

# North Carolina 403 (b)

# **Defined Contribution Performance Evaluation**

Third Quarter 2014



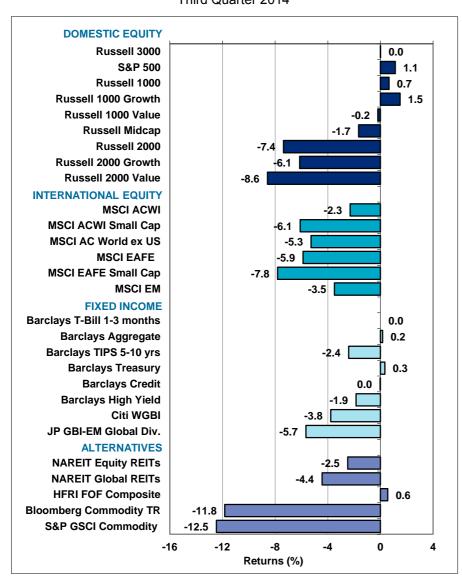
# Contents

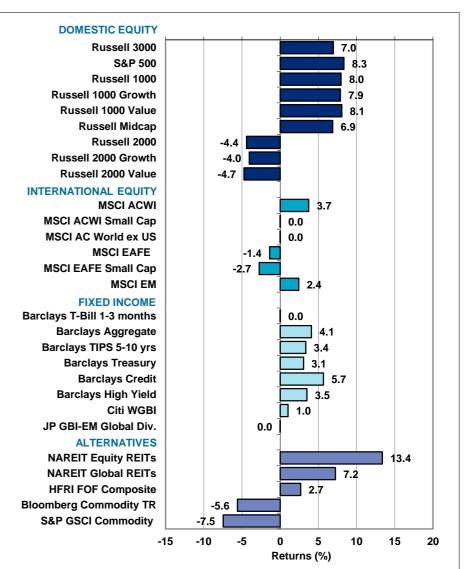
Market Environment	1
Management Summary	2
Fund Profiles	3
Investment Expense Analysis	4
Appendix	

# Performance Summary: Quarter in Review

# Market Performance Third Quarter 2014

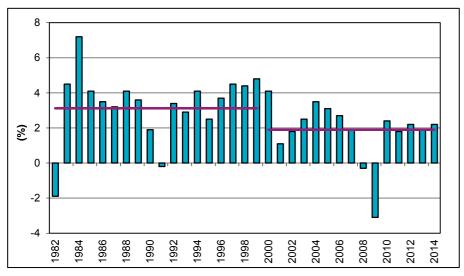
# Market Performance YTD





## Macro Environment: Economic Review

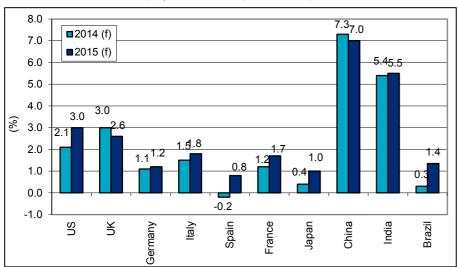
#### **Annual GDP Growth**



Source: Bureau of Economic Analysis

#### **World Economic Growth**

(Projections as of September 2014)

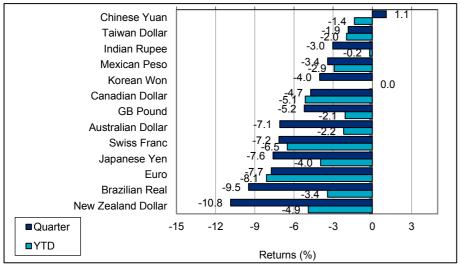


- The economic outlook for the developed world is mixed. While US growth is accelerating, growth in the Eurozone and Japan is faltering. US GDP expanded by 4.6% in the second quarter and is forecasted to grow by 3% in the third and fourth. The economy added an average of 242,000 jobs per month in third quarter and the headline unemployment rate has declined to 5.9%, essentially in-line with the historical average of 5.6%. However, while business investment has started to improve, it remains low by historical standards.
- The Eurozone economy weakened in the third quarter. The slowdown may partly be due to a lagging response to the earlier strength of the euro as well as tensions over Ukraine. Recent currency declines and a new round of ECB asset purchases may improve the macro outlook. Still, the debt overhang and poor policy responses could result in a prolonged period of economic weakness. The increase in consumption taxes weighed on the Japanese economy earlier in the year. However, business confidence is starting to improve. Implementing the third pillar of Abenomics, structural reforms aimed at improving productivity and corporate governance, would improve the growth outlook.
- Similar to developed markets, there is a growth dichotomy across the emerging world. Asian economies saw a pick-up in export growth, while Latin America continued to flounder due to stagnant commodity prices and a stalled political environment. Chinese growth has continued to slow, but policy makers are likely to resist further aggressive easing in order to avoid worsening credit and investment excesses. China should be able to avoid a hard landing since it is not reliant on external financing and has the capital to shore up its banking system. The outlook for EM economies in 2015 is mixed. Faster US GDP growth should help lift exports, but the risk of higher US interest rates leading to capital outflows is a concern. EM growth is expected to improve to 5.0% in 2015. From a longer-term perspective, implementing structural reform could lift the secular growth trajectory.

Source: Bloomberg 2

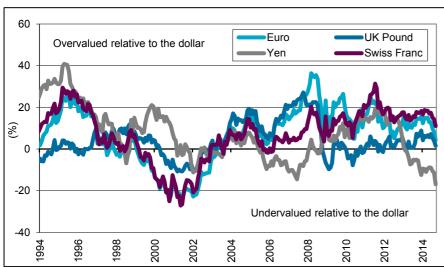
## Macro Environment: Currencies

#### Performance of Foreign Currencies versus the US Dollar



Source: Bloomberg

#### Currency Valuation versus US Dollar (Based on Relative PPP)

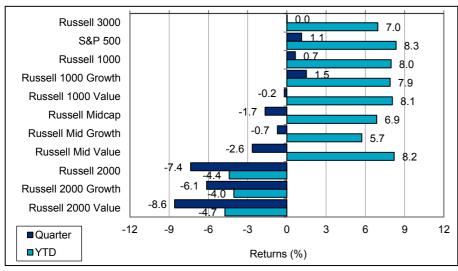


- On a trade-weighted basis, the US dollar gained 3.9% in the third quarter. The euro and yen both plummeted, declining by 7.7% and 7.6%, respectively. Emerging market currencies and commodity sensitive currencies were also hit hard. While foreign currencies may rebound in the short term, we expect the dollar to strengthen over the intermediate-term.
- The US economy has re-emerged as a global growth leader, which suggests the Fed will lead other central banks in hiking rates. US short-term rates relative to other countries have been on the rise as foreign central banks have been reducing rates. The rate disparity should widen further as the Fed prepares to hike rates in 2015. While the sharp upward move in the dollar decreased its attractiveness based on PPP, tighter relative monetary policy may trump valuations over the intermediate term. A risk to this outlook is that a stronger dollar could weaken growth and lower inflation, prompting the Fed to delay rate increases.
- Even after the steep the third quarter decline, the yen is down just 4% year to date. Absent substantial supply side reforms, further stimulus and another downturn in the yen are likely needed to sustain growth and reflationary momentum. In the face of stagnant growth and deflationary risks, European monetary policy remains easy. While the Fed is winding down QE and is on course to hike rates, the ECB announced it will purchase covered bonds for two years. The intermediate-term implications for the euro are negative. However, short speculative positioning in the euro has reached elevated levels, suggesting the possibility of a near-term rebound.
- The large depreciation of EM currencies in the third quarter is reminiscent of 2013, when the QE taper drove currencies lower. This time around, currency declines were likely influenced by lower commodity prices. The prospect for higher US rates may have also contributed to the weakness. Higher US interest rates could divert capital away from EMD. However, the recent selloff has improved EM currency valuations and has most likely priced in tighter Fed policy.

Source: Bloomberg

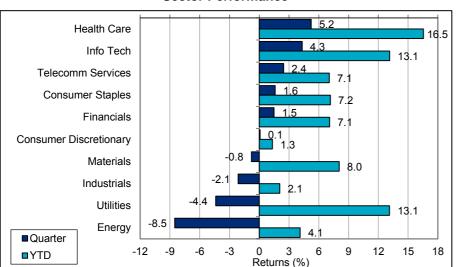
## Asset Class: US Equities – Style, Sector, Cap Performance

#### **Style and Capitalization Market Performance**



Source: Standard & Poor's, Russell, Bloomberg

#### **Sector Performance**



#### **Broad Market**

It was a mixed quarter for US stocks as returns varied significantly by sector, style and capitalization. The Russell 3000 Index finished the quarter flat and is still up 7.0% for the year.

#### **Market Cap**

- Large Caps: The S&P 500 rose by 1.1% during the third quarter and has gained 8.3% year to date. In the third quarter, large cap stocks outperformed mid cap and small cap stocks by 280 bps and 850 bps, respectively.
- Mid Caps: The Russell Midcap Index fell by 1.7% in the third quarter, but is still up 6.9% year to date. For both periods, mid caps have lagged large caps, but outpaced small cap stocks.
- Small Caps: Small cap stocks struggled in the third quarter, shedding 7.4%. year to date, small cap stocks have fallen by 4.4%, underperforming the S&P 500 by 1,270 bps.

#### **Style**

• Value vs. Growth: Growth surpassed value stocks across market capitalizations in the third quarter. Large cap growth stocks returned 1.5%, while large cap value stocks lost 0.2%. Small cap value stocks were the worst performers, dropping 8.6% for the quarter.

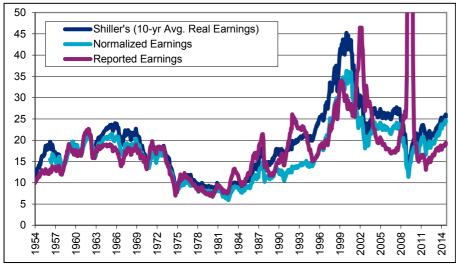
#### Sector

There was also significant dispersion between sectors in the third quarter. For example, health care stocks spiked 5.2%, while energy stocks tumbled 8.5%. Year to date, the health care, technology and utilities sectors have posted the best gains, while the consumer discretionary and industrial sectors have lagged.

Source: Russell 1000 GICs Sector

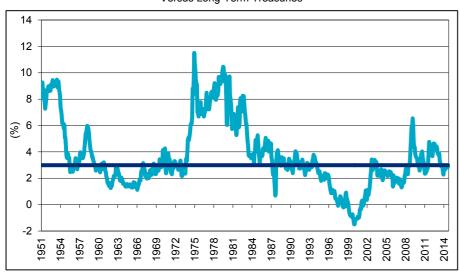
## Asset Class: US Equities – Valuation Review

#### S&P500 - P/E Ratio



Source: S&P, Bloomberg, Mercer

S&P500 – Estimated Equity Risk Premium<sup>1</sup>
Versus Long-Term Treasuries



- Given modest price gains and an uptick in earnings, valuations moved slightly lower during the quarter. The P/E ratio on trailing earnings moved from 19.4 to 19.1, which is above the median of 17.3 since 1956. Valuations are much higher based on measures that adjust for record high profit margins.
- The P/E ratio based on average 10-year real earnings (Shiller's methodology) finished the quarter at 25.6, compared to a median of 19.0 since 1956. Shiller's P/E probably overstates the bearish valuation case on equities due to accounting changes and the trend towards companies buying back shares rather than paying dividends.
- Profit margins on the S&P 500 remain elevated at close to 9% compared to a historical average of about 6%. However, margins have been trending upwards over the past two decades and have averaged close to 7% over the last 10-years. While margins tend to be mean reverting, they should remain above normal over the intermediate-term. High profit margins have mostly come at the expense of employees. While the unemployment rate is declining, reducing the slack in the labor market, it will take some time for the employees share of corporate revenues to return to pre-crisis norms.
- Valuations still look reasonable against bonds. We estimate that the equity risk premium over long-term Treasuries increased slightly from 2.8% to 2.9% during the third quarter, as real bond yields moved marginally lower. We expect stocks to outperform bonds, but current valuations suggest long-term returns will be below normal, especially if profit margins decline from current high levels.

Shiller's P/E= Current S&P 500 price/average 10-year real earnings

Normalized P/E= Current S&P 500 price/(current trailing twelve month sales \* 6.6% profit margin)

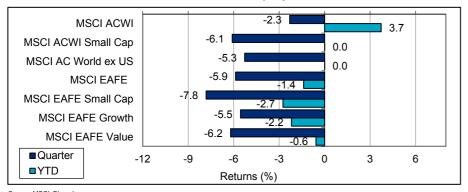
Equity Risk Premium= Earnings yield (1/PE) minus the real yield on long-term Treasuries

5

Definitions

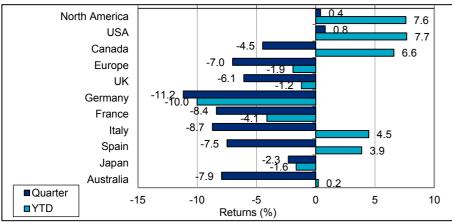
## Asset Class: International Equities – Performance Review

#### **Global and International Equity Performance**



Source: MSCI, Bloomberg

#### **Developed Country Performance**



Source: MSCI, Bloomberg

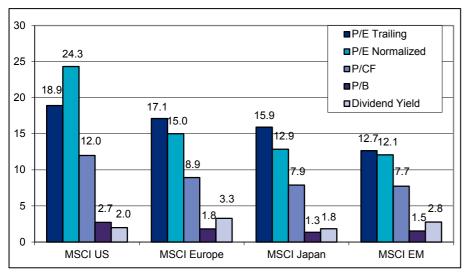
#### **Emerging Market Performance**



- Global equities were mixed in the third quarter. US equities rose, while currency declines and economic concerns weighed on the performance of international developed and emerging market equities. The MSCI ACWI index declined by 2.3% in the third guarter, but is still up 3.7% year to date. The MSCI ACWI-ex US index tumbled 5.3% during the guarter and is flat year to date.
- Global and international small cap equities have lagged large cap equities for the third quarter and year to date periods. The MSCI EAFE Small Cap index fell 7.8% in the third quarter and has trailed large caps by 130 bps year to date. After falling 6.1% in the third quarter, MSCI ACWI small cap index is flat year to date.
- International developed stocks fell 5.9% in the third quarter. The losses were entirely attributable to currency declines. In local terms. EAFE actually rose 0.3%. Year to date, EAFE has underperformed the S&P 500 by 970 bps in \$US terms and 420 bps in local terms. European stocks tumbled 7.0% in the third quarter as the euro experienced further losses. In local terms, European stocks lost 0.2% as the region experienced subpar economic growth. Year to date. Europe is up 4.7% in local terms, but down 1.9% in \$US terms. Japanese stocks contracted by 2.3% in the third quarter as the yen fell relative to the US dollar. In local terms, Japanese stocks rose a solid 5.8%. Year to date, Japanese stocks have risen 2.7% in local currency terms, but stumbled 1.6% in \$US terms.
- **Emerging market stocks** struggled in the third guarter due to geopolitical and economic growth concerns. In local terms, the MSCI EM index rose 0.6%; however, it fell 3.5% in \$US terms due to currency losses. year to date, EM stocks have lagged the S&P 500 by 590 bps. Political stress weighed on Eastern European stocks. which fell 9.7%. Weak growth and falling commodity prices caused Latin American stock to drop by 5.5%.

## Asset Class: International Equities – Valuation Review

#### **Global Valuations**



Source: MSCI, Bloomberg

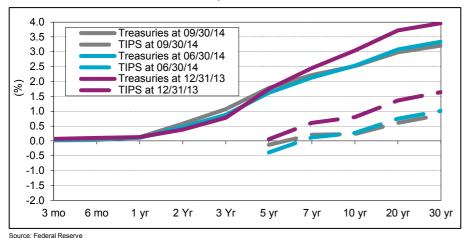
## Valuation of MSCI Emerging Markets to MSCI World (Based on Average of P/E. P/B and P/CF)



- The weak growth environment in Europe has continued to weigh on profit growth as earnings rose only an estimated 2.0% over the last 12 months. Corporate profitability remains depressed with profit margins 13% below their historical average. While the weak economic environment is likely to weigh on earnings, recent currency declines and limited wage increases should provide support to margins. Valuations on European stocks are mixed. Based on trailing earnings, Europe is trading at a P/E of 17.1, which is a 20% premium relative to their historical average since 1970. However, if margins return to historical averages, valuations look more attractive, with European stocks trading at a normalized P/E of 15.0.
- Japanese earnings have continued to improve, rising an estimated 11% year to date. Profitability remains soft, with ROE nearly 20% below the pre-financial crisis peak. Faster US growth and a weaker yen could help lift exports, although a further slowdown in China represents a risk. Analysts project that earnings will rise 12% over the next year, which appears reasonable, but will likely hinge on a continued recovery in the domestic economy. From a structural standpoint, the push for corporate governance reforms has the potential to narrow the profitability gap between Japan and the rest of the world.
- The outlook for emerging market equities remains mixed. Currency declines and improved US growth has the potential to lift exports and earnings. However, the fall in commodity prices could place downward pressure on profitability, particularly in Latin America. Higher US interest rates could also lead to capital outflows, placing downward pressure on EM currencies. Valuations seem to reflect these risks. EM stocks are trading at only 12.7x trailing earnings, a 13% discount to their historical average since 1995. They are also trading at a 28% discount to developed stocks. However, these discounts are narrowly based and are largely driven by sector differences. On a sector-neutral basis, absolute and relative valuations are less compelling.

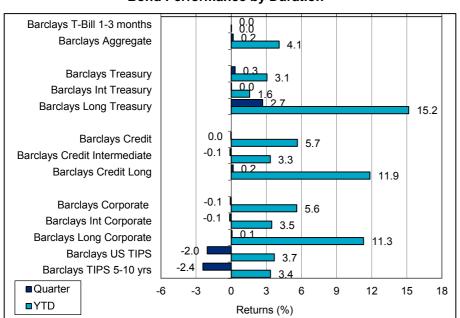
## Asset Class: Fixed Income – Interest Rates and Yield Curve

#### **Treasury Yield Curve**



- The yield curve continued to flatten during the third quarter. The yield on the 3-year Treasury rose from 16 bps to 1.78%, while the yield on the 10-year Treasury was relatively unchanged, declining just 1 bps to 2.52%. The 30-year Treasury yield declined by 13 bps to 3.21%
- Market expectations on the timing and pace of interest rate increases as well as the ultimate endpoint for the Target Rate are likely to be the key drivers of yield movements. Fed Fund futures suggests that the FOMC will begin to raise short-term interest rates in mid-2015 and the Target Rate will not hit 3% until 2018. Given the current outlook for inflation and job growth, the process of interest rate normalization is likely to be gradual.

#### Bond Performance by Duration

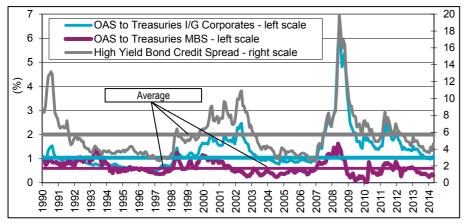


- US Bonds rose in the third quarter as yields declined. The Barclays Aggregate bond Index returned 0.2% and is now up 4.1% year to date. For the quarter, Treasuries outperformed credit as spreads widened.
- Long-Duration Bonds advanced in the third quarter as the yield on 30-year Treasury decreased by 13 bps. The Barclays Long Treasury, Credit and Corporate Indexes returned 2.7% and 0.2% respectively during the third quarter.
- TIPS underperformed Treasuries in the third quarter, falling by 2.0%. The real yield on 5-year TIPS rose by 26 bps to -0.13%. The inflation breakeven rate on 10-Year TIPS has fallen from 2.59% to 2.29% year to date.

Source: Barclays, Bloomberg

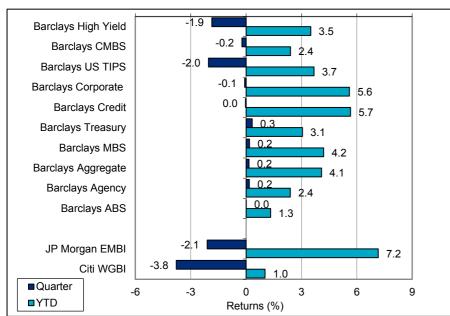
## Asset Class: Fixed Income – Credit and Non-US Bonds

#### **Credit Spreads**



Source: Barclays

#### Sector, Credit, and Global Bond Performance

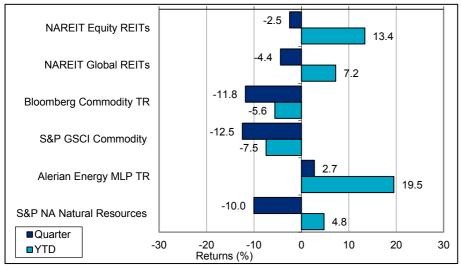


- The yield on the Corporate index increased 20 bps to 3.1%, and the option-adjusted spread to Treasuries moved up by 12 bps to 1.1%, which is in-line with long-term norms. Downside risk for corporates relative to Treasuries is limited over the short-term. However, tight spreads leave limited upside from this point.
- The yield on the Barclays High Yield index increased from 4.9% to 6.1% during the third quarter. While the option adjusted spread widened by 87 bps to 4.2%, it still remains below the historical median. Although leverage ratios have been on the rise, balance sheets and cash flows still remain strong. Favorable economic conditions in the US should also be supportive of fundamentals, keeping default rates low.
- US Treasuries rose as yields on longer-term maturities declined. year to date, the yield on the 10-Year Treasury has fallen by 52 bps to 2.52%. The Barclays Treasury Index returned 0.3% in the third quarter and is up 3.1% year to date.
- **US Corporate** bonds underperformed Treasuries by 40 bps in the third quarter as spreads widened. Year to date, investment grade corporate bonds have returned 5.6%, outperforming Treasuries by 250 bps.
- US MBS, Agency, CMBS, and ABS bonds suffered from credit spread tightening and a flatter yield curve as all these sectors lagged Treasuries in the third quarter.
- **High Yield** bonds shed 1.9% in the third quarter as yields increased and credit spreads widened. High yield bonds underperformed the Treasury index by 220 bps in the third quarter, but have outperformed by 40 bps year to date.
- Global Bonds were hurt as the dollar appreciated relative to foreign currencies. The Citigroup World Government Bond index fell 3.8% in the third quarter, but is still up 1.0% year to date.
- Local Currency Emerging Market Debt lost 5.7% for the quarter due to large currency depreciation, particularly in September. Local currency EMD is flat for the year.

Source: Barclays, Citigroup, JP Morgan, Bloomberg

## Asset Class: Alternatives - Performance Review

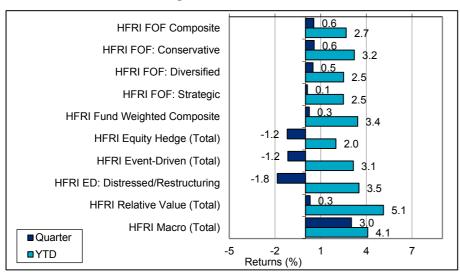
#### **Real Asset Performance**



- REITs After posting strong gains in the first half of the year, global and US REITs fell back by 4.4% and 2.5%, respectively, in the third quarter. Year to date, they have returned 7.2% and 13.4%, respectively, benefiting from the decline in interest rates and improving property prices.
- Commodities suffered as oil prices dropped 13.5% during the quarter. The S&P NA Natural Resources Index declined 10.0%, while the Bloomberg Commodity Index lost 11.8%.

Source: NAREIT, Dow-Jones, UBS, Goldman Sachs

#### **Hedge Fund Performance**



• Hedge funds held up relatively well, outperforming global equities in the third quarter. The HFRI Fund of Funds Composite Index gained 0.6%, while the MSCI ACWI index lost 2.3%. Macro strategies returned a healthy 3.0%, while distressed, event driven and equity hedge strategies posted negative returns.

Source: HFR

Investment Option	Tier/Asset Class	Current Balance	Prior Balance	% of Plan	% Chg vs. Prior
Asset Allocation Funds	Tier I	\$0	\$0	N/A	N/A
Wells Fargo Advantage Dow Jones Tgt Today Fd R6	Target-Date	\$0	\$0	N/A	N/A
Wells Fargo Advantage Dow Jones Tgt 2020 Fund R6	Target-Date	\$0	\$0	N/A	N/A
Wells Fargo Advantage Dow Jones Tgt 2030 Fund R6	Target-Date	\$0	\$0	N/A	N/A
Wells Fargo Advantage Dow Jones Tgt 2040 Fund R6	Target-Date	\$0	\$0	N/A	N/A
Wells Fargo Advantage Dow Jones Tgt 2050 Fund R6	Target-Date	\$0	\$0	N/A	N/A
Passive Core Options	Tier IIA	\$0	\$0	N/A	N/A
Vanguard Short-Term Bond Index Fund Admiral	US Fixed	\$0	\$0	N/A	N/A
Vanguard 500 Index Fund Admiral	US Large Cap Equity	\$0	\$0	N/A	N/A
Vanguard Mid-Cap Index Fund Admiral	US Mid Cap Equity	\$0	\$0	N/A	N/A
Vanguard Small-Cap Index Fund Admiral	US Small Cap Equity	\$0	\$0	N/A	N/A
Vanguard Total International Stock Index Fund Adm	International Equity \$0		\$0	N/A	N/A
Active Core Options	Tier IIB	\$0	\$0	N/A	N/A
TIAA Stable Value	Other	\$0	\$0	N/A	N/A
JPMorgan Core Bond Fund R6	US Fixed	\$0	\$0	N/A	N/A
TIAA Real Estate Account	Real Estate	\$0	\$0	N/A	N/A
PIMCO Inflation Response Multi-Asset Fund Inst	Balanced	\$0	\$0	N/A	N/A
PIMCO All Asset Fund Institutional	Balanced	\$0	\$0	N/A	N/A
Vanguard Windsor II Fund Admiral	US Large Cap Equity	\$0	\$0	N/A	N/A
TIAA-CREF Social Choice Equity Fund Institutional	US Large Cap Equity	\$0	\$0	N/A	N/A
T Rowe Price Growth & Income Fund	US Large Cap Equity	\$0	\$0	N/A	N/A
AllianzGI NFJ International Value Fund Inst	International Equity	\$0	\$0	N/A	N/A
American Funds EuroPacific Growth Fund R-6	International Equity	\$0	\$0	N/A	N/A
DFA International Small Company Portfolio Inst	International Equity	\$0	\$0	N/A	N/A
TIAA Real Estate Account	Real Estate	\$0	\$0	N/A	N/A
Total Plan		\$0	\$0	100%	

# Manager Summary – Compliance Table

### Periods ending September 30, 2014

	Mercer Rating*	3 Months	YTD	1 Year	3 Years	5 Years	Watch List/Comments
I - Index U - Universe Median		I U	I U	I U	I U	I U	
Tier I - Asset Allocation Funds							
Wells Fargo Advantage Dow Jones Tgt Today Fd R6	N	т –	т –	т –	т –	т –	
Wells Fargo Advantage Dow Jones Tgt 2020 Fund R6	N	т –	т –	т –	т –	т –	
Wells Fargo Advantage Dow Jones Tgt 2030 Fund R6	N	т –	т –	т –	т –	т –	
Wells Fargo Advantage Dow Jones Tgt 2040 Fund R6	N	т –	т –	т –	т –	т –	
Wells Fargo Advantage Dow Jones Tgt 2050 Fund R6	N	т –	т –	т –	т –	т –	
Tier IIA - Passive Core Options							
Vanguard Short-Term Bond Index Fund Admiral	PP	т –	т –	т –	т –	т –	
Vanguard 500 Index Fund Admiral	PP	Т -	т –	Т -	т –	т –	
Vanguard Mid-Cap Index Fund Admiral	PP	т –	т –	т –	Т -	т –	
Vanguard Small-Cap Index Fund Admiral	PP	т –	т –	т –	т –	т –	
Vanguard Total International Stock Index Fund Adm	PP	* ✓	<b>x</b> 🗸	<b>x</b> 🗸	<b>√</b> ×		
Tier IIB - Active Core Options							
TIAA Stable Value	N	✓ -	✓ -	✓ -	✓ -		
JPMorgan Core Bond Fund R6	Α	<b>✓ ✓</b>	* ✓	x x	<b>√ x</b>	✓ ✓	

<sup>✓ =</sup> Outperformed or matched performance = Underperformed T = Index Fund
\* For the most recent approved ratings of an investment strategy, and a fuller explanation of their meanings, contact your Mercer representative.

	Mercer Rating*	3 Months	YTD	1 Year	3 Years	5 Years	Watch List/Comments
I – Index U – Universe Median		I U	I U	I U	I U	I U	
PIMCO Inflation Response Multi-Asset Fund Inst	B+ (W)	x x	✓ ✓	<b>√</b> ×	<b>√</b> ×		
PIMCO All Asset Fund Institutional <sup>1</sup>	B+	- *	- 🗸	- *	- *	- *	
Vanguard Windsor II Fund Admiral	B+	<b>√ x</b>	* 🗸	× <	x x	<b>x</b> 🗸	
TIAA-CREF Social Choice Equity Fund Institutional	N	x x	* ✓	* *	<b>x</b> 🗸	<b>x</b> 🗸	
T Rowe Price Growth & Income Fund	N	x x	<b>x</b> 🗸	<b>x</b> 🗸	x x	xx	
AllianzGl NFJ International Value Fund Inst	R	<b>x</b> 🗸	* 🗸	* *	<b>√</b> ×	<b>√</b> √	
American Funds EuroPacific Growth Fund R-6	В	<b>√</b> √	<b>x</b> 🗸	<b>√</b> √	<b>√</b> √	<b>√</b> √	
DFA International Small Company Portfolio Inst	А	x x	x x	* *	<b>√</b> √	<b>√ x</b>	
TIAA Real Estate Account	N						

<sup>&</sup>lt;sup>1</sup> CPI not relased at the time of production

<sup>✓ =</sup> Outperformed or matched performance = Underperformed T = Index Fund
\* For the most recent approved ratings of an investment strategy, and a fuller explanation of their meanings, contact your Mercer representative.

# Management Summary – Performance Summary

### Periods ending September 30, 2014

	% of Plan	3 Months	YTD	1 Year	3 Years	5 Years
Tier I - Asset Allocation Funds						
Wells Fargo Advantage Dow Jones Tgt Today Fd R6		-1.4%	2.9%	3.6%	3.6%	4.4%
Dow Jones Global Target Today Index		-1.4%	3.0%	3.8%	4.0%	4.8%
Mercer MF Target-Date Income Universe Median		-1.1%	3.1%	5.7%	7.2%	6.7%
Fund Rank in Universe		72	58	95	99	93
Wells Fargo Advantage Dow Jones Tgt 2020 Fund R6		-1.8%	3.3%	6.0%	8.4%	7.2%
Dow Jones Global Target 2020 Index		-1.8%	3.5%	6.3%	8.7%	7.6%
Mercer MF Target-Date 2020 Universe Median		-1.4%	3.6%	8.4%	11.7%	8.9%
Fund Rank in Universe		81	66	89	87	91
Wells Fargo Advantage Dow Jones Tgt 2030 Fund R6		-2.2%	3.4%	8.1%	12.8%	9.5%
Dow Jones Global Target 2030 Index		-2.2%	3.6%	8.5%	13.1%	10.0%
Mercer MF Target-Date 2030 Universe Median		-1.7%	3.7%	10.1%	14.9%	10.4%
Fund Rank in Universe		76	68	86	80	75
Wells Fargo Advantage Dow Jones Tgt 2040 Fund R6		-2.6%	3.3%	9.7%	16.0%	11.1%
Dow Jones Global Target 2040 Index		-2.5%	3.6%	10.2%	16.3%	11.5%
Mercer MF Target-Date 2040 Universe Median		-1.9%	3.7%	10.8%	16.5%	11.3%
Fund Rank in Universe		73	67	74	58	56
Wells Fargo Advantage Dow Jones Tgt 2050 Fund R6		-2.7%	3.4%	10.2%	16.8%	11.4%
Dow Jones Global Target 2050 Index		-2.6%	3.6%	10.6%	17.0%	11.8%
Mercer MF Target-Date 2050+ Universe Median		-1.8%	3.7%	11.2%	17.2%	11.4%
Fund Rank in Universe		68	63	70	62	48
Tier IIA - Passive Core Options						
Vanguard Short-Term Bond Index Fund Admiral		-0.1%	0.9%	1.0%	1.2%	2.1%
Vanguard Spliced Barclays 1-5 G/C Float Adj Idx		0.0%	1.0%	1.2%	1.3%	2.2%
Vanguard 500 Index Fund Admiral		1.1%	8.3%	19.7%	22.9%	15.7%
S&P 500		1.1%	8.3%	19.7%	23.0%	15.7%
Vanguard Mid-Cap Index Fund Admiral		-1.2%	6.7%	15.9%	23.3%	17.0%
Vanguard Spliced Mid Cap Index		-1.2%	6.7%	15.9%	23.4%	17.1%
Vanguard Small-Cap Index Fund Admiral		-5.5%	0.6%	9.5%	23.5%	16.3%
Vanguard Spliced Small Cap Index		-5.5%	0.7%	9.5%	23.5%	16.2%

Fund: Outperformed Benchmark Underperformed Benchmark Universe Ranking: 0% - 50% 51% - 100%

	% of Plan	3 Months	YTD	1 Year	3 Years	5 Years
Vanguard Total International Stock Index Fund Adm		-5.5%	0.0%	4.9%	12.4%	NA
Vanguard Total International Composite Index		-5.3%	0.4%	5.2%	12.0%	6.0%
Tier IIB - Active Core Options						
TIAA Stable Value		0.5% <sup>2</sup>	1.5%	2.0%	2.2%	NA
3 Year Constant Maturity Tresasury Index		0.3%	0.7%	0.8%	0.6%	0.8%
JPMorgan Core Bond Fund R6		0.3%	3.8%	3.7%	2.8%	4.6%
Barclays US Aggregate		0.2%	4.1%	3.9%	2.4%	4.1%
Mercer MF US Fixed Core Universe Median		-0.1%	3.8%	4.1%	3.4%	4.6%
Fund Rank in Universe		14	49	54	62	50
PIMCO Inflation Response Multi-Asset Fund Inst		-5.4%	3.4%	1.3%	1.7%	NA
PIMCO Inflation Response Multi-Asset Index		-5.0%	1.9%	-0.4%	0.4%	NA
Mercer MF Diversified Inflation Hedge Universe Median		-3.7%	1.7%	2.2%	3.0%	4.3%
Fund Rank in Universe		88	12	88	75	NA
PIMCO All Asset Fund Institutional <sup>3</sup>		-2.9%	3.8%	5.2%	8.0%	7.5%
CPI USD + 500bp		NA	NA	NA	NA	NA
Mercer MF Target-Risk Aggressive Universe Median		-1.5%	3.7%	10.8%	15.3%	10.7%
Fund Rank in Universe		88	48	98	98	97
Vanguard Windsor II Fund Admiral		-0.2%	7.4%	17.7%	22.8%	14.8%
Russell 1000 Value		-0.2%	8.1%	18.9%	23.9%	15.3%
Mercer MF US Equity Large Cap Value Universe Median		-0.1%	7.0%	17.7%	22.9%	14.1%
Fund Rank in Universe		60	35	52	54	34
TIAA-CREF Social Choice Equity Fund Institutional		-0.2%	6.9%	17.0%	22.4%	15.3%
Russell 1000		0.7%	8.0%	19.0%	23.2%	15.9%
Mercer MF US Equity Large Cap Core Universe Median		0.5%	6.9%	17.7%	22.0%	14.1%
Fund Rank in Universe		74	49	58	41	26
T Rowe Price Growth & Income Fund		0.4%	5.8%	17.2%	21.3%	14.2%
Russell 1000 Growth		1.5%	7.9%	19.1%	22.4%	16.5%
Mercer MF US Equity Large Cap Growth Universe Median		1.5%	5.6%	17.1%	21.6%	14.9%
Fund Rank in Universe		76	44	46	55	67
AllianzGI NFJ International Value Fund Inst		-5.7%	-0.6%	3.1%	12.7%	7.2%
MSCI AC Wld ex US		-5.2%	0.4%	5.2%	12.3%	6.5%
Mercer MF Intl Equity Large Cap Value Universe Median		-5.9%	-1.2%	5.2%	12.8%	6.1%
Fund Rank in Universe		40	39	82	56	15

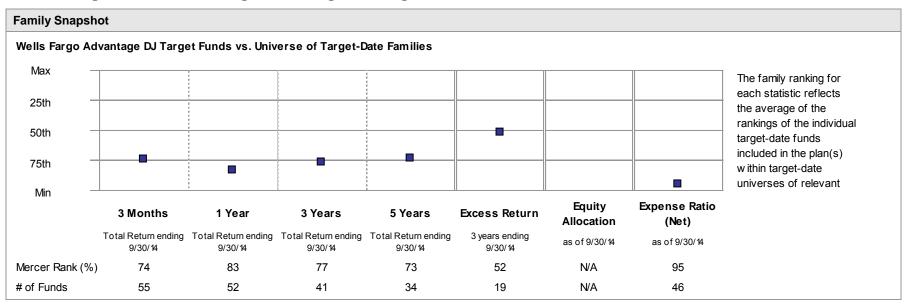
<sup>&</sup>lt;sup>2</sup> Product level gross composite performance <sup>3</sup> CPI not released at time of production

Fund: Outperformed Benchmark Underperformed Benchmark Universe Ranking: 0% - 50% 51% - 100%

	% of Plan	3 Months	YTD	1 Year	3 Years	5 Years
American Funds EuroPacific Growth Fund R-6		-4.2%	-0.7%	7.0%	14.4%	7.1%
MSCI AC Wld ex US		-5.2%	0.4%	5.2%	12.3%	6.5%
Mercer MF Intl Equity Universe Median		-5.8%	-1.7%	4.4%	13.8%	7.1%
Fund Rank in Universe		12	32	14	35	48
DFA International Small Company Portfolio Inst		-8.5%	-2.2%	4.4%	14.5%	9.3%
MSCI AC Wid ex US Small Cap		-6.7%	0.3%	4.9%	12.9%	8.7%
Mercer MF Intl Equity Small Cap Universe Median		-7.1%	-0.8%	5.2%	13.6%	9.7%
Fund Rank in Universe		81	60	59	39	55
TIAA Real Estate Account		NA	NA	NA	NA	NA
NCREIF NFI ODCE		NA	NA	NA	NA	NA
Mercer Instl US Real Estate Open Universe Median		3.0%	8.3%	11.5%	11.3%	11.8%
Fund Rank in Universe		NA	NA	NA	NA	NA

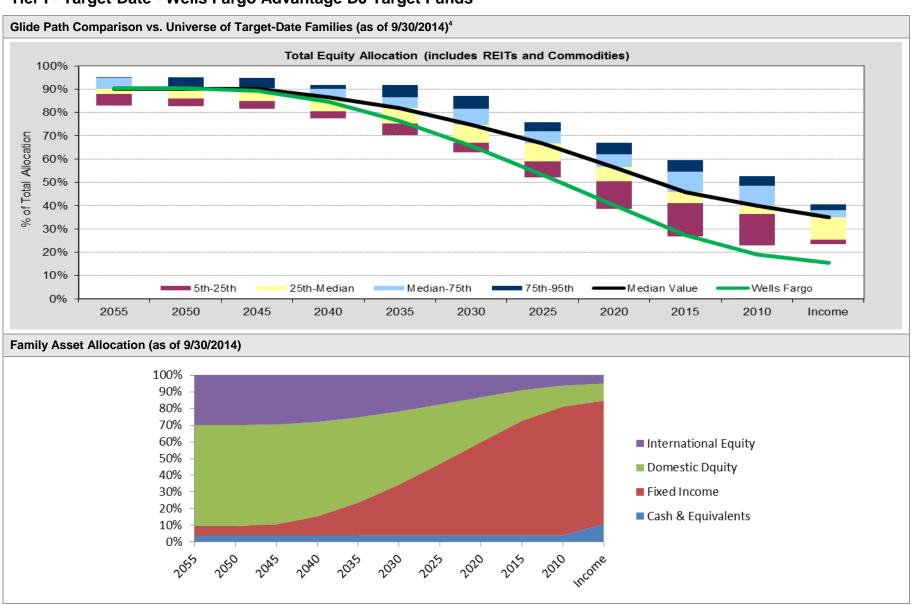
# Family Profile

### Tier I - Target-Date - Wells Fargo Advantage DJ Target Funds



# Family Profile

Tier I - Target-Date - Wells Fargo Advantage DJ Target Funds



<sup>&</sup>lt;sup>4</sup> Universe data based on Mercer's Q214 Target Date Fund Survey Mercer

# Family Profile

### Tier I - Target-Date - Wells Fargo Advantage DJ Target Funds

Allocation (%) to Underlying Funds (as of September 30, 2014)

Strategy	Asset Class	2055	2050	2045	2040	2035	2030	2025	2020	2015	2010	Income
Cash and Equivalents												
Barclays Capital 1-3M Treasury-Bill Index	US Money Market	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	4.0%	4.0%	4.0%	10.8%
Total Cash and Equivalents		3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	3.9%	4.0%	4.0%	4.0%	10.8%
Fixed Income												
Barclays Capital Corporate Bond Index	US Intermediate-Term Fixed Income	1.4%	1.4%	1.7%	2.9%	4.9%	7.6%	10.7%	13.9%	17.1%	19.2%	18.4%
Barclays Capital Government Bond Index	US Intermediate-Term Fixed Income	1.4%	1.4%	1.7%	2.9%	4.9%	7.6%	10.7%	13.9%	17.1%	19.2%	18.4%
Barclays Capital Majors ex-US Index	International Fixed Income	1.4%	1.4%	1.7%	2.9%	4.9%	7.6%	10.7%	14.0%	17.1%	19.3%	18.5%
Barclays Capital Fixed-Rate MBS Index	US Intermediate-Term Fixed Income	1.5%	1.5%	1.7%	2.9%	5.0%	7.7%	10.8%	14.1%	17.3%	19.4%	18.6%
Total Fixed Income		5.7%	5.7%	6.7%	11.5%	19.7%	30.6%	43.0%	55.9%	68.6%	77.1%	73.9%
Domestic Equity												
Dow Jones U.S. Large Growth Index	US Large Cap Grow th Equity	9.9%	9.9%	9.8%	9.3%	8.4%	7.2%	5.8%	4.4%	3.0%	2.1%	1.7%
Dow Jones U.S. Large-Cap Value Index	US Large Cap Value Equity	9.9%	9.9%	9.8%	9.3%	8.4%	7.2%	5.8%	4.4%	3.0%	2.1%	1.7%
Dow Jones U.S. Mid-Cap Growth Index	US Mid Cap Grow th Equity	10.1%	10.1%	10.0%	9.4%	8.5%	7.3%	5.9%	4.5%	3.1%	2.1%	1.7%
Dow Jones U.S. Mid-Cap Value Index	US Mid Cap Value Equity	10.1%	10.1%	10.0%	9.4%	8.5%	7.3%	5.9%	4.5%	3.1%	2.1%	1.7%
Dow Jones U.S. Small-Cap Growth Index	US Small Cap Grow th Equity	10.2%	10.2%	10.1%	9.6%	8.6%	7.4%	6.0%	4.5%	3.1%	2.1%	1.7%
Dow Jones U.S. Small-Cap Value Index	US Small Cap Value Equity	10.2%	10.2%	10.1%	9.5%	8.6%	7.4%	6.0%	4.5%	3.1%	2.1%	1.7%
Total Domestic Equity		60.4%	60.4%	59.7%	56.5%	51.0%	43.8%	35.5%	26.8%	18.3%	12.7%	10.3%
International Equity												
Dow Jones Asia/Pacific Index	International Large Cap Core Equity	10.1%	10.1%	10.0%	9.5%	8.5%	7.3%	5.9%	4.5%	3.1%	2.1%	1.7%
Dow Jones Europe/Canada Index	International Large Cap Core Equity	9.8%	9.8%	9.7%	9.2%	8.3%	7.1%	5.8%	4.4%	3.0%	2.1%	1.7%
DJ Wilshire EM Large-Cap Specialty Index	Emerging Markets Equity	10.1%	10.1%	10.0%	9.4%	8.5%	7.3%	5.9%	4.5%	3.1%	2.1%	1.7%
Total International Equity		30.0%	30.0%	29.6%	28.1%	25.3%	21.7%	17.6%	13.3%	9.1%	6.3%	5.1%

2.6 2.8 3.0 3.2 3.4 3.6 3.8 4.0 4.2 4.4 4.6 4.8

---- Median

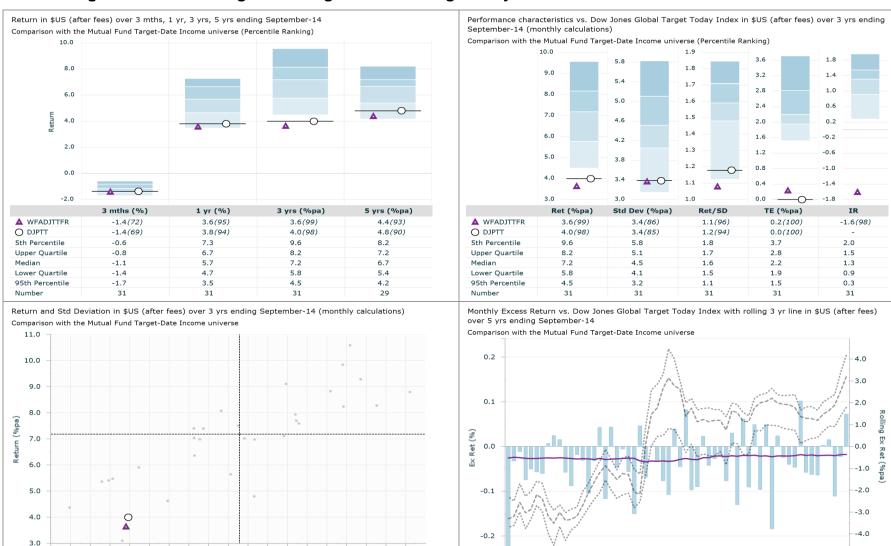
Universe

O DJPTT

### **Fund Profile**

### Tier I - Target-Date - Wells Fargo Advantage Dow Jones Tgt Today Fd R6 - WOTDX

5.0 5.2 5.4 5.6 5.8 6.0 6.2



10/10 3/11 8/11

Monthly Ex Return

▲ WFADJTTFR

1/12 6/12 11/12

Rolling 3 Years

4/13

! Median

9/13 2/14 7/14

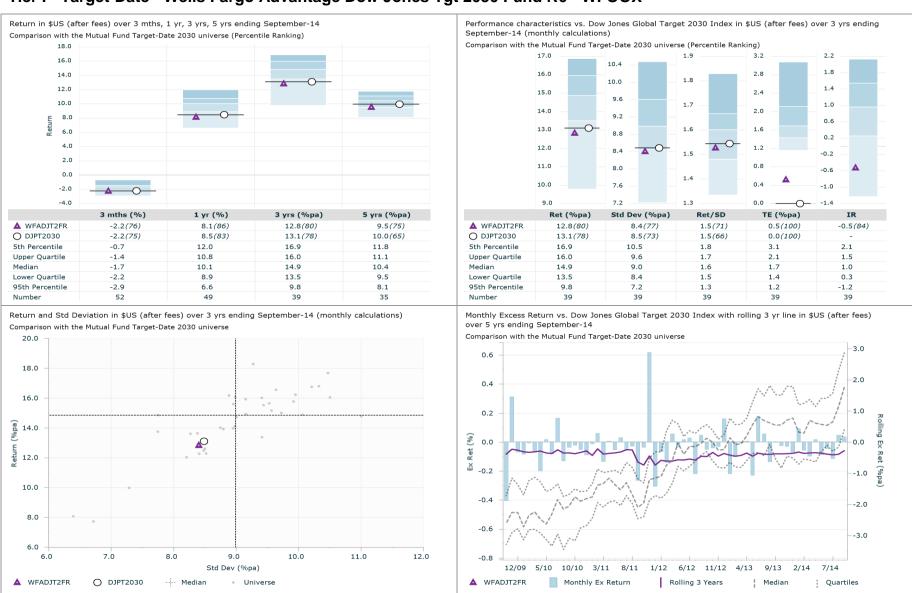
Quartiles

▲ WFADJTTFR

### Tier I - Target-Date - Wells Fargo Advantage Dow Jones Tgt 2020 Fund R6 - WFOBX



### Tier I - Target-Date - Wells Fargo Advantage Dow Jones Tgt 2030 Fund R6 - WFOOX



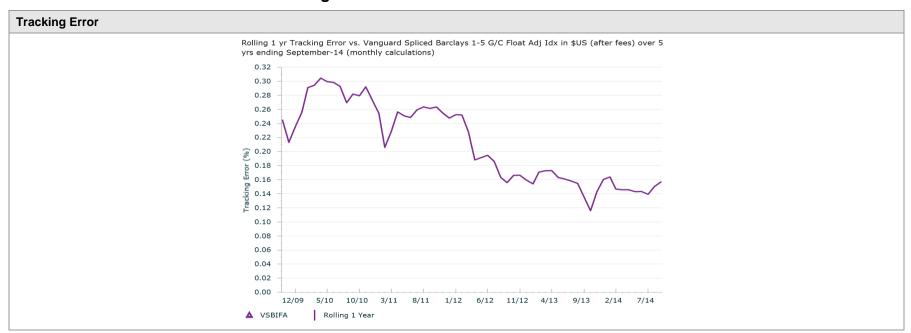
### Tier I - Target-Date - Wells Fargo Advantage Dow Jones Tgt 2040 Fund R6 - WFOSX



### Tier I - Target-Date - Wells Fargo Advantage Dow Jones Tgt 2050 Fund R6 - WFQFX



### Tier IIA - Domestic Fixed - Passive - Vanguard Short-Term Bond Index Fund Admiral - VBIRX



### Tier IIA - Domestic Fixed - Passive - Vanguard Short-Term Bond Index Fund Admiral - VBIRX

Factor	Rating (-, =, + or ++)	Comments
Idea Generation		The team does not attempt to generate alpha-producing investment ideas, as all of the team's efforts are directed toward minimizing tracking error. Therefore, this factor is not a relevant input to our rating of the strategy.
Portfolio Construction	++	Vanguard's risk dashboard provides a robust framework for assessing the level of dispersion between its portfolio and the benchmark. The process has been thoughtfully constructed and the tolerance for tracking risk has been tightened considerably over the years. The firm's tactics for generating very modest excess returns are prudently applied and do not constitute a meaningful source of tracking variance. This is true whether looking at ex-ante risk reports or reviewing ex-post results. Vanguard monitors its positioning across a wide range of curve, sector, sub-sector, issuer, and issue factors. These factors are intelligently designed and take into account risk sources beyond the obvious, high-level index characteristics data.
Implementation	++	Trading costs are closely monitored and the team attempts to eke out basis points through trading. Each trader is evaluated over rolling three month periods to determine if the individual is finding opportunities to sell bonds when they are rich or special without disturbing the factor-neutrality of the portfolio. The index team has dedicated traders who use all available trading platforms and are able to cross-trade among index portfolios where fund-specific flows provide opportunity to do so.
Business Management	++	Business management is a key strength of the firm. Vanguard remains committed to providing top quality services to investors at the lowest reasonable costs. Turnover within the active and passive fixed income investment teams has been low.
Overall Rating		scale, depth, and stability as a team provide a competitive advantage in efficient portfolio management and trade execution. The
Preferred Provider	close correlation with in	of the team have permitted continuous refinement of techniques for reducing tracking error. The group uses proprietary tools to maintain dex performance and to implement fund flows efficiently. Compensation of index team members is based on keeping six month rolling and acking error at absolute low levels. This aligns the team's incentive with the goals of the fund.

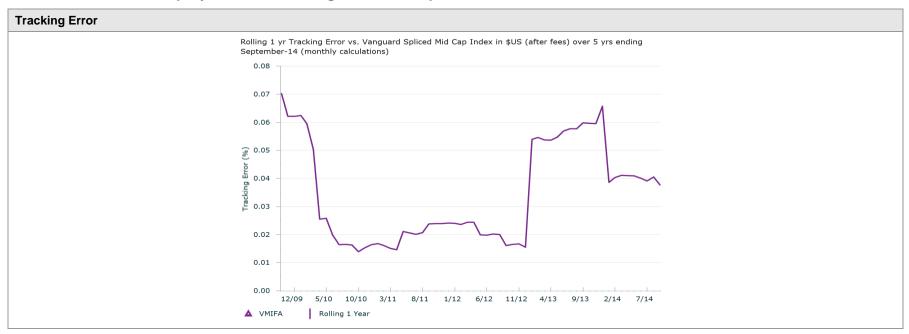
### Tier IIA - Domestic Equity - Passive - Vanguard 500 Index Fund Admiral - VFIAX



Tier IIA - Domestic Equity - Passive - Vanguard 500 Index Fund Admiral - VFIAX

Factor	Rating (-, =, + or ++)	Comments
Idea Generation		Vanguard is a major provider in passive management which aims to be extremely competitive on fees. The firm uses its breadth, asset base and unique ownership structure to reduce transaction costs, maximize efficiency and pass savings on to its investor-owners. Uniquely, 100% of lending revenue is credited back to investors.
Portfolio Construction	++	Vanguard's equity index specialist team constructs portfolios that aim to mirror the benchmark index returns. Subject to liquidity constraints in small or foreign markets, it employs a full replication approach. Its competitive edge comes from the experience and stability of the US based investment team, trading strength, rigid management of cash flows and from minimizing costs. It may employ securities lending on a small component of the portfolio to add incremental value, particularly within Non-US and Small Cap portfolios.
		Proprietary systems with daily monitoring of tracking risks using multiple systems help the team manage tightly to the index. Where full replication is not possible, Vanguard employs an optimizer to mirror the benchmark characteristics as tightly as possible.
Implementation	++	Vanguard employs a variety of trading strategies to maximize trading efficiency. Managers trade themselves to stay in close contact with the market. Vanguard operates regional trading desks for developed and emerging markets trades. Most strategies have sufficient assets under management to ensure efficient execution.
		Risk management is an independent function and continuously monitored at the factor and stock levels. Daily analysis is available to the portfolio managers regarding portfolio imbalances, tracking error, and other discrepancies.
Business Management	+	Vanguard has a stellar history in the investment business built on its long time success in passive management. The firm's size has enabled it to develop ample resources in investment and retirement research. Vanguard remains committed to providing top quality services to investors at the lowest reasonable costs. Its reputation for investing in the best interest of its participants is a clear strength. In addition, the firm has created a culture of stability with investment professionals having long tenures at the firm. The firm has plans to expand its global presence, while retaining regional specialties. This may lead to certain changes in roles and responsibilities, although we don't expect significant disruption to the US based investment team itself. Any company expansion, such as the one Vanguard intends, creates the potential for higher turnover and client service challenges.
Overall Rating Preferred Provider	flexibility for new invest efficient execution. The checks-and-balances.	tegies managed out of the US are overseen by a stable and experienced team. Vanguard carefully controls cash flows, which may reduce ors, but allows for superior cost management. Large assets under management in most strategies also contribute to cost management and Risk Management team provides independent enforcement of constraints and risk controls which is vital to the products and a good form of Vanguard's plan to increase its global presence, integrate all systems and processes, and maximize regional trading opportunities should over the long term, although shorter term it may face some challenges.
Additional Observations	penalties. Investors sh should be willing to inve country depends on wh the eligibility criteria. Fo Vanguard reserves the a risk of illiquidity or los	act long-term investors. It may refuse assets from investors wanting to park money for short periods of time or it may apply withdrawal ould ensure they understand the withdrawal rules for the particular fund they are investing in prior to making the investment. Investors est in Vanguard's pooled vehicles as it has little interest in separate accounts or custom mandates. The availability of a fund in a particular ere the fund is domiciled (US or Ireland) and the type of investor. Investors must work with the local Vanguard representative to determine unds domiciled in the US may have more tracking discrepancies due to differences in the close time for the benchmark vs. the portfolio. right to engage in stock lending with cash collateral invested in an internal money market fund. With any such arrangement, there is always in the collateral fund. We have not reviewed the quality of the stock lending program as part of this assessment of the firm's passive ess. Investors seeking more information about the stock lending features should contact Mercer Sentinel.

### Tier IIA - Domestic Equity - Passive - Vanguard Mid-Cap Index Fund Admiral - VIMAX



### Tier IIA - Domestic Equity - Passive - Vanguard Mid-Cap Index Fund Admiral - VIMAX

Factor	Rating (-, =, + or ++)	Comments
Idea Generation		Vanguard is a major provider in passive management which aims to be extremely competitive on fees. The firm uses its breadth, asset base and unique ownership structure to reduce transaction costs, maximize efficiency and pass savings on to its investor-owners. Uniquely, 100% of lending revenue is credited back to investors.
Portfolio Construction	++	Vanguard's equity index specialist team constructs portfolios that aim to mirror the benchmark index returns. Subject to liquidity constraints in small or foreign markets, it employs a full replication approach. Its competitive edge comes from the experience and stability of the US based investment team, trading strength, rigid management of cash flows and from minimizing costs. It may employ securities lending on a small component of the portfolio to add incremental value, particularly within Non-US and Small Cap portfolios.
		Proprietary systems with daily monitoring of tracking risks using multiple systems help the team manage tightly to the index. Where full replication is not possible, Vanguard employs an optimizer to mirror the benchmark characteristics as tightly as possible.
Implementation	++	Vanguard employs a variety of trading strategies to maximize trading efficiency. Managers trade themselves to stay in close contact with the market. Vanguard operates regional trading desks for developed and emerging markets trades. Most strategies have sufficient assets under management to ensure efficient execution.
		Risk management is an independent function and continuously monitored at the factor and stock levels. Daily analysis is available to the portfolio managers regarding portfolio imbalances, tracking error, and other discrepancies.
Business Management	+	Vanguard has a stellar history in the investment business built on its long time success in passive management. The firm's size has enabled it to develop ample resources in investment and retirement research. Vanguard remains committed to providing top quality services to investors at the lowest reasonable costs. Its reputation for investing in the best interest of its participants is a clear strength. In addition, the firm has created a culture of stability with investment professionals having long tenures at the firm. The firm has plans to expand its global presence, while retaining regional specialties. This may lead to certain changes in roles and responsibilities, although we don't expect significant disruption to the US based investment team itself. Any company expansion, such as the one Vanguard intends, creates the potential for higher turnover and client service challenges.
Overall Rating Preferred Provider	flexibility for new invest efficient execution. The checks-and-balances.	tegies managed out of the US are overseen by a stable and experienced team. Vanguard carefully controls cash flows, which may reduce ors, but allows for superior cost management. Large assets under management in most strategies also contribute to cost management and Risk Management team provides independent enforcement of constraints and risk controls which is vital to the products and a good form of Vanguard's plan to increase its global presence, integrate all systems and processes, and maximize regional trading opportunities should over the long term, although shorter term it may face some challenges.
Additional Observations	Vanguard strives to attr penalties. Investors sh should be willing to inve country depends on wh the eligibility criteria. Fi Vanguard reserves the a risk of illiquidity or los	ract long-term investors. It may refuse assets from investors wanting to park money for short periods of time or it may apply withdrawal ould ensure they understand the withdrawal rules for the particular fund they are investing in prior to making the investment. Investors est in Vanguard's pooled vehicles as it has little interest in separate accounts or custom mandates. The availability of a fund in a particular here the fund is domiciled (US or Ireland) and the type of investor. Investors must work with the local Vanguard representative to determine unds domiciled in the US may have more tracking discrepancies due to differences in the close time for the benchmark vs. the portfolio. right to engage in stock lending with cash collateral invested in an internal money market fund. With any such arrangement, there is always in the collateral fund. We have not reviewed the quality of the stock lending program as part of this assessment of the firm's passive ess. Investors seeking more information about the stock lending features should contact Mercer Sentinel.

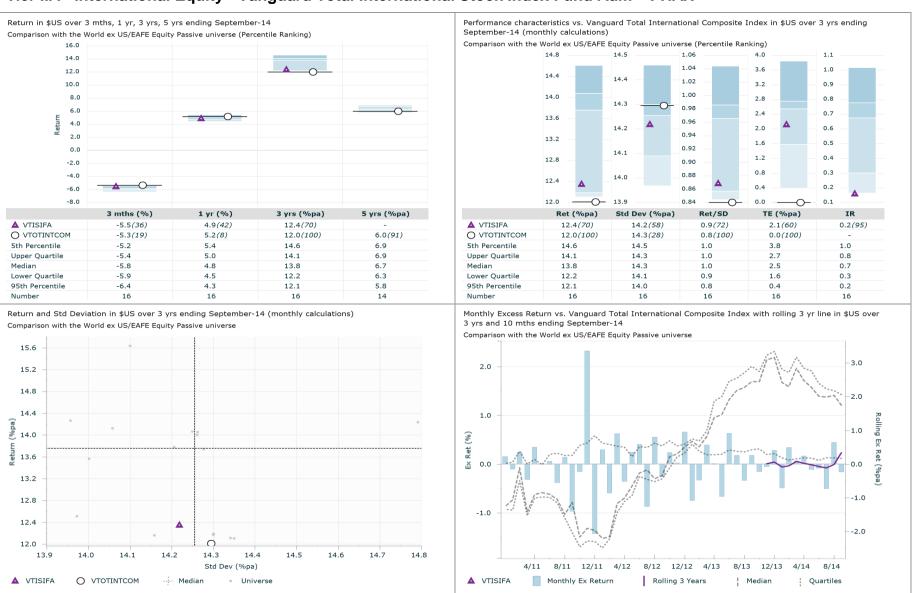
### Tier IIA - Domestic Equity - Passive - Vanguard Small-Cap Index Fund Admiral - VSMAX



### Tier IIA - Domestic Equity - Passive - Vanguard Small-Cap Index Fund Admiral - VSMAX

Factor	Rating (-, =, + or ++)	Comments
Idea Generation		Vanguard is a major provider in passive management which aims to be extremely competitive on fees. The firm uses its breadth, asset base and unique ownership structure to reduce transaction costs, maximize efficiency and pass savings on to its investor-owners. Uniquely, 100% of lending revenue is credited back to investors.
Portfolio Construction	++	Vanguard's equity index specialist team constructs portfolios that aim to mirror the benchmark index returns. Subject to liquidity constraints in small or foreign markets, it employs a full replication approach. Its competitive edge comes from the experience and stability of the US based investment team, trading strength, rigid management of cash flows and from minimizing costs. It may employ securities lending on a small component of the portfolio to add incremental value, particularly within Non-US and Small Cap portfolios.
		Proprietary systems with daily monitoring of tracking risks using multiple systems help the team manage tightly to the index. Where full replication is not possible, Vanguard employs an optimizer to mirror the benchmark characteristics as tightly as possible.
Implementation	++	Vanguard employs a variety of trading strategies to maximize trading efficiency. Managers trade themselves to stay in close contact with the market. Vanguard operates regional trading desks for developed and emerging markets trades. Most strategies have sufficient assets under management to ensure efficient execution.
		Risk management is an independent function and continuously monitored at the factor and stock levels. Daily analysis is available to the portfolio managers regarding portfolio imbalances, tracking error, and other discrepancies.
Business Management	+	Vanguard has a stellar history in the investment business built on its long time success in passive management. The firm's size has enabled it to develop ample resources in investment and retirement research. Vanguard remains committed to providing top quality services to investors at the lowest reasonable costs. Its reputation for investing in the best interest of its participants is a clear strength. In addition, the firm has created a culture of stability with investment professionals having long tenures at the firm. The firm has plans to expand its global presence, while retaining regional specialties. This may lead to certain changes in roles and responsibilities, although we don't expect significant disruption to the US based investment team itself. Any company expansion, such as the one Vanguard intends, creates the potential for higher turnover and client service challenges.
Overall Rating Preferred Provider	flexibility for new invest efficient execution. The checks-and-balances.	tegies managed out of the US are overseen by a stable and experienced team. Vanguard carefully controls cash flows, which may reduce ors, but allows for superior cost management. Large assets under management in most strategies also contribute to cost management and Risk Management team provides independent enforcement of constraints and risk controls which is vital to the products and a good form of Vanguard's plan to increase its global presence, integrate all systems and processes, and maximize regional trading opportunities should over the long term, although shorter term it may face some challenges.
Additional Observations	penalties. Investors sh should be willing to inve country depends on wh the eligibility criteria. F Vanguard reserves the a risk of illiquidity or los	ract long-term investors. It may refuse assets from investors wanting to park money for short periods of time or it may apply withdrawal ould ensure they understand the withdrawal rules for the particular fund they are investing in prior to making the investment. Investors est in Vanguard's pooled vehicles as it has little interest in separate accounts or custom mandates. The availability of a fund in a particular tere the fund is domiciled (US or Ireland) and the type of investor. Investors must work with the local Vanguard representative to determine unds domiciled in the US may have more tracking discrepancies due to differences in the close time for the benchmark vs. the portfolio. right to engage in stock lending with cash collateral invested in an internal money market fund. With any such arrangement, there is always in the collateral fund. We have not reviewed the quality of the stock lending program as part of this assessment of the firm's passive ess. Investors seeking more information about the stock lending features should contact Mercer Sentinel.

#### Tier IIA - International Equity - Vanguard Total International Stock Index Fund Adm - VTIAX



### Tier IIA - International Equity - Vanguard Total International Stock Index Fund Adm - VTIAX

Factor	Rating (-, =, + or ++)	Comments
Idea Generation	++	Vanguard is a major provider in passive management which aims to be extremely competitive on fees. The firm uses its breadth, asset base and unique ownership structure to reduce transaction costs, maximize efficiency and pass savings on to its investor-owners. Uniquely, 100% of lending revenue is credited back to investors.
Portfolio Construction	++	Vanguard's equity index specialist team constructs portfolios that aim to mirror the benchmark index returns. Subject to liquidity constraints in small or foreign markets, it employs a full replication approach. Its competitive edge comes from the experience and stability of the US based investment team, trading strength, rigid management of cash flows and from minimizing costs. It may employ securities lending on a small component of the portfolio to add incremental value, particularly within Non-US and Small Cap portfolios.
		Proprietary systems with daily monitoring of tracking risks using multiple systems help the team manage tightly to the index. Where full replication is not possible, Vanguard employs an optimizer to mirror the benchmark characteristics as tightly as possible.
Implementation	+	Vanguard employs a variety of trading strategies to maximize trading efficiency. Managers trade themselves to stay in close contact with the market. Vanguard operates regional trading desks for developed and emerging markets trades. Most strategies have sufficient assets under management to ensure efficient execution.
		Risk management is an independent function and continuously monitored at the factor and stock levels. Daily analysis is available to the portfolio managers regarding portfolio imbalances, tracking error, and other discrepancies.
Business Management	++	Vanguard has a stellar history in the investment business built on its long time success in passive management. The firm's size has enabled it to develop ample resources in investment and retirement research. Vanguard remains committed to providing top quality services to investors at the lowest reasonable costs. Its reputation for investing in the best interest of its participants is a clear strength. In addition, the firm has created a culture of stability with investment professionals having long tenures at the firm. The firm has plans to expand its global presence, while retaining regional specialties. This may lead to certain changes in roles and responsibilities, although we don't expect significant disruption to the US based investment team itself. Any company expansion, such as the one Vanguard intends, creates the potential for higher turnover and client service challenges.
Overall Rating	The passive equity strategies managed out of the US are overseen by a stable and experienced team. Vanguard carefully controls cash flows, which may reduce	
Preferred Provider	flexibility for new investors, but allows for superior cost management. Large assets under management in most strategies also contribute to cost management and efficient execution. The Risk Management team provides independent enforcement of constraints and risk controls which is vital to the products and a good form of checks-and-balances. Vanguard's plan to increase its global presence, integrate all systems and processes, and maximize regional trading opportunities should strengthen its offerings over the long term, although shorter term it may face some challenges.	
Additional Observations	Vanguard strives to attract long-term investors. It may refuse assets from investors wanting to park money for short periods of time or it may apply withdrawal penalties. Investors should ensure they understand the withdrawal rules for the particular fund they are investing in prior to making the investment. Investors should be willing to invest in Vanguard's pooled vehicles as it has little interest in separate accounts or custom mandates. The availability of a fund in a particular country depends on where the fund is domiciled (US or Ireland) and the type of investor. Investors must work with the local Vanguard representative to determine the eligibility criteria. Funds domiciled in the US may have more tracking discrepancies due to differences in the close time for the benchmark vs. the portfolio. Vanguard reserves the right to engage in stock lending with cash collateral invested in an internal money market fund. With any such arrangement, there is always a risk of illiquidity or loss in the collateral fund. We have not reviewed the quality of the stock lending program as part of this assessment of the firm's passive management capabilities. Investors seeking more information about the stock lending features should contact Mercer Sentinel.	

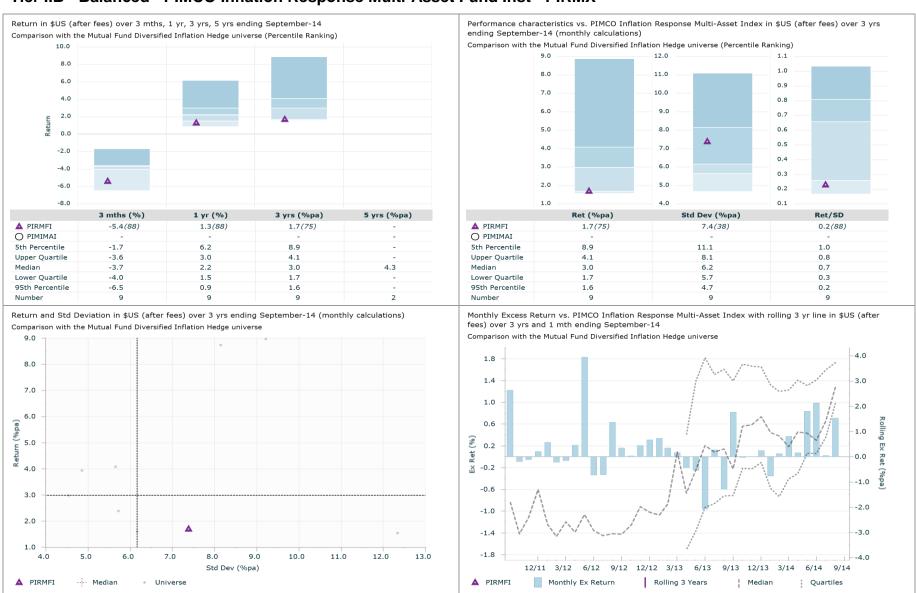
#### Tier IIB - Domestic Fixed - JPMorgan Core Bond Fund R6 - JCBUX



### Tier IIB - Domestic Fixed - JPMorgan Core Bond Fund R6 - JCBUX

Factor	Rating (-, =, + or ++)	Comments					
Idea Generation	++	JPMAM's key strength is Doug Swanson's experience in the mortgage sector and the depth of his support staff. The strategy relies heavily on Swanson's ability to find superior carry in the CMO market, which provides positive convexity with minimal credit risk. As a result, the team has generated consistent alpha with minimal return volatility. Quantitative analysis of structured products is adequate, but unlike most managers with a mortgage slant, proprietary quantitative tools do not play a significant role in the decision-making process.					
Portfolio Construction	+	The fixed income investment process includes ongoing review, monitoring, and control of key portfolio characteristics. The consi overweight to CMO tranches is reflective of Swanson's mortgage background and investment philosophy. Risk management tool robust with user-friendly data displays at the sector and portfolio levels.					
Implementation	+	To respond effectively to market opportunities and inefficiencies, trading authority lies with the portfolio managers. At this time, capacity is not a concern.					
Business Management	+	The Columbus-based fixed income team has been able to keep its investment management team and management style separate and intact from its New York team. Also, despite recent changes to the reporting hierarchy within JPMAM, the firm has retained key personnel affiliated with the Multi-Sector and Mortgage strategies. That said, the integration with the New York platform is still evolving, and therefore, remains an issue of concern.					
Overall Rating A	JPMAM's value-oriented approach to investing is ideal for risk-averse core fixed income clients. The investment process, led by Swanson, thrives on identifying relative value in the CMO market with minimal option or event risk. In addition, the risk management function is well integrated with the investment process at all levels. However, clients should be comfortable with the strategy's significant overweight to the mortgage sector, and understand that the team favors CMOs over MBS pass-throughs and corporates.						
Additional Observations	Our rating pertains solely to the Columbus fixed income team, rather than JPMAM's New York team. It is also dependent on Douglas Swanson remaining head of the Columbus team. Swanson is the seminal figure in the taxable fixed income strategies, having guided the investment philosophy in Columbus for over a decade. We are not confident that the firm has sufficient leadership and technical expertise to thrive in his absence.						

#### Tier IIB - Balanced - PIMCO Inflation Response Multi-Asset Fund Inst - PIRMX



### Tier IIB - Balanced - PIMCO Inflation Response Multi-Asset Fund Inst - PIRMX

Factor	Rating	Comments
	(-, =, + or ++)	
Idea Generation	++	The strategy's edge lies in the strength and depth of PIMCO's macroeconomic research capabilities. The firm's scale enables it to employ a depth of resources and people globally across multiple market sectors. The firm's Secular and Cyclical Forums bring together trade ideas and outlooks from regional and sector investment teams in a repeatable and well-organized way. PIMCO's investment committee has an established track record of generating macroeconomic views and formulating opinions on the prospective performance of risk factors. The strategy effectively leverages those skills when developing ideas regarding the potential drivers of inflation, the impact of inflation on various asset classes and the performance of asset classes during inflationary periods. In addition to the firm's overall strengths, Worah demonstrates a deep understanding of inflation and its impact on markets. The strategy also effectively utilizes PIMCO's ability to add value from a bottom-up perspective, relying on specialists to manage the underlying sub-strategies.
		At the end of the day however, PIMCO has relatively limited experience with tactical multi-asset decisions, particularly with this product which was launched only in September 2011. IRMAF's benchmark relative performance has been encouraging to date, while other PIMCO asset allocation strategies have struggled in the past two years.
Portfolio Construction	++	The rationale behind the strategic benchmark index is sound, taking account of both historic asset class return patterns and the directness of their responsiveness to inflation. We think the tactical asset allocation process effectively leverages PIMCO's strength in idea generation, although it is relatively untested in a multi-asset context. Each asset class sleeve is managed by a specialist PIMCO portfolio manager, providing the ability to add value through bottom-up security selection. We believe that Worah should see that custom sleeve ideas are well vetted and tailored to the specific objectives of the strategy. The portfolio also employs tail-risk hedging strategies, which we think can provide further protection when diversification fails.
Implementation	+	Assets in IRMAF have jumped since the strategy was launched in mid-2011 reaching \$1.6bn as of July 2014. Inflation linked bonds and Commodities represent 45% and 20% respectively of IRMAF's strategic allocations. Firm-wide PIMCO has significant exposure to the TIPS/ILB market which precludes us from awarding a higher rating. We harbor concerns on their ability to implement strategies in smaller markets, particularly as they have resisted providing fixed income capacity constraint information. The firm's ability to exit large positions efficiently remains a concern.
		On the positive side, PIMCO has an appetite for off-benchmark positions and a willingness to use derivatives to gain or hedge exposures. This means it does not need to express all curve or duration trades via cash/physical markets. The liquidity of the inflation linked market and favorable new issuance/supply trends are also considerations.
		Furthermore, the firm has significant resources to analyze a large number of investment opportunities and is well positioned to achieve desired exposures with trading desks located across the globe. PIMCO has significant influence in structuring deals and setting pricing when approaching issuers with reverse inquiries and can extract pricing concessions when it comes to providing liquidity on the other side of very large trades. A dedicated risk committee assesses counterparties and monitor exposures closely.
Business Management	+	PIMCO is one of the largest, deepest, and best known fixed income managers, and the firm's brand name continues to be one of its greatest assets for attracting clients and investment professionals. The firm understands that its market-leading position is not indefinitely secured and offers clients a wealth of resources (monthly investment commentaries from senior investors, market research and white papers, a multitude of client service personnel) to complement and enhance investment management product. Despite PIMCO's stature in the industry, the culture of the firm is ultra-competitive. Intensity and professionalism permeate the investment team as well as non-investment functions at PIMCO. This can lead to periodic bouts of turnover, but is considered to be a net positive. PIMCO's unwillingness to provide capacity guidance for various products leads to our belief that the firm is too focused on its own asset goals. The firm's unwillingness to provide transparency on succession planning, capacity, and access to investment team meetings precludes us from awarding a higher factor score.

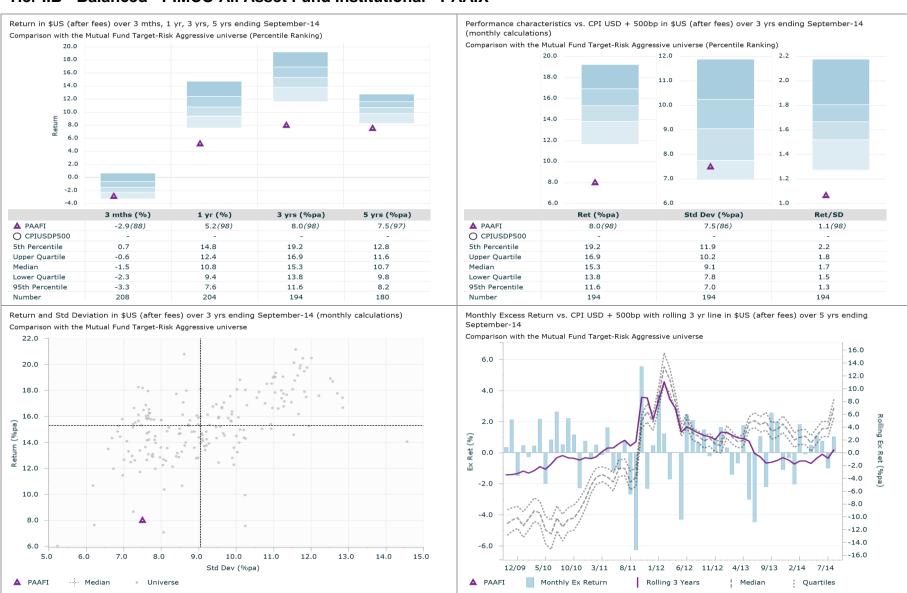
# Overall Rating B+ (W)

The strategy benefits from PIMCO's highly regarded research capabilities. The firm's investment committee demonstrates a strong ability to generate tactical and secular macroeconomic and risk factor forecasts. The firm's asset allocation committee effectively converts those views into asset class risk/return projections. In addition to the firm's overall strengths, the strategy benefits from a dedicated real return team who demonstrate a deep understanding of inflation trends and how to position the portfolio from both a strategic and tactical perspective to benefit from those trends. The dynamic nature of this fund effectively leverages PIMCO's skills and increases it ability to add value. PIMCO also has significant experience managing inflation related strategies. While we have confidence in PIMCO's ability to generate an inflation outlook and gauge the performance of asset classes in that environment, we would like to see further evidence of the fund's ability to hedge inflation and to add value through active asset allocation.

#### **Additional Observations**

While the strategy seeks a return in excess of inflation, investors should be aware that CPI is not an investable benchmark and PIMCO does not seek to track it. As such, the shorter-term performance of the strategy will likely be driven by factors other than realized inflation or changes in market inflation expectations. Still, the objective of the strategy is to formulate macroeconomic views regarding potential inflation and then seek exposure to asset classes and investments that should benefit from/protect against inflation and that perform relatively well during periods of rising inflation. While the portfolio is diversified, volatility and downside risk could be higher than expected as many of the underlying asset classes have exposure to common risk factors.

#### Tier IIB - Balanced - PIMCO All Asset Fund Institutional - PAAIX<sup>5</sup>



<sup>&</sup>lt;sup>5</sup> CPI not released at time of production Mercer

#### Tier IIB - Balanced - PIMCO All Asset Fund Institutional - PAAIX

Factor	Rating	Comments				
	(-, =, + or ++)					
Idea Generation	++	Comprised of a selection of underlying PIMCO funds, this strategy enjoys strong idea generation from two excellent firms. First, Research Affiliates (RA), which controls the portfolio composition, exhibits strength in top down strategic and tactical decisions based on its substantial quantitative research capabilities and talented leader, Rob Arnott. Their investment process is thorough and well-structured, and their models continue to be enhanced.				
		Second, PIMCO, which runs the underlying funds, provides deep research across market sectors and market-leading breadth of coverage globally. The skill, experience, and depth of the investment team are evident in PIMCO's world-class macroeconomic research and ability to generate thematic trade ideas, particularly in fixed income. PIMCO contributes ideas in both top-down and bottom up respects.				
Portfolio Construction	+	Portfolio construction by RA is strong, encompassing modern risk budgeting methods.				
		Portfolio construction within the underlying funds is a particular strength of PIMCO's. Proprietary risk management systems are among the best in the industry and allow portfolio managers to segment portfolios into a multitude of practical and novel risk buckets. The sophistication of PIMCO's models and systems allows the management teams of individual funds to accentuate the highest-conviction trade ideas and hedge out unwanted risks.				
Implementation	+	All trades are implemented via available PIMCO mutual funds, with RA's orders handled on the PIMCO platform equally to those of any other client. With a few exceptions, PIMCO's fund line-up is fairly comprehensive and should be able to accommodate the top down ideas that Research Affiliates currently articulates. Further, free flowing discussion between the firms make it likely that the PIMCO fund offering will evolve in line with the needs of All Asset/All Asset All Authority (AA/AAAA). However, there is a risk that some future idea may not be expressible in the available PIMCO line-up. Additionally, and more difficult to detect, there is a risk that Research Affiliates may filter out ideas that are not implementable in PIMCO funds.				
		PIMCO's huge size is both an advantage, and at times, a disadvantage. On the positive side, the firm has significant resources to analyze a large number of investment opportunities and is well positioned to achieve desired exposures through cash market and synthetic instruments, with trading desks located across the globe. On the other hand, PIMCO's size may impact execution in certain physical credit markets (namely high yield and emerging markets) for traditional fixed income mandates. Capacity may become constrained in specific funds.				
		Somewhat off-setting the capacity concern is the fact that RA's asset allocation approach is value oriented. This increases the likelihood that AA/AAAA will be exiting markets as they get crowded and entering them as they get cheap.				
Business Management	+	PIMCO is one the largest asset management firms in the world, which carries both advantages and disadvantages. On the positive side, a large asset base provides the firm with extensive resources and contacts, which can be used to develop an informational advantage and conduct an in-depth analysis of a wide range of global investment opportunities. Additionally, the firm can use its size to obtain advantageous pricing in certain markets. On the other hand, a large asset base can hinder its ability to generate alpha by limiting the potential to invest in smaller/niche areas of the market and could create problems in exiting certain positions. PIMCO is also trying to enter new markets (e.g. equity management), which can lead to a potential loss of focus. The firm's culture is ultra-competitive and intense, which, when coupled with its renowned status, can lead to periodic bouts of turnover, but is a net positive as it produces a highly disciplined and thorough investment process.				
		PIMCO's unwillingness to provide capacity guidance for multiple products leads to our belief that the firm is too focused on its own asset goals. The firm's unwillingness to provide transparency on succession planning, capacity, and access to investment team meetings precludes us from awarding a higher factor score.				

### Overall Rating

B+

Among multi-asset balanced mutual fund products, AA/AAAA are leading competitors which combine the strengths of two solid organizations. Top down decisions benefit from Research Affiliates' resources and experience in tactical allocation, while security selection draw on PIMCO's many strengths. These include depth of research, sophisticated quantitative and credit analysis, extensive use of synthetic instruments, and a robust risk control framework incorporated into the portfolio construction process.

The products are ultimately constrained by the funds available at PIMCO. Although this is a wide opportunity set, tactical calls of Research Affiliates may push at the edges of this spectrum. The strategies' value orientation and broad diversification help mitigate some of our concerns about PIMCO's large asset base.

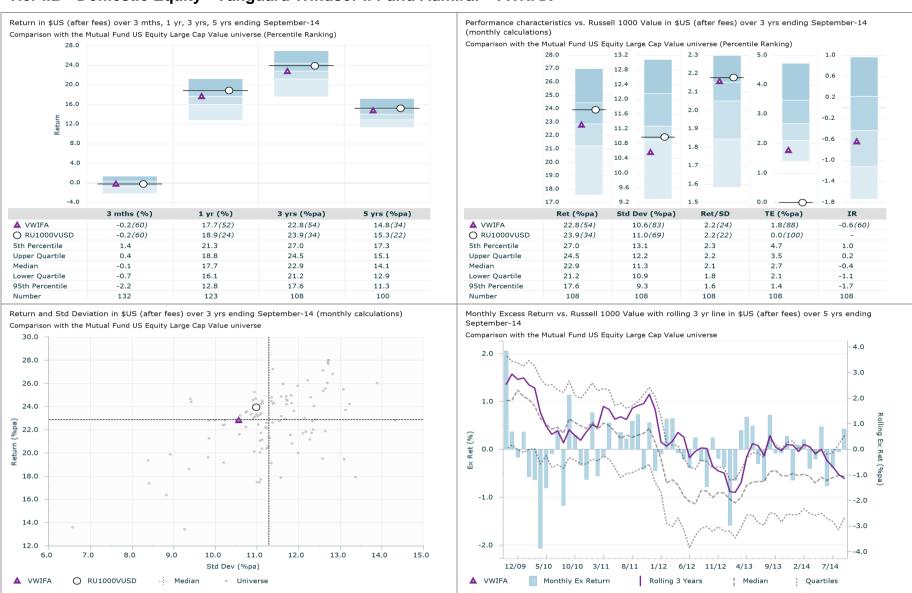
#### **Additional Observations**

AA and AAAA are broadly diversified multi-asset strategies which are distinct in two ways. First, they are essentially real return-oriented products. Second, they may also act as alternatives to traditional balanced or GTAA strategies.

AA targets CPI + 5% with risk of 6-8%. It has a secondary benchmark of the Barclays 1-10 year TIPS index, and it shares features with a GTAA strategy that has no short selling capabilities.

AAAA targets CPI + 6.5% with risk of 8-10%. It has a secondary benchmark of the S&P 500 index, and it has more in common with a global macro strategy, in that it has some short selling capability.

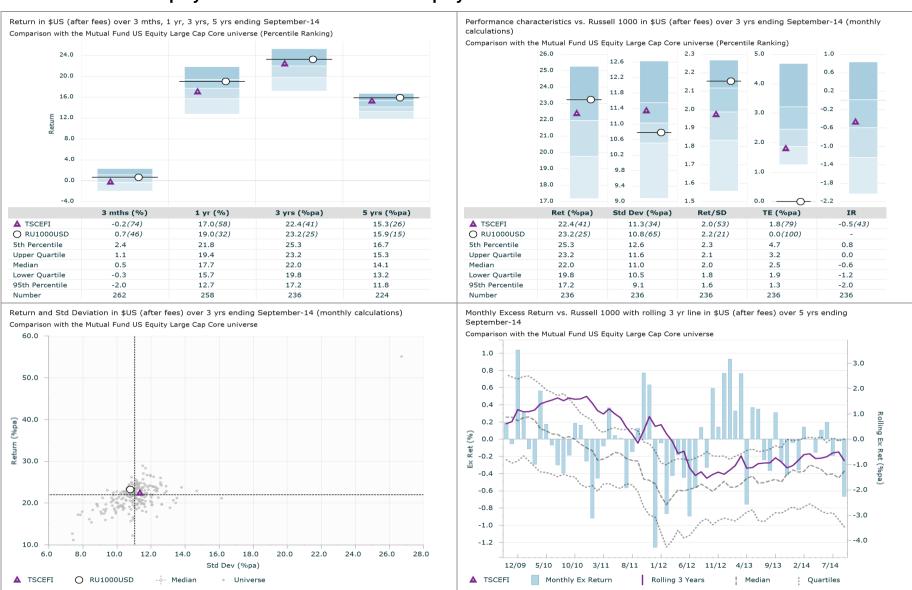
#### Tier IIB - Domestic Equity - Vanguard Windsor II Fund Admiral - VWNAX



### Tier IIB - Domestic Equity - Vanguard Windsor II Fund Admiral - VWNAX

Factor	Rating (-, =, + or ++)	Comments
Idea Generation	+	
Portfolio Construction	+	
Implementation	+	
Business Management	+	Business management is a key strength of the firm. Vanguard remains committed to providing top quality services to investors at the lowest reasonable costs. Turnover within the active and passive fixed income investment teams has been low.
Overall Rating		
B+		

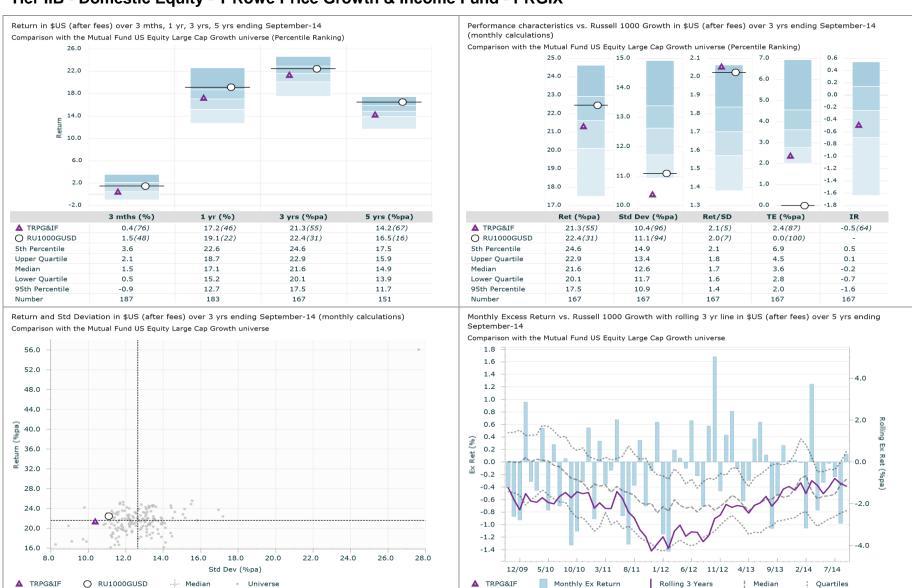
#### Tier IIB - Domestic Equity - TIAA-CREF Social Choice Equity Fund Institutional - TISCX



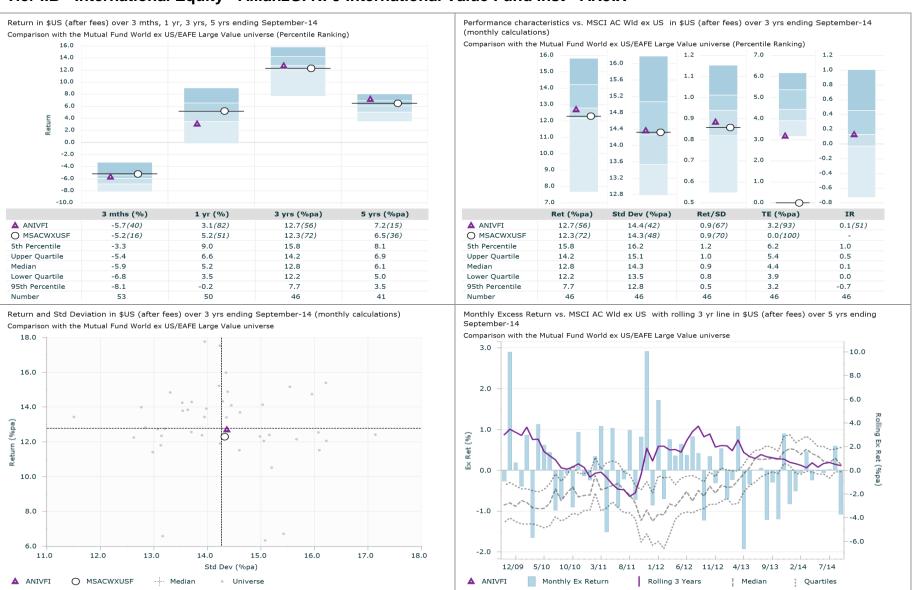
### Tier IIB - Domestic Equity - TIAA-CREF Social Choice Equity Fund Institutional - TISCX

Factor	Rating (-, =, + or ++)	Comments
Idea Generation		TCAM rely solely on inputs from KLD for the definition of their investment universe, though they actively liaise with KLD to help shape the social priorities. It is a purely quant process using a model developed internally over 10 years ago so may under perform in periods of unusual market activity when the predictive power of the model is challenged.
Portfolio Construction		The proprietary quantitative model is run daily by TCAM's quant equity team, in the same way as unconstrained portfolios. It incorporates Barra risk factors to minimise tracking error and past performance indicates the model has been consistent in replicating index returns. The managers are conscious of minimising trading costs e.g. through minimum trade sizes.
Implementation		Trading is done centrally by 24-hour desks in New York and San Francisco. Capacity is not an issue.
Business Management		TCAM have long been committed to socially responsible investing; their philosophy of influencing positive change through investing stems from their history as a non-profit organisation, dedicated to the education profession.
Overall Rating N	commitment to SRI; the	ated this strategy as it will appeal only to a very specific type of investor, i.e. one who wants a passive ethical strategy. TCAM have a clear eir work in corporate governance and community investing is market leading. The index replication appears to be competently and efficiently are a full cycle the exclusion of certain sectors should not be a drag on performance.
Additional Observations	A prolonged period of o	out performance by industrial or larger cap companies would result in underperformance of this strategy due to the exclusionary screens.

#### Tier IIB - Domestic Equity - T Rowe Price Growth & Income Fund - PRGIX



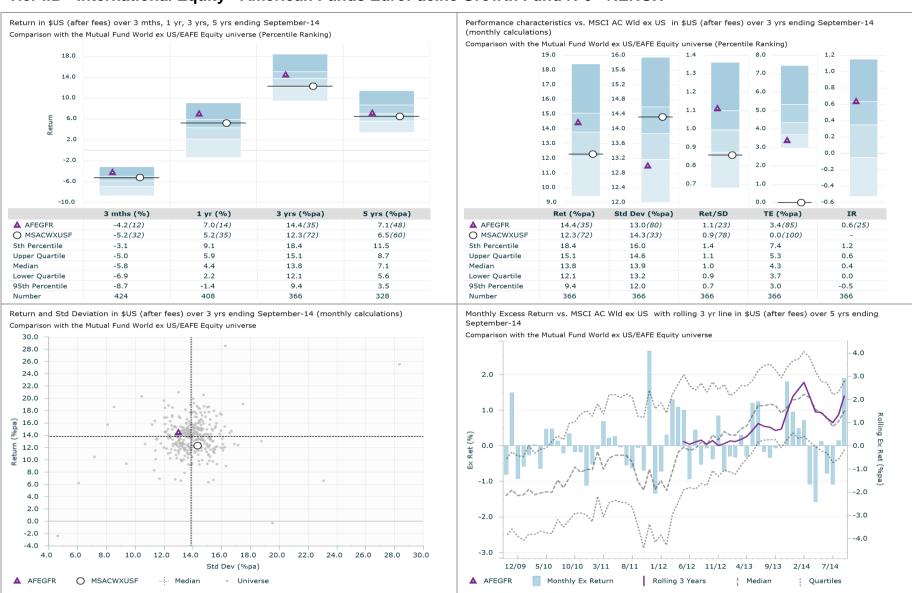
### Tier IIB - International Equity - AllianzGI NFJ International Value Fund Inst - ANJIX



### Tier IIB - International Equity - AllianzGI NFJ International Value Fund Inst - ANJIX

Factor	Rating (-, =, + or ++)	Comments		
Idea Generation	\$ 6 //	While NFJ's investment philosophy, which takes a contrarian approach and focuses on dividend paying companies, is reasonable, the screening process is simplistic and the fundamental research conducted by the team lacks insights on specific companies. The lack of accountability for individual companies throughout the process is also a point of concern. Additionally, the firm's decision to only invest in ADRs limits the investable universe, particularly for smaller capitalization and emerging markets companies. NFJ prefers companies file JS financial statements to improve transparency and comparability. However, we believe this approach is driven by the team's unfamiliarity with and limited understanding of the nuances of non-US markets and the companies operating there, and we view this as a detractor from the team's ability to add value through bottom-up fundamental research.		
Portfolio Construction		Portfolio construction is adequate and gives reasonable consideration to diversification. The portfolio has significant leeway to allocate to he emerging markets and NFJ utilizes the full range given, which may lead to significant tracking error relative to the index.		
Implementation		Assets under management should not pose a challenge to implementing the strategy. NFJ has set a reasonable capacity target for the strategy.		
Business Management	r 6 (	NFJ continues to operate as an autonomous organization within parent company Allianz Global Investors (Allianz). Allianz provides marketing and administrative support, thereby allowing NFJ to focus on investment management. Despite lacking the equity incentives of an independently owned firm, NFJ continues to foster a culture that promotes team stability with Allianz offering alternative modes of compensation incentives. NFJ appears to have successfully established its next generation of investment professionals as part of its proader succession plan.		
Overall Rating	NFJ's investment process is simplistic and the dividend requirement is low. The investment process focuses exclusively on companies with ADRs which limit			
R	global markets in general.	ionally, the team's inability or unwillingness to analyze financial statements filed outside the US suggests a lack of comfort with IFRS and NFJ lacks a comprehensive understanding of non-US markets and companies, which limits the team's ability to add value through a result, we are unable to identify an edge to the process that would allow NFJ to consistently add value on a risk adjusted basis.		
Additional Observations	characteristics. The portfo	phy as contrarian and focuses on dividend paying companies. The strategy should hold up relatively well when markets reward those lio will be concentrated in 40 to 60 stocks and may invest up to 50% in the emerging markets, which may lead to above average tracking e ability to make significant allocations to emerging markets to also be a key driver of performance. This strategy invests exclusively in		

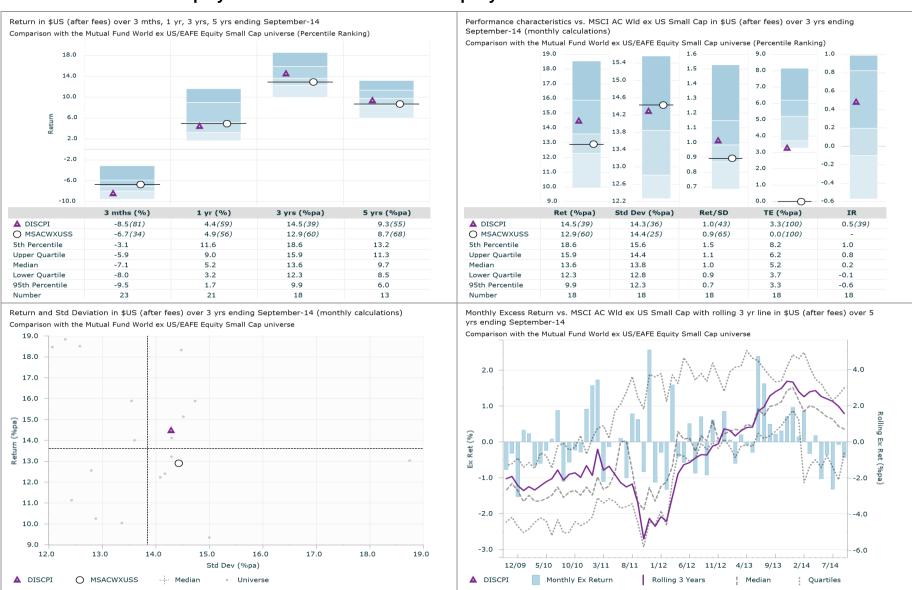
#### Tier IIB - International Equity - American Funds EuroPacific Growth Fund R-6 - RERGX



### Tier IIB - International Equity - American Funds EuroPacific Growth Fund R-6 - RERGX

Factor	Rating (-, =, + or ++)	Comments					
Idea Generation	+	Cap Guardian employs highly experienced analysts whom we perceive generate insightful ideas, and produce in-depth research of a high quality. However, turnover in the analyst team has led us to question whether some of the in-depth knowledge and strong industry relationships of the past have been lost. The analyst team has been reduced from around 70 four years ago to around 50 today. Whilst of itself not an issue, the reassignment of responsibilities we believe loses some experience. In general, we think that the research remains of a high standard, but have not seen this translate into strong performance; we believe that some alpha may be lost between the idea generation and portfolio construction phases.					
Portfolio Construction	=	Cap Guardian gives portfolio managers a high degree of freedom and uses the multi-manager approach to smooth out the most aggressive biases. Nevertheless, deviations from benchmarks can be pronounced and positions can be large at the aggregate level. There is some concern that aggregate positions may not be fully intended. Whilst we accept that positions will reflect the conviction level of the team of portfolio managers, this is not managed at an aggregate portfolio level. At the other end of the spectrum this approach also results in a very large tail of small positions which have limited impact on the portfolio. We do not think that the portfolio construction process makes the best use of the ideas generated by the analysts.					
Implementation	-	The volume of assets has fallen as a result of market moves and client withdrawals, which has addressed the immediate capacity constraints. While outflows have eased capacity issues somewhat, we do not expect Cap Guardian to do anything but move back into growth mode when performance improves. Whilst they do appear to be taking capacity more seriously and have undertaken a series of studies to determine what they might be able to manage, it remains to be seen if they do actually close strategies when they reach those capacity levels. Additionally the changes to the global portfolio team structure, whereby all three global portfolios will be run in the same manner, and therefore display a higher degree of overlap could lead to increased capacity pressure.					
Business Management	+	Cap Guardian has historically been one of the most successfully managed firms in the industry, with high levels of stability and a reward structure that is focused on success. We fear that as Cap Guardian has grown it has become very slow to implement decisions and change course, although they have acknowledged this and are seeking to address it. That said, we worry that this stability, that impressed us previously, could be compromised by the degree of change they have recently been implementing. There have been ongoing changes at the investment team level including analyst departures and team reorganisation, as well as at the organisational level, but we are unsure that this will translate into improved investment performance. Whilst we like the partnership structure and compensation arrangements the degree of on-going change and apparent lack of direction leads us to downgrade the business management score.					
Overall Rating B	A lack of direction in the management of the team and products, with on-going changes which seem reactionary in nature, lead us to question the ability for the strategy to outperform going forward. Combined with a lack of transparency, this makes it difficult for us to assess what has driven poor performance and whether this is likely to reverse in the future, and leads us to propose a downgrade to this strategy. Although idea generation at the analyst level remains relatively strong this does not seem to translate into high quality portfolios. As such we feel that a B rating is appropriate						
Additional Observations	different investment phi	e that there is not a firm-wide investment philosophy that can easily be articulated, but that the portfolio represents an amalgamation of losophies of individual portfolio managers. While individual sleeves of the portfolio may reflect the views of the portfolio counselors via actors, the process should produce a total portfolio that is broadly diversified across companies, sectors, and countries.					

#### Tier IIB - International Equity - DFA International Small Company Portfolio Inst - DFISX



### Tier IIB - International Equity - DFA International Small Company Portfolio Inst - DFISX

Factor	Rating (-, =, + or ++)	Comments					
Idea Generation	++	All DFA's strategies seek to exploit basic investment principles through the capture of small cap and/or value risk premia. These principles are academically supported, and the affiliation of top academic researchers within finance with DFA strengthens the credibility of the adoption of this approach. The additional rules based screening and diversification of the portfolios mitigates stock specific risk despite no fundamental research being undertaken. Unlike most active managers, DFA are agnostic when it comes to stock selection within those two areas. DFA invests in on-going academic research, a hallmark of the firm, to ensure that maximum value is extracted from the investment process. This is reflected in modest enhancements to the process over time, most recently the inclusion of a profitability factor. Such developments should marginally enhance the process.					
Portfolio Construction	+	The portfolio construction aims to efficiently capture the value and/or small cap risk premia (depending on the strategy) beyond a purley passive approach. The definition of value is narrow, focusing only on price to book ratios, but the rationale for this is academically supported. The definition of small cap is generally smaller than most small cap indices, translating into active risk from size, even in a small cap context. Close attention is paid to minimising "leakage" in the capture of the targeted risk premia by adopting boundaries and exclusion rules, and diversifying away stock specific risks. This however does generate a very long "tail" of small, relatively illiquid positions owned.					
Implementation	+	DFA's sensitivity to implicit and explicit trading costs has led them to develop strong trading skills and the technology required to access all viable trading channels. The lack of attention to stock selection creates flexibility at the implementation stage, and traders are given scope, within clearly defined boundaries, to choose the most efficient implementation option and use liquidity patterns to the advantage of DFA-managed funds. This is especially seen in areas such as small cap, where the firm accounts for a considerable proportion of trading volume and sensible use is made of "buffers" to control portfolio turnover. Despite this, DFA's asset base has grown quickly, and there is no clear recognition of capacity constraints. We accept that the unique approach to implementation alleviates some of these pressures, but our view remains that DFA could struggle if faced with a period of sustained outflows from these funds.					
Business Management	+	though DFA has appeared to be a well run firm, providing resources and infrastructure to support growth in its various businesses, there has been a changing of the guard with the firm's leadership. The firm has introduced a more structured approach to business management and promoted the next generation of leaders to key positions. Succession planning appears to have been well thought through, and the transition to the next generation of investors appears to be going smoothly at this point, but there may be a shift in focus, and continued vigilance is required. We would also like further comfort that the firm, which remains majority-owned by the two founders, have put sufficient thought into the long term future of the company.					
Overall Rating A	strong and DFA is com constrained product line	The beliefs underpinning DFA's approach are robust, and the investment process, while simplistic, is well designed and consistently applied. Trading skills are strong and DFA is committed to remaining at the forefront in this area. Our enthusiasm is tempered by concerns over DFA's willingness to grow capacity constrained product lines. However, overall we continue believe that the firm's range of small cap products (with varying degrees of value bias) are a cost effective means for clients with a long-term investment horizon to gain exposure to those premia.					
Additional Observations	Portfolios will have a bias to smaller companies, even within the small cap universe. The bias to value will vary by strategy depending on the mandate. Portfolios are highly diversified by number of stocks. Tracking errors are generally low except in the explicitly "value" strategies. The strategies should not be expected to perform well in periods when growth stocks and momentum are driving the market, or when risk aversion is high.						

# **Investment Expense Analysis**

### Analysis reflects investment expenses only and does not include an evaluation of plan recordkeeping costs.

Fund	Style	Fund Balance	Estimated Fund Expense	Fund Net Expense Ratio	Median Net Expense Ratio	Net Expense Diff.
Wells Fargo Advantage Dow Jones Tgt Today Fd R6	Target-Date	\$0	\$0	0.79%	0.57%	0.22%
Wells Fargo Advantage Dow Jones Tgt 2020 Fund R6	Target-Date	\$0	\$0	0.84%	0.65%	0.19%
Wells Fargo Advantage Dow Jones Tgt 2030 Fund R6	Target-Date	\$0	\$0	0.85%	0.67%	0.18%
Wells Fargo Advantage Dow Jones Tgt 2040 Fund R6	Target-Date	\$0	\$0	0.86%	0.70%	0.16%
Wells Fargo Advantage Dow Jones Tgt 2050 Fund R6	Target-Date	\$0	\$0	0.86%	0.70%	0.16%
Vanguard Short-Term Bond Index Fund Admiral	US Fixed	\$0	\$0	0.59%	0.20%	0.39%
Vanguard 500 Index Fund Admiral	US Large Cap Equity	\$0	\$0	0.54%	0.20%	0.34%
Vanguard Mid-Cap Index Fund Admiral	US Mid Cap Equity	\$0	\$0	0.59%	0.25%	0.34%
Vanguard Small-Cap Index Fund Admiral	US Small Cap Equity	\$0	\$0	0.59%	0.30%	0.29%
Vanguard Total International Stock Index Fund Adm	International Equity	\$0	\$0	0.63%	0.38%	0.25%
TIAA Stable Value	Other	\$0	\$0	0.79% <sup>6</sup>	0.46%	0.23%
JPMorgan Core Bond Fund R6	US Fixed	\$0	\$0	0.90%	0.52%	0.38%
PIMCO Inflation Response Multi-Asset Fund Inst	Balanced	\$0	\$0	1.39%	0.86%	0.53%
PIMCO All Asset Fund Institutional	Balanced	\$0	\$0	1.38%	0.95%	0.43%
Vanguard Windsor II Fund Admiral	US Large Cap Equity	\$0	\$0	0.77%	0.77%	0.00%
TIAA-CREF Social Choice Equity Fund Institutional	US Large Cap Equity	\$0	\$0	0.68%	0.78%	-0.10%
T Rowe Price Growth & Income Fund	US Large Cap Equity	\$0	\$0	1.03%	0.81%	0.22%
AllianzGl NFJ International Value Fund Inst	International Equity	\$0	\$0	1.32%	1.00%	0.32%
American Funds EuroPacific Growth Fund R-6	International Equity	\$0	\$0	0.99%	1.00%	-0.01%
DFA International Small Company Portfolio Inst	International Equity	\$0	\$0	1.05%	1.22%	-0.17%
TIAA Real Estate Account	Real Estate	\$0	\$0	1.15%	0.86%	0.29%
Total		\$0	\$0	0.00%	0.00%	0.00%

Median institutional share class net expense ratio as defined by the respective Mercer Mutual Fund Universe

<sup>&</sup>lt;sup>6</sup> Total Fund Expense Ratio includes the 0.40% TIAA Stable Value Multi-Vendor Risk Fee which is intended to offset the disintermediation risks associated with participant transfers to other vendors.

# Appendix – Disclosures

#### Important notices

References to Mercer shall be construed to include Mercer LLC and/or its associated companies.

© 2014 Mercer LLC. All rights reserved.

This contains confidential and proprietary information of Mercer and is intended for the exclusive use of the parties to whom it was provided by Mercer. Its content may not be modified, sold or otherwise provided, in whole or in part, to any other person or entity, without Mercer's prior written permission.

The findings, ratings and/or opinions expressed herein are the intellectual property of Mercer and are subject to change without notice. They are not intended to convey any guarantees as to the future performance of the investment products, asset classes or capital markets discussed. Past performance does not guarantee future results. Mercer's ratings do not constitute individualized investment advice.

Information contained herein has been obtained from a range of third party sources. While the information is believed to be reliable, Mercer has not sought to verify it independently. As such, Mercer makes no representations or warranties as to the accuracy of the information presented and takes no responsibility or liability (including for indirect, consequential or incidental damages), for any error, omission or inaccuracy in the data supplied by any third party.

This does not constitute an offer or a solicitation of an offer to buy or sell securities, commodities and/or any other financial instruments or products or constitute a solicitation on behalf of any of the investment managers, their affiliates, products or strategies that Mercer may evaluate or recommend.

For the most recent approved ratings of an investment strategy, and a fuller explanation of their meanings, contact your Mercer representative.

For Mercer's conflict of interest disclosures, contact your Mercer representative or see <a href="https://www.mercer.com/conflictsofinterest">www.mercer.com/conflictsofinterest</a>.

**Mercer universes**: Mercer's universes are intended to provide collective samples of strategies that best allow for robust peer group comparisons over a chosen timeframe. Mercer does not assert that the peer groups are wholly representative of and applicable to all strategies available to investors.

The value of your investments can go down as well as up, and you may not get back the amount you have invested. Investments denominated in a foreign currency will fluctuate with the value of the currency. Certain investments, such as securities issued by small capitalization, foreign and emerging market issuers, real property, and illiquid, leveraged or high-yield funds, carry additional risks that should be considered before choosing an investment manager or making an investment decision.

Returns for periods greater than one year are annualized. Returns are calculated gross of investment management fees, unless noted as net of fees.

Style analysis graph time periods may differ reflecting the length of performance history available.

THE FOLLOWING PROVISIONS APPLY TO DATA OR OTHER SERVICES PROVIDED BY THE FOLLOWING COMPANIES: Where "End User" appears before the Vendor name, a direct end-user license with the Vendor is required to receive some indices. You are responsible for ensuring you have in place all such licenses as are required by Vendors.

**BARCLAYS:** © Barclays Bank PLC 2014. This data is provided by Barclays Bank PLC. Barclays Bank PLC and its affiliated companies accept no liability for the accuracy, timeliness or completeness of such data which is provided "as is." All warranties in relation to such data are hereby extended to the fullest extent permitted under applicable law.

**BARCLAYS CAPITAL:** The Barclays Indices are a proprietary product of Barclays. Barclays shall maintain exclusive ownership of and rights to the Barclays Indices and that inclusion of the Barclays Indices in this Service shall not be construed to vest in the subscriber any rights with respect to the Indices. The subscriber agrees that it will not remove any copyright notice or other notification or trade name or marks of Barclays that may appear in the Barclays Indices and that any reproduction and/or distribution of the Barclays Indices (if authorized) shall contain such notices and/or marks.

**BLOOMBERG L.P.:** © 2014 Bloomberg L.P. All rights reserved. BLOOMBERG, BLOOMBERG PROFESSIONAL, BLOOMBERG FINANCIAL MARTKETS, BLOOMBERG NEWS, BLOOMBERG TRADEMARK, BLOOMBERG BONDTRADER, AND BLOOMBERG TELEVISION are trademarks and service marks of Bloomberg L.P. a Delaware Limited Partnership.

**Center for Research in Security Prices (CRSP):** Derived based upon data from Center for Research in Security Prices (CRSP®), The University of Chicago Booth School of Business

CITIGROUP GLOBAL MARKETS (formerly SALOMON SMITH BARNEY): Smith Barney<sup>sm</sup> and Citigroup Global Equity Index<sup>sm</sup> are service marks of Citigroup Inc. "BECAUSE ACCURACY COUNTS®" is a registered service mark of Citigroup Inc. FloatWatch<sup>©</sup> is a trade mark of Citigroup Inc. Citigroup Global Equity Index System<sup>sm</sup> Citigroup Broad Market Index<sup>sm</sup>, Citigroup Primary Market Index<sup>sm</sup>, Citigroup Extended Market Index<sup>sm</sup>, Citigroup Cap-Range Index<sup>sm</sup>, Citigroup Internet Index (NIX)<sup>sm</sup>, Citigroup Style Indices (Growth/Value)<sup>sm</sup>, Citigroup Property Index<sup>sm</sup> are service marks of Citigroup Inc. ©2014 Citigroup Inc All rights reserved. Any unauthorized use, duplication or disclosure is prohibited by law and may result in prosecution. Citigroup, including its parent, subsidiaries and/or affiliates ("the Firm"), usually makes a market in the securities discussed or recommended in its report and may sell to or buy from customers, as principal, securities discussed or recommended in its report. The Firm or employees preparing its report may have a position in securities or options of any company discussed or recommended in its report. An employee of the Firm may be a director of a company discussed or recommended in its report. The Firm may perform or solicit investment banking or other services from any company discussed or recommended in its report. Securities recommended, offered, or sold by SSB: (i) are not insured by the Federal

Deposit Insurance Corporation: (ii) are not deposits or other obligations of any insured depository institution (including Citibank); and (iii) are subject to investment risks, including the possible loss of the principal amount invested. Although information has been obtained from and is based upon sources SSB believes to be reliable, we do not guarantee its accuracy and it may be incomplete or condensed. All opinions and estimates constitute SSB's judgment as of the date of the report and are subject to change without notice. Its report is for informational purposes only and is not intended as an offer or solicitation for the purchase or sale of a security. Its report does not take into account the investment objectives or financial situation of any particular person. Investors should obtain advice based on their own individual circumstances before making an investment decision.

CREDIT SUISSE FIRST BOSTON LLC. (CSFB): Copyright © 1996 – 2014 Credit Suisse First Boston LLC and/or its affiliate companies. All rights reserved.

DataStream: Source: ThomsonReuters Datastream

**Dow Jones**: The Dow Jones Indexes<sup>SM</sup> are proprietary to and distributed by Dow Jones & Company, Inc. and have been licensed for use. All content of Dow Jones Indexes SM © 2014 is proprietary to Dow Jones & Company, Inc.

"End User" FTSE™: is a trade mark of the London Stock Exchange PLC and The Financial Times Limited and is used by FTSE International Limited under license. Russell Investment Group Europe Ltd is licensed by FTSE International Limited to distribute FTSE Advanced Service and other FTSE indices. FTSE shall not be responsible for any error or omission in FTSE data. All copyright and database rights in FTSE products belong to FTSE or its licensors. Redistribution of the data comprising the FTSE products is not permitted. You agree to comply with any restrictions or conditions imposed upon the use. access, or storage of the data as may be notified to you by FTSE or Russell/Mellon Europe Ltd. You are not permitted to receive the FTSE Advanced Service unless you have a separate agreement with FTSE. "FTSE™", "FT-SE™" and "Footsie™" are trade marks of London Stock Exchange PLC and The Financial Times Limited and are used by FTSE International Limited under license.

The FTSE Private Investor Indices are owned and calculated by FTSE International and are produced in association with APCIMS (Association of Private Client Investment Managers and Stockbrokers). © FTSE International Limited 2014

The UK Value and Growth Indices are owned and calculated by FTSE International Limited in association with Russell Investment Group. © FTSE International Limited 2014.

RUSSELL INVESTMENT GROUP: Russell Investment Group is the source and owner of certain of the data contained or reflected in this material and all trademarks and copyrights related thereto. The material may contain confidential information and unauthorized use. disclosure, copying, dissemination or redistribution is strictly prohibited. This is a user presentation of the data. Russell Investment Group is not responsible for the formatting or configuration of this material or for any inaccuracy in presentation thereof. Returns and security data for the Russell indices are provided by Mellon Analytical Solutions. Russell indices are trademarks/service marks of the Russell Investment Group. Russell® is a trademark of the Russell Investment Group.

HFRI: Source: Hedge Fund Research, Inc., © HFR, Inc. 2014, www.hedgefundresearch.com

JPMORGAN: The JPMorgan EMBI Index (i) is protected by copyright and JPMorgan

claims trade secret rights, (ii) is and shall remain the sole property of JPMorgan, and (iii)

title and full ownership in the JPMorgan EMBI Index is reserved to and shall remain with JPMorgan. All proprietary and intellectual property rights of any nature, including patents, copyrights, trademarks and trade secrets regarding the JPMorgan EMBI Index, and any and all parts, copies, modifications, enhancements and derivative works are owned by, and shall remain the property of JPMorgan and its affiliates. The JPMorgan EMBI Index and related materials and software were developed, compiled, prepared and arranged by JPMorgan through expenditure of substantial time, effort and money and constitute valuable intellectual property and trade secrets of JPMorgan. The JPMorgan EMBI Index shall not be used in a manner that would infringe the property rights of JPMorgan or others or violate the laws, tariffs, or regulations of any country.

LIPPER: Performance data was supplied by Lipper, A Thomson Reuters Company, subject to the following: Copyright 2014 © Thomson Reuters. All rights reserved. Any copying, republication or redistribution of Lipper Information, including by caching, framing or similar means, is expressly prohibited without the prior written consent of Lipper. Lipper shall not be liable for any errors or delays in the Information, or for any actions taken in reliance thereon. Lipper performance data is total return, and is preliminary and subject to revision. The data contained herein has been obtained from company reports, financial reporting services, periodicals, and other resources believed to be reasonable. Although carefully verified, data on compilations is not guaranteed by Lipper Inc. - A Reuters Company and may be incomplete. No offer or solicitations to buy or sell any of the securities herein is being made by Lipper. Portions of the information contained in this report was derived by Mercer using Content supplied by Lipper, A Thomson Reuters Company.

MERRILL LYNCH: The Merrill Lynch Indices are used with permission. Copyright 2014. Merrill Lynch, Pierce, Fenner & Smith Incorporated, All rights reserved. The Merrill Lynch Indices may not be copied, used, or distributed without Merrill Lynch's prior written approval.

This Product is not sponsored, endorsed, sold or promoted by Merrill Lynch. Merrill Lynch makes no quarantees, representations or warranties of any kind, express or implied, to any person, including, without limitation, any member of the public regarding the use of the Indices in the Product, the advisability of investing in securities generally or of the ability of the Index to track any market performance. Merrill Lynch's only relationship to Mellon Analytical Solutions or any other person or entity in respect to this Product is limited to the licensing of the Merrill Lynch Indices, which are determined, composed, and calculated by Merrill Lynch without regard to Mellon Analytical Solutions or this Product. Merrill Lynch retains exclusive ownership of the Indices and the programs and trademarks used in connection with the Indices. Merrill Lynch has no obligation to take the needs of Mellon Analytical Solutions or the purchasers, investors or participants in the Product into consideration in determining, composing or calculating the Indices, nor shall Merrill Lynch have any obligation to continue to calculate or provide the Indices in the future. Merrill Lynch may, in its absolute discretion and without prior notice, revise or terminate the Indices at any time. IN NO EVENT SHALL MERRILL LYNCH OR ANY OF ITS PARTNERS, AFFILIATES, EMPLOYEES, OFFICERS, DIRECTORS OR AGENTS HAVE ANY LIABILITY TO ANY PERSON OR ENTITY FOR ANY INDIRECT, PUNITIVE, SPECIAL. OR CONSEQUENTIAL DAMAGES. INCLUDING LOST PROFITS.

MOODY'S INVESTORS SERVICE: Moody's © Copyright 2014, Moody's Investors Service, Inc. ("Moody's). Moody's ratings ("Ratings") are proprietary to Moody's or its affiliates and are protected by copyright and other intellectual property laws. Ratings are licensed to Distributor by Moody's. RATINGS MAY NOT BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED,

DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT. Moody's® is a registered trademark of Moody's Investors Service, Inc..

MSCI<sup>®</sup>: Portions of this report are copyright MSCI 2014. Unpublished. All Rights Reserved. This information may only be used for your internal use, may not be reproduced or redisseminated in any form and may not be used to create any financial instruments or products or any indices. This information is provided on an "as is" basis and the user of this information assumes the entire risk of any use it may make or permit to be made of this information. Neither MSCI, any of its affiliates or any other person involved in or related to compiling, computing or creating this information makes any express or implied warranties or representations with respect to such information or the results to be obtained by the use thereof, and MSCI, its affiliates and each such other person hereby expressly disclaim all warranties (including, without limitation, all warranties of originality, accuracy, completeness, timeliness, non-infringement, merchantability and fitness for a particular purpose) with respect to this information. Without limiting any of the foregoing, in no event shall MSCI, any of its affiliates or any other person involved in or related to compiling. computing or creating this information have any liability for any direct, indirect, special. incidental, punitive, consequential or any other damages (including, without limitation, lost profits) even if notified of, or if it might otherwise have anticipated, the possibility of such damages. MSCI is a registered trademark of MSCI, Inc.

**NAREIT:** NAREIT<sup>®</sup> is the exclusive registered mark of the National Association of Real Estate Investment Trusts.

**NCREIF:** All NCREIF Data - Copyright by the National Council of Real Estate Investment Fiduciaries. This information is proprietary and may not be reported in whole or in part without written permission.

**STANDARD & POOR'S:** Standard & Poor's information contained in this document is subject to change without notice. Standard & Poor's cannot guarantee the accuracy, adequacy or completeness of the information and is not responsible for any errors or omissions or for results obtained from use of such information. Standard & Poor's makes no warranties or merchantability or fitness for a particular purpose. In no event shall Standard & Poor's be liable for direct, indirect or incidental, special or consequential damages from the information here regardless or whether such damages were foreseen or unforeseen.

WILSHIRE ASSOCIATES: Copyright © 2014 Wilshire Associates Incorporated.

Investment advisory services provided by Mercer Investment Consulting, Inc.



Mercer (US) Inc. 3560 Lenox Road Suite 2400 Atlanta, GA 30326 +1 404 442 3100

