



## **INVESTMENT PERFORMANCE REVIEW**

**Imperial County Employees' Retirement System**

**3Q 2014**



SEATTLE | 206.622.3700  
LOS ANGELES | 310.297.1777  
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## QUARTERLY RESEARCH REPORT

September 2014

WURTS  ASSOCIATES

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## Cinderella Man

In 1929, James J. Braddock was an up-and-coming fighter. With a record of 35-5-6, he challenged Tommy Loughran for the Light Heavyweight championship and lost in a 15 round decision. After the fight, Jim fell on hard times losing 16 of the next 26 fights and what savings he and his wife (Mae) had accumulated were lost during the Great Depression. Jim became resigned to fighting in small clubs and working on the docks just to try and get by. The once great fighter went from fighting in front of tens of thousands in Madison Square Garden to not having enough money to keep the electricity on and feed his children in a very short period of time.

Then, long-time friend and manager Joe Gould offered Jim a fight versus Corn Griffin who was expected to challenge for the title after the next fight. Jim was brought in as “meat” since Corn’s original challenger had pulled out at the last moment. Jim was not expected to make it out of the first round. The thing is, nobody told Jim he was supposed to lose. Jim shocked everyone by knocking out Corn in the 3<sup>rd</sup> round. With the win, Joe Gould was able to get Jim another fight against another contender, John Henry Lewis. Again, Jim was supposed to lose badly. Again, Jim won. Another fight was arranged between Jim and Art Lasky with the winner getting a title shot. Jim beat Art by unanimous decision in 15 rounds. The stage was set, Jim was going to fight Max Baer for the title. But Max was no ordinary fighter. Max had killed two other fighters in the ring and was as dominant and brutal of a fighter as one could imagine (think Mike Tyson and Floyd Mayweather combined).

Jim did not listen and fought Max for the title in 1935. By then, Jim had become the people’s champion and everyone’s hopes rested with him. Jim fought Max over 15 grueling rounds and won by unanimous decision to become the Heavyweight Champion. Jim’s rise against all odds earned him the nickname Cinderella Man and his story is told through the Ron Howard movie “Cinderella Man.” What we’re told to expect, what appears a near certainty, does not always materialize. Rather than listening to what others tell us, let’s decide for ourselves.

## Not What You Were Expecting?

For the past 4 years, the Federal Reserve has been telling us to expect GDP growth of 3-4 %, however the actual result has been growth in the 2-2.5% range. The promised potential of QE has yet to materialize. But it’s not just the Fed with a poor forecasting track record. Investment strategists and investment surveys have a wonderful track record of being bullish at equity market tops and bearish at bottoms. Poor forecasting is not limited to the economy or equities: poor interest rate forecasting has reached impressive proportions. For over 10 years, economists have told us to expect higher rates, despite the small fact that rates have moved steadily lower. Further, unlike other financial markets where bullish/bearish sentiment rarely reaches in the 90% plurality, bearish sentiment in bonds has been so pervasive that 90-100% sentiment has been common. Rather than listening to others’ forecasts, let’s take a look at the data and see what it tells us about the state of the economy and the equity, bond, currency, and commodity markets.

## The Noise of The Economic Cheerleaders

For the past few years, we've graded the U.S. economy as a C/C- and recent data provides us no reason to change. Why hasn't growth improved from being just average? Isn't the labor market doing better along with the ISM and the manufacturing sector?

While the economic cheerleaders on CNBC excitedly discuss the payroll report – as if a 200k payroll number is the key to help the economy finally reach escape velocity – we would calmly remind everyone that payrolls have been contained within a +100-300k range since 2010, and these 200k reports are just average. Further, what's average today would have been a disaster 30 years ago.

In the early 1980s, along with bad haircuts and one hit wonders, the U.S. economy had about 90 million people in the payroll survey. Now, we have about 140 million (or just over 1.5x more workers today than in the 1980s). When the recession ended in the early 1980s, the economy was producing about 400-500k jobs/month. Today, with more than 1.5x more workers, we're only able to generate 209k. These two facts are combined by looking at the employment population ratio. What economists are calling great numbers today would be considered a complete disaster in the 1980s and 1990s.

If you ask an economist to name the two most important economic indicators, they'll likely say initial jobless claims and ISM. Since the early 1980s, ISM correlated well with GDP. However, since the Great Recession, the correlation has fallen apart. ISM will not provide the data to their index, but an active theory in the markets is that several firms in the index went bankrupt during the Great Recession and were subsequently

removed from the index. What's left are the stronger companies with better growth prospects, which leaves the index with a positive bias. To be clear, the manufacturing sector has been and remains supportive to growth. However, we need to understand that the historical relationship between ISM and GDP has changed and the forecasts need to be adjusted.

## Are You Seeing What I'm Seeing?

The housing market has been improving – both in terms of price and volume. New and existing home prices are either above or near their 2007 peaks; however, total units sold are well below their peaks. How is it that prices have improved more significantly than volume? There are several reasons:

- Mortgage lending standards have eased, but they remain fairly tight
- Homes remain affordable, but less so over the past 2 years
- Most importantly, housing inventory remains low

Various measures of housing inventory all tell the same story – reduced supply. Even the much feared shadow inventory has moved consistently lower since peaking in 2009.

We've all heard/read about the top 1% vs. the 99%. We wondered if the same was true in the housing market. To be honest, there isn't much data to determine if the hypothesis was true or not. Bloomberg ran an article showing if you own a house worth \$1 million or more, prices have increased 4%, but below \$100k they've fallen 14.5%. How is that possible? These are national statistics and our local/anecdotal evidence might not be the same experience as others are having.

## I'll Have What They're Having

According to an NBC News/WSJ poll, **57% of Americans still think the U.S. economy is in a recession.** While we've not been overly excited about U.S. growth (C/C- grade), we've hopefully been clear that growth is still positive (2-2.5% GDP). How is it possible that the majority of Americans believe we are still in a recession? Much like housing where our local/anecdotal experience may be quite different than the rest of the country – we cannot assume our daily life experience is similar to others in different parts of the country.

According to data provided by the BEA, the economic growth experience by state has been quite varied. Of course, North Dakota jumps off the map with 9.7% growth – driven by the Bakken oil field. Oil production in North Dakota is booming and thanks to fracking/horizontal drilling, U.S. crude oil production has rebounded from a 38-year decline. Economists estimate the increased oil production has added between 0.5-1% to national GDP. So if the economy is producing 2-2.5% GDP and increased oil production accounts for 0.5-1% of the growth, the picture of why 57% of Americans still think the economy is in a recession becomes more clear.

## You Can't Eat GDP

To the average family, GDP matters very little. You can't feed your family with GDP; what matters is real income. Much like GDP by state, income gains by state vary greatly. The area surrounding the Bakken oil fields has shown tremendous income gain, while most other states' income growth has been negative.

Further, when looking at hourly real wage growth since 2007, if you are in middle America, you've experienced a decline in real hourly earnings of

0.4-0.6%. While if you in the top 30%, you've experienced gains of 0.1-0.2%.

The Fed, aware of this problem, has attempted to offset declines in real wages with a wealth effect (higher stock prices). Unfortunately, rising stock prices have only stretched the income gap further as the top 10% have experienced increases in wealth while the rest have experienced a decline.

But do not despair, there are other ways to spur consumption, such as credit growth.

## Ring the Bell

We have stated for the past several years, the key to both economic growth and inflation is wage and credit growth. As we've already discussed, the labor market remains positive but unable to generate significant wage gains. Mortgage credit lending has improved, but slowly. However, non-mortgage lending standards have eased more significantly and both auto and student loans have experienced fairly rapid expansion over the past several years.

Since 2009, auto loans have increased 69%, with subprime auto loans increasing 93%. While the growth in subprime auto lending is both impressive and scary, subprime lending has yet to reach the peaks set in 2006. Further, there does not appear any immediate credit concerns as auto loans that are 90-day or seriously delinquent have remained fairly steady at 7.65%.

More impressive than the growth in auto/subprime auto lending is the growth in the student loan market. Since 2009, student loans have grown

from nearly \$700 billion to nearly \$1.2 trillion. The DOE estimates students will borrow over \$100 billion each year. Unlike the auto loan market where delinquencies remain fairly low, student loan delinquencies have increased significantly from nearly 20% toward 40%.

Credit expansion remains a critical component to generating self-sustaining economic growth. While the majority of household credit remains focused on mortgage loans where credit standards remain fairly tight, other sectors of the credit market have improved. It's clear credit growth cannot be led by student loan and if growth is going to move forward, the easier credit conditions must translate to the home loan market.

### Europe: Fallen Off the Horse

Over the past 4 years, Eurozone growth has been anemic, with little to no growth. Comparing actual GDP growth relative to potential, we can see that since the credit crisis, Euro growth has failed to recover. Is it any wonder Eurozone unemployment remains high and short-term rates negative? In fact, 11 of the 17 Eurozone countries had negative 2-year note yields.

How has the ECB responded? At first they promised to do “whatever it takes.” The markets responded by staging a relief rally as equities moved higher and interest rates moved lower. All the while, the ECB balance sheet moved steadily lower as their promise to do “whatever it takes” was enough and no real action was necessary. However, with a contracting balance sheet (less monetary stimulus), inflation also moved steadily lower and with YoY CPI at just 0.3%, the market has become concerned about the real threat of deflation in Europe.

Again the ECB responds by announcing plans to revive growth and reduce the risk of deflation (notice the reactionary nature of the ECB). The ECB plan would include the purchase of up to \$1 trillion in ABS securities.

Similar to the reaction following the announcement to do “whatever it takes,” the initial market reaction was relief with the equity market moving higher. However, after the initial relief, the market began to wonder about exactly how the program could be implemented with the annual Euro ABS issuance of approximately \$200 billion. Even if the ECB purchased 100% of the annual issuance, the plan would take 5 full years to implement – not exactly the size or timing the market was expecting. The ECB responded by acknowledging they may not be able to implement the entire \$1 trillion program.

The ECB stimulus programs have promised a great deal, but the implementation seems to struggle when compared to the U.S. programs. We should not assume the various central bank stimulus program will be implemented with similar success or market impacts.

### Japan: Déjà Vu All Over Again

Shinzo Abe was elected Prime Minister of Japan in December 2012, and despite the promises of Abenomics, Japan's GDP has grown very little. Much like the reaction in Europe to the various ECB promises, the reaction in Japan to Abenomics was remarkably positive as we've highlighted in prior QRRs. However, recent economic and market activity has been a concern.

The good news is the QE experiment in Japan has pushed both inflation and GDP higher. The bad news is the Japanese government has instituted a tax hike similar to the one implemented in 1997. In both the 1997 and 2014 tax

hikes, consumption in the quarter prior to the hike going into effect, increased significantly. In both 1997 and 2014, following the quarter of high consumption growth, consumption and GDP both fell significantly.

So far, the equity markets have behaved in strikingly similar form to 1997 – moving higher into the tax hike (as growth and consumption expand) only to later drop off significantly as growth and consumption decline. Inflation has moved above the 2% Bank of Japan target, but it has failed to translate into higher real income or home prices. The net result is that the consumer is increasingly getting squeezed.

The Japanese economy is at an important juncture – stay tuned.

### A Bull in a China Shop

The quality of Chinese economic statistics has always been “questionable” – with some figures not quite adding up. To gain a picture on what true GDP might look like, Bloomberg recently created a monthly GDP index (using an econometric model of various measures). According to the Bloomberg estimate, Chinese GDP is currently tracking at 6.3% compared to the reported 7.5% GDP. The difference is not surprising as the Citigroup Surprise index, which shows that economic statistics have been coming in below expectations, generally matches the trend lower of most economic measures.

However, before we get all bearish on China, we should note GDP has generally tended to follow the market. Unlike the U.S. where equity markets have been near their all time peaks, the Chinese equity market has been close to its 2009 lows. Additionally, according to a trend indicator, the market could be putting in an important bottom, which could lead to improved growth expectations.

While the expectations for Chinese growth have been high, we would note how poor the equity market has performed relative to the rest of the world. While we are not saying we expect positive returns from the Chinese markets, we would not be surprised to see the Chinese market begin to outperform some of the developed markets.

### All Hat, No Cowboy

Since 2009, capital market performance has been absolutely amazing with all asset classes producing positive cumulative total returns. With the recent decline in small cap stocks, high yield has taken over as the best performing asset class. The worst performing asset class has been commodities followed by Treasuries.

How likely are the positive total returns to continue? There are various ways to measure the health of a market: breadth, depth, volume, etc. When it comes to volume, one rule of thumb is used around the street, volume = conviction. Makes sense, if someone believes in something they'll buy more of it. However, since the 2009 low, as equity prices have move ever higher, trading volume has moved significantly lower. In fact, since 2001, higher trading volume has occurred on the declines and lower volume on the rallies.

But it's not just equities; in the fixed income markets, while spreads have moved tighter, the inventory dealers that are willing/able to carry have steadily declined. The unwillingness/inability to carry inventory has important implications on fixed income liquidity should spreads start to widen.

## Miracle Grow for Equities

How have equities managed to move higher in price with lower volumes (implying less conviction)?

As we discussed in prior QRRs, the correlation between stock prices and the Fed balance has reached an amazing 96%. During periods of QE, the S&P 500 is up 153%, without QE it's down 28%. Despite comments about the labor market or inflation, Fed QE policy is clearly related to the equity market drawdowns. The Fed does not appear to have the stomach for an equity market drawdown as the various stages of QE have been consistently implemented following a declines of 5% or greater. Is the current drawdown of 7.4% enough to change the QE taper?

The high degree of correlation between the Fed balance sheet and equities explains at least part of the gains. What other factors might contribute? GDP, corporate sales growth, earnings? As discussed above, GDP growth has been average and certainly doesn't explain the explosive equity growth. Corporate sales growth has broadly followed GDP and likewise does not explain the returns. Earnings growth, however, has posted a 133% growth rate since 2009. How are we to explain the rather punk sales growth with the tremendous earnings growth?

## Engineered Earnings

If topline sales growth is roughly in line with average GDP growth, how can corporations grow earnings and EPS? As we've discussed in prior QRRs, earnings have grown as a function of several factors including lower interest rates, reduced tax obligations, increased productivity, and currency (more on that in a moment). But with the growth rate in earnings slowing, how

can they grow EPS? Simple, buy back stock and reduce the number of shares outstanding. In 2013, companies in the S&P 500 spent \$500 billion in stock buybacks and they're poised to spend nearly \$600 billion in 2014 (above the \$589 billion peak in 2007). The market has generally rewarded companies engaged in share buybacks as the total return has exceeded the S&P 500 index substantially.

As a case in point, let's look at IBM:

- Since 2007, IBM has experienced NO revenue growth. They started around \$98 billion, they're still at \$98 billion
- Earnings are up 57% and EPS is up 140%
- IBM has been recycling earnings and issuing new debt to fund share buybacks
- Growth in EPS has had nothing to do with selling more products and everything to do with financial engineering

## Expect Change – Unless It Remains the Same

One factor we've heard a lot about this quarter as a potential impact to earnings is the dollar strength. Since July 1, 2014, the dollar rallied almost 9%, an impressive move to be sure. With the strength in the dollar, some have commented the move will negatively impact earnings (due to the translation impact).

Of the 500 companies in the S&P 500, roughly 200 report foreign sales – roughly 90 of which report foreign sales as zero. Of the remaining 110 companies reporting a non-zero number for foreign sales, the correlation between returns and the percent of revenues coming from overseas is only 8%. In other words, the market is not discriminating based upon exposure



to the dollar. If the dollar strength continues, the impact could be greater, but for now, it's too short-term.

What's driving the dollar strength? While interest rate differentials can be an important driver of FX, the driver of recent dollar strength has more to do with expected changes in central bank balance sheets. As the Fed is exiting QE, the ECB is at least trying to implement some type of QE (although we question their ability to implement).

### Playing the Earnings Game

If we want to strip out the effects of the earnings game, we can look at operating income. Since 2010, S&P 500's net operating income growth rate has trended lower from approximately 40% to the current 7%. We can further break down the operating income growth into financial and non-financials. Financials have clearly experienced a much higher growth rate than non-financials. Why is this important? About 80% of the S&P 500 is composed of non-financials and if they're only able to grow at 3-4%, it further reinforces the idea of average growth.

As we move into Q3 earnings season, we see the same pattern emerging – start off with 10-11% earnings growth expectations. As the reporting seasons draws closer, revise down the estimate toward 5-6%, and then surprise, most companies beat expectations and the earnings call can start off with the same line: “great quarter guys.” It's a game and everyone knows it's a game as shown in the beat rate.

CNBC makes it sound like the hurdle rate for a good quarter is 50% beat rate, but since 2009, the average beat rate is 73%. Further, since the Fair Disclosure Regulation was enacted, the beat rates have ALWAYS been above 50%, even in 2008 (when we had the biggest collapse of earnings since they began recording them in the 1930s following the SEC act).

### Riding the Bull Until It Bucks

Recent market turmoil has brought into question whether the bull market trend will continue. Small cap stocks have significantly underperformed large cap stocks, high yield spreads have pressed wider, and the total return in Treasuries are producing one of the best years in history.

Comparing small cap stocks (Russell 2000) to large cap stocks (Russell 1000), we can see they've generally trended together. However, over the past few months, small cap stocks have underperformed more than at any point since 2009 – indicating a significant change in trend.

However, before we place too much emphasis on one market, we would highlight that other areas (such as large cap and tech stocks) have yet to show a strong trend reversal. We acknowledge they are no longer bullish, but are reserving judgment until the trends indicate a stronger reversal in trend. Stay tuned.

### The Happy Bull (No Longer Lonely)

Interest rates have generally confounded economists and investors for years. Sentiment has remained bearish despite the continued move lower in rates. In May 2013, the Fed introduced the idea of tapering, and the market reaction was quick and severe as the 10-year rate moved sharply higher from 1.6% to 3%. As a result, the total return of 30-year Treasuries in 2013 was one of the worst in history.

Since then, economists and investors have remained bearish - despite rates moving lower and producing one of the best total return years in history. Seemingly, those bearish bonds have been waiting for the rate rise that already took place in 2013.

## OVERVIEW

On October 15, 2014 we experienced one of the most volatile trading days ever in Treasuries as the bears finally capitulated. Interest rates fell nearly 35 bps in the first few hours of trading, only to move back higher by 30 bps by the end of the day.

### **Market Outlook:**

Has the recent market turmoil changed the investment outlooks? We remain cautious on U.S. equities as valuations remain rich and the trend has turned from neutral to slightly bearish. Will a 10-15% correction shift QE policy and support higher prices? This remains an open question and recent experience teaches us that anticipating a trend change in equities is of little value.

Our outlook for interest rates has moved from bullish to neutral with our long-standing target of 2.25% on 10-year Treasuries having been reached.

With historically rich valuations and credit spread trends moving wider, we continue to be cautious on the credit markets. Further, we note market liquidity has started to become even more constrained. We continue to prefer a slight underweight in credit in favor of similar risk in equities for better liquidity.

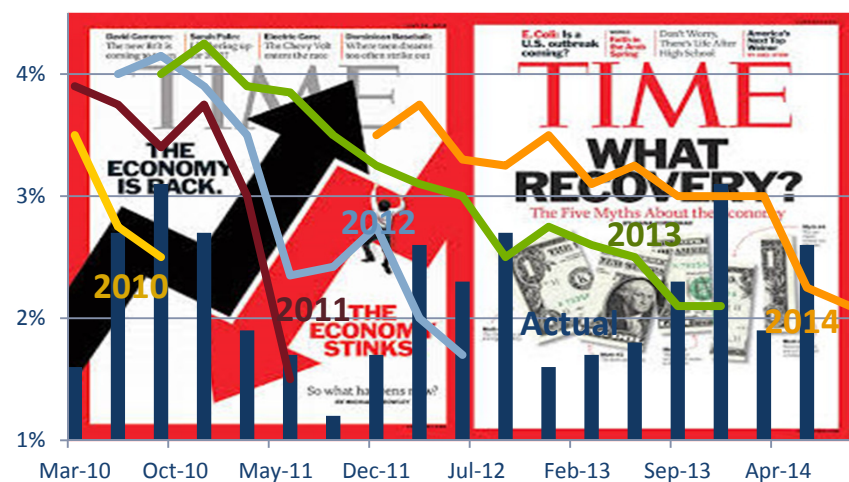


# GLOBAL ECONOMIC ENVIRONMENT

# NOT WHAT YOU WERE EXPECTING?

- What we expect or what we're told to expect does not always materialize.
- The Federal Reserve has told us for the past 4 years to expect GDP growth of 3-4%; however, the actual result has been growth in the 2-2.5% range.
- Investment strategists and investment surveys have a wonderful track record of being bullish at equity market tops and bearish at bottoms.
- Economists have told us to expect higher rates for over 10 years, despite rates moving steadily lower. Unlike other markets where bullish/bearish sentiment rarely reaches in the 90%, bearish sentiment in bonds has been so pervasive that 90-100% sentiment has been common.
- Rather than listening to others' forecasts, let's take a look at the data and see what it tells us about the state of the economy, and the equity, bond, currency, and commodity markets.

## Federal Reserve Forecast of U.S. GDP



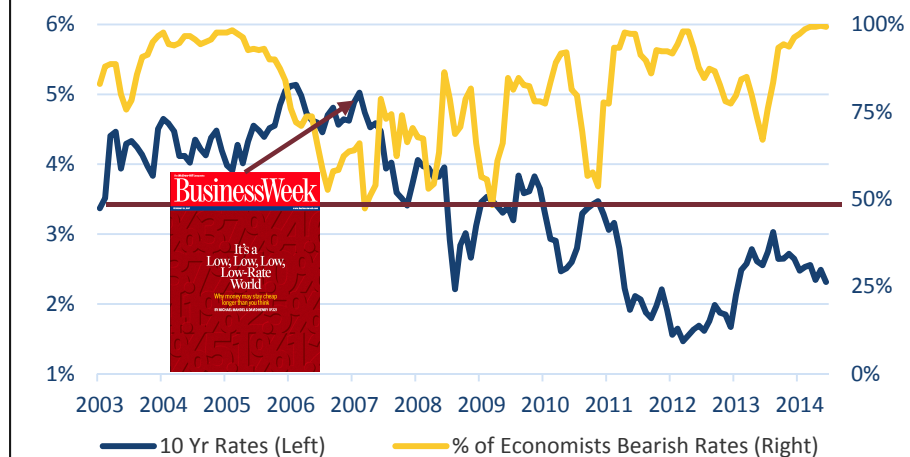
Source: Federal Reserve, Bloomberg, Wurts

## S&P 500 – Bullish at Top, Bearish at Bottoms



Source: S&P, AII, Bloomberg, Wurts

## Rates Will Go Higher... Eventually

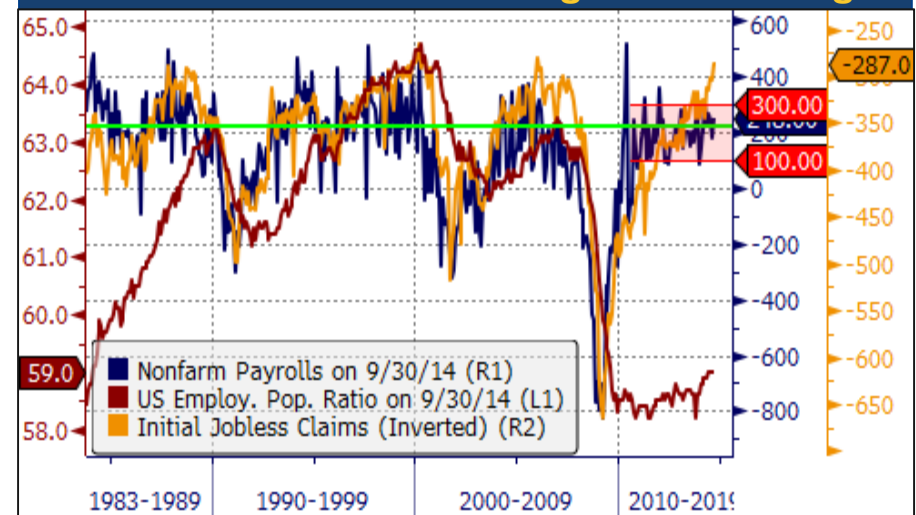


Source: Bloomberg, Wurts

# THE NOISE OF THE ECONOMIC CHEERLEADERS

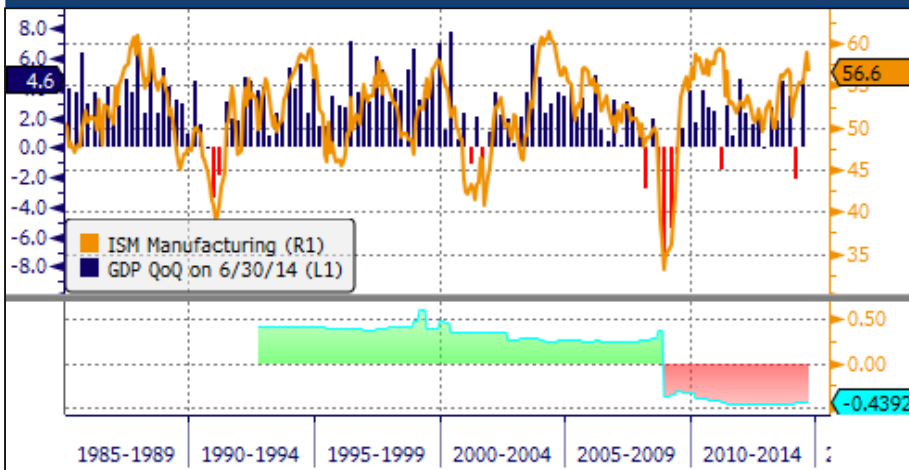
- For the past few years, we've graded the U.S. economy as a C/C- and recent data provides us no reason to change.
- The economic cheerleaders on CNBC excitedly discuss the payroll reports as if a 200k payroll number is the key for the economy to finally reach escape velocity. As we've stated in the past, payrolls have been contained within a +100-300k range since 2010, and these 200k reports are just average.
- Moreover, compared to the 1980s when the U.S. economy had about 90 million people in the payroll survey versus the current 140 million (just over 1.5x more workers today than in the 1980s), the economy was producing about 400-500k jobs/month, with 1.5x LESS workers. These two facts are combined by looking at the employment population ratio. What economists are calling great numbers today would be a complete disaster in the 1980s.
- The ISM reports have generally been positive and used to be a good indicator for economy growth. However, since the Great Recession the correlation with GDP has fallen apart.

## The Labor Market – Growing But Not Enough



Source: BLS, Bloomberg, Wurts

## ISM – Not What It Used to Be

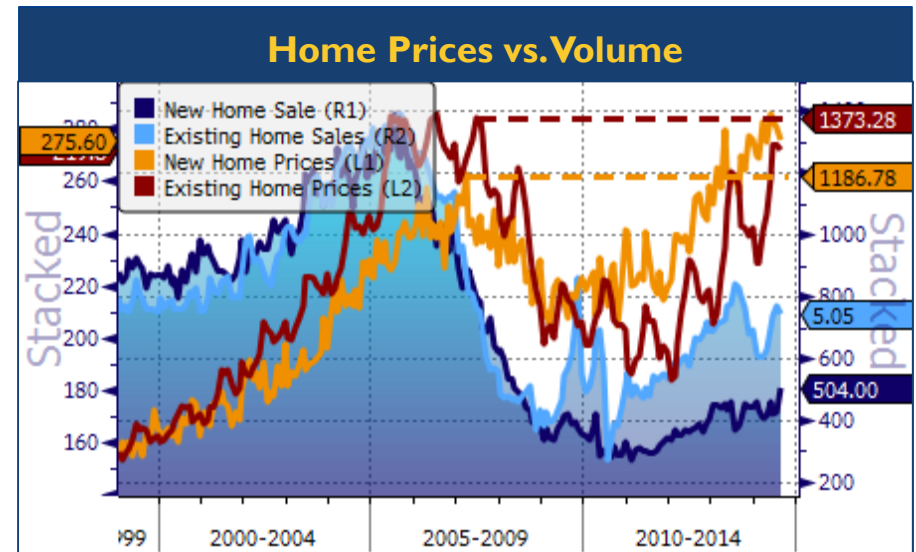


Source: NAPM, Bloomberg, Wurts

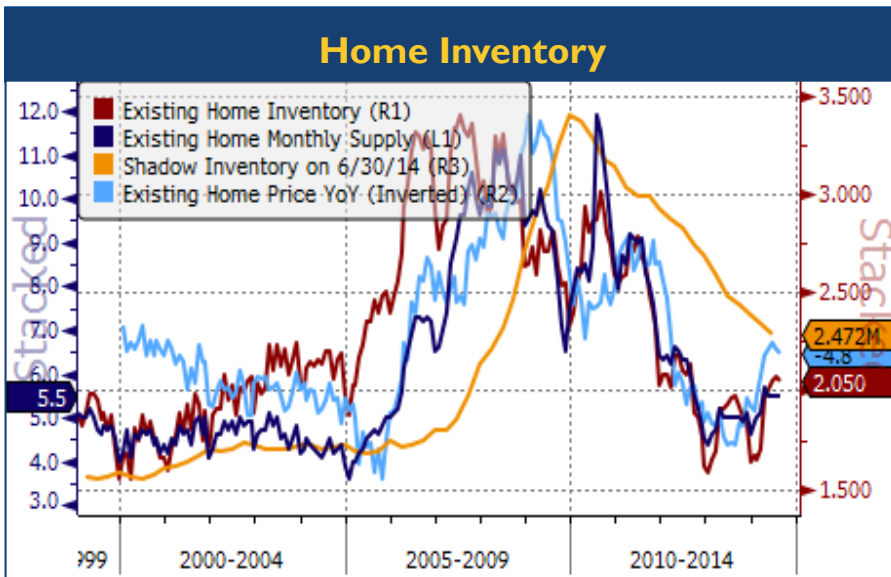


# ARE YOU SEEING WHAT I'M SEEING

- New and existing home prices are either above or near their 2007 peaks. However, total units sold are well below their peaks. Why?
- There are several reasons:
  - Mortgage lending standards have eased a bit, but remain fairly tight
  - Homes remain affordable, however they have become less affordable over the past 2 years
  - Mostly importantly, housing inventory remains low
- Various measures of housing inventory all tell the same story – reduced supply. Even the much feared shadow inventory has moved consistently lower since peaking in 2009.
- We've all heard/read about the top 1% vs. the 99%. We wondered if the same was true in the housing market. According to Bloomberg, if you own a house worth \$1 million or more, prices have increased 4%, but below \$100k they've fallen 14.5%. What? How is that possible? These are national statistics and our local/anecdotal evidence might not be the same experience others are having.



Source: US Census Bureau, National Assoc. of Realtors, Bloomberg, Wurts



Source: Citigroup, Bloomberg, Wurts

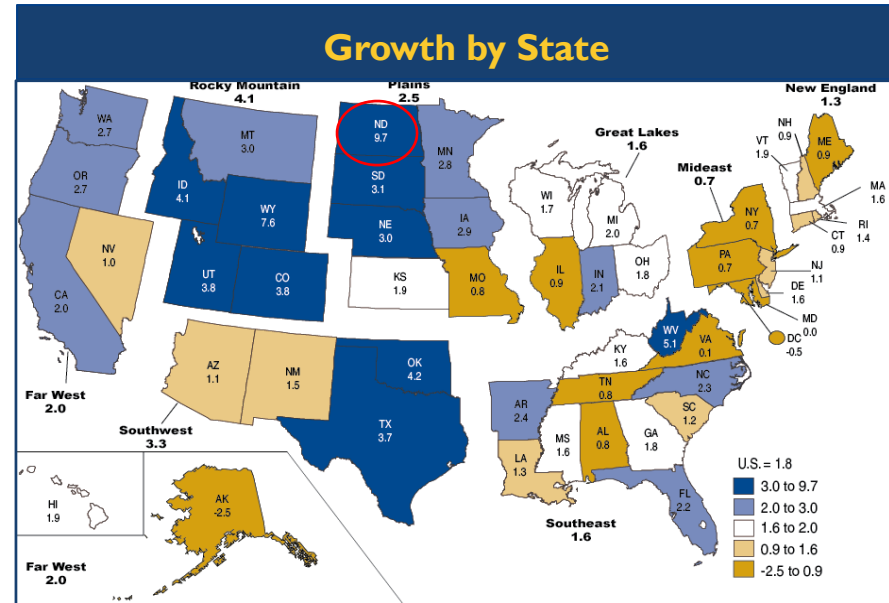
	-----% change from 1-Year Ago-----					
	\$0-100K	\$100-250K	\$250-500K	\$500-750K	\$750-1M	\$1M+
U.S.	-14.5%	-6.6%	-2.5%	-1.7%	-0.1%	4.0%
Bloomberg						



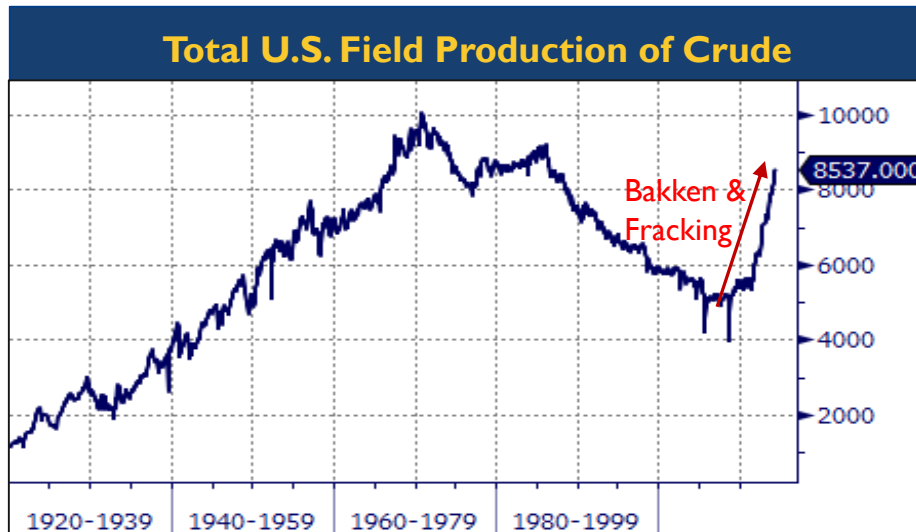


# I'LL HAVE WHAT THEY'RE HAVING

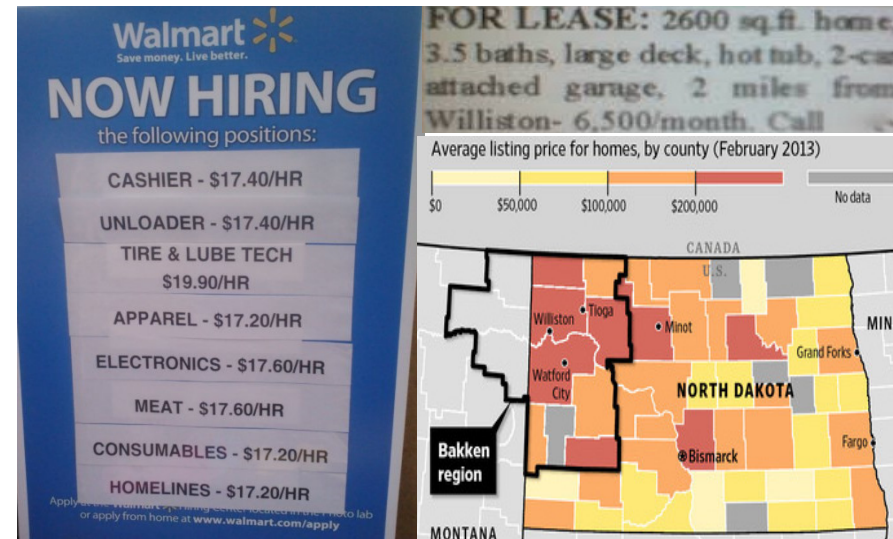
- According to a NBC News/WSJ poll, 57% of Americans still think the U.S. economy is in a recession. We've not been overly excited about U.S. growth (C/C- grade), but hopefully we've been clear growth is still positive (2-2.5% GDP).
- Much like housing where our local experiences may be different, growth by states has been quite varied. Of course North Dakota jumps off the map with 9.7% growth – driven by the Bakken oil field.
- Oil production in North Dakota is booming and thanks to fracking and horizontal drilling, U.S. crude oil production has rebounded from a 38-year decline. Economists estimate the increased oil production has added between 0.5-1% to national GDP. So if the economy is producing 2% GDP and increased oil production accounts for 25-50% of this growth, the picture of why 57% still think the economy is in a recession becomes more clear. Surrounding the Bakken oil field, growth is booming with significant labor market shortages. Whereas in the northeast, growth has been anemic.



Sources: BEA, Federal Reserve, Wurts



Sources: US Department of Energy, Bloomberg, Wurts

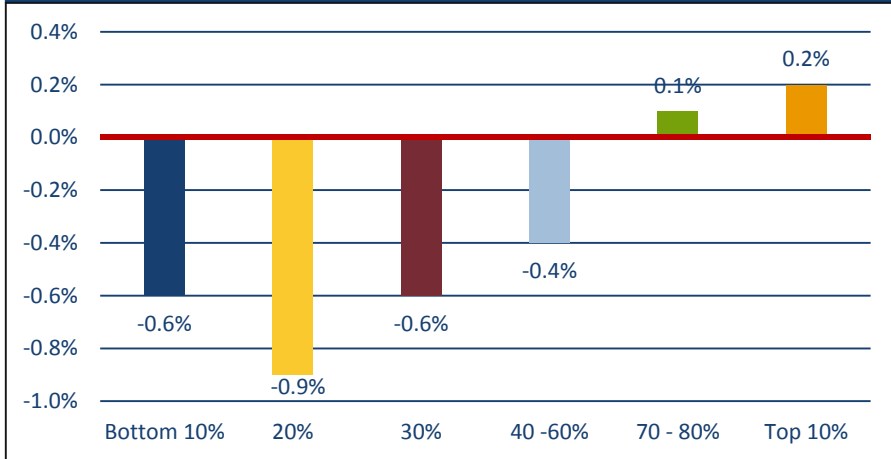


Sources: WSJ, Realtor.com

# YOU CAN'T EAT GDP

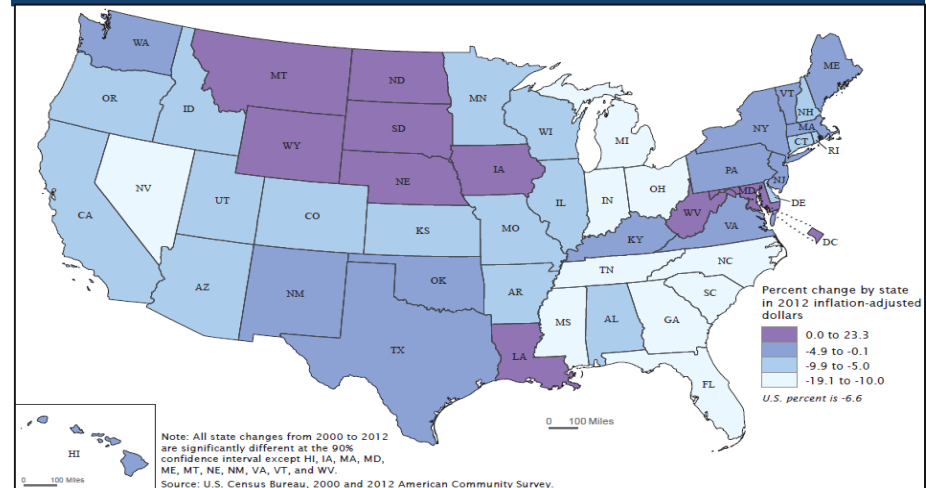
- To the average family, GDP matters very little. You can't feed your family with GDP; what matters is real income. Much like GDP by state, income gains by state vary greatly. The area surrounding the Bakken oil fields has shown tremendous income gain, while most other states' income growth has been negative.
- Further, when looking at hourly real wage growth since 2007, if you are in middle America, you've experienced a decline in real hourly earnings of 0.4-0.6%. While if your income falls within the top 30%, you've experienced gains of 0.1-0.2%.
- The Fed, aware of this problem, has attempted to offset declines in real wages with a wealth effect (higher stock prices). Unfortunately, rising stock prices have only stretched the income gap further as the top 10% have experienced increases in wealth while the rest have experienced a decline.
- There are other ways to spur consumption, such as credit growth.

## Annual % Change in Hourly Real Earning (2007 – 2014)



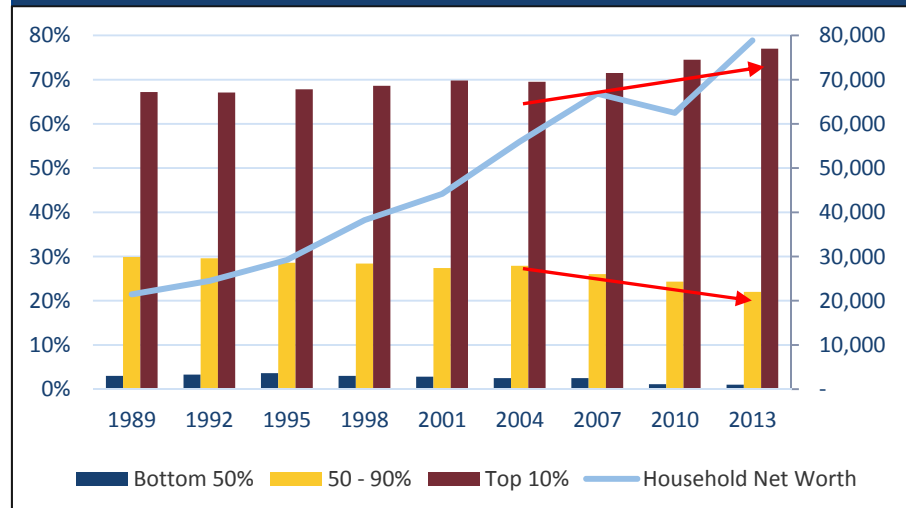
Sources: Economics Policy Institute, Wurts

## Change in Income by State



Sources: BLS, Federal Reserve, Bloomberg, Wurts

## Wealth Distribution

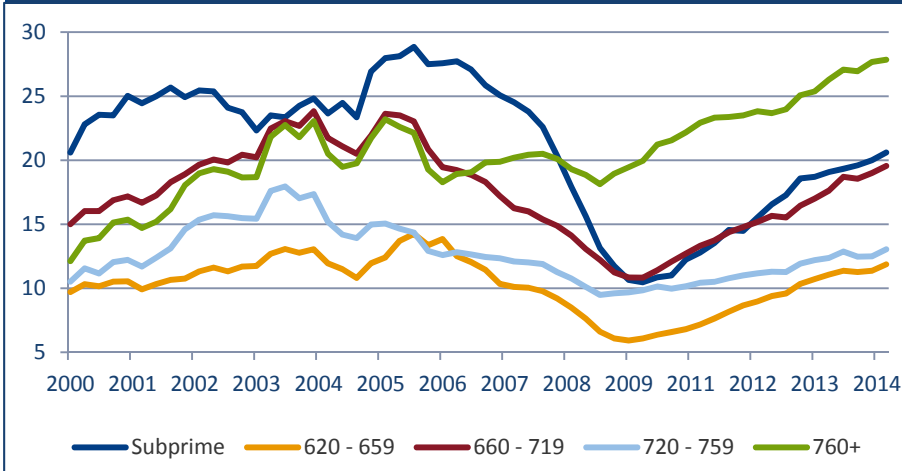


Sources: Economics Policy Institute, Federal Reserve, Bloomberg, Wurts

## RINGING THE BELL

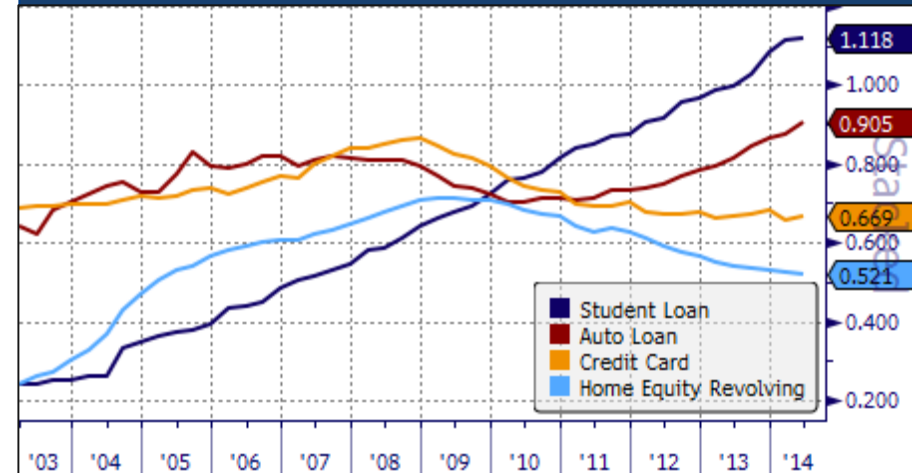
- Non-mortgage lending standards have eased – allowing for a fairly rapid expansion in both auto and student loans.
- Subprime auto lending has spiked over the past 5 years accounting for just over 20% of all new loans. While auto loans have increased by \$371 billion through June 2014 (up 7.4% since last year and 69% since 2009), subprime auto loans are up by 93% since 2009. While the growth is both impressive and scary, subprime lending has yet to reach the peaks set in 2006. Further, auto loans that are 90-day or seriously delinquent have remained fairly steady at 7.65%.
- More impressive than the growth in auto/subprime auto lending is the growth in the student loan market. Since 2009, student loans have grown from nearly \$700 billion to nearly \$1.2 trillion (168% growth). The DOE estimates students will borrow over \$100 billion each year. Unlike the auto loan market where delinquencies remain fairly low, student loan delinquencies have increased significantly from nearly 20% toward 40%.

### Auto Loans by Credit Score



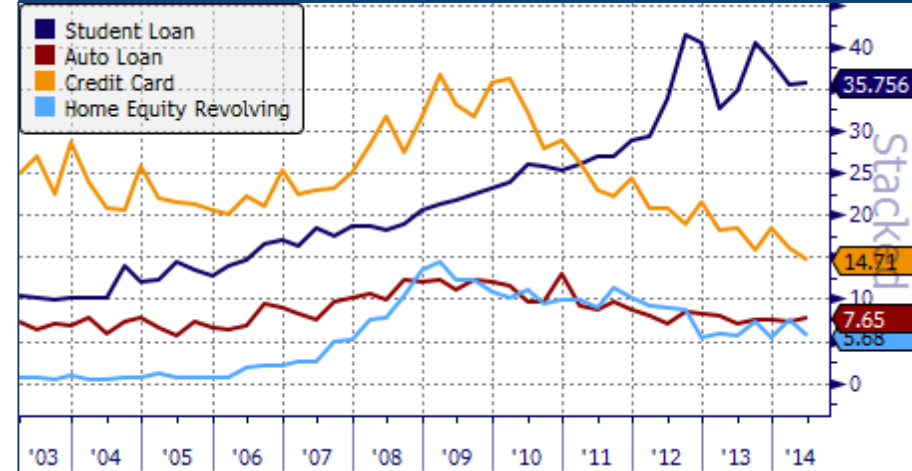
Sources: Federal Reserve, Wurts

### Non-Mortgage Household Debt



Sources: Federal Reserve, Bloomberg, Wurts

### 90-Day & Seriously Delinquent Loans

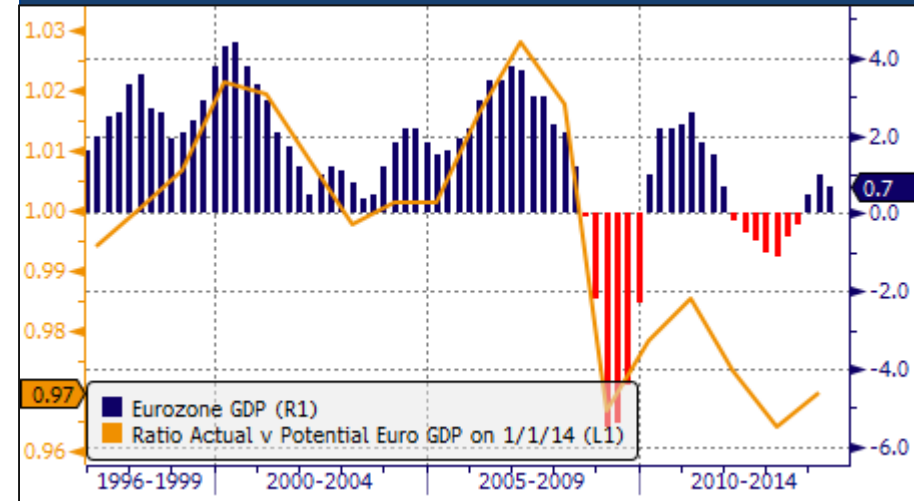


Sources: Federal Reserve, Bloomberg, Wurts

## EUROPE: FALLEN OFF THE HORSE

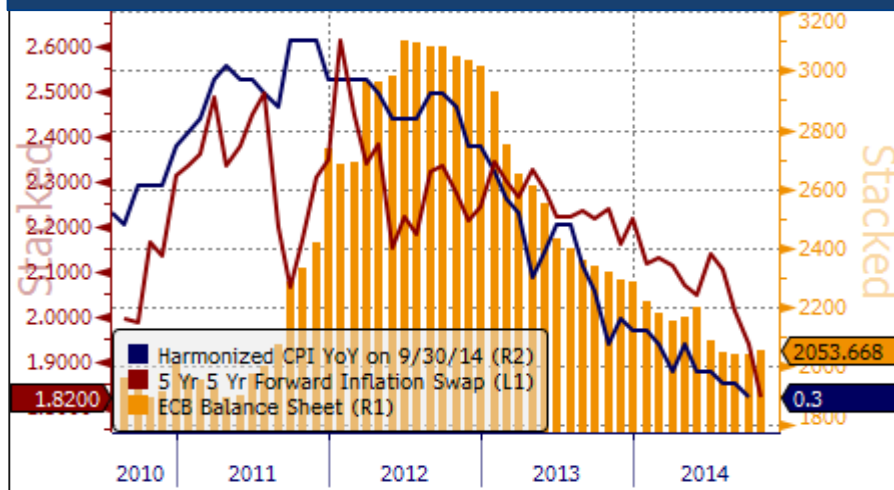
- Over the past 4 years, Europe has experienced little to no economic growth. Comparing actual GDP growth relative to potential, we can see that since the credit crisis, Euro growth has failed to recover. Is it any wonder Eurozone unemployment remains high and short-term rates negative? In fact, 11 of the 17 Eurozone countries have negative 2-year note yields.
- Recently the ECB announced plans to revive growth and reduce the risk of deflation. As the ECB balance sheet has continued to contract, so has inflation. With YoY CPI at just 0.3%, the market has become concerned about the real threat of deflation in Europe. The ECB plan would include the purchase of up to \$1 trillion in Euro ABS. The initial market reaction was relief with the equity market moving higher. However, after the initial relief, the market began to wonder about exactly how the program could be implemented with the annual ABS issuance of approximately \$200 billion. The ECB responded by acknowledging they may not be able to implement the entire \$1 trillion program.

### Growth – I’ve Fallen & Can’t Get Up



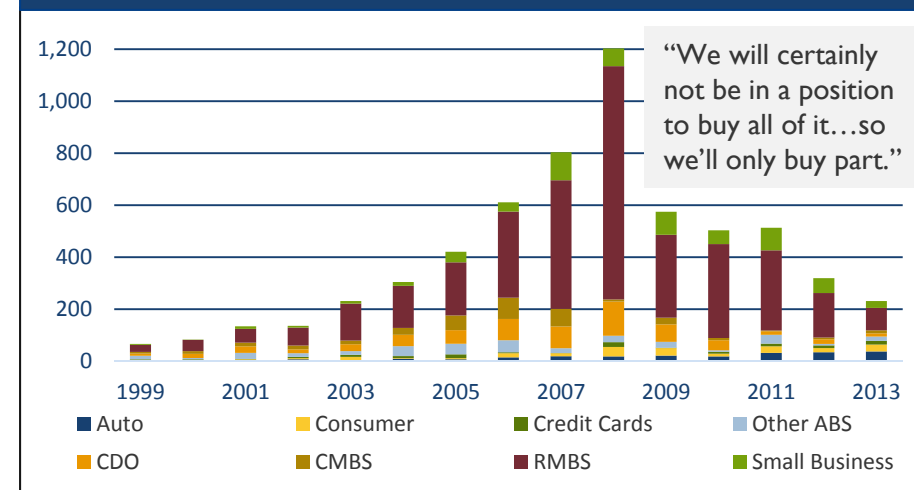
Sources: European Commission Eurostat, Bloomberg, Wurts

### Inflation or the Lack Thereof



Sources: Eurostat, ECB, Bloomberg, Wurts

### Europe ABS Issuance

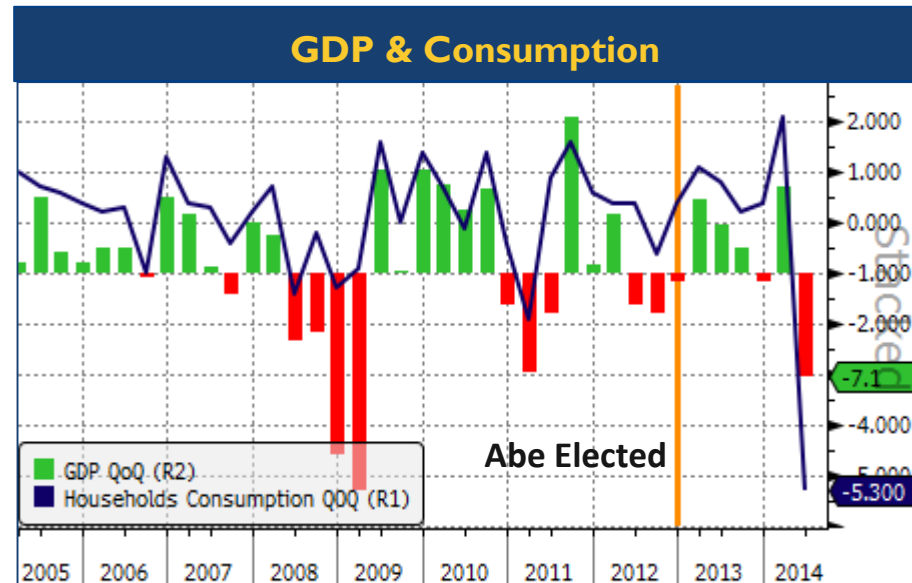


Sources: ECB, Eurostat, Wurts



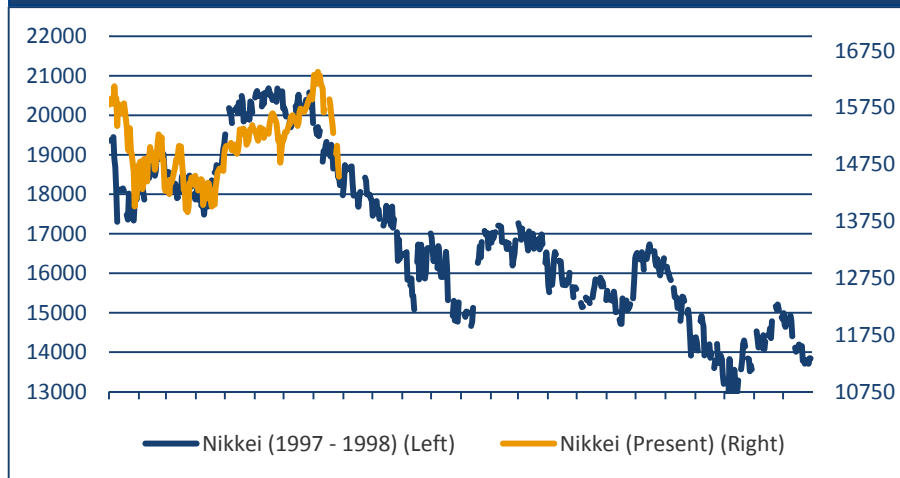
# JAPAN: DÉJÀ VU ALL OVER AGAIN

- Since Abe was elected in December 2012, Japan's GDP has grown very little. Despite the initial positive reaction of Abenomics, recent economic and market activity has been a concern.
- Similar to the tax hike implemented in 1997, the initial spike in consumption and GDP is followed by a significant decline as seen in Q2 2014.
- The current market reaction has been remarkably similar to 1997 as well – as initial excitement over GDP gives way to disappointment and concern.
- Inflation has moved above the 2% Bank of Japan target, but it has failed to translate into higher real income or home prices. The net result is that the consumer is increasingly squeezed.
- The Japanese economy is at an important juncture – stay tuned.



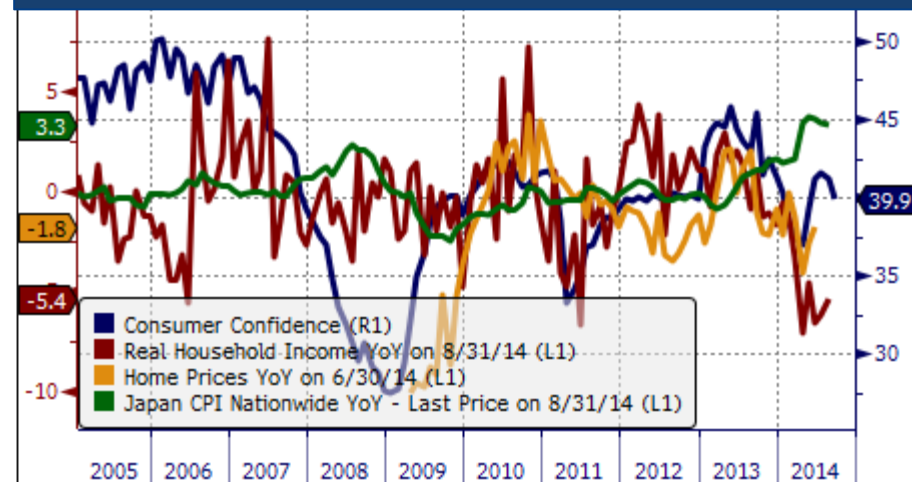
Sources: Ministry of Internal Affairs & Communication, Bloomberg, Wurts

## History Doesn't Repeat, But It Rhymes



Sources: TSE, Bloomberg, Wurts

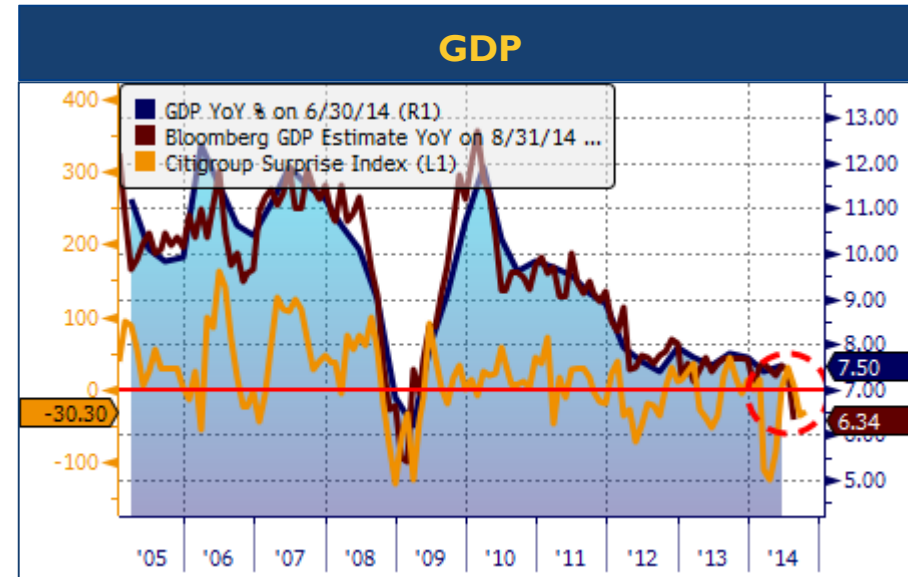
## Inflation – The Good & The Bad



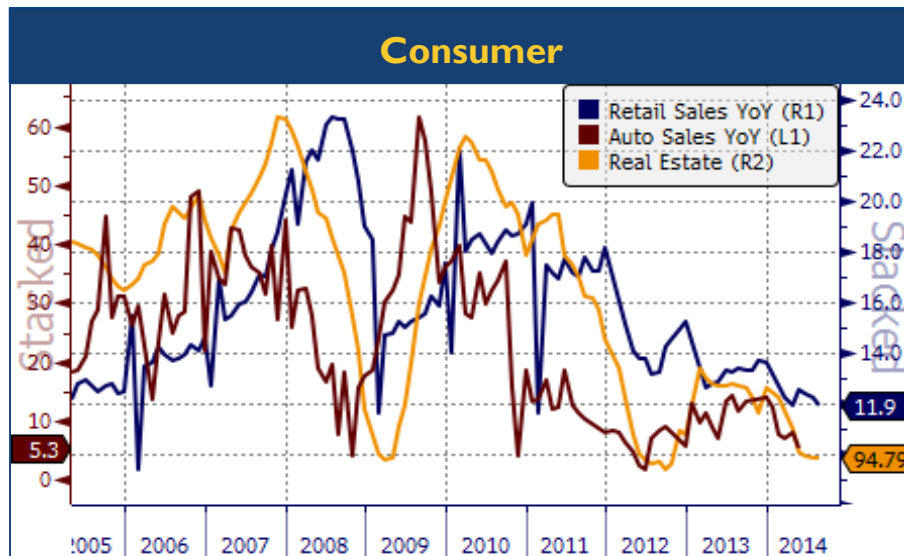
Sources: Bank of Japan, TSE, Bloomberg, Wurts

# A BULL IN THE CHINA SHOP

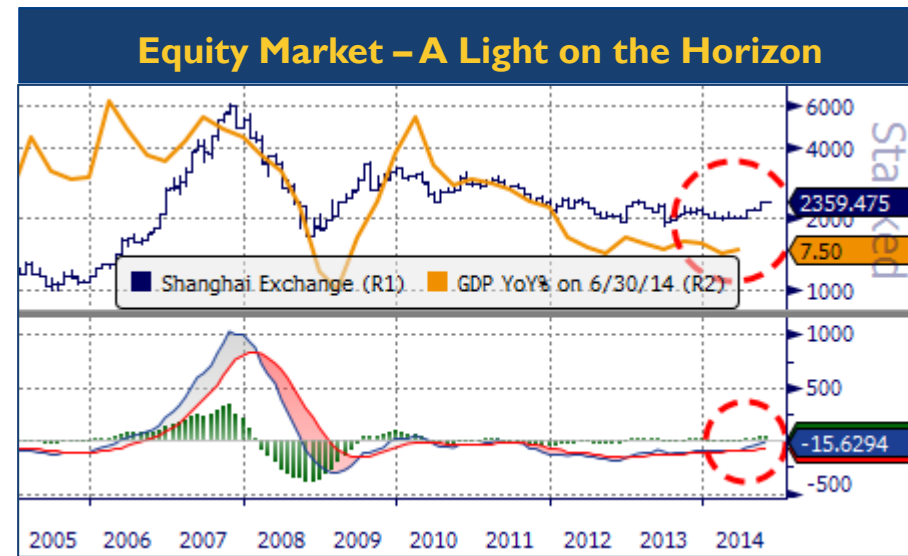
- The quality of Chinese economic statistics has always been “questionable.” Bloomberg recently created a monthly GDP index (using an econometric model of various measures) to track “true” GDP. According to the Bloomberg estimate, Chinese GDP is currently tracking at 6.3% compared to the reported 7.5% GDP. The difference is not surprising as the Citigroup Surprise index has moved lower along with most economic measures.
- However, before we get all bearish on China, we should note GDP is closely related to the equity market. Unlike the U.S. where equity markets have been near their all time peaks, the Chinese equity market has been close to its 2009 lows. Additionally, according to a trend indicator, the market could be putting in an important bottom, which could lead to improved growth expectations.



Sources: National Bureau of Statistics of China, Citigroup, Bloomberg, Wurts



Sources: National Bureau of Statistics of China, Bloomberg, Wurts



Sources: Shanghai Index, Bloomberg, Wurts

## GLOBAL MACRO CONCLUSIONS

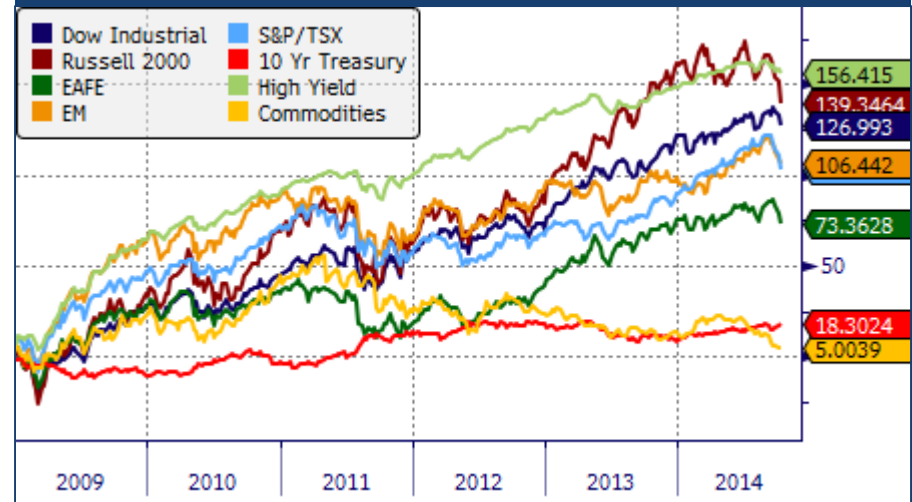
- What we're told to expect does not always materialize. Since the end of the Great Recession, the Federal Reserve and economists have told us to expect 3-4% GDP growth, but the actual result has been 2-2.5%.
- The economic cheerleaders on CNBC excitedly discuss the latest payroll report, which is little more than average, as if it was the missing link to explain why growth has consistently disappointed.
- Growth and income distribution in the U.S. is not even – with growth in the region surrounding the Bakken oil fields surging over the past few years, while other regions of the U.S. have not.
- European growth remains anemic with historically high unemployment rates and deflation becoming a greater threat. The ECB has responded with the promise of another package. Will the ECB be able to fully implement the stimulus and will it be enough to stimulus for growth and inflation? We have our doubts.
- The initial response to QE in Japan was positive – with both growth and inflation moving higher. However, similar to 1997, the government has instituted a tax hike, pulling forward consumption (improving GDP) and the financial markets. However, in both 1997 and 2014, in the quarter following the implementation of the tax hike, consumption and GDP declined significantly.
- China has struggled to maintain GDP at their targeted 7% – with some estimates showing GDP is currently tracking below 7%. However, given the valuation of the equity market, there may be light on the horizon.

# CAPITAL MARKETS

## ALL HAT, NO COWBOY

- Since 2009, capital market performance has been absolutely amazing with all asset classes producing positive cumulative total returns. With the recent decline in small cap stocks, high yield has taken over as the best performing asset class. The worst performing asset class has been commodities, followed by Treasuries.
- How likely are the positive total returns to continue? There are various ways to measure the health of a market: breadth, depth, volume, etc. When it comes to volume, one rule of thumb is used around the street, volume = conviction. Makes sense, if someone believes in something, they'll buy more of it.
- However, look at trading volume in the Dow relative to prices. Since the 2009 low, prices have moved steadily higher while volume has moved lower.
- In fixed income, while spreads have moved tighter, the inventory dealers that are willing/able to carry has steadily declined. The unwillingness/inability to carry inventory has important implications on fixed income liquidity should spreads start to widen.

### Cumulative Total Return Since 2009



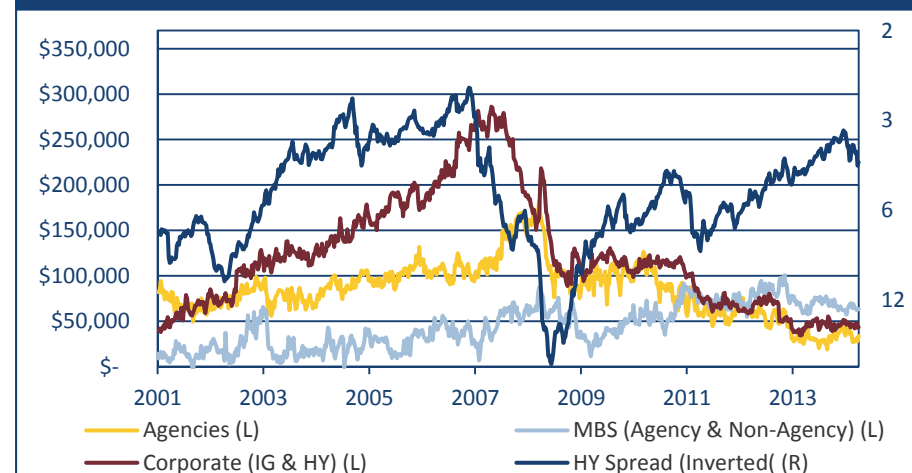
Source: Dow Jones, Russell, MSCI, TSX, Barclays, DJ UBS, Bloomberg, Wurts

### Equities: Volume = Conviction?!



Source: Dow Jones, Bloomberg, Wurts

### Fixed Income Dealer Inventory

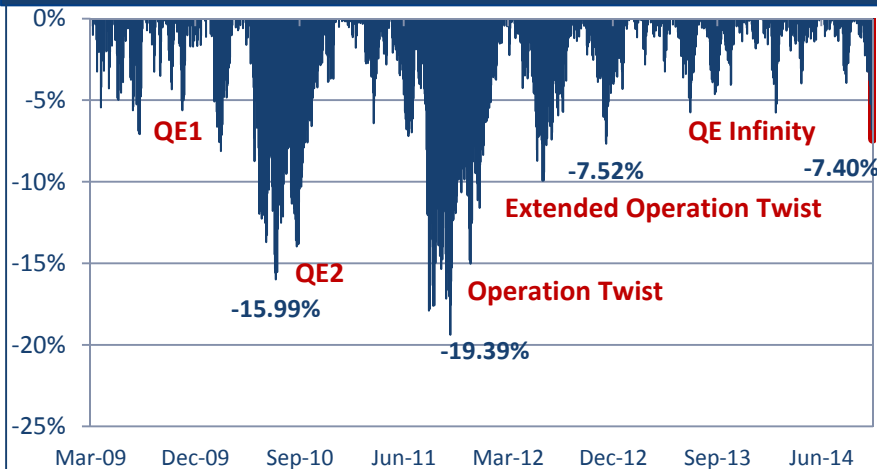


Source: New York Federal Reserve, Bloomberg, Wurts

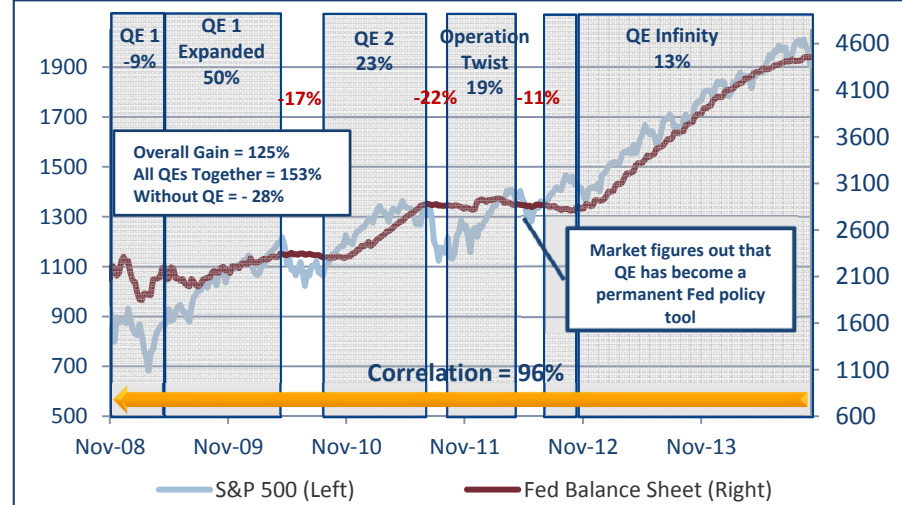
# MIRACLE GROW FOR EQUITIES

- How have equities managed to move higher in price with lower volumes (implying less conviction)?
- As we discussed in prior QRRs, the correlation between stock prices and the Fed balance has reached an amazing 96%. During periods of QE, the S&P 500 is up 153%, and without QE the S&P 500 is -28%.
- The Fed has fairly consistently implemented various stages of QE as the equity market experiences a drawdown. Is the current drawdown of 7.4% enough to change the QE taper?
- The high degree of correlation between the Fed balance sheet and equities explains at least part of the gains. What other factors might contribute? GDP, corporate sales growth, earnings? As we discussed in the prior section, GDP growth has been average, and certainly doesn't explain the explosive equity growth. Corporate sales growth has broadly followed GDP and likewise does not explain the returns. Earnings growth, however, has posted a 133% growth rate since 2009. How are we to explain the rather punk sales growth with the tremendous earnings growth?

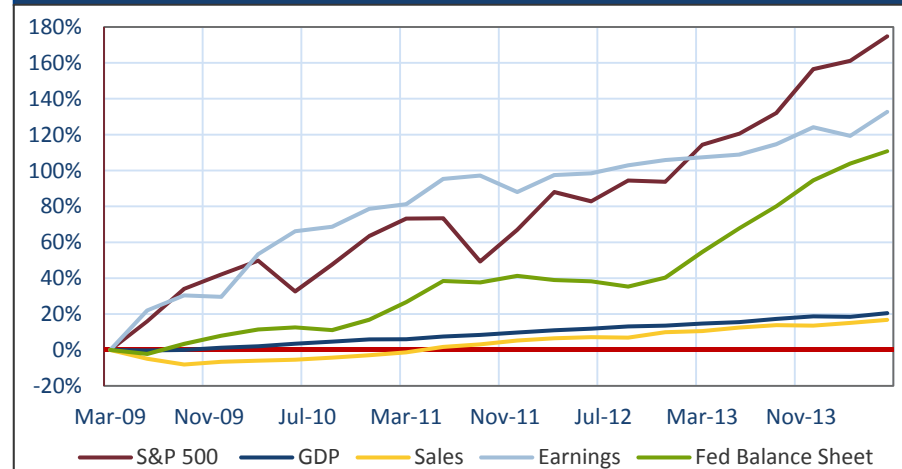
## S&P 500 Drawdown – Driver of Fed Policy



## Can't Spell Equities Without QE



## Growth Since 2009





## ENGINEERED EARNINGS

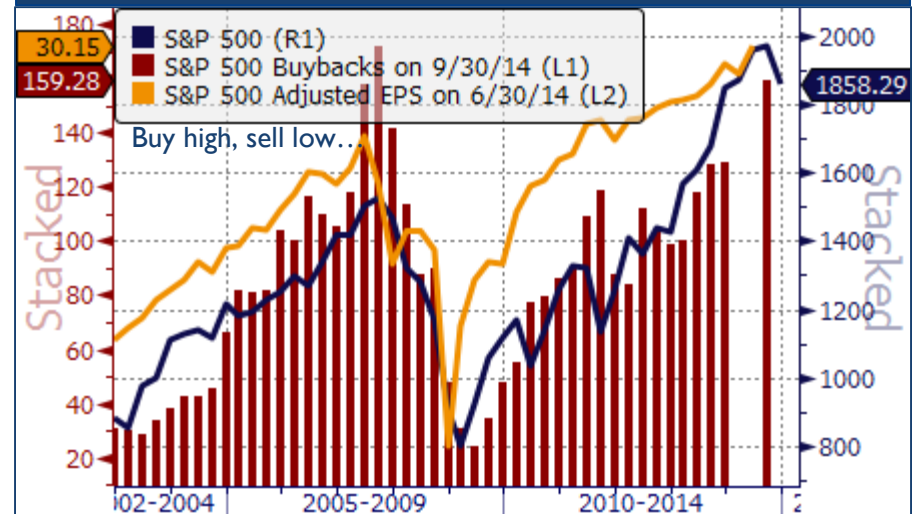
- Companies in the S&P 500 spent \$500 billion in stock buybacks in 2013, and they're poised to spend nearly \$600 billion in 2014 (above the \$589 billion peak in 2007). Why?
- How do you grow EPS when top-line revenues are growing with GDP? Reduce the number of shares outstanding. The market has generally rewarded companies engaged in share buybacks as the total return has exceeded the S&P 500 index substantially.
- As a case in point, let's look at IBM:
  - Since 2007, IBM has experienced NO revenue growth. They started around \$98 billion, they're still at \$98 billion
  - Earnings are up 57%
  - EPS is up 140%
  - IBM has been recycling earnings and issuing new debt to fund share buybacks
  - Growth in EPS has had nothing to do with selling more products and everything to do with financial engineering

### To Buy Back or Not



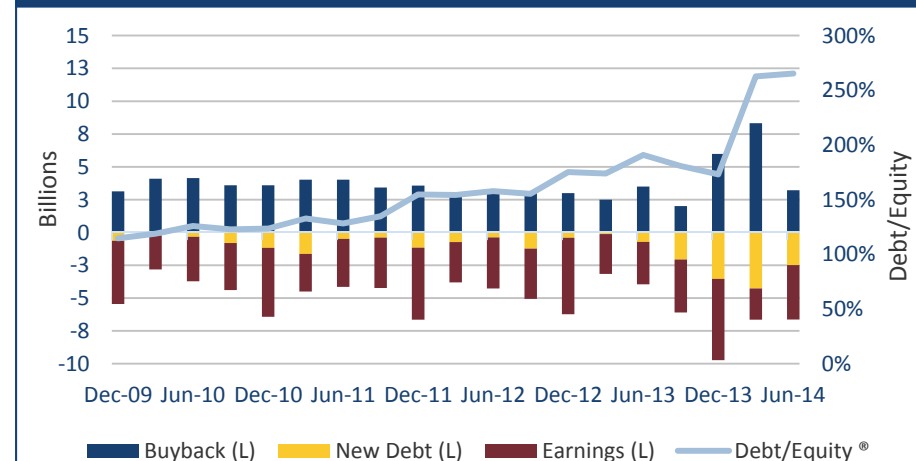
Source: S&P, Bloomberg, Wurts

### S&P 500 Buybacks & Earnings



Source: S&P, Bloomberg, Wurts

### Case in Point - IBM



Source: Bloomberg, Wurts

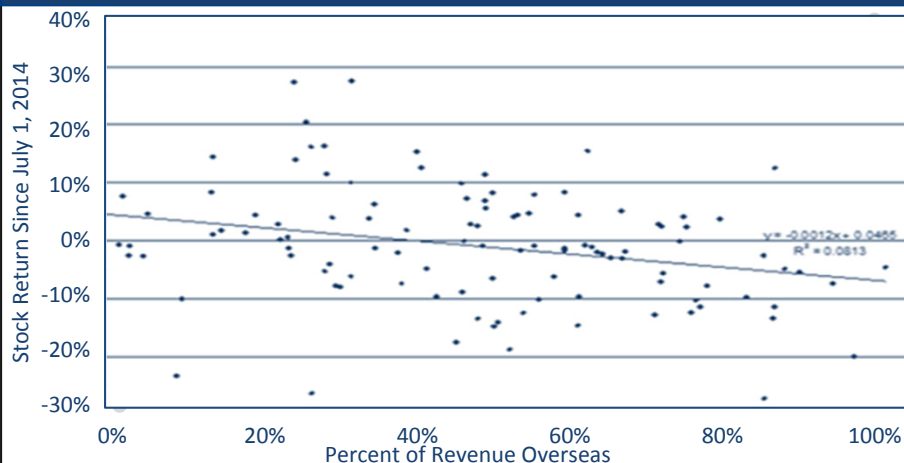
# I EXPECT CHANGE – UNLESS IT REMAINS THE SAME

- One factor we've heard a lot about this quarter as a potential impact to earnings is the dollar strength. Since July 1, 2014, the dollar rallied almost 9%, an impressive move to be sure. With the strength in the dollar, some have commented the move will negatively impact earnings (due to the translation impact).
- Of the 500 companies in the S&P 500, roughly 200 report foreign sales – roughly 90 of which report foreign sales as zero. Of the remaining 110 companies reporting a non-zero number for foreign sales, we can see in the scatter plot the percentage of overseas revenue relative to how the stock has performed since July 1. With a 8% correlation, the market is not discriminating based upon exposure to the dollar. If the dollar strength continues, the impact could be greater, but for now, it's too short-term.
- What's driving the dollar strength? Simple – expected changes in central bank balance sheet. The Fed is exiting QE and the ECB is at least trying to implement some type of QE.



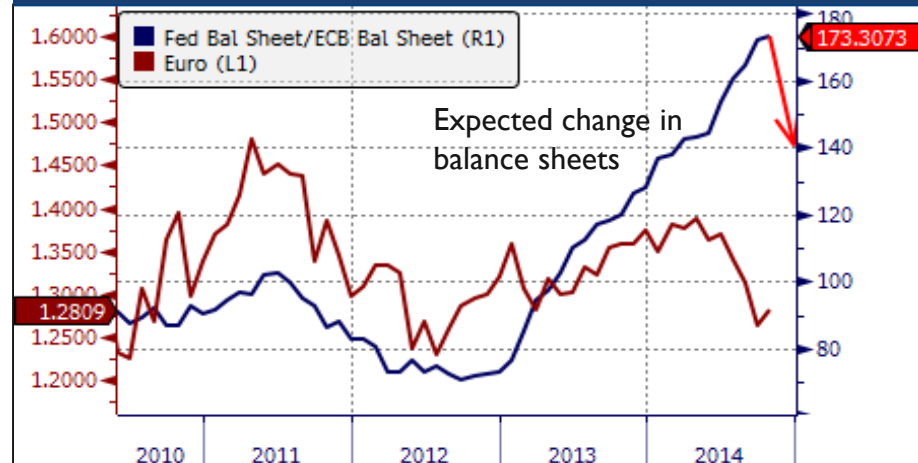
Source: Bloomberg, Wurts

## S&P 500 Returns vs. Overseas Revenue



Source: S&P, Bloomberg, Wurts

## Expected Central Bank Policy Driving FX



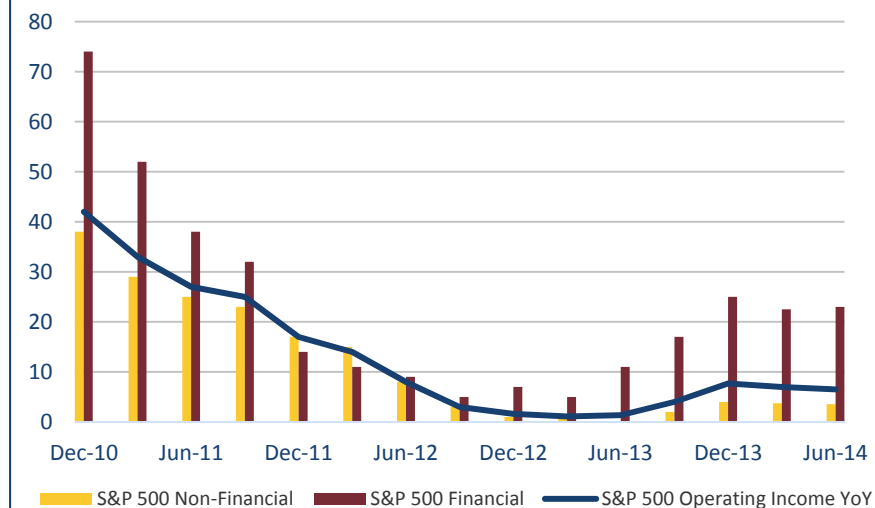
Source: Federal Reserve, ECB, Bloomberg, Wurts



# PLAYING THE EARNINGS GAME

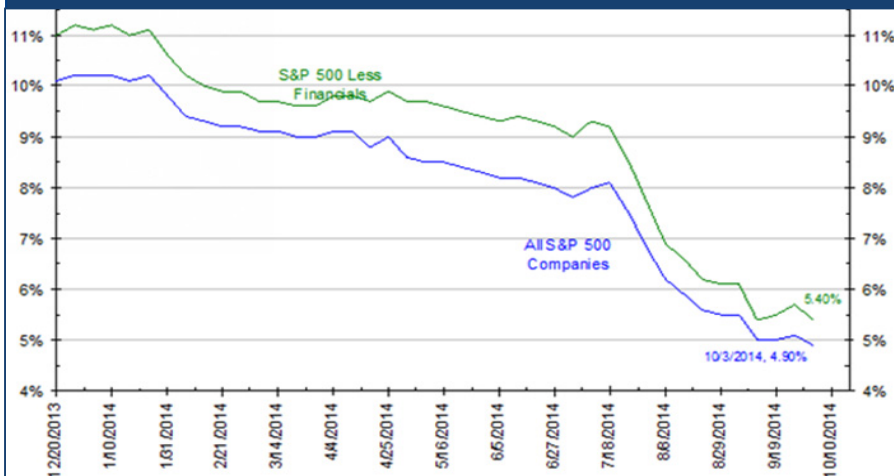
- If we want to strip out the effects of share repurchases and the earnings game, we can look at operating income. Since 2010, we've seen the S&P 500 net operating income growth rate trend lower from approximately 40% to the current 7%. We can further break down the operating income growth into financial and non-financials. Financials have clearly experienced a much higher growth rate than non-financials. Why is this important? About 80% of the S&P is composed of non-financials and if they're only able to grow at 3-4%, it further reinforces the idea of average growth.
- As we move into Q3 earnings season, we see the same pattern emerging – start off with 10-11% earnings growth expectations. As the reporting seasons draws closer, revise down the estimate toward 5-6%, and then surprise! Most companies beat expectations.
- CNBC makes it sound like the hurdle rate for a good quarter is 50% beat rate, but since 2009, the average beat rate is 73%. Further, since the Fair Disclosure Regulation was enacted, the beat rates has ALWAYS been above 50% – even during the worst quarter in 2008.

## Operating Earnings Growth YoY



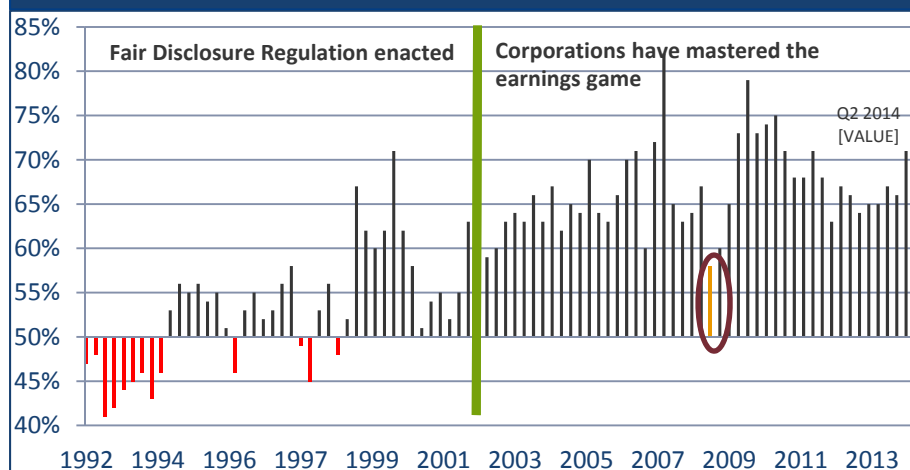
Source: S&P, Bloomberg, Wurts

## Q3 Earnings Expectations



Source: S&P, Bloomberg, Wurts

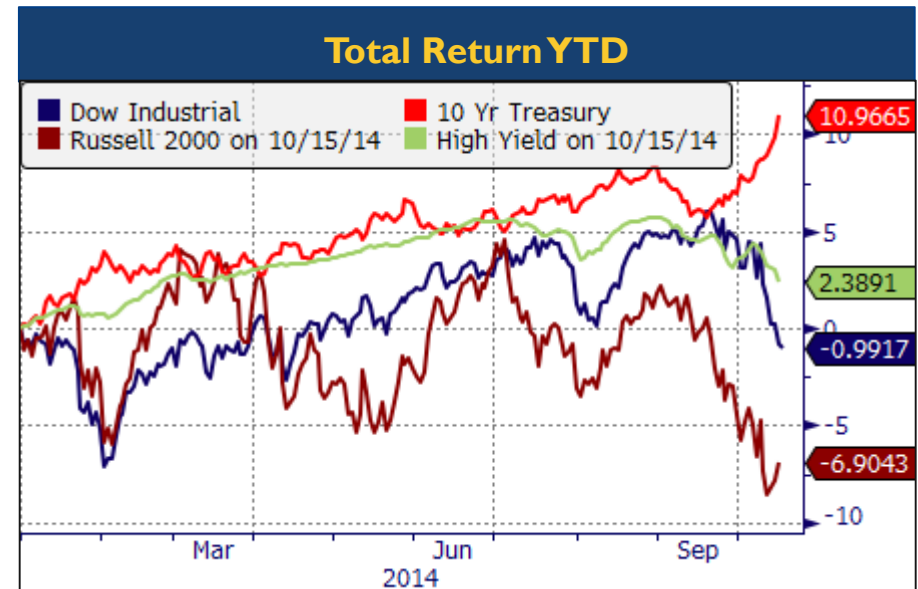
## Quarterly Earnings Beat – Playing the Game



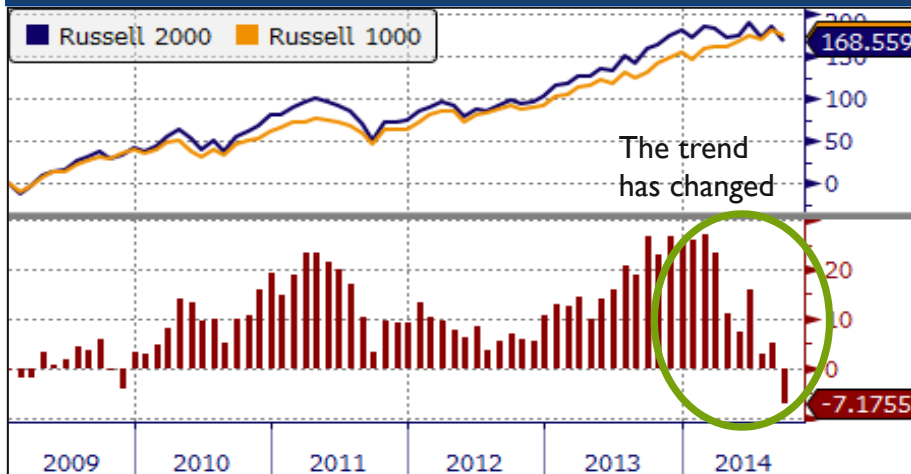
Source: S&P, Bloomberg, Wurts

# RIDING THE BULL UNTIL IT BUCKS

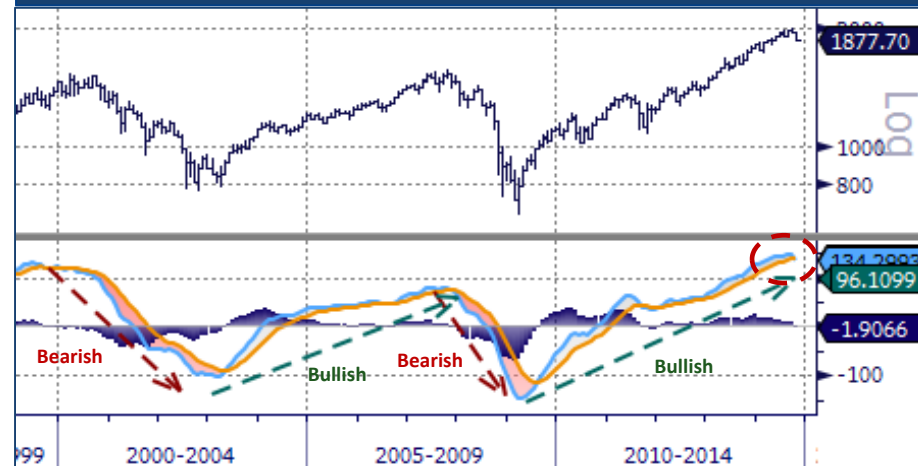
- Recent market turmoil has brought into question if the bull market trend will continue. Small cap stocks have significantly underperformed large cap stocks, high yield spreads continue to press wider, and the total return in Treasuries are producing one of the best years in history.
- Comparing small cap stocks (Russell 2000) to large cap stocks (Russell 1000), we can see they've generally trended together. However, over the past few months, small cap stocks have underperformed more than at any point since 2009 – indicating a significant change in trend.
- However, before we place too much emphasis on one market, we would highlight that other areas (such as large cap and tech stocks) have yet to show a strong trend reversal. We acknowledge they are no longer bullish, but are reserving judgment until the trends indicate a stronger reversal in trend. Stay tuned.



## Large Caps vs. Small Caps



## The Trend is Your Friend



# THE HAPPY BULL (NO LONGER LONELY)

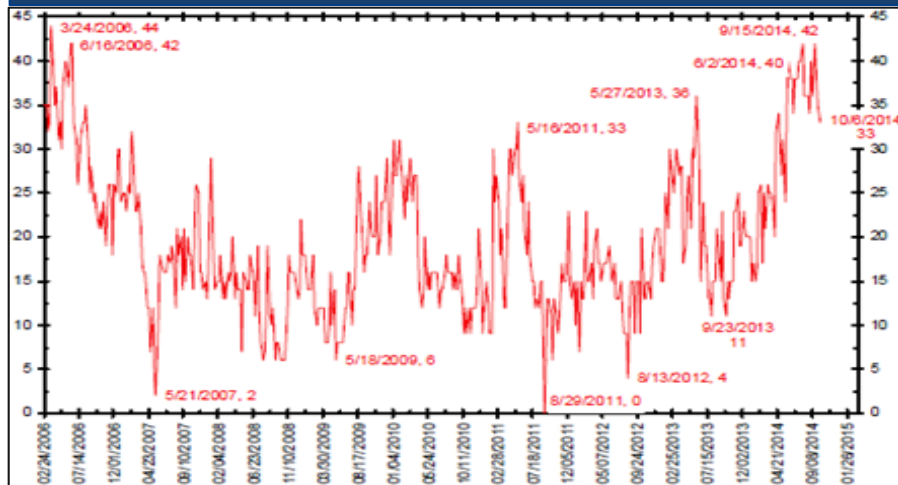
- In May 2013, the Fed introduced the idea of tapering, and the market reaction was quick and severe as the 10-year rate moved sharply higher from 1.6% to 3%. As a result, the total return of 30-year Treasuries in 2013 was one of the worst in history.
- Since then, economists and investors have remained bearish despite rates moving lower and producing one of the best total return years in history. Seemingly, those bearish bonds have been waiting for the rate rise that already took place in 2013.
- On October 15, 2014 we experience one of the most volatile trading days ever in Treasuries as the bears finally capitulated. Interest rates fell nearly 35 bps in the first few hours of trading, only to move back higher by 30 bps by the end of the day.

## U.S. 10-Year Rates



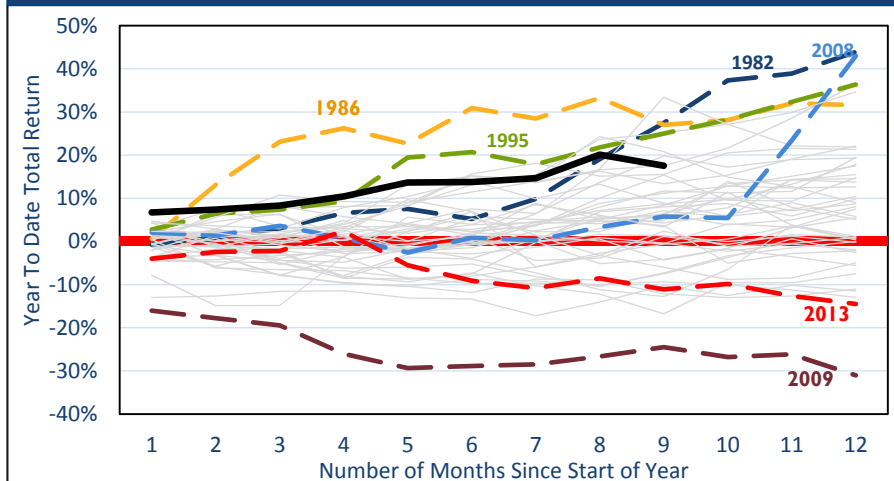
Sources: Bloomberg, Wurts

## JP Morgan Client Survey Underweight Tsy



Sources: JP Morgan

## 30-Year Treasury Total Returns by Year



Sources: MPI, Bloomberg, Wurts

## SUMMARY OF CAPITAL MARKETS

- Gains in the capital markets since 2009 have been spectacular, but not supported by conviction as volumes have steadily declined as prices moved higher. If volume = conviction, investors do not have much faith in the rally.
- No doubt equity prices have moved higher as a result of Fed QE policy – with a 96% correlation between stock prices and the Fed balance sheet. While the correlation might not be as high, corporate earnings have increased 133% since 2009, and have had an obvious impact on equities. With top line revenue growth performing more like GDP, corporations have been able to grow EPS through share buybacks. Earnings are a game, and everyone knows it's a game.
- We remain neutral in our overall equity allocation, however given the rich valuation and trend changing from neutral to slightly bearish, we remain cautious in our outlook.
- With historically rich valuations and credit spread trends moving wider, we continue to be cautious on the credit markets and prefer a slight underweight in credit in favor of similar risk in equities for better liquidity.

## RECENT WURTS RESEARCH

## Are Unconstrained Bonds A Substitute For Core Bonds In The Portfolio? (August)

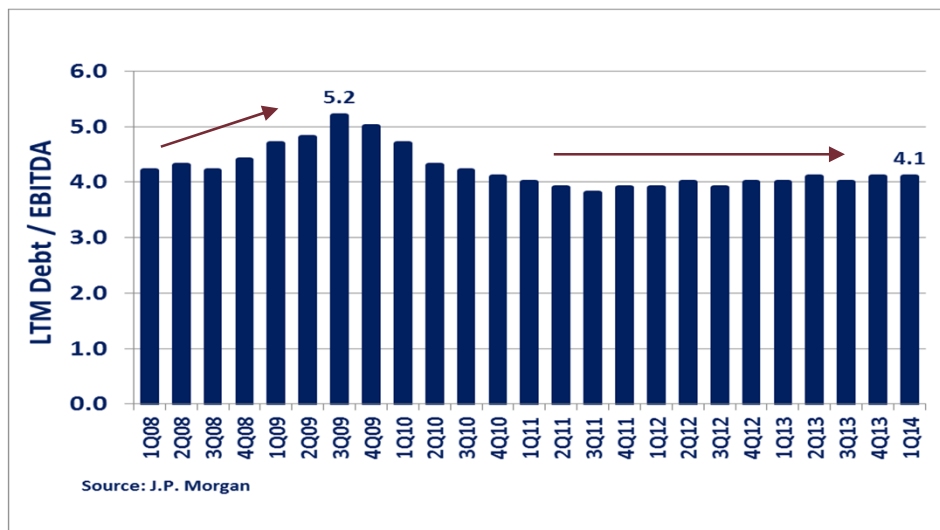
- The primary role of fixed income in most portfolios is as a diversifier for equity risk
- Most unconstrained bond strategies act as fixed income portfolios with a significant added equity risk component
- Unconstrained bonds make a poor replacement for the typical core fixed allocation, although may make sense in a total portfolio if added for their own characteristics

Figure 6: Performance of Core and Nontraditional Bond Manager Universe

	Financial Market Crisis 05/2008 - 01/2009	Greek Financial Crisis 05/2011 - 10/2011	Emerging Market Debt Sell-off 03/2013 - 07/2013	Rising Interest Rates 12/08-6/09	Rising Interest Rates 10/10-2/11	Rising Interest Rates 7/12-12/13
<b>BC Aggregate Bond</b>	2.3	5	-2.1	5.7	-0.9	-0.2
<b>S&amp;P 500 TR USD</b>	-39.2	-7.1	12.2	-30.4	17.3	25.3
<b>Core Bond Manager Universe</b>						
Top 5%	5.5	6.1	-0.8	24.9	4.3	7.6
Top Quartile	3.5	5	-1.8	14	1.6	3.9
Median	1.6	4.4	-2.1	10.8	0.7	2.3
Third Quartile	-1.8	3.8	-2.3	8.2	0	1.3
95th Percentile	-8	1.9	-2.8	5.5	-0.9	0.3
<b>Nontraditional Bond Manager Universe</b>						
Top 5%	2.7	2.2	1.7	35.5	5.9	15.1
Top Quartile	-4.3	-0.2	0.2	19.2	3.8	9.3
Median	-12.7	-1.7	-0.6	15.3	2.3	5
Third Quartile	-15.5	-3	-1.8	9.6	1.1	1.7
95th Percentile	-26.5	-5.4	-3.2	2.5	-1.3	-2.2

## Bank Loans: Keeping A Watchful Eye On The Ball (September)

- There have been rapid inflows into bank loan portfolios, with tight spreads relative to history
- While this might raise concerns over possible overheating, other metrics in the marketplace provide comfort
- Continued exposure to this space remains sensible, although conservative portfolio management strategies may be appropriate



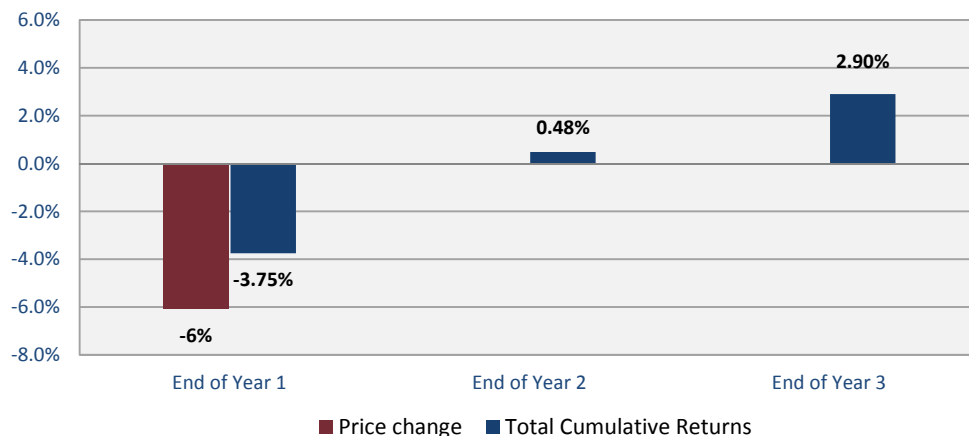
## The Role Of Core Bonds In A Rising Rate Environment (September)

- With interest rates at historic lows, investors remain concerned about the effect on bond exposures of a rising rate environment
- Fixed Income plays a diversifying role in the portfolio and in itself that role is valuable
- The effect of rate rises is more nuanced than expected. Reinvestment in a higher rate environment can make up for immediate capital loss within a relatively short timeframe

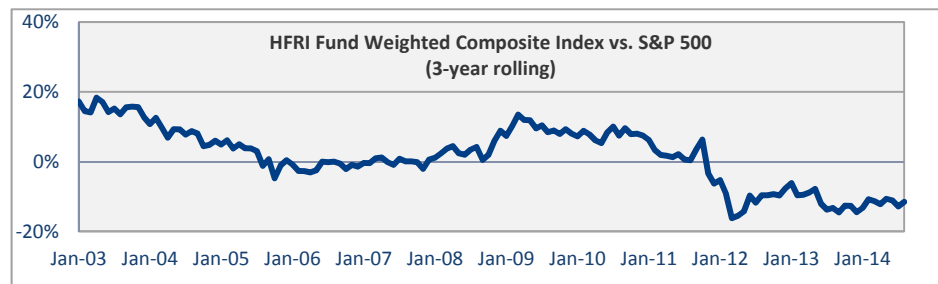
## Annual Hedge Fund Outlook (October)

- Relatively poor returns from hedge fund strategies may be partially explained by the market environment and behavior
- Decreasing value added is also closely related to asset inflow into the hedge fund space
- The underlying betas that hedge funds access are increasingly available in efficient formats
- Understanding the role the hedge fund allocation plays in the portfolio and the sensitivities that each exposure represents is vital to success
- High fees should be paid only where there is a reasonable expectation of significant value-added

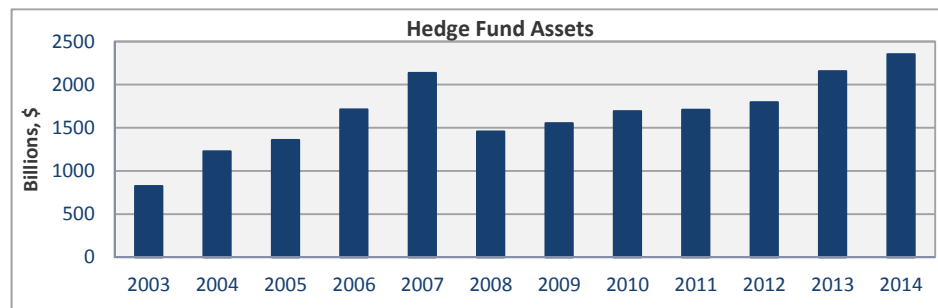
**Figure 3**  
Total Returns Following a 1% Increase in Interest Rates\*  
Barclays U.S. Aggregate Bond Index



\*Assumes 1% increase in rates at end of year 1



Source: HFRI



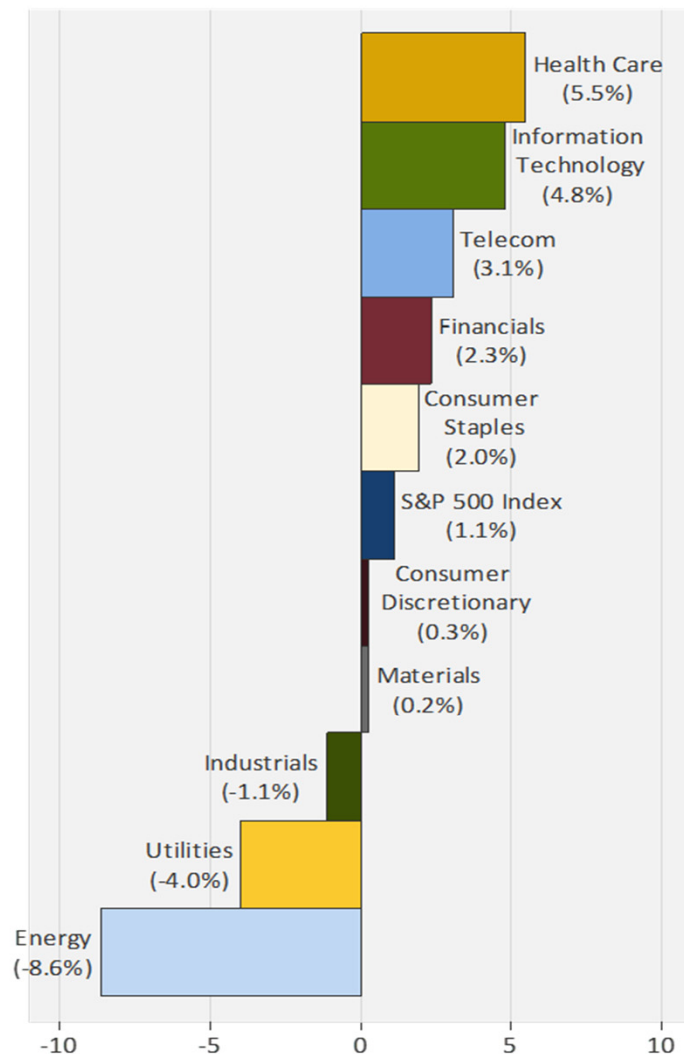
Source: Barclays Hedge

# APPENDIX

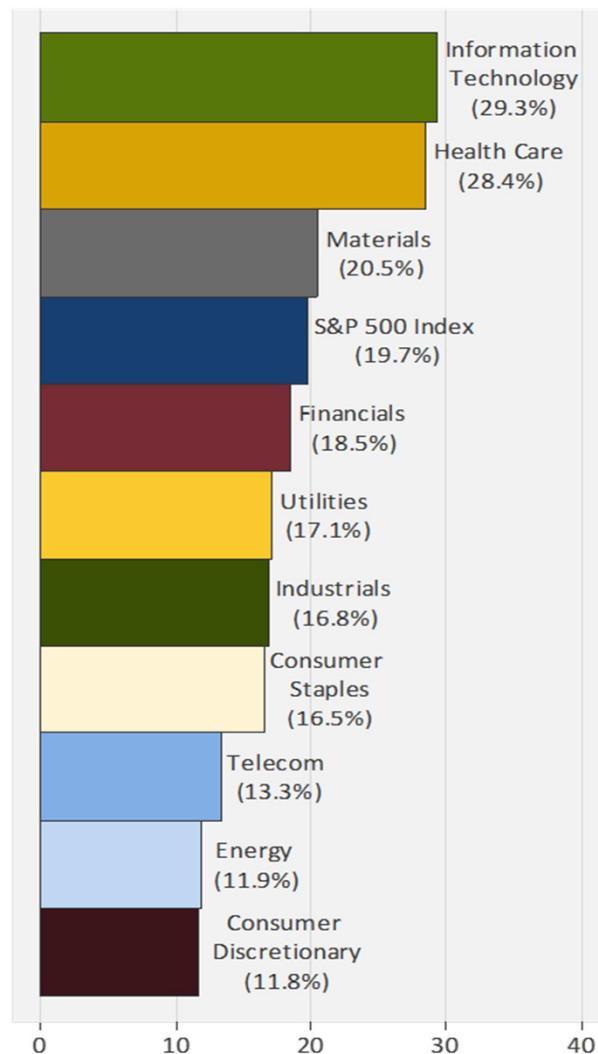


# S & P 500 AND S & P 500 SECTOR RETURNS

## QTD Ending September 2014



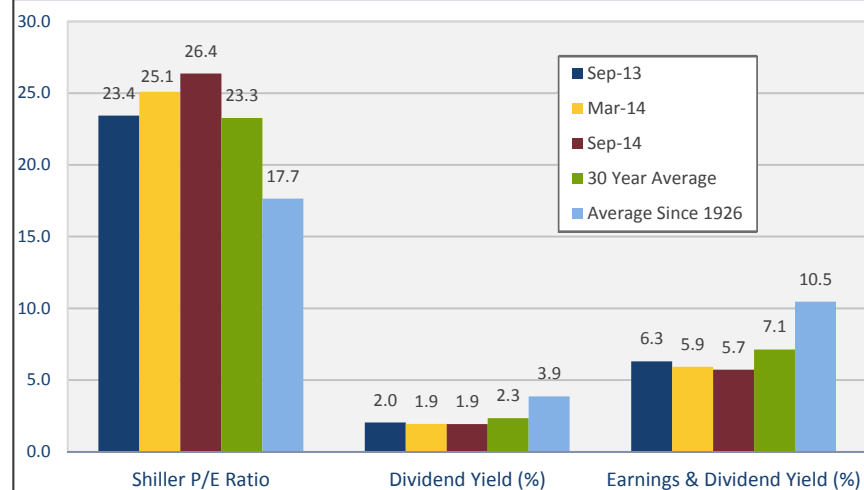
## One Year Ending September 2014



# US LARGE CAP EQUITIES

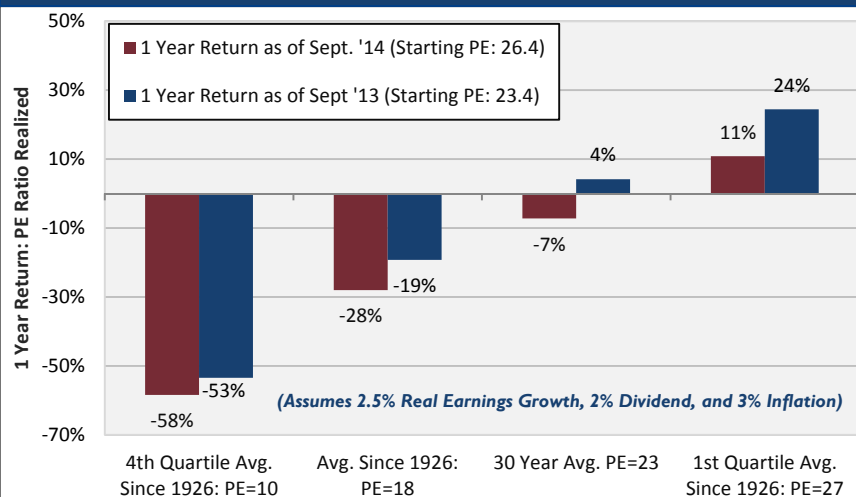
- The S&P 500 returned 1.1% over the quarter, despite being down -1.4% in September.
- Healthcare and information technology stocks were the best performing sectors for the quarter, returning +5.5% and +4.8%, respectively. Energy stocks suffered most, declining 8.6%.
- The expansion in the Shiller P/E ratio has slowed this year, but its level remains 12.8% higher than last year.
- If the Shiller P/E mean-reverts to its long-term average, the markets one year return would be approximately -28.0%.

## US Large Cap (S&P 500) Valuation Snapshot



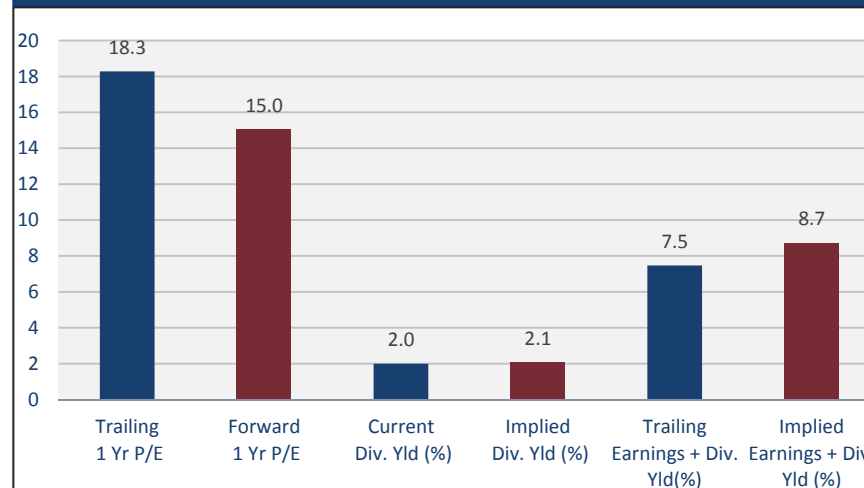
Source: Yale/Shiller, Wurts

## Effects of Changes in Shiller PE Ratio



Source: Yale/Shiller, Wurts

## S&P 500 Valuation Snapshot (Sept. '14)

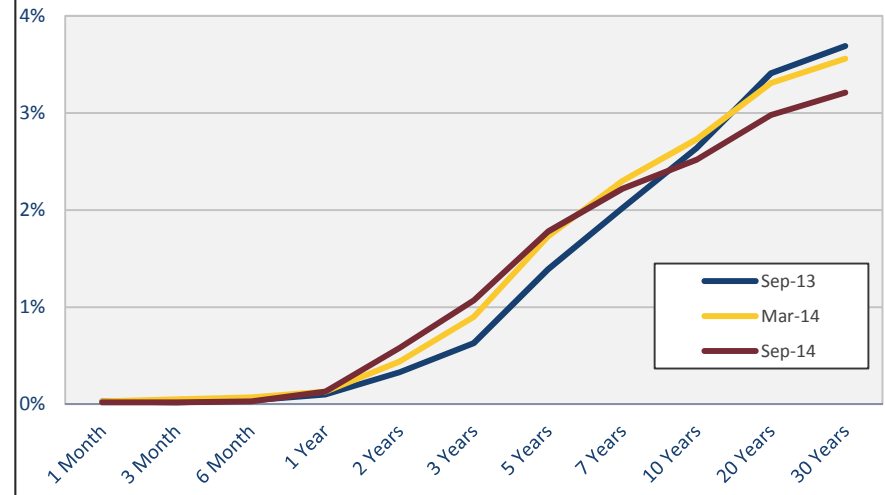


Source: S&P, Wurts

## FIXED INCOME

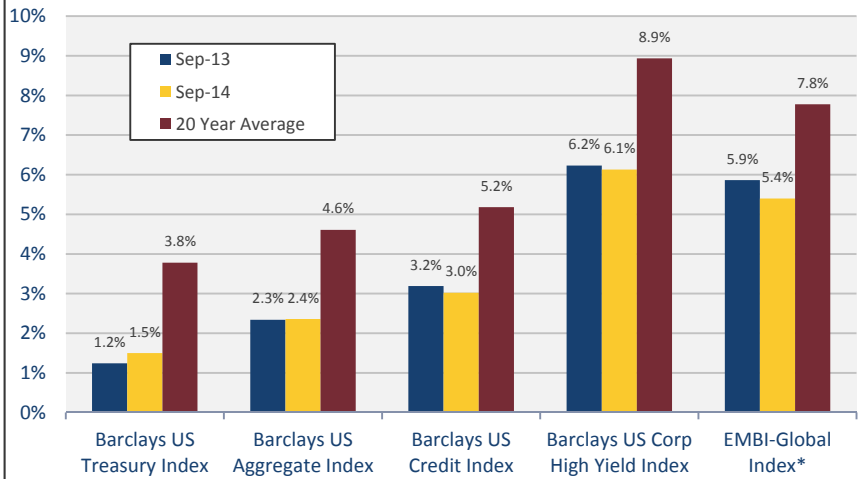
- 10-year treasury rates were up 17 bps in September, the largest month-over-month increase since December of 2013.
- Despite rates rising across the yield curve during the month, long-end yields remain below levels last year, with 20- and 30- year rates nearly 50 bps lower.
- Yields in most sectors increased during September but remain at last year's levels.
- The Barclays US Corporate High Yield Index yield increased 93 bps during the month, and is up over 100 bps since mid June.
- Inflation expectations, as observed through breakeven inflation rates, are little changed from six months and one year ago.

### US Treasury Yield Curve



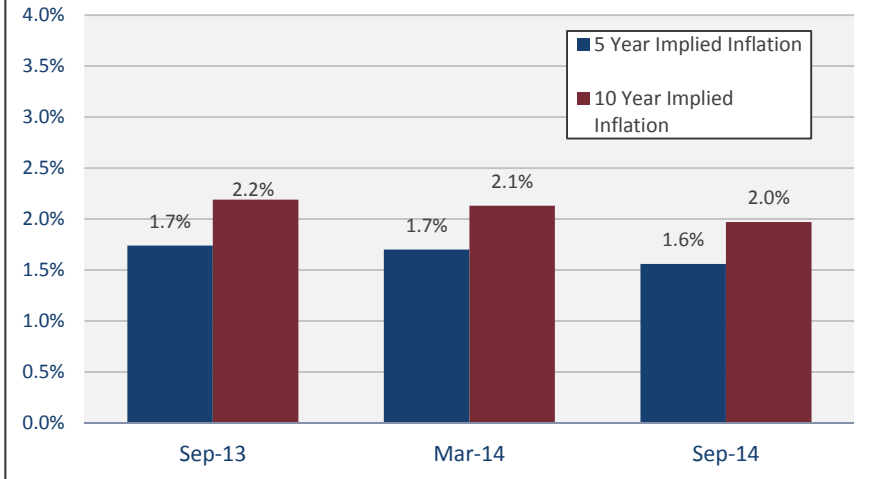
Source: Federal Reserve

### Nominal Fixed Income Yields



Source: Ibbotson, JP Morgan

### Inflation Expectations (Nominal less Real)

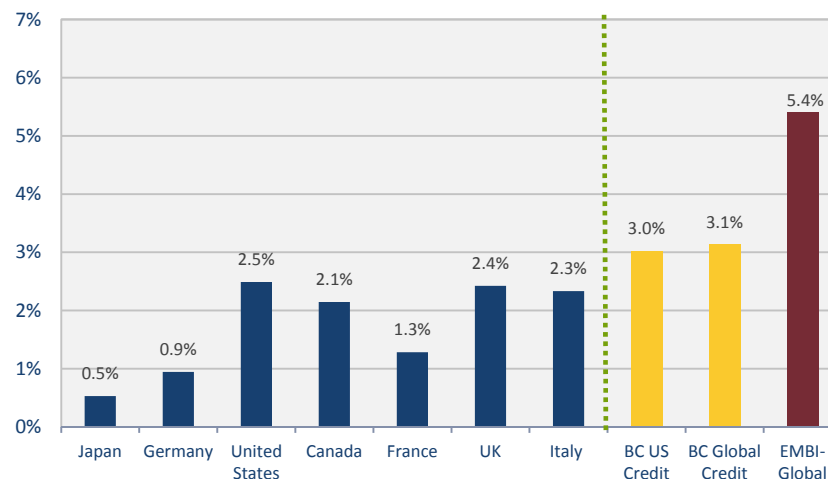


Source: Federal Reserve

## GLOBAL MARKETS

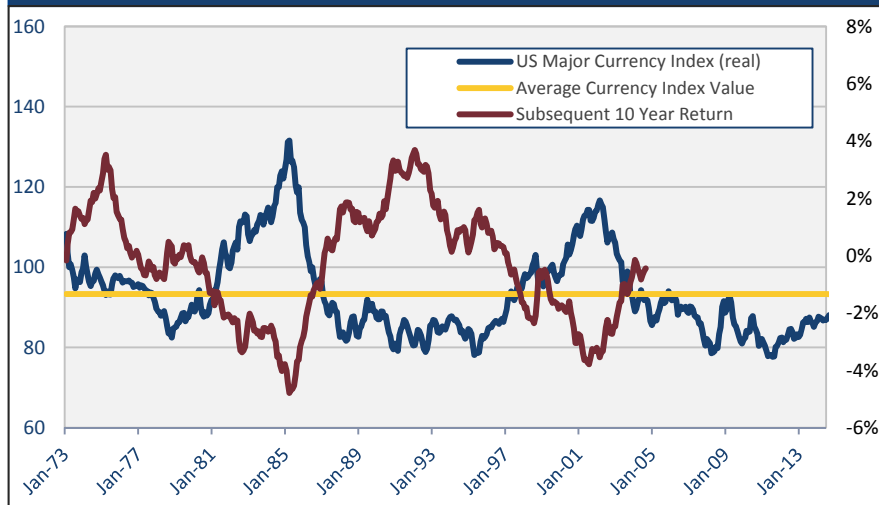
- Changes in sovereign bond yields were mixed, with Emerging markets increasing the most. Since the beginning of 2014, Italian yields have fallen from 4.1% to 2.3% and French yields are down from 2.6% to 1.3%.
- International markets continue to look undervalued relative to domestic markets under a number of different price ratios.
- U.S. Dollar is approaching 2009 levels due to strength in September.

### Global Sovereign 10 Year Index Yields (Sept. '14)



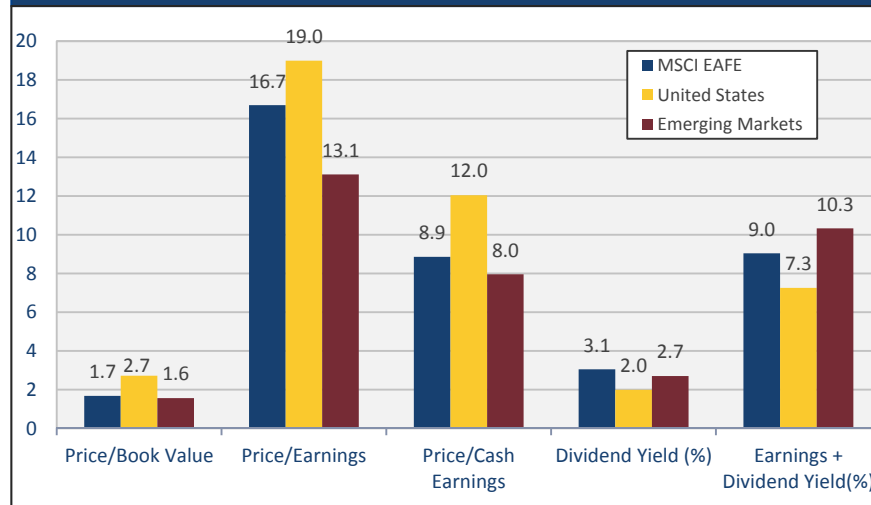
Source: Bloomberg, JP Morgan

### US Dollar Major Currency Index (Sept. '14)



Source: Free Lunch, Wurts

### MSCI Valuation Metrics (3 Month Average)

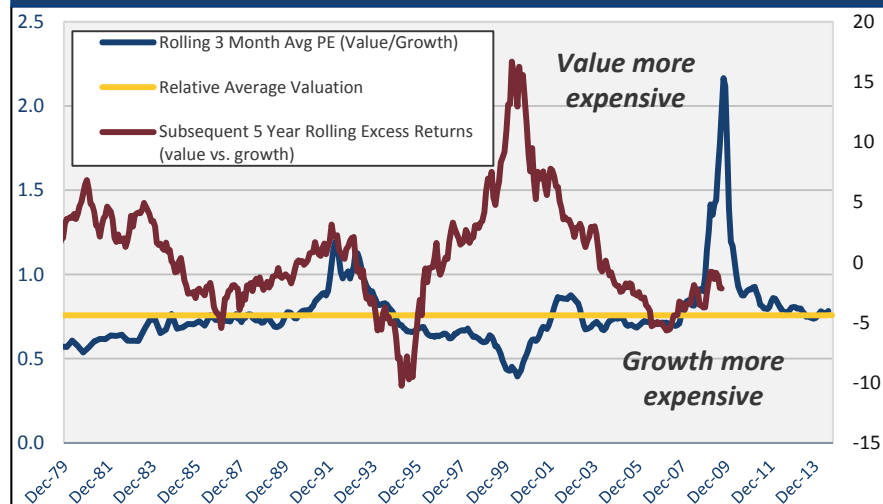


Source: MSCI

# STYLE TILTS: US LARGE VALUE VS. GROWTH

- The Russell 1000 Growth Index outperformed the Russell 1000 Value Index by 170 bps (1.5% vs. -0.2%).
- The relative P/E ratio between value and growth stocks is near the historical average, indicating fair value between the two.

## Relative PE Ratio of US Value vs. Growth



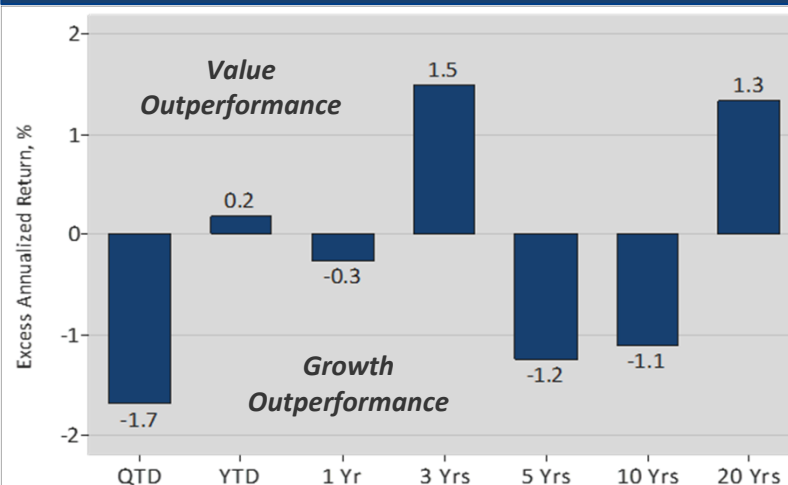
Source: Russell, Wurts & Associates

## US Value vs. Growth Absolute Performance

	Russell 1000 Growth Annualized Return to Date %	Russell 1000 Value Annualized Return to Date %
QTD	1.5	-0.2
YTD	7.9	8.1
1 Year	19.1	18.9
3 Years	22.4	23.9
5 Years	16.5	15.3
7 Years	7.6	4.8
10 Years	8.9	7.8
20 Years	8.8	10.2
	Sharpe Ratio	Sharpe Ratio
3 Years	2.02	2.17
5 Years	1.20	1.11
7 Years	0.41	0.24
10 Years	0.49	0.40
20 Years	0.34	0.48

Source: MPI

## US Value vs. Growth Relative Performance

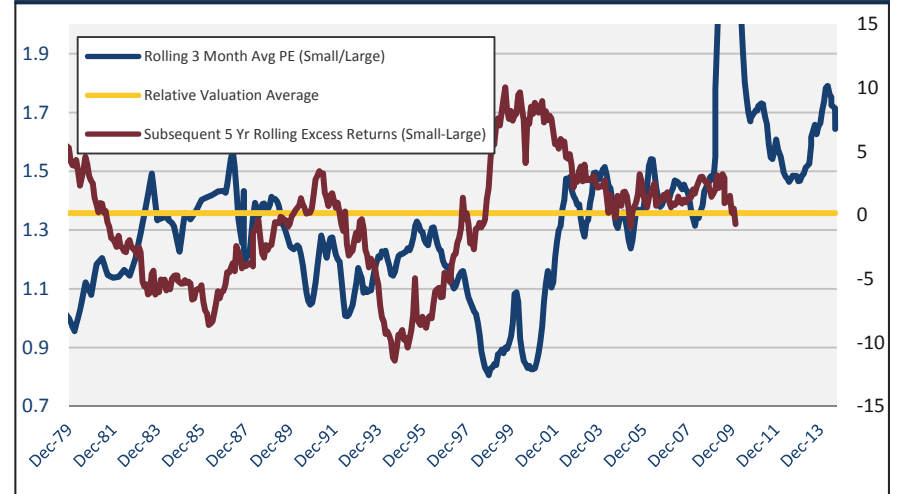


Source: MPI

## STYLE TILTS: US LARGE VS. SMALL

- Small cap equities returned -7.4% over the third quarter while large cap equities were up 0.7%.
- Large cap equities are outperforming small cap equities over both medium and long-term time periods.
- Recent underperformance of small cap has brought the relative P/E ratio between small cap and large cap closer to the historical average.
- In addition to higher absolute performance, the Sharpe ratio of the Russell 1000 Index is higher than the Russell 2000 because of lower realized volatility.

### Relative PE Ratio of US Small vs. Large



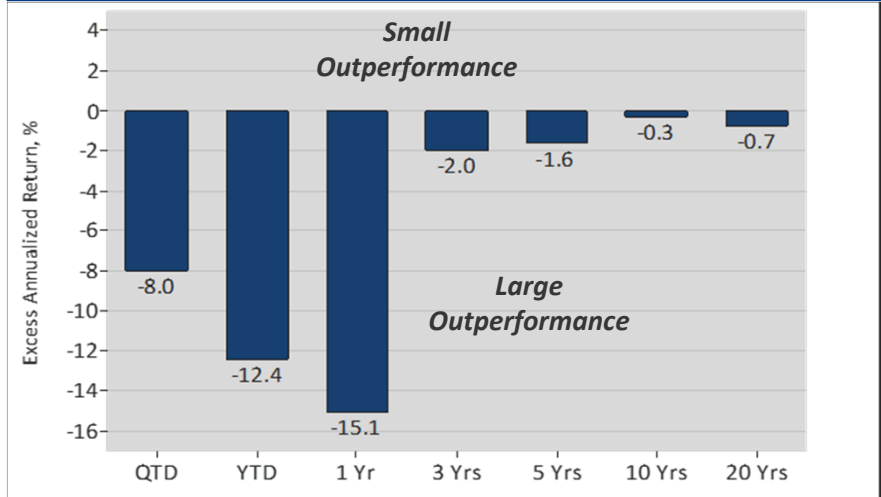
Source: Russell, Wurts & Associates

### US Large vs. Small Absolute Performance

	Russell 1000 Index Annualized Return to Date %	Russell 2000 Index Annualized Return to Date %
QTD	0.7	-7.4
YTD	8.0	-4.4
1 Year	19.0	3.9
3 Years	23.2	21.3
5 Years	15.9	14.3
7 Years	6.3	6.0
10 Years	8.5	8.2
20 Years	9.8	9.0
	Sharpe Ratio	Sharpe Ratio
3 Years	2.15	1.39
5 Years	1.17	0.77
7 Years	0.33	0.25
10 Years	0.45	0.33
20 Years	0.45	0.31

Source: MPI

### US Small vs. Large Relative Performance



Source: MPI

# COMMODITIES

- Commodities declined -11.8% over the quarter, its worst quarterly loss since 2008.
- Commodities have now posted negative returns over the most recent 1-, 3-, 5-, 7- and 10-year time periods, despite mixed calendar year performance over these time periods.

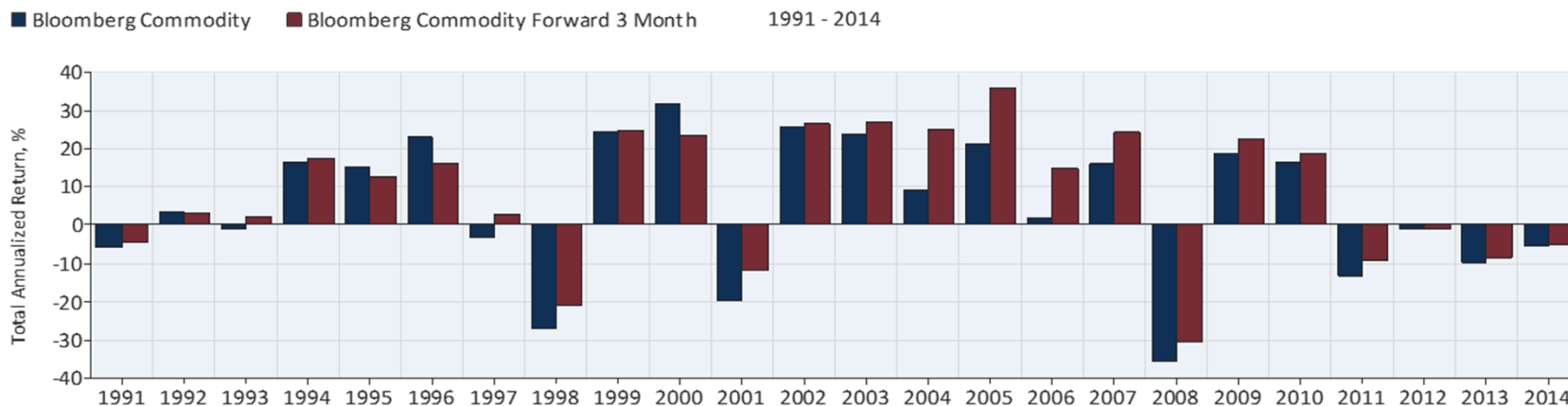
## Index vs. Forward Contract Performance

	Annualized Return to date, %	
	Bloomberg Commodity	Bloomberg Commodity Forward 3 Month
QTD	-11.8	-11.0
YTD	-5.6	-5.1
1 Year	-6.6	-6.0
3 Years	-5.3	-4.7
5 Years	-1.4	0.3
7 Years	-5.2	-2.4
10 Years	-1.0	4.4
20 Years	4.0	7.9

Source: MPI

## Annual Comparative Performance of Index vs. Forward Contracts

Fiscal Annual Performance

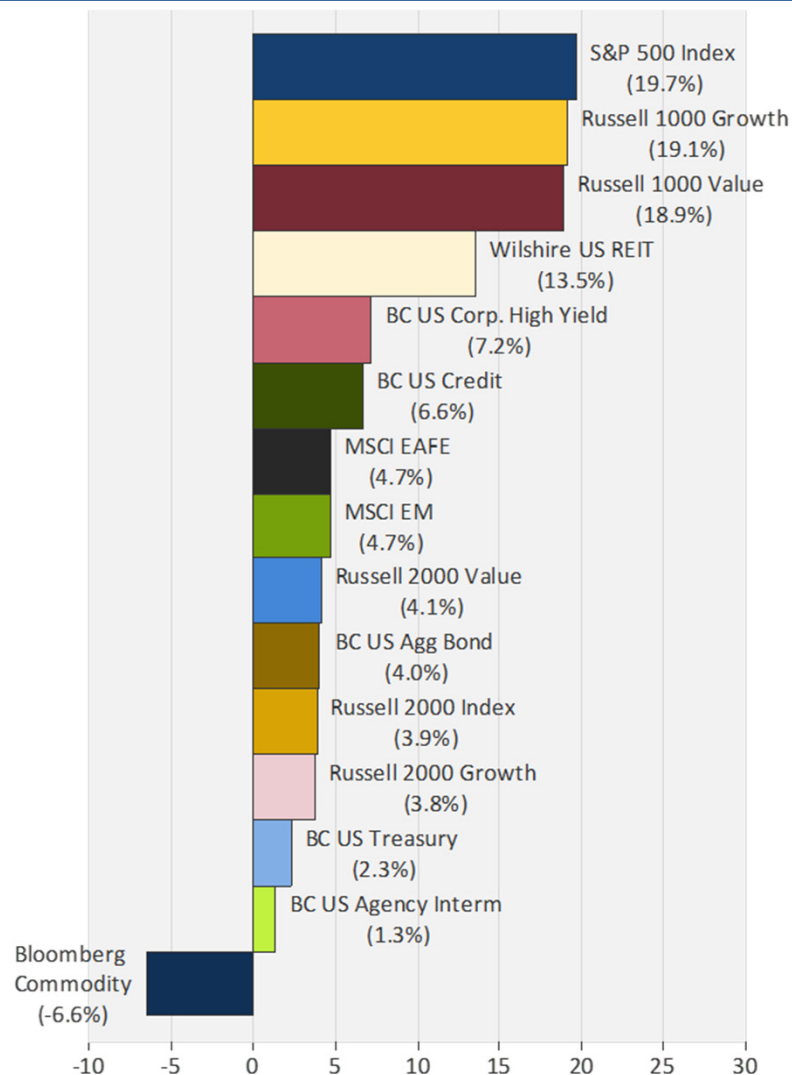


Source: MPI

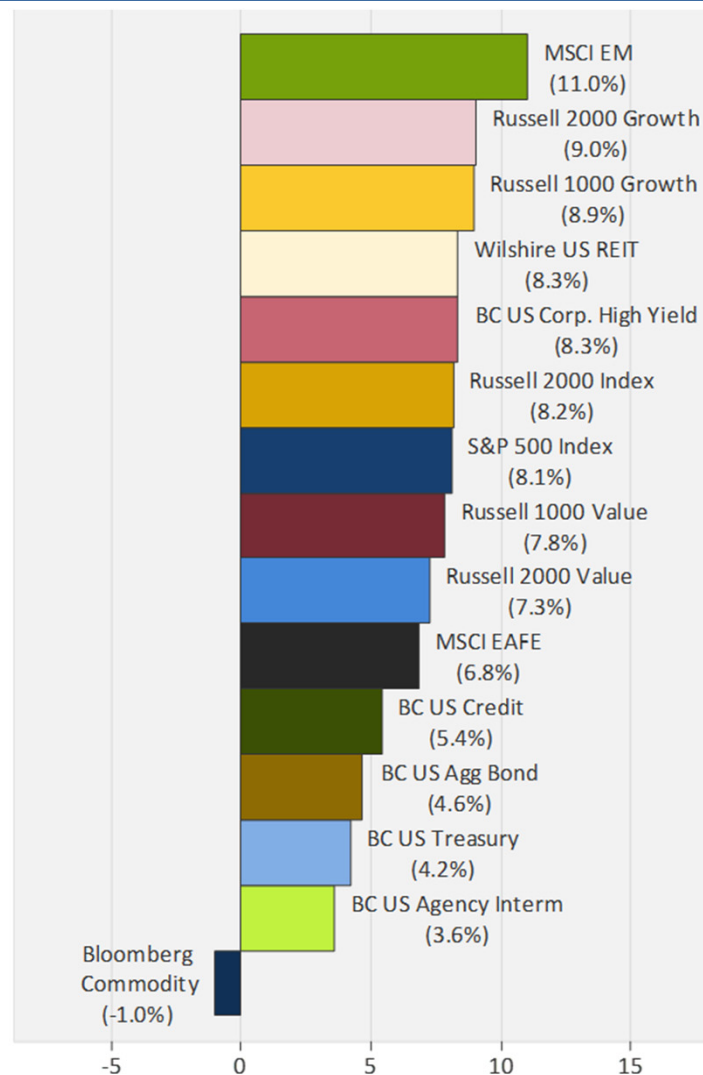


# MAJOR ASSET CLASS RETURNS

## One Year ending September 2014



## Ten Years ending September 2014



Source: MPI

# PERIODIC TABLE OF RETURNS – SEPTEMBER 2014

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	YTD
Best	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	8.5
	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	8.1
	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	8.0
	23.8	4.4	31.0	21.6	30.5	16.2	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	7.9
	18.9	2.6	28.5	21.4	22.4	15.6	26.5	7.0	2.8	1.0	39.2	16.5	8.0	18.4	11.6	-25.5	28.4	16.8	1.2	16.4	33.1	4.8
	18.1	0.4	25.7	16.5	19.1	13.8	24.3	6.0	2.5	-6.0	30.0	14.5	7.5	16.6	10.3	-28.9	27.2	16.7	0.4	16.3	32.5	4.1
	13.4	-0.2	24.4	15.5	16.2	8.7	21.3	4.1	-2.4	-8.9	29.9	14.3	7.1	15.5	8.7	-33.8	20.6	16.1	0.1	15.3	23.3	2.7
	13.2	-1.5	18.5	14.4	13.9	4.9	20.9	0.4	-4.3	-11.4	29.7	11.9	6.3	14.0	7.0	-35.6	19.7	15.5	-2.9	14.6	14.4	2.4
	10.2	-1.8	15.2	11.3	12.9	1.2	16.8	-3.0	-5.6	-15.5	23.9	11.4	5.3	13.3	7.0	-36.8	18.9	13.1	-4.2	12.6	11.0	0.0
	9.7	-2.0	11.6	10.3	9.7	-2.5	11.4	-7.8	-9.2	-15.7	22.9	9.1	4.7	10.4	5.8	-37.6	18.4	13.0	-5.5	10.5	9.0	-1.0
	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	-4.0
	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	-4.4
	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	-4.7
Worst	-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	-5.6

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

Universe Median Total Funds

Source: Data: Morningstar, Inc., Hedge Fund Research, Inc. (HFR), National Council of Real Estate Investment Fiduciaries (NCREIF) and BNY Mellon

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, DJ UBS Comm, NCREIF Property, HFRI FOF, BNY Universe Median Total Funds.

# DETAILED INDEX RETURNS

Domestic Equity 9/2014	Month	QTD	YTD	1 Year	3 Years	5 Years	10 Years
<b><u>Core Index</u></b>							
S&P 500	(1.4)	1.1	8.3	19.7	23.0	15.7	8.1
S&P 500 Equal Weighted	(2.5)	(0.7)	7.9	18.5	24.8	17.5	10.2
DJ Industrial Average	(0.2)	1.9	4.6	15.3	19.0	14.8	8.2
Russell Top 200	(1.0)	1.7	8.5	20.5	23.0	15.4	7.7
Russell 1000	(1.8)	0.7	8.0	19.0	23.2	15.9	8.5
Russell 2000	(6.0)	(7.4)	(4.4)	3.9	21.3	14.3	8.2
Russell 3000	(2.1)	0.0	7.0	17.8	23.1	15.8	8.4
Russell Mid Cap	(3.3)	(1.7)	6.9	15.8	23.8	17.2	10.3
<b><u>Style Index</u></b>							
Russell 1000 Growth	(1.5)	1.5	7.9	19.1	22.4	16.5	8.9
Russell 1000 Value	(2.1)	(0.2)	8.1	18.9	23.9	15.3	7.8
Russell 2000 Growth	(5.4)	(6.1)	(4.0)	3.8	21.9	15.5	9.0
Russell 2000 Value	(6.7)	(8.6)	(4.7)	4.1	20.6	13.0	7.3

Fixed Income 9/2014	Month	QTD	YTD	1 Year	3 Years	5 Years	10 Years
<b><u>Broad Index</u></b>							
BC US Treasury US TIPS	(2.5)	(2.0)	3.7	1.6	1.3	4.5	4.6
BC US Treasury Bills	0.0	0.0	0.1	0.1	0.1	0.1	1.7
BC US Agg Bond	(0.7)	0.2	4.1	4.0	2.4	4.1	4.6
<b><u>Duration</u></b>							
BC US Treasury 1-3 Yr	(0.1)	0.0	0.4	0.5	0.5	1.0	2.5
BC US Treasury Long	(1.9)	2.7	15.1	11.6	2.0	7.0	6.8
BC US Treasury	(0.5)	0.3	3.1	2.3	1.0	3.2	4.2
<b><u>Issuer</u></b>							
BC US MBS	(0.2)	0.2	4.2	3.8	2.1	3.5	4.7
BC US Corp. High Yield	(2.1)	(1.9)	3.5	7.2	11.1	10.6	8.3
BC US Agency Interm	(0.2)	0.0	1.3	1.3	1.0	2.1	3.6
BC US Credit	(1.4)	0.0	5.7	6.6	4.8	6.1	5.4

International Equity 9/2014	Month	QTD	YTD	1 Year	3 Years	5 Years	10 Years
<b><u>Broad Index</u></b>							
MSCI EAFE	(3.8)	(5.8)	(1.0)	4.7	14.2	7.0	6.8
MSCI AC World ex US	(4.8)	(5.2)	0.4	5.2	12.3	6.5	7.5
MSCI EM	(7.4)	(3.4)	2.8	4.7	7.6	4.8	11.0
MSCI EAFE Small Cap	(5.4)	(7.8)	(2.5)	3.3	14.9	9.3	8.4
<b><u>Style Index</u></b>							
MSCI EAFE Growth	(3.5)	(5.5)	(1.9)	3.2	13.7	7.9	7.0
MSCI EAFE Value	(4.1)	(6.1)	(0.1)	6.2	14.6	6.1	6.5
<b><u>Regional Index</u></b>							
MSCI UK	(5.2)	(6.1)	(1.2)	6.2	14.5	9.3	6.4
MSCI Japan	(0.6)	(2.2)	(1.4)	0.9	9.4	5.6	4.0
MSCI Euro	(2.8)	(7.9)	(2.8)	6.9	16.8	4.7	6.6
MSCI EM Asia	(5.8)	(1.4)	5.5	9.4	10.6	6.7	11.3
MSCI EM Latin American							

Other 9/2014	Month	QTD	YTD	1 Year	3 Years	5 Years	10 Years
<b><u>Index</u></b>							
Bloomberg Comm. Index	(6.2)	(11.8)	(5.6)	(6.6)	(5.3)	(1.4)	(1.0)
Wilshire US REIT	(5.8)	(3.1)	14.5	13.5	16.5	16.0	8.3
<b><u>Regional Index</u></b>							
JPM EMBI Global Div	(1.8)	(0.6)	8.0	9.7	7.9	8.0	8.3
JPM GBI-EM Global Div	(5.1)	(5.7)	(0.0)	(1.5)	2.2	4.4	8.8

# Imperial County Employees' Retirement System

Investment Performance Review  
Period Ending: September 30, 2014



SEATTLE | 206.622.3700  
LOS ANGELES | 310.297.1777  
[www.wurts.com](http://www.wurts.com)

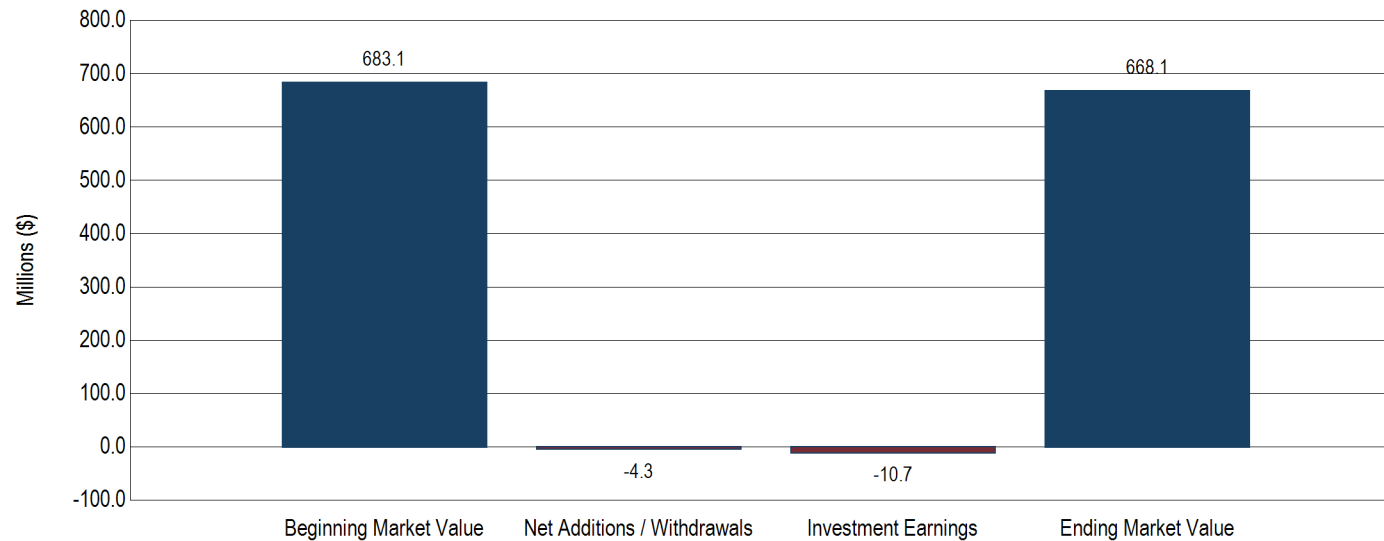
# Total Fund Portfolio Reconciliation

Period Ending: September 30, 2014

## Portfolio Reconciliation

Sources of Portfolio Growth	Last Three Months	Fiscal Year-To-Date	One Year
Beginning Market Value	\$683,134,883	\$683,134,883	\$622,760,149
Net Additions/Withdrawals	-\$4,340,729	-\$4,340,729	-\$10,787,838
Investment Earnings	-\$10,706,628	-\$10,706,628	\$56,115,214
Ending Market Value	\$668,087,526	\$668,087,526	\$668,087,526

## Change in Market Value Last Three Months



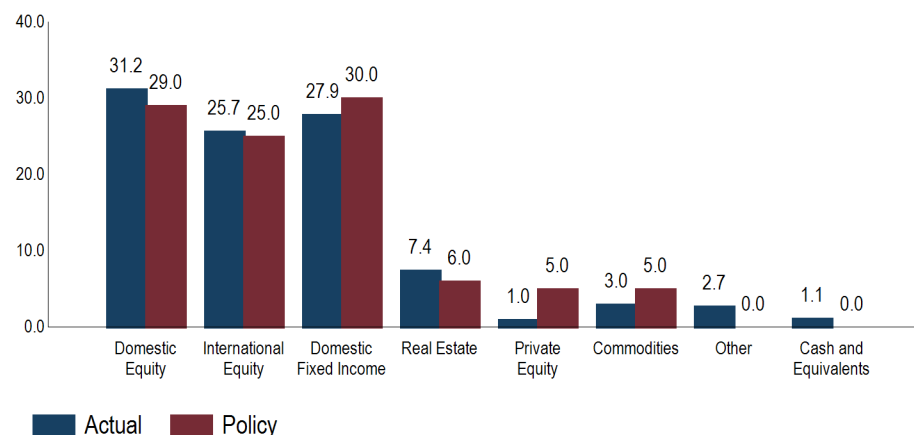
Due to prior performance system methodology, contributions and withdrawals may include intra-account transfers between managers/funds.

## Executive Summary (Gross of Fees)

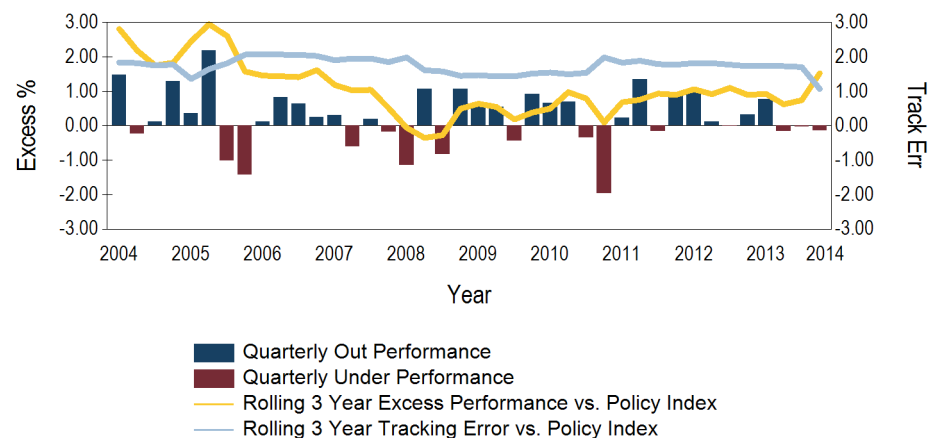
Period Ending: September 30, 2014

	QTD	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs
<b>Total Fund</b>	<b>-1.6</b>	<b>3.8</b>	<b>-1.6</b>	<b>9.2</b>	<b>13.1</b>	<b>10.0</b>	<b>7.4</b>
<i>Total Fund ex Clifton</i>	-1.6	3.9	-1.6	9.2	13.0	10.0	7.4
<i>Policy Index</i>	-1.4	4.2	-1.4	8.8	11.6	9.1	6.6
<i>InvestorForce Public DB Gross Rank</i>	69	54	69	48	38	39	21
<b>Total Domestic Equity</b>	<b>-1.1</b>	<b>4.9</b>	<b>-1.1</b>	<b>15.9</b>	<b>22.9</b>	<b>15.9</b>	<b>9.1</b>
<i>Russell 3000</i>	0.0	7.0	0.0	17.8	23.1	15.8	8.4
<b>Total International Equity</b>	<b>-5.2</b>	<b>-0.4</b>	<b>-5.2</b>	<b>4.5</b>	<b>12.4</b>	<b>6.0</b>	<b>7.7</b>
<i>MSCI ACWI ex USA Gross</i>	-5.2	0.4	-5.2	5.2	12.3	6.5	7.5
<b>Total Fixed Income</b>	<b>-0.3</b>	<b>4.4</b>	<b>-0.3</b>	<b>4.8</b>	<b>4.6</b>	<b>6.1</b>	<b>6.1</b>
<i>Barclays Aggregate</i>	0.2	4.1	0.2	4.0	2.4	4.1	4.6
<b>Total Real Estate</b>	<b>3.7</b>	<b>8.8</b>	<b>3.7</b>	<b>12.1</b>	<b>11.4</b>	<b>12.1</b>	<b>--</b>
<i>NCREIF Property Index</i>	2.6	8.5	2.6	11.3	11.1	11.0	--
<i>NCREIF-ODCE</i>	3.2	8.9	3.2	12.4	12.3	12.4	--
<b>Total Private Equity</b>	<b>7.4</b>	<b>21.1</b>	<b>7.4</b>	<b>27.9</b>	<b>15.6</b>	<b>--</b>	<b>--</b>
<i>Russell 3000 +3% Lagged</i>	5.6	20.3	5.6	28.9	19.9	--	--
<b>Total Commodities</b>	<b>-10.9</b>	<b>-4.6</b>	<b>-10.9</b>	<b>-5.6</b>	<b>-4.9</b>	<b>-1.0</b>	<b>--</b>
<i>Bloomberg Commodity Index TR USD</i>	-11.8	-5.6	-11.8	-6.6	-5.3	-1.4	--
<b>Total Opportunistic</b>	<b>3.6</b>	<b>15.1</b>	<b>3.6</b>	<b>23.2</b>	<b>28.2</b>	<b>27.4</b>	<b>--</b>
<i>Assumption Rate + 1%</i>	2.2	6.7	2.2	9.0	9.0	9.1	--

Actual vs Target Allocation (%)



Annualized Excess Performance and Tracking Error  
Total Fund vs. Policy Index



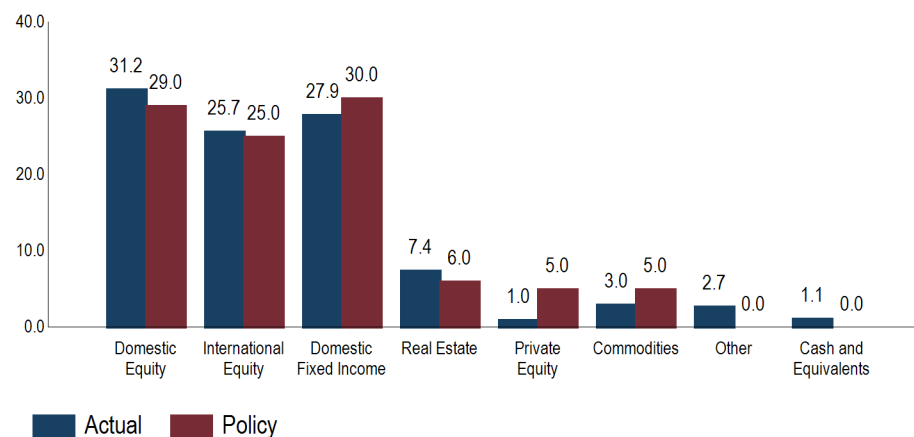
Policy Index (as of 7/1/2014): 29% Russell 3000, 25% MSCI ACWI Free Ex US, 30% BC AGG, 6% NCREIF Property, 5% DJ UBS Commodity, 5% Russell 3000 plus 300 BP. Prior Policy Index (7/1/2010 to 6/30/2014): 24% S&P 500, 10% R2500, 21% MSCI ACWI Free Ex US, 30% BC AGG, 5% NCREIF Property, 5% DJ UBS Commodity,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

## Executive Summary (Net of Fees)

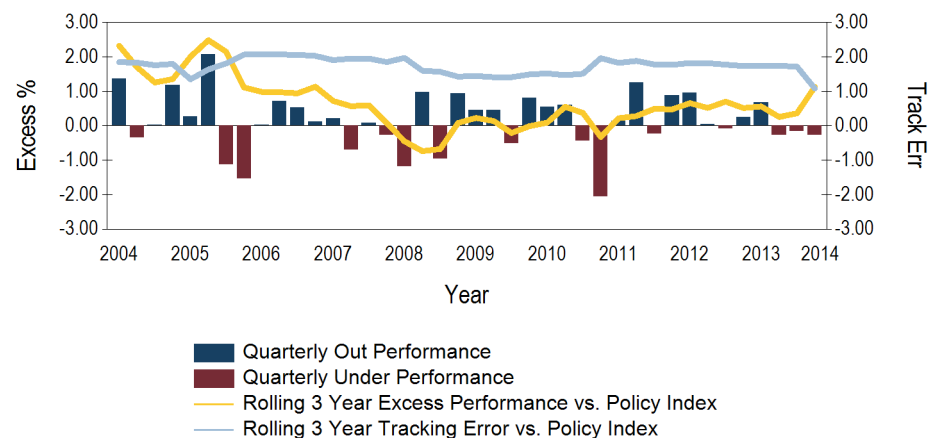
Period Ending: September 30, 2014

	QTD	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs
<b>Total Fund</b>	<b>-1.7</b>	<b>3.5</b>	<b>-1.7</b>	<b>8.8</b>	<b>12.7</b>	<b>9.6</b>	<b>7.0</b>
<i>Total Fund ex Clifton</i>	-1.7	3.5	-1.7	8.8	12.6	9.6	7.0
<i>Policy Index</i>	-1.4	4.2	-1.4	8.8	11.6	9.1	6.6
<b>Total Domestic Equity</b>	<b>-1.2</b>	<b>4.8</b>	<b>-1.2</b>	<b>15.7</b>	<b>22.6</b>	<b>15.6</b>	<b>8.7</b>
<i>Russell 3000</i>	0.0	7.0	0.0	17.8	23.1	15.8	8.4
<b>Total International Equity</b>	<b>-5.4</b>	<b>-0.8</b>	<b>-5.4</b>	<b>3.9</b>	<b>11.8</b>	<b>5.4</b>	<b>7.0</b>
<i>MSCI ACWI ex USA Gross</i>	-5.2	0.4	-5.2	5.2	12.3	6.5	7.5
<b>Total Fixed Income</b>	<b>-0.4</b>	<b>4.1</b>	<b>-0.4</b>	<b>4.4</b>	<b>4.3</b>	<b>5.8</b>	<b>5.8</b>
<i>Barclays Aggregate</i>	0.2	4.1	0.2	4.0	2.4	4.1	4.6
<b>Total Real Estate</b>	<b>3.5</b>	<b>7.7</b>	<b>3.5</b>	<b>10.9</b>	<b>10.7</b>	<b>11.3</b>	<b>--</b>
<i>NCREIF Property Index</i>	2.6	8.5	2.6	11.3	11.1	11.0	--
<i>NCREIF-ODCE</i>	3.2	8.9	3.2	12.4	12.3	12.4	--
<b>Total Private Equity</b>	<b>6.5</b>	<b>17.7</b>	<b>6.5</b>	<b>23.1</b>	<b>7.6</b>	<b>--</b>	<b>--</b>
<i>Russell 3000 +3% Lagged</i>	5.6	20.3	5.6	28.9	19.9	--	--
<b>Total Commodities</b>	<b>-11.1</b>	<b>-5.0</b>	<b>-11.1</b>	<b>-6.0</b>	<b>-5.2</b>	<b>-2.1</b>	<b>--</b>
<i>Bloomberg Commodity Index TR USD</i>	-11.8	-5.6	-11.8	-6.6	-5.3	-1.4	--
<b>Total Opportunistic</b>	<b>3.2</b>	<b>13.6</b>	<b>3.2</b>	<b>21.2</b>	<b>26.2</b>	<b>25.7</b>	<b>--</b>
<i>Assumption Rate + 1%</i>	2.2	6.7	2.2	9.0	9.0	9.1	--

Actual vs Target Allocation (%)



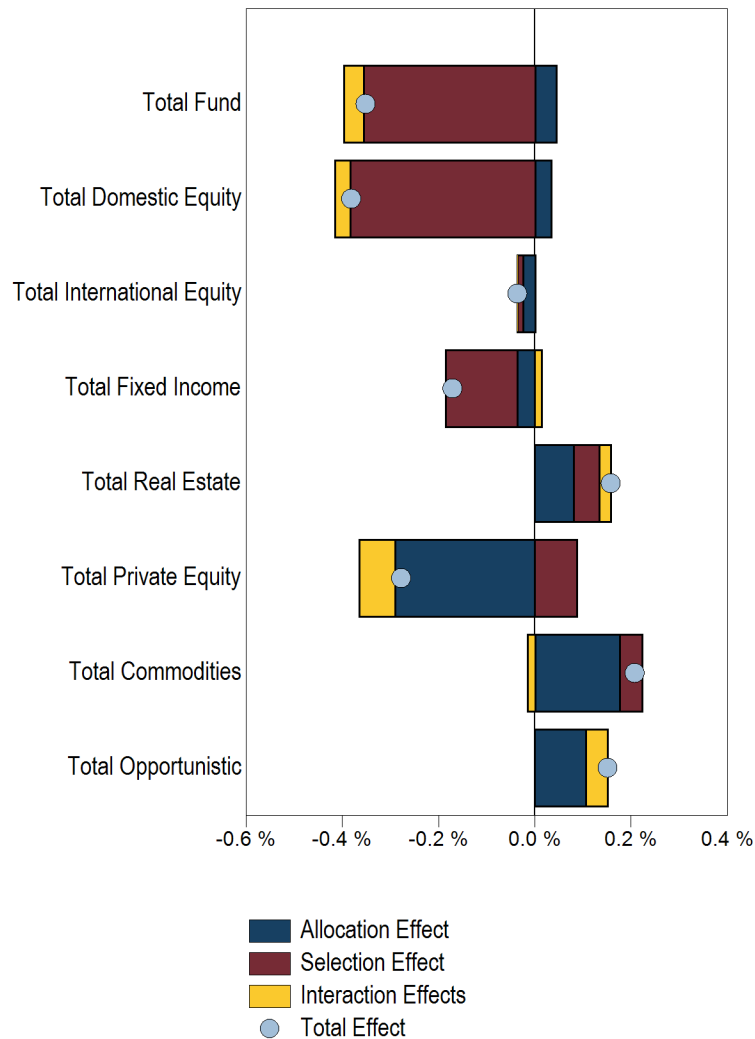
Annualized Excess Performance and Tracking Error  
Total Fund vs. Policy Index



Policy Index (as of 7/1/2014): 29% Russell 3000, 25% MSCI ACWI Free Ex US, 30% BC AGG, 6% NCREIF Property, 5% DJ UBS Commodity, 5% Russell 3000 plus 300 BP. 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% DJ UBS Commodity, 5% CPI+ 5%. Prior quarter Private Equity returns and index data are used. All returns are (N) net of fees.



## Attribution Effects



## Performance Attribution

	Quarter	YTD
Wtd. Actual Return	-1.57%	4.00%
Wtd. Index Return *	-1.22%	4.84%
<b>Excess Return</b>	<b>-0.35%</b>	<b>-0.84%</b>
Selection Effect	-0.36%	-0.69%
Allocation Effect	0.04%	-0.32%
Interaction Effect	-0.04%	0.17%

\*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	-1.1%	0.0%	-1.1%	-0.4%	0.0%	0.0%	-0.4%
Total International Equity	-5.2%	-5.2%	-0.1%	0.0%	0.0%	0.0%	0.0%
Total Fixed Income	-0.3%	0.2%	-0.5%	-0.1%	0.0%	0.0%	-0.2%
Total Real Estate	3.7%	2.6%	1.1%	0.1%	0.1%	0.0%	0.2%
Total Private Equity	7.4%	5.6%	1.7%	0.1%	-0.3%	-0.1%	-0.3%
Total Commodities	-10.9%	-11.8%	0.9%	0.0%	0.2%	0.0%	0.2%
Total Opportunistic	3.6%	2.2%	1.4%	0.0%	0.1%	0.0%	0.2%
<b>Total</b>	<b>-1.6%</b>	<b>-1.2%</b>	<b>-0.4%</b>	<b>-0.4%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>-0.4%</b>

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

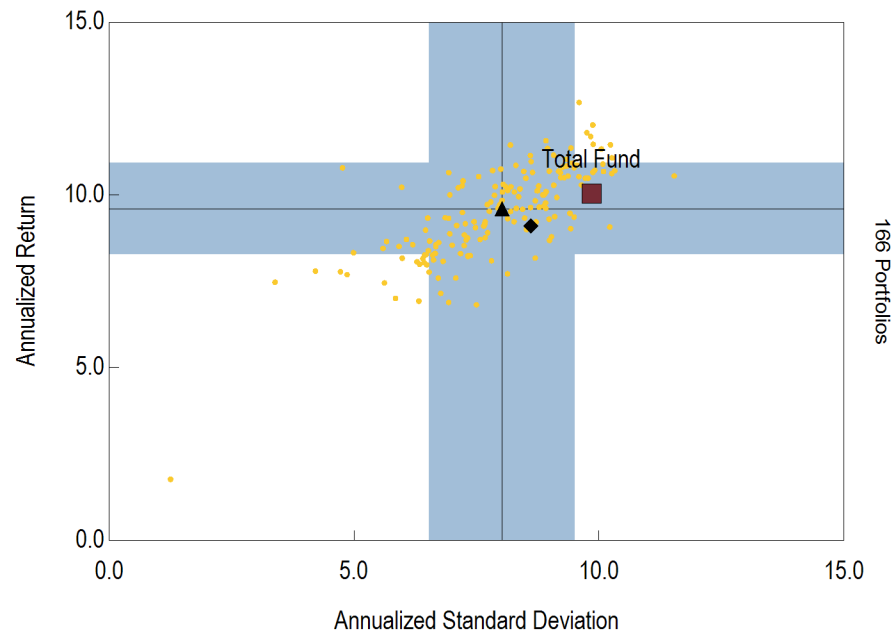
# Total Fund

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

Period Ending: September 30, 2014

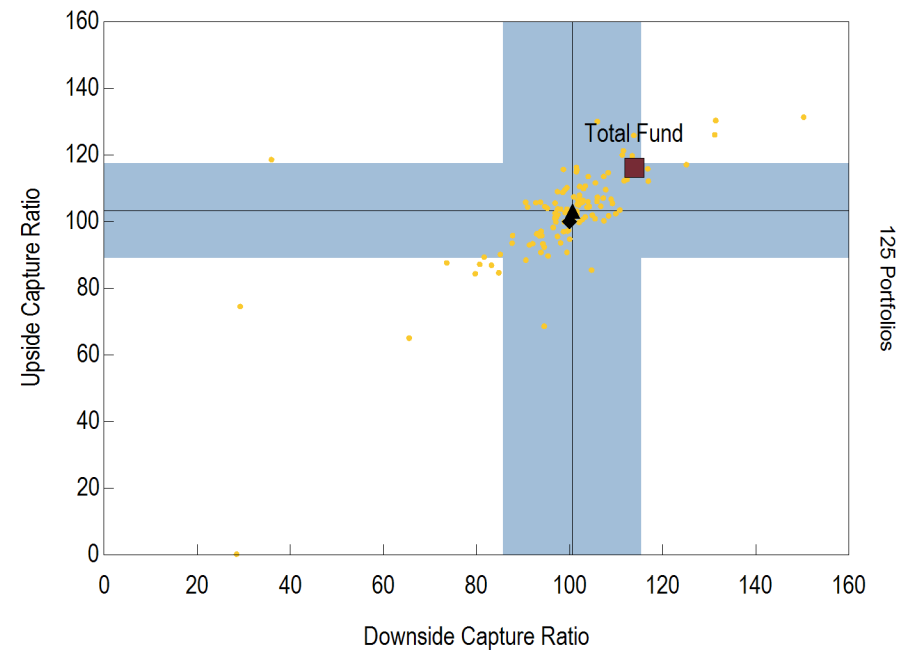
	Anlzd Ret	Ann Excess BM Return	Anlzd Std Dev	Anlzd Alpha	Beta	Tracking Error	R-Squared	Sharpe Ratio	Info Ratio	Up Mkt Cap Ratio	Down Mkt Cap Ratio
Total Fund	10.04%	0.94%	9.85%	-0.33%	1.14	1.45%	0.99	1.01	0.65	116.19%	113.88%

Risk vs. Return



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

Up Markets vs. Down Markets

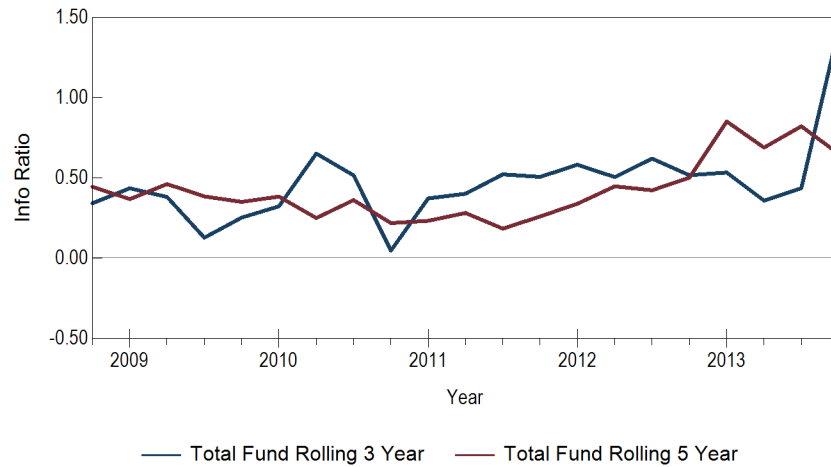


- Total Fund
- ◆ Policy Index
- ▲ Universe Median
- 68% Confidence Interval
- InvestorForce Public DB Gross

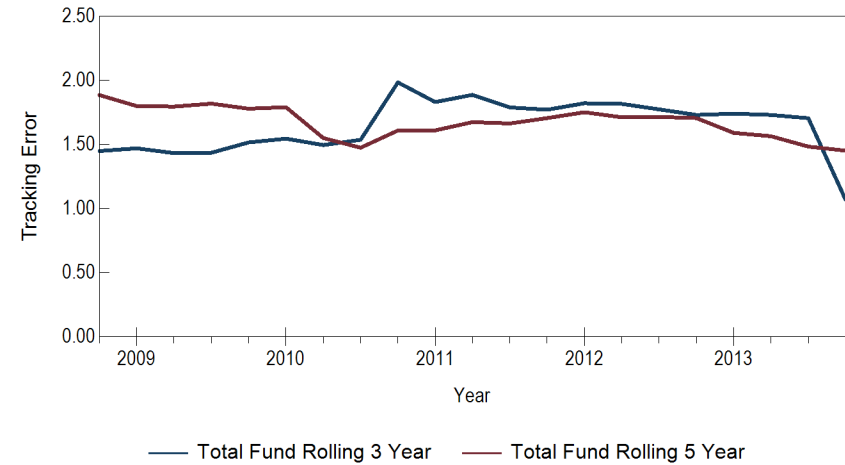
# Total Fund Rolling Risk Statistics

Period Ending: September 30, 2014

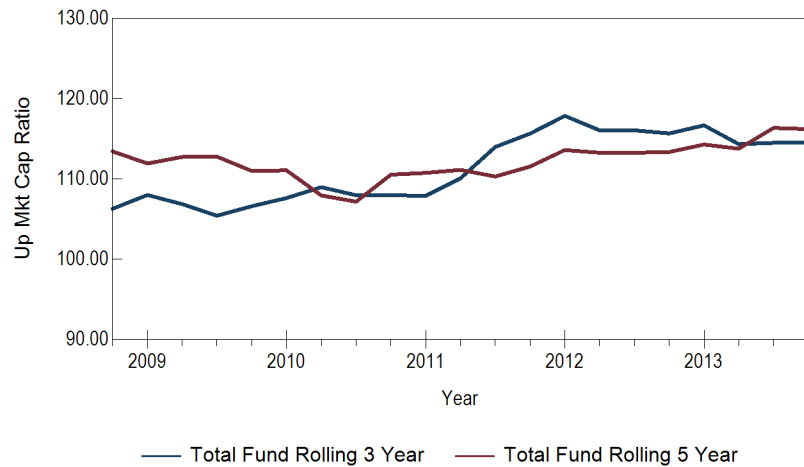
Rolling Information Ratio



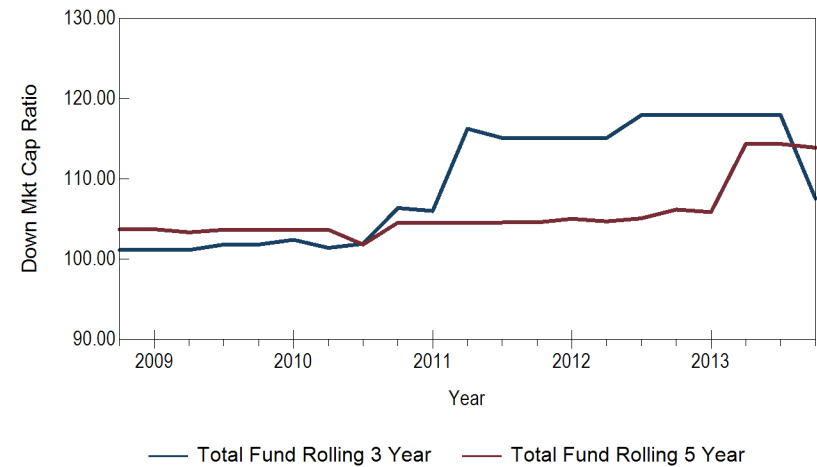
Rolling Tracking Error



Rolling Up Market Capture Ratio (%)



Rolling Down Market Capture Ratio (%)



# Performance Summary (Gross of Fees)

Period Ending: September 30, 2014

	Market Value	% of Portfolio	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2013	2012	2011	2010	2009	Return	Since
<b>Total Fund</b>	<b>668,087,526</b>	<b>100.0</b>	<b>-1.6</b>	<b>3.8</b>	<b>-1.6</b>	<b>9.2</b>	<b>13.1</b>	<b>10.0</b>	<b>7.4</b>	<b>14.8</b>	<b>14.6</b>	<b>-1.1</b>	<b>14.7</b>	<b>25.6</b>	<b>9.7</b>	<b>Mar-89</b>
Policy Index			-1.4	4.2	-1.4	8.8	11.6	9.1	6.6	13.5	11.2	0.5	13.0	23.2	--	Mar-89
InvestorForce Public DB Gross Rank			69	54	69	48	38	39	21	57	3	90	13	13	1	Mar-89
Total Fund ex Clifton	666,695,769	99.8	-1.6	3.9	-1.6	9.2	13.0	10.0	7.4	14.7	14.2	-1.0	14.7	25.6	9.7	Mar-89
Policy Index			-1.4	4.2	-1.4	8.8	11.6	9.1	6.6	13.5	11.2	0.5	13.0	23.2	--	Mar-89
InvestorForce Public DB Gross Rank			70	53	70	47	41	42	22	58	9	90	14	13	1	Mar-89
<b>Total Domestic Equity</b>																
Blackrock Russell 1000	155,152,245	23.2	0.7	8.0	0.7	19.0	23.3	16.0	8.5	33.2	16.5	1.6	16.2	28.6	10.3	Oct-02
Russell 1000			0.7	8.0	0.7	19.0	23.2	15.9	8.5	33.1	16.4	1.5	16.1	28.4	10.2	Oct-02
eA US Large Cap Equity Gross Rank			47	40	47	42	43	41	69	54	39	39	34	48	51	Oct-02
TimesSquare Capital Mid Cap Growth	27,684,999	4.1	-1.9	2.4	-1.9	14.7	24.6	16.6	12.5	38.7	20.0	-0.7	19.3	38.5	14.7	Mar-03
Russell MidCap Growth			-0.7	5.7	-0.7	14.4	22.7	17.1	10.2	35.7	15.8	-1.7	26.4	46.3	12.5	Mar-03
eA US Mid Cap Growth Equity Gross Rank			65	57	65	21	15	45	12	36	11	40	94	60	9	Mar-03
T. Rowe Price Small Cap Value	25,599,355	3.8	-9.5	-7.6	-9.5	2.1	19.7	14.4	9.4	34.7	17.1	1.0	25.6	25.9	12.8	Dec-95
Russell 2000 Value			-8.6	-4.7	-8.6	4.1	20.6	13.0	7.3	34.5	18.1	-5.5	24.5	20.6	10.0	Dec-95
eA US Small Cap Value Equity Gross Rank			91	95	91	91	82	73	63	78	49	22	63	72	51	Dec-95
<b>Total International Equity</b>																
Blackrock International Equity	63,152,788	9.5	-5.9	-1.1	-5.9	4.5	14.0	6.9	6.7	23.2	17.8	-11.8	8.1	32.3	8.6	Jul-03
MSCI EAFE Gross			-5.8	-1.0	-5.8	4.7	14.2	7.0	6.8	23.3	17.9	-11.7	8.2	32.5	8.7	Jul-03
eA All EAFE Equity Gross Rank			58	54	58	65	75	82	83	61	74	48	79	68	68	Jul-03
Templeton Foreign Equity	62,342,274	9.3	-5.7	-1.8	-5.7	4.6	14.6	6.8	8.2	20.4	19.5	-10.2	7.5	34.7	8.9	Dec-94
MSCI ACWI ex USA Gross			-5.2	0.4	-5.2	5.2	12.3	6.5	7.5	15.8	17.4	-13.3	11.6	42.1	6.1	Dec-94
eA All ACWI ex-US Equity Gross Rank			62	68	62	63	50	81	60	47	50	28	92	74	47	Dec-94
DFA Emerging Markets Value	22,071,945	3.3	-4.3	2.5	-4.3	3.6	7.3	3.6	--	-3.2	20.1	-25.2	22.8	93.3	5.0	Jan-07
MSCI Emerging Markets Gross			-3.4	2.7	-3.4	4.7	7.6	4.8	--	-2.3	18.6	-18.2	19.2	79.0	4.1	Jan-07
eA Emg Mkts Equity Gross Rank			80	64	80	77	79	86	--	84	56	92	33	12	48	Jan-07
Vontobel Global Emerging Markets	24,000,000	3.6	--	--	--	--	--	--	--	--	--	--	--	--	--	Sep-14
MSCI Emerging Markets Gross			--	--	--	--	--	--	--	--	--	--	--	--	--	Sep-14
eA Emg Mkts Equity Gross Rank			--	--	--	--	--	--	--	--	--	--	--	--	--	Sep-14

Vontobel balance reflects initial funding which fully settled 10/1/2014. Since Inception ranking is from the beginning of the first complete month.

# Performance Summary (Gross of Fees)

Period Ending: September 30, 2014

	Market Value	% of Portfolio	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2013	2012	2011	2010	2009	Return	Since
<b>Total Fixed Income</b>																
Bradford & Marzec Fixed	87,968,602	13.2	-0.1	5.2	-0.1	6.3	5.3	6.5	6.3	-0.4	8.8	7.4	9.6	13.5	7.0	Dec-92
Barclays Aggregate			0.2	4.1	0.2	4.0	2.4	4.1	4.6	-2.0	4.2	7.8	6.5	5.9	6.0	Dec-92
eA US Core Plus Fixed Inc Gross Rank			69	28	69	30	45	45	29	52	45	51	40	55	35	Dec-92
PIMCO Total Return	83,608,766	12.5	-0.2	3.7	-0.2	3.8	5.1	5.6	--	-1.3	11.0	4.7	9.3	--	7.4	Feb-09
Barclays Aggregate			0.2	4.1	0.2	4.0	2.4	4.1	--	-2.0	4.2	7.8	6.5	--	5.0	Feb-09
eA US Core Plus Fixed Inc Gross Rank			78	90	78	93	48	72	--	80	18	94	45	--	67	Feb-09
Blackrock US TIPS	14,629,814	2.2	-2.1	3.7	-2.1	1.7	1.4	4.6	--	-8.5	7.1	13.7	6.4	11.4	5.3	Apr-07
Barclays US TIPS			-2.0	3.7	-2.0	1.6	1.3	4.5	--	-8.6	7.0	13.6	6.3	11.4	5.1	Apr-07
eA TIPS / Infl Indexed Fixed Inc Gross Rank			71	43	71	29	51	66	--	62	59	37	52	36	74	Apr-07
<b>Total Real Estate</b>																
ASB Real Estate	24,348,140	3.6	3.9	9.5	3.9	12.9	--	--	--	13.7	--	--	--	--	13.4	Dec-12
NCREIF Property Index			2.6	8.5	2.6	11.3	--	--	--	11.0	--	--	--	--	11.2	Dec-12
NCREIF-ODCE			3.2	8.9	3.2	12.4	--	--	--	13.9	--	--	--	--	13.1	Dec-12
Clarion Lion	23,822,517	3.6	3.8	8.5	3.8	12.1	11.8	13.0	--	12.8	10.9	18.7	19.4	-38.7	2.5	Dec-06
NCREIF Property Index			2.6	8.5	2.6	11.3	11.1	11.0	--	11.0	10.5	14.3	13.1	-16.9	5.8	Dec-06
NCREIF-ODCE			3.2	8.9	3.2	12.4	12.3	12.4	--	13.9	10.9	16.0	16.4	-29.8	4.1	Dec-06
1221 State St. Corp	1,369,851	0.2	0.0	0.0	0.0	0.0	-4.5	-1.1	--	0.0	0.1	-9.0	3.7	1.1	-0.7	Sep-08
<b>Total Commodities</b>																
Blackrock Commodities	6,178,153	0.9	-11.8	-5.5	-11.8	-6.5	-5.3	--	--	-9.4	-0.9	-13.2	17.0	--	-1.5	Oct-09
Bloomberg Commodity Index TR USD			-11.8	-5.6	-11.8	-6.6	-5.3	--	--	-9.5	-1.1	-13.3	16.8	--	-1.4	Oct-09
Gresham MTAP Commodity Builder	13,824,814	2.1	-10.5	-4.1	-10.5	-5.3	--	--	--	--	--	--	--	--	-6.9	Aug-13
Bloomberg Commodity Index TR USD			-11.8	-5.6	-11.8	-6.6	--	--	--	--	--	--	--	--	-8.3	Aug-13
<b>Total Cash</b>																
Cash Account	7,522,036	1.1	0.0	0.0	0.0	0.0	0.1	--	--	0.0	0.4	0.2	--	--	--	

Vontobel balance reflects initial funding which fully settled 10/1/2014. Since Inception ranking is from the beginning of the first complete month.

# Performance Summary (Net of Fees)

Period Ending: September 30, 2014

	Market Value	% of Portfolio	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2013	2012	2011	2010	2009	Return	Since
<b>Total Fund</b>	<b>668,087,526</b>	<b>100.0</b>	<b>-1.7</b>	<b>3.5</b>	<b>-1.7</b>	<b>8.8</b>	<b>12.7</b>	<b>9.6</b>	<b>7.0</b>	<b>14.5</b>	<b>14.2</b>	<b>-1.5</b>	<b>14.3</b>	<b>25.0</b>	<b>9.3</b>	<b>Mar-89</b>
Policy Index			-1.4	4.2	-1.4	8.8	11.6	9.1	6.6	13.5	11.2	0.5	13.0	23.2	--	Mar-89
Total Fund ex Clifton	666,695,769	99.8	-1.7	3.5	-1.7	8.8	12.6	9.6	7.0	14.4	13.8	-1.4	14.2	25.0	9.3	Mar-89
Policy Index			-1.4	4.2	-1.4	8.8	11.6	9.1	6.6	13.5	11.2	0.5	13.0	23.2	--	Mar-89
<b>Total Domestic Equity</b>																
Blackrock Russell 1000	155,152,245	23.2	0.7	8.0	0.7	19.0	23.2	15.9	8.5	33.1	16.4	1.5	16.1	28.5	10.2	Oct-02
Russell 1000			0.7	8.0	0.7	19.0	23.2	15.9	8.5	33.1	16.4	1.5	16.1	28.4	10.2	Oct-02
TimesSquare Capital Mid Cap Growth	27,684,999	4.1	-2.1	1.9	-2.1	14.0	23.7	15.9	11.8	37.8	19.2	-1.3	18.5	37.7	14.0	Mar-03
Russell MidCap Growth			-0.7	5.7	-0.7	14.4	22.7	17.1	10.2	35.7	15.8	-1.7	26.4	46.3	12.5	Mar-03
T. Rowe Price Small Cap Value	25,599,355	3.8	-9.7	-8.1	-9.7	1.4	18.8	13.6	8.6	33.8	16.3	0.3	24.8	25.1	12.0	Dec-95
Russell 2000 Value			-8.6	-4.7	-8.6	4.1	20.6	13.0	7.3	34.5	18.1	-5.5	24.5	20.6	10.0	Dec-95
<b>Total International Equity</b>																
Blackrock International Equity	63,152,788	9.5	-5.9	-1.2	-5.9	4.4	13.8	6.8	6.5	22.9	17.6	-11.9	7.9	32.1	8.4	Jul-03
MSCI EAFE Gross			-5.8	-1.0	-5.8	4.7	14.2	7.0	6.8	23.3	17.9	-11.7	8.2	32.5	8.7	Jul-03
Templeton Foreign Equity	62,342,274	9.3	-5.8	-2.4	-5.8	3.7	13.7	5.9	7.4	19.5	18.5	-10.9	6.7	33.6	8.0	Dec-94
MSCI ACWI ex USA Gross			-5.2	0.4	-5.2	5.2	12.3	6.5	7.5	15.8	17.4	-13.3	11.6	42.1	6.1	Dec-94
DFA Emerging Markets Value	22,071,945	3.3	-4.4	2.0	-4.4	3.1	6.6	3.0	--	-3.8	19.4	-25.6	22.1	92.3	4.4	Jan-07
MSCI Emerging Markets Gross			-3.4	2.7	-3.4	4.7	7.6	4.8	--	-2.3	18.6	-18.2	19.2	79.0	4.1	Jan-07
Vontobel Global Emerging Markets	24,000,000	3.6	--	--	--	--	--	--	--	--	--	--	--	--	--	Sep-14
MSCI Emerging Markets Gross			--	--	--	--	--	--	--	--	--	--	--	--	--	Sep-14
<b>Total Fixed Income</b>																
Bradford & Marzec Fixed	87,968,602	13.2	-0.2	5.0	-0.2	6.0	4.9	6.1	6.0	-0.8	8.5	7.1	9.3	13.1	6.7	Dec-92
Barclays Aggregate			0.2	4.1	0.2	4.0	2.4	4.1	4.6	-2.0	4.2	7.8	6.5	5.9	6.0	Dec-92
PIMCO Total Return	83,608,766	12.5	-0.4	3.3	-0.4	3.3	4.6	5.1	--	-1.9	10.4	4.2	8.8	--	6.8	Feb-09
Barclays Aggregate			0.2	4.1	0.2	4.0	2.4	4.1	--	-2.0	4.2	7.8	6.5	--	5.0	Feb-09
Blackrock US TIPS	14,629,814	2.2	-2.1	3.7	-2.1	1.6	1.3	4.5	--	-8.6	7.0	13.6	6.3	11.3	5.2	Apr-07
Barclays US TIPS			-2.0	3.7	-2.0	1.6	1.3	4.5	--	-8.6	7.0	13.6	6.3	11.4	5.1	Apr-07

Vontobel balance reflects initial funding which fully settled 10/1/2014. Since Inception ranking is from the beginning of the first complete month.

# Performance Summary (Net of Fees)

Period Ending: September 30, 2014

	Market Value	% of Portfolio	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2013	2012	2011	2010	2009	Return	Since
<b>Total Real Estate</b>																
ASB Real Estate	24,348,140	3.6	3.6	8.8	3.6	11.8	--	--	--	12.5	--	--	--	--	12.2	Dec-12
NCREIF Property Index			2.6	8.5	2.6	11.3	--	--	--	11.0	--	--	--	--	11.2	Dec-12
NCREIF-ODCE			3.2	8.9	3.2	12.4	--	--	--	13.9	--	--	--	--	13.1	Dec-12
Clarion Lion	23,822,517	3.6	3.6	7.8	3.6	11.1	10.8	11.9	--	11.8	9.9	17.8	18.2	-39.2	1.5	Dec-06
NCREIF Property Index			2.6	8.5	2.6	11.3	11.1	11.0	--	11.0	10.5	14.3	13.1	-16.9	5.8	Dec-06
NCREIF-ODCE			3.2	8.9	3.2	12.4	12.3	12.4	--	13.9	10.9	16.0	16.4	-29.8	4.1	Dec-06
1221 State St. Corp	1,369,851	0.2	0.0	0.0	0.0	0.0	-4.5	-1.1	--	0.0	0.1	-9.0	3.7	1.1	-0.7	Sep-08
<b>Total Commodities</b>																
Blackrock Commodities	6,178,153	0.9	-11.9	-5.8	-11.9	-6.8	-5.6	--	--	-9.7	-1.2	-13.5	16.6	--	-1.8	Oct-09
Bloomberg Commodity Index TR USD			-11.8	-5.6	-11.8	-6.6	-5.3	--	--	-9.5	-1.1	-13.3	16.8	--	-1.4	Oct-09
Gresham MTAP Commodity Builder	13,824,814	2.1	-10.7	-4.7	-10.7	-5.7	--	--	--	--	--	--	--	--	-7.3	Aug-13
Bloomberg Commodity Index TR USD			-11.8	-5.6	-11.8	-6.6	--	--	--	--	--	--	--	--	-8.3	Aug-13
<b>Total Cash</b>																
Cash Account	7,522,036	1.1	0.0	0.0	0.0	0.0	0.1	--	--	0.0	0.4	0.2	--	--	--	--

Vontobel balance reflects initial funding which fully settled 10/1/2014. Since Inception ranking is from the beginning of the first complete month.



# Investment Manager

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

Period Ending: September 30, 2014

### 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	23.23%	0.00%	10.36%	0.00%	1.00	0.02%	1.00	2.24	-0.01	99.98%	99.76%
TimesSquare Capital Mid Cap Growth	23.75%	1.01%	13.17%	-1.11%	1.09	3.76%	0.93	1.80	0.27	106.54%	110.52%
T. Rowe Price Small Cap Value	18.84%	-1.77%	14.10%	-2.15%	1.02	2.65%	0.97	1.33	-0.67	90.01%	95.09%
Blackrock International Equity	13.83%	-0.33%	11.63%	-0.34%	1.00	0.04%	1.00	1.18	-8.32	98.48%	101.67%
Templeton Foreign Equity	13.69%	1.39%	12.12%	1.59%	0.98	3.93%	0.89	1.12	0.35	105.07%	90.10%
DFA Emerging Markets Value	6.65%	-0.91%	15.38%	-1.92%	1.13	2.46%	0.99	0.43	-0.37	106.18%	118.09%
Bradford & Marzec Fixed	4.94%	2.51%	3.27%	2.02%	1.20	1.41%	0.84	1.49	1.78	170.40%	66.46%
PIMCO Total Return	4.56%	2.13%	3.76%	1.40%	1.30	2.05%	0.74	1.20	1.04	173.62%	118.39%
Blackrock US TIPS	1.33%	-0.01%	6.01%	-0.02%	1.01	0.06%	1.00	0.21	-0.16	100.31%	100.60%
Clarion Lion	10.79%	-0.29%	1.43%	-2.35%	1.19	1.37%	0.09	7.51	-0.22	97.07%	--
Blackrock Commodities	-5.56%	-0.21%	12.41%	-0.22%	1.00	0.06%	1.00	-0.45	-3.76	97.75%	100.66%

### 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	15.91%	0.01%	14.82%	0.02%	1.00	0.02%	1.00	1.07	0.55	100.01%	99.86%
TimesSquare Capital Mid Cap Growth	15.87%	-1.25%	16.60%	-0.29%	0.94	3.98%	0.95	0.95	-0.31	90.07%	96.27%
T. Rowe Price Small Cap Value	13.62%	0.60%	17.98%	1.16%	0.96	3.17%	0.97	0.75	0.19	95.33%	90.77%
Blackrock International Equity	6.75%	-0.29%	16.68%	-0.29%	1.00	0.04%	1.00	0.40	-7.15	98.32%	100.63%
Templeton Foreign Equity	5.93%	-0.57%	16.79%	-0.47%	0.98	3.72%	0.95	0.35	-0.15	93.30%	98.27%
DFA Emerging Markets Value	3.00%	-1.76%	20.76%	-2.46%	1.15	3.11%	0.99	0.14	-0.56	108.77%	115.77%
Bradford & Marzec Fixed	6.12%	2.00%	3.02%	3.32%	0.68	2.41%	0.47	2.00	0.83	135.77%	45.87%
PIMCO Total Return	5.07%	0.95%	3.59%	2.13%	0.71	3.00%	0.36	1.39	0.31	122.10%	102.67%
Blackrock US TIPS	4.49%	0.01%	5.40%	-0.02%	1.01	0.06%	1.00	0.82	0.10	100.37%	100.59%
Clarion Lion	11.95%	0.96%	4.84%	-5.68%	1.60	2.69%	0.81	2.45	0.36	117.22%	221.80%

# Private Equity

## Non Marketable Securities Overview

Period Ending: September 30, 2014

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	\$2,698,487	\$10,000,000	\$2,350,000	24%	\$7,650,000	\$228,146	\$2,698,487	9.7%	124.5%	12.4%	6/30/14
2011	HarbourVest IX-Credit	\$529,611	\$2,000,000	\$430,000	22%	\$1,570,000	\$28,459	\$529,611	6.6%	129.8%	18.8%	6/30/14
2008	HarbourVest Int'l VI <sup>6</sup>	\$1,814,560	\$3,712,930	\$1,729,018	47%	\$1,983,912	\$133,150	\$1,814,560	7.7%	112.6%	8.4%	6/30/14
2011	HarbourVest IX-Venture	\$1,906,711	\$4,000,000	\$1,500,000	38%	\$2,500,000	\$45,249	\$1,906,711	3.0%	130.1%	18.0%	6/30/14
2010	KKR Mezzanine <sup>7</sup>	\$6,978,815	\$10,000,000	\$9,728,207	97%	\$271,793	\$4,809,124	\$6,978,815	49.4%	121.2%	11.1%	9/30/14
2011	PIMCO BRAVO <sup>4</sup>	\$9,788,156	\$10,000,000	\$10,000,000	100%	\$0	\$7,973,428	\$9,788,156	79.7%	177.6%	26.1%	9/30/14

**Total Alternative Illiquids** **\$23,716,340** \$39,712,930 \$25,737,225 65% \$13,975,705 \$13,217,556 \$23,716,340 92.1% 143.5%

**% of Portfolio (Market Value)** **3.5%**

	Management Fee	Admin Fee	Interest Expense	Other Expense	Total Expense <sup>8</sup>
HarbourVest IX-Buyout	\$24,795	\$0	\$0	\$3,753	\$28,548
HarbourVest IX-Credit	\$4,961	\$0	\$0	\$1,701	\$6,662
HarbourVest Int'l VI	\$9,116	\$0	\$0	\$557	\$9,673
HarbourVest IX-Venture	\$9,956	\$0	\$0	\$1,963	\$11,919
KKR Mezzanine	\$26,473	\$0	\$0	\$46,670	\$73,142
PIMCO BRAVO	\$31,548	\$6,959	\$5,437	\$-4,853	\$39,091
	\$106,849	\$6,959	\$5,437	\$49,791	<b>\$169,035</b>

<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 6/30/2014)

<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>Remaining commitment including return of unused capital and distributions available for reinvestment would be \$2,720,368

<sup>8</sup>All HarbourVest fees and expenses are for 2Q 2014

# Financial Reconciliation

Period Ending: September 30, 2014

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	\$176,679,886	\$0	(\$23,000,000)	\$0	(\$23,000,000)	\$0	\$1,472,359	\$1,472,359	\$155,152,245
Times Square Capital	\$37,202,002	\$0	(\$9,000,000)	(\$60,441)	(\$9,060,441)	\$90,544	(\$547,105)	(\$456,561)	\$27,684,999
T. Rowe Price Associates	\$33,732,699	\$0	(\$5,000,000)	\$0	(\$5,000,000)	\$116,844	(\$3,250,188)	(\$3,133,344)	\$25,599,355
DFA Emerging Markets	\$35,317,121	\$0	(\$12,000,000)	\$0	(\$12,000,000)	\$374,275	(\$1,619,452)	(\$1,245,176)	\$22,071,945
Vontobel Global Emerging Markets	\$0	\$24,000,000	\$0	\$0	\$24,000,000	\$0	\$0	\$0	\$24,000,000
Blackrock International Equity	\$44,075,083	\$22,000,000	\$0	\$0	\$22,000,000	\$0	(\$2,922,295)	(\$2,922,295)	\$63,152,788
Franklin Templeton International Equity	\$66,267,918	\$0	\$0	\$0	\$0	\$149,255	(\$4,074,899)	(\$3,925,644)	\$62,342,274
Bradford & Marzec, Inc.	\$85,053,224	\$3,000,000	\$0	\$0	\$3,000,000	\$1,207,176	(\$1,291,798)	(\$84,622)	\$87,968,602
PIMCO Total Return	\$83,912,617	\$0	\$0	\$0	\$0	\$463,377	(\$767,228)	(\$303,851)	\$83,608,766
Blackrock US TIPS	\$14,936,067	\$0	\$0	\$0	\$0	\$0	(\$306,253)	(\$306,253)	\$14,629,814
Clarion Lion Properties	\$23,018,710	\$169,970	(\$240,554)	(\$61,627)	(\$132,211)	\$279,158	\$656,860	\$936,018	\$23,822,517
ICERS State Street Real Estate	\$1,349,643	\$30,892	(\$10,688)	\$0	\$20,204	\$6	(\$2)	\$4	\$1,369,851
ASB Allegiance Real Estate	\$23,445,805	\$0	\$0	(\$58,153)	(\$58,153)	\$234,458	\$726,030	\$960,488	\$24,348,140
PIMCO BRAVO	\$14,119,620	\$0	(\$4,729,343)	(\$39,091)	(\$4,768,434)	\$95,554	\$341,416	\$436,970	\$9,788,156
KKR Mezzanine I	\$6,968,075	\$195,543	(\$379,361)	(\$73,142)	(\$256,960)	\$252,314	\$15,386	\$267,701	\$6,978,815
Blackrock Global Commodity	\$7,006,105	\$0	\$0	\$0	\$0	\$0	(\$827,951)	(\$827,951)	\$6,178,153
Gresham TAP Commodity Builder	\$15,476,786	\$0	\$0	(\$23,822)	(\$23,822)	\$0	(\$1,628,150)	(\$1,628,150)	\$13,824,814
HarbourVest International VI <sup>1</sup>	\$1,541,800	\$203,487	(\$63,892)	(\$9,673)	\$129,922	\$0	\$154,438	\$154,438	\$1,826,160
HarbourVest Buyout IX <sup>1</sup>	\$1,847,103	\$725,000	(\$178,239)	(\$28,548)	\$518,213	\$259	\$146,984	\$147,243	\$2,512,559
HarbourVest Credit Opportunities IX <sup>1</sup>	\$420,724	\$90,000	\$0	(\$6,662)	\$83,338	\$2,580	\$22,969	\$25,549	\$529,611
HarbourVest Venture IX <sup>1</sup>	\$1,276,558	\$420,000	\$0	(\$11,919)	\$408,081	\$1	\$99,529	\$99,530	\$1,784,169
Cash	\$3,095,580	\$4,426,456	\$0	\$0	\$4,426,456	\$0	(\$0)	(\$0)	\$7,522,036
The Clifton Group	\$6,391,756	\$0	(\$5,000,000)	\$0	(\$5,000,000)	\$0	\$0	\$0	\$1,391,756
<b>Totals</b>	<b>\$683,134,883</b>	<b>\$55,261,348</b>	<b>(\$59,602,077)</b>	<b>(\$373,079)</b>	<b>(\$4,713,807)</b>	<b>\$3,265,802</b>	<b>(\$13,599,351)</b>	<b>(\$10,333,550)</b>	<b>\$668,087,526</b>

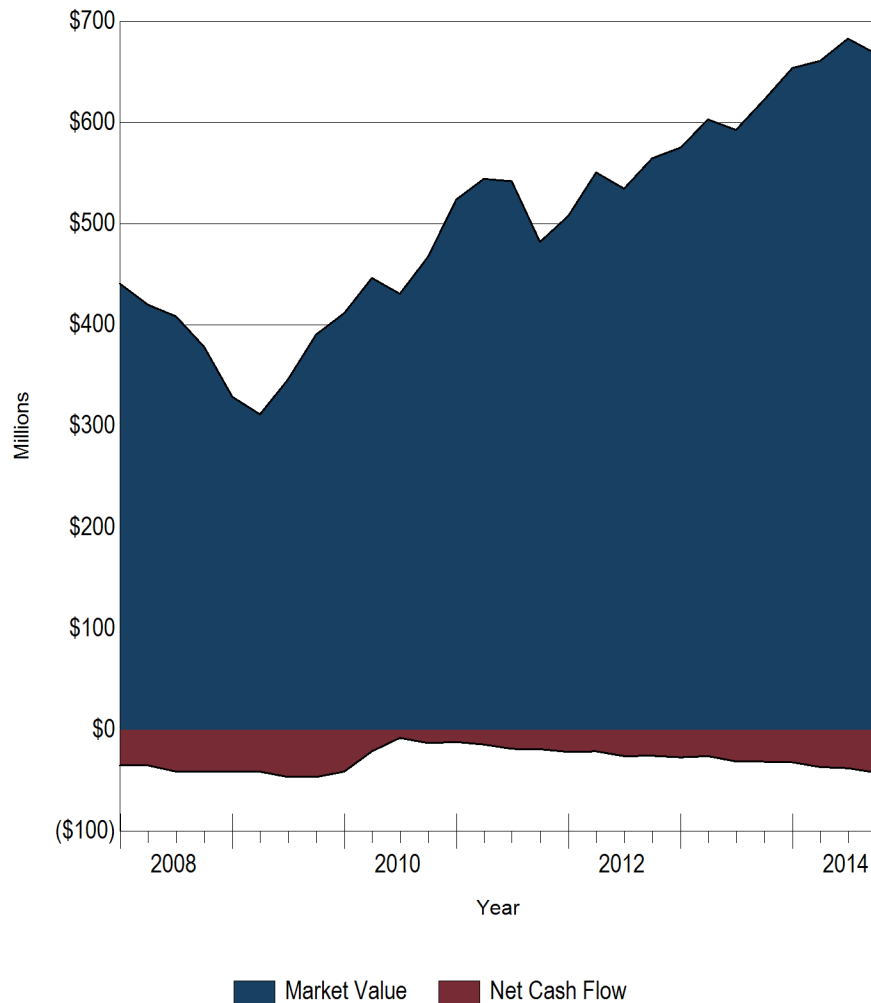
<sup>1</sup>2Q 2014 data

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

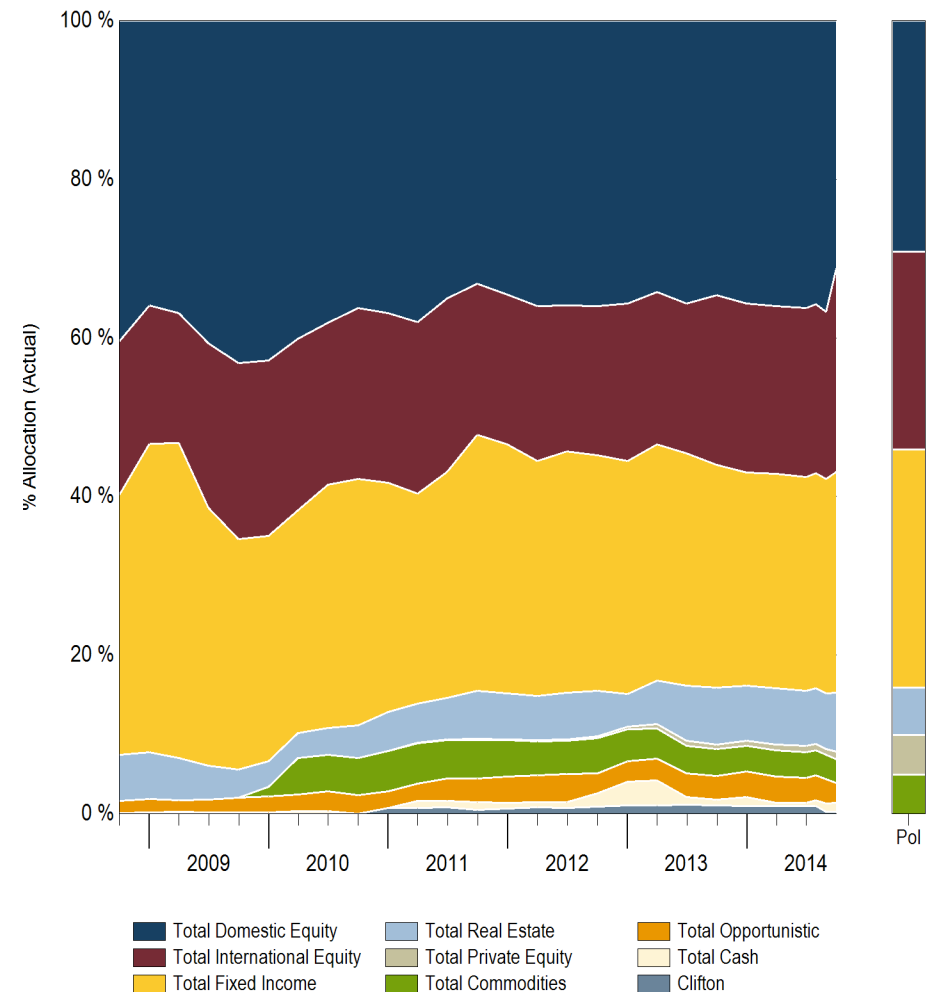
# Total Fund Asset Allocation History

Period Ending: September 30, 2014

Market Value History

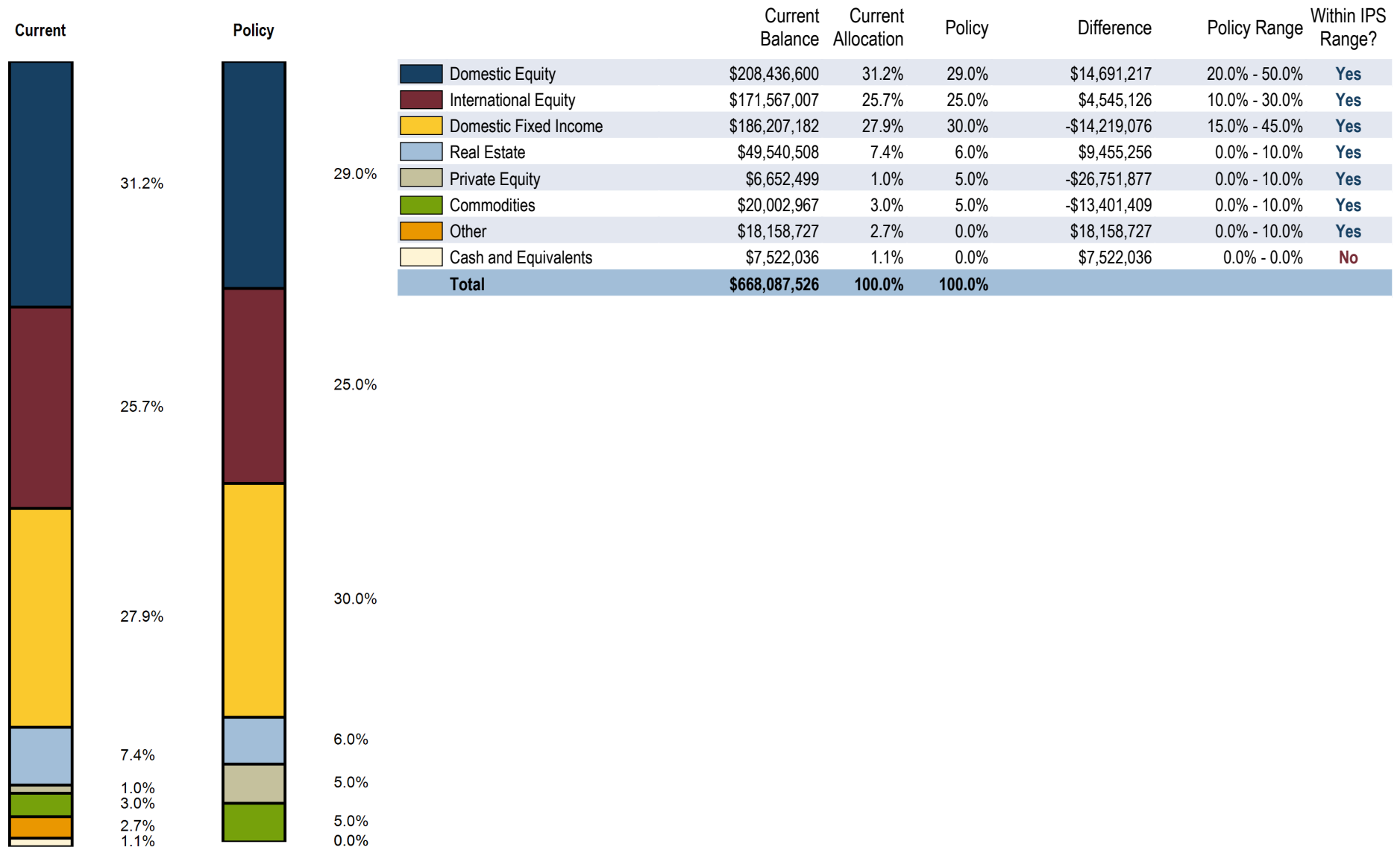


Asset Allocation History



# Total Fund Asset Allocation vs. Policy

Period Ending: September 30, 2014



# Manager Report Card

Period Ending: September 30, 2014

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

**Obejective 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	23.2%	23.2%	No			15.9%	15.9%	No		
Times Square	Russell Mid-Cap Growth + 100 basis points	23.7%	23.7%	No	15	Yes	15.9%	18.1%	No	45	Yes
T. Rowe Price	Russell 2000 Value + 100 basis points	18.8%	21.6%	No	82	No	13.6%	14.0%	No	73	No
<u>International Equity</u>											
BlackRock	MSCI EAFE	13.8%	14.2%	No			6.8%	7.0%	No		
Franklin Templeton	MSCI All Country World ex U.S. + 100 basis points	13.7%	13.3%	Yes	50	No	5.9%	7.5%	No	81	No
DFA	MSCI Emerging Markets + 150 basis points	6.6%	9.1%	No	79	No	3.0%	6.3%	No	86	No
<u>Fixed Income</u>											
Bradford & Marzec	Barclays Credit Aggregate Bond + 50 basis points	4.9%	2.9%	Yes	45	Yes	6.1%	4.6%	Yes	45	Yes
PIMCO	Barclays Credit Aggregate Bond + 50 basis points	4.6%	2.9%	Yes	48	Yes	5.1%	4.6%	Yes	72	No
BlackRock	Barclays Credit US TIPS	1.3%	1.3%	No			4.5%	4.5%	No		
PIMCO	Barclays Credit Aggregate Bond + 500 basis points										
<u>Alternatives</u>											
Clarion	NCREIF Property	10.8%	11.1%	No			11.9%	11.0%	Yes		
ASB Allegiance	NFI-ODCE										
BlackRock	DJ UBS Commodity	-5.6%	-5.3%	No							
Gresham TAP	DJ UBS Commodity										
HarbourVest	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	8.5%	8.5%	No							
Times Square	Russell Mid-Cap Growth + 100 basis points	11.8%	11.2%	Yes	12	Yes					
T. Rowe Price	Russell 2000 Value + 100 basis points	8.6%	8.3%	Yes	63	No	11.8%	10.7%	Yes		
<u>International Equity</u>											
BlackRock	MSCI EAFE	6.5%	6.8%	No	83	No					
Franklin Templeton	MSCI All Country World ex U.S. + 100 basis points	7.4%	8.5%	No	60	No	6.3%	6.1%	Yes		
DFA	MSCI Emerging Markets + 150 basis points										
<u>Fixed Income</u>											
Bradford & Marzec	Barclays Credit Aggregate Bond + 50 basis points	6.0%	5.1%	Yes	29	Yes	6.4%	6.1%	Yes		
PIMCO	Barclays Credit Aggregate Bond + 50 basis points										
BlackRock	Barclays Credit US TIPS										
PIMCO	Barclays Credit Aggregate Bond + 500 basis points										
<u>Alternatives</u>											
Clarion	NCREIF Property										
ASB Allegiance	NFI-ODCE										
BlackRock	DJ UBS Commodity										
Gresham TAP	DJ UBS Commodity										
HarbourVest	Russell 3000 + 250 basis points										

# Investment Fund Fee Analysis

Period Ending: September 30, 2014

Account	Fee Schedule	Market Value As of 9/30/2014	% of Portfolio	Estimated Annual Fee (\$)	Estimated Annual Fee (%)
1221 State St. Corp	No Fee	\$1,369,851	0.2%	--	--
ASB Real Estate	1.25% of First \$5.0 Mil, 1.00% of Next \$10.0 Mil, 0.75% Thereafter	\$24,348,140	3.6%	\$232,611	0.96%
Blackrock Commodities	0.30% of Assets	\$6,178,153	0.9%	\$18,534	0.30%
Blackrock International Equity	0.15% of First \$50.0 Mil, 0.10% of Next \$50.0 Mil	\$63,152,788	9.5%	\$88,153	0.14%
Blackrock Russell 1000	0.03% of Assets	\$155,152,245	23.2%	\$46,546	0.03%
Blackrock US TIPS	0.07% of Assets	\$14,629,814	2.2%	\$10,241	0.07%
Bradford & Marzec Fixed	0.29% of First \$100.0 Mil, 0.25% of Next \$100.0 Mil	\$87,968,602	13.2%	\$250,711	0.29%
Cash Account	No Fee	\$7,522,036	1.1%	--	--
Clarion Lion	1.25% of First \$10.0 Mil, 1.00% of Next \$15.0 Mil, 0.85% Thereafter	\$23,822,517	3.6%	\$263,225	1.10%
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	\$22,071,945	3.3%	\$134,639	0.61%
Gresham MTAP Commodity Builder	0.75% of Assets	\$13,824,814	2.1%	\$103,686	0.75%
Harbourvest Buyout IX	\$100,000 Annually	\$2,512,559	0.4%	\$100,000	3.98%
Harbourvest Credit Ops IX	\$20,000 Annually	\$529,611	0.1%	\$20,000	3.78%
Harbourvest International PE VI	\$37,000 Annually	\$1,826,160	0.3%	\$37,000	2.03%
Harbourvest Venture IX	\$40,000 Annually	\$1,784,169	0.3%	\$40,000	2.24%
KKR Mezzanine Partners	\$150,000 Annually	\$6,978,815	1.0%	\$150,000	2.15%
PIMCO BRAVO	1.90% of Assets	\$9,788,156	1.5%	\$185,975	1.90%
PIMCO Total Return	0.46% of Assets	\$83,608,766	12.5%	\$384,600	0.46%
T. Rowe Price Small Cap Value	0.75% of First \$20.0 Mil, 0.60% Thereafter	\$25,599,355	3.8%	\$183,596	0.72%
Templeton Foreign Equity	0.78% of Assets	\$62,342,274	9.3%	\$486,270	0.78%
TimesSquare Capital Mid Cap Growth	0.65% of Assets	\$27,684,999	4.1%	\$179,952	0.65%
Vontobel Global Emerging Markets	0.95% of First \$150.0 Mil, 0.85% Thereafter	\$24,000,000	3.6%	\$228,000	0.95%
<b>Investment Management Fee</b>		<b>\$668,087,526</b>	<b>100.0%</b>	<b>\$3,143,739</b>	<b>0.47%</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

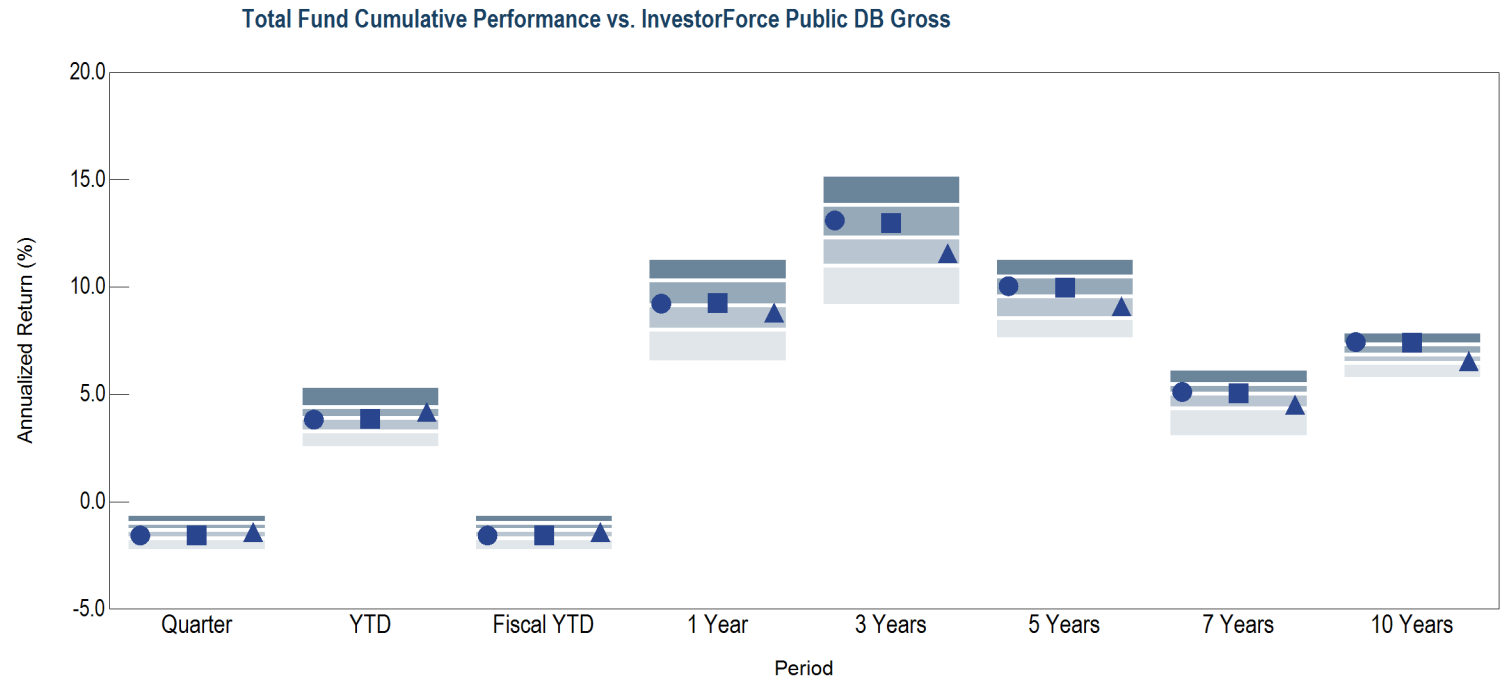
\*HarbourVest International Private Equity VI fees are based on committed Euros, actual US Dollar amount will fluctuate based on exchange rates.



# Total Fund (Gross of Fees)

## Peer Universe Comparison: Cumulative Performance

Period Ending: September 30, 2014

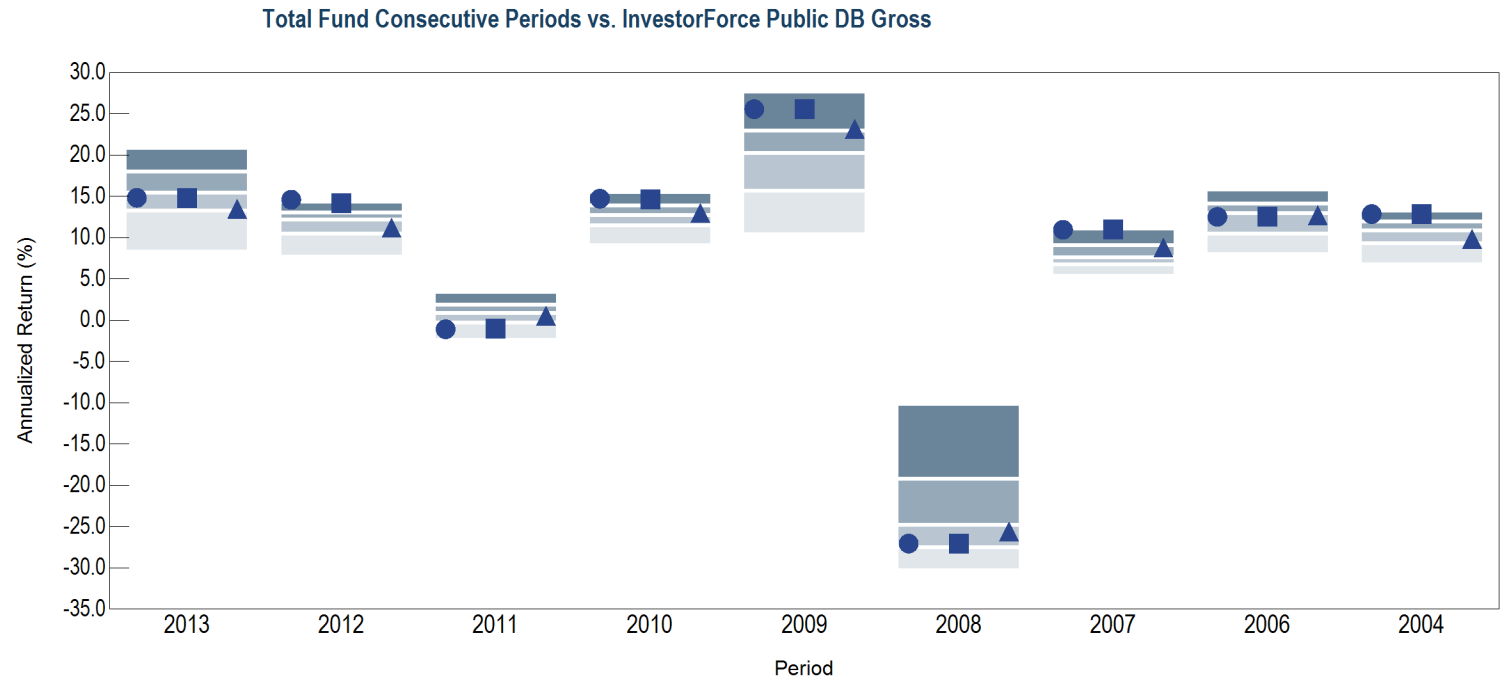


	Return (Rank)							
5th Percentile	-0.6	5.4	-0.6	11.4	15.2	11.4	6.2	7.9
25th Percentile	-1.0	4.4	-1.0	10.3	13.9	10.5	5.5	7.4
Median	-1.3	3.9	-1.3	9.2	12.3	9.6	5.1	6.9
75th Percentile	-1.7	3.3	-1.7	8.0	11.0	8.6	4.4	6.5
95th Percentile	-2.3	2.5	-2.3	6.5	9.1	7.6	3.0	5.7
# of Portfolios	202	199	202	196	180	166	158	143
● Total Fund	-1.6 (69)	3.8 (54)	-1.6 (69)	9.2 (48)	13.1 (38)	10.0 (39)	5.1 (49)	7.4 (21)
■ Total Fund ex Clifton	-1.6 (70)	3.9 (53)	-1.6 (70)	9.2 (47)	13.0 (41)	10.0 (42)	5.1 (50)	7.4 (22)
▲ Policy Index	-1.4 (58)	4.2 (40)	-1.4 (58)	8.8 (61)	11.6 (64)	9.1 (64)	4.5 (70)	6.6 (71)

# Total Fund (Gross of Fees)

## Peer Universe Comparision: Consecutive Periods

Period Ending: September 30, 2014



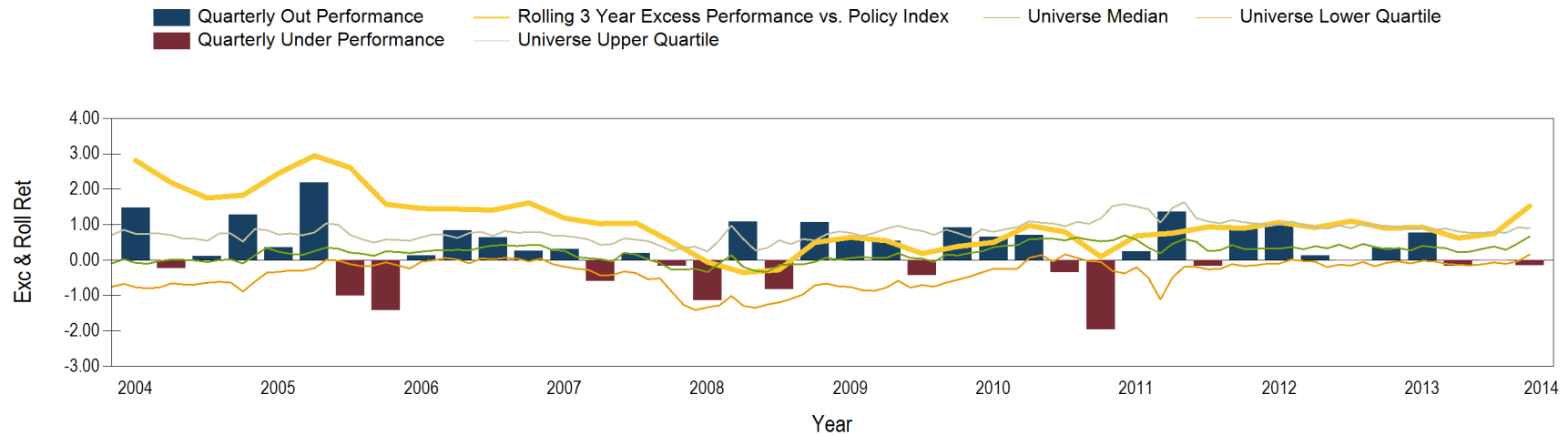
	Return (Rank)									
5th Percentile	20.8	14.3	3.4	15.5	27.6	-10.2	11.1	15.8	13.2	
25th Percentile	18.0	13.1	1.9	13.9	23.0	-19.2	9.1	14.2	12.0	
Median	15.5	12.2	0.9	12.8	20.3	-24.7	7.7	13.0	10.9	
75th Percentile	13.3	10.5	-0.3	11.5	15.7	-27.4	6.8	10.5	9.4	
95th Percentile	8.4	7.7	-2.4	9.2	10.4	-30.2	5.4	8.0	6.8	
# of Portfolios	212	192	162	154	152	149	146	136	125	
● Total Fund	14.8 (57)	14.6 (3)	-1.1 (90)	14.7 (13)	25.6 (13)	-27.1 (70)	10.9 (6)	12.5 (56)	12.8 (8)	
■ Total Fund ex Clifton	14.7 (58)	14.2 (9)	-1.0 (90)	14.7 (14)	25.6 (13)	-27.1 (70)	10.9 (6)	12.5 (56)	12.8 (8)	
▲ Policy Index	13.5 (74)	11.2 (70)	0.5 (62)	13.0 (47)	23.2 (25)	-25.6 (61)	8.8 (29)	12.7 (53)	9.8 (69)	

# Total Fund

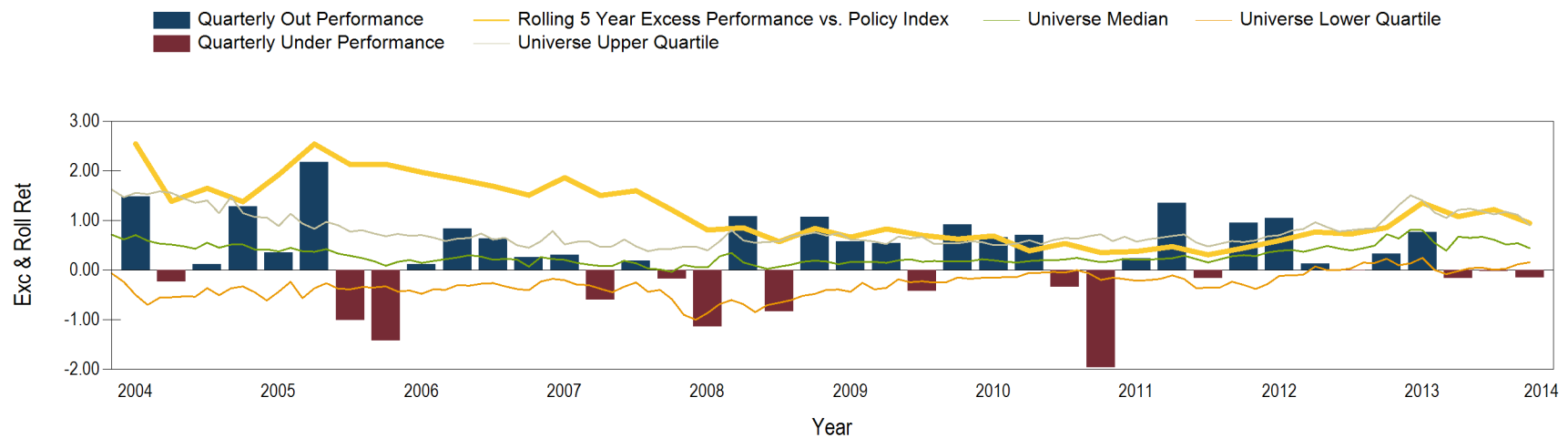
## Rolling Return Analysis

Period Ending: September 30, 2014

Rolling 3 Year Annualized Excess Performance



Rolling 5 Year Annualized Excess Performance



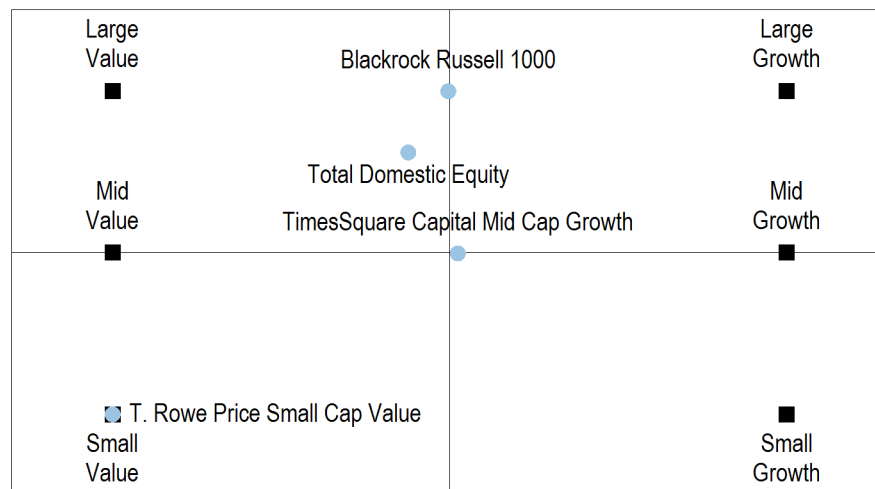
# Domestic Equity

## Asset Class Overview (Gross of Fees)

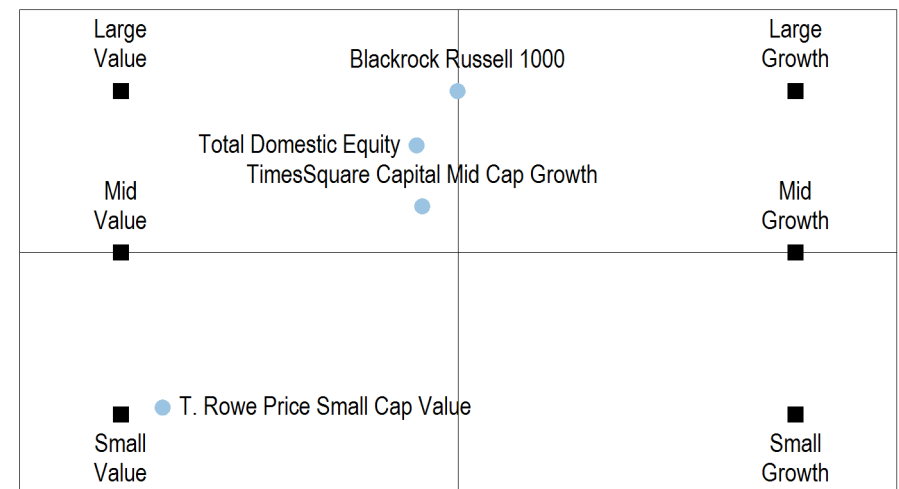
Period Ending: September 30, 2014

	Market Value	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2013	2012	2011	2010	2009
<b>Total Domestic Equity</b>													
Blackrock Russell 1000	155,152,245	0.7	8.0	0.7	19.0	23.3	16.0	8.5	33.2	16.5	1.6	16.2	28.6
Russell 1000		0.7	8.0	0.7	19.0	23.2	15.9	8.5	33.1	16.4	1.5	16.1	28.4
eA US Large Cap Equity Gross Rank		47	40	47	42	43	41	69	54	39	39	34	48
TimesSquare Capital Mid Cap Growth	27,684,999	-1.9	2.4	-1.9	14.7	24.6	16.6	12.5	38.7	20.0	-0.7	19.3	38.5
Russell MidCap Growth		-0.7	5.7	-0.7	14.4	22.7	17.1	10.2	35.7	15.8	-1.7	26.4	46.3
eA US Mid Cap Growth Equity Gross Rank		65	57	65	21	15	45	12	36	11	40	94	60
T. Rowe Price Small Cap Value	25,599,355	-9.5	-7.6	-9.5	2.1	19.7	14.4	9.4	34.7	17.1	1.0	25.6	25.9
Russell 2000 Value		-8.6	-4.7	-8.6	4.1	20.6	13.0	7.3	34.5	18.1	-5.5	24.5	20.6
eA US Small Cap Value Equity Gross Rank		91	95	91	91	82	73	63	78	49	22	63	72

U.S. Effective Style Map  
3 Years Ending September 30, 2014



U.S. Effective Style Map  
5 Years Ending September 30, 2014



## Domestic Equity

### Asset Class Overview (Net of Fees)

Period Ending: September 30, 2014

	Market Value	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2013	2012	2011	2010	2009
<b>Total Domestic Equity</b>													
Blackrock Russell 1000	155,152,245	0.7	8.0	0.7	19.0	23.2	15.9	8.5	33.1	16.4	1.5	16.1	28.5
<i>Russell 1000</i>		0.7	8.0	0.7	19.0	23.2	15.9	8.5	33.1	16.4	1.5	16.1	28.4
TimesSquare Capital Mid Cap Growth	27,684,999	-2.1	1.9	-2.1	14.0	23.7	15.9	11.8	37.8	19.2	-1.3	18.5	37.7
<i>Russell MidCap Growth</i>		-0.7	5.7	-0.7	14.4	22.7	17.1	10.2	35.7	15.8	-1.7	26.4	46.3
T. Rowe Price Small Cap Value	25,599,355	-9.7	-8.1	-9.7	1.4	18.8	13.6	8.6	33.8	16.3	0.3	24.8	25.1
<i>Russell 2000 Value</i>		-8.6	-4.7	-8.6	4.1	20.6	13.0	7.3	34.5	18.1	-5.5	24.5	20.6

#### Common Holdings Matrix As of September 30, 2014

	Blackrock Russell 1000		TimesSquare Capital Mid Cap Growth		T. Rowe Price Small Cap Value	
	#	%	#	%	#	%
Blackrock Russell 1000	--	--	70	87.79	16	20.09
TimesSquare Capital Mid Cap Growth	70	3.15	--	--	3	3.46
T. Rowe Price Small Cap Value	16	0.32	3	3.35	--	--

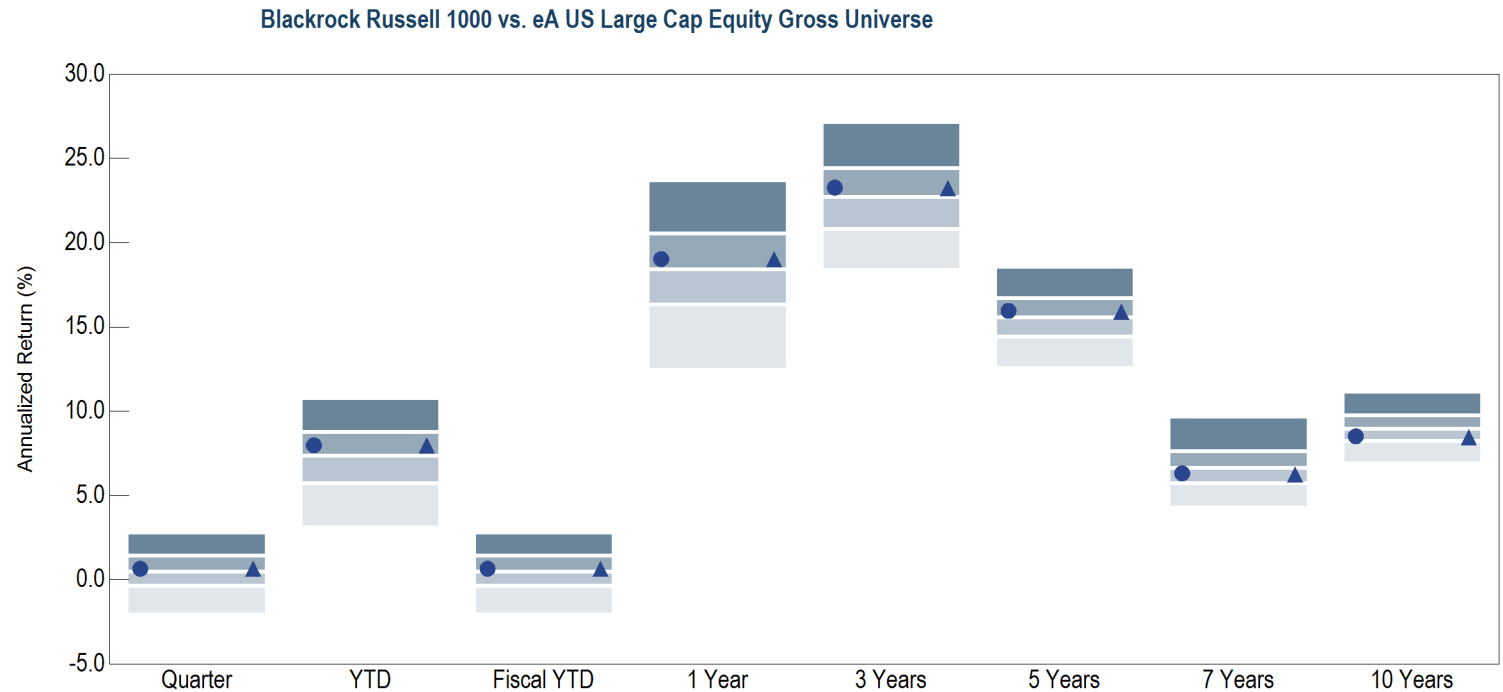
#### Correlation Matrix Last 5 Years

	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	0.99	0.98	1.00	--
T. Rowe Price Small Cap Value	0.94	0.91	0.92	1.00

# Blackrock Russell 1000

## Cumulative Performance Comparison

Period Ending: September 30, 2014

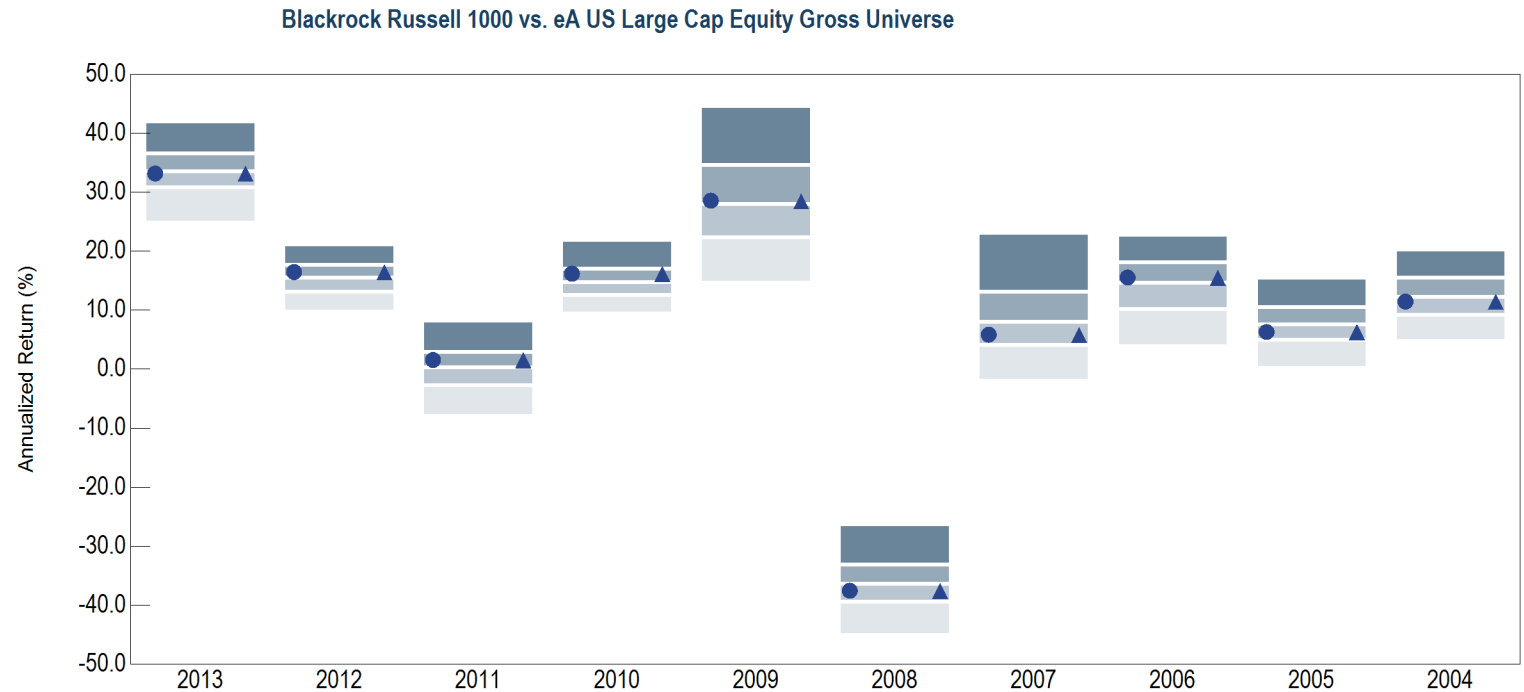


	Return (Rank)							
5th Percentile	2.8	10.8	2.8	23.7	27.2	18.6	9.7	11.2
25th Percentile	1.4	8.8	1.4	20.6	24.4	16.7	7.7	9.8
Median	0.5	7.4	0.5	18.5	22.7	15.6	6.7	9.0
75th Percentile	-0.3	5.8	-0.3	16.4	20.8	14.4	5.8	8.2
95th Percentile	-2.0	3.2	-2.0	12.5	18.4	12.6	4.3	6.9
# of Portfolios	863	861	863	861	839	797	742	633
● Blackrock Russell 1000	0.7 (47)	8.0 (40)	0.7 (47)	19.0 (42)	23.3 (43)	16.0 (41)	6.3 (62)	8.5 (69)
▲ Russell 1000	0.7 (48)	8.0 (40)	0.7 (48)	19.0 (43)	23.2 (43)	15.9 (42)	6.3 (63)	8.5 (71)

# Blackrock Russell 1000

## Consecutive Performance Comparison

Period Ending: September 30, 2014



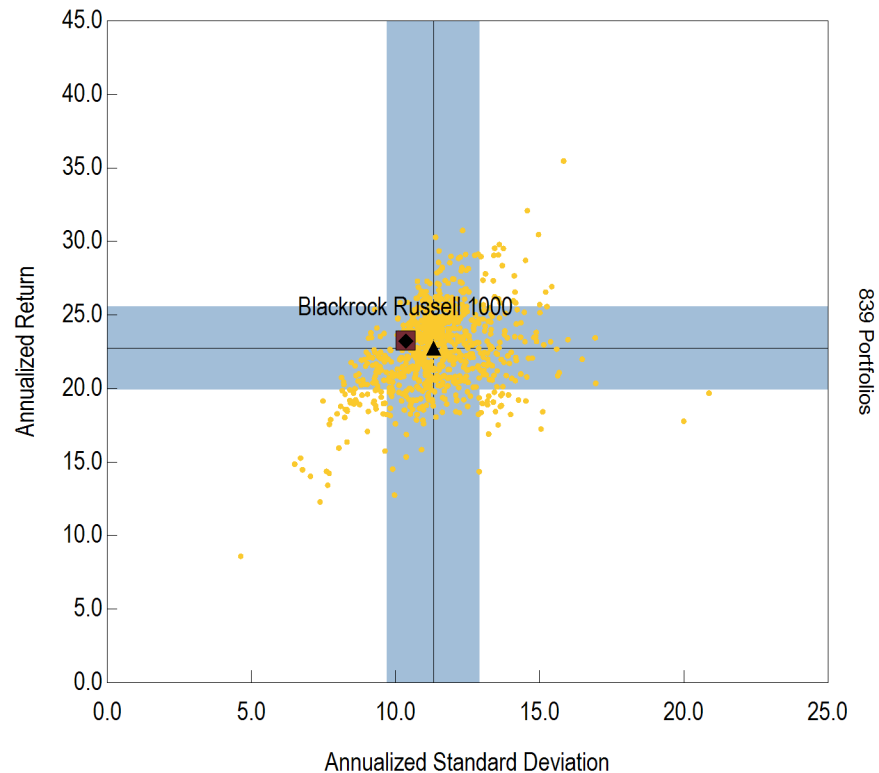
	Return (Rank)									
5th Percentile	41.9	21.1	8.2	21.9	44.6	-26.3	23.1	22.7	15.5	20.2
25th Percentile	36.6	17.8	3.0	17.1	34.7	-33.1	13.2	18.2	10.6	15.6
Median	33.6	15.6	0.4	14.8	28.0	-36.3	8.0	14.8	7.7	12.3
75th Percentile	30.8	13.2	-2.7	12.6	22.4	-39.4	4.2	10.2	5.0	9.3
95th Percentile	24.9	9.8	-7.9	9.5	14.7	-45.0	-1.9	4.0	0.3	4.8
# of Portfolios	851	836	865	883	989	1,068	1,120	1,140	1,138	1,126
● Blackrock Russell 1000	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)	11.5 (58)
▲ Russell 1000	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)	11.4 (59)

# Blackrock Russell 1000

## Risk vs Return Three & Five Year

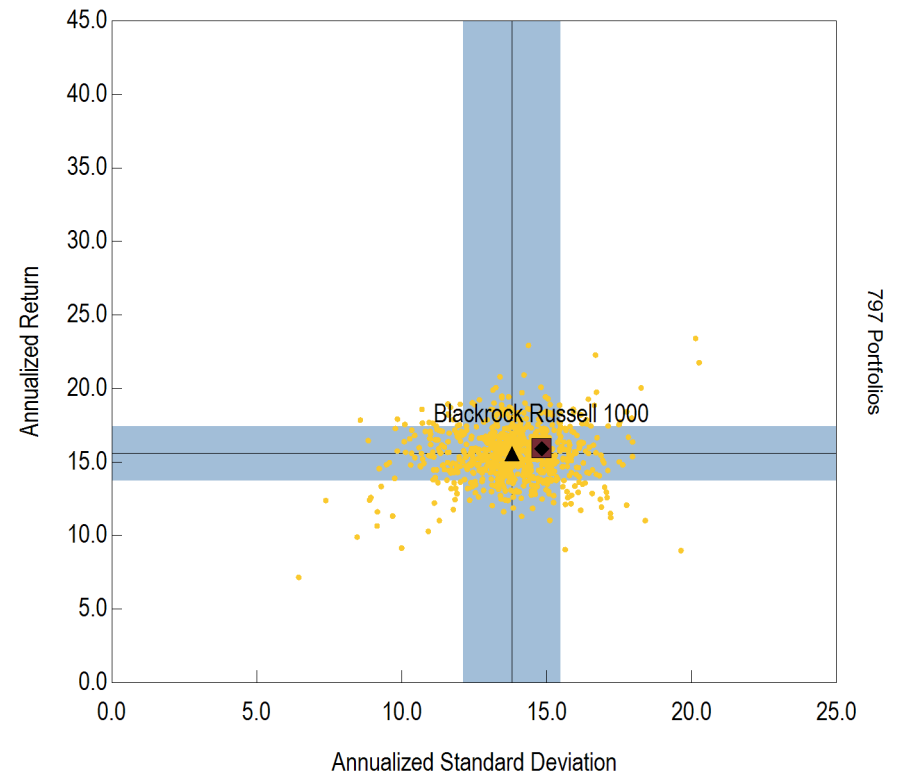
Period Ending: September 30, 2014

Risk vs. Return  
3 Years Ending September 30, 2014



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

Risk vs. Return  
5 Years Ending September 30, 2014



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



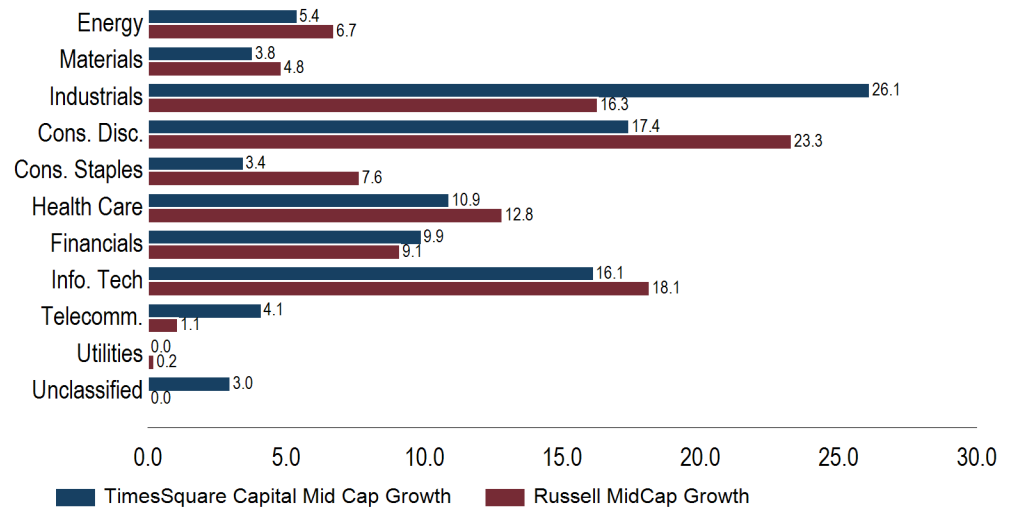
# TimesSquare Capital Mid Cap Growth Manager Portfolio Overview

Period Ending: September 30, 2014

## Characteristics

	Portfolio	Russell MidCap Growth
Number of Holdings	80	546
Weighted Avg. Market Cap. (\$B)	10.05	12.68
Median Market Cap. (\$B)	8.53	6.34
Price To Earnings	25.47	25.65
Price To Book	5.56	5.57
Price To Sales	3.23	3.44
Return on Equity (%)	23.09	21.37
Yield (%)	0.68	1.00
Beta	1.09	1.00

## Sector Allocation (%) vs Russell MidCap Growth



\*Unclassified includes Cash

## Top Holdings Ending Period Weight

SBA COMMS.	4.09%	UNITED THERAPEUTICS
DAVITA HEALTHCARE PTNS.	3.81%	SALIX PHARMS.
ALLIANCE DATA SYSTEMS	3.32%	SBA COMMS.
CASH - USD	2.97%	ROSS STORES
GARTNER 'A'	2.42%	WHITEWAVE FOODS
NIELSEN	2.19%	HANESBRANDS
EQUIFAX	1.76%	QLIK TECHNOLOGIES
O REILLY AUTOMOTIVE	1.74%	FOOT LOCKER
ENVISION HEALTHCARE HDG.	1.72%	PREMIER CLASS A
RENAISSANCE HDG.	1.70%	SALLY BEAUTY HOLDINGS
<b>Total</b>	<b>25.69%</b>	

## Top Contributors

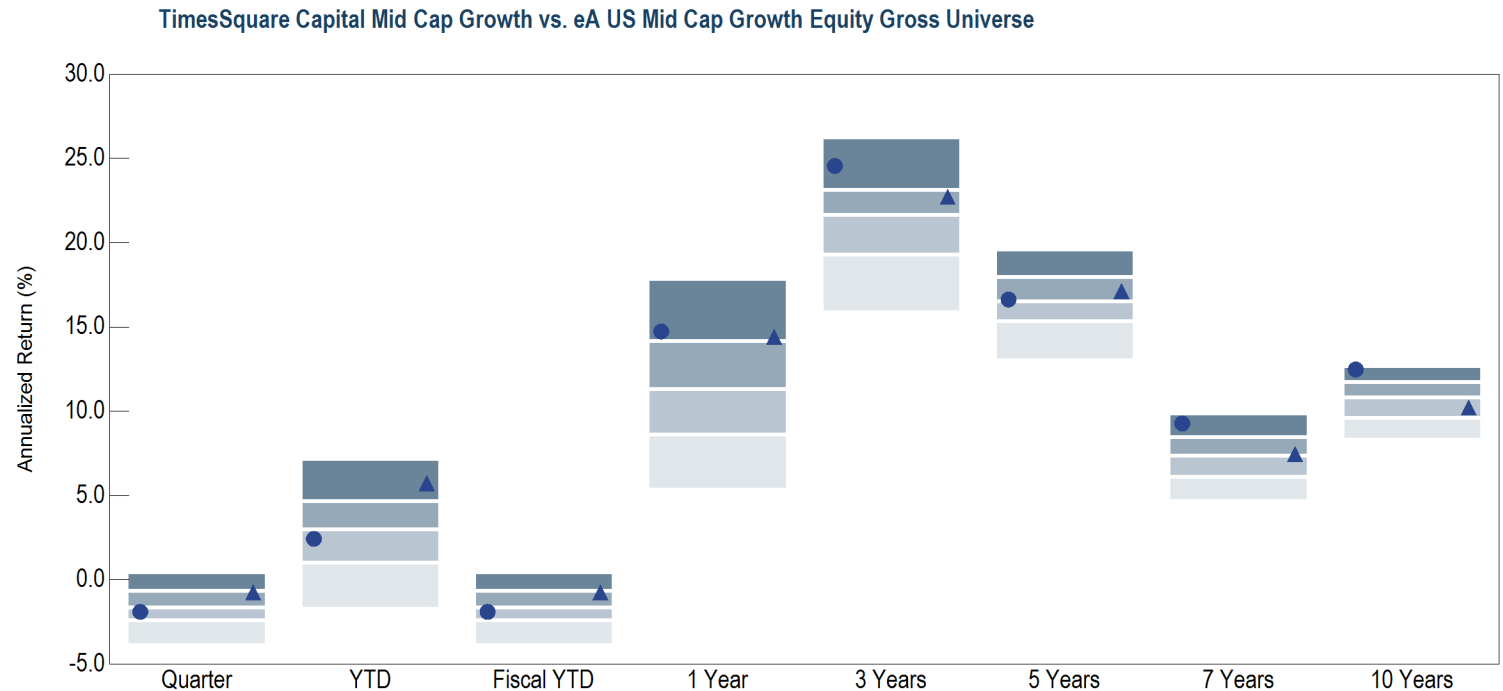
Avg Wgt	Return	Contribution
1.00	45.38	0.45
1.33	26.66	0.35
3.91	8.41	0.33
1.21	14.59	0.18
1.22	12.23	0.15
1.43	9.48	0.14
0.64	19.54	0.13
1.23	10.22	0.13
0.80	13.31	0.11
1.04	9.13	0.09

## Bottom Contributors

Avg Wgt	Return	Contribution
3.55	-11.73	-0.42
1.35	-29.43	-0.40
1.67	-19.13	-0.32
1.90	-14.86	-0.28
1.46	-18.28	-0.27
1.10	-24.16	-0.27
0.97	-23.17	-0.22
1.19	-15.80	-0.19
2.26	-7.94	-0.18
1.39	-12.32	-0.17

# TimesSquare Capital Mid Cap Growth Cumulative Performance Comparison

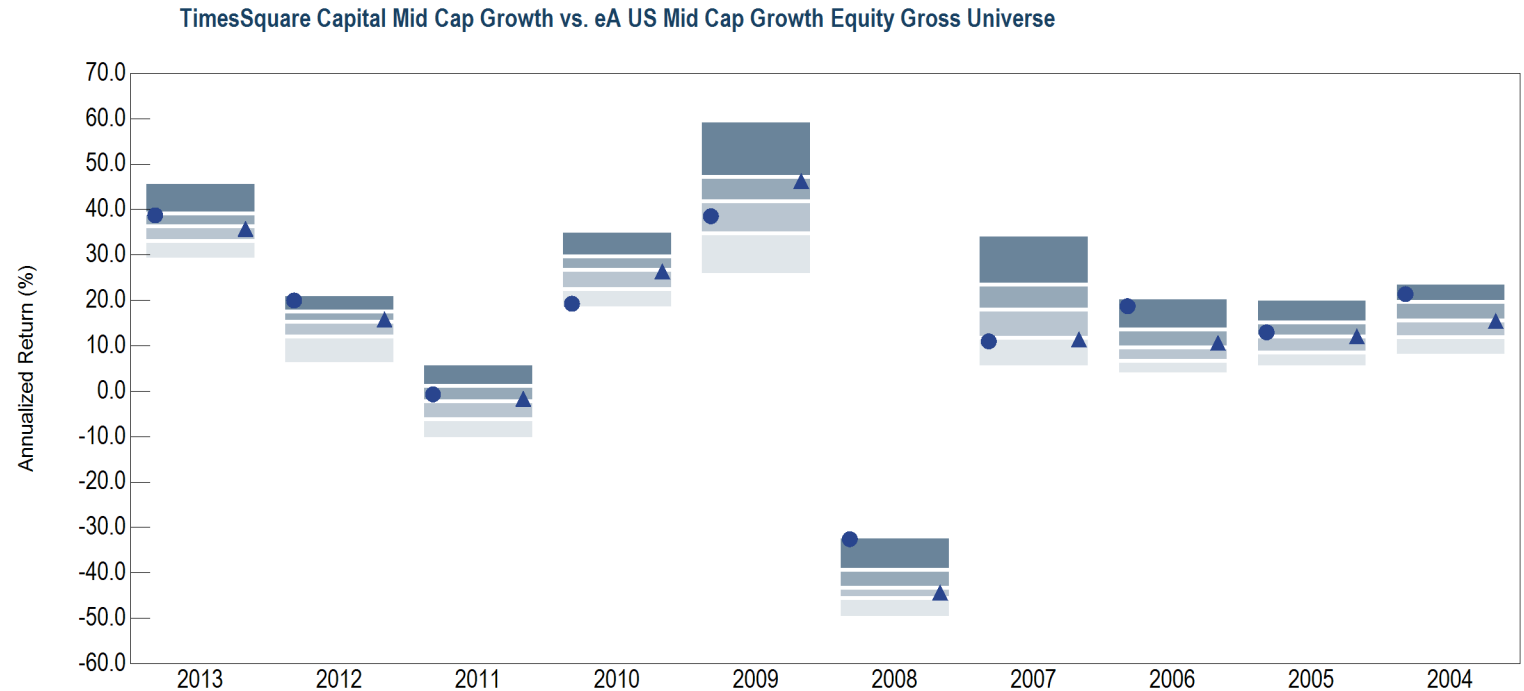
Period Ending: September 30, 2014



	Return (Rank)													
5th Percentile	0.4		7.2		0.4		17.8		26.2		19.6		9.8	
25th Percentile	-0.6		4.7		-0.6		14.2		23.2		18.0		8.5	
Median	-1.6		3.0		-1.6		11.4		21.7		16.6		7.4	
75th Percentile	-2.4		1.0		-2.4		8.6		19.3		15.4		6.1	
95th Percentile	-3.9		-1.7		-3.9		5.4		15.9		13.0		4.7	
# of Portfolios	111		111		111		111		107		104		96	
● TimesSquare Capital Mid Cap Growth	-1.9	(65)	2.4	(57)	-1.9	(65)	14.7	(21)	24.6	(15)	16.6	(45)	9.3	(16)
▲ Russell MidCap Growth	-0.7	(28)	5.7	(14)	-0.7	(28)	14.4	(24)	22.7	(29)	17.1	(38)	7.5	(48)

# TimesSquare Capital Mid Cap Growth Consecutive Performance Comparison

Period Ending: September 30, 2014



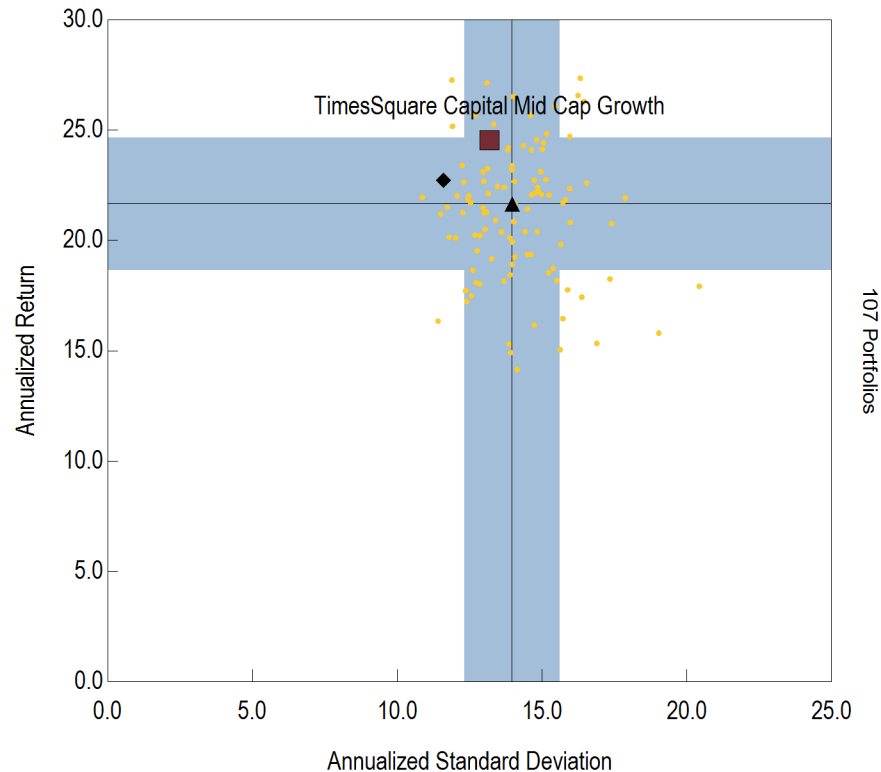
	Return (Rank)									
5th Percentile	46.0	21.3	6.1	35.3	59.6	-32.0	34.5	20.6	20.3	23.8
25th Percentile	39.2	17.6	1.3	29.8	47.2	-39.3	23.5	13.7	15.2	19.7
Median	36.4	15.4	-2.1	26.7	41.9	-43.2	18.0	9.8	12.1	15.6
75th Percentile	33.2	12.2	-6.1	22.5	34.9	-45.5	11.8	6.8	8.7	12.0
95th Percentile	29.0	6.0	-10.4	18.3	25.7	-49.8	5.3	3.8	5.3	7.9
# of Portfolios	106	111	122	127	142	158	154	155	147	141
● TimesSquare Capital Mid Cap Growth	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)	21.4 (15)
▲ Russell MidCap Growth	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)	15.5 (51)

# TimesSquare Capital Mid Cap Growth

## Risk vs Return Three & Five Year

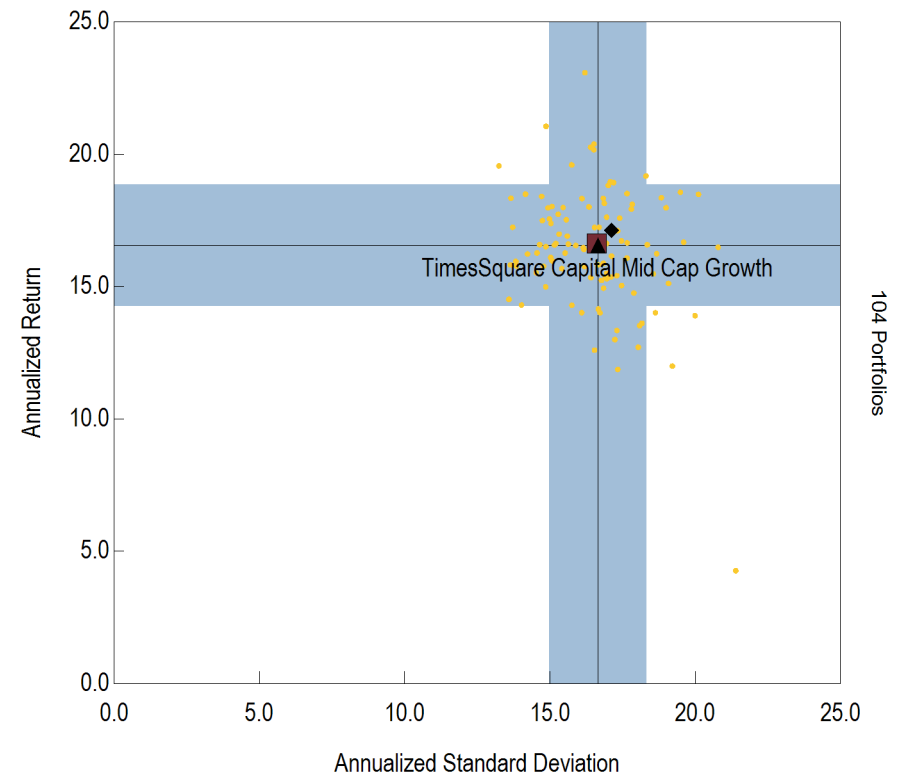
Period Ending: September 30, 2014

Risk vs. Return  
3 Years Ending September 30, 2014



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

Risk vs. Return  
5 Years Ending September 30, 2014



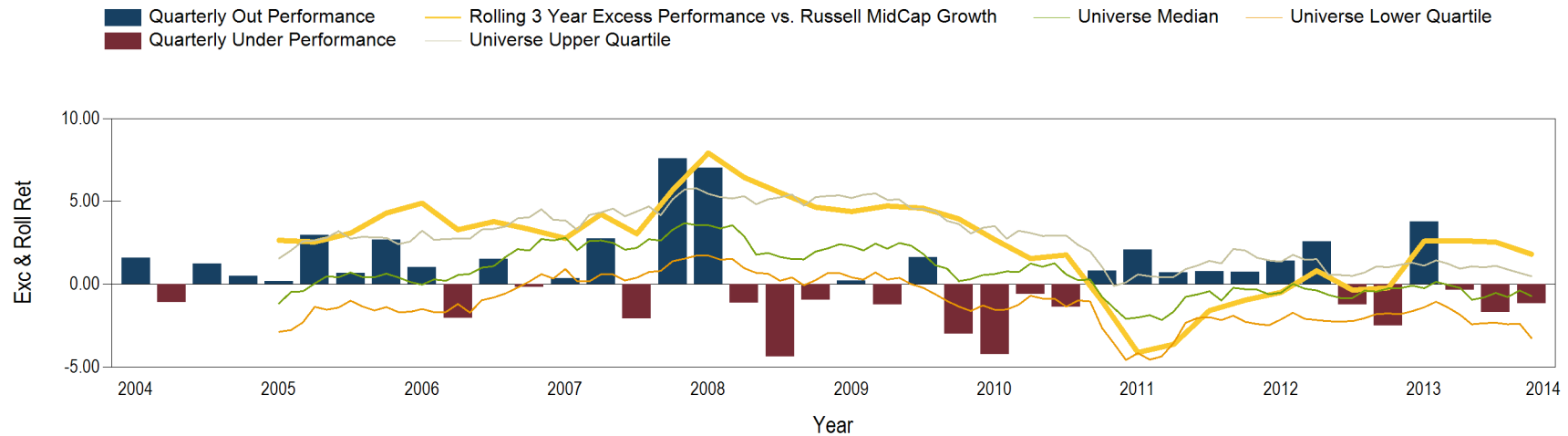
- TimesSquare Capital Mid Cap Growth
- ◆ Russell MidCap Growth
- ▲ Universe Median
- 68% Confidence Interval
- eA US Mid Cap Growth Equity Gross

# TimesSquare Capital Mid Cap Growth

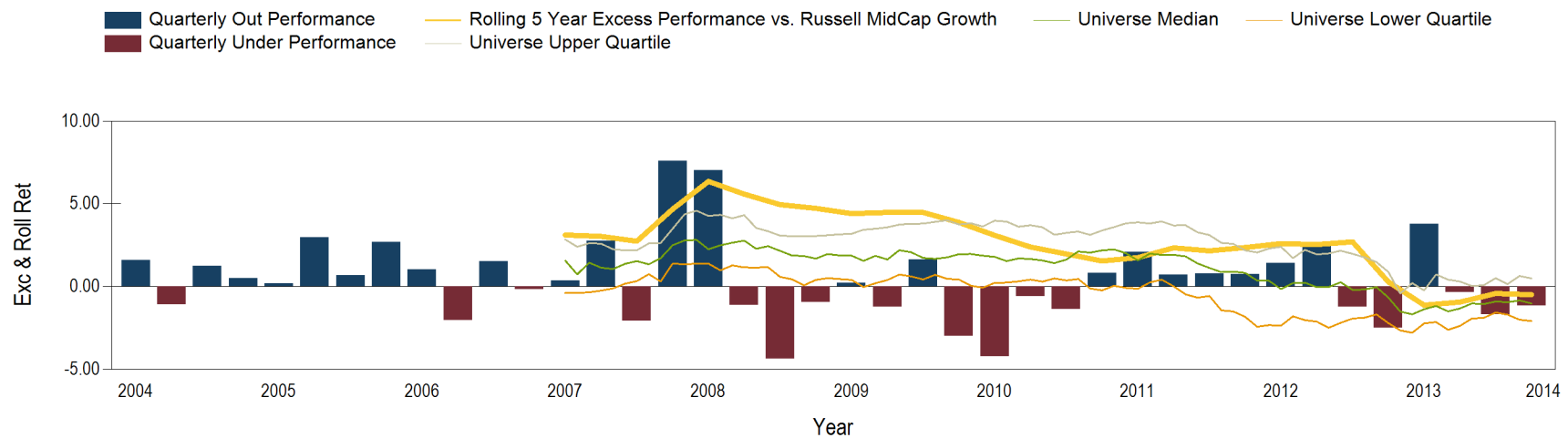
## Rolling Return Analysis

Period Ending: September 30, 2014

Rolling 3 Year Annualized Excess Performance



Rolling 5 Year Annualized Excess Performance



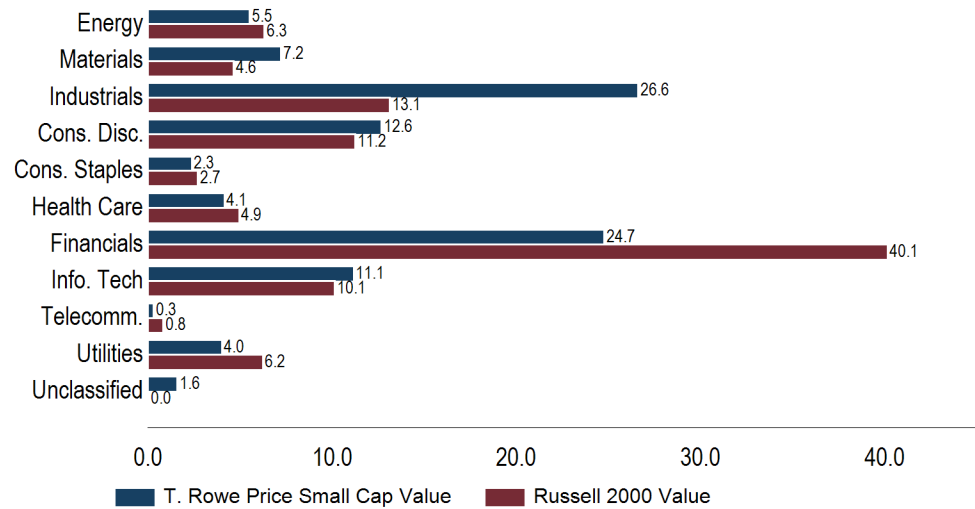
# T. Rowe Price Small Cap Value Manager Portfolio Overview

Period Ending: September 30, 2014

## Characteristics

	Portfolio	Russell 2000 Value
Number of Holdings	154	1,307
Weighted Avg. Market Cap. (\$B)	1.90	1.53
Median Market Cap. (\$B)	0.98	0.59
Price To Earnings	22.10	18.59
Price To Book	2.69	1.62
Price To Sales	2.87	2.40
Return on Equity (%)	12.80	7.42
Yield (%)	1.46	1.85
Beta	1.02	1.00

## Sector Allocation (%) vs Russell 2000 Value



\*Unclassified includes Cash

## Top Holdings Ending Period Weight

	Weight	Company
MIDDLEBY	2.41%	LANDSTAR SYSTEM
HOME BANCSHARES	2.26%	BANK OF KENTUCKY
LANDSTAR SYSTEM	2.11%	MIDDLEBY
GENESEE & WYOMING 'A'	1.97%	CYBEROPTICS
KIRBY	1.89%	SABA SOFTWARE
SVB FINANCIAL GROUP	1.62%	QUIDEL
HUB GROUP 'A'	1.55%	WEST PHARM.SVS.
RAVEN INDUSTRIES	1.50%	G & K SERVICES 'A'
PROASSURANCE	1.46%	TRIPLE-S MANAGEMENT 'B'
EAST WEST BANCORP	1.46%	COBIZ FINANCIAL
<b>Total</b>	<b>18.24%</b>	

## Top Contributors

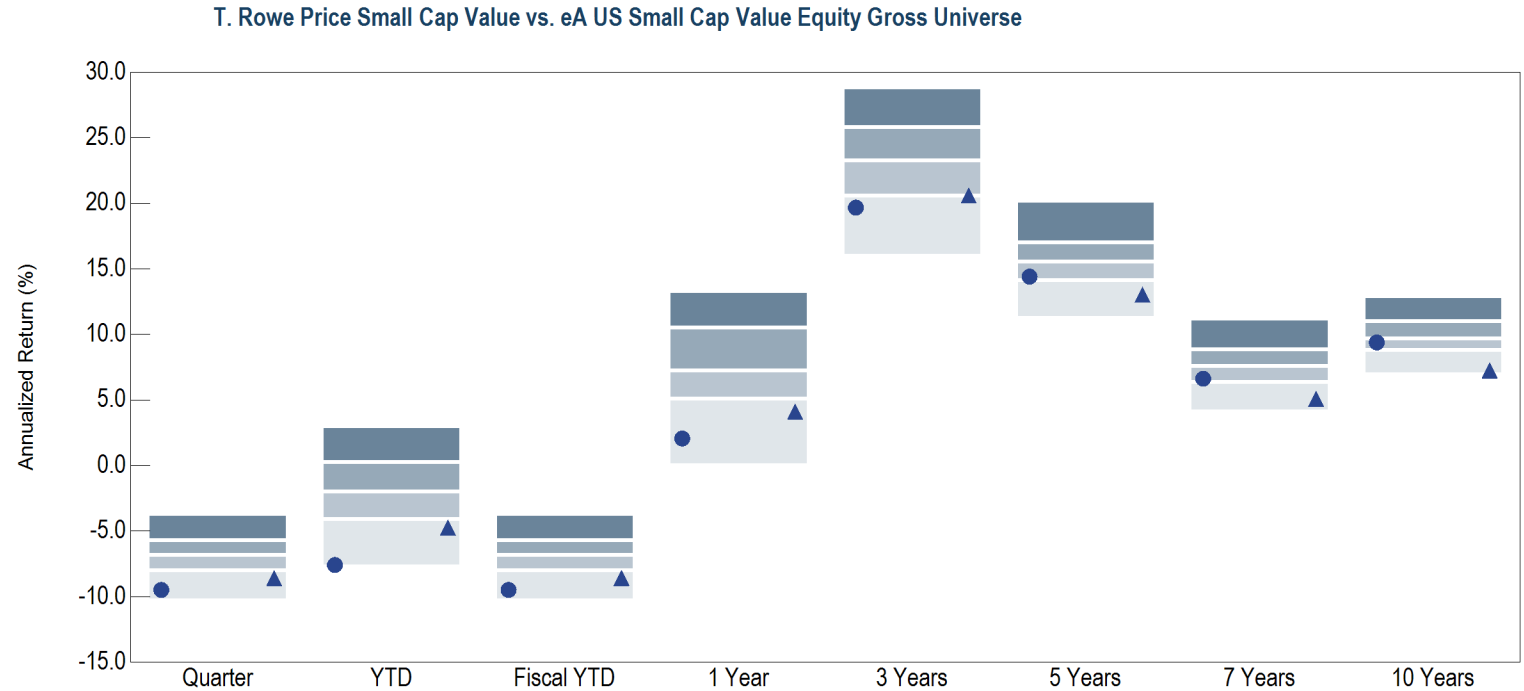
Avg Wgt	Return	Contribution
1.73	12.92	0.22
0.44	33.55	0.15
2.06	6.54	0.13
0.28	40.43	0.11
0.54	20.00	0.11
0.47	21.53	0.10
1.00	6.38	0.06
0.51	6.95	0.04
0.29	10.99	0.03
0.74	4.17	0.03

## Bottom Contributors

Avg Wgt	Return	Contribution
1.84	-31.71	-0.58
1.87	-26.09	-0.49
0.78	-61.48	-0.48
1.32	-31.23	-0.41
1.76	-19.58	-0.35
1.30	-24.51	-0.32
1.42	-21.30	-0.30
1.06	-24.59	-0.26
0.83	-28.38	-0.23
2.32	-10.09	-0.23

# T. Rowe Price Small Cap Value Cumulative Performance Comparison

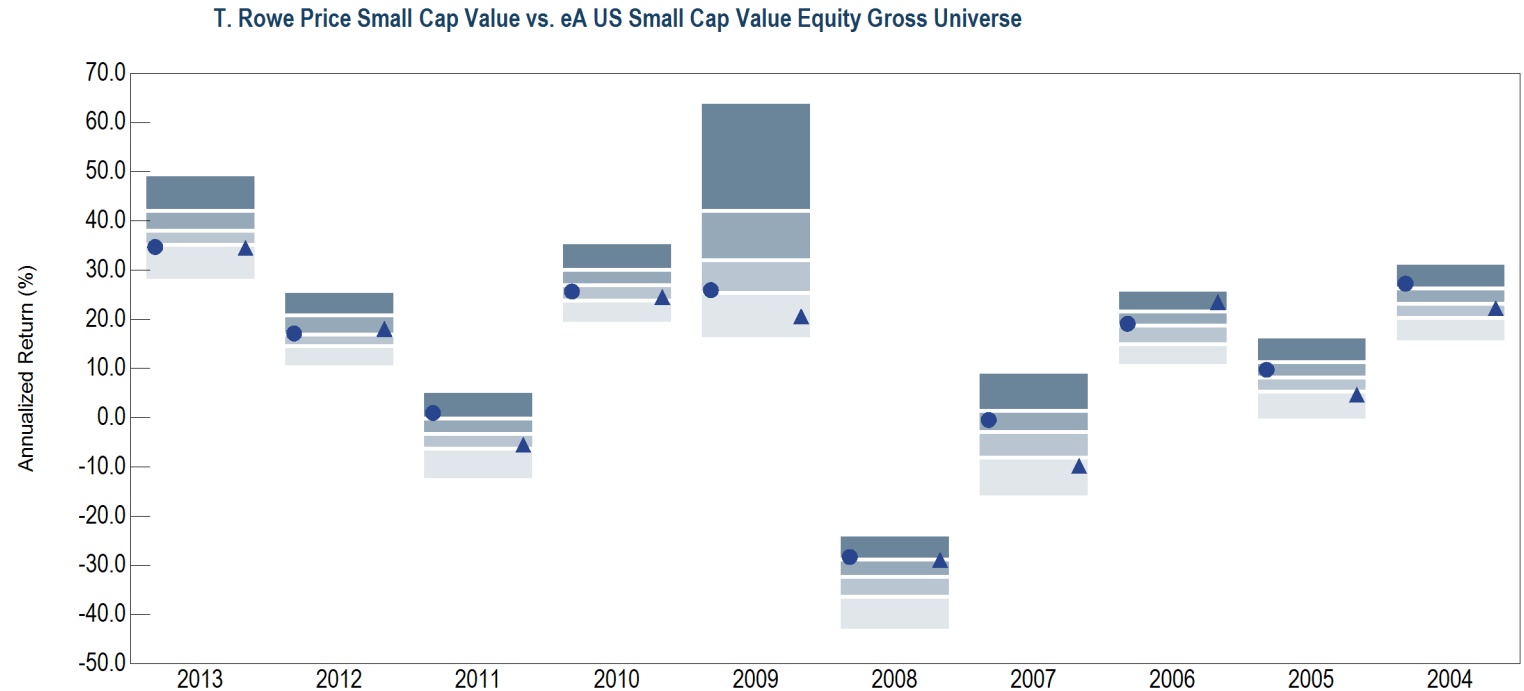
Period Ending: September 30, 2014



	Return (Rank)							
5th Percentile	-3.7	3.0	-3.7	13.3	28.8	20.2	11.2	12.9
25th Percentile	-5.7	0.3	-5.7	10.6	25.8	17.1	8.9	11.0
Median	-6.8	-1.9	-6.8	7.3	23.3	15.6	7.6	9.7
75th Percentile	-7.9	-4.1	-7.9	5.1	20.6	14.1	6.4	8.9
95th Percentile	-10.3	-7.7	-10.3	0.1	16.0	11.3	4.1	7.0
# of Portfolios	208	208	208	208	204	195	176	149
● T. Rowe Price Small Cap Value	-9.5 (91)	-7.6 (95)	-9.5 (91)	2.1 (91)	19.7 (82)	14.4 (73)	6.6 (71)	9.4 (63)
▲ Russell 2000 Value	-8.6 (82)	-4.7 (81)	-8.6 (82)	4.1 (81)	20.6 (76)	13.0 (88)	5.1 (90)	7.3 (95)

# T. Rowe Price Small Cap Value Consecutive Performance Comparison

Period Ending: September 30, 2014



	Return (Rank)									
5th Percentile	49.4	25.7	5.3	35.6	64.2	-23.8	9.3	25.9	16.4	31.4
25th Percentile	42.1	20.8	0.0	30.2	42.1	-28.7	1.5	21.6	11.3	26.4
Median	38.1	16.9	-3.3	26.9	32.0	-32.3	-2.9	18.7	8.2	23.2
75th Percentile	35.2	14.7	-6.2	23.8	25.5	-36.3	-8.1	15.0	5.3	20.3
95th Percentile	27.8	10.3	-12.6	19.2	16.1	-43.3	-16.1	10.6	-0.5	15.5
# of Portfolios	199	187	177	186	197	221	230	223	220	213
● T. Rowe Price Small Cap Value	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)	27.2 (19)
▲ Russell 2000 Value	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)	22.3 (55)

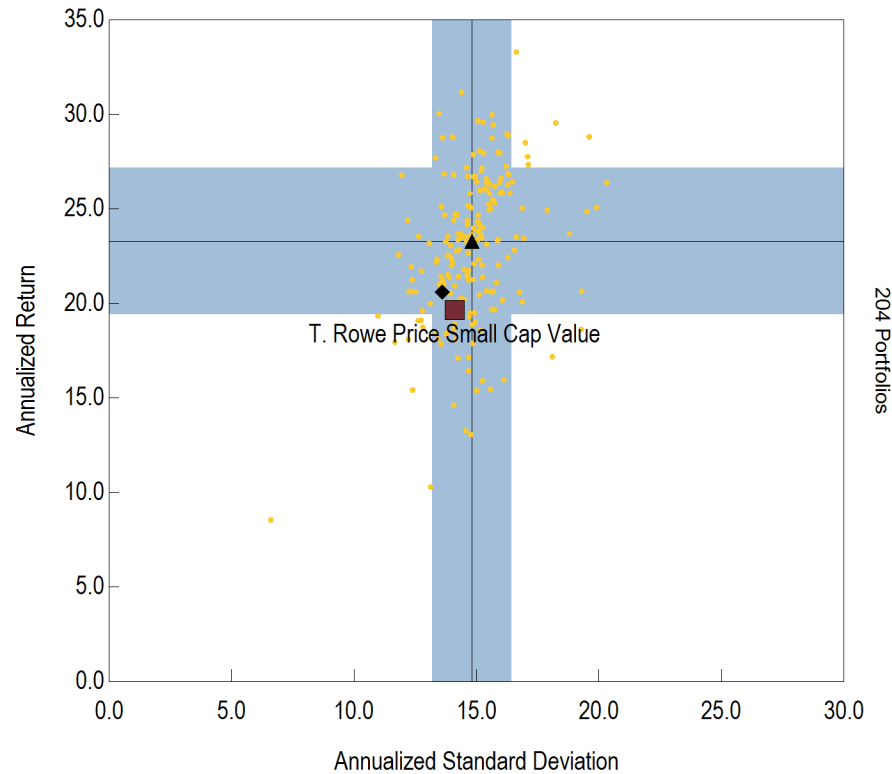


# T. Rowe Price Small Cap Value

## Risk vs Return Three & Five Year

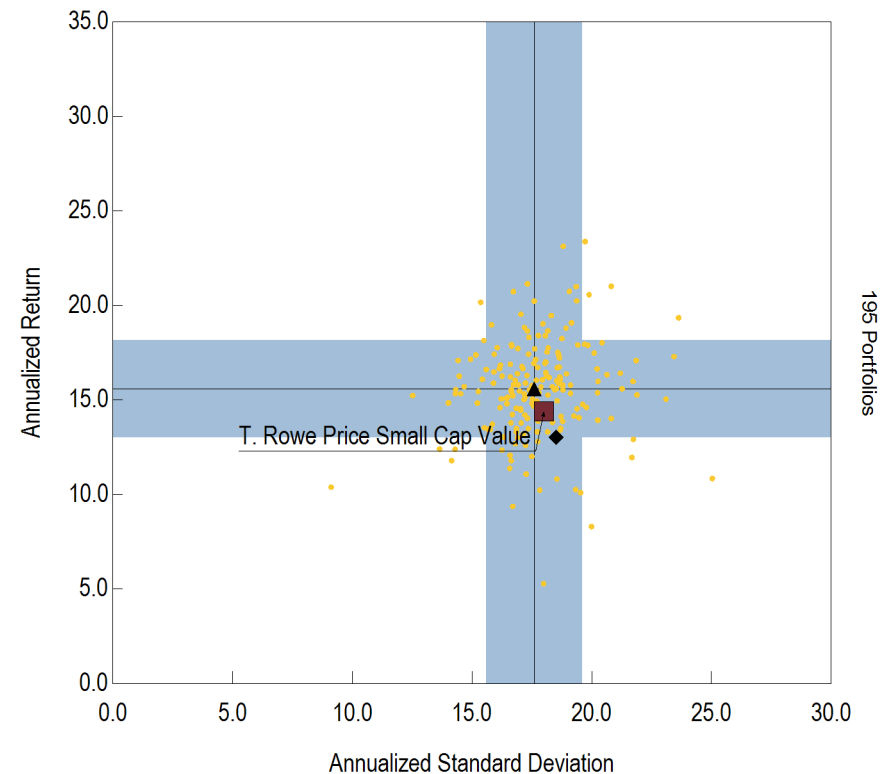
Period Ending: September 30, 2014

Risk vs. Return  
3 Years Ending September 30, 2014



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

Risk vs. Return  
5 Years Ending September 30, 2014



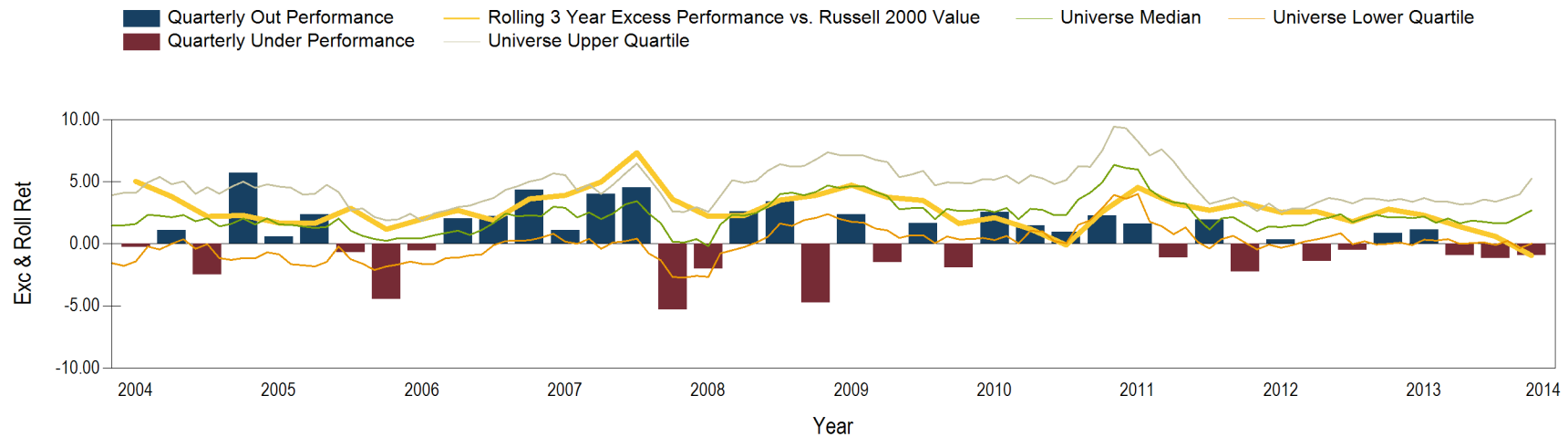
- T. Rowe Price Small Cap Value
- ◆ Russell 2000 Value
- ▲ Universe Median
- 68% Confidence Interval
- eA US Small Cap Value Equity Gross

# T. Rowe Price Small Cap Value

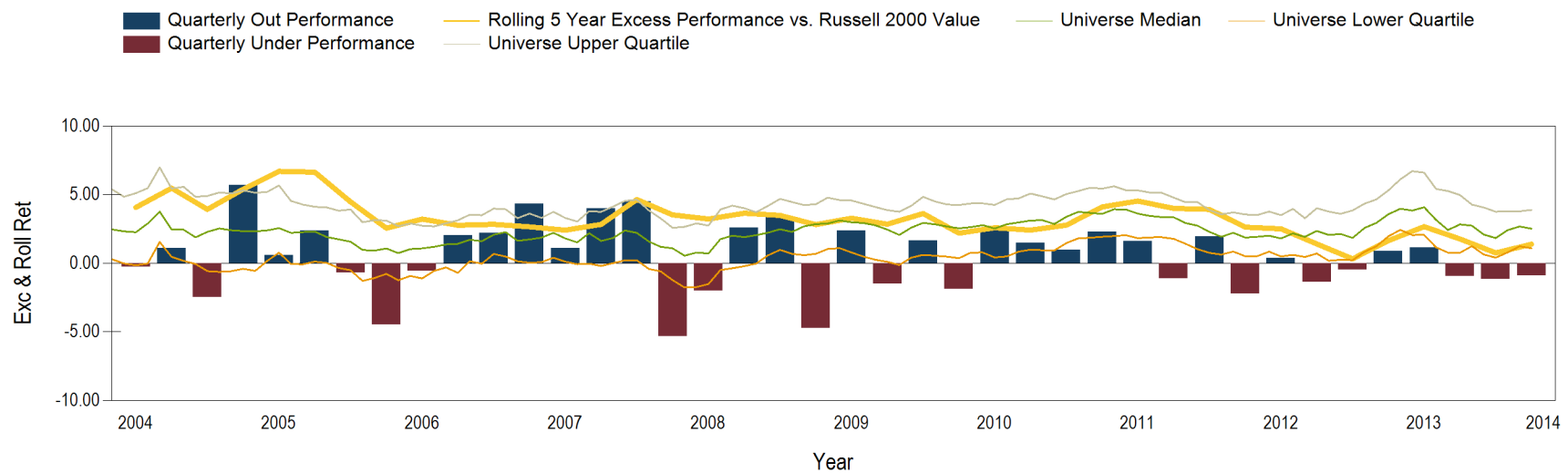
## Rolling Return Analysis

Period Ending: September 30, 2014

Rolling 3 Year Annualized Excess Performance



Rolling 5 Year Annualized Excess Performance



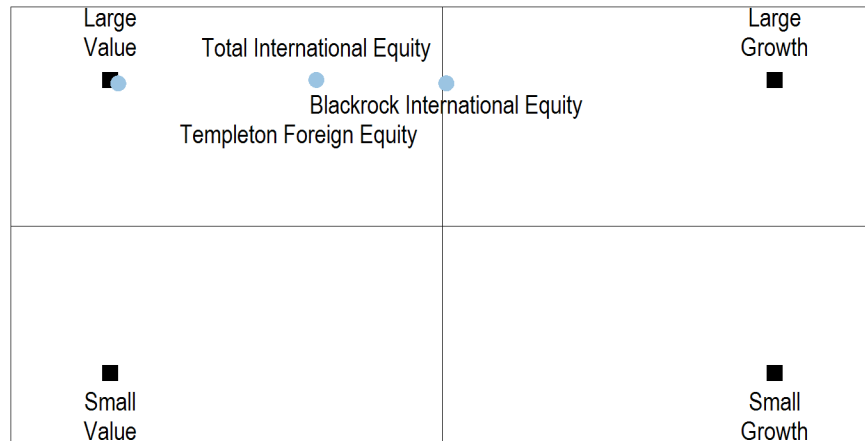
# International Equity

## Asset Class Overview (Gross of Fees)

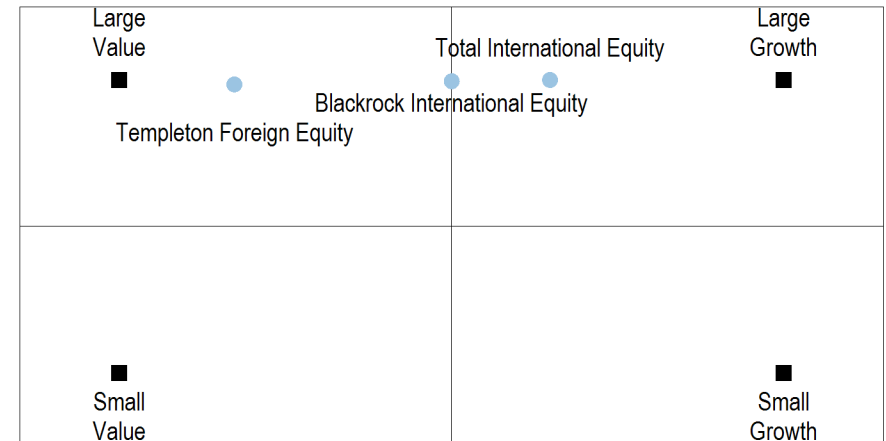
Period Ending: September 30, 2014

	Market Value	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2013	2012	2011	2010	2009
<b>Total International Equity</b>													
Blackrock International Equity	63,152,788	-5.9	-1.1	-5.9	4.5	14.0	6.9	6.7	23.2	17.8	-11.8	8.1	32.3
MSCI EAFE Gross		-5.8	-1.0	-5.8	4.7	14.2	7.0	6.8	23.3	17.9	-11.7	8.2	32.5
eA All EAFE Equity Gross Rank		58	54	58	65	75	82	83	61	74	48	79	68
Templeton Foreign Equity	62,342,274	-5.7	-1.8	-5.7	4.6	14.6	6.8	8.2	20.4	19.5	-10.2	7.5	34.7
MSCI ACWI ex USA Gross		-5.2	0.4	-5.2	5.2	12.3	6.5	7.5	15.8	17.4	-13.3	11.6	42.1
eA All ACWI ex-US Equity Gross Rank		62	68	62	63	50	81	60	47	50	28	92	74
DFA Emerging Markets Value	22,071,945	-4.3	2.5	-4.3	3.6	7.3	3.6	--	-3.2	20.1	-25.2	22.8	93.3
MSCI Emerging Markets Gross		-3.4	2.7	-3.4	4.7	7.6	4.8	--	-2.3	18.6	-18.2	19.2	79.0
eA Emg Mkts Equity Gross Rank		80	64	80	77	79	86	--	84	56	92	33	12
Vontobel Global Emerging Markets	24,000,000	--	--	--	--	--	--	--	--	--	--	--	--
MSCI Emerging Markets Gross		--	--	--	--	--	--	--	--	--	--	--	--
eA Emg Mkts Equity Gross Rank		--	--	--	--	--	--	--	--	--	--	--	--

EAFE Effective Style Map  
3 Years Ending September 30, 2014



EAFE Effective Style Map  
5 Years Ending September 30, 2014



# International Equity

## Asset Class Overview (Net of Fees)

Period Ending: September 30, 2014

	Market Value	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2013	2012	2011	2010	2009
<b>Total International Equity</b>													
Blackrock International Equity	63,152,788	-5.9	-1.2	-5.9	4.4	13.8	6.8	6.5	22.9	17.6	-11.9	7.9	32.1
MSCI EAFE Gross		-5.8	-1.0	-5.8	4.7	14.2	7.0	6.8	23.3	17.9	-11.7	8.2	32.5
Templeton Foreign Equity	62,342,274	-5.8	-2.4	-5.8	3.7	13.7	5.9	7.4	19.5	18.5	-10.9	6.7	33.6
MSCI ACWI ex USA Gross		-5.2	0.4	-5.2	5.2	12.3	6.5	7.5	15.8	17.4	-13.3	11.6	42.1
DFA Emerging Markets Value	22,071,945	-4.4	2.0	-4.4	3.1	6.6	3.0	--	-3.8	19.4	-25.6	22.1	92.3
MSCI Emerging Markets Gross		-3.4	2.7	-3.4	4.7	7.6	4.8	--	-2.3	18.6	-18.2	19.2	79.0
Vontobel Global Emerging Markets	24,000,000	--	--	--	--	--	--	--	--	--	--	--	--
MSCI Emerging Markets Gross		--	--	--	--	--	--	--	--	--	--	--	--

EM Effective Style Map  
3 Years Ending September 30, 2014

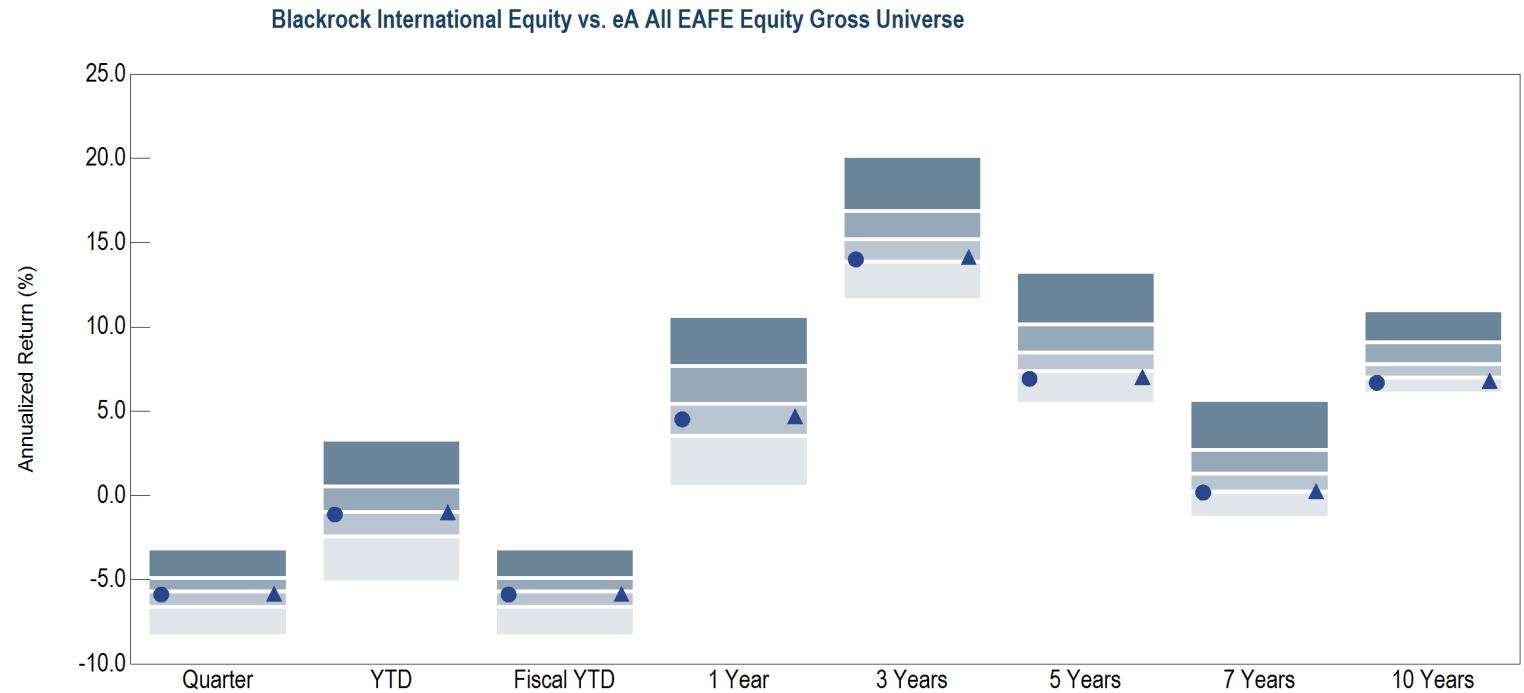


EM Effective Style Map  
5 Years Ending September 30, 2014



# Blackrock International Equity Cumulative Performance Comparison

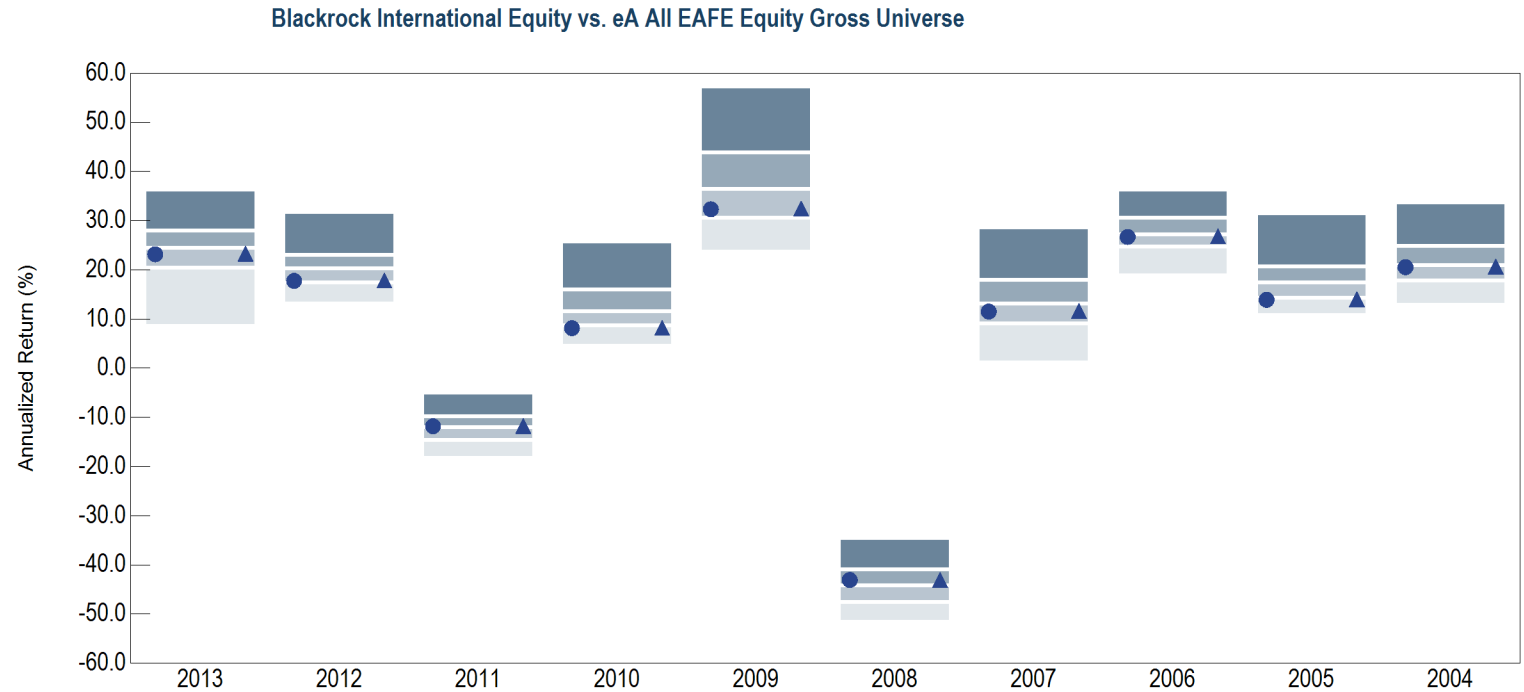
Period Ending: September 30, 2014



	Return (Rank)													
5th Percentile	-3.2		3.3		-3.2		10.6		20.1		13.2		5.7	
25th Percentile	-4.9		0.6		-4.9		7.7		16.9		10.2		2.7	
Median	-5.7		-0.9		-5.7		5.5		15.2		8.5		1.3	
75th Percentile	-6.6		-2.4		-6.6		3.6		13.9		7.4		0.3	
95th Percentile	-8.3		-5.1		-8.3		0.5		11.6		5.5		-1.3	
# of Portfolios	317		317		317		317		301		286		253	
● Blackrock International Equity	-5.9	(58)	-1.1	(54)	-5.9	(58)	4.5	(65)	14.0	(75)	6.9	(82)	0.2	(77)
▲ MSCI EAFE Gross	-5.8	(57)	-1.0	(52)	-5.8	(57)	4.7	(62)	14.2	(72)	7.0	(80)	0.3	(76)

# Blackrock International Equity Consecutive Performance Comparison

Period Ending: September 30, 2014

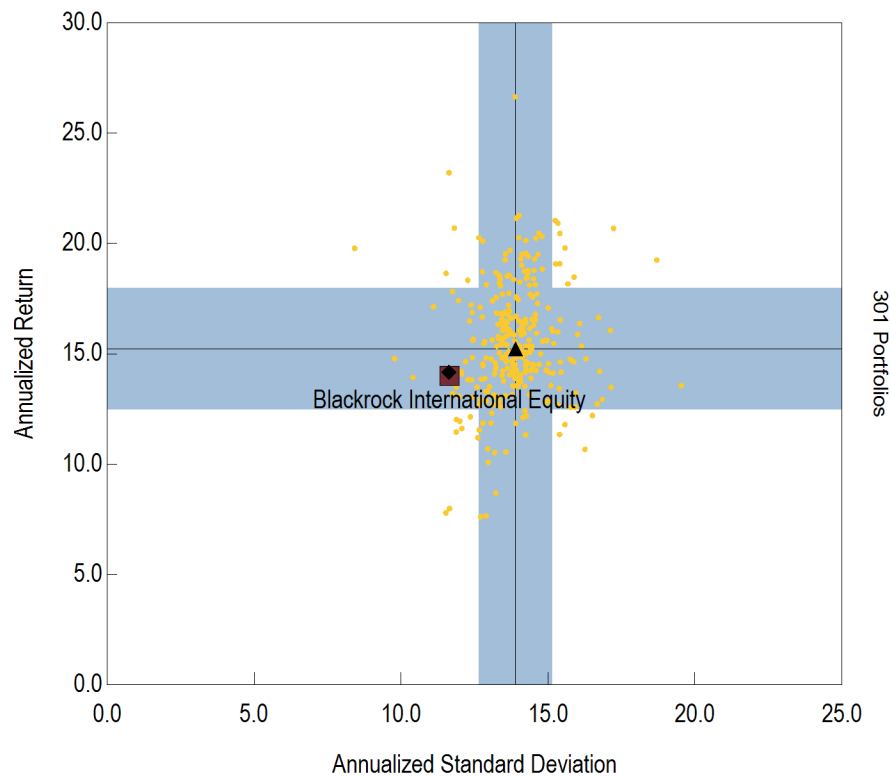


	Return (Rank)									
5th Percentile	36.3	31.7	-5.1	25.7	57.3	-34.5	28.5	36.2	31.5	33.6
25th Percentile	28.1	23.1	-9.7	16.1	44.0	-40.8	18.0	30.7	20.8	25.0
Median	24.6	20.4	-12.0	11.7	36.5	-44.1	13.2	27.3	17.5	21.0
75th Percentile	20.5	17.5	-14.5	8.7	30.7	-47.5	9.1	24.8	14.4	17.9
95th Percentile	8.6	13.3	-18.2	4.6	23.7	-51.5	1.2	18.9	10.8	13.0
# of Portfolios	284	263	278	352	455	477	466	434	409	383
● Blackrock International Equity	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)	20.5 (53)
▲ MSCI EAFE Gross	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)	20.7 (52)

# Blackrock International Equity Risk vs Return Three & Five Year

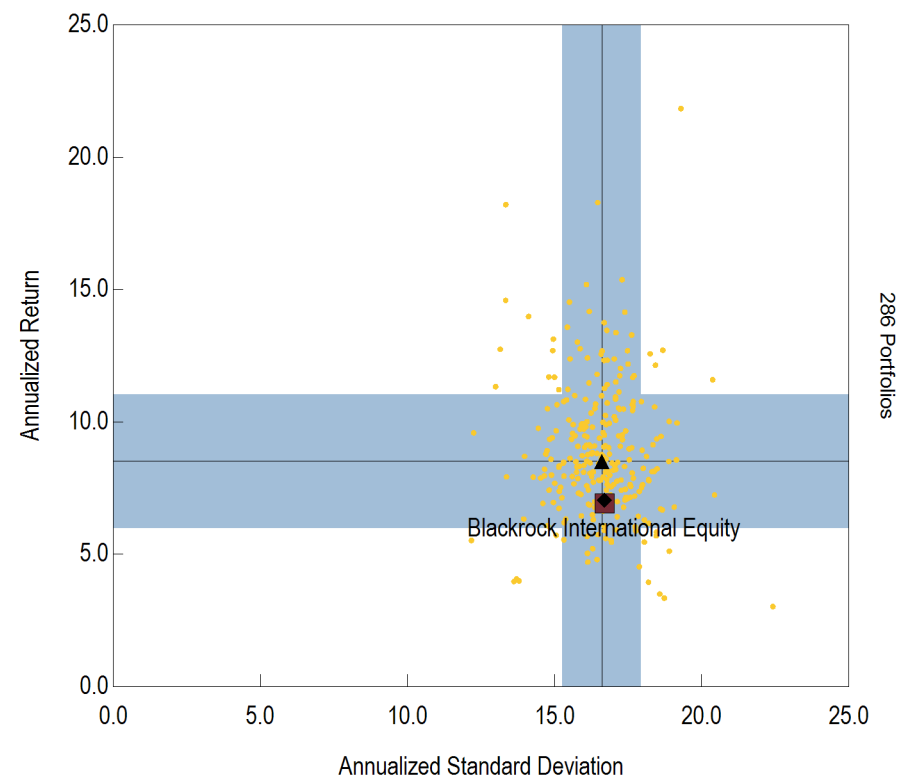
Period Ending: September 30, 2014

Risk vs. Return  
3 Years Ending September 30, 2014



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

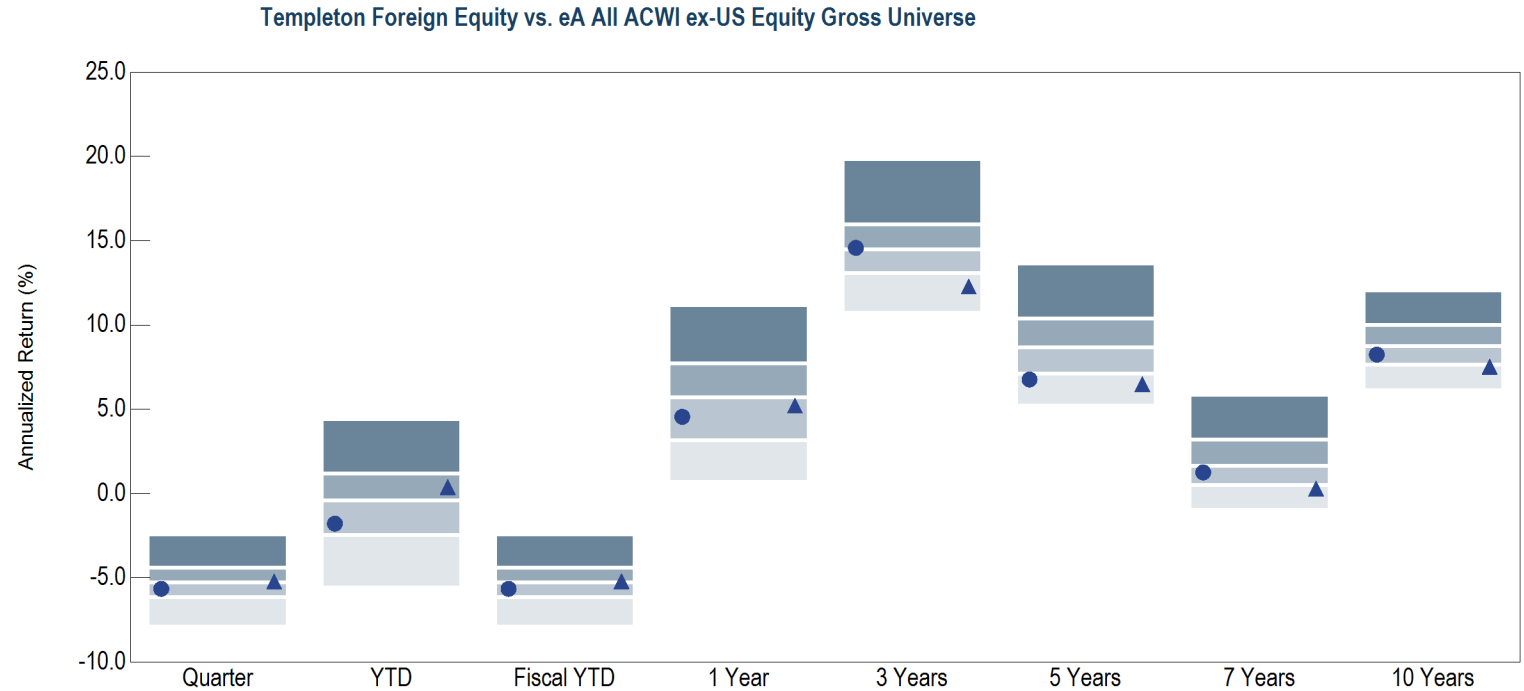
Risk vs. Return  
5 Years Ending September 30, 2014



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

# Templeton Foreign Equity Cumulative Performance Comparison

Period Ending: September 30, 2014

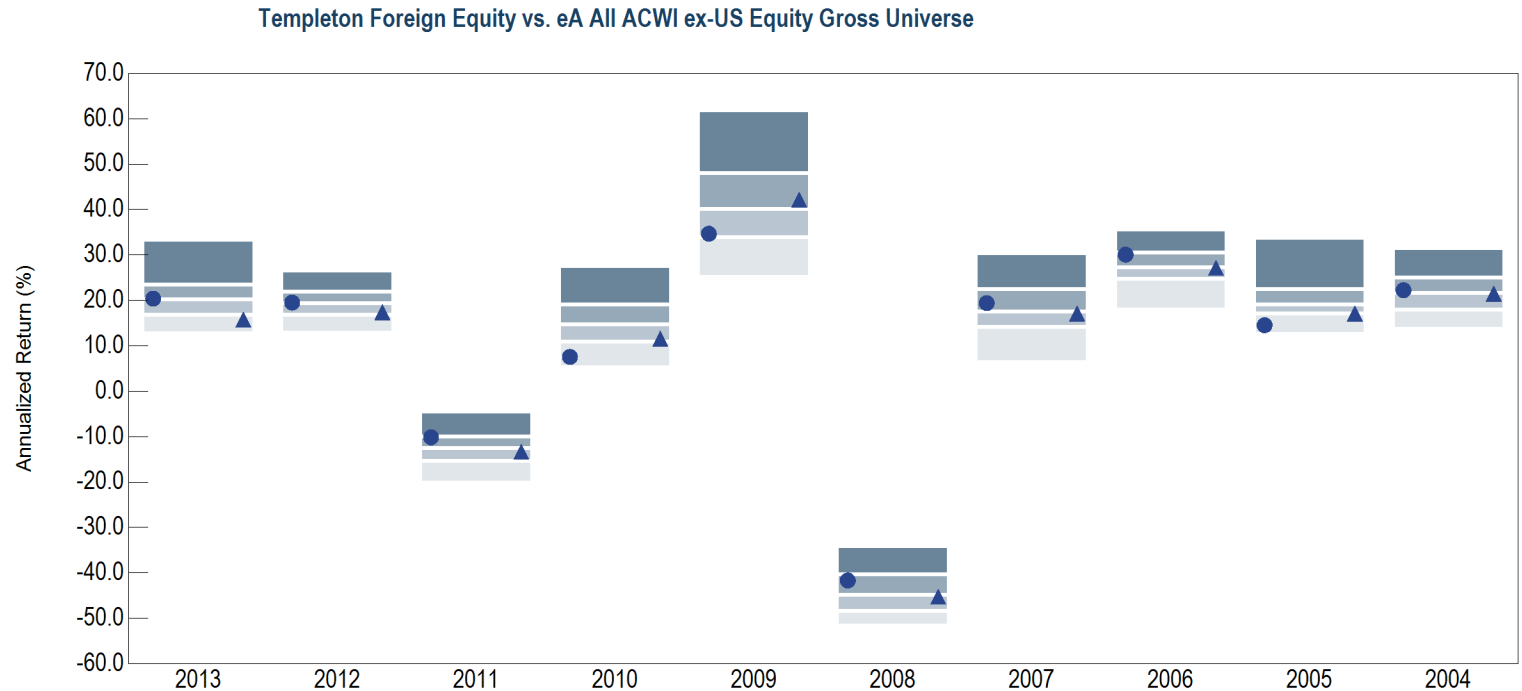


	Return (Rank)													
5th Percentile	-2.4		4.4		-2.4		11.2		19.8		13.6		5.8	
25th Percentile	-4.4		1.2		-4.4		7.7		16.0		10.4		3.2	
Median	-5.2		-0.4		-5.2		5.7		14.5		8.7		1.7	
75th Percentile	-6.1		-2.4		-6.1		3.2		13.1		7.2		0.5	
95th Percentile	-7.9		-5.6		-7.9		0.7		10.8		5.2		-1.0	
# of Portfolios	198		198		198		198		183		166		140	
● Templeton Foreign Equity	-5.7	(62)	-1.8	(68)	-5.7	(62)	4.6	(63)	14.6	(50)	6.8	(81)	1.3	(58)
▲ MSCI ACWI ex USA Gross	-5.2	(48)	0.4	(37)	-5.2	(48)	5.2	(58)	12.3	(82)	6.5	(87)	0.3	(81)



# Templeton Foreign Equity Consecutive Performance Comparison

Period Ending: September 30, 2014



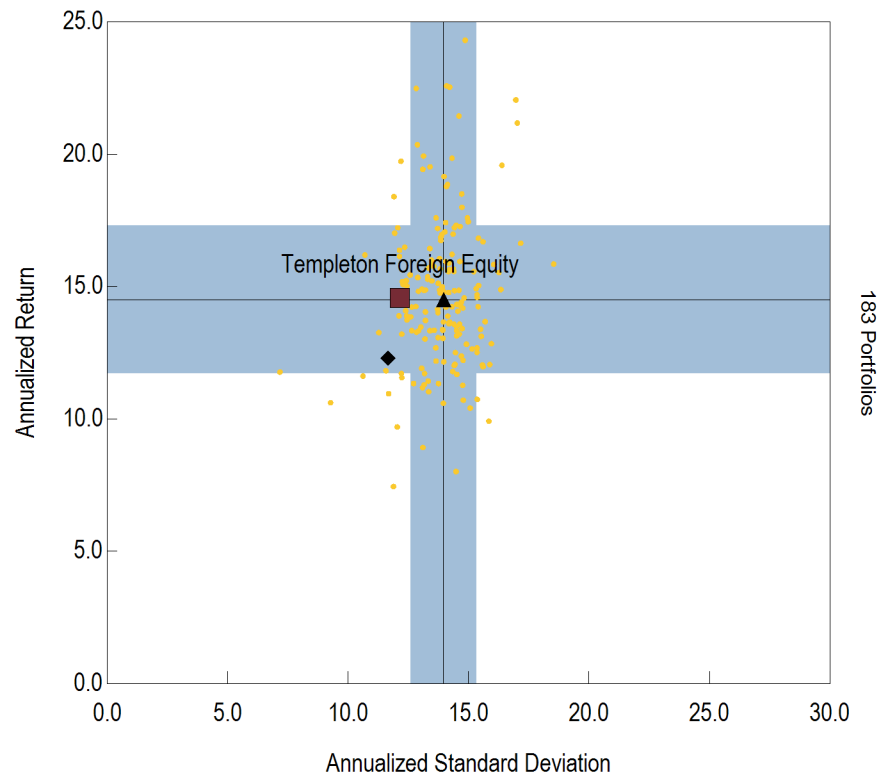
	Return (Rank)									
5th Percentile	33.2	26.5	-4.6	27.5	61.9	-34.1	30.4	35.6	33.7	31.5
25th Percentile	23.5	22.1	-9.8	19.2	48.1	-40.2	22.5	30.6	22.5	25.1
Median	20.2	19.5	-12.4	14.8	40.2	-44.7	17.6	27.4	19.1	21.7
75th Percentile	16.9	16.8	-15.2	11.0	34.0	-48.3	14.3	24.8	17.3	18.0
95th Percentile	12.8	13.0	-20.0	5.4	25.2	-51.5	6.5	18.1	12.7	13.8
# of Portfolios	181	174	169	153	149	136	130	117	104	91
● Templeton Foreign Equity	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)	22.2 (44)
▲ MSCI ACWI ex USA Gross	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)	21.5 (51)

# Templeton Foreign Equity

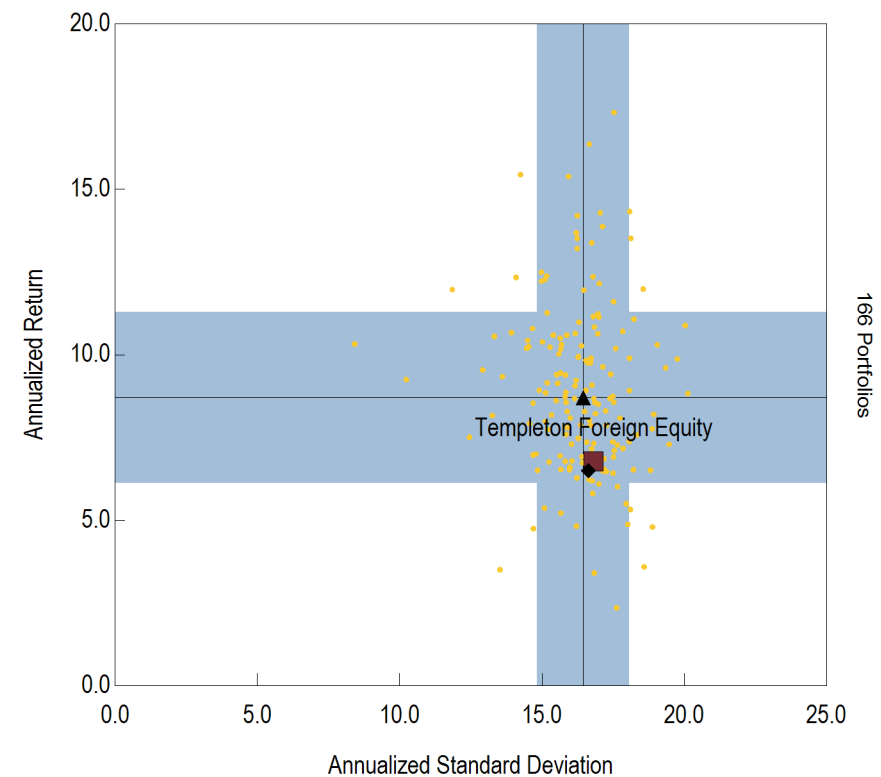
## Risk vs Return Three & Five Year

Period Ending: September 30, 2014

Risk vs. Return  
3 Years Ending September 30, 2014



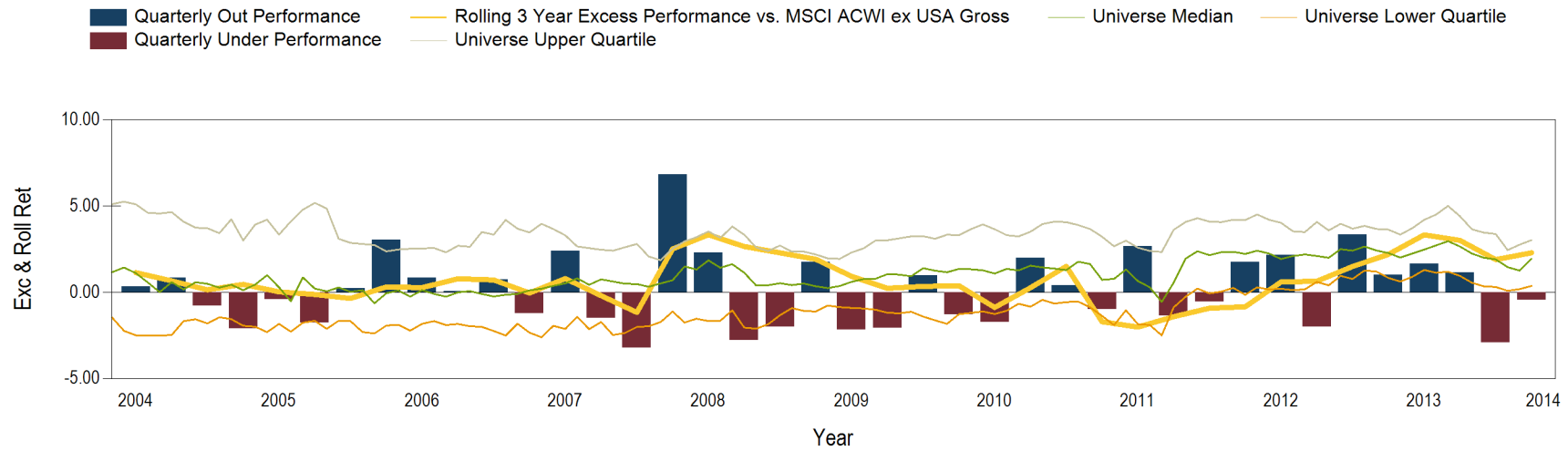
Risk vs. Return  
5 Years Ending September 30, 2014



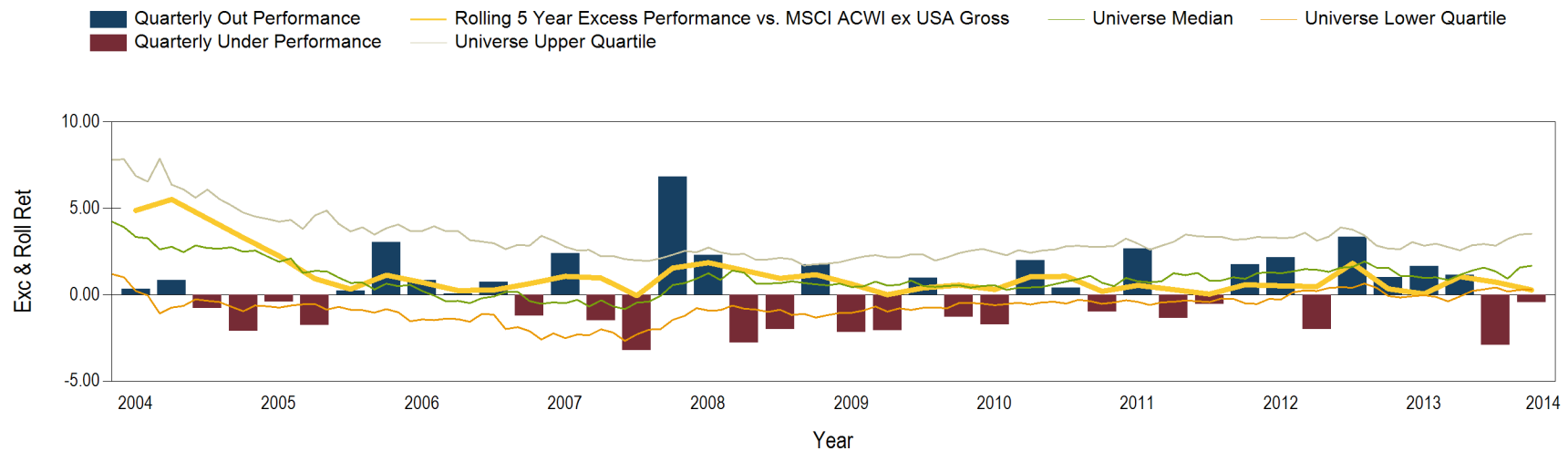
# Templeton Foreign Equity Rolling Return Analysis

Period Ending: September 30, 2014

Rolling 3 Year Annualized Excess Performance

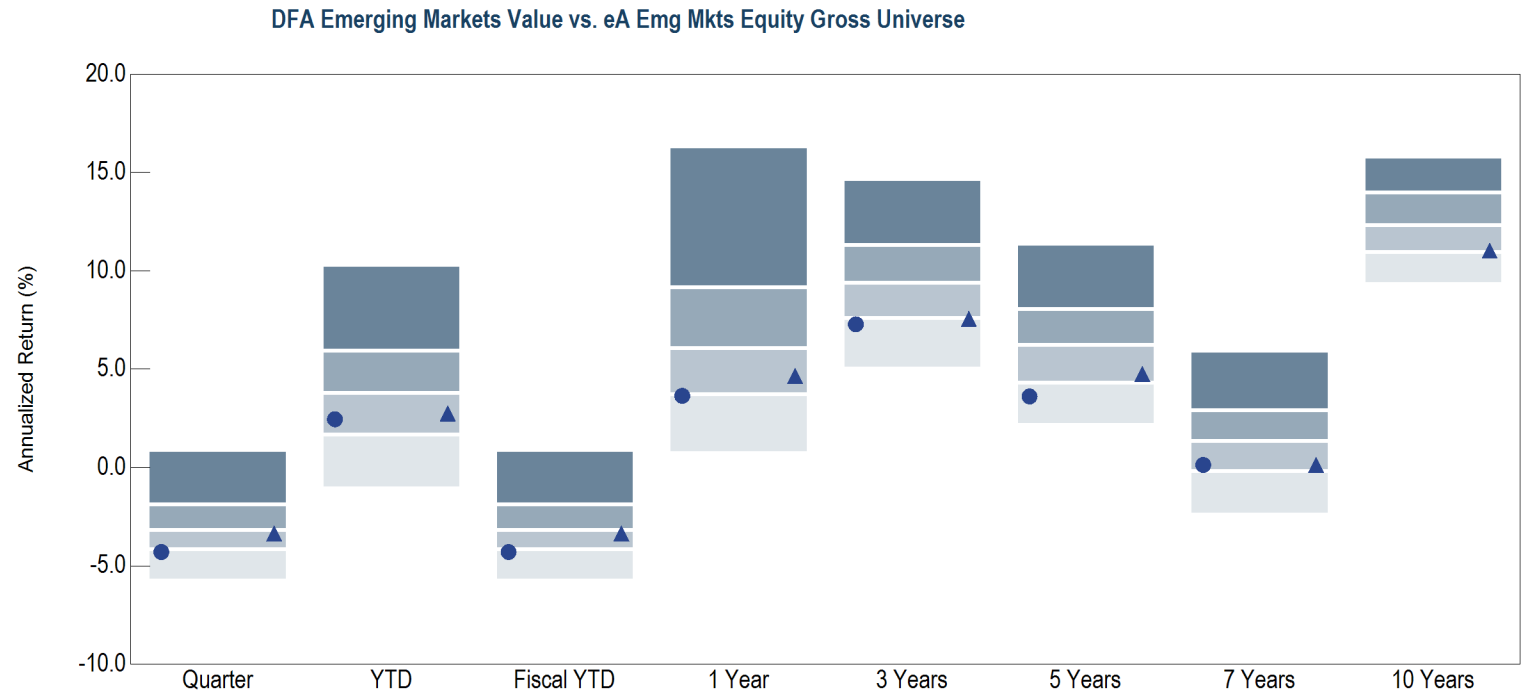


Rolling 5 Year Annualized Excess Performance



# DFA Emerging Markets Value Cumulative Performance Comparison

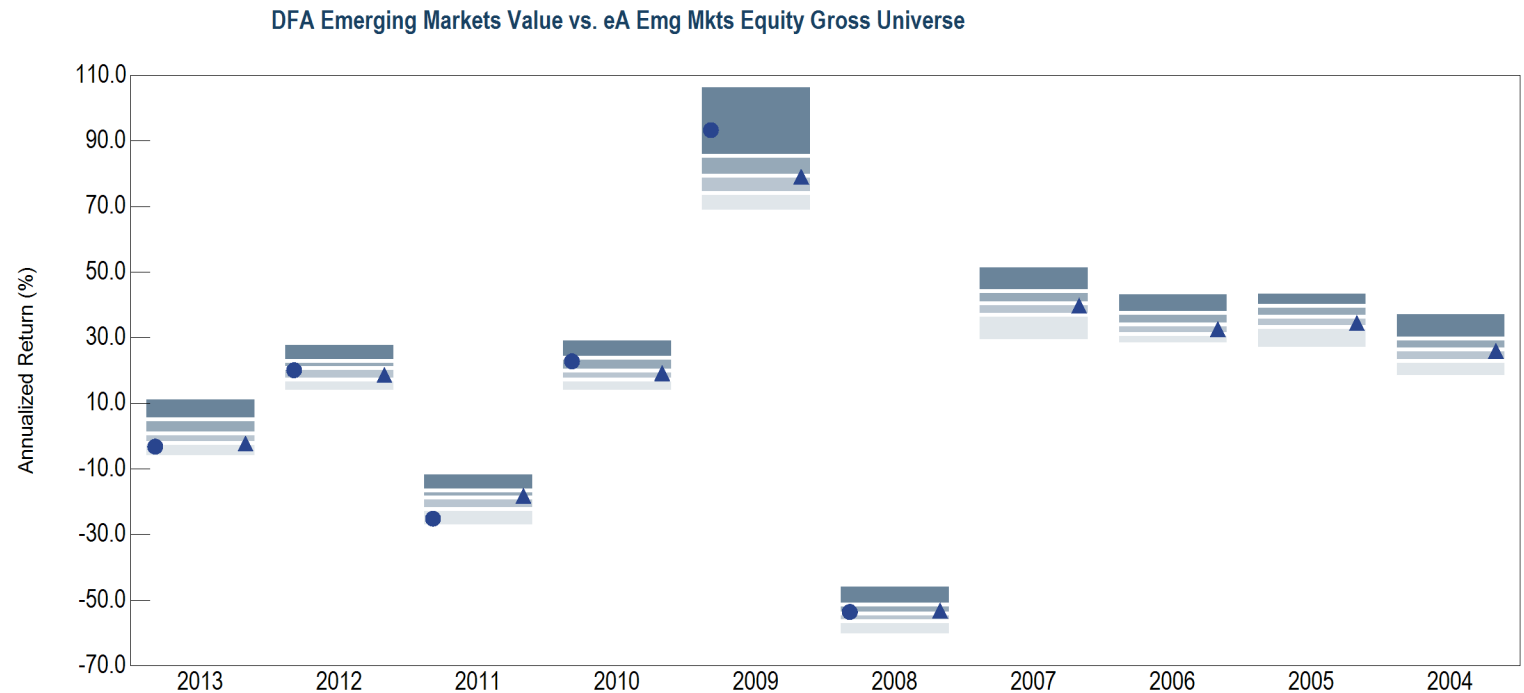
Period Ending: September 30, 2014



	Return (Rank)													
5th Percentile	0.9		10.3		0.9		16.3		14.7		11.3		5.9	15.8
25th Percentile	-1.9		5.9		-1.9		9.2		11.3		8.1		2.9	14.0
Median	-3.2		3.8		-3.2		6.1		9.4		6.2		1.4	12.3
75th Percentile	-4.1		1.7		-4.1		3.7		7.6		4.3		-0.1	11.0
95th Percentile	-5.7		-1.0		-5.7		0.7		5.0		2.2		-2.4	9.4
# of Portfolios	239		239		239		238		198		149		122	81
● DFA Emerging Markets Value	-4.3	(80)	2.5	(64)	-4.3	(80)	3.6	(77)	7.3	(79)	3.6	(86)	0.1	(73)
▲ MSCI Emerging Markets Gross	-3.4	(56)	2.7	(62)	-3.4	(56)	4.7	(69)	7.6	(76)	4.8	(72)	0.1	(73)

# DFA Emerging Markets Value Consecutive Performance Comparison

Period Ending: September 30, 2014

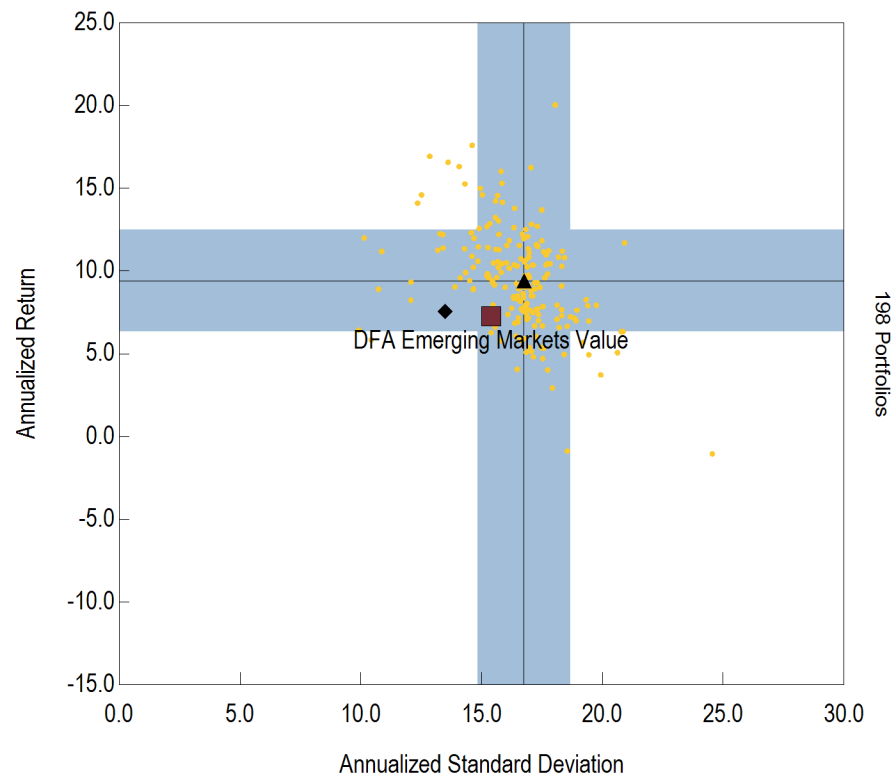


	Return (Rank)									
5th Percentile	11.7	28.4	-11.1	29.6	106.8	-45.4	51.9	43.7	43.9	37.7
25th Percentile	5.2	23.0	-16.4	23.9	85.5	-51.3	44.3	37.7	39.8	29.9
Median	1.0	20.9	-18.6	20.1	79.5	-54.0	40.5	34.2	36.5	26.5
75th Percentile	-2.0	17.3	-22.2	17.3	74.3	-56.3	37.1	31.2	33.4	23.0
95th Percentile	-6.3	13.7	-27.3	13.7	68.5	-60.7	29.1	28.1	26.7	18.1
# of Portfolios	198	155	139	113	113	118	115	108	101	94
● DFA Emerging Markets Value	-3.2 (84)	20.1 (56)	-25.2 (92)	22.8 (33)	93.3 (12)	-53.6 (44)	-- (--)	-- (--)	-- (--)	-- (--)
▲ MSCI Emerging Markets Gross	-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)	26.0 (56)

# DFA Emerging Markets Value Risk vs Return Three & Five Year

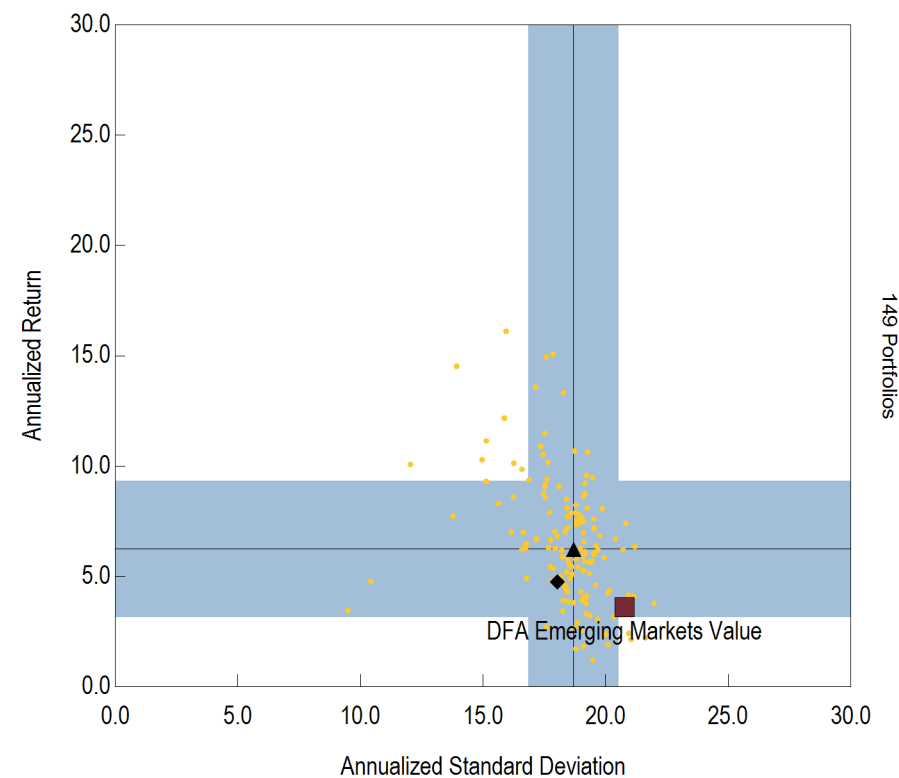
Period Ending: September 30, 2014

Risk vs. Return  
3 Years Ending September 30, 2014



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

Risk vs. Return  
5 Years Ending September 30, 2014

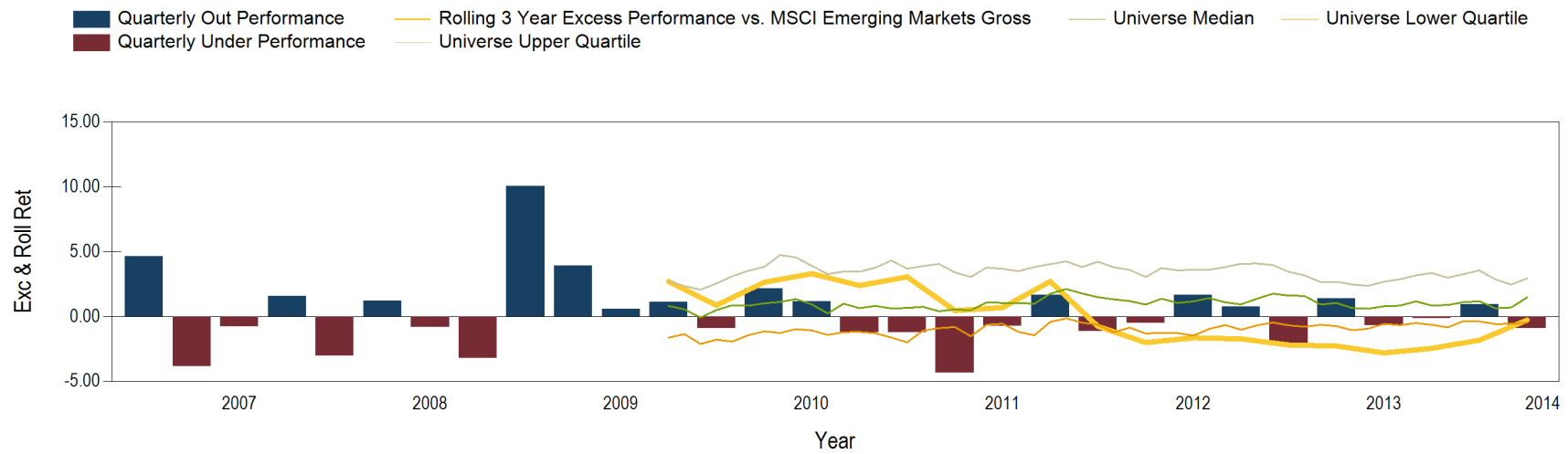


- DFA Emerging Markets Value
- ◆ MSCI Emerging Markets Gross
- ▲ Universe Median
- 68% Confidence Interval
- eA Emg Mkts Equity Gross

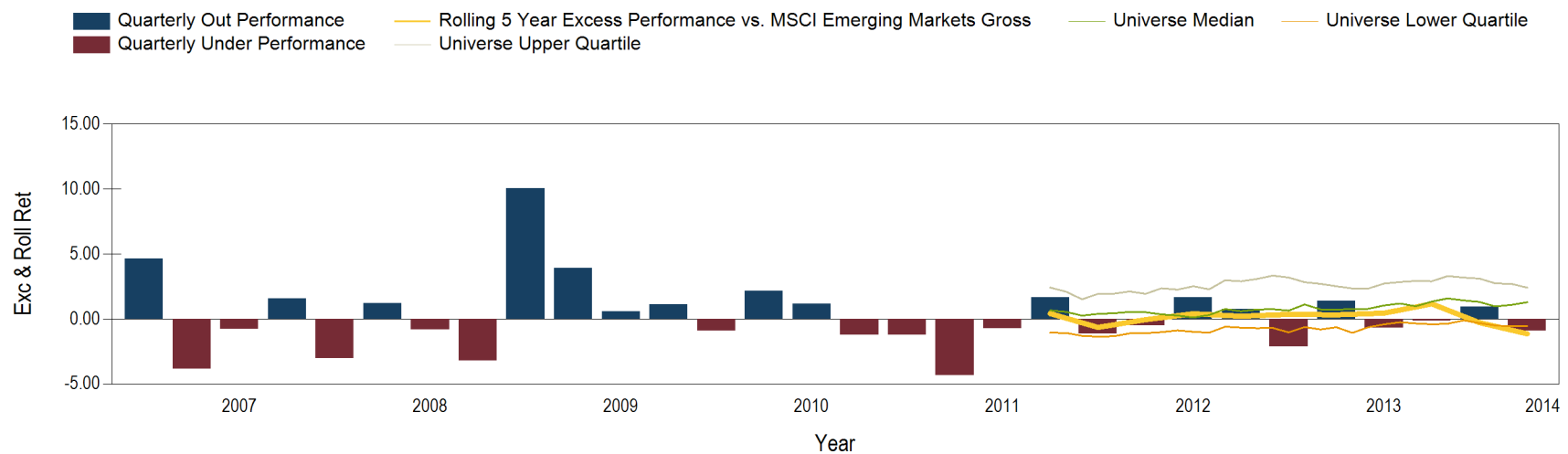
# DFA Emerging Markets Value Rolling Return Analysis

Period Ending: September 30, 2014

Rolling 3 Year Annualized Excess Performance



Rolling 5 Year Annualized Excess Performance



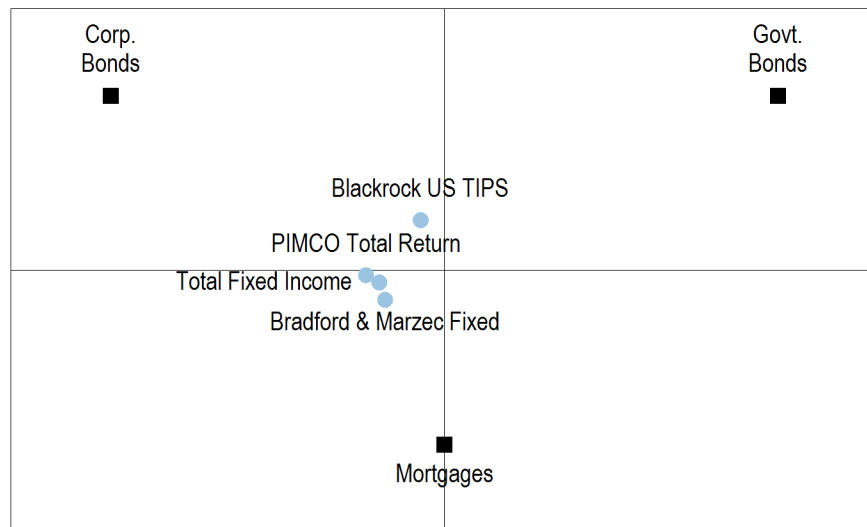
# Fixed Income

## Asset Class Overview (Gross of Fees)

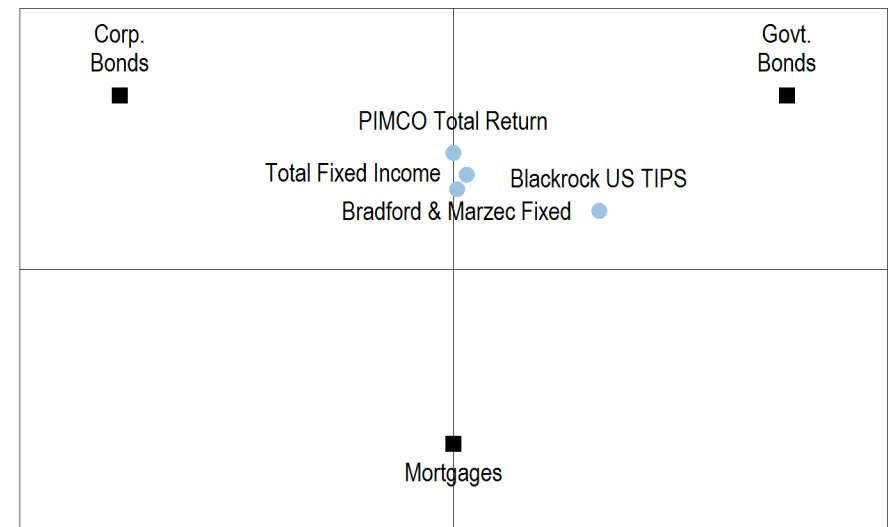
Period Ending: September 30, 2014

	Market Value	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2013	2012	2011	2010	2009
<b>Total Fixed Income</b>													
Bradford & Marzec Fixed	87,968,602	-0.1	5.2	5.2	6.3	5.3	6.5	6.3	-0.4	8.8	7.4	9.6	13.5
Barclays Aggregate		0.2	4.1	4.1	4.0	2.4	4.1	4.6	-2.0	4.2	7.8	6.5	5.9
eA US Core Plus Fixed Inc Gross Rank		69	28	28	30	45	45	29	52	45	51	40	55
PIMCO Total Return	83,608,766	-0.2	3.7	3.7	3.8	5.1	5.6	--	-1.3	11.0	4.7	9.3	--
Barclays Aggregate		0.2	4.1	4.1	4.0	2.4	4.1	--	-2.0	4.2	7.8	6.5	--
eA US Core Plus Fixed Inc Gross Rank		78	90	90	93	48	72	--	80	18	94	45	--
Blackrock US TIPS	14,629,814	-2.1	3.7	3.7	1.7	1.4	4.6	--	-8.5	7.1	13.7	6.4	11.4
Barclays US TIPS		-2.0	3.7	3.7	1.6	1.3	4.5	--	-8.6	7.0	13.6	6.3	11.4
eA TIPS / Infl Indexed Fixed Inc Gross Rank		71	43	43	29	51	66	--	62	59	37	52	36

Effective Style Map  
3 Years Ending September 30, 2014



Effective Style Map  
5 Years Ending September 30, 2014





## Fixed Income

### Asset Class Overview (Net of Fees)

Period Ending: September 30, 2014

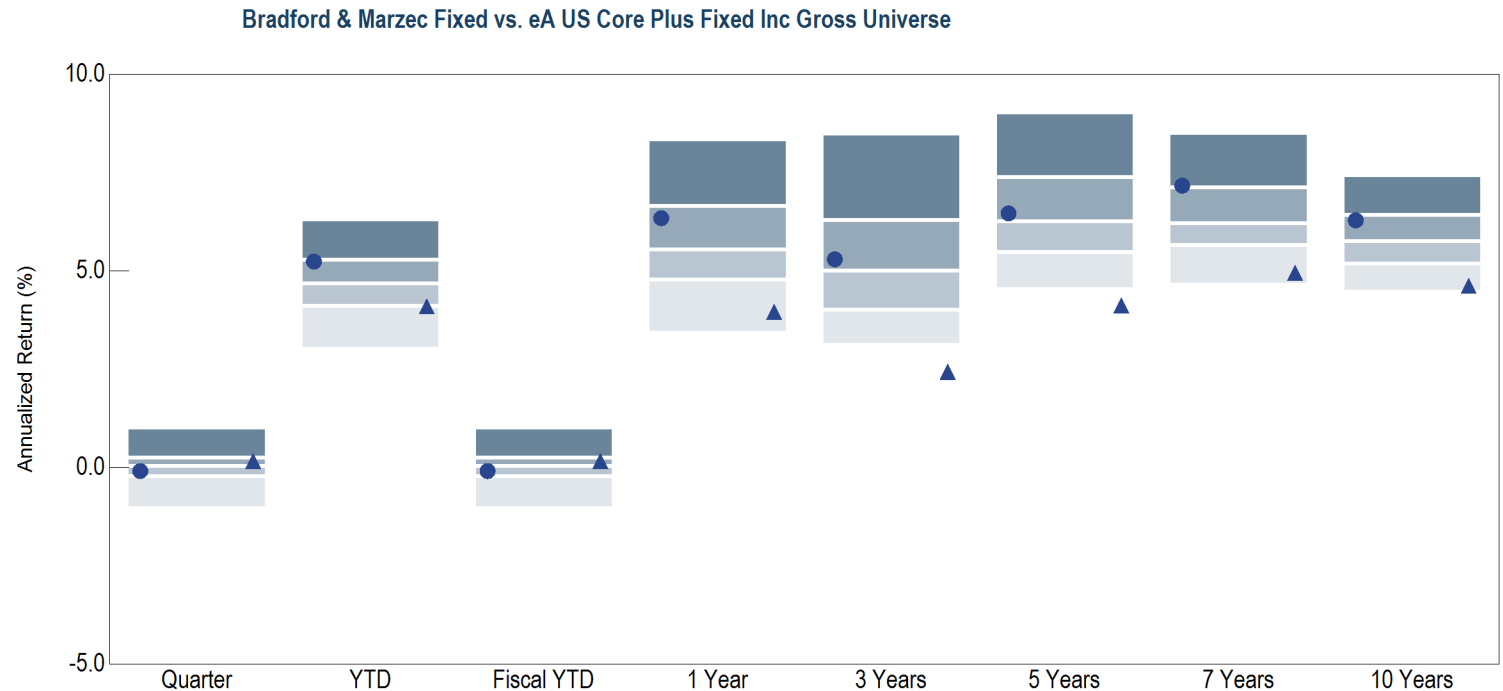
	Market Value	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2013	2012	2011	2010	2009
<b>Total Fixed Income</b>													
Bradford & Marzec Fixed	87,968,602	-0.2	5.0	5.0	6.0	4.9	6.1	6.0	-0.8	8.5	7.1	9.3	13.1
Barclays Aggregate		0.2	4.1	4.1	4.0	2.4	4.1	4.6	-2.0	4.2	7.8	6.5	5.9
PIMCO Total Return	83,608,766	-0.4	3.3	3.3	3.3	4.6	5.1	--	-1.9	10.4	4.2	8.8	--
Barclays Aggregate		0.2	4.1	4.1	4.0	2.4	4.1	--	-2.0	4.2	7.8	6.5	--
Blackrock US TIPS	14,629,814	-2.1	3.7	3.7	1.6	1.3	4.5	--	-8.6	7.0	13.6	6.3	11.3
Barclays US TIPS		-2.0	3.7	3.7	1.6	1.3	4.5	--	-8.6	7.0	13.6	6.3	11.4

#### Correlation Matrix Last 5 Years

	Total Fixed Income	Bradford & Marzec Fixed	PIMCO Total Return	Blackrock US TIPS	Barclays Aggregate
Total Fixed Income	1.00	--	--	--	--
Bradford & Marzec Fixed	0.98	1.00	--	--	--
PIMCO Total Return	0.95	0.94	1.00	--	--
Blackrock US TIPS	0.81	0.77	0.68	1.00	--
Barclays Aggregate	0.73	0.68	0.60	0.86	1.00

# Bradford & Marzec Fixed Cumulative Performance Comparison

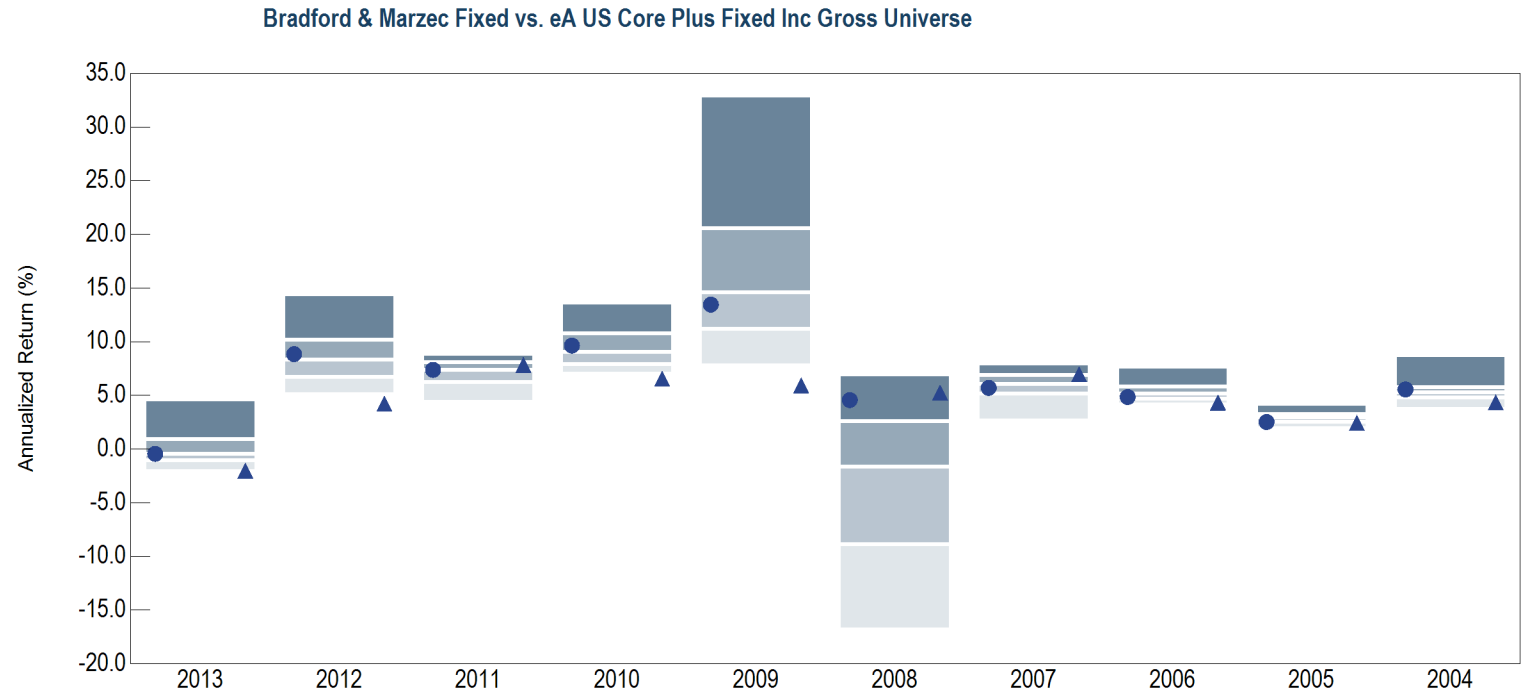
Period Ending: September 30, 2014



	Return (Rank)															
5th Percentile	1.0		6.3		1.0		8.3		8.5		9.0		8.5		7.4	
25th Percentile	0.3		5.3		0.3		6.7		6.3		7.4		7.1		6.4	
Median	0.0		4.7		0.0		5.6		5.0		6.3		6.2		5.8	
75th Percentile	-0.2		4.1		-0.2		4.8		4.0		5.5		5.7		5.2	
95th Percentile	-1.0		3.0		-1.0		3.4		3.1		4.5		4.7		4.5	
# of Portfolios	122		122		122		122		122		119		106		90	
● Bradford & Marzec Fixed	-0.1	(69)	5.2	(28)	-0.1	(69)	6.3	(30)	5.3	(45)	6.5	(45)	7.2	(24)	6.3	(29)
▲ Barclays Aggregate	0.2	(37)	4.1	(77)	0.2	(37)	4.0	(91)	2.4	(99)	4.1	(99)	4.9	(93)	4.6	(94)

# Bradford & Marzec Fixed Consecutive Performance Comparison

Period Ending: September 30, 2014

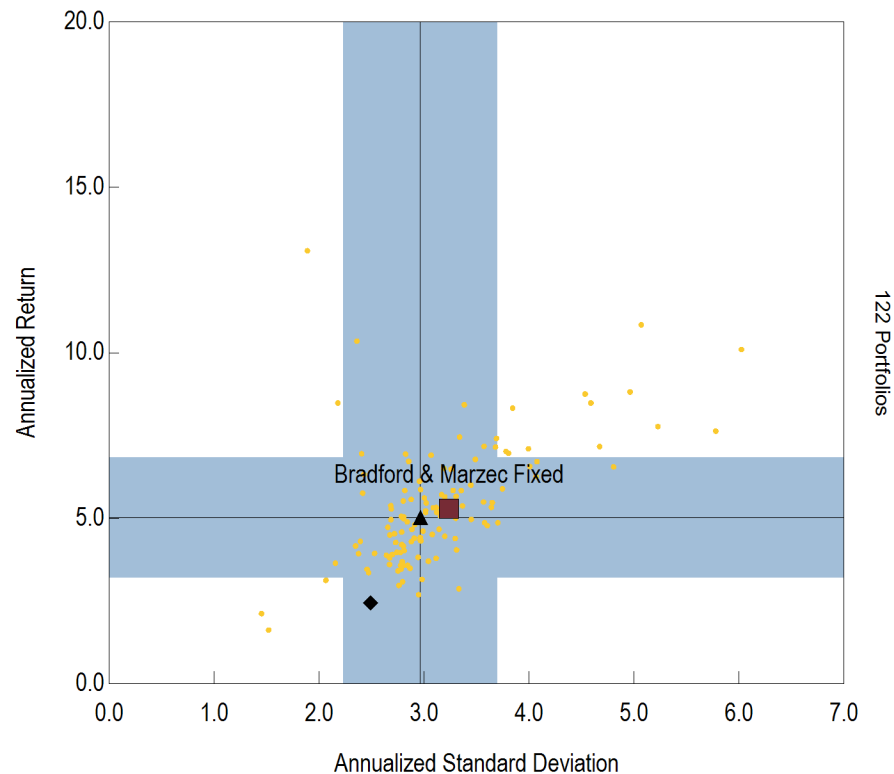


	Return (Rank)									
5th Percentile	4.6	14.4	8.8	13.6	32.9	6.9	7.9	7.6	4.2	8.7
25th Percentile	1.0	10.2	8.1	10.8	20.6	2.7	6.9	5.9	3.3	5.8
Median	-0.4	8.3	7.4	9.1	14.6	-1.6	6.1	5.2	3.0	5.3
75th Percentile	-1.0	6.7	6.3	8.0	11.2	-8.9	5.2	4.7	2.6	4.8
95th Percentile	-2.0	5.1	4.4	7.0	7.8	-16.8	2.7	4.2	2.0	3.7
# of Portfolios	116	124	118	123	128	136	144	146	141	150
● Bradford & Marzec Fixed	-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)	5.5 (38)
▲ Barclays Aggregate	-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)	4.3 (89)

# Bradford & Marzec Fixed Risk vs Return Three & Five Year

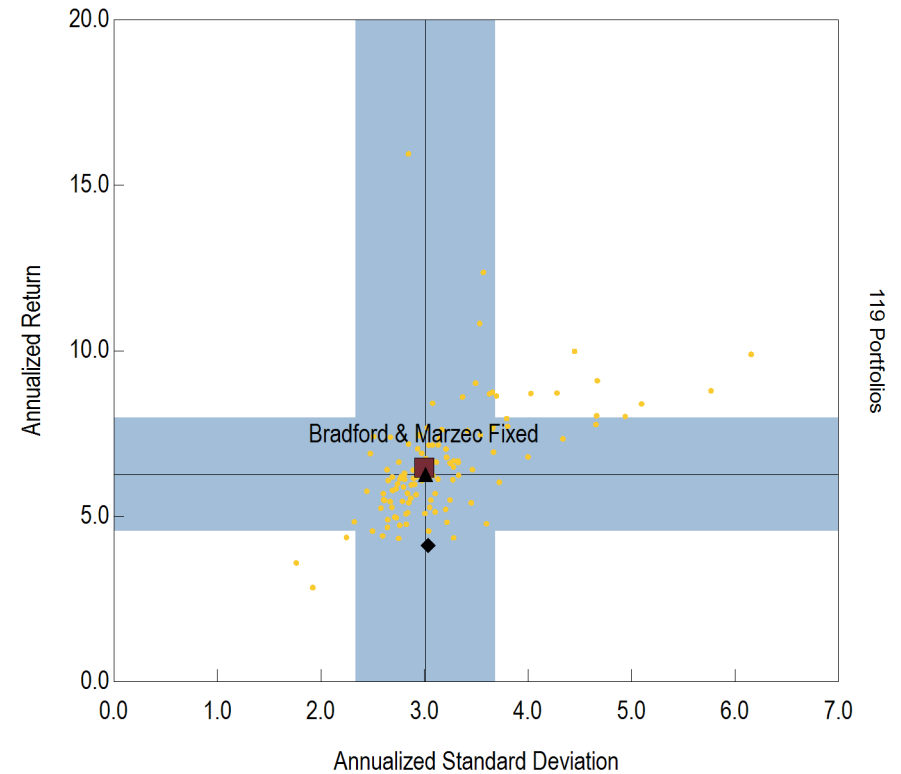
Period Ending: September 30, 2014

Risk vs. Return  
3 Years Ending September 30, 2014



- Bradford & Marzec Fixed
- ◆ Barclays Aggregate
- ▲ Universe Median
- 68% Confidence Interval
- eA US Core Plus Fixed Inc Gross

Risk vs. Return  
5 Years Ending September 30, 2014

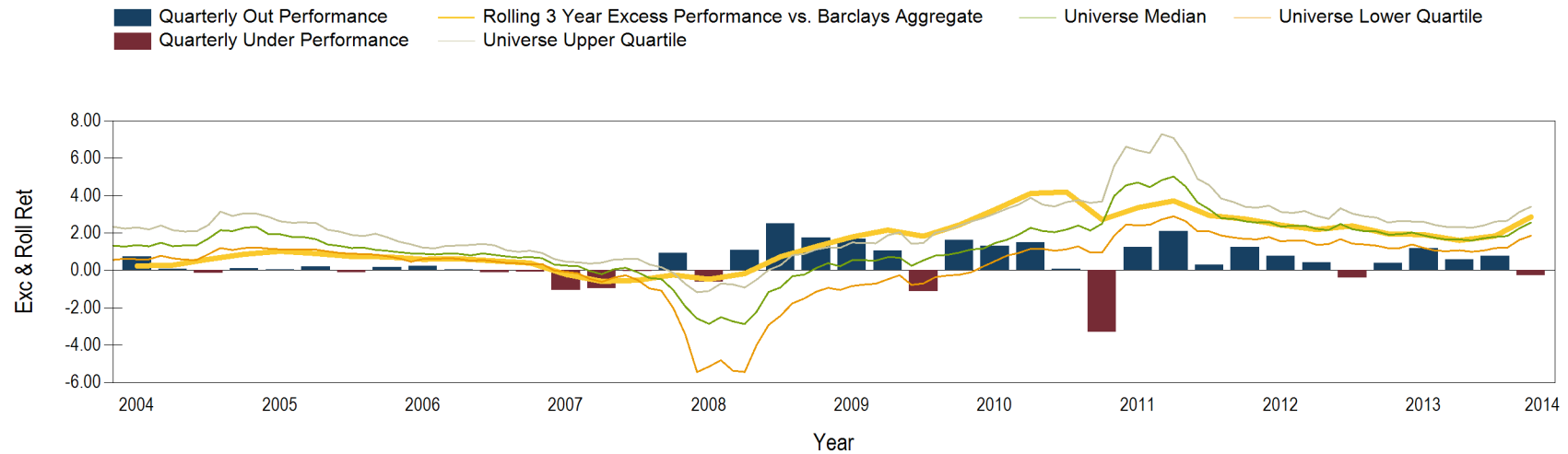


- Bradford & Marzec Fixed
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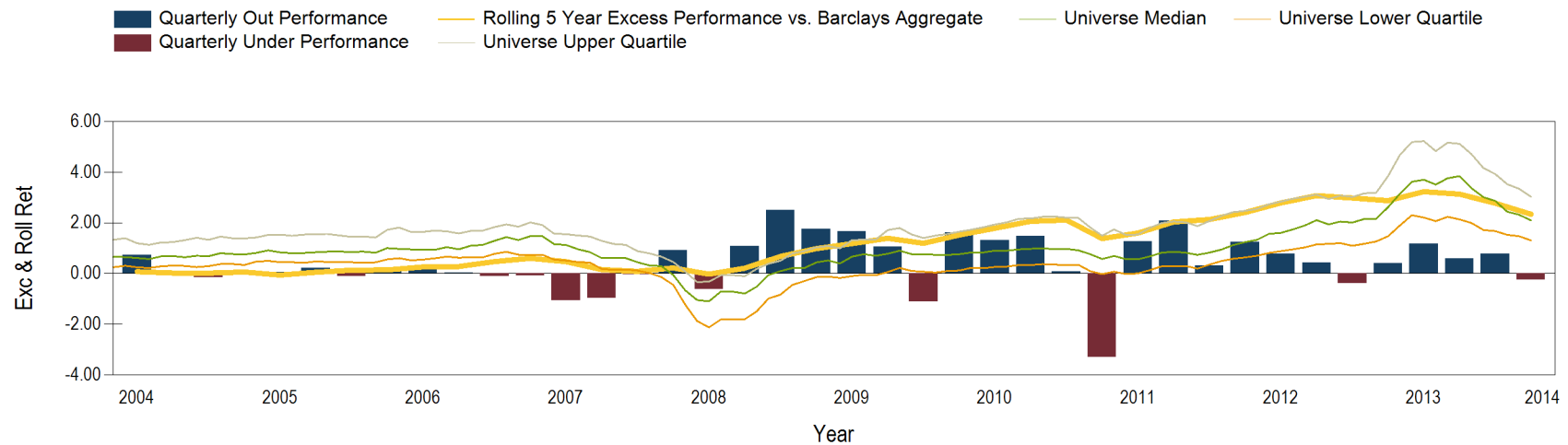
# Bradford & Marzec Fixed Rolling Return Analysis

Period Ending: September 30, 2014

## Rolling 3 Year Annualized Excess Performance

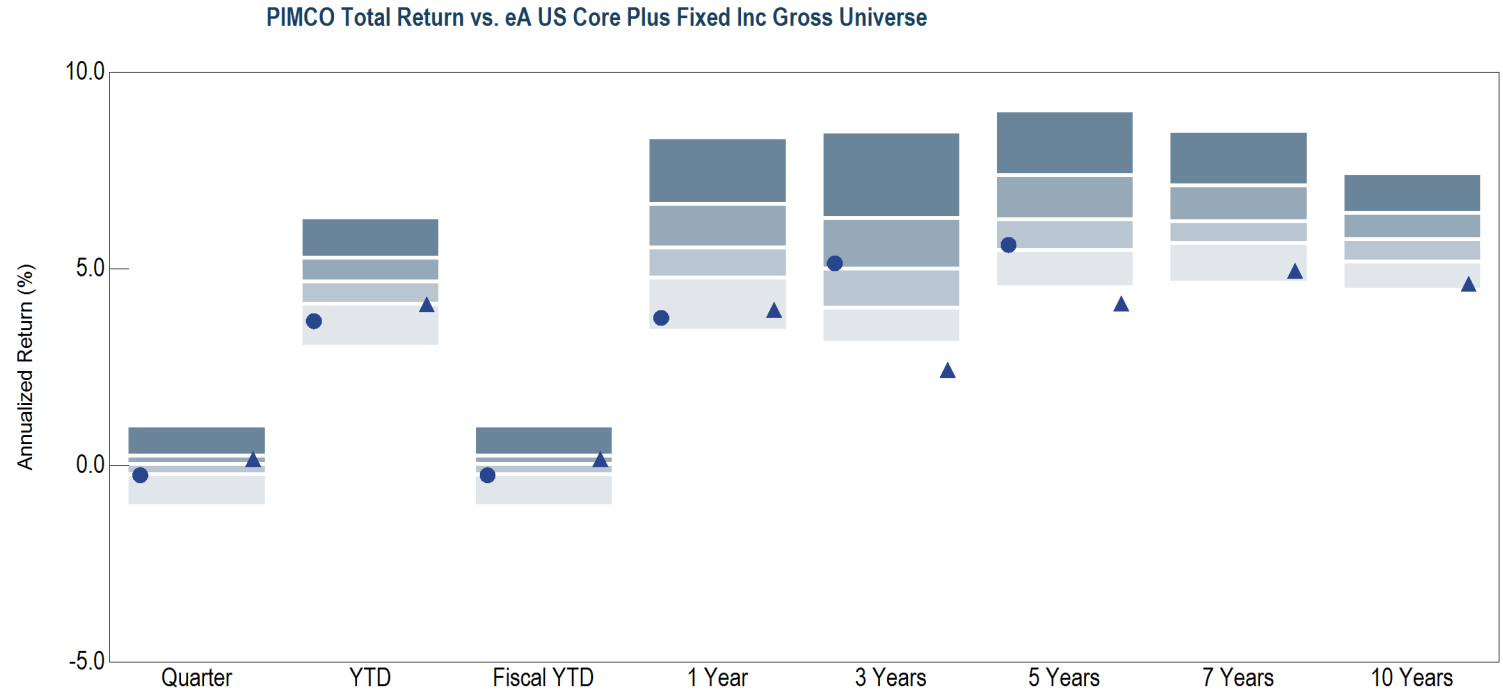


## Rolling 5 Year Annualized Excess Performance



# PIMCO Total Return Cumulative Performance Comparison

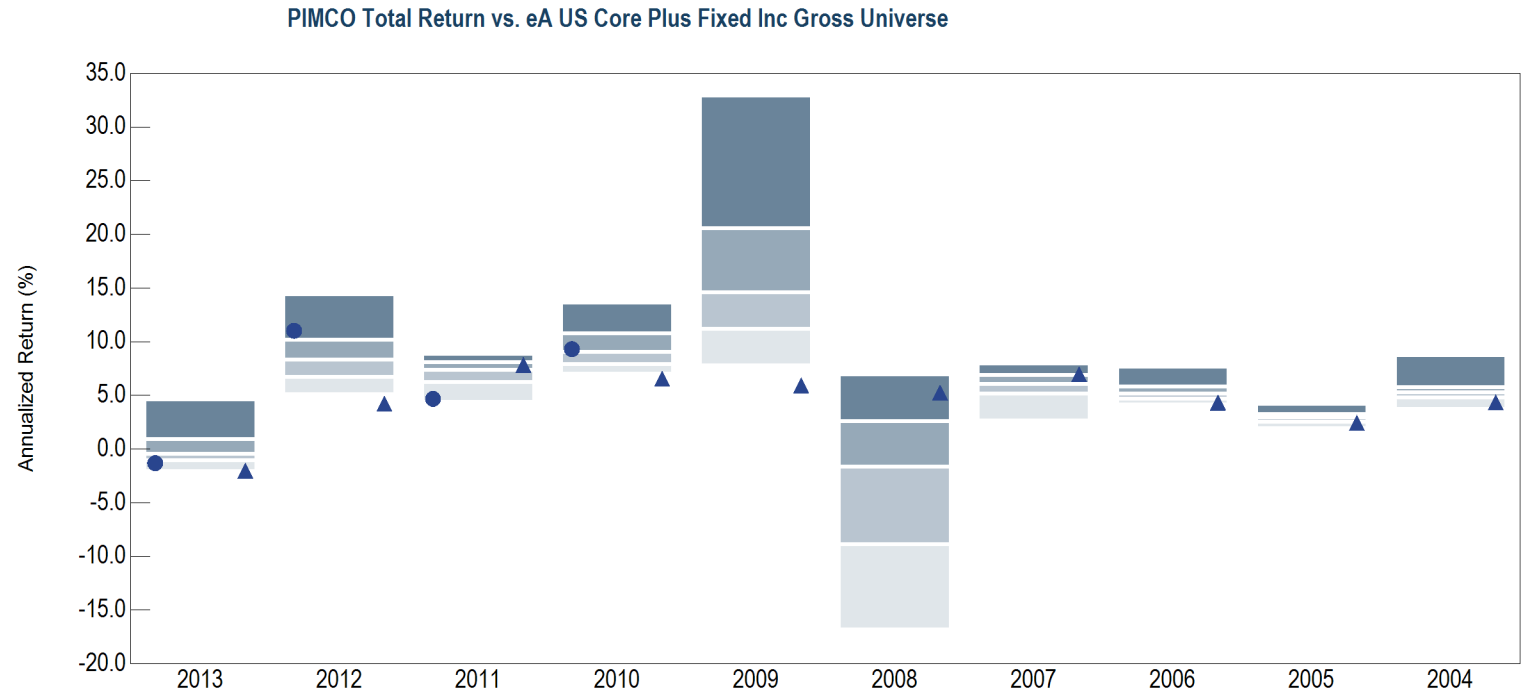
Period Ending: September 30, 2014



	Return (Rank)													
5th Percentile	1.0		6.3		1.0		8.3		8.5		9.0		8.5	
25th Percentile	0.3		5.3		0.3		6.7		6.3		7.4		7.1	
Median	0.0		4.7		0.0		5.6		5.0		6.3		6.2	
75th Percentile	-0.2		4.1		-0.2		4.8		4.0		5.5		5.7	
95th Percentile	-1.0		3.0		-1.0		3.4		3.1		4.5		4.7	
# of Portfolios	122		122		122		122		122		119		106	
● PIMCO Total Return	-0.2	(78)	3.7	(90)	-0.2	(78)	3.8	(93)	5.1	(48)	5.6	(72)	--	(--)
▲ Barclays Aggregate	0.2	(37)	4.1	(77)	0.2	(37)	4.0	(91)	2.4	(99)	4.1	(99)	4.9	(93)

# PIMCO Total Return Consecutive Performance Comparison

Period Ending: September 30, 2014



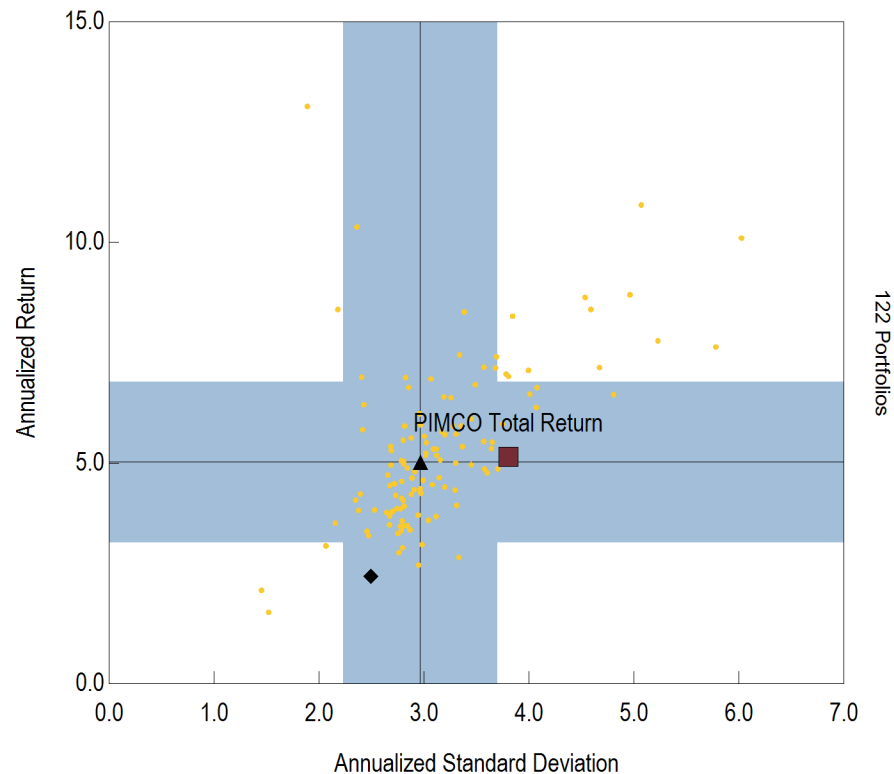
	Return (Rank)									
5th Percentile	4.6	14.4	8.8	13.6	32.9	6.9	7.9	7.6	4.2	8.7
25th Percentile	1.0	10.2	8.1	10.8	20.6	2.7	6.9	5.9	3.3	5.8
Median	-0.4	8.3	7.4	9.1	14.6	-1.6	6.1	5.2	3.0	5.3
75th Percentile	-1.0	6.7	6.3	8.0	11.2	-8.9	5.2	4.7	2.6	4.8
95th Percentile	-2.0	5.1	4.4	7.0	7.8	-16.8	2.7	4.2	2.0	3.7
# of Portfolios	116	124	118	123	128	136	144	146	141	150
● PIMCO Total Return	-1.3 (80)	11.0 (18)	4.7 (94)	9.3 (45)	-- (--)	-- (--)	-- (--)	-- (--)	-- (--)	-- (--)
▲ Barclays Aggregate	-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)	4.3 (89)

# PIMCO Total Return

## Risk vs Return Three & Five Year

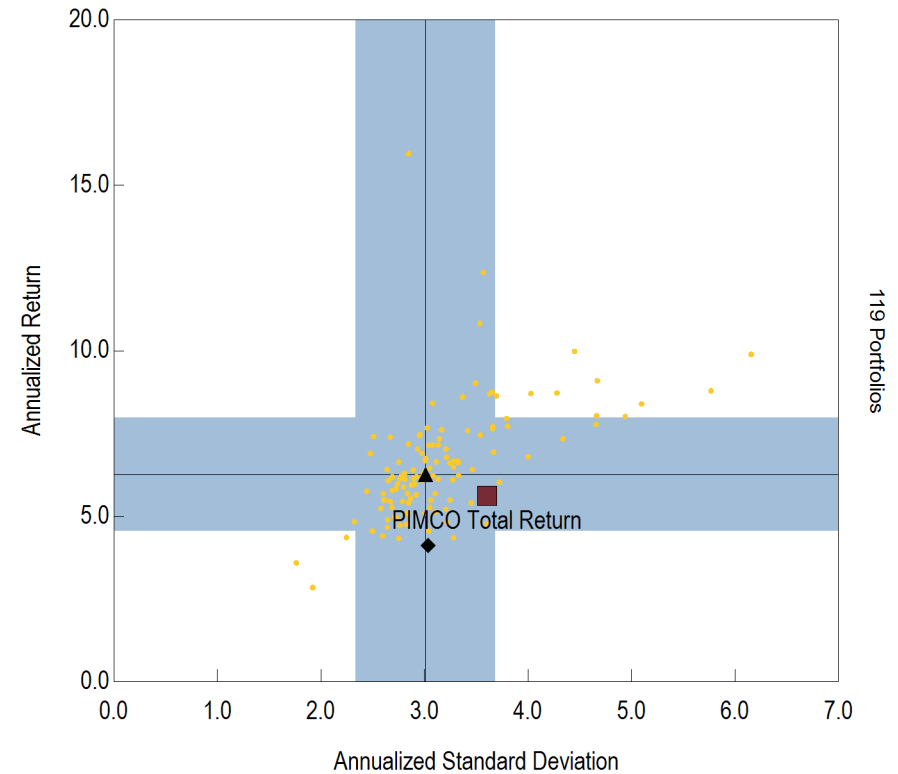
Period Ending: September 30, 2014

Risk vs. Return  
3 Years Ending September 30, 2014



- PIMCO Total Return
- ◆ Barclays Aggregate
- ▲ Universe Median
- 68% Confidence Interval
- eA US Core Plus Fixed Inc Gross

Risk vs. Return  
5 Years Ending September 30, 2014



- PIMCO Total Return
- ◆ Barclays Aggregate
- ▲ Universe Median
- 68% Confidence Interval
- eA US Core Plus Fixed Inc Gross

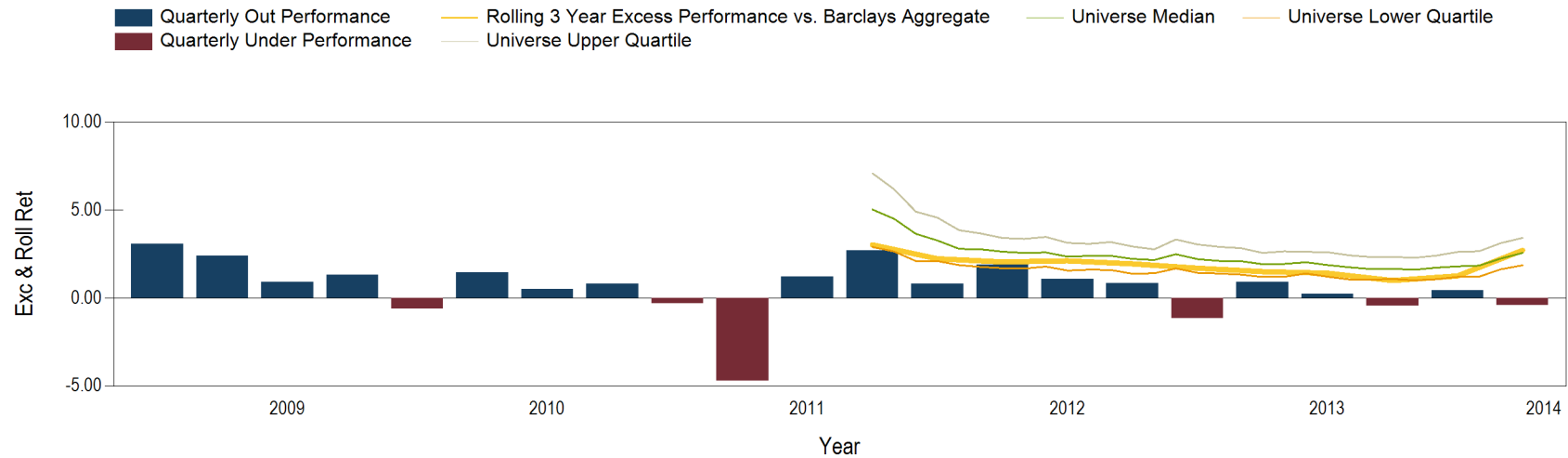


# PIMCO Total Return

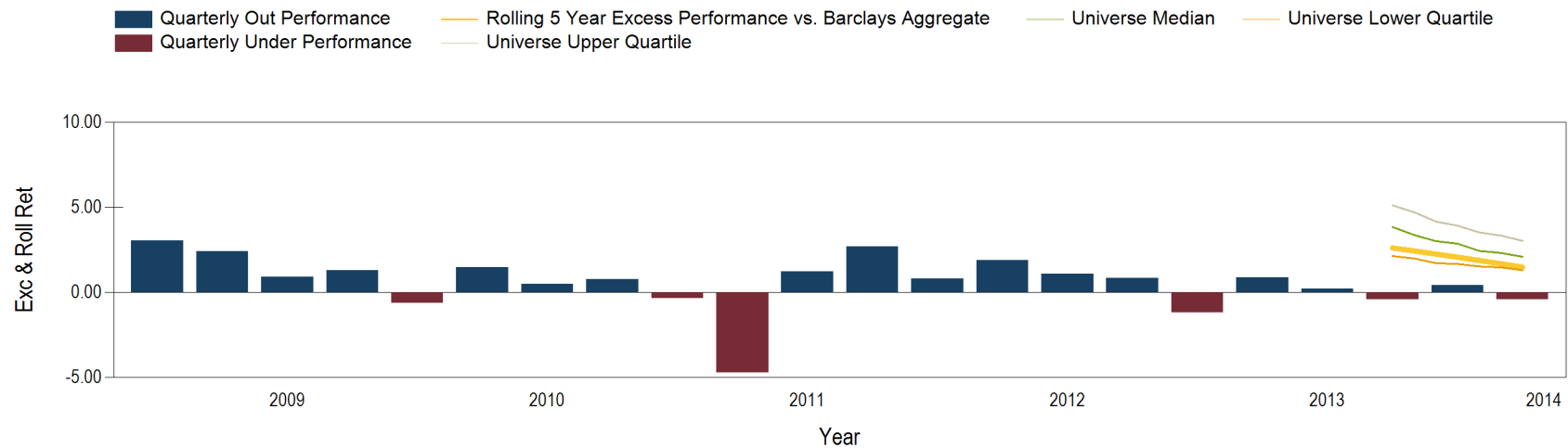
## Rolling Return Analysis

Period Ending: September 30, 2014

Rolling 3 Year Annualized Excess Performance



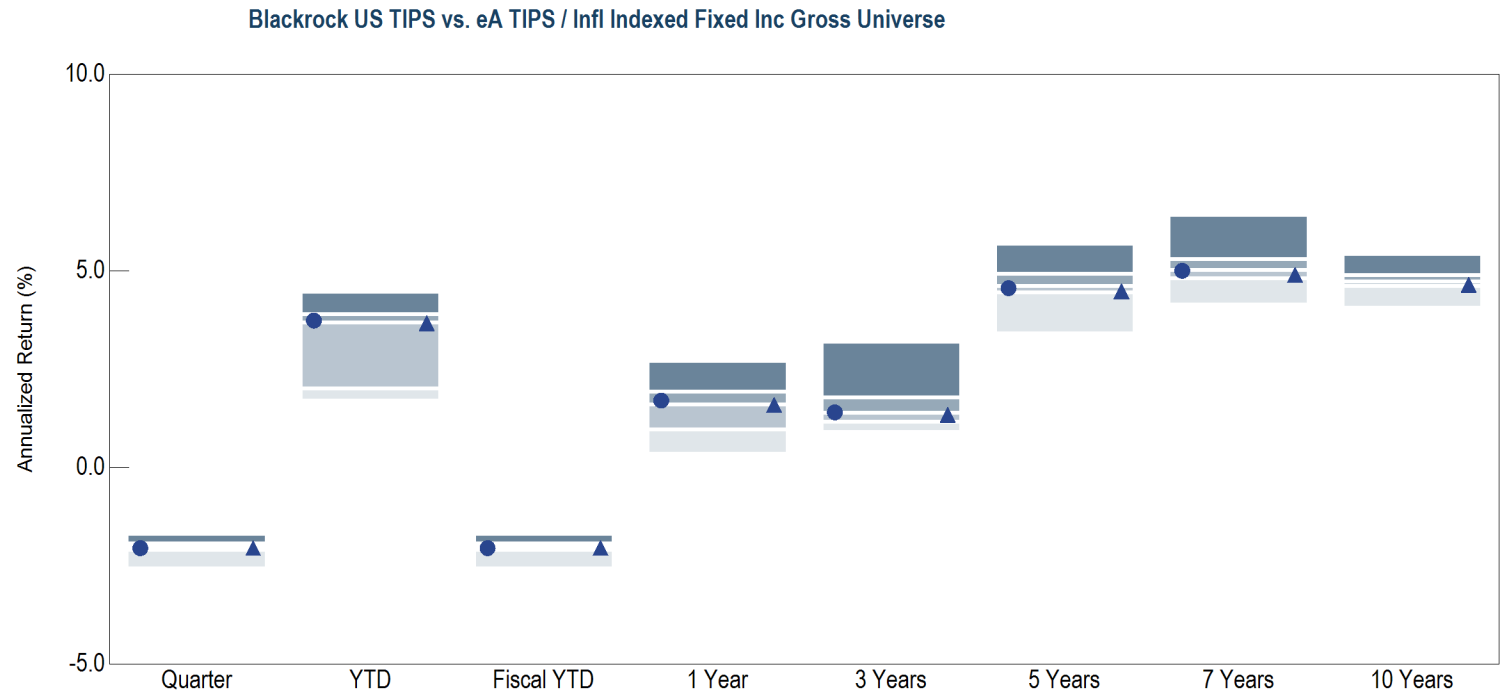
Rolling 5 Year Annualized Excess Performance



# Blackrock US TIPS

## Cumulative Performance Comparison

Period Ending: September 30, 2014

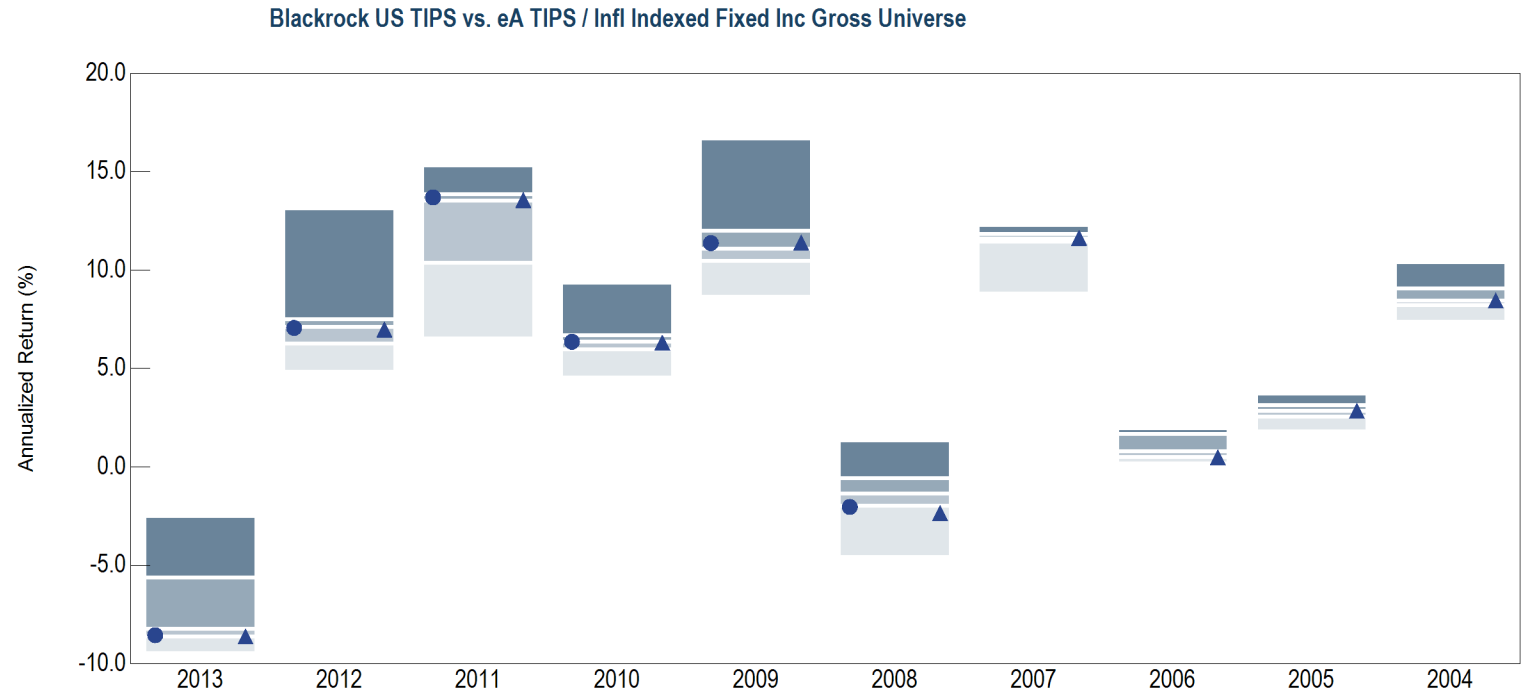


	Return (Rank)													
5th Percentile	-1.7		4.5		-1.7		2.7		3.2		5.7		6.4	
25th Percentile	-1.9		3.9		-1.9		1.9		1.8		4.9		5.3	
Median	-2.0		3.7		-2.0		1.6		1.4		4.6		5.0	
75th Percentile	-2.1		2.0		-2.1		1.0		1.2		4.5		4.8	
95th Percentile	-2.5		1.7		-2.5		0.4		0.9		3.4		4.1	
# of Portfolios	43		43		43		43		41		36		35	
● Blackrock US TIPS	-2.1	(71)	3.7	(43)	-2.1	(71)	1.7	(29)	1.4	(51)	4.6	(66)	5.0	(54)
▲ Barclays US TIPS	-2.0	(69)	3.7	(53)	-2.0	(69)	1.6	(52)	1.3	(57)	4.5	(70)	4.9	(69)
													4.6	(71)

# Blackrock US TIPS

## Consecutive Performance Comparison

Period Ending: September 30, 2014

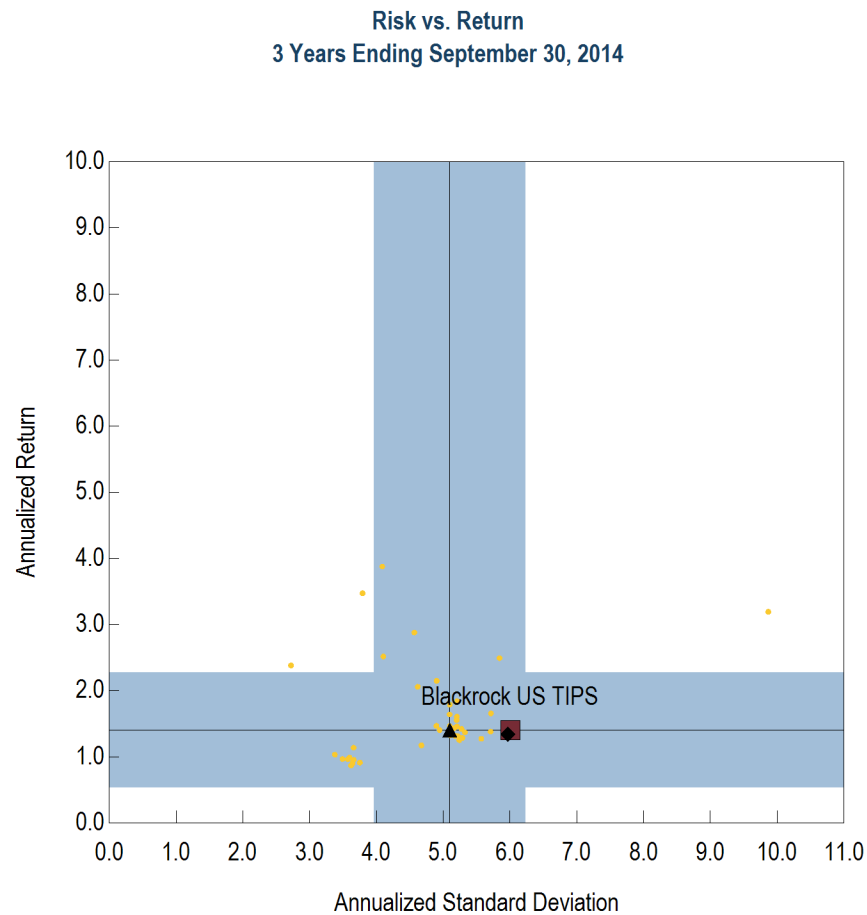


	Return (Rank)									
5th Percentile	-2.5	13.1	15.3	9.4	16.7	1.3	12.3	2.0	3.7	10.4
25th Percentile	-5.6	7.5	13.9	6.7	12.0	-0.5	11.8	1.7	3.2	9.1
Median	-8.2	7.1	13.5	6.4	11.1	-1.4	11.6	0.8	2.9	8.5
75th Percentile	-8.6	6.3	10.4	6.0	10.5	-1.9	11.5	0.5	2.6	8.2
95th Percentile	-9.4	4.9	6.6	4.6	8.7	-4.6	8.8	0.2	1.8	7.4
# of Portfolios	43	43	47	39	37	40	37	35	34	27
● Blackrock US TIPS	-8.5 (62)	7.1 (59)	13.7 (37)	6.4 (52)	11.4 (36)	-2.0 (78)	-- (--)	-- (--)	-- (--)	-- (--)
▲ Barclays US TIPS	-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)	8.5 (52)

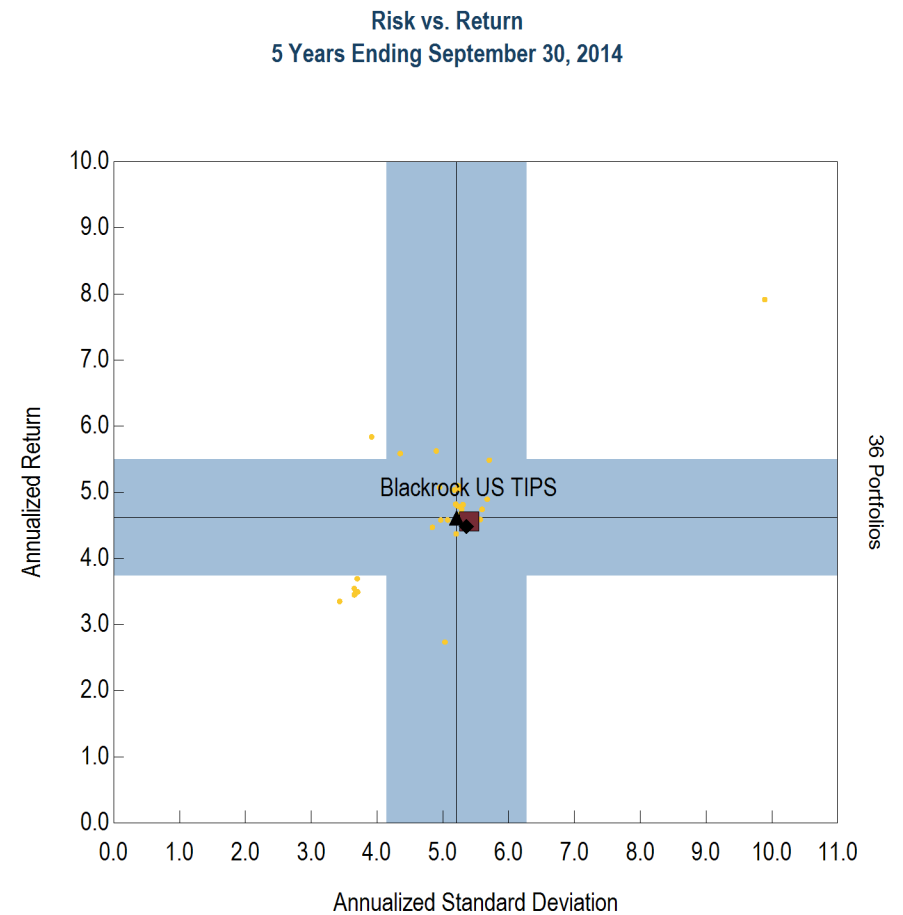
# Blackrock US TIPS

## Risk vs Return Three & Five Year

Period Ending: September 30, 2014



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



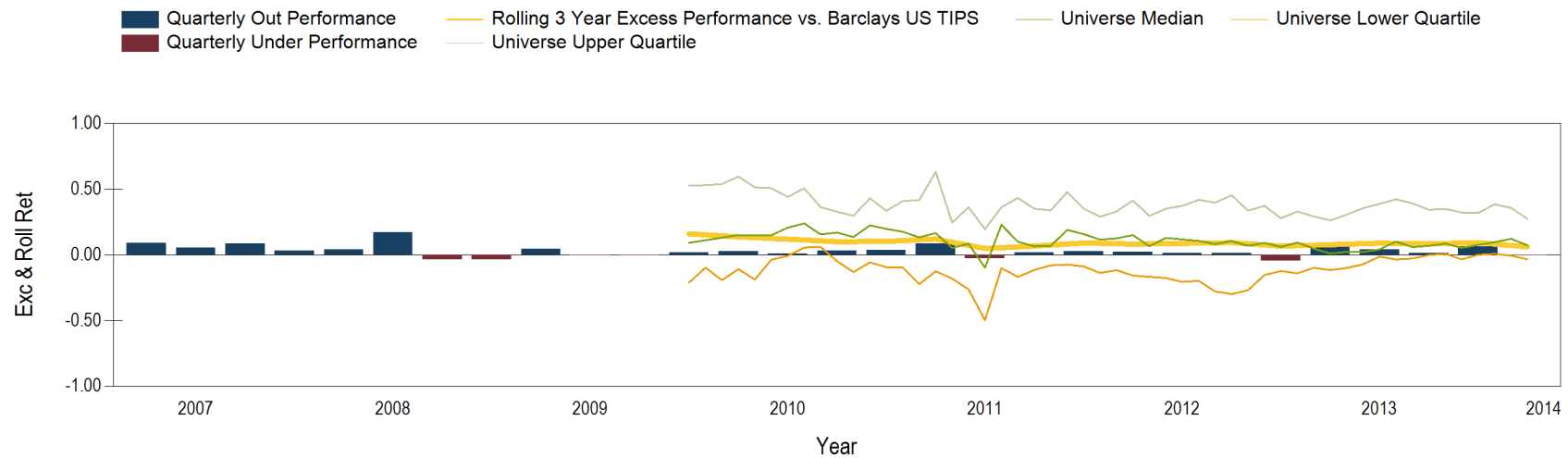
- Blackrock US TIPS
- ◆ Barclays US TIPS
- ▲ Universe Median
- 68% Confidence Interval
- eA TIPS / Infl Indexed Fixed Inc Gross

# Blackrock US TIPS

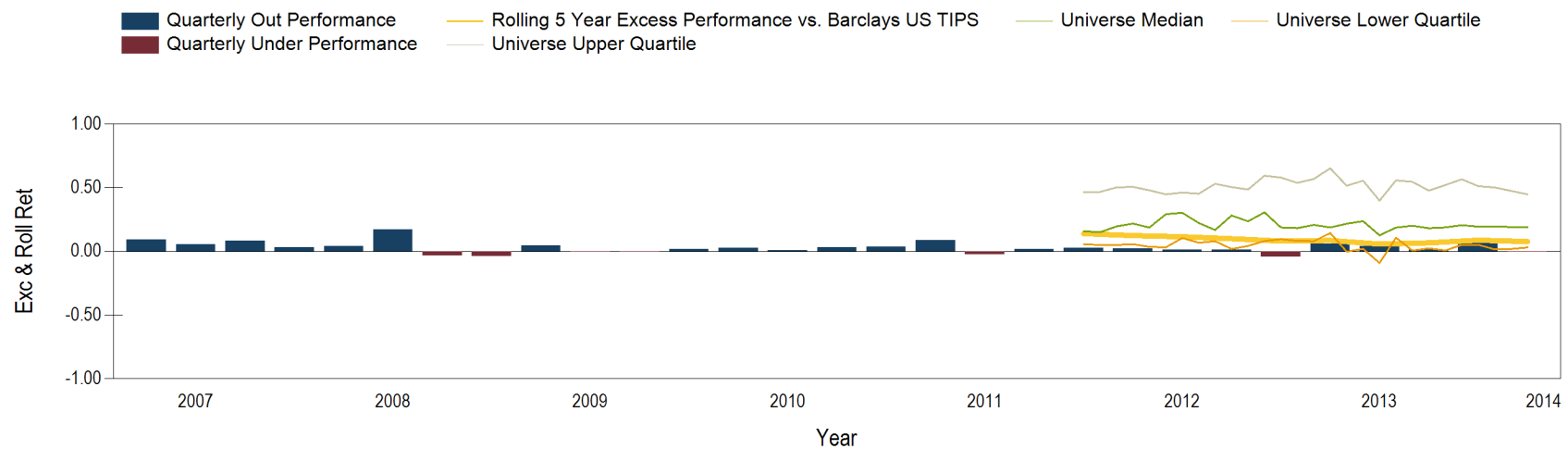
## Rolling Return Analysis

Period Ending: September 30, 2014

Rolling 3 Year Annualized Excess Performance



Rolling 5 Year Annualized Excess Performance



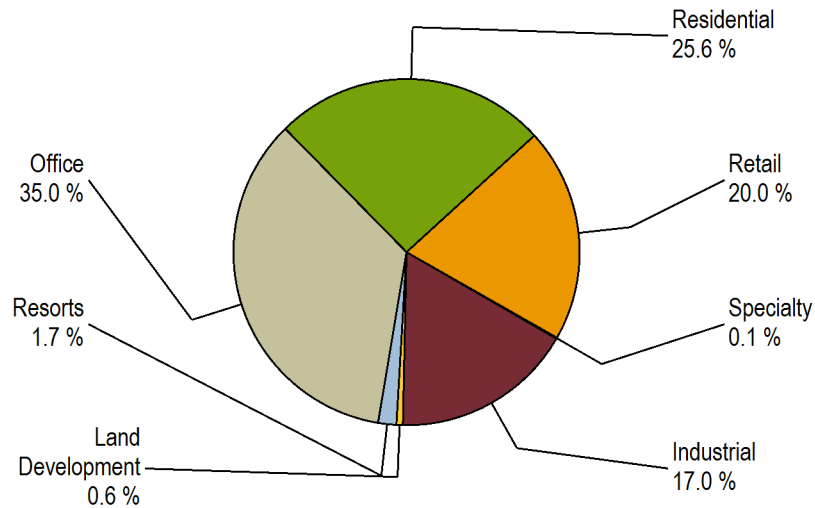
## Real Estate

### Asset Class Overview (Gross of Fees)

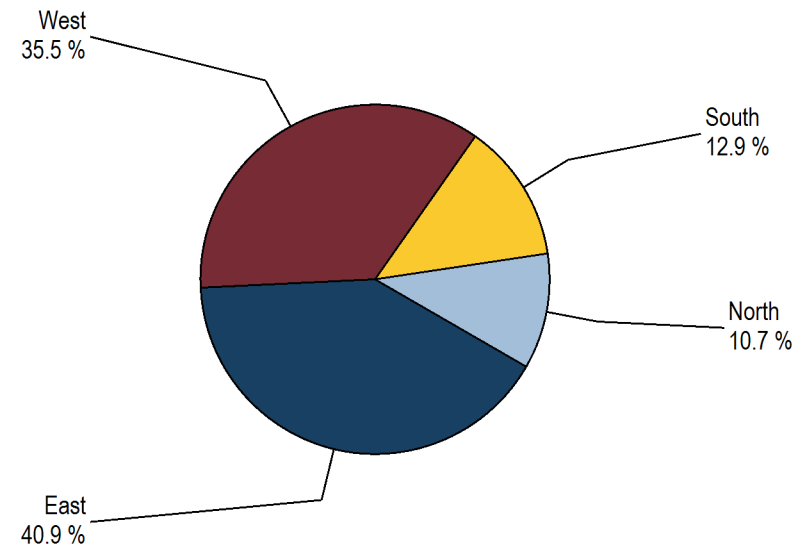
Period Ending: September 30, 2014

	Market Value	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2013	2012	2011	2010	2009
<b>Total Real Estate</b>													
ASB Real Estate	24,348,140	3.9	9.5	3.9	12.9	--	--	--	13.7	--	--	--	--
NCREIF Property Index		2.6	8.5	2.6	11.3	--	--	--	11.0	--	--	--	--
NCREIF-ODCE		3.2	8.9	3.2	12.4	--	--	--	13.9	--	--	--	--
Clarion Lion	23,822,517	3.8	8.5	3.8	12.1	11.8	13.0	--	12.8	10.9	18.7	19.4	-38.7
NCREIF Property Index		2.6	8.5	2.6	11.3	11.1	11.0	--	11.0	10.5	14.3	13.1	-16.9
NCREIF-ODCE		3.2	8.9	3.2	12.4	12.3	12.4	--	13.9	10.9	16.0	16.4	-29.8
1221 State St. Corp	1,369,851	0.0	0.0	0.0	0.0	-4.5	-1.1	--	0.0	0.1	-9.0	3.7	1.1

**Property Type Allocation**  
Allocation as of September 30, 2014



**Geographic Diversification**  
Allocation as of September 30, 2014



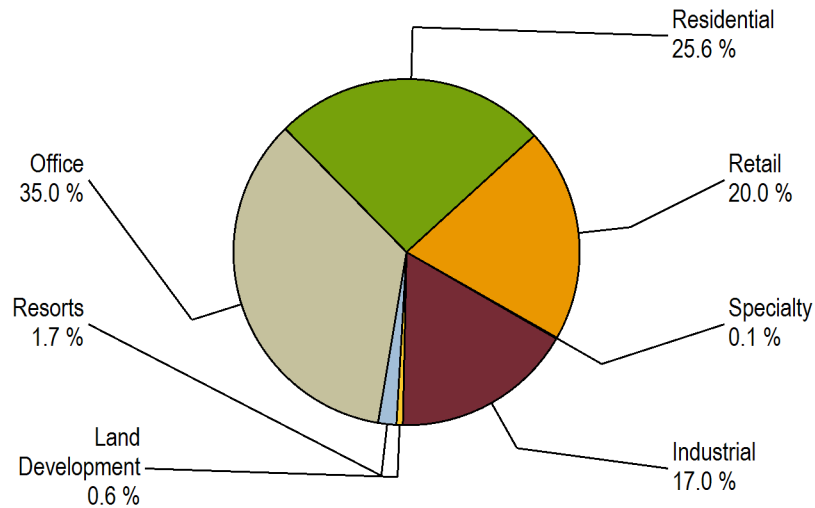
## Real Estate

### Asset Class Overview (Net of Fees)

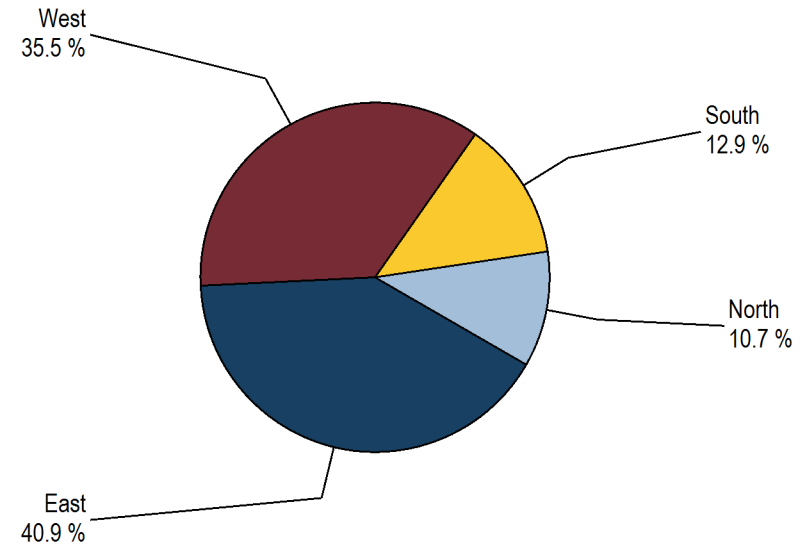
Period Ending: September 30, 2014

	Market Value	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2013	2012	2011	2010	2009
<b>Total Real Estate</b>													
ASB Real Estate	24,348,140	3.6	8.8	3.6	11.8	--	--	--	12.5	--	--	--	--
NCREIF Property Index		2.6	8.5	2.6	11.3	--	--	--	11.0	--	--	--	--
NCREIF-ODCE		3.2	8.9	3.2	12.4	--	--	--	13.9	--	--	--	--
Clarion Lion	23,822,517	3.6	7.8	3.6	11.1	10.8	11.9	--	11.8	9.9	17.8	18.2	-39.2
NCREIF Property Index		2.6	8.5	2.6	11.3	11.1	11.0	--	11.0	10.5	14.3	13.1	-16.9
NCREIF-ODCE		3.2	8.9	3.2	12.4	12.3	12.4	--	13.9	10.9	16.0	16.4	-29.8
1221 State St. Corp	1,369,851	0.0	0.0	0.0	0.0	-4.5	-1.1	--	0.0	0.1	-9.0	3.7	1.1

**Property Type Allocation**  
Allocation as of September 30, 2014



**Geographic Diversification**  
Allocation as of September 30, 2014



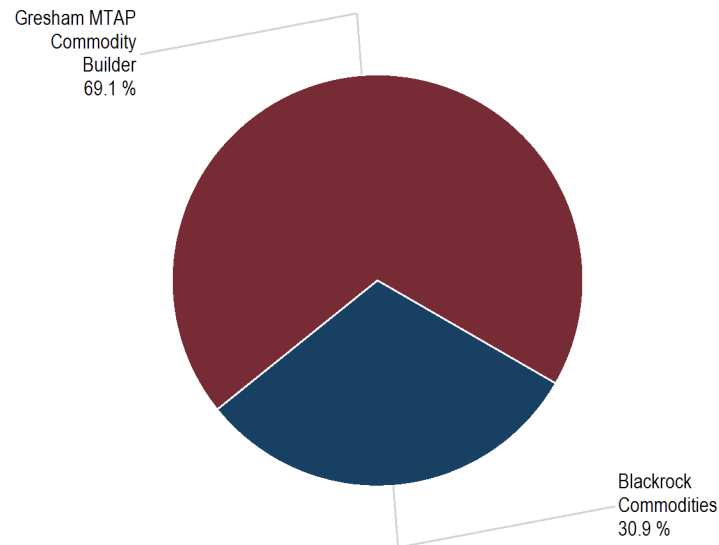
# Commodities

## Asset Class Summary (Gross of Fees)

Period Ending: September 30, 2014

	Market Value	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2013	2012	2011	2010	2009
<b>Total Commodities</b>													
Blackrock Commodities	6,178,153	-11.8	-5.5	-11.8	-6.5	-5.3	--	--	-9.4	-0.9	-13.2	17.0	--
<i>Bloomberg Commodity Index TR USD</i>		-11.8	-5.6	-11.8	-6.6	-5.3	--	--	-9.5	-1.1	-13.3	16.8	--
Gresham MTAP Commodity Builder	13,824,814	-10.5	-4.1	-10.5	-5.3	--	--	--	--	--	--	--	--
<i>Bloomberg Commodity Index TR USD</i>		-11.8	-5.6	-11.8	-6.6	--	--	--	--	--	--	--	--

Current Allocation



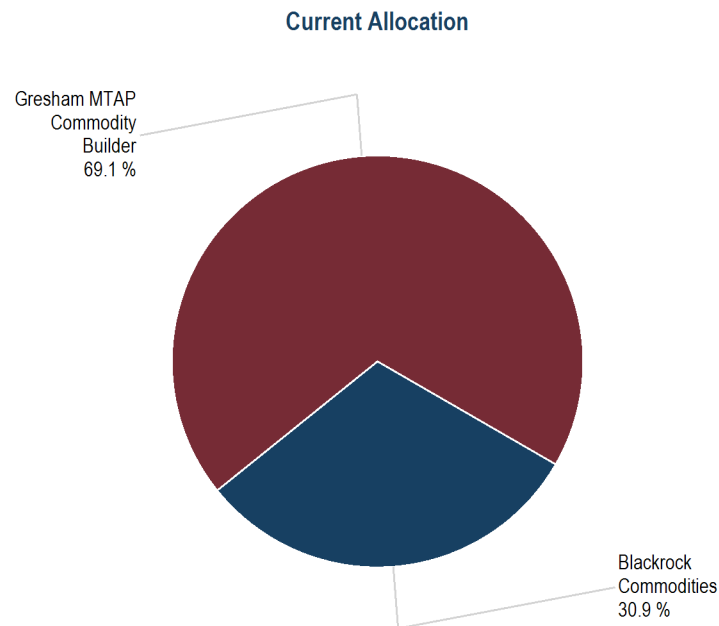


# Commodities

## Asset Class Summary (Net of Fees)

Period Ending: September 30, 2014

	Market Value	3 Mo	YTD	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2013	2012	2011	2010	2009
<b>Total Commodities</b>													
Blackrock Commodities	6,178,153	-11.9	-5.8	-11.9	-6.8	-5.6	--	--	-9.7	-1.2	-13.5	16.6	--
Bloomberg Commodity Index TR USD		-11.8	-5.6	-11.8	-6.6	-5.3	--	--	-9.5	-1.1	-13.3	16.8	--
Gresham MTAP Commodity Builder	13,824,814	-10.7	-4.7	-10.7	-5.7	--	--	--	--	--	--	--	--
Bloomberg Commodity Index TR USD		-11.8	-5.6	-11.8	-6.6	--	--	--	--	--	--	--	--



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

**Alpha (á):** 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: (Portfolio Return - Risk-free Rate) x Portfolio Beta x (Market Return - 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 (â):** 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: alpha 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: Portfolio Excess Return / 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 (ó):** 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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