b>
NetApp Inc	1.05	0.00	1.05	9.93
Royal Caribbean Cruises Ltd	1.03	0.48	0.55	26.09
M&T Bank Corp	1.01	0.53	0.48	-2.75
Motorola Solutions Inc	1.00	0.41	0.59	12.29
WEC Energy Group Inc	1.00	0.47	0.53	4.12
KeyCorp	0.99	0.46	0.53	2.61
CenturyLink Inc	0.98	0.45	0.53	16.57
Regions Financial Corp	0.96	0.45	0.51	3.94
Marathon Oil Corp	0.94	0.44	0.50	11.87
DTE Energy Co	0.94	0.44	0.50	6.13
% of Portfolio	9.90	4.13	5.77	

<b>Ten Best Performers</b>				
	<b>Portfolio Weight (%)</b>	<b>Benchmark Weight (%)</b>	<b>Active Weight (%)</b>	<b>Quarterly Return (%)</b>
Flowserve Corp.	0.17	0.16	0.01	35.83
Arconic Inc	0.45	0.21	0.24	29.76
Allison Transmission Holdings Inc	0.32	0.00	0.32	28.85
United Continental Holdings Inc	0.49	0.48	0.01	27.72
Hubbell Inc	0.35	0.05	0.30	27.09
Royal Caribbean Cruises Ltd	1.03	0.48	0.55	26.09
CA Inc	0.66	0.31	0.35	24.57
Advance Auto Parts Inc.	0.56	0.18	0.38	24.09
Ball Corp	0.72	0.33	0.39	24.04
Dover Corp	0.62	0.28	0.34	21.62
% of Portfolio	5.37	2.48	2.89	

<b>Ten Worst Performers</b>				
	<b>Portfolio Weight (%)</b>	<b>Benchmark Weight (%)</b>	<b>Active Weight (%)</b>	<b>Quarterly Return (%)</b>
Western Digital Corp	0.77	0.39	0.38	-23.73
Westlake Chemical Corp	0.15	0.01	0.14	-22.58
Lear Corp	0.45	0.19	0.26	-21.64
Newell Brands Inc	0.41	0.20	0.21	-20.46
EQT Corp	0.55	0.26	0.29	-19.80
Newmont Mining Corp	0.76	0.36	0.40	-19.54
Freeport-McMoRan Inc	0.91	0.45	0.46	-19.35
Whirlpool Corp	0.36	0.17	0.19	-18.05
L Brands Inc	0.34	0.13	0.21	-16.10
Hanesbrands Inc	0.31	0.00	0.31	-15.61
% of Portfolio	5.01	2.16	2.85	



## Vanguard Mid-Cap Value Index Fund vs. Russell Midcap Value Index





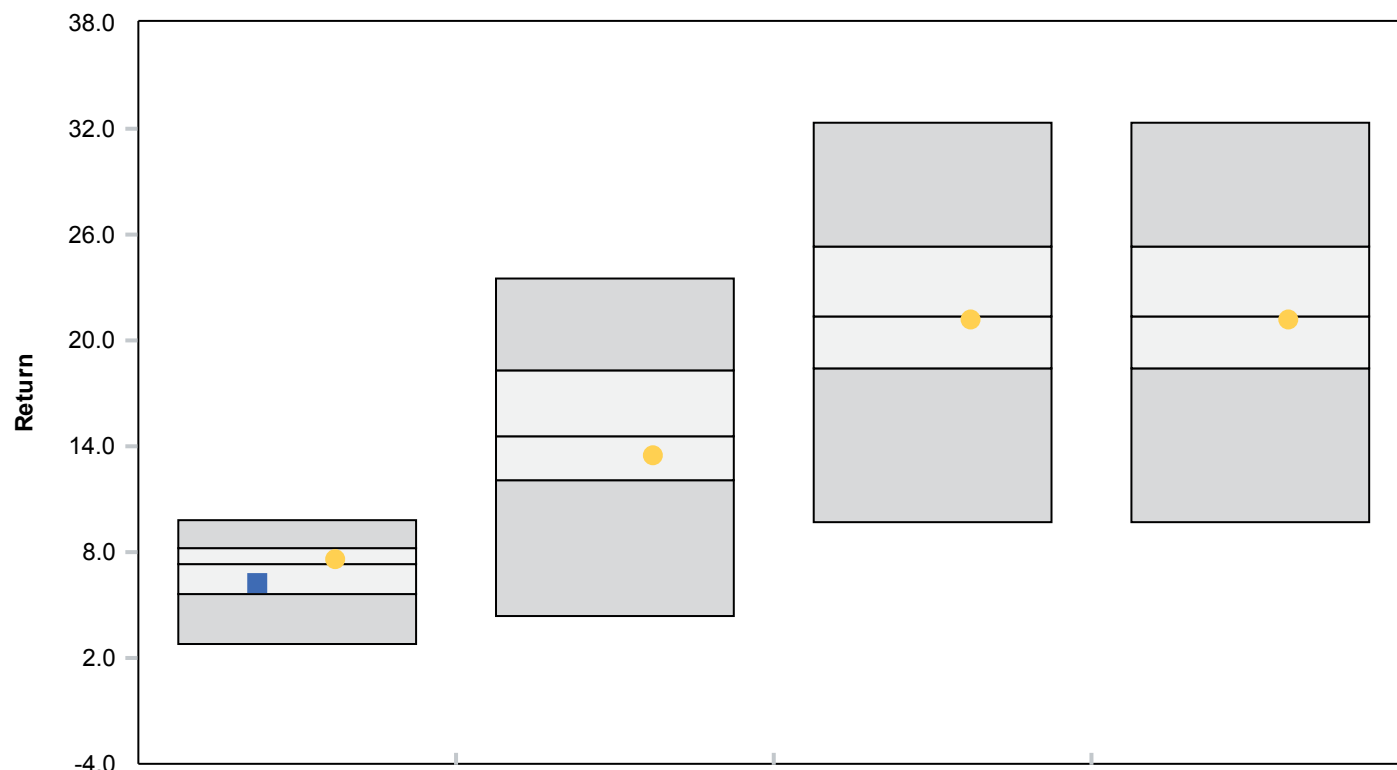
Vanguard Mid-Cap Value Index Fund vs. Russell Midcap Value Index

Buy-and-Hold Portfolio	2.57
Portfolio Trading	0.53
Actual Return	3.10
Benchmark Return	3.30
Actual Active Return	-0.19
Stock Selection	-0.47
Sector Selection	-0.19
Interaction	-0.05
Total Selection	-0.71
Portfolio Trading	0.53
Benchmark Trading	0.01
Active Trading Impact	0.52
Buy & Hold Active Return	-0.19

	Allocation-07/01/2018		Performance-1 Quarter Ending September 30, 2018		Attribution			
	Portfolio	Benchmark	Portfolio	Benchmark	Stock	Sector	Interaction	Total
Communication Services	4.74	3.20	5.73	5.83	0.00	0.04	0.00	0.03
Consumer Discretionary	15.96	9.25	1.25	0.13	0.10	-0.21	0.08	-0.03
Consumer Staples	5.13	5.10	-2.79	-0.35	-0.12	0.00	0.00	-0.13
Energy	5.27	7.71	-2.18	1.80	-0.31	0.04	0.10	-0.17
Financials	20.69	18.10	2.69	1.45	0.23	-0.05	0.03	0.21
Health Care	5.18	6.41	2.85	9.23	-0.41	-0.07	0.08	-0.40
Industrials	8.01	11.83	14.03	9.60	0.52	-0.24	-0.17	0.11
Information Technology	11.88	8.65	3.41	7.77	-0.38	0.14	-0.14	-0.37
Materials	8.32	6.35	-2.26	-1.07	-0.08	-0.09	-0.02	-0.19
Real Estate	4.39	13.35	0.40	0.43	0.00	0.26	0.00	0.25
Utilities	10.42	10.04	2.86	3.14	-0.03	0.00	0.00	-0.03
Cash	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	100.00	100.00	2.57	3.28	-0.47	-0.19	-0.05	-0.71



## IM U.S. Mid Cap Growth Equity (MF)



■ Vanguard Mid-Cap Growth Index Fund

● Russell Midcap Growth Index

5th Percentile

9.83

23.56

32.34

32.34

1st Quartile

8.24

18.33

25.36

25.36

Median

7.27

14.60

21.39

21.39

3rd Quartile

5.63

12.09

18.38

18.38

95th Percentile

2.83

4.40

9.67

9.67

Population

399

393

387

387

Parentheses contain percentile rankings.

Calculation based on monthly periodicity.

Returns are net of fees and are expressed as percentages.



## Vanguard Mid-Cap Growth Index Fund vs. Russell Midcap Growth Index

<b>Portfolio Characteristics</b>		
	<b>Portfolio</b>	<b>Benchmark</b>
Wtd. Avg. Mkt. Cap (\$M)	18,393	16,585
Median Mkt. Cap (\$M)	13,599	8,810
Price/Earnings ratio	31.15	27.12
Price/Book ratio	4.58	6.30
5 Yr. EPS Growth Rate (%)	16.40	18.32
Current Yield (%)	0.82	0.85
Number of Stocks	183	415

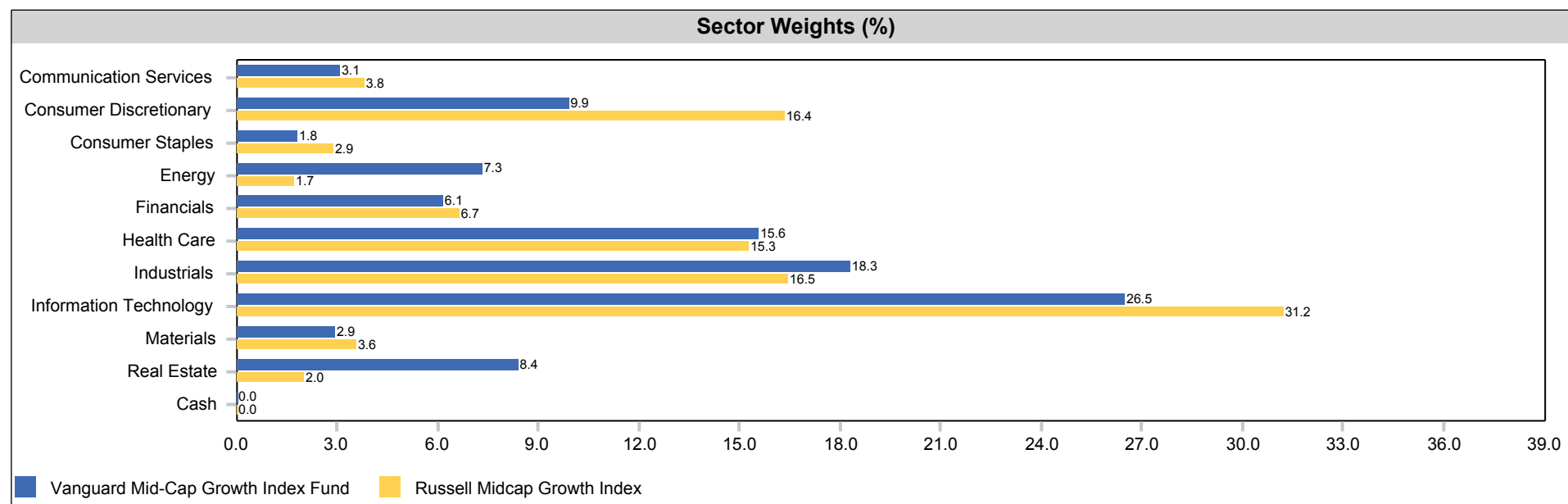
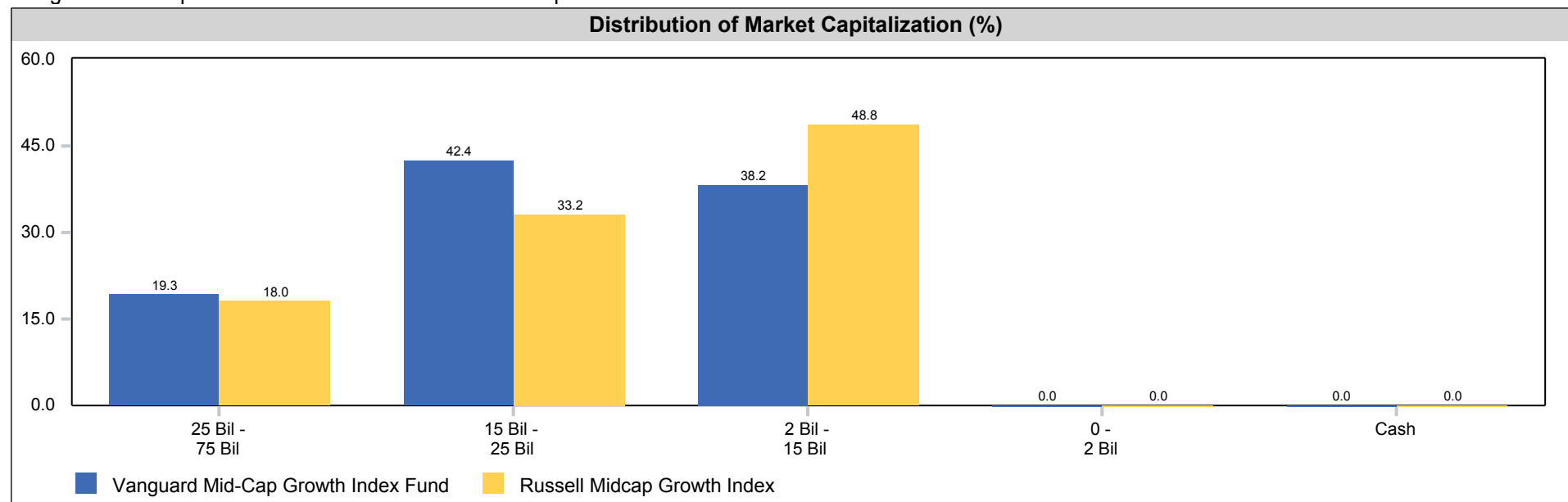
<b>Top Ten Equity Holdings</b>				
	<b>Portfolio Weight (%)</b>	<b>Benchmark Weight (%)</b>	<b>Active Weight (%)</b>	<b>Quarterly Return (%)</b>
Edwards Lifesciences Corp	1.62	1.17	0.45	19.60
Autodesk Inc.	1.52	0.92	0.60	19.09
Fiserv Inc.	1.48	1.07	0.41	11.19
Roper Technologies Inc	1.36	0.18	1.18	7.52
Concho Resources Inc	1.36	0.12	1.24	10.41
Worldpay Inc	1.36	0.09	1.27	23.83
Align Technology Inc	1.32	0.99	0.33	14.35
Amphenol Corp	1.25	0.89	0.36	8.14
Centene Corp	1.25	0.83	0.42	17.51
ONEOK Inc.	1.24	0.37	0.87	-1.74
% of Portfolio	13.76	6.63	7.13	

<b>Ten Best Performers</b>				
	<b>Portfolio Weight (%)</b>	<b>Benchmark Weight (%)</b>	<b>Active Weight (%)</b>	<b>Quarterly Return (%)</b>
Advanced Micro Devices Inc	1.20	0.90	0.30	106.07
Square Inc	0.63	0.91	-0.28	60.63
DexCom Inc	0.28	0.40	-0.12	50.60
Match Group Inc	0.13	0.10	0.03	49.48
Fortinet Inc	0.29	0.41	-0.12	47.80
IAC/InterActiveCorp	0.74	0.52	0.22	42.12
Carvana Co	0.04	0.00	0.04	42.04
Veeva Systems Inc	0.29	0.42	-0.13	41.65
Acuity Brands Inc.	0.14	0.00	0.14	35.80
Trimble Inc	0.48	0.00	0.48	32.34
% of Portfolio	4.22	3.66	0.56	

<b>Ten Worst Performers</b>				
	<b>Portfolio Weight (%)</b>	<b>Benchmark Weight (%)</b>	<b>Active Weight (%)</b>	<b>Quarterly Return (%)</b>
SNAP INC	0.22	0.00	0.22	-35.22
Twitter Inc	0.86	0.64	0.22	-34.83
IPG Photonics Corp	0.24	0.18	0.06	-29.26
Weight Watchers International Inc.	0.00	0.00	0.00	-28.79
Wynn Resorts Ltd	0.55	0.42	0.13	-23.66
EQT Corp	0.00	0.00	0.00	-19.80
Martin Marietta Materials Inc.	0.51	0.34	0.17	-18.33
Mohawk Industries Inc.	0.49	0.00	0.49	-18.16
Dropbox Inc	0.11	0.00	0.11	-17.24
Antero Resources Corp	0.09	0.07	0.02	-17.05
% of Portfolio	3.07	1.65	1.42	



## Vanguard Mid-Cap Growth Index Fund vs. Russell Midcap Growth Index



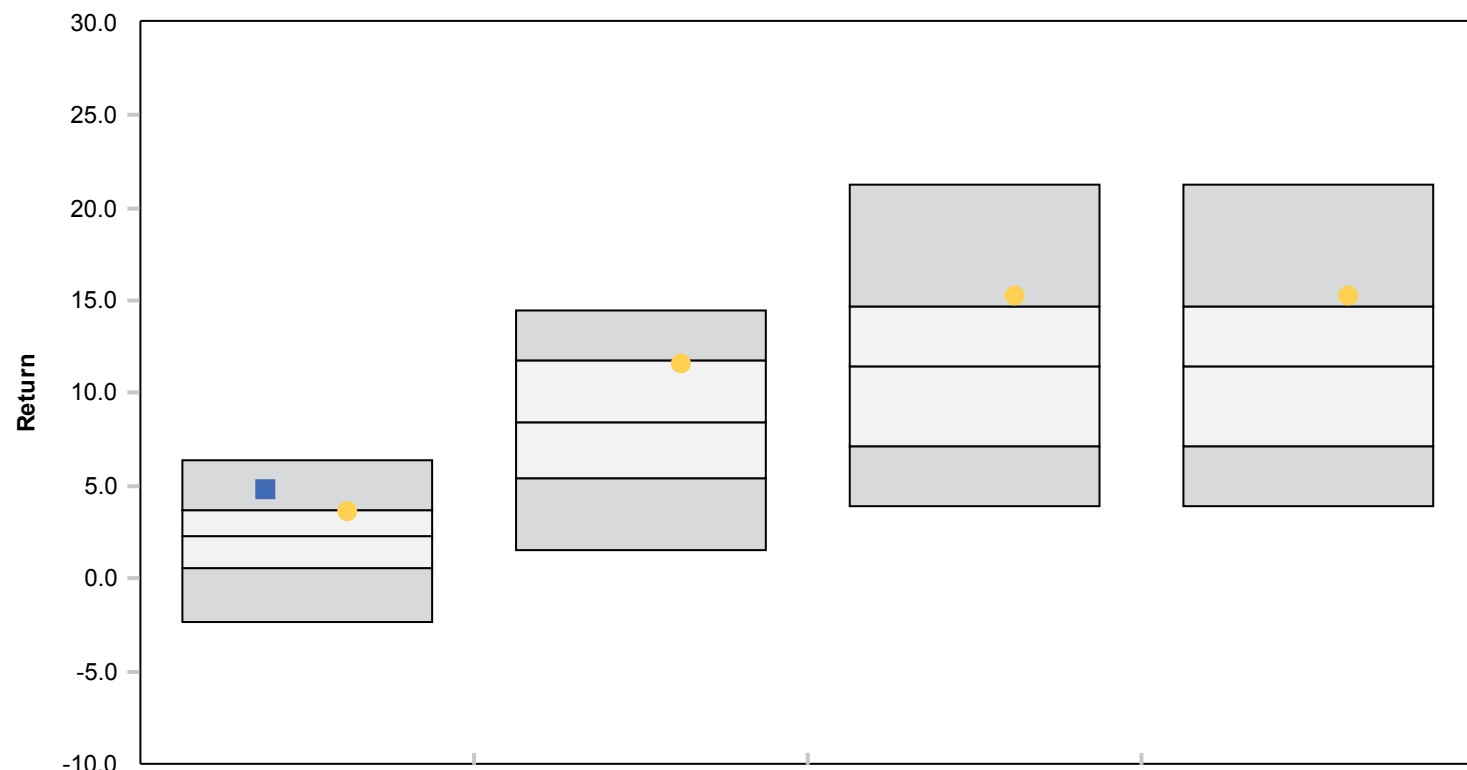
Vanguard Mid-Cap Growth Index Fund vs. Russell Midcap Growth Index

Buy-and-Hold Portfolio	6.76
Portfolio Trading	-0.55
Actual Return	6.22
Benchmark Return	7.57
Actual Active Return	-1.36
Stock Selection	-0.18
Sector Selection	-0.90
Interaction	0.34
Total Selection	-0.73
Portfolio Trading	-0.55
Benchmark Trading	0.08
Active Trading Impact	-0.62
Buy & Hold Active Return	-1.36

	Allocation-07/01/2018		Performance-1 Quarter Ending September 30, 2018		Attribution			
	Portfolio	Benchmark	Portfolio	Benchmark	Stock	Sector	Interaction	Total
Communication Services	3.55	4.28	-7.29	-4.75	-0.11	0.09	0.02	0.00
Consumer Discretionary	10.30	16.54	2.51	5.78	-0.54	0.11	0.20	-0.23
Consumer Staples	1.75	3.48	10.09	5.62	0.16	0.03	-0.08	0.11
Energy	7.63	1.78	2.70	-0.95	0.06	-0.49	0.21	-0.22
Financials	6.48	7.35	1.14	-0.16	0.10	0.07	-0.01	0.15
Health Care	14.82	14.43	12.11	12.29	-0.03	0.02	0.00	-0.01
Industrials	18.23	16.14	7.13	9.39	-0.36	0.04	-0.05	-0.37
Information Technology	24.94	29.84	13.43	11.82	0.48	-0.21	-0.08	0.19
Materials	3.30	3.99	-4.37	-5.06	0.03	0.09	0.00	0.11
Real Estate	8.99	2.19	0.06	-1.77	0.04	-0.63	0.12	-0.47
Cash	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	100.00	100.00	6.76	7.50	-0.18	-0.90	0.34	-0.73



IM U.S. Small Cap Core Equity (MF)



■ Vanguard Small Cap Index Fund

● Russell 2000 Index

	Current Quarter	Year To Date	Trailing 12-months	Fiscal Year To Date
	4.77 (13)	N/A	N/A	N/A
	3.58 (27)	11.51 (30)	15.24 (20)	15.24 (20)
5th Percentile	6.44	14.45	21.27	21.27
1st Quartile	3.74	11.73	14.73	14.73
Median	2.26	8.46	11.41	11.41
3rd Quartile	0.61	5.41	7.13	7.13
95th Percentile	-2.40	1.54	3.91	3.91
Population	116	115	112	112

Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.  
Returns are net of fees and are expressed as percentages.



## Vanguard Small Cap Index Fund vs. Russell 2000 Index

<b>Portfolio Characteristics</b>		
	<b>Portfolio</b>	<b>Benchmark</b>
Wtd. Avg. Mkt. Cap (\$M)	4,640	2,406
Median Mkt. Cap (\$M)	2,465	941
Price/Earnings ratio	19.44	19.00
Price/Book ratio	2.69	2.56
5 Yr. EPS Growth Rate (%)	15.95	11.99
Current Yield (%)	1.47	1.27
Number of Stocks	1,408	2,040

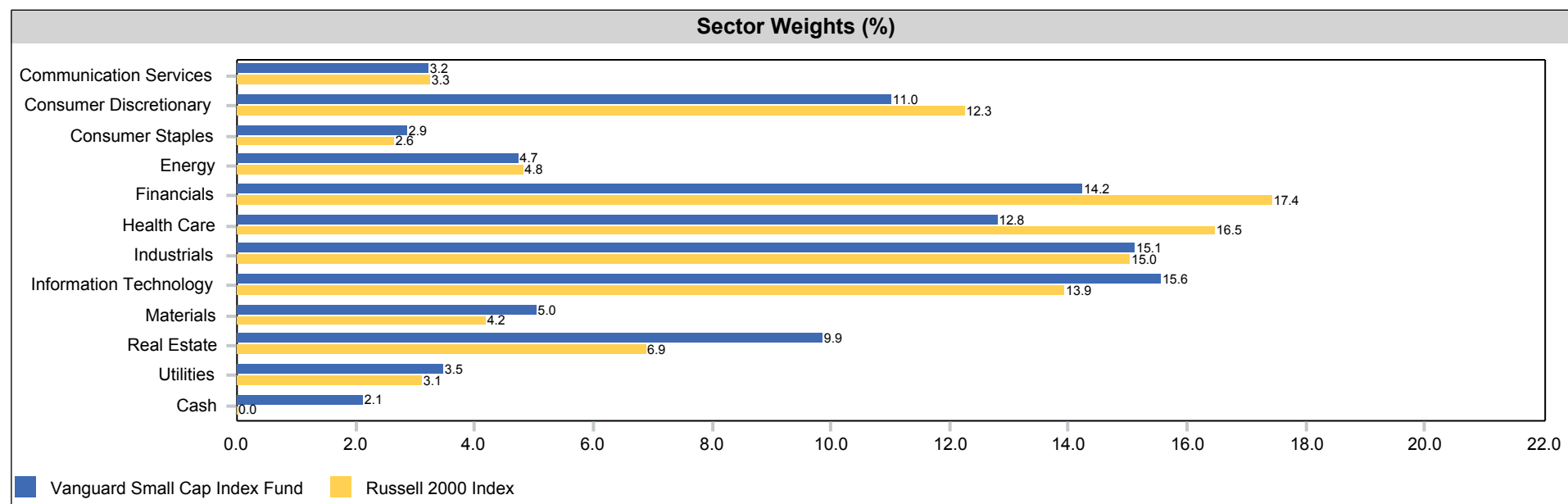
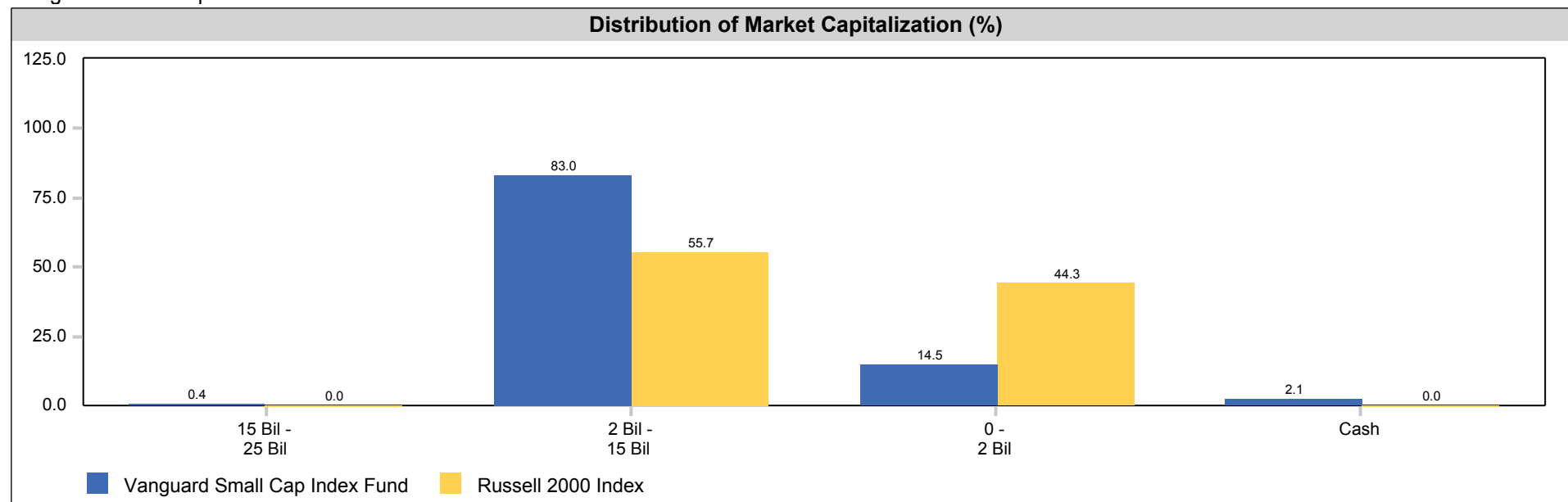
<b>Top Ten Equity Holdings</b>				
	<b>Portfolio Weight (%)</b>	<b>Benchmark Weight (%)</b>	<b>Active Weight (%)</b>	<b>Quarterly Return (%)</b>
CASH	2.11	0.00	2.11	N/A
IDEX Corporation	0.31	0.00	0.31	10.73
PTC Inc	0.30	0.00	0.30	13.20
Neurocrine Biosciences Inc	0.29	0.00	0.29	25.15
Burlington Stores Inc	0.29	0.00	0.29	8.23
NRG Energy Inc	0.28	0.00	0.28	21.94
PerkinElmer Inc.	0.28	0.00	0.28	32.95
Atmos Energy Corp	0.28	0.00	0.28	4.73
Leidos Holdings Inc	0.27	0.00	0.27	17.75
Sarepta Therapeutics Inc	0.27	0.00	0.27	22.19
% of Portfolio	4.68	0.00	4.68	

<b>Ten Best Performers</b>				
	<b>Portfolio Weight (%)</b>	<b>Benchmark Weight (%)</b>	<b>Active Weight (%)</b>	<b>Quarterly Return (%)</b>
Reata Pharmaceuticals Inc	0.02	0.07	-0.05	133.80
Tandem Diabetes Care Inc	0.03	0.10	-0.07	94.55
Intelsat SA	0.05	0.06	-0.01	80.07
Endo International plc	0.09	0.17	-0.08	78.47
Roku Inc	0.11	0.14	-0.03	71.35
NovoCure Ltd	0.10	0.17	-0.07	67.41
Liveramp Holdings Inc	0.10	0.17	-0.07	64.98
MongoDB Inc	0.04	0.00	0.04	64.32
Belmond Ltd	0.04	0.07	-0.03	63.68
Trade Desk Inc (The)	0.13	0.22	-0.09	60.89
% of Portfolio	0.71	1.17	-0.46	

<b>Ten Worst Performers</b>				
	<b>Portfolio Weight (%)</b>	<b>Benchmark Weight (%)</b>	<b>Active Weight (%)</b>	<b>Quarterly Return (%)</b>
Endologix Inc	0.00	0.01	-0.01	-66.25
Longfin Corp	0.00	0.00	0.00	-65.52
Lannett Co Inc.	0.00	0.01	-0.01	-65.07
Maiden Holdings Ltd	0.00	0.01	-0.01	-62.58
Diebold Nixdorf Inc	0.01	0.02	-0.01	-62.34
Sears Holdings Corp	0.00	0.00	0.00	-59.16
Covia Holdings Corp	0.01	0.01	0.00	-51.67
Blue Apron Holdings Inc	0.00	0.00	0.00	-48.66
Scientific Games Corp	0.04	0.06	-0.02	-48.32
Radius Health Inc	0.02	0.03	-0.01	-39.60
% of Portfolio	0.08	0.15	-0.07	



## Vanguard Small Cap Index Fund vs. Russell 2000 Index





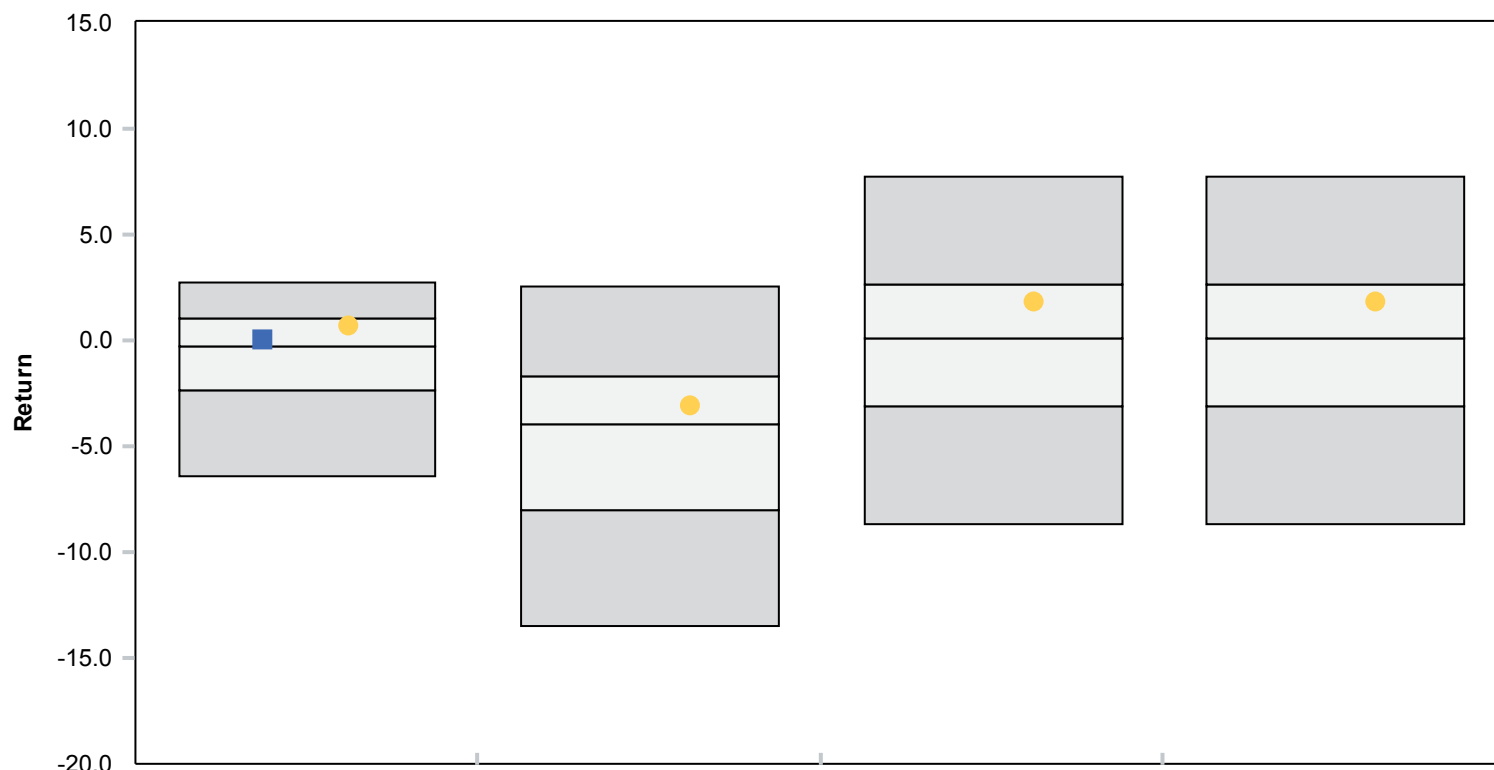
Vanguard Small Cap Index Fund vs. Russell 2000 Index

Buy-and-Hold Portfolio	4.79
Portfolio Trading	-0.01
Actual Return	4.77
Benchmark Return	3.58
Actual Active Return	1.20
Stock Selection	1.44
Sector Selection	-0.15
Interaction	-0.04
Total Selection	1.25
Portfolio Trading	-0.01
Benchmark Trading	0.04
Active Trading Impact	-0.05
Buy & Hold Active Return	1.20

	Allocation-07/01/2018		Performance-1 Quarter Ending September 30, 2018		Attribution			
	Portfolio	Benchmark	Portfolio	Benchmark	Stock	Sector	Interaction	Total
Communication Services	3.14	2.99	6.75	12.60	-0.17	0.01	-0.01	-0.17
Consumer Discretionary	11.54	12.19	3.08	3.61	-0.06	0.00	0.00	-0.06
Consumer Staples	2.97	2.80	-2.51	-1.74	-0.02	-0.01	0.00	-0.03
Energy	5.06	5.01	0.48	-2.94	0.17	0.00	0.00	0.17
Financials	14.68	17.95	0.88	0.91	-0.01	0.09	0.00	0.08
Health Care	12.13	15.59	11.58	7.57	0.63	-0.14	-0.14	0.35
Industrials	15.31	14.87	6.64	4.40	0.33	0.00	0.01	0.35
Information Technology	15.71	13.70	9.56	5.69	0.53	0.04	0.08	0.65
Materials	5.33	4.34	0.20	1.13	-0.04	-0.02	-0.01	-0.07
Real Estate	10.37	7.26	0.39	-0.38	0.06	-0.12	0.02	-0.04
Utilities	3.74	3.31	4.46	3.49	0.03	0.00	0.00	0.04
Other	0.01	0.00	13.24	0.00	0.00	0.00	0.00	0.00
Total	100.00	100.00	4.79	3.54	1.44	-0.15	-0.04	1.25



IM International Equity (MF)



■ International Equity  
● MSCI AC World ex USA (Net)

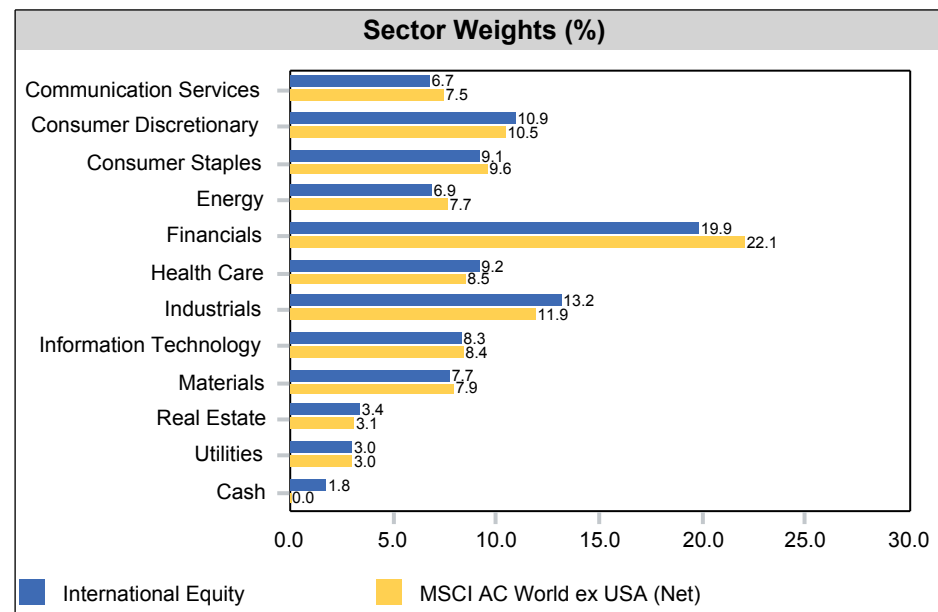
5th Percentile	2.77	2.50	7.71	7.71
1st Quartile	0.99	-1.73	2.62	2.62
Median	-0.27	-3.92	0.06	0.06
3rd Quartile	-2.32	-8.02	-3.10	-3.10
95th Percentile	-6.44	-13.51	-8.67	-8.67
Population	3,285	3,186	3,123	3,123

Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.  
Returns are net of fees and are expressed as percentages.  
3.25

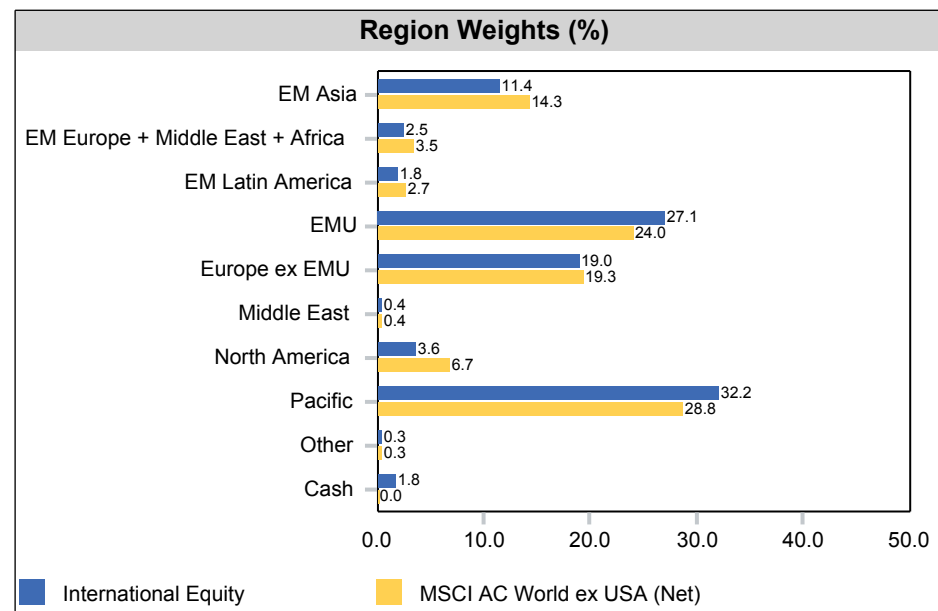


International Equity vs. MSCI AC World ex USA (Net)

Portfolio Characteristics		
	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$M)	56,744	64,560
Median Mkt. Cap (\$M)	2,250	8,009
Price/Earnings ratio	14.17	14.09
Price/Book ratio	2.20	2.20
5 Yr. EPS Growth Rate (%)	12.00	11.33
Current Yield (%)	3.09	3.15
Number of Stocks	4,991	2,166



Top Ten Equity Holdings			
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)
CASH	1.76	0.00	1.76
Nestle SA, Cham Und Vevey	1.34	1.24	0.10
Samsung Electronics Co Ltd	1.02	0.96	0.06
Novartis AG	0.98	0.89	0.09
HSBC Holdings PLC	0.92	0.83	0.09
Roche Holding AG	0.89	0.81	0.08
TOTAL SA	0.83	0.74	0.09
Royal Dutch Shell PLC	0.82	0.75	0.07
Toyota Motor Corp	0.78	0.68	0.10
Tencent Holdings LTD	0.75	1.12	-0.37
% of Portfolio	10.09	8.02	2.07



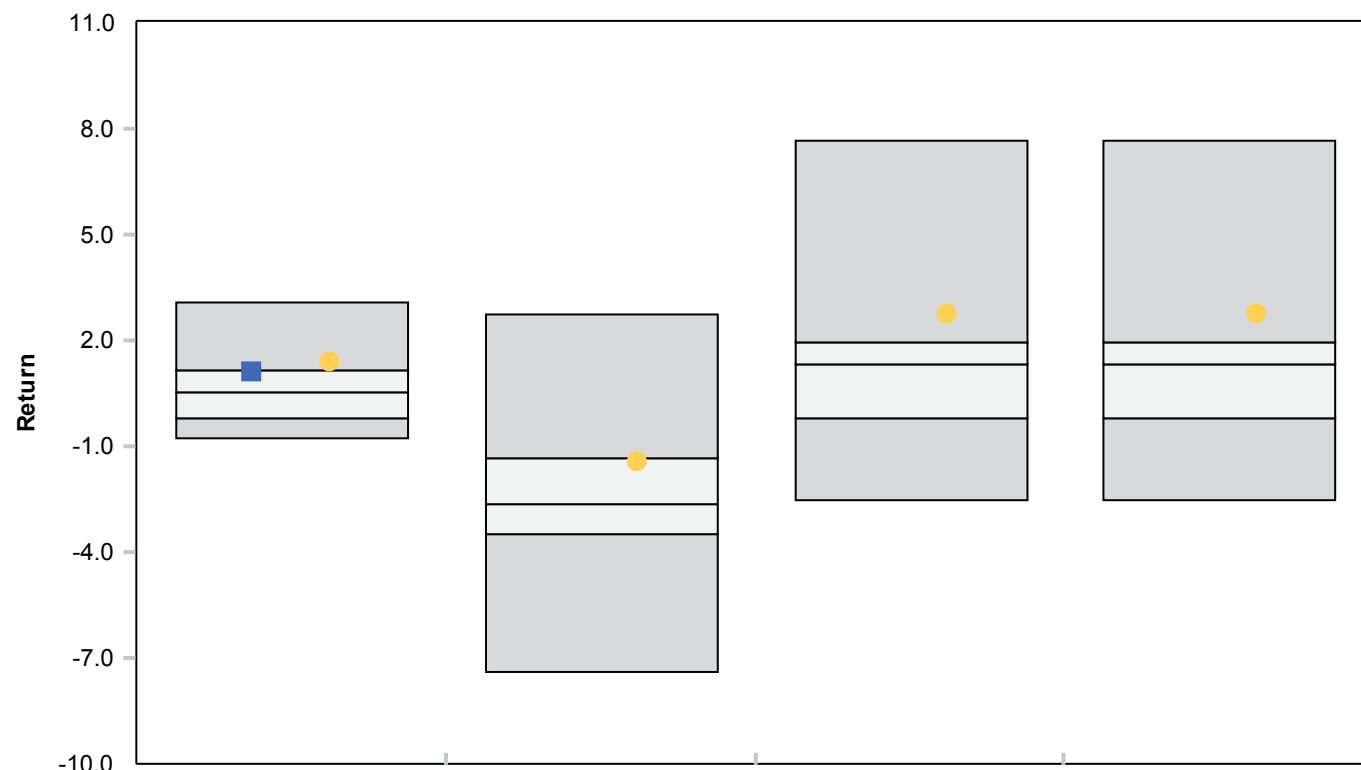
International Equity vs. MSCI AC World ex USA (Net)

Buy-and-Hold Portfolio	0.97
Portfolio Trading	-1.00
Actual Return	-0.04
Benchmark Return	0.71
Actual Active Return	-0.74
Stock Selection	0.09
Sector Selection	0.00
Interaction	0.00
Total Selection	0.10
Portfolio Trading	-1.00
Benchmark Trading	-0.16
Active Trading Impact	-0.84
Buy & Hold Active Return	-0.74

	Allocation-07/01/2018		Performance-1 Quarter Ending September 30, 2018		Attribution			
	Portfolio	Benchmark	Portfolio	Benchmark	Stock	Sector	Interaction	Total
Communication Services	6.90	7.69	-1.72	-2.92	0.09	0.03	-0.01	0.11
Consumer Discretionary	11.30	10.80	-1.99	-2.95	0.10	-0.02	0.00	0.09
Consumer Staples	9.64	9.66	-0.26	-0.37	0.01	0.00	0.00	0.01
Energy	6.70	7.42	4.20	4.59	-0.03	-0.03	0.00	-0.05
Financials	20.20	21.91	1.49	1.82	-0.07	-0.02	0.01	-0.08
Health Care	8.78	8.12	4.70	4.46	0.02	0.02	0.00	0.04
Industrials	13.13	11.64	2.72	2.91	-0.02	0.03	0.00	0.01
Information Technology	8.37	8.36	0.88	1.43	-0.05	0.00	0.00	-0.05
Materials	8.08	8.19	0.39	0.37	0.00	0.00	0.00	0.00
Real Estate	3.57	3.21	-2.81	-3.50	0.02	-0.02	0.00	0.01
Utilities	3.03	3.00	-0.75	-0.93	0.01	0.00	0.00	0.01
Cash	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	100.00	100.00	0.97	0.87	0.09	0.00	0.00	0.10



IM International Large Cap Core Equity (MF)



■ Vanguard Developed Markets Index Fund  
 ● MSCI EAFE (net)

5th Percentile  
 1st Quartile  
 Median  
 3rd Quartile  
 95th Percentile

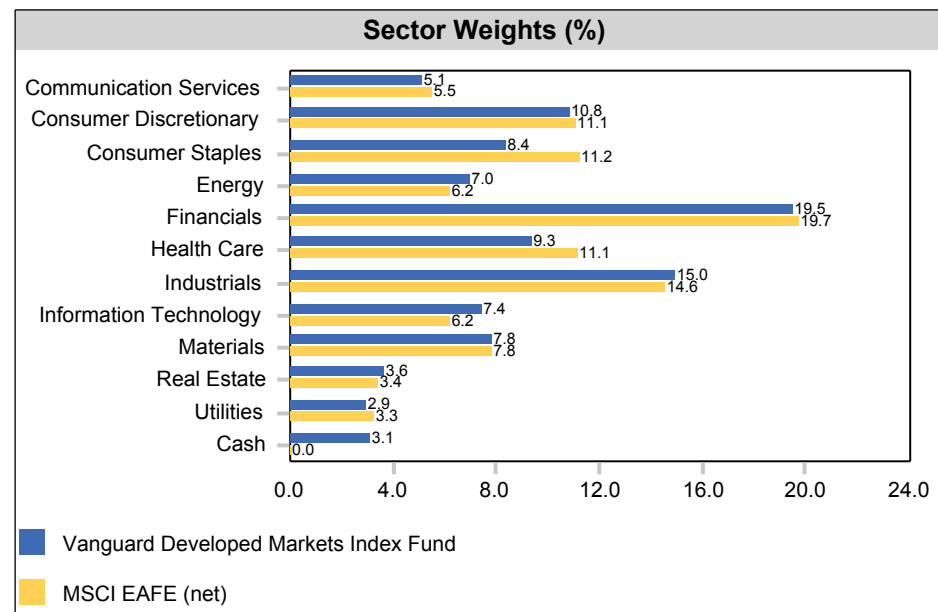
Current Quarter	Year To Date	Trailing 12-months	Fiscal Year To Date
1.09 (27)	N/A	N/A	N/A
1.35 (22)	-1.43 (27)	2.74 (15)	2.74 (15)
3.05	2.73	7.67	7.67
1.15	-1.35	1.93	1.93
0.52	-2.63	1.34	1.34
-0.20	-3.47	-0.19	-0.19
-0.76	-7.38	-2.52	-2.52
Population	87	78	78

Parentheses contain percentile rankings.  
 Calculation based on monthly periodicity.  
 Returns are net of fees and are expressed as percentages.  
 3.28

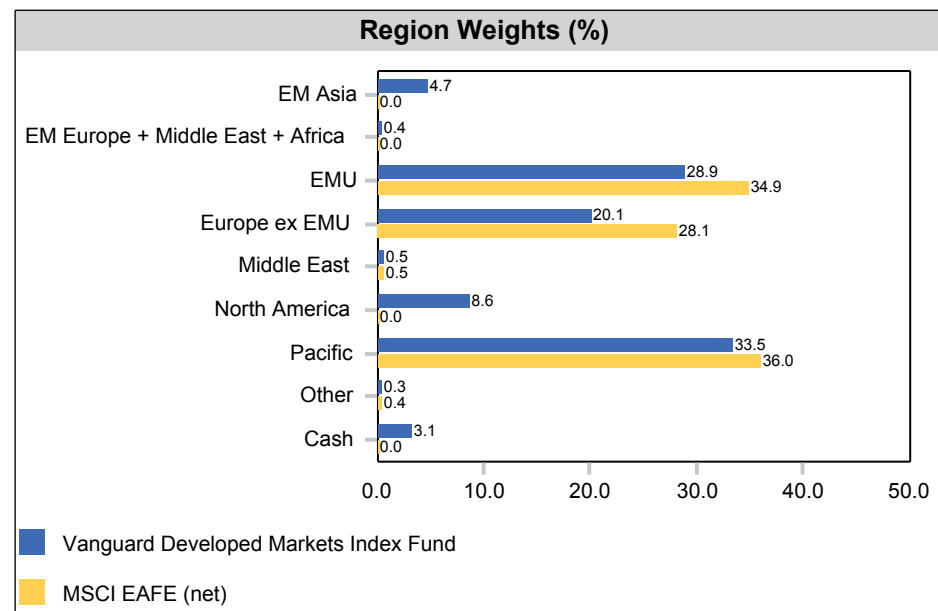


Vanguard Developed Markets Index Fund vs. MSCI EAFE (net)

Portfolio Characteristics		
	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$M)	48,367	61,249
Median Mkt. Cap (\$M)	1,756	11,018
Price/Earnings ratio	14.73	14.43
Price/Book ratio	2.16	2.19
5 Yr. EPS Growth Rate (%)	11.49	10.83
Current Yield (%)	3.05	3.27
Number of Stocks	3,980	924



Top Ten Equity Holdings			
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)
CASH	3.12	0.00	3.12
Nestle SA, Cham Und Vevey	1.34	1.81	-0.47
Novartis AG	1.00	1.30	-0.30
HSBC Holdings PLC	0.94	1.21	-0.27
Samsung Electronics Co Ltd	0.93	0.00	0.93
Roche Holding AG	0.90	1.18	-0.28
TOTAL SA	0.86	1.07	-0.21
Toyota Motor Corp	0.84	0.99	-0.15
Royal Dutch Shell PLC	0.84	1.09	-0.25
BP PLC	0.74	1.06	-0.32
% of Portfolio	11.51	9.71	1.80



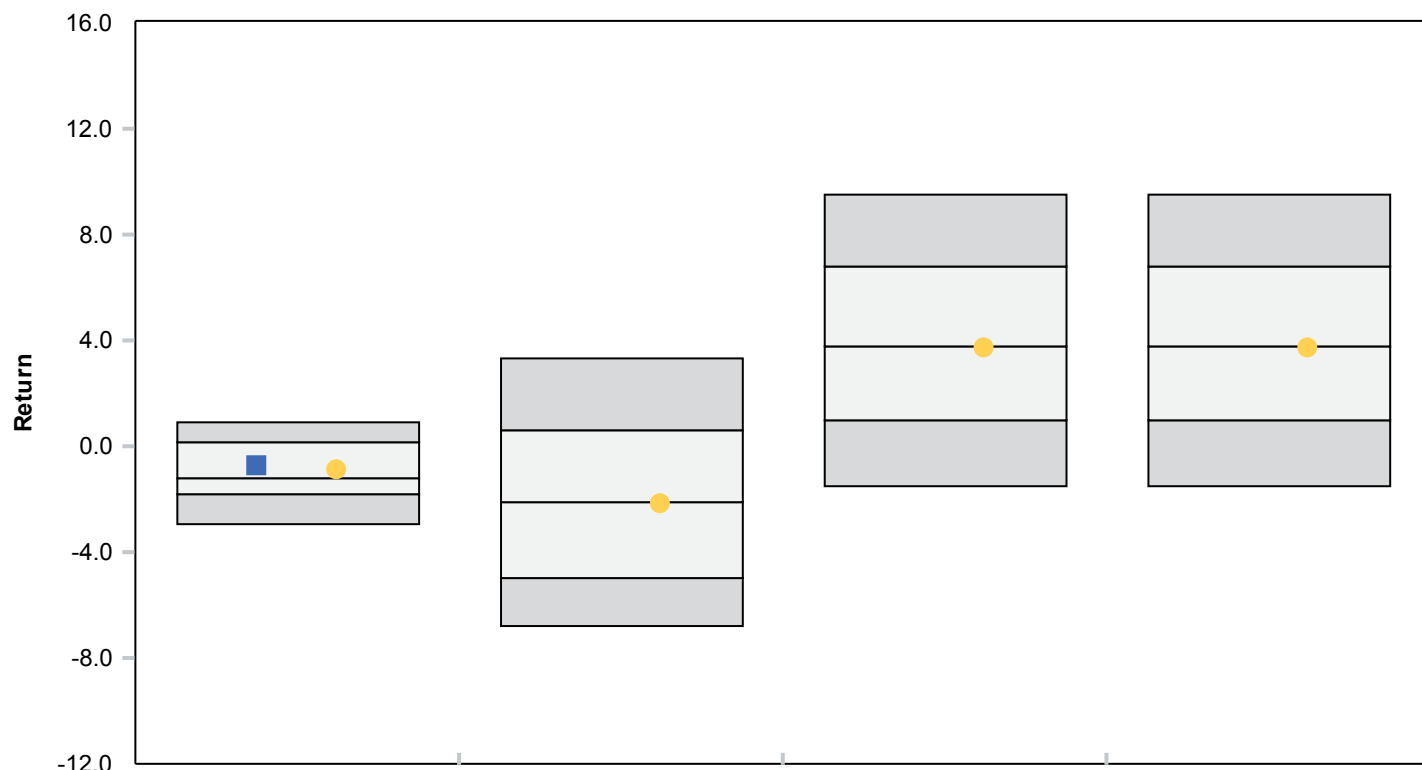
Vanguard Developed Markets Index Fund vs. MSCI EAFE (net)

Buy-and-Hold Portfolio	1.18
Portfolio Trading	-0.09
Actual Return	1.09
Benchmark Return	1.35
Actual Active Return	-0.26
Stock Selection	-0.31
Sector Selection	-0.04
Interaction	-0.01
Total Selection	-0.36
Portfolio Trading	-0.09
Benchmark Trading	-0.18
Active Trading Impact	0.09
Buy & Hold Active Return	-0.26

	Allocation-07/01/2018		Performance-1 Quarter Ending September 30, 2018		Attribution			
	Portfolio	Benchmark	Portfolio	Benchmark	Stock	Sector	Interaction	Total
Communication Services	5.06	5.40	2.29	3.38	-0.06	-0.01	0.00	-0.06
Consumer Discretionary	11.02	11.22	-0.68	-0.25	-0.05	0.00	0.00	-0.04
Consumer Staples	9.91	11.32	-0.61	0.03	-0.07	0.02	0.01	-0.04
Energy	6.85	6.07	1.75	3.72	-0.12	0.02	-0.02	-0.12
Financials	20.01	19.81	1.81	1.08	0.14	0.00	0.00	0.14
Health Care	9.36	10.65	5.77	5.73	0.00	-0.05	0.00	-0.05
Industrials	14.87	14.31	2.60	2.66	-0.01	0.01	0.00	0.00
Information Technology	7.48	6.19	0.10	0.45	-0.02	-0.01	0.00	-0.04
Materials	8.67	8.17	-1.41	0.55	-0.16	-0.01	-0.01	-0.17
Real Estate	3.78	3.53	-1.91	-2.91	0.04	-0.01	0.00	0.03
Utilities	2.98	3.32	-0.86	-0.74	0.00	0.01	0.00	0.00
Total	100.00	100.00	1.18	1.53	-0.31	-0.04	-0.01	-0.36



IM International Small Cap Core Equity (SA+CF)



■ iShares MSCI EAFE Small-Cap ETF

● MSCI EAFE Small Cap (net)

5th Percentile

1st Quartile

Median

3rd Quartile

95th Percentile

Population

**Current  
Quarter**

-0.73 (36)

-0.88 (37)

0.89

0.17

-1.21

-1.82

-2.97

41

**Year  
To  
Date**

N/A

-2.19 (51)

3.32

0.58

-2.12

-4.97

-6.78

41

**Trailing  
12-months**

N/A

3.73 (51)

9.50

6.81

3.76

0.98

-1.48

41

**Fiscal Year  
To Date**

N/A

3.73 (51)

9.50

6.81

3.76

0.98

-1.48

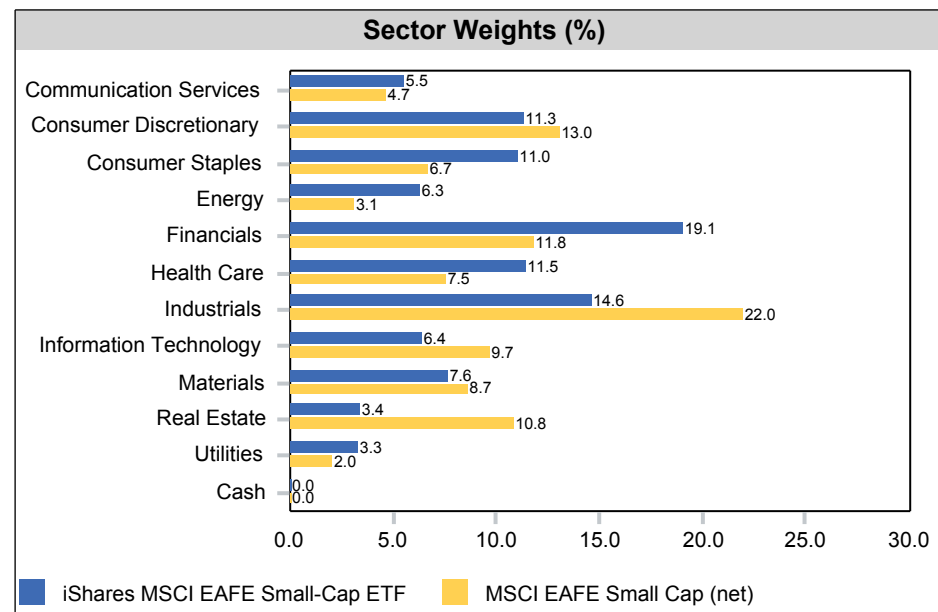
41



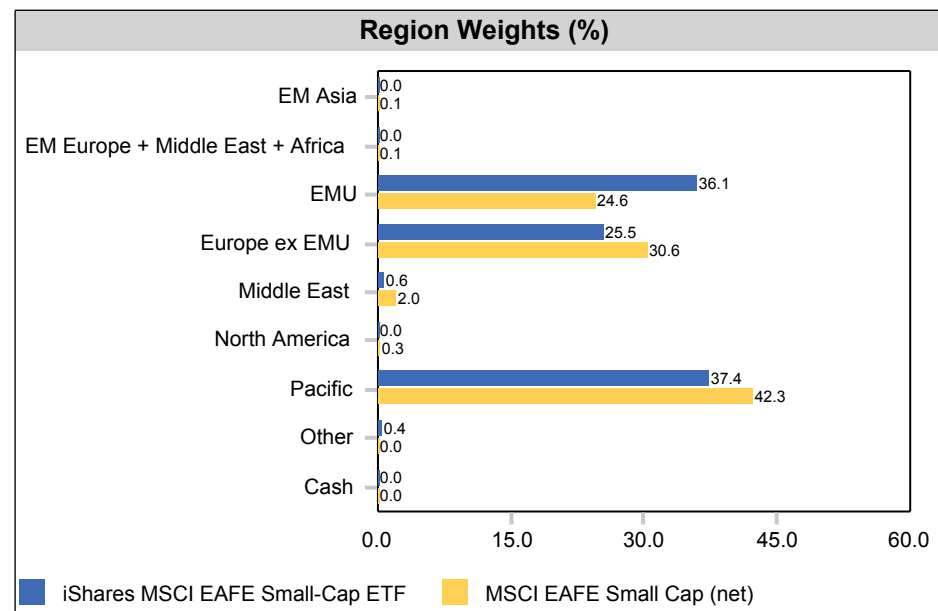


iShares MSCI EAFE Small-Cap ETF vs. MSCI EAFE Small Cap (net)

Portfolio Characteristics		
	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$M)	57,300	2,776
Median Mkt. Cap (\$M)	11,008	1,146
Price/Earnings ratio	14.19	15.71
Price/Book ratio	2.20	2.27
5 Yr. EPS Growth Rate (%)	11.99	13.52
Current Yield (%)	3.23	2.61
Number of Stocks	931	2,344



Top Ten Equity Holdings			
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)
Nestle SA, Cham Und Vevey	1.88	0.00	1.88
Novartis AG	1.35	0.00	1.35
HSBC Holdings PLC	1.27	0.00	1.27
Roche Holding AG	1.23	0.00	1.23
Royal Dutch Shell PLC	1.14	0.00	1.14
TOTAL SA	1.12	0.00	1.12
Toyota Motor Corp	1.03	0.00	1.03
BP PLC	1.02	0.00	1.02
Royal Dutch Shell PLC	0.94	0.00	0.94
SAP SE	0.87	0.00	0.87
% of Portfolio	11.85	0.00	11.85



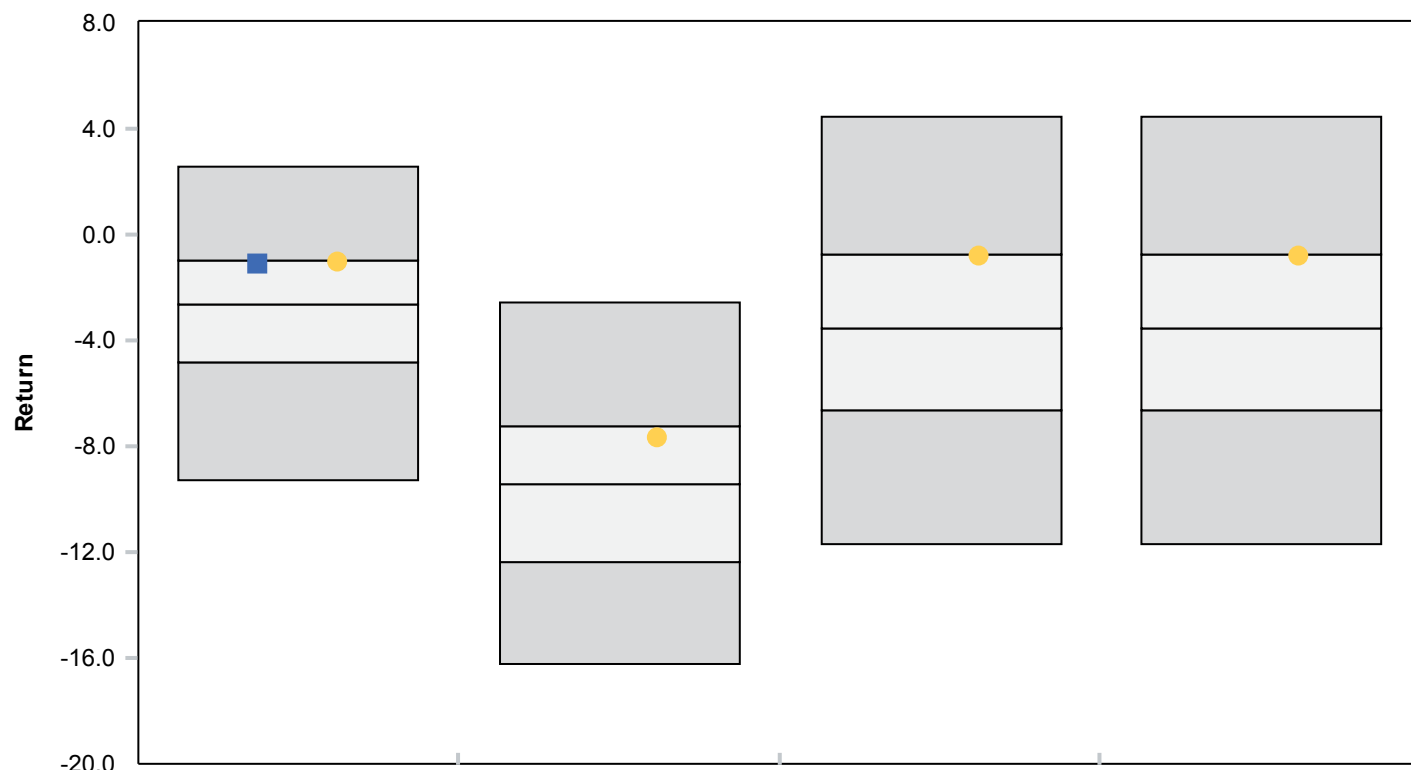
iShares MSCI EAFE Small-Cap ETF vs. MSCI EAFE Small Cap (net)

Buy-and-Hold Portfolio	1.56
Portfolio Trading	-2.29
Actual Return	-0.73
Benchmark Return	-0.88
Actual Active Return	0.14
Stock Selection	2.12
Sector Selection	0.25
Interaction	0.10
Total Selection	2.46
Portfolio Trading	-2.29
Benchmark Trading	0.02
Active Trading Impact	-2.31
Buy & Hold Active Return	0.14

	Allocation-07/01/2018		Performance-1 Quarter Ending September 30, 2018		Attribution			
	Portfolio	Benchmark	Portfolio	Benchmark	Stock	Sector	Interaction	Total
Communication Services	5.47	4.71	3.06	-5.47	0.40	-0.03	0.06	0.43
Consumer Discretionary	11.66	13.42	-0.18	-3.79	0.48	0.05	-0.06	0.47
Consumer Staples	10.64	6.77	0.66	-2.11	0.19	-0.05	0.11	0.25
Energy	6.41	2.83	2.33	6.43	-0.12	0.26	-0.15	0.00
Financials	19.44	11.70	1.09	-0.37	0.17	0.04	0.11	0.32
Health Care	10.46	7.31	5.30	2.22	0.23	0.10	0.10	0.42
Industrials	14.60	21.58	2.85	0.50	0.51	-0.10	-0.16	0.25
Information Technology	6.55	9.80	0.48	-0.84	0.13	0.00	-0.04	0.08
Materials	7.74	9.02	1.09	-2.50	0.32	0.02	-0.05	0.30
Real Estate	3.62	10.76	-2.65	-0.46	-0.24	-0.03	0.16	-0.11
Utilities	3.36	2.09	-0.28	-2.06	0.04	-0.01	0.02	0.05
Cash	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	100.00	100.00	1.56	-0.90	2.12	0.25	0.10	2.46



IM Emerging Markets Equity (SA+CF+MF)



■ Fidelity Emerging Markets Index Fund

● MSCI EM (net)

5th Percentile

1st Quartile

Median

3rd Quartile

95th Percentile

Population

**Current  
Quarter**

-1.13 (28)

-1.09 (28)

2.56

-0.94

-2.65

-4.82

-9.25

1,322

**Year  
To  
Date**

N/A

-7.68 (30)

-2.55

-7.22

-9.46

-12.35

-16.19

1,278

**Trailing  
12-months**

N/A

-0.81 (27)

4.43

-0.75

-3.57

-6.61

-11.69

1,255

**Fiscal Year  
To Date**

N/A

-0.81 (27)

4.43

-0.75

-3.57

-6.61

-11.69

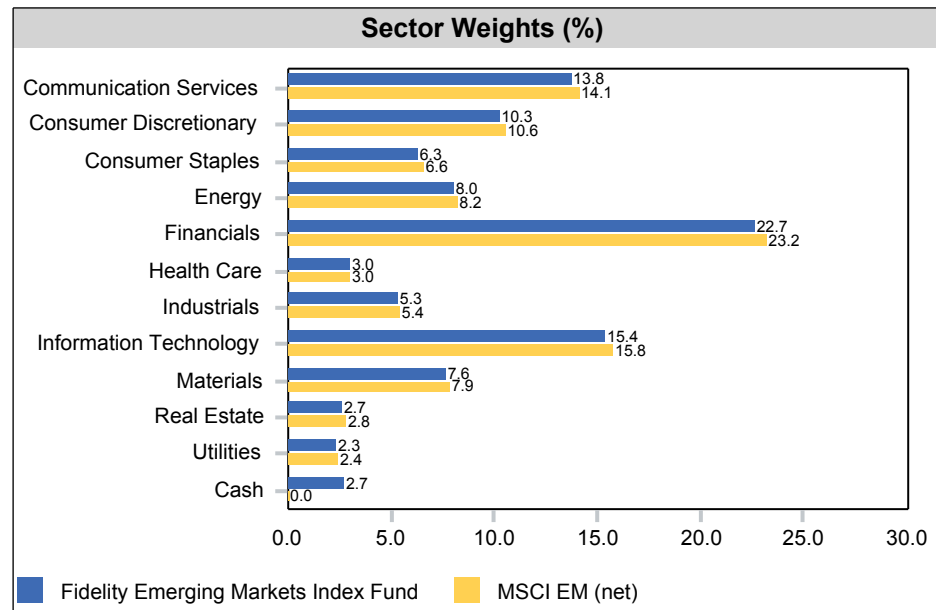
1,255

Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.  
Returns are net of fees and are expressed as percentages.

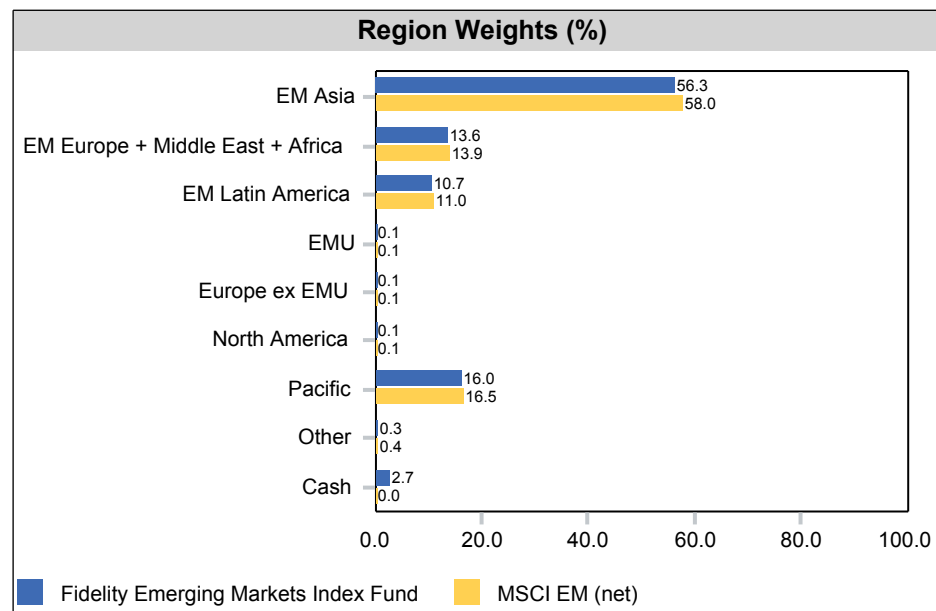


Fidelity Emerging Markets Index Fund vs. MSCI EM (net)

Portfolio Characteristics		
	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$M)	75,840	78,602
Median Mkt. Cap (\$M)	5,197	5,211
Price/Earnings ratio	12.83	12.71
Price/Book ratio	2.30	2.30
5 Yr. EPS Growth Rate (%)	13.39	13.69
Current Yield (%)	2.84	2.83
Number of Stocks	1,133	1,151



Top Ten Equity Holdings			
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)
Tencent Holdings LTD	4.44	4.54	-0.10
Taiwan Semicon Manufctrng Co Ltd	3.99	4.09	-0.10
Samsung Electronics Co Ltd	3.79	3.89	-0.10
Alibaba Group Holding Ltd	3.59	3.68	-0.09
CASH	2.74	0.00	2.74
Naspers Ltd	1.78	1.83	-0.05
China Construction Bank Corp	1.58	1.62	-0.04
Baidu Inc	1.19	1.22	-0.03
China Mobile Ltd	1.14	1.17	-0.03
Ping An Insurance Group	1.03	1.02	0.01
% of Portfolio	25.27	23.06	2.21



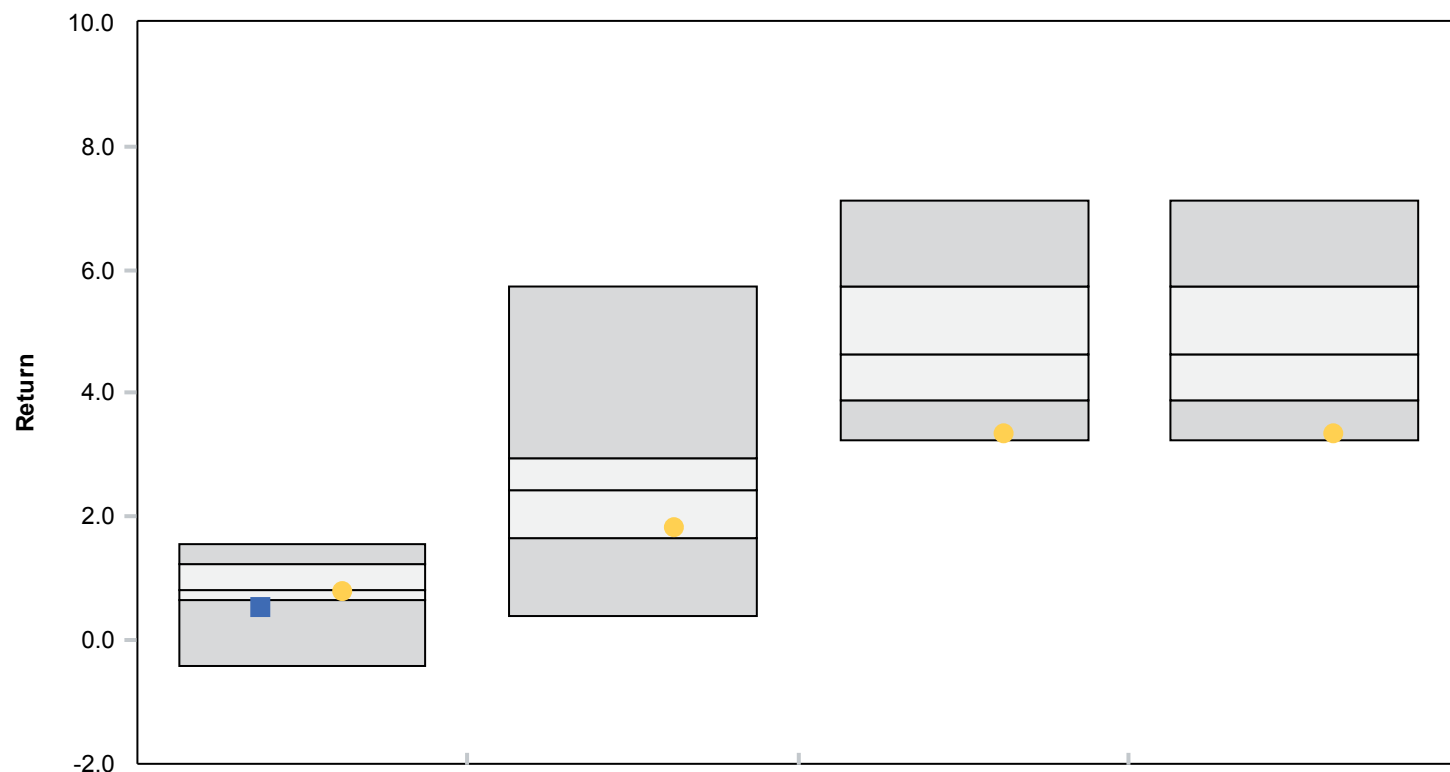
Fidelity Emerging Markets Index Fund vs. MSCI EM (net)

Buy-and-Hold Portfolio	-1.03
Portfolio Trading	-0.10
Actual Return	-1.13
Benchmark Return	-1.09
Actual Active Return	-0.03
Stock Selection	-0.11
Sector Selection	0.02
Interaction	0.00
Total Selection	-0.09
Portfolio Trading	-0.10
Benchmark Trading	-0.15
Active Trading Impact	0.05
Buy & Hold Active Return	-0.03

	Allocation-07/01/2018		Performance-1 Quarter Ending September 30, 2018		Attribution			
	Portfolio	Benchmark	Portfolio	Benchmark	Stock	Sector	Interaction	Total
Communication Services	15.02	15.23	-9.42	-9.37	-0.01	0.02	0.00	0.01
Consumer Discretionary	11.13	11.35	-9.96	-9.79	-0.02	0.02	0.00	0.00
Consumer Staples	6.50	6.66	-2.72	-2.56	-0.01	0.00	0.00	-0.01
Energy	7.03	7.14	14.37	14.65	-0.02	-0.02	0.00	-0.04
Financials	22.53	22.83	1.68	1.72	-0.01	-0.01	0.00	-0.02
Health Care	3.14	3.20	-8.12	-7.30	-0.03	0.00	0.00	-0.02
Industrials	5.16	5.18	2.73	2.73	0.00	0.00	0.00	0.00
Information Technology	15.13	15.37	2.25	2.27	0.00	-0.01	0.00	-0.01
Materials	7.45	7.61	3.83	3.86	0.00	-0.01	0.00	-0.01
Real Estate	2.90	3.00	-6.22	-5.74	-0.01	0.00	0.00	-0.01
Utilities	2.34	2.43	-2.06	-1.96	0.00	0.00	0.00	0.00
Cash	1.67	0.00	0.00	0.00	0.00	0.02	0.00	0.02
Total	100.00	100.00	-1.03	-0.94	-0.11	0.02	0.00	-0.09



IM U.S. REIT (SA+CF)



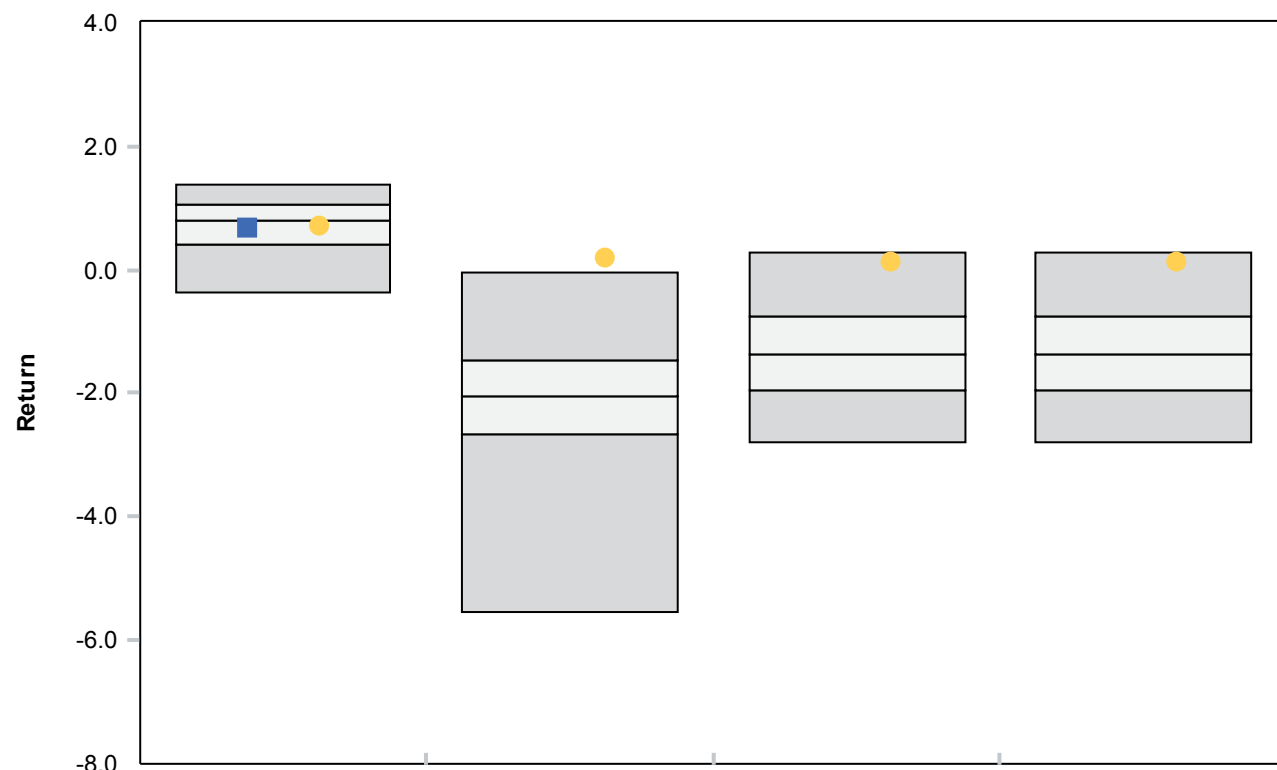
■ Vanguard Real Estate Index Fund  
● FTSE NAREIT Equity REIT Index

5th Percentile	1.55	5.74	7.11	7.11
1st Quartile	1.23	2.96	5.74	5.74
Median	0.82	2.43	4.64	4.64
3rd Quartile	0.64	1.66	3.89	3.89
95th Percentile	-0.42	0.41	3.24	3.24
Population	52	52	51	51

Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.  
Returns are net of fees and are expressed as percentages.  
3.37



IM U.S. Corporate Bonds (MF)



■ Vanguard Short-Term Corporate Bond Index Fund

● Blmbg. Barc. U.S. Corporate 1-5 Year Index

5th Percentile

1st Quartile

Median

3rd Quartile

95th Percentile

Population

**Current  
Quarter**

**Year  
To  
Date**

**Trailing  
12-months**

**Fiscal Year  
To Date**

0.68 (61)

N/A

N/A

N/A

0.71 (59)

0.19 (5)

0.11 (6)

0.11 (6)

1.38

-0.05

0.29

0.29

1.07

-1.47

-0.75

-0.75

0.78

-2.06

-1.37

-1.37

0.40

-2.66

-1.96

-1.96

-0.36

-5.54

-2.79

-2.79

324

321

315

315

Parentheses contain percentile rankings.

Calculation based on monthly periodicity.

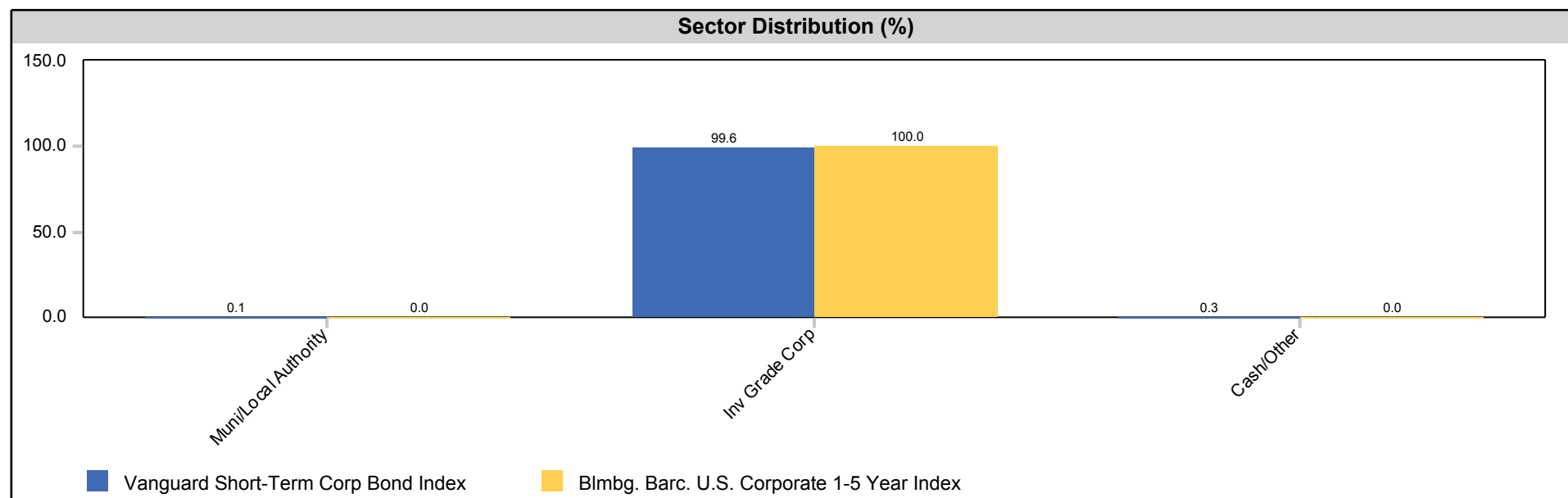
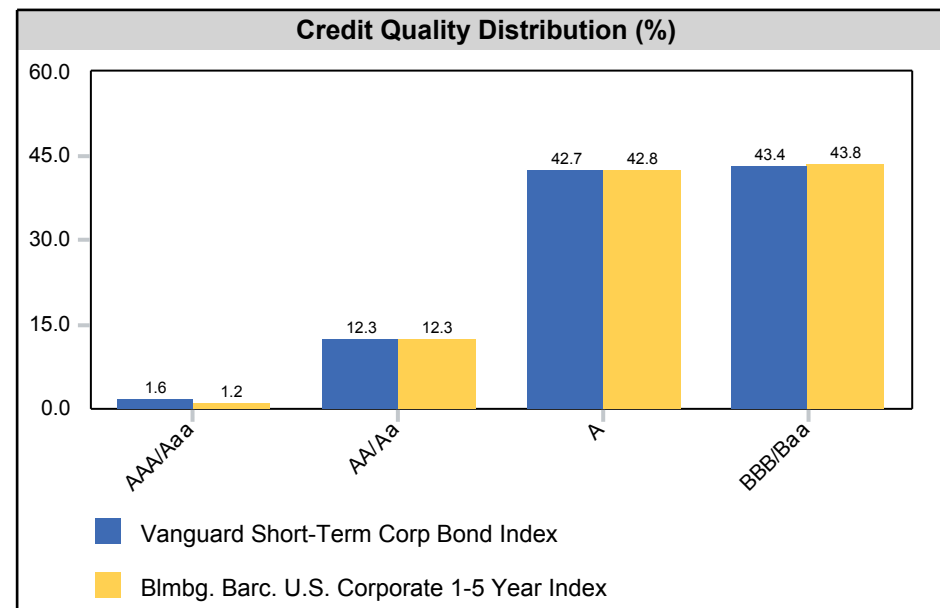
Returns are net of fees and are expressed as percentages.

3.38



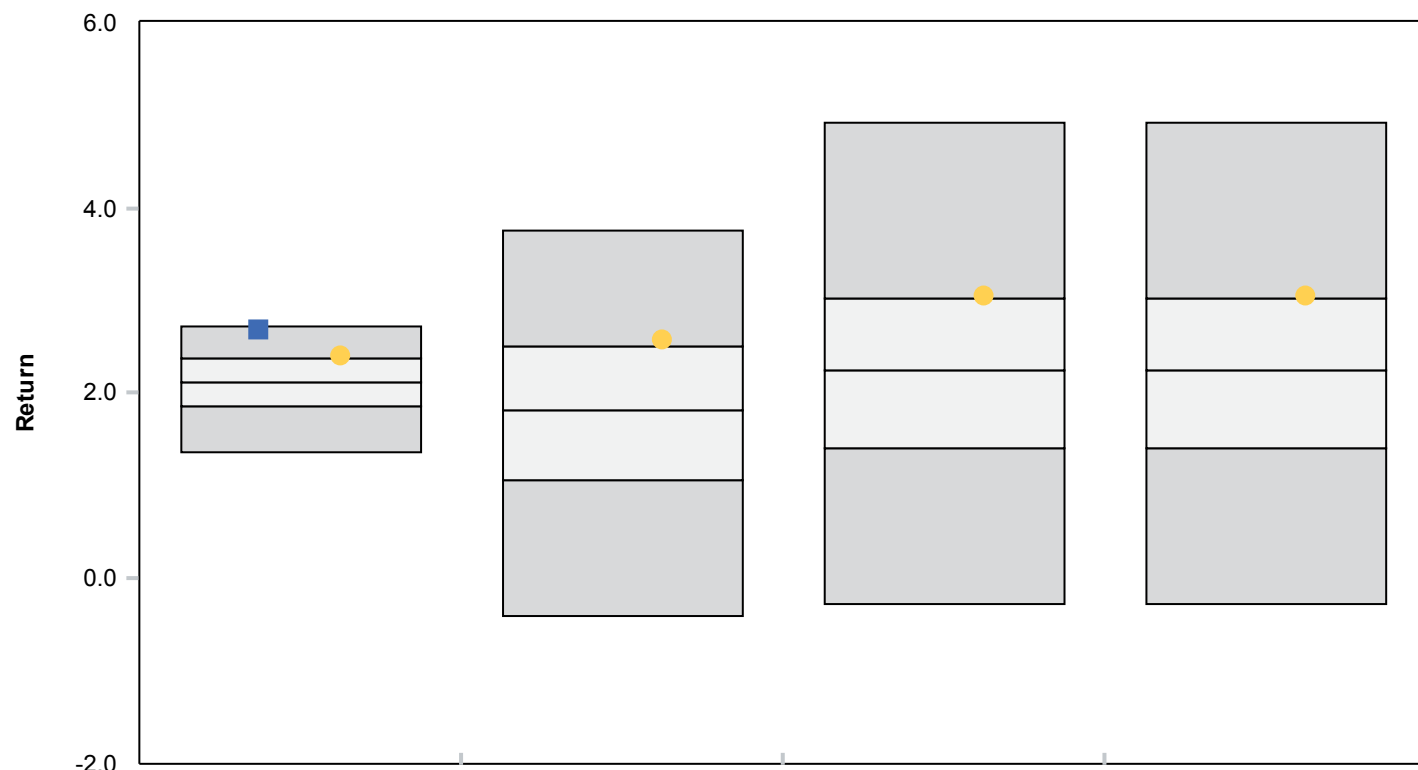
Vanguard Short-Term Corp Bond Index vs. Blmbg. Barc. U.S. Corporate 1-5 Year Index

Portfolio Characteristics		
	Portfolio	Benchmark
Effective Duration	2.70	2.75
Yield To Maturity (%)	3.64	3.50
Avg. Maturity	2.90	1.99
Avg. Quality	A	A
Coupon Rate (%)	3.25	3.30





IM U.S. High Yield Bonds (MF)



■ Vanguard High-Yield Corporate Fund

● Blmbg. Barc. U.S. Corp: High Yield

5th Percentile

1st Quartile

Median

3rd Quartile

95th Percentile

Population

**Current  
Quarter**

2.67 (7)

2.40 (23)

2.72

2.38

2.11

1.85

1.36

696

**Year  
To  
Date**

N/A

2.57 (24)

3.76

2.51

1.82

1.05

-0.41

681

**Trailing  
12-months**

N/A

3.05 (25)

4.92

3.03

2.26

1.40

-0.28

664

**Fiscal Year  
To Date**

N/A

3.05 (25)

4.92

3.03

2.26

1.40

-0.28

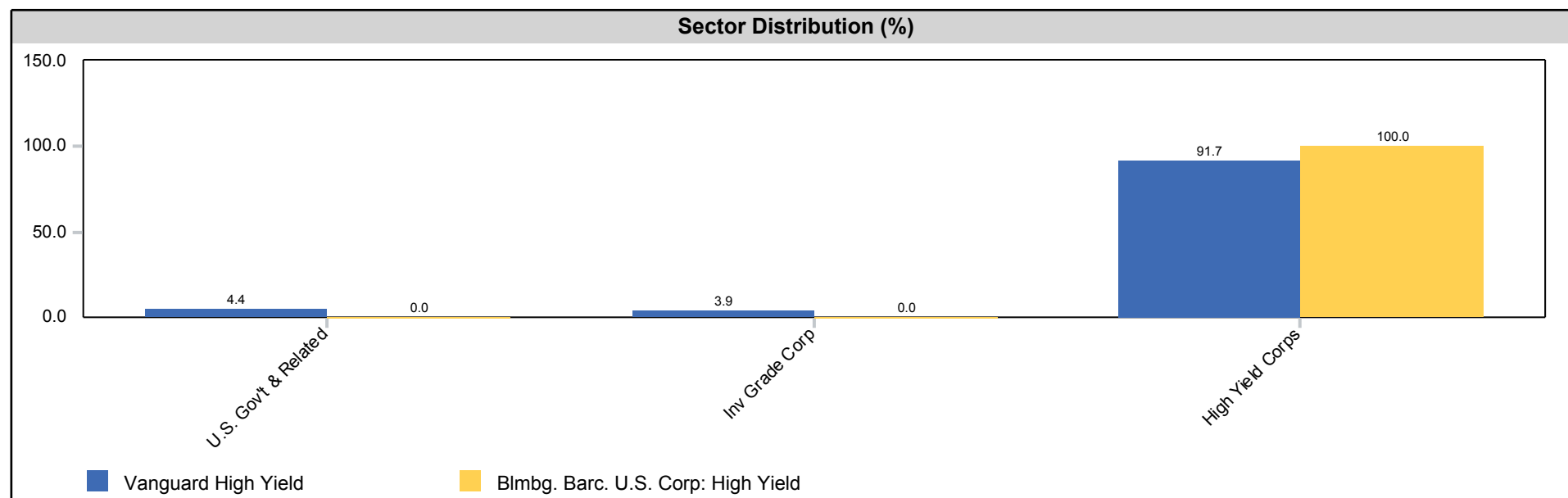
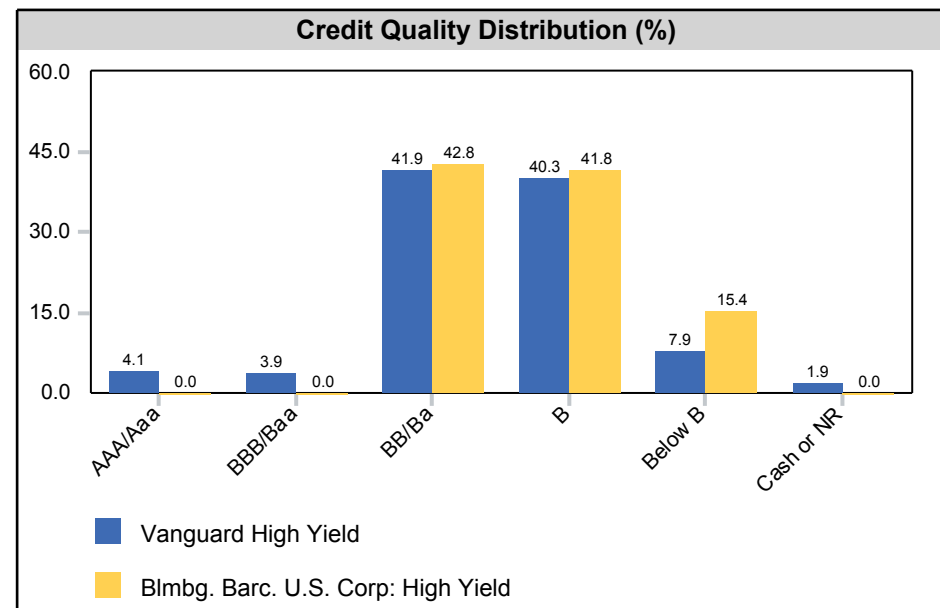
664

Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.  
Returns are net of fees and are expressed as percentages.  
3.40



Vanguard High Yield vs. Blmbg. Barc. U.S. Corp: High Yield

Portfolio Characteristics		
	Portfolio	Benchmark
Effective Duration	4.20	3.76
Yield To Maturity (%)	5.96	6.49
Avg. Maturity	5.40	6.10
Avg. Quality	BB	B
Coupon Rate (%)	5.73	6.37



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