



# PERSPECTIVES THAT DRIVE ENTERPRISE SUCCESS



PERIOD ENDING: SEPTEMBER 30, 2015

Investment Performance Review for

**Imperial County Employees' Retirement System**

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**PERSPECTIVES  
THAT DRIVE  
ENTERPRISE  
SUCCESS**

**4<sup>TH</sup> QUARTER 2015  
Investment Landscape**



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# 4<sup>th</sup> quarter summary

## THE ECONOMIC CLIMATE

- The U.S. economy continues at a lukewarm pace, with improvement in employment rates but lackluster participation and wage growth. **p.5**
- Inflation remains near zero, but is in a normal range if the effects of food and energy are excluded. Inflation rests near zero in developed countries. **p.11, 13**
- Decelerating growth in China has had far reaching impacts. However, milder growth and decreasing fiscal stimulus are in line with China's hoped-for transition to a consumption-oriented economy. **p.34**

## MARKET PORTFOLIO IMPACTS

- The U.S. dollar further appreciated against emerging market currencies – particularly against the “fragile five” currencies. **p.35, 40**
- Developed economy 10-year yields broadly declined. Global FX reserves fell as central banks made efforts to support currency values in the face of falling oil price and weakening demand from China. **p.16**

## THE INVESTMENT CLIMATE

- Risk markets remain expensive relative to history, though August's selloff resulted in improved valuations. **p.30**
- The Federal Reserve left rates unchanged in September. It remains uncertain whether the Fed will move rates by year-end. **p.16**

## ASSET ALLOCATION ISSUES

- Credit spreads widened substantially across the board, with energy leading the way. It is essential for investors to understand the extent of credit risk exposure in portfolios. **p.20**
- Recent market behavior reminds us of the need to pause and assess the investment landscape objectively and dispassionately. **p.28**
- Inflation-hedging assets have realized significant volatility and are increasingly difficult to own. It is important to remember that inflation sensitive assets also provide exposure to downward inflation movement. **p.39**

We are tactically slightly underweight in risk terms, and watchful of China and commodity-producing economies

Economic progress continues slowly in the developed markets

# Economic environment



# U.S. economics summary

- U.S. GDP YoY growth remains in the 2% to 3% range, and is flat from the previous 12 month figure. The Atlanta Fed GDPNow model forecasts third quarter GDP growth of approximately 1%.
- Both realized inflation and expected inflation have dropped further. This continues to imply lower nominal asset returns in the future.
- The Federal Reserve left rates unchanged in September. It remains uncertain whether the Fed will move rates by year-end.
- Employment rates continue to improve, as demonstrated by U6 (broader definition) and by U3 (stricter definition). However, the participation rate declined further and is now at a rate not seen since 1977.
- Consumer credit growth showed further improvement, and auto sales growth is very strong relative to history.

	Most Recent	12 Months Prior
GDP ( <i>Annual YoY</i> )	2.7% 6/30/15	2.6% 6/30/14
Inflation ( <i>CPI</i> )	0.2% 8/31/15	1.7% 8/31/14
Expected Inflation ( <i>5yr-5yr forward</i> )	1.9% 9/1/15	2.5% 9/2/14
Fed Funds Rate	0.07% 9/30/15	0.07% 9/30/14
10 Year Rate	2.0% 9/30/15	2.5% 9/30/14
U-3 Unemployment	5.1% 9/30/15	5.9% 9/30/14
U-6 Unemployment	10.0% 9/30/15	11.7% 9/30/14

Higher employment but participation remains low

GDP remains in 2-3% range

Inflation still low, but in normal range ex-Food & Energy

# U.S. economics – GDP growth

U.S. GDP has continued to grow and there has been an evident rebound from the slightly weaker Q1 number. However, the Atlanta Fed GDPNow model estimates real GDP growth for Q3 to be approximately 1% - lower than current market expectations. This forecast is driven by weaker export data.

The U.S. economy faces headwinds in the form of a strong dollar, troubles in energy prices, and trade deficit. It is important to note that the U.S. economy

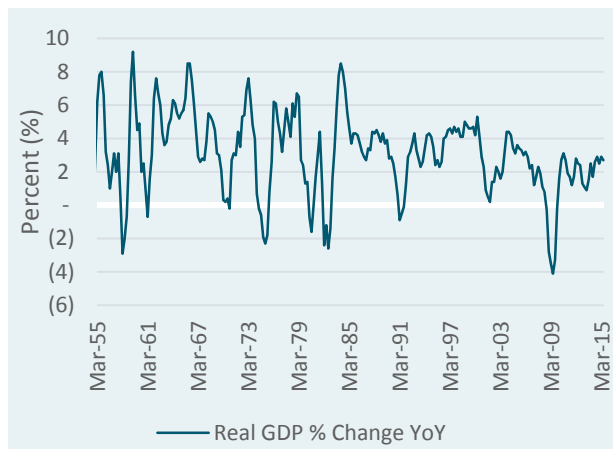
continues to exhibit stronger growth than many other developed markets, which may help explain the policy differences across nations.

Despite this potential slowing, it is important to remember that real GDP growth rates around 2% while somewhat low, do still represent an expansion of the economy and the continuing working out of some of the problems accumulated over the last 10 years.

Strong Q2 rebound, but weaker expected Q3

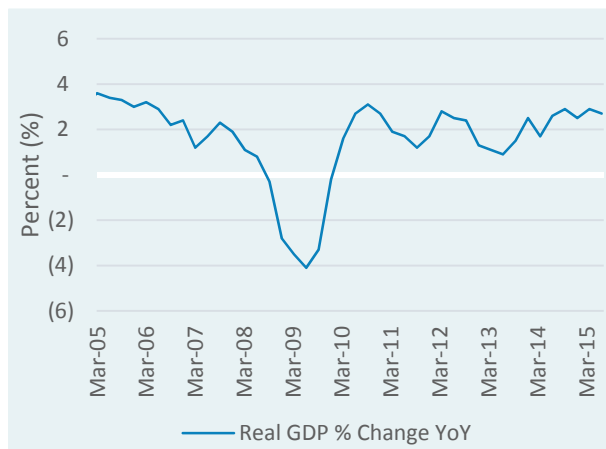
Strong U.S. dollar proving headwind for export growth

LONG TERM U.S. GDP GROWTH



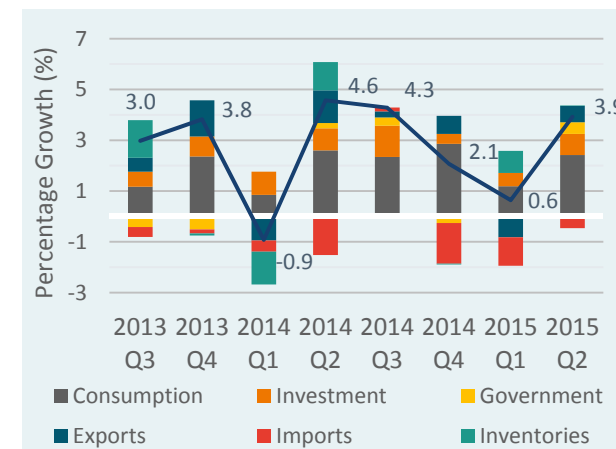
Source: FRED, as of 6/30/15

MEDIUM TERM U.S. GDP GROWTH



Source: FRED, as of 6/30/15

GDP COMPONENTS



Source: FRED



# U.S. economics – unemployment

U.S. unemployment has been dropping steadily since the peak in late 2009, with U6 unemployment (broader definition) and U3 unemployment (stricter definition) standing at 10.0% and 5.1% in September, respectively.

Nonfarm payrolls missed expectations in September at 142,000 vs 203,000 expected. Fed Chair Janet Yellen and other senior economists have noted disappointing labor productivity growth despite overall improving employment data.

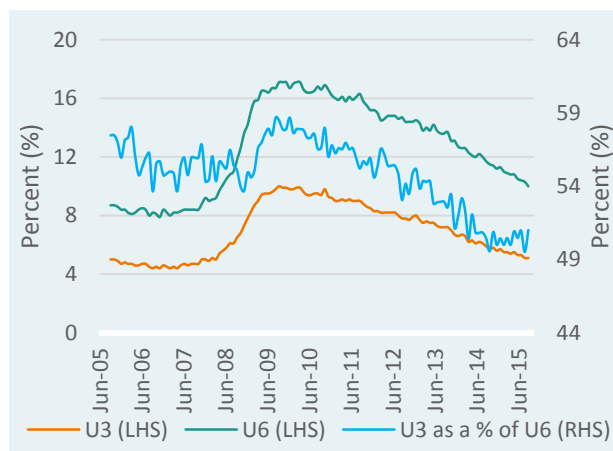
U6 unemployment includes discouraged and underemployed workers, and includes people unemployed for a short time. Despite improvement, U6 remains elevated relative to history, which is indicative of structural issues in the economy. The drops in U6 may be more indicative of the nature of types of jobs available rather than aggregate job openings. It remains to be seen whether these discouraged workers entering the workplace will find long-term sustainable employment, and begin to move up the job value chain.

Continuing improvement in broad employment measures, but structural concerns persist

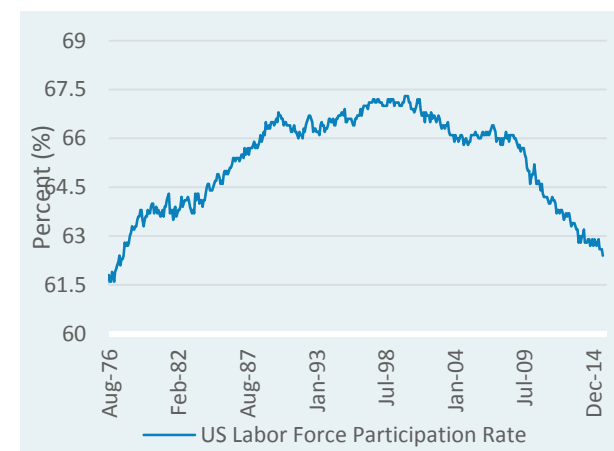
UNEMPLOYMENT SINCE 1948



MORE RECENT UNEMPLOYMENT & U6



LABOR FORCE PARTICIPATION RATE



Source: Bloomberg, as of 9/30/15

Source: FRED, as of 9/1/15

Source: FRED, as of 9/30/15

# U.S. economics – the consumer

Consumer spending continues to show improvement, but credit expansion is muted. Auto sales continue to show strong growth.

While the decline in the oil price was originally expected to flow through to lower gas prices and therefore greater consumer discretionary income, this effect has been lackluster as gas prices remain stubbornly high.

Real disposable income growth remains at a normal

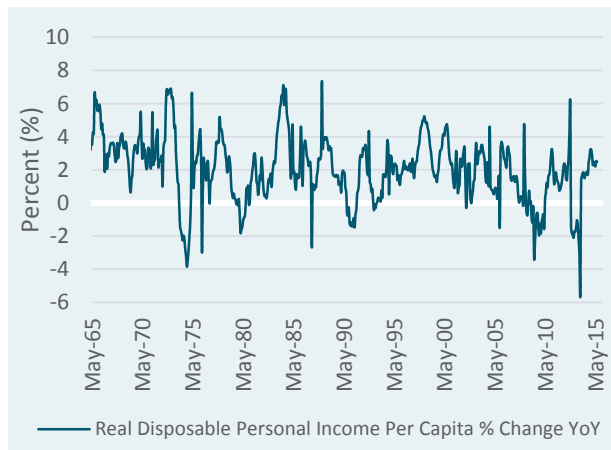
level as of August, at 2.5%, up from 1.9% one year prior. Personal savings rates remain at a normal level of 4.6% after spiking during the 2008-2009 crisis.

Consumer behavior appears conservative, but further wage increases could be realized as the job market tightens, which may drive stronger spending and credit expansion. Continuing increases in student loan debt could remain a drag on spending for younger consumers.

Consumer spending continues to improve

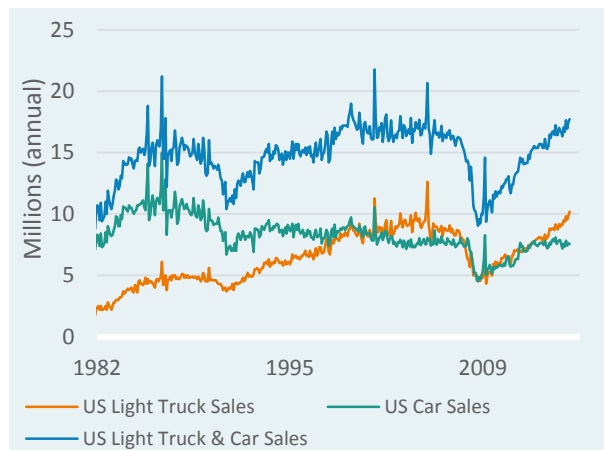
Credit expansion remains muted but auto sales are strong

**GROWTH OF DISPOSABLE INCOME**



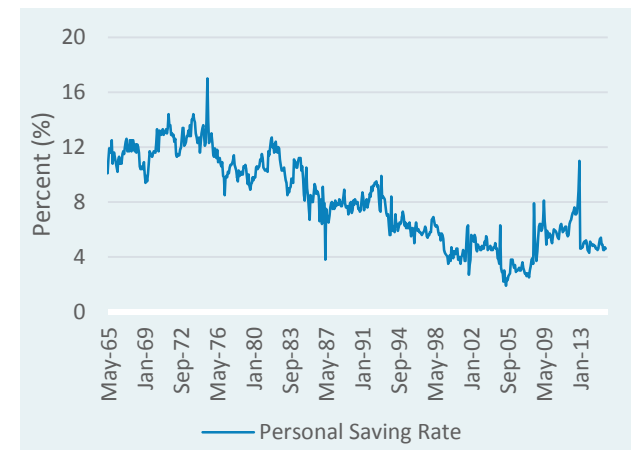
Source: FRED, as of 8/1/15

**AUTO SALES**



Source: FRED, as of 8/31/15

**SAVINGS RATE**



Source: FRED, as of 8/1/15



# U.S. economics – sentiment

Consumer and market sentiment surveys remain mixed, but appear to be leaning more positive than negative.

The Bloomberg consumer comfort index had been significantly below average since December 2007. This index now sits at the bottom end of a normal range. The University of Michigan Consumer Sentiment Survey dipped in September, but remains near average levels.

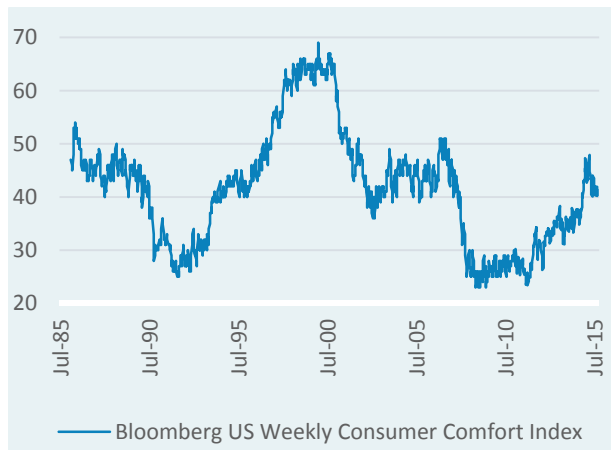
The Citi Economic Surprise index recently dropped into

levels not seen since 2012, but has bounced back to an average range.

According to sentiment indicators, the U.S. consumer has been on a steady recovery since the great recession, although spending behavior has not yet fully reflected this change. In the recent quarter we have seen indicators turn to the downside, but absolute levels are healthy. We continue to believe sentiment may be vulnerable to a stream of bad news.

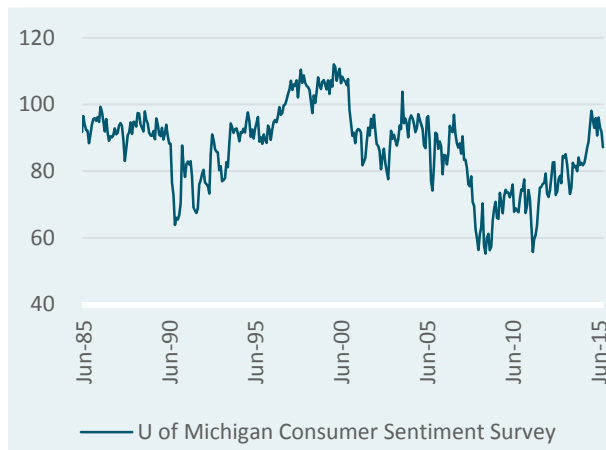
Sentiment and comfort indices in average range, but slightly down in Q3

CONSUMER COMFORT INDEX



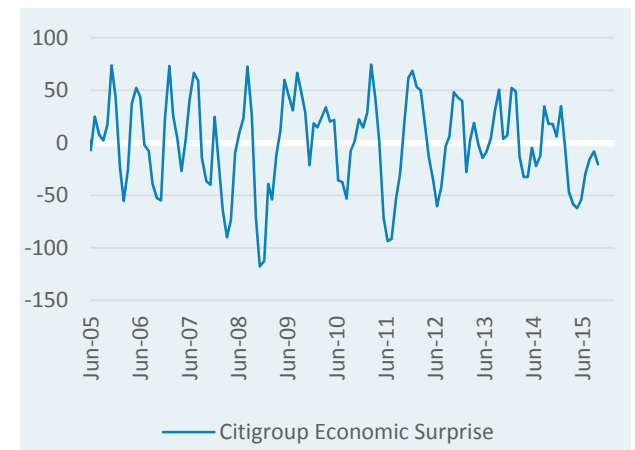
Source: Bloomberg, as of 9/20/15 (see Appendix)

CONSUMER SENTIMENT



Source: University of Michigan, as of 9/30/15 (see Appendix)

ECONOMIC SURPRISE



Source: Bloomberg, as of 9/30/15 (see Appendix)

# U.S. economics – housing

The U.S. housing market has normalized in terms of pricing, rate of new home construction, and rate of home sales. The home affordability index remains higher (homes more affordable) than average. This index measures how easily a typical family with a median income is able to qualify for a mortgage on a typical median-priced home. Low interest rates have increased affordability while rising home prices have decreased affordability.

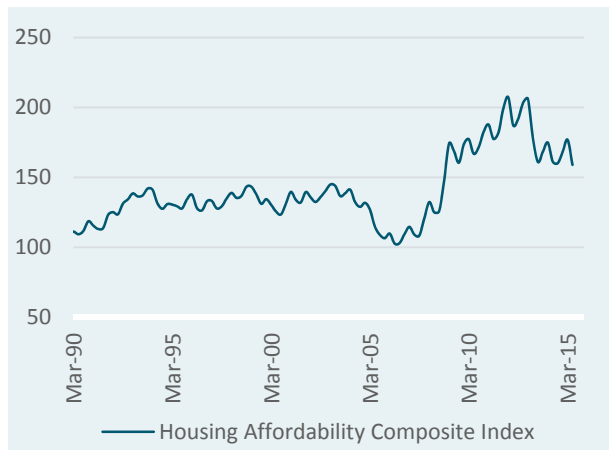
There continues to be potential pent up demand for

homes, as indicated by the considerably low homeownership rate. At 63.5%, this is the lowest level on record (the data series began in 1980). Though home affordability influences ownership rates, other factors such as mediocre wage growth, rising student loan debt, changing demographics, and propensity to borrow also affect rates.

Monthly home sales for both existing and new housing have continued a steady upward climb since the crisis, although remain far from previous high levels.

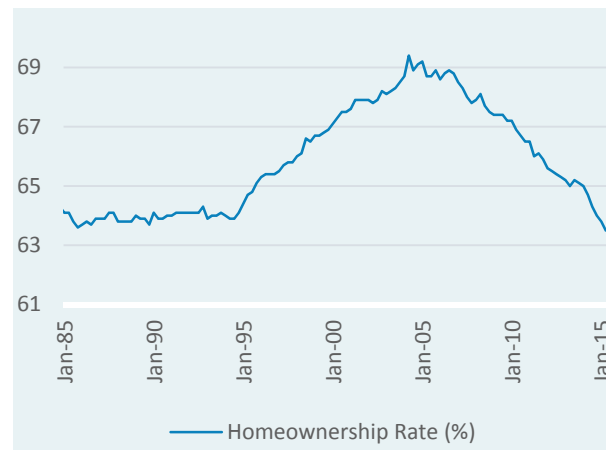
Continued improvement in U.S. housing market is consistent with continuing slow economic recovery

HOME AFFORDABILITY



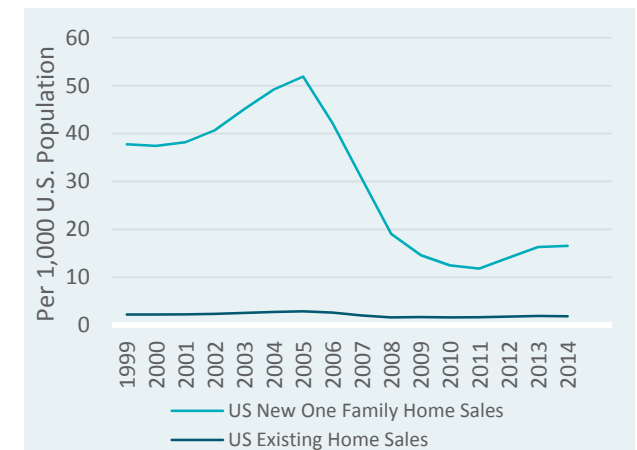
Source: National Association of Realtors, as of 6/30/15

HOMEOWNERSHIP RATE



Source: FRED, as of 4/1/15

ANNUAL HOME SALES



Source: FRED



# U.S. economics – inflation

Long-term U.S. inflation expectations declined slightly in the 3<sup>rd</sup> quarter, as indicated by the 10 Year TIPS Breakeven Rate. Headline inflation rests at 0.2%, while Core CPI, which excludes food and energy prices, remains in a normal range (Core CPI of 1.8%).

The decline in oil price is expected to translate to lower gas prices – a major part of the CPI calculation. However, gas prices do not yet fully reflect the movement in oil price. Lower oil price has also flowed

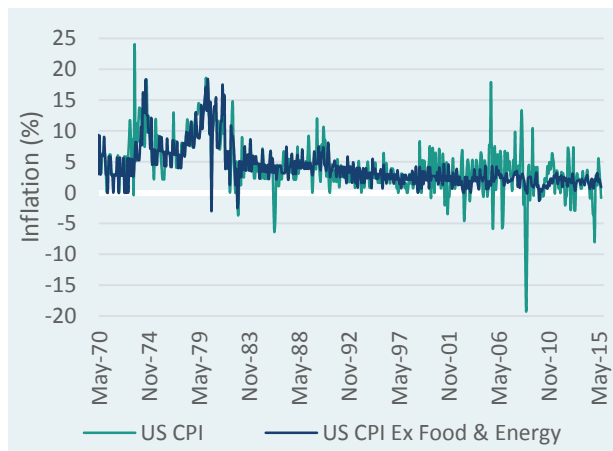
through to other areas of the CPI calculation, such as shipping and air transportation.

Domestic inflation is an input to Federal Reserve policy, and continued disinflation will certainly influence rate hike decisions. However, even in a low inflation environment interest rates could reasonably be at a modestly higher level than they are today. Lowered inflation expectations suggest a reduction in expected future nominal returns.

Lower than target U.S. inflation

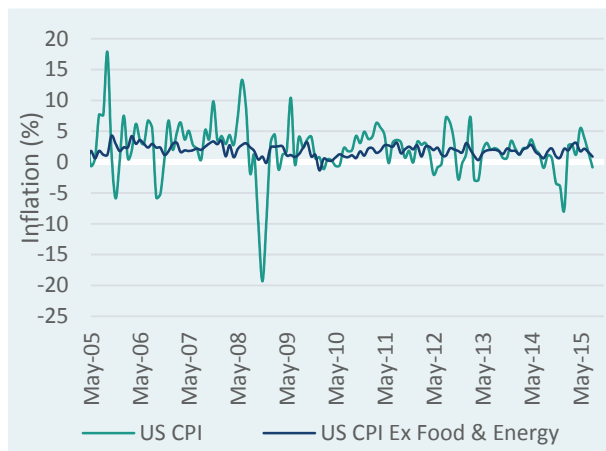
Energy prices have been a driver of CPI change

LONG TERM U.S. CPI



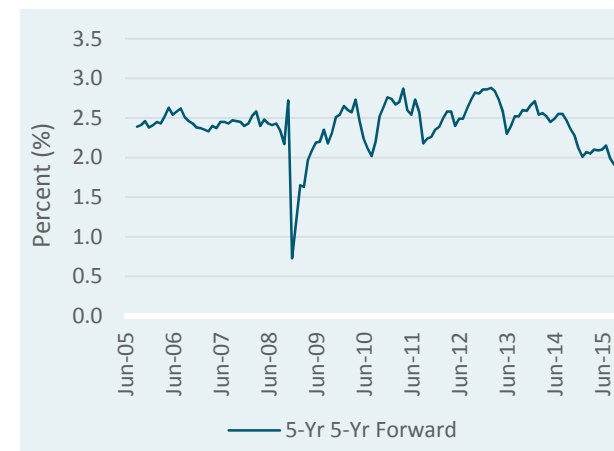
Source: FRED, as of 8/1/15

MEDIUM TERM U.S. CPI



Source: FRED, as of 8/1/15

MARKET EXPECTATIONS OF INFLATION



Source: FRED, as of 9/1/15

# International economics – current

- GDP growth remains muted. The IMF cut global growth expectations once again, from July's forecast of 3.3%, to 3.1%.
- U.S. GDP growth continues to outpace many other developed economies.
- Easy monetary policy continues in Europe and Japan.
- Currency movement was a major factor in Q3. Specifically, the “fragile five” emerging market currencies fell sharply against the U.S. dollar.
- Commodities remain volatile, and this uncertainty has affected across commodity-producing nations.
- Emerging markets struggle with concerns over China's growth, choppiness of commodity prices, and currency volatility. GDP expectations continue to be adjusted downwards.
- Global unemployment is slowly decreasing, but the BRIC nations experienced an uptick. Unemployment in Europe remains high, though disparate.
- Decelerating growth in China has had far reaching impacts. However, milder growth and decreasing fiscal stimulus are in line with China's hoped-for transition to a consumption-oriented economy.

Area	GDP (Real, YoY)	Inflation (CPI)	Unemployment
United States	2.7% 6/30/15	0.2% 8/31/15	5.1% 9/30/15
Western Europe	1.8% 6/30/15	0.2% 6/30/15	9.2% 6/30/15
Japan	0.8% 6/30/15	0.2% 8/31/15	3.3% 6/30/15
BRIC Nations	4.7% 6/30/15	4.2% 6/30/15	5.0% 3/31/15
Brazil	(2.6%) 6/30/15	9.5% 8/31/15	6.7% 6/30/15
Russia	(4.6%) 6/30/15	15.7% 9/30/15	5.3% 8/31/15
India	7.0% 6/30/15	5.9% 6/30/15	8.6% 12/31/14
China	7.0% 6/30/15	2.0% 8/31/15	4.0% 6/30/15

High level of central bank involvement

Some nations dialing back QE programs

Structural employment issues remain a concern

# International economics

Economies across the globe broadly exhibit slowing to flat growth, improving employment (since the financial crisis), and subdued inflation.

Inflation levels continue to hover around zero. Inflation in the Eurozone dipped into negative territory, while Japan faced further disinflation.

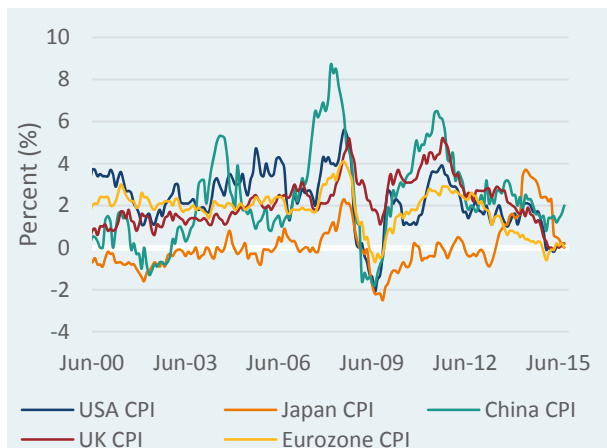
Real GDP growth remains moderate, while BRIC nations

experienced further slowing. Core economies in the Eurozone displayed modest growth, while certain periphery nations experienced great difficulties.

Unemployment across the globe has come back to normal levels, with the exception of Europe where aggregate unemployment is high and conditions vary significantly. BRIC nations recently experienced a slight uptick in unemployment.

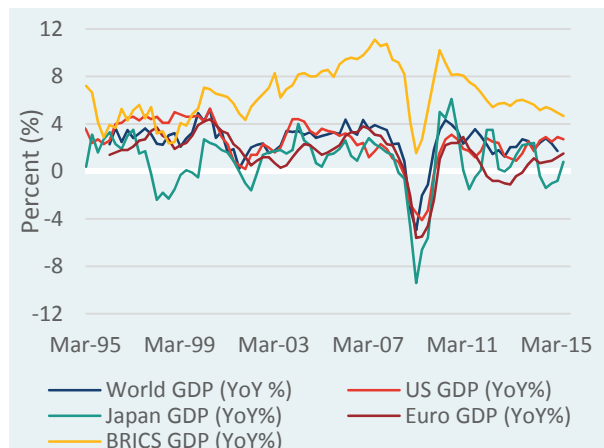
Economies around the globe exhibit slowing to flat growth, improving employment, and low inflation

INTERNATIONAL INFLATION (CPI)



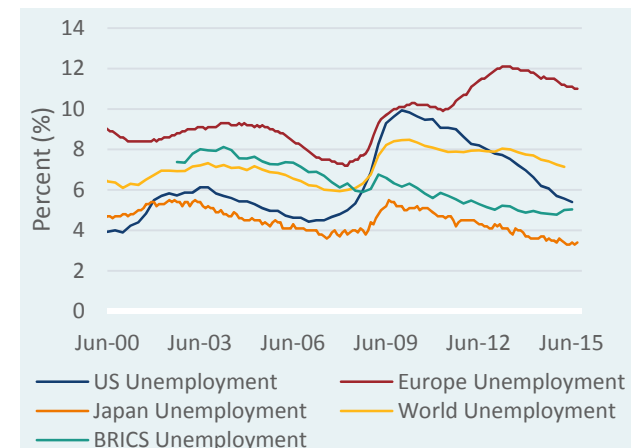
Source: Bloomberg, as of 8/31/15

REAL GDP GROWTH



Source: Bloomberg, as of 6/30/15

UNEMPLOYMENT



Source: Bloomberg, as of 8/31/15



# What do you mean “Europe”?

The investment community often refers to economic health and attractiveness of “Europe”. “Europe”, however, is in fact a combination of developed, less developed, and emerging markets. This spectrum of economies possesses widely different characteristics.

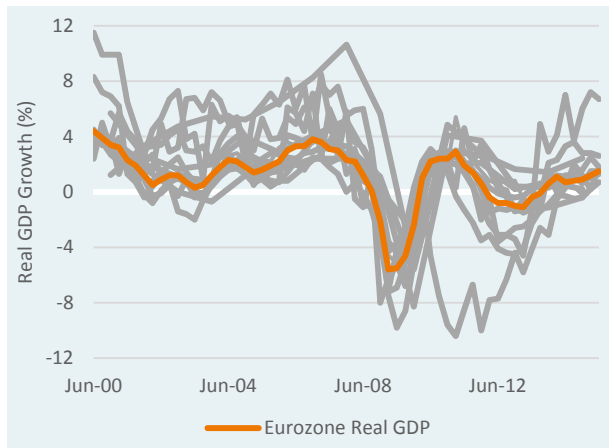
Bright spots exist on the Euro stage, including Germany, the United Kingdom, and Switzerland, while other countries face severe economic problems or stagnation following the financial crisis.

This affects the political conversation underway in Europe. The difference in viewpoints expressed are often due to the wide range of experiences endured by the populations of the countries concerned. This may act as a continuing barrier to eventual solution of the economic issues. Solutions that could be easier to implement in a more integrated economy, or with more integrated political systems, may be harder to achieve, and risk tolerances should reflect that reality.

European economic behavior remains divergent

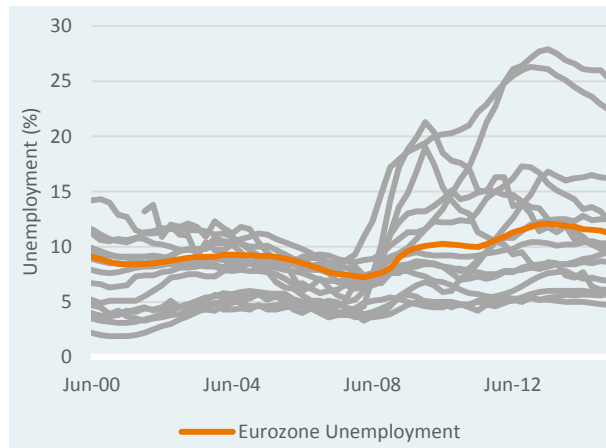
European equity remains attractive

REAL GDP GROWTH (%YOY)



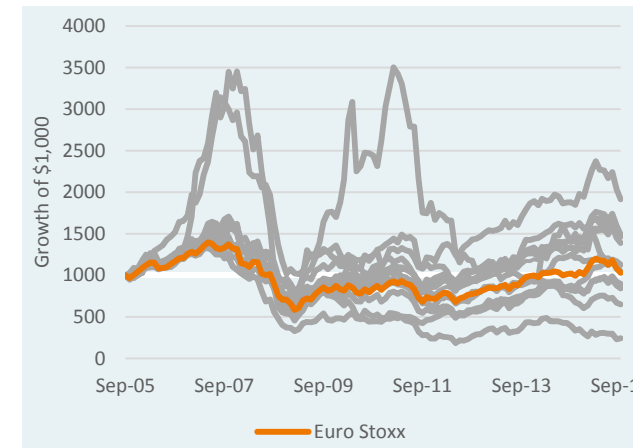
Eurozone member nations, as of 6/30/15

UNEMPLOYMENT RATES



Eurozone member nations, as of 6/30/15

CUMULATIVE EQUITY PERFORMANCE



Eurozone member nations, as of 9/30/15

# Fixed income rates & credit

# Interest rate environment

- The Federal Reserve left rates unchanged in September. It remains uncertain whether the Fed will move rates by year-end.
- Interest rates decreased broadly in Q3 across developed markets, with the exception of Japan.
- U.S. interest rates remain high relative to other developed markets, which may provide ongoing support for U.S. Treasury prices.
- The falling oil price in conjunction with slowing global economic growth has resulted in downward pressure on emerging market currencies.
- Central banks have sold considerable amounts of FX reserves to support their currencies, which may place upward pressure on interest rates. Some have referred to this effect as “quantitative tightening”.
- China sold billions in reserve assets (U.S. Treasuries) to support the value of the yuan.
- Future rate rises in developed markets could have implications for emerging market economies and nations with high debt-to-GDP ratios.
- The market is pricing in slow and moderate interest rate rises.

Area	Short Term	10 Year
United States	(0.03%)	2.03%
Germany	(0.34%)	0.54%
France	(0.25%)	0.93%
Spain	(0.06%)	1.82%
Italy	(0.05%)	1.68%
Greece	4.79%	8.14%
UK	0.55%	1.74%
Japan	(0.02%)	0.33%
Australia	2.01%	2.62%
China	2.30%	3.27%
Brazil	14.19%	15.40%
Russia	10.01%	10.91%

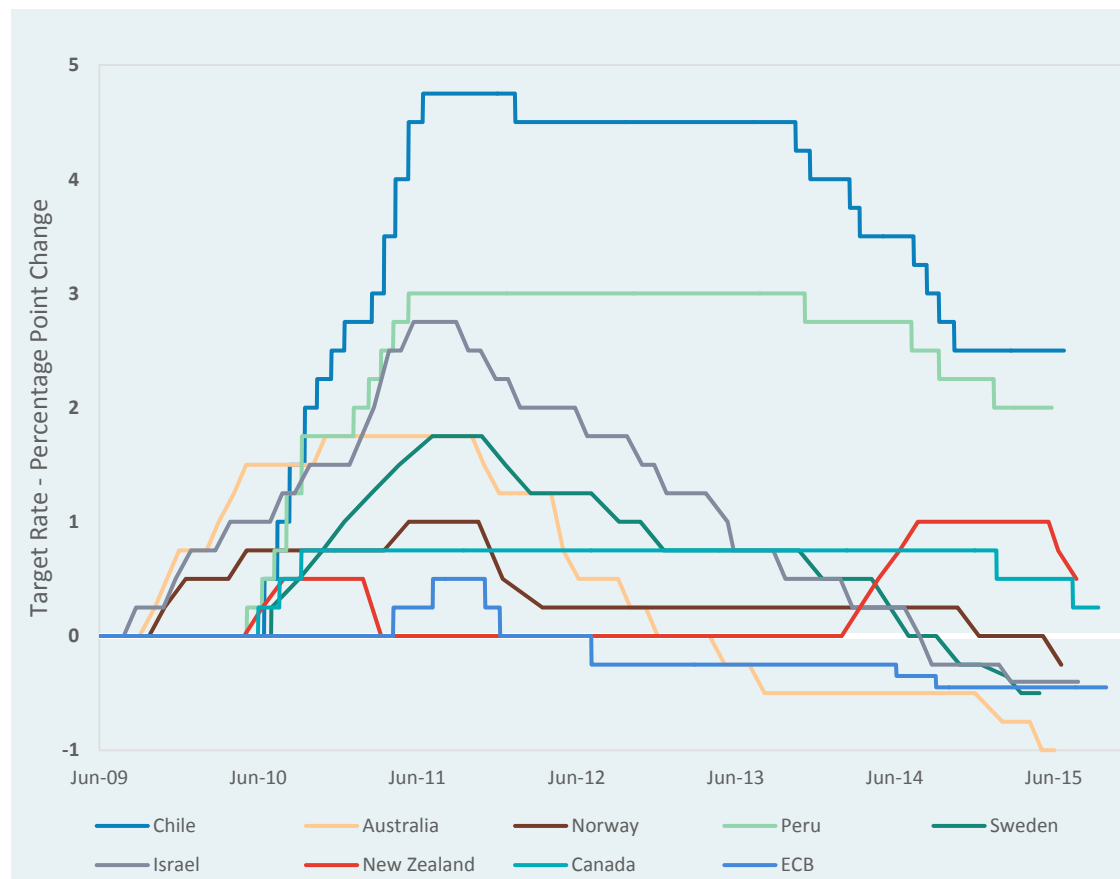
Interest rates decreased across the developed markets in Q3

Negative nominal interest rates continue to persist

Source: Bloomberg, as of 9/30/15

# Central bank behavior

- Central banks have held interest rates at historic lows around the globe for a significant period. While necessary, there has been increasing understanding that a move to more normalized rates would be helpful, if only to reset the interest rate tool in the central bank toolkit.
- Despite this being a valuable goal this return to more normal rate levels has been difficult to achieve.
- Many central banks have been forced to back off in recent years due primarily to concerns over slowing economic growth. They have opted to (or been pressured to) move rates downward once again.

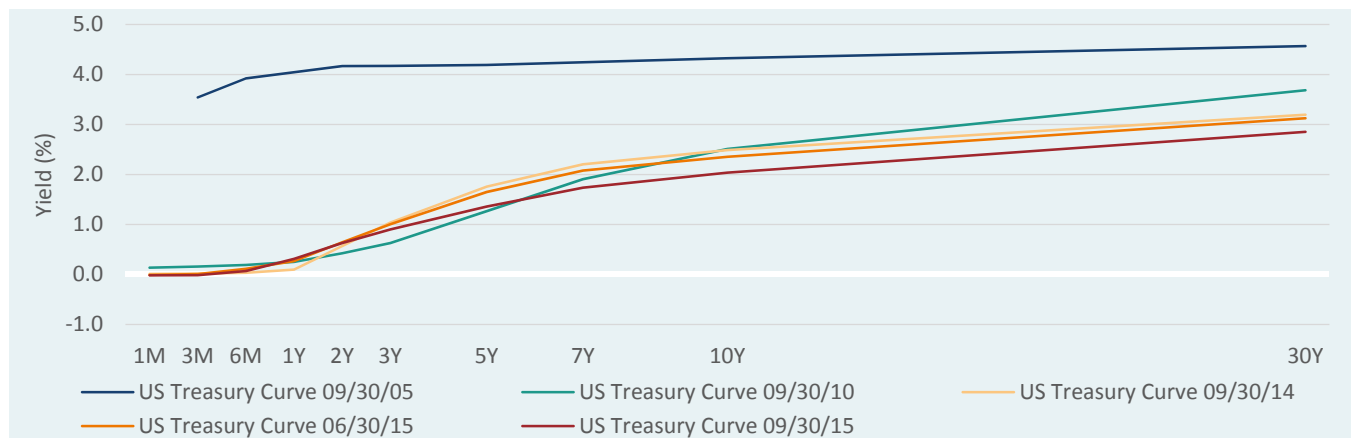


Rate rises appear fragile where they happen, and may be derailed by continuing economic weakness

Source: Bloomberg, as of 9/30/15

# Global yield curve

## U.S. YIELD CURVE

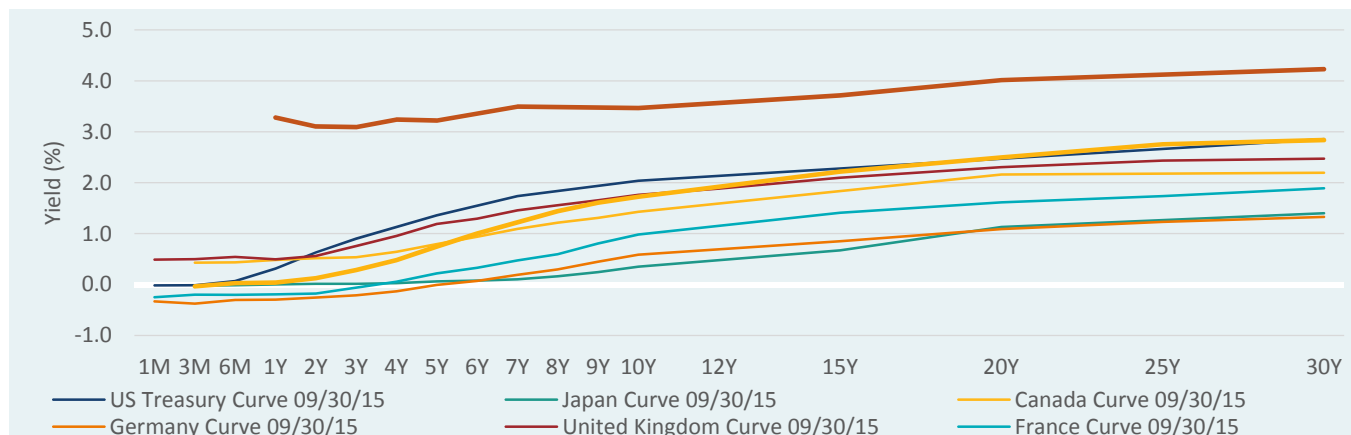


The middle of the U.S. yield curve flattened upon expectations of “lower for longer”

Interest rates decreased across major markets in Q3

Negative nominal interest rates persist

## GLOBAL GOVERNMENT YIELD CURVES

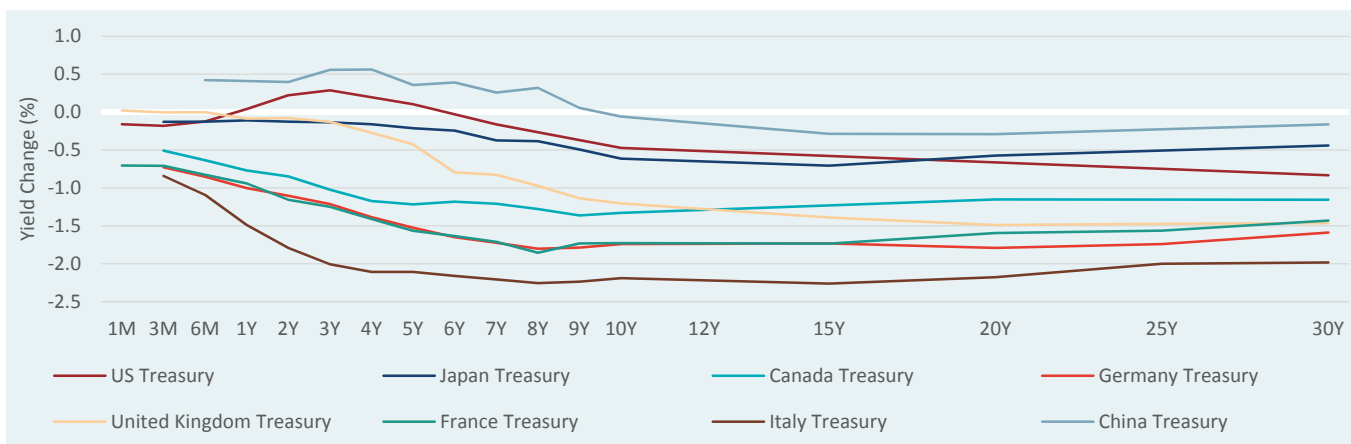


Source: Bloomberg



# Global yield curve changes

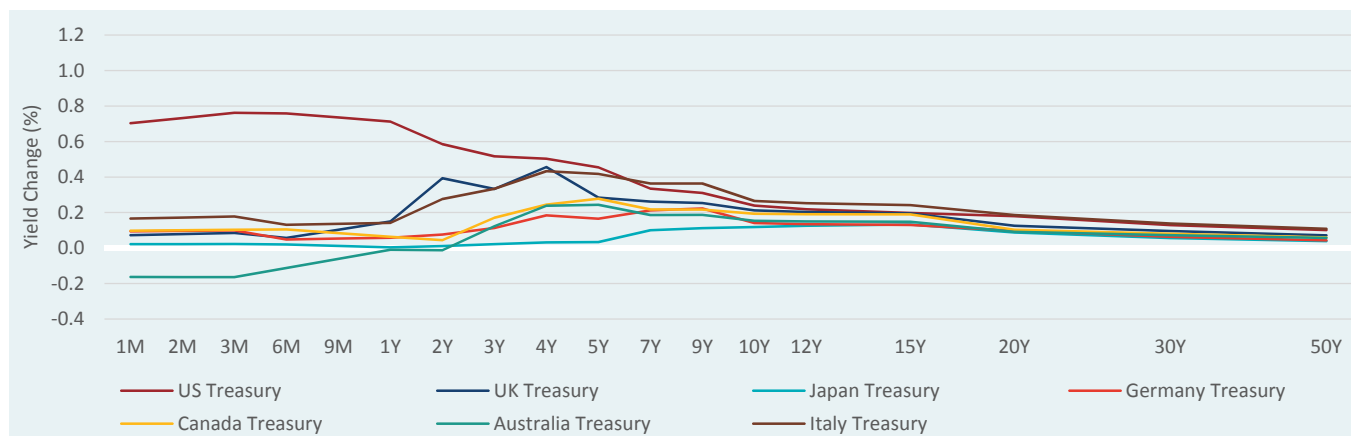
INTERNATIONAL YIELD CURVE CHANGES OVER LAST FIVE YEARS



Major rates yield curves have moved lower and flatter, with the exception of China

Forward curves imply flat or modestly higher rates in most countries

EXPECTED INTEREST RATE CHANGES ONE YEAR FORWARD IMPLIED BY MARKET PRICING



Source: Bloomberg, as of 9/30/15

# Credit environment

Domestic credit spreads widened across the board in Q3, led by the energy sector. However, spreads broadly remain in a normal range.

Widening of spreads, and a deceleration of borrowing (though still high historically), may suggest we are at or nearing a peak in the borrowing cycle. Although spreads have widened, we believe credit risk remains less attractive relative to history.

Borrowing is becoming tighter for lower-quality

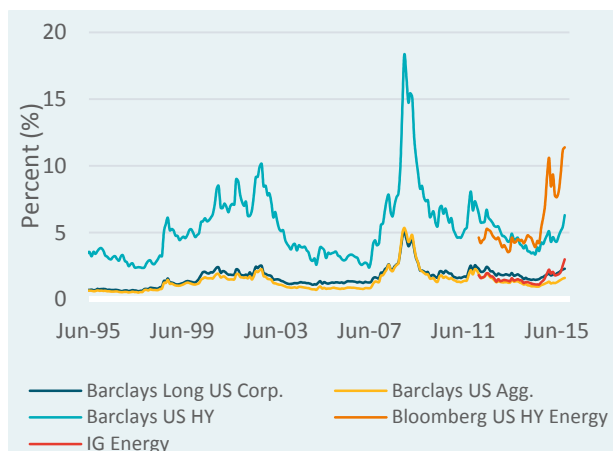
borrowers, especially for those linked to commodities. Energy spreads have widened further on continued volatility and uncertainty surrounding the price of oil. Emerging market economies are increasingly feeling this pain, with emerging market CDS spreads widening to significant levels.

Investors should be cognizant of the nature and size of their exposure to credit risk to ensure that it matches their broader views.

Credit spreads widening across the board

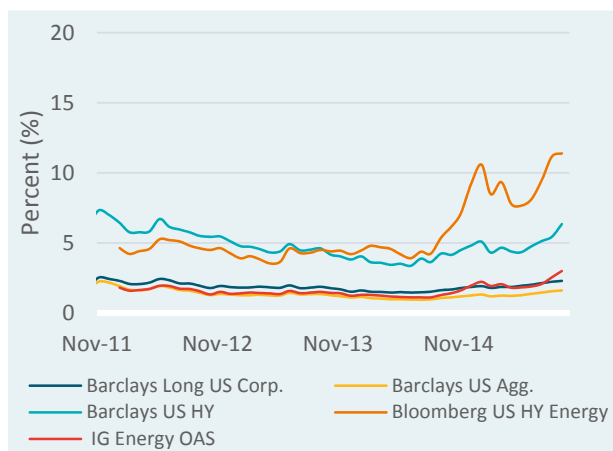
Energy spreads continue higher

## LONG TERM CREDIT SPREADS



Source: Barclays Capital Indices, Bloomberg, as of 8/31/15

## SHORT TERM CREDIT SPREADS



Source: Barclays Capital Indices, Bloomberg, as of 8/31/15

## SPREADS

Market	Credit Spread (9/30/2015)	Credit Spread (1 Year Ago)
Long US Corporate	2.12%	1.52%
US Aggregate	1.17%	1.08%
US High Yield	6.84%	4.80%
US High Yield Energy	11.38%	5.38%
US Bank Loans	3.86%	3.84%

Source: Barclays, Credit Suisse, Bloomberg, as of 9/30/15

# Issuance and default

Debt issuance has continued at a substantial pace, particularly in the high yield market.

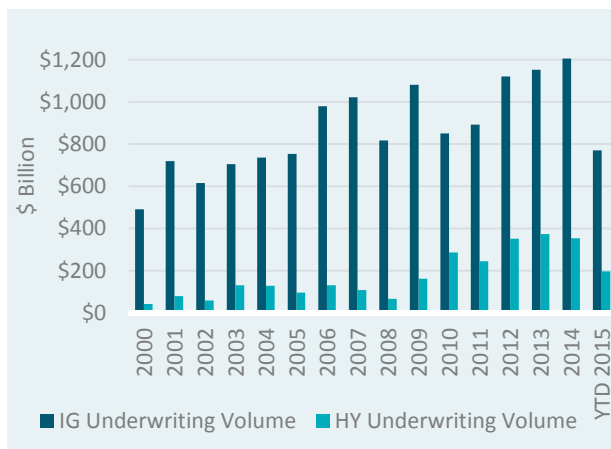
Despite the lower creditworthiness of firms accessing these markets over the last few years, there remain few signs of inability to pay amongst these issuers. However, those that believe we are further along in the economic cycle may decide against taking on new exposure to credit risk.

Default rates remain low, but if they were to rise suddenly, investors basing their expectations of return from credit portfolios on a continuation of the current low default rate environment could well be disappointed.

Issuance continues at a record pace

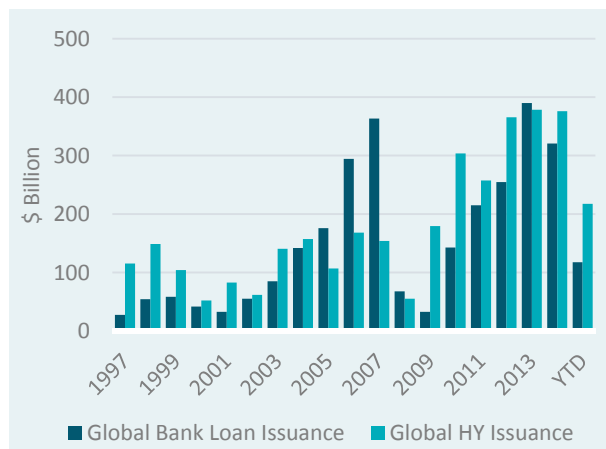
The default rate remains low

IG & HIGH YIELD ISSUANCE



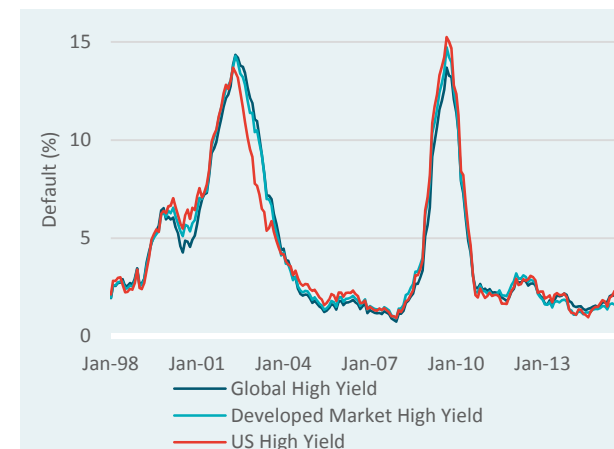
Source: Bloomberg, as of 6/30/15

BANK LOAN & GLOBAL HY ISSUANCE



Source: BofA Merrill Lynch Global Research, as of 7/31/15

DEFAULT TRENDS (ROLLING 12 MONTH)



Source: Credit Suisse, BofA, as of 6/30/15

# Equity

# Equity environment

- Domestic equity markets experienced a 10% correction in August, but have retraced most of the loss.
- Volatility picked up substantially from previously low levels, but now remains in a normal range. Increased price uncertainty follows large fluctuations in commodities and lowered expectations of Chinese economic growth.
- U.S. small cap equities felt greater pain than large cap equities in Q3.
- Currency movement has generally caused unhedged international equity investors to underperform those with hedging programs.
- Japan rallied during H1 but experienced a selloff in Q3. Signs of weakness appeared in August's industrial output and export data. Continuing monetary easing, coupled with new corporate governance and social initiatives may provide further tailwinds for Japan equities.
- Emerging markets experienced significant volatility and losses. Currency depreciation has amplified these effects for those with unhedged currency exposure. Uncertainty surrounding oil price, and Fed comments on global growth, weigh on valuations.

	QTD Total Return (unhedged)	QTD Total Return (hedged)	YTD Total Return (unhedged)	YTD Total Return (hedged)	1 Year Total Return (unhedged)	1 Year Total Return (hedged)
US Large Cap (Russell 1000)	(6.8%)		(5.2%)		(0.6%)	
US Small Cap (Russell 2000)	(11.9%)		(7.7%)		1.2%	
US Large Value (Russell 1000 Value)	(8.4%)		(9.0%)		(4.4%)	
US Large Growth (Russell 1000 Growth)	(5.3%)		(1.5%)		3.2%	
International Large (MSCI EAFE)	(10.2%)	(4.4%)	(5.3%)	3.7%	(8.7%)	5.5%
Eurozone (Euro Stoxx 50)	(9.1%)	(9.3%)	(7.1%)	0.7%	(12.9%)	(1.3%)
UK (FTSE 100)	(8.6%)	(5.5%)	(5.4%)	(4.4%)	(10.2%)	(4.7%)
Japan (NIKKEI 225)	(11.7%)	(14.2%)	(1.1%)	(0.6%)	0.2%	6.9%
Emerging Markets (MSCI Emerging Markets)	(17.9%)	(10.9%)	(15.5%)	(7.2%)	(19.3%)	(12.0%)

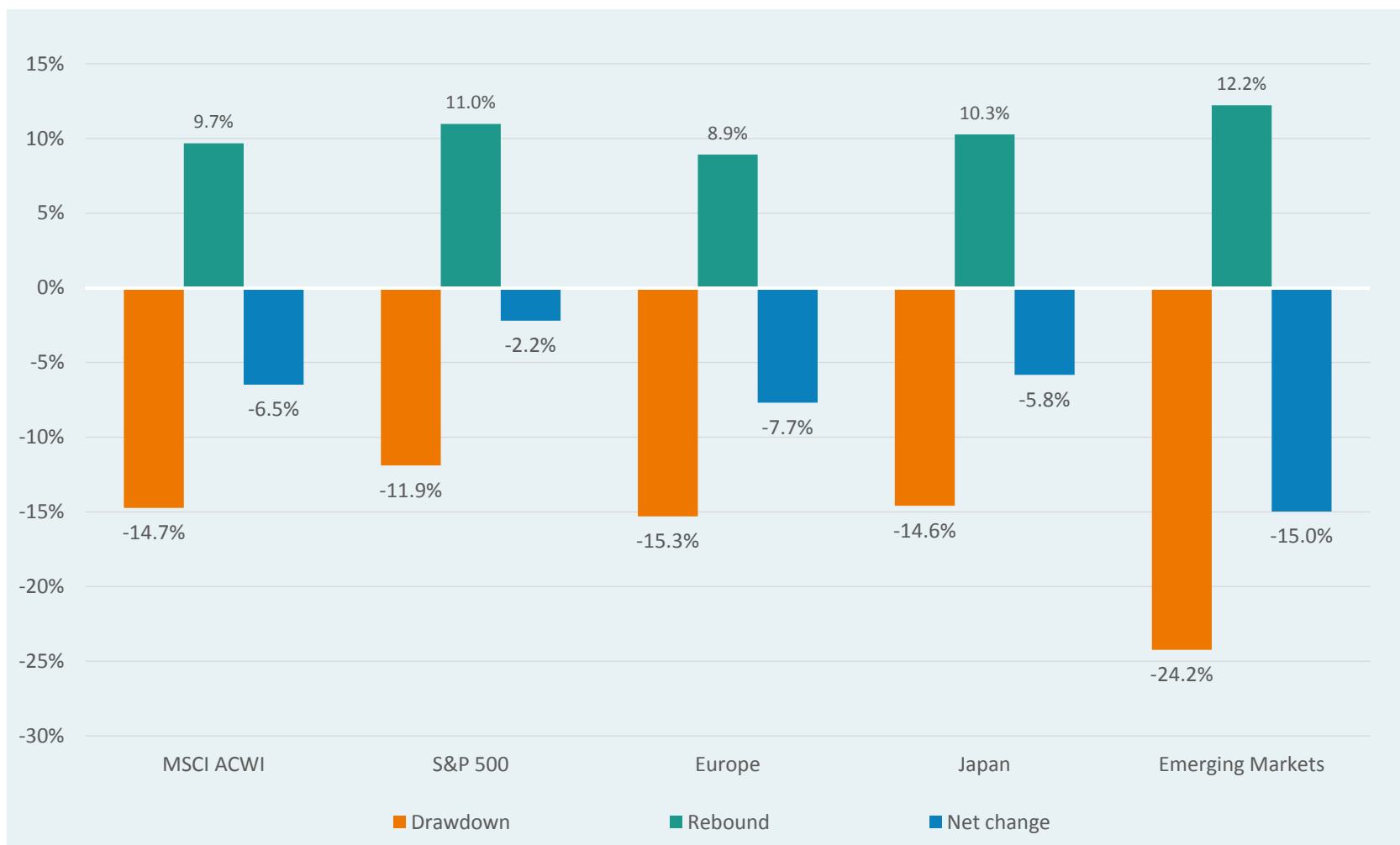
Small cap performance reversed in Q3 and now trails large cap equities

Currency effects remain important for unhedged equity investors

Source: Russell Investments, MSCI, STOXX, FTSE, Nikkei, as of 9/30/15



# Close look at recent correction



Equity markets have retraced much of their losses from earlier in the year

These markets are still below May levels

Source: Bloomberg, as of 10/27 Returns are for the drawdown and rebound observed during the 5/21/15 thru 10/27/15 period. Indices are stated in USD and returns are gross.

# Domestic equity historical return

The U.S. equity market has performed exceptionally well since the global financial crisis, but experienced a correction in Q3. Equity exposure remains an integral part of the portfolio as the primary means for investors to access long term productive capacity of the economy.

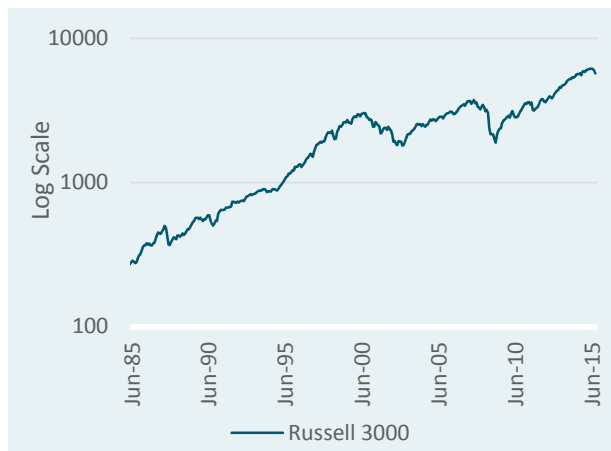
It is important to keep in mind the long-term nature of equity behavior, and to resist short-term attempts at market timing. A systematic rebalancing policy can be very helpful to long-term performance by avoiding

emotional buying or selling which can damage long-term returns. The recent equity bull market has been strong but is certainly not anomalous relative to history. Arguments that the behavior of the last six years are unprecedented should be placed in their true historical context. Market corrections can be frequent and may allow rebalancing opportunities for the patient investor.

Domestic equities fundamentals have shown slight weakening as of late. Other developed equity markets may provide better opportunity.

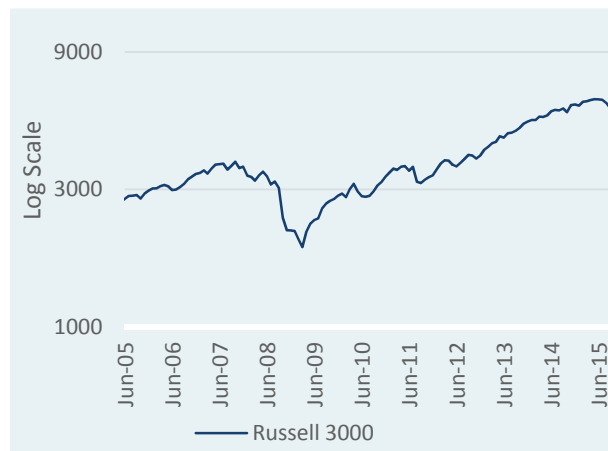
Recent strong market returns are somewhat extended, but not unheard of historically

## LONG TERM PERFORMANCE



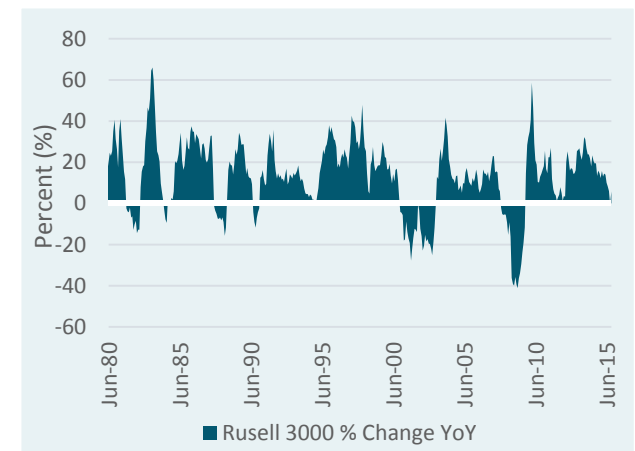
Source: FRED, as of 9/1/15

## INTERMEDIATE RETURN



Source: FRED, as of 9/1/15

## DOWNSIDE EVENTS



Source: FRED, as of 10/1/15

# Domestic equity recent

Domestic equities flattened out in 2015 and then exhibited a correction in Q3. The domestic market has likely been affected by normalizing monetary policy, heightened valuations, and concerns over decelerating growth abroad. Earnings growth for 2015 is expected to be negative after poor Q1 and Q2 performance, though Q4 is expected to be positive. Weakness in the energy sector has driven underperformance, as 2015 earnings have been positive on an ex-energy basis. Even despite the effects of the energy sector, 2016 earnings growth is expected to be positive.

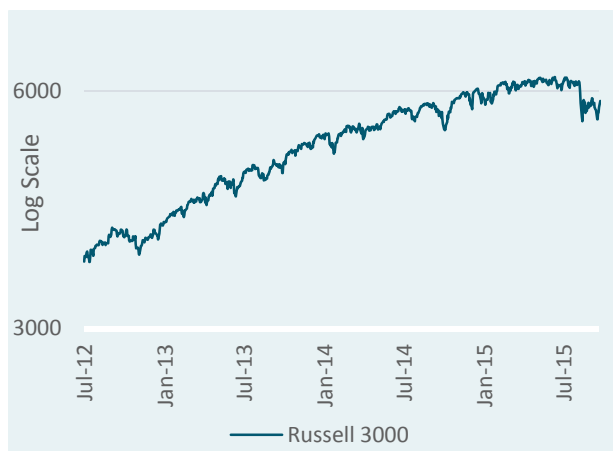
Small cap equities experienced a reversal in Q3, underperforming large cap. Large cap growth outperformed large cap value in Q3.

Recent weak economic news, along with negative earnings growth, have led us to be happy with a short-term underweight in U.S. domestic equity allocations relative to policy.

Equity corrections often present rebalancing opportunities

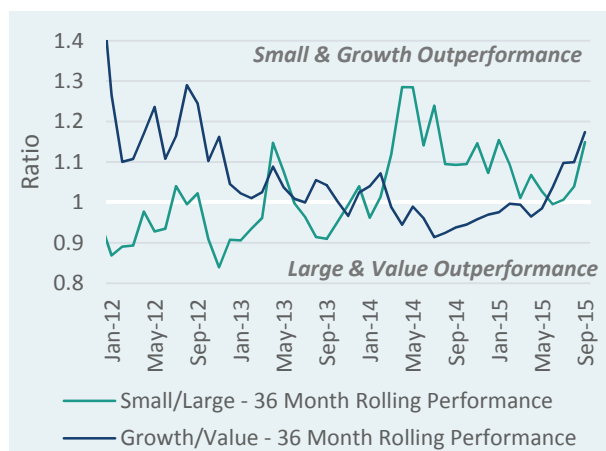
Recent weakness in earnings should be monitored

## SHORT TERM PERFORMANCE (3YR)



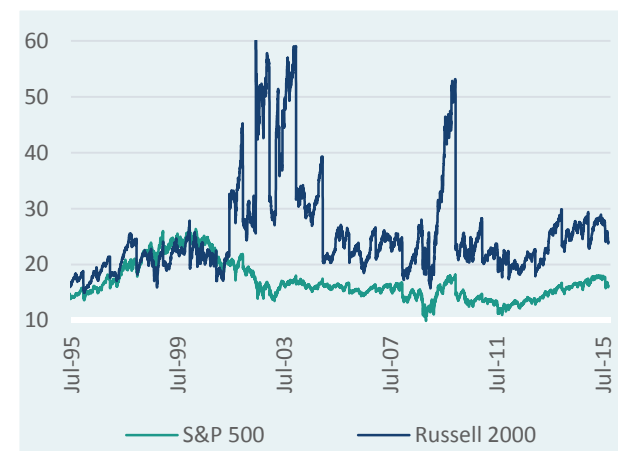
Source: Russell Investments, as of 9/30/15

## SMALL/LARGE & GROWTH/VALUE



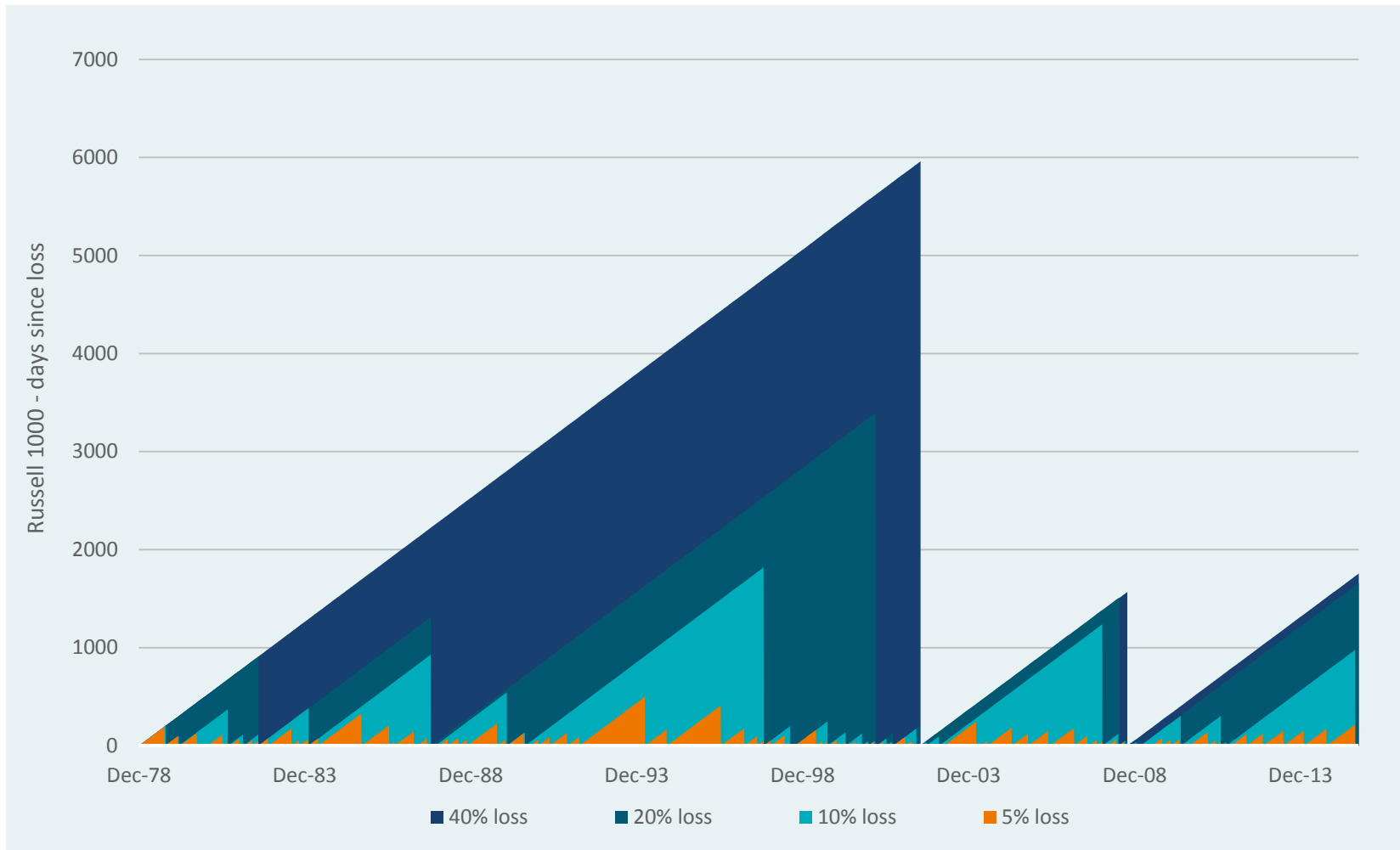
Source: Russell Investments, as of 9/30/15

## FORWARD P/E



Source: Standard & Poor's, Russell Investments, as of 9/30/15

# Drawdowns happen more than you think



The recent drawdown when examined over a 30 year period appears relatively normal

Source: Russell Investments, as of 9/30/15

# Equity volatility

During August's sell-off, domestic equity volatility spiked but then returned to an average range. Disparate views relating to the impact and magnitude of a decelerating China, and falling oil price, has contributed to greater price uncertainty.

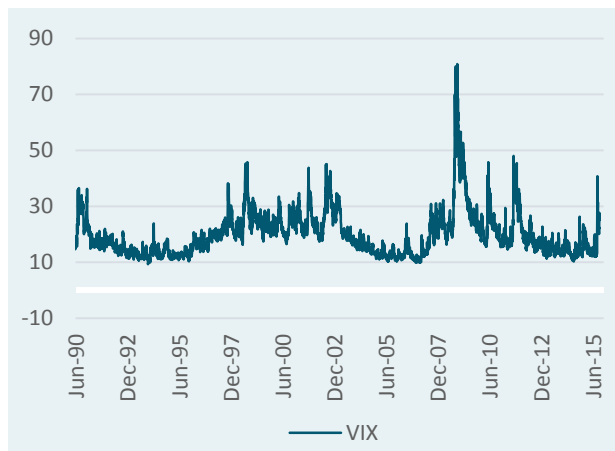
As mentioned previously, VIX is not a perfect proxy for true equity volatility. This index is prone to properties of the options market, including dealer activity and the premium built into options prices (which changes over

time). It is possible that investor use of options instruments is changing, and this could mean that VIX currently reflects other factors unrelated to true equity volatility levels.

Volatility levels typically exhibit muted behavior during bull markets and spike during market downturns, which makes it important to monitor volatility. The current spike in volatility should be watched, but is not necessarily cause for action.

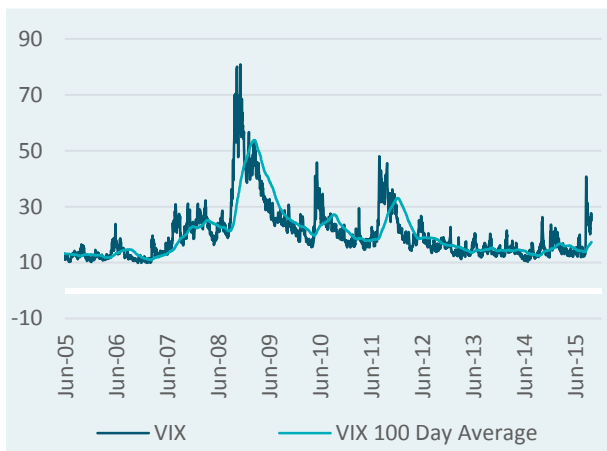
Equity volatility spiked in Q3 but then returned to normal level

LONG TERM VOLATILITY %



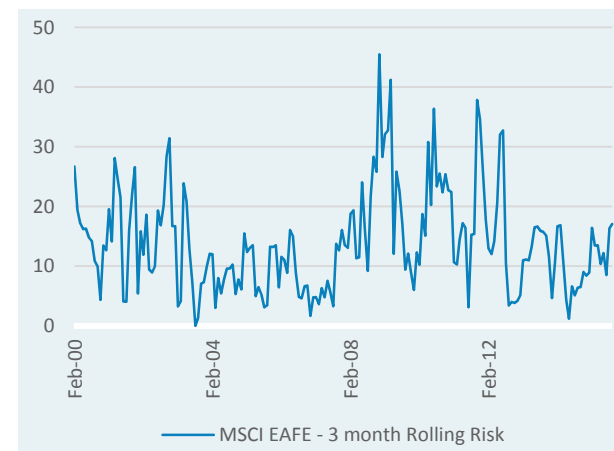
Source: CBOE, as of 9/30/15

INTERMEDIATE TERM VOLATILITY %



Source: CBOE, as of 9/30/15

INTERNATIONAL EQUITY VOLATILITY %



Source: MSCI, as of 9/30/15



# Domestic equity size and style

The long-term trend of small cap outperformance reversed in Q3, with small cap underperforming by 5%. Growth continues to beat value, with large cap growth outperforming large cap value by 3% during Q3.

Although the long term cumulative difference is important, it is necessary to take note of the degree of periodicity in these returns. Recent small cap outperformance reversed sharply in Q3 and now trails large cap.

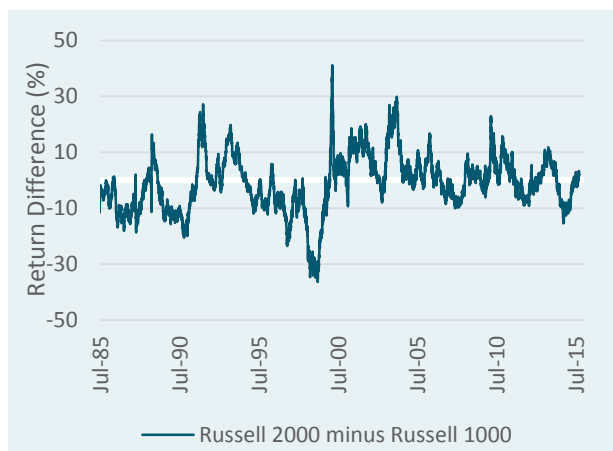
Similar behavior can be seen in style terms, with a significant move over the last two years towards growth and away from value.

On an underlying factor basis it should be noted that most of the risk embedded in each of these exposures is primarily equity risk – however factor awareness and potentially management in certain portfolio structures can be important.

Small cap trailed large cap in Q3

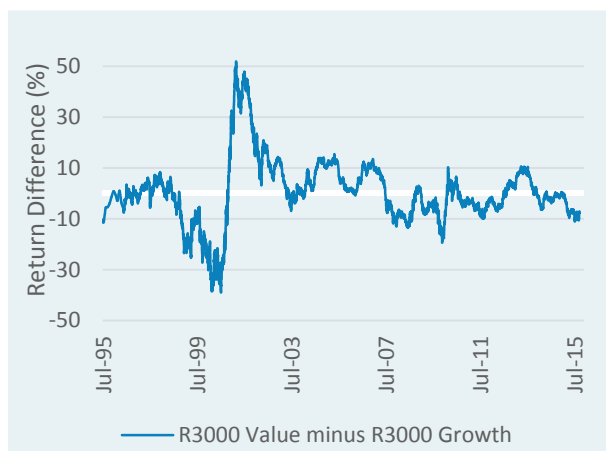
Growth continues to beat value

**SMALL CAP VS LARGE CAP (% YOY)**



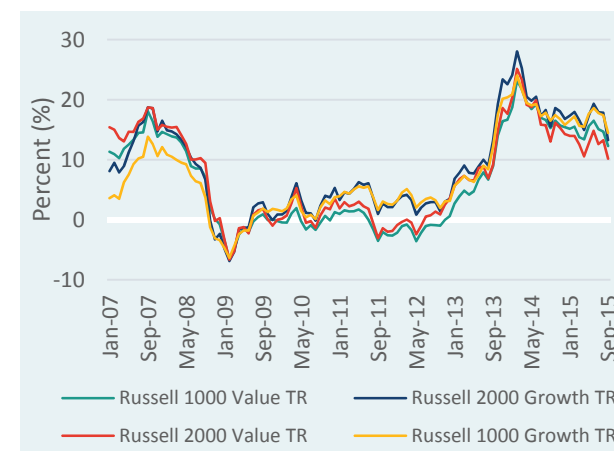
Source: Russell Investments, as of 9/30/15

**VALUE VS GROWTH (% YOY)**



Source: Russell Investments, as of 9/30/15

**ROLLING 5 YEAR RETURN**



Source: Russell Investments, as of 9/30/15

# Domestic equity valuations

Domestic equity valuations remain relatively high, but were brought down by the Q3 correction. A decrease in inflation and global growth expectations may justify the valuation adjustment. Appropriateness of valuations ultimately depends on the accuracy of earnings forecasts.

Strong profit margins and growing earnings of recent years have justified expanding valuations, but earnings growth is now expected to be negative for the next year. This should be monitored to determine whether it

is a short-term fluctuation or a long-term trend, particularly as negativity appears concentrated in the energy sector. Current valuations do not seem cause for immediate concern but a trend towards negative earnings could be expected to affect valuations.

A continued rise in interest rates would bring the equity/debt yield relationship back closer to the long-term average.

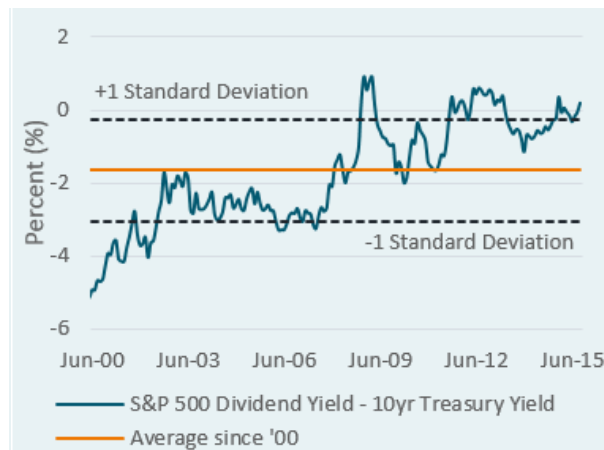
Growth concerns and an indecisive Fed have brought equity valuations down slightly

**12 MONTH FORWARD P/E**



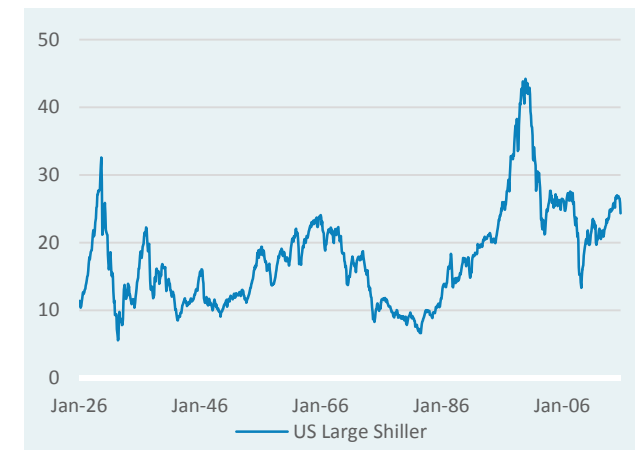
Source: Standard & Poor's, Russell Investments, as of 9/30/15

**EQUITY YIELD LESS BOND YIELD**



Source: Standard & Poor's, Bloomberg, as of 9/30/15

**SHILLER P/E LONG-TERM**



Source: Shiller, as of 9/30/15

# International equity historical return

Investors with international developed equity exposure (MSCI EAFE) have realized losses year-to-date, though positive if the effects of currency are removed. International developed equities have underperformed both U.S. and emerging market equities on a 10-year basis.

Emerging markets were relatively range bound in recent years, but exhibited losses in Q3. Growth concerns in China, and the depressed price of oil, have contributed to currency and equity volatility. Volatility is likely to

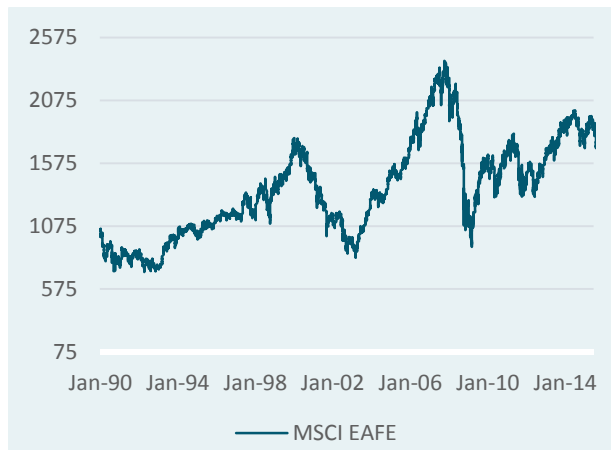
continue, but with significant disparities between markets. Active management may be preferable.

These recent results reiterate the importance of understanding the currency exposures that are implicit in taking on unhedged equity exposure to international markets. At times the return from the currency portfolio involved can be as large or larger than the equity return. Where possible investors should think of these two exposure sets as separate investment decisions.

Emerging market currencies saw broad sell-off in Q3

Currency remains an important decision

EAFE LONG TERM (USD)



Source: MSCI, as of 9/30/15

EMERGING MARKETS LONG TERM (USD)



Source: MSCI, as of 9/30/15

HEDGED VS UNHEDGED - 3YR ROLLING



Source: MSCI, as of 9/30/15

# International equity valuations

The equity market drawdown in Q3 increased the attractiveness of international equity valuations. In contrast to Q2, Europe now appears slightly cheap relative to history. Japan valuations are at the low end of the historical range, further contributing to our belief that Japan deserves a neutral or perhaps overweight position in portfolios.

Continued ECB intervention has helped keep deflation at bay, depreciation of the Euro has helped exports, and corporate earnings are improving. However, large

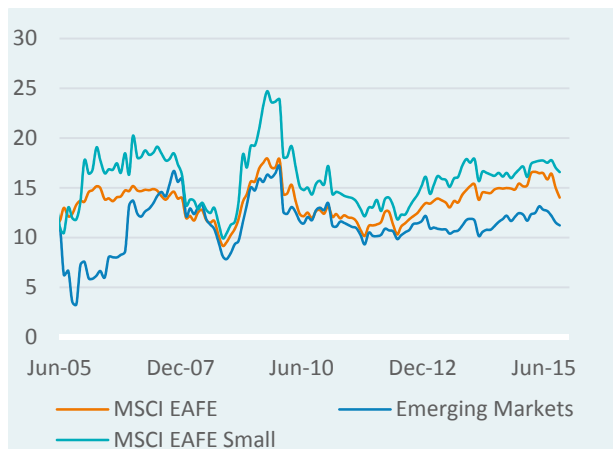
valuation differences exist between individual countries in Europe.

Emerging market general valuation levels remain very cheap on an historical basis, and have become cheaper following the Q3 selloff. There are well known underlying quality concerns relating to emerging markets, but investors prepared to accept the volatility involved have the opportunity to selectively buy at attractive valuations.

Valuations more in line with history

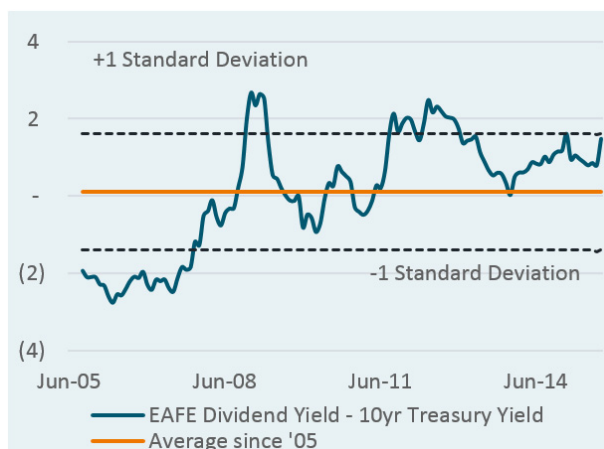
Though very volatile, select EM countries may offer value

12 MONTH FORWARD P/E



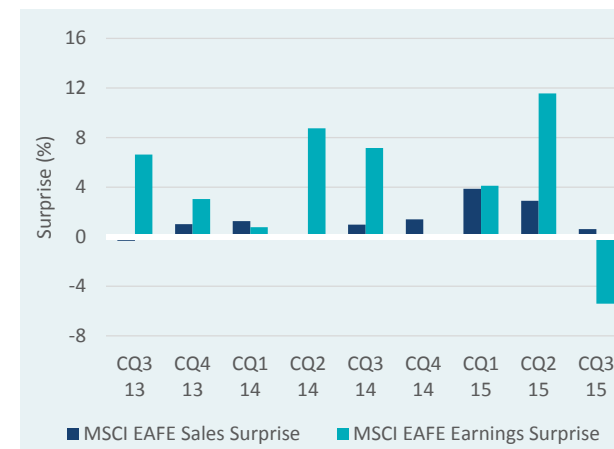
Source: MSCI, as of 9/30/15

EQUITY YIELD LESS BOND YIELD



Source: MSCI, as of 9/30/15

HISTORICAL EARNINGS SURPRISE



Source: Bloomberg, as of 9/30/15

# International equity recent

International equity markets are broadly positive YTD on a currency hedged basis, but negative on an unhedged currency basis. Currency fluctuations have overwhelmed positive equity returns in many markets.

Japan's fundamentals have been trending up over the medium term, but signs of weakness appeared in August's industrial output and export data. Continued monetary easing, coupled with new corporate governance and social initiatives may provide further tailwinds for Japan equities.

The European Central Bank continues accommodative monetary policy, and Mario Draghi expressed willingness to provide further quantitative easing if necessary.

Emerging markets experienced significant volatility and losses. Many markets have been positive in local terms, but currency movements have pushed returns to the downside. India continues to exhibit strong economic progress and equity returns.

Broad sell-off during Q3

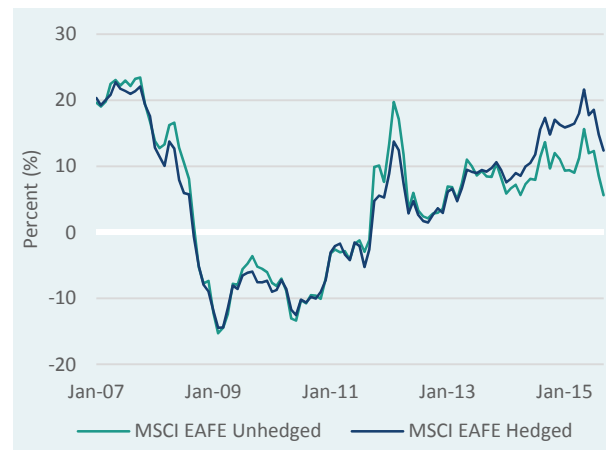
Currency a negative impact for U.S. investors with unhedged exposure

## SHORT TERM PERFORMANCE



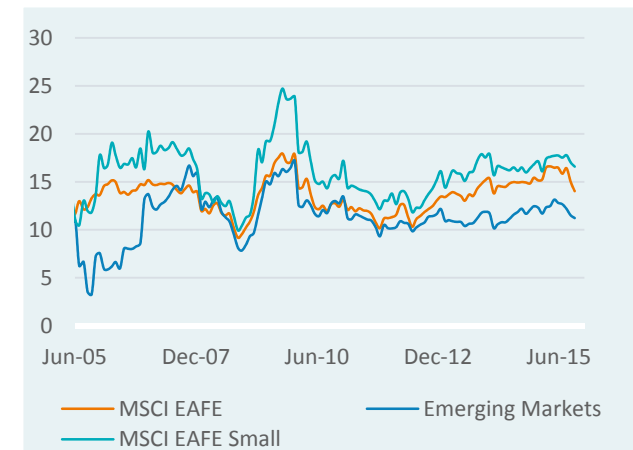
Source: MSCI, as of 9/30/15

## ROLLING 3 YEAR RETURN



Source: MSCI, as of 9/30/15

## FORWARD P/E



Source: MSCI, as of 9/30/15



# China – from a sprint to a jog

Over recent years China has remained a global driver of growth, although in part due to extensive government-sponsored investment. In recent quarters we have seen a moderating of Chinese growth expectations and government spending, along with a devaluation of the yuan – the effects of which have been felt across the economies of China's trading partners.

Emerging market commodity producers have felt much pain from both lower commodity prices and from lower

go-forward demand from China.

However, these developments may be expected to have positive long-term effects on the Chinese economy, through containment of public and private debt growth (which expanded drastically after '09) and a reduction in industrial excess capacity. These changes are consistent with China's progression towards becoming a consumption-oriented rather than export-oriented nation, and a transition to a service-based economy.

China has been the largest contributor to global growth

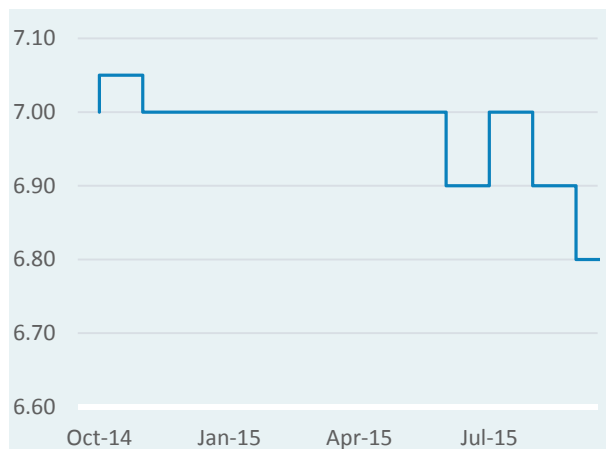
Slowing and changing composition

CHINA REAL GDP



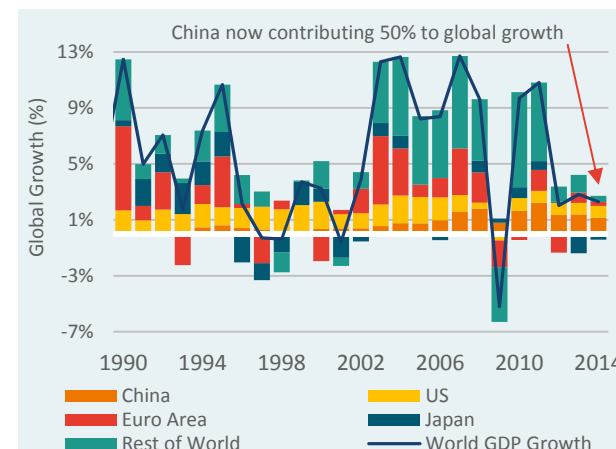
Source: Bloomberg, as of 6/30/15

CHINA REAL GDP FORECAST



Source: Bloomberg, as of 9/30/15

DRIVERS OF GLOBAL GROWTH



Source: Bloomberg

# Emerging market equity

Emerging markets continue to feel the effects of decelerating Chinese growth and oil volatility. Lessened demand has negatively impacted currency values in many nations, and central banks are spending down FX reserves to support their currencies. The movement in oil has also helped those economies which rely more on oil usage than oil production. For example, the Indian equity market has demonstrated strong relative returns on the back of oil price moves.

“Risk-on / risk-off” behavior continues, as can be seen in recent large price moves. However, volatility is an

expected characteristic of the emerging markets, and its occurrence should not alter the role of this asset class.

Wide disparity in country-to-country performance may make active management particularly attractive.

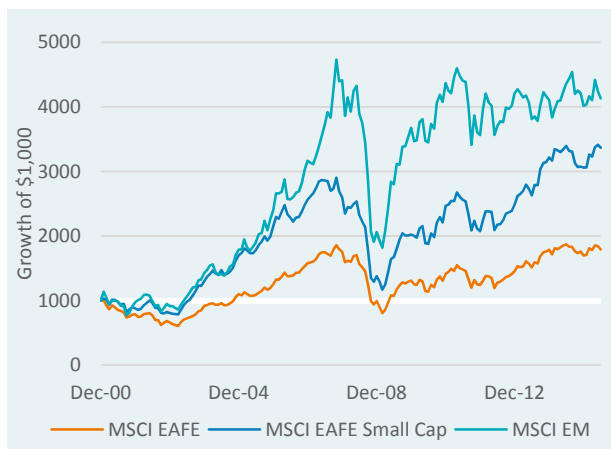
Eventual interest rate rises in developed economies may pose problems for emerging market economies if current exchange rates have not fully discounted this change.

Volatility and currency moves continue

The role of EM has not changed

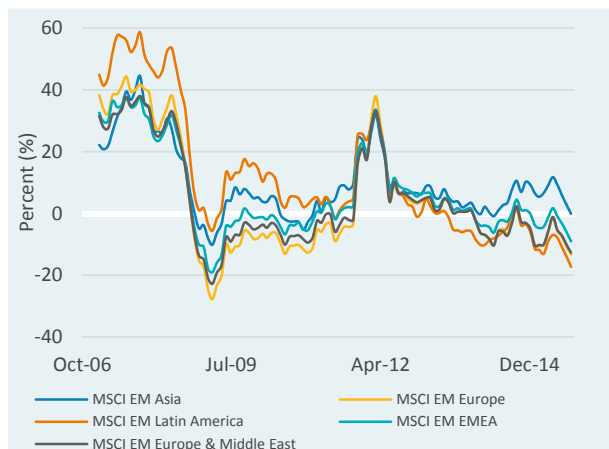
Valuations appear normal

## LONG TERM PERFORMANCE



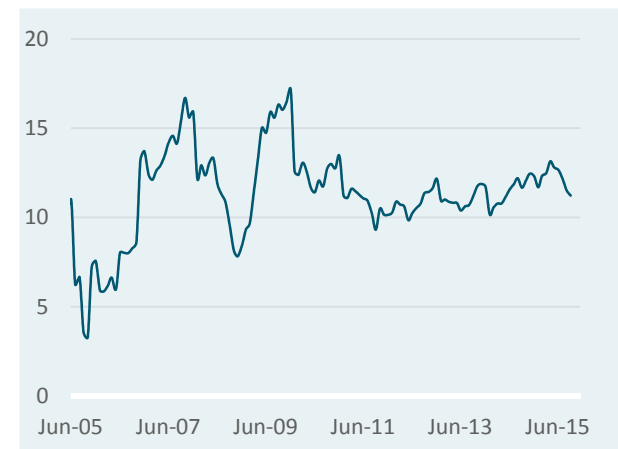
Source: MSCI, as of 9/30/15

## ROLLING 3 YEAR RETURN



Source: MSCI, as of 9/30/15

## FORWARD P/E



Source: MSCI, as of 9/30/15

# Other assets

# Other asset volatility

Rates volatility continues to be range-bound between 50 and 100, which is low relative to history.

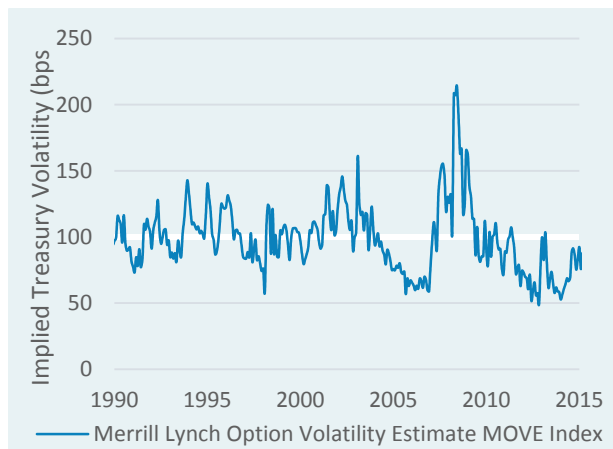
The JP Morgan G7 volatility index captures the volatility of a basket of currencies, representing significant FX moves over the past year, but remaining at a normal level. An alternative approach is to calculate the volatility of the RCCI currency beta index, which spiked in Q1 but has since come back to a normal level.

Commodity volatility remains above average, driven in large part by volatility in the oil price. This can be seen by contrasting broad commodity index volatility and the volatility of the energy component.

Spikes in volatility in these markets, even if to higher but normal levels, should be watched carefully in case they act as a sign of a broader phase shift in the markets.

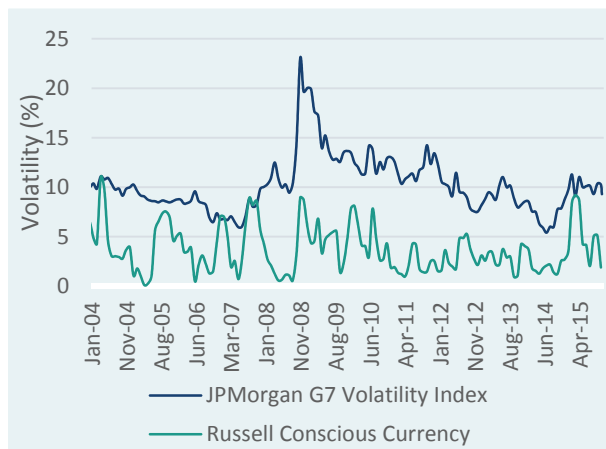
Volatility generally within normal ranges across asset classes

## FIXED INCOME VOLATILITY



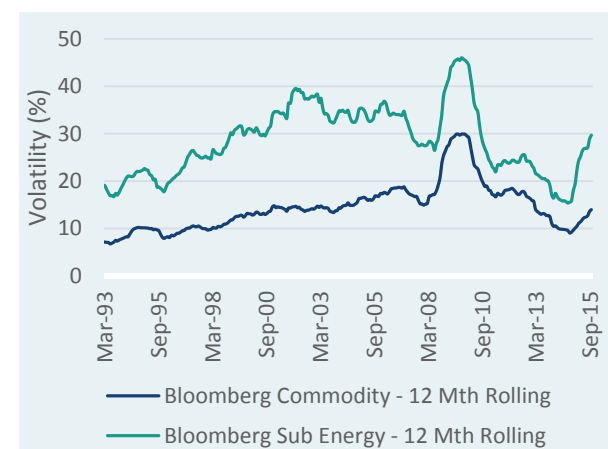
Source: Merrill Lynch, as of 9/30/15 (see Appendix)

## FX VOLATILITY %



Source: JP Morgan, Russell Investments, as of 9/30/15

## COMMODITY VOLATILITY %



Source: Bloomberg, as of 9/30/15

# Real estate & REITs

Real estate assets provide high exposure to the general business cycle. The recovery from the economic crisis has benefited the real estate market, which has shown significant recovery.

Real estate fundamentals remain strong with continued low and declining vacancy rates across all property types. NOI is strongest in apartments and office. Low commodity prices may act as a tailwind for real estate, as lower inflation expectations encourages dovish monetary policy (lower interest rates help real estate

returns).

A variety of opportunities in this space have attracted investors, and the long term allocations required to access these returns have led to significant levels of dry powder. Picking the correct fund remains important.

REITs have been volatile, trading down with the uncertainty of potential rate rises and resulting in a discount to fund NAV. This discount to NAV disappeared following the Fed decision to leave rates unchanged.

Provides broad exposure to economic cycle

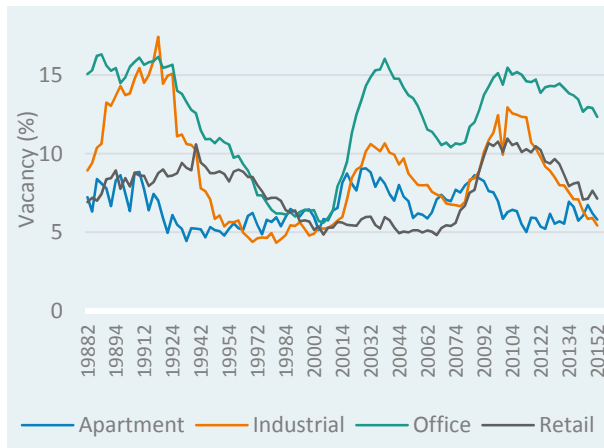
Some opportunities but careful selection needed

**REAL ESTATE & THE BUSINESS CYCLE**



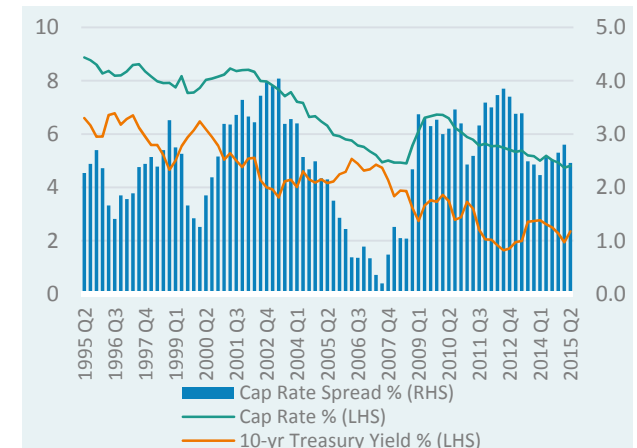
Source: NCREIF, as of 6/1/15

**REAL ESTATE VACANCY BY TYPE %**



Source: NCREIF, as of 6/30/15

**CAP RATE SPREADS**



Source: NCREIF, as of 6/1/15

# Commodities – inflation beta works both ways

The Bloomberg Commodity Index returned -14.5% in Q3, with energy and agriculture leading the way. Oil continues to exhibit strong volatility.

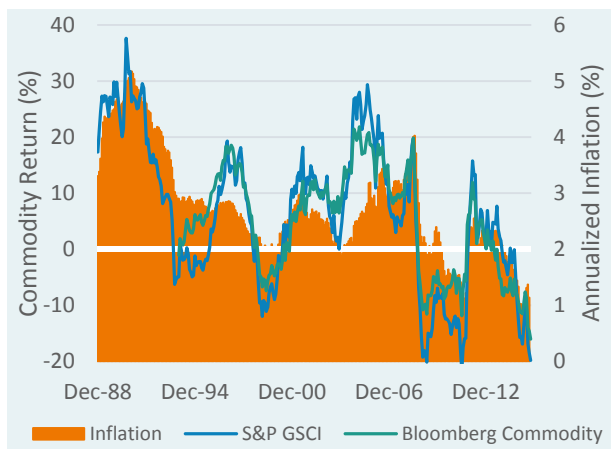
Commodities are typically held in portfolios to provide inflation sensitivity. Inflation sensitivity translates to strong performance during inflation *shocks* and negative performance during inflation *drops*. As shown in the bottom-left chart, commodities continue to fulfill their role of providing inflation sensitivity.

Commodities exposure aims to provide strong returns during inflation shocks, provide high medium-term correlation to inflation, and potentially boost portfolio returns. It may be tempting to forego inflation protection when the market's fear of inflation is dampened, but inflation forecasts have been very inaccurate and inflation shocks often occur from a low-inflation starting point.

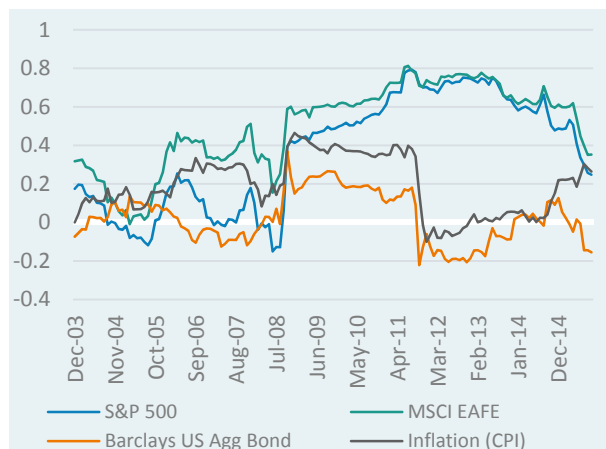
Commodities continue to correlate with inflation

Oil has been volatile and somewhat range-bound

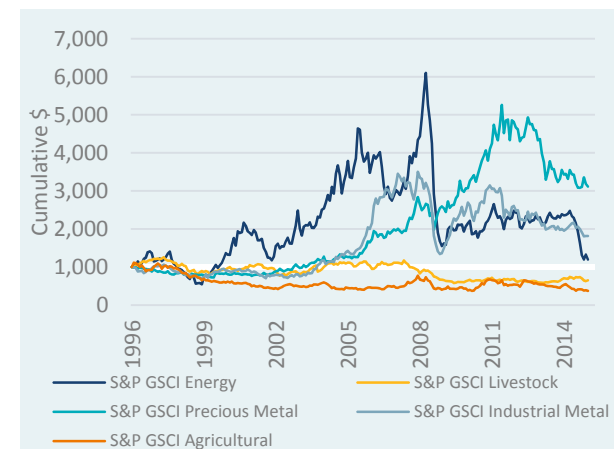
3 YR ROLLING RETURNS



COMMODITY CORRELATION (3YR ROLLING)



COMMODITY CUMULATIVE RETURNS



Source: Standard & Poor's, Bloomberg, as of 9/30/15

Source: MPI, as of 9/30/15 - correlation to Bloomberg Commodity

Source: S&P Dow Jones, as of 9/30/15

# Currency

Investors can look at the behavior of the currency markets from the standpoint of a U.S. investor on a trade-weighted or similar basis. The U.S. dollar had been depreciating fairly steadily since the mid 1980s, but the recent reversal has caused losses across various unhedged international asset exposures.

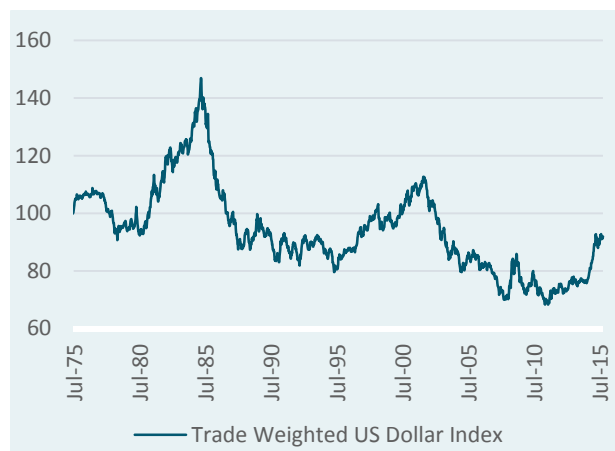
When measured and managed using unhedged benchmarks, international equity portfolios hold significant exposure to a currency portfolio derived from the size and structure of the equity markets

concerned. Despite recent dollar moderation, the trend towards U.S. dollar strength has made this a negative contribution for investors over the short and medium term.

Treating currency as an independent market allows investors additional insight. Although typically return from this exposure has been positive, recent price movements have tipped rolling one year return from currency beta into slightly negative territory.

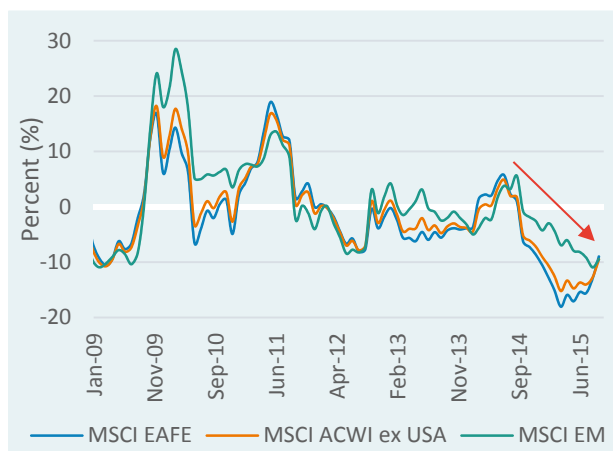
Recent dollar strength likely to continue, though sensitive to timing of fed rate hikes

LONG TERM TRADE WEIGHTED USD



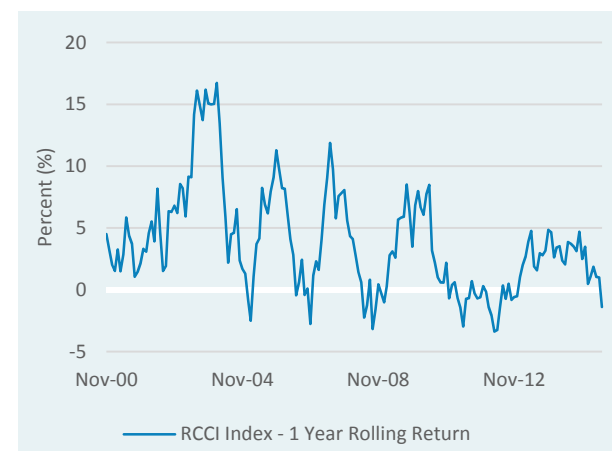
Source: FRED, as of 10/2/15

EFFECT OF CURRENCY (1YR ROLLING)



Source: FRED, as of 9/30/15

CURRENCY MARKET BEHAVIOR



Source: Russell Investments, as of 9/30/15



# Appendix

# Periodic table of returns - September 2015

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	YTD	5-Year	10-Year
Emerging Markets Equity	74.8	16.6	38.4	23.2	35.2	38.7	66.4	31.8	14.0	25.9	56.3	26.0	34.5	32.6	39.8	5.2	79.0	29.1	14.3	18.6	43.3	13.5	1.1	14.5	8.1
International Equity	32.9	8.1	37.8	23.1	32.9	27.0	43.1	22.8	8.4	10.3	48.5	22.2	21.4	26.9	16.2	1.4	37.2	26.9	7.8	18.1	38.8	13.2	0.0	13.4	7.7
Hedge Funds of Funds	26.3	6.4	37.2	22.4	31.8	20.3	33.2	12.2	7.3	6.7	47.3	20.7	20.1	23.5	15.8	-6.5	34.5	24.5	2.6	17.9	34.5	13.0	-0.7	13.3	7.0
Small Cap Value	23.8	4.4	31.0	21.6	30.5	19.3	27.3	11.6	3.3	1.6	46.0	18.3	14.0	22.2	11.8	-21.4	32.5	19.2	1.5	17.5	33.5	11.8	-1.5	12.3	6.5
60/40 Global Portfolio	19.3	3.2	28.5	21.4	22.4	16.2	26.5	7.0	2.8	1.0	39.2	16.5	7.5	18.4	11.6	-25.9	28.4	16.8	0.4	16.4	33.1	6.0	-5.0	11.7	5.7
Small Cap Equity	18.9	2.6	25.7	16.5	16.2	15.6	24.3	6.0	2.5	-5.9	30.0	14.5	7.1	16.6	10.9	-28.9	27.2	16.7	0.1	16.3	32.5	5.6	-5.2	10.2	5.3
Large Cap Value	18.1	0.4	19.6	14.4	13.9	8.7	21.3	4.1	-2.4	-6.0	29.9	14.3	6.3	15.5	10.3	-33.8	23.3	16.1	-2.1	15.3	23.3	4.9	-5.3	4.6	4.6
Small Cap Growth	13.4	-1.5	18.5	11.3	12.9	4.9	20.9	-3.0	-5.6	-11.4	29.7	12.9	5.3	15.1	7.0	-35.6	20.6	15.5	-2.9	14.6	12.1	4.2	-5.5	4.0	4.5
Large Cap Equity	10.2	-1.8	15.2	10.3	10.6	1.2	13.2	-7.3	-9.1	-15.5	25.2	11.4	4.7	13.3	7.0	-36.8	19.7	13.1	-4.2	11.5	11.0	3.4	-7.7	3.1	4.3
US Bonds	9.7	-2.0	11.6	9.9	9.7	-2.5	11.4	-7.8	-9.2	-15.7	23.9	9.1	4.6	10.4	5.8	-37.6	18.9	10.2	-5.5	10.5	9.0	2.8	-9.0	2.7	3.0
Cash	3.1	-2.4	11.1	6.4	5.2	-5.1	7.3	-14.0	-12.4	-20.5	11.6	6.9	4.6	9.1	4.4	-38.4	11.5	8.2	-5.7	4.8	0.1	0.0	-10.1	0.1	2.4
Large Cap Growth	2.9	-2.9	7.5	6.0	2.1	-6.5	4.8	-22.4	-19.5	-21.7	9.0	6.3	4.2	4.8	-0.2	-38.5	5.9	6.5	-11.7	4.2	-2.0	-1.8	-15.5	-3.6	1.3
Real Estate	1.4	-3.5	5.7	5.1	-3.4	-25.3	-0.8	-22.4	-20.4	-27.9	4.1	4.3	3.2	4.3	-1.6	-43.1	0.2	5.7	-13.3	0.1	-2.3	-4.5	-15.8	-8.9	-5.7
Commodities	-1.1	-7.3	-5.2	3.6	-11.6	-27.0	-1.5	-30.6	-21.2	-30.3	1.0	1.4	2.4	2.1	-9.8	-53.2	-16.9	0.1	-18.2	-1.1	-9.5	-17.0	N/A	N/A	N/A

Large Cap Equity

Large Cap Value

Large Cap Growth

Small Cap Equity

Small Cap Value

Small Cap Growth

International Equity

Emerging Markets Equity

US Bonds

Cash

Commodities

Real Estate

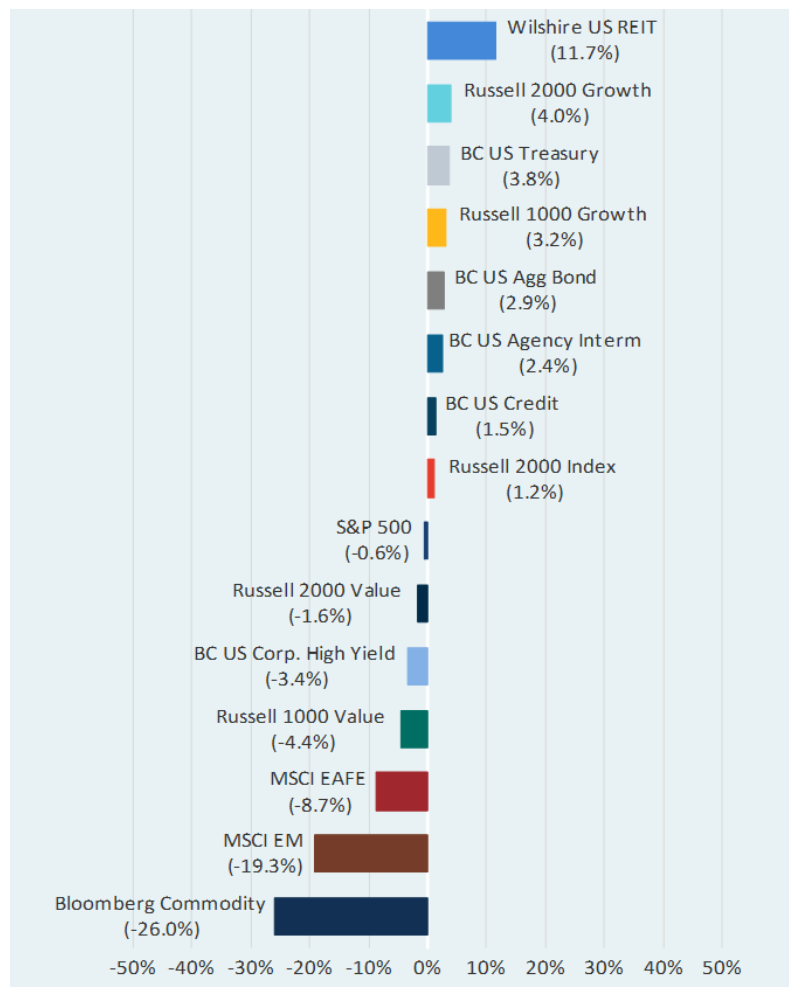
Hedge Funds of Funds

60% MSCI ACWI/40% BC Global Bond

Source Data: Morningstar, Inc., Hedge Fund Research, Inc. (HFR), National Council of Real Estate Investment Fiduciaries (NCREIF). Indices used: Russell 1000, Russell 1000 Value, Russell 1000 Growth, Russell 2000, Russell 2000 Value, Russell 2000 Growth, MSCI EAFE, MSCI EM, BC Agg, T-Bill 90 Day, Bloomberg Comm Index, NCREIF Property, HFRI FOF, MSCI ACWI, BC Global Bond.

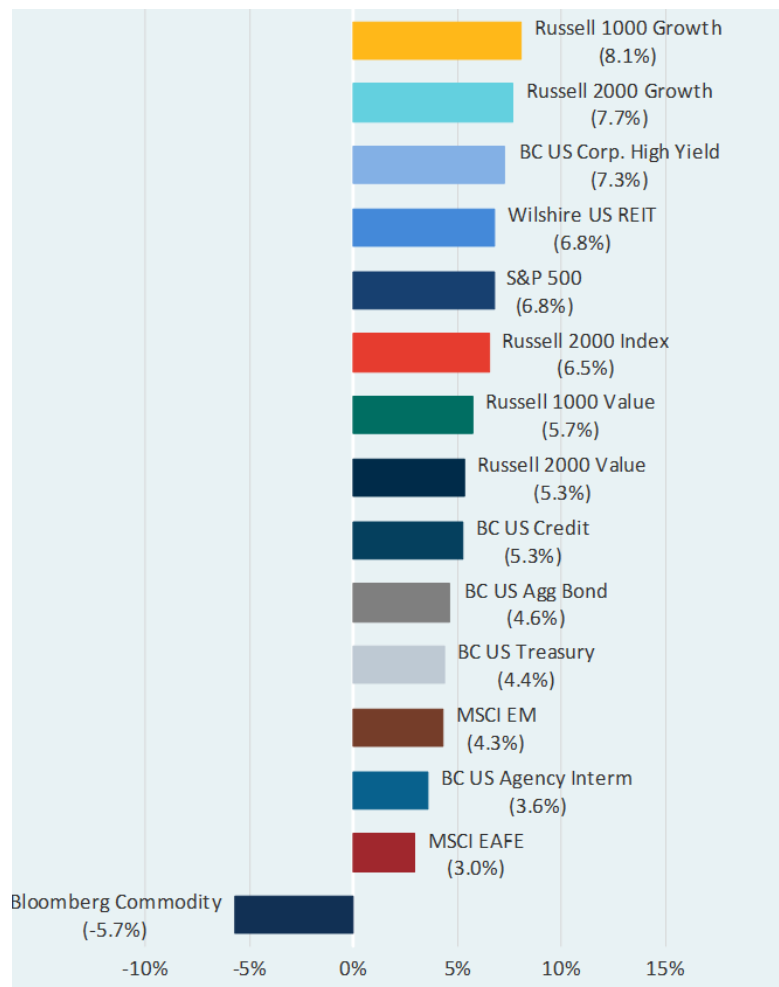
# Major asset class returns

ONE YEAR ENDING SEPTEMBER 2015



Source: MPI, as of September 30, 2015

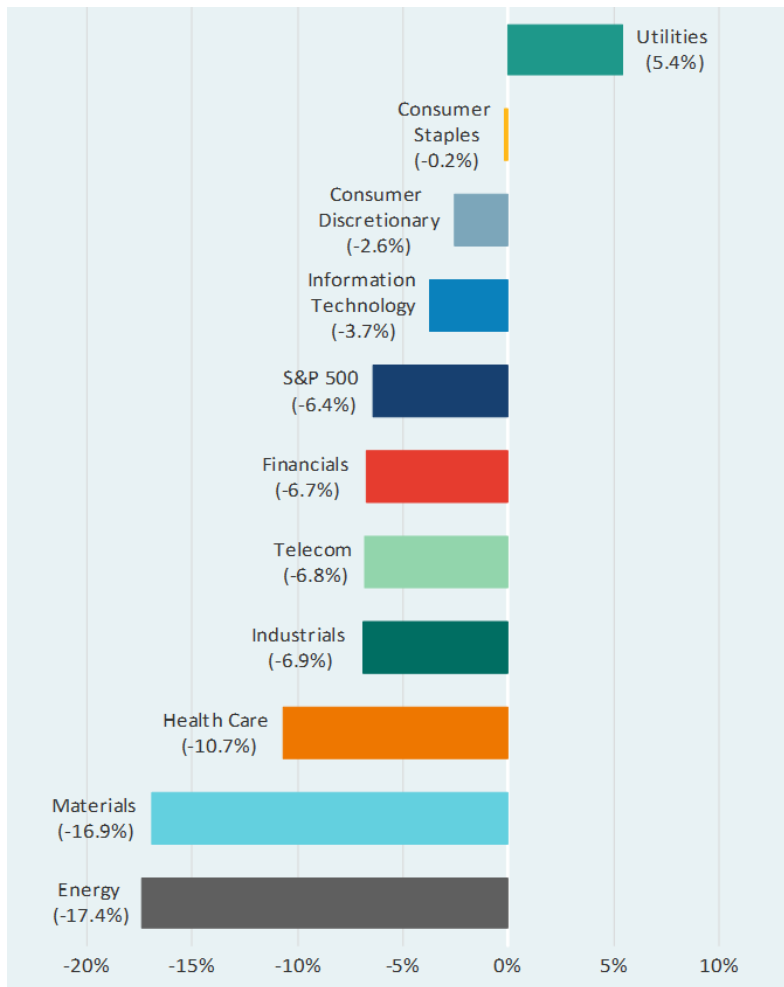
TEN YEARS ENDING SEPTEMBER 2015



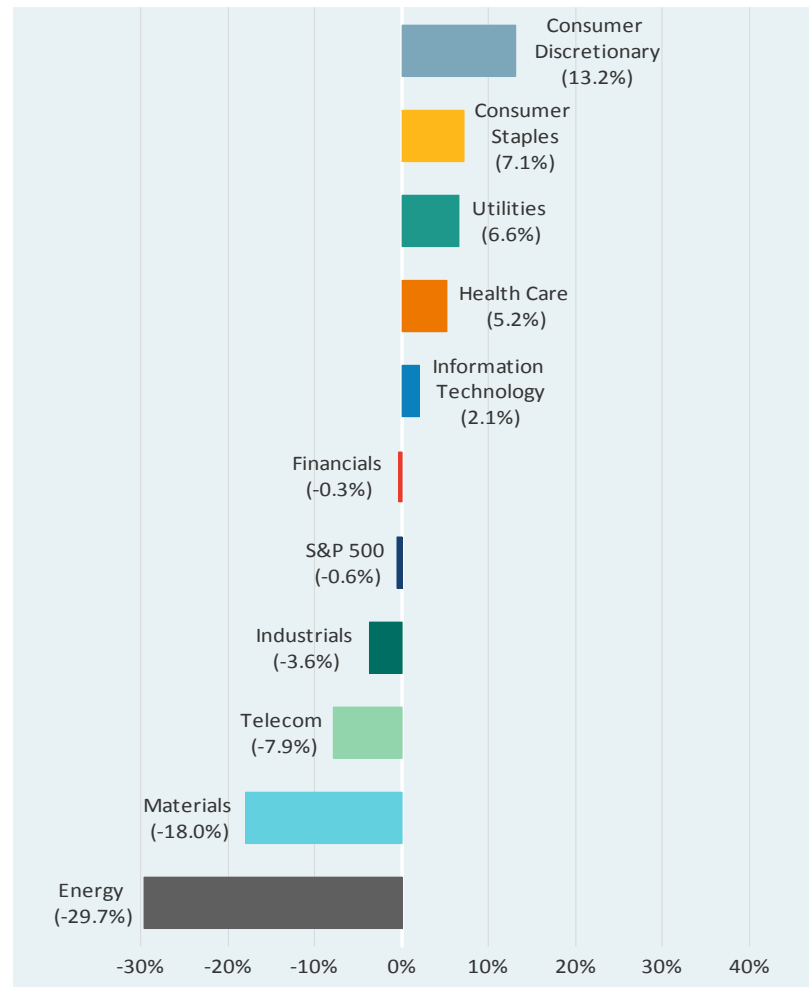
Source: MPI, as of September 30, 2015

# S&P 500 and S&P 500 sector returns

QTD ENDING SEPTEMBER 2015



ONE YEAR ENDING SEPTEMBER 2015



Source: MPI, as of 9/30/15

# Detailed index returns

## DOMESTIC EQUITY

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
<b>Core Index</b>							
S&P 500	(2.5)	(6.4)	(5.3)	(0.6)	12.4	13.3	6.8
S&P 500 Equal Weighted	(3.2)	(7.5)	(6.9)	(1.2)	14.3	13.8	8.3
DJ Industrial Average	(1.4)	(7.0)	(7.0)	(2.1)	9.3	11.4	7.2
Russell Top 200	(2.4)	(6.3)	(5.0)	(0.8)	12.1	13.4	6.6
Russell 1000	(2.7)	(6.8)	(5.2)	(0.6)	12.7	13.4	7.0
Russell 2000	(4.9)	(11.9)	(7.7)	1.2	11.0	11.7	6.5
Russell 3000	(2.9)	(7.2)	(5.4)	0.5	12.5	13.3	6.9
Russell Mid Cap	(3.6)	(8.0)	(5.8)	0.2	13.9	13.4	7.9
<b>Style Index</b>							
Russell 1000 Growth	(2.5)	(5.3)	(1.5)	3.2	13.6	14.5	8.1
Russell 1000 Value	(3.0)	(8.4)	(9.0)	(4.4)	11.6	12.3	5.7
Russell 2000 Growth	(6.3)	(13.1)	(5.5)	4.0	12.8	13.3	7.7
Russell 2000 Value	(3.5)	(10.7)	(10.1)	(1.6)	10.2	10.2	5.3

## INTERNATIONAL EQUITY

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
<b>Broad Index</b>							
MSCI EAFE	(5.1)	(10.2)	(5.3)	(8.7)	5.6	4.0	3.0
MSCI AC World ex US	(4.6)	(12.2)	(8.6)	(12.2)	2.3	1.8	3.0
MSCI EM	(3.0)	(17.9)	(15.5)	(19.3)	(5.3)	(3.6)	4.3
MSCI EAFE Small Cap	(3.4)	(6.8)	2.6	0.3	10.2	7.3	4.7
<b>Style Index</b>							
MSCI EAFE Growth	(4.0)	(8.7)	(2.4)	(4.7)	6.5	4.8	3.8
MSCI EAFE Value	(6.2)	(11.8)	(8.2)	(12.6)	4.7	3.1	2.1
<b>Regional Index</b>							
MSCI UK	(4.5)	(10.0)	(8.2)	(12.1)	3.0	4.5	3.0
MSCI Japan	(6.8)	(11.8)	0.2	(2.2)	9.0	4.9	1.1
MSCI Euro	(5.3)	(8.9)	(6.0)	(10.8)	6.7	2.6	2.2
MSCI EM Asia	(1.5)	(17.0)	(12.8)	(13.1)	(0.4)	(0.1)	6.3
MSCI EM Latin American	(7.7)	(24.3)	(29.1)	(38.7)	(17.5)	(12.9)	1.8

## FIXED INCOME

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
<b>Broad Index</b>							
BC US Treasury US TIPS	(0.6)	(1.1)	(0.8)	(0.8)	(1.8)	2.5	4.0
BC US Treasury Bills	0.0	0.0	0.1	0.1	0.1	0.1	1.4
BC US Agg Bond	0.7	1.2	1.1	2.9	1.7	3.1	4.6
<b>Duration</b>							
BC US Treasury 1-3 Yr	0.3	0.3	1.0	1.2	0.7	0.8	2.6
BC US Treasury Long	1.5	5.1	0.2	8.8	2.8	6.2	7.0
BC US Treasury	0.9	1.8	1.8	3.8	1.3	2.5	4.4
<b>Issuer</b>							
BC US MBS	0.6	1.3	3.4	2.7	2.0	3.0	4.7
BC US Corp. High Yield	(2.6)	(4.9)	(3.4)	(2.9)	3.5	6.1	7.3
BC US Agency Interim	0.5	0.8	2.4	1.8	1.1	1.6	3.6
BC US Credit	0.5	0.5	1.5	(0.4)	2.0	4.1	5.3

## OTHER

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
<b>Index</b>							
Bloomberg Comm. Index	(3.4)	(14.5)	(15.8)	(26.0)	(16.0)	(8.9)	(5.7)
Wilshire US REIT	3.3	2.9	(3.0)	11.7	10.1	12.5	6.8
<b>Regional Index</b>							
JPM EMBI Global Div	(1.3)	(1.7)	(0.1)	(0.6)	1.5	4.7	6.9
JPM GBI-EM Global Div	(3.0)	(10.5)	(14.9)	(19.8)	(8.7)	(3.6)	4.5

Source: Morningstar, as of 9/30/15

# Definitions

**Bloomberg US Weekly Consumer Comfort Index** - tracks the public's economic attitudes each week, providing a high-frequency read on consumer sentiment. The index, based on cell and landline telephone interviews with a random, representative national sample of U.S. adults, tracks Americans' ratings of the national economy, their personal finances and the buying climate on a weekly basis, with views of the economy's direction measured separately each month. ([www.langerresearch.com](http://www.langerresearch.com))

**University of Michigan Consumer Sentiment Index** - A survey of consumer attitudes concerning both the present situation as well as expectations regarding economic conditions conducted by the University of Michigan. For the preliminary release approximately three hundred consumers are surveyed while five hundred are interviewed for the final figure. The level of consumer sentiment is related to the strength of consumer spending. ([www.Bloomberg.com](http://www.Bloomberg.com))

**Citi Economic Surprise Index** - objective and quantitative measures of economic news. Defined as weighted historical standard deviations of data surprises (actual releases vs Bloomberg survey median). A positive reading of the Economic Surprise Index suggests that economic releases have on balance been beating consensus. The indices are calculated daily in a rolling three-month window. The weights of economic indicators are derived from relative high-frequency spot FX impacts of 1 standard deviation data surprises. The indices also employ a time decay function to replicate the limited memory of markets. ([www.Bloomberg.com](http://www.Bloomberg.com))

**Merrill Lynch Option Volatility Estimate (MOVE) Index** – a yield curve weighted index comprised of a weighted set of 1-month Treasury options, including 2.5.10 and 30 year tenor contracts. This index is an indicator of the expected (implied) future volatility in the rate markets.

# Notices & Disclosures

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# Imperial County Employees' Retirement System

Investment Performance Review

Period Ending: September 30, 2015



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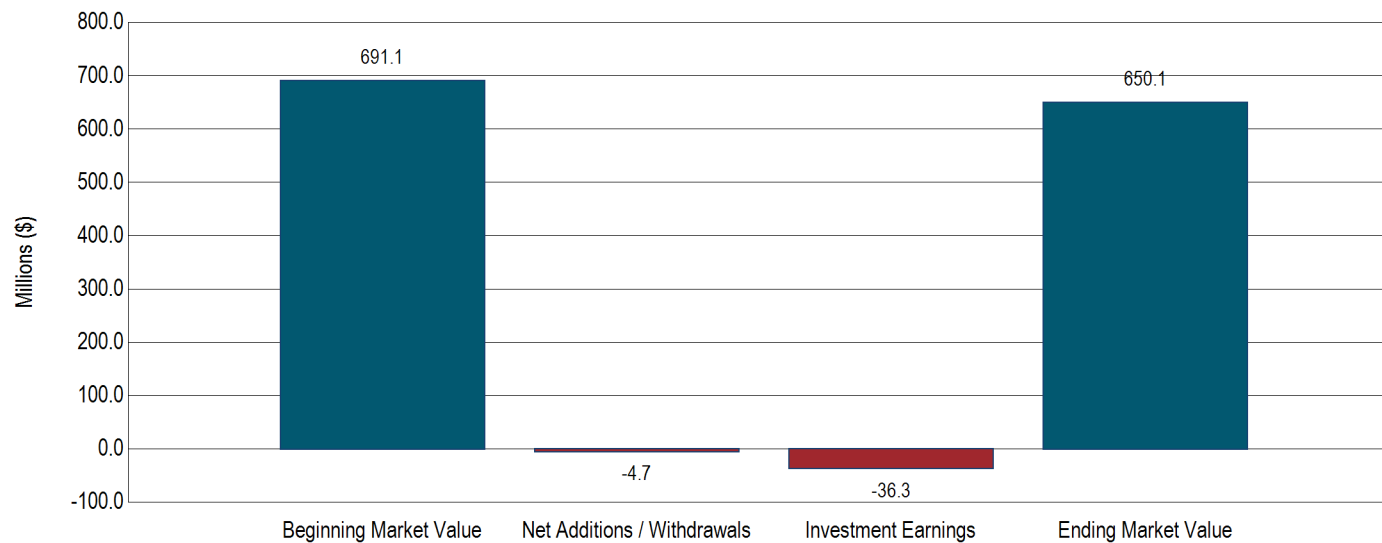
# Total Fund Portfolio Reconciliation

Period Ending: September 30, 2015

## Portfolio Reconciliation

Sources of Portfolio Growth	Last Three Months	Fiscal Year-To-Date	One Year
Beginning Market Value	\$691,058,257	\$691,058,257	\$668,087,526
Net Additions/Withdrawals	-\$4,713,151	-\$4,713,151	-\$5,012,156
Investment Earnings	-\$36,257,109	-\$36,257,109	-\$12,987,374
Ending Market Value	\$650,087,996	\$650,087,996	\$650,087,996

## Change in Market Value Last Three Months

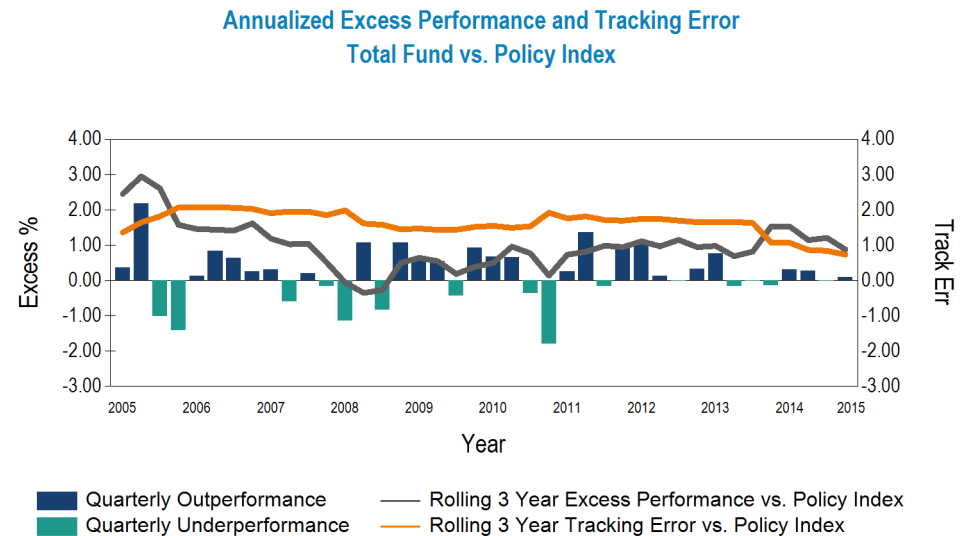
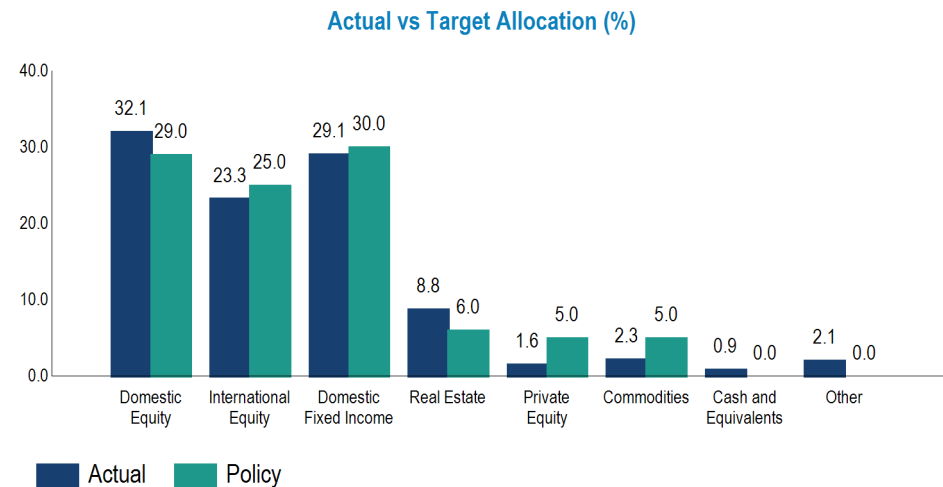


Contributions and withdrawals may include intra-account transfers between managers/funds. Fee transactions are excluded from Portfolio Reconciliation.

# Total Fund Executive Summary (Gross of Fees)

Period Ending: September 30, 2015

	QTD	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs
<b>Total Fund</b>	<b>-5.2</b>	<b>-2.6</b>	<b>-5.2</b>	<b>-1.7</b>	<b>6.2</b>	<b>7.3</b>	<b>5.9</b>
<i>Total Fund ex Clifton</i>	-5.2	-2.6	-5.2	-1.7	6.2	7.2	5.9
<i>Policy Index</i>	-5.3	-3.0	-5.3	-2.3	5.4	6.5	5.2
<i>InvestorForce Public DB Gross Rank</i>	57	47	57	74	69	54	33
<b>Total Domestic Equity</b>	<b>-7.0</b>	<b>-4.9</b>	<b>-7.0</b>	<b>0.0</b>	<b>12.4</b>	<b>13.2</b>	<b>7.4</b>
<i>Russell 3000</i>	-7.2	-5.4	-7.2	-0.5	12.5	13.3	6.9
<i>eA All US Equity Gross Rank</i>	34	47	34	55	59	52	60
<b>Total International Equity</b>	<b>-11.4</b>	<b>-7.2</b>	<b>-11.4</b>	<b>-10.9</b>	<b>2.8</b>	<b>1.7</b>	<b>3.9</b>
<i>MSCI ACWI ex USA Gross</i>	-12.1	-8.3	-12.1	-11.8	2.8	2.3	3.5
<i>eA ACWI ex-US All Cap Equity Gross Rank</i>	69	77	69	85	86	99	78
<b>Total Fixed Income</b>	<b>0.0</b>	<b>0.2</b>	<b>0.0</b>	<b>1.6</b>	<b>1.8</b>	<b>4.1</b>	<b>5.8</b>
<i>Barclays Aggregate</i>	1.2	1.1	1.2	2.9	1.7	3.1	4.6
<i>eA All US Fixed Inc Gross Rank</i>	74	74	74	59	63	42	26
<b>Total Real Estate</b>	<b>2.9</b>	<b>11.2</b>	<b>2.9</b>	<b>15.5</b>	<b>13.2</b>	<b>13.7</b>	<b>--</b>
<i>NCREIF Property Index</i>	3.1	10.1	3.1	13.5	11.9	12.5	--
<i>NCREIF-ODCE</i>	3.7	11.3	3.7	14.9	13.4	14.0	--
<b>Total Private Equity</b>	<b>6.1</b>	<b>17.0</b>	<b>6.1</b>	<b>20.3</b>	<b>21.1</b>	<b>--</b>	<b>--</b>
<i>Russell 3000 +3% Lagged</i>	0.9	9.7	0.9	10.5	21.2	--	--
<b>Total Commodities</b>	<b>-14.8</b>	<b>-16.0</b>	<b>-14.8</b>	<b>-26.4</b>	<b>-15.8</b>	<b>-8.7</b>	<b>--</b>
<i>Bloomberg Commodity Index TR USD</i>	-14.5	-15.8	-14.5	-26.0	-16.0	-8.9	--
<b>Total Opportunistic</b>	<b>-2.1</b>	<b>2.4</b>	<b>-2.1</b>	<b>4.9</b>	<b>18.6</b>	<b>17.9</b>	<b>--</b>
<i>Assumption Rate + 1%</i>	2.2	6.7	2.2	9.0	9.0	9.1	--

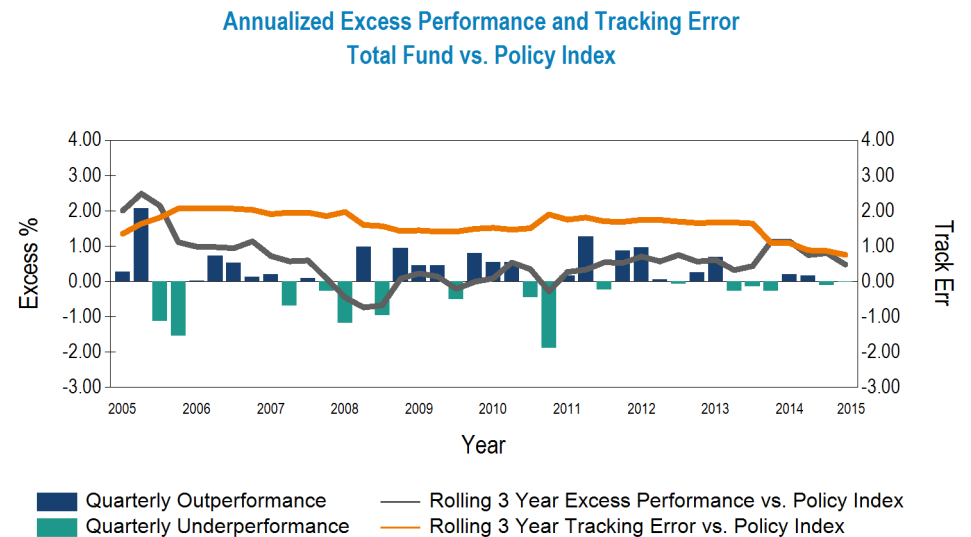
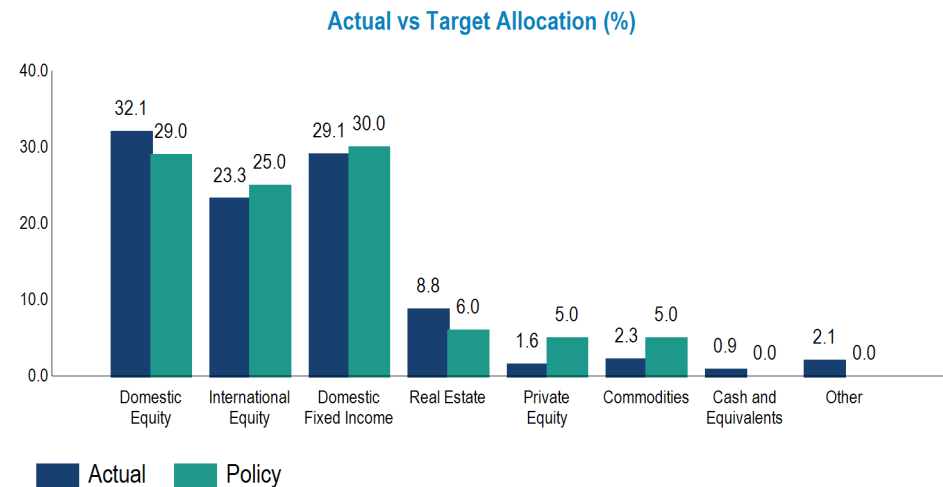


Policy Index (as of 7/1/2014): 29% Russell 3000, 25% MSCI ACWI Free Ex US, 30% BC AGG, 6% NCREIF Property, 5% Bloomberg Commodity Index, 5% Russell 3000 plus 300 bps (Lagged). Prior Policy Index (7/1/2010 to 6/30/2014): 24% S&P 500, 10% R2500, 21% MSCI ACWI Free Ex US, 30% BC AGG, 5% NCREIF Property, 5% Bloomberg Commodity Index, 5% CPI+ 5%. Prior quarter Private Equity returns and index data are used. All returns are (G) gross of fees.

# Total Fund Executive Summary (Net of Fees)

Period Ending: September 30, 2015

	QTD	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs
<b>Total Fund</b>	<b>-5.3</b>	<b>-2.9</b>	<b>-5.3</b>	<b>-2.1</b>	<b>5.8</b>	<b>6.9</b>	<b>5.5</b>
<i>Total Fund ex Clifton</i>	-5.3	-2.9	-5.3	-2.1	5.8	6.8	5.5
<i>Policy Index</i>	-5.3	-3.0	-5.3	-2.3	5.4	6.5	5.2
<b>Total Domestic Equity</b>	<b>-7.1</b>	<b>-5.0</b>	<b>-7.1</b>	<b>-0.2</b>	<b>12.1</b>	<b>13.0</b>	<b>7.1</b>
<i>Russell 3000</i>	-7.2	-5.4	-7.2	-0.5	12.5	13.3	6.9
<b>Total International Equity</b>	<b>-11.5</b>	<b>-7.6</b>	<b>-11.5</b>	<b>-11.4</b>	<b>2.2</b>	<b>1.1</b>	<b>3.3</b>
<i>MSCI ACWI ex USA Gross</i>	-12.1	-8.3	-12.1	-11.8	2.8	2.3	3.5
<b>Total Fixed Income</b>	<b>-0.1</b>	<b>0.0</b>	<b>-0.1</b>	<b>1.4</b>	<b>1.5</b>	<b>3.8</b>	<b>5.6</b>
<i>Barclays Aggregate</i>	1.2	1.1	1.2	2.9	1.7	3.1	4.6
<b>Total Real Estate</b>	<b>2.7</b>	<b>10.4</b>	<b>2.7</b>	<b>14.3</b>	<b>12.3</b>	<b>12.8</b>	<b>--</b>
<i>NCREIF Property Index</i>	3.1	10.1	3.1	13.5	11.9	12.5	--
<i>NCREIF-ODCE</i>	3.7	11.3	3.7	14.9	13.4	14.0	--
<b>Total Private Equity</b>	<b>5.6</b>	<b>15.2</b>	<b>5.6</b>	<b>17.6</b>	<b>16.6</b>	<b>2.2</b>	<b>--</b>
<i>Russell 3000 +3% Lagged</i>	0.9	9.7	0.9	10.5	21.2	21.0	--
<b>Total Commodities</b>	<b>-14.9</b>	<b>-16.4</b>	<b>-14.9</b>	<b>-26.8</b>	<b>-16.2</b>	<b>-9.1</b>	<b>--</b>
<i>Bloomberg Commodity Index TR USD</i>	-14.5	-15.8	-14.5	-26.0	-16.0	-8.9	--
<b>Total Opportunistic</b>	<b>-2.4</b>	<b>1.3</b>	<b>-2.4</b>	<b>3.4</b>	<b>16.7</b>	<b>16.1</b>	<b>--</b>
<i>Assumption Rate + 1%</i>	2.2	6.7	2.2	9.0	9.0	9.1	--



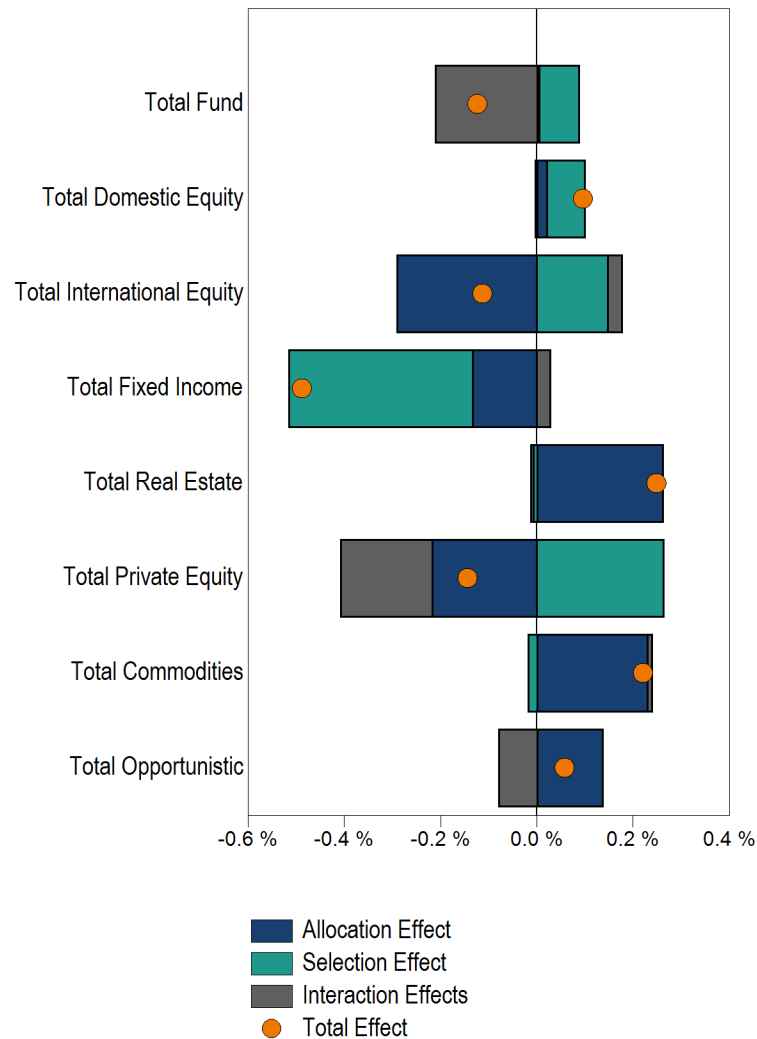
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# Total Fund

## Attribution Analysis - Asset Class Level (Gross of Fees)

Period Ending: September 30, 2015

### Attribution Effects



### Performance Attribution

	Quarter	YTD
Wtd. Actual Return	-5.28%	-2.64%
Wtd. Index Return *	-5.16%	-3.03%
<b>Excess Return</b>	<b>-0.12%</b>	<b>0.39%</b>
Selection Effect	0.08%	0.50%
Allocation Effect	0.01%	0.12%
Interaction Effect	-0.21%	-0.23%

\*Calculated from benchmark returns and weightings of each component.

### Attribution Summary Last Three Months

	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
Total Domestic Equity	-7.0%	-7.2%	0.2%	0.1%	0.0%	0.0%	0.1%
Total International Equity	-11.4%	-12.1%	0.7%	0.1%	-0.3%	0.0%	-0.1%
Total Fixed Income	0.0%	1.2%	-1.3%	-0.4%	-0.1%	0.0%	-0.5%
Total Real Estate	2.9%	3.1%	-0.2%	0.0%	0.3%	0.0%	0.2%
Total Private Equity	6.1%	0.9%	5.2%	0.3%	-0.2%	-0.2%	-0.1%
Total Commodities	-14.8%	-14.5%	-0.4%	0.0%	0.2%	0.0%	0.2%
Total Opportunistic	-2.1%	2.2%	-4.3%	0.0%	0.1%	-0.1%	0.1%
<b>Total</b>	<b>-5.3%</b>	<b>-5.2%</b>	<b>-0.1%</b>	<b>0.1%</b>	<b>0.0%</b>	<b>-0.2%</b>	<b>-0.1%</b>

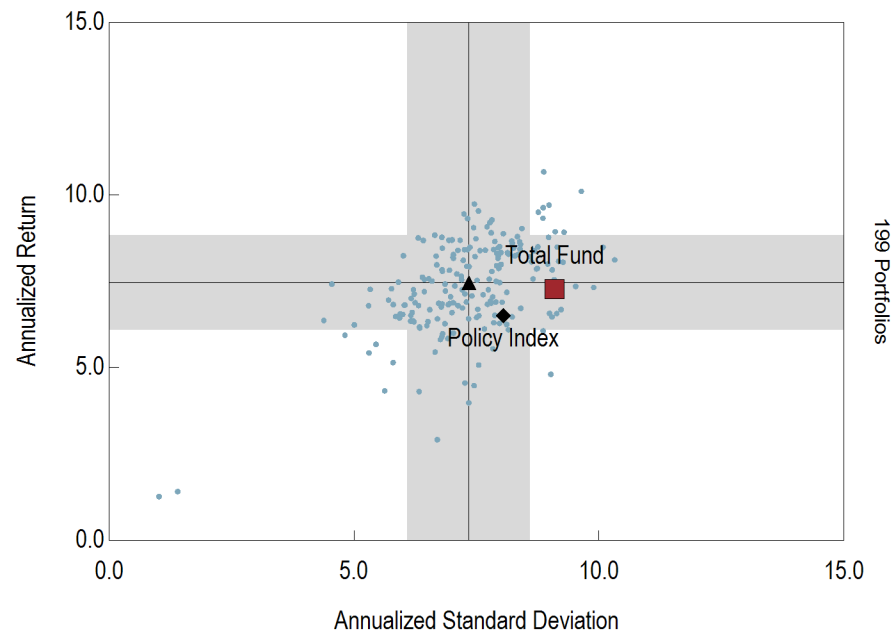
Weighted returns shown in attribution analysis may differ from actual returns.

# Total Fund Risk Analysis - 5 Years (Gross of Fees)

Period Ending: September 30, 2015

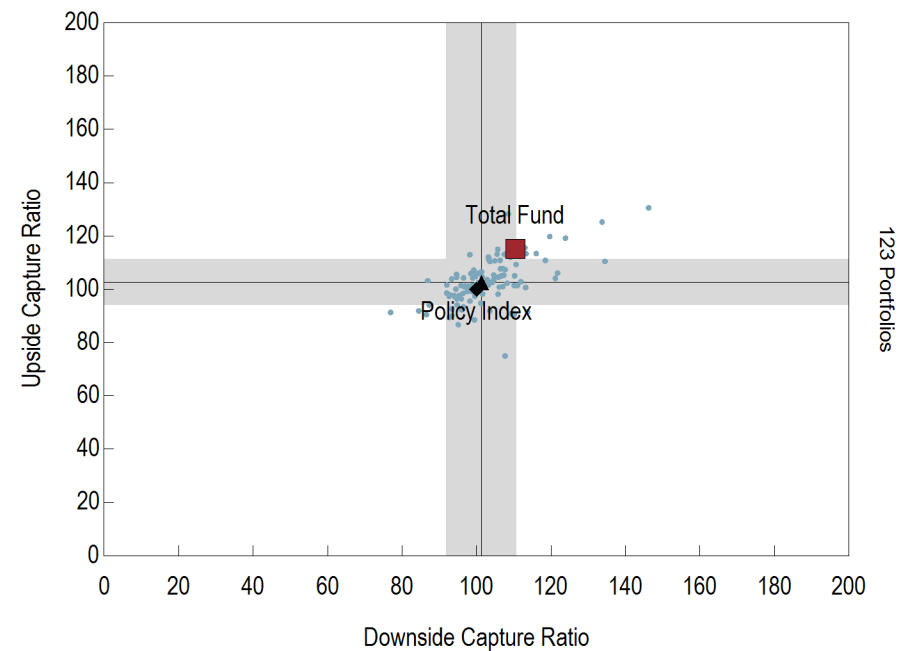
	Anlzd Ret	Ann Excess BM Return	Anlzd Std Dev	Anlzd Alpha	Beta	Tracking Error	R-Squared	Sharpe Ratio	Info Ratio	Up Mkt Cap Ratio	Down Mkt Cap Ratio
Total Fund	7.28%	0.77%	9.09%	-0.04%	1.13	1.31%	0.99	0.79	0.59	115.11%	110.36%

Risk vs. Return



- Total Fund
- ◆ Policy Index
- ▲ Universe Median
- 68% Confidence Interval
- InvestorForce Public DB Gross

Up Markets vs. Down Markets

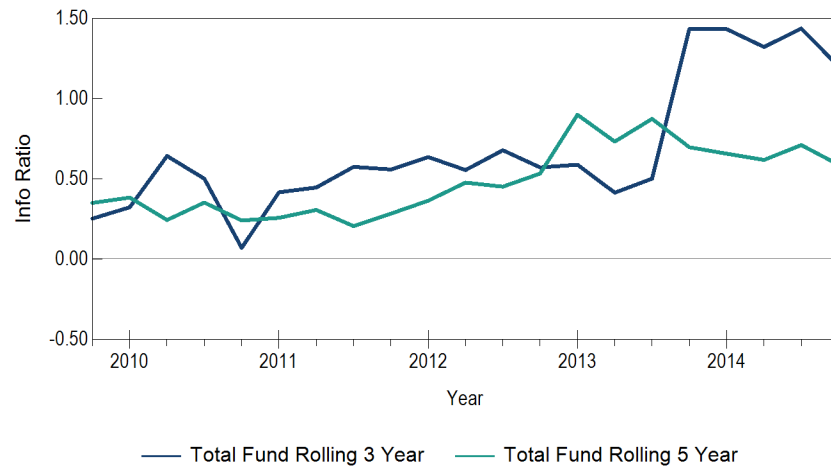


- Total Fund
- ◆ Policy Index
- ▲ Universe Median
- 68% Confidence Interval
- InvestorForce Public DB Gross

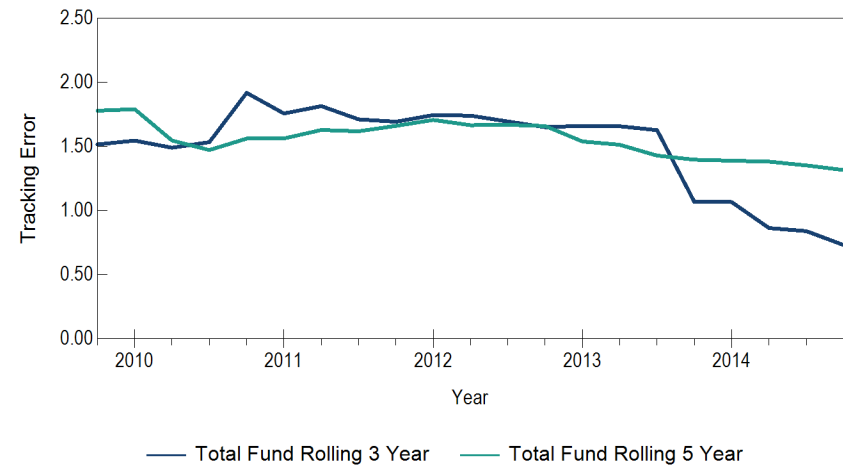
# Total Fund Rolling Risk Statistics (Gross of Fees)

Period Ending: September 30, 2015

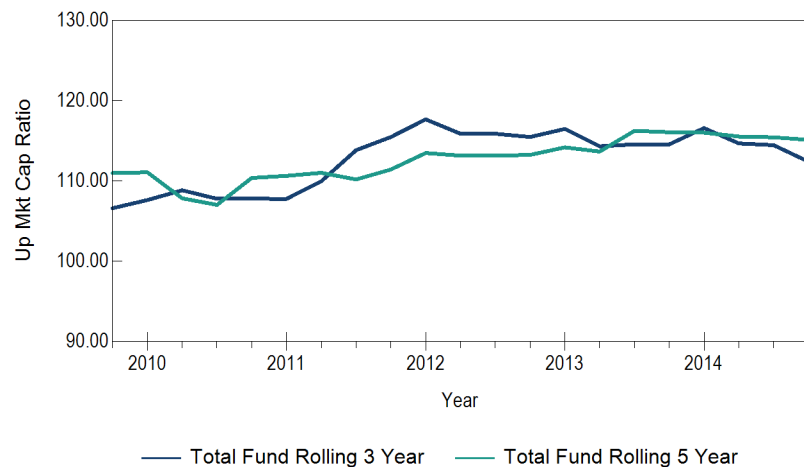
Rolling Information Ratio



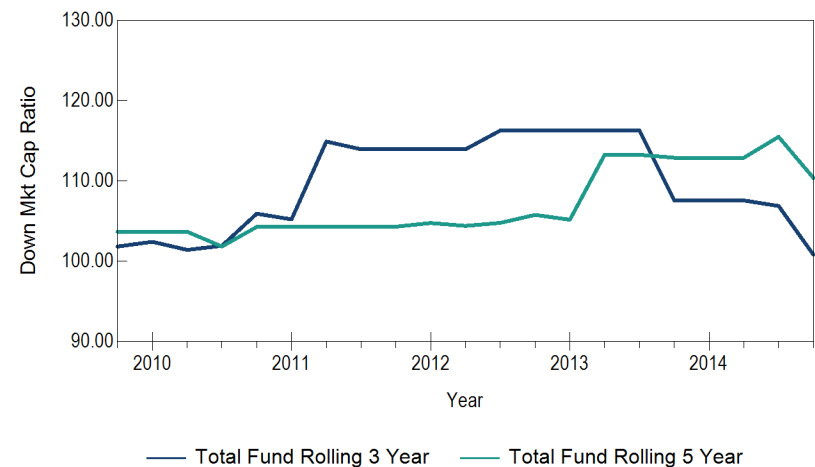
Rolling Tracking Error



Rolling Up Market Capture Ratio (%)



Rolling Down Market Capture Ratio (%)



# Total Fund Performance Summary (Gross of Fees)

Period Ending: September 30, 2015

	Market Value	% of Portfolio	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2014	2013	2012	2011	2010	Return	Since
<b>Total Fund</b>	<b>650,087,996</b>	<b>100.0</b>	<b>-5.2</b>	<b>-2.6</b>	<b>-5.2</b>	<b>-1.7</b>	<b>6.2</b>	<b>7.3</b>	<b>5.9</b>	<b>4.8</b>	<b>14.8</b>	<b>14.6</b>	<b>-1.1</b>	<b>14.7</b>	<b>9.3</b>	<b>Mar-89</b>
Policy Index			-5.3	-3.0	-5.3	-2.3	5.4	6.5	5.2	4.9	13.5	11.2	0.4	13.0	--	Mar-89
InvestorForce Public DB Gross Rank			57	47	57	74	69	54	33	74	59	6	89	13	3	Mar-89
<b>Total Fund ex Clifton</b>			<b>-5.2</b>	<b>-2.6</b>	<b>-5.2</b>	<b>-1.7</b>	<b>6.2</b>	<b>7.2</b>	<b>5.9</b>	<b>4.9</b>	<b>14.7</b>	<b>14.2</b>	<b>-1.0</b>	<b>14.7</b>	<b>9.3</b>	<b>Mar-89</b>
Policy Index			-5.3	-3.0	-5.3	-2.3	5.4	6.5	5.2	4.9	13.5	11.2	0.4	13.0	--	Mar-89
InvestorForce Public DB Gross Rank			58	47	58	74	71	57	35	72	59	11	88	15	3	Mar-89
<b>Total Domestic Equity</b>	<b>208,358,022</b>	<b>32.1</b>	<b>-7.0</b>	<b>-4.9</b>	<b>-7.0</b>	<b>0.0</b>	<b>12.4</b>	<b>13.2</b>	<b>7.4</b>	<b>10.2</b>	<b>33.9</b>	<b>17.1</b>	<b>0.9</b>	<b>18.3</b>	<b>--</b>	
Russell 3000			-7.2	-5.4	-7.2	-0.5	12.5	13.3	6.9	12.6	33.6	16.4	1.0	16.9	--	
eA All US Equity Gross Rank			34	47	34	55	59	52	60	51	62	37	40	55	--	
<b>BlackRock Russell 1000</b>	<b>154,257,806</b>	<b>23.7</b>	<b>-6.8</b>	<b>-5.2</b>	<b>-6.8</b>	<b>-0.6</b>	<b>12.7</b>	<b>13.5</b>	<b>7.0</b>	<b>13.3</b>	<b>33.2</b>	<b>16.5</b>	<b>1.6</b>	<b>16.2</b>	<b>9.4</b>	<b>Oct-02</b>
Russell 1000			-6.8	-5.2	-6.8	-0.6	12.7	13.4	7.0	13.2	33.1	16.4	1.5	16.1	9.3	Oct-02
eA US Large Cap Equity Gross Rank			46	52	46	52	53	45	64	41	54	39	39	34	53	Oct-02
<b>TimesSquare Capital Mid Cap Growth</b>	<b>28,350,178</b>	<b>4.4</b>	<b>-7.1</b>	<b>-1.3</b>	<b>-7.1</b>	<b>2.4</b>	<b>14.4</b>	<b>13.7</b>	<b>10.2</b>	<b>6.2</b>	<b>38.7</b>	<b>20.0</b>	<b>-0.7</b>	<b>19.3</b>	<b>13.7</b>	<b>Mar-03</b>
Russell MidCap Growth			-8.0	-4.1	-8.0	1.4	14.0	13.6	8.1	11.9	35.7	15.8	-1.7	26.4	11.6	Mar-03
eA US Mid Cap Growth Equity Gross Rank			22	32	22	53	32	47	18	75	36	11	40	94	11	Mar-03
<b>T. Rowe Price Small Cap Value</b>	<b>25,750,038</b>	<b>4.0</b>	<b>-8.2</b>	<b>-6.5</b>	<b>-8.2</b>	<b>0.6</b>	<b>9.0</b>	<b>11.8</b>	<b>7.3</b>	<b>-0.5</b>	<b>34.7</b>	<b>17.1</b>	<b>1.0</b>	<b>25.6</b>	<b>12.2</b>	<b>Dec-95</b>
Russell 2000 Value			-10.7	-10.1	-10.7	-1.6	9.2	10.2	5.3	4.2	34.5	18.1	-5.5	24.5	9.4	Dec-95
eA US Small Cap Value Equity Gross Rank			24	48	24	48	85	63	58	88	78	49	22	63	44	Dec-95
<b>Total International Equity</b>	<b>151,279,437</b>	<b>23.3</b>	<b>-11.4</b>	<b>-7.2</b>	<b>-11.4</b>	<b>-10.9</b>	<b>2.8</b>	<b>1.7</b>	<b>3.9</b>	<b>-4.4</b>	<b>14.0</b>	<b>19.3</b>	<b>-15.6</b>	<b>12.6</b>	<b>--</b>	
MSCI ACWI ex USA Gross			-12.1	-8.3	-12.1	-11.8	2.8	2.3	3.5	-3.4	15.8	17.4	-13.3	11.6	--	
eA ACWI ex-US All Cap Equity Gross Rank			69	77	69	85	86	99	78	70	92	54	84	70	--	
<b>BlackRock International Equity</b>	<b>57,867,265</b>	<b>8.9</b>	<b>-10.2</b>	<b>-5.0</b>	<b>-10.2</b>	<b>-8.4</b>	<b>6.0</b>	<b>4.3</b>	<b>3.3</b>	<b>-4.7</b>	<b>23.2</b>	<b>17.8</b>	<b>-11.8</b>	<b>8.1</b>	<b>7.1</b>	<b>Jul-03</b>
MSCI EAFE Gross			-10.2	-4.9	-10.2	-8.3	6.1	4.4	3.4	-4.5	23.3	17.9	-11.7	8.2	7.2	Jul-03
eA All EAFE Equity Gross Rank			71	73	71	76	67	78	84	64	61	74	48	79	74	Jul-03
<b>Templeton Foreign Equity</b>	<b>55,463,003</b>	<b>8.5</b>	<b>-10.4</b>	<b>-4.9</b>	<b>-10.4</b>	<b>-9.1</b>	<b>5.1</b>	<b>4.0</b>	<b>4.6</b>	<b>-6.0</b>	<b>20.4</b>	<b>19.5</b>	<b>-10.2</b>	<b>7.5</b>	<b>8.0</b>	<b>Dec-94</b>
MSCI ACWI ex USA Gross			-12.1	-8.3	-12.1	-11.8	2.8	2.3	3.5	-3.4	15.8	17.4	-13.3	11.6	5.1	Dec-94
eA All ACWI ex-US Equity Gross Rank			53	55	53	71	60	69	63	80	47	50	28	92	56	Dec-94
<b>DFA Emerging Markets Value</b>	<b>16,966,153</b>	<b>2.6</b>	<b>-19.0</b>	<b>-17.6</b>	<b>-19.0</b>	<b>-22.7</b>	<b>-6.3</b>	<b>-5.7</b>	<b>--</b>	<b>-3.9</b>	<b>-3.2</b>	<b>20.1</b>	<b>-25.2</b>	<b>22.8</b>	<b>1.4</b>	<b>Jan-07</b>
MSCI Emerging Markets Gross			-17.8	-15.2	-17.8	-19.0	-4.9	-3.2	--	-1.8	-2.3	18.6	-18.2	19.2	1.1	Jan-07
eA Emg Mkts Equity Gross Rank			91	90	91	91	90	98	--	84	84	56	92	33	65	Jan-07
<b>Vontobel Global Emerging Markets</b>	<b>20,983,016</b>	<b>3.2</b>	<b>-10.4</b>	<b>-9.6</b>	<b>-10.4</b>	<b>-11.8</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>-11.8</b>	<b>Sep-14</b>
MSCI Emerging Markets Gross			-17.8	-15.2	-17.8	-19.0	--	--	--	--	--	--	--	--	-19.0	Sep-14
eA Emg Mkts Equity Gross Rank			4	16	4	15	--	--	--	--	--	--	--	--	15	Sep-14

Since Inception ranking is from the beginning of the first complete month.



# Total Fund Performance Summary (Gross of Fees)

Period Ending: September 30, 2015

	Market Value	% of Portfolio	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2014	2013	2012	2011	2010	Return	Since
<b>Total Fixed Income</b>	<b>189,312,051</b>	<b>29.1</b>	<b>0.0</b>	<b>0.2</b>	<b>0.0</b>	<b>1.6</b>	<b>1.8</b>	<b>4.1</b>	<b>5.8</b>	<b>5.9</b>	<b>-1.7</b>	<b>9.6</b>	<b>6.8</b>	<b>10.2</b>	<b>--</b>	
Barclays Aggregate			1.2	1.1	1.2	2.9	1.7	3.1	4.6	6.0	-2.0	4.2	7.8	6.5	--	
eA All US Fixed Inc Gross Rank			74	74	74	59	63	42	26	34	78	28	45	23	--	
Bradford & Marzec Fixed	90,906,682	14.0	0.9	1.5	0.9	3.1	3.0	4.8	6.2	7.0	-0.4	8.8	7.4	9.6	6.9	Dec-92
Barclays Aggregate			1.2	1.1	1.2	2.9	1.7	3.1	4.6	6.0	-2.0	4.2	7.8	6.5	5.8	Dec-92
eA US Core Plus Fixed Inc Gross Rank			23	19	23	12	28	28	25	16	52	45	51	40	41	Dec-92
MacKay Shields Core Plus Opportunities	83,890,886	12.9	-0.8	--	-0.8	--	--	--	--	--	--	--	--	--	-2.3	Mar-15
Barclays Aggregate			1.2	--	1.2	--	--	--	--	--	--	--	--	--	0.0	Mar-15
eA US Core Plus Fixed Inc Gross Rank			84	--	84	--	--	--	--	--	--	--	--	--	86	Mar-15
BlackRock US TIPS	14,514,483	2.2	-1.2	-0.7	-1.2	-0.8	-1.8	2.6	--	3.6	-8.5	7.1	13.7	6.4	4.5	Apr-07
Barclays US TIPS			-1.1	-0.8	-1.1	-0.8	-1.8	2.5	--	3.6	-8.6	7.0	13.6	6.3	4.4	Apr-07
eA TIPS / Infl Indexed Fixed Inc Gross Rank			62	39	62	44	70	44	--	45	62	59	37	52	71	Apr-07
<b>Total Real Estate</b>	<b>56,938,551</b>	<b>8.8</b>	<b>2.9</b>	<b>11.2</b>	<b>2.9</b>	<b>15.5</b>	<b>13.2</b>	<b>13.7</b>	<b>--</b>	<b>13.0</b>	<b>12.6</b>	<b>10.6</b>	<b>14.9</b>	<b>18.0</b>	<b>--</b>	
NCREIF Property Index			3.1	10.1	3.1	13.5	11.9	12.5	--	11.8	11.0	10.5	14.3	13.1	--	
NCREIF-ODCE			3.7	11.3	3.7	14.9	13.4	14.0	--	12.5	13.9	10.9	16.0	16.4	--	
ASB Real Estate	28,016,004	4.3	2.7	11.0	2.7	15.1	--	--	--	13.5	13.7	--	--	--	14.0	Dec-12
NCREIF Property Index			3.1	10.1	3.1	13.5	--	--	--	11.8	11.0	--	--	--	12.0	Dec-12
NCREIF-ODCE			3.7	11.3	3.7	14.9	--	--	--	12.5	13.9	--	--	--	13.8	Dec-12
Clarion Lion	27,529,369	4.2	3.3	12.0	3.3	16.8	13.6	15.0	--	13.2	12.8	10.9	18.7	19.4	4.0	Dec-06
NCREIF Property Index			3.1	10.1	3.1	13.5	11.9	12.5	--	11.8	11.0	10.5	14.3	13.1	6.7	Dec-06
NCREIF-ODCE			3.7	11.3	3.7	14.9	13.4	14.0	--	12.5	13.9	10.9	16.0	16.4	5.3	Dec-06
1221 State St. Corp	1,393,178	0.2	0.0	0.0	0.0	0.0	0.0	-1.5	--	0.0	0.0	0.1	-9.0	3.7	-0.6	Sep-08
<b>Total Commodities</b>	<b>14,653,874</b>	<b>2.3</b>	<b>-14.8</b>	<b>-16.0</b>	<b>-14.8</b>	<b>-26.4</b>	<b>-15.8</b>	<b>-8.7</b>	<b>--</b>	<b>-16.3</b>	<b>-9.3</b>	<b>-0.9</b>	<b>-13.2</b>	<b>17.0</b>	<b>-5.8</b>	<b>Oct-09</b>
Bloomberg Commodity Index TR USD			-14.5	-15.8	-14.5	-26.0	-16.0	-8.9	--	-17.0	-9.5	-1.1	-13.3	16.8	-6.0	Oct-09
BlackRock Commodities	4,574,368	0.7	-14.4	-15.8	-14.4	-26.0	-15.9	-8.8	--	-17.0	-9.4	-0.9	-13.2	17.0	-6.1	Oct-09
Bloomberg Commodity Index TR USD			-14.5	-15.8	-14.5	-26.0	-16.0	-8.9	--	-17.0	-9.5	-1.1	-13.3	16.8	-6.0	Oct-09
Gresham MTAP Commodity Builder	10,079,506	1.6	-15.0	-16.1	-15.0	-26.5	--	--	--	-16.1	--	--	--	--	-16.9	Aug-13
Bloomberg Commodity Index TR USD			-14.5	-15.8	-14.5	-26.0	--	--	--	-17.0	--	--	--	--	-17.3	Aug-13
<b>Total Cash</b>																
Cash Account	5,867,367	0.9	0.0	0.0	0.0	0.0	0.0	0.1	--	0.0	0.0	0.4	0.2	--	--	
91 Day T-Bills			0.0	0.0	0.0	0.0	0.0	0.0	--	0.0	0.0	0.1	0.0	--	--	

Since Inception ranking is from the beginning of the first complete month.

# Total Fund Performance Summary (Net of Fees)

Period Ending: September 30, 2015

	Market Value	% of Portfolio	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2014	2013	2012	2011	2010	Return	Since
<b>Total Fund</b>	<b>650,087,996</b>	<b>100.0</b>	<b>-5.3</b>	<b>-2.9</b>	<b>-5.3</b>	<b>-2.1</b>	<b>5.8</b>	<b>6.9</b>	<b>5.5</b>	<b>4.4</b>	<b>14.5</b>	<b>14.2</b>	<b>-1.5</b>	<b>14.3</b>	<b>8.8</b>	<b>Mar-89</b>
Policy Index			-5.3	-3.0	-5.3	-2.3	5.4	6.5	5.2	4.9	13.5	11.2	0.4	13.0	--	Mar-89
Total Fund ex Clifton			-5.3	-2.9	-5.3	-2.1	5.8	6.8	5.5	4.4	14.4	13.8	-1.4	14.2	8.8	Mar-89
Policy Index			-5.3	-3.0	-5.3	-2.3	5.4	6.5	5.2	4.9	13.5	11.2	0.4	13.0	--	Mar-89
<b>Total Domestic Equity</b>	<b>208,358,022</b>	<b>32.1</b>	<b>-7.1</b>	<b>-5.0</b>	<b>-7.1</b>	<b>-0.2</b>	<b>12.1</b>	<b>13.0</b>	<b>7.1</b>	<b>10.0</b>	<b>33.6</b>	<b>16.9</b>	<b>0.7</b>	<b>18.0</b>	<b>--</b>	
Russell 3000			-7.2	-5.4	-7.2	-0.5	12.5	13.3	6.9	12.6	33.6	16.4	1.0	16.9	--	
BlackRock Russell 1000	154,257,806	23.7	-6.8	-5.2	-6.8	-0.6	12.7	13.4	7.0	13.2	33.1	16.4	1.5	16.1	9.4	Oct-02
Russell 1000			-6.8	-5.2	-6.8	-0.6	12.7	13.4	7.0	13.2	33.1	16.4	1.5	16.1	9.3	Oct-02
TimesSquare Capital Mid Cap Growth	28,350,178	4.4	-7.2	-1.8	-7.2	1.7	13.8	13.0	9.5	5.7	37.8	19.2	-1.3	18.5	13.0	Mar-03
Russell MidCap Growth			-8.0	-4.1	-8.0	1.4	14.0	13.6	8.1	11.9	35.7	15.8	-1.7	26.4	11.6	Mar-03
T. Rowe Price Small Cap Value	25,750,038	4.0	-8.3	-7.0	-8.3	-0.1	8.3	11.0	6.5	-1.2	33.8	16.3	0.3	24.8	11.4	Dec-95
Russell 2000 Value			-10.7	-10.1	-10.7	-1.6	9.2	10.2	5.3	4.2	34.5	18.1	-5.5	24.5	9.4	Dec-95
<b>Total International Equity</b>	<b>151,279,437</b>	<b>23.3</b>	<b>-11.5</b>	<b>-7.6</b>	<b>-11.5</b>	<b>-11.4</b>	<b>2.2</b>	<b>1.1</b>	<b>3.3</b>	<b>-4.9</b>	<b>13.4</b>	<b>18.6</b>	<b>-16.1</b>	<b>12.0</b>	<b>--</b>	
MSCI ACWI ex USA Gross			-12.1	-8.3	-12.1	-11.8	2.8	2.3	3.5	-3.4	15.8	17.4	-13.3	11.6	--	
BlackRock International Equity	57,867,265	8.9	-10.2	-5.1	-10.2	-8.5	5.8	4.2	3.2	-4.8	22.9	17.6	-11.9	7.9	6.9	Jul-03
MSCI EAFE Gross			-10.2	-4.9	-10.2	-8.3	6.1	4.4	3.4	-4.5	23.3	17.9	-11.7	8.2	7.2	Jul-03
Templeton Foreign Equity	55,463,003	8.5	-10.6	-5.5	-10.6	-9.8	4.3	3.2	3.8	-6.8	19.5	18.5	-10.9	6.7	7.1	Dec-94
MSCI ACWI ex USA Gross			-12.1	-8.3	-12.1	-11.8	2.8	2.3	3.5	-3.4	15.8	17.4	-13.3	11.6	5.1	Dec-94
DFA Emerging Markets Value	16,966,153	2.6	-19.2	-17.9	-19.2	-23.1	-6.9	-6.2	--	-4.4	-3.8	19.4	-25.6	22.1	0.8	Jan-07
MSCI Emerging Markets Gross			-17.8	-15.2	-17.8	-19.0	-4.9	-3.2	--	-1.8	-2.3	18.6	-18.2	19.2	1.1	Jan-07
Vontobel Global Emerging Markets	20,983,016	3.2	-10.6	-10.2	-10.6	-12.6	--	--	--	--	--	--	--	--	-12.6	Sep-14
MSCI Emerging Markets Gross			-17.8	-15.2	-17.8	-19.0	--	--	--	--	--	--	--	--	-19.0	Sep-14
<b>Total Fixed Income</b>	<b>189,312,051</b>	<b>29.1</b>	<b>-0.1</b>	<b>0.0</b>	<b>-0.1</b>	<b>1.4</b>	<b>1.5</b>	<b>3.8</b>	<b>5.6</b>	<b>5.6</b>	<b>-2.0</b>	<b>9.3</b>	<b>6.5</b>	<b>9.9</b>	<b>--</b>	
Barclays Aggregate			1.2	1.1	1.2	2.9	1.7	3.1	4.6	6.0	-2.0	4.2	7.8	6.5	--	
Bradford & Marzec Fixed	90,906,682	14.0	0.8	1.3	0.8	2.9	2.6	4.5	5.9	6.7	-0.8	8.5	7.1	9.3	6.5	Dec-92
Barclays Aggregate			1.2	1.1	1.2	2.9	1.7	3.1	4.6	6.0	-2.0	4.2	7.8	6.5	5.8	Dec-92
MacKay Shields Core Plus Opportunities	83,890,886	12.9	-0.9	--	-0.9	--	--	--	--	--	--	--	--	--	-2.5	Mar-15
Barclays Aggregate			1.2	--	1.2	--	--	--	--	--	--	--	--	--	0.0	Mar-15
BlackRock US TIPS	14,514,483	2.2	-1.2	-0.7	-1.2	-0.9	-1.8	2.6	--	3.6	-8.6	7.0	13.6	6.3	4.5	Apr-07
Barclays US TIPS			-1.1	-0.8	-1.1	-0.8	-1.8	2.5	--	3.6	-8.6	7.0	13.6	6.3	4.4	Apr-07

Total Fund  
Performance Summary (Net of Fees)

Period Ending: September 30, 2015

	Market Value	% of Portfolio	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2014	2013	2012	2011	2010	Return	Since
<b>Total Real Estate</b>	<b>56,938,551</b>	<b>8.8</b>	<b>2.7</b>	<b>10.4</b>	<b>2.7</b>	<b>14.3</b>	<b>12.3</b>	<b>12.8</b>	<b>--</b>	<b>11.6</b>	<b>12.1</b>	<b>10.3</b>	<b>14.2</b>	<b>16.7</b>	<b>--</b>	
NCREIF Property Index			3.1	10.1	3.1	13.5	11.9	12.5	--	11.8	11.0	10.5	14.3	13.1	--	
NCREIF-ODCE			3.7	11.3	3.7	14.9	13.4	14.0	--	12.5	13.9	10.9	16.0	16.4	--	
ASB Real Estate	28,016,004	4.3	2.4	10.2	2.4	14.0	--	--	--	12.5	12.5	--	--	--	12.9	Dec-12
NCREIF Property Index			3.1	10.1	3.1	13.5	--	--	--	11.8	11.0	--	--	--	12.0	Dec-12
NCREIF-ODCE			3.7	11.3	3.7	14.9	--	--	--	12.5	13.9	--	--	--	13.8	Dec-12
Clarion Lion	27,529,369	4.2	3.1	11.2	3.1	15.7	12.6	14.1	--	12.2	11.8	9.9	17.8	18.2	3.0	Dec-06
NCREIF Property Index			3.1	10.1	3.1	13.5	11.9	12.5	--	11.8	11.0	10.5	14.3	13.1	6.7	Dec-06
NCREIF-ODCE			3.7	11.3	3.7	14.9	13.4	14.0	--	12.5	13.9	10.9	16.0	16.4	5.3	Dec-06
1221 State St. Corp	1,393,178	0.2	0.0	0.0	0.0	0.0	0.0	-1.5	--	0.0	0.0	0.1	-9.0	3.7	-0.6	Sep-08
<b>Total Commodities</b>	<b>14,653,874</b>	<b>2.3</b>	<b>-14.9</b>	<b>-16.4</b>	<b>-14.9</b>	<b>-26.8</b>	<b>-16.2</b>	<b>-9.1</b>	<b>--</b>	<b>-16.9</b>	<b>-9.5</b>	<b>-1.2</b>	<b>-13.5</b>	<b>16.6</b>	<b>-6.1</b>	<b>Oct-09</b>
Bloomberg Commodity Index TR USD			-14.5	-15.8	-14.5	-26.0	-16.0	-8.9	--	-17.0	-9.5	-1.1	-13.3	16.8	-6.0	Oct-09
BlackRock Commodities	4,574,368	0.7	-14.5	-16.0	-14.5	-26.2	-16.2	-9.1	--	-17.2	-9.7	-1.2	-13.5	16.6	-6.4	Oct-09
Bloomberg Commodity Index TR USD			-14.5	-15.8	-14.5	-26.0	-16.0	-8.9	--	-17.0	-9.5	-1.1	-13.3	16.8	-6.0	Oct-09
Gresham MTAP Commodity Builder	10,079,506	1.6	-15.2	-16.6	-15.2	-27.1	--	--	--	-16.7	--	--	--	--	-17.4	Aug-13
Bloomberg Commodity Index TR USD			-14.5	-15.8	-14.5	-26.0	--	--	--	-17.0	--	--	--	--	-17.3	Aug-13
<b>Total Cash</b>																
Cash Account	5,867,367	0.9	0.0	0.0	0.0	0.0	0.0	0.1	--	0.0	0.0	0.4	0.2	--	--	
91 Day T-Bills			0.0	0.0	0.0	0.0	0.0	0.0	--	0.0	0.0	0.1	0.0	--	--	

Investment Manager  
Performance Analysis - 3 & 5 Years (Net of Fees)

Period Ending: September 30, 2015

3 Years

	Anlzd Ret	Ann Excess BM Return	Anlzd Std Dev	Anlzd Alpha	Beta	Tracking Error	R-Squared	Sharpe Ratio	Info Ratio	Up Mkt Cap Ratio	Down Mkt Cap Ratio
BlackRock Russell 1000	12.66%	-0.01%	9.61%	0.00%	1.00	0.02%	1.00	1.31	-0.50	99.93%	99.98%
TimesSquare Capital Mid Cap Growth	13.79%	-0.18%	11.58%	-0.62%	1.03	3.91%	0.89	1.19	-0.05	98.60%	99.36%
T. Rowe Price Small Cap Value	8.29%	-0.89%	12.83%	-0.15%	0.92	2.68%	0.96	0.64	-0.33	86.34%	87.88%
BlackRock International Equity	5.79%	-0.29%	12.08%	-0.29%	1.00	0.05%	1.00	0.48	-6.21	98.32%	101.24%
Templeton Foreign Equity	4.33%	1.54%	12.17%	1.65%	0.96	3.64%	0.91	0.35	0.42	103.66%	87.70%
DFA Emerging Markets Value	-6.87%	-1.93%	15.59%	-1.34%	1.12	2.82%	0.98	-0.44	-0.68	104.21%	114.75%
Bradford & Marzec Fixed	2.63%	0.92%	3.32%	0.69%	1.13	1.08%	0.91	0.78	0.85	121.34%	81.58%
BlackRock US TIPS	-1.84%	-0.01%	5.44%	0.01%	1.01	0.12%	1.00	-0.35	-0.07	102.55%	101.55%
Clarion Lion	12.64%	0.73%	1.84%	-3.45%	1.35	1.64%	0.22	6.84	0.45	106.91%	--
BlackRock Commodities	-16.22%	-0.20%	13.99%	-0.25%	1.00	0.09%	1.00	-1.16	-2.10	97.02%	100.35%

5 Years

	Anlzd Ret	Ann Excess BM Return	Anlzd Std Dev	Anlzd Alpha	Beta	Tracking Error	R-Squared	Sharpe Ratio	Info Ratio	Up Mkt Cap Ratio	Down Mkt Cap Ratio
BlackRock Russell 1000	13.42%	0.00%	13.56%	0.01%	1.00	0.02%	1.00	0.99	0.22	99.99%	99.92%
TimesSquare Capital Mid Cap Growth	13.03%	-0.56%	16.07%	-0.16%	0.97	3.82%	0.94	0.81	-0.15	93.85%	96.61%
T. Rowe Price Small Cap Value	11.02%	0.85%	17.77%	1.32%	0.95	3.09%	0.97	0.62	0.28	93.26%	87.30%
BlackRock International Equity	4.17%	-0.28%	14.82%	-0.28%	1.00	0.04%	1.00	0.28	-6.32	98.22%	100.68%
Templeton Foreign Equity	3.21%	0.94%	15.74%	0.92%	1.01	3.45%	0.95	0.20	0.27	107.10%	98.37%
DFA Emerging Markets Value	-6.21%	-2.96%	19.90%	-2.54%	1.13	3.10%	0.99	-0.31	-0.96	100.49%	113.45%
Bradford & Marzec Fixed	4.45%	1.36%	3.02%	2.17%	0.74	2.22%	0.52	1.46	0.61	124.34%	63.90%
BlackRock US TIPS	2.56%	0.01%	5.36%	-0.01%	1.01	0.10%	1.00	0.47	0.09	101.18%	101.50%
Clarion Lion	14.05%	1.51%	2.74%	-10.21%	1.93	1.99%	0.61	5.12	0.76	115.42%	--
BlackRock Commodities	-9.08%	-0.19%	15.98%	-0.20%	1.00	0.08%	1.00	-0.57	-2.42	98.23%	100.30%

# Private Equity Non Marketable Securities Overview

Period Ending: September 30, 2015

Vintage	Manager & Fund Name	Estimated 9/30 Market Value <sup>3</sup>	Total Commitment	Capital Called	% Called	Remaining Commitment	Capital Returned	Market Value for IRR	Distrib./ Paid-In (DPI) <sup>1</sup>	Tot. Value/ Paid-In (TVPI) <sup>2</sup>	Net IRR Since Inception <sup>5</sup>	IRR Date	
2011	HarbourVest IX-Buyout	\$4,416,504	\$10,000,000	\$4,425,000	44%	\$5,575,000	\$919,712	\$4,337,613	20.8%	120.6%	14.6%	6/30/15	
2011	HarbourVest IX-Credit	\$645,639	\$2,000,000	\$730,000	37%	\$1,270,000	\$287,025	\$721,257	39.3%	127.8%	16.5%	6/30/15	
2008	HarbourVest Int'l VI <sup>6</sup>	\$2,307,590	\$3,712,930	\$2,204,205	59%	\$1,508,725	\$349,047	\$2,307,590	15.8%	120.5%	17.9%	6/30/15	
2011	HarbourVest IX-Venture	\$3,109,681	\$4,000,000	\$2,640,000	66%	\$1,360,000	\$435,080	\$2,929,681	16.5%	134.3%	22.9%	6/30/15	
2010	KKR Mezzanine <sup>7</sup>	\$6,590,450	\$10,000,000	\$10,000,000	100%	\$0	\$6,950,026	\$7,383,739	69.5%	135.4%	9.4%	3/31/15	
2011	PIMCO BRAVO <sup>4</sup>	\$5,400,347	\$10,000,000	\$10,000,000	100%	\$0	\$13,666,433	\$5,400,347	136.7%	190.7%	23.3%	9/30/15	
Total Alternative Illiquids		\$22,470,211	\$39,712,930	\$29,999,205	76%	\$9,713,725	\$22,607,323	\$23,080,227	76.9%	152.3%			
% of Portfolio (Market Value)		3.5%											
								Management Fee	Admin Fee	Interest Expense	Other Expense	Total Expense <sup>8</sup>	
								HarbourVest IX-Buyout	\$24,835	\$0	\$0	\$2,992	\$27,827
								HarbourVest IX-Credit	\$4,971	\$0	\$0	\$1,253	\$6,224
								HarbourVest Int'l VI	\$7,373	\$0	\$0	\$271	\$7,644
								HarbourVest IX-Venture	\$9,974	\$0	\$0	\$854	\$10,828
								KKR Mezzanine	\$21,140	\$0	\$0	\$24,210	\$45,350
								PIMCO BRAVO	\$15,798	\$3,485	\$3,699	-\$1,417	\$21,565
									\$84,091	\$3,485	\$3,699	\$28,163	\$119,438

<sup>1</sup>(DPI) is equal to (capital returned / capital called)

<sup>1</sup>(DPI) is equal to (capital returned / capital called)

<sup>2</sup>(TVPI) is equal to (market value + capital returned) / capital called

<sup>3</sup>Last known market value + capital calls - distributions (All HarbourVest funds are as of 6/30/2015)

<sup>4</sup>Investment period ended, no further capital to be called.

<sup>5</sup>Gross IRR is calculated on the cash flows of the underlying investments of the fund and is net of the underlying fund fees and carried interest.

<sup>6</sup>Net IRR is calculated on the cash flows of all the limited partners of the fund and is net of all fees. Each IRR figure is provided by its respective manager.

<sup>7</sup>HarbourVest International Private Equity Partners VI-Partnership Fund L.P. values are originally presented in euros and are calculated to dollars using OANDA™.

<sup>8</sup>KKR: Total capital called is \$11,251,720, which includes recycled distributions. Unused capital commitment is \$1,462,588 after including distribution proceeds available for reinvestment

<sup>9</sup>All HarbourVest fees and expenses are for 2Q 2015

Total Fund  
Financial Reconciliation (Last Three Months)

Period Ending: September 30, 2015

Manager	Beginning Market Value	Contributions	Disbursements	Fees <sup>2</sup>	Net Cash Flow	Investment Income	Capital Gain/ Loss	Total Gains/Earnings/ Losses	Ending Market Value
Blackrock Russell 1000 Index	\$165,548,955	\$0	\$0	\$0	\$0	\$0	(\$11,291,149)	(\$11,291,149)	\$154,257,806
Times Square Capital	\$30,504,881	\$0	\$0	(\$49,559)	(\$49,559)	\$59,306	(\$2,164,451)	(\$2,105,145)	\$28,350,178
T. Rowe Price Associates	\$28,042,416	\$0	\$0	\$0	\$0	\$109,712	(\$2,402,090)	(\$2,292,378)	\$25,750,038
DFA Emerging Markets	\$20,988,405	\$0	\$0	\$0	\$0	\$171,834	(\$4,194,085)	(\$4,022,252)	\$16,966,153
Vontobel Global Emerging Markets	\$23,471,080	\$0	\$0	\$0	\$0	\$134,379	(\$2,622,443)	(\$2,488,064)	\$20,983,016
Blackrock International Equity	\$64,443,623	\$0	\$0	\$0	\$0	\$0	(\$6,576,358)	(\$6,576,358)	\$57,867,265
Franklin Templeton International Equity	\$62,048,320	\$0	\$0	\$0	\$0	\$0	(\$6,585,317)	(\$6,585,317)	\$55,463,003
Bradford & Marzec, Inc.	\$90,136,319	\$0	\$0	\$0	\$0	\$694,022	\$76,341	\$770,364	\$90,906,682
MacKay Shields Core Plus Opp.	\$84,628,784	\$0	\$0	\$0	\$0	\$0	(\$737,898)	(\$737,898)	\$83,890,886
Blackrock US TIPS	\$14,689,116	\$0	\$0	\$0	\$0	\$0	(\$174,633)	(\$174,633)	\$14,514,483
Clarion Lion Properties	\$26,713,684	\$186,707	(\$266,470)	(\$71,691)	(\$151,454)	\$288,589	\$678,550	\$967,139	\$27,529,369
ICERS State Street Real Estate	\$1,392,291	\$36,883	(\$36,004)	\$0	\$880	\$7	\$0	\$7	\$1,393,178
ASB Allegiance Real Estate	\$27,283,315	\$0	\$0	(\$65,030)	(\$65,030)	\$237,976	\$559,743	\$797,719	\$28,016,004
PIMCO BRAVO	\$5,619,387	\$0	\$0	(\$21,565)	(\$21,565)	\$271,049	(\$468,524)	(\$197,475)	\$5,400,347
KKR Mezzanine I	\$7,295,702	\$374,050	(\$1,001,696)	(\$45,350)	(\$672,996)	\$156,592	(\$188,847)	(\$32,255)	\$6,590,450
Blackrock Global Commodity	\$5,345,872	\$0	\$0	\$0	\$0	\$0	(\$771,504)	(\$771,504)	\$4,574,368
Gresham TAP Commodity Builder	\$11,879,493	\$0	\$0	(\$17,188)	(\$17,188)	\$0	(\$1,782,799)	(\$1,782,799)	\$10,079,506
HarbourVest International VI <sup>1</sup>	\$2,192,110	\$144,560	(\$144,560)	(\$7,644)	(\$7,644)	\$1	\$123,123	\$123,124	\$2,307,590
HarbourVest Buyout IX <sup>1</sup>	\$3,809,419	\$575,000	(\$249,535)	(\$27,827)	\$297,638	\$11	\$230,545	\$230,556	\$4,337,613
HarbourVest Credit Opportunities IX <sup>1</sup>	\$588,411	\$110,000	(\$20,328)	(\$6,224)	\$83,448	\$2,867	\$46,531	\$49,398	\$721,257
HarbourVest Venture IX <sup>1</sup>	\$2,621,925	\$200,000	(\$66,132)	(\$10,828)	\$123,040	\$2	\$184,714	\$184,716	\$2,929,681
Cash	\$10,422,994	\$647,589	(\$5,203,216)	\$0	(\$4,555,627)	\$0	\$0	\$0	\$5,867,367
The Clifton Group	\$1,391,756	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,391,756
<b>Totals</b>	<b>\$691,058,257</b>	<b>\$2,274,789</b>	<b>(\$6,987,941)</b>	<b>(\$322,906)</b>	<b>(\$5,036,057)</b>	<b>\$2,126,346</b>	<b>(\$38,060,550)</b>	<b>(\$35,934,204)</b>	<b>\$650,087,996</b>

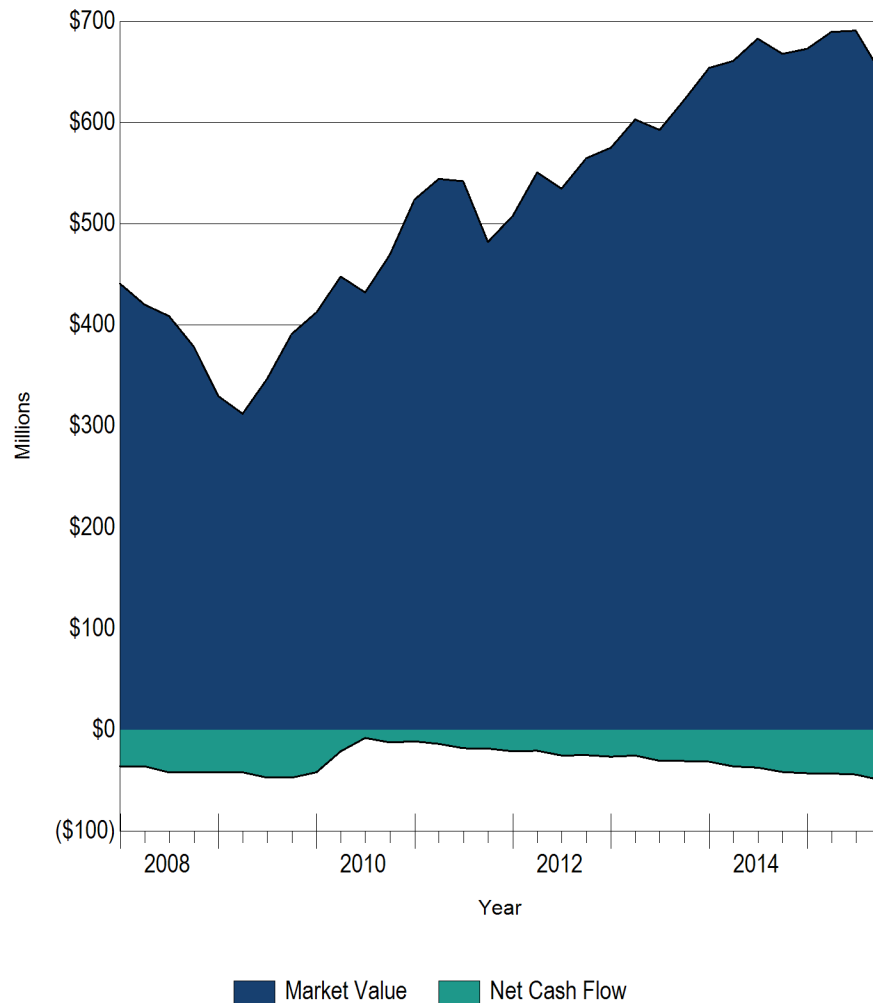
<sup>1</sup>2Q 2015 data

<sup>2</sup>Fee transactions not included in the Portfolio Reconciliation page at beginning of report

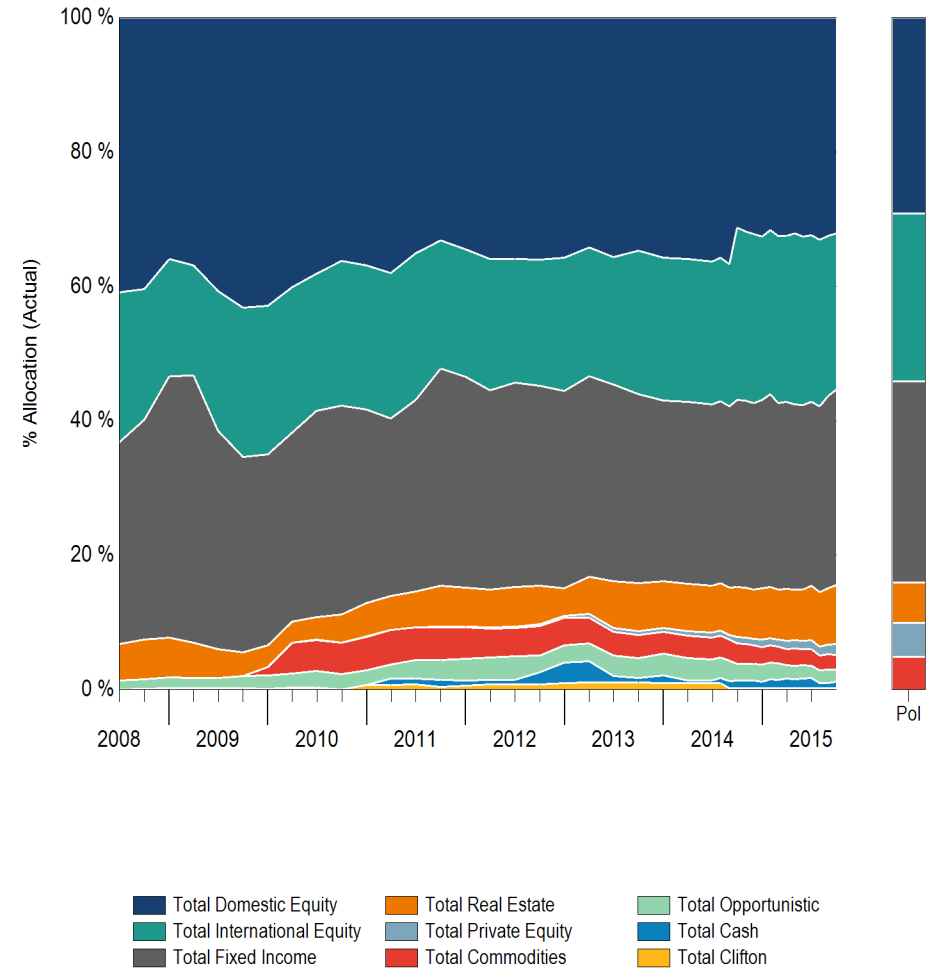
# Total Fund Asset Allocation History

Period Ending: September 30, 2015

Market Value History



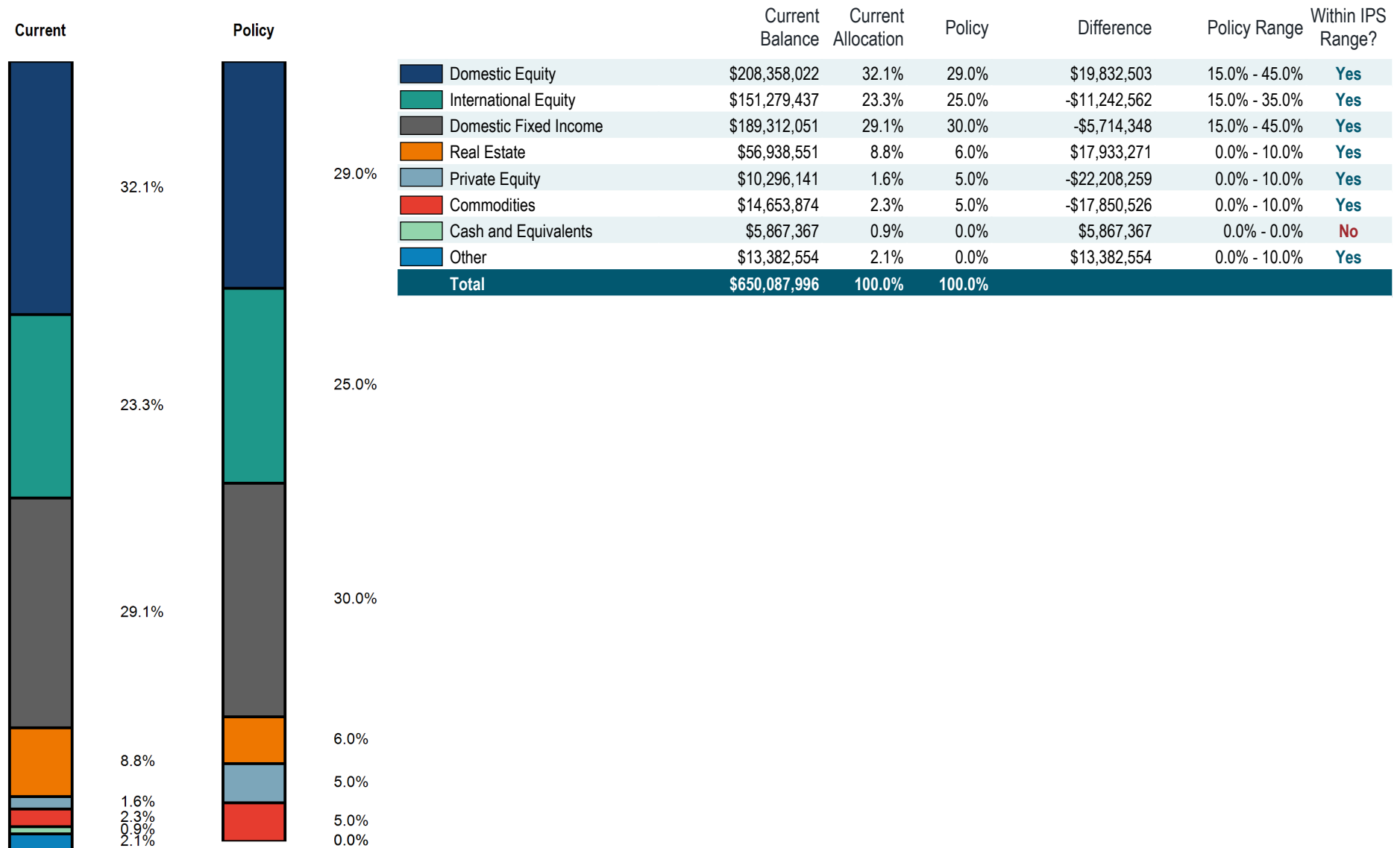
Asset Allocation History





# Total Fund Asset Allocation vs. Policy

Period Ending: September 30, 2015



# Total Fund Manager Report Card

Period Ending: September 30, 2015

**Objective 1: Exceed passive benchmark on a net-of-fee basis**

**Objective 2: Exceed median manager return in comparable universe on a gross-of-fee basis**

Asset Class / Manager	Benchmark	3-Year					5-Year				
		Manager Return	Benchmark Return	Meets Expectations	Universe Ranking	Meets Expectations	Manager Return	Benchmark Return	Meets Expectations	Universe Ranking	Meets Expectations
<u>Domestic Equity</u>											
BlackRock	Russell 1000 Index	12.7%	12.7%	No			13.4%	13.4%	No		
Times Square	Russell Mid-Cap Growth Index + 100 basis points	13.8%	15.0%	No	32	Yes	13.0%	14.6%	No	47	Yes
T. Rowe Price	Russell 2000 Value Index + 100 basis points	8.3%	10.2%	No	85	No	11.0%	11.2%	No	63	No
<u>International Equity</u>											
BlackRock	MSCI EAFE Index	5.8%	6.1%	No			4.2%	4.4%	No		
Franklin Templeton	MSCI All Country World ex U.S. Index + 100 basis points	4.3%	3.8%	Yes	60	No	3.2%	3.3%	No	69	No
Dimensional Fund Advisors	MSCI Emerging Markets Index + 150 basis points	-6.9%	-3.4%	No	90	No	-6.2%	-1.7%	No	98	No
Vontobel	MSCI Emerging Markets Index + 150 basis points										
<u>Fixed Income</u>											
Bradford & Marzec	Barclays Credit Aggregate Bond Index + 50 basis points	2.6%	2.2%	Yes	28	Yes	4.5%	3.6%	Yes	28	Yes
MacKay Shields	Barclays Credit Aggregate Bond Index + 50 basis points										
BlackRock	Barclays Credit US TIPS Index	-1.8%	-1.8%	No			2.6%	2.5%	Yes		
<u>Alternatives</u>											
Clarion	NCREIF Property Index	12.6%	11.9%	Yes			14.1%	12.5%	Yes		
ASB Allegiance	NCREIF Property Index										
BlackRock	Bloomberg Commodity Index	-16.2%	-16.0%	No			-9.1%	-8.9%	No		
Gresham TAP	Bloomberg Commodity Index + 100 basis points										
PIMCO	Actuarial Assumption Rate + 100 basis points										
KKR	Actuarial Assumption Rate + 100 basis points										
HarbourVest Partners	Russell 3000 + 250 basis points										

Asset Class / Manager	Benchmark	10-Year					15-Year				
		Manager Return	Benchmark Return	Meets Expectations	Universe Ranking	Meets Expectations	Manager Return	Benchmark Return	Meets Expectations	Universe Ranking	Meets Expectations
<u>Domestic Equity</u>											
BlackRock	Russell 1000 Index	7.0%	7.0%	No							
Times Square	Russell Mid-Cap Growth Index + 100 basis points	9.5%	9.1%	Yes	18	Yes					
T. Rowe Price	Russell 2000 Value Index + 100 basis points	6.5%	6.3%	Yes	58	No	10.8%	9.5%	Yes		
<u>International Equity</u>											
BlackRock	MSCI EAFE Index	3.2%	3.4%	No							
Franklin Templeton	MSCI All Country World ex U.S. Index + 100 basis points	3.8%	4.5%	No	63	No	5.0%	4.9%	Yes		
Dimensional Fund Advisors	MSCI Emerging Markets Index + 150 basis points										
Vontobel	MSCI Emerging Markets Index + 150 basis points										
<u>Fixed Income</u>											
Bradford & Marzec	Barclays Credit Aggregate Bond Index + 50 basis points	5.9%	5.1%	Yes	25	Yes	6.1%	5.8%	Yes		
MacKay Shields	Barclays Credit Aggregate Bond Index + 50 basis points										
BlackRock	Barclays Credit US TIPS Index										
<u>Alternatives</u>											
Clarion	NCREIF Property Index										
ASB Allegiance	NCREIF Property Index										
BlackRock	Bloomberg Commodity Index										
Gresham TAP	Bloomberg Commodity Index + 100 basis points										
PIMCO	Actuarial Assumption Rate + 100 basis points										
KKR	Actuarial Assumption Rate + 100 basis points										
HarbourVest Partners	Russell 3000 + 250 basis points										

# Total Fund Investment Fee Analysis

Period Ending: September 30, 2015

Account	Fee Schedule	Market Value As of 9/30/2015	% of Portfolio	Estimated Annual Fee (\$)	Estimated Annual Fee (%)
1221 State St. Corp	No Fee	\$1,393,178	0.2%	--	--
ASB Real Estate	1.25% of First \$5.0 Mil, 1.00% of Next \$10.0 Mil, 0.75% Thereafter	\$28,016,004	4.3%	\$260,120	0.93%
BlackRock Commodities	0.30% of Assets	\$4,574,368	0.7%	\$13,723	0.30%
BlackRock International Equity	0.15% of First \$50.0 Mil, 0.10% of Next \$50.0 Mil	\$57,867,265	8.9%	\$82,867	0.14%
BlackRock Russell 1000	0.03% of Assets	\$154,257,806	23.7%	\$46,277	0.03%
BlackRock US TIPS	0.07% of Assets	\$14,514,483	2.2%	\$10,160	0.07%
Bradford & Marzec Fixed	0.29% of First \$100.0 Mil, 0.25% of Next \$100.0 Mil	\$90,906,682	14.0%	\$259,084	0.29%
Cash Account	No Fee	\$5,867,367	0.9%	--	--
Clarion Lion	1.25% of First \$10.0 Mil, 1.00% of Next \$15.0 Mil, 0.85% Thereafter	\$27,529,369	4.2%	\$296,500	1.08%
Clifton	0.20% of First \$25.0 Mil, 0.10% of Next \$50.0 Mil, 0.05% Thereafter Retainer Fee: \$1,500 (Monthly) Minimum Expense: \$12,500 (Quarterly)	\$1,391,756	0.2%	--	--
DFA Emerging Markets Value	0.61% of Assets	\$16,966,153	2.6%	\$103,494	0.61%
Gresham MTAP Commodity Builder	0.75% of Assets	\$10,079,506	1.6%	\$75,596	0.75%
Harbourvest Buyout IX	\$100,000 Annually	\$4,337,613	0.7%	\$100,000	2.31%
Harbourvest Credit Ops IX	\$20,000 Annually	\$721,257	0.1%	\$20,000	2.77%
Harbourvest International PE VI	\$35,000 Annually	\$2,307,590	0.4%	\$35,000	1.52%
Harbourvest Venture IX	\$40,000 Annually	\$2,929,681	0.5%	\$40,000	1.37%
KKR Mezzanine Partners	\$150,000 Annually	\$6,590,450	1.0%	\$150,000	2.28%
MacKay Shields Core Plus Opportunities	0.35% of Assets	\$83,890,886	12.9%	\$293,618	0.35%
PIMCO BRAVO	1.90% of Assets	\$5,400,347	0.8%	\$102,607	1.90%
T. Rowe Price Small Cap Value	0.75% of First \$20.0 Mil, 0.60% Thereafter	\$25,750,038	4.0%	\$184,500	0.72%
Templeton Foreign Equity	0.78% of Assets	\$55,463,003	8.5%	\$432,611	0.78%
TimesSquare Capital Mid Cap Growth	0.65% of Assets	\$28,350,178	4.4%	\$184,276	0.65%
Verus Advisory Fee	\$175,000 Annually				
Vontobel Global Emerging Markets	0.95% of First \$150.0 Mil, 0.85% Thereafter	\$20,983,016	3.2%	\$199,339	0.95%
<b>Investment Management Fee</b>		<b>\$650,087,996</b>	<b>100.0%</b>	<b>\$2,889,773</b>	<b>0.44%</b>

\*HarbourVest, KKR and PIMCO BRAVO fees are estimated gross management fees only and do not include incentive allocations or offsetting cash flows received by the fund.

\*HarbourVest International Private Equity VI fees are based on committed Euros, actual US Dollar amount will fluctuate based on exchange rates.

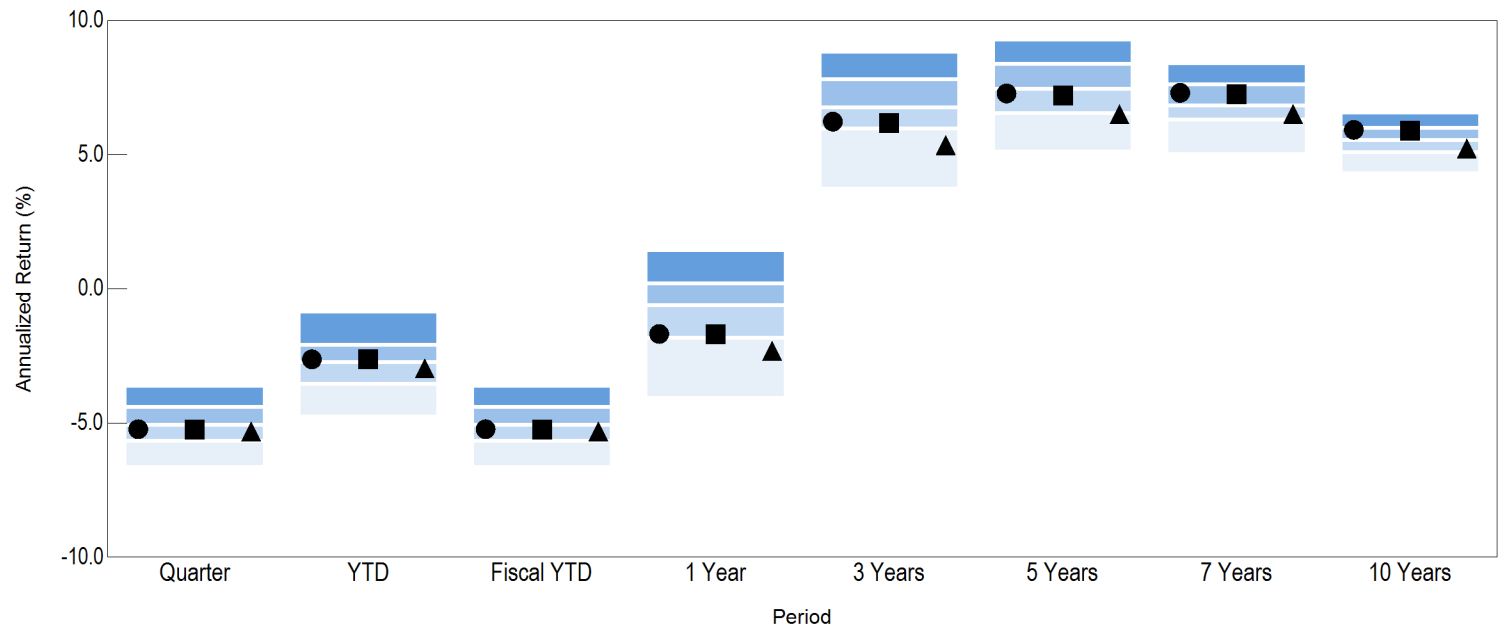
\*Verus advisory fee shown for disclosure purposes only and is not included in total investment management fee calculations.

# Total Fund

## Peer Universe Comparison: Cumulative Performance (Gross of Fees)

Period Ending: September 30, 2015

Total Fund Cumulative Performance vs. InvestorForce Public DB Gross

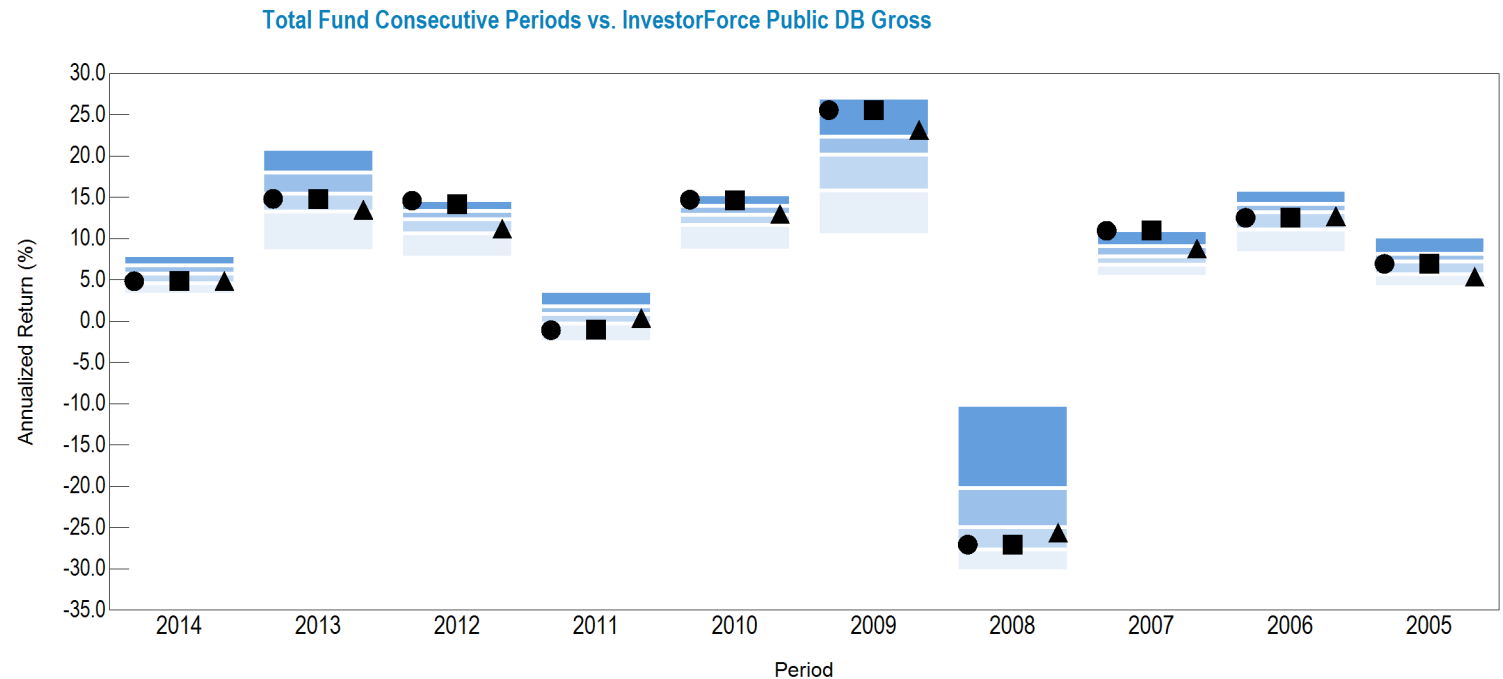


	Return (Rank)							
5th Percentile	-3.6	-0.9	-3.6	1.4	8.8	9.3	8.4	6.6
25th Percentile	-4.4	-2.1	-4.4	0.2	7.8	8.4	7.6	6.0
Median	-5.1	-2.7	-5.1	-0.6	6.8	7.5	6.8	5.6
75th Percentile	-5.6	-3.5	-5.6	-1.8	6.0	6.6	6.3	5.1
95th Percentile	-6.6	-4.8	-6.6	-4.1	3.7	5.1	5.0	4.3
# of Portfolios	258	250	258	247	220	199	177	163
● Total Fund	-5.2 (57)	-2.6 (47)	-5.2 (57)	-1.7 (74)	6.2 (69)	7.3 (54)	7.3 (37)	5.9 (33)
■ Total Fund ex Clifton	-5.2 (58)	-2.6 (47)	-5.2 (58)	-1.7 (74)	6.2 (71)	7.2 (57)	7.2 (39)	5.9 (35)
▲ Policy Index	-5.3 (61)	-3.0 (56)	-5.3 (61)	-2.3 (81)	5.4 (83)	6.5 (78)	6.5 (66)	5.2 (72)

# Total Fund

## Peer Universe Comparison: Consecutive Periods (Gross of Fees)

Period Ending: September 30, 2015

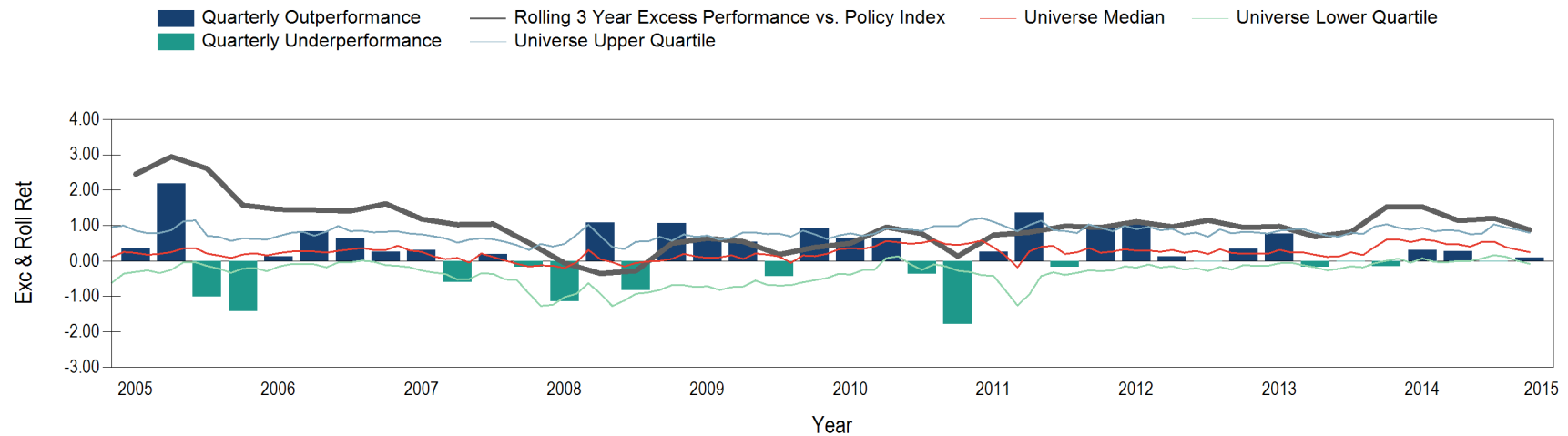


	Return (Rank)									
5th Percentile	8.0	20.8	14.6	3.6	15.4	27.0	-10.1	11.0	15.9	10.2
25th Percentile	6.8	18.0	13.4	1.9	14.0	22.4	-20.1	9.1	14.2	8.2
Median	5.8	15.5	12.4	0.9	12.9	20.2	-24.9	7.9	13.2	7.3
75th Percentile	4.6	13.3	10.7	-0.3	11.7	15.9	-27.6	6.9	11.2	5.7
95th Percentile	3.2	8.5	7.8	-2.5	8.6	10.5	-30.3	5.4	8.3	4.2
# of Portfolios	248	231	236	206	188	184	181	177	171	158
● Total Fund	4.8 (74)	14.8 (59)	14.6 (6)	-1.1 (89)	14.7 (13)	25.6 (11)	-27.1 (68)	10.9 (6)	12.5 (59)	6.9 (54)
■ Total Fund ex Clifton	4.9 (72)	14.7 (59)	14.2 (11)	-1.0 (88)	14.7 (15)	25.6 (11)	-27.1 (68)	10.9 (6)	12.5 (59)	6.9 (54)
▲ Policy Index	4.9 (72)	13.5 (74)	11.2 (72)	0.4 (63)	13.0 (49)	23.2 (23)	-25.6 (58)	8.8 (31)	12.7 (57)	5.4 (80)

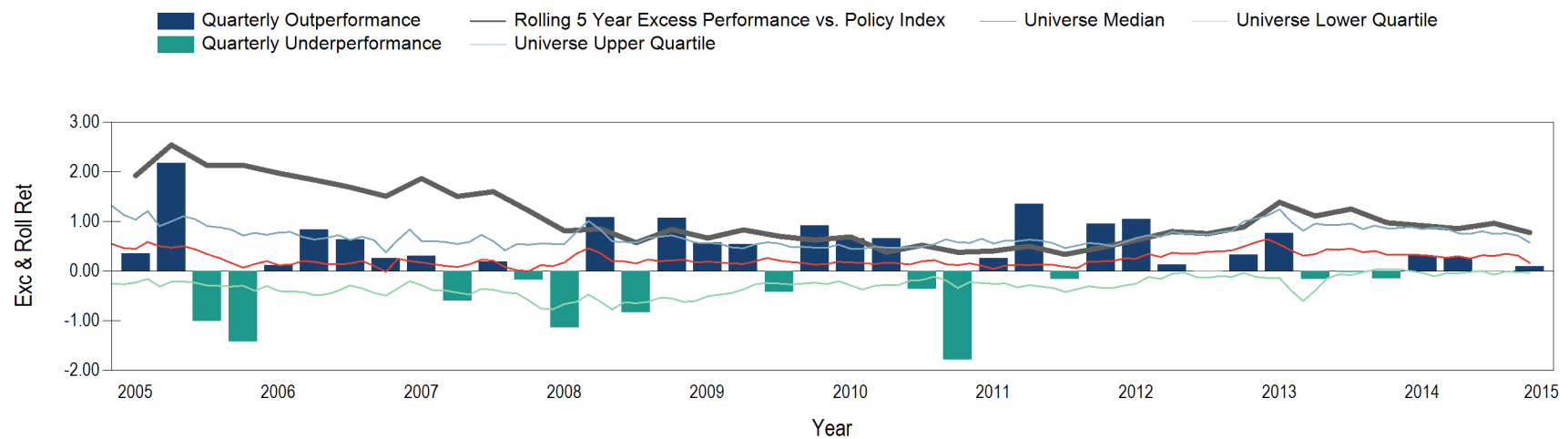
# Total Fund Rolling Return Analysis (Gross of Fees)

Period Ending: September 30, 2015

## Rolling 3 Year Annualized Excess Performance



## Rolling 5 Year Annualized Excess Performance



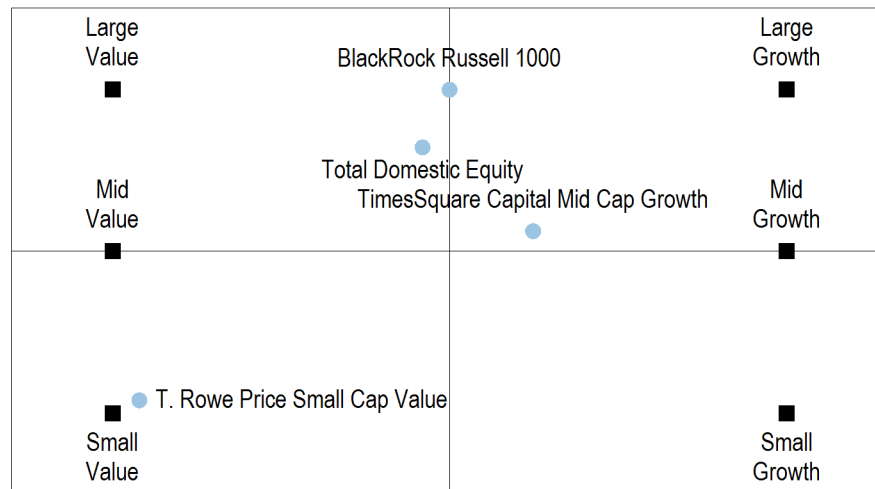
# Total Domestic Equity

## Asset Class Overview (Gross of Fees)

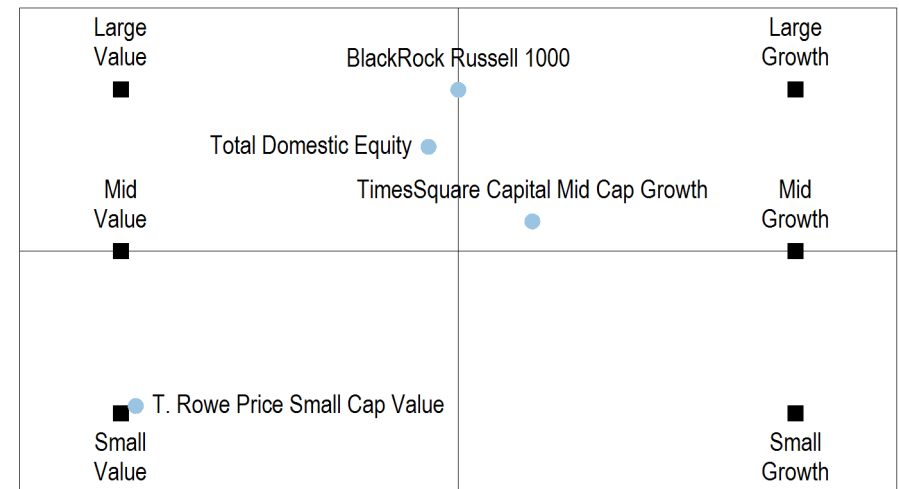
Period Ending: September 30, 2015

	Market Value	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2014	2013	2012	2011	2010
<b>Total Domestic Equity</b>	<b>208,358,022</b>	<b>-7.0</b>	<b>-4.9</b>	<b>-7.0</b>	<b>0.0</b>	<b>12.4</b>	<b>13.2</b>	<b>7.4</b>	<b>10.2</b>	<b>33.9</b>	<b>17.1</b>	<b>0.9</b>	<b>18.3</b>
Russell 3000		-7.2	-5.4	-7.2	-0.5	12.5	13.3	6.9	12.6	33.6	16.4	1.0	16.9
eA All US Equity Gross Rank		34	47	34	55	59	52	60	51	62	37	40	55
BlackRock Russell 1000	154,257,806	-6.8	-5.2	-6.8	-0.6	12.7	13.5	7.0	13.3	33.2	16.5	1.6	16.2
Russell 1000		-6.8	-5.2	-6.8	-0.6	12.7	13.4	7.0	13.2	33.1	16.4	1.5	16.1
eA US Large Cap Equity Gross Rank		46	52	46	52	53	45	64	41	54	39	39	34
TimesSquare Capital Mid Cap Growth	28,350,178	-7.1	-1.3	-7.1	2.4	14.4	13.7	10.2	6.2	38.7	20.0	-0.7	19.3
Russell MidCap Growth		-8.0	-4.1	-8.0	1.4	14.0	13.6	8.1	11.9	35.7	15.8	-1.7	26.4
eA US Mid Cap Growth Equity Gross Rank		22	32	22	53	32	47	18	75	36	11	40	94
T. Rowe Price Small Cap Value	25,750,038	-8.2	-6.5	-8.2	0.6	9.0	11.8	7.3	-0.5	34.7	17.1	1.0	25.6
Russell 2000 Value		-10.7	-10.1	-10.7	-1.6	9.2	10.2	5.3	4.2	34.5	18.1	-5.5	24.5
eA US Small Cap Value Equity Gross Rank		24	48	24	48	85	63	58	88	78	49	22	63

U.S. Effective Style Map  
3 Years Ending September 30, 2015



U.S. Effective Style Map  
5 Years Ending September 30, 2015



# Total Domestic Equity Asset Class Overview (Net of Fees)

Period Ending: September 30, 2015

	Market Value	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2014	2013	2012	2011	2010
<b>Total Domestic Equity</b>	<b>208,358,022</b>	<b>-7.1</b>	<b>-5.0</b>	<b>-7.1</b>	<b>-0.2</b>	<b>12.1</b>	<b>13.0</b>	<b>7.1</b>	<b>10.0</b>	<b>33.6</b>	<b>16.9</b>	<b>0.7</b>	<b>18.0</b>
<i>Russell 3000</i>		-7.2	-5.4	-7.2	-0.5	12.5	13.3	6.9	12.6	33.6	16.4	1.0	16.9
BlackRock Russell 1000	154,257,806	-6.8	-5.2	-6.8	-0.6	12.7	13.4	7.0	13.2	33.1	16.4	1.5	16.1
<i>Russell 1000</i>		-6.8	-5.2	-6.8	-0.6	12.7	13.4	7.0	13.2	33.1	16.4	1.5	16.1
TimesSquare Capital Mid Cap Growth	28,350,178	-7.2	-1.8	-7.2	1.7	13.8	13.0	9.5	5.7	37.8	19.2	-1.3	18.5
<i>Russell MidCap Growth</i>		-8.0	-4.1	-8.0	1.4	14.0	13.6	8.1	11.9	35.7	15.8	-1.7	26.4
T. Rowe Price Small Cap Value	25,750,038	-8.3	-7.0	-8.3	-0.1	8.3	11.0	6.5	-1.2	33.8	16.3	0.3	24.8
<i>Russell 2000 Value</i>		-10.7	-10.1	-10.7	-1.6	9.2	10.2	5.3	4.2	34.5	18.1	-5.5	24.5

## Common Holdings Matrix As of September 30, 2015

	BlackRock Russell 1000		TimesSquare Capital Mid Cap Growth		T. Rowe Price Small Cap Value	
	#	%	#	%	#	%
BlackRock Russell 1000	--	--	64	85.58	26	18.84
TimesSquare Capital Mid Cap Growth	64	3.23	--	--	4	2.94
T. Rowe Price Small Cap Value	26	0.48	4	5.20	--	--

## Correlation Matrix Last 5 Years

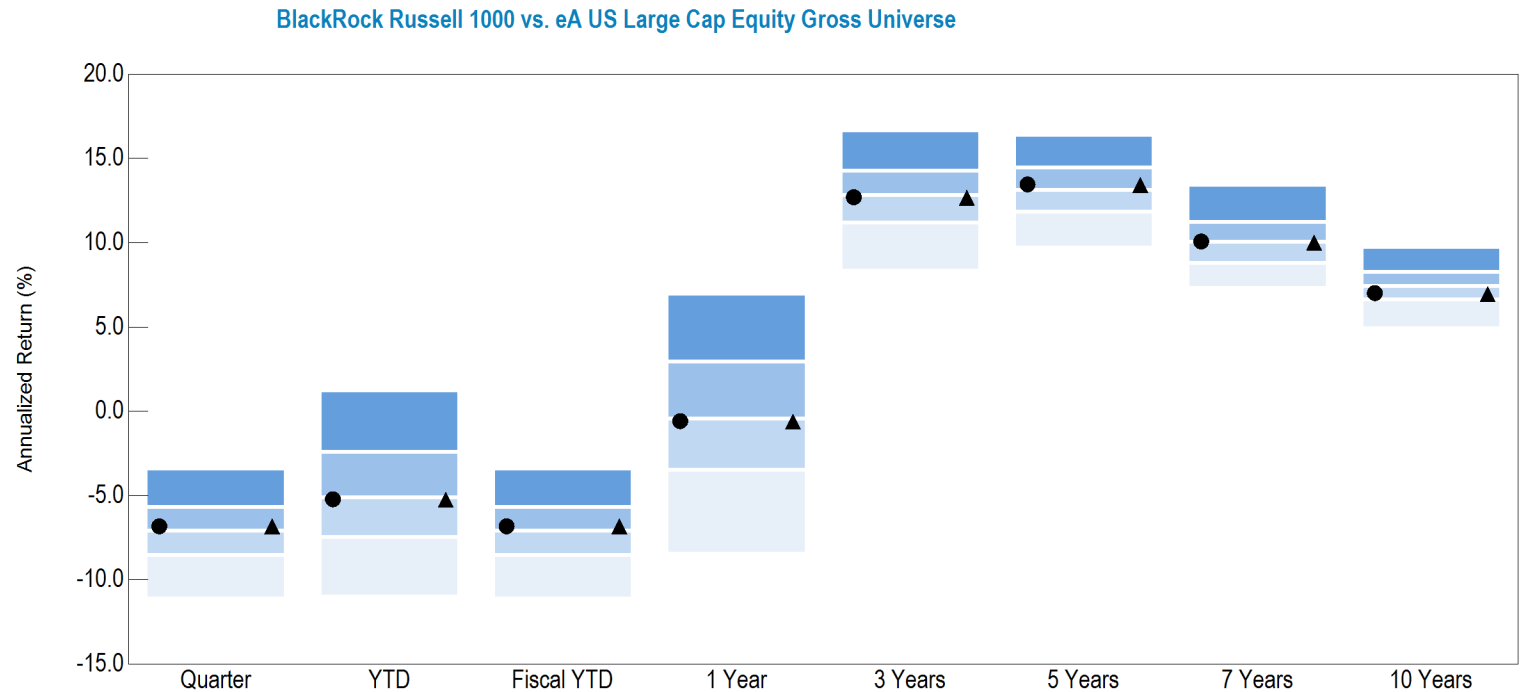
	Total Domestic Equity	BlackRock Russell 1000	TimesSquare Capital Mid Cap Growth	T. Rowe Price Small Cap Value
Total Domestic Equity	1.00	--	--	--
BlackRock Russell 1000	1.00	1.00	--	--
TimesSquare Capital Mid Cap Growth	0.98	0.97	1.00	--
T. Rowe Price Small Cap Value	0.95	0.92	0.91	1.00



# BlackRock Russell 1000

## Cumulative Performance Comparison (Gross of Fees)

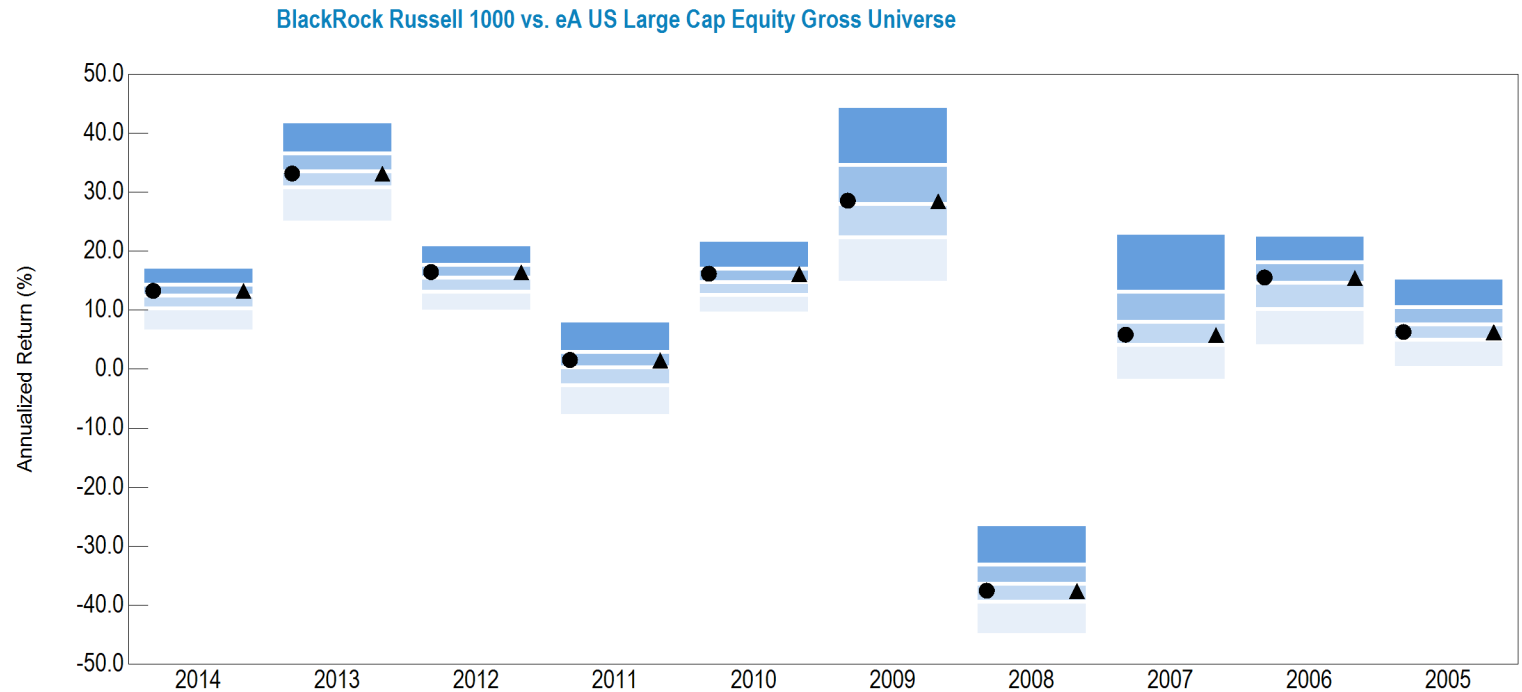
Period Ending: September 30, 2015



	Return (Rank)							
5th Percentile	-3.4	1.2	-3.4	7.0	16.7	16.4	13.4	9.7
25th Percentile	-5.7	-2.4	-5.7	3.0	14.3	14.5	11.3	8.3
Median	-7.1	-5.1	-7.1	-0.4	12.9	13.2	10.1	7.5
75th Percentile	-8.5	-7.4	-8.5	-3.4	11.2	11.8	8.8	6.7
95th Percentile	-11.1	-11.0	-11.1	-8.4	8.4	9.7	7.4	5.0
# of Portfolios	853	853	853	853	824	791	743	652
● BlackRock Russell 1000	-6.8 (46)	-5.2 (52)	-6.8 (46)	-0.6 (52)	12.7 (53)	13.5 (45)	10.1 (50)	7.0 (64)
▲ Russell 1000	-6.8 (46)	-5.2 (52)	-6.8 (46)	-0.6 (52)	12.7 (53)	13.4 (46)	10.0 (51)	7.0 (66)

# BlackRock Russell 1000 Consecutive Performance Comparison (Gross of Fees)

Period Ending: September 30, 2015

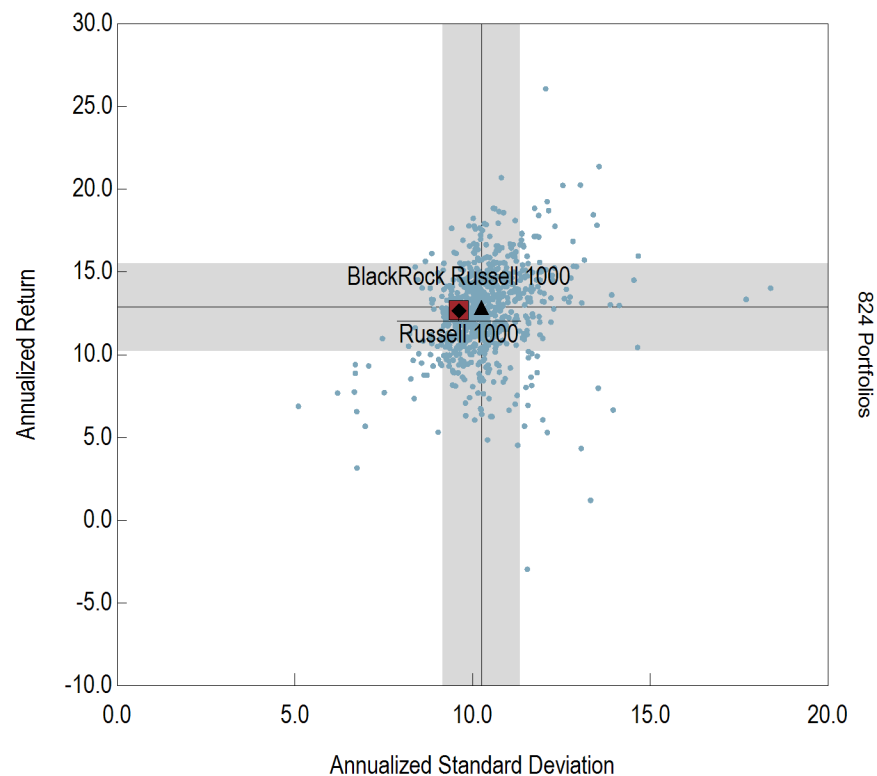


	Return (Rank)									
5th Percentile	17.3	41.9	21.1	8.2	21.9	44.6	-26.3	23.1	22.7	15.5
25th Percentile	14.4	36.6	17.8	3.0	17.1	34.7	-33.1	13.2	18.2	10.6
Median	12.5	33.6	15.6	0.4	14.8	28.0	-36.3	8.0	14.8	7.7
75th Percentile	10.4	30.8	13.2	-2.7	12.6	22.4	-39.4	4.2	10.2	5.0
95th Percentile	6.4	24.9	9.8	-7.9	9.5	14.7	-45.0	-1.9	4.0	0.3
# of Portfolios	869	851	836	865	883	989	1,068	1,120	1,140	1,138
● BlackRock Russell 1000	13.3 (41)	33.2 (54)	16.5 (39)	1.6 (39)	16.2 (34)	28.6 (48)	-37.5 (61)	5.8 (64)	15.5 (45)	6.3 (64)
▲ Russell 1000	13.2 (41)	33.1 (54)	16.4 (40)	1.5 (40)	16.1 (34)	28.4 (49)	-37.6 (61)	5.8 (65)	15.5 (46)	6.3 (65)

# BlackRock Russell 1000 Risk vs Return Three & Five Year (Gross of Fees)

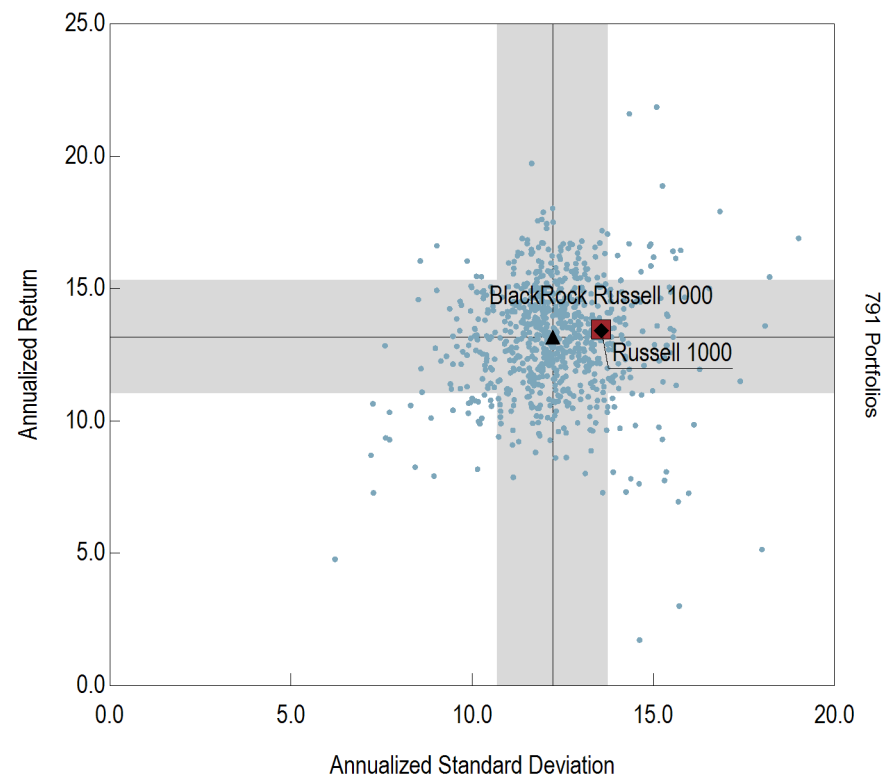
Period Ending: September 30, 2015

Annualized Return vs. Annualized Standard Deviation  
3 Years Ending September 30, 2015



- BlackRock Russell 1000
- ◆ Russell 1000
- ▲ Universe Median
- 68% Confidence Interval
- eA US Large Cap Equity Gross

Annualized Return vs. Annualized Standard Deviation  
5 Years Ending September 30, 2015



- BlackRock Russell 1000
- ◆ Russell 1000
- ▲ Universe Median
- 68% Confidence Interval
- eA US Large Cap Equity Gross

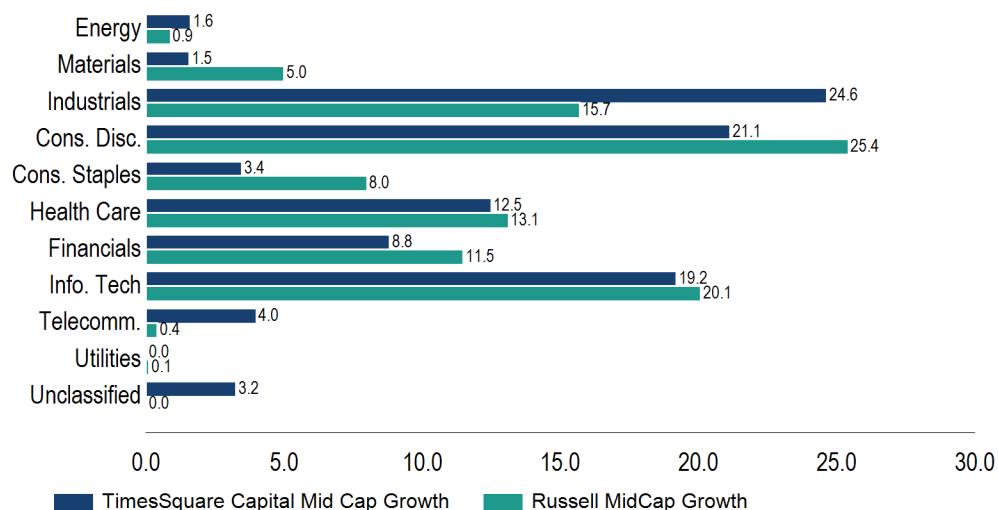
# TimesSquare Capital Mid Cap Growth Manager Portfolio Overview

Period Ending: September 30, 2015

## Characteristics

	Portfolio	Russell MidCap Growth
Number of Holdings	75	502
Weighted Avg. Market Cap. (\$B)	10.63	12.43
Median Market Cap. (\$B)	8.16	6.54
Price To Earnings	26.99	26.45
Price To Book	5.24	5.77
Price To Sales	3.05	3.52
Return on Equity (%)	23.82	22.25
Yield (%)	0.93	1.18
Beta	1.04	1.00

## Sector Allocation (%) vs Russell MidCap Growth



\*Unclassified includes Cash

## Top Holdings Ending Period Weight

		Avg Wgt	Return	Contribution
SBA COMMS.	3.97%	VANTIV CLASS A	1.39	17.62
ALLIANCE DATA SYSTEMS	3.65%	SOLERA HOLDINGS	0.91	21.73
NIELSEN	3.25%	O REILLY AUTOMOTIVE	1.76	10.63
CASH - USD	3.24%	MARKIT	1.29	13.41
DAVITA HEALTHCARE PTNS.	3.21%	GLOBAL PAYMENTS	1.56	10.92
GARTNER 'A'	2.38%	RYANAIR SPN.ADR 1:5	1.66	9.74
EQUIFAX	2.23%	CAMERON INTERNATIONAL	0.74	17.09
O REILLY AUTOMOTIVE	2.05%	TEMPUR SEALY INTL.	1.30	8.39
ENVISION HEALTHCARE HDG.	1.91%	AMDOCS	1.66	4.51
GLOBAL PAYMENTS	1.78%	RENAISSANCERE HDG.	1.45	5.04
<b>Total</b>	<b>27.67%</b>			

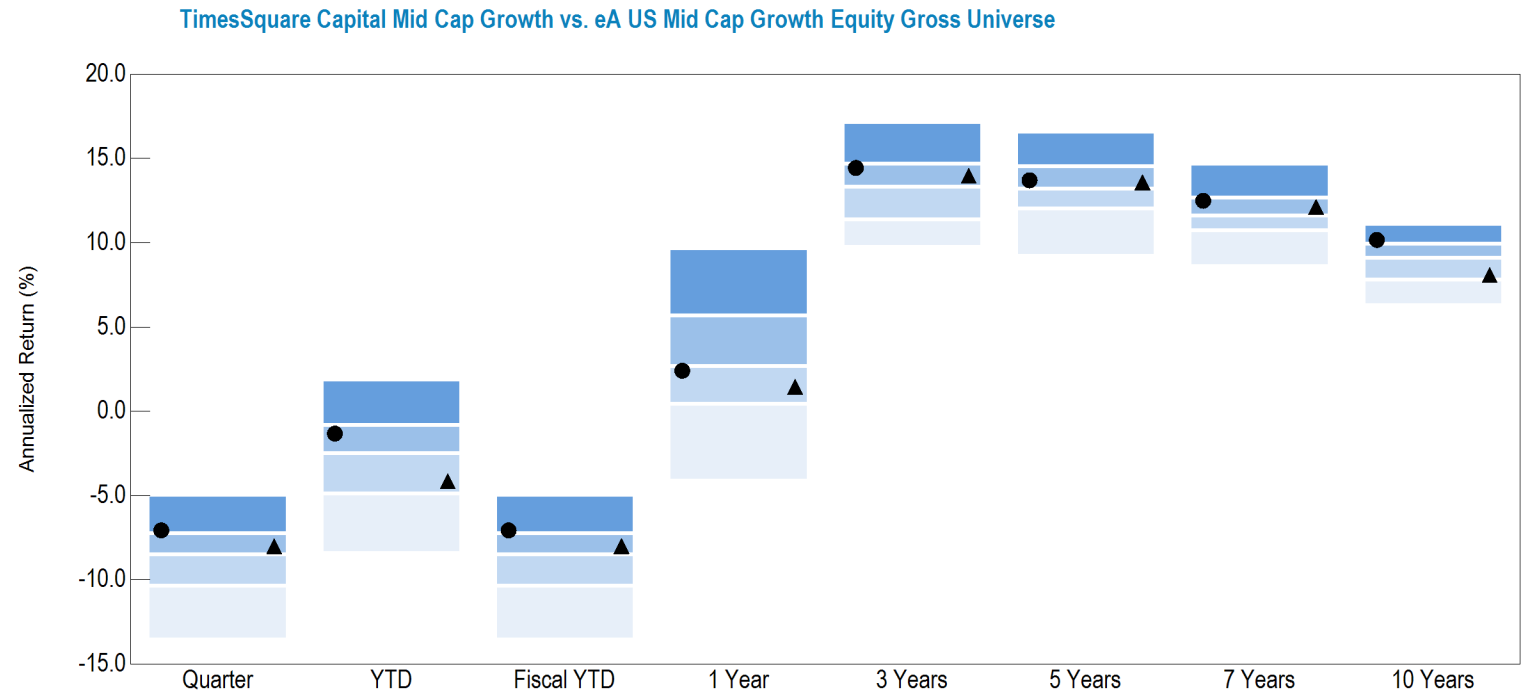
## Top Contributors

## Bottom Contributors

	Avg Wgt	Return	Contribution
ALLIANCE DATA SYSTEMS	3.88	-11.29	-0.44
BORGWARNER	1.64	-26.62	-0.44
SBA COMMS.	4.00	-8.90	-0.36
RANGE RES.	1.01	-34.88	-0.35
SALLY BEAUTY HOLDINGS	1.37	-24.79	-0.34
BELDEN	0.75	-42.46	-0.32
GENESEE & WYOMING 'A'	1.32	-22.45	-0.30
DAVITA HEALTHCARE PTNS.	3.13	-8.98	-0.28
APOLLO GLOBAL MAN.CL.A	1.27	-20.86	-0.27
WABCO HOLDINGS	1.62	-15.27	-0.25

# TimesSquare Capital Mid Cap Growth Cumulative Performance Comparison (Gross of Fees)

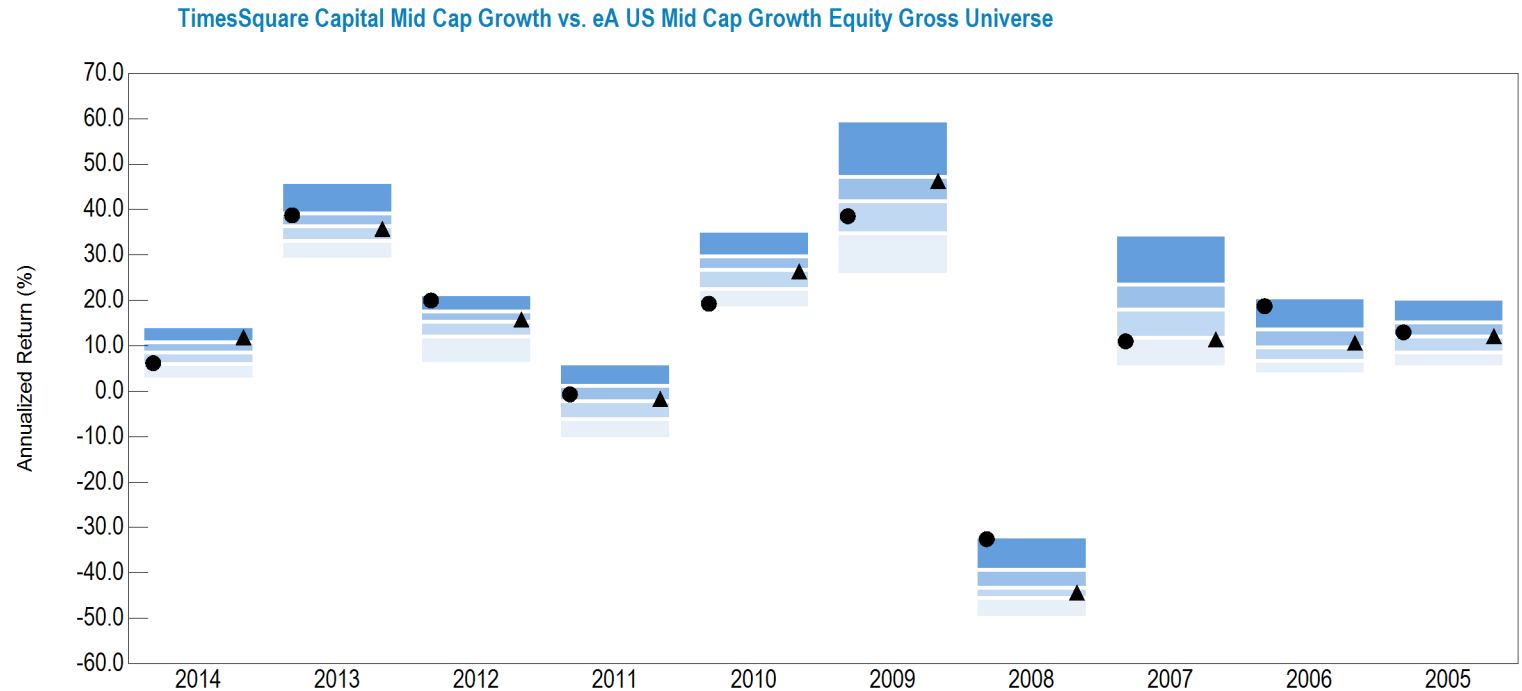
Period Ending: September 30, 2015



	Return (Rank)											
5th Percentile	-5.0		1.9		-5.0		9.7		17.1		16.6	
25th Percentile	-7.2		-0.8		-7.2		5.7		14.7		14.6	
Median	-8.5		-2.5		-8.5		2.7		13.3		13.2	
75th Percentile	-10.3		-4.9		-10.3		0.5		11.4		12.1	
95th Percentile	-13.5		-8.4		-13.5		-4.1		9.8		9.2	
# of Portfolios	116		116		116		116		114		108	
● TimesSquare Capital Mid Cap Growth	-7.1	(22)	-1.3	(32)	-7.1	(22)	2.4	(53)	14.4	(32)	13.7	(47)
▲ Russell MidCap Growth	-8.0	(43)	-4.1	(70)	-8.0	(43)	1.4	(67)	14.0	(38)	13.6	(49)

# TimesSquare Capital Mid Cap Growth Consecutive Performance Comparison (Gross of Fees)

Period Ending: September 30, 2015



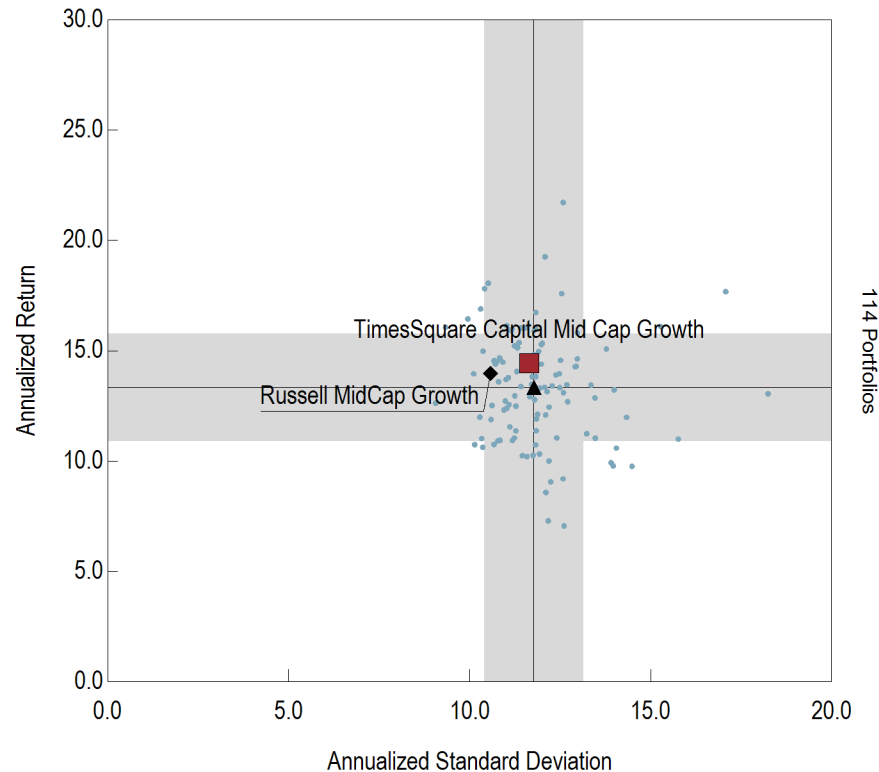
	Return (Rank)									
5th Percentile	14.2	46.0	21.3	6.1	35.3	59.6	-32.0	34.5	20.6	20.3
25th Percentile	10.9	39.2	17.6	1.3	29.8	47.2	-39.3	23.5	13.7	15.2
Median	8.6	36.4	15.4	-2.1	26.7	41.9	-43.2	18.0	9.8	12.1
75th Percentile	6.1	33.2	12.2	-6.1	22.5	34.9	-45.5	11.8	6.8	8.7
95th Percentile	2.6	29.0	6.0	-10.4	18.3	25.7	-49.8	5.3	3.8	5.3
# of Portfolios	117	106	111	122	127	142	158	154	155	147
● TimesSquare Capital Mid Cap Growth	6.2 (75)	38.7 (36)	20.0 (11)	-0.7 (40)	19.3 (94)	38.5 (60)	-32.6 (6)	11.0 (80)	18.7 (9)	13.0 (47)
▲ Russell MidCap Growth	11.9 (20)	35.7 (56)	15.8 (45)	-1.7 (46)	26.4 (52)	46.3 (30)	-44.3 (63)	11.4 (77)	10.6 (44)	12.1 (51)

# TimesSquare Capital Mid Cap Growth

## Risk vs Return Three & Five Year (Gross of Fees)

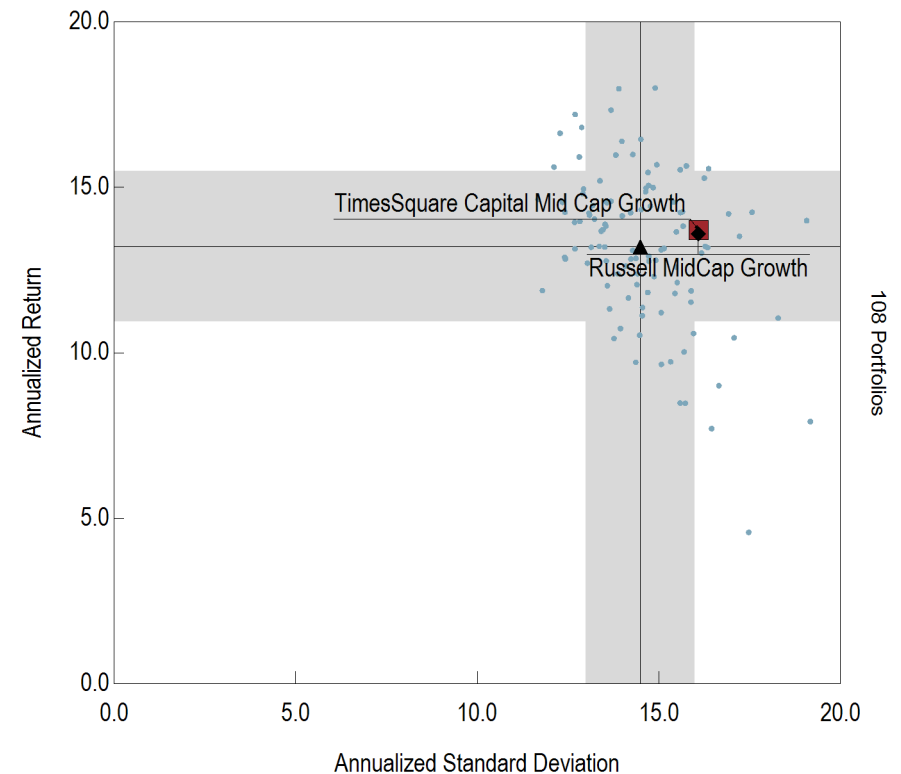
Period Ending: September 30, 2015

Annualized Return vs. Annualized Standard Deviation  
3 Years Ending September 30, 2015



- TimesSquare Capital Mid Cap Growth
- ◆ Russell MidCap Growth
- ▲ Universe Median
- 68% Confidence Interval
- eA US Mid Cap Growth Equity Gross

Annualized Return vs. Annualized Standard Deviation  
5 Years Ending September 30, 2015

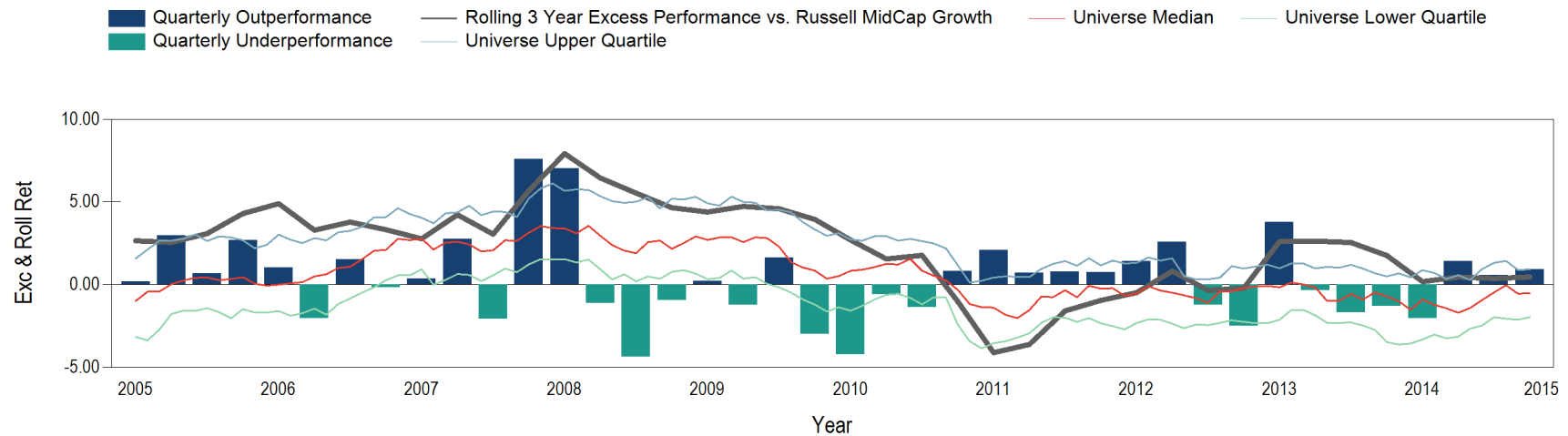


- TimesSquare Capital Mid Cap Growth
- ◆ Russell MidCap Growth
- ▲ Universe Median
- 68% Confidence Interval
- eA US Mid Cap Growth Equity Gross

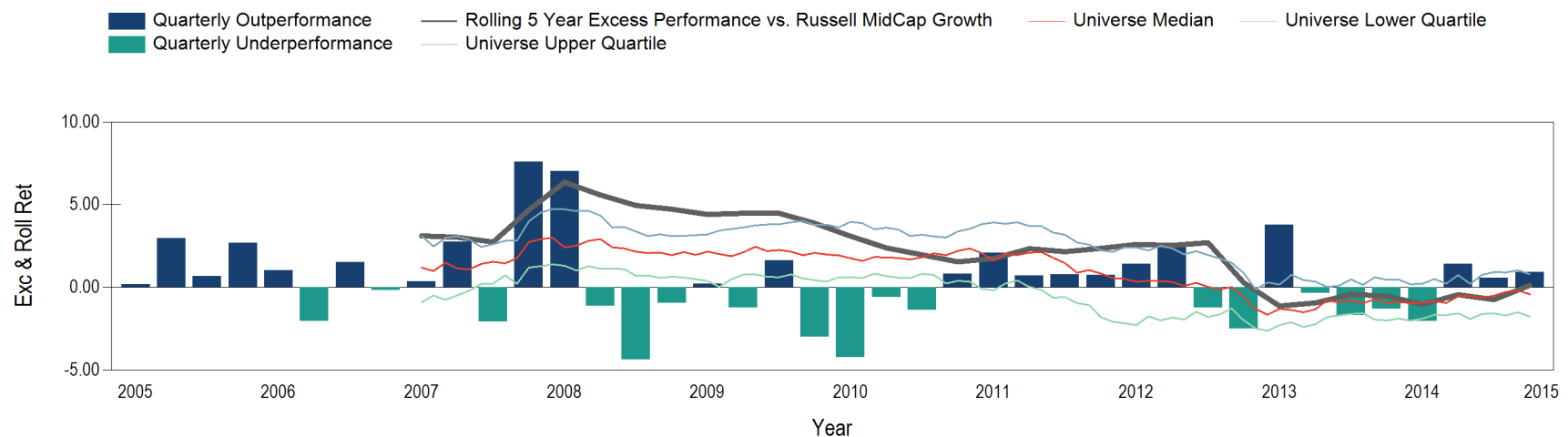
# TimesSquare Capital Mid Cap Growth Rolling Return Analysis (Gross of Fees)

Period Ending: September 30, 2015

## Rolling 3 Year Annualized Excess Performance



## Rolling 5 Year Annualized Excess Performance





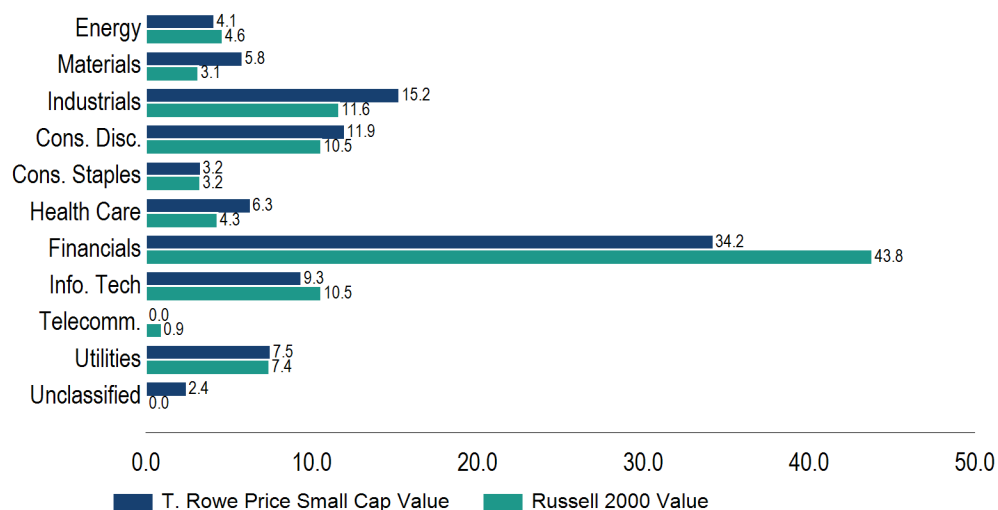
# T. Rowe Price Small Cap Value Manager Portfolio Overview

Period Ending: September 30, 2015

## Characteristics

	Portfolio	Russell 2000 Value
Number of Holdings	162	1,308
Weighted Avg. Market Cap. (\$B)	1.91	1.60
Median Market Cap. (\$B)	1.23	0.59
Price To Earnings	21.78	18.58
Price To Book	2.24	1.56
Price To Sales	2.63	2.59
Return on Equity (%)	11.37	7.73
Yield (%)	1.99	2.07
Beta	0.92	1.00

## Sector Allocation (%) vs Russell 2000 Value



\*Unclassified includes Cash

## Top Holdings Ending Period Weight

	Weight	Symbol
HOME BANCSHARES	2.76%	HOME BANCSHARES
CASH - USD	2.41%	PROASSURANCE
PROASSURANCE	1.98%	COMFORT SYS.USA
EAST WEST BANCORP	1.54%	IXIA
LANDSTAR SYSTEM	1.50%	PNM RESOURCES
SVB FINANCIAL GROUP	1.49%	NORTHWESTERN
AARON'S	1.44%	POST HOLDINGS
WEST PHARM.SVS.	1.44%	UNIVERSAL FOR.PRDS.
CHESAPEAKE UTILS.	1.28%	STRATEGIC HOTELS & RSTS.
PNM RESOURCES	1.23%	EL PASO ELEC.
<b>Total</b>	<b>17.07%</b>	

## Top Contributors

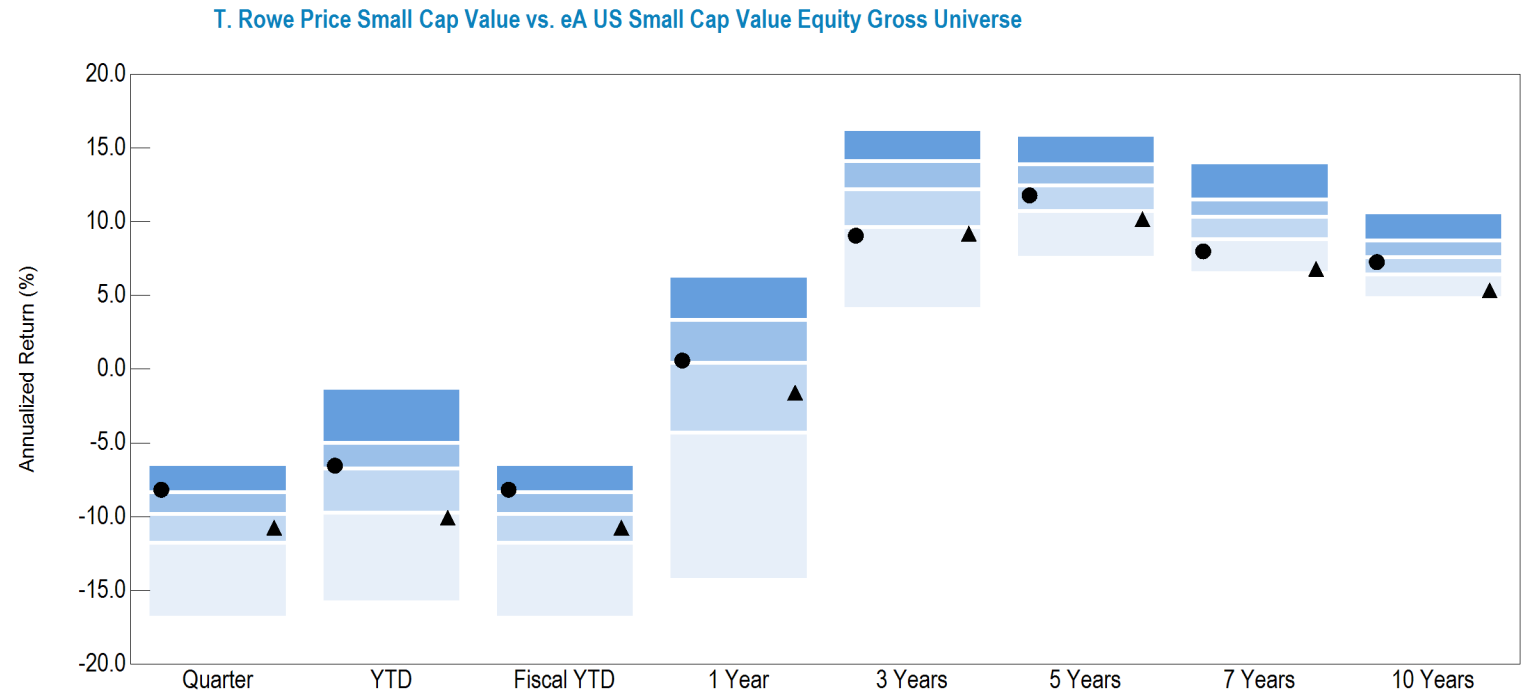
Avg Wgt	Return	Contribution
2.57	11.18	0.29
1.71	6.86	0.12
0.60	19.05	0.11
0.65	16.48	0.11
0.70	14.90	0.10
0.66	11.49	0.08
0.75	9.59	0.07
0.57	10.86	0.06
0.42	13.78	0.06
0.71	7.15	0.05

## Bottom Contributors

Avg Wgt	Return	Contribution
1.22	-42.46	-0.52
1.70	-19.75	-0.34
1.44	-22.45	-0.32
1.02	-28.06	-0.29
0.97	-29.24	-0.28
0.45	-54.05	-0.25
0.82	-29.78	-0.25
0.52	-45.06	-0.24
1.65	-13.89	-0.23
0.54	-40.97	-0.22

T. Rowe Price Small Cap Value  
Cumulative Performance Comparison (Gross of Fees)

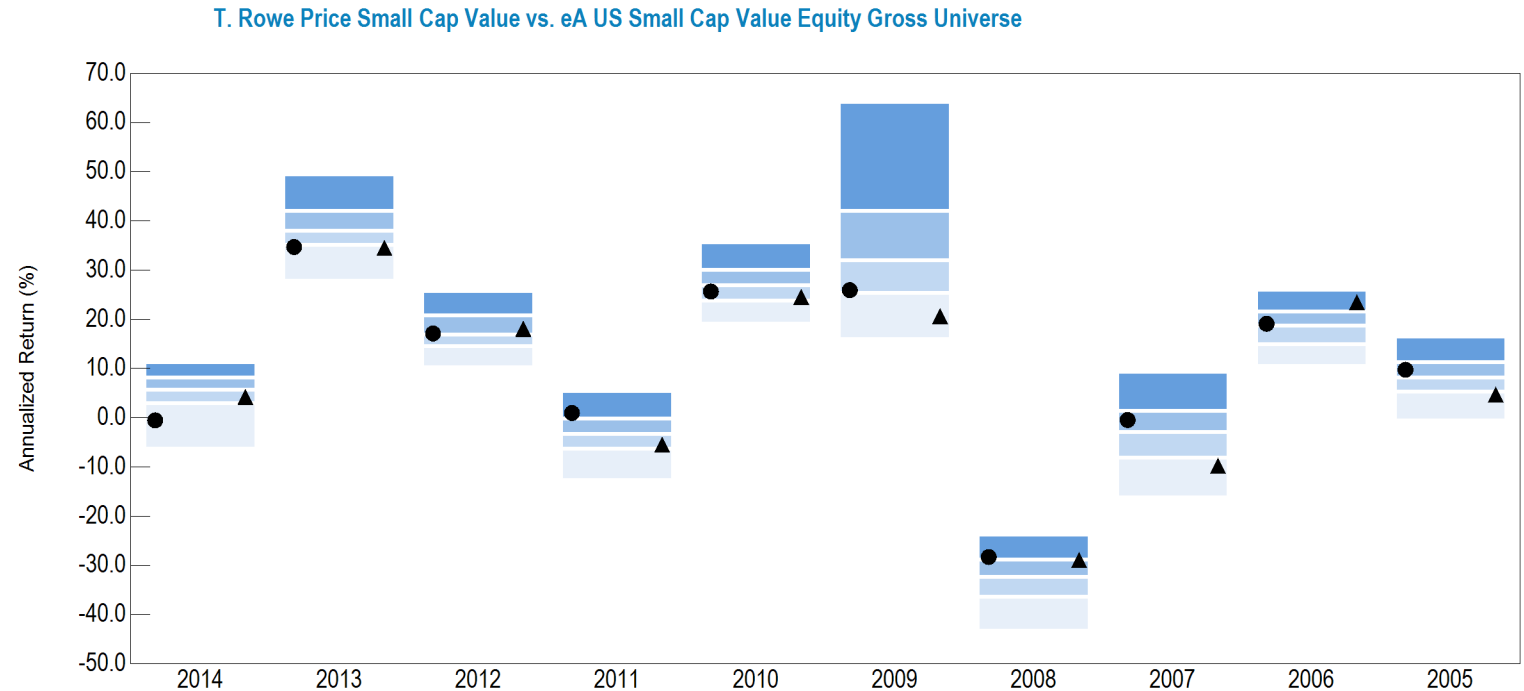
Period Ending: September 30, 2015



	Return (Rank)													
5th Percentile	-6.5	(24)	-1.3	(48)	-6.5	(24)	6.3	(48)	16.3	(85)	15.8	(63)	14.0	(84)
25th Percentile	-8.3	(67)	-5.0	(77)	-8.3	(67)	3.4	(64)	14.1	(83)	13.9	(83)	11.5	(92)
Median	-9.8		-6.7		-9.8		0.5		12.2		12.5		10.4	
75th Percentile	-11.8		-9.7		-11.8		-4.3		9.6		10.7		8.8	
95th Percentile	-16.8		-15.8		-16.8		-14.3		4.1		7.6		6.5	
# of Portfolios	207		207		207		207		202		192		178	
● T. Rowe Price Small Cap Value	-8.2	(24)	-6.5	(48)	-8.2	(24)	0.6	(48)	9.0	(85)	11.8	(63)	8.0	(84)
▲ Russell 2000 Value	-10.7	(67)	-10.1	(77)	-10.7	(67)	-1.6	(64)	9.2	(83)	10.2	(83)	6.8	(92)

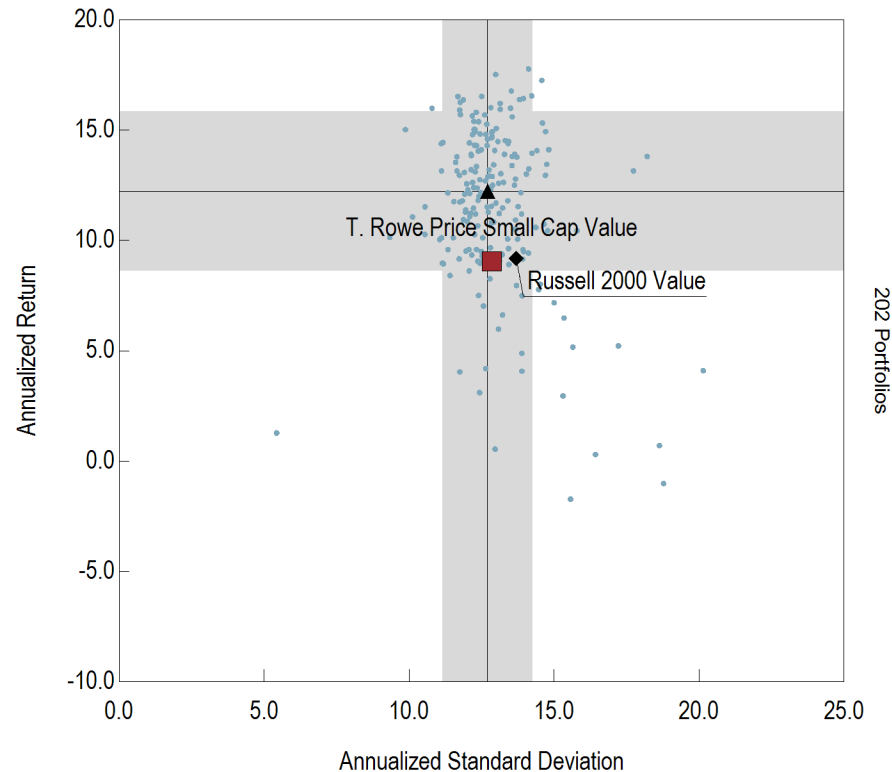
T. Rowe Price Small Cap Value  
Consecutive Performance Comparison (Gross of Fees)

Period Ending: September 30, 2015



	Return (Rank)									
5th Percentile	11.2	49.4	25.7	5.3	35.6	64.2	-23.8	9.3	25.9	16.4
25th Percentile	8.2	42.1	20.8	0.0	30.2	42.1	-28.7	1.5	21.6	11.3
Median	5.8	38.1	16.9	-3.3	26.9	32.0	-32.3	-2.9	18.7	8.2
75th Percentile	3.1	35.2	14.7	-6.2	23.8	25.5	-36.3	-8.1	15.0	5.3
95th Percentile	-6.3	27.8	10.3	-12.6	19.2	16.1	-43.3	-16.1	10.6	-0.5
# of Portfolios	206	199	187	177	186	197	221	230	223	220
● T. Rowe Price Small Cap Value	-0.5 (88)	34.7 (78)	17.1 (49)	1.0 (22)	25.6 (63)	25.9 (72)	-28.3 (23)	-0.5 (36)	19.1 (48)	9.7 (35)
▲ Russell 2000 Value	4.2 (68)	34.5 (78)	18.1 (43)	-5.5 (69)	24.5 (72)	20.6 (85)	-28.9 (27)	-9.8 (82)	23.5 (14)	4.7 (79)

Annualized Return vs. Annualized Standard Deviation  
3 Years Ending September 30, 2015



- T. Rowe Price Small Cap Value
- ◆ Russell 2000 Value
- ▲ Universe Median
- ▣ 68% Confidence Interval
- eA US Small Cap Value Equity Gross

Annualized Return vs. Annualized Standard Deviation  
5 Years Ending September 30, 2015



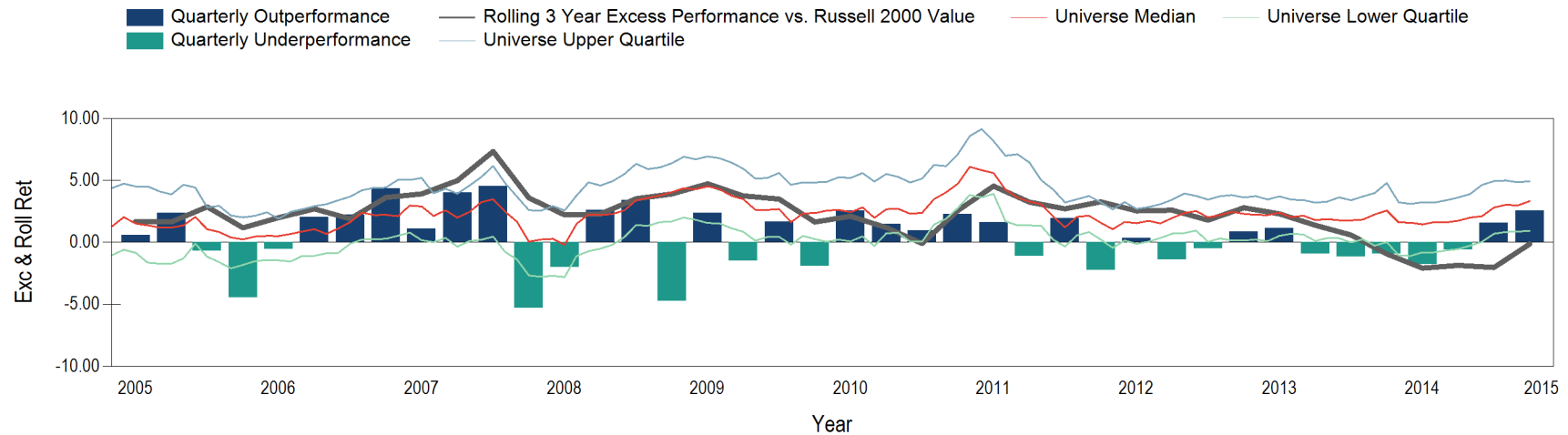
- T. Rowe Price Small Cap Value
- ◆ Russell 2000 Value
- ▲ Universe Median
- ▣ 68% Confidence Interval
- eA US Small Cap Value Equity Gross

# T. Rowe Price Small Cap Value

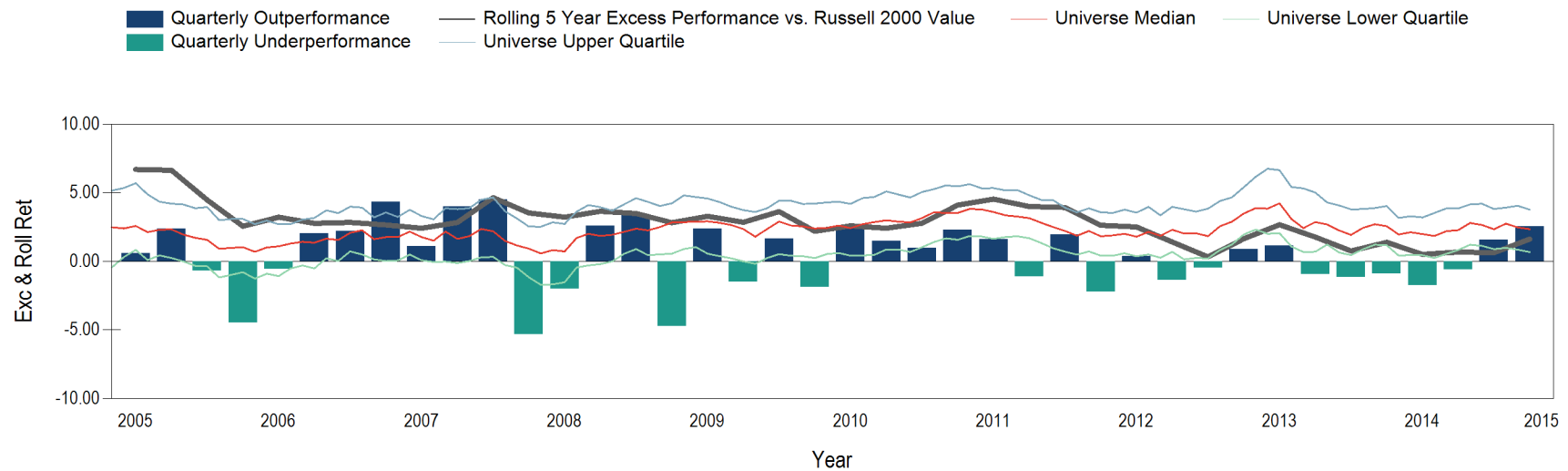
## Rolling Return Analysis (Gross of Fees)

Period Ending: September 30, 2015

Rolling 3 Year Annualized Excess Performance



Rolling 5 Year Annualized Excess Performance

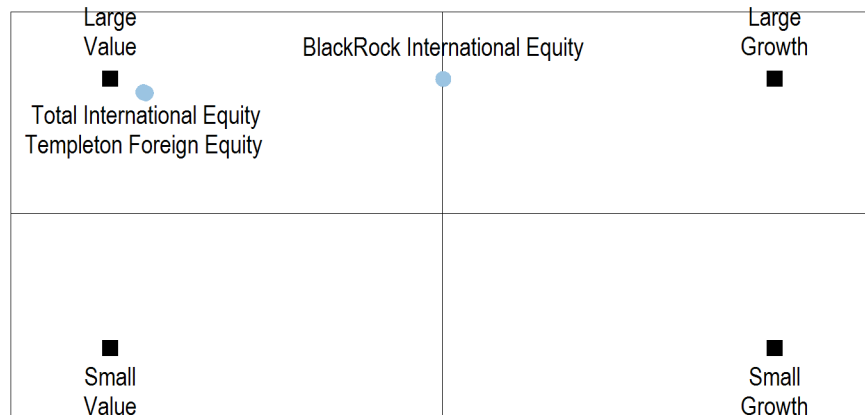


# Total International Equity Asset Class Overview (Gross of Fees)

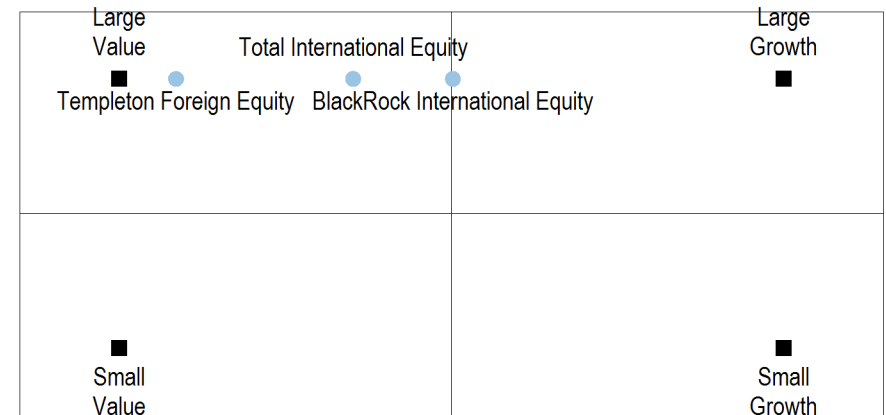
Period Ending: September 30, 2015

	Market Value	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2014	2013	2012	2011	2010
<b>Total International Equity</b>	<b>151,279,437</b>	<b>-11.4</b>	<b>-7.2</b>	<b>-11.4</b>	<b>-10.9</b>	<b>2.8</b>	<b>1.7</b>	<b>3.9</b>	<b>-4.4</b>	<b>14.0</b>	<b>19.3</b>	<b>-15.6</b>	<b>12.6</b>
MSCI ACWI ex USA Gross		-12.1	-8.3	-12.1	-11.8	2.8	2.3	3.5	-3.4	15.8	17.4	-13.3	11.6
eA ACWI ex-US All Cap Equity Gross Rank		69	77	69	85	86	99	78	70	92	54	84	70
<b>BlackRock International Equity</b>	<b>57,867,265</b>	<b>-10.2</b>	<b>-5.0</b>	<b>-10.2</b>	<b>-8.4</b>	<b>6.0</b>	<b>4.3</b>	<b>3.3</b>	<b>-4.7</b>	<b>23.2</b>	<b>17.8</b>	<b>-11.8</b>	<b>8.1</b>
MSCI EAFE Gross		-10.2	-4.9	-10.2	-8.3	6.1	4.4	3.4	-4.5	23.3	17.9	-11.7	8.2
eA All EAFE Equity Gross Rank		71	73	71	76	67	78	84	64	61	74	48	79
<b>Templeton Foreign Equity</b>	<b>55,463,003</b>	<b>-10.4</b>	<b>-4.9</b>	<b>-10.4</b>	<b>-9.1</b>	<b>5.1</b>	<b>4.0</b>	<b>4.6</b>	<b>-6.0</b>	<b>20.4</b>	<b>19.5</b>	<b>-10.2</b>	<b>7.5</b>
MSCI ACWI ex USA Gross		-12.1	-8.3	-12.1	-11.8	2.8	2.3	3.5	-3.4	15.8	17.4	-13.3	11.6
eA All ACWI ex-US Equity Gross Rank		53	55	53	71	60	69	63	80	47	50	28	92
<b>DFA Emerging Markets Value</b>	<b>16,966,153</b>	<b>-19.0</b>	<b>-17.6</b>	<b>-19.0</b>	<b>-22.7</b>	<b>-6.3</b>	<b>-5.7</b>	<b>--</b>	<b>-3.9</b>	<b>-3.2</b>	<b>20.1</b>	<b>-25.2</b>	<b>22.8</b>
MSCI Emerging Markets Gross		-17.8	-15.2	-17.8	-19.0	-4.9	-3.2	--	-1.8	-2.3	18.6	-18.2	19.2
eA Emg Mkts Equity Gross Rank		91	90	91	91	90	98	--	84	84	56	92	33
<b>Vontobel Global Emerging Markets</b>	<b>20,983,016</b>	<b>-10.4</b>	<b>-9.6</b>	<b>-10.4</b>	<b>-11.8</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
MSCI Emerging Markets Gross		-17.8	-15.2	-17.8	-19.0	--	--	--	--	--	--	--	--
eA Emg Mkts Equity Gross Rank		4	16	4	15	--	--	--	--	--	--	--	--

EAFE Effective Style Map  
3 Years Ending September 30, 2015



EAFE Effective Style Map  
5 Years Ending September 30, 2015



# Total International Equity Asset Class Overview (Net of Fees)

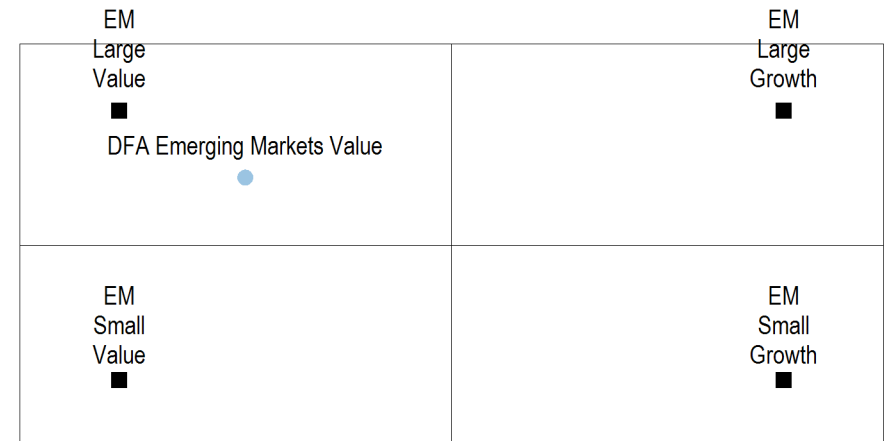
Period Ending: September 30, 2015

	Market Value	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2014	2013	2012	2011	2010
<b>Total International Equity</b>	<b>151,279,437</b>	<b>-11.5</b>	<b>-7.6</b>	<b>-11.5</b>	<b>-11.4</b>	<b>2.2</b>	<b>1.1</b>	<b>3.3</b>	<b>-4.9</b>	<b>13.4</b>	<b>18.6</b>	<b>-16.1</b>	<b>12.0</b>
MSCI ACWI ex USA Gross		-12.1	-8.3	-12.1	-11.8	2.8	2.3	3.5	-3.4	15.8	17.4	-13.3	11.6
BlackRock International Equity	57,867,265	-10.2	-5.1	-10.2	-8.5	5.8	4.2	3.2	-4.8	22.9	17.6	-11.9	7.9
MSCI EAFE Gross		-10.2	-4.9	-10.2	-8.3	6.1	4.4	3.4	-4.5	23.3	17.9	-11.7	8.2
Templeton Foreign Equity	55,463,003	-10.6	-5.5	-10.6	-9.8	4.3	3.2	3.8	-6.8	19.5	18.5	-10.9	6.7
MSCI ACWI ex USA Gross		-12.1	-8.3	-12.1	-11.8	2.8	2.3	3.5	-3.4	15.8	17.4	-13.3	11.6
DFA Emerging Markets Value	16,966,153	-19.2	-17.9	-19.2	-23.1	-6.9	-6.2	--	-4.4	-3.8	19.4	-25.6	22.1
MSCI Emerging Markets Gross		-17.8	-15.2	-17.8	-19.0	-4.9	-3.2	--	-1.8	-2.3	18.6	-18.2	19.2
Vontobel Global Emerging Markets	20,983,016	-10.6	-10.2	-10.6	-12.6	--	--	--	--	--	--	--	--
MSCI Emerging Markets Gross		-17.8	-15.2	-17.8	-19.0	--	--	--	--	--	--	--	--

EM Effective Style Map  
3 Years Ending September 30, 2015

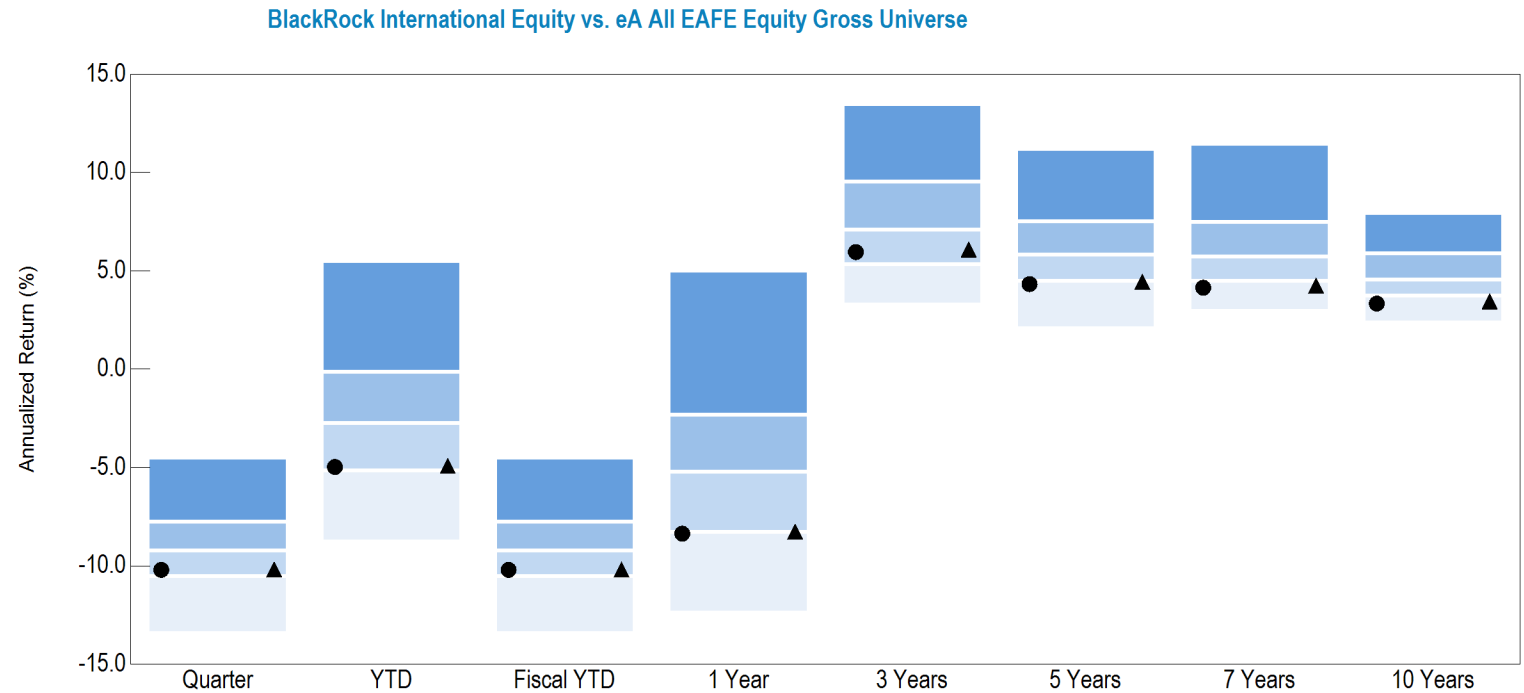


EM Effective Style Map  
5 Years Ending September 30, 2015



# BlackRock International Equity Cumulative Performance Comparison (Gross of Fees)

Period Ending: September 30, 2015

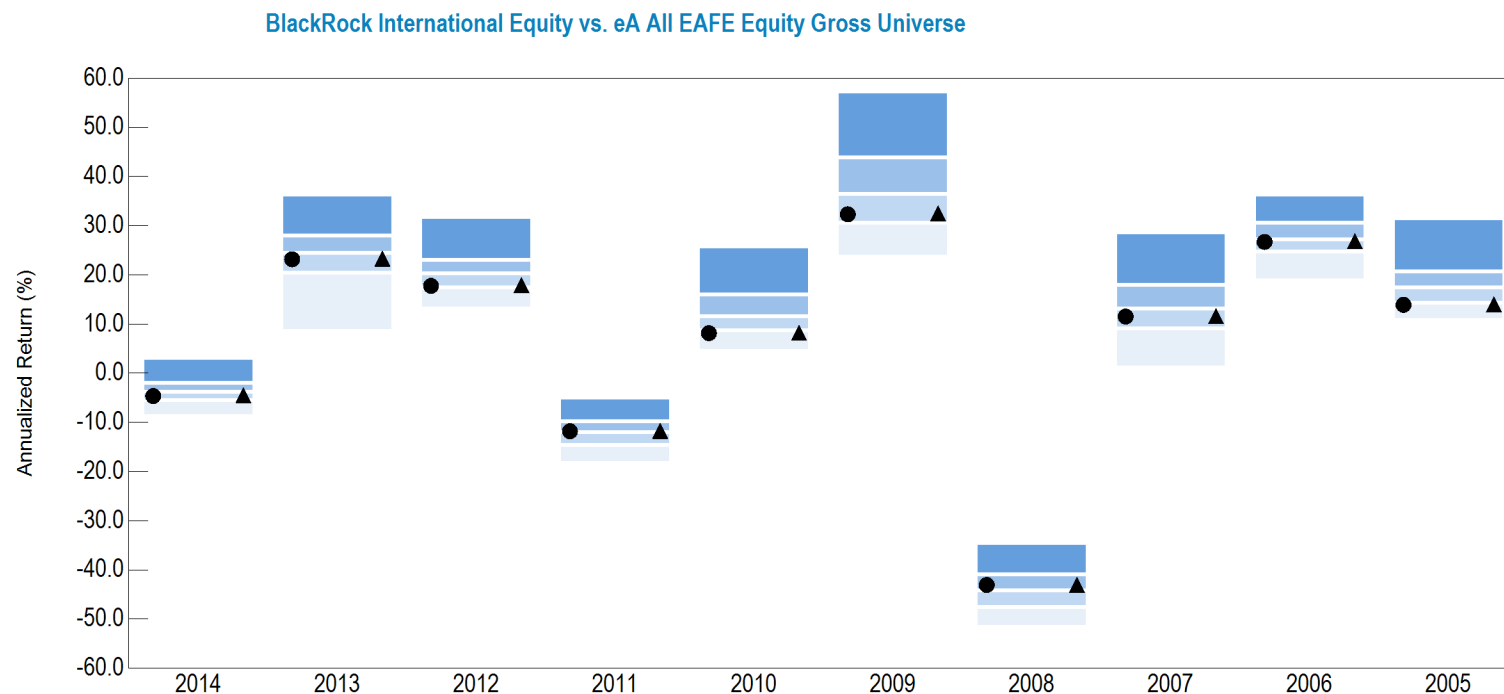


	Return (Rank)													
5th Percentile	-4.5		5.5		-4.5		5.0		13.5		11.2		11.4	
25th Percentile	-7.7		-0.1		-7.7		-2.3		9.6		7.5		7.5	
Median	-9.2		-2.7		-9.2		-5.2		7.1		5.9		5.7	
75th Percentile	-10.5		-5.1		-10.5		-8.3		5.4		4.5		4.5	
95th Percentile	-13.4		-8.8		-13.4		-12.4		3.3		2.1		3.0	
# of Portfolios	317		317		317		317		301		277		257	
● BlackRock International Equity	-10.2	(71)	-5.0	(73)	-10.2	(71)	-8.4	(76)	6.0	(67)	4.3	(78)	4.1	(84)
▲ MSCI EAFE Gross	-10.2	(70)	-4.9	(72)	-10.2	(70)	-8.3	(75)	6.1	(66)	4.4	(76)	4.2	(82)



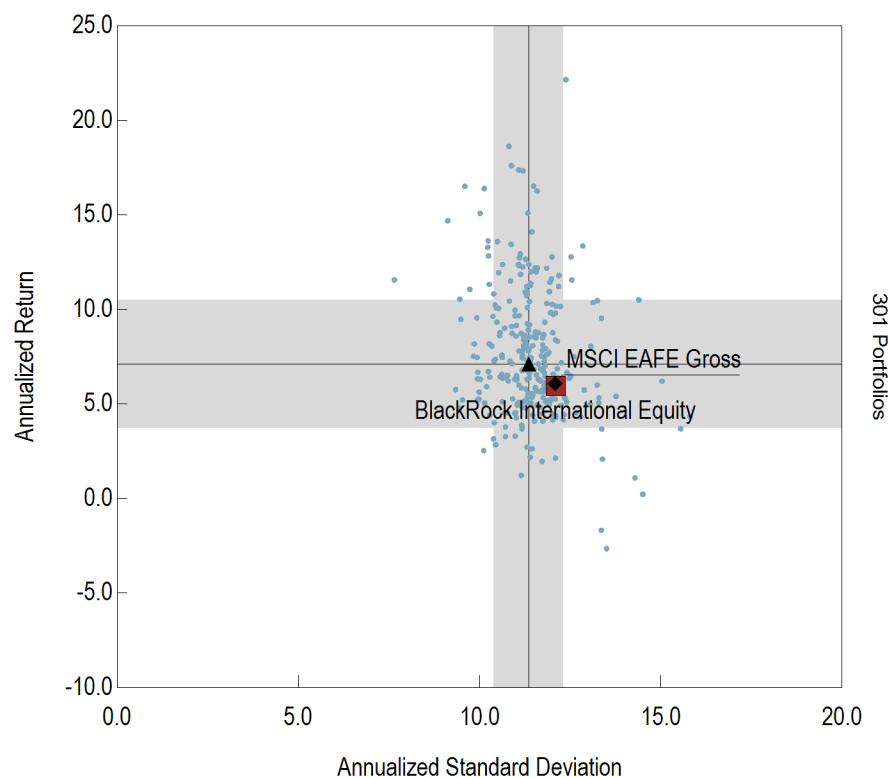
# BlackRock International Equity Consecutive Performance Comparison (Gross of Fees)

Period Ending: September 30, 2015



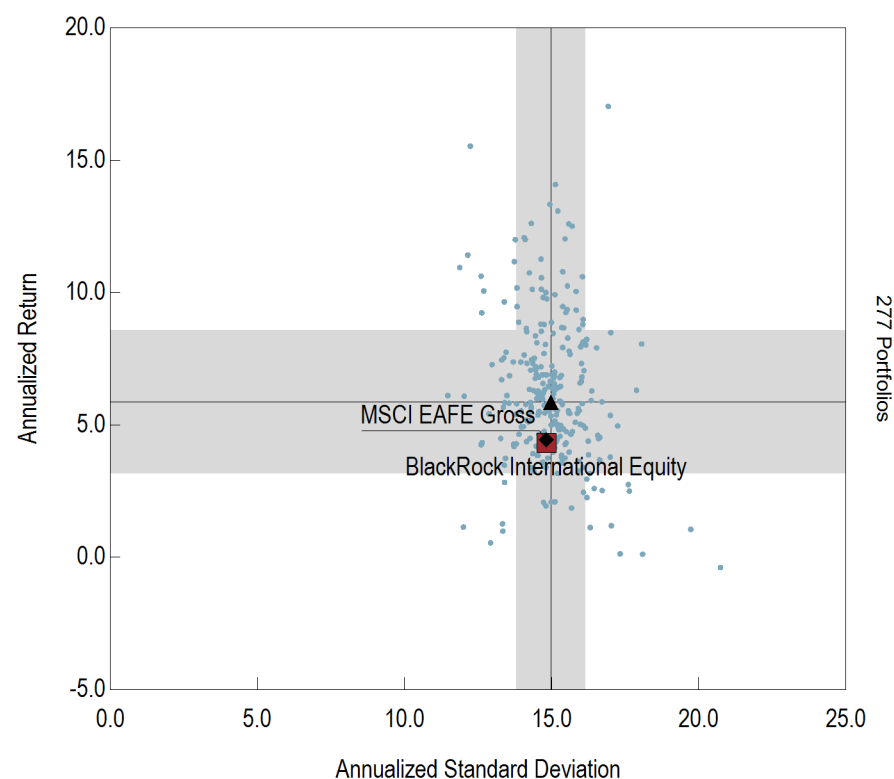
	Return (Rank)									
5th Percentile	3.0	36.3	31.7	-5.1	25.7	57.3	-34.5	28.5	36.2	31.5
25th Percentile	-1.9	28.1	23.1	-9.7	16.1	44.0	-40.8	18.0	30.7	20.8
Median	-3.7	24.6	20.4	-12.0	11.7	36.5	-44.1	13.2	27.3	17.5
75th Percentile	-5.4	20.5	17.5	-14.5	8.7	30.7	-47.5	9.1	24.8	14.4
95th Percentile	-8.6	8.6	13.3	-18.2	4.6	23.7	-51.5	1.2	18.9	10.8
# of Portfolios	314	284	263	278	352	455	477	466	434	409
● BlackRock International Equity	-4.7 (64)	23.2 (61)	17.8 (74)	-11.8 (48)	8.1 (79)	32.3 (68)	-43.1 (41)	11.5 (60)	26.7 (57)	13.9 (80)
▲ MSCI EAFE Gross	-4.5 (60)	23.3 (60)	17.9 (72)	-11.7 (47)	8.2 (78)	32.5 (67)	-43.1 (41)	11.6 (59)	26.9 (55)	14.0 (79)

Annualized Return vs. Annualized Standard Deviation  
3 Years Ending September 30, 2015



- BlackRock International Equity
- ◆ MSCI EAFE Gross
- ▲ Universe Median
- 68% Confidence Interval
- eA All EAFE Equity Gross

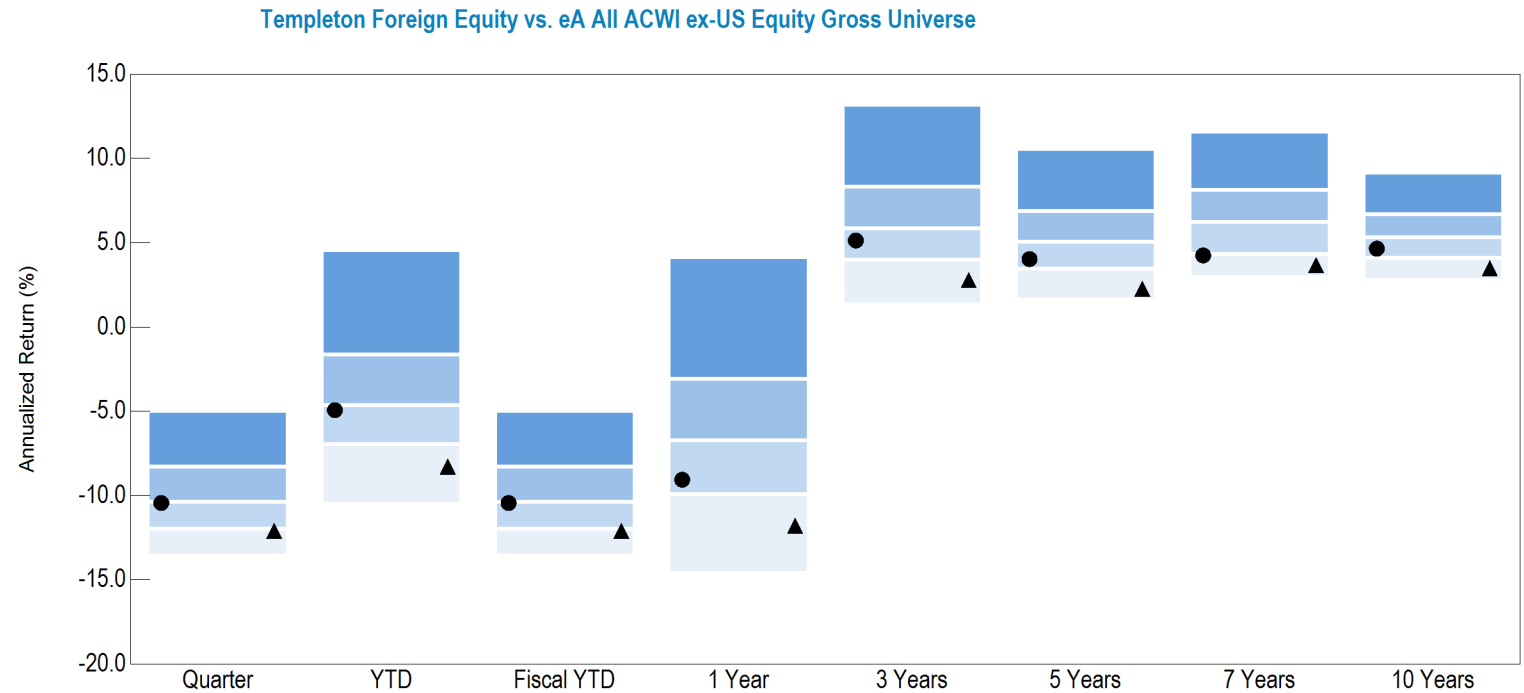
Annualized Return vs. Annualized Standard Deviation  
5 Years Ending September 30, 2015



- BlackRock International Equity
- ◆ MSCI EAFE Gross
- ▲ Universe Median
- 68% Confidence Interval
- eA All EAFE Equity Gross

# Templeton Foreign Equity Cumulative Performance Comparison (Gross of Fees)

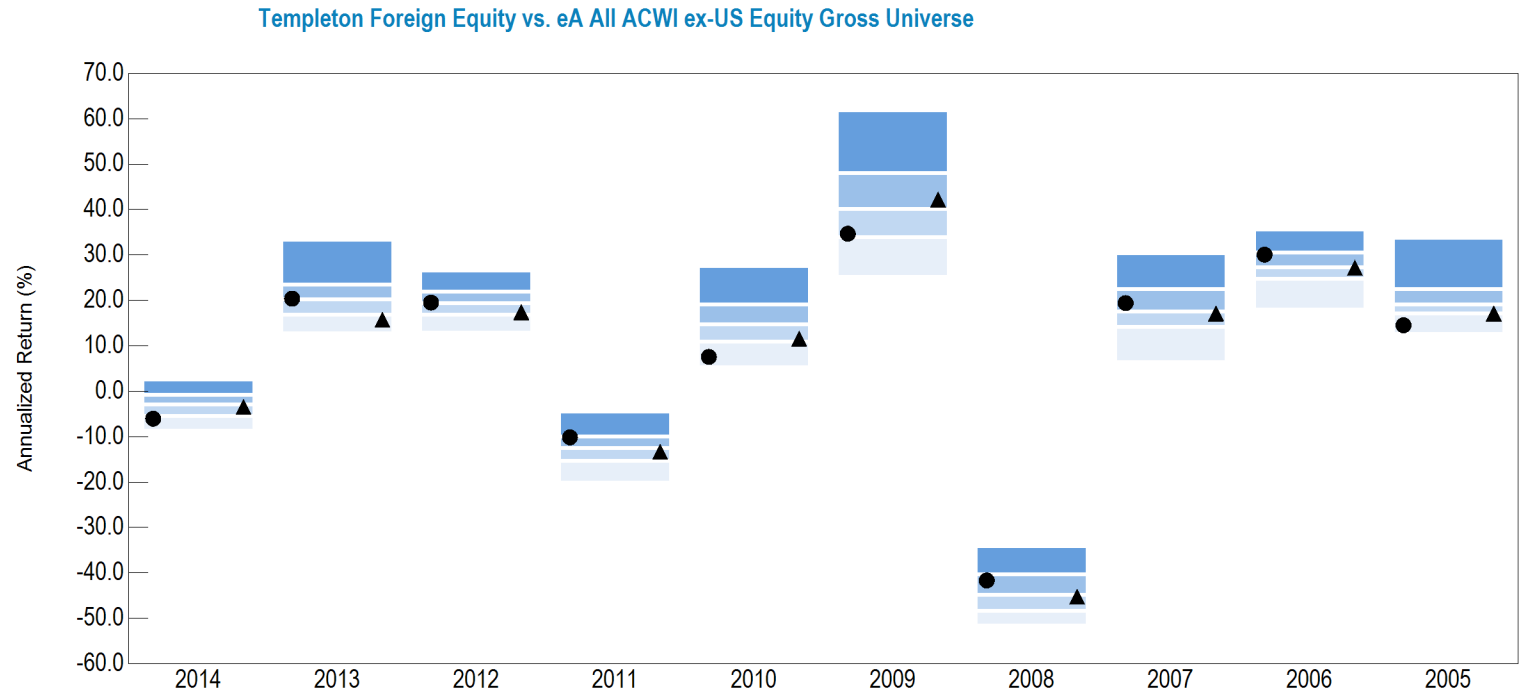
Period Ending: September 30, 2015



	Return (Rank)													
5th Percentile	-5.0		4.6		-5.0		4.1		13.2		10.5		11.6	
25th Percentile	-8.3		-1.6		-8.3		-3.1		8.4		6.9		8.2	
Median	-10.3		-4.6		-10.3		-6.7		5.9		5.1		6.2	
75th Percentile	-12.0		-6.9		-12.0		-9.9		4.0		3.5		4.4	
95th Percentile	-13.5		-10.5		-13.5		-14.6		1.3		1.7		3.0	
# of Portfolios	201		201		201		201		190		168		147	
● Templeton Foreign Equity	-10.4	(53)	-4.9	(55)	-10.4	(53)	-9.1	(71)	5.1	(60)	4.0	(69)	4.2	(78)
▲ MSCI ACWI ex USA Gross	-12.1	(77)	-8.3	(88)	-12.1	(77)	-11.8	(88)	2.8	(87)	2.3	(87)	3.7	(88)
													3.5	(89)

Templeton Foreign Equity  
Consecutive Performance Comparison (Gross of Fees)

Period Ending: September 30, 2015



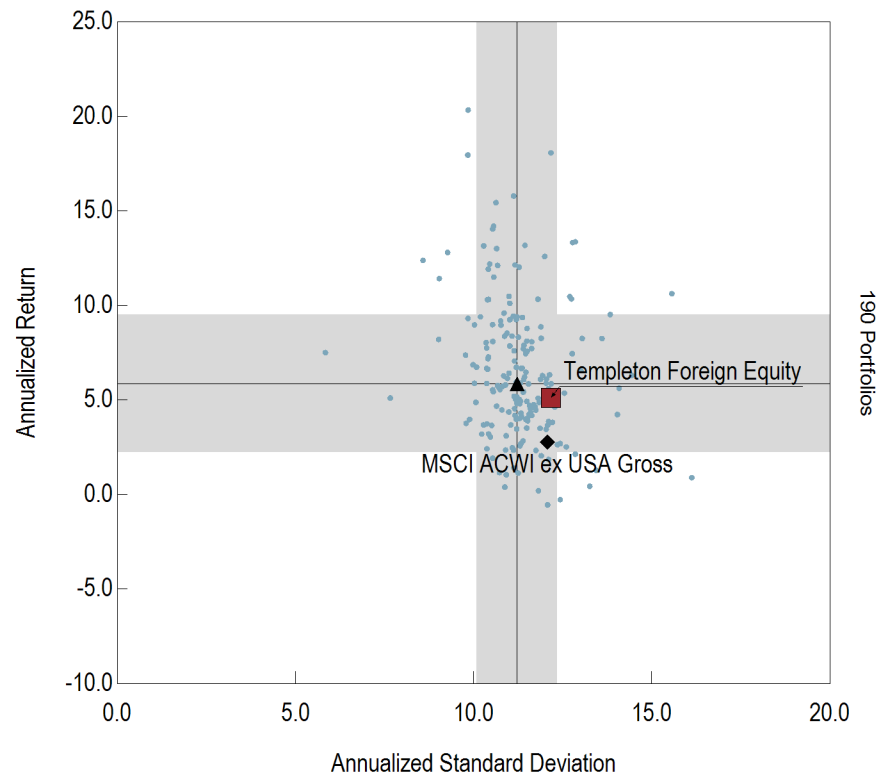
	Return (Rank)									
5th Percentile	2.5	33.2	26.5	-4.6	27.5	61.9	-34.1	30.4	35.6	33.7
25th Percentile	-0.7	23.5	22.1	-9.8	19.2	48.1	-40.2	22.5	30.6	22.5
Median	-2.9	20.2	19.5	-12.4	14.8	40.2	-44.7	17.6	27.4	19.1
75th Percentile	-5.3	16.9	16.8	-15.2	11.0	34.0	-48.3	14.3	24.8	17.3
95th Percentile	-8.7	12.8	13.0	-20.0	5.4	25.2	-51.5	6.5	18.1	12.7
# of Portfolios	190	181	174	169	153	149	136	130	117	104
● Templeton Foreign Equity	-6.0 (80)	20.4 (47)	19.5 (50)	-10.2 (28)	7.5 (92)	34.7 (74)	-41.7 (34)	19.4 (40)	30.1 (27)	14.5 (90)
▲ MSCI ACWI ex USA Gross	-3.4 (58)	15.8 (86)	17.4 (72)	-13.3 (60)	11.6 (73)	42.1 (46)	-45.2 (55)	17.1 (57)	27.1 (53)	17.1 (76)

# Templeton Foreign Equity

## Risk vs Return Three & Five Year (Gross of Fees)

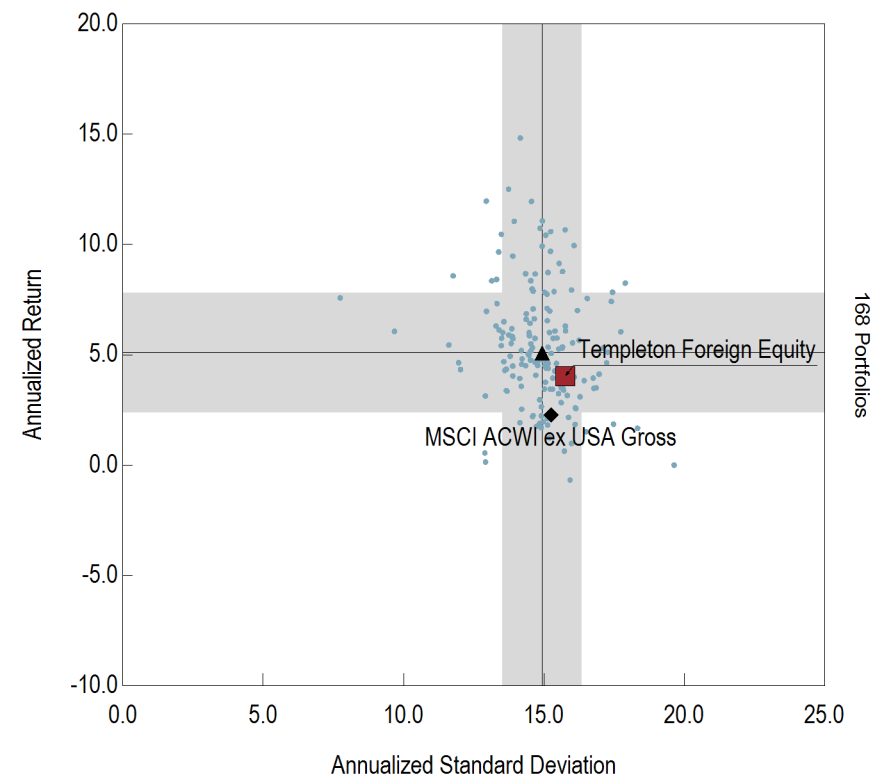
Period Ending: September 30, 2015

Annualized Return vs. Annualized Standard Deviation  
3 Years Ending September 30, 2015



- Templeton Foreign Equity
- ◆ MSCI ACWI ex USA Gross
- ▲ Universe Median
- 68% Confidence Interval
- eA All ACWI ex-US Equity Gross

Annualized Return vs. Annualized Standard Deviation  
5 Years Ending September 30, 2015

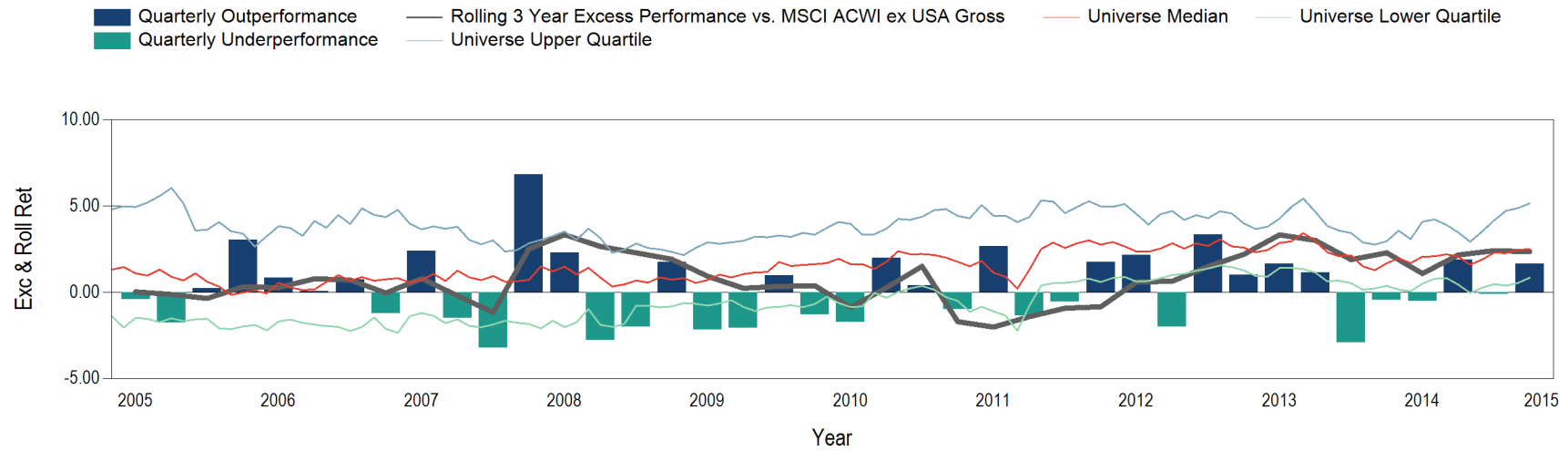


- Templeton Foreign Equity
- ◆ MSCI ACWI ex USA Gross
- ▲ Universe Median
- 68% Confidence Interval
- eA All ACWI ex-US Equity Gross

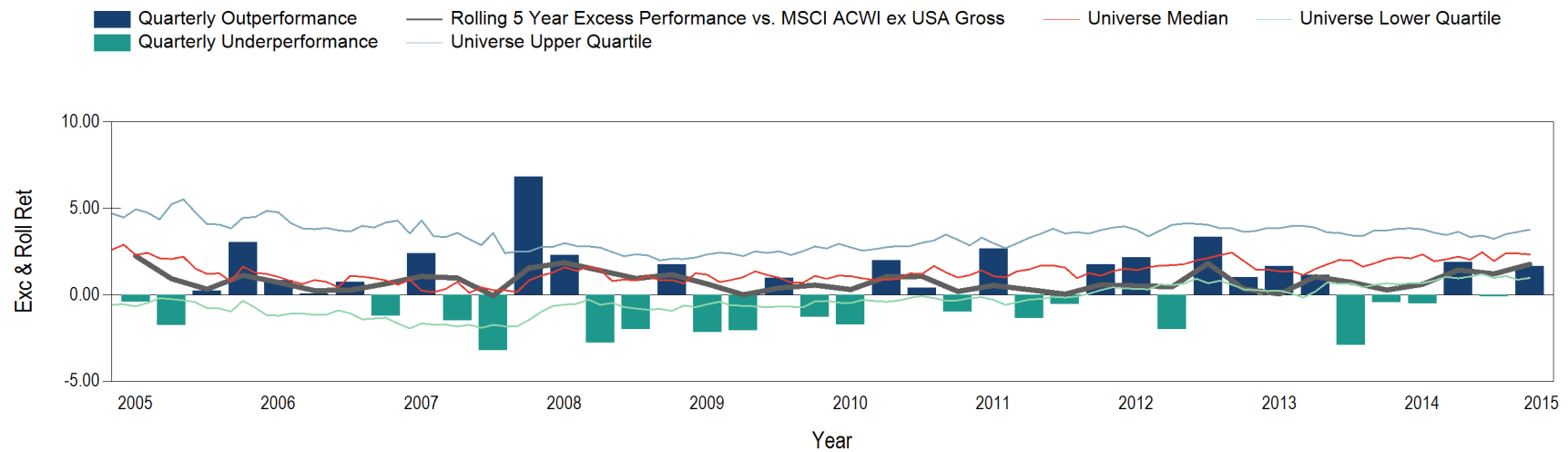
# Templeton Foreign Equity Rolling Return Analysis (Gross of Fees)

Period Ending: September 30, 2015

## Rolling 3 Year Annualized Excess Performance

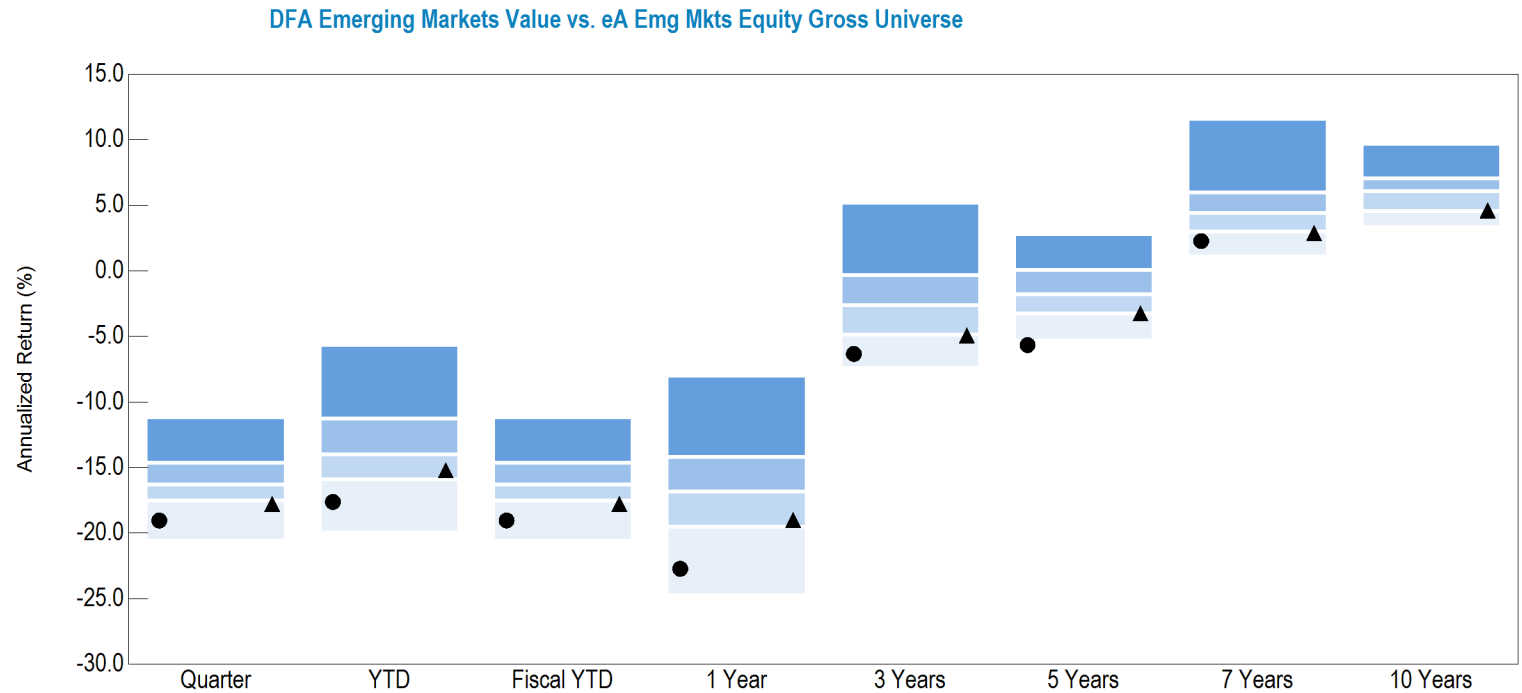


## Rolling 5 Year Annualized Excess Performance



# DFA Emerging Markets Value Cumulative Performance Comparison (Gross of Fees)

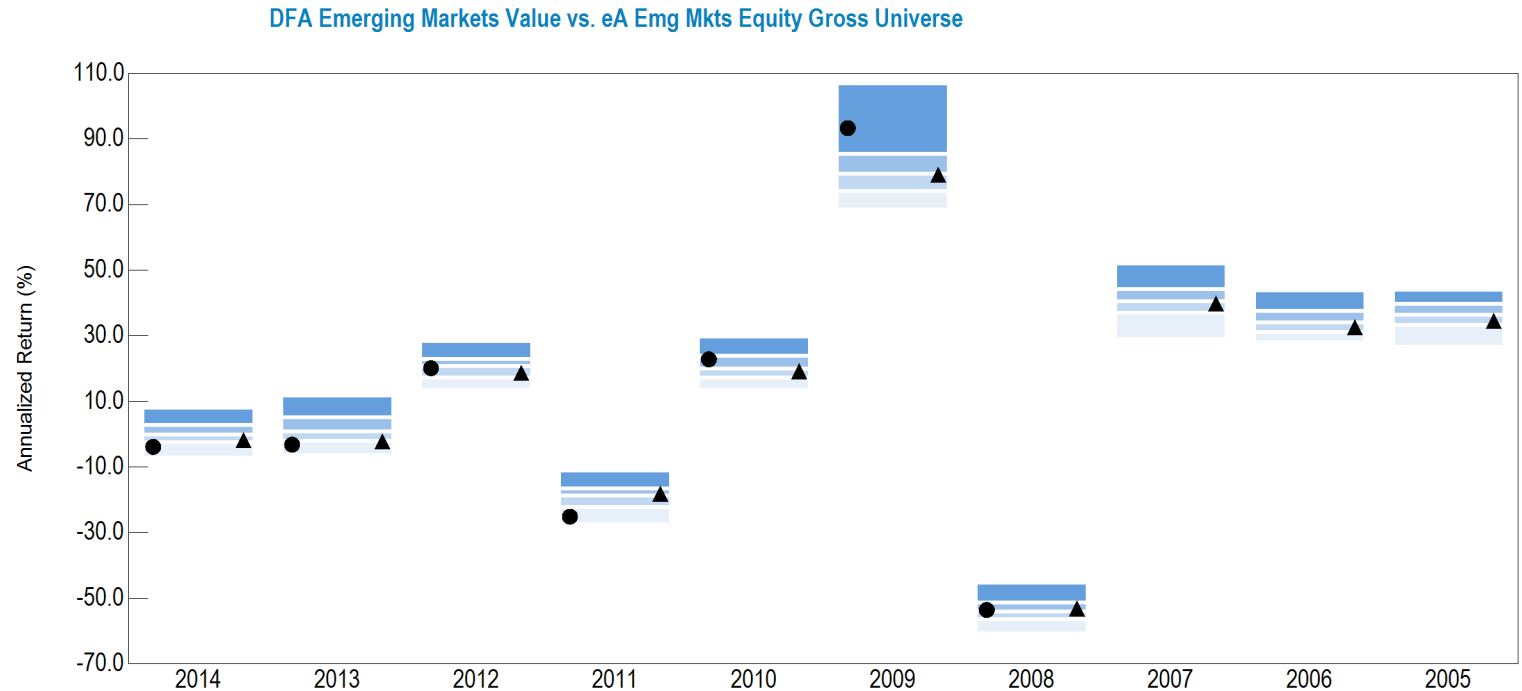
Period Ending: September 30, 2015



	Return (Rank)													
5th Percentile	-11.2		-5.7		-11.2		-8.0		5.2		2.8		11.6	
25th Percentile	-14.6		-11.2		-14.6		-14.2		-0.3		0.1		6.0	
Median	-16.3		-14.0		-16.3		-16.8		-2.6		-1.8		4.4	
75th Percentile	-17.5		-15.9		-17.5		-19.5		-4.8		-3.2		3.0	
95th Percentile	-20.6		-19.9		-20.6		-24.7		-7.4		-5.3		1.1	
# of Portfolios	250		250		250		249		215		161		131	
● DFA Emerging Markets Value	-19.0	(91)	-17.6	(90)	-19.0	(91)	-22.7	(91)	-6.3	(90)	-5.7	(98)	2.3	(85)
▲ MSCI Emerging Markets Gross	-17.8	(79)	-15.2	(65)	-17.8	(79)	-19.0	(71)	-4.9	(76)	-3.2	(76)	2.9	(77)

# DFA Emerging Markets Value Consecutive Performance Comparison (Gross of Fees)

Period Ending: September 30, 2015



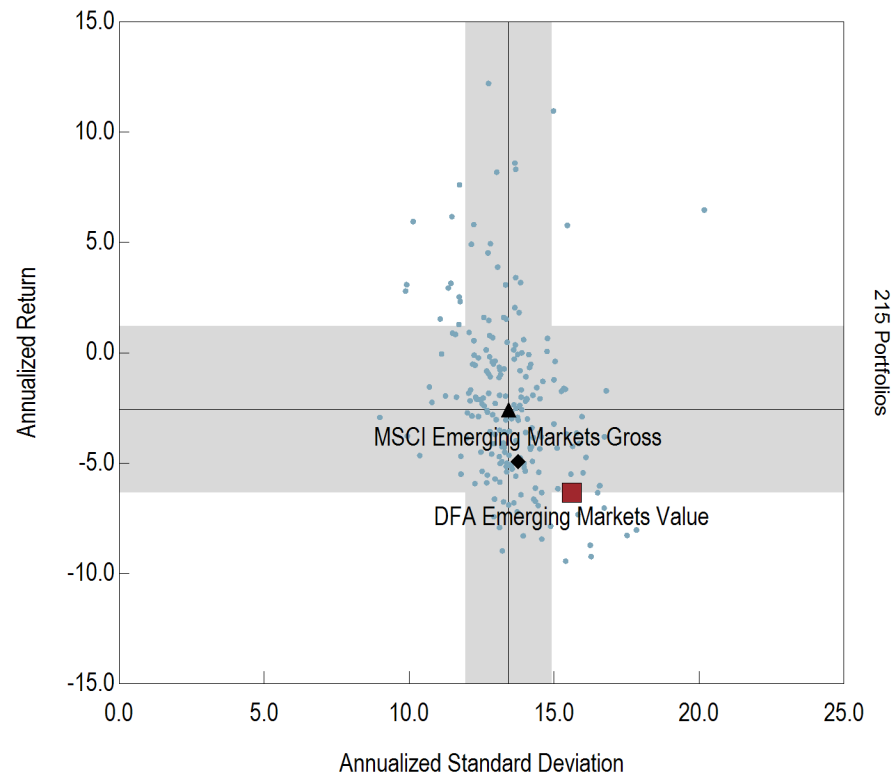
	Return (Rank)									
5th Percentile	8.0	11.7	28.4	-11.1	29.6	106.8	-45.4	51.9	43.7	43.9
25th Percentile	2.9	5.2	23.0	-16.4	23.9	85.5	-51.3	44.3	37.7	39.8
Median	-0.1	1.0	20.9	-18.6	20.1	79.5	-54.0	40.5	34.2	36.5
75th Percentile	-2.4	-2.0	17.3	-22.2	17.3	74.3	-56.3	37.1	31.2	33.4
95th Percentile	-7.0	-6.3	13.7	-27.3	13.7	68.5	-60.7	29.1	28.1	26.7
# of Portfolios	251	198	155	139	113	113	118	115	108	101
● DFA Emerging Markets Value	-3.9 (84)	-3.2 (84)	20.1 (56)	-25.2 (92)	22.8 (33)	93.3 (12)	-53.6 (44)	-- (--)	-- (--)	-- (--)
▲ MSCI Emerging Markets Gross	-1.8 (69)	-2.3 (78)	18.6 (68)	-18.2 (45)	19.2 (62)	79.0 (54)	-53.2 (37)	39.8 (58)	32.6 (62)	34.5 (66)



# DFA Emerging Markets Value Risk vs Return Three & Five Year (Gross of Fees)

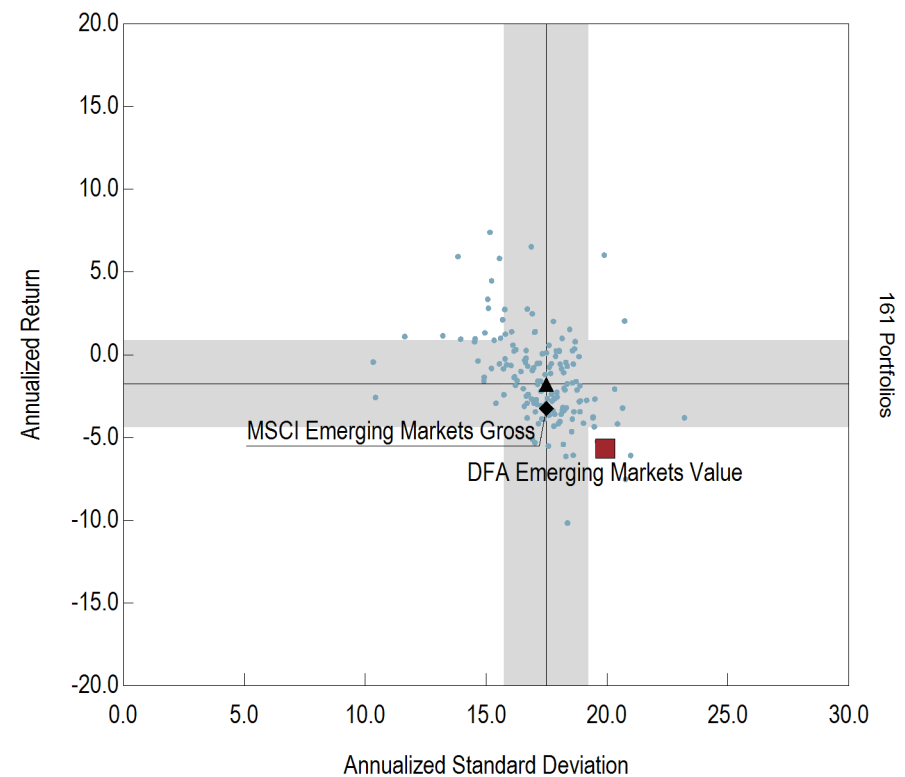
Period Ending: September 30, 2015

Annualized Return vs. Annualized Standard Deviation  
3 Years Ending September 30, 2015



- DFA Emerging Markets Value
- ◆ MSCI Emerging Markets Gross
- ▲ Universe Median
- 68% Confidence Interval
- eA Emg Mkts Equity Gross

Annualized Return vs. Annualized Standard Deviation  
5 Years Ending September 30, 2015

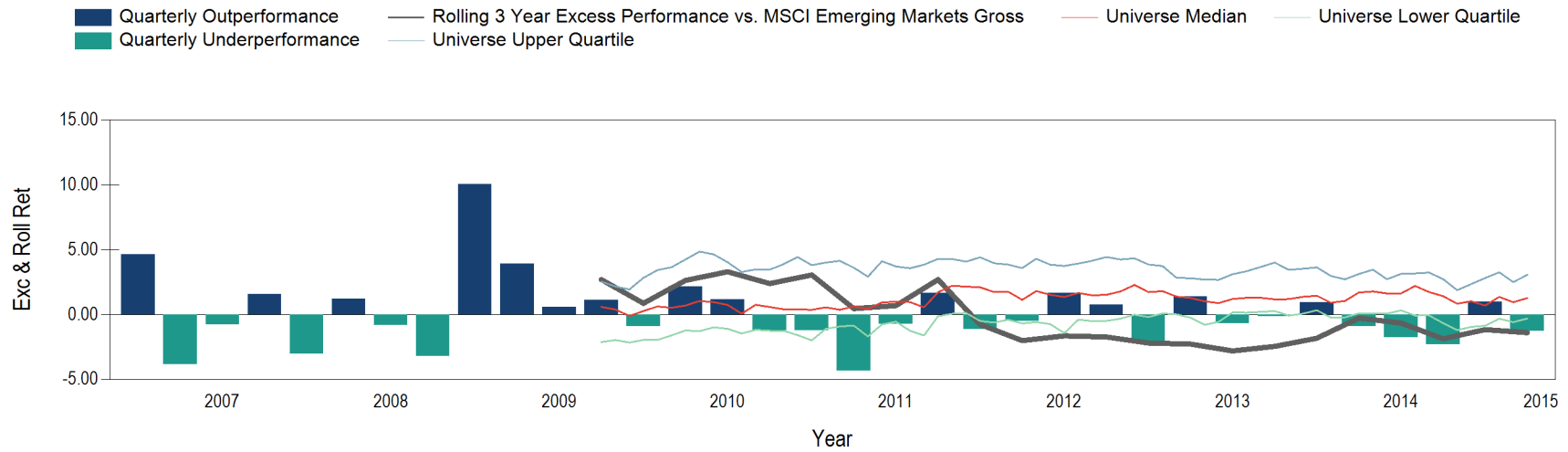


- DFA Emerging Markets Value
- ◆ MSCI Emerging Markets Gross
- ▲ Universe Median
- 68% Confidence Interval
- eA Emg Mkts Equity Gross

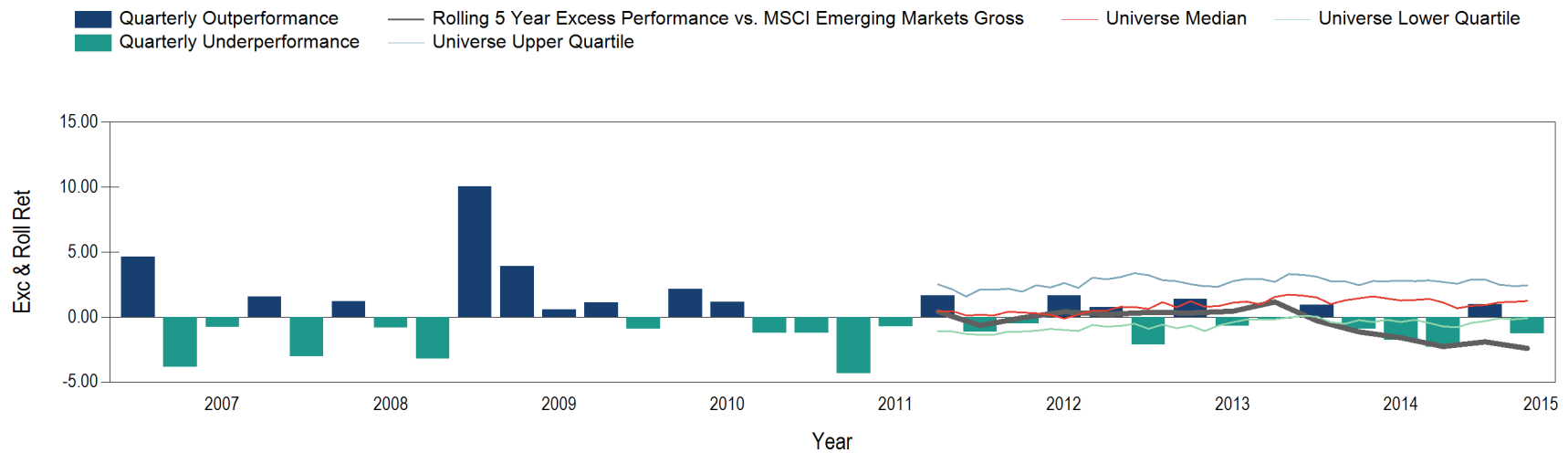
# DFA Emerging Markets Value Rolling Return Analysis (Gross of Fees)

Period Ending: September 30, 2015

## Rolling 3 Year Annualized Excess Performance



## Rolling 5 Year Annualized Excess Performance

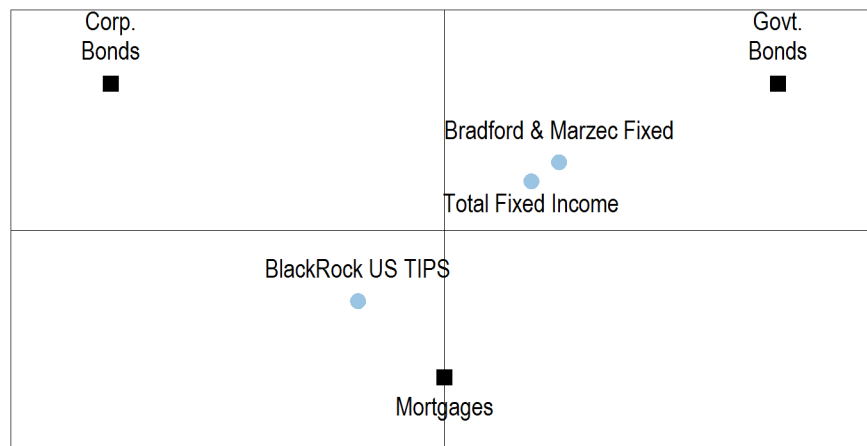


# Total Fixed Income Asset Class Overview (Gross of Fees)

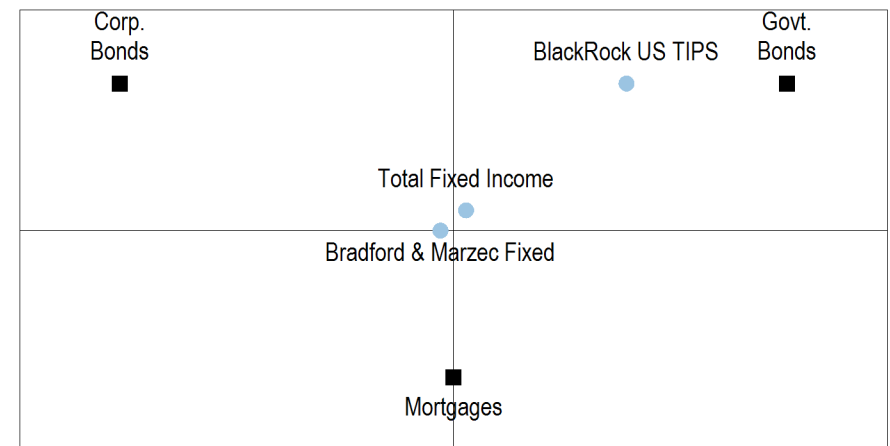
Period Ending: September 30, 2015

	Market Value	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2014	2013	2012	2011	2010
<b>Total Fixed Income</b>	<b>189,312,051</b>	<b>0.0</b>	<b>0.2</b>	<b>0.0</b>	<b>1.6</b>	<b>1.8</b>	<b>4.1</b>	<b>5.8</b>	<b>5.9</b>	<b>-1.7</b>	<b>9.6</b>	<b>6.8</b>	<b>10.2</b>
Barclays Aggregate		1.2	1.1	1.2	2.9	1.7	3.1	4.6	6.0	-2.0	4.2	7.8	6.5
eA All US Fixed Inc Gross Rank		74	74	74	59	63	42	26	34	78	28	45	23
Bradford & Marzec Fixed	90,906,682	0.9	1.5	0.9	3.1	3.0	4.8	6.2	7.0	-0.4	8.8	7.4	9.6
Barclays Aggregate		1.2	1.1	1.2	2.9	1.7	3.1	4.6	6.0	-2.0	4.2	7.8	6.5
eA US Core Plus Fixed Inc Gross Rank		23	19	23	12	28	28	25	16	52	45	51	40
MacKay Shields Core Plus Opportunities	83,890,886	-0.8	--	-0.8	--	--	--	--	--	--	--	--	--
Barclays Aggregate		1.2	--	1.2	--	--	--	--	--	--	--	--	--
eA US Core Plus Fixed Inc Gross Rank		84	--	84	--	--	--	--	--	--	--	--	--
BlackRock US TIPS	14,514,483	-1.2	-0.7	-1.2	-0.8	-1.8	2.6	--	3.6	-8.5	7.1	13.7	6.4
Barclays US TIPS		-1.1	-0.8	-1.1	-0.8	-1.8	2.5	--	3.6	-8.6	7.0	13.6	6.3
eA TIPS / Infl Indexed Fixed Inc Gross Rank		62	39	62	44	70	44	--	45	62	59	37	52

Fixed Income Style Map  
3 Years Ending September 30, 2015



Fixed Income Style Map  
5 Years Ending September 30, 2015



Total Fixed Income  
Asset Class Overview (Net of Fees)

Period Ending: September 30, 2015

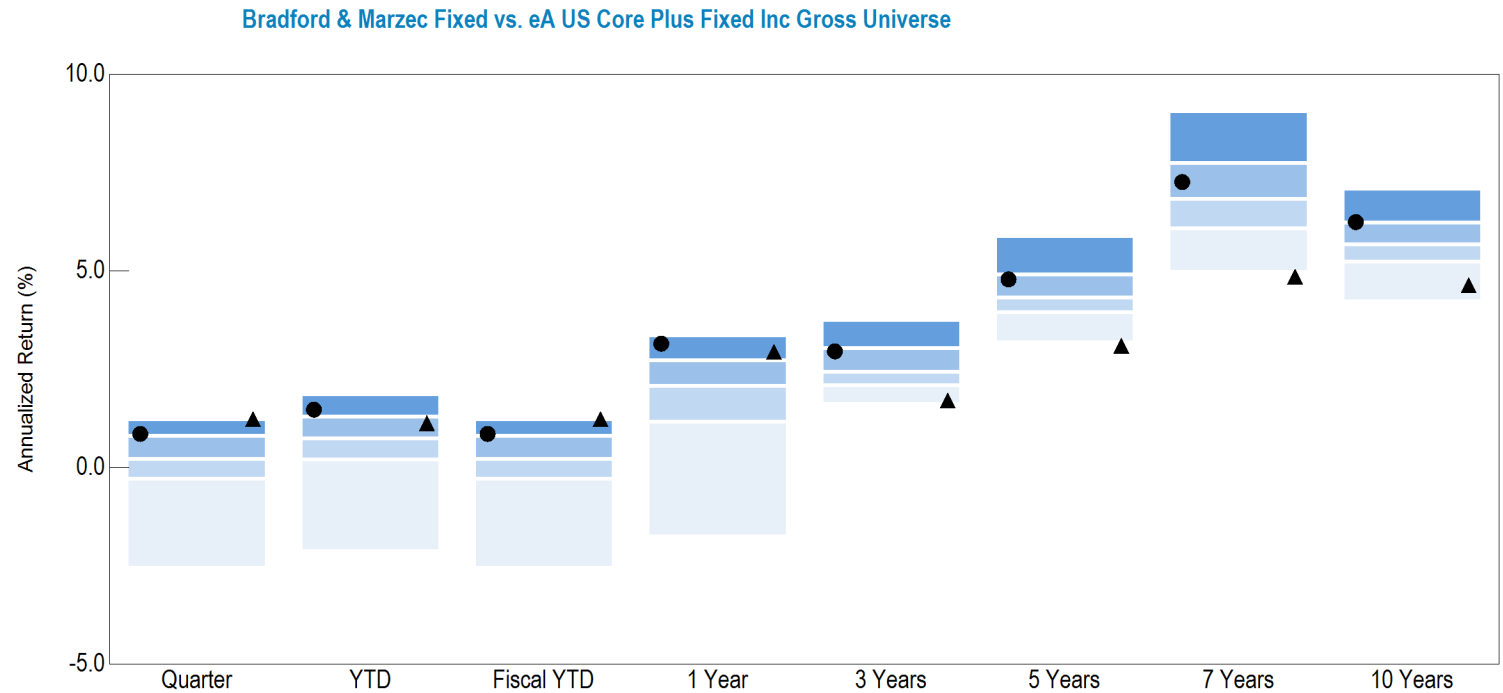
	Market Value	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2014	2013	2012	2011	2010
<b>Total Fixed Income</b>	<b>189,312,051</b>	<b>-0.1</b>	<b>0.0</b>	<b>-0.1</b>	<b>1.4</b>	<b>1.5</b>	<b>3.8</b>	<b>5.6</b>	<b>5.6</b>	<b>-2.0</b>	<b>9.3</b>	<b>6.5</b>	<b>9.9</b>
Barclays Aggregate		1.2	1.1	1.2	2.9	1.7	3.1	4.6	6.0	-2.0	4.2	7.8	6.5
Bradford & Marzec Fixed	90,906,682	0.8	1.3	0.8	2.9	2.6	4.5	5.9	6.7	-0.8	8.5	7.1	9.3
Barclays Aggregate		1.2	1.1	1.2	2.9	1.7	3.1	4.6	6.0	-2.0	4.2	7.8	6.5
Mackay Shields Core Plus Opportunities	83,890,886	-0.9	--	-0.9	--	--	--	--	--	--	--	--	--
Barclays Aggregate		1.2	--	1.2	--	--	--	--	--	--	--	--	--
BlackRock US TIPS	14,514,483	-1.2	-0.7	-1.2	-0.9	-1.8	2.6	--	3.6	-8.6	7.0	13.6	6.3
Barclays US TIPS		-1.1	-0.8	-1.1	-0.8	-1.8	2.5	--	3.6	-8.6	7.0	13.6	6.3

Correlation Matrix  
Last 5 Years

	Total Fixed Income	Bradford & Marzec Fixed	Mackay Shields Core Plus Opportunities	BlackRock US TIPS	Barclays Aggregate
Total Fixed Income	1.00	--	--	--	--
Bradford & Marzec Fixed	0.97	1.00	--	--	--
Mackay Shields Core Plus Opportunities	--	--	--	--	--
BlackRock US TIPS	0.85	0.78	--	1.00	--
Barclays Aggregate	0.72	0.72	--	0.82	1.00

# Bradford & Marzec Fixed Cumulative Performance Comparison (Gross of Fees)

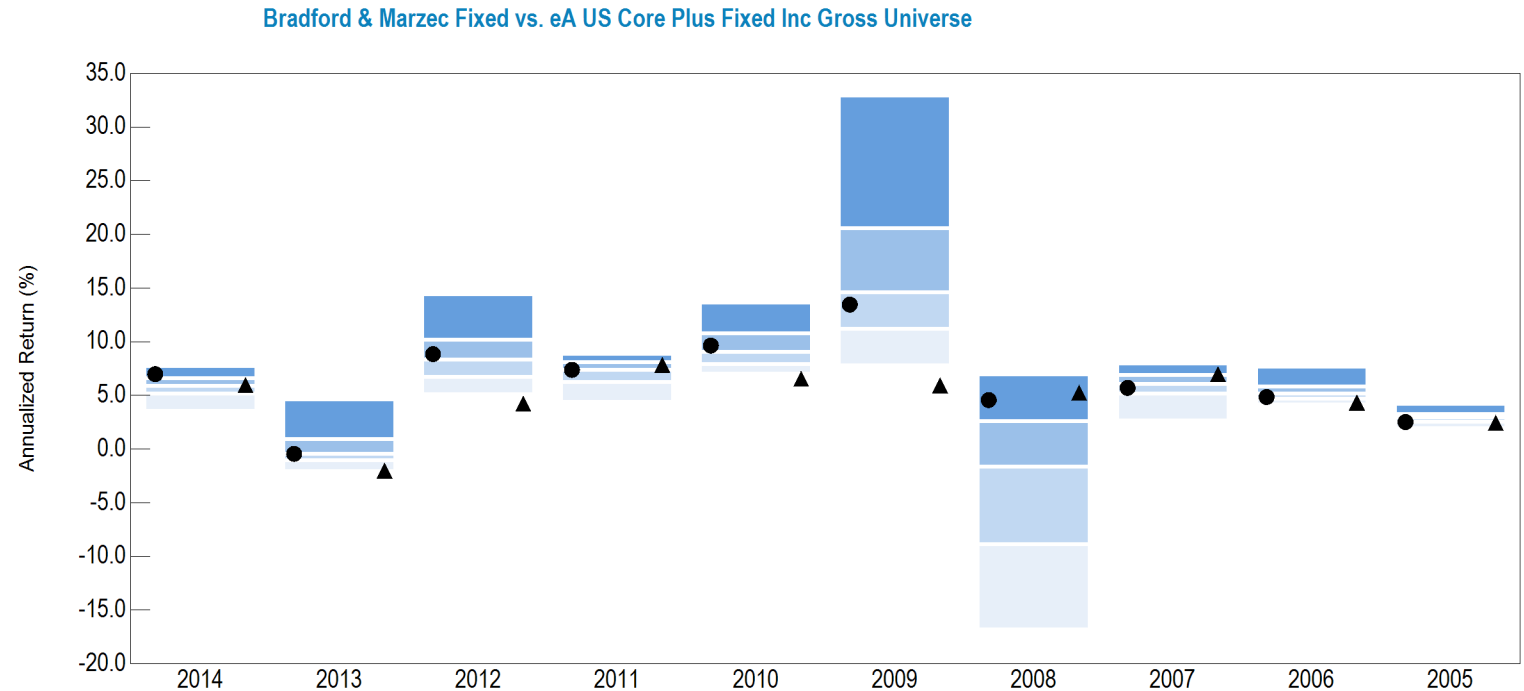
Period Ending: September 30, 2015



	Return (Rank)													
5th Percentile	1.2		1.9		1.2		3.4		3.7		5.9		9.1	
25th Percentile	0.8		1.3		0.8		2.7		3.0		4.9		7.8	
Median	0.2		0.8		0.2		2.1		2.4		4.3		6.8	
75th Percentile	-0.3		0.2		-0.3		1.2		2.1		4.0		6.1	
95th Percentile	-2.5		-2.1		-2.5		-1.7		1.6		3.2		5.0	
# of Portfolios	110		110		110		110		108		104		96	
● Bradford & Marzec Fixed	0.9	(23)	1.5	(19)	0.9	(23)	3.1	(12)	3.0	(28)	4.8	(28)	7.3	(37)
▲ Barclays Aggregate	1.2	(5)	1.1	(33)	1.2	(5)	2.9	(15)	1.7	(94)	3.1	(96)	4.8	(96)
													4.6	(94)

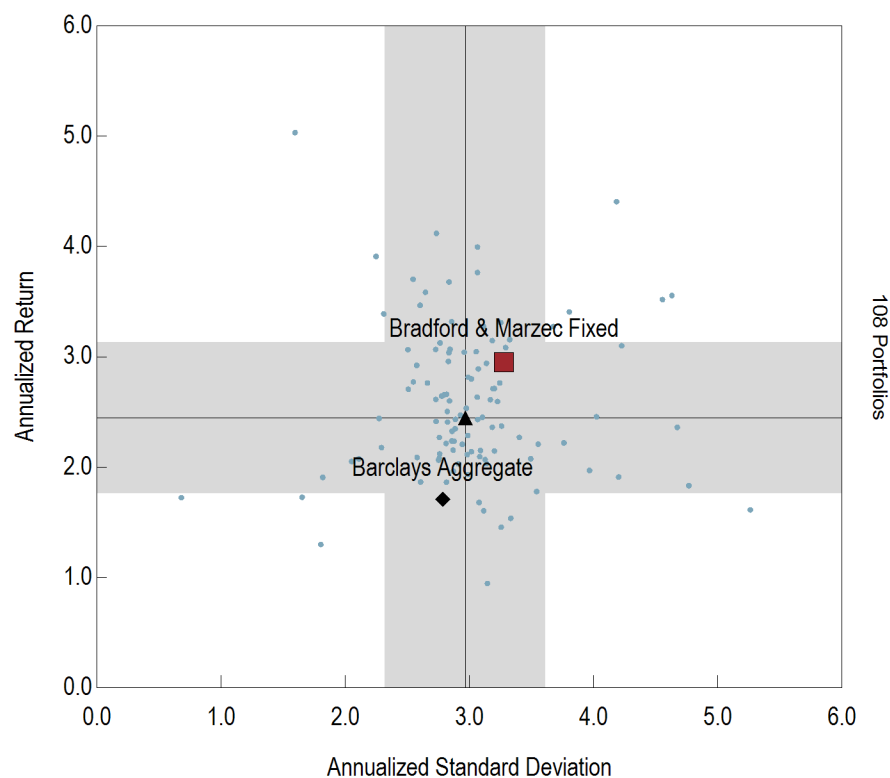
Bradford & Marzec Fixed  
Consecutive Performance Comparison (Gross of Fees)

Period Ending: September 30, 2015

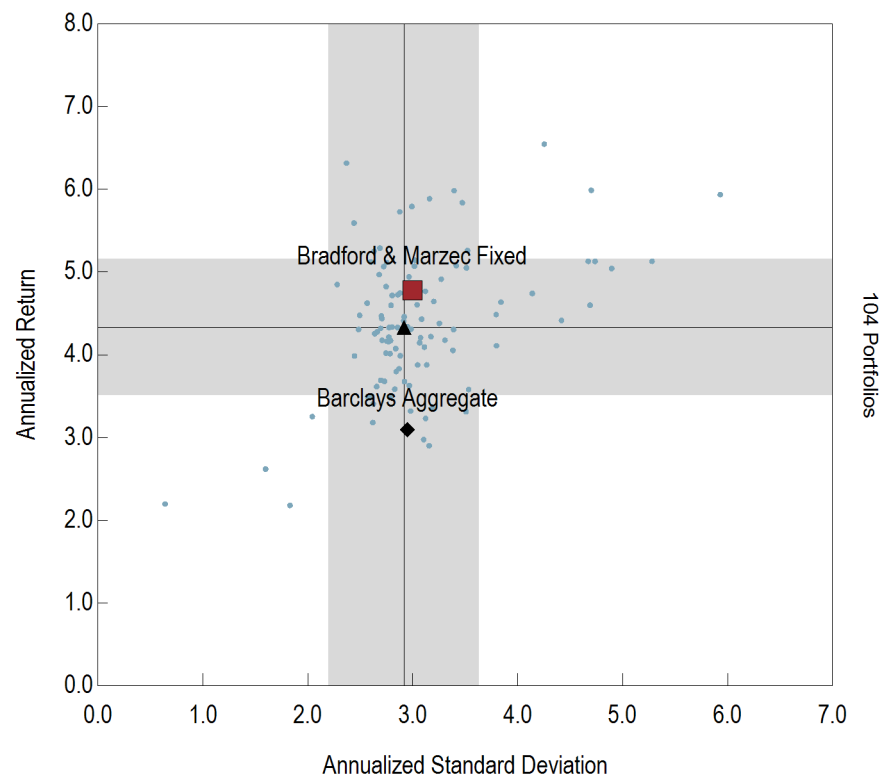


	Return (Rank)									
5th Percentile	7.7	4.6	14.4	8.8	13.6	32.9	6.9	7.9	7.6	4.2
25th Percentile	6.7	1.0	10.2	8.1	10.8	20.6	2.7	6.9	5.9	3.3
Median	5.9	-0.4	8.3	7.4	9.1	14.6	-1.6	6.1	5.2	3.0
75th Percentile	5.2	-1.0	6.7	6.3	8.0	11.2	-8.9	5.2	4.7	2.6
95th Percentile	3.6	-2.0	5.1	4.4	7.0	7.8	-16.8	2.7	4.2	2.0
# of Portfolios	118	116	124	118	123	128	136	144	146	141
● Bradford & Marzec Fixed	7.0 (16)	-0.4 (52)	8.8 (45)	7.4 (51)	9.6 (40)	13.5 (55)	4.6 (17)	5.7 (66)	4.8 (67)	2.5 (77)
▲ Barclays Aggregate	6.0 (50)	-2.0 (96)	4.2 (97)	7.8 (37)	6.5 (97)	5.9 (99)	5.2 (13)	7.0 (25)	4.3 (90)	2.4 (80)

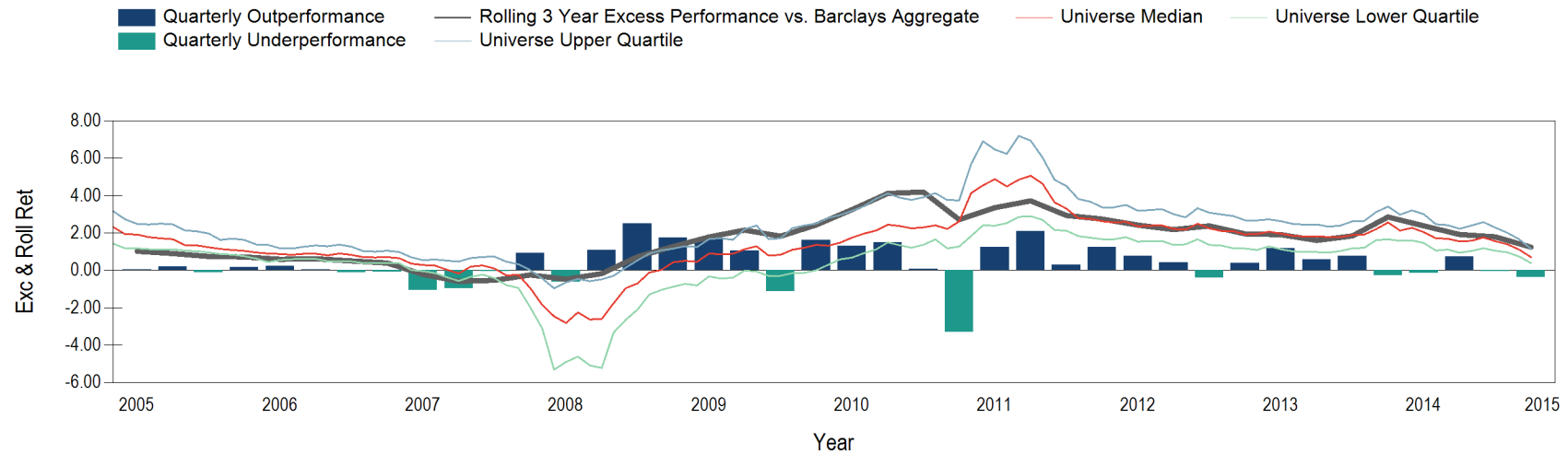
Annualized Return vs. Annualized Standard Deviation  
3 Years Ending September 30, 2015



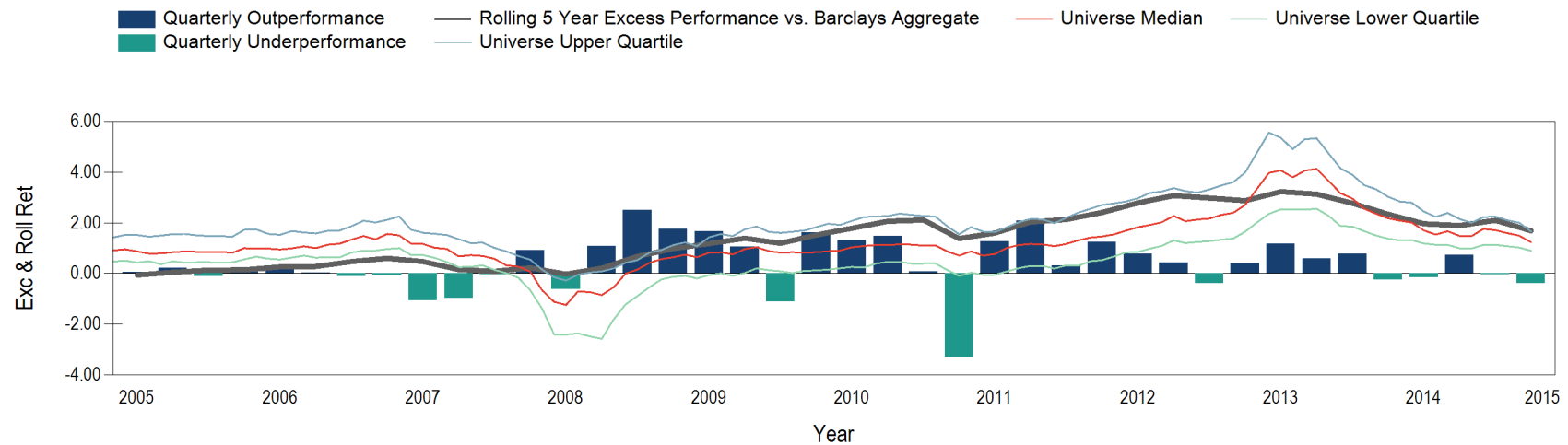
Annualized Return vs. Annualized Standard Deviation  
5 Years Ending September 30, 2015



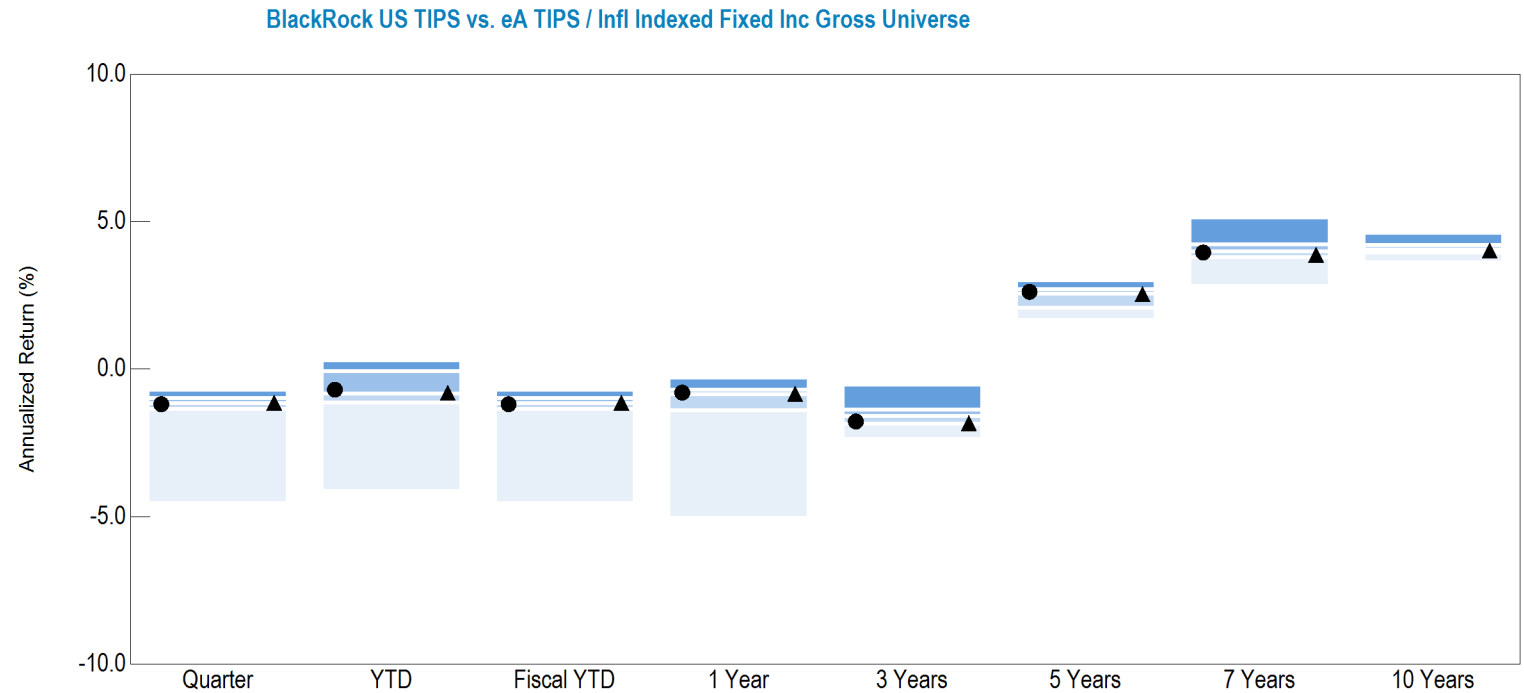
### Rolling 3 Year Annualized Excess Performance



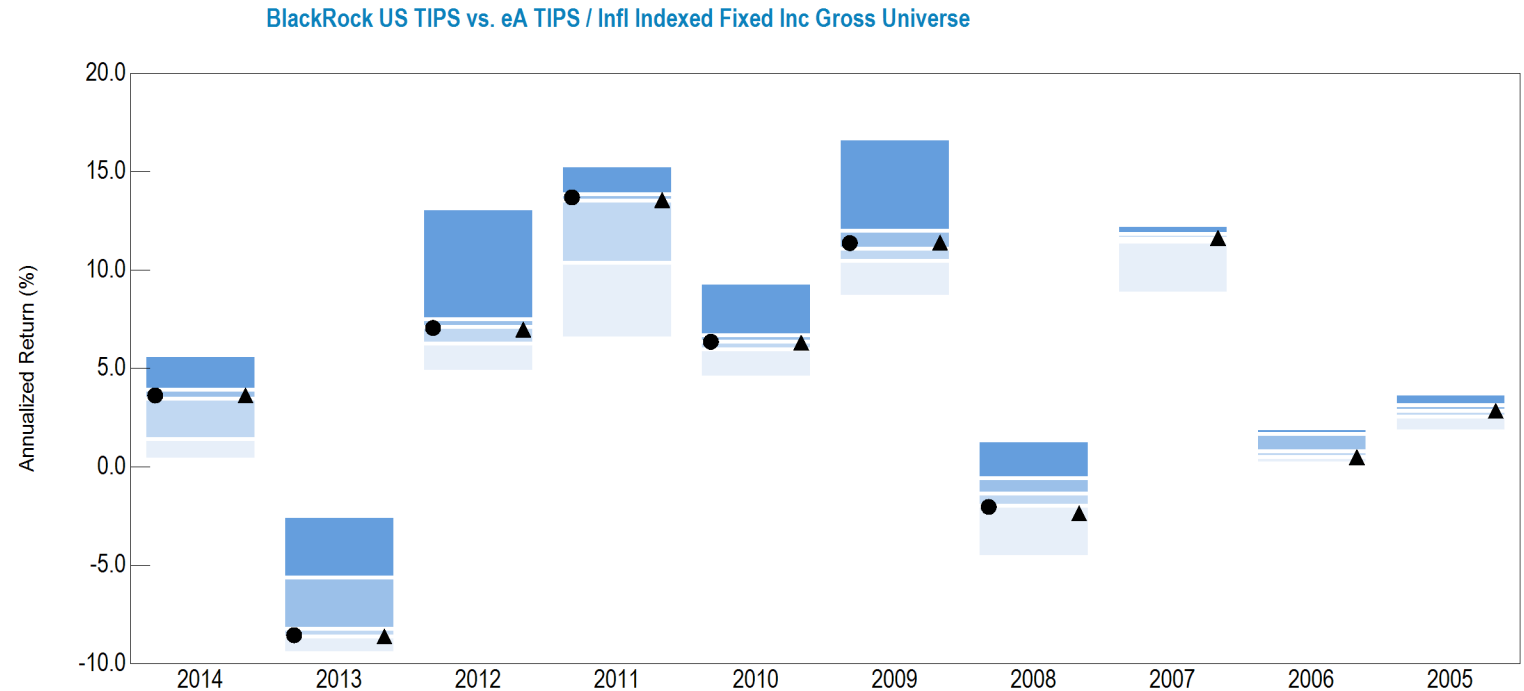
### Rolling 5 Year Annualized Excess Performance





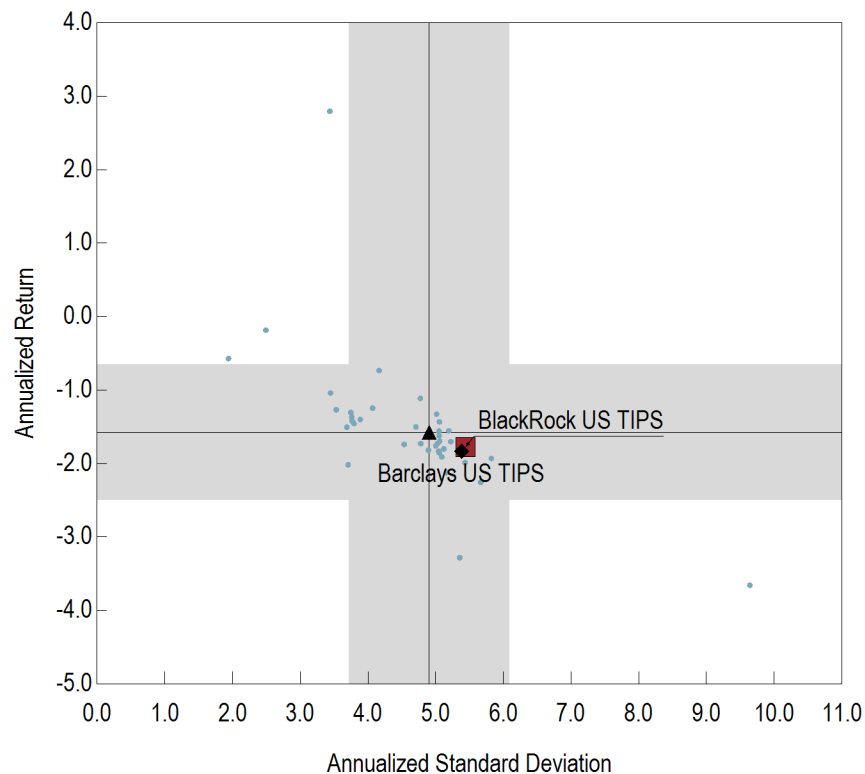


	Return (Rank)											
5th Percentile	-0.7		0.3		-0.7		-0.3		-0.5		3.0	
25th Percentile	-1.0		-0.1		-1.0		-0.7		-1.3		2.7	
Median	-1.1		-0.8		-1.1		-0.8		-1.6		2.6	
75th Percentile	-1.3		-1.1		-1.3		-1.4		-1.8		2.1	
95th Percentile	-4.5		-4.1		-4.5		-5.0		-2.4		1.7	
# of Portfolios	39		39		39		39		39		36	
● BlackRock US TIPS	-1.2	(62)	-0.7	(39)	-1.2	(62)	-0.8	(44)	-1.8	(70)	2.6	(44)
▲ Barclays US TIPS	-1.1	(56)	-0.8	(50)	-1.1	(56)	-0.8	(48)	-1.8	(77)	2.5	(52)
											4.0	(57)
											3.9	(68)
											--	(--)
											4.0	(71)



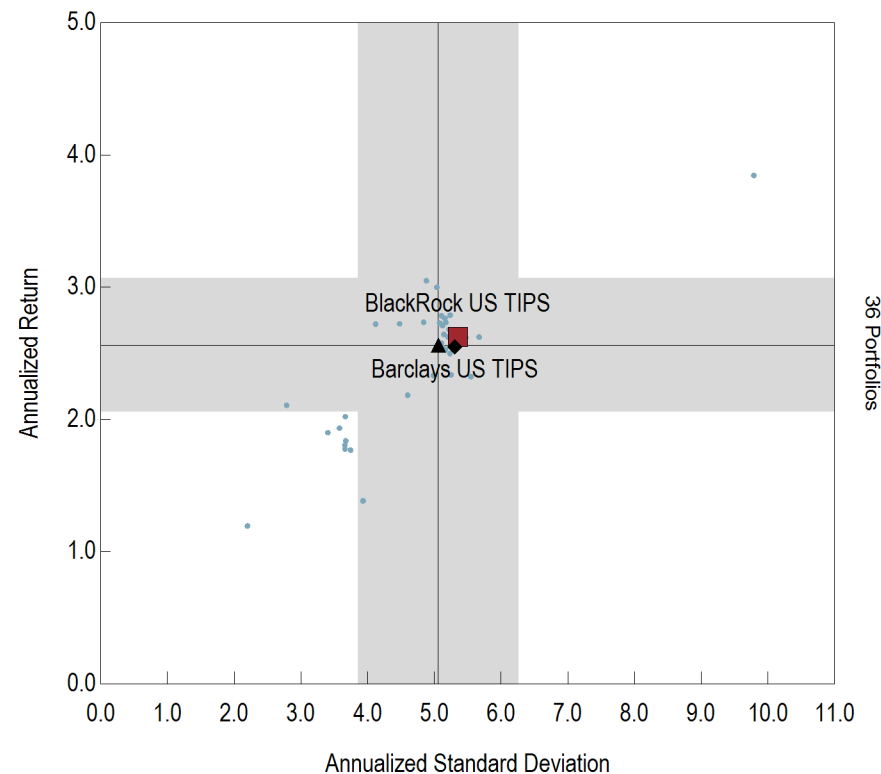
	Return (Rank)									
5th Percentile	5.7	-2.5	13.1	15.3	9.4	16.7	1.3	12.3	2.0	3.7
25th Percentile	4.0	-5.6	7.5	13.9	6.7	12.0	-0.5	11.8	1.7	3.2
Median	3.5	-8.2	7.1	13.5	6.4	11.1	-1.4	11.6	0.8	2.9
75th Percentile	1.4	-8.6	6.3	10.4	6.0	10.5	-1.9	11.5	0.5	2.6
95th Percentile	0.4	-9.4	4.9	6.6	4.6	8.7	-4.6	8.8	0.2	1.8
# of Portfolios	50	43	43	47	39	37	40	37	35	34
● BlackRock US TIPS	3.6 (45)	-8.5 (62)	7.1 (59)	13.7 (37)	6.4 (52)	11.4 (36)	-2.0 (78)	-- (--)	-- (--)	-- (--)
▲ Barclays US TIPS	3.6 (44)	-8.6 (76)	7.0 (66)	13.6 (49)	6.3 (57)	11.4 (35)	-2.4 (85)	11.6 (49)	0.5 (80)	2.9 (54)

Annualized Return vs. Annualized Standard Deviation  
3 Years Ending September 30, 2015



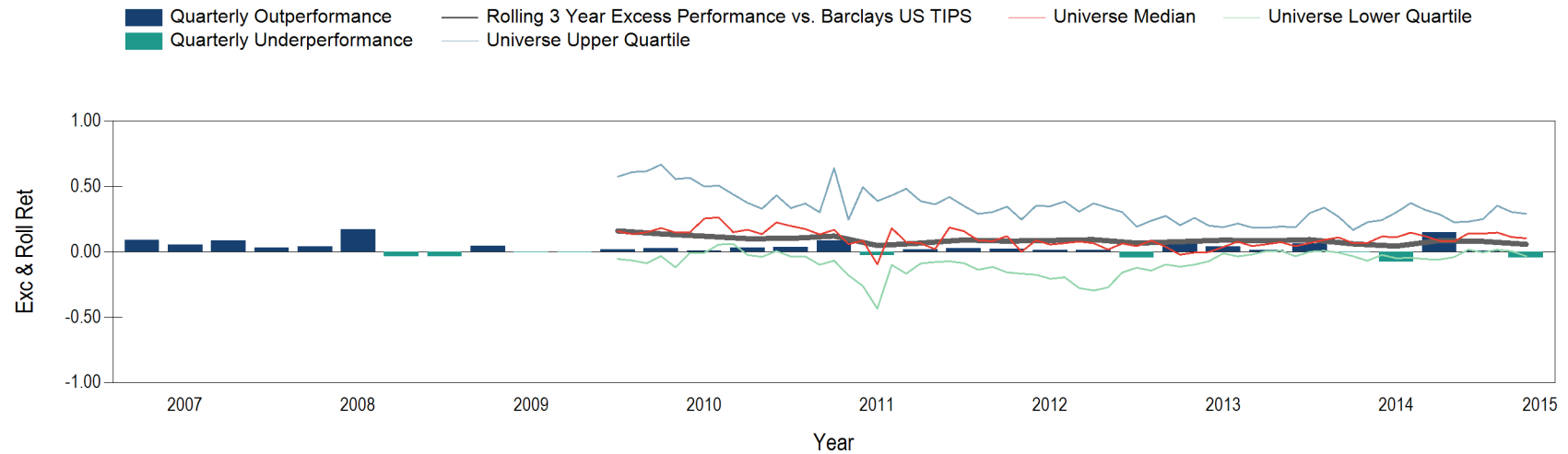
- BlackRock US TIPS
- ◆ Barclays US TIPS
- ▲ Universe Median
- 68% Confidence Interval
- eA TIPS / Inflation Indexed Fixed Inc Gross

Annualized Return vs. Annualized Standard Deviation  
5 Years Ending September 30, 2015

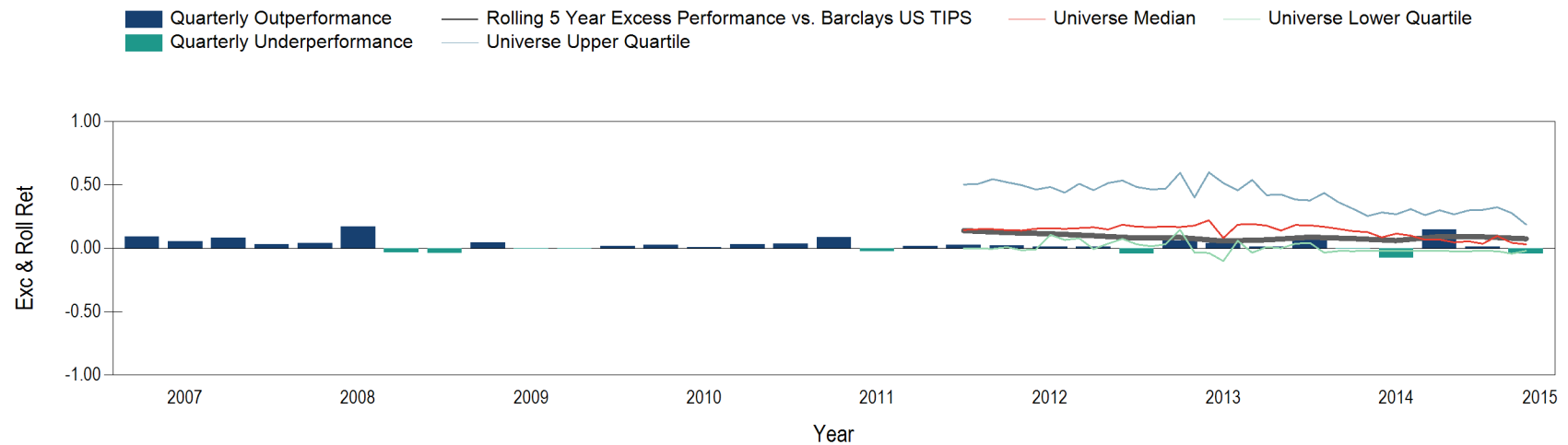


- BlackRock US TIPS
- ◆ Barclays US TIPS
- ▲ Universe Median
- 68% Confidence Interval
- eA TIPS / Inflation Indexed Fixed Inc Gross

### Rolling 3 Year Annualized Excess Performance



### Rolling 5 Year Annualized Excess Performance

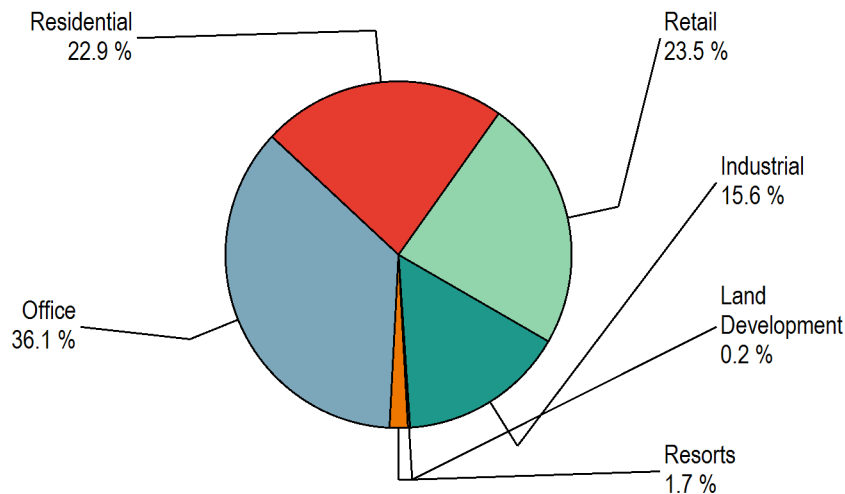


# Total Real Estate Asset Class Overview (Gross of Fees)

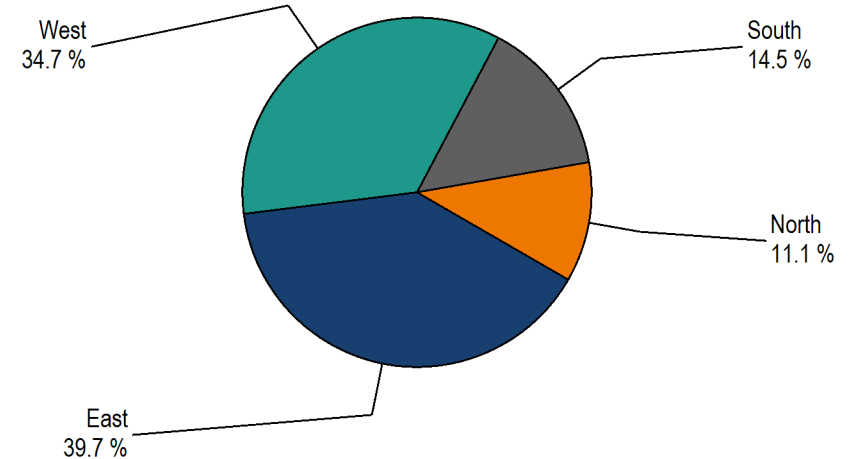
Period Ending: September 30, 2015

	Market Value	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2014	2013	2012	2011	2010
<b>Total Real Estate</b>	<b>56,938,551</b>	<b>2.9</b>	<b>11.2</b>	<b>2.9</b>	<b>15.5</b>	<b>13.2</b>	<b>13.7</b>	<b>--</b>	<b>13.0</b>	<b>12.6</b>	<b>10.6</b>	<b>14.9</b>	<b>18.0</b>
NCREIF Property Index		3.1	10.1	3.1	13.5	11.9	12.5	--	11.8	11.0	10.5	14.3	13.1
NCREIF-ODCE		3.7	11.3	3.7	14.9	13.4	14.0	--	12.5	13.9	10.9	16.0	16.4
ASB Real Estate	28,016,004	2.7	11.0	2.7	15.1	--	--	--	13.5	13.7	--	--	--
NCREIF Property Index		3.1	10.1	3.1	13.5	--	--	--	11.8	11.0	--	--	--
NCREIF-ODCE		3.7	11.3	3.7	14.9	--	--	--	12.5	13.9	--	--	--
Clarion Lion	27,529,369	3.3	12.0	3.3	16.8	13.6	15.0	--	13.2	12.8	10.9	18.7	19.4
NCREIF Property Index		3.1	10.1	3.1	13.5	11.9	12.5	--	11.8	11.0	10.5	14.3	13.1
NCREIF-ODCE		3.7	11.3	3.7	14.9	13.4	14.0	--	12.5	13.9	10.9	16.0	16.4
1221 State St. Corp	1,393,178	0.0	0.0	0.0	0.0	0.0	-1.5	--	0.0	0.0	0.1	-9.0	3.7

Property Type Allocation  
Allocation as of September 30, 2015



Geographic Diversification  
Allocation as of September 30, 2015

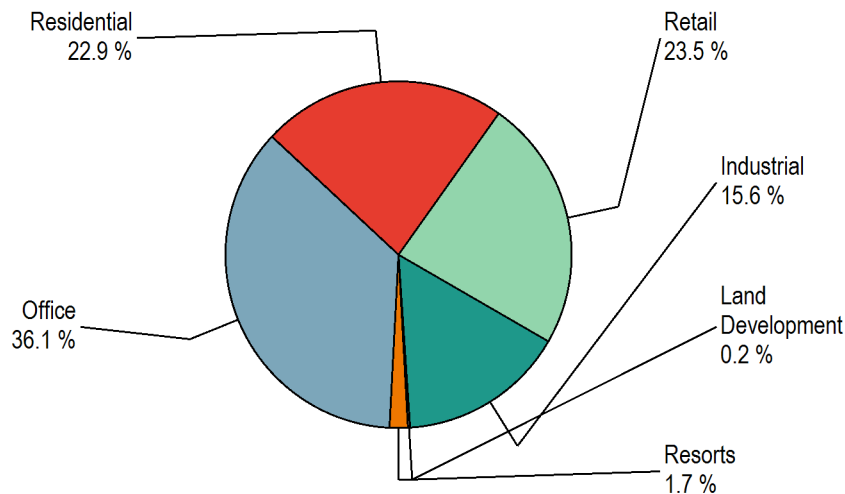


# Total Real Estate Asset Class Overview (Net of Fees)

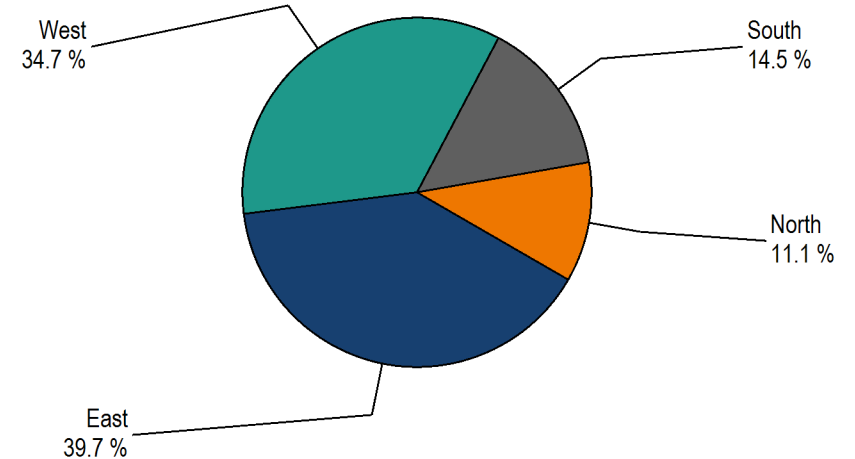
Period Ending: September 30, 2015

	Market Value	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2014	2013	2012	2011	2010
<b>Total Real Estate</b>	<b>56,938,551</b>	<b>2.7</b>	<b>10.4</b>	<b>2.7</b>	<b>14.3</b>	<b>12.3</b>	<b>12.8</b>	<b>--</b>	<b>11.6</b>	<b>12.1</b>	<b>10.3</b>	<b>14.2</b>	<b>16.7</b>
NCREIF Property Index		3.1	10.1	3.1	13.5	11.9	12.5	--	11.8	11.0	10.5	14.3	13.1
NCREIF-ODCE		3.7	11.3	3.7	14.9	13.4	14.0	--	12.5	13.9	10.9	16.0	16.4
ASB Real Estate	28,016,004	2.4	10.2	2.4	14.0	--	--	--	12.5	12.5	--	--	--
NCREIF Property Index		3.1	10.1	3.1	13.5	--	--	--	11.8	11.0	--	--	--
NCREIF-ODCE		3.7	11.3	3.7	14.9	--	--	--	12.5	13.9	--	--	--
Clarion Lion	27,529,369	3.1	11.2	3.1	15.7	12.6	14.1	--	12.2	11.8	9.9	17.8	18.2
NCREIF Property Index		3.1	10.1	3.1	13.5	11.9	12.5	--	11.8	11.0	10.5	14.3	13.1
NCREIF-ODCE		3.7	11.3	3.7	14.9	13.4	14.0	--	12.5	13.9	10.9	16.0	16.4
1221 State St. Corp	1,393,178	0.0	0.0	0.0	0.0	0.0	-1.5	--	0.0	0.0	0.1	-9.0	3.7

**Property Type Allocation**  
Allocation as of September 30, 2015



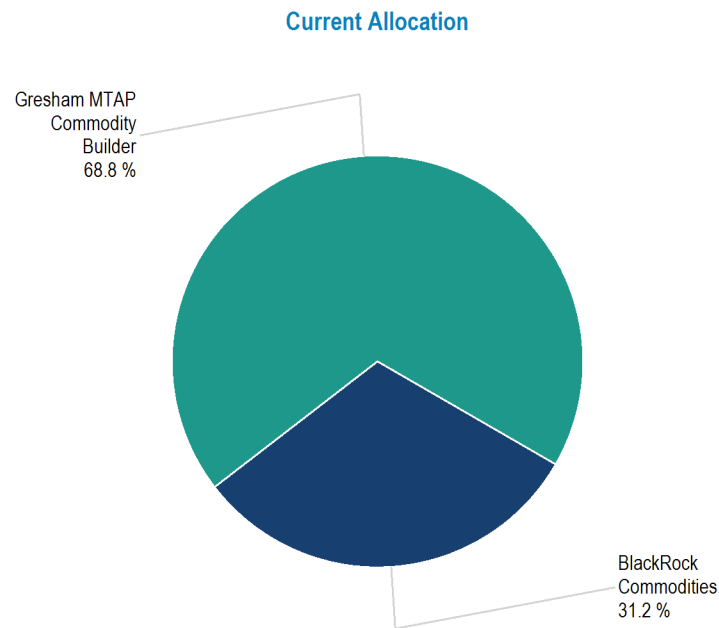
**Geographic Diversification**  
Allocation as of September 30, 2015



# Total Commodities Asset Class Summary (Gross of Fees)

Period Ending: September 30, 2015

	Market Value	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2014	2013	2012	2011	2010
<b>Total Commodities</b>	<b>14,653,874</b>	<b>-14.8</b>	<b>-16.0</b>	<b>-14.8</b>	<b>-26.4</b>	<b>-15.8</b>	<b>-8.7</b>	<b>--</b>	<b>-16.3</b>	<b>-9.3</b>	<b>-0.9</b>	<b>-13.2</b>	<b>17.0</b>
<i>Bloomberg Commodity Index TR USD</i>		<i>-14.5</i>	<i>-15.8</i>	<i>-14.5</i>	<i>-26.0</i>	<i>-16.0</i>	<i>-8.9</i>	<i>--</i>	<i>-17.0</i>	<i>-9.5</i>	<i>-1.1</i>	<i>-13.3</i>	<i>16.8</i>
BlackRock Commodities	4,574,368	-14.4	-15.8	-14.4	-26.0	-15.9	-8.8	--	-17.0	-9.4	-0.9	-13.2	17.0
<i>Bloomberg Commodity Index TR USD</i>		<i>-14.5</i>	<i>-15.8</i>	<i>-14.5</i>	<i>-26.0</i>	<i>-16.0</i>	<i>-8.9</i>	<i>--</i>	<i>-17.0</i>	<i>-9.5</i>	<i>-1.1</i>	<i>-13.3</i>	<i>16.8</i>
Gresham MTAP Commodity Builder	10,079,506	-15.0	-16.1	-15.0	-26.5	--	--	--	-16.1	--	--	--	--
<i>Bloomberg Commodity Index TR USD</i>		<i>-14.5</i>	<i>-15.8</i>	<i>-14.5</i>	<i>-26.0</i>	<i>--</i>	<i>--</i>	<i>--</i>	<i>-17.0</i>	<i>--</i>	<i>--</i>	<i>--</i>	<i>--</i>

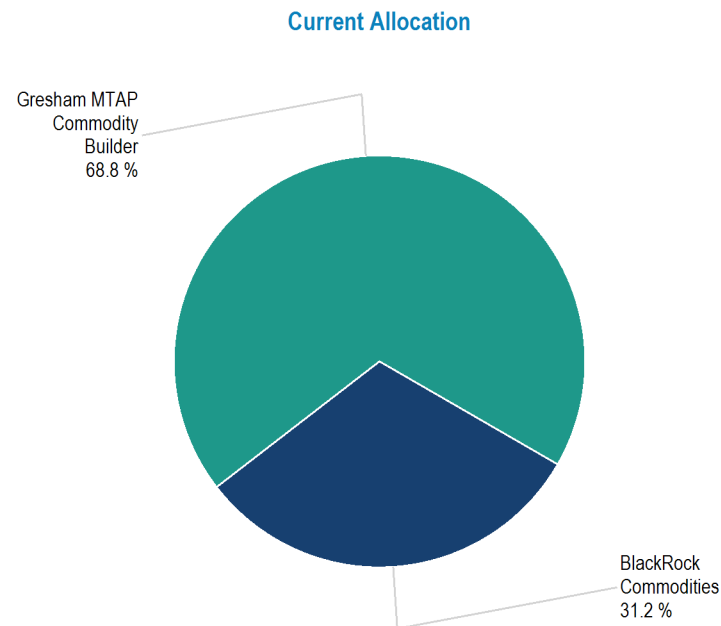


# Total Commodities

## Asset Class Summary (Net of Fees)

Period Ending: September 30, 2015

	Market Value	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2014	2013	2012	2011	2010
<b>Total Commodities</b>	<b>14,653,874</b>	<b>-14.9</b>	<b>-16.4</b>	<b>-14.9</b>	<b>-26.8</b>	<b>-16.2</b>	<b>-9.1</b>	<b>--</b>	<b>-16.9</b>	<b>-9.5</b>	<b>-1.2</b>	<b>-13.5</b>	<b>16.6</b>
<i>Bloomberg Commodity Index TR USD</i>		<i>-14.5</i>	<i>-15.8</i>	<i>-14.5</i>	<i>-26.0</i>	<i>-16.0</i>	<i>-8.9</i>	<i>--</i>	<i>-17.0</i>	<i>-9.5</i>	<i>-1.1</i>	<i>-13.3</i>	<i>16.8</i>
BlackRock Commodities	4,574,368	-14.5	-16.0	-14.5	-26.2	-16.2	-9.1	--	-17.2	-9.7	-1.2	-13.5	16.6
<i>Bloomberg Commodity Index TR USD</i>		<i>-14.5</i>	<i>-15.8</i>	<i>-14.5</i>	<i>-26.0</i>	<i>-16.0</i>	<i>-8.9</i>	<i>--</i>	<i>-17.0</i>	<i>-9.5</i>	<i>-1.1</i>	<i>-13.3</i>	<i>16.8</i>
Gresham MTAP Commodity Builder	10,079,506	-15.2	-16.6	-15.2	-27.1	--	--	--	-16.7	--	--	--	--
<i>Bloomberg Commodity Index TR USD</i>		<i>-14.5</i>	<i>-15.8</i>	<i>-14.5</i>	<i>-26.0</i>	<i>--</i>	<i>--</i>	<i>--</i>	<i>-17.0</i>	<i>--</i>	<i>--</i>	<i>--</i>	<i>--</i>





# Total Fund Explanatory Notes

Period Ending: September 30, 2015

## Performance Return Calculations

Returns calculated in the performance summary tables are time-weighted rates of return (TWRR). TWRR are calculated from changes in monthly market values, adjusted for weighted cash flows between months. Returns are linked geometrically and annualized for periods longer than one year.

## Data Source

Verus is an independent third party consulting firm and calculates returns from best source book of record data. Returns calculated by Verus may deviate from those shown by the manager in part, but not limited to, differences in prices and market values reported by the custodian and manager, as well as significant cash flows into or out of an account. It is the responsibility of the manager and custodian to provide insight into the pricing methodologies and any difference in valuation.

## Illiquid Alternatives

Closed end funds including but not limited to Real Estate, Hedge Funds, Private Equity, and Private Credit may lag performance and market value data due to delayed reporting. Verus will show market values for closed end funds as of the most recent reported performance adjusted for capital calls and distributions. Closed end fund managers report performance using an internal rate of return (IRR), which differs from the TWRR calculation done by Verus. It is inappropriate to compare IRR and TWRR to each other. IRR figures reported in the illiquid alternative pages are provided by the respective managers, and Verus has not made any attempts to verify these returns. Until a partnership is liquidated (typically over 10-12 years), the IRR is only an interim estimated return. The actual IRR performance of any LP is not known until the final liquidation.

## Manager Line Up

Manager	Inception Date	Data Source	Manager	Inception Date	Data Source
BlackRock Russell 1000	10/04/2002	J.P. Morgan	BlackRock Commodities	10/09/2009	J.P. Morgan
TimesSquare Capital Mid Growth	03/03/2003	J.P. Morgan	Grasham MTAP Commodities	08/31/2013	J.P. Morgan
T.Rowe Price Small Value	12/01/1995	J.P. Morgan	Cash	-	J.P. Morgan
BlackRock International Equity	07/03/2003	J.P. Morgan	Clifton Group	-	J.P. Morgan
Templeton Foreign Equity	12/01/1994	J.P. Morgan	HarbourVest IX-Buyout	2011 <sup>1</sup>	HarbourVest
DFA Emerging Markets Value	01/11/2007	J.P. Morgan	HarbourVest IX-Credit	2011 <sup>1</sup>	HarbourVest
Vontobel Global Emerging Markets	09/30/2014	J.P. Morgan	HarbourVest International VI	2008 <sup>1</sup>	HarbourVest
Bradford & Marzec Fixed	12/01/1992	J.P. Morgan	Harbourvest IX-Venture	2011 <sup>1</sup>	HarbourVest
MacKay Shields Core Plus Ops	03/02/2015	CITCO	KKR Mezzanine	2010 <sup>1</sup>	KKR
BlackRock US TIPS	04/11/2007	J.P. Morgan	PIMCO BRAVO	2011 <sup>1</sup>	PIMCO
ASB Real Estate	12/31/2012	ASB Real Estate			
Clarion Lion	12/31/2006	Clarion Lion			
1221 State Street Corp	09/30/2008	ICERS/Union Bank			

<sup>1</sup>Represents fund vintage year.

## Policy & Custom Index Composition

Policy Index (7/1/2014-Current)	29% Russell 3000, 25% MSCI ACWI ex-US (Gross), 30% Barclays U.S. Aggregate, 6% NCREIF Property Index, 5% Bloomberg Commodity Index, 5% Russell 3000 plus 300 bps (Lagged).
Policy Index (7/1/2010-6/30/2014)	24% S&P 500 Index, 10% Russell 2500, 21% MSCI ACWI ex-US (Gross), 30% Barclays U.S. Aggregate, 5% NCREIF Property Index, 5% Bloomberg Commodity Index, 5% CPI+ 5%.

## Other Disclosures

N/A

# Glossary

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**Allocation Effect:** An attribution effect that describes the amount attributable to the managers' asset allocation decisions, relative to the benchmark.

**Alpha:** The excess return of a portfolio after adjusting for market risk. This excess return is attributable to the selection skill of the portfolio manager. Alpha is calculated as:  $\text{Portfolio Return} - [\text{Risk-free Rate} + \text{Portfolio Beta} \times (\text{Market Return} - \text{Risk-free Rate})]$ .

**Benchmark R-squared:** Measures how well the Benchmark return series fits the manager's return series. The higher the Benchmark R-squared, the more appropriate the benchmark is for the manager.

**Beta:** A measure of systematic, or market risk; the part of risk in a portfolio or security that is attributable to general market movements. Beta is calculated by dividing the covariance of a security by the variance of the market.

**Book-to-Market:** The ratio of book value per share to market price per share. Growth managers typically have low book-to-market ratios while value managers typically have high book-to-market ratios.

**Capture Ratio:** A statistical measure of an investment manager's overall performance in up or down markets. The capture ratio is used to evaluate how well an investment manager performed relative to an index during periods when that index has risen (up market) or fallen (down market). The capture ratio is calculated by dividing the manager's returns by the returns of the index during the up/down market, and multiplying that factor by 100.

**Correlation:** A measure of the relative movement of returns of one security or asset class relative to another over time. A correlation of 1 means the returns of two securities move in lock step, a correlation of -1 means the returns of two securities move in the exact opposite direction over time. Correlation is used as a measure to help maximize the benefits of diversification when constructing an investment portfolio.

**Excess Return:** A measure of the difference in appreciation or depreciation in the price of an investment compared to its benchmark, over a given time period. This is usually expressed as a percentage and may be annualized over a number of years or represent a single period.

**Information Ratio:** A measure of a manager's ability to earn excess return without incurring additional risk. Information ratio is calculated as: excess return divided by tracking error.

**Interaction Effect:** An attribution effect that describes the portion of active management that is contributable to the cross interaction between the allocation and selection effect. This can also be explained as an effect that cannot be easily traced to a source.

**Portfolio Turnover:** The percentage of a portfolio that is sold and replaced (turned over) during a given time period. Low portfolio turnover is indicative of a buy and hold strategy while high portfolio turnover implies a more active form of management.

**Price-to-Earnings Ratio (P/E):** Also called the earnings multiplier, it is calculated by dividing the price of a company's stock into earnings per share. Growth managers typically hold stocks with high price-to-earnings ratios whereas value managers hold stocks with low price-to-earnings ratios.

**R-Squared:** Also called the coefficient of determination, it measures the amount of variation in one variable explained by variations in another, i.e., the goodness of fit to a benchmark. In the case of investments, the term is used to explain the amount of variation in a security or portfolio explained by movements in the market or the portfolio's benchmark.

**Selection Effect:** An attribution effect that describes the amount attributable to the managers' stock selection decisions, relative to the benchmark.

**Sharpe Ratio:** A measure of portfolio efficiency. The Sharpe Ratio indicates excess portfolio return for each unit of risk associated with achieving the excess return. The higher the Sharpe Ratio, the more efficient the portfolio. Sharpe ratio is calculated as:  $\text{Portfolio Excess Return} / \text{Portfolio Standard Deviation}$ .

**Sortino Ratio:** Measures the risk-adjusted return of an investment, portfolio, or strategy. It is a modification of the Sharpe Ratio, but penalizes only those returns falling below a specified benchmark. The Sortino Ratio uses downside deviation in the denominator rather than standard deviation, like the Sharpe Ratio.

**Standard Deviation:** A measure of volatility, or risk, inherent in a security or portfolio. The standard deviation of a series is a measure of the extent to which observations in the series differ from the arithmetic mean of the series. For example, if a security has an average annual rate of return of 10% and a standard deviation of 5%, then two-thirds of the time, one would expect to receive an annual rate of return between 5% and 15%.

**Style Analysis:** A return based analysis designed to identify combinations of passive investments to closely replicate the performance of funds

**Style Map:** A specialized form or scatter plot chart typically used to show where a Manager lies in relation to a set of style indices on a two-dimensional plane. This is simply a way of viewing the asset loadings in a different context. The coordinates are calculated by rescaling the asset loadings to range from -1 to 1 on each axis and are dependent on the Style Indices comprising the Map.

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