



# PERSPECTIVES THAT DRIVE ENTERPRISE SUCCESS



PERIOD ENDING: SEPTEMBER 30, 2015

Investment Performance Review for

**Contra Costa County Employees' Retirement Association**

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**PERSPECTIVES  
THAT DRIVE  
ENTERPRISE  
SUCCESS**

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

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

## THE ECONOMIC CLIMATE

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

## MARKET PORTFOLIO IMPACTS

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

## THE INVESTMENT CLIMATE

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

## ASSET ALLOCATION ISSUES

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

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

Economic progress continues slowly in the developed markets

# Economic environment

# U.S. economics summary

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

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

Higher employment but participation remains low

GDP remains in 2-3% range

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

# U.S. economics – GDP growth

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

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

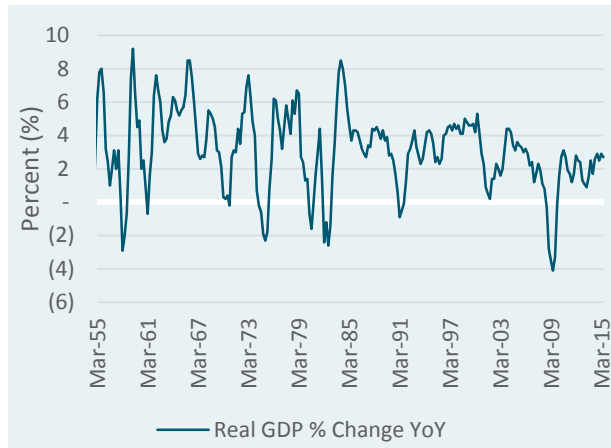
continues to exhibit stronger growth than many other developed markets, which may help explain the policy differences across nations.

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

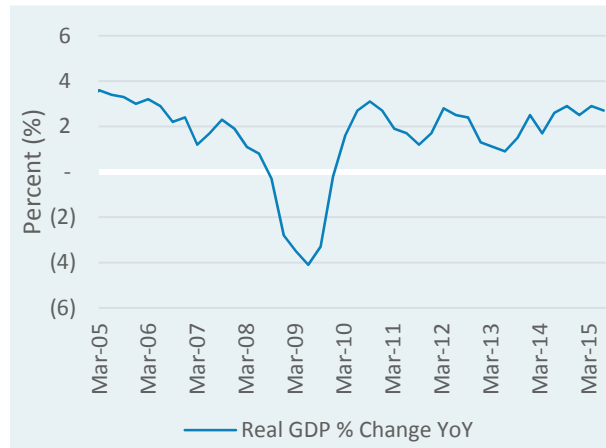
Strong Q2 rebound, but weaker expected Q3

Strong U.S. dollar proving headwind for export growth

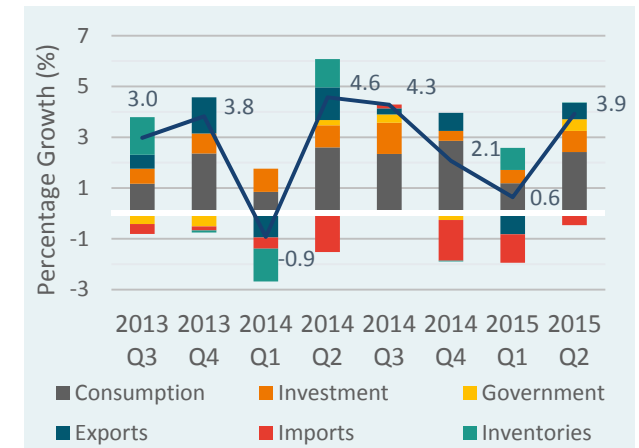
## LONG TERM U.S. GDP GROWTH



## MEDIUM TERM U.S. GDP GROWTH



## GDP COMPONENTS



Source: FRED, as of 6/30/15

Source: FRED, as of 6/30/15

Source: FRED



# U.S. economics – unemployment

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

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

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

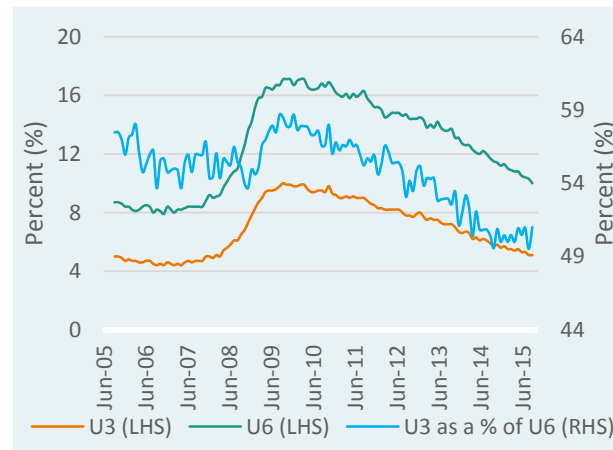
Continuing improvement in broad employment measures, but structural concerns persist

UNEMPLOYMENT SINCE 1948



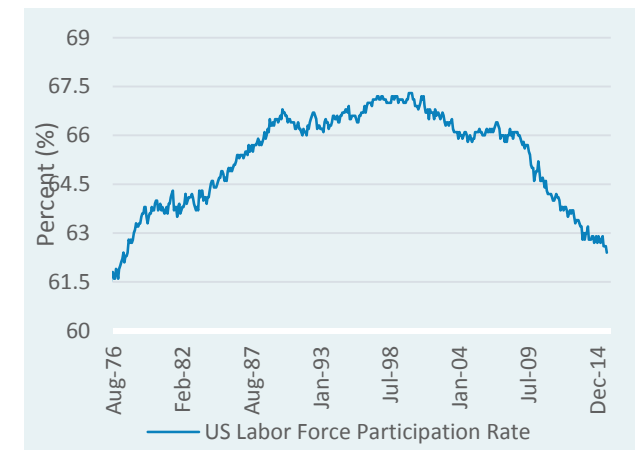
Source: Bloomberg, as of 9/30/15

MORE RECENT UNEMPLOYMENT & U6



Source: FRED, as of 9/1/15

LABOR FORCE PARTICIPATION RATE



Source: FRED, as of 9/30/15

# U.S. economics – the consumer

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

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

Real disposable income growth remains at a normal

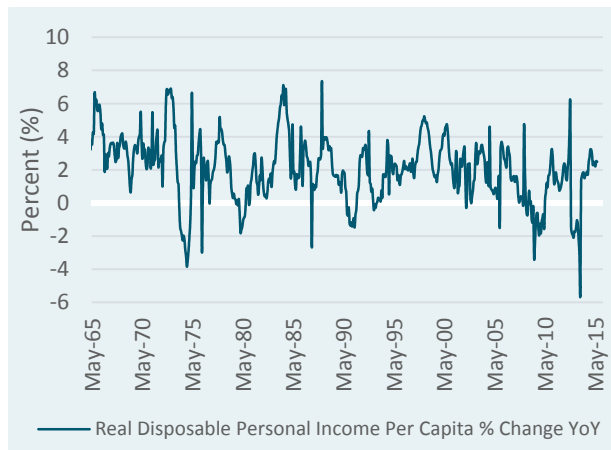
level as of August, at 2.5%, up from 1.9% one year prior. Personal savings rates remain at a normal level of 4.6% after spiking during the 2008-2009 crisis.

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

Consumer spending continues to improve

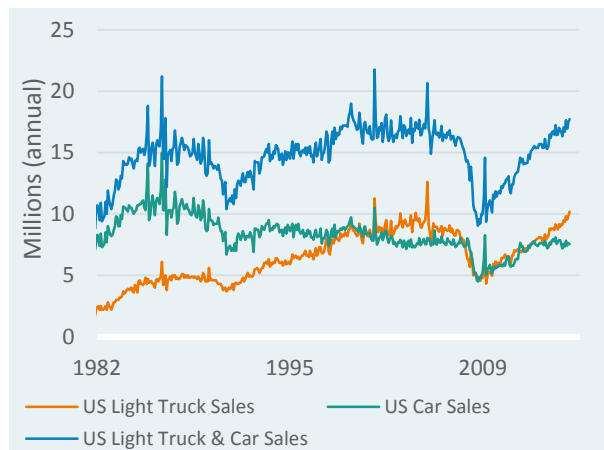
Credit expansion remains muted but auto sales are strong

**GROWTH OF DISPOSABLE INCOME**



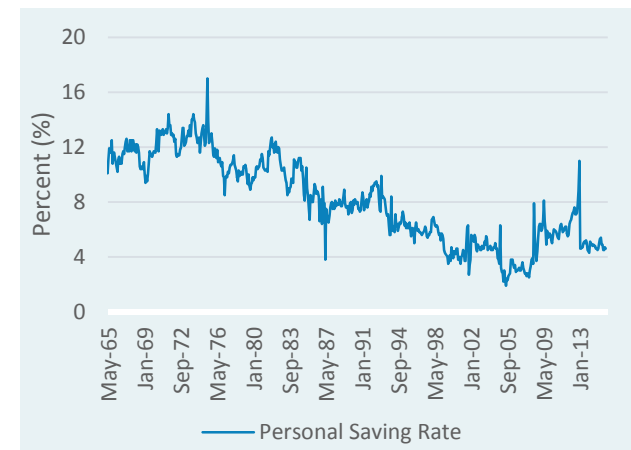
Source: FRED, as of 8/1/15

**AUTO SALES**



Source: FRED, as of 8/31/15

**SAVINGS RATE**



Source: FRED, as of 8/1/15

# U.S. economics – sentiment

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

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

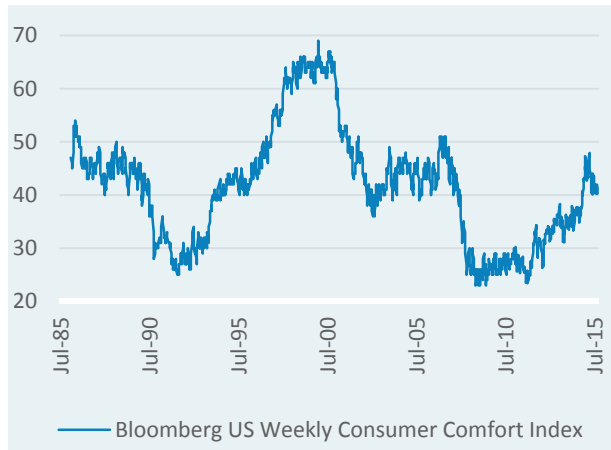
The Citi Economic Surprise index recently dropped into

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

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

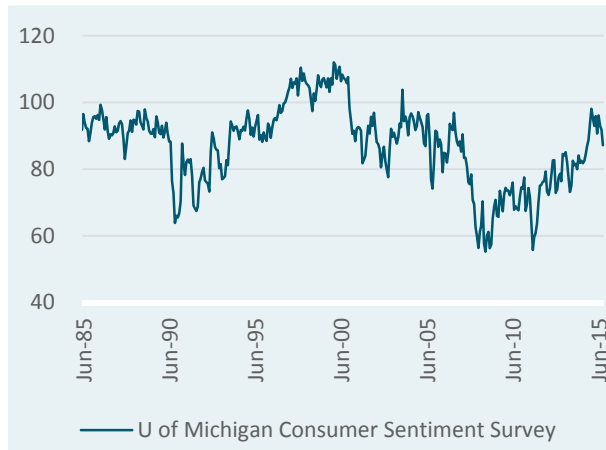
Sentiment and comfort indices in average range, but slightly down in Q3

**CONSUMER COMFORT INDEX**



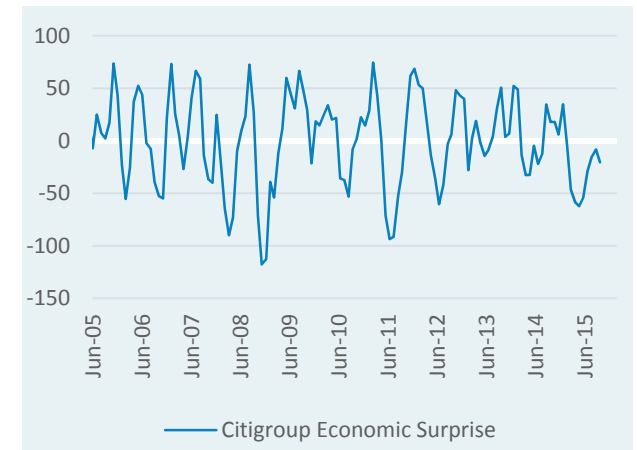
Source: Bloomberg, as of 9/20/15 (see Appendix)

**CONSUMER SENTIMENT**



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

**ECONOMIC SURPRISE**



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

# U.S. economics – housing

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

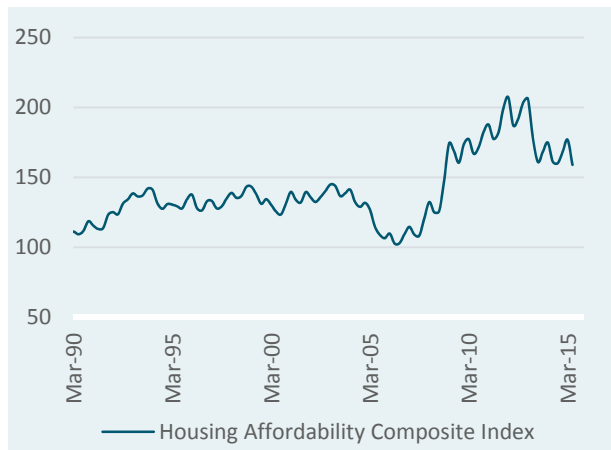
There continues to be potential pent up demand for

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

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

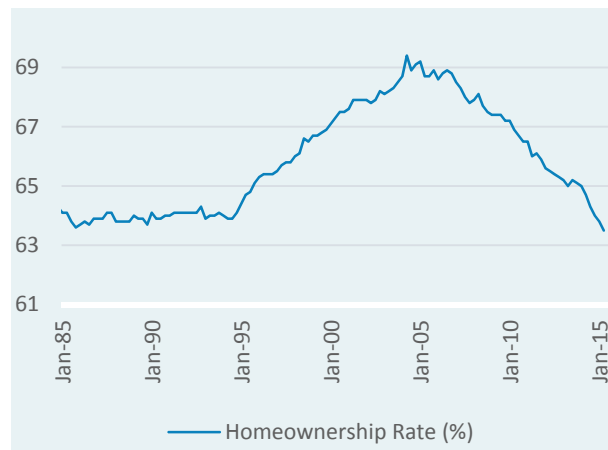
Continued improvement in U.S. housing market is consistent with continuing slow economic recovery

**HOME AFFORDABILITY**



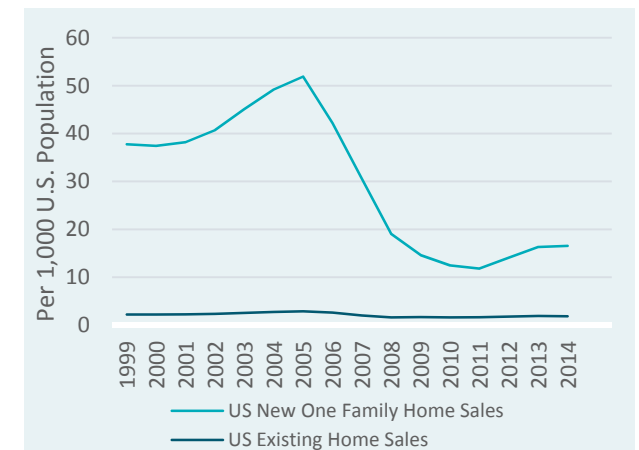
Source: National Association of Realtors, as of 6/30/15

**HOMEOWNERSHIP RATE**



Source: FRED, as of 4/1/15

**ANNUAL HOME SALES**



Source: FRED

# U.S. economics – inflation

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

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

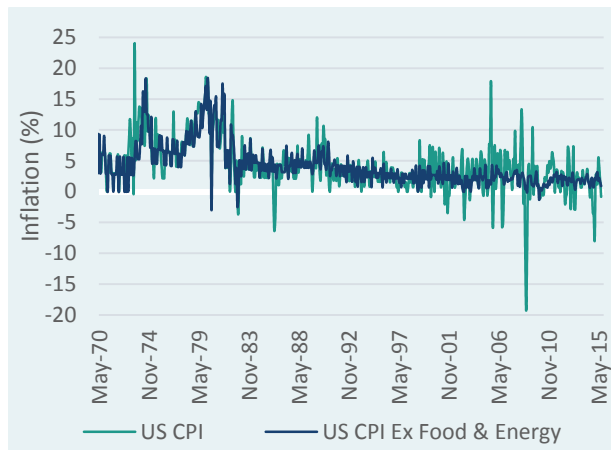
through to other areas of the CPI calculation, such as shipping and air transportation.

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

Lower than target U.S. inflation

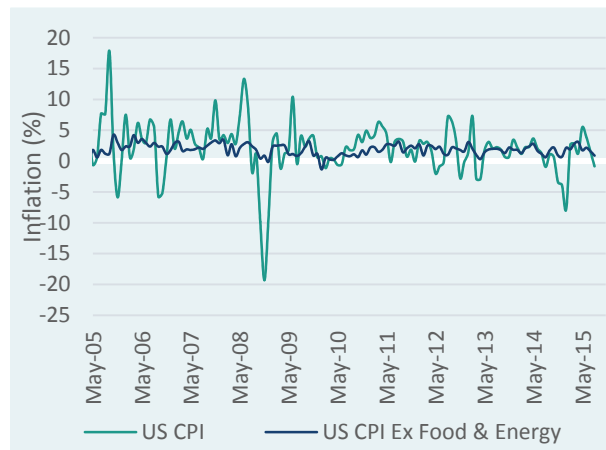
Energy prices have been a driver of CPI change

**LONG TERM U.S. CPI**



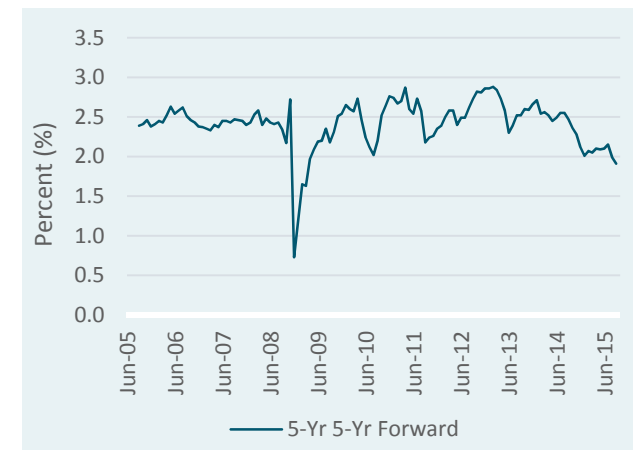
Source: FRED, as of 8/1/15

**MEDIUM TERM U.S. CPI**



Source: FRED, as of 8/1/15

**MARKET EXPECTATIONS OF INFLATION**



Source: FRED, as of 9/1/15

# International economics – current

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

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

High level of central bank involvement

Some nations dialing back QE programs

Structural employment issues remain a concern

# International economics

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

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

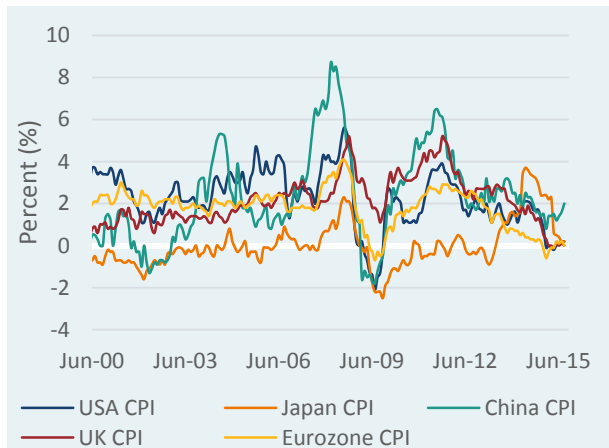
Real GDP growth remains moderate, while BRIC nations

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

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

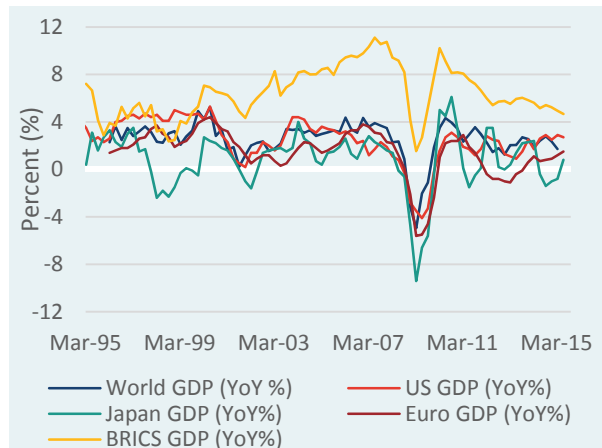
Economies around the globe exhibit slowing to flat growth, improving employment, and low inflation

**INTERNATIONAL INFLATION (CPI)**



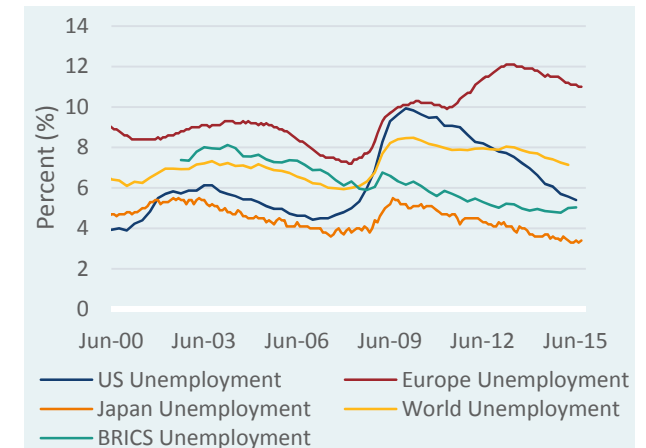
Source: Bloomberg, as of 8/31/15

**REAL GDP GROWTH**



Source: Bloomberg, as of 6/30/15

**UNEMPLOYMENT**



Source: Bloomberg, as of 8/31/15

# What do you mean “Europe”?

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

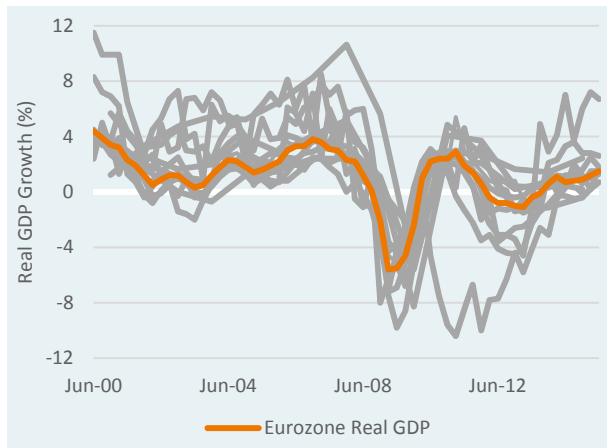
Bright spots exist on the Euro stage, including Germany, the United Kingdom, and Switzerland, while other countries face severe economic problems or stagnation following the financial crisis.

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

European economic behavior remains divergent

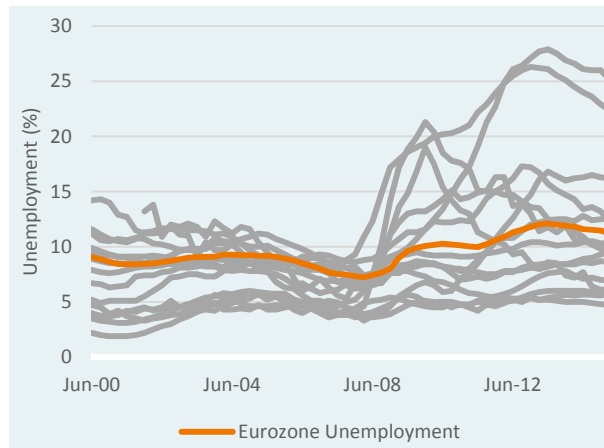
European equity remains attractive

**REAL GDP GROWTH (%YOY)**



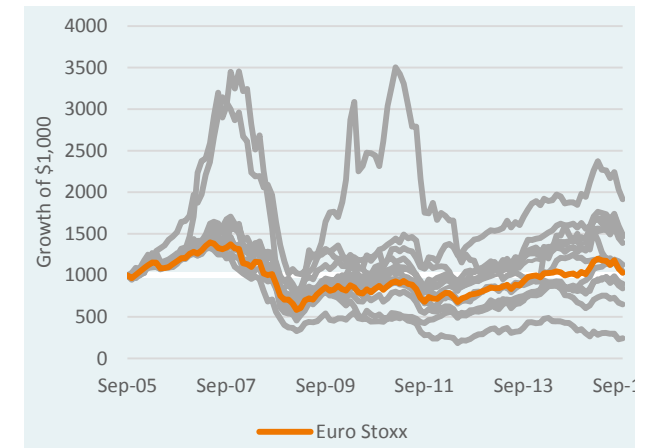
*Eurozone member nations, as of 6/30/15*

**UNEMPLOYMENT RATES**



*Eurozone member nations, as of 6/30/15*

**CUMULATIVE EQUITY PERFORMANCE**



*Eurozone member nations, as of 9/30/15*



# Fixed income rates & credit

# Interest rate environment

- The Federal Reserve left rates unchanged in September. It remains uncertain whether the Fed will move rates by year-end.
- Interest rates decreased broadly in Q3 across developed markets, with the exception of Japan.
- U.S. interest rates remain high relative to other developed markets, which may provide ongoing support for U.S. Treasury prices.
- The falling oil price in conjunction with slowing global economic growth has resulted in downward pressure on emerging market currencies.
- Central banks have sold

considerable amounts of FX reserves to support their currencies, which may place upward pressure on interest rates. Some have referred to this effect as “quantitative tightening”.

- China sold billions in reserve assets (U.S. Treasuries) to support the value of the yuan.

- Future rate rises in developed markets could have implications for emerging market economies and nations with high debt-to-GDP ratios.

- The market is pricing in slow and moderate interest rate rises.

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

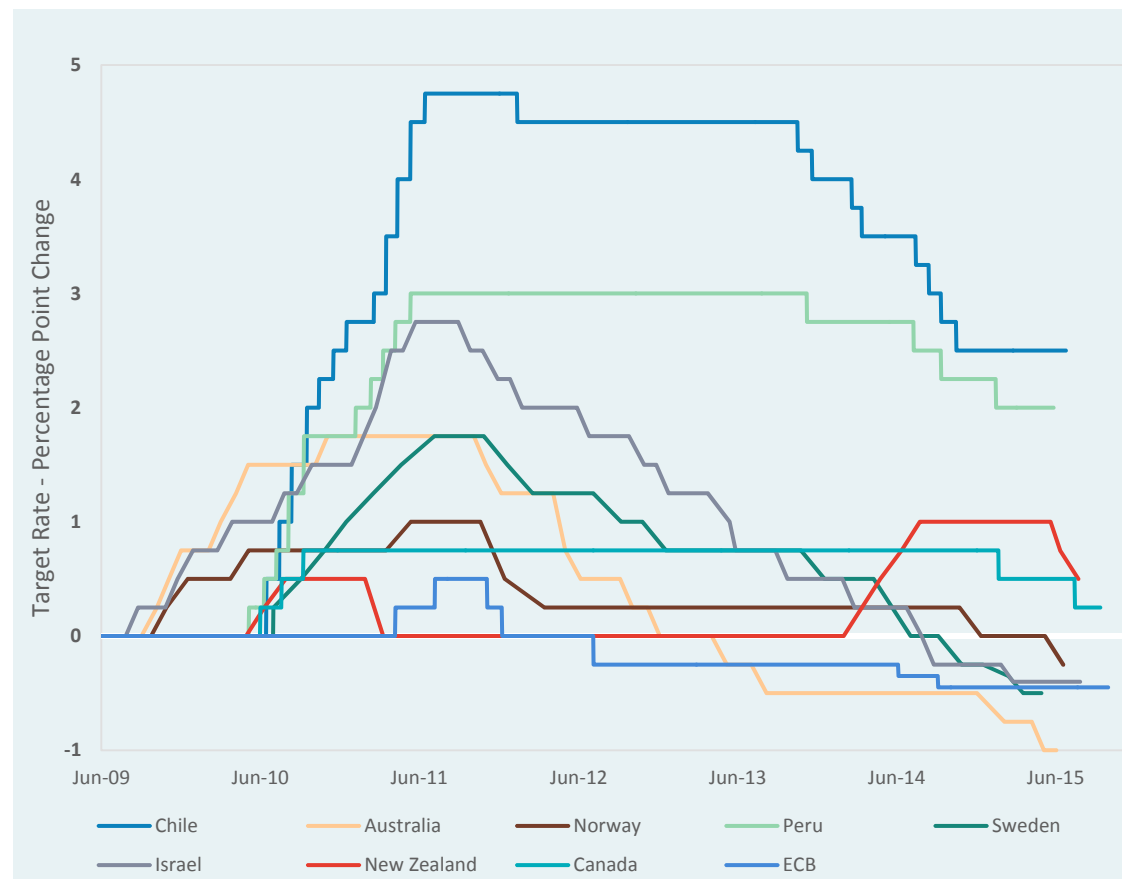
Interest rates decreased across the developed markets in Q3

Negative nominal interest rates continue to persist

Source: Bloomberg, as of 9/30/15

# Central bank behavior

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

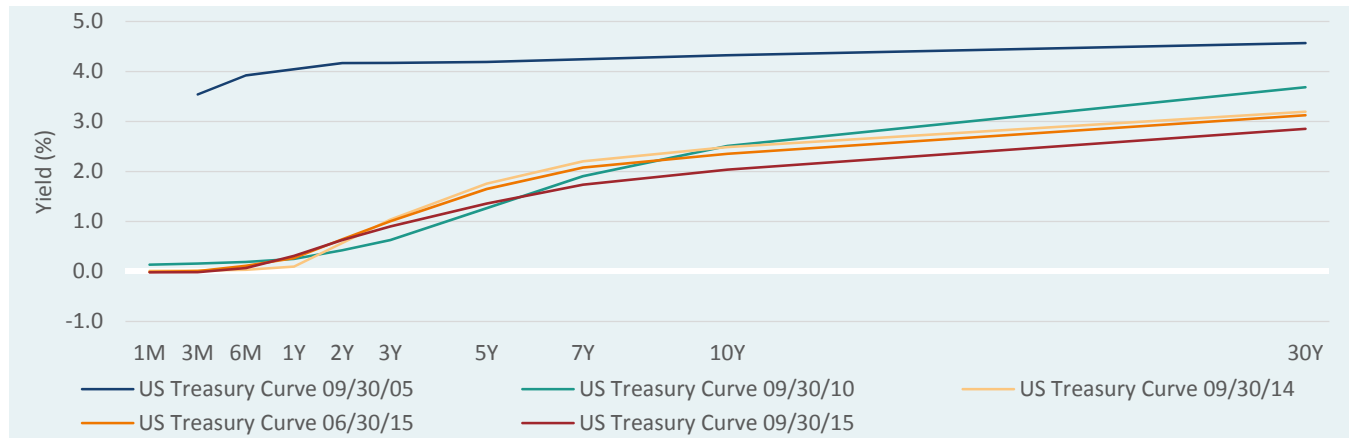


Rate rises appear fragile where they happen, and may be derailed by continuing economic weakness

Source: Bloomberg, as of 9/30/15

# Global yield curve

## U.S. YIELD CURVE

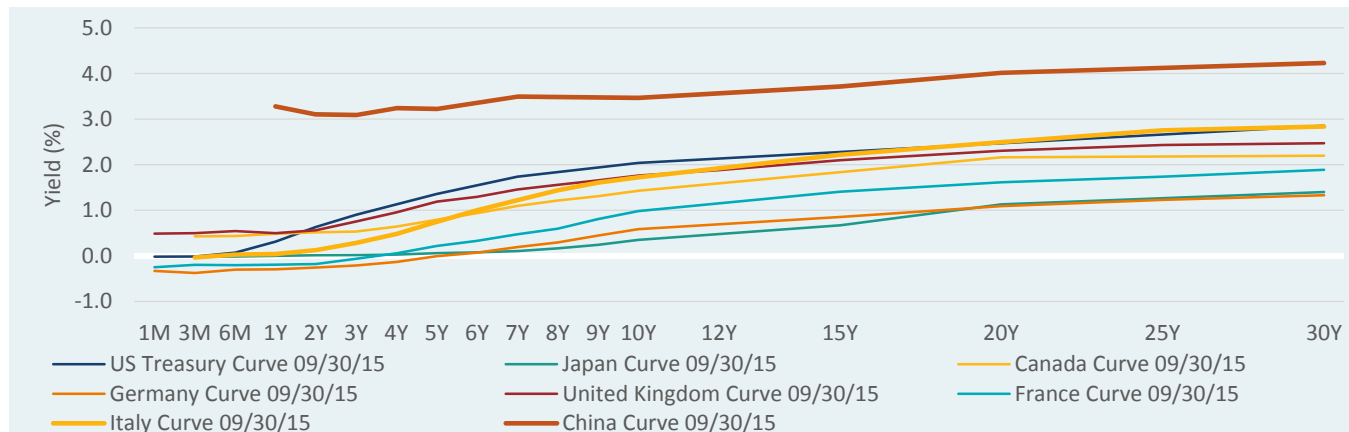


The middle of the U.S. yield curve flattened upon expectations of “lower for longer”

Interest rates decreased across major markets in Q3

Negative nominal interest rates persist

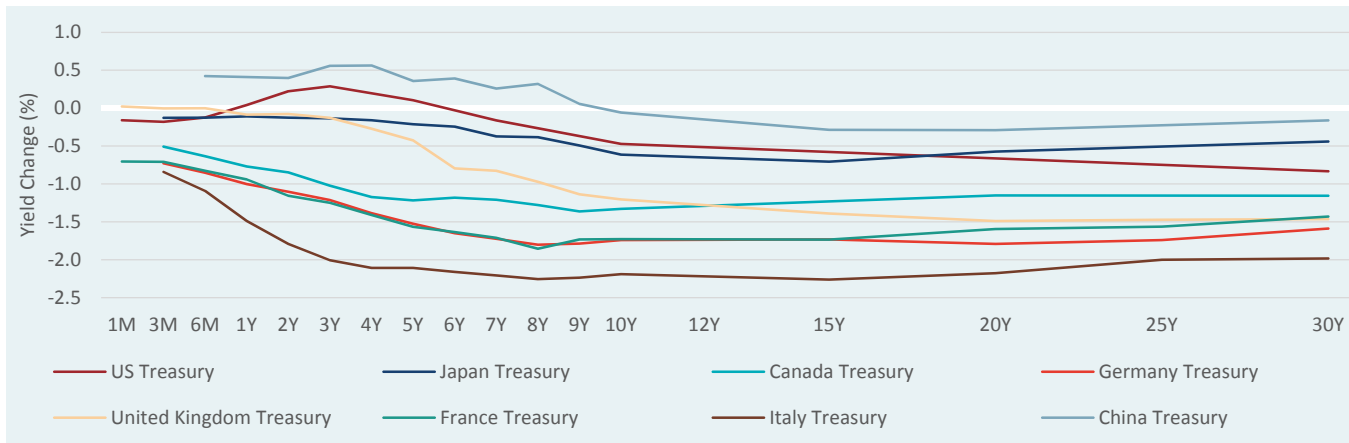
## GLOBAL GOVERNMENT YIELD CURVES



Source: Bloomberg

# Global yield curve changes

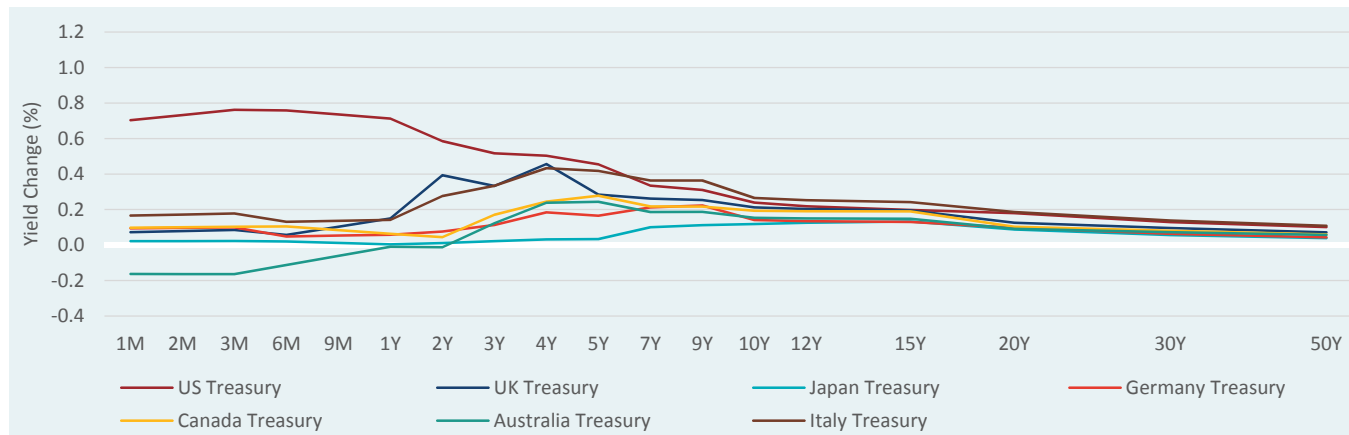
INTERNATIONAL YIELD CURVE CHANGES OVER LAST FIVE YEARS



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

Forward curves imply flat or modestly higher rates in most countries

EXPECTED INTEREST RATE CHANGES ONE YEAR FORWARD IMPLIED BY MARKET PRICING



Source: Bloomberg, as of 9/30/15

# Credit environment

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

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

Borrowing is becoming tighter for lower-quality

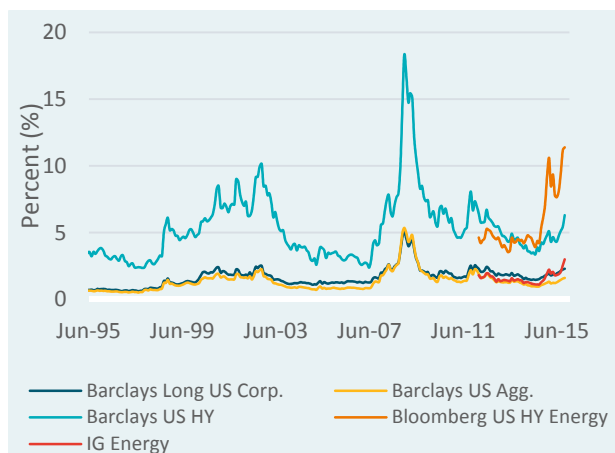
borrowers, especially for those linked to commodities. Energy spreads have widened further on continued volatility and uncertainty surrounding the price of oil. Emerging market economies are increasingly feeling this pain, with emerging market CDS spreads widening to significant levels.

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

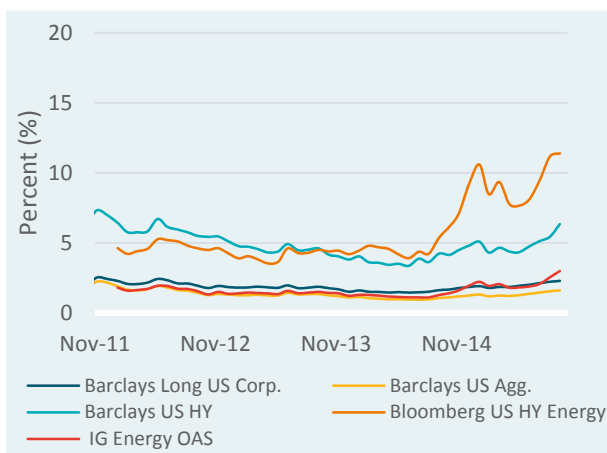
Credit spreads widening across the board

Energy spreads continue higher

## LONG TERM CREDIT SPREADS



## SHORT TERM CREDIT SPREADS



## SPREADS

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

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

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

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

# Issuance and default

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

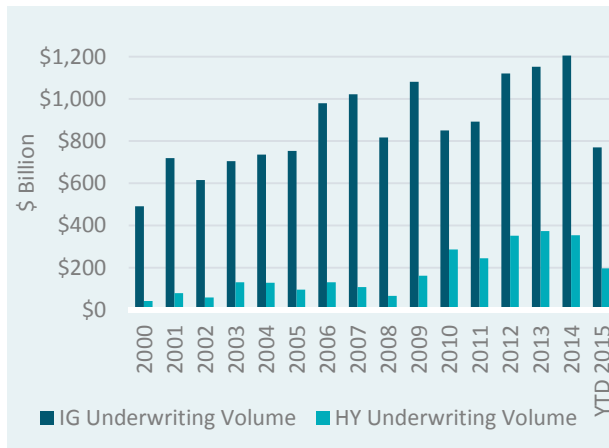
Despite the lower creditworthiness of firms accessing these markets over the last few years, there remain few signs of inability to pay amongst these issuers. However, those that believe we are further along in the economic cycle may decide against taking on new exposure to credit risk.

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

Issuance continues at a record pace

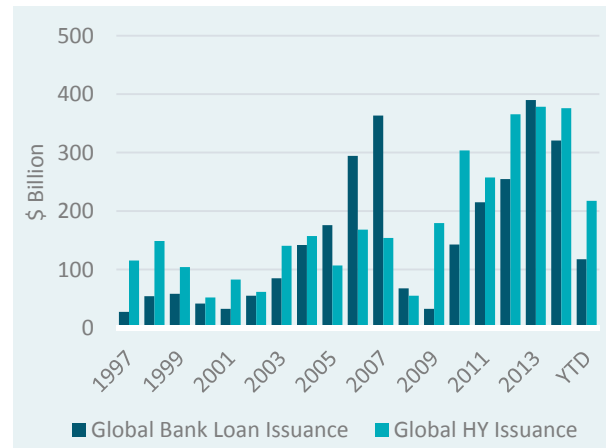
The default rate remains low

IG & HIGH YIELD ISSUANCE



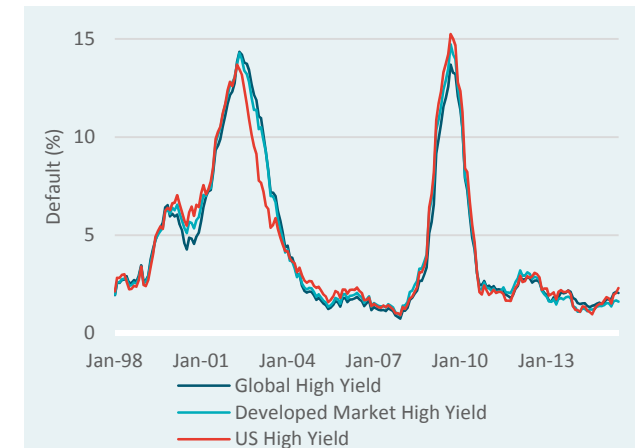
Source: Bloomberg, as of 6/30/15

BANK LOAN & GLOBAL HY ISSUANCE



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

DEFAULT TRENDS (ROLLING 12 MONTH)



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

# Equity



# Equity environment

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

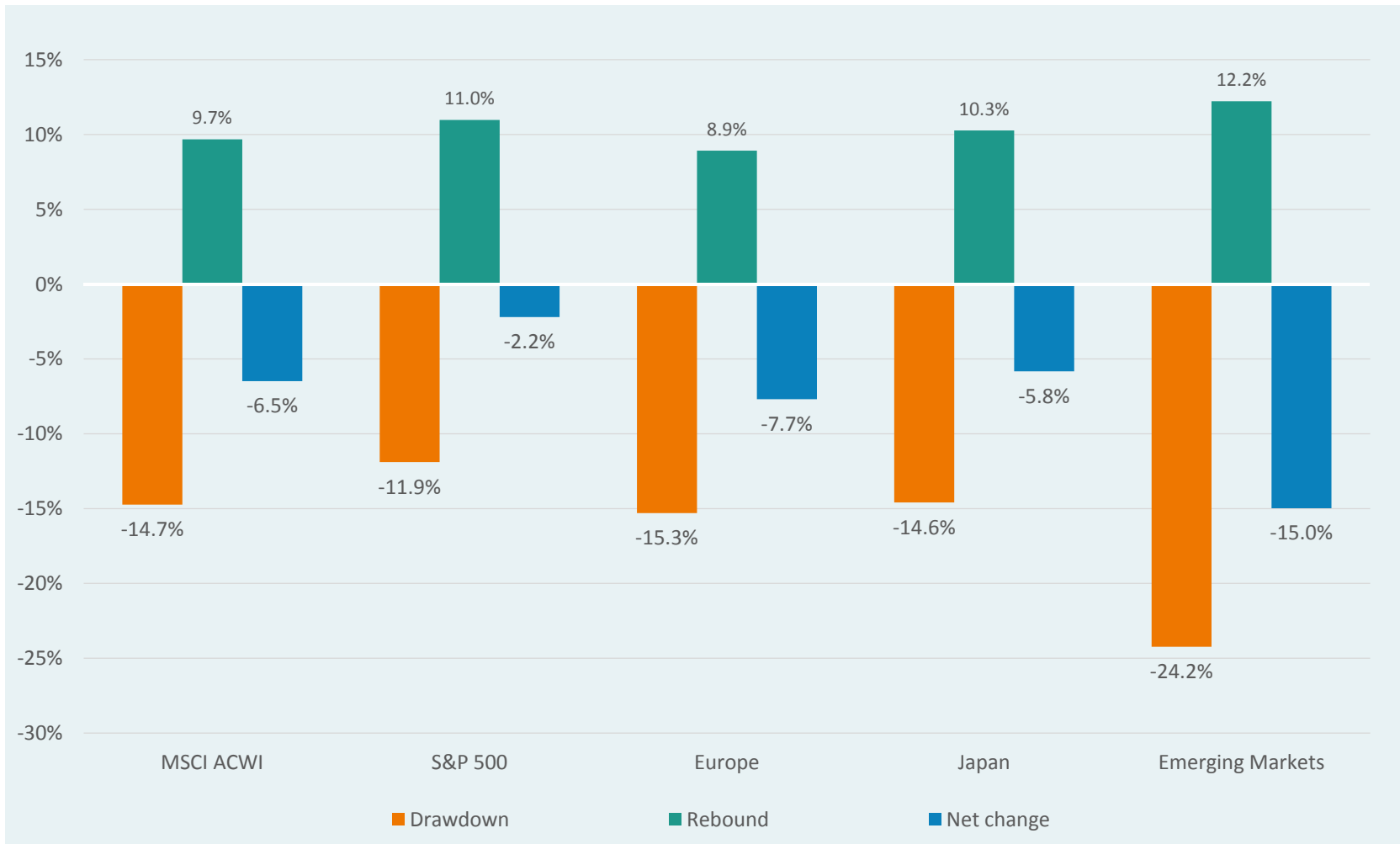
	QTD Total Return (unhedged)	QTD Total Return (hedged)	YTD Total Return (unhedged)	YTD Total Return (hedged)	1 Year Total Return (unhedged)	1 Year Total Return (hedged)
US Large Cap (Russell 1000)	(6.8%)		(5.2%)		(0.6%)	
US Small Cap (Russell 2000)	(11.9%)		(7.7%)		1.2%	
US Large Value (Russell 1000 Value)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

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

Currency effects remain important for unhedged equity investors

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

# Close look at recent correction



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

These markets are still below May levels

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

# Domestic equity historical return

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

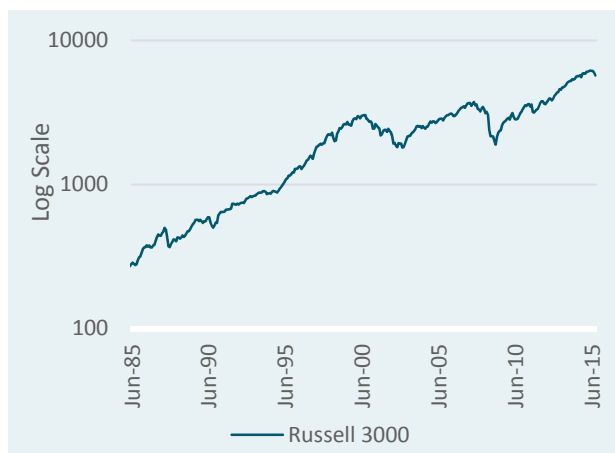
It is important to keep in mind the long-term nature of equity behavior, and to resist short-term attempts at market timing. A systematic rebalancing policy can be very helpful to long-term performance by avoiding

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

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

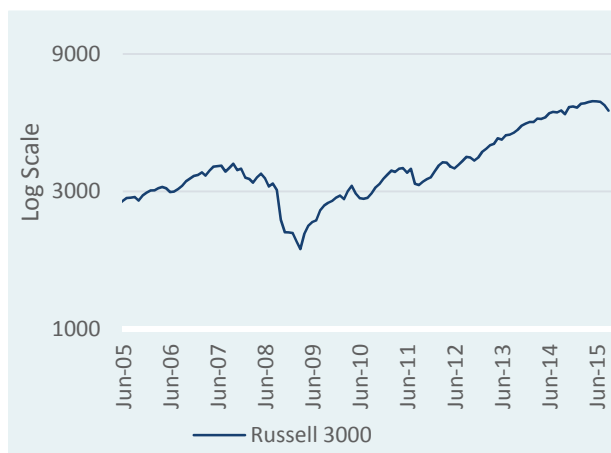
Recent strong market returns are somewhat extended, but not unheard of historically

## LONG TERM PERFORMANCE



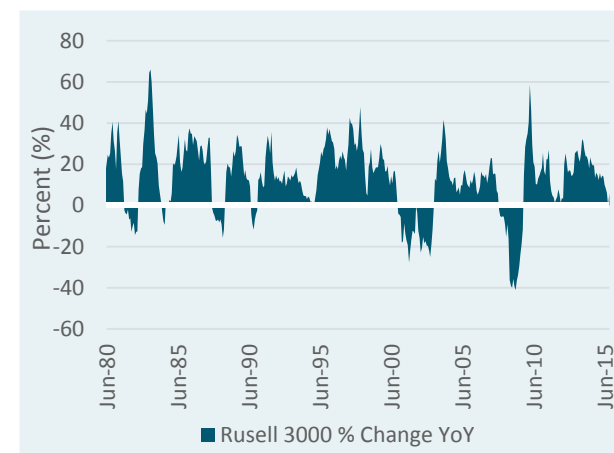
Source: FRED, as of 9/1/15

## INTERMEDIATE RETURN



Source: FRED, as of 9/1/15

## DOWNSIDE EVENTS



Source: FRED, as of 10/1/15

# Domestic equity recent

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

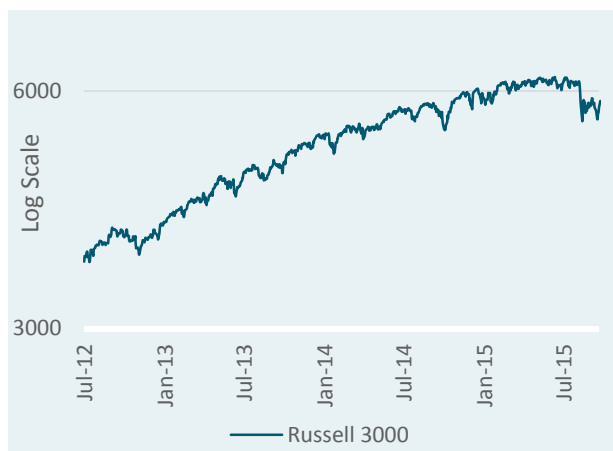
Small cap equities experienced a reversal in Q3, underperforming large cap. Large cap growth outperformed large cap value in Q3.

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

Equity corrections often present rebalancing opportunities

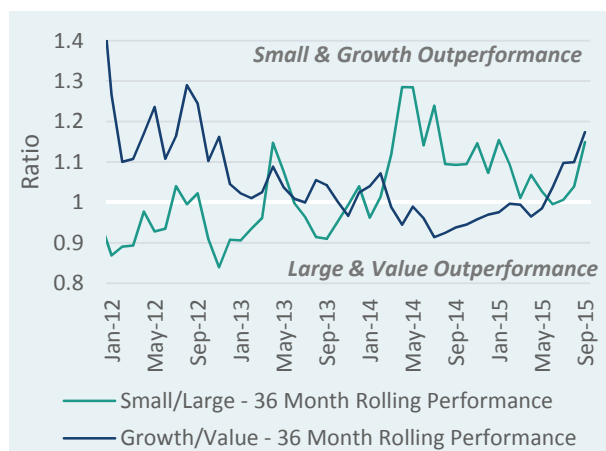
Recent weakness in earnings should be monitored

## SHORT TERM PERFORMANCE (3YR)



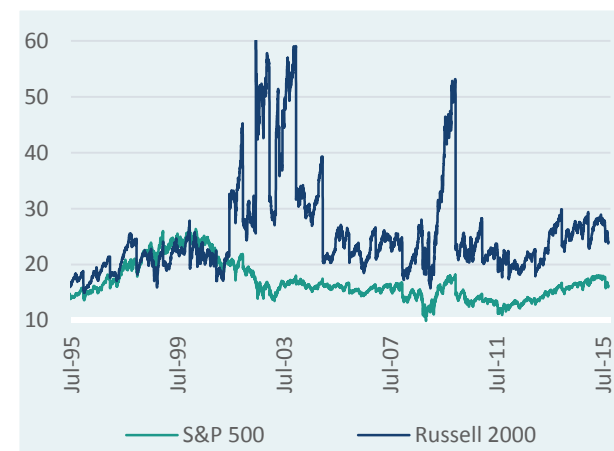
Source: Russell Investments, as of 9/30/15

## SMALL/LARGE & GROWTH/VALUE



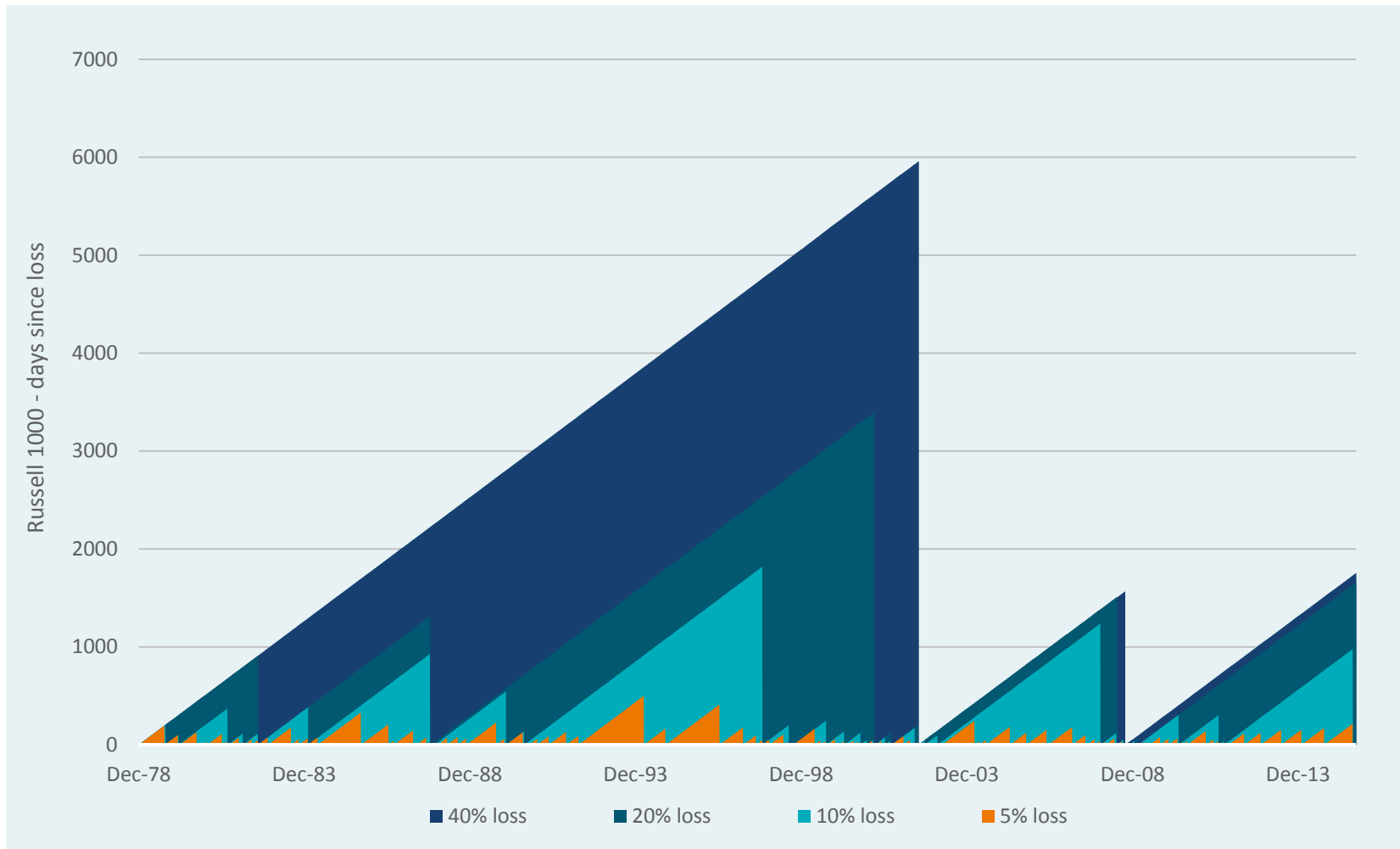
Source: Russell Investments, as of 9/30/15

## FORWARD P/E



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

# Drawdowns happen more than you think



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

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

# Equity volatility

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

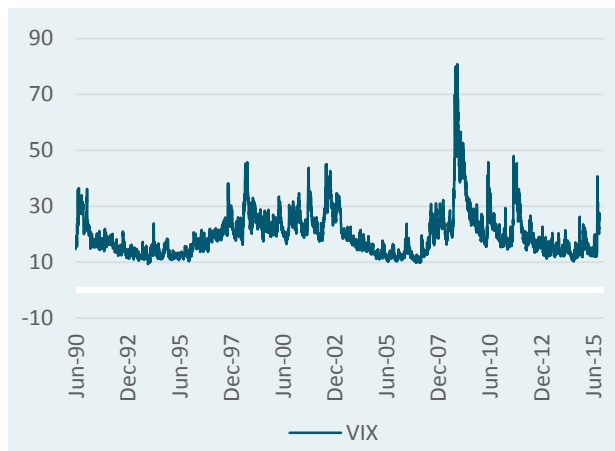
As mentioned previously, VIX is not a perfect proxy for true equity volatility. This index is prone to properties of the options market, including dealer activity and the premium built into options prices (which changes over

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

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

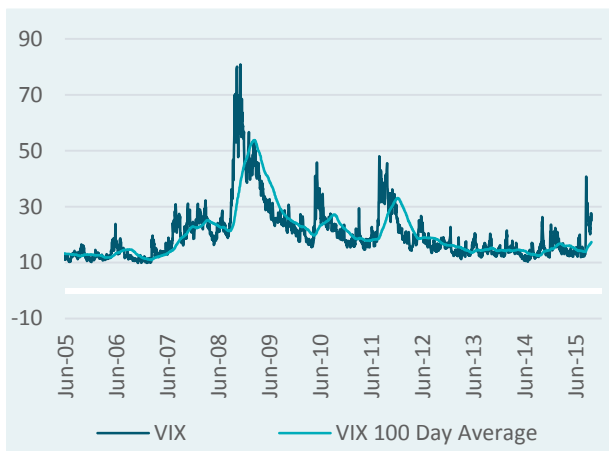
Equity volatility spiked in Q3 but then returned to normal level

**LONG TERM VOLATILITY %**



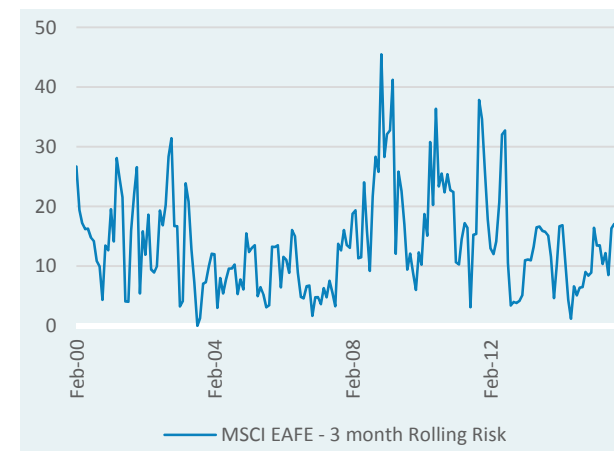
Source: CBOE, as of 9/30/15

**INTERMEDIATE TERM VOLATILITY %**



Source: CBOE, as of 9/30/15

**INTERNATIONAL EQUITY VOLATILITY %**



Source: MSCI, as of 9/30/15

# Domestic equity size and style

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

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

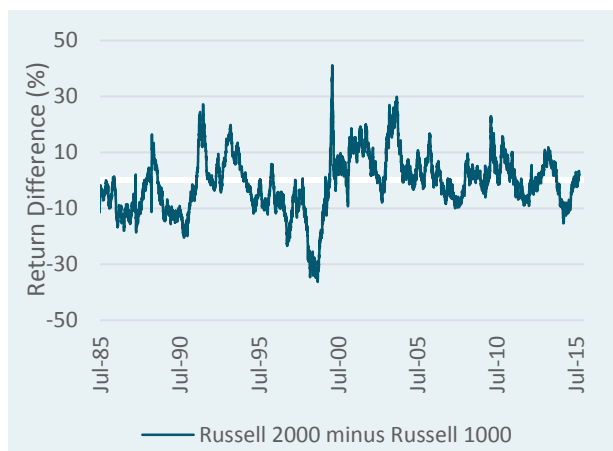
Similar behavior can be seen in style terms, with a significant move over the last two years towards growth and away from value.

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

Small cap trailed large cap in Q3

Growth continues to beat value

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



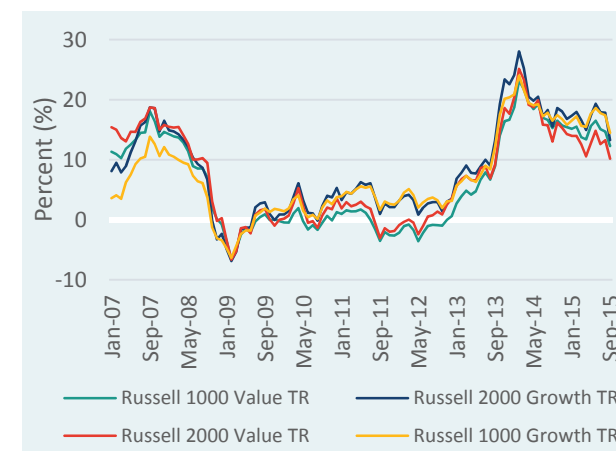
Source: Russell Investments, as of 9/30/15

**VALUE VS GROWTH (% YOY)**



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

**ROLLING 5 YEAR RETURN**



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

# Domestic equity valuations

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

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

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

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

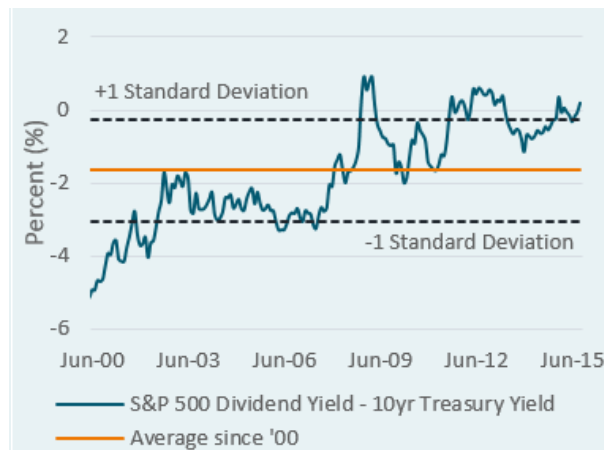
Growth concerns and an indecisive Fed have brought equity valuations down slightly

12 MONTH FORWARD P/E



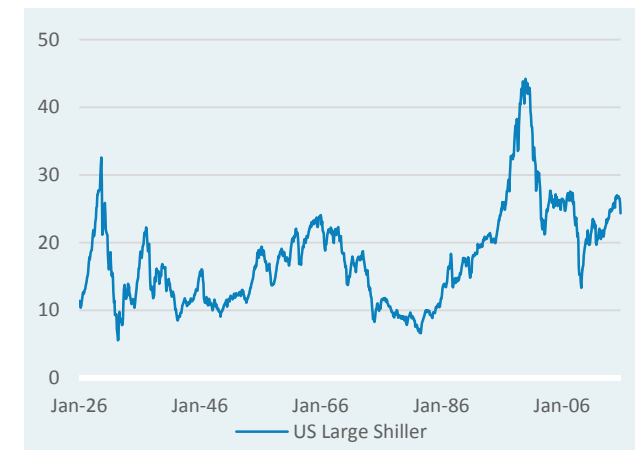
Source: Standard & Poor's, Russell Investments, as of 9/30/15

EQUITY YIELD LESS BOND YIELD



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

SHILLER P/E LONG-TERM



Source: Shiller, as of 9/30/15



# International equity historical return

Investors with international developed equity exposure (MSCI EAFE) have realized losses year-to-date, though positive if the effects of currency are removed.

International developed equities have underperformed both U.S. and emerging market equities on a 10-year basis.

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

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

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

Emerging market currencies saw broad sell-off in Q3

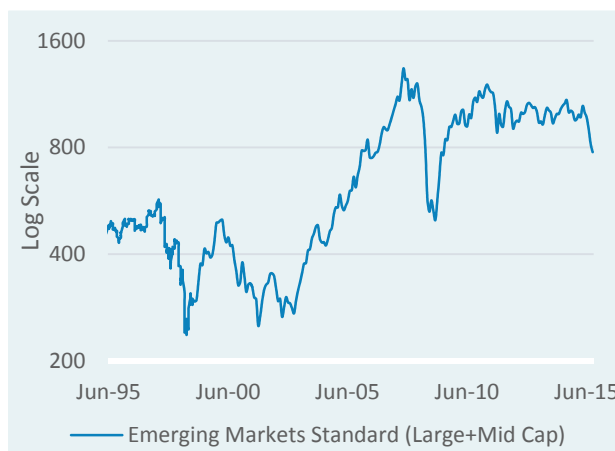
Currency remains an important decision

**EAFE LONG TERM (USD)**



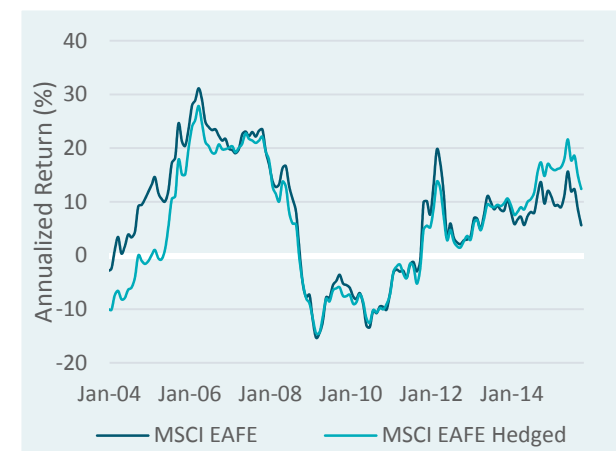
Source: MSCI, as of 9/30/15

**EMERGING MARKETS LONG TERM (USD)**



Source: MSCI, as of 9/30/15

**HEDGED VS UNHEDGED - 3YR ROLLING**



Source: MSCI, as of 9/30/15

# International equity valuations

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

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

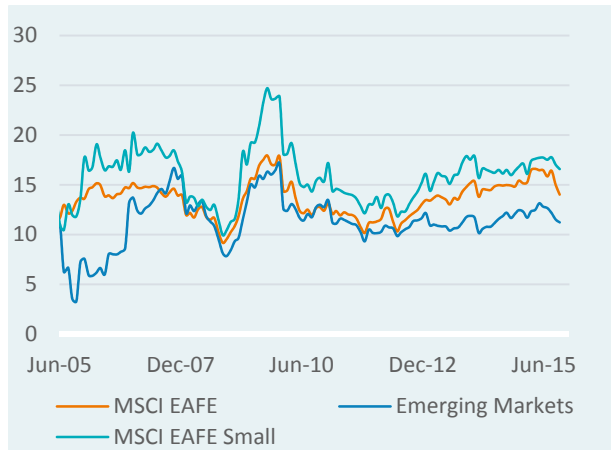
valuation differences exist between individual countries in Europe.

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

Valuations more in line with history

Though very volatile, select EM countries may offer value

12 MONTH FORWARD P/E



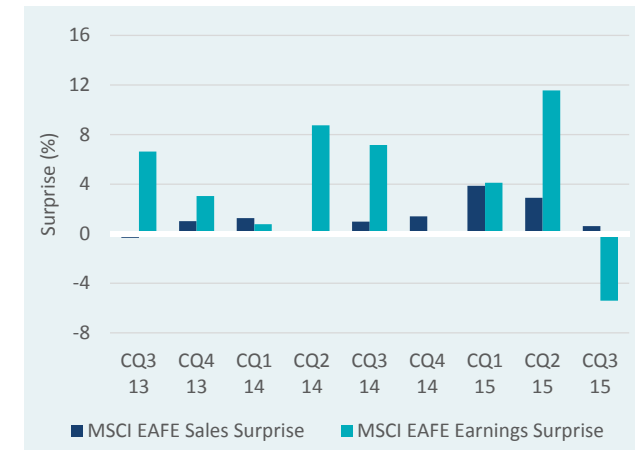
Source: MSCI, as of 9/30/15

EQUITY YIELD LESS BOND YIELD



Source: MSCI, as of 9/30/15

HISTORICAL EARNINGS SURPRISE



Source: Bloomberg, as of 9/30/15

# International equity recent

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

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

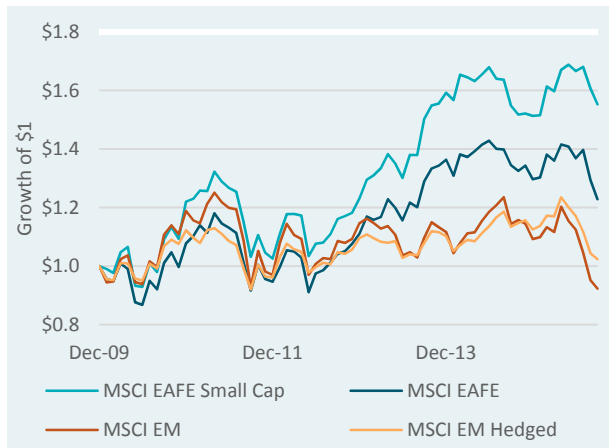
The European Central Bank continues accommodative monetary policy, and Mario Draghi expressed willingness to provide further quantitative easing if necessary.

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

Broad sell-off during Q3

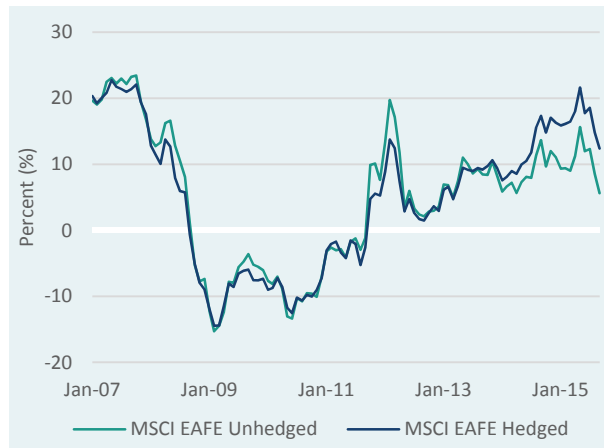
Currency a negative impact for U.S. investors with unhedged exposure

## SHORT TERM PERFORMANCE



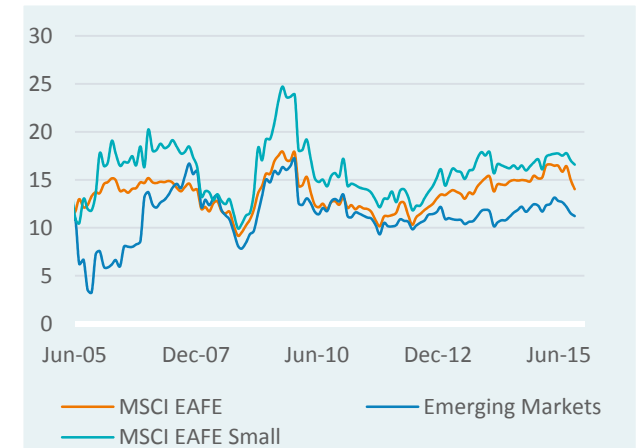
Source: MSCI, as of 9/30/15

## ROLLING 3 YEAR RETURN



Source: MSCI, as of 9/30/15

## FORWARD P/E



Source: MSCI, as of 9/30/15

# China – from a sprint to a jog

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

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

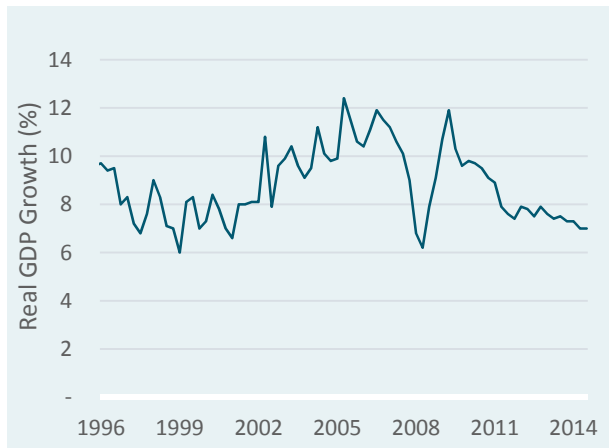
go-forward demand from China.

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

China has been the largest contributor to global growth

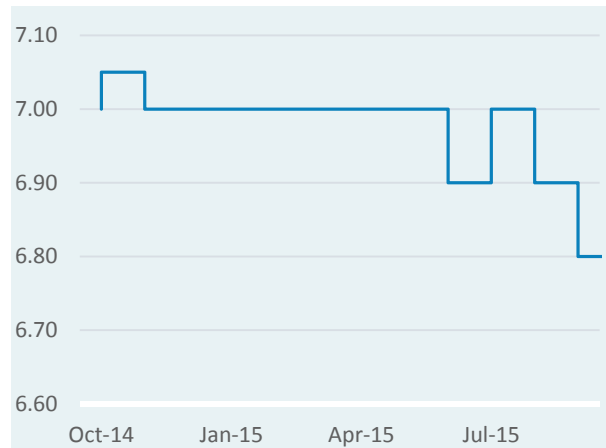
Slowing and changing composition

**CHINA REAL GDP**



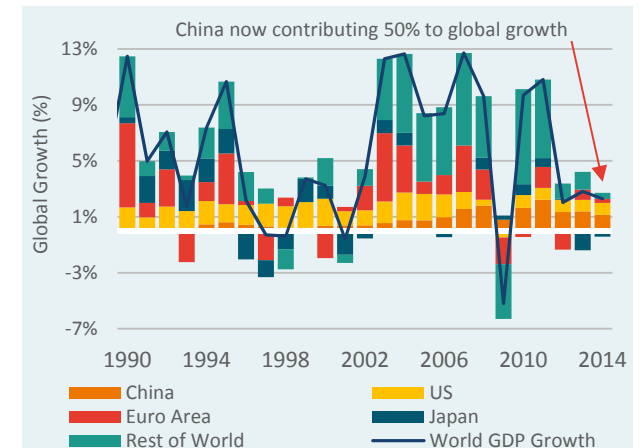
Source: Bloomberg, as of 6/30/15

**CHINA REAL GDP FORECAST**



Source: Bloomberg, as of 9/30/15

**DRIVERS OF GLOBAL GROWTH**



Source: Bloomberg

# Emerging market equity

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

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

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

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

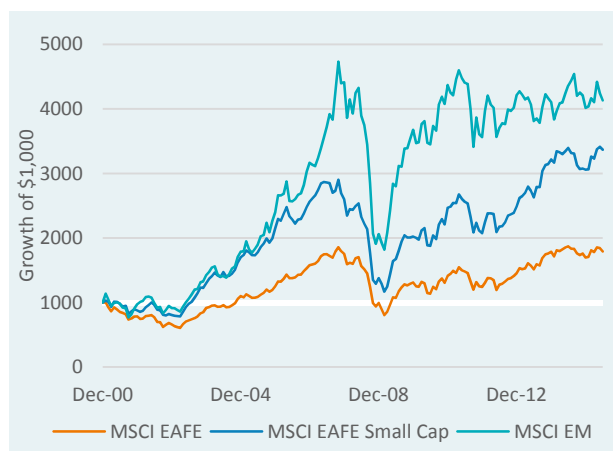
Eventual interest rate rises in developed economies may pose problems for emerging market economies if current exchange rates have not fully discounted this change.

Volatility and currency moves continue

The role of EM has not changed

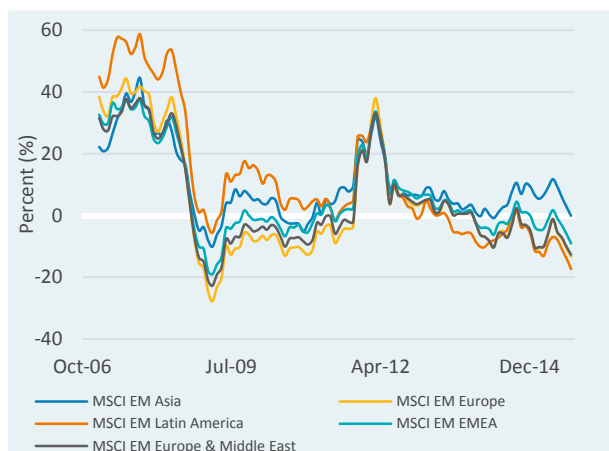
Valuations appear normal

## LONG TERM PERFORMANCE



Source: MSCI, as of 9/30/15

## ROLLING 3 YEAR RETURN



Source: MSCI, as of 9/30/15

## FORWARD P/E



Source: MSCI, as of 9/30/15

# Other assets

# Other asset volatility

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

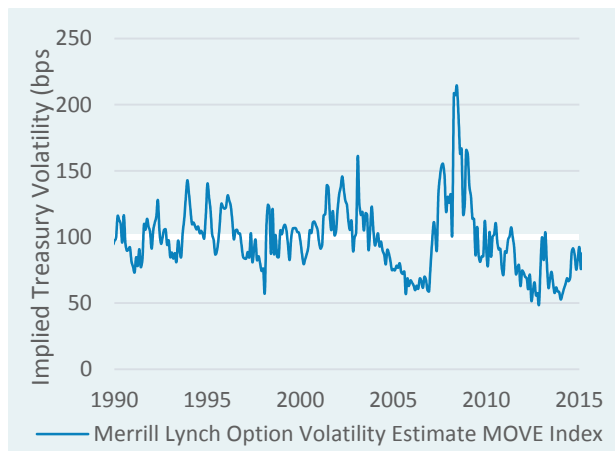
The JP Morgan G7 volatility index captures the volatility of a basket of currencies, representing significant FX moves over the past year, but remaining at a normal level. An alternative approach is to calculate the volatility of the RCCI currency beta index, which spiked in Q1 but has since come back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

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

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

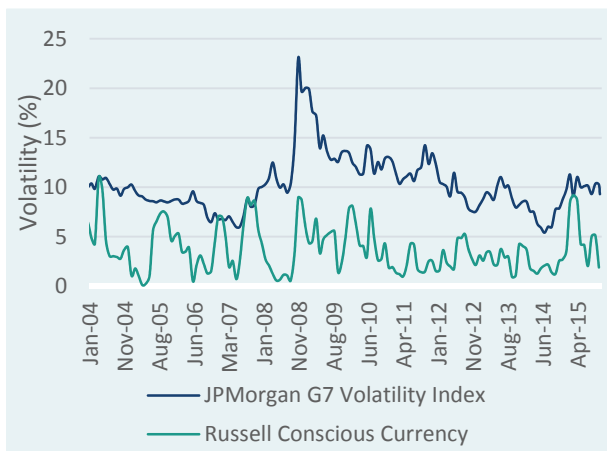
Volatility generally within normal ranges across asset classes

## FIXED INCOME VOLATILITY



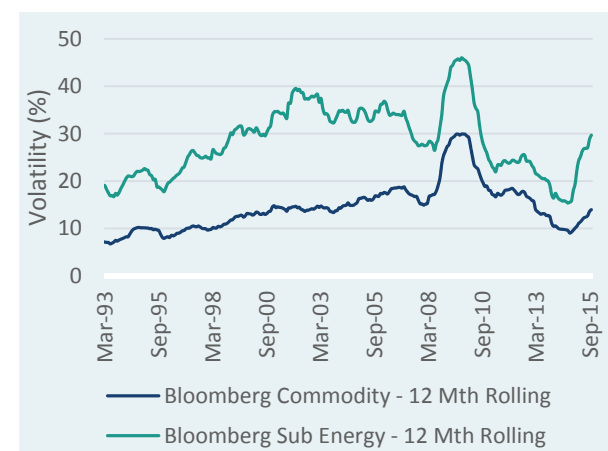
Source: Merrill Lynch, as of 9/30/15 (see Appendix)

## FX VOLATILITY %



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

## COMMODITY VOLATILITY %



Source: Bloomberg, as of 9/30/15

# Real estate & REITs

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

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

returns).

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

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

Provides broad exposure to economic cycle

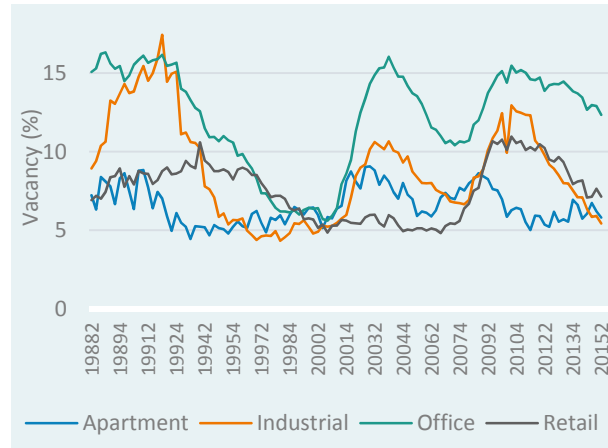
Some opportunities but careful selection needed

**REAL ESTATE & THE BUSINESS CYCLE**



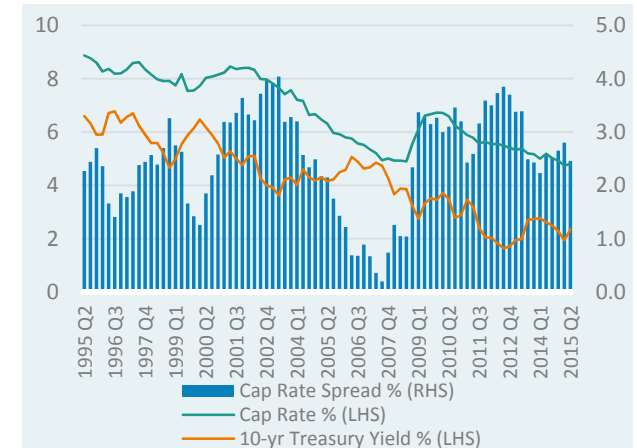
Source: NCREIF, as of 6/1/15

**REAL ESTATE VACANCY BY TYPE %**



Source: NCREIF, as of 6/30/15

**CAP RATE SPREADS**



Source: NCREIF, as of 6/1/15



# Commodities – inflation beta works both ways

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

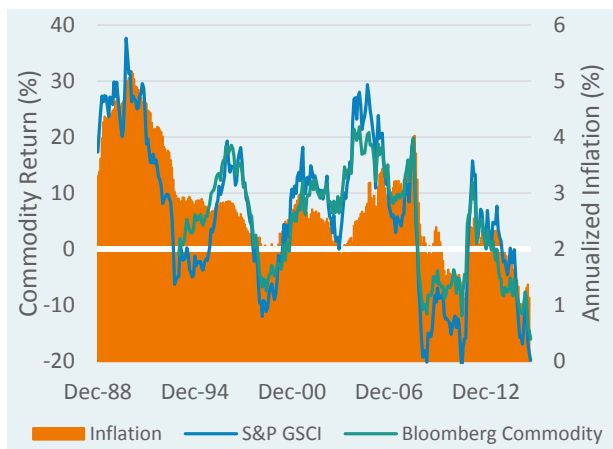
Commodities are typically held in portfolios to provide inflation sensitivity. Inflation sensitivity translates to strong performance during inflation *shocks* and negative performance during inflation *drops*. As shown in the bottom-left chart, commodities continue to fulfill their role of providing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

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

Commodities continue to correlate with inflation

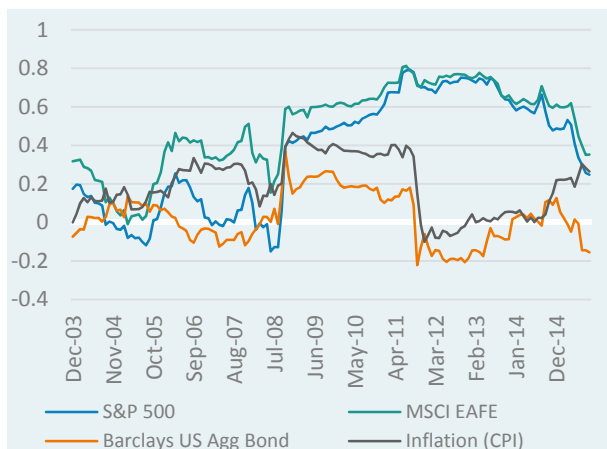
Oil has been volatile and somewhat range-bound

3 YR ROLLING RETURNS



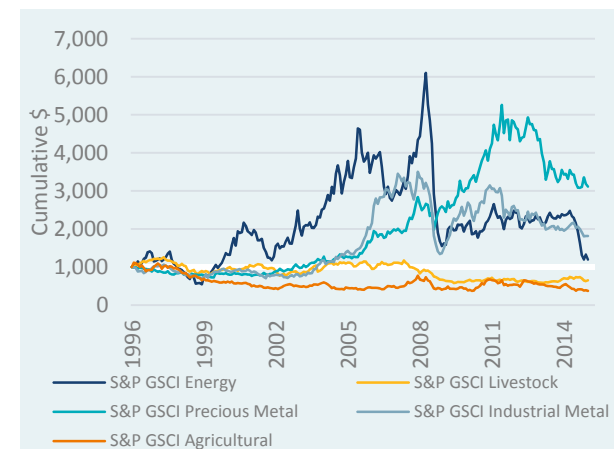
Source: Standard & Poor's, Bloomberg, as of 9/30/15

COMMODITY CORRELATION (3YR ROLLING)



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

COMMODITY CUMULATIVE RETURNS



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

# Currency

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

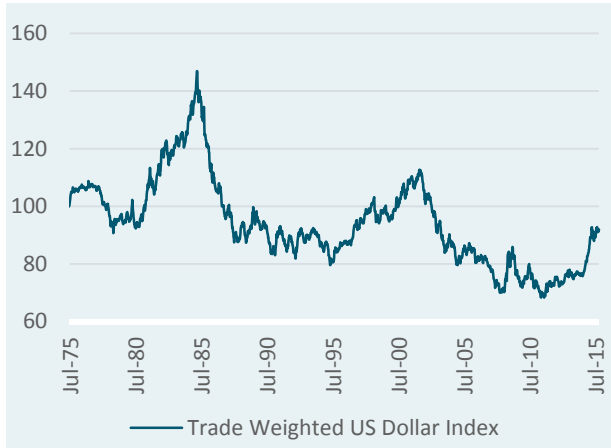
When measured and managed using unhedged benchmarks, international equity portfolios hold significant exposure to a currency portfolio derived from the size and structure of the equity markets

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

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

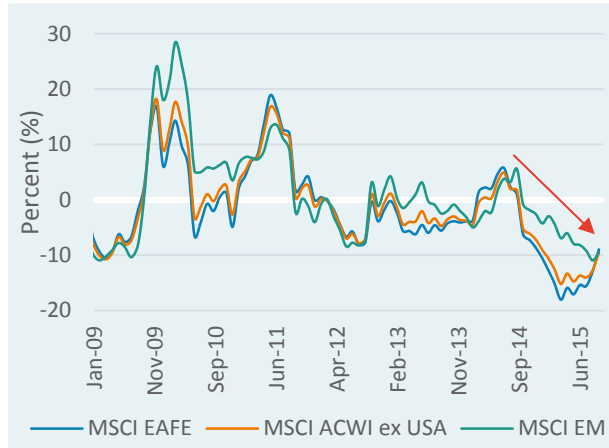
Recent dollar strength likely to continue, though sensitive to timing of fed rate hikes

**LONG TERM TRADE WEIGHTED USD**



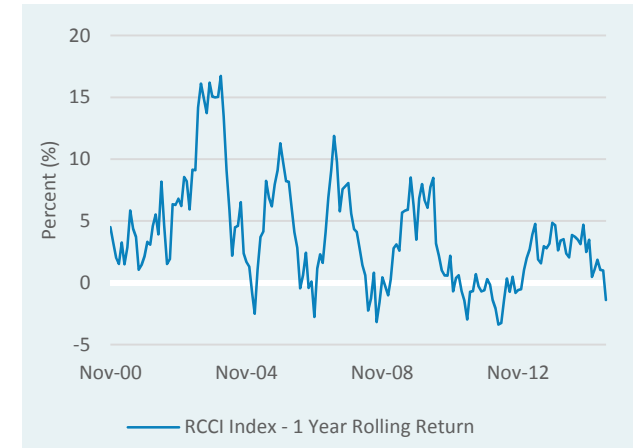
Source: FRED, as of 10/2/15

**EFFECT OF CURRENCY (1YR ROLLING)**



Source: FRED, as of 9/30/15

**CURRENCY MARKET BEHAVIOR**



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

# Appendix

# Periodic table of returns - September 2015

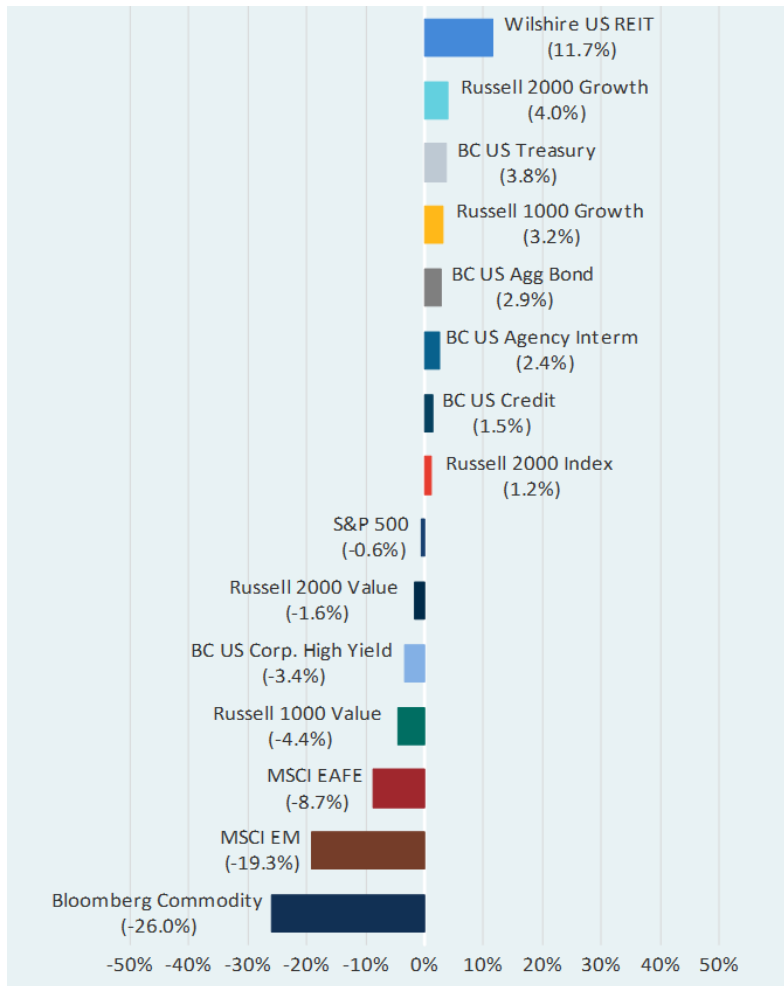
	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	YTD	5-Year	10-Year
Emerging Markets Equity	74.8	16.6	38.4	23.2	35.2	38.7	66.4	31.8	14.0	25.9	56.3	26.0	34.5	32.6	39.8	5.2	79.0	29.1	14.3	18.6	43.3	13.5	10.1	14.5	8.1
International Equity	32.9	8.1	37.8	23.1	32.9	27.0	43.1	22.8	8.4	10.3	48.5	22.2	21.4	26.9	16.2	1.4	37.2	26.9	7.8	18.1	38.8	13.2	1.1	13.4	8.0
Hedge Funds of Funds	26.3	6.4	37.2	22.4	31.8	20.3	33.2	12.2	7.3	6.7	47.3	20.7	20.1	23.5	15.8	-6.5	34.5	24.5	2.6	17.9	34.5	13.0	0.0	13.3	7.7
Small Cap Value	23.8	4.4	31.0	21.6	30.5	19.3	27.3	11.6	3.3	1.6	46.0	18.3	14.0	22.2	11.8	-21.4	32.5	19.2	1.5	17.5	33.5	11.8	-0.7	12.5	7.0
60/40 Global Portfolio	19.3	3.2	28.5	21.4	22.4	16.2	26.5	7.0	2.8	1.0	39.2	16.5	7.5	18.4	11.6	-25.9	28.4	16.8	0.4	16.4	33.1	6.0	-1.5	12.3	6.5
Small Cap Equity	18.9	2.6	25.7	16.5	16.2	15.6	24.3	6.0	2.5	-5.9	30.0	14.5	7.1	16.6	10.9	-28.9	27.2	16.7	0.1	16.3	32.5	5.6	-5.0	11.7	5.7
Large Cap Value	18.1	0.4	19.6	14.4	13.9	8.7	21.3	4.1	-2.4	-6.0	29.9	14.3	6.3	15.5	10.3	-33.8	23.3	16.1	-2.1	15.3	23.3	4.9	-5.2	10.2	5.3
Small Cap Growth	13.4	-1.5	18.5	11.3	12.9	4.9	20.9	-3.0	-5.6	-11.4	29.7	12.9	5.3	15.1	7.0	-35.6	20.6	15.5	-2.9	14.6	12.1	4.2	-5.3	4.6	4.6
Large Cap Equity	10.2	-1.8	15.2	10.3	10.6	1.2	13.2	-7.3	-9.1	-15.5	25.2	11.4	4.7	13.3	7.0	-36.8	19.7	13.1	-4.2	11.5	11.0	3.4	-5.5	4.0	4.5
US Bonds	9.7	-2.0	11.6	9.9	9.7	-2.5	11.4	-7.8	-9.2	-15.7	23.9	9.1	4.6	10.4	5.8	-37.6	18.9	10.2	-5.5	10.5	9.0	2.8	-7.7	3.1	4.3
Cash	3.1	-2.4	11.1	6.4	5.2	-5.1	7.3	-14.0	-12.4	-20.5	11.6	6.9	4.6	9.1	4.4	-38.4	11.5	8.2	-5.7	4.8	0.1	0.0	-9.0	2.7	3.0
Large Cap Growth	2.9	-2.9	7.5	6.0	2.1	-6.5	4.8	-22.4	-19.5	-21.7	9.0	6.3	4.2	4.8	-0.2	-38.5	5.9	6.5	-11.7	4.2	-2.0	-1.8	-10.1	0.1	2.4
Real Estate	1.4	-3.5	5.7	5.1	-3.4	-25.3	-0.8	-22.4	-20.4	-27.9	4.1	4.3	3.2	4.3	-1.6	-43.1	0.2	5.7	-13.3	0.1	-2.3	-4.5	-15.5	-3.6	1.3
Commodities	-1.1	-7.3	-5.2	3.6	-11.6	-27.0	-1.5	-30.6	-21.2	-30.3	1.0	1.4	2.4	2.1	-9.8	-53.2	-16.9	0.1	-18.2	-1.1	-9.5	-17.0	-15.8	-8.9	-5.7

- Large Cap Equity
- Small Cap Growth
- Commodities
- Large Cap Value
- International Equity
- Real Estate
- Large Cap Growth
- Emerging Markets Equity
- Hedge Funds of Funds
- US Bonds
- 60% MSCI ACWI/40% BC Global Bond
- Small Cap Value
- Cash

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

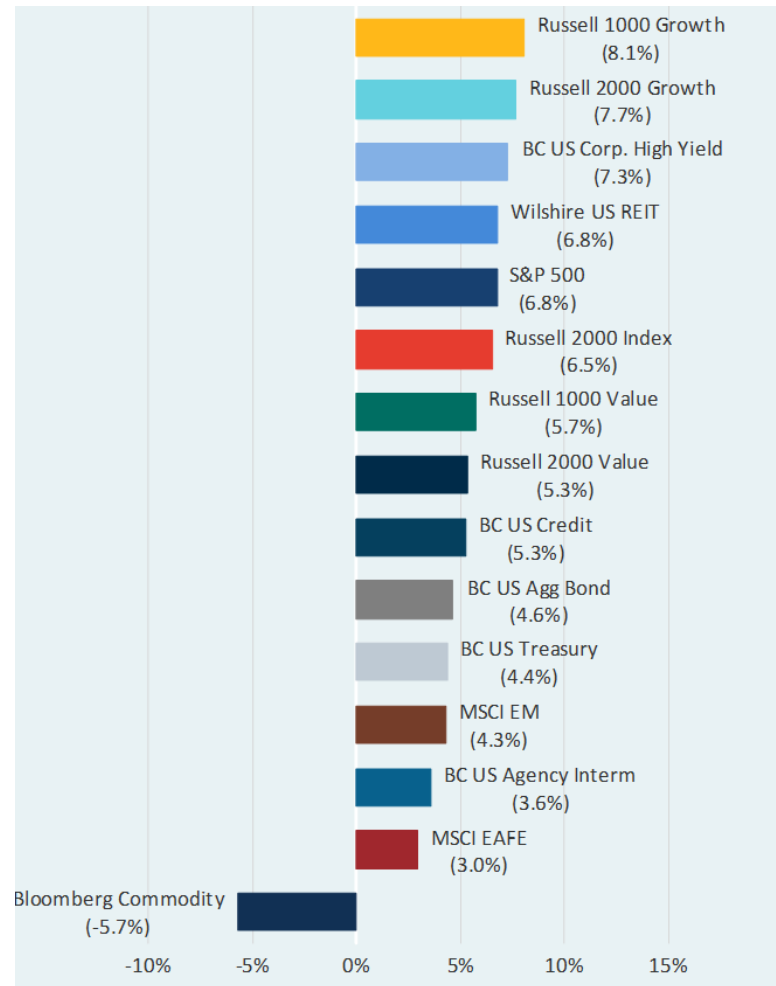
# Major asset class returns

ONE YEAR ENDING SEPTEMBER 2015



Source: MPI, as of September 30, 2015

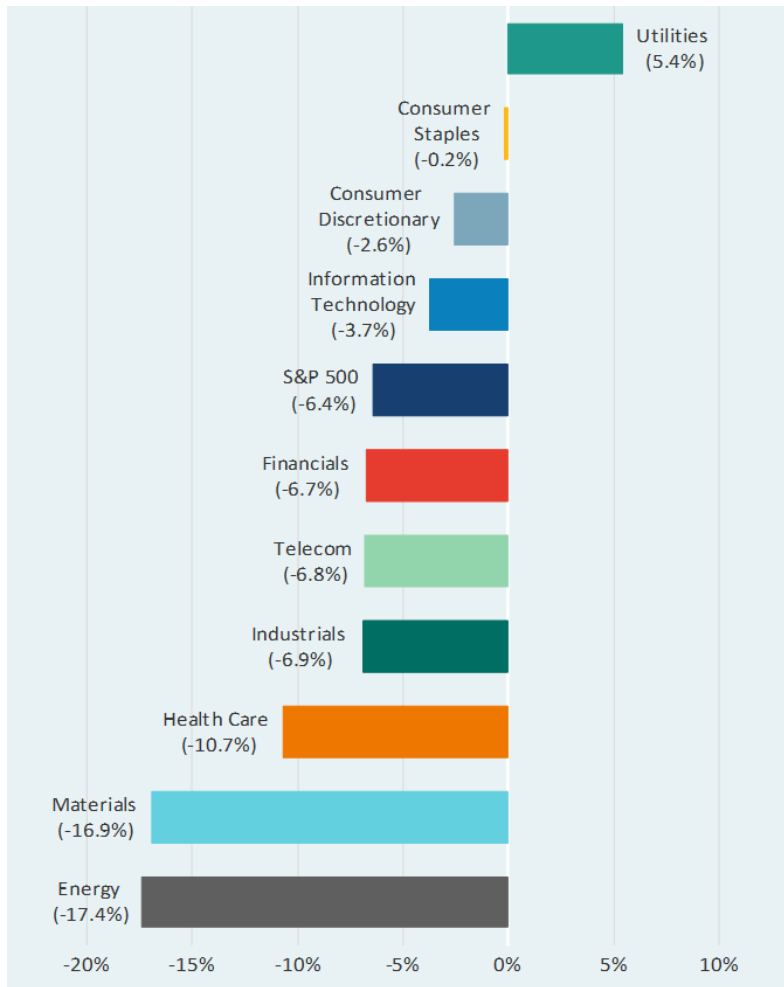
TEN YEARS ENDING SEPTEMBER 2015



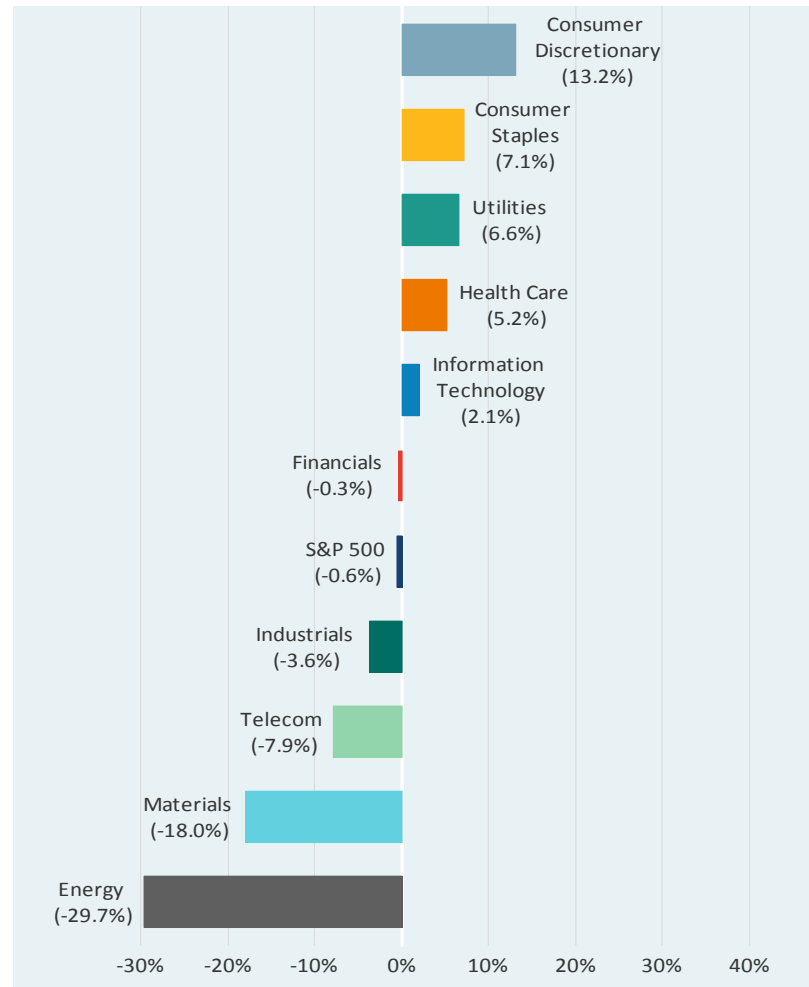
Source: MPI, as of September 30, 2015

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

QTD ENDING SEPTEMBER 2015



ONE YEAR ENDING SEPTEMBER 2015



Source: MPI, as of 9/30/15

# Detailed index returns

## DOMESTIC EQUITY

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

## INTERNATIONAL EQUITY

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

## FIXED INCOME

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

## OTHER

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

Source: Morningstar, as of 9/30/15

# Definitions

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

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

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

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

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# Contra Costa County Employees' Retirement Association

Investment Performance Review

Period Ending: September 30, 2015



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# Executive Summary

**To:** Contra Costa County Employees' Retirement Association

**From:** Verus

**Date:** November 24, 2015

**Re:** Quarterly Review – Period Ending September 30, 2015

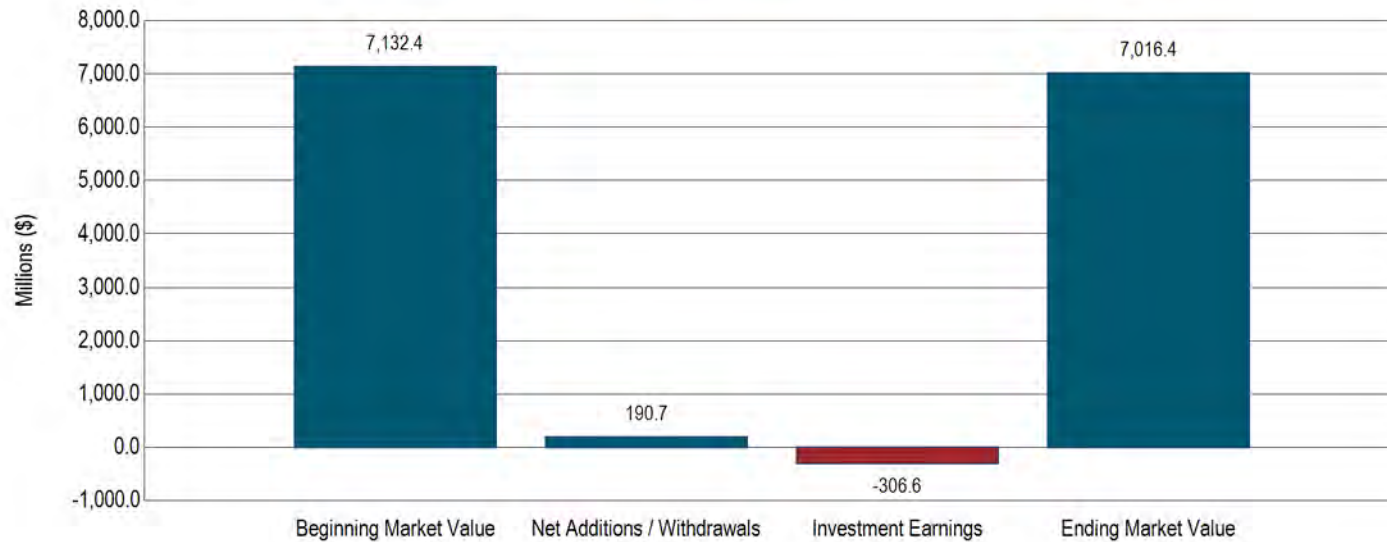
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- The CCCERA Total Fund returned -4.1% for the third quarter, above the -4.9% return of the median public fund, below the 0.7% return of the CPI +4%, and in-line with the -4.1% return of the policy index. CCCERA's Total Fund performance trails the CPI +4% on a year-to-date and 1-year basis. The Total Fund is above the median, the CPI +4%, and the policy index over all other trailing time periods.
- CCCERA domestic equities returned -7.8% for the quarter, below the -7.2% return of the Russell 3000 Index while ranking in the 46<sup>th</sup> percentile of all cap domestic equity portfolios.
- CCCERA international equities returned -9.2% for the quarter, above the -10.2% return of the MSCI EAFE and the -12.1% return of the MSCI ACWI ex-US while ranking in the 35<sup>th</sup> percentile of MSCI ACWI ex-US portfolios.
- CCCERA global equities returned -8.3% for the quarter, above the -9.4% return of the MSCI ACWI while ranking in the 48<sup>th</sup> percentile of global equity portfolios.
- CCCERA domestic fixed income, excluding the Allianz high yield portfolio, returned 0.4% for the quarter, below the 0.7% return of the Barclays U.S. Universal while ranking in the 91<sup>st</sup> percentile of domestic core fixed income portfolios.
- The Allianz high yield portfolio returned -4.9% for the quarter, in-line with the -4.9% return of the ML High Yield index while ranking in the 73<sup>rd</sup> percentile of domestic high yield fixed income portfolios.
- CCCERA global fixed income returned -0.2% for the quarter, below the 0.9% return of the Barclays Global Aggregate Index while ranking in the 37<sup>th</sup> percentile of global fixed income portfolios.
- The inflation hedging investments returned -5.8% for the quarter, below the 0.7% return of the CPI+4% benchmark.
- CCCERA real estate returned 0.8% for the quarter, below the 2.2% return of the Real Estate Benchmark.
- The total equity allocation stood at 43.2% at the end of the third quarter, below the current target of 46.6%. Total global fixed income stood at 24.9%, above the target of 23.6%. High yield fixed income stood at 4.9% and inflation hedging assets stood at 5.0%, below and in-line with their targets of 5.0%, respectively. Real estate stood at 13.2% and alternative investments stood at 7.7%, both above their targets of 12.5% and 6.0%, respectively. Opportunistic stood at 0.3%, below the target of 0.8%. Cash stood at 0.7%, above the target of 0.5%.

**Portfolio Reconciliation**

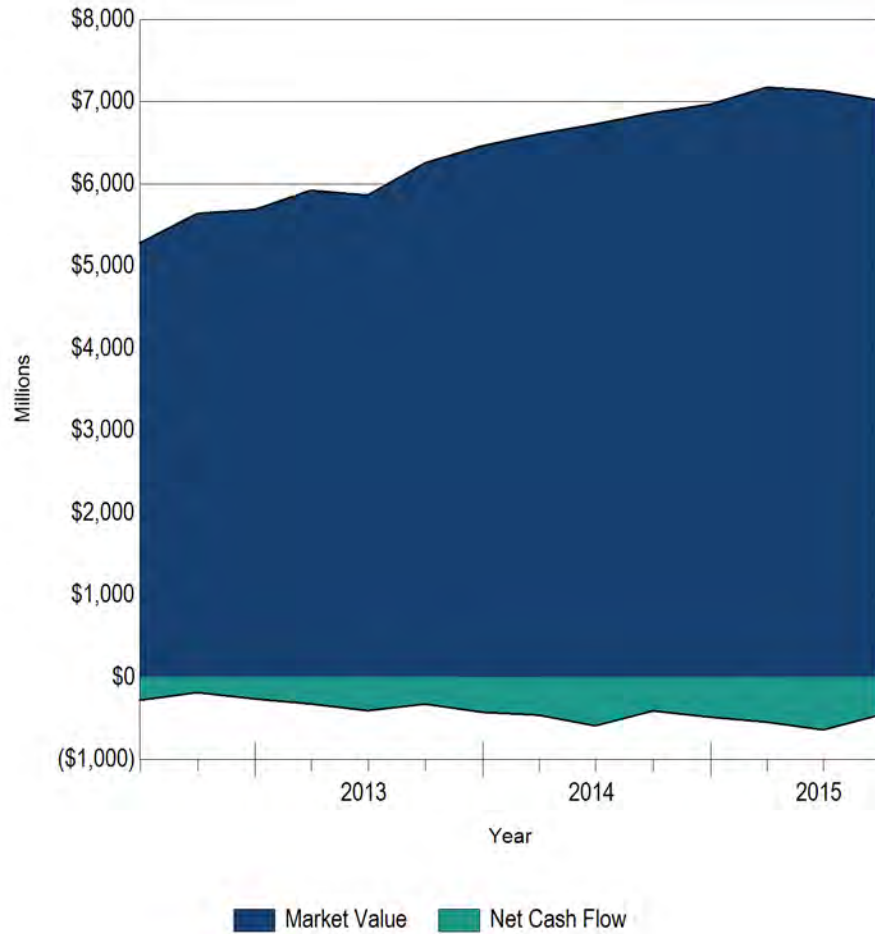
Sources of Portfolio Growth	Last Three Months	Year-To-Date
Beginning Market Value	\$7,132,356,705	\$6,968,229,116
Net Additions/Withdrawals	\$190,660,310	\$58,940,068
Investment Earnings	-\$306,583,768	-\$10,735,936
<b>Ending Market Value</b>	<b>\$7,016,433,248</b>	<b>\$7,016,433,248</b>

**Change in Market Value  
Last Three Months**

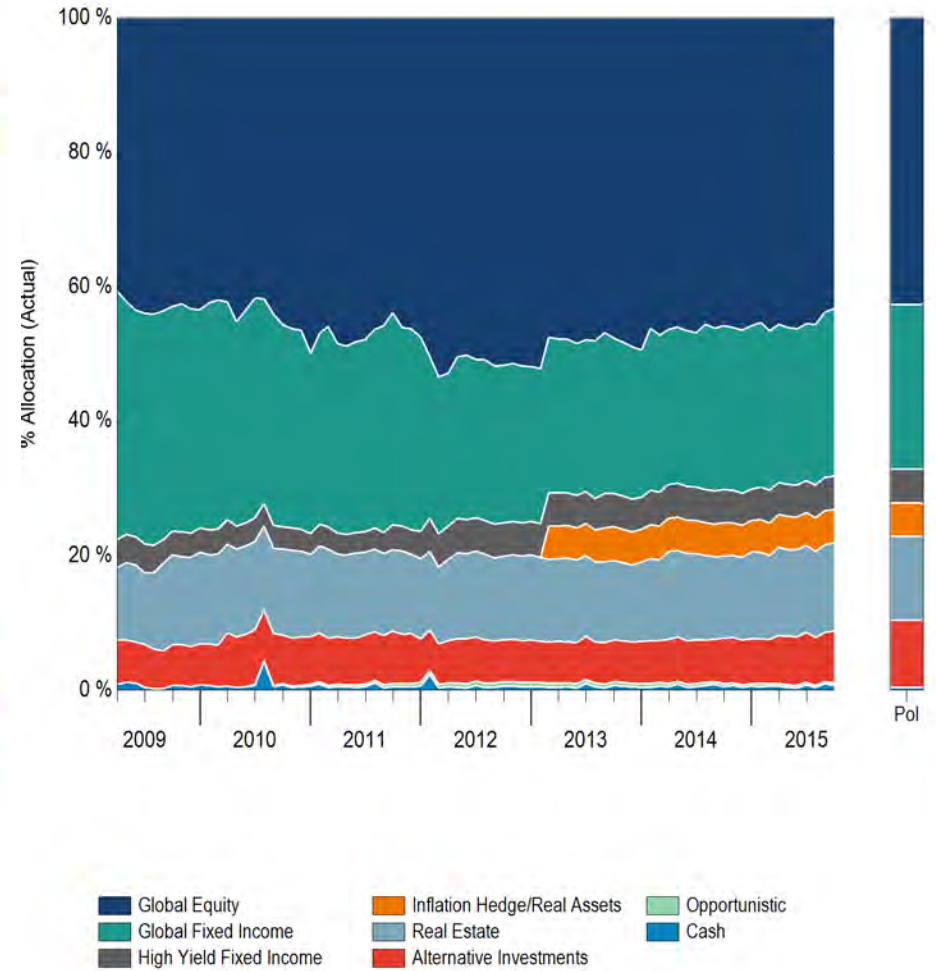


Contributions and withdrawals may include intra-account transfers between managers/funds.

Market Value History  
 Cumulative Cash Flows



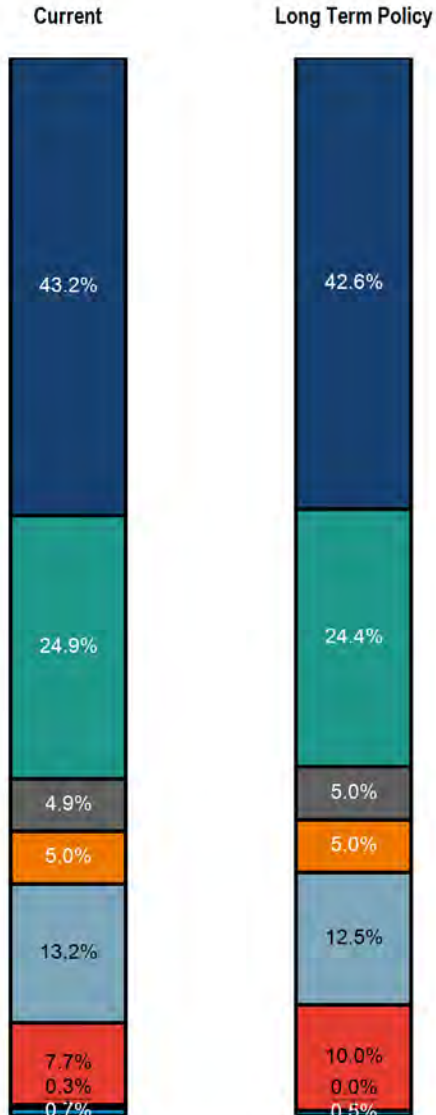
Asset Allocation History



Total Fund

Asset Allocation vs. Long Term Target Policy

Period Ending: September 30, 2015



Allocation vs. Long Term Target

	Current Balance	Current Allocation	Long Term Target	Difference	Long Term Target Range	Within IPS Range?
Global Equity	\$3,031,816,408	43.2%	42.6%	\$42,815,844	40.0% - 55.0%	Yes
Global Fixed Income	\$1,749,789,467	24.9%	24.4%	\$37,779,755	20.0% - 30.0%	Yes
High Yield Fixed Income	\$346,797,107	4.9%	5.0%	-\$4,024,555	2.0% - 9.0%	Yes
Inflation Hedge/Real Assets	\$350,641,503	5.0%	5.0%	-\$180,160	0.0% - 10.0%	Yes
Real Estate	\$922,781,102	13.2%	12.5%	\$45,726,946	10.0% - 16.0%	Yes
Alternative Investments	\$542,356,001	7.7%	10.0%	-\$159,287,324	5.0% - 12.0%	Yes
Opportunistic	\$22,996,137	0.3%	0.0%	\$22,996,137	0.0% - 5.0%	Yes
Cash	\$49,255,523	0.7%	0.5%	\$14,173,357	0.0% - 1.0%	Yes
<b>Total</b>	<b>\$7,016,433,248</b>	<b>100.0%</b>	<b>100.0%</b>			

Allocation vs. Current Targets

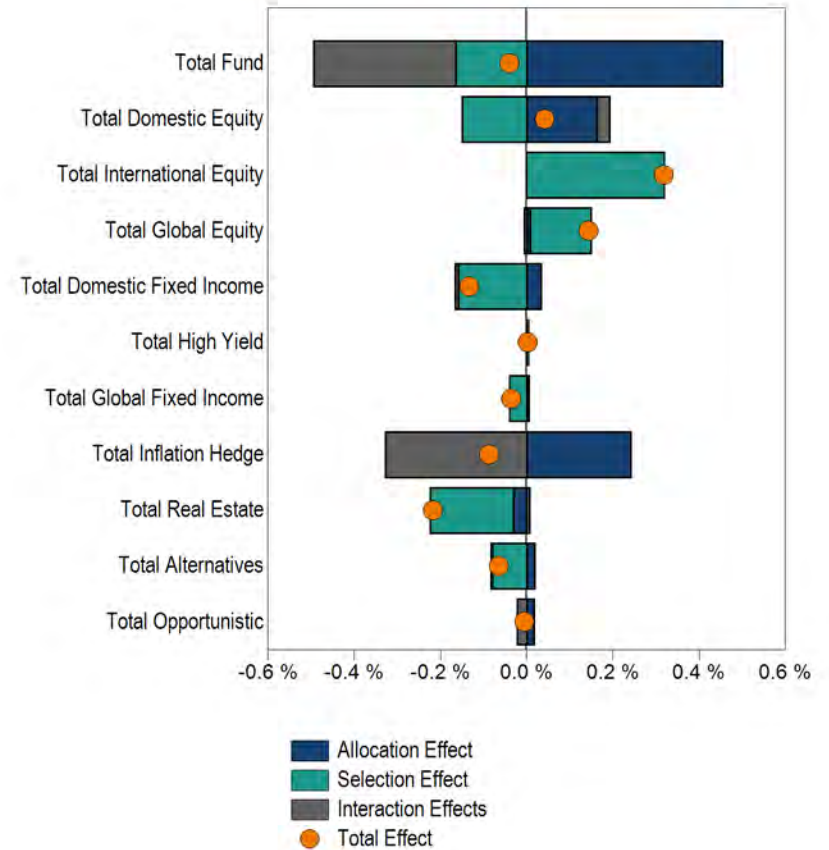
	Current Balance	Current Allocation	Current Target	Difference
Global Equity	\$3,031,816,408	43.2%	46.6%	-\$237,841,486
Global Fixed Income	\$1,749,789,467	24.9%	23.6%	\$93,911,221
High Yield Fixed Income	\$346,797,107	4.9%	5.0%	-\$4,024,555
Inflation Hedge/Real Assets	\$350,641,503	5.0%	5.0%	-\$180,160
Real Estate	\$922,781,102	13.2%	12.5%	\$45,726,946
Alternative Investments	\$542,356,001	7.7%	6.0%	\$121,370,006
Opportunistic	\$22,996,137	0.3%	0.8%	-\$33,135,329
Cash	\$49,255,523	0.7%	0.5%	\$14,173,357
<b>Total</b>	<b>\$7,016,433,248</b>	<b>100.0%</b>	<b>100.0%</b>	

# Total Fund Executive Summary (Gross of Fees)

Period Ending: September 30, 2015

	QTD	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs
<b>Total Fund</b>	<b>-4.1</b>	<b>0.2</b>	<b>2.6</b>	<b>8.9</b>	<b>9.5</b>	<b>6.8</b>
Policy Index	-4.1	-2.1	0.4	8.0	9.1	--
CPI + 4%	0.7	4.4	4.0	5.0	5.8	5.9
InvestorForce Public DB > \$1B Gross Rank	17	4	1	8	5	2
<b>Total Domestic Equity</b>	<b>-7.8</b>	<b>-3.5</b>	<b>3.6</b>	<b>13.8</b>	<b>14.4</b>	<b>7.7</b>
Russell 3000	-7.2	-5.4	-0.5	12.5	13.3	6.9
eA US All Cap Equity Gross Rank	46	32	25	34	24	51
<b>Total International Equity</b>	<b>-9.2</b>	<b>-5.4</b>	<b>-6.8</b>	<b>6.0</b>	<b>4.5</b>	<b>3.1</b>
MSCI ACWI ex USA Gross	-12.1	-8.3	-11.8	2.8	2.3	3.5
MSCI EAFE Gross	-10.2	-4.9	-8.3	6.1	4.4	3.4
eA All ACWI ex-US Equity Gross Rank	35	58	51	48	63	93
<b>Total Global Equity</b>	<b>-8.3</b>	<b>-3.7</b>	<b>-2.8</b>	<b>8.6</b>	<b>7.3</b>	<b>--</b>
MSCI ACWI	-9.4	-7.0	-6.7	7.0	6.8	--
eA All Global Equity Gross Rank	48	39	47	56	74	--
<b>Total Domestic Fixed Income</b>	<b>0.4</b>	<b>1.7</b>	<b>3.4</b>	<b>3.8</b>	<b>5.4</b>	<b>6.0</b>
Barclays U.S. Universal	0.7	1.0	2.3	1.9	3.4	4.8
Barclays Aggregate	1.2	1.1	2.9	1.7	3.1	4.6
eA US Core Fixed Inc Gross Rank	91	26	25	2	2	6
<b>Total High Yield</b>	<b>-4.9</b>	<b>-2.0</b>	<b>-3.4</b>	<b>3.6</b>	<b>6.3</b>	<b>7.5</b>
BofA ML High Yield Master II	-4.9	-2.5	-3.6	3.5	5.9	7.1
eA US High Yield Fixed Inc Gross Rank	73	70	73	64	56	36
<b>Total Global Fixed Income</b>	<b>-0.2</b>	<b>-2.2</b>	<b>-3.3</b>	<b>-1.8</b>	<b>1.2</b>	<b>3.2</b>
Barclays Global Aggregate	0.9	-2.3	-3.3	-1.6	0.8	3.7
eA All Global Fixed Inc Gross Rank	37	56	60	83	78	97

Attribution Effects  
3 Months Ending September 30, 2015



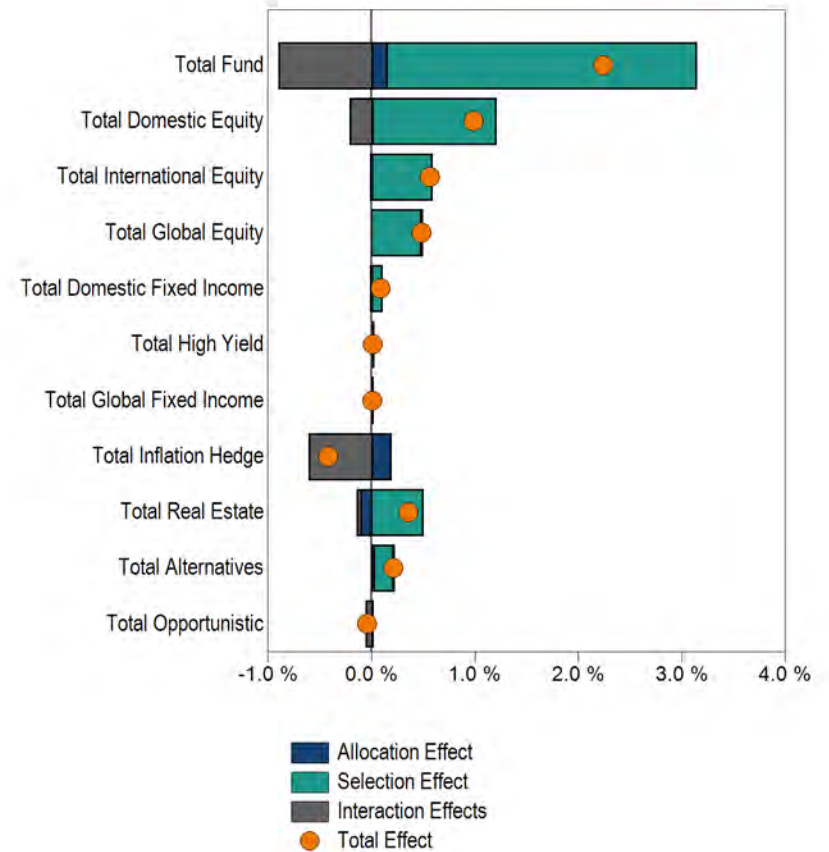
Policy Index (as of 4/1/2012): 27.7% Russell 3000, 10.6% MSCI ACWI ex-US (Gross), 12.3% MSCI ACWI (Net), 19.6% Barclays U.S. Aggregate, 5% Bank of America High Yield Master II, 4% Barclays Global Aggregate, 13.5% Real Estate Benchmark, 6.8% S&P 500 +4% (Lagged), 0.5% 91-Day T-Bills. Real Estate Benchmark: 40% Wilshire REIT, 50% NCREIF Property Index, 10% FTSE/EPRA NAREIT Developed ex-USA.

# Total Fund Executive Summary (Gross of Fees)

Period Ending: September 30, 2015

	QTD	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs
<b>Total Inflation Hedge</b>	<b>-5.8</b>	<b>-4.0</b>	<b>-7.7</b>	--	--	--
CPI + 4%	0.7	4.4	4.0	--	--	--
<b>Total Real Estate</b>	<b>0.8</b>	<b>9.1</b>	<b>15.5</b>	<b>14.6</b>	<b>14.4</b>	<b>7.3</b>
Real Estate Benchmark	2.2	3.5	11.5	10.7	12.4	8.3
NCREIF-ODCE	3.7	11.3	14.9	13.4	14.0	6.7
NCREIF Property Index	3.1	10.1	13.5	11.9	12.5	8.0
<b>Total Alternatives</b>	<b>0.1</b>	<b>12.8</b>	<b>14.4</b>	<b>15.7</b>	<b>14.6</b>	<b>13.1</b>
S&P 500 Index +4% (Lagged)	1.3	9.4	11.7	21.9	22.0	12.2
<b>Total Opportunistic</b>	<b>-5.8</b>	<b>-6.7</b>	<b>-9.4</b>	<b>6.7</b>	<b>5.4</b>	--
CPI + 4%	0.7	4.4	4.0	5.0	5.8	--

Attribution Effects  
1 Year Ending September 30, 2015

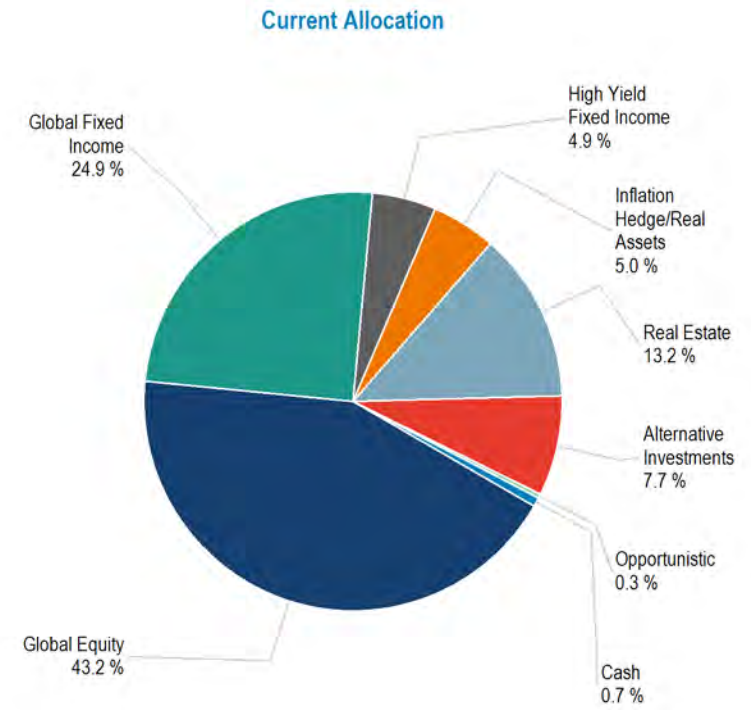


Policy Index (as of 4/1/2012): 27.7% Russell 3000, 10.6% MSCI ACWI ex-US (Gross), 12.3% MSCI ACWI (Net), 19.6% Barclays U.S. Aggregate, 5% Bank of America High Yield Master II, 4% Barclays Global Aggregate, 13.5% Real Estate Benchmark, 6.8% S&P 500 +4% (Lagged), 0.5% 91-Day T-Bills. Real Estate Benchmark: 40% Wilshire REIT, 50% NCREIF Property Index, 10% FTSE/EPRA NAREIT Developed ex-USA.

# Total Fund Executive Summary (Net of Fees)

Period Ending: September 30, 2015

	QTD	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs
<b>Total Fund</b>	<b>-4.2</b>	<b>-0.3</b>	<b>2.1</b>	<b>8.2</b>	<b>8.8</b>	<b>6.2</b>
<i>Policy Index</i>	-4.1	-2.1	0.4	8.0	9.1	--
<i>CPI + 4%</i>	0.7	4.4	4.0	5.0	5.8	5.9
<b>Total Domestic Equity</b>	<b>-7.9</b>	<b>-3.8</b>	<b>3.1</b>	<b>13.4</b>	<b>14.0</b>	<b>7.3</b>
<i>Russell 3000</i>	-7.2	-5.4	-0.5	12.5	13.3	6.9
<b>Total International Equity</b>	<b>-9.3</b>	<b>-5.7</b>	<b>-7.1</b>	<b>5.6</b>	<b>4.0</b>	<b>2.6</b>
<i>MSCI ACWI ex USA Gross</i>	-12.1	-8.3	-11.8	2.8	2.3	3.5
<i>MSCI EAFE Gross</i>	-10.2	-4.9	-8.3	6.1	4.4	3.4
<b>Total Global Equity</b>	<b>-8.5</b>	<b>-4.1</b>	<b>-3.5</b>	<b>8.0</b>	<b>6.7</b>	<b>--</b>
<i>MSCI ACWI</i>	-9.4	-7.0	-6.7	7.0	6.8	--
<b>Total Domestic Fixed Income</b>	<b>0.3</b>	<b>1.5</b>	<b>3.1</b>	<b>3.3</b>	<b>4.9</b>	<b>5.5</b>
<i>Barclays U.S. Universal</i>	0.7	1.0	2.3	1.9	3.4	4.8
<i>Barclays Aggregate</i>	1.2	1.1	2.9	1.7	3.1	4.6
<b>Total High Yield</b>	<b>-5.0</b>	<b>-2.3</b>	<b>-3.8</b>	<b>3.2</b>	<b>6.0</b>	<b>7.3</b>
<i>BofA ML High Yield Master II</i>	-4.9	-2.5	-3.6	3.5	5.9	7.1
<b>Total Global Fixed Income</b>	<b>-0.2</b>	<b>-2.4</b>	<b>-3.5</b>	<b>-2.1</b>	<b>0.9</b>	<b>2.9</b>
<i>Barclays Global Aggregate</i>	0.9	-2.3	-3.3	-1.6	0.8	3.7
<b>Total Inflation Hedge</b>	<b>-6.0</b>	<b>-4.7</b>	<b>-8.5</b>	<b>--</b>	<b>--</b>	<b>--</b>
<i>CPI + 4%</i>	0.7	4.4	4.0	--	--	--



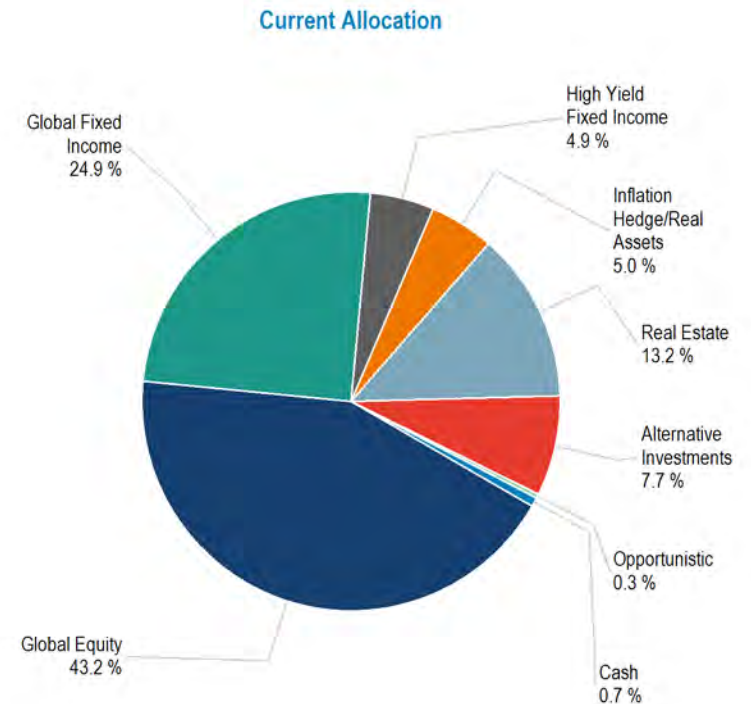
*Policy Index (as of 4/1/2012): 27.7% Russell 3000, 10.6% MSCI ACWI ex-US (Gross), 12.3% MSCI ACWI (Net), 19.6% Barclays U.S. Aggregate, 5% Bank of America High Yield Master II, 4% Barclays Global Aggregate, 13.5% Real Estate Benchmark, 6.8% S&P 500 +4% (Lagged), 0.5% 91-Day T-Bills. Real Estate Benchmark: 40% Wilshire REIT, 50% NCREIF Property Index, 10% FTSE/EPRA NAREIT Developed ex-USA.*



Total Fund  
Executive Summary (Net of Fees)

Period Ending: September 30, 2015

	QTD	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs
<b>Total Real Estate</b>	<b>0.6</b>	<b>8.3</b>	<b>14.4</b>	<b>13.2</b>	<b>13.1</b>	<b>6.2</b>
Real Estate Benchmark	2.2	3.5	11.5	10.7	12.4	8.3
NCREIF-ODCE	3.7	11.3	14.9	13.4	14.0	6.7
NCREIF Property Index	3.1	10.1	13.5	11.9	12.5	8.0
<b>Total Alternatives</b>	<b>0.1</b>	<b>11.7</b>	<b>12.9</b>	<b>13.7</b>	<b>12.4</b>	<b>10.5</b>
S&P 500 Index +4% (Lagged)	1.3	9.4	11.7	21.9	22.0	12.2
<b>Total Opportunistic</b>	<b>-5.8</b>	<b>-6.7</b>	<b>-9.4</b>	<b>6.7</b>	<b>5.3</b>	<b>--</b>
CPI + 4%	0.7	4.4	4.0	5.0	5.8	--



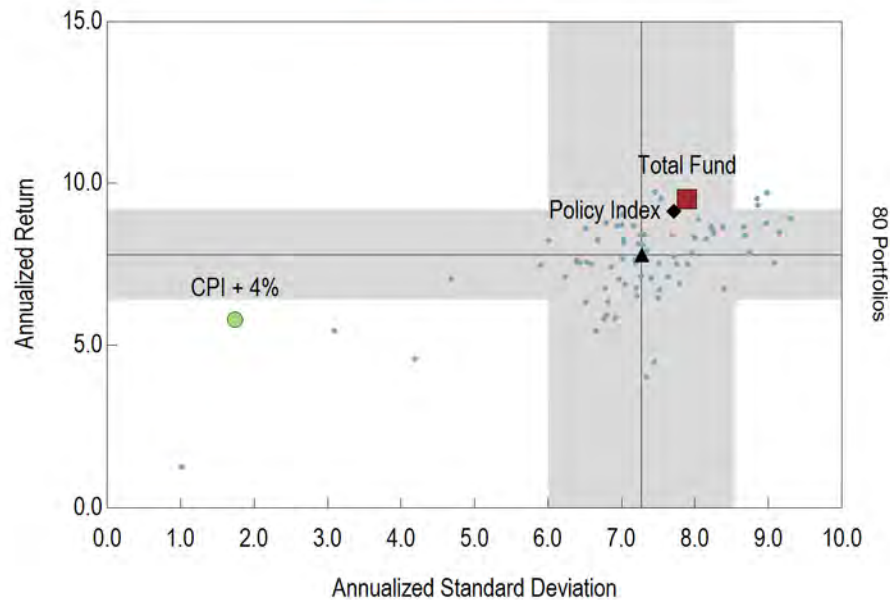
Policy Index (as of 4/1/2012): 27.7% Russell 3000, 10.6% MSCI ACWI ex-US (Gross), 12.3% MSCI ACWI (Net), 19.6% Barclays U.S. Aggregate, 5% Bank of America High Yield Master II, 4% Barclays Global Aggregate, 13.5% Real Estate Benchmark, 6.8% S&P 500 +4% (Lagged), 0.5% 91-Day T-Bills. Real Estate Benchmark: 40% Wilshire REIT, 50% NCREIF Property Index, 10% FTSE/EPRA NAREIT Developed ex-USA.

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

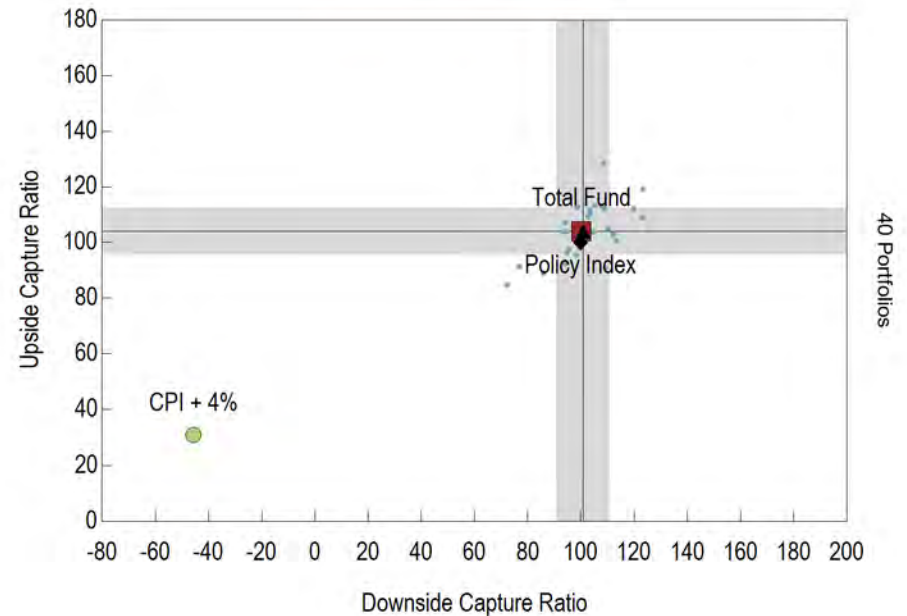
Period Ending: September 30, 2015

	Anlzd Ret	Ann Excess BM Return	Anlzd Std Dev	Anlzd Alpha	Beta	Tracking Error	R-Squared	Sharpe Ratio	Info Ratio	Up Mkt Cap Ratio	Down Mkt Cap Ratio
Total Fund	9.51%	0.37%	7.89%	0.24%	1.01	0.99%	0.98	1.20	0.38	103.98%	100.23%

Risk vs. Return



Up Markets vs. Down Markets



- Total Fund
- ◆ Policy Index
- CPI + 4%
- ▲ Universe Median
- 68% Confidence Interval
- InvestorForce Public DB > \$1B Gross

- Total Fund
- ◆ Policy Index
- CPI + 4%
- ▲ Universe Median
- 68% Confidence Interval
- InvestorForce Public DB > \$1B Gross

Total Fund  
Performance Summary (Gross of Fees)

Period Ending: September 30, 2015

	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2014	2013	2012	2011	2010
<b>Total Fund</b>	<b>7,016,433,248</b>	<b>100.0</b>	<b>-4.1</b>	<b>0.2</b>	<b>2.6</b>	<b>8.9</b>	<b>9.5</b>	<b>6.8</b>	<b>8.4</b>	<b>16.4</b>	<b>14.3</b>	<b>2.7</b>	<b>14.0</b>
<i>Policy Index</i>			-4.1	-2.1	0.4	8.0	9.1	--	9.0	15.6	14.6	2.8	14.1
<i>CPI + 4%</i>			0.7	4.4	4.0	5.0	5.8	5.9	4.8	5.6	5.8	7.1	5.6
<i>InvestorForce Public DB &gt; \$1B Gross Rank</i>			17	4	1	8	5	2	6	33	13	9	29
<b>Total Domestic Equity</b>	<b>1,501,320,097</b>	<b>21.4</b>	<b>-7.8</b>	<b>-3.5</b>	<b>3.6</b>	<b>13.8</b>	<b>14.4</b>	<b>7.7</b>	<b>11.4</b>	<b>36.2</b>	<b>18.2</b>	<b>1.1</b>	<b>17.8</b>
<i>Russell 3000</i>			-7.2	-5.4	-0.5	12.5	13.3	6.9	12.6	33.6	16.4	1.0	16.9
<i>eA US All Cap Equity Gross Rank</i>			46	32	25	34	24	51	36	41	24	34	52
<b>Intech Large Cap Core</b>	<b>281,873,427</b>	<b>4.0</b>	<b>-3.7</b>	<b>-1.8</b>	<b>5.2</b>	<b>14.2</b>	<b>14.4</b>	<b>--</b>	<b>14.7</b>	<b>32.7</b>	<b>15.3</b>	<b>3.6</b>	<b>15.0</b>
<i>S&amp;P 500</i>			-6.4	-5.3	-0.6	12.4	13.3	--	13.7	32.4	16.0	2.1	15.1
<i>eA US Large Cap Core Equity Gross Rank</i>			10	13	10	25	28	--	31	54	54	25	39
<b>PIMCO Stocks+ Absolute Return</b>	<b>240,306,376</b>	<b>3.4</b>	<b>-10.2</b>	<b>-8.2</b>	<b>-3.8</b>	<b>11.1</b>	<b>13.5</b>	<b>6.8</b>	<b>13.6</b>	<b>31.4</b>	<b>20.6</b>	<b>2.3</b>	<b>19.2</b>
<i>S&amp;P 500</i>			-6.4	-5.3	-0.6	12.4	13.3	6.8	13.7	32.4	16.0	2.1	15.1
<i>eA US Large Cap Core Equity Gross Rank</i>			98	90	89	80	49	75	45	68	4	36	7
<b>Jackson Square Partners</b>	<b>291,200,693</b>	<b>4.2</b>	<b>-7.1</b>	<b>-2.7</b>	<b>4.0</b>	<b>14.3</b>	<b>16.0</b>	<b>8.2</b>	<b>13.9</b>	<b>35.4</b>	<b>16.9</b>	<b>8.9</b>	<b>14.7</b>
<i>Russell 1000 Growth</i>			-5.3	-1.5	3.2	13.6	14.5	8.1	13.0	33.5	15.3	2.6	16.7
<i>eA US Large Cap Growth Equity Gross Rank</i>			73	61	41	37	14	45	31	40	37	3	63
<b>Robeco Boston Partners</b>	<b>286,894,817</b>	<b>4.1</b>	<b>-8.9</b>	<b>-8.3</b>	<b>-3.1</b>	<b>12.7</b>	<b>13.8</b>	<b>7.9</b>	<b>12.0</b>	<b>37.4</b>	<b>21.6</b>	<b>0.9</b>	<b>13.4</b>
<i>Russell 1000 Value</i>			-8.4	-9.0	-4.4	11.6	12.3	5.7	13.5	32.5	17.5	0.4	15.5
<i>eA US Large Cap Value Equity Gross Rank</i>			62	61	45	40	21	21	55	24	5	46	68
<b>Emerald Advisors</b>	<b>198,487,579</b>	<b>2.8</b>	<b>-10.3</b>	<b>5.1</b>	<b>17.8</b>	<b>18.7</b>	<b>18.6</b>	<b>10.4</b>	<b>7.3</b>	<b>50.3</b>	<b>18.5</b>	<b>-0.6</b>	<b>30.5</b>
<i>Russell 2000 Growth</i>			-13.1	-5.5	4.0	12.8	13.3	7.7	5.6	43.3	14.6	-2.9	29.1
<i>eA US Small Cap Growth Equity Gross Rank</i>			29	5	1	4	5	13	21	27	22	42	36
<b>Ceredex</b>	<b>202,557,207</b>	<b>2.9</b>	<b>-7.7</b>	<b>-4.0</b>	<b>5.6</b>	<b>12.9</b>	<b>--</b>	<b>--</b>	<b>3.3</b>	<b>36.5</b>	<b>19.0</b>	<b>--</b>	<b>--</b>
<i>Russell 2000 Value</i>			-10.7	-10.1	-1.6	9.2	--	--	4.2	34.5	18.1	--	--
<i>eA US Small Cap Value Equity Gross Rank</i>			16	15	8	42	--	--	74	66	38	--	--
<b>Total International Equity</b>	<b>709,069,299</b>	<b>10.1</b>	<b>-9.2</b>	<b>-5.4</b>	<b>-6.8</b>	<b>6.0</b>	<b>4.5</b>	<b>3.1</b>	<b>0.3</b>	<b>17.8</b>	<b>18.5</b>	<b>-11.5</b>	<b>8.3</b>
<i>MSCI ACWI ex USA Gross</i>			-12.1	-8.3	-11.8	2.8	2.3	3.5	-3.4	15.8	17.4	-13.3	11.6
<i>MSCI EAFE Gross</i>			-10.2	-4.9	-8.3	6.1	4.4	3.4	-4.5	23.3	17.9	-11.7	8.2
<i>eA All ACWI ex-US Equity Gross Rank</i>			35	58	51	48	63	93	17	69	63	43	89
<b>Pyrford</b>	<b>353,611,586</b>	<b>5.0</b>	<b>-8.9</b>	<b>-6.4</b>	<b>-8.3</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<i>MSCI ACWI ex USA Value</i>			-13.6	-11.3	-16.2	--	--	--	--	--	--	--	--
<i>eA ACWI ex-US Value Equity Gross Rank</i>			24	55	33	--	--	--	--	--	--	--	--

Individual closed end funds are not shown in performance summary table.

Total Fund  
Performance Summary (Gross of Fees)

Period Ending: September 30, 2015

	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2014	2013	2012	2011	2010
William Blair	354,922,784	5.1	-9.6	-4.3	-5.2	6.6	--	--	-1.2	20.9	24.3	-13.2	--
<i>MSCI ACWI ex USA Growth</i>			-10.8	-6.0	-8.1	3.6	--	--	-2.6	15.5	16.7	-14.2	--
<i>eA ACWI ex-US Growth Equity Gross Rank</i>			41	60	60	47	--	--	37	44	6	55	--
International Equity Transition	534,929	0.0											
<b>Total Global Equity</b>	<b>821,427,012</b>	<b>11.7</b>	<b>-8.3</b>	<b>-3.7</b>	<b>-2.8</b>	<b>8.6</b>	<b>7.3</b>	<b>--</b>	<b>5.2</b>	<b>23.7</b>	<b>11.1</b>	<b>-5.6</b>	<b>--</b>
<i>MSCI ACWI</i>			-9.4	-7.0	-6.7	7.0	6.8	--	4.2	22.8	16.1	-7.3	--
<i>eA All Global Equity Gross Rank</i>			48	39	47	56	74	--	44	64	90	40	--
Artisan Partners	269,597,042	3.8	-8.3	1.3	0.8	10.2	--	--	3.9	26.1	--	--	--
<i>MSCI ACWI</i>			-9.4	-7.0	-6.7	7.0	--	--	4.2	22.8	--	--	--
<i>eA All Global Equity Gross Rank</i>			47	7	26	36	--	--	56	51	--	--	--
First Eagle	275,139,223	3.9	-6.6	-4.4	-3.9	6.4	--	--	4.5	17.9	13.9	--	--
<i>MSCI ACWI</i>			-9.4	-7.0	-6.7	7.0	--	--	4.2	22.8	16.1	--	--
<i>eA All Global Equity Gross Rank</i>			27	49	57	80	--	--	51	80	78	--	--
Intech Global Low Vol	21,454,075	0.3	-2.6	-0.4	5.3	11.0	--	--	11.2	24.2	--	--	--
<i>MSCI ACWI</i>			-9.4	-7.0	-6.7	7.0	--	--	4.2	22.8	--	--	--
<i>eA All Global Equity Gross Rank</i>			9	12	9	26	--	--	14	62	--	--	--
JP Morgan Global Opportunities	255,236,672	3.6	-10.6	-8.3	-6.3	9.0	7.8	--	6.7	26.9	19.2	-9.0	--
<i>MSCI ACWI</i>			-9.4	-7.0	-6.7	7.0	6.8	--	4.2	22.8	16.1	-7.3	--
<i>eA All Global Equity Gross Rank</i>			77	82	75	52	69	--	30	46	32	63	--
<b>Total Domestic Fixed Income</b>	<b>1,457,362,896</b>	<b>20.8</b>	<b>0.4</b>	<b>1.7</b>	<b>3.4</b>	<b>3.8</b>	<b>5.4</b>	<b>6.0</b>	<b>7.3</b>	<b>1.3</b>	<b>9.7</b>	<b>7.2</b>	<b>10.6</b>
<i>Barclays U.S. Universal</i>			0.7	1.0	2.3	1.9	3.4	4.8	5.6	-1.3	5.5	7.4	7.2
<i>Barclays Aggregate</i>			1.2	1.1	2.9	1.7	3.1	4.6	6.0	-2.0	4.2	7.8	6.5
<i>eA US Core Fixed Inc Gross Rank</i>			91	26	25	2	2	6	8	2	5	71	4
AFL-CIO	244,688,880	3.5	1.5	2.2	4.0	2.3	3.6	5.1	6.6	-1.9	4.7	8.3	6.6
<i>Barclays Aggregate</i>			1.2	1.1	2.9	1.7	3.1	4.6	6.0	-2.0	4.2	7.8	6.5
<i>eA US Core Fixed Inc Gross Rank</i>			9	6	5	35	47	49	25	78	80	23	75
Goldman Sachs Core Plus	338,777,578	4.8	-0.7	1.2	2.4	2.6	4.2	--	6.0	-0.4	7.9	7.6	7.6
<i>Barclays Aggregate</i>			1.2	1.1	2.9	1.7	3.1	--	6.0	-2.0	4.2	7.8	6.5
<i>eA US Core Plus Fixed Inc Gross Rank</i>			83	31	37	46	61	--	47	49	59	43	86
GSAM Workout Portfolio	4,078	0.0											
Lord Abbett	338,684,925	4.8	0.1	0.5	1.8	2.6	4.4	--	6.7	-0.6	8.6	8.2	8.5
<i>Barclays Aggregate</i>			1.2	1.1	2.9	1.7	3.1	--	6.0	-2.0	4.2	7.8	6.5
<i>eA US Core Fixed Inc Gross Rank</i>			97	93	94	15	9	--	18	18	8	27	15

Individual closed end funds are not shown in performance summary table.

Total Fund  
Performance Summary (Gross of Fees)

Period Ending: September 30, 2015

	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2014	2013	2012	2011	2010
PIMCO Fixed Income	423,495,116	6.0	0.8	0.5	2.5	2.0	3.5	5.7	6.3	-1.6	8.5	5.0	9.3
<i>Barclays Aggregate</i>			1.2	1.1	2.9	1.7	3.1	4.6	6.0	-2.0	4.2	7.8	6.5
<i>eA US Core Fixed Inc Gross Rank</i>			83	91	76	55	57	11	34	61	8	97	8
<b>Total High Yield</b>	<b>346,797,107</b>	<b>4.9</b>	<b>-4.9</b>	<b>-2.0</b>	<b>-3.4</b>	<b>3.6</b>	<b>6.3</b>	<b>7.5</b>	<b>1.2</b>	<b>8.8</b>	<b>14.1</b>	<b>6.4</b>	<b>15.2</b>
<i>BofA ML High Yield Master II</i>			-4.9	-2.5	-3.6	3.5	5.9	7.1	2.5	7.4	15.6	4.4	15.2
<i>eA US High Yield Fixed Inc Gross Rank</i>			73	70	73	64	56	36	83	28	73	19	42
Allianz Global Investors	346,797,107	4.9	-4.9	-2.0	-3.4	3.6	6.3	7.5	1.2	8.8	14.1	6.4	15.2
<i>BofA ML High Yield Master II</i>			-4.9	-2.5	-3.6	3.5	5.9	7.1	2.5	7.4	15.6	4.4	15.2
<i>eA US High Yield Fixed Inc Gross Rank</i>			73	70	73	64	56	36	83	28	73	21	42
<b>Total Global Fixed Income</b>	<b>292,426,571</b>	<b>4.2</b>	<b>-0.2</b>	<b>-2.2</b>	<b>-3.3</b>	<b>-1.8</b>	<b>1.2</b>	<b>3.2</b>	<b>0.4</b>	<b>-3.5</b>	<b>6.7</b>	<b>5.6</b>	<b>8.8</b>
<i>Barclays Global Aggregate</i>			0.9	-2.3	-3.3	-1.6	0.8	3.7	0.6	-2.6	4.3	5.6	5.5
<i>eA All Global Fixed Inc Gross Rank</i>			37	56	60	83	78	97	77	83	68	40	32
Lazard	292,426,571	4.2	-0.2	-2.2	-3.3	-1.8	1.2	--	0.4	-3.5	6.7	5.6	8.8
<i>Barclays Global Aggregate</i>			0.9	-2.3	-3.3	-1.6	0.8	--	0.6	-2.6	4.3	5.6	5.5
<i>eA All Global Fixed Inc Gross Rank</i>			37	56	60	83	78	--	77	83	68	40	32
<b>Total Inflation Hedge</b>	<b>350,641,503</b>	<b>5.0</b>	<b>-5.8</b>	<b>-4.0</b>	<b>-7.7</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>-0.6</b>	<b>1.3</b>	<b>--</b>	<b>--</b>	<b>--</b>
<i>CPI + 4%</i>			0.7	4.4	4.0	--	--	--	4.8	5.6	--	--	--
PIMCO All Asset Fund	117,153,551	1.7	-8.4	-8.2	-10.6	--	--	--	1.7	--	--	--	--
<i>CPI + 4%</i>			0.7	4.4	4.0	--	--	--	4.8	--	--	--	--
Wellington Real Total Return	194,695,222	2.8	-5.4	-2.9	-7.5	--	--	--	-2.5	--	--	--	--
<i>CPI + 4%</i>			0.7	4.4	4.0	--	--	--	4.8	--	--	--	--
<b>Total Real Estate</b>	<b>922,781,102</b>	<b>13.2</b>	<b>0.8</b>	<b>9.1</b>	<b>15.5</b>	<b>14.6</b>	<b>14.4</b>	<b>7.3</b>	<b>20.6</b>	<b>10.5</b>	<b>16.7</b>	<b>10.4</b>	<b>21.0</b>
<i>Real Estate Benchmark</i>			2.2	3.5	11.5	10.7	12.4	8.3	18.8	7.1	13.6	13.6	17.5
<i>NCREIF-ODCE</i>			3.7	11.3	14.9	13.4	14.0	6.7	12.5	13.9	10.9	16.0	16.4
<i>NCREIF Property Index</i>			3.1	10.1	13.5	11.9	12.5	8.0	11.8	11.0	10.5	14.3	13.1
Adelante	175,516,027	2.5	3.1	-0.8	13.9	11.9	13.5	7.0	33.4	3.6	17.7	9.2	31.2
<i>Wilshire REIT</i>			2.9	-3.0	11.7	10.1	12.5	6.8	31.8	1.9	17.6	9.2	28.6
INVESCO International REIT	76,002,251	1.1	-4.8	-2.9	-2.0	5.3	5.6	--	2.8	5.4	42.3	-16.5	14.6
<i>FTSE EPRA/NAREIT Developed ex-USA</i>			-5.3	-4.3	-2.6	4.4	5.3	--	3.2	6.1	38.6	-15.3	16.0
Willows Office Property	10,000,000	0.1	0.9	4.8	5.9	14.7	-2.8	4.4	32.8	7.5	6.3	6.1	-46.7
<i>NCREIF Property Index</i>			3.1	10.1	13.5	11.9	12.5	8.0	11.8	11.0	10.5	14.3	13.1

Individual closed end funds are not shown in performance summary table.

Total Fund  
Performance Summary (Net of Fees)

Period Ending: September 30, 2015

	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2014	2013	2012	2011	2010
<b>Total Fund</b>	<b>7,016,433,248</b>	<b>100.0</b>	<b>-4.2</b>	<b>-0.3</b>	<b>2.1</b>	<b>8.2</b>	<b>8.8</b>	<b>6.2</b>	<b>7.7</b>	<b>15.6</b>	<b>13.6</b>	<b>2.1</b>	<b>13.3</b>
Policy Index			-4.1	-2.1	0.4	8.0	9.1	--	9.0	15.6	14.6	2.8	14.1
CPI + 4%			0.7	4.4	4.0	5.0	5.8	5.9	4.8	5.6	5.8	7.1	5.6
<b>Total Domestic Equity</b>	<b>1,501,320,097</b>	<b>21.4</b>	<b>-7.9</b>	<b>-3.8</b>	<b>3.1</b>	<b>13.4</b>	<b>14.0</b>	<b>7.3</b>	<b>11.0</b>	<b>35.7</b>	<b>17.8</b>	<b>0.8</b>	<b>17.3</b>
Russell 3000			-7.2	-5.4	-0.5	12.5	13.3	6.9	12.6	33.6	16.4	1.0	16.9
Intech Large Cap Core	281,873,427	4.0	-3.8	-2.1	4.8	13.7	13.9	--	14.2	32.2	14.8	3.3	14.6
S&P 500			-6.4	-5.3	-0.6	12.4	13.3	--	13.7	32.4	16.0	2.1	15.1
PIMCO Stocks+ Absolute Return	240,306,376	3.4	-10.2	-8.3	-3.9	10.8	13.2	6.5	13.2	31.0	20.3	2.0	18.8
S&P 500			-6.4	-5.3	-0.6	12.4	13.3	6.8	13.7	32.4	16.0	2.1	15.1
Jackson Square Partners	291,200,693	4.2	-7.2	-3.0	3.6	13.9	15.5	7.8	13.4	35.0	16.4	8.4	14.3
Russell 1000 Growth			-5.3	-1.5	3.2	13.6	14.5	8.1	13.0	33.5	15.3	2.6	16.7
Robeco Boston Partners	286,894,817	4.1	-9.0	-8.5	-3.5	12.4	13.5	7.6	11.6	37.0	21.2	0.6	13.0
Russell 1000 Value			-8.4	-9.0	-4.4	11.6	12.3	5.7	13.5	32.5	17.5	0.4	15.5
Emerald Advisors	198,487,579	2.8	-10.4	4.7	17.1	18.0	17.9	9.7	6.6	49.4	17.8	-1.2	29.8
Russell 2000 Growth			-13.1	-5.5	4.0	12.8	13.3	7.7	5.6	43.3	14.6	-2.9	29.1
Ceredex	202,557,207	2.9	-7.8	-4.4	5.0	12.3	--	--	2.7	35.8	18.6	--	--
Russell 2000 Value			-10.7	-10.1	-1.6	9.2	--	--	4.2	34.5	18.1	--	--
<b>Total International Equity</b>	<b>709,069,299</b>	<b>10.1</b>	<b>-9.3</b>	<b>-5.7</b>	<b>-7.1</b>	<b>5.6</b>	<b>4.0</b>	<b>2.6</b>	<b>0.0</b>	<b>17.4</b>	<b>17.9</b>	<b>-12.0</b>	<b>7.9</b>
MSCI ACWI ex USA Gross			-12.1	-8.3	-11.8	2.8	2.3	3.5	-3.4	15.8	17.4	-13.3	11.6
MSCI EAFE Gross			-10.2	-4.9	-8.3	6.1	4.4	3.4	-4.5	23.3	17.9	-11.7	8.2
Pyrford	353,611,586	5.0	-9.0	-6.7	-8.7	--	--	--	--	--	--	--	--
MSCI ACWI ex USA Value			-13.6	-11.3	-16.2	--	--	--	--	--	--	--	--
William Blair	354,922,784	5.1	-9.7	-4.6	-5.6	6.2	--	--	-1.7	20.4	23.7	-13.7	--
MSCI ACWI ex USA Growth			-10.8	-6.0	-8.1	3.6	--	--	-2.6	15.5	16.7	-14.2	--
International Equity Transition	534,929	0.0											
<b>Total Global Equity</b>	<b>821,427,012</b>	<b>11.7</b>	<b>-8.5</b>	<b>-4.1</b>	<b>-3.5</b>	<b>8.0</b>	<b>6.7</b>	<b>--</b>	<b>4.5</b>	<b>22.9</b>	<b>10.6</b>	<b>-6.1</b>	<b>--</b>
MSCI ACWI			-9.4	-7.0	-6.7	7.0	6.8	--	4.2	22.8	16.1	-7.3	--
Artisan Partners	269,597,042	3.8	-8.5	0.7	0.1	9.5	--	--	3.1	25.2	--	--	--
MSCI ACWI			-9.4	-7.0	-6.7	7.0	--	--	4.2	22.8	--	--	--
First Eagle	275,139,223	3.9	-6.8	-5.0	-4.7	5.6	--	--	3.7	17.1	13.1	--	--
MSCI ACWI			-9.4	-7.0	-6.7	7.0	--	--	4.2	22.8	16.1	--	--
Intech Global Low Vol	21,454,075	0.3	-2.7	-0.6	5.0	10.7	--	--	10.8	23.8	--	--	--
MSCI ACWI			-9.4	-7.0	-6.7	7.0	--	--	4.2	22.8	--	--	--

Individual closed end funds are not shown in performance summary table.

Total Fund  
Performance Summary (Net of Fees)

Period Ending: September 30, 2015

	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2014	2013	2012	2011	2010
JP Morgan Global Opportunities	255,236,672	3.6	-10.7	-8.6	-6.7	8.5	7.3	--	6.2	26.4	18.7	-9.4	--
MSCI ACWI			-9.4	-7.0	-6.7	7.0	6.8	--	4.2	22.8	16.1	-7.3	--
<b>Total Domestic Fixed Income</b>	<b>1,457,362,896</b>	<b>20.8</b>	<b>0.3</b>	<b>1.5</b>	<b>3.1</b>	<b>3.3</b>	<b>4.9</b>	<b>5.5</b>	<b>6.7</b>	<b>0.9</b>	<b>9.2</b>	<b>6.8</b>	<b>9.9</b>
Barclays U.S. Universal			0.7	1.0	2.3	1.9	3.4	4.8	5.6	-1.3	5.5	7.4	7.2
Barclays Aggregate			1.2	1.1	2.9	1.7	3.1	4.6	6.0	-2.0	4.2	7.8	6.5
AFL-CIO	244,688,880	3.5	1.4	1.8	3.6	1.8	3.2	4.7	6.1	-2.4	4.3	7.9	6.2
Barclays Aggregate			1.2	1.1	2.9	1.7	3.1	4.6	6.0	-2.0	4.2	7.8	6.5
Goldman Sachs Core Plus	338,777,578	4.8	-0.7	1.1	2.2	2.4	4.0	--	5.8	-0.6	7.7	7.3	7.3
Barclays Aggregate			1.2	1.1	2.9	1.7	3.1	--	6.0	-2.0	4.2	7.8	6.5
GSAM Workout Portfolio	4,078	0.0											
Lord Abbett	338,684,925	4.8	0.0	0.4	1.6	2.4	4.2	--	6.5	-0.8	8.4	8.0	8.3
Barclays Aggregate			1.2	1.1	2.9	1.7	3.1	--	6.0	-2.0	4.2	7.8	6.5
PIMCO Fixed Income	423,495,116	6.0	0.7	0.4	2.2	1.7	3.2	5.4	6.0	-1.9	8.2	4.7	9.0
Barclays Aggregate			1.2	1.1	2.9	1.7	3.1	4.6	6.0	-2.0	4.2	7.8	6.5
<b>Total High Yield</b>	<b>346,797,107</b>	<b>4.9</b>	<b>-5.0</b>	<b>-2.3</b>	<b>-3.8</b>	<b>3.2</b>	<b>6.0</b>	<b>7.3</b>	<b>0.8</b>	<b>8.4</b>	<b>13.7</b>	<b>6.4</b>	<b>15.2</b>
BofA ML High Yield Master II			-4.9	-2.5	-3.6	3.5	5.9	7.1	2.5	7.4	15.6	4.4	15.2
Allianz Global Investors	346,797,107	4.9	-5.0	-2.3	-3.8	3.2	5.9	7.0	0.8	8.4	13.6	6.0	14.8
BofA ML High Yield Master II			-4.9	-2.5	-3.6	3.5	5.9	7.1	2.5	7.4	15.6	4.4	15.2
<b>Total Global Fixed Income</b>	<b>292,426,571</b>	<b>4.2</b>	<b>-0.2</b>	<b>-2.4</b>	<b>-3.5</b>	<b>-2.1</b>	<b>0.9</b>	<b>2.9</b>	<b>0.1</b>	<b>-3.8</b>	<b>6.4</b>	<b>5.3</b>	<b>8.5</b>
Barclays Global Aggregate			0.9	-2.3	-3.3	-1.6	0.8	3.7	0.6	-2.6	4.3	5.6	5.5
Lazard	292,426,571	4.2	-0.2	-2.4	-3.5	-2.1	0.9	--	0.1	-3.8	6.4	5.3	8.5
Barclays Global Aggregate			0.9	-2.3	-3.3	-1.6	0.8	--	0.6	-2.6	4.3	5.6	5.5
<b>Total Inflation Hedge</b>	<b>350,641,503</b>	<b>5.0</b>	<b>-6.0</b>	<b>-4.7</b>	<b>-8.5</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>-1.5</b>	<b>0.3</b>	<b>--</b>	<b>--</b>	<b>--</b>
CPI + 4%			0.7	4.4	4.0	--	--	--	4.8	5.6	--	--	--
PIMCO All Asset Fund	117,153,551	1.7	-8.6	-8.8	-11.4	--	--	--	0.8	--	--	--	--
CPI + 4%			0.7	4.4	4.0	--	--	--	4.8	--	--	--	--
Wellington Real Total Return	194,695,222	2.8	-5.5	-3.3	-8.1	--	--	--	-3.1	--	--	--	--
CPI + 4%			0.7	4.4	4.0	--	--	--	4.8	--	--	--	--
<b>Total Real Estate</b>	<b>922,781,102</b>	<b>13.2</b>	<b>0.6</b>	<b>8.3</b>	<b>14.4</b>	<b>13.2</b>	<b>13.1</b>	<b>6.2</b>	<b>19.1</b>	<b>8.9</b>	<b>15.7</b>	<b>9.4</b>	<b>19.8</b>
Real Estate Benchmark			2.2	3.5	11.5	10.7	12.4	8.3	18.8	7.1	13.6	13.6	17.5
NCREIF-ODCE			3.7	11.3	14.9	13.4	14.0	6.7	12.5	13.9	10.9	16.0	16.4
NCREIF Property Index			3.1	10.1	13.5	11.9	12.5	8.0	11.8	11.0	10.5	14.3	13.1
Adelante	175,516,027	2.5	3.0	-1.1	13.4	11.4	13.0	6.5	32.7	3.0	17.2	8.6	30.6
Wilshire REIT			2.9	-3.0	11.7	10.1	12.5	6.8	31.8	1.9	17.6	9.2	28.6

Individual closed end funds are not shown in performance summary table.

Total Fund  
Performance Summary (Net of Fees)

Period Ending: September 30, 2015

	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	2014	2013	2012	2011	2010
INVESCO International REIT	76,002,251	1.1	-5.0	-3.4	-2.6	4.6	4.9	--	2.2	4.7	41.3	-17.0	13.9
<i>FTSE EPRA/NAREIT Developed ex-USA</i>			-5.3	-4.3	-2.6	4.4	5.3	--	3.2	6.1	38.6	-15.3	16.0
Willows Office Property	10,000,000	0.1	0.9	4.8	5.9	14.7	-2.8	4.4	32.8	7.5	6.3	6.1	-46.7
<i>NCREIF Property Index</i>			3.1	10.1	13.5	11.9	12.5	8.0	11.8	11.0	10.5	14.3	13.1

Individual closed end funds are not shown in performance summary table.



Total Fund  
Closed End Funds - Investment Summary

Period Ending: September 30, 2015

Verus Internal Analysis												
Inception Date	Manager Name/Fund Name	Estimated Market Value as of 9/30/15 <sup>3</sup>	Total Commitment	% Called	Capital Called	Third Qtr. Capital Called	Third Qtr. Distributions	Total Distributions	Remaining Commitment	Distrib./ Paid-In (DPI) <sup>1</sup>	Tot. Value/ Paid-In (TVPI) <sup>2</sup>	Latest Valuation
<b>Fixed Income</b>												
07/01/2006	Torchlight II	\$52,613,794	\$128,000,000	100%	\$128,000,000	\$0	\$6,993,048	\$146,401,130	\$0	1.14	1.55	09/30/2015
12/12/2008	Torchlight III	\$10,308,946	\$75,000,000	100%	\$75,000,000	\$0	\$0	\$98,512,563	\$0	1.31	1.45	09/30/2015
08/01/2012	Torchlight IV	\$45,003,694	\$60,000,000	80%	\$48,000,000	\$0	\$7,921,154	\$32,206,386	\$12,000,000	0.67	1.61	09/30/2015
03/12/2015	Torchlight V	\$3,785,885	\$75,000,000	0%	\$3,750,000	\$0	\$0	\$0	\$71,250,000	0.00	1.01	06/30/2015
<b>Total Fixed Income</b>		<b>\$111,712,319</b>										
<b>% of Portfolio (Market Value)</b>		<b>1.6%</b>										
<b>Inflation Hedge</b>												
11/27/2013	Aether Real Assets III	\$5,276,283	\$25,000,000	20%	\$5,079,503	\$1,070,136	\$12,813	\$66,398	\$19,920,497	0.01	1.05	06/30/2015
11/27/2013	Aether Real Assets III Surplus	\$16,477,856	\$50,000,000	31%	\$15,473,828	\$3,570,754	\$88,606	\$193,803	\$34,526,172	0.01	1.08	06/30/2015
06/28/2013	Commonfund	\$17,038,590	\$50,000,000	38%	\$18,750,000	\$1,750,000	\$0	\$0	\$31,250,000	0.00	0.91	06/30/2015
<b>Total Inflation Hedge</b>		<b>\$38,792,729</b>										
<b>% of Portfolio (Market Value)</b>		<b>0.5%</b>										
<b>Opportunistic</b>												
02/18/2010	Oaktree PIF 2009 <sup>3</sup>	\$22,996,136	\$40,000,000	87%	\$34,800,000	\$0	\$1,200,000	\$23,290,579	\$34,800,000	0.67	1.33	09/30/2015
<b>Total Opportunistic</b>		<b>\$22,996,136</b>										
<b>% of Portfolio (Market Value)</b>		<b>0.3%</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>Latest valuation + capital calls - distributions

Total Fund  
Closed End Funds - Investment Summary

Period Ending: September 30, 2015

Verus Internal Analysis												
Inception Date	Manager Name/Fund Name	Estimated Market Value as of 9/30/15 <sup>3</sup>	Total Commitment	Capital Called	Total % Called	Third Qtr. Capital Called	Third Qtr. Distributions	Total Distributions	Remaining Commitment	Distrib./Paid-In (DPI) <sup>1</sup>	Tot. Value/Paid-In (TVPI) <sup>2</sup>	Latest Valuation
<b>Real Estate</b>												
01/23/2012	Angelo Gordon Realty Fund VIII	\$65,094,132	\$80,000,000	\$73,000,000	91%	\$3,600,000	\$10,800,000	\$33,752,397	\$7,000,000	0.46	1.35	06/30/2015
12/08/2014	Angelo Gordon Realty Fund IX	\$0	\$65,000,000	\$0	0%	\$0	\$0	\$0	\$65,000,000	-	-	-
09/24/1999	DLJ RECP II	\$3,009,846	\$40,000,000	\$40,000,000	100%	\$0	\$0	\$75,941,559	\$0	1.90	1.97	09/30/2015
06/23/2005	DLJ RECP III	\$45,351,496	\$75,000,000	\$75,000,000	100%	\$0	\$1,115,763	\$58,420,451	\$0	0.78	1.38	09/30/2015
02/11/2008	DLJ RECP IV	\$80,933,419	\$100,000,000	\$100,000,000	100%	\$0	\$0	\$47,047,533	\$0	0.47	1.28	09/30/2015
07/01/2014	DLJ RECP V	\$22,934,169	\$75,000,000	\$31,808,578	42%	\$324,284	\$15,422,419	\$15,422,419	\$43,191,422	0.48	1.21	09/30/2015
06/17/1998	Hearthstone II <sup>4</sup>	-\$37,731	\$25,000,000	\$19,925,048	80%	\$0	\$0	\$19,952,734	\$0	1.00	1.00	09/30/2015
02/01/2005	Invesco Real Estate I	\$6,186,918	\$50,000,000	\$46,241,947	92%	\$0	\$0	\$43,616,113	\$3,758,053	0.94	1.08	09/30/2015
11/26/2007	Invesco Real Estate II	\$17,913,117	\$85,000,000	\$78,202,813	92%	\$0	\$12,752,813	\$83,302,813	\$6,797,187	1.07	1.29	09/30/2015
06/30/2013	Invesco Real Estate III	\$22,952,616	\$35,000,000	\$29,705,961	85%	\$0	\$0	\$16,052,850	\$5,294,039	0.54	1.31	09/30/2015
06/30/2014	Invesco Real Estate IV	\$11,228,271	\$35,000,000	\$13,300,000	38%	\$0	\$358,954	\$2,974,058	\$21,700,000	0.22	1.07	09/30/2015
07/16/2013	LaSalle Income & Growth VI	\$78,653,705	\$75,000,000	\$71,428,571	95%	\$0	\$12,254,357	\$12,629,357	\$3,571,429	0.18	1.28	06/30/2015
03/10/2004	Long Wharf Fund II	\$118,811	\$50,000,000	\$50,000,000	100%	\$0	\$0	\$33,260,248	\$0	0.67	0.67	09/30/2015
03/30/2007	Long Wharf Fund III	\$12,886,732	\$75,000,000	\$66,940,230	89%	\$0	\$6,851,748	\$76,182,982	\$8,059,770	1.14	1.33	09/30/2015
07/03/2013	Long Wharf Fund IV	\$22,176,670	\$25,000,000	\$22,717,499	91%	\$2,465,970	\$0	\$5,188,400	\$2,282,501	0.23	1.20	09/30/2015
12/31/2011	Oaktree REOF V	\$43,156,561	\$50,000,000	\$50,000,000	100%	\$0	\$1,300,000	\$36,250,000	\$0	0.73	1.59	09/30/2015
09/30/2013	Oaktree REOF VI <sup>5</sup>	\$99,415,112	\$80,000,000	\$80,000,000	100%	\$8,000,000	\$0	\$5,641,206	\$0	0.07	1.31	09/30/2015
04/01/2015	Oaktree REOF VII	\$0	\$65,000,000	\$0	0%	\$0	\$0	\$0	\$65,000,000	-	-	-
11/10/2013	Paulson Real Estate Fund II	\$18,683,266	\$20,000,000	\$13,081,096	65%	\$0	\$0	\$0	\$6,918,904	0.00	1.43	06/30/2015
01/25/2012	Siguler Guff DREOF	\$70,751,486	\$75,000,000	\$68,625,000	92%	\$1,500,000	\$3,599,590	\$28,465,988	\$6,375,000	0.41	1.45	09/30/2015
08/31/2013	Siguler Guff DREOF II	\$39,854,227	\$70,000,000	\$39,900,000	57%	\$10,850,000	\$40,000	\$561,123	\$30,100,000	0.01	1.01	09/30/2015
<b>Total Closed End Real Estate</b>		<b>\$661,262,824</b>	<b>\$1,250,000,000</b>	<b>\$969,876,743</b>	<b>78%</b>			<b>\$594,662,230</b>	<b>\$275,048,305</b>	<b>0.28</b>	<b>0.97</b>	
<b>% of Portfolio (Market Value)</b>		<b>9.4%</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>Latest valuation + capital calls - distributions

<sup>4</sup>No further capital to be called

<sup>5</sup>Actual capital called is \$85,600,000 which includes recallable distributions

Total Fund  
Closed End Funds - Investment Summary

Period Ending: September 30, 2015

Verus Internal Analysis											
Inception Date	Manager Name/Fund Name	Estimated Market Value as of 9/30/15 <sup>3</sup>	Total Commitment	Total % Called	Third Qtr. Capital Called	Third Qtr. Distributions	Total Distributions	Remaining Commitment	Distrib./ Paid-In (DPI) <sup>1</sup>	Tot. Value/ Paid-In (TVPI) <sup>2</sup>	Latest Valuation
<b>Private Equity &amp; Venture Capital</b>											
03/18/1996	Adams Street Partners	\$117,041,712	\$210,000,000	62%	\$1,680,000	\$3,312,471	\$64,038,291	\$78,996,375	0.49	1.38	06/30/2015
01/16/2009	Adams Street Partners II	\$22,145,869	\$30,000,000	95%	\$0	\$891,163	\$25,123,201	\$1,635,000	0.89	1.67	06/30/2015
09/21/2012	Adams Street Partners - Fund 5	\$16,026,517	\$40,000,000	53%	\$1,000,000	\$1,083,846	\$5,648,154	\$18,812,000	0.27	1.02	06/30/2015
01/18/1996	Adams Street Partners - BFP	\$7,191,622	\$59,565,614	97%	\$0	\$376,484	\$97,223,119	\$2,048,205	1.69	1.82	06/30/2015
06/14/2004	Bay Area Equity Fund	\$5,750,342	\$10,000,000	100%	\$0	\$0	\$35,310,439	\$0	3.53	4.11	06/30/2015
12/07/2009	Bay Area Equity Fund II	\$9,720,424	\$10,000,000	97%	\$349,000	\$1,011,557	\$1,015,352	\$316,000	0.10	1.11	06/30/2015
11/26/2003	EIF US Power Fund I	\$815,000	\$30,000,000	100%	\$0	\$0	\$64,168,646	\$0	2.14	2.17	06/30/2015
08/16/2005	EIF US Power Fund II	\$39,089,816	\$50,000,000	100%	\$0	\$0	\$41,614,905	\$0	0.83	1.61	06/30/2015
05/30/2007	EIF US Power Fund III	\$55,123,634	\$65,000,000	83%	\$587,576	\$481,482	\$25,774,539	\$11,350,026	0.48	1.51	06/30/2015
11/28/2011	EIF US Power Fund IV	\$48,256,071	\$50,000,000	91%	\$17,413,038	\$0	\$7,797,889	\$4,576,688	0.17	1.23	06/30/2015
05/24/2011	Pathway 6	\$23,648,008	\$40,000,000	58%	\$2,300,722	\$490,449	\$2,136,526	\$16,851,423	0.09	1.11	06/30/2015
02/07/2013	Pathway 7	\$21,074,149	\$70,000,000	33%	\$4,069,830	\$319,882	\$1,116,769	\$47,219,759	0.05	0.97	06/30/2015
11/09/1998	Pathway	\$54,356,551	\$125,000,000	97%	\$277,200	\$4,587,299	\$122,826,854	\$3,884,566	1.01	1.46	06/30/2015
12/26/2008	Pathway 2008	\$23,789,354	\$30,000,000	80%	\$1,252,875	\$865,814	\$7,141,604	\$6,108,043	0.30	1.29	06/30/2015
01/31/2008	Carpenter Bancfund	\$28,361,088	\$30,000,000	95%	\$0	\$13,256,816	\$14,288,033	\$1,478,732	0.50	1.50	06/30/2015
02/15/2004	Nogales	\$437,117	\$15,000,000	99%	\$0	\$3,100,423	\$11,985,887	\$194,897	0.81	0.84	06/30/2015
11/30/2007	Paladin III	\$19,811,238	\$25,000,000	84%	\$0	\$0	\$13,762,604	\$4,089,677	0.66	1.61	06/30/2015
06/11/2014	Ocean Avenue Fund II	\$9,964,326	\$30,000,000	35%	\$0	\$0	\$589,938	\$19,500,000	0.06	1.01	09/30/2015
06/03/2014	Siguler Guff CCCERA Opportunities	\$40,249,209	\$200,000,000	18%	\$9,400,000	\$0	\$0	\$163,578,500	0.00	1.11	06/30/2015
<b>Total Private Equity and Venture Capital</b>		<b>\$542,852,046</b>	<b>\$1,119,565,614</b>	<b>66%</b>	<b>\$38,330,241</b>	<b>\$29,777,686</b>	<b>\$541,562,749</b>	<b>\$380,639,891</b>	<b>0.73</b>	<b>1.47</b>	
<b>% of Portfolio (Market Value)</b>		<b>7.7%</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>Latest valuation + capital calls - distributions

Total Fund  
Closed End Funds - IRR Summary

Period Ending: September 30, 2015

Fixed Income	Inception	Fund Level (G)	CCCERA (G)	Fund Level (N)	CCCERA (N)	IRR Date
Torchlight II	07/01/2006	-	-0.4%	-	-2.0%	09/30/2015
Torchlight III	12/12/2008	-	18.6%	-	13.9%	09/30/2015
Torchlight IV	08/01/2012	-	15.1%	-	11.9%	09/30/2015
Torchlight V <sup>1</sup>	03/12/2015	-	-	-	-	-
Inflation Hedge	Inception	Fund Level (G)	CCCERA (G)	Fund Level (N)	CCCERA (N)	IRR Date
Aether Real Assets III	11/27/2013	17.5%	17.5%	6.3%	6.3%	06/30/2015
Aether Real Assets III Surplus	11/27/2013	14.4%	14.4%	9.1%	9.1%	06/30/2015
CommonFund <sup>1</sup>	06/28/2013	-	-	-	-	-
Opportunistic	Inception	Fund Level (G)	CCCERA (G)	Fund Level (N)	CCCERA (N)	IRR Date
Oaktree PIF	02/18/2010	8.1%	-	8.0%	-	09/30/2015
Real Estate	Inception	Fund Level (G)	CCCERA (G)	Fund Level (N)	CCCERA (N)	IRR Date
Angelo Gordon VIII	01/23/2012	21.4%	23.0%	16.1%	17.6%	06/30/2015
Angelo Gordon IX <sup>1</sup>	12/08/2014	-	-	-	-	-
DLJ RECP II	09/24/1999	28.0%	-	-	19.0%	09/30/2015
DLJ RECP III	06/23/2005	3.0%	-	-	-	09/30/2015
DLJ RECP IV	02/11/2008	6.0%	-	-	3.0%	09/30/2015
DLJ RECP V <sup>1</sup>	07/01/2014	-	-	-	-	-
Hearthstone II	06/17/1998	-	30.1%	-	30.1%	09/30/2015
Invesco Fund I	02/01/2005	2.5%	2.5%	150.0%	1.5%	09/30/2015
Invesco Fund II	11/26/2007	8.6%	7.7%	7.1%	6.9%	09/30/2015
Invesco Fund III	06/30/2013	22.6%	23.8%	21.2%	17.5%	09/30/2015
Invesco Fund IV <sup>1</sup>	06/30/2014	-	-	-	-	-
LaSalle Income & Growth	07/16/2013	23.3%	23.3%	20.6%	20.8%	06/30/2015
Long Wharf II	03/10/2004	-	-	-8.2%	-	09/30/2015
Long Wharf III	03/30/2007	9.8%	9.9%	7.7%	7.7%	09/30/2015
Long Wharf IV	07/03/2013	27.0%	28.3%	18.5%	19.0%	09/30/2015
Oaktree REOF V	12/31/2011	19.2%	-	14.1%	-	09/30/2015
Oaktree REOF VI	09/30/2013	23.3%	-	15.6%	-	09/30/2015
Oaktree REOF VII <sup>1</sup>	04/01/2015	-	-	-	-	-
Paulson <sup>1</sup>	11/10/2013	-	-	-	-	-
Siguler Guff I	01/25/2012	17.1%	18.7%	14.7%	16.3%	06/30/2015
Siguler Guff II	08/31/2013	7.2%	5.1%	2.8%	2.3%	06/30/2015

<sup>1</sup>Manager has yet to report IRR figure due to no capital invested or meaningful distributions.

<sup>2</sup>Fund level data includes CCCERA and all other fund investors.

<sup>3</sup>Net IRR calculated after deductions of management fees and carried interest to the General Partner.

Total Fund  
Closed End Funds - IRR Summary

Period Ending: September 30, 2015

Private Equity & Venture Capital	Inception	Fund Level (G)	CCCERA (G)	Fund Level (N)	CCCERA (N)	IRR Date
Adams Street Partners	03/18/1996	-	12.6%	-	9.5%	06/30/2015
Adams Street Partners II	01/16/2009	-	22.1%	-	19.2%	06/30/2015
Adams Street Partners - Fund 5	09/21/2012	-	7.9%	-	2.7%	06/30/2015
Adams Street Partners - BPF	01/18/1996	-	14.4%	-	11.7%	06/30/2015
Bay Area Equity Fund I	06/14/2004	32.2%	32.7%	24.2%	24.6%	06/30/2015
Bay Area Equity Fund II	12/07/2009	10.5%	9.9%	3.6%	3.4%	06/30/2015
Energy Investor Fund	11/26/2003	33.6%	34.8%	28.6%	28.4%	06/30/2015
Energy Investor Fund II	08/16/2005	7.9%	7.3%	5.1%	4.5%	06/30/2015
Energy Investor Fund III	05/30/2007	8.8%	8.8%	6.0%	6.0%	06/30/2015
Energy Investor Fund IV	11/28/2011	26.4%	27.2%	17.0%	16.7%	06/30/2015
Pathway 6	05/24/2011	15.3%	15.3%	9.0%	9.0%	06/30/2015
<i>Benchmark</i> <sup>4</sup>		7.3%	-	-	-	06/30/2015
Pathway 7 <sup>1</sup>	02/07/2013	-	-	-	-	-
Pathway Private Equity Fund	11/09/1998	10.6%	10.6%	8.7%	8.7%	06/30/2015
<i>Benchmark</i> <sup>5</sup>		8.3%	-	-	-	06/30/2015
Pathway Private Equity Fund 2008	12/26/2008	14.5%	14.5%	10.5%	10.5%	06/30/2015
<i>Benchmark</i> <sup>6</sup>		8.8%	-	-	-	06/30/2015
Carpenter Bancfund	01/31/2008	9.7%	9.6%	8.2%	8.0%	06/30/2015
Nogales	02/15/2004	-4.0%	-4.5%	-8.6%	-8.8%	03/31/2015
Paladin III	11/30/2007	16.0%	-	6.7%	6.7%	06/30/2015
Ocean Avenue	06/11/2014	-	-	8.7%	-	03/31/2015
Siguler Guff CCCERA Opportunities	06/03/2014	-	31.5%	-	23.8%	06/30/2015

<sup>1</sup>Manager has yet to report IRR figure due to no capital invested or meaningful distributions.

<sup>2</sup>Fund level data includes CCCERA and all other fund investors.

<sup>3</sup>Net IRR calculated after deductions of management fees and carried interest to the General Partner.

<sup>4</sup>Private iQ global all private equity median pooled return for vintage years 2011-2014, as of March 31, 2015.

<sup>5</sup>Private iQ global all private equity median pooled return for vintage years 1999-2011, as of March 31, 2015.

<sup>6</sup>Private iQ global all private equity median pooled return for vintage years 2008-2014, as of March 31, 2015.

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

Period Ending: September 30, 2015

## 3 Years

	Anlzd Ret	Ann Excess BM Return	Anlzd Std Dev	Anlzd Alpha	Beta	Tracking Error	R-Squared	Sharpe Ratio	Info Ratio	Up Mkt Cap Ratio	Down Mkt Cap Ratio
Intech Large Cap Core	13.74%	1.34%	9.49%	2.16%	0.93	3.57%	0.86	1.44	0.37	102.39%	62.05%
PIMCO Stocks+ Absolute Return	10.76%	-1.64%	10.93%	-3.36%	1.14	2.35%	0.97	0.98	-0.70	98.28%	151.35%
Jackson Square Partners	13.87%	0.26%	10.88%	-1.81%	1.15	2.74%	0.95	1.27	0.10	105.52%	118.35%
Robeco Boston Partners	12.37%	0.78%	10.70%	1.01%	0.98	2.55%	0.94	1.15	0.31	104.09%	93.29%
Emerald Advisors	18.02%	5.17%	16.50%	5.02%	1.01	5.64%	0.88	1.09	0.92	122.16%	80.50%
Ceredex	12.25%	3.07%	14.09%	3.11%	0.99	3.58%	0.94	0.87	0.86	112.37%	84.26%
William Blair	6.20%	2.57%	10.70%	2.72%	0.96	1.91%	0.97	0.58	1.34	110.02%	80.62%
Artisan Partners	9.46%	2.51%	9.64%	3.06%	0.92	3.90%	0.84	0.98	0.64	111.39%	71.28%
First Eagle	5.62%	-1.33%	7.63%	0.27%	0.77	2.86%	0.94	0.73	-0.46	80.99%	87.20%
Intech Global Low Vol	10.66%	3.71%	9.09%	6.05%	0.66	7.25%	0.49	1.17	0.51	111.42%	45.80%
JP Morgan Global Opportunities	8.48%	1.53%	10.44%	1.10%	1.06	2.24%	0.96	0.81	0.68	109.40%	87.65%
AFL-CIO	1.84%	0.13%	2.79%	0.15%	0.99	0.50%	0.97	0.65	0.26	97.88%	87.02%
Goldman Sachs Core Plus	2.39%	0.68%	2.78%	0.97%	0.83	1.62%	0.69	0.85	0.42	98.12%	50.27%
Lord Abbett	2.40%	0.69%	2.93%	0.77%	0.95	1.25%	0.82	0.81	0.56	104.90%	63.38%
PIMCO Fixed Income	1.73%	0.02%	3.14%	-0.11%	1.08	0.96%	0.91	0.54	0.02	102.12%	102.99%
Allianz Global Investors	3.18%	-0.28%	5.32%	-0.21%	0.98	0.78%	0.98	0.59	-0.36	94.71%	98.63%
Lazard	-2.07%	-0.48%	4.20%	-0.53%	0.97	1.19%	0.92	-0.50	-0.40	78.30%	97.83%
Adelante	11.39%	1.30%	12.72%	2.06%	0.92	1.98%	0.98	0.89	0.66	96.79%	76.56%
INVESCO International REIT	4.58%	0.18%	11.22%	0.10%	1.02	1.66%	0.98	0.40	0.11	101.03%	99.00%

## 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
Intech Large Cap Core	13.94%	0.60%	13.08%	1.06%	0.97	3.27%	0.94	1.06	0.18	101.27%	93.10%
PIMCO Stocks+ Absolute Return	13.15%	-0.19%	14.34%	-1.30%	1.08	2.17%	0.98	0.91	-0.09	105.49%	113.89%
Jackson Square Partners	15.50%	1.02%	13.57%	1.00%	1.00	2.86%	0.96	1.14	0.36	106.33%	97.54%
Robeco Boston Partners	13.49%	1.20%	15.50%	0.33%	1.07	2.83%	0.97	0.87	0.43	113.14%	105.86%
Emerald Advisors	17.88%	4.61%	22.19%	3.38%	1.09	6.01%	0.93	0.80	0.77	135.29%	102.13%
JP Morgan Global Opportunities	7.34%	0.51%	15.04%	-0.08%	1.09	2.45%	0.98	0.48	0.21	108.03%	103.46%
AFL-CIO	3.18%	0.09%	2.88%	0.22%	0.96	0.56%	0.96	1.09	0.16	99.89%	92.10%
Goldman Sachs Core Plus	4.00%	0.90%	2.91%	1.30%	0.87	1.41%	0.78	1.36	0.64	110.45%	57.93%
Lord Abbett	4.24%	1.15%	2.89%	1.57%	0.86	1.42%	0.78	1.45	0.81	118.91%	64.47%
PIMCO Fixed Income	3.23%	0.13%	2.93%	0.87%	0.76	2.01%	0.59	1.09	0.07	101.66%	94.09%
Allianz Global Investors	5.90%	-0.04%	6.20%	0.26%	0.95	0.98%	0.98	0.94	-0.04	95.67%	91.95%
Lazard	0.91%	0.10%	4.15%	0.10%	0.99	1.36%	0.89	0.21	0.07	97.37%	94.04%
Adelante	12.96%	0.44%	14.35%	1.15%	0.94	1.69%	0.99	0.90	0.26	95.12%	87.79%
INVESCO International REIT	4.87%	-0.41%	15.29%	-0.60%	1.04	1.76%	0.99	0.32	-0.23	100.04%	103.71%

Performance Analysis excludes closed end funds and those funds without 3 and 5 years of performance.

# Total Fund Investment Fund Fee Analysis

Period Ending: September 30, 2015

Name	Asset Class	Fee Schedule	Market Value	Estimated Fee Value	Estimated Fee
Intech Large Cap Core	Global Equity	0.50% of First \$100.0 Mil, 0.45% of Next \$100.0 Mil, 0.35% of Next \$100.0 Mil, 0.30% of Next \$200.0 Mil, 0.25% Thereafter	\$281,873,427	\$1,231,557	0.44%
PIMCO Stocks+ Absolute Return	Global Equity	0.15% of Assets	\$240,306,376	\$360,460	0.15%
Jackson Square Partners	Global Equity	0.50% of First \$100.0 Mil, 0.40% of Next \$150.0 Mil, 0.35% Thereafter	\$291,200,693	\$1,244,202	0.43%
Robeco Boston Partners	Global Equity	0.50% of First \$25.0 Mil, 0.30% Thereafter	\$286,894,817	\$910,684	0.32%
Emerald Advisors	Global Equity	0.75% of First \$10.0 Mil, 0.60% Thereafter	\$198,487,579	\$1,205,925	0.61%
Ceredex	Global Equity	0.85% of First \$10.0 Mil, 0.68% of Next \$40.0 Mil, 0.51% Thereafter	\$202,557,207	\$1,135,042	0.56%
Pyrford	Global Equity	0.70% of First \$50.0 Mil, 0.50% of Next \$50.0 Mil, 0.35% Thereafter	\$353,611,586	\$1,487,641	0.42%
William Blair	Global Equity	0.80% of First \$20.0 Mil, 0.60% of Next \$30.0 Mil, 0.50% of Next \$50.0 Mil, 0.45% of Next \$50.0 Mil, 0.40% of Next \$50.0 Mil, 0.30% Thereafter	\$354,922,784	\$1,479,768	0.42%
Artisan Partners	Global Equity	0.75% of Assets	\$269,597,042	\$2,021,978	0.75%
First Eagle	Global Equity	0.75% of Assets	\$275,139,223	\$2,063,544	0.75%
Intech Global Low Vol	Global Equity	0.25% of First \$100.0 Mil, 0.21% of Next \$100.0 Mil, 0.18% of Next \$100.0 Mil, 0.16% of Next \$200.0 Mil, 0.14% Thereafter	\$21,454,075	\$52,562	0.25%
JP Morgan Global Opportunities	Global Equity	0.50% of First \$100.0 Mil, 0.40% Thereafter	\$255,236,672	\$1,120,947	0.44%
AFL-CIO	Global Fixed Income	0.43% of Assets	\$244,688,880	\$1,052,162	0.43%

Mutual fund fees shown are sourced from Morningstar and are as of the most current prospectus.

Total Fund  
Investment Fund Fee Analysis

Period Ending: September 30, 2015

Name	Asset Class	Fee Schedule	Market Value	Estimated Fee Value	Estimated Fee
Goldman Sachs Core Plus	Global Fixed Income	0.18% of First \$500.0 Mil, 0.16% Thereafter	\$338,777,578	\$592,861	0.18%
GSAM Workout Portfolio	Global Fixed Income		\$4,078		
Lord Abbett	Global Fixed Income	0.20% of First \$250.0 Mil, 0.15% of Next \$250.0 Mil, 0.13% Thereafter	\$338,684,925	\$633,027	0.19%
PIMCO Fixed Income	Global Fixed Income	0.25% of First \$600.0 Mil, 0.15% Thereafter	\$423,495,116	\$1,058,738	0.25%
Allianz Global Investors	High Yield Fixed Income	0.50% of First \$50.0 Mil, 0.40% of Next \$50.0 Mil, 0.35% Thereafter	\$346,797,107	\$1,313,790	0.38%
Lazard	Global Fixed Income	0.40% of First \$25.0 Mil, 0.30% of Next \$25.0 Mil, 0.25% Thereafter	\$292,426,571	\$781,066	0.27%
PIMCO All Asset Fund	Inflation Hedge/Real Assets	0.87% of Assets	\$117,153,551	\$1,019,236	0.87%
Wellington Real Total Return	Inflation Hedge/Real Assets	0.55% of Assets	\$194,695,222	\$1,070,824	0.55%

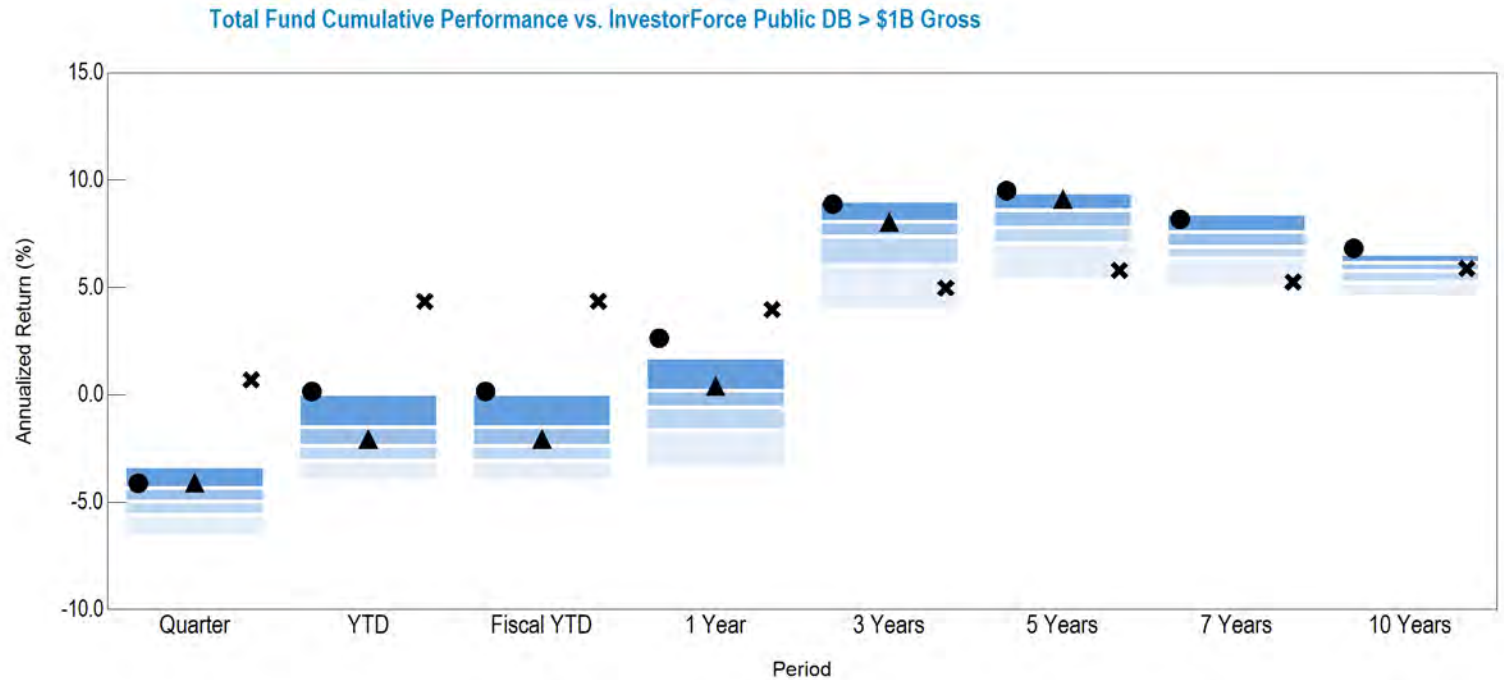
Mutual fund fees shown are sourced from Morningstar and are as of the most current prospectus.



Total Fund

Peer Universe Comparison: Cumulative Performance (Gross of Fees)

Period Ending: September 30, 2015



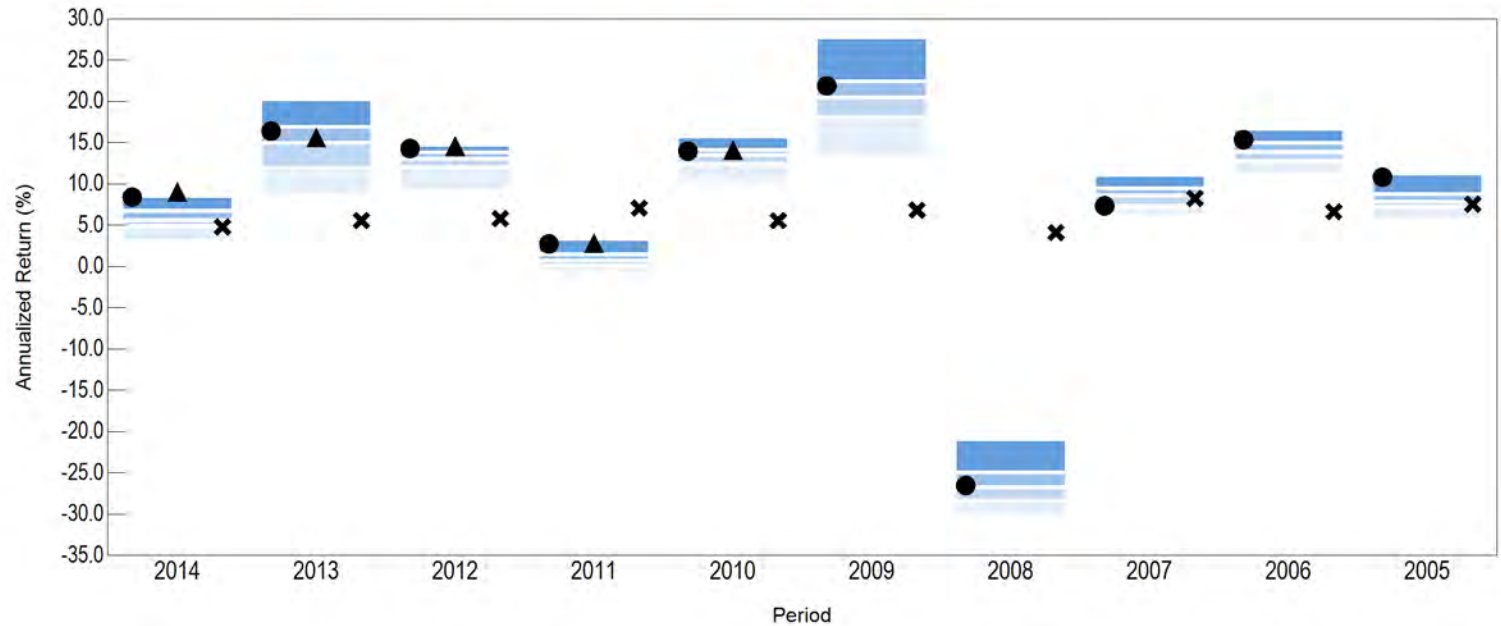
	Quarter		YTD		Fiscal YTD		1 Year		3 Years		5 Years		7 Years		10 Years	
5th Percentile	-3.4	0.0	0.0	1.7	9.0	9.4	8.4	6.6								
25th Percentile	-4.3	-1.5	-1.5	0.2	8.1	8.6	7.6	6.2								
Median	-4.9	-2.3	-2.3	-0.6	7.4	7.8	6.9	5.8								
75th Percentile	-5.6	-3.0	-3.0	-1.6	6.1	7.0	6.4	5.2								
95th Percentile	-6.6	-4.0	-4.0	-3.4	4.0	5.4	5.0	4.6								
# of Portfolios	93	87	87	87	82	80	69	63								
● Total Fund	-4.1	(17)	0.2	(4)	0.2	(4)	2.6	(1)	8.9	(8)	9.5	(5)	8.2	(12)	6.8	(2)
▲ Policy Index	-4.1	(16)	-2.1	(38)	-2.1	(38)	0.4	(21)	8.0	(27)	9.1	(9)	--	(--)	--	(--)
✕ CPI + 4%	0.7	(1)	4.4	(1)	4.4	(1)	4.0	(1)	5.0	(88)	5.8	(93)	5.3	(94)	5.9	(41)

Total Fund

Peer Universe Comparison: Consecutive Periods (Gross of Fees)

Period Ending: September 30, 2015

Total Fund Consecutive Periods vs. InvestorForce Public DB > \$1B Gross



	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005
<b>5th Percentile</b>	8.5	20.2	14.7	3.3	15.7	27.7	-21.0	11.0	16.6	11.2
<b>25th Percentile</b>	6.8	17.0	13.9	1.6	14.2	22.5	-24.9	9.5	15.0	8.8
<b>Median</b>	5.7	15.0	13.0	0.8	13.5	20.5	-26.7	8.6	13.9	7.9
<b>75th Percentile</b>	4.9	12.0	12.1	0.1	12.5	18.1	-28.3	7.4	12.9	7.3
<b>95th Percentile</b>	3.1	8.7	9.2	-0.9	10.2	13.4	-30.2	6.2	11.2	5.7
<b># of Portfolios</b>	79	67	74	68	66	66	65	64	64	58
<b>● Total Fund</b>	8.4 (6)	16.4 (33)	14.3 (13)	2.7 (9)	14.0 (29)	21.9 (34)	-26.5 (48)	7.3 (78)	15.4 (19)	10.8 (6)
<b>▲ Policy Index</b>	9.0 (2)	15.6 (43)	14.6 (8)	2.8 (9)	14.1 (27)	-- (--)	-- (--)	-- (--)	-- (--)	-- (--)
<b>✕ CPI + 4%</b>	4.8 (80)	5.6 (99)	5.8 (99)	7.1 (1)	5.6 (99)	6.8 (99)	4.1 (1)	8.2 (53)	6.6 (99)	7.5 (67)

## Domestic Equity Managers

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# Intech Large Cap Core Manager Portfolio Overview

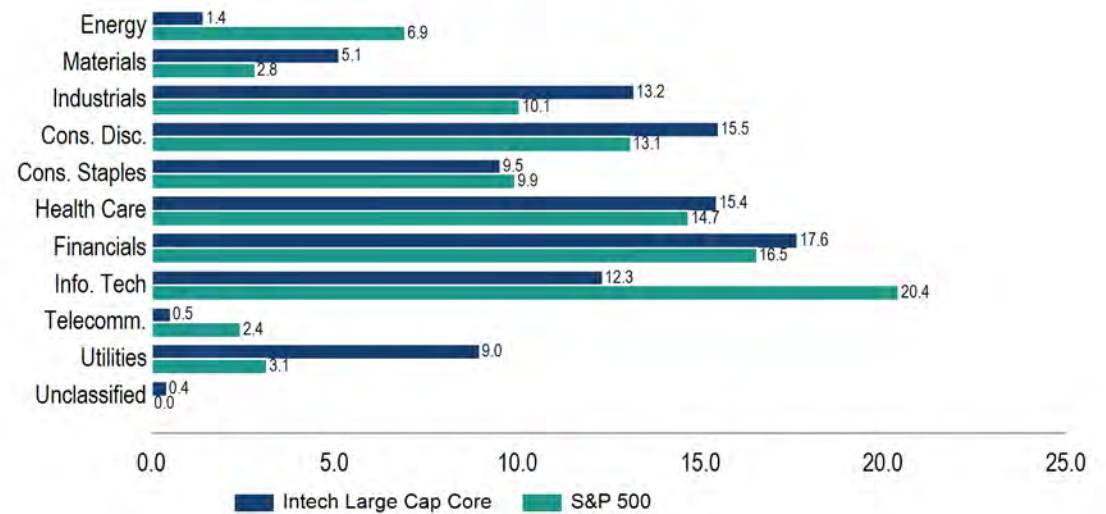
Period Ending: September 30, 2015

Domestic equity large cap core portfolio with high correlation exposure to a broad universe seeking enhanced returns. Primary personnel include Adrian Banner, Vassilios Papathanakos, Joseph Runnels, and Phillip Whitman.

## Characteristics

	Portfolio	S&P 500
Number of Holdings	305	505
Weighted Avg. Market Cap. (\$B)	37.77	119.17
Median Market Cap. (\$B)	16.64	16.64
Price To Earnings	22.65	20.88
Price To Book	4.61	4.10
Price To Sales	2.88	2.98
Return on Equity (%)	19.36	18.27
Yield (%)	1.90	2.29
Beta	0.93	1.00

## Sector Allocation (%) vs S&P 500



## Largest Holdings

	End Weight	Return
LOCKHEED MARTIN	1.42	12.34
KROGER	1.32	0.04
SEMPRA EN.	1.31	-1.50
APPLE	1.29	-11.66
ANTHEM	1.27	-14.34
CONSTELLATION BRANDS 'A'	1.27	8.19
FISERV	1.24	4.56
NORTHROP GRUMMAN	1.21	5.12
AMERISOURCEBERGEN	1.20	-10.42
CVS HEALTH	1.10	-7.72

## Top Contributors

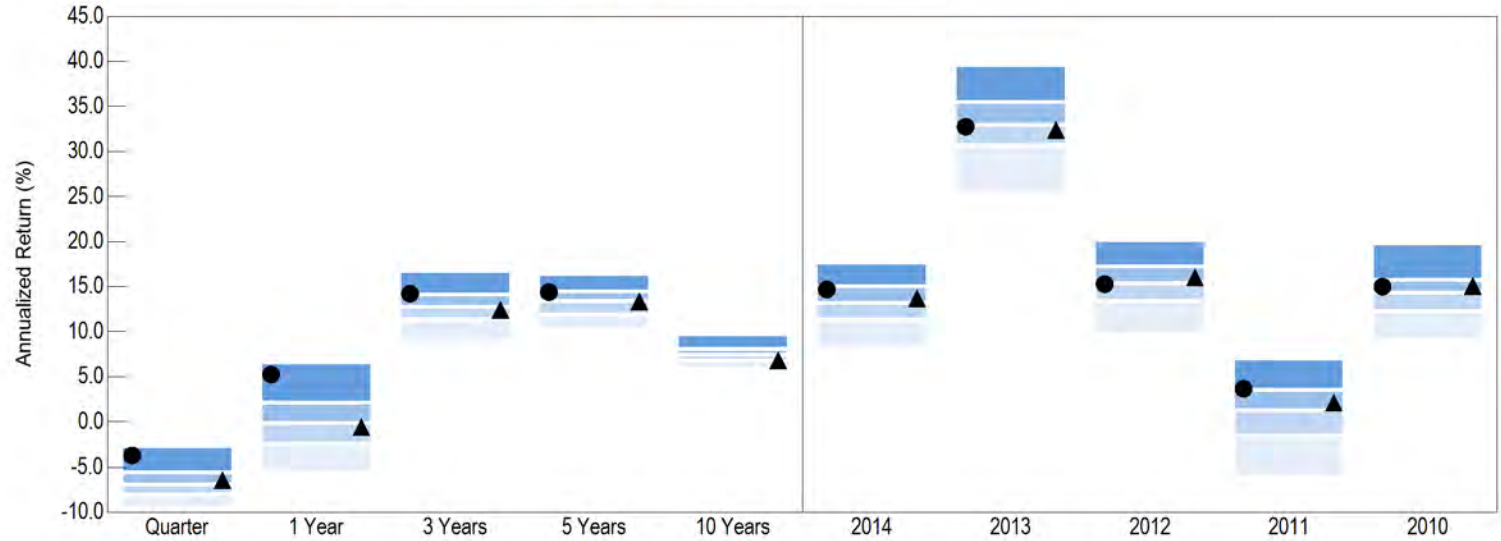
	Avg Wgt	Return	Contribution
SOUTHWEST AIRLINES	1.29	15.17	0.20
LOCKHEED MARTIN	1.31	12.34	0.16
RAYTHEON 'B'	1.02	14.19	0.14
O REILLY AUTOMOTIVE	0.96	10.63	0.10
MOLSON COORS BREWING 'B'	0.50	19.62	0.10
EDISON INTL.	0.64	14.24	0.09
CONSTELLATION BRANDS 'A'	1.11	8.19	0.09
WEC ENERGY GROUP	0.54	16.65	0.09
TECO ENERGY	0.16	50.21	0.08
DR PEPPER SNAPPLE GROUP	0.82	9.12	0.07

## Bottom Contributors

	Avg Wgt	Return	Contribution
MALLINCKRODT	0.56	-45.68	-0.26
ANTHEM	1.30	-14.34	-0.19
MCKESSON	1.00	-17.58	-0.18
CIGNA	0.92	-16.65	-0.15
APPLE	1.26	-11.66	-0.15
ALLERGAN	1.31	-10.43	-0.14
AETNA	0.97	-13.98	-0.14
NAVIENT	0.35	-37.46	-0.13
MCGRAW HILL FINANCIAL	0.93	-13.58	-0.13
AMERISOURCEBERGEN	1.21	-10.42	-0.13

Unclassified sector allocation includes cash allocations.

Intech Large Cap Core vs. eA US Large Cap Core Equity Gross Universe

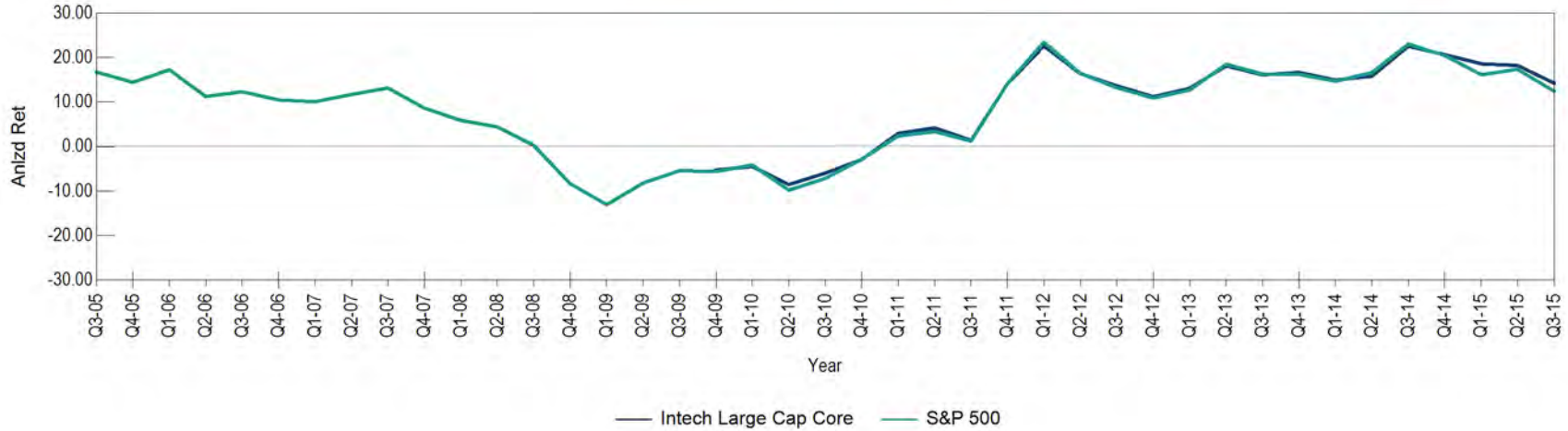


	Return (Rank)														
5th Percentile	-2.6	6.6	16.7	16.4	9.6	17.7	39.6	20.1	7.0	19.7					
25th Percentile	-5.5	2.1	14.2	14.5	8.1	15.1	35.5	17.2	3.6	15.8					
Median	-6.9	-0.1	12.8	13.4	7.5	13.3	32.9	15.4	1.3	14.4					
75th Percentile	-7.9	-2.4	11.4	12.0	6.8	11.4	30.8	13.4	-1.5	12.3					
95th Percentile	-9.5	-5.5	8.9	10.2	5.9	8.2	25.4	9.8	-5.9	9.1					
# of Portfolios	265	265	255	244	201	267	261	254	259	254					
● Intech Large Cap Core	-3.7 (10)	5.2 (10)	14.2 (25)	14.4 (28)	-- (--)	14.7 (31)	32.7 (54)	15.3 (54)	3.6 (25)	15.0 (39)					
▲ S&P 500	-6.4 (42)	-0.6 (57)	12.4 (56)	13.3 (52)	6.8 (77)	13.7 (42)	32.4 (58)	16.0 (41)	2.1 (40)	15.1 (37)					

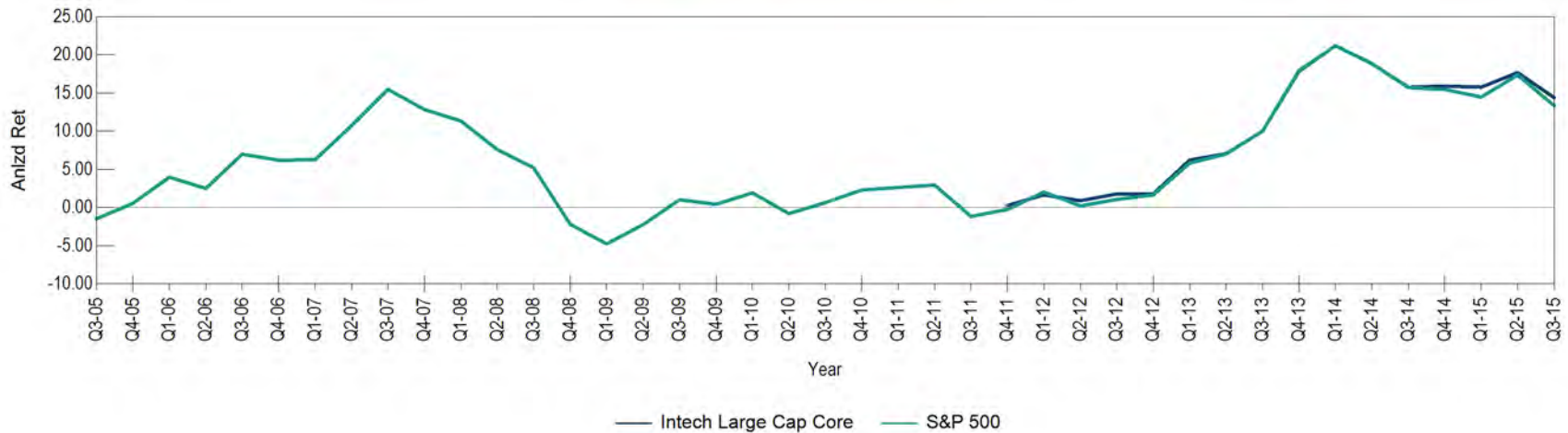
Intech Large Cap Core  
 Manager Performance - Rolling 3 & 5 Year (Gross of Fees)

Period Ending: September 30, 2015

Rolling 3 Year Annualized Return (%)



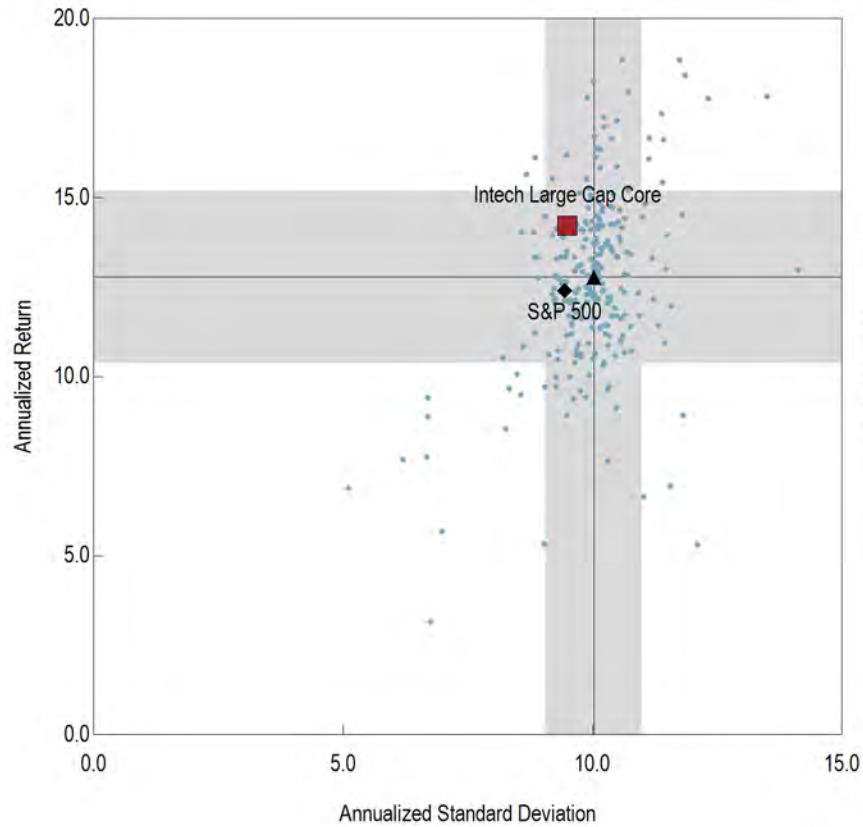
Rolling 5 Year Annualized Return (%)



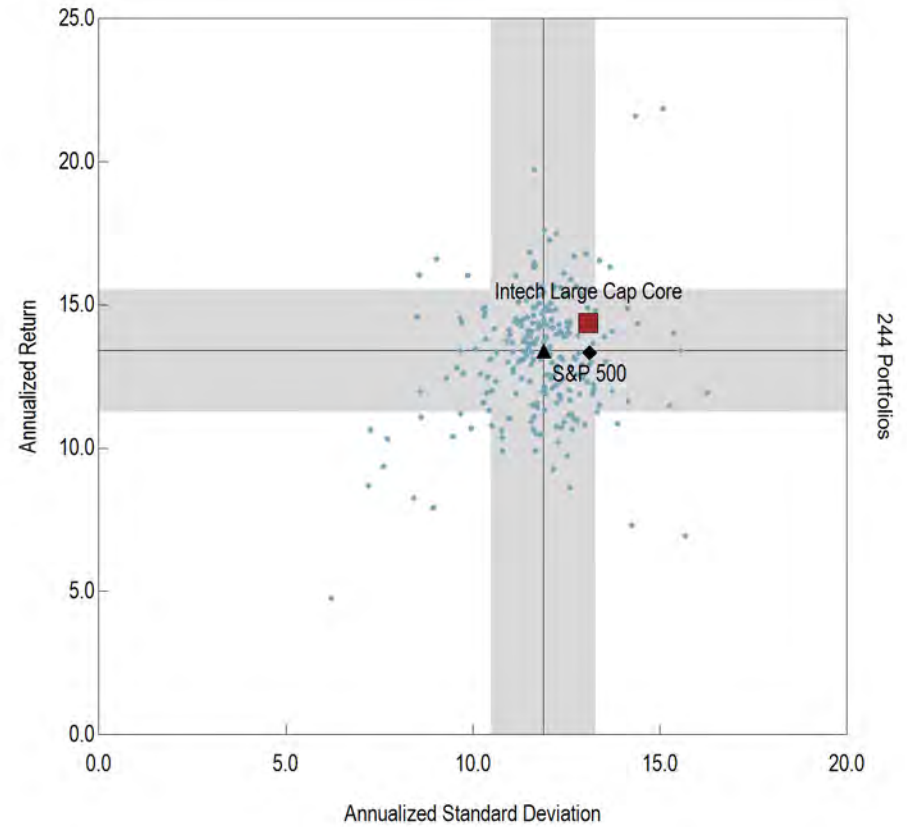
Intech Large Cap Core  
 Risk vs. Return 3 & 5 Year (Gross of Fees)

Period Ending: September 30, 2015

3 Years



5 Years



3 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
Intech Large Cap Core	14.2%	9.5%	1.5
S&P 500	12.4%	9.4%	1.3
eA US Large Cap Core Equity Gross Median	12.8%	10.0%	1.3

5 Years

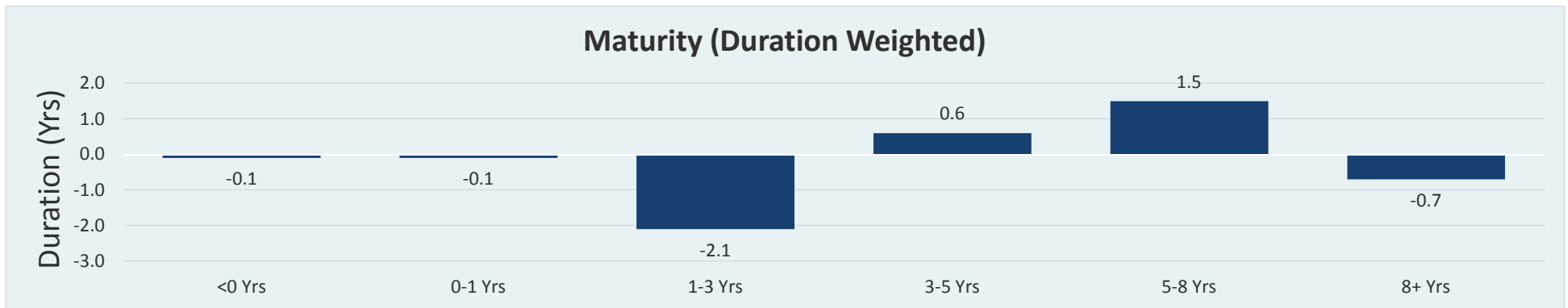
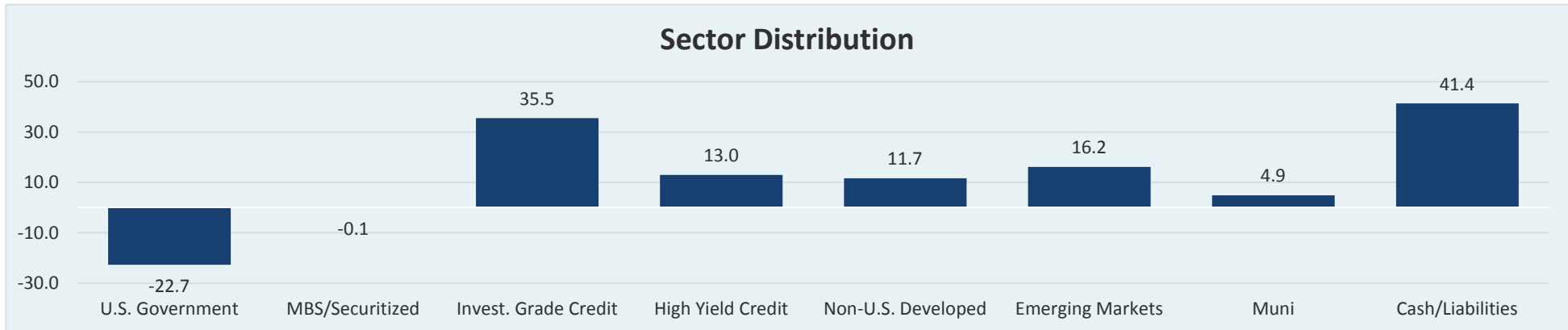
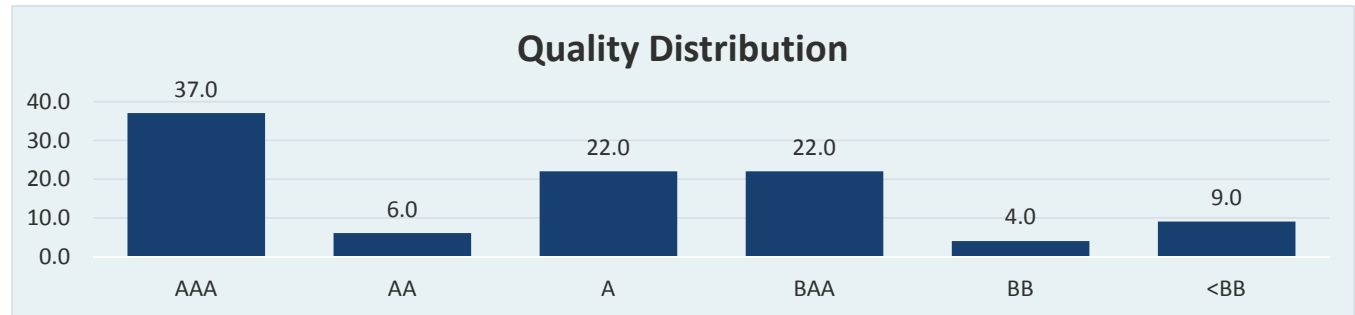
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
Intech Large Cap Core	14.4%	13.1%	1.1
S&P 500	13.3%	13.1%	1.0
eA US Large Cap Core Equity Gross Median	13.4%	11.9%	1.1

# PIMCO Stocks+ Absolute Return Manager Portfolio Overview

Period Ending: September 30, 2015

Domestic equity large cap core portfolio with high correlation exposure to a broad universe seeking enhanced returns. Primary personnel include Mohsen Fahmi and Scott Mather.

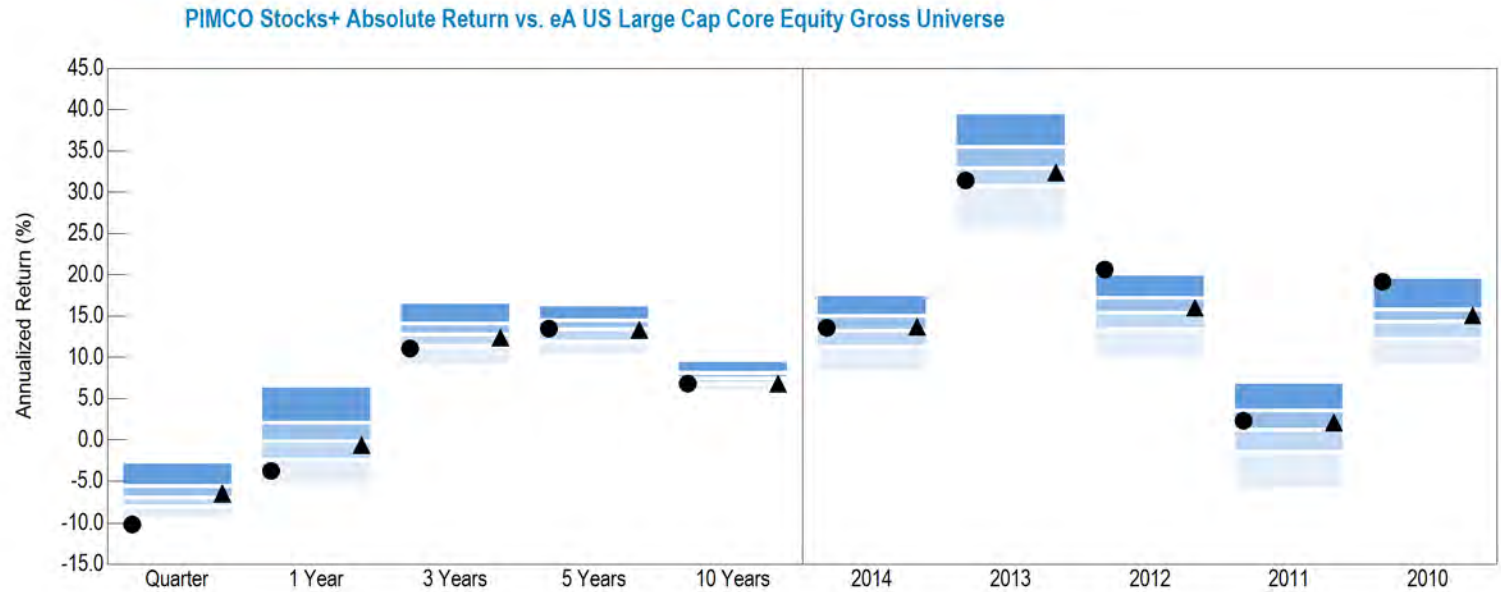
	<b>PIMCO Stocks+</b>
Effective Duration	-0.72
Futures Adjusted Duration	-0.97
Yield to Maturity	1.87
Average Quality	A+





PIMCO Stocks+ Absolute Return  
 Manager Performance Comparisons (Gross of Fees)

Period Ending: September 30, 2015

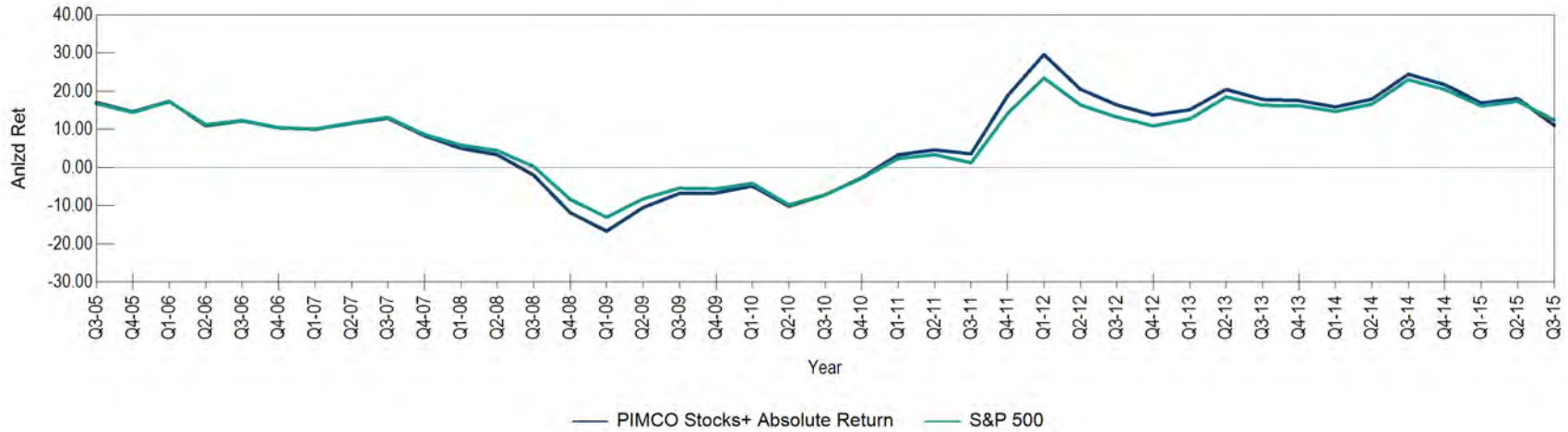


	Return (Rank)												
	Quarter	1 Year	3 Years	5 Years	10 Years	2014	2013	2012	2011	2010			
5th Percentile	-2.6	6.6	16.7	16.4	9.6	17.7	39.6	20.1	7.0	19.7			
25th Percentile	-5.5	2.1	14.2	14.5	8.1	15.1	35.5	17.2	3.6	15.8			
Median	-6.9	-0.1	12.8	13.4	7.5	13.3	32.9	15.4	1.3	14.4			
75th Percentile	-7.9	-2.4	11.4	12.0	6.8	11.4	30.8	13.4	-1.5	12.3			
95th Percentile	-9.5	-5.5	8.9	10.2	5.9	8.2	25.4	9.8	-5.9	9.1			
# of Portfolios	265	265	255	244	201	267	261	254	259	254			
● PIMCO Stocks+ Absolute Return	-10.2 (98)	-3.8 (89)	11.1 (80)	13.5 (49)	6.8 (75)	13.6 (45)	31.4 (68)	20.6 (4)	2.3 (36)	19.2 (7)			
▲ S&P 500	-6.4 (42)	-0.6 (57)	12.4 (56)	13.3 (52)	6.8 (77)	13.7 (42)	32.4 (58)	16.0 (41)	2.1 (40)	15.1 (37)			

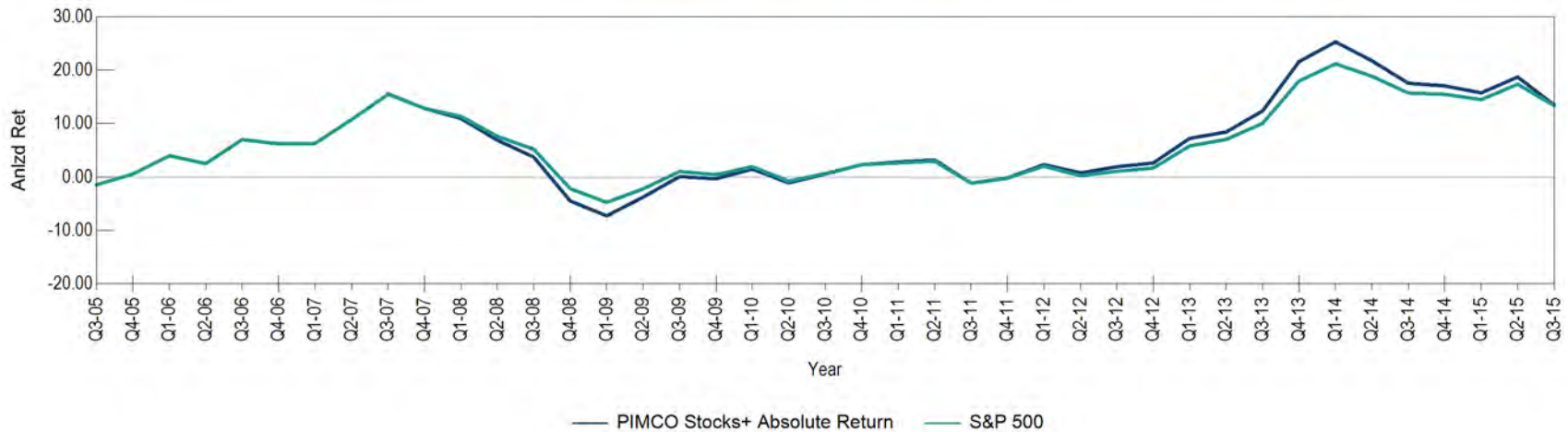
PIMCO Stocks+ Absolute Return  
 Manager Performance - Rolling 3 & 5 Year (Gross of Fees)

Period Ending: September 30, 2015

Rolling 3 Year Annualized Return (%)



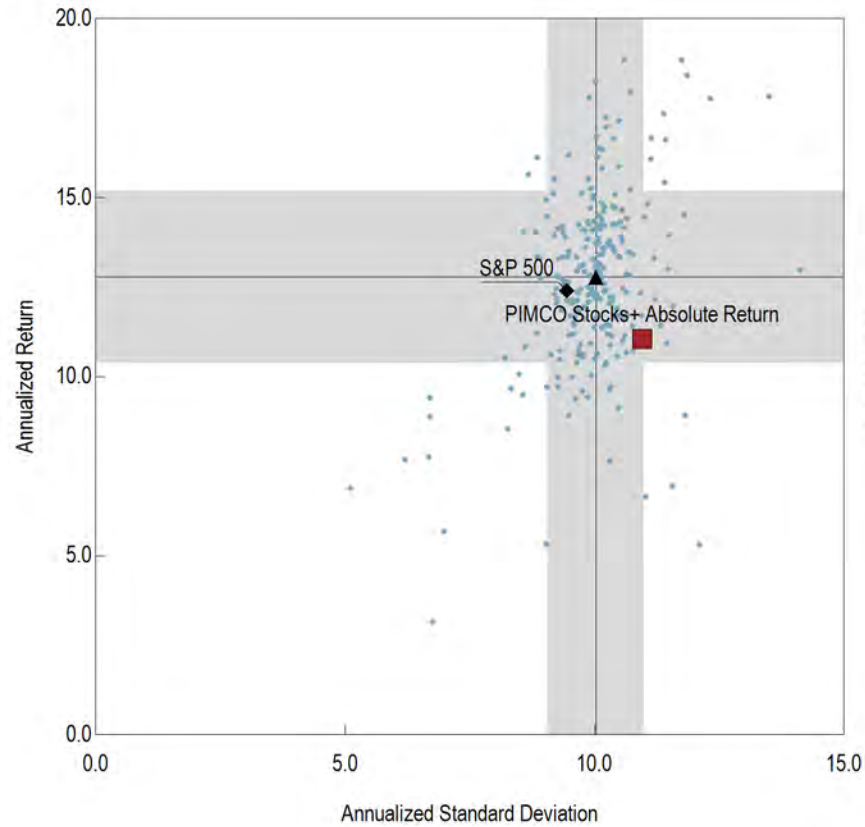
Rolling 5 Year Annualized Return (%)



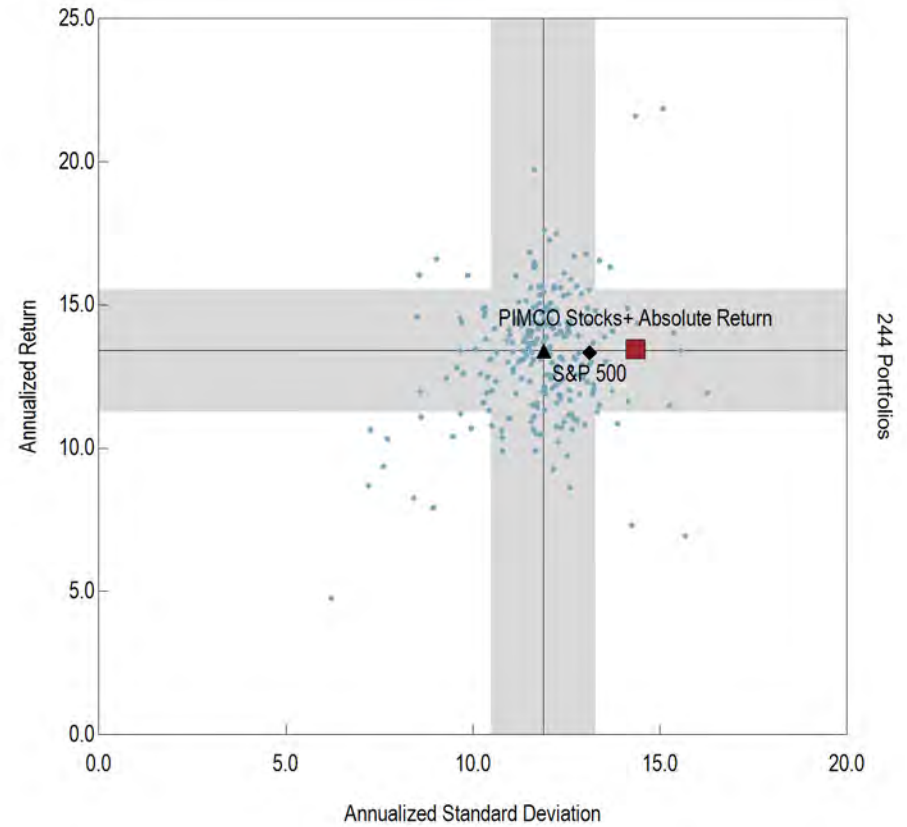
PIMCO Stocks+ Absolute Return  
 Risk vs. Return 3 & 5 Year (Gross of Fees)

Period Ending: September 30, 2015

3 Years



5 Years



3 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
PIMCO Stocks+ Absolute Return	11.1%	11.0%	1.0
S&P 500	12.4%	9.4%	1.3
eA US Large Cap Core Equity Gross Median	12.8%	10.0%	1.3

5 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
PIMCO Stocks+ Absolute Return	13.5%	14.4%	0.9
S&P 500	13.3%	13.1%	1.0
eA US Large Cap Core Equity Gross Median	13.4%	11.9%	1.1

# Jackson Square Partners Manager Portfolio Overview

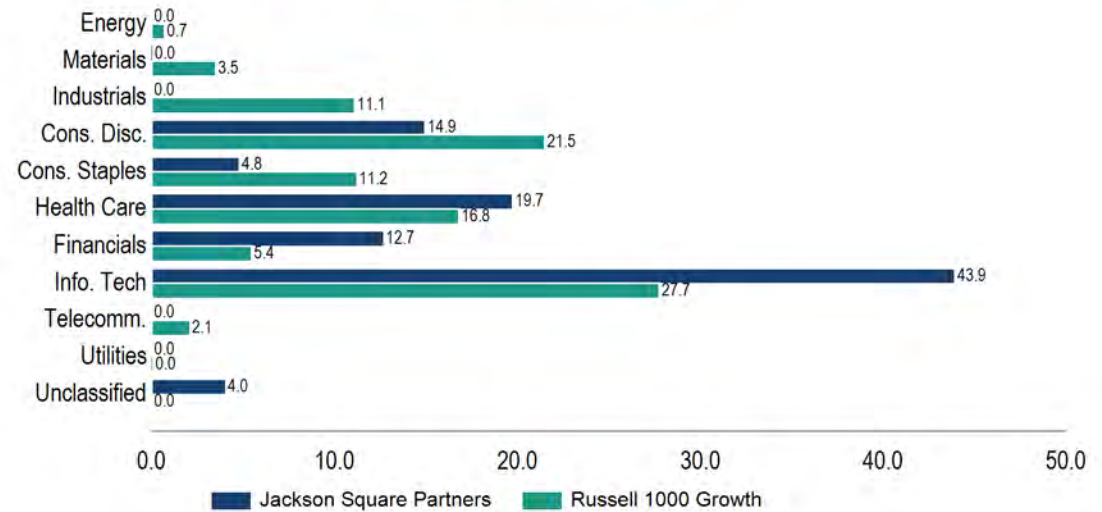
Period Ending: September 30, 2015

Domestic equity large cap growth portfolio concentrated in companies with sustainable long-term growth characteristics. Primary personnel include Jeffrey Van Harte, Christopher Bonavico, Christopher Ericksen, and Daniel Prislín.

## Characteristics

	Portfolio	Russell 1000 Growth
Number of Holdings	30	642
Weighted Avg. Market Cap. (\$B)	84.26	115.53
Median Market Cap. (\$B)	37.97	8.30
Price To Earnings	31.61	24.38
Price To Book	6.96	6.54
Price To Sales	6.72	3.64
Return on Equity (%)	21.95	25.38
Yield (%)	1.05	1.66
Beta	1.15	1.00

## Sector Allocation (%) vs Russell 1000 Growth



## Largest Holdings

	End Weight	Return
VISA 'A'	5.73	3.91
QUALCOMM	5.70	-13.48
CELGENE	5.62	-6.54
EQUINIX	5.10	8.35
MASTERCARD	4.81	-3.43
WALGREENS BOOTS ALLIANCE	4.78	-1.20
LIBERTY INTACT.QVC GROUP 'A'	4.45	-5.48
CROWN CASTLE INTL.	4.30	-0.75
ALLERGAN	4.29	-10.43
ELECTRONIC ARTS	4.00	1.88

## Top Contributors

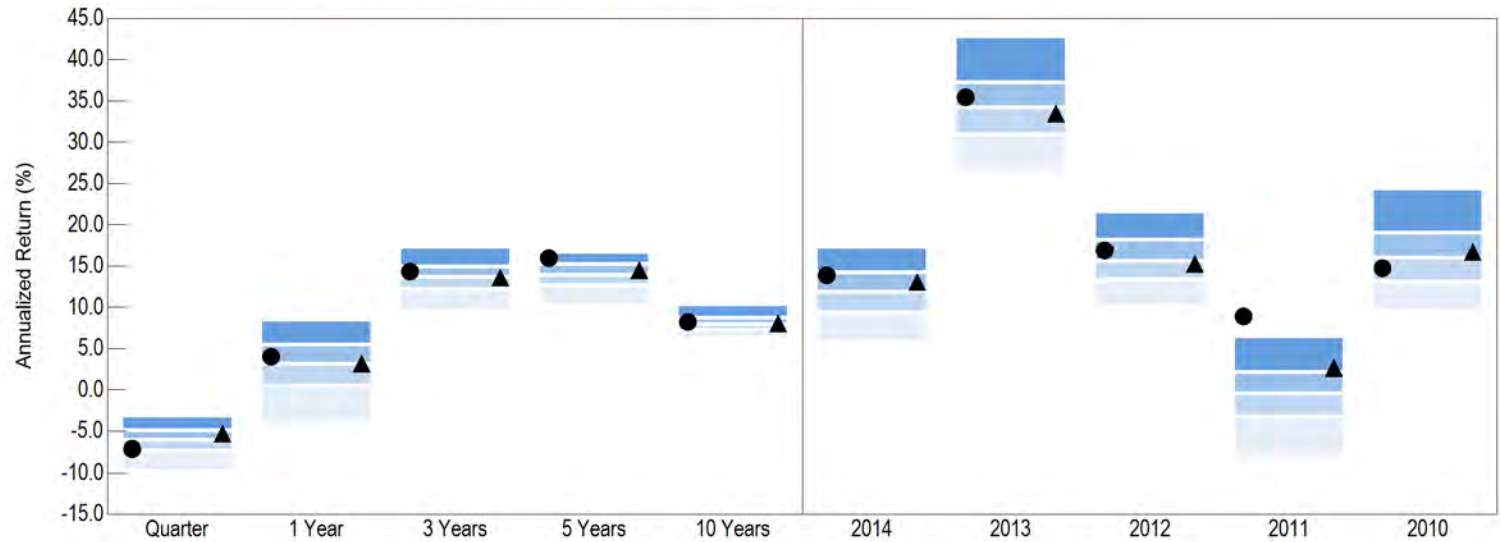
	Avg Wgt	Return	Contribution
ALPHABET 'A'	2.76	18.21	0.50
ALPHABET 'C'	2.27	16.89	0.38
EQUINIX	4.57	8.35	0.38
NIKE 'B'	2.67	14.13	0.38
VISA 'A'	5.41	3.91	0.21
L BRANDS	2.83	5.78	0.16
INTERCONTINENTAL EX.	2.95	5.43	0.16
FACEBOOK CLASS A	1.43	4.82	0.07
ELECTRONIC ARTS	3.36	1.88	0.06
MICROSOFT	3.34	0.91	0.03

## Bottom Contributors

	Avg Wgt	Return	Contribution
VALEANT PHARMS. (NYS) INTL.	4.16	-19.70	-0.82
BIOGEN	2.93	-27.76	-0.81
WILLIAMS	2.24	-34.87	-0.78
QUALCOMM	5.79	-13.48	-0.78
TRIPADVISOR 'A'	2.79	-27.68	-0.77
BAIDU 'A' ADR 10:1	2.18	-30.98	-0.68
WYNN RESORTS	1.02	-45.90	-0.47
ALLERGAN	4.28	-10.43	-0.45
DISCOVERY COMMS.'C'	1.81	-21.85	-0.40
CELGENE	5.94	-6.54	-0.39

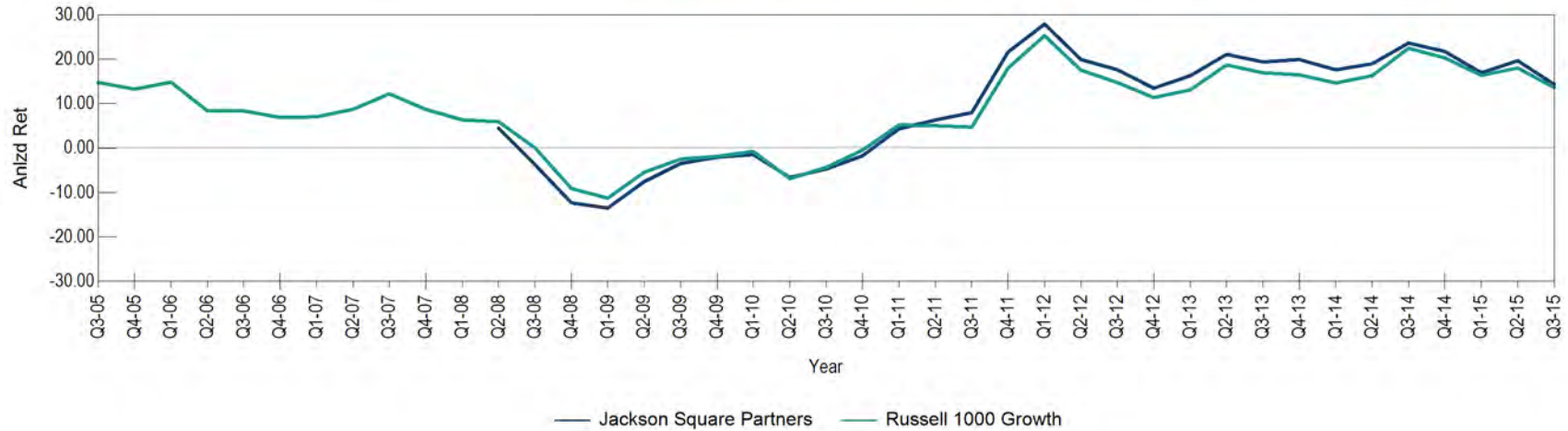
Unclassified sector allocation includes cash allocations.

Jackson Square Partners vs. eA US Large Cap Growth Equity Gross Universe

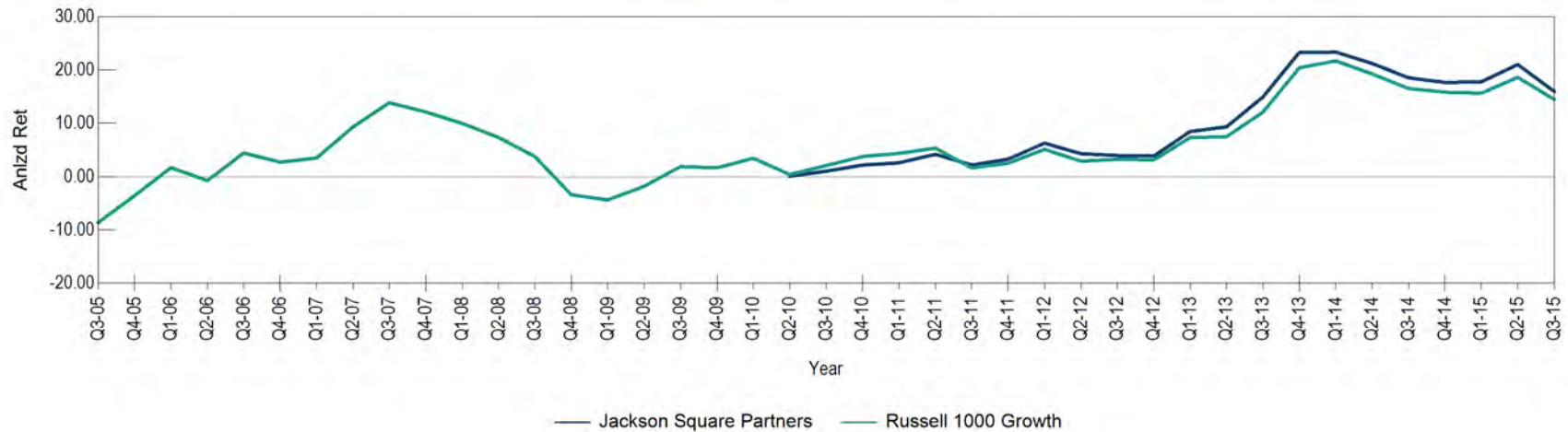


	Return (Rank)									
	Quarter	1 Year	3 Years	5 Years	10 Years	2014	2013	2012	2011	2010
5th Percentile	-3.1	8.4	17.3	16.7	10.4	17.3	42.8	21.6	6.4	24.4
25th Percentile	-4.9	5.5	14.9	15.3	8.8	14.3	37.3	18.2	2.2	19.1
Median	-6.0	3.2	13.7	14.0	8.0	12.0	34.3	15.7	-0.3	16.1
75th Percentile	-7.2	0.6	12.3	12.7	7.3	9.5	31.0	13.4	-3.2	13.2
95th Percentile	-9.6	-3.9	9.7	10.4	6.3	5.8	26.6	10.2	-8.0	9.6
# of Portfolios	276	276	264	256	210	291	274	274	294	304
● Jackson Square Partners	-7.1 (73)	4.0 (41)	14.3 (37)	16.0 (14)	8.2 (45)	13.9 (31)	35.4 (40)	16.9 (37)	8.9 (3)	14.7 (63)
▲ Russell 1000 Growth	-5.3 (32)	3.2 (52)	13.6 (53)	14.5 (42)	8.1 (50)	13.0 (38)	33.5 (56)	15.3 (55)	2.6 (22)	16.7 (46)

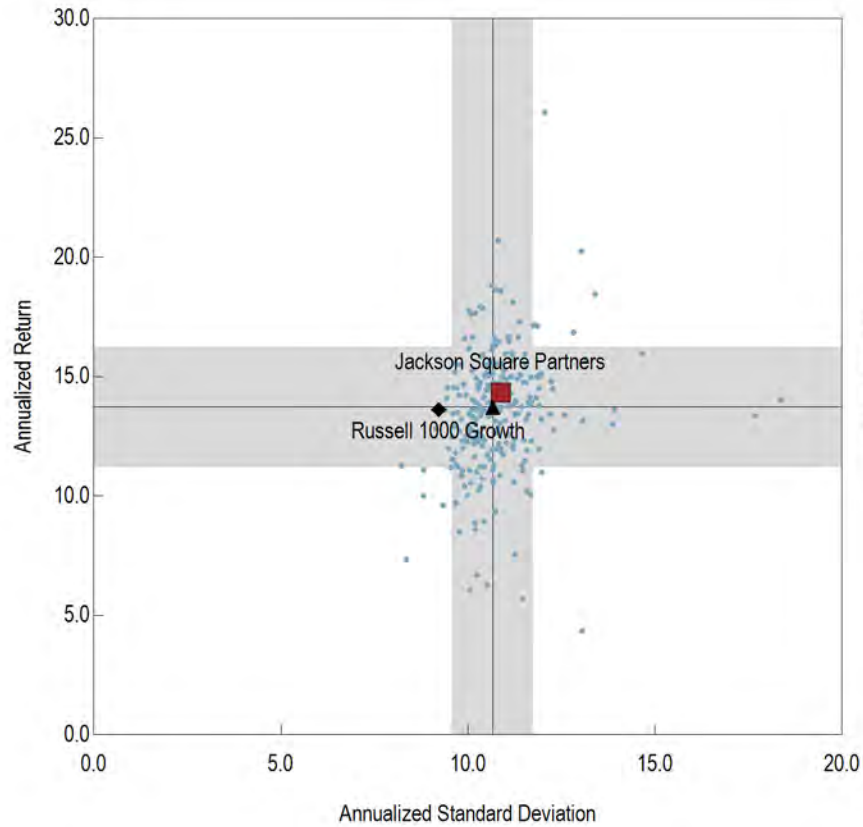
Rolling 3 Year Annualized Return (%)



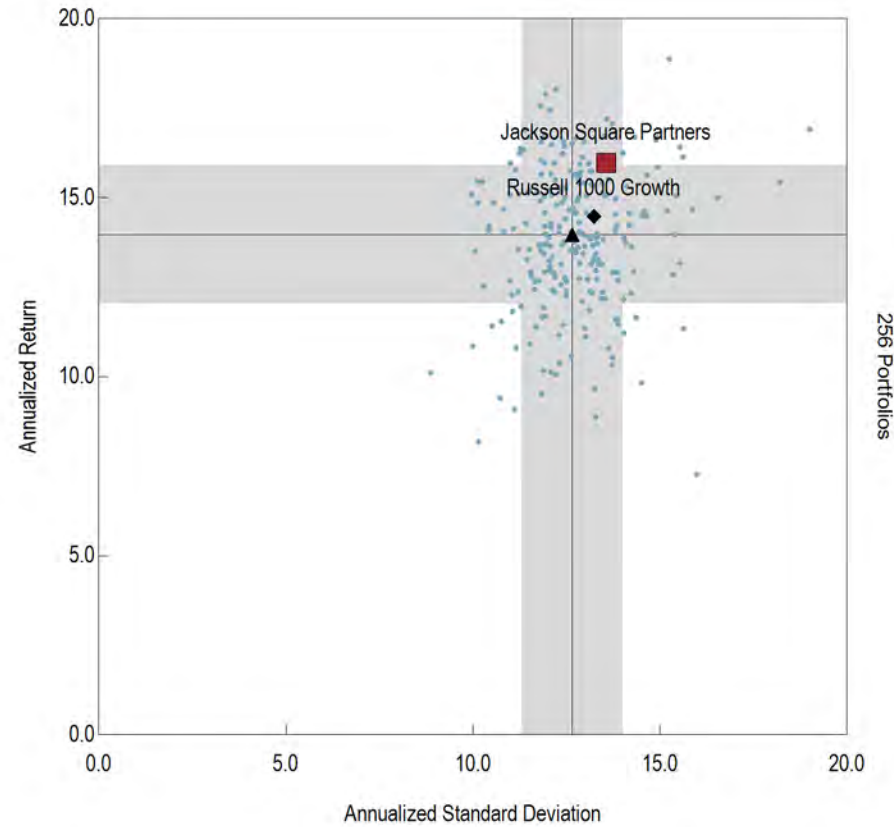
Rolling 5 Year Annualized Return (%)



3 Years



5 Years



3 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
Jackson Square Partners	14.3%	10.9%	1.3
Russell 1000 Growth	13.6%	9.2%	1.5
eA US Large Cap Growth Equity Gross Median	13.7%	10.7%	1.3

5 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
Jackson Square Partners	16.0%	13.6%	1.2
Russell 1000 Growth	14.5%	13.2%	1.1
eA US Large Cap Growth Equity Gross Median	14.0%	12.7%	1.1

# Robeco Boston Partners Manager Portfolio Overview

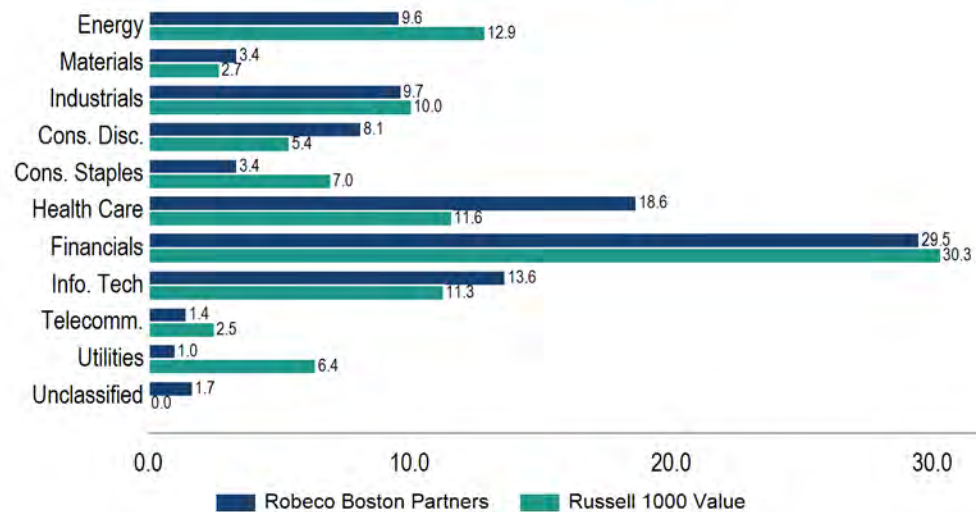
Period Ending: September 30, 2015

Domestic equity large cap value portfolio exhibiting low turnover in companies with low valuations relative to intrinsic value. Primary personnel include Mark Donovan and David Pyle.

## Characteristics

	Portfolio	Russell 1000 Value
Number of Holdings	92	689
Weighted Avg. Market Cap. (\$B)	103.35	94.99
Median Market Cap. (\$B)	25.09	6.80
Price To Earnings	17.00	17.92
Price To Book	2.82	2.09
Price To Sales	2.39	2.50
Return on Equity (%)	14.39	11.56
Yield (%)	2.16	2.73
Beta	0.98	1.00

## Sector Allocation (%) vs Russell 1000 Value



## Largest Holdings

	End Weight	Return
BERKSHIRE HATHAWAY 'B'	4.38	-4.20
JP MORGAN CHASE & CO.	4.31	-9.44
WELLS FARGO & CO	3.87	-8.10
JOHNSON & JOHNSON	3.66	-3.47
CAPITAL ONE FINL.	3.09	-17.16
PFIZER	3.01	-5.59
CITIGROUP	2.90	-10.12
MICROSOFT	2.66	0.91
OCCIDENTAL PTL.	2.65	-14.02
CISCO SYSTEMS	2.22	-3.67

## Top Contributors

	Avg Wgt	Return	Contribution
ACTIVISION BLIZZARD	1.14	27.59	0.31
LOCKHEED MARTIN	1.78	12.34	0.22
RAYTHEON 'B'	1.33	14.19	0.19
DELTA AIR LINES	1.33	9.54	0.13
ACE	1.45	2.37	0.03
TRAVELERS COS.	0.65	3.60	0.02
MICROSOFT	2.36	0.91	0.02
TYSON FOODS 'A'	1.56	1.34	0.02
WESTERN DIGITAL	0.94	1.94	0.02
SIX FLAGS ENTM.	0.44	3.30	0.01

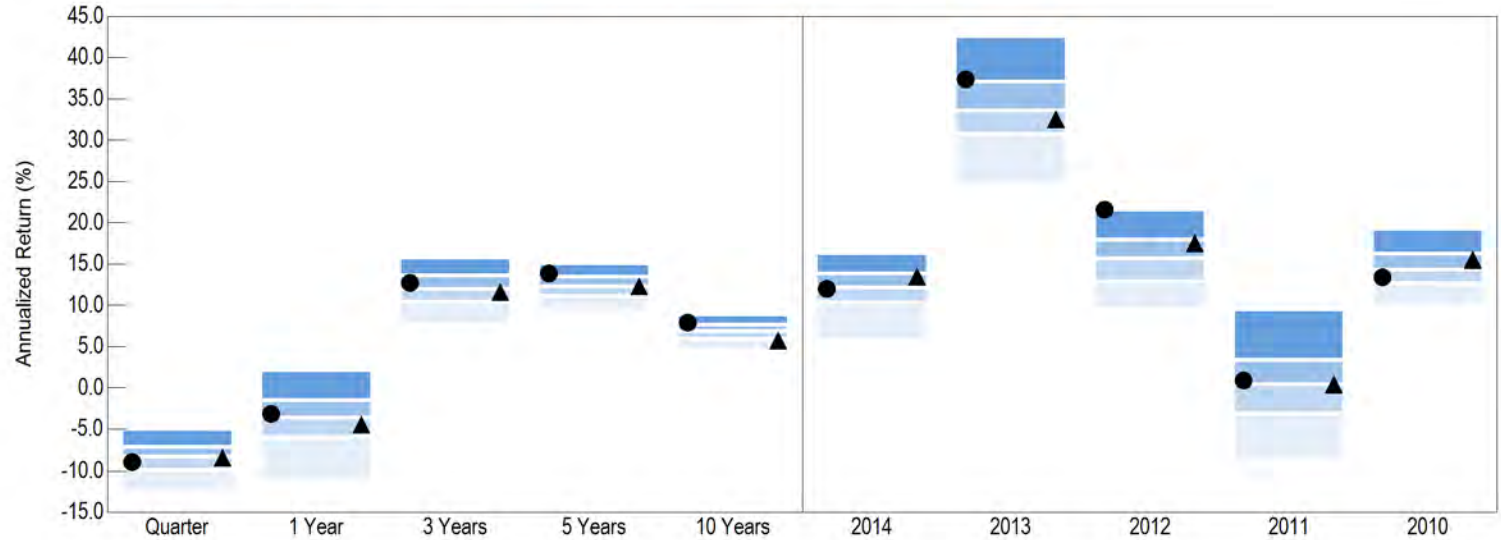
## Bottom Contributors

	Avg Wgt	Return	Contribution
CAPITAL ONE FINL.	3.09	-17.16	-0.53
JP MORGAN CHASE & CO.	4.18	-9.44	-0.39
HUNTSMAN	0.63	-55.73	-0.35
OCCIDENTAL PTL.	2.22	-14.02	-0.31
WELLS FARGO & CO	3.62	-8.10	-0.29
UNITED TECHNOLOGIES	1.51	-19.26	-0.29
CITIGROUP	2.76	-10.12	-0.28
AES	1.06	-25.59	-0.27
MERCK & COMPANY	1.88	-12.49	-0.24
APPLE	1.83	-11.66	-0.21

Unclassified sector allocation includes cash allocations.

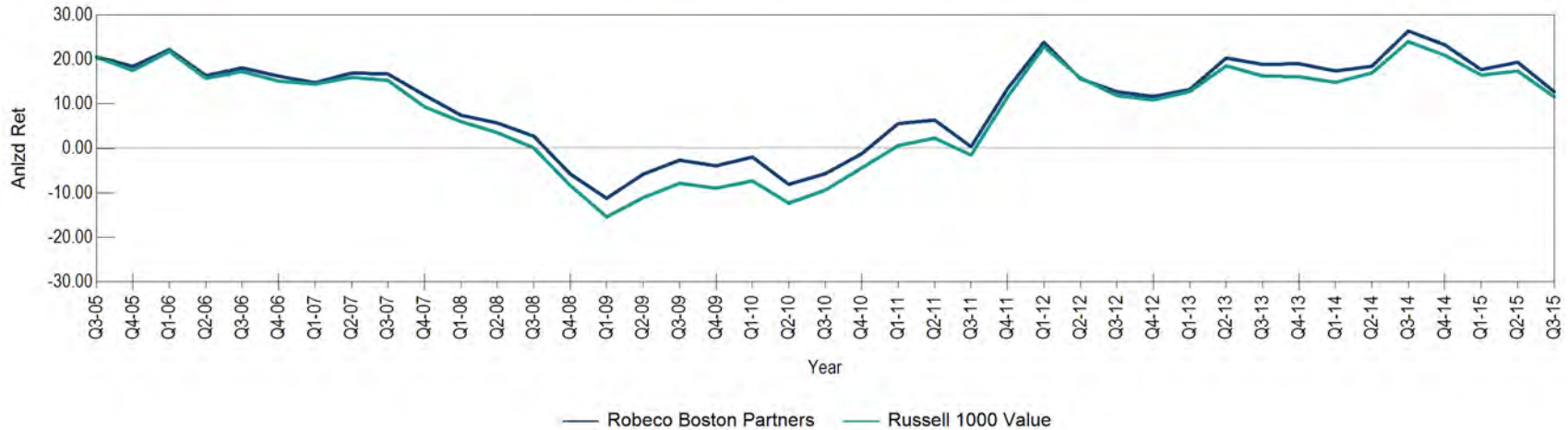


Robeco Boston Partners vs. eA US Large Cap Value Equity Gross Universe

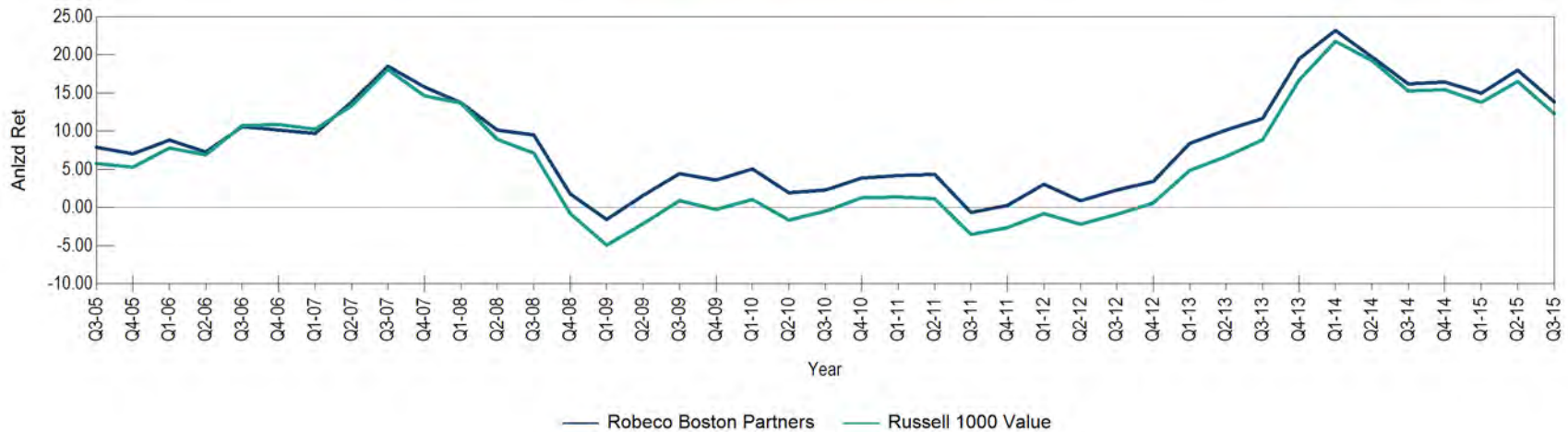


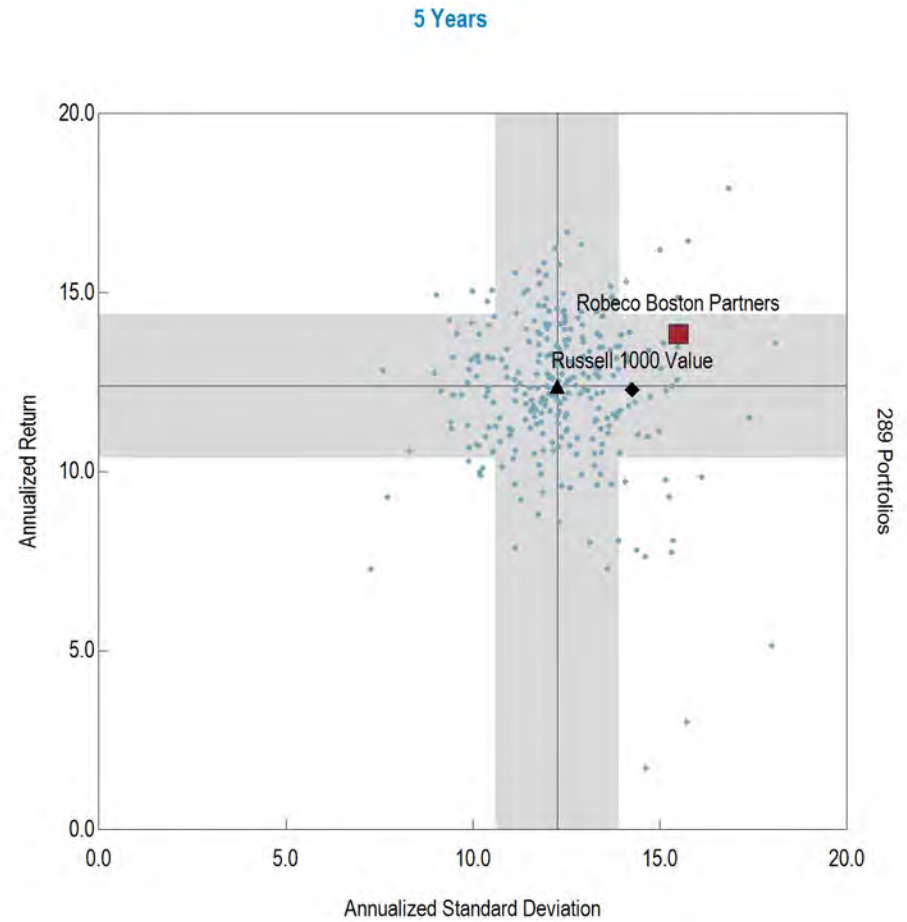
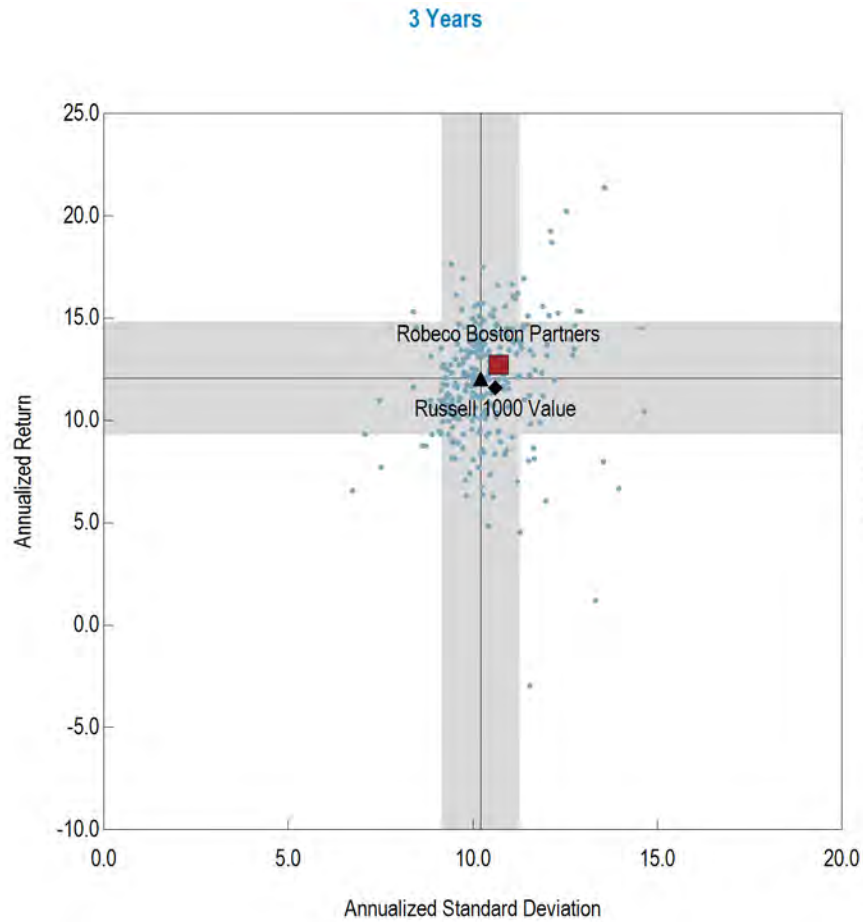
	Return (Rank)									
	Quarter	1 Year	3 Years	5 Years	10 Years	2014	2013	2012	2011	2010
5th Percentile	-5.0	2.1	15.7	15.1	8.8	16.3	42.5	21.5	9.5	19.2
25th Percentile	-7.0	-1.4	13.7	13.5	7.7	13.9	37.2	18.0	3.4	16.3
Median	-8.2	-3.5	12.1	12.4	6.9	12.2	33.6	15.7	0.5	14.3
75th Percentile	-9.8	-5.8	10.5	11.2	6.0	10.4	30.8	13.0	-3.1	12.7
95th Percentile	-12.5	-11.0	7.7	9.2	4.6	5.9	24.6	9.6	-8.6	10.1
# of Portfolios	306	306	300	289	241	307	310	303	310	323
● Robeco Boston Partners	-8.9 (62)	-3.1 (45)	12.7 (40)	13.8 (21)	7.9 (21)	12.0 (55)	37.4 (24)	21.6 (5)	0.9 (46)	13.4 (68)
▲ Russell 1000 Value	-8.4 (52)	-4.4 (61)	11.6 (60)	12.3 (53)	5.7 (81)	13.5 (33)	32.5 (60)	17.5 (30)	0.4 (51)	15.5 (35)

Rolling 3 Year Annualized Return (%)



Rolling 5 Year Annualized Return (%)





**3 Years**

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
Robeco Boston Partners	12.7%	10.7%	1.2
Russell 1000 Value	11.6%	10.6%	1.1
eA US Large Cap Value Equity Gross Median	12.1%	10.2%	1.2

**5 Years**

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
Robeco Boston Partners	13.8%	15.5%	0.9
Russell 1000 Value	12.3%	14.3%	0.9
eA US Large Cap Value Equity Gross Median	12.4%	12.3%	1.0

# Emerald Advisors Manager Portfolio Overview

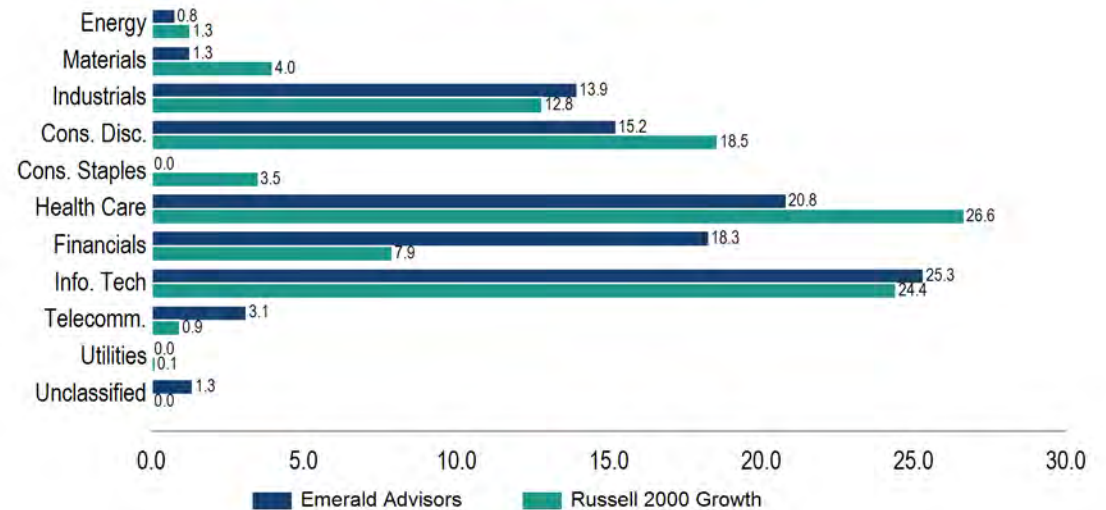
Period Ending: September 30, 2015

Domestic equity small cap growth portfolio of companies with significantly high growth rates. Primary personnel include Kenneth Mertz, Joseph Garner, and Stacey Sears.

## Characteristics

	Portfolio	Russell 2000 Growth
Number of Holdings	119	1,155
Weighted Avg. Market Cap. (\$B)	1.74	1.95
Median Market Cap. (\$B)	1.07	0.75
Price To Earnings	28.78	27.77
Price To Book	5.49	5.02
Price To Sales	3.86	3.30
Return on Equity (%)	15.59	16.21
Yield (%)	0.29	0.55
Beta	1.01	1.00

## Sector Allocation (%) vs Russell 2000 Growth



## Largest Holdings

	End Weight	Return
EPAM SYSTEMS	2.39	4.62
BANK OF THE OZARKS	2.04	-4.06
IMPERVA	2.01	-3.28
APOGEE ENTERPRISES	2.00	-15.00
MICROSTRATEGY	1.95	15.52
VONAGE HOLDINGS	1.85	19.76
OPUS BANK	1.84	5.96
ACADIA HEALTHCARE CO.	1.84	-15.40
LENDINGTREE	1.79	18.34
WALKER & DUNLOP	1.68	-2.47

## Top Contributors

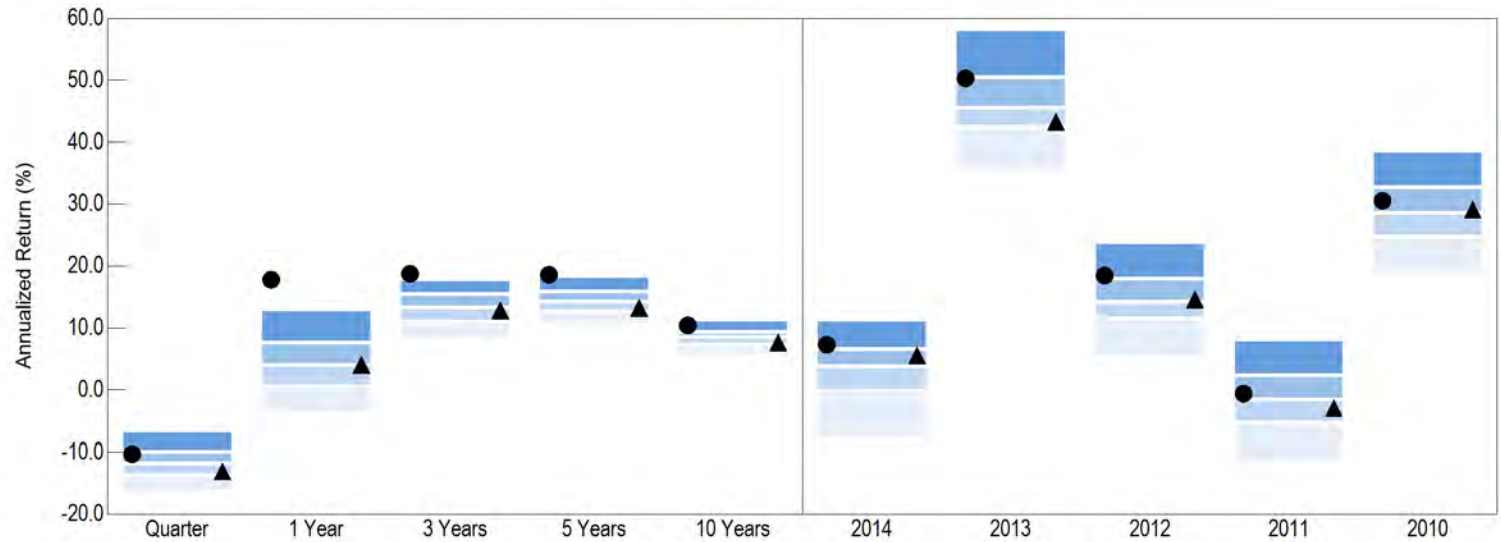
	Avg Wgt	Return	Contribution
LENDINGTREE	1.65	18.34	0.30
VONAGE HOLDINGS	1.39	19.76	0.28
MICROSTRATEGY	1.64	15.52	0.25
KFORCE	1.36	15.38	0.21
ZS PHARMA	0.73	25.33	0.19
VIRGIN AMERICA	0.49	24.56	0.12
BOFI HOLDING	0.49	21.87	0.11
PAC.PREMIER BANC.	0.53	19.81	0.10
EPAM SYSTEMS	2.26	4.62	0.10
OPUS BANK	1.64	5.96	0.10

## Bottom Contributors

	Avg Wgt	Return	Contribution
ASTRONICS	1.31	-42.97	-0.56
INTREXON	1.40	-34.84	-0.49
TREX	1.41	-32.57	-0.46
MACROGENICS	0.95	-43.59	-0.42
GIGAMON	0.94	-39.35	-0.37
SPIRIT AIRLINES	1.52	-23.83	-0.36
MARINEMAX	0.80	-39.90	-0.32
GLU MOBILE	1.08	-29.63	-0.32
ACADIA HEALTHCARE CO.	2.03	-15.40	-0.31
RENTRAK	1.33	-22.54	-0.30

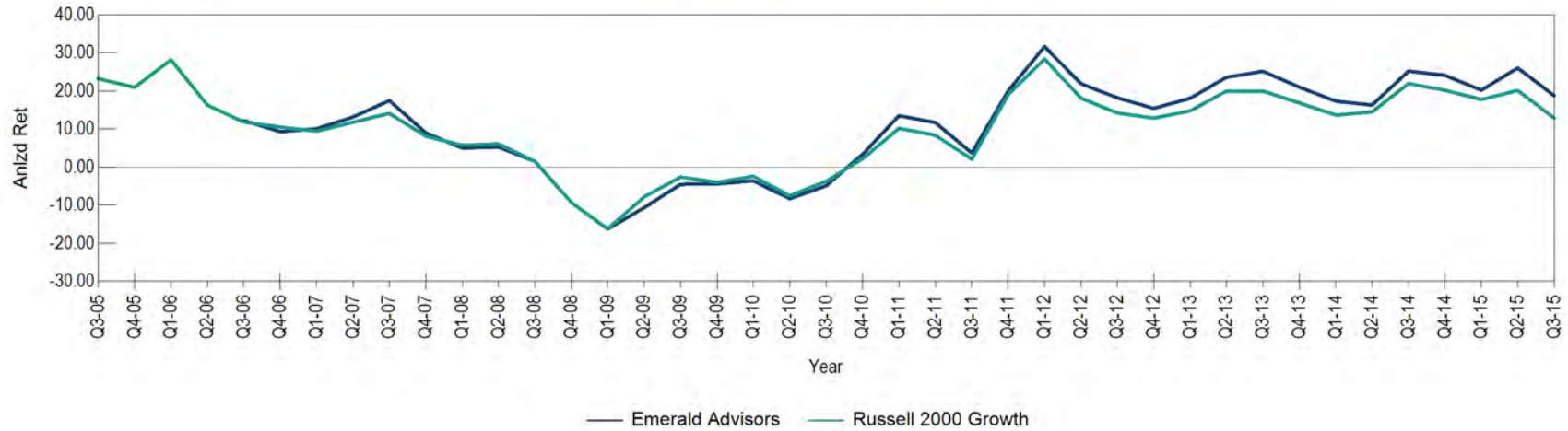
Unclassified sector allocation includes cash allocations.

Emerald Advisors vs. eA US Small Cap Growth Equity Gross Universe

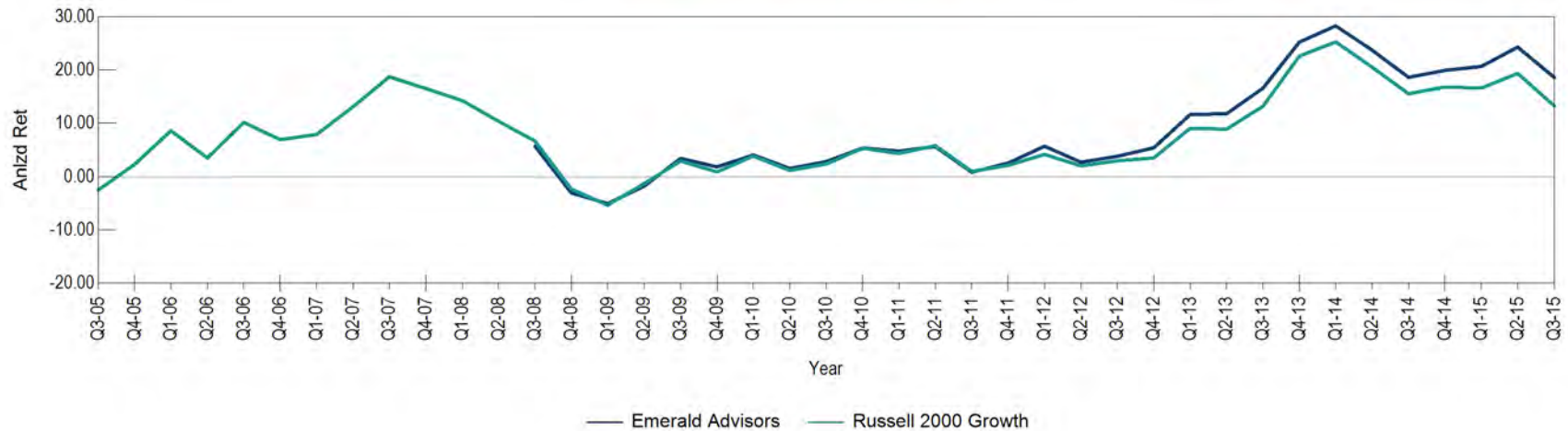


	Return (Rank)									
	Quarter	1 Year	3 Years	5 Years	10 Years	2014	2013	2012	2011	2010
5th Percentile	-6.6	13.0	17.9	18.3	11.3	11.3	58.2	23.8	8.1	38.6
25th Percentile	-9.9	7.6	15.5	15.9	9.5	6.7	50.6	18.0	2.4	32.8
Median	-11.7	4.1	13.4	14.3	8.7	3.9	45.6	14.3	-1.5	28.6
75th Percentile	-13.5	0.6	11.1	12.8	7.4	-0.1	42.6	11.6	-5.2	24.8
95th Percentile	-16.3	-3.7	8.3	10.7	5.6	-7.6	35.6	5.4	-11.5	19.0
# of Portfolios	159	159	149	145	117	161	160	162	166	169
● Emerald Advisors	-10.3 (29)	17.8 (1)	18.7 (4)	18.6 (5)	10.4 (13)	7.3 (21)	50.3 (27)	18.5 (22)	-0.6 (42)	30.5 (36)
▲ Russell 2000 Growth	-13.1 (68)	4.0 (51)	12.8 (55)	13.3 (67)	7.7 (69)	5.6 (32)	43.3 (70)	14.6 (48)	-2.9 (60)	29.1 (46)

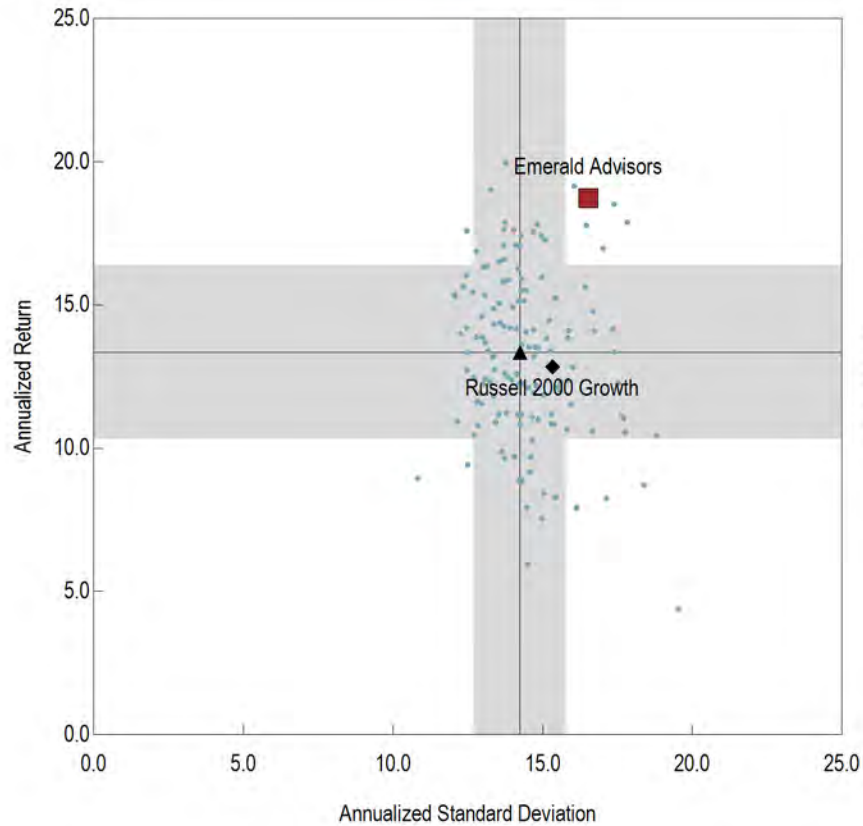
Rolling 3 Year Annualized Return (%)



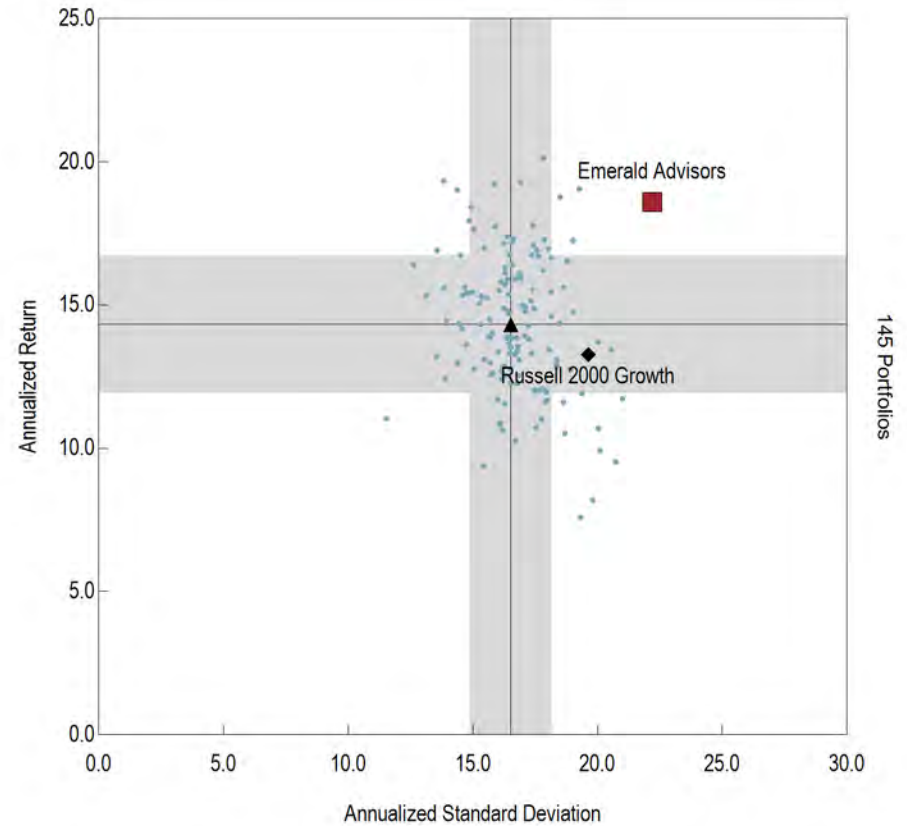
Rolling 5 Year Annualized Return (%)



3 Years



5 Years



3 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
Emerald Advisors	18.7%	16.5%	1.1
Russell 2000 Growth	12.8%	15.3%	0.8
eA US Small Cap Growth Equity Gross Median	13.4%	14.2%	0.9

5 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
Emerald Advisors	18.6%	22.2%	0.8
Russell 2000 Growth	13.3%	19.6%	0.7
eA US Small Cap Growth Equity Gross Median	14.3%	16.5%	0.9

# Ceredex Manager Portfolio Overview

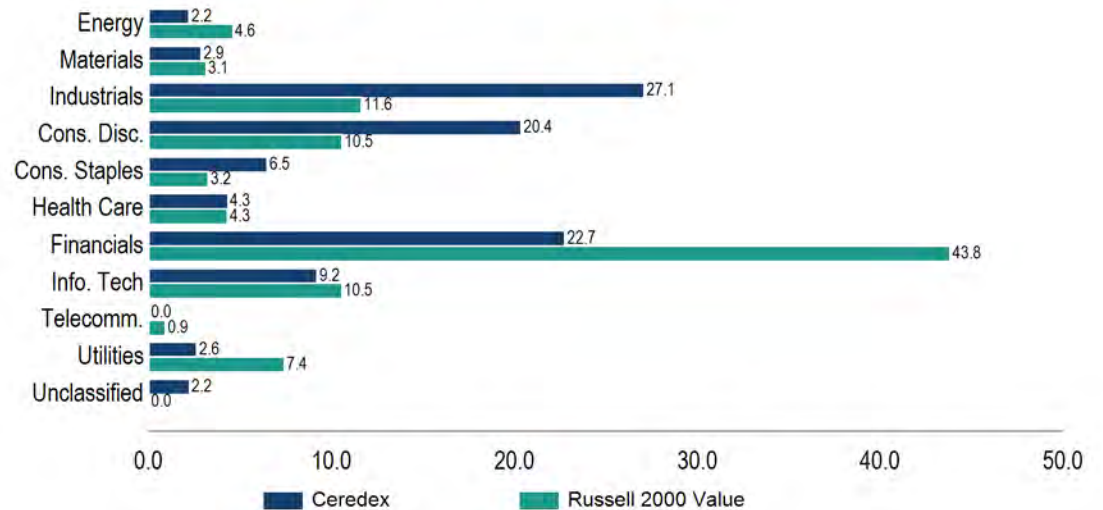
Period Ending: September 30, 2015

Domestic equity small cap value portfolio of companies with dividend yields and low valuations. Primary personnel include Brett Barner and David Maynard.

## Characteristics

	Portfolio	Russell 2000 Value
Number of Holdings	86	1,308
Weighted Avg. Market Cap. (\$B)	1.95	1.60
Median Market Cap. (\$B)	1.49	0.59
Price To Earnings	23.61	18.58
Price To Book	2.58	1.56
Price To Sales	2.10	2.59
Return on Equity (%)	12.92	7.73
Yield (%)	2.41	2.07
Beta	1.00	1.00

## Sector Allocation (%) vs Russell 2000 Value



## Largest Holdings

	End Weight	Return
FAIR ISAAC	4.22	-6.90
PROGRESSIVE WASTE (NYS) SLTN.	3.46	-1.12
HANOVER INSURANCE GROUP	3.15	5.50
HSN	3.04	-17.98
AMC ENTERTAINMENT HDG. CL.A	2.74	-17.30
ENERGIZER HOLDINGS	2.68	14.81
PLANTRONICS	2.65	-9.46
GUESS	2.57	12.54
HILL-ROM HOLDINGS	2.49	-4.02
HERMAN MILLER	2.47	0.24

## Top Contributors

	Avg Wgt	Return	Contribution
STANCORP FINL.GP.	3.83	51.04	1.96
CUBESMART	2.03	18.18	0.37
GUESS	2.33	12.54	0.29
HANOVER INSURANCE GROUP	2.83	5.50	0.16
ENERGIZER HOLDINGS	0.86	14.81	0.13
POST PROPERTIES	1.47	8.04	0.12
ALLETE	0.98	9.92	0.10
NORTHWESTERN	0.83	11.49	0.09
VIAD	0.67	7.32	0.05
LANDAUER	0.91	4.57	0.04

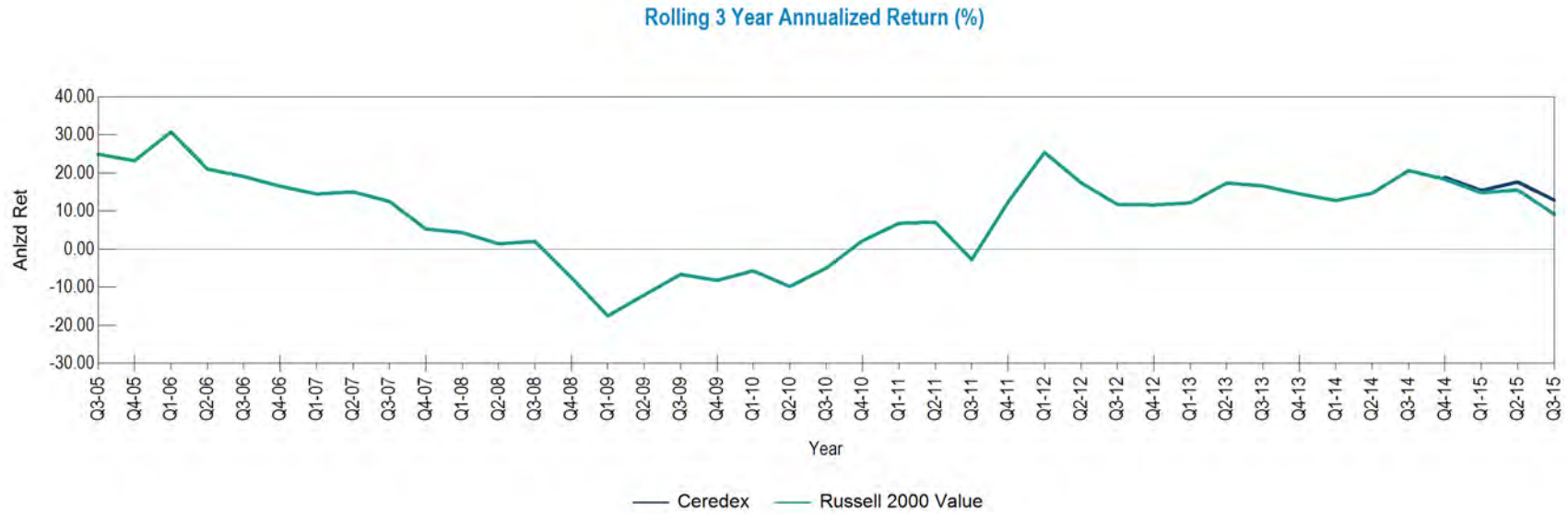
## Bottom Contributors

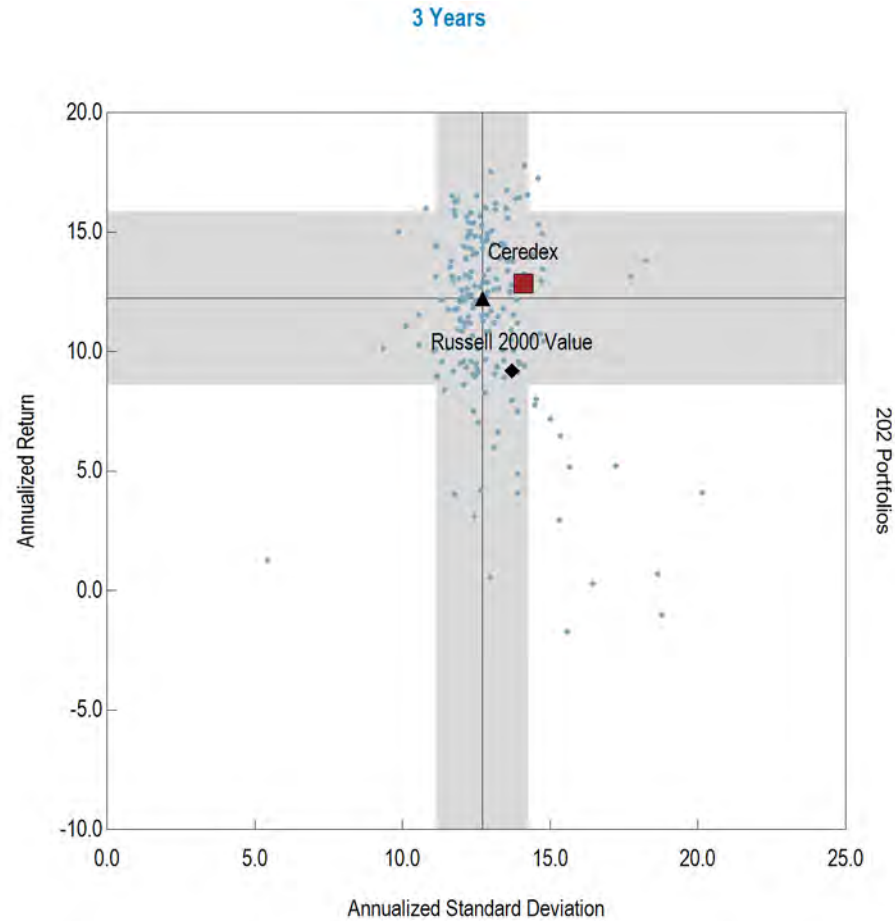
	Avg Wgt	Return	Contribution
BRISTOW GROUP	1.57	-50.45	-0.79
CARBO CERAMICS	1.41	-54.26	-0.76
HSN	3.21	-17.98	-0.58
AMC ENTERTAINMENT HDG. CL.A	2.87	-17.30	-0.50
SOTHEBY'S	1.31	-29.11	-0.38
AAR	0.93	-40.32	-0.38
CLARCOR	1.59	-23.14	-0.37
FAIR ISAAC	4.05	-6.90	-0.28
HECLA MINING	1.10	-25.01	-0.28
MUELLER WATER PRODUCTS	1.72	-15.63	-0.27

Unclassified sector allocation includes cash allocations.









3 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
Ceredex	12.9%	14.1%	0.9
Russell 2000 Value	9.2%	13.7%	0.7
eA US Small Cap Value Equity Gross Median	12.2%	12.7%	1.0

# International Equity Managers

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# Pyrford Manager Portfolio Overview

Period Ending: September 30, 2015

International equity value portfolio of non-US companies with low valuations at the country and stock level. Primary personnel include Tony Cousins, Daniel McDonagh, and Paul Simons.

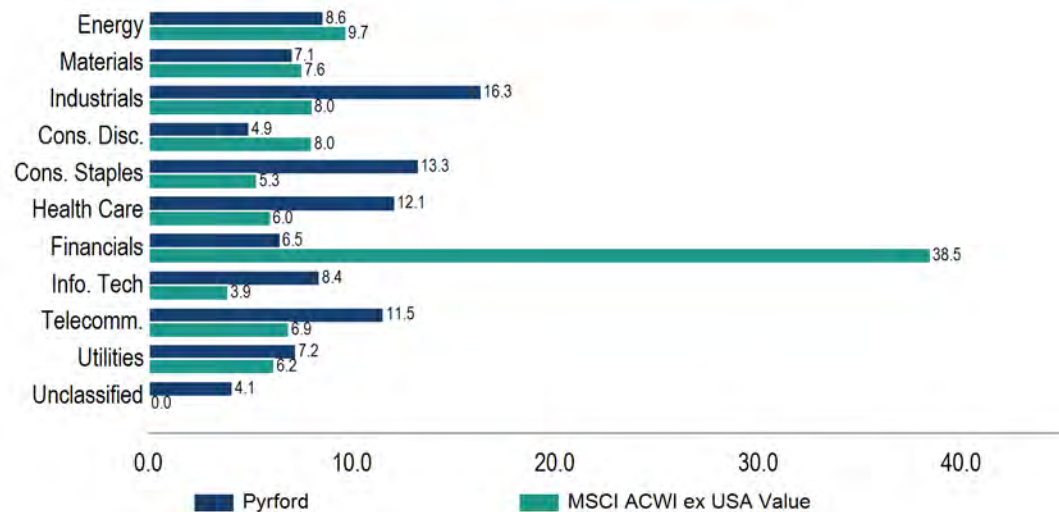
## Characteristics

	MSCI ACWI Portfolio	MSCI ACWI ex USA Value
Number of Holdings	76	998
Weighted Avg. Market Cap. (\$B)	55.00	48.20
Median Market Cap. (\$B)	17.17	5.60
Price To Earnings	17.95	13.90
Price To Book	3.63	1.47
Price To Sales	2.14	1.66
Return on Equity (%)	19.23	11.44
Yield (%)	3.94	4.25
Beta		1.00

## Country Allocation

	Manager Ending Allocation (USD)	Index Ending Allocation (USD)
<b>Totals</b>		
Developed	88.5%	79.6%
Emerging*	7.4%	20.4%
Cash	4.1%	
<b>Top 10 Largest Countries</b>		
United Kingdom	15.1%	17.6%
Switzerland	13.7%	4.5%
Australia	9.9%	4.7%
Japan	8.4%	16.9%
France	7.6%	8.3%
Germany	7.0%	5.3%
Hong Kong	6.6%	2.6%
Netherlands	5.3%	1.4%
Singapore	4.3%	1.0%
Cash	4.1%	0.0%
<b>Total-Top 10 Largest Countries</b>	<b>82.0%</b>	<b>62.3%</b>

## Sector Allocation (%) vs MSCI ACWI ex USA Value



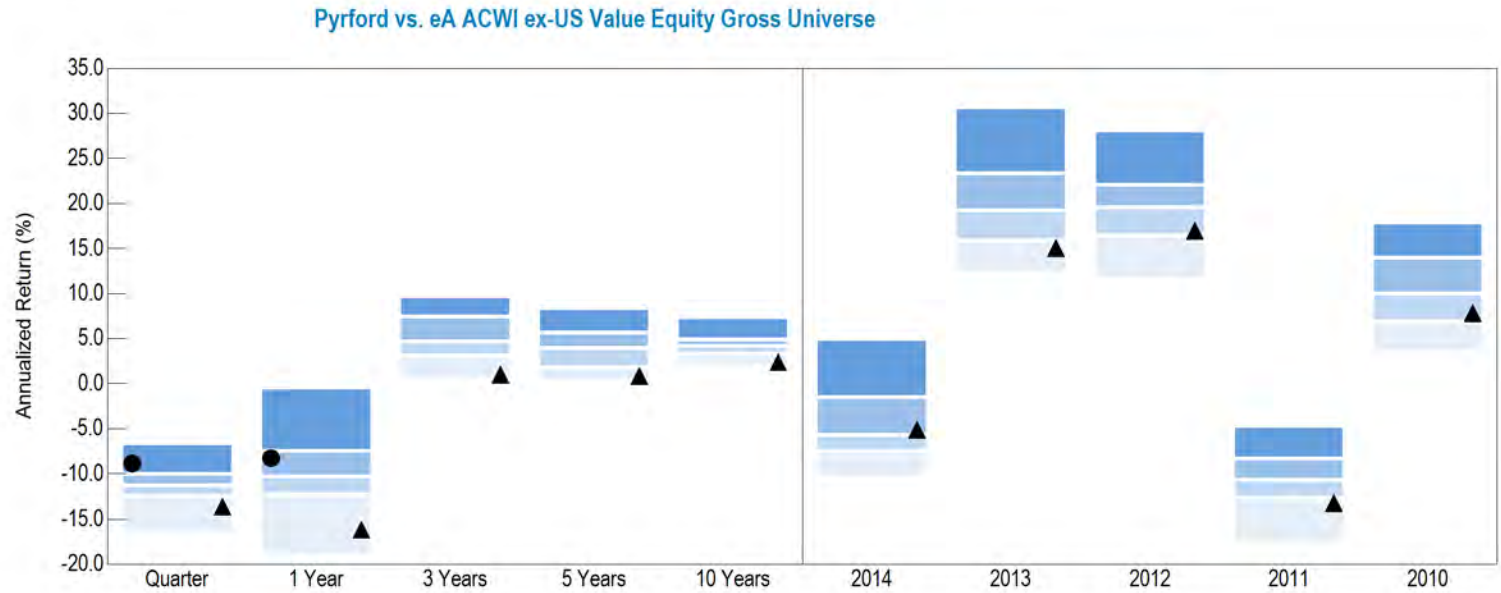
## Top Contributors

	Avg Wgt	Return	Contribution
NATIONAL GRID	1.75	8.30	0.15
SCA 'B'	1.37	9.73	0.13
NESTLE 'R'	3.31	3.79	0.13
RUBIS	1.22	8.33	0.10
COLRUYT	1.34	7.33	0.10
BRITISH AMERICAN TOBACCO	1.76	4.16	0.07
RELX	1.13	6.33	0.07
BEZEQ THE ISRAELI TELECOM CORP.LTD.	0.58	12.11	0.07
FUCHS PETROLUB PREF.	1.60	4.00	0.06
POWER ASSETS HOLDINGS	1.16	4.46	0.05

## Bottom Contributors

	Avg Wgt	Return	Contribution
MITSUBISHI ELECTRIC	1.77	-29.04	-0.51
ASM PACIFIC TECH.	1.40	-33.20	-0.47
AXIATA GROUP	1.89	-21.14	-0.40
NIHON KOHDEN	1.20	-32.74	-0.39
MEDIATEK	0.92	-42.74	-0.39
MALAYAN BANKING	1.97	-19.61	-0.39
TOYOTA TSUSHO	1.63	-20.90	-0.34
WOODSIDE PETROLEUM	1.60	-20.48	-0.33
CNOOC	1.18	-25.84	-0.31
ZURICH INSURANCE GROUP	1.51	-19.61	-0.30

Unclassified sector allocation includes cash allocations.



	Quarter		1 Year		3 Years		5 Years		10 Years		2014	2013	2012	2011	2010
<b>5th Percentile</b>	-6.7	-0.5	9.7	8.3	7.4	4.9	30.7	28.1	-4.7	17.9					
<b>25th Percentile</b>	-10.0	-7.5	7.5	5.7	4.9	-1.4	23.4	22.1	-8.2	14.0					
<b>Median</b>	-11.2	-10.3	4.7	4.0	4.2	-5.7	19.3	19.6	-10.7	10.1					
<b>75th Percentile</b>	-12.4	-12.3	3.2	1.9	3.4	-7.4	15.9	16.5	-12.6	7.0					
<b>95th Percentile</b>	-16.4	-18.9	0.5	0.3	2.0	-10.4	12.4	11.7	-17.7	3.5					
<b># of Portfolios</b>	37	37	35	31	23	37	34	32	26	23					
<b>● Pyrford</b>	-8.9 (24)	-8.3 (33)	-- (--)	-- (--)	-- (--)	-- (--)	-- (--)	-- (--)	-- (--)	-- (--)	-- (--)	-- (--)	-- (--)	-- (--)	-- (--)
<b>▲ MSCI ACWI ex USA Value</b>	-13.6 (88)	-16.2 (93)	1.0 (93)	0.9 (88)	2.4 (92)	-5.1 (49)	15.0 (83)	17.0 (74)	-13.2 (81)	7.8 (72)					

# William Blair Manager Portfolio Overview

Period Ending: September 30, 2015

International equity growth portfolio of non-US companies with high growth rates constructed from the security level. Primary personnel include Simon Fennell and Jeffrey Urbina.

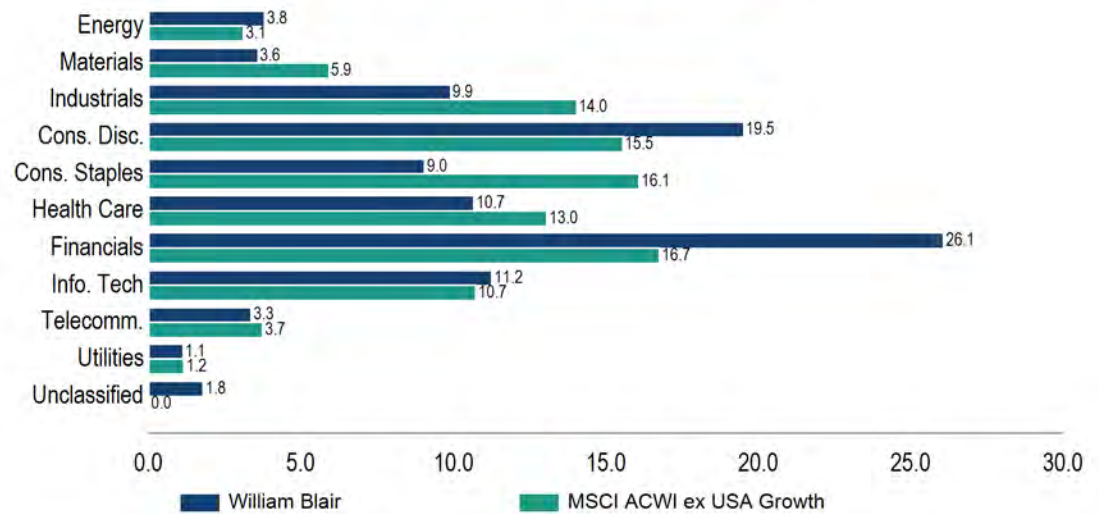
## Characteristics

	MSCI ACWI Portfolio	MSCI ACWI ex USA Growth
Number of Holdings	203	1,087
Weighted Avg. Market Cap. (\$B)	37.41	46.81
Median Market Cap. (\$B)	14.45	6.51
Price To Earnings	20.30	21.08
Price To Book	4.24	3.72
Price To Sales	3.01	2.86
Return on Equity (%)	22.20	18.85
Yield (%)	2.36	2.22
Beta	0.96	1.00

## Country Allocation

	Manager Ending Allocation (USD)	Index Ending Allocation (USD)
<b>Totals</b>		
Developed	89.0%	79.5%
Emerging*	9.2%	20.5%
Cash	1.8%	
<b>Top 10 Largest Countries</b>		
Japan	20.9%	15.7%
United Kingdom	17.9%	12.1%
France	8.3%	6.5%
Switzerland	6.4%	9.6%
Canada	6.1%	6.3%
Germany	5.7%	7.7%
Hong Kong	3.2%	2.1%
Spain	2.4%	1.8%
South Africa*	2.4%	1.6%
Italy	2.4%	1.7%
<b>Total-Top 10 Largest Countries</b>	<b>75.7%</b>	<b>64.9%</b>

## Sector Allocation (%) vs MSCI ACWI ex USA Growth



## Top Contributors

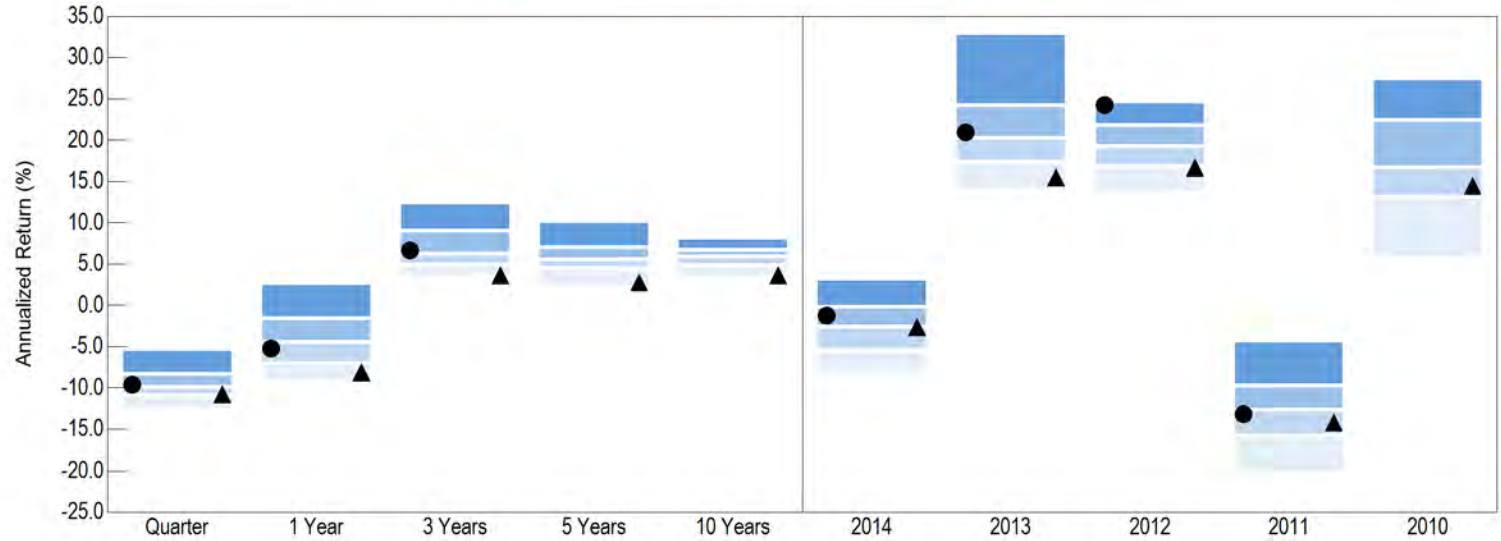
	Avg Wgt	Return	Contribution
EASYJET	0.88	10.71	0.09
PARTNERS GROUP HOLDING	0.65	13.01	0.09
RECKITT BENCKISER GROUP	1.41	5.95	0.08
TEMP HOLDINGS	0.16	26.18	0.04
DOLLARAMA	0.36	11.11	0.04
ALIMENTATION CCH.TARD SUBD.VTG.SHS.	0.52	7.16	0.04
SCSK	0.16	23.39	0.04
NOMURA RESEARCH INST.	0.45	8.18	0.04
PANDORA	0.43	8.54	0.04

## Bottom Contributors

	Avg Wgt	Return	Contribution
GLENCORE	0.68	-64.45	-0.44
MURATA MANUFACTURING	1.50	-26.01	-0.39
AIA GROUP	1.76	-20.76	-0.37
REPSOL YPF	0.83	-33.78	-0.28
CANADIAN NATURAL RES.	0.98	-28.00	-0.28
PRUDENTIAL	1.73	-11.69	-0.20
SUMITOMO MITSUI FINL.GP.	1.38	-14.19	-0.20
ORIX	1.50	-12.83	-0.19
ENBRIDGE	0.94	-20.34	-0.19
DAIKIN INDUSTRIES	0.87	-21.95	-0.19

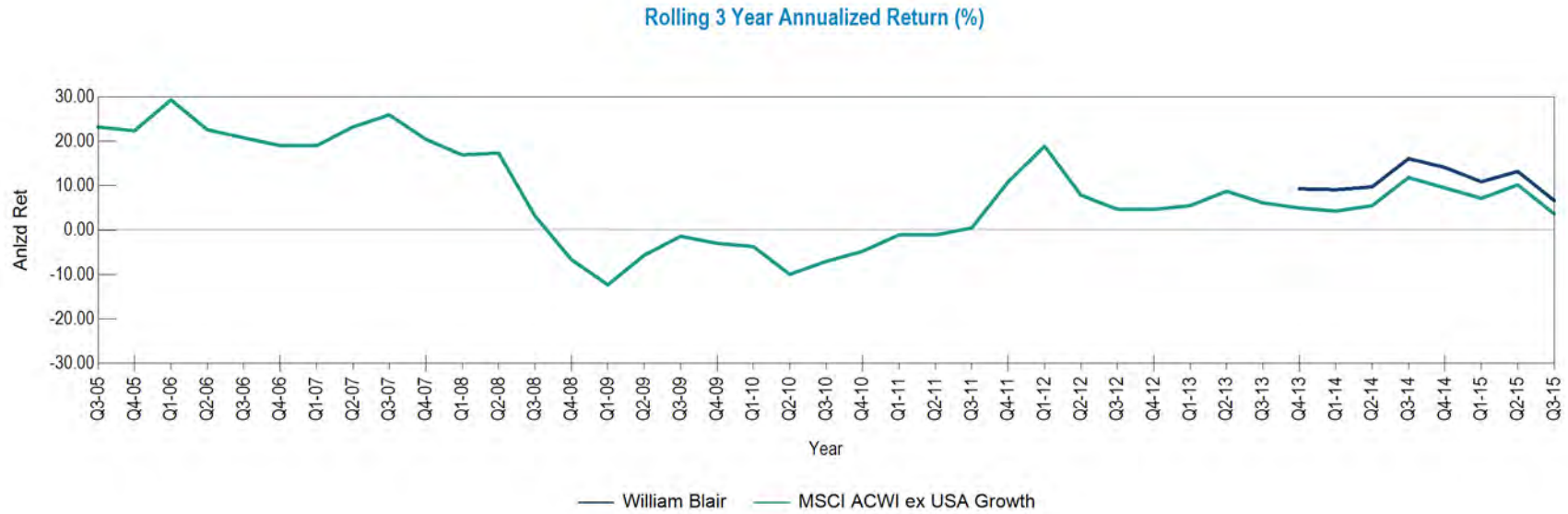
Unclassified sector allocation includes cash allocations.

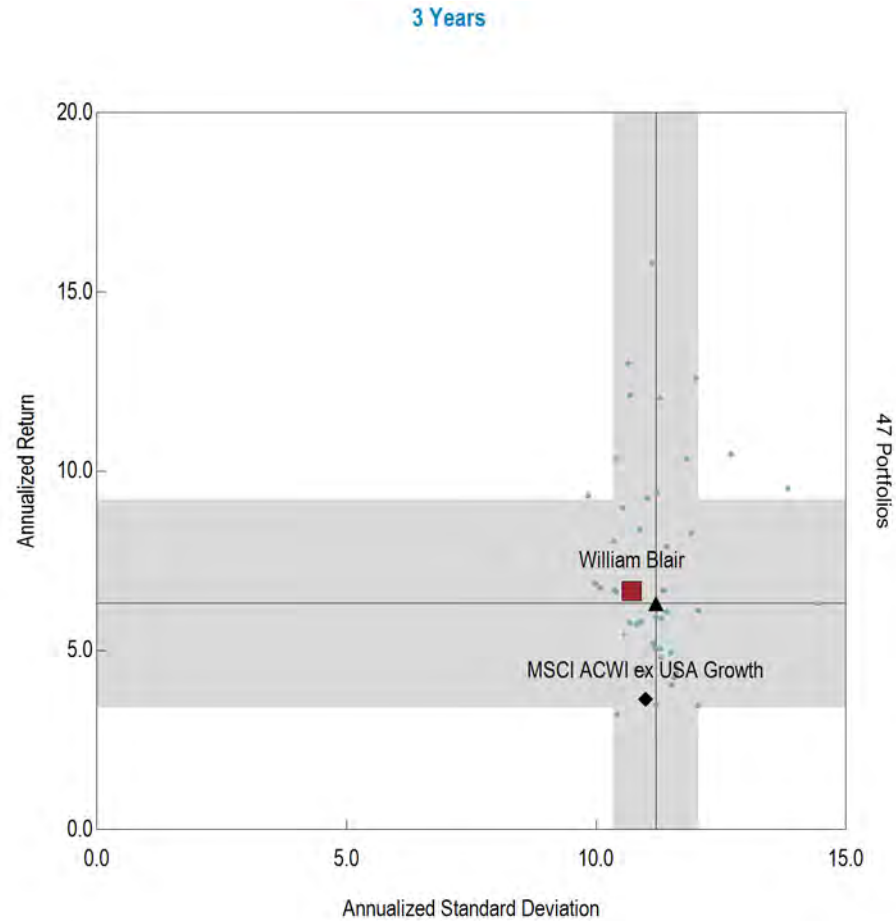
William Blair vs. eA ACWI ex-US Growth Equity Gross Universe



	Return (Rank)															
5th Percentile	-5.3	2.7	12.5	10.2	8.2	3.2	33.0	24.6	-4.3	27.4						
25th Percentile	-8.3	-1.5	9.1	7.1	6.7	-0.1	24.3	21.9	-9.7	22.5						
Median	-9.8	-4.4	6.3	5.6	6.0	-2.5	20.3	19.3	-12.6	16.7						
75th Percentile	-10.8	-6.9	5.0	4.6	4.9	-5.3	17.5	16.9	-15.7	13.2						
95th Percentile	-12.5	-9.3	3.5	2.3	3.4	-8.2	14.0	13.7	-20.3	5.7						
# of Portfolios	48	48	47	46	30	50	46	51	51	49						
● William Blair	-9.6 (41)	-5.2 (60)	6.6 (47)	-- (--)	-- (--)	-1.2 (37)	20.9 (44)	24.3 (6)	-13.2 (55)	-- (--)						
▲ MSCI ACWI ex USA Growth	-10.8 (75)	-8.1 (87)	3.6 (94)	2.7 (94)	3.6 (94)	-2.6 (53)	15.5 (87)	16.7 (78)	-14.2 (62)	14.5 (65)						







3 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
William Blair	6.6%	10.7%	0.6
MSCI ACWI ex USA Growth	3.6%	11.0%	0.3
eA ACWI ex-US Growth Equity Gross Median	6.3%	11.2%	0.5

## Global Equity Managers

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# Artisan Partners Manager Portfolio Overview

Period Ending: September 30, 2015

Global equity portfolio of companies that is benchmark agnostic with accelerating profit cycles and a focus on capital allocation. Primary personnel include James Hamel, Craigh Cepukenas, and Matthew Kamm.

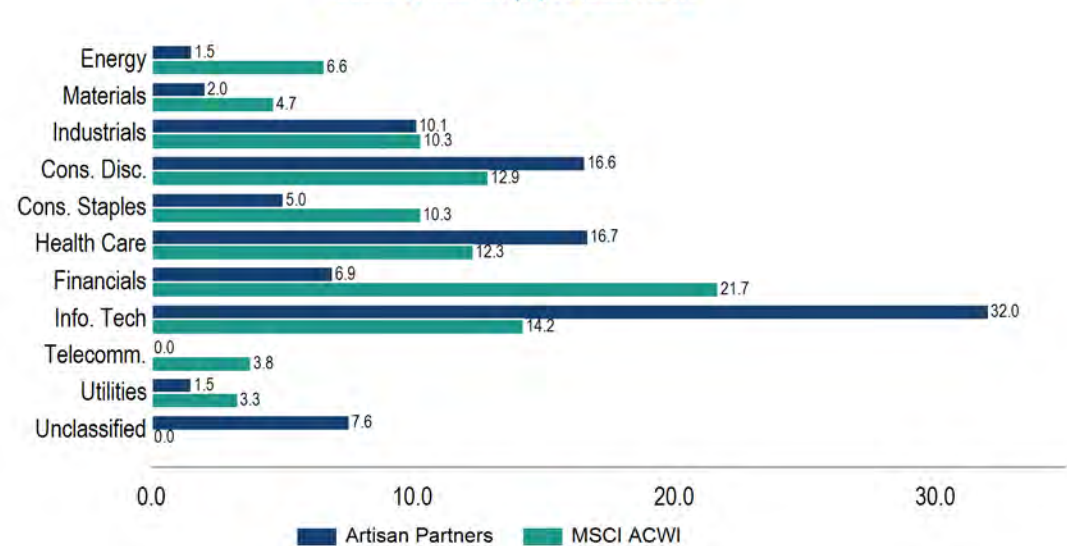
## Characteristics

	Portfolio	MSCI ACWI
Number of Holdings	47	2,480
Weighted Avg. Market Cap. (\$B)	67.75	82.21
Median Market Cap. (\$B)	20.05	7.68
Price To Earnings	36.75	19.64
Price To Book	7.61	2.99
Price To Sales	7.37	2.66
Return on Equity (%)	19.10	16.44
Yield (%)	0.86	2.66
Beta	0.92	1.00

## Country Allocation

	Manager Ending Allocation (USD)	Index Ending Allocation (USD)
<b>Totals</b>		
Developed	87.9%	90.4%
Emerging*	4.5%	9.6%
Cash	7.6%	
<b>Top 10 Largest Countries</b>		
United States	56.4%	52.8%
Cash	7.6%	0.0%
Japan	7.4%	7.7%
United Kingdom	6.4%	7.0%
Hong Kong	4.2%	1.1%
Germany	3.4%	3.1%
Denmark	3.0%	0.6%
Sweden	2.1%	1.0%
Australia	2.0%	2.2%
France	1.8%	3.5%
<b>Total-Top 10 Largest Countries</b>	<b>94.2%</b>	<b>79.0%</b>

## Sector Allocation (%) vs MSCI ACWI



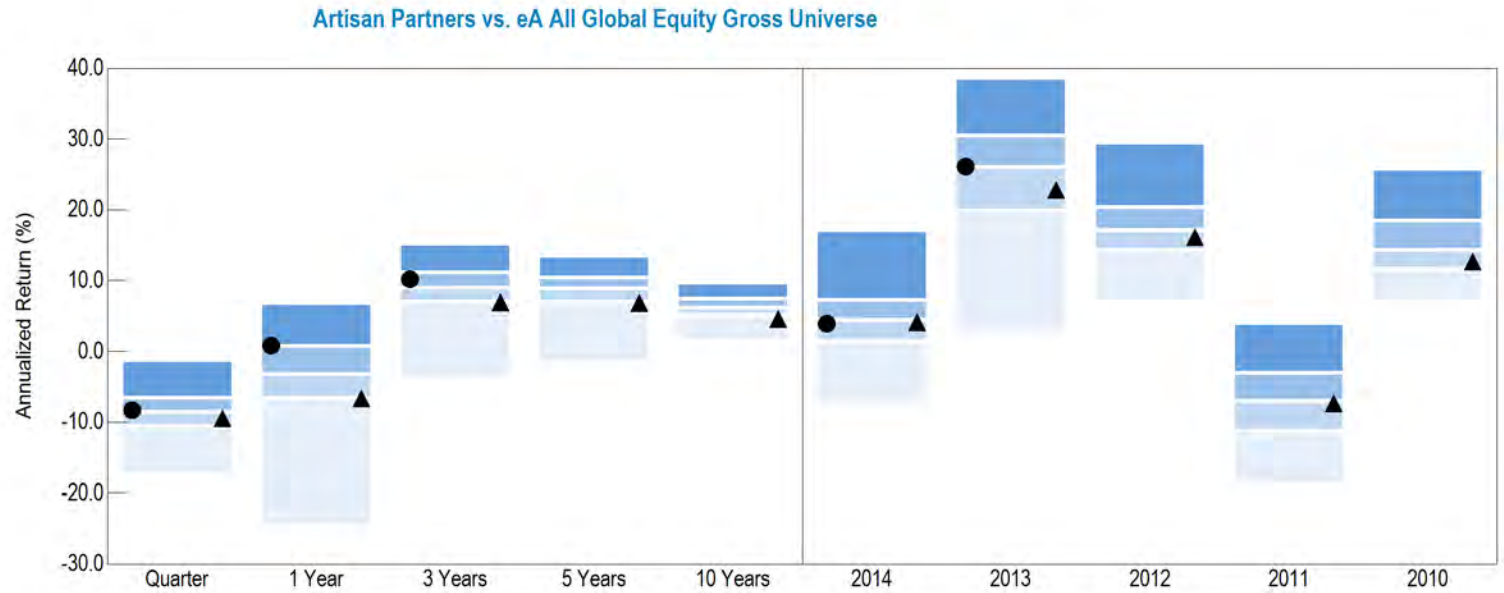
## Top Contributors

	Avg Wgt	Return	Contribution
ALPHABET 'A'	3.05	18.21	0.55
ALPHABET 'C'	1.88	16.89	0.32
MARKIT	2.30	13.41	0.31
CHIPOTLE MEXN.GRILL	1.36	19.05	0.26
DIRECT LINE IN.GROUP	2.83	8.86	0.25
STARBUCKS	2.95	6.30	0.19
FACEBOOK CLASS A	3.76	4.82	0.18
VISA 'A'	3.98	3.91	0.16
GENMAB	2.75	5.26	0.14
ASSOCIATED BRIT.FOODS	0.88	12.05	0.11

## Bottom Contributors

	Avg Wgt	Return	Contribution
HERMES MICROVISION	2.15	-41.96	-0.90
HONG KONG EXS.& CLEAR.	2.58	-34.25	-0.88
BIOGEN	2.53	-27.76	-0.70
FANUC	2.68	-25.39	-0.68
ALIBABA GROUP HLDG.SPN. ADR 1:1	2.37	-28.32	-0.67
ASOS	2.14	-31.37	-0.67
ILLUMINA	3.30	-19.48	-0.64
ABBOTT LABORATORIES	3.32	-17.66	-0.59
TENCENT HOLDINGS	3.42	-16.39	-0.56
IHS 'A'	5.42	-9.82	-0.53

Unclassified sector allocation includes cash allocations.



	Return (Rank)															
	Quarter	1 Year	3 Years	5 Years	10 Years	2014	2013	2012	2011	2010						
5th Percentile	-1.2	6.8	15.2	13.4	9.7	17.1	38.6	29.5	4.0	25.8						
25th Percentile	-6.5	0.8	11.2	10.5	7.5	7.4	30.6	20.4	-3.0	18.5						
Median	-8.5	-3.2	9.0	9.0	6.3	4.6	26.2	17.2	-7.0	14.3						
75th Percentile	-10.5	-6.5	7.1	7.1	5.2	1.5	20.0	14.4	-11.2	11.8						
95th Percentile	-17.3	-24.5	-3.8	-1.5	1.5	-7.4	2.7	7.4	-18.7	6.9						
# of Portfolios	633	631	591	497	242	609	552	475	434	343						
● Artisan Partners	-8.3 (47)	0.8 (26)	10.2 (36)	-- (--)	-- (--)	3.9 (56)	26.1 (51)	-- (--)	-- (--)	-- (--)						
▲ MSCI ACWI	-9.4 (64)	-6.7 (76)	7.0 (77)	6.8 (78)	4.6 (82)	4.2 (54)	22.8 (66)	16.1 (61)	-7.3 (53)	12.7 (65)						

# First Eagle Manager Portfolio Overview

Period Ending: September 30, 2015

Global equity portfolio that is benchmark agnostic comprised of companies with low valuations. Primary personnel include Matt McLennan and Kimball Brooker.

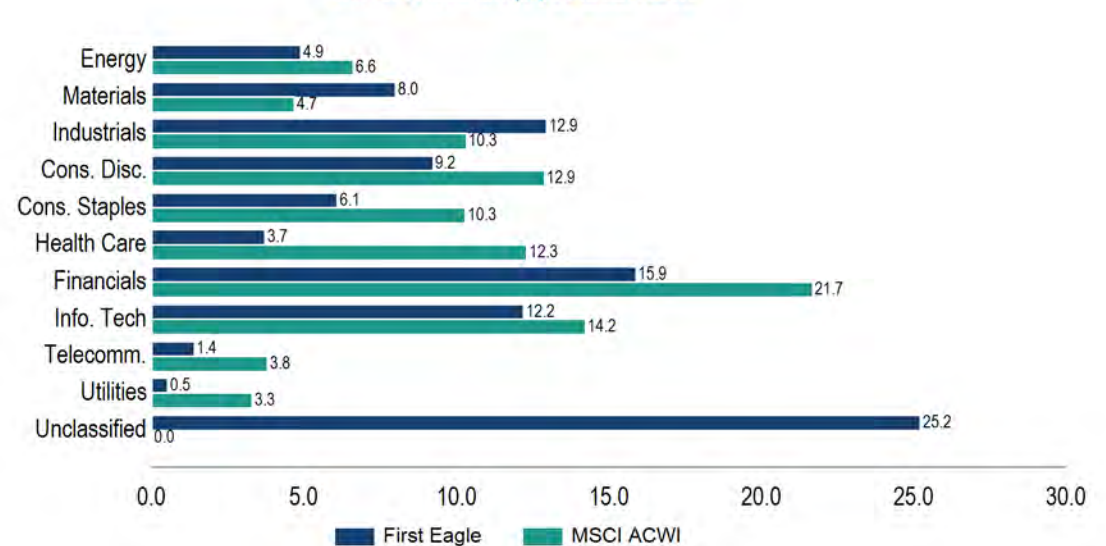
## Characteristics

	Portfolio	MSCI ACWI
Number of Holdings	178	2,480
Weighted Avg. Market Cap. (\$B)	52.05	82.21
Median Market Cap. (\$B)	12.91	7.68
Price To Earnings	19.28	19.64
Price To Book	3.02	2.99
Price To Sales	2.97	2.66
Return on Equity (%)	15.37	16.44
Yield (%)	2.43	2.66
Beta	0.77	1.00

## Country Allocation

	Manager Ending Allocation (USD)	Index Ending Allocation (USD)
<b>Totals</b>		
Developed	77.7%	90.4%
Emerging*	4.0%	9.6%
Cash	18.3%	
<b>Top 10 Largest Countries</b>		
United States	45.8%	52.8%
Cash	18.3%	0.0%
Japan	11.2%	7.7%
France	5.9%	3.5%
United Kingdom	3.5%	7.0%
Canada	3.3%	3.0%
Korea*	1.7%	1.5%
Switzerland	1.5%	3.3%
Mexico*	1.4%	0.5%
Singapore	1.3%	0.4%
<b>Total-Top 10 Largest Countries</b>	<b>93.8%</b>	<b>79.7%</b>

## Sector Allocation (%) vs MSCI ACWI



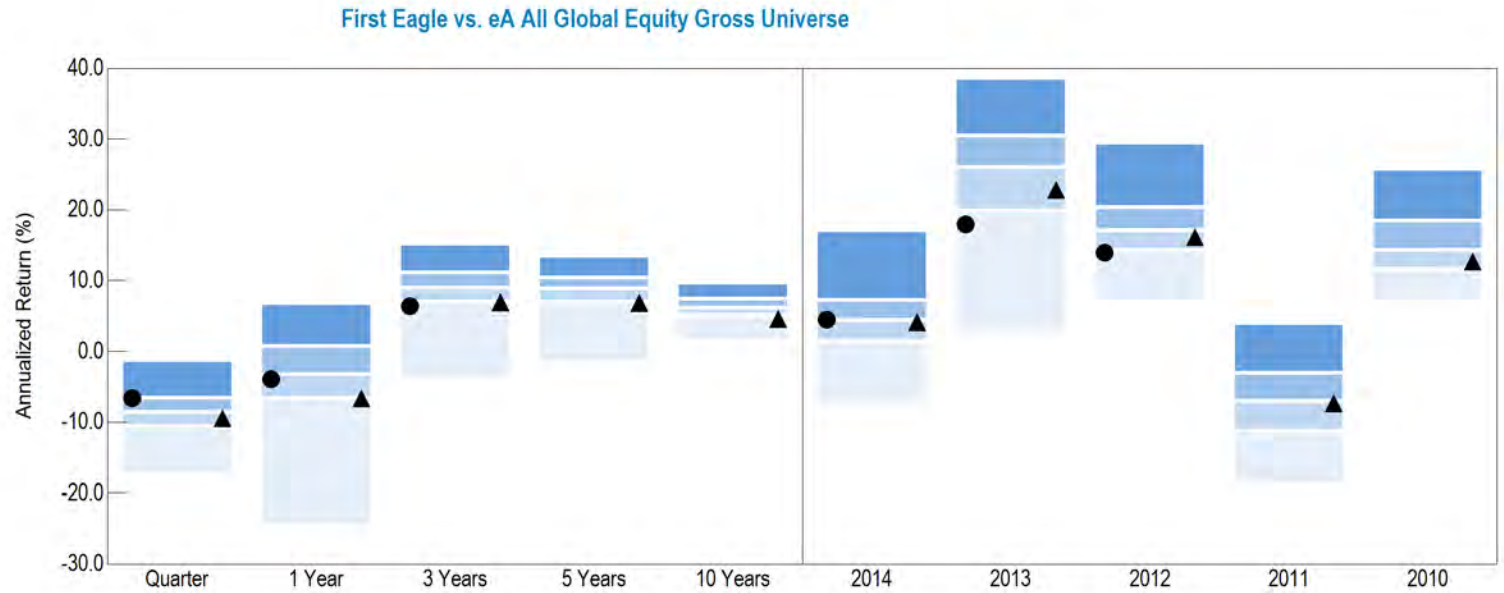
## Top Contributors

	Avg Wgt	Return	Contribution
ITALCEMENTI FABBRICHE RIUNITE	0.32	67.79	0.22
ALPHABET 'A'	0.56	18.21	0.10
LOCKHEED MARTIN	0.80	12.34	0.10
KT & G	0.74	10.57	0.08
H&R BLOCK	0.29	22.78	0.07
CINCINNATI FINL.	0.73	8.15	0.06
KIA MOTORS	0.52	11.35	0.06
ITALMOBILIARE	0.12	48.72	0.06
IDACORP	0.31	16.14	0.05
ALPHABET 'C'	0.29	16.89	0.05

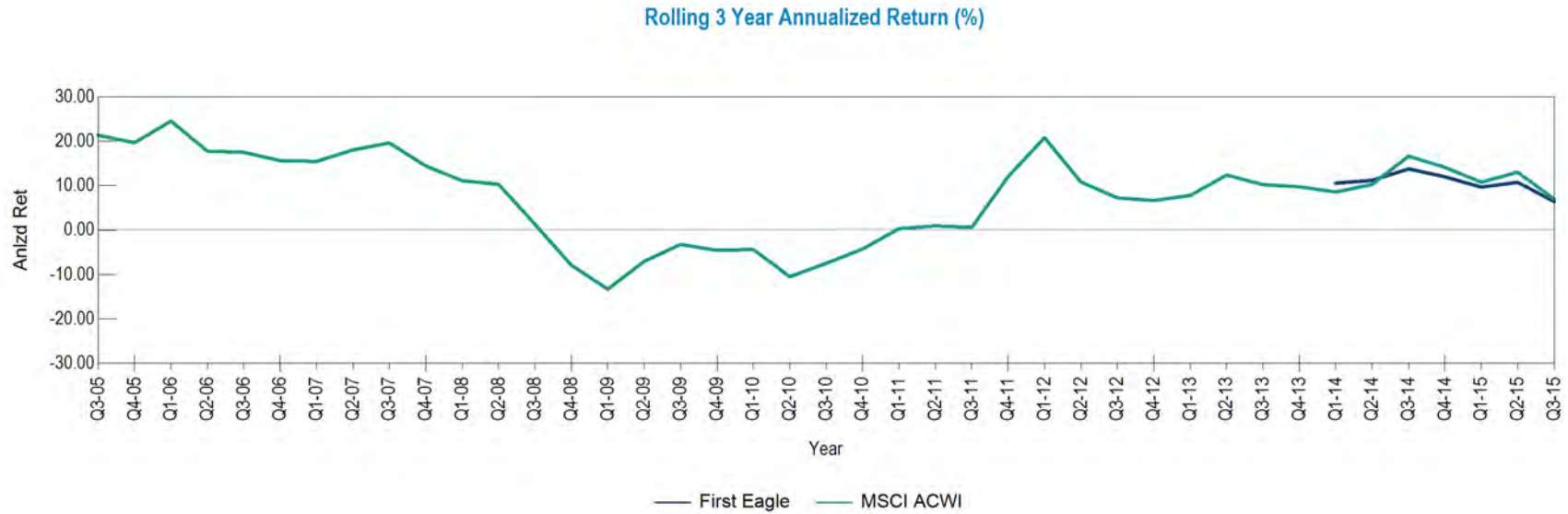
## Bottom Contributors

	Avg Wgt	Return	Contribution
GRUPO TELEVISA SPN.ADR 1:5	1.24	-32.97	-0.41
FANUC	1.16	-25.39	-0.29
SMC	0.95	-27.51	-0.26
NATIONAL OILWELL VARCO	1.19	-21.09	-0.25
SOMPO JAPAN NPNK.HDG.	1.18	-20.48	-0.24
POTASH CORPORATION (NYS) OF SASKATCHEWAN	0.71	-32.78	-0.23
DEVON ENERGY	0.61	-37.27	-0.23
ORACLE	2.11	-10.04	-0.21
HOYA	1.06	-18.73	-0.20
KEYENCE	1.00	-17.72	-0.18

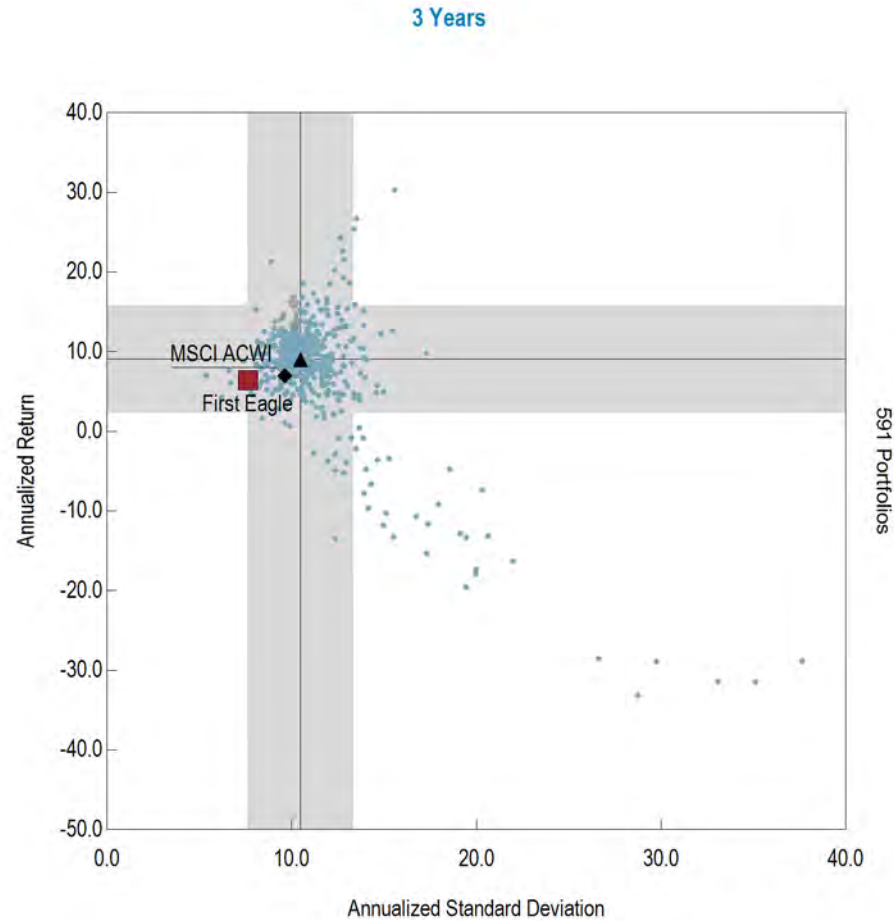
Unclassified sector allocation includes cash allocations and Gold allocations (6.1% as of 9/30/2015).



	Return (Rank)													
	Quarter	1 Year	3 Years	5 Years	10 Years	2014	2013	2012	2011	2010				
5th Percentile	-1.2	6.8	15.2	13.4	9.7	17.1	38.6	29.5	4.0	25.8				
25th Percentile	-6.5	0.8	11.2	10.5	7.5	7.4	30.6	20.4	-3.0	18.5				
Median	-8.5	-3.2	9.0	9.0	6.3	4.6	26.2	17.2	-7.0	14.3				
75th Percentile	-10.5	-6.5	7.1	7.1	5.2	1.5	20.0	14.4	-11.2	11.8				
95th Percentile	-17.3	-24.5	-3.8	-1.5	1.5	-7.4	2.7	7.4	-18.7	6.9				
# of Portfolios	633	631	591	497	242	609	552	475	434	343				
● First Eagle	-6.6 (27)	-3.9 (57)	6.4 (80)	-- (--)	-- (--)	4.5 (51)	17.9 (80)	13.9 (78)	-- (--)	-- (--)				
▲ MSCI ACWI	-9.4 (64)	-6.7 (76)	7.0 (77)	6.8 (78)	4.6 (82)	4.2 (54)	22.8 (66)	16.1 (61)	-7.3 (53)	12.7 (65)				







3 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
First Eagle	6.4%	7.6%	0.8
MSCI ACWI	7.0%	9.6%	0.7
eA All Global Equity Gross Median	9.0%	10.5%	0.9

# Intech Global Low Vol Manager Portfolio Overview

Period Ending: September 30, 2015

Global equity diversified portfolio focused on maintaining volatility at or below the benchmark. Primary personnel include Adrian Banner, Vassilios Papathanakos, and Joseph Runnels.

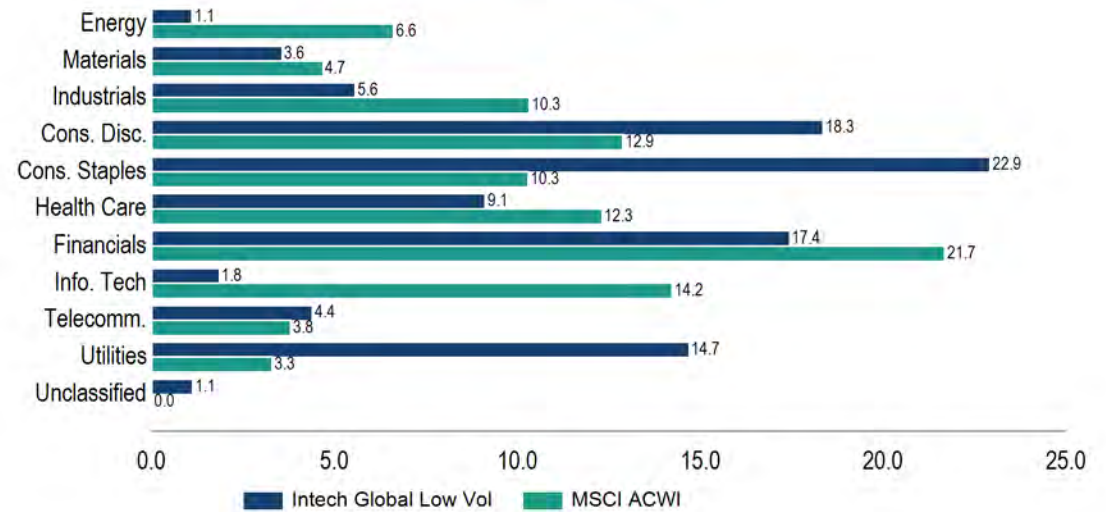
## Characteristics

	Portfolio	MSCI ACWI
Number of Holdings	429	2,480
Weighted Avg. Market Cap. (\$B)	34.75	82.21
Median Market Cap. (\$B)	9.92	7.68
Price To Earnings	24.38	19.64
Price To Book	3.56	2.99
Price To Sales	3.13	2.66
Return on Equity (%)	15.51	16.44
Yield (%)	2.70	2.66
Beta	0.66	1.00

## Country Allocation

	Manager Ending Allocation (USD)	Index Ending Allocation (USD)
<b>Totals</b>		
Developed	99.0%	90.4%
Cash	1.0%	
<b>Top 10 Largest Countries</b>		
United States	56.6%	52.8%
Japan	14.8%	7.7%
Hong Kong	9.4%	1.1%
Canada	5.5%	3.0%
Israel	2.8%	0.2%
Switzerland	2.3%	3.3%
Singapore	2.2%	0.4%
Germany	1.4%	3.1%
United Kingdom	1.2%	7.0%
Cash	1.0%	0.0%
<b>Total-Top 10 Largest Countries</b>	<b>97.1%</b>	<b>78.7%</b>

## Sector Allocation (%) vs MSCI ACWI



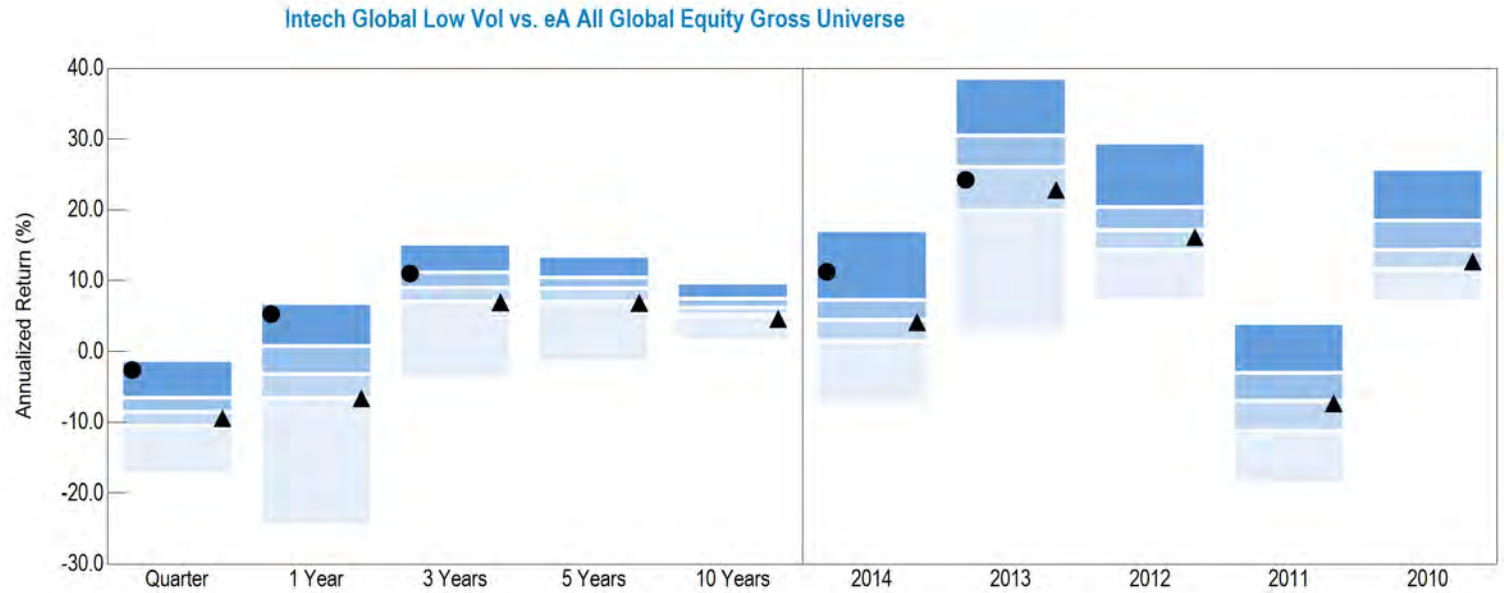
## Top Contributors

	Avg Wgt	Return	Contribution
SOUTHERN	4.99	7.94	0.40
CLOROX	1.58	11.84	0.19
AUTOZONE	2.20	8.54	0.19
CONSOLIDATED EDISON	1.09	16.62	0.18
CHEUNG KONG INFR.HDG.	0.74	16.19	0.12
KELLOGG	1.59	6.93	0.11
O REILLY AUTOMOTIVE	0.96	10.63	0.10
DOLLARAMA	0.86	11.11	0.10
KIMBERLY-CLARK	2.47	3.76	0.09
ANNALY CAPITAL MAN.	0.84	10.64	0.09

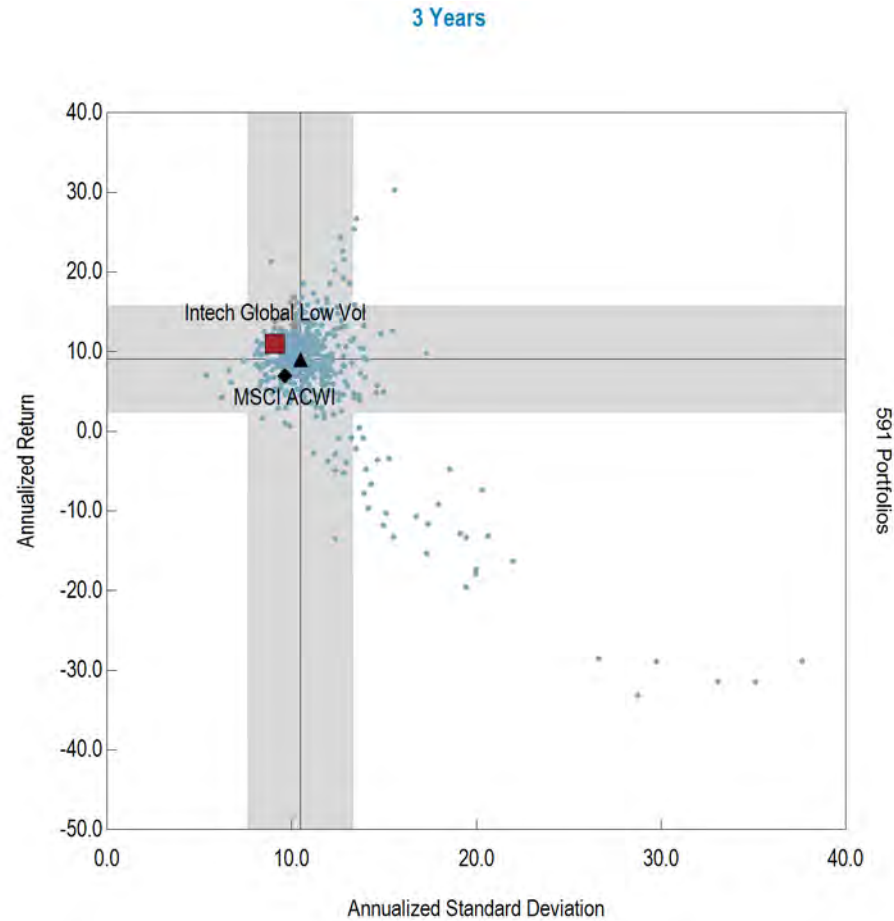
## Bottom Contributors

	Avg Wgt	Return	Contribution
PROCTER & GAMBLE	2.67	-7.30	-0.19
GALAXY	0.44	-35.81	-0.16
ENTERTAINMENT GP.	1.12	-12.59	-0.14
ORIENTAL LAND	0.44	-30.64	-0.13
SWISSCOM 'R'	1.16	-11.25	-0.13
WAL MART STORES	1.60	-7.98	-0.13
RANGE RES.	0.36	-34.88	-0.13
CIGNA	0.67	-16.65	-0.11
SONIC HEALTHCARE	0.54	-20.35	-0.11
UNI CHARM	0.40	-25.76	-0.10

Unclassified sector allocation includes cash allocations.



	Return (Rank)									
	Quarter	1 Year	3 Years	5 Years	10 Years	2014	2013	2012	2011	2010
5th Percentile	-1.2	6.8	15.2	13.4	9.7	17.1	38.6	29.5	4.0	25.8
25th Percentile	-6.5	0.8	11.2	10.5	7.5	7.4	30.6	20.4	-3.0	18.5
Median	-8.5	-3.2	9.0	9.0	6.3	4.6	26.2	17.2	-7.0	14.3
75th Percentile	-10.5	-6.5	7.1	7.1	5.2	1.5	20.0	14.4	-11.2	11.8
95th Percentile	-17.3	-24.5	-3.8	-1.5	1.5	-7.4	2.7	7.4	-18.7	6.9
# of Portfolios	633	631	591	497	242	609	552	475	434	343
● Intech Global Low Vol	-2.6 (9)	5.3 (9)	11.0 (26)	-- (--)	-- (--)	11.2 (14)	24.2 (62)	-- (--)	-- (--)	-- (--)
▲ MSCI ACWI	-9.4 (64)	-6.7 (76)	7.0 (77)	6.8 (78)	4.6 (82)	4.2 (54)	22.8 (66)	16.1 (61)	-7.3 (53)	12.7 (65)



3 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
Intech Global Low Vol	11.0%	9.1%	1.2
MSCI ACWI	7.0%	9.6%	0.7
eA All Global Equity Gross Median	9.0%	10.5%	0.9

# JP Morgan Global Opportunities Manager Portfolio Overview

Period Ending: September 30, 2015

Global equity diversified portfolio focused on companies with valuations below their intrinsic value. Primary personnel include Jeroen Huysinga, Georgina Perceval-Maxwell, and Gerd Woort-Menker.

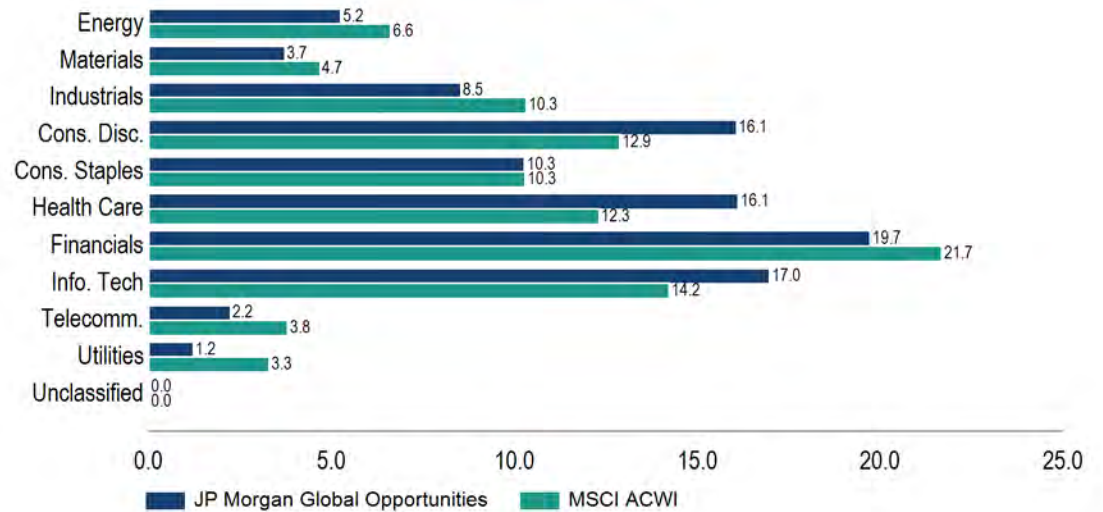
## Characteristics

	Portfolio	MSCI ACWI
Number of Holdings	110	2,480
Weighted Avg. Market Cap. (\$B)	78.11	82.21
Median Market Cap. (\$B)	36.98	7.68
Price To Earnings	20.95	19.64
Price To Book	3.81	2.99
Price To Sales	2.99	2.66
Return on Equity (%)	19.34	16.44
Yield (%)	2.09	2.66
Beta	1.06	1.00

## Country Allocation

	Manager Ending Allocation (USD)	Index Ending Allocation (USD)
<b>Totals</b>		
Developed	93.2%	90.4%
Emerging*	6.8%	9.6%
<b>Top 10 Largest Countries</b>		
United States	44.9%	52.8%
United Kingdom	13.0%	7.0%
Japan	9.0%	7.7%
Germany	6.9%	3.1%
Switzerland	4.7%	3.3%
France	3.7%	3.5%
Hong Kong	2.7%	1.1%
South Africa*	1.8%	0.8%
Sweden	1.7%	1.0%
Netherlands	1.6%	1.0%
<b>Total-Top 10 Largest Countries</b>	<b>90.1%</b>	<b>81.2%</b>

## Sector Allocation (%) vs MSCI ACWI



## Top Contributors

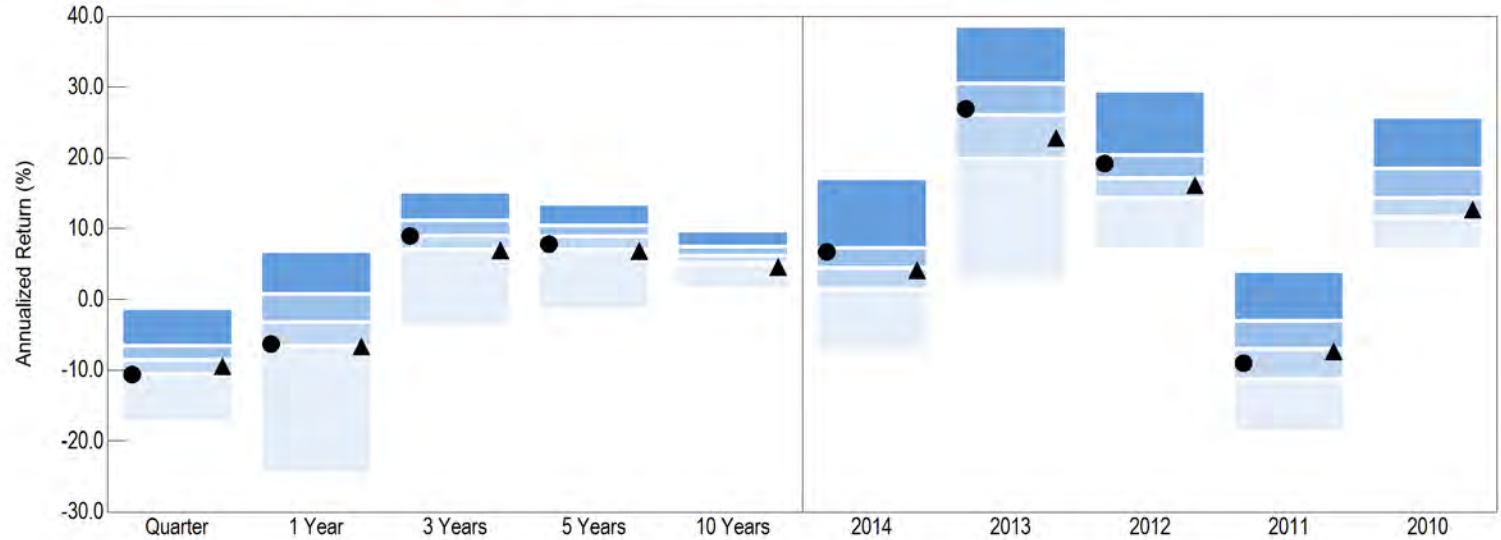
	Avg Wgt	Return	Contribution
ALPHABET 'A'	2.21	18.21	0.40
ASSOCIATED	1.13	12.05	0.14
BRIT.FOODS	1.10	10.72	0.12
SABMILLER	0.52	17.92	0.09
CONSTELLATION BRANDS 'A'	1.05	8.19	0.09
COSTCO WHOLESALE	0.95	7.33	0.07
TJX	0.85	8.26	0.07
RECKITT BENCKISER GROUP	1.07	5.95	0.06
BRITISH AMERICAN TOBACCO	1.12	4.16	0.05
FACEBOOK CLASS A	0.80	4.82	0.04

## Bottom Contributors

	Avg Wgt	Return	Contribution
ARCELORMITTAL	1.41	-46.55	-0.66
FIRST QUANTUM MRLS.	0.63	-71.96	-0.45
MORGAN STANLEY	1.95	-18.48	-0.36
DAIMLER	1.57	-20.75	-0.33
DAIKIN INDUSTRIES	1.29	-21.95	-0.28
APPLE	2.39	-11.66	-0.28
MITSUBISHI UFJ FINL.GP.	1.75	-15.80	-0.28
TWENTY-FIRST CENTURY FOX CL.A	1.41	-16.63	-0.23
MOSAIC	0.68	-33.13	-0.22
MEDIATEK	0.52	-42.74	-0.22

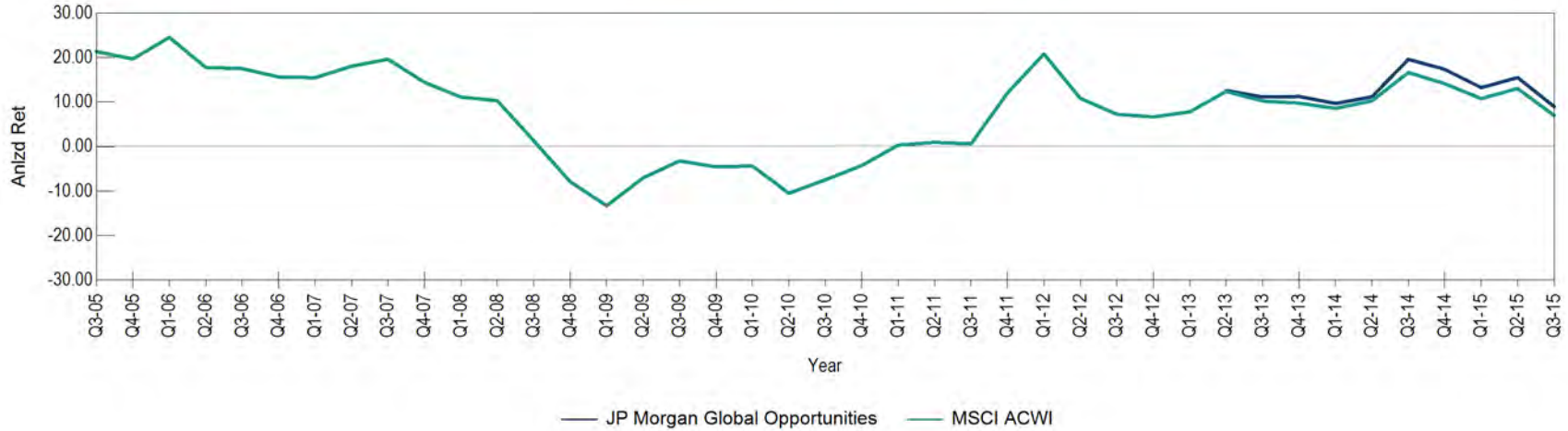
Unclassified sector allocation includes cash allocations.

JP Morgan Global Opportunities vs. eA All Global Equity Gross Universe

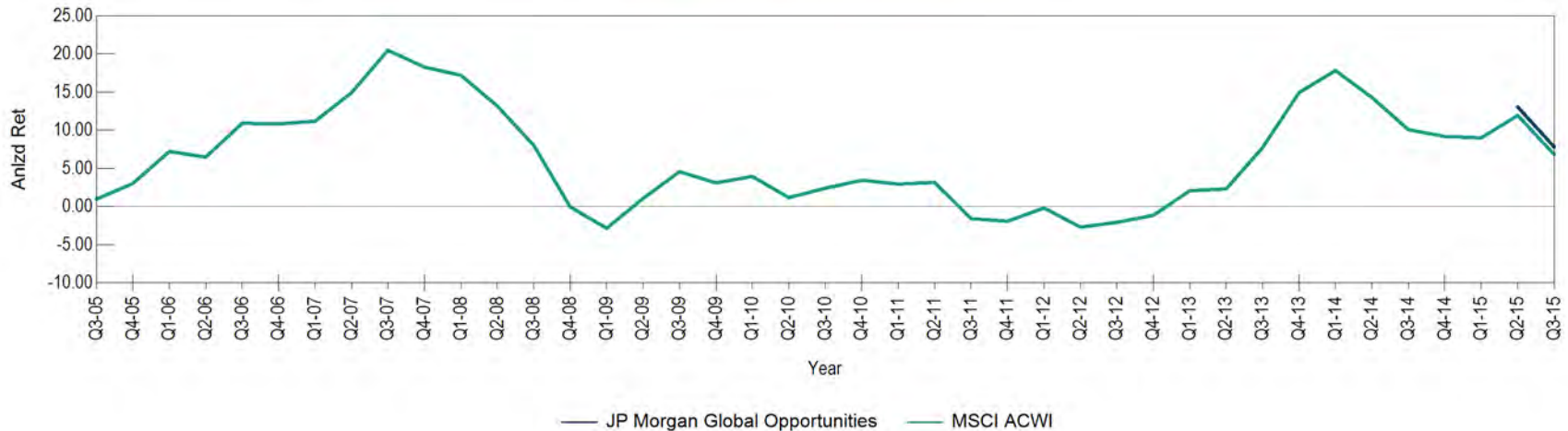


	Return (Rank)										
	Quarter	1 Year	3 Years	5 Years	10 Years	2014	2013	2012	2011	2010	
5th Percentile	-1.2	6.8	15.2	13.4	9.7	17.1	38.6	29.5	4.0	25.8	
25th Percentile	-6.5	0.8	11.2	10.5	7.5	7.4	30.6	20.4	-3.0	18.5	
Median	-8.5	-3.2	9.0	9.0	6.3	4.6	26.2	17.2	-7.0	14.3	
75th Percentile	-10.5	-6.5	7.1	7.1	5.2	1.5	20.0	14.4	-11.2	11.8	
95th Percentile	-17.3	-24.5	-3.8	-1.5	1.5	-7.4	2.7	7.4	-18.7	6.9	
# of Portfolios	633	631	591	497	242	609	552	475	434	343	
● JP Morgan Global Opportunities	-10.6 (77)	-6.3 (75)	9.0 (52)	7.8 (69)	-- (--)	6.7 (30)	26.9 (46)	19.2 (32)	-9.0 (63)	-- (--)	
▲ MSCI ACWI	-9.4 (64)	-6.7 (76)	7.0 (77)	6.8 (78)	4.6 (82)	4.2 (54)	22.8 (66)	16.1 (61)	-7.3 (53)	12.7 (65)	

Rolling 3 Year Annualized Return (%)



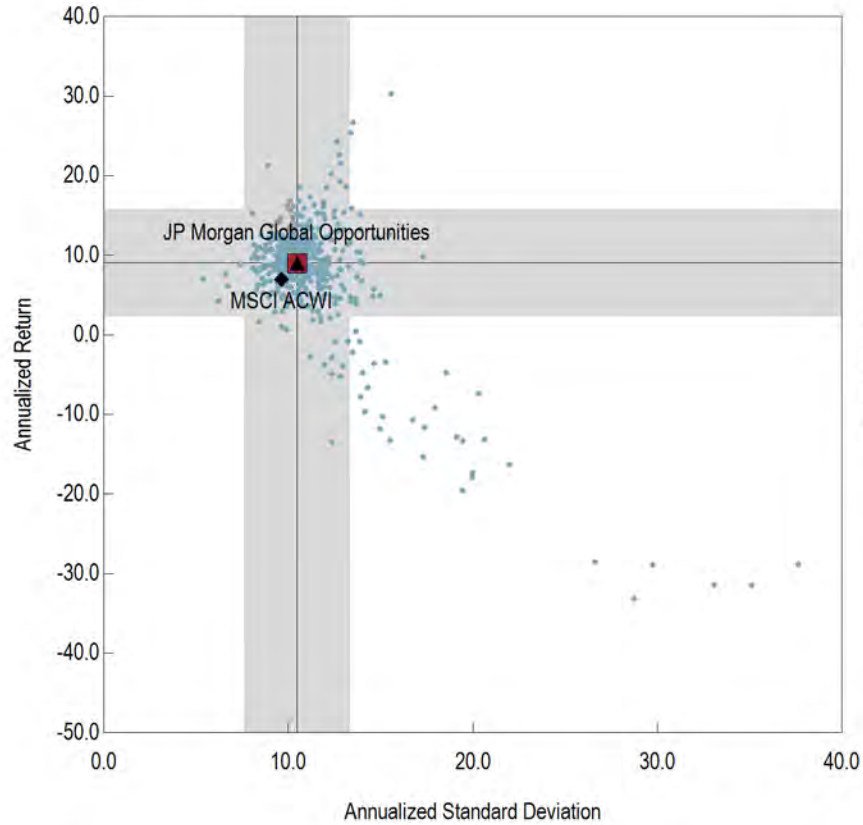
Rolling 5 Year Annualized Return (%)



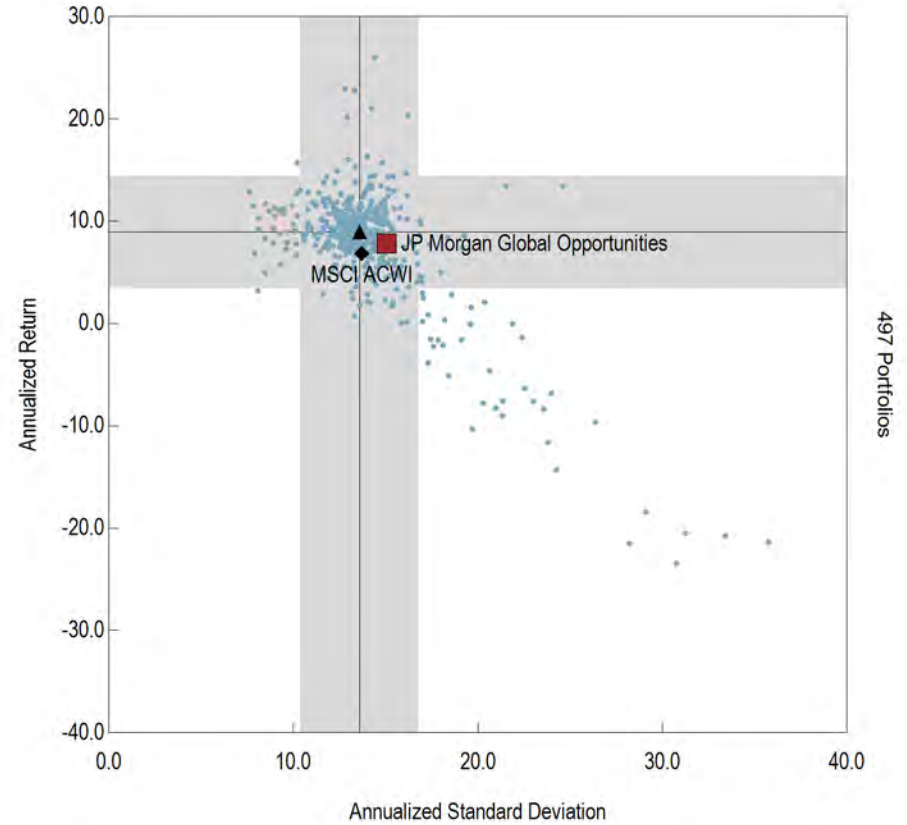
JP Morgan Global Opportunities  
 Risk vs. Return 3 & 5 Year (Gross of Fees)

Period Ending: September 30, 2015

3 Years



5 Years



3 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
JP Morgan Global Opportunities	9.0%	10.5%	0.9
MSCI ACWI	7.0%	9.6%	0.7
eA All Global Equity Gross Median	9.0%	10.5%	0.9

5 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
JP Morgan Global Opportunities	7.8%	15.0%	0.5
MSCI ACWI	6.8%	13.7%	0.5
eA All Global Equity Gross Median	9.0%	13.6%	0.7

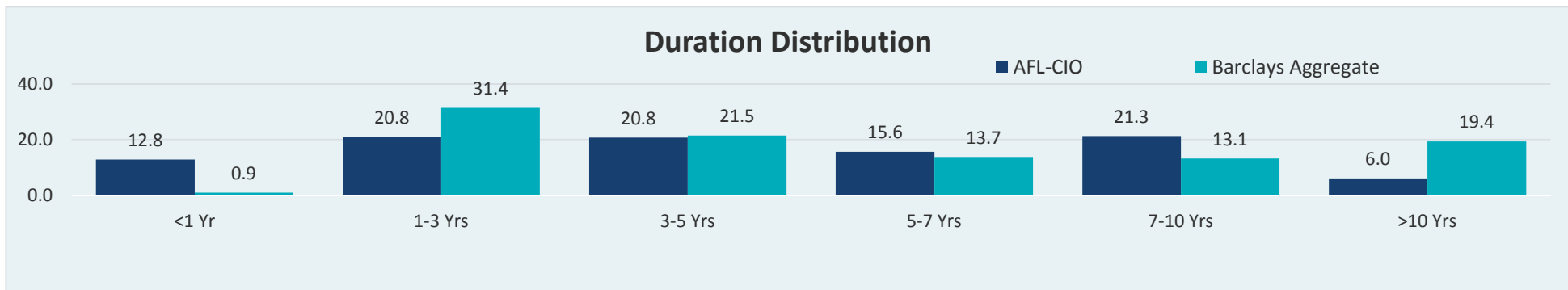
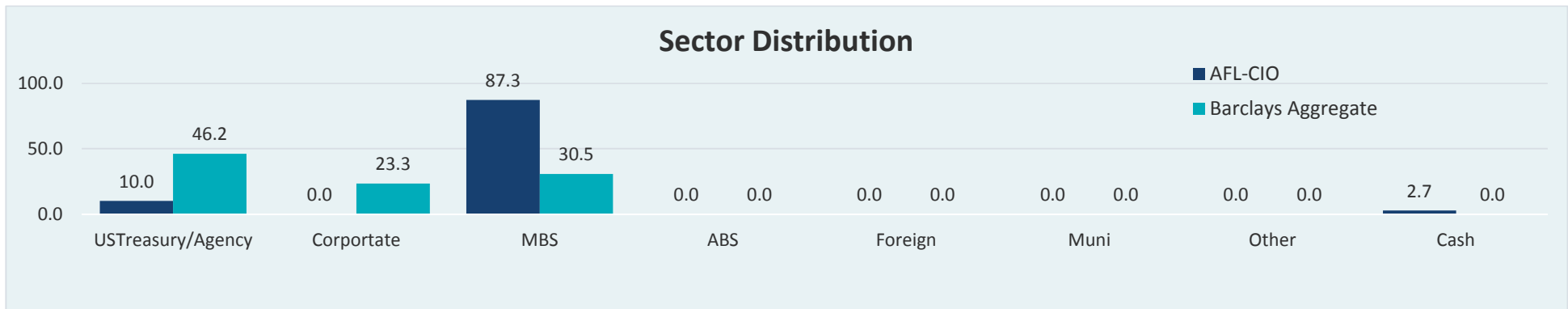


## **Domestic Fixed Income Managers**

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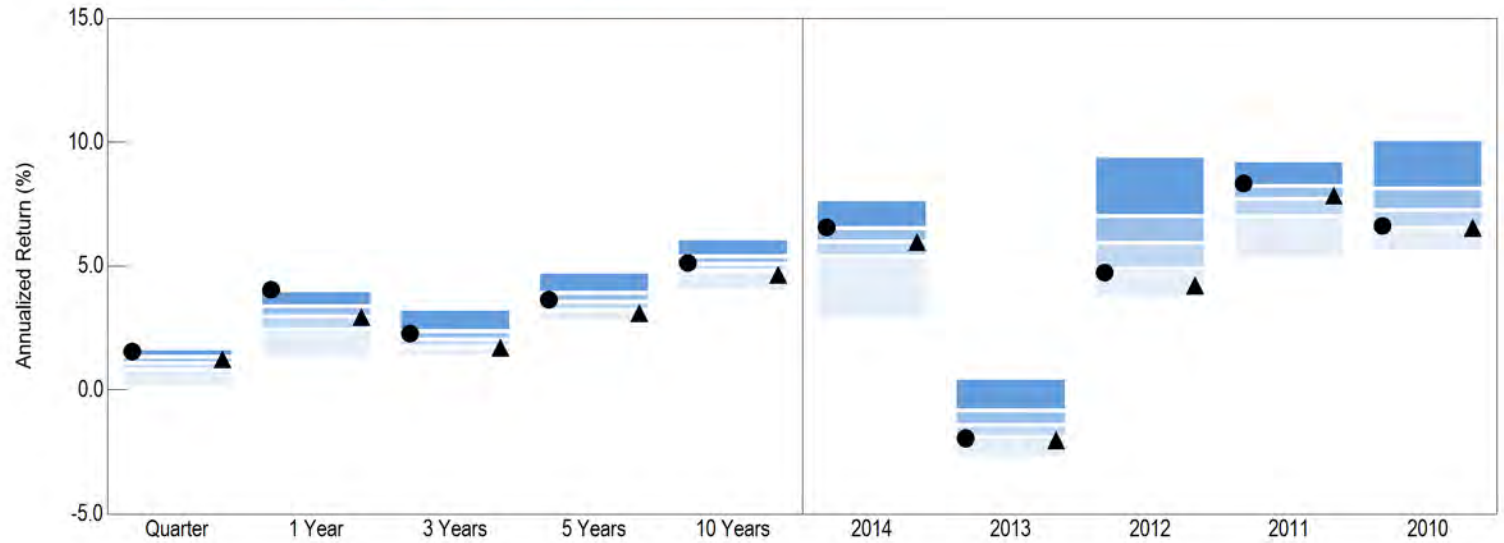
Domestic core fixed income portfolio with an exclusive focus on mortgage-related securities. Primary personnel include Stephen Coyle and Chang Su.

	AFL-CIO	Barclays Aggregate
Effective Duration	5.12	5.82
Yield to Maturity	2.60	2.12
Average Quality	AAA	A
Average Coupon	3.39%	3.03%



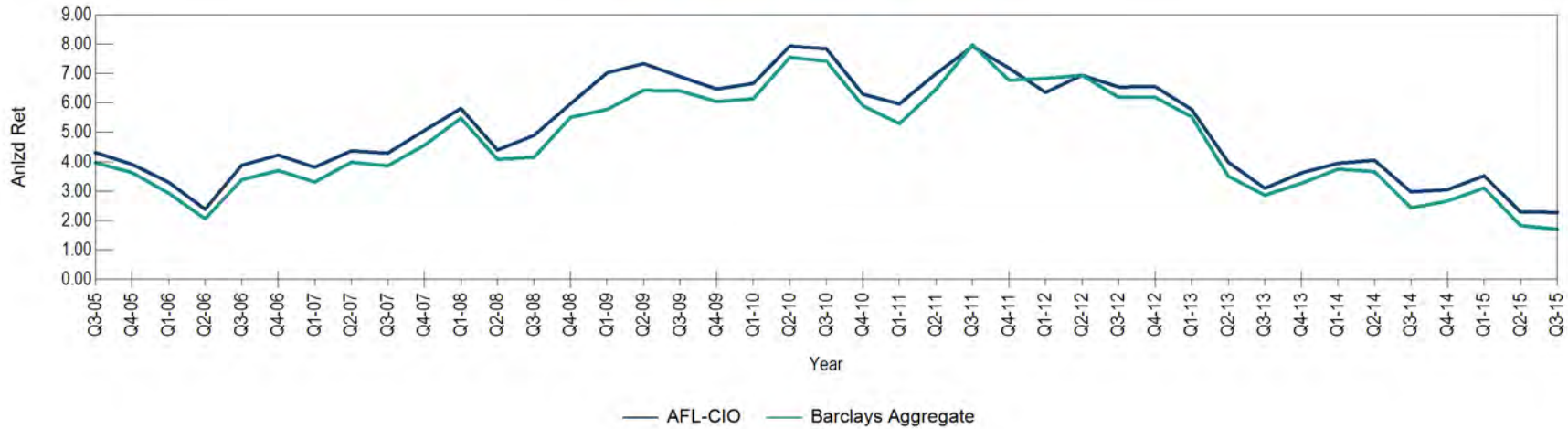
Duration and Quality distributions exclude cash.

AFL-CIO vs. eA US Core Fixed Inc Gross Universe

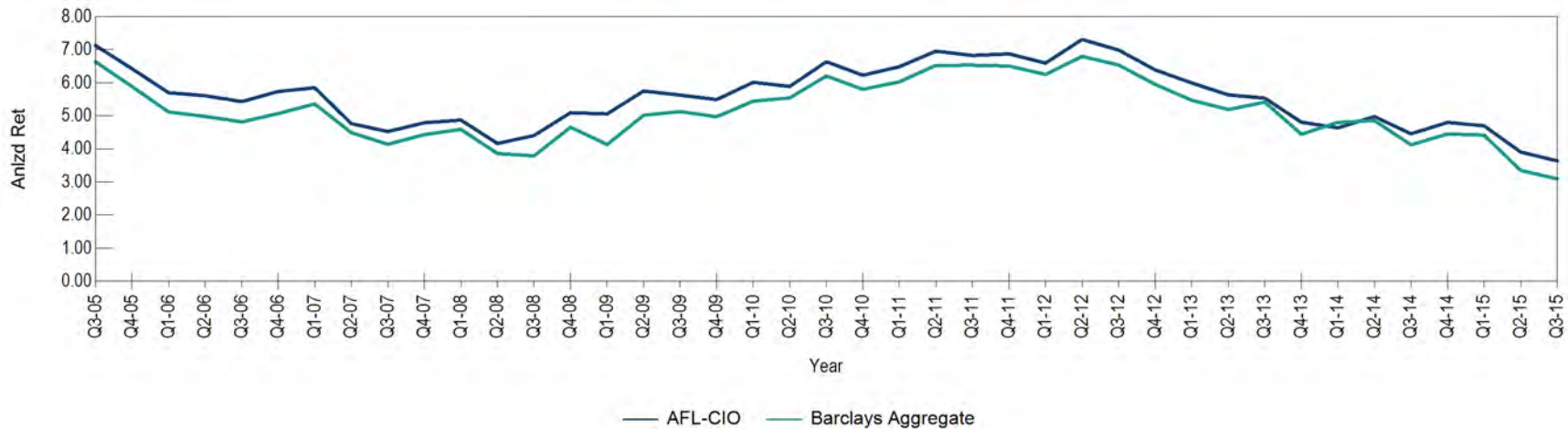


	Return (Rank)										
5th Percentile	1.7	4.0	3.3	4.8	6.1	7.7	0.5	9.4	9.2	10.1	
25th Percentile	1.4	3.4	2.4	3.9	5.4	6.5	-0.8	7.0	8.2	8.1	
Median	1.1	3.0	2.0	3.6	5.1	6.0	-1.4	5.9	7.7	7.3	
75th Percentile	0.8	2.5	1.8	3.2	4.8	5.4	-1.9	4.9	7.0	6.6	
95th Percentile	0.2	1.3	1.4	2.7	4.0	2.9	-2.7	3.7	5.3	5.6	
# of Portfolios	192	192	191	189	167	213	209	228	213	230	
● AFL-CIO	1.5 (9)	4.0 (5)	2.3 (35)	3.6 (47)	5.1 (49)	6.6 (25)	-1.9 (78)	4.7 (80)	8.3 (23)	6.6 (75)	
▲ Barclays Aggregate	1.2 (37)	2.9 (54)	1.7 (79)	3.1 (82)	4.6 (87)	6.0 (52)	-2.0 (82)	4.2 (90)	7.8 (46)	6.5 (76)	

Rolling 3 Year Annualized Return (%)



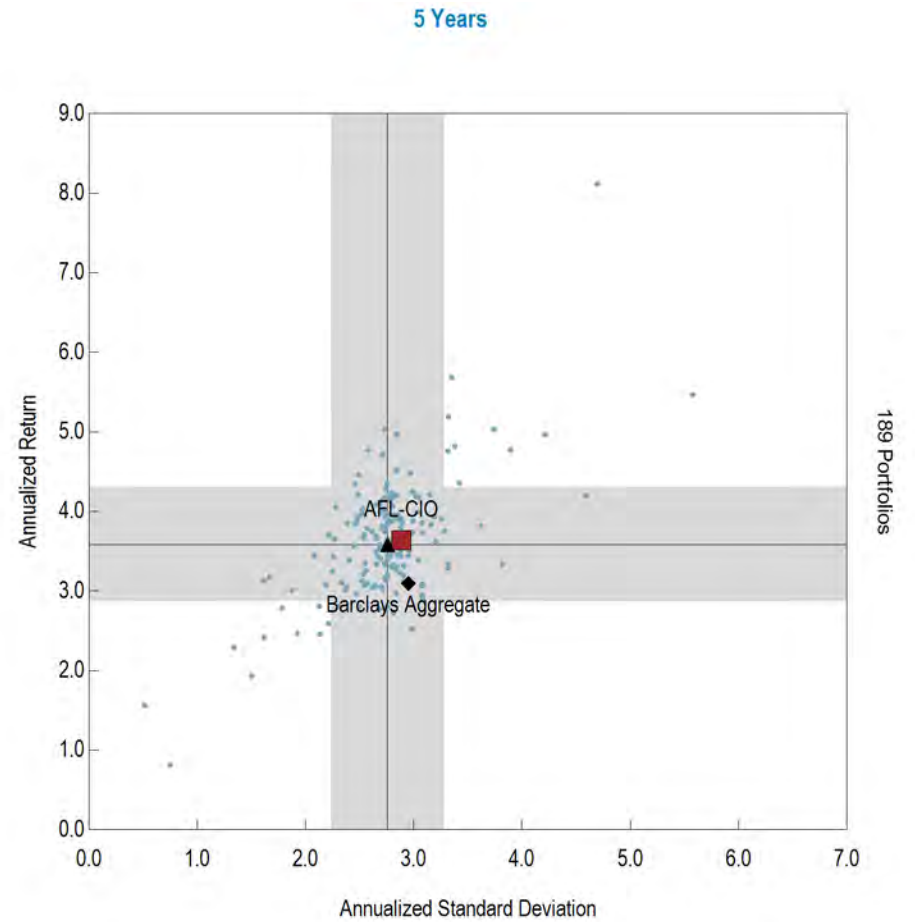
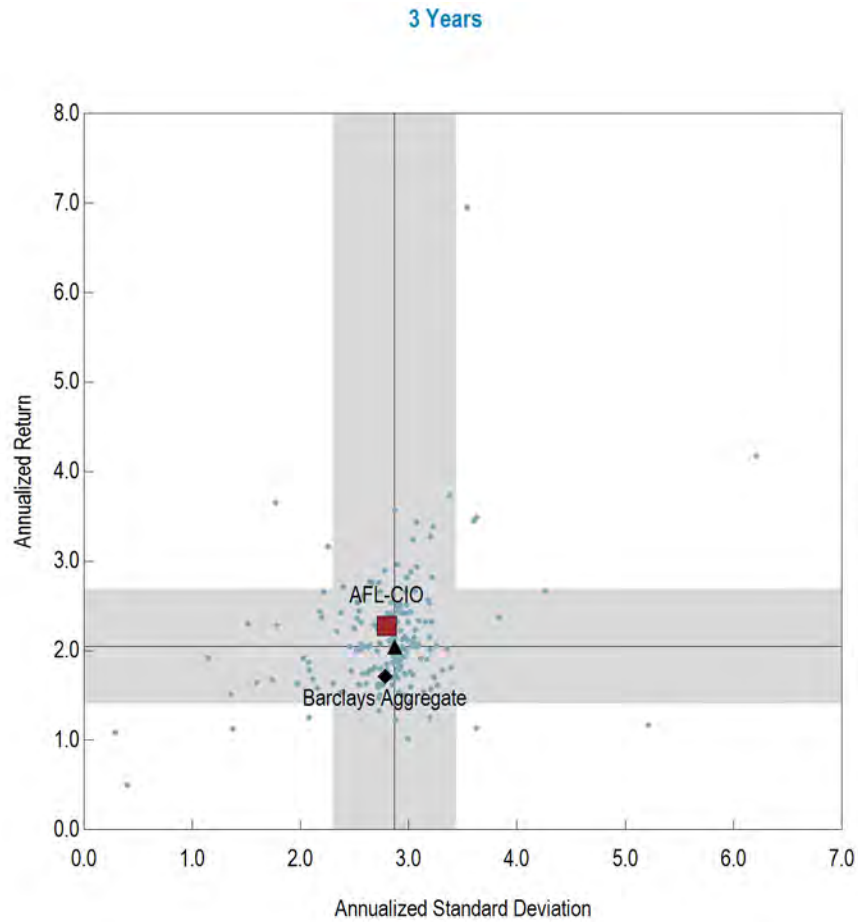
Rolling 5 Year Annualized Return (%)



# AFL-CIO

## Risk vs. Return 3 & 5 Year (Gross of Fees)

Period Ending: September 30, 2015



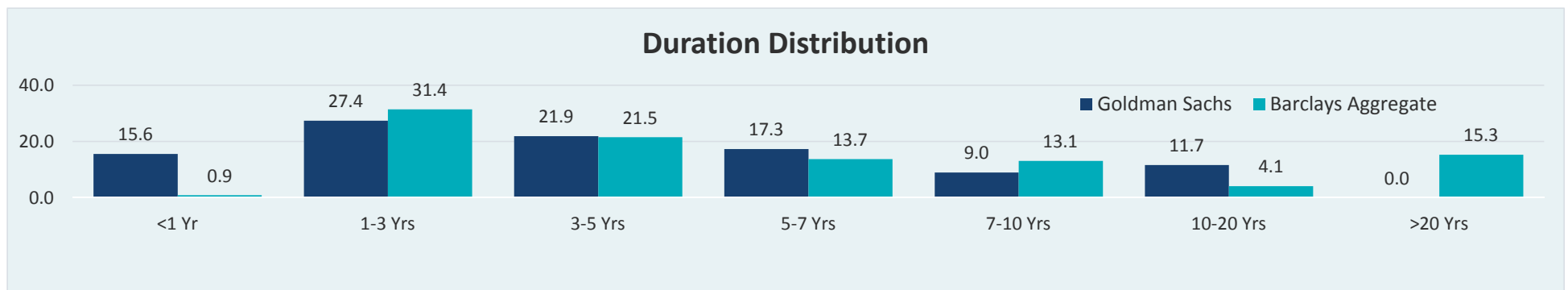
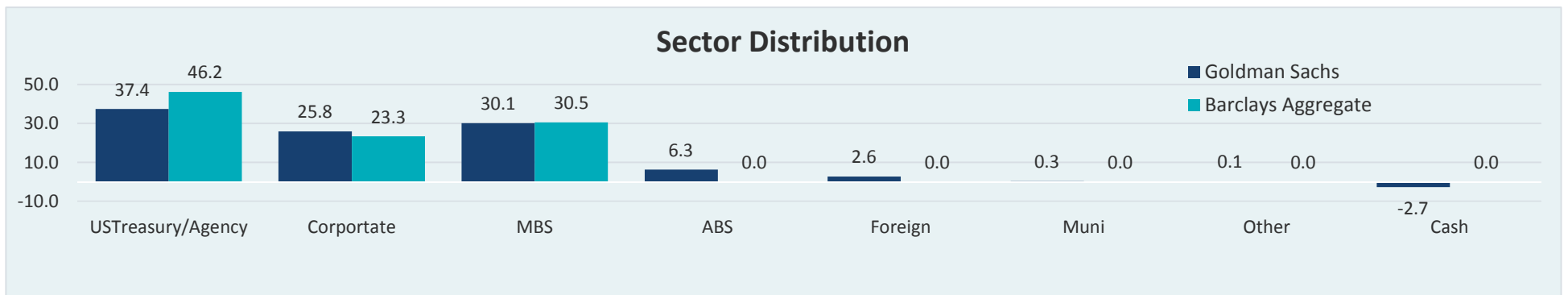
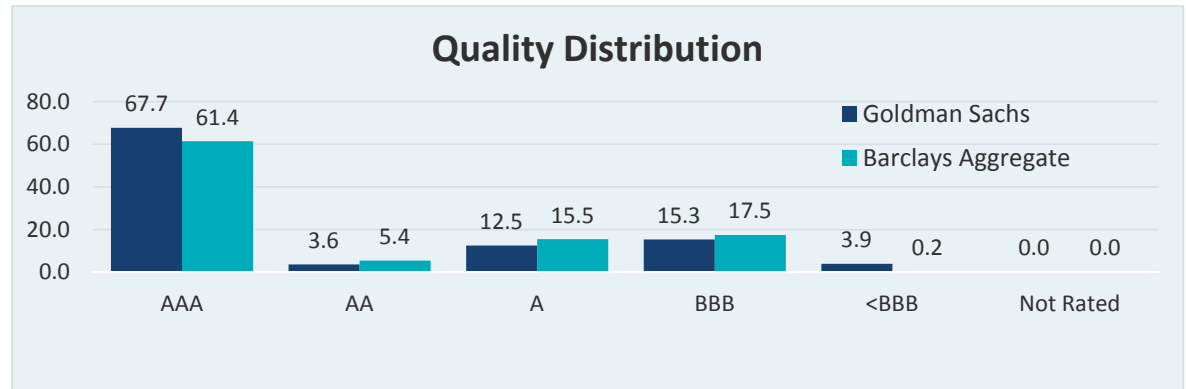
	3 Years			5 Years			
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	
AFL-CIO	2.3%	2.8%	0.8	AFL-CIO	3.6%	2.9%	1.2
Barclays Aggregate	1.7%	2.8%	0.6	Barclays Aggregate	3.1%	3.0%	1.0
eA US Core Fixed Inc Gross Median	2.0%	2.9%	0.7	eA US Core Fixed Inc Gross Median	3.6%	2.8%	1.3

# Goldman Sachs Core Plus Manager Portfolio Overview

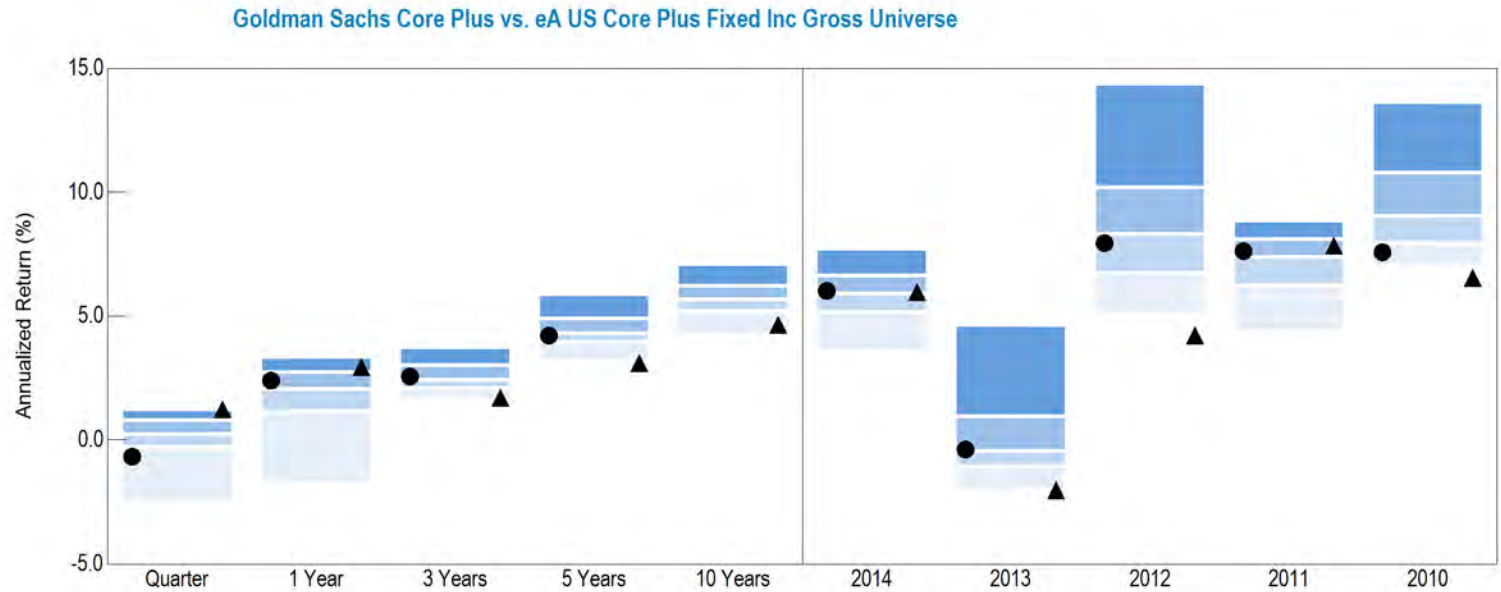
Period Ending: September 30, 2015

Domestic core plus fixed income portfolio with a focus on security selection seeking enhanced returns. Primary personnel include Jonathan Beinner.

	Goldman Sachs	Barclays Aggregate
Option Adjusted Duration	5.42	5.28
Yield to Maturity	2.92	2.15
Average Quality	AA	AA
Average Coupon	3.35%	3.05%

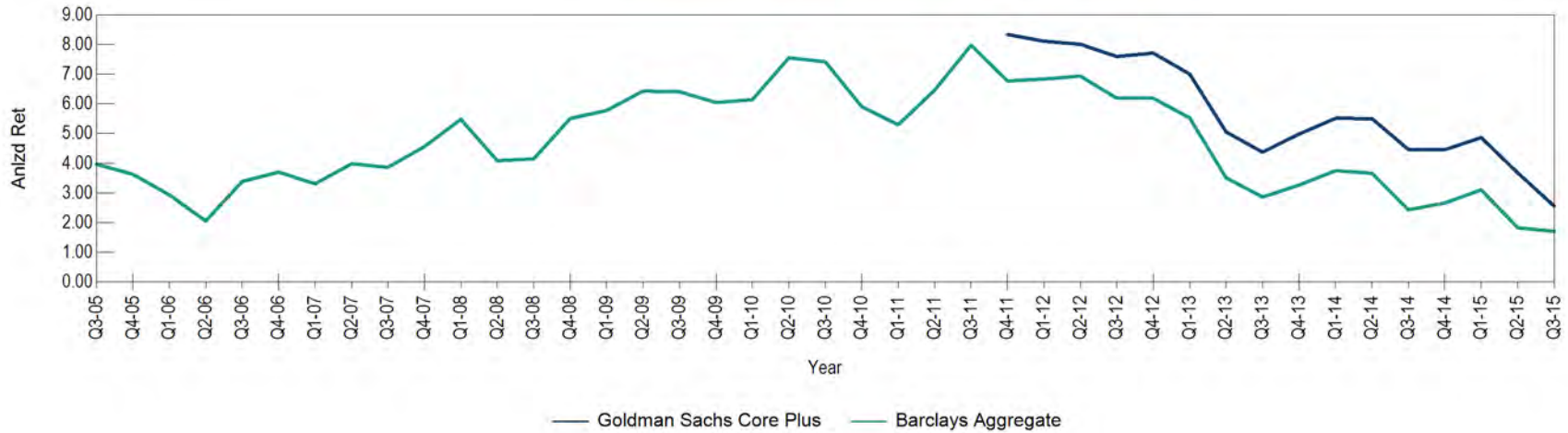


Duration and Quality distributions exclude cash.

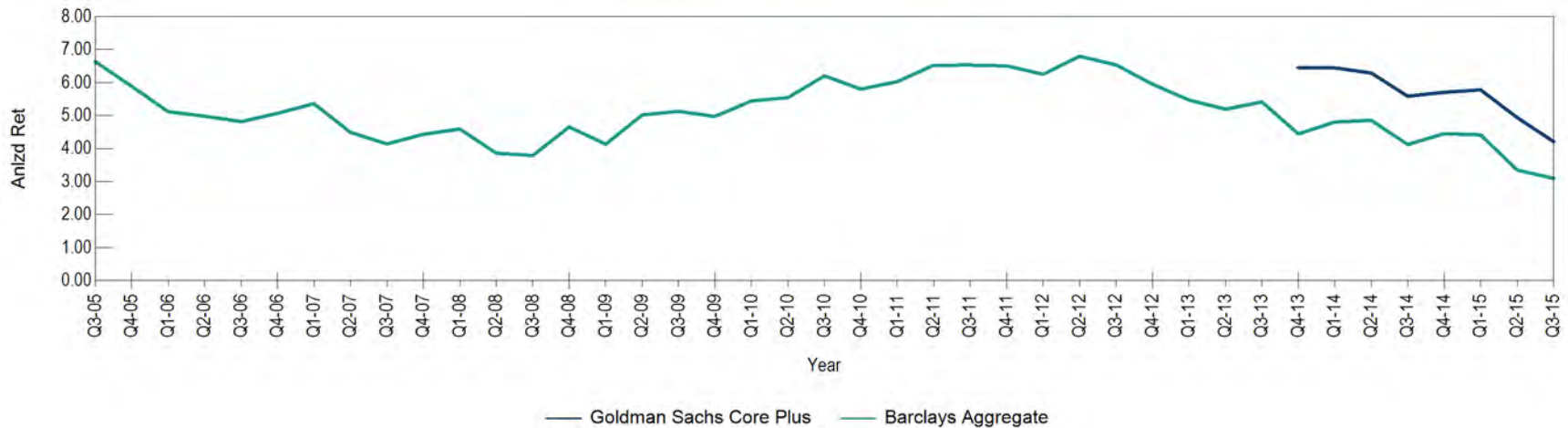


	Return (Rank)									
	Quarter	1 Year	3 Years	5 Years	10 Years	2014	2013	2012	2011	2010
5th Percentile	1.2	3.4	3.7	5.9	7.1	7.7	4.6	14.4	8.8	13.6
25th Percentile	0.8	2.7	3.0	4.9	6.2	6.7	1.0	10.2	8.1	10.8
Median	0.2	2.1	2.4	4.3	5.7	5.9	-0.4	8.3	7.4	9.1
75th Percentile	-0.3	1.2	2.1	4.0	5.2	5.2	-1.0	6.7	6.3	8.0
95th Percentile	-2.5	-1.7	1.6	3.2	4.2	3.6	-2.0	5.1	4.4	7.0
# of Portfolios	110	110	108	104	87	118	116	124	118	123
● Goldman Sachs Core Plus	-0.7 (83)	2.4 (37)	2.6 (46)	4.2 (61)	-- (--)	6.0 (47)	-0.4 (49)	7.9 (59)	7.6 (43)	7.6 (86)
▲ Barclays Aggregate	1.2 (5)	2.9 (15)	1.7 (94)	3.1 (96)	4.6 (94)	6.0 (50)	-2.0 (96)	4.2 (97)	7.8 (37)	6.5 (97)

Rolling 3 Year Annualized Return (%)



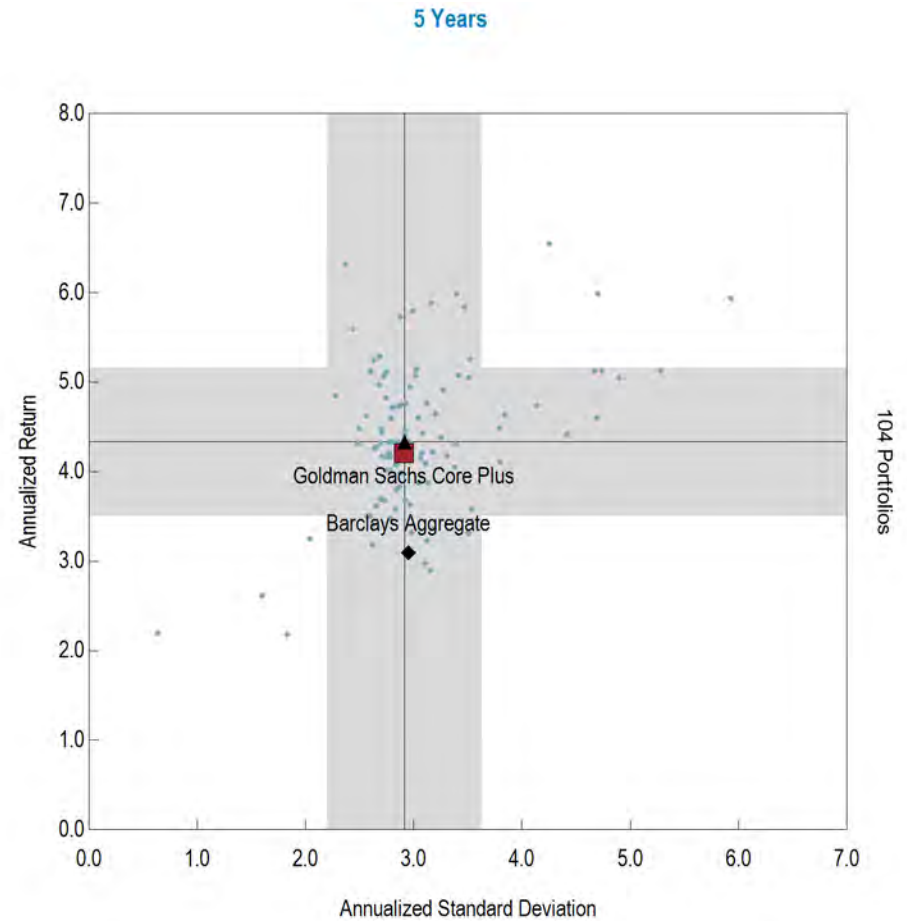
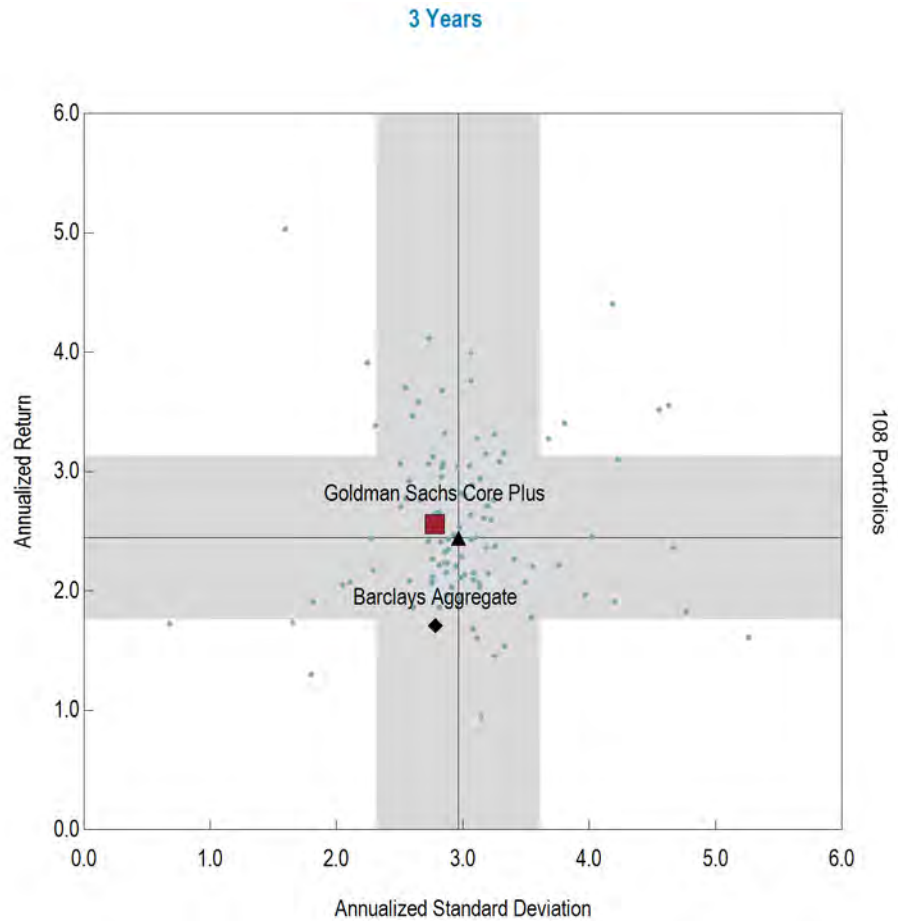
Rolling 5 Year Annualized Return (%)





Goldman Sachs Core Plus  
Risk vs. Return 3 & 5 Year (Gross of Fees)

Period Ending: September 30, 2015



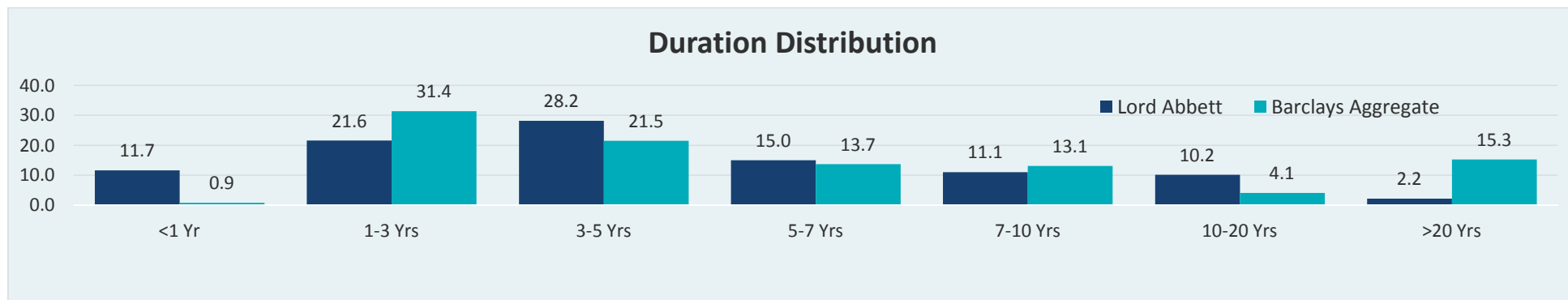
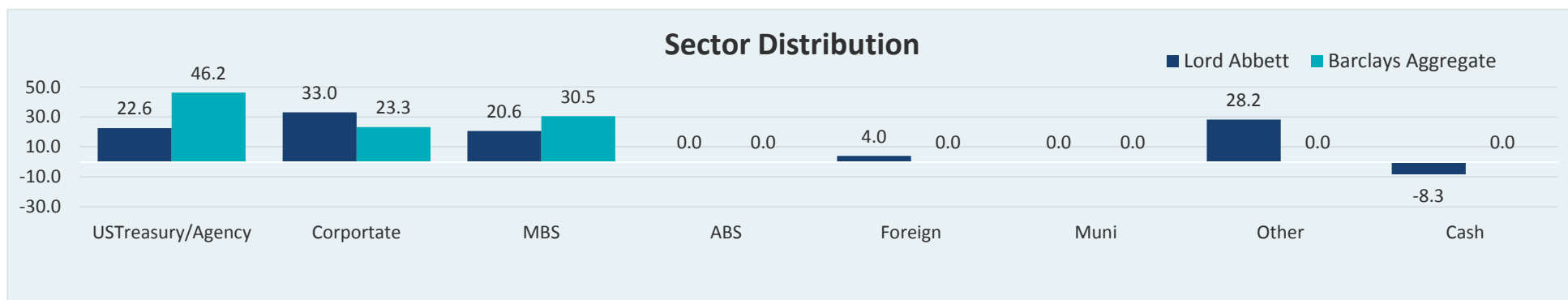
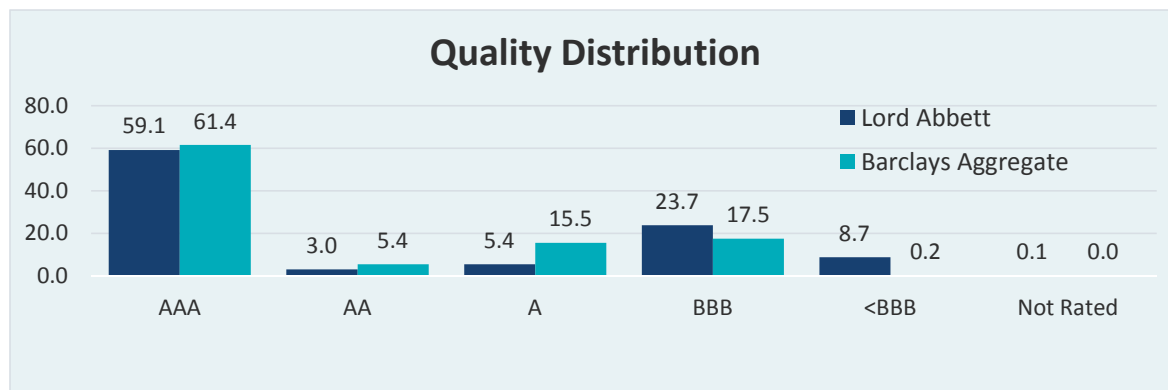
	<b>3 Years</b>			<b>5 Years</b>			
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	
Goldman Sachs Core Plus	2.6%	2.8%	0.9	Goldman Sachs Core Plus	4.2%	2.9%	1.4
Barclays Aggregate	1.7%	2.8%	0.6	Barclays Aggregate	3.1%	3.0%	1.0
eA US Core Plus Fixed Inc Gross Median	2.4%	3.0%	0.8	eA US Core Plus Fixed Inc Gross Median	4.3%	2.9%	1.5

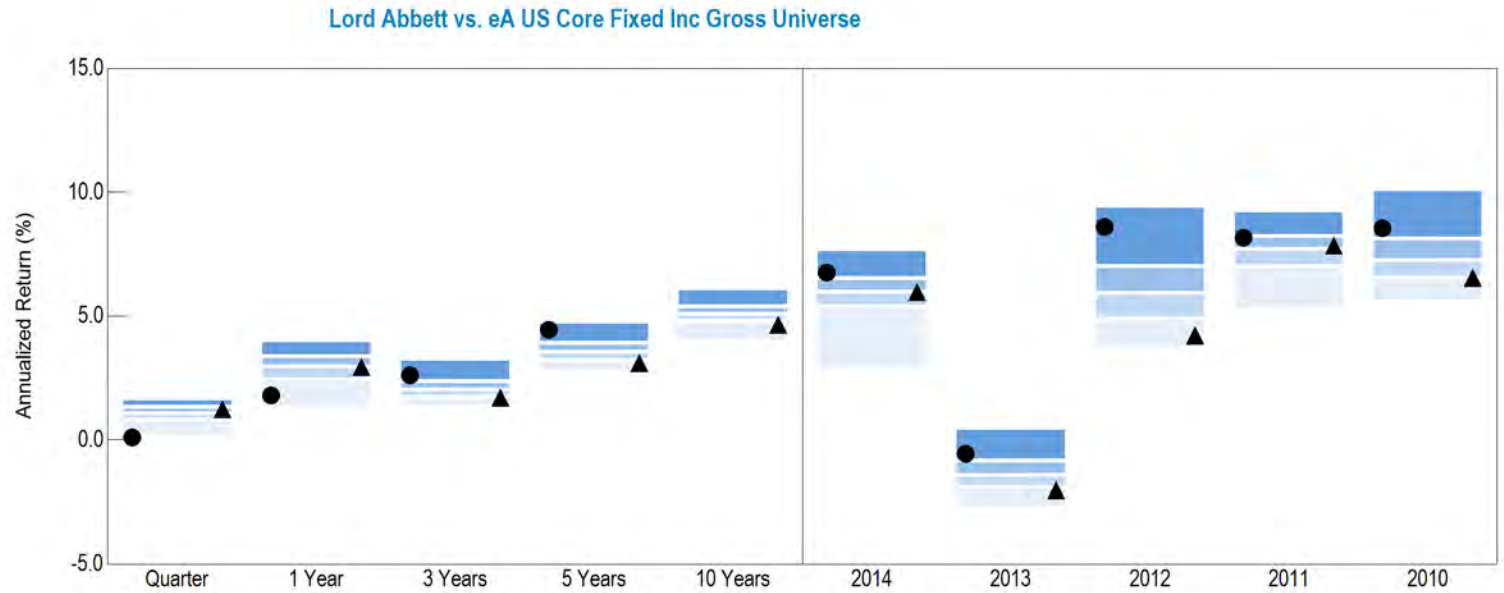
# Lord Abbett Manager Portfolio Overview

Period Ending: September 30, 2015

Domestic core plus fixed income portfolio that is duration-neutral with a focus on sector selection seeking enhanced returns. Primary personnel include Robert Lee and Robert Gerber.

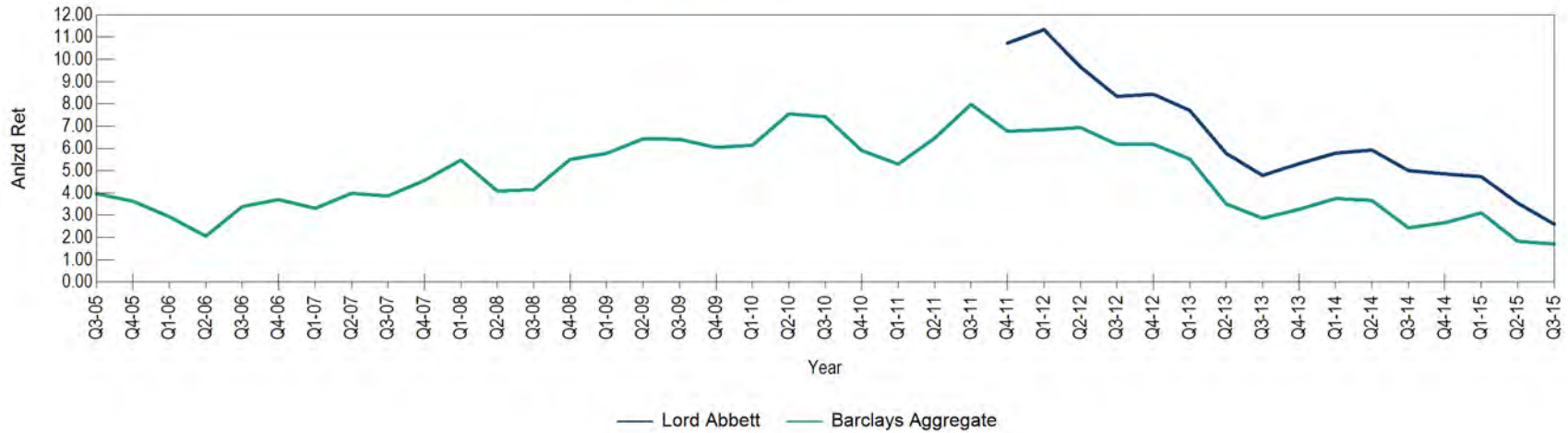
	Lord Abbett	Barclays Aggregate
Effective Duration	5.20	5.82
Yield to Maturity	3.40	2.12
Average Quality	AA	A
Average Coupon	4.00%	3.03%





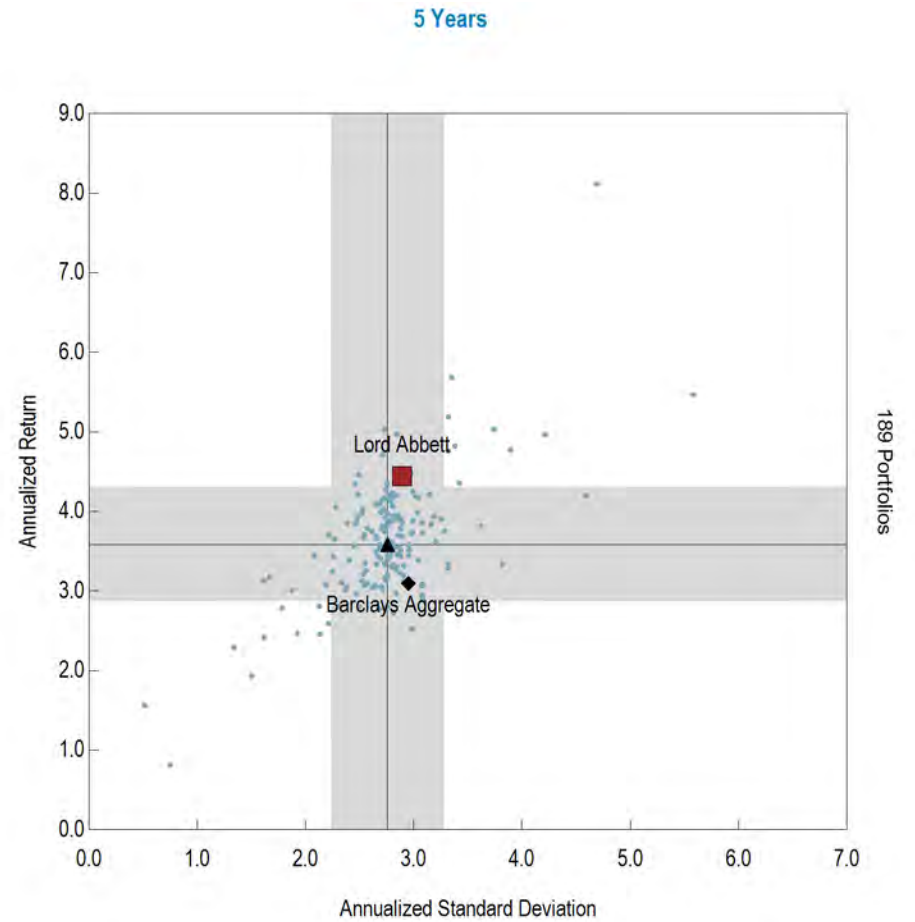
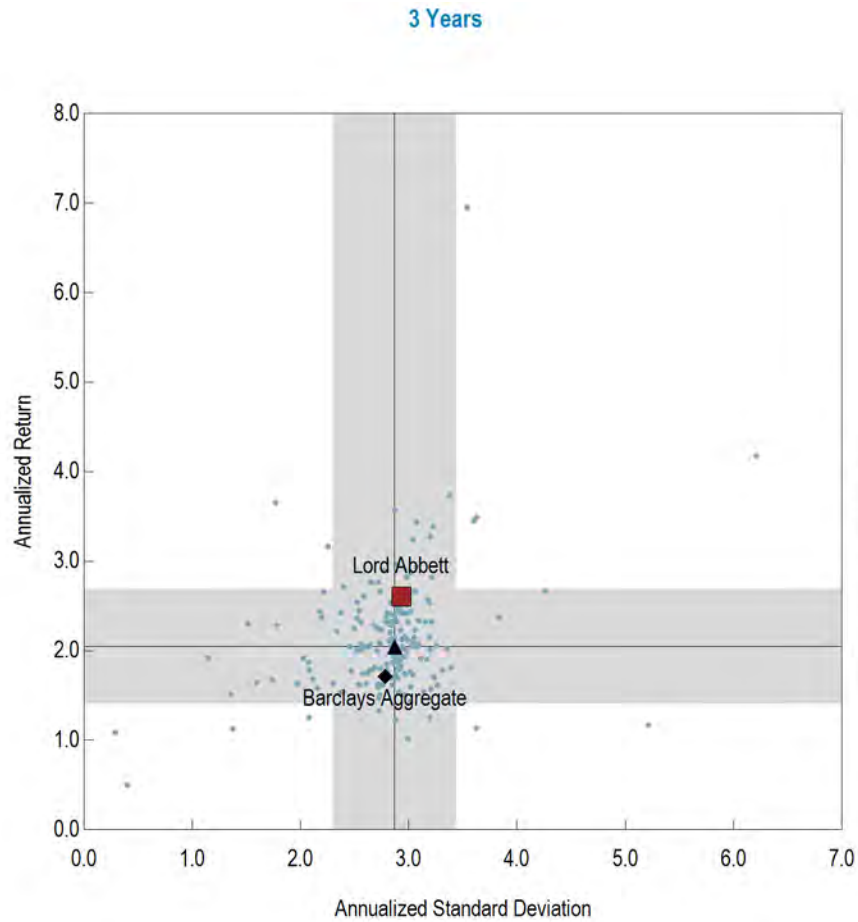
	Return (Rank)													
5th Percentile	1.7	4.0	3.3	4.8	6.1	7.7	0.5	9.4	9.2	10.1				
25th Percentile	1.4	3.4	2.4	3.9	5.4	6.5	-0.8	7.0	8.2	8.1				
Median	1.1	3.0	2.0	3.6	5.1	6.0	-1.4	5.9	7.7	7.3				
75th Percentile	0.8	2.5	1.8	3.2	4.8	5.4	-1.9	4.9	7.0	6.6				
95th Percentile	0.2	1.3	1.4	2.7	4.0	2.9	-2.7	3.7	5.3	5.6				
# of Portfolios	192	192	191	189	167	213	209	228	213	230				
● Lord Abbett	0.1 (97)	1.8 (94)	2.6 (15)	4.4 (9)	-- (--)	6.7 (18)	-0.6 (18)	8.6 (8)	8.2 (27)	8.5 (15)				
▲ Barclays Aggregate	1.2 (37)	2.9 (54)	1.7 (79)	3.1 (82)	4.6 (87)	6.0 (52)	-2.0 (82)	4.2 (90)	7.8 (46)	6.5 (76)				

Rolling 3 Year Annualized Return (%)



Rolling 5 Year Annualized Return (%)





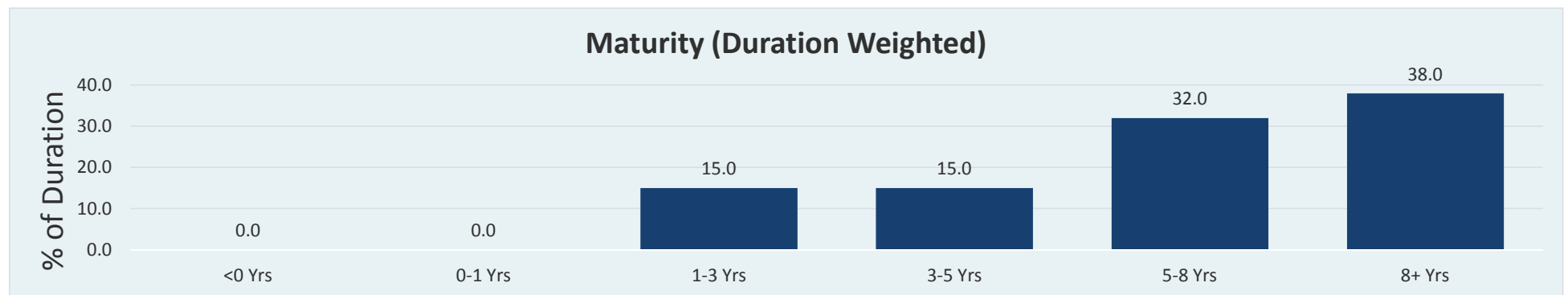
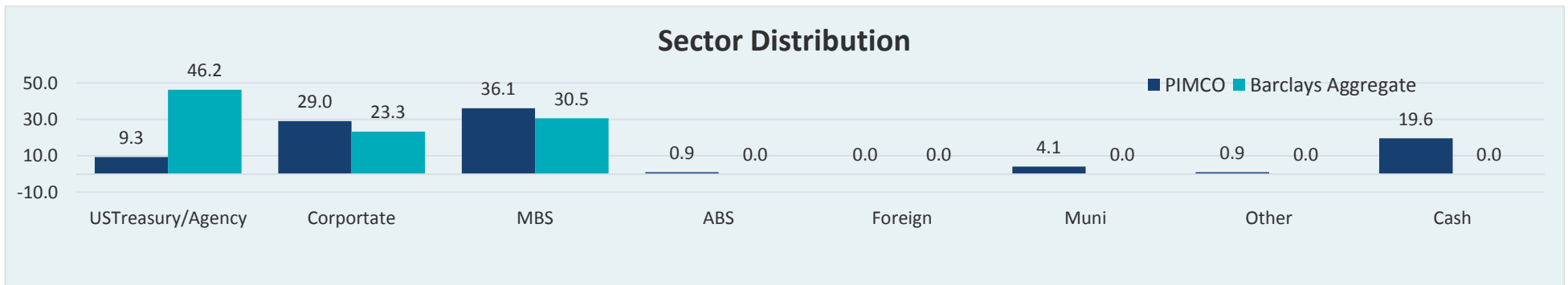
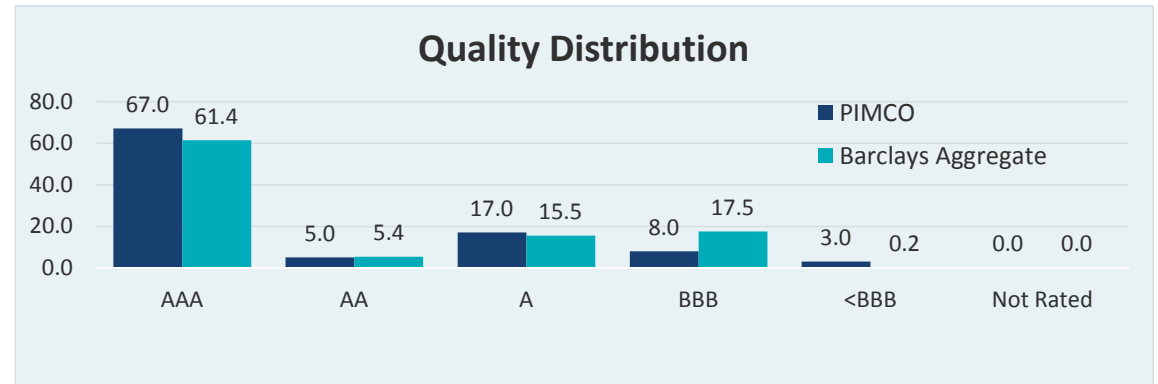
	<b>3 Years</b>			<b>5 Years</b>			
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	
Lord Abbett	2.6%	2.9%	0.9	Lord Abbett	4.4%	2.9%	1.5
Barclays Aggregate	1.7%	2.8%	0.6	Barclays Aggregate	3.1%	3.0%	1.0
eA US Core Fixed Inc Gross Median	2.0%	2.9%	0.7	eA US Core Fixed Inc Gross Median	3.6%	2.8%	1.3

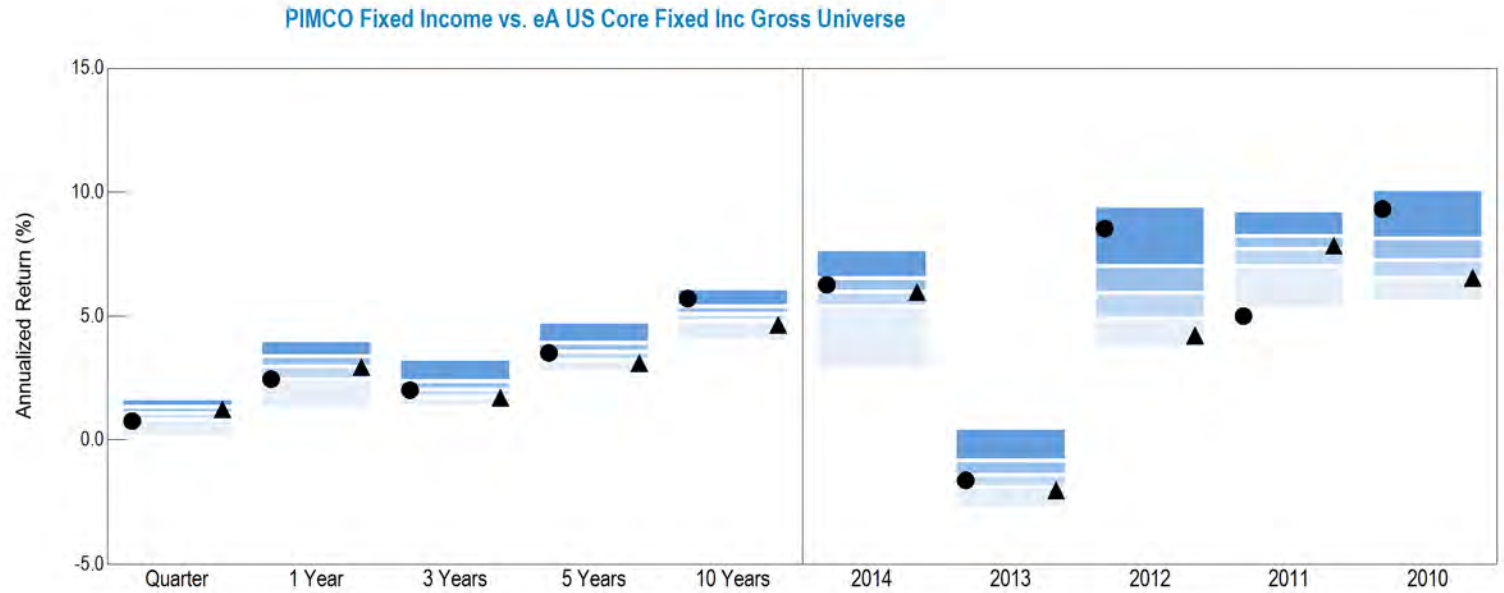
# PIMCO Fixed Income Manager Portfolio Overview

Period Ending: September 30, 2015

Domestic core plus fixed income portfolio seeking enhanced returns through sector and security selection, yield curve structure, and duration decision.

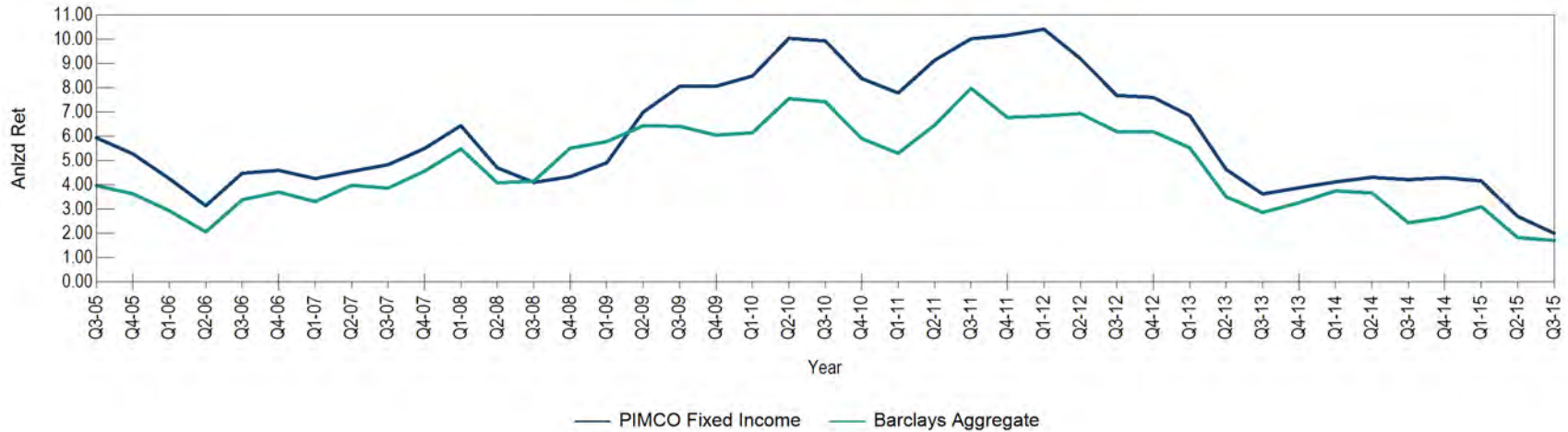
	PIMCO	Barclays Aggregate
Effective Duration	4.35	5.74
Yield to Maturity	2.62	2.15
Average Quality	AA	AA
Average Coupon	3.28%	3.05%



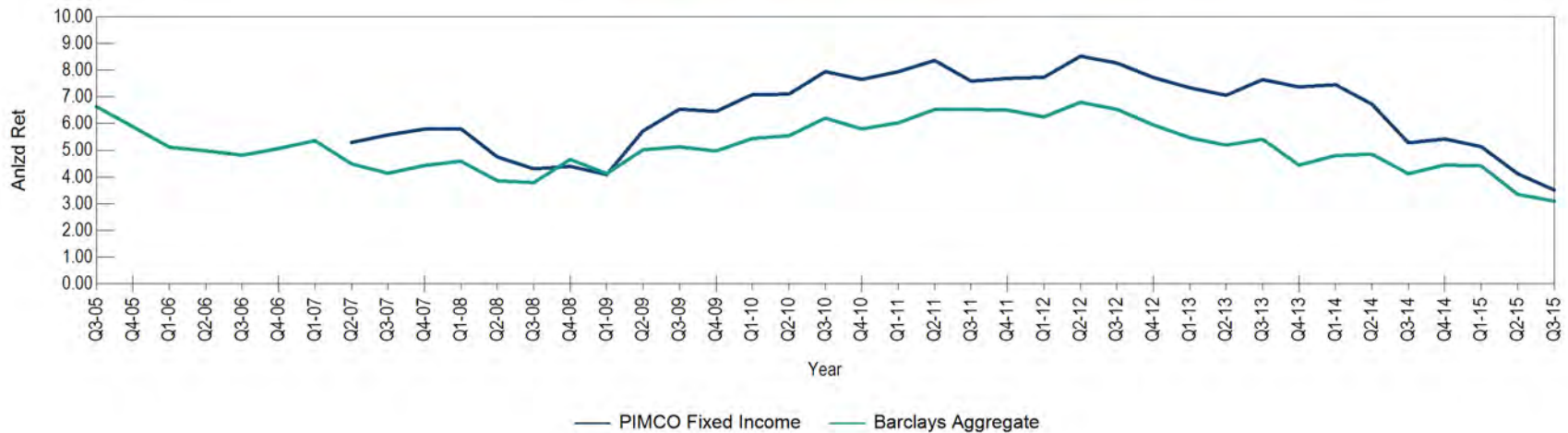


	Quarter	1 Year	3 Years	5 Years	10 Years	2014	2013	2012	2011	2010
<b>5th Percentile</b>	1.7	4.0	3.3	4.8	6.1	7.7	0.5	9.4	9.2	10.1
<b>25th Percentile</b>	1.4	3.4	2.4	3.9	5.4	6.5	-0.8	7.0	8.2	8.1
<b>Median</b>	1.1	3.0	2.0	3.6	5.1	6.0	-1.4	5.9	7.7	7.3
<b>75th Percentile</b>	0.8	2.5	1.8	3.2	4.8	5.4	-1.9	4.9	7.0	6.6
<b>95th Percentile</b>	0.2	1.3	1.4	2.7	4.0	2.9	-2.7	3.7	5.3	5.6
<b># of Portfolios</b>	192	192	191	189	167	213	209	228	213	230
<b>● PIMCO Fixed Income</b>	0.8 (83)	2.5 (76)	2.0 (55)	3.5 (57)	5.7 (11)	6.3 (34)	-1.6 (61)	8.5 (8)	5.0 (97)	9.3 (8)
<b>▲ Barclays Aggregate</b>	1.2 (37)	2.9 (54)	1.7 (79)	3.1 (82)	4.6 (87)	6.0 (52)	-2.0 (82)	4.2 (90)	7.8 (46)	6.5 (76)

Rolling 3 Year Annualized Return (%)



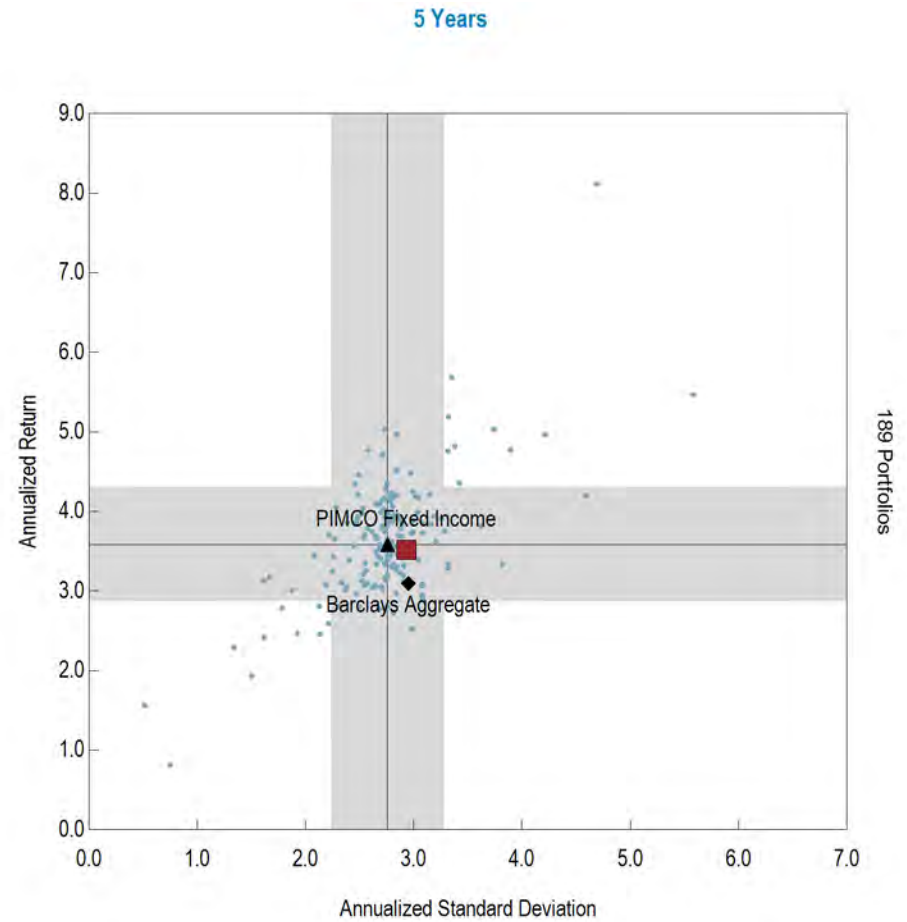
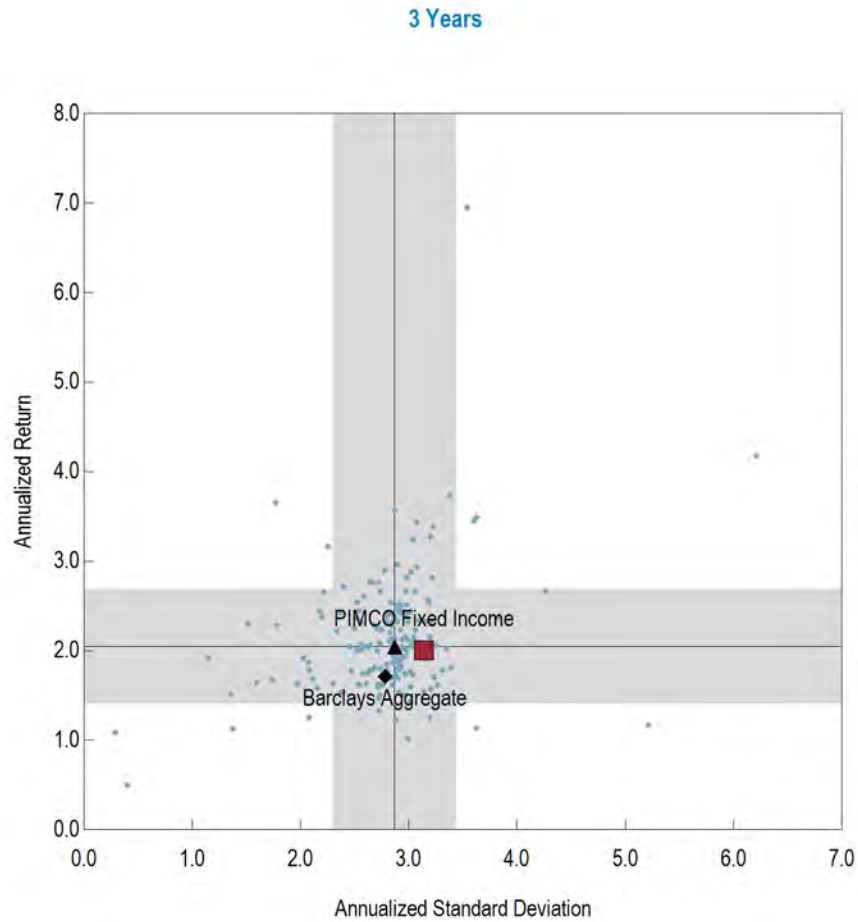
Rolling 5 Year Annualized Return (%)





PIMCO Fixed Income  
Risk vs. Return 3 & 5 Year (Gross of Fees)

Period Ending: September 30, 2015



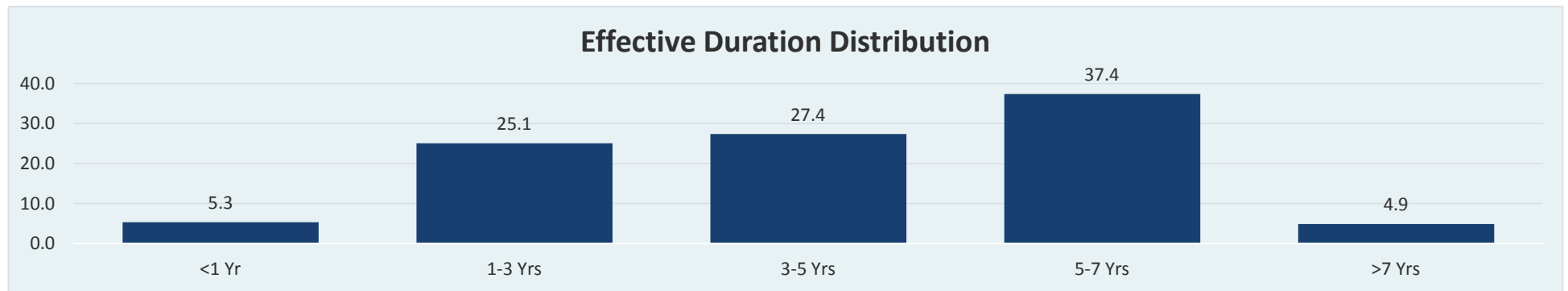
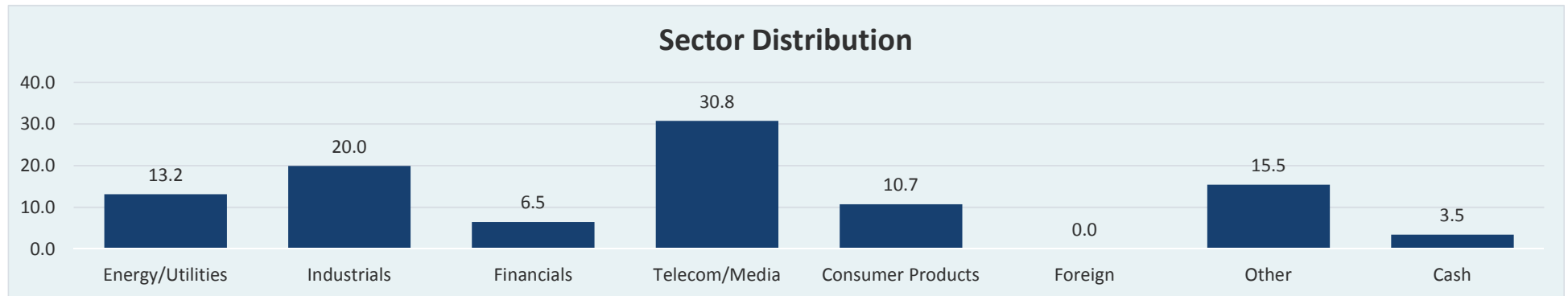
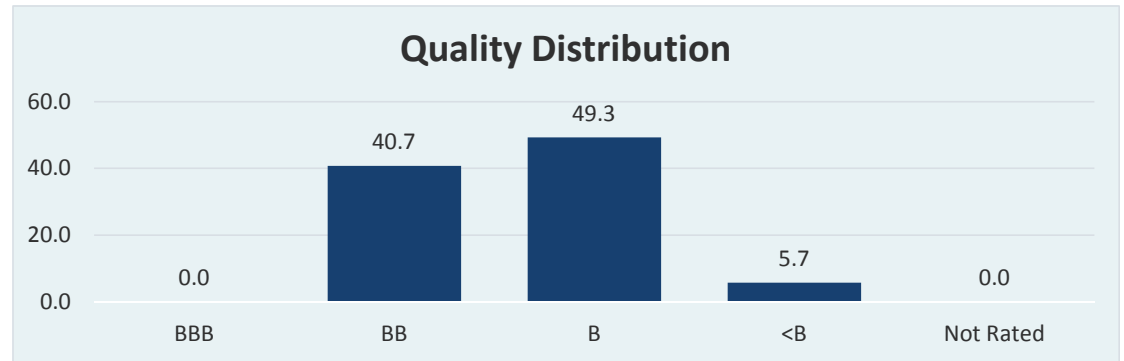
	<b>3 Years</b>			<b>5 Years</b>			
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	
PIMCO Fixed Income	2.0%	3.1%	0.6	PIMCO Fixed Income	3.5%	2.9%	1.2
Barclays Aggregate	1.7%	2.8%	0.6	Barclays Aggregate	3.1%	3.0%	1.0
eA US Core Fixed Inc Gross Median	2.0%	2.9%	0.7	eA US Core Fixed Inc Gross Median	3.6%	2.8%	1.3

## High Yield Managers

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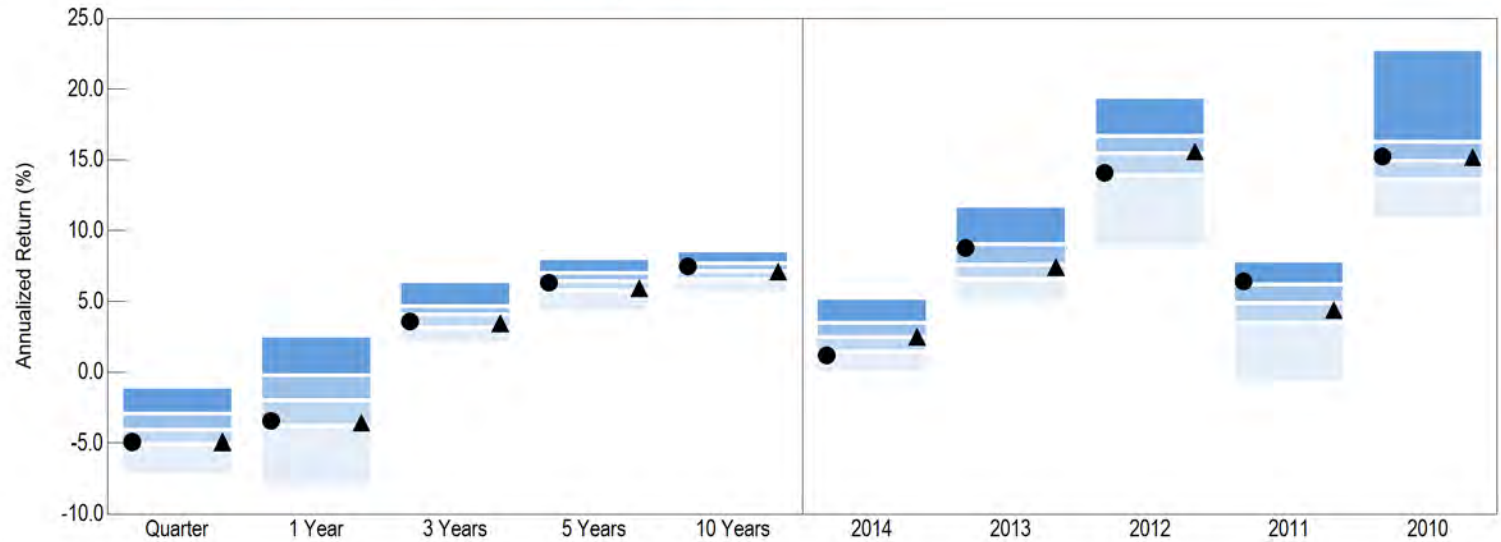
Domestic high yield fixed income portfolio with a focus on security selection. Primary personnel include Douglas Forsyth, Justin Kass, William Stickney, and Michael Yee.

	Allianz	BofA ML HY Master II
Effective Duration	4.2	4.5
Yield to Maturity	8.4	8.2
Average Quality	B1	B1
Average Coupon	7.4%	6.8%



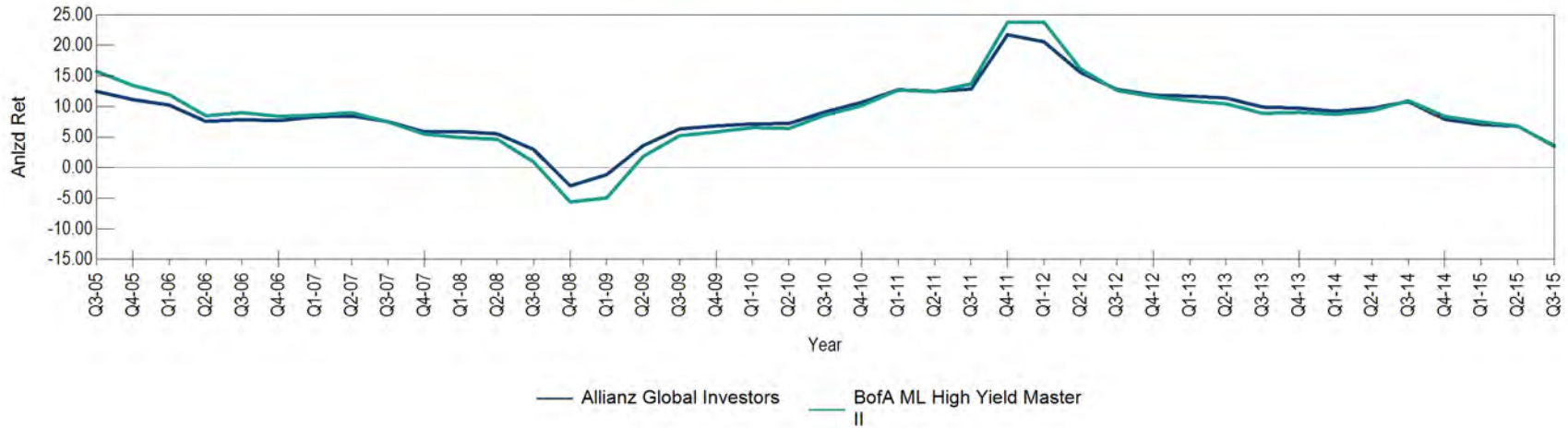
Quality distribution excludes cash.

Allianz Global Investors vs. eA US High Yield Fixed Inc Gross Universe

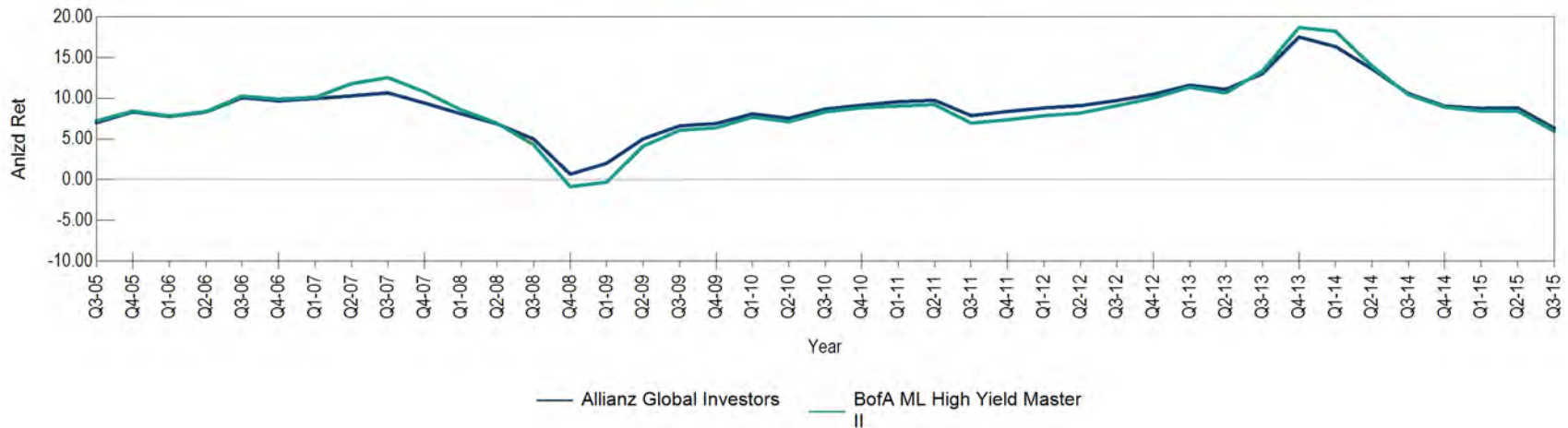


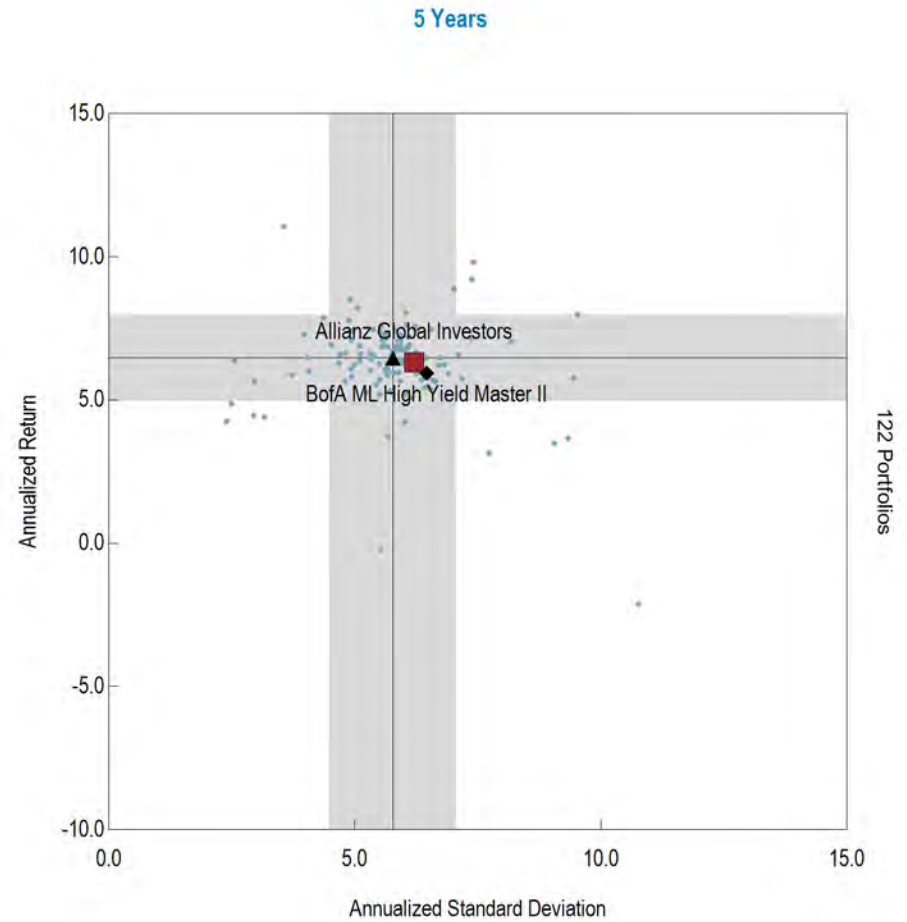
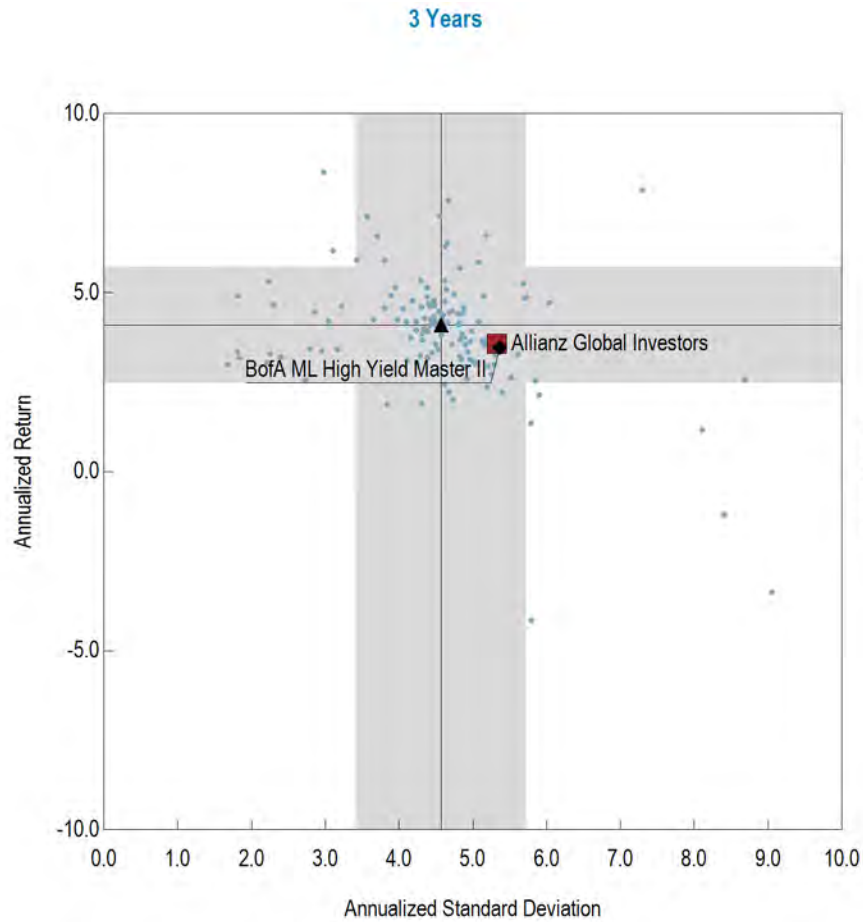
	Quarter	1 Year	3 Years	5 Years	10 Years	2014	2013	2012	2011	2010
<b>5th Percentile</b>	-1.1	2.6	6.4	8.0	8.6	5.2	11.7	19.4	7.9	22.8
<b>25th Percentile</b>	-2.9	-0.2	4.7	7.0	7.7	3.5	9.1	16.7	6.2	16.3
<b>Median</b>	-4.0	-2.0	4.1	6.5	7.2	2.5	7.6	15.5	4.9	14.9
<b>75th Percentile</b>	-5.0	-3.7	3.2	5.8	6.6	1.5	6.6	14.0	3.5	13.6
<b>95th Percentile</b>	-7.3	-8.1	2.0	4.2	5.6	0.0	5.0	8.9	-0.7	10.9
<b># of Portfolios</b>	146	146	139	122	102	141	130	129	117	106
● Allianz Global Investors	-4.9 (73)	-3.4 (73)	3.6 (64)	6.3 (56)	7.5 (36)	1.2 (83)	8.8 (28)	14.1 (73)	6.4 (21)	15.2 (42)
▲ BofA ML High Yield Master II	-4.9 (73)	-3.6 (74)	3.5 (67)	5.9 (70)	7.1 (55)	2.5 (50)	7.4 (55)	15.6 (47)	4.4 (60)	15.2 (42)

Rolling 3 Year Annualized Return (%)



Rolling 5 Year Annualized Return (%)





	<b>3 Years</b>			<b>5 Years</b>			
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	
Allianz Global Investors	3.6%	5.3%	0.7	Allianz Global Investors	6.3%	6.2%	1.0
BofA ML High Yield Master II	3.5%	5.4%	0.6	BofA ML High Yield Master II	5.9%	6.5%	0.9
eA US High Yield Fixed Inc Gross Median	4.1%	4.6%	0.9	eA US High Yield Fixed Inc Gross Median	6.5%	5.8%	1.1

## **Global Fixed Income Managers**

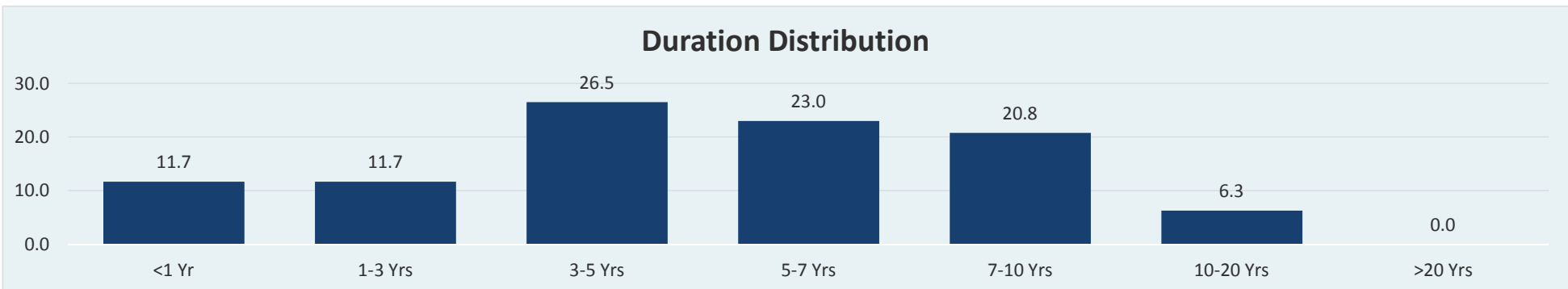
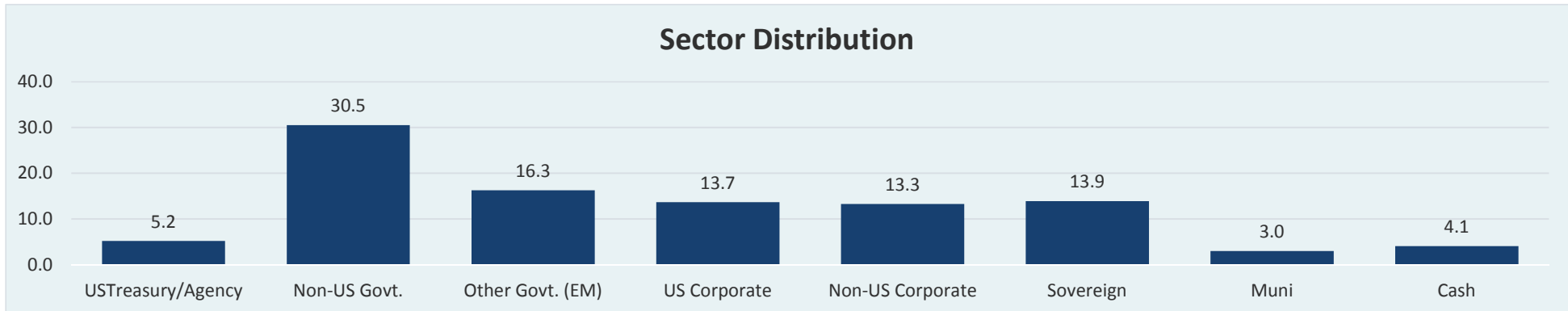
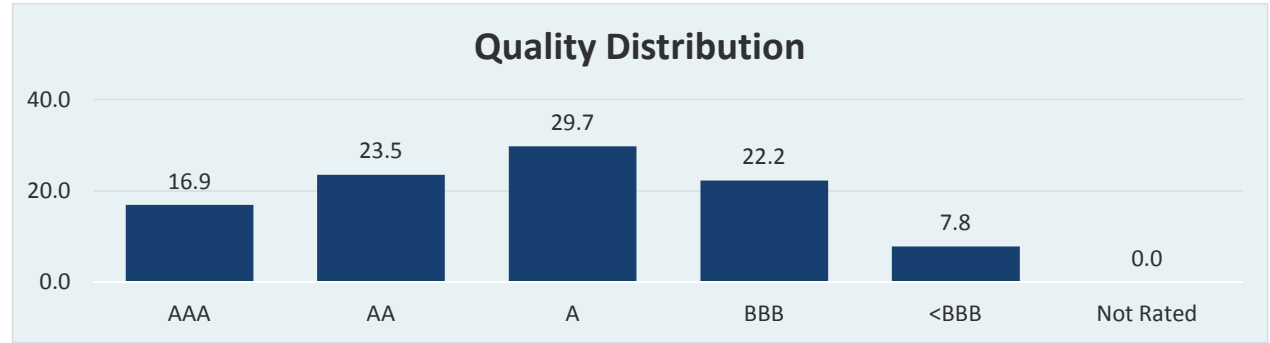
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Lazard  
 Manager Portfolio Overview

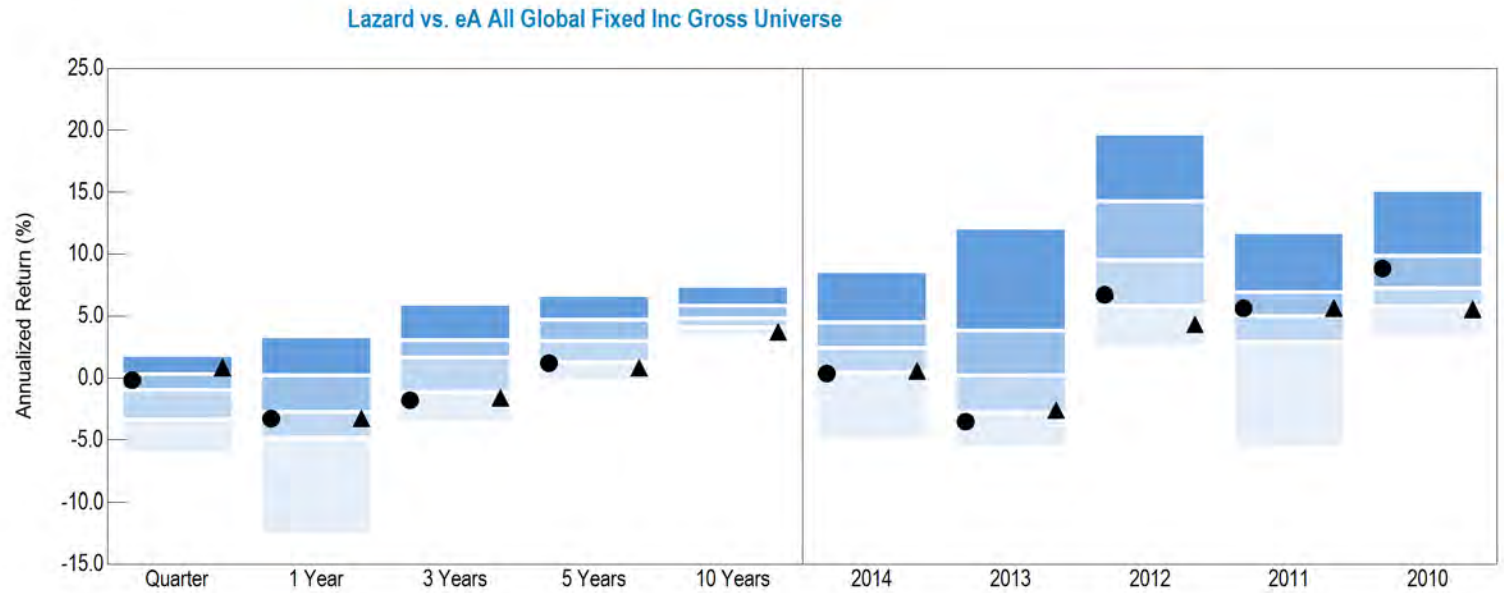
Period Ending: September 30, 2015

Global core fixed income portfolio with a focus on country selection and currency management. Primary personnel include Yvette Klevan, Benjamin Dietrich, and Jared Daniels.

	Lazard
Effective Duration	5.43
Average Maturity	6.7
Average Quality	A

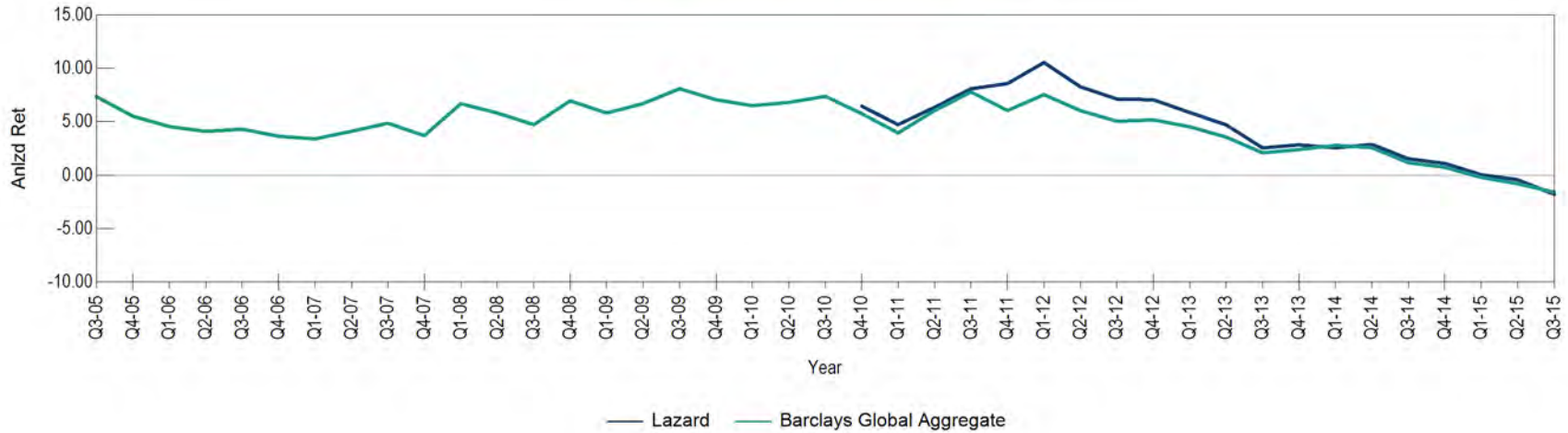




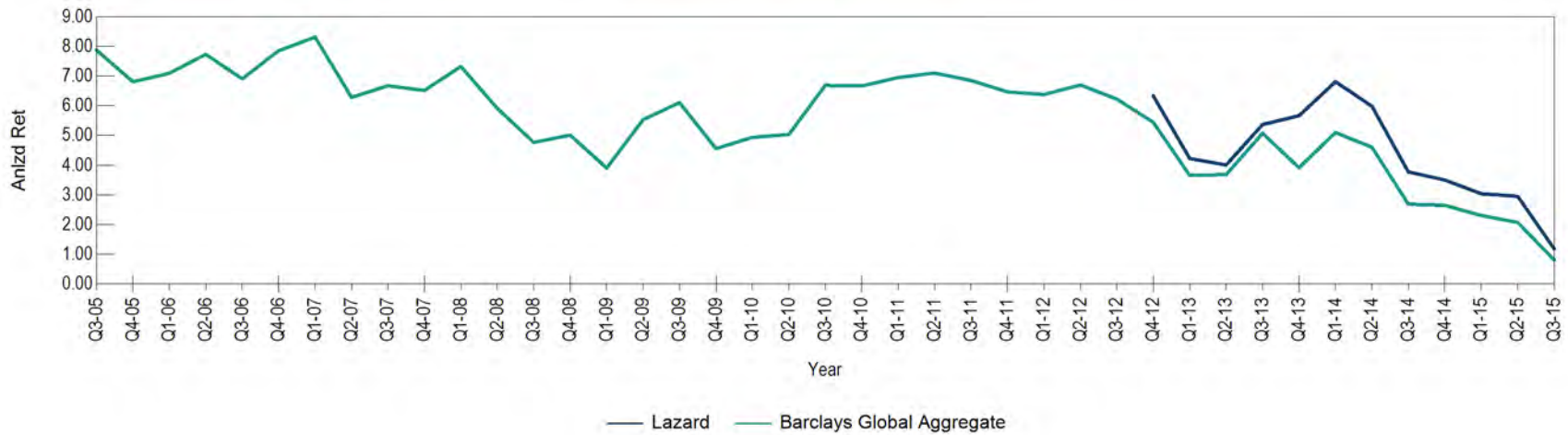


	Return (Rank)									
	Quarter	1 Year	3 Years	5 Years	10 Years	2014	2013	2012	2011	2010
5th Percentile	1.8	3.3	6.0	6.7	7.4	8.6	12.1	19.7	11.7	15.2
25th Percentile	0.4	0.2	3.1	4.7	5.9	4.5	3.9	14.3	6.9	9.9
Median	-0.9	-2.7	1.7	3.0	4.8	2.5	0.2	9.5	5.0	7.3
75th Percentile	-3.3	-4.8	-1.1	1.3	4.1	0.5	-2.8	5.9	2.9	5.8
95th Percentile	-6.1	-12.6	-3.6	-0.2	3.4	-4.9	-5.6	2.5	-5.5	3.4
# of Portfolios	301	298	275	221	126	263	225	197	171	100
● Lazard	-0.2 (37)	-3.3 (60)	-1.8 (83)	1.2 (78)	-- (--)	0.4 (77)	-3.5 (83)	6.7 (68)	5.6 (40)	8.8 (32)
▲ Barclays Global Aggregate	0.9 (16)	-3.3 (60)	-1.6 (82)	0.8 (84)	3.7 (87)	0.6 (74)	-2.6 (74)	4.3 (87)	5.6 (39)	5.5 (82)

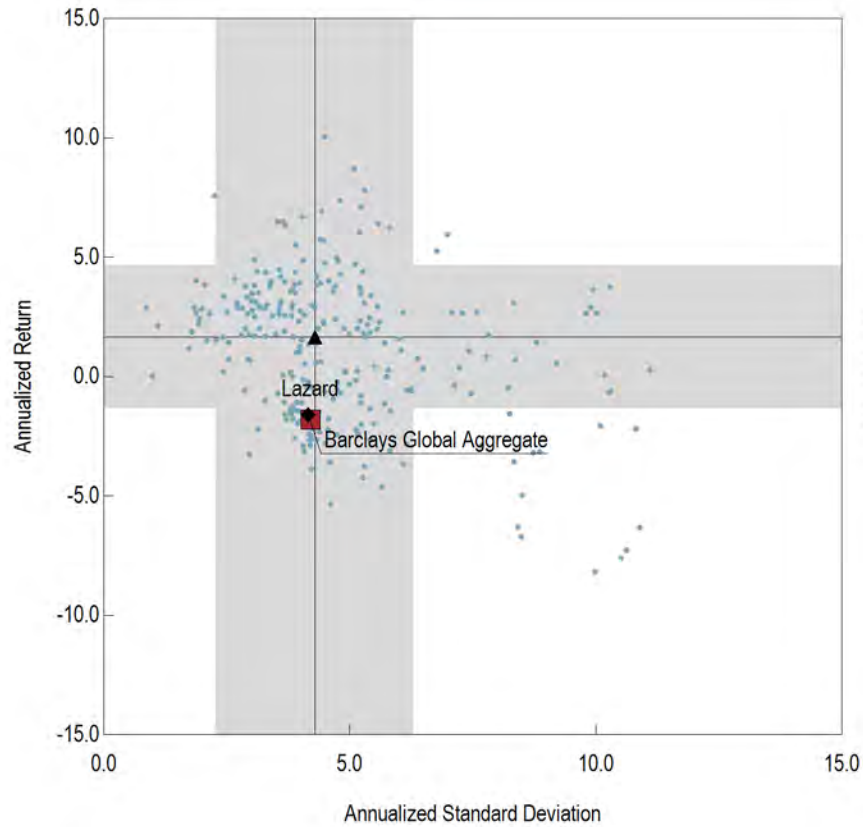
Rolling 3 Year Annualized Return (%)



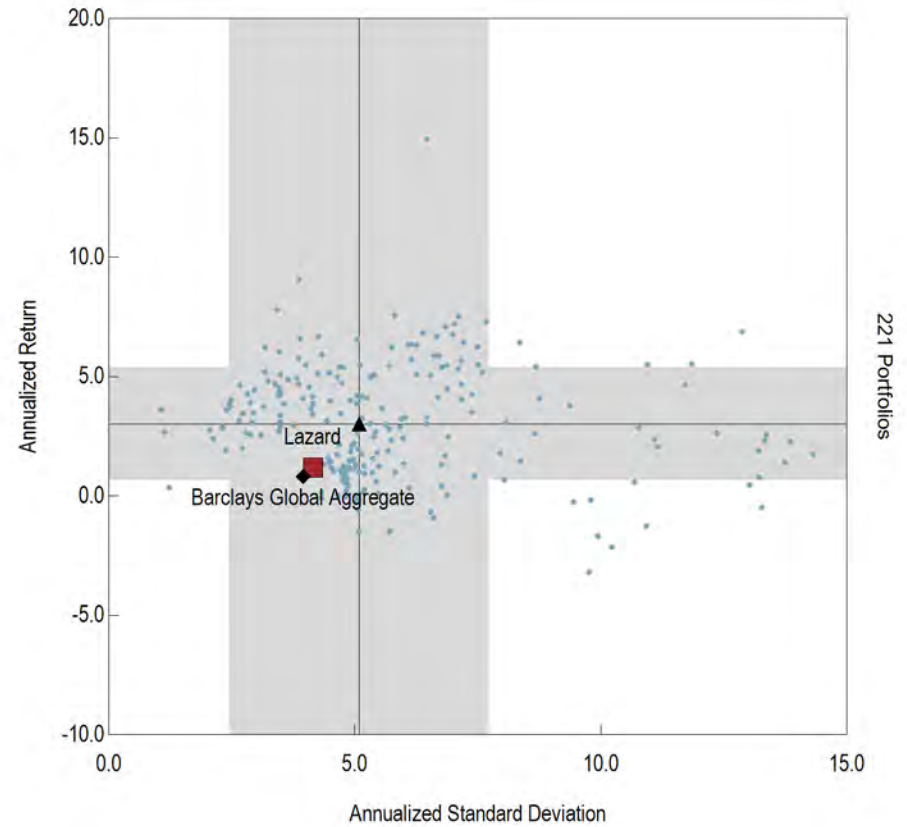
Rolling 5 Year Annualized Return (%)



3 Years



5 Years



3 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
Lazard	-1.8%	4.2%	-0.4
Barclays Global Aggregate	-1.6%	4.1%	-0.4
eA All Global Fixed Inc Gross Median	1.7%	4.3%	0.3

5 Years

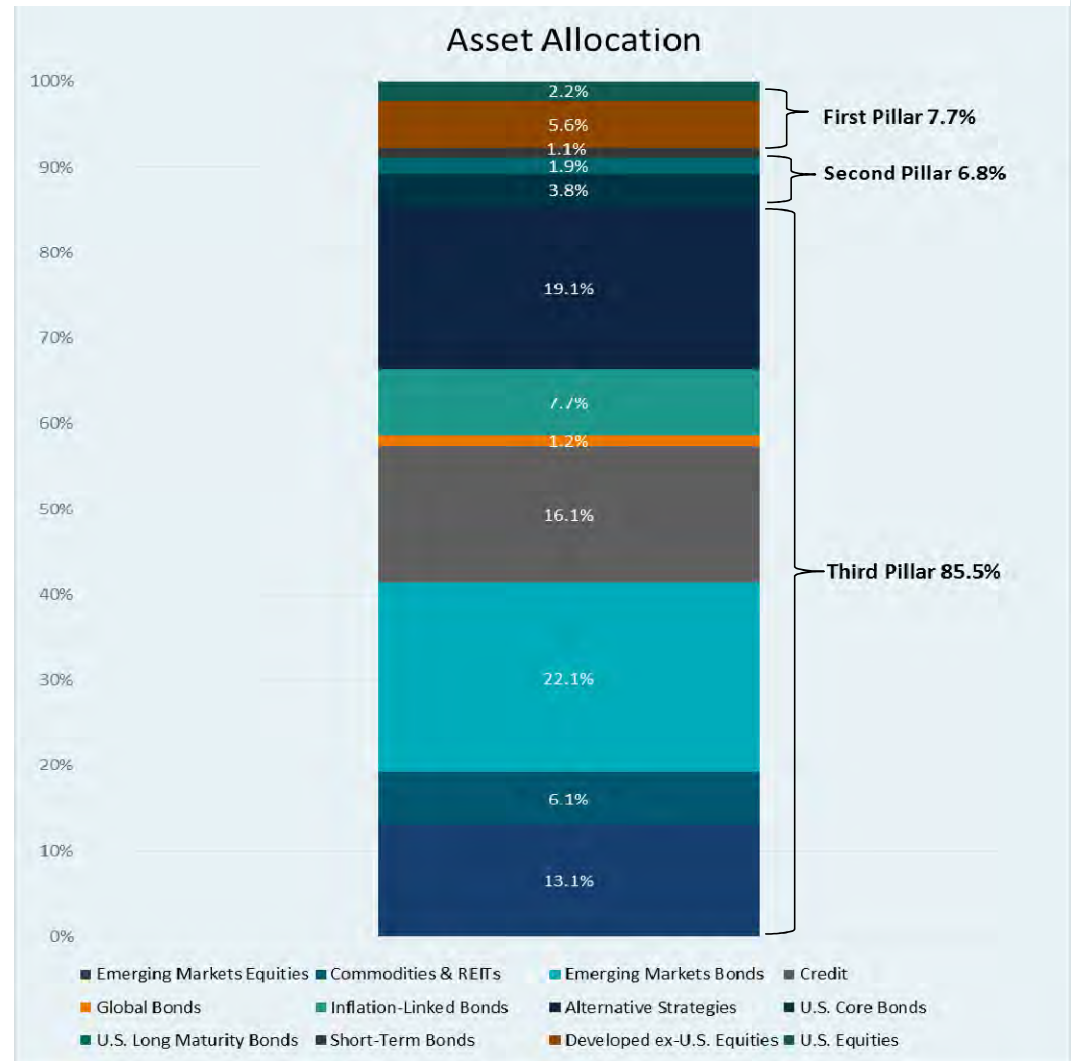
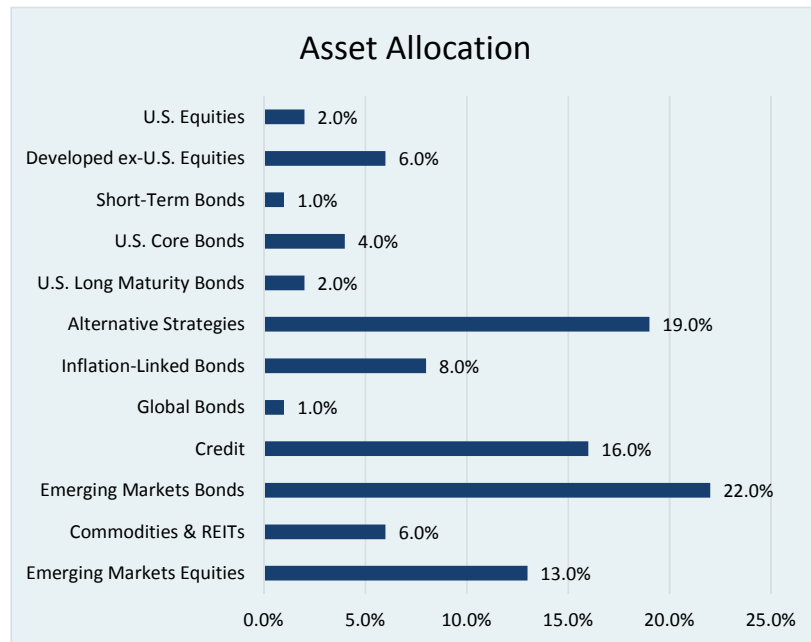
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio
Lazard	1.2%	4.1%	0.3
Barclays Global Aggregate	0.8%	3.9%	0.2
eA All Global Fixed Inc Gross Median	3.0%	5.1%	0.6

## Inflation Hedge Managers

---

Tactical multi-asset class real return strategy with a primary focus on inflation protection and a secondary focus on enhanced returns

	PIMCO All Asset
Effective Duration	2.61
Sharpe Ratio (10 year)	0.27
Volatility (10 Year)	9.3%
Equity Beta (10 Year)	0.46

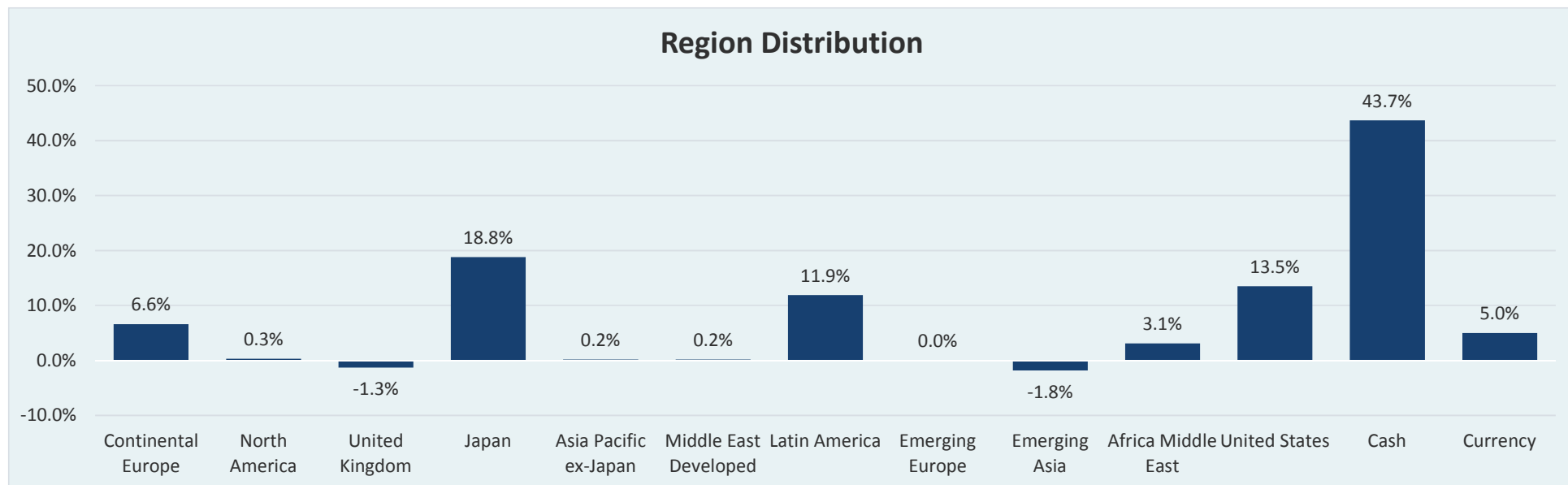
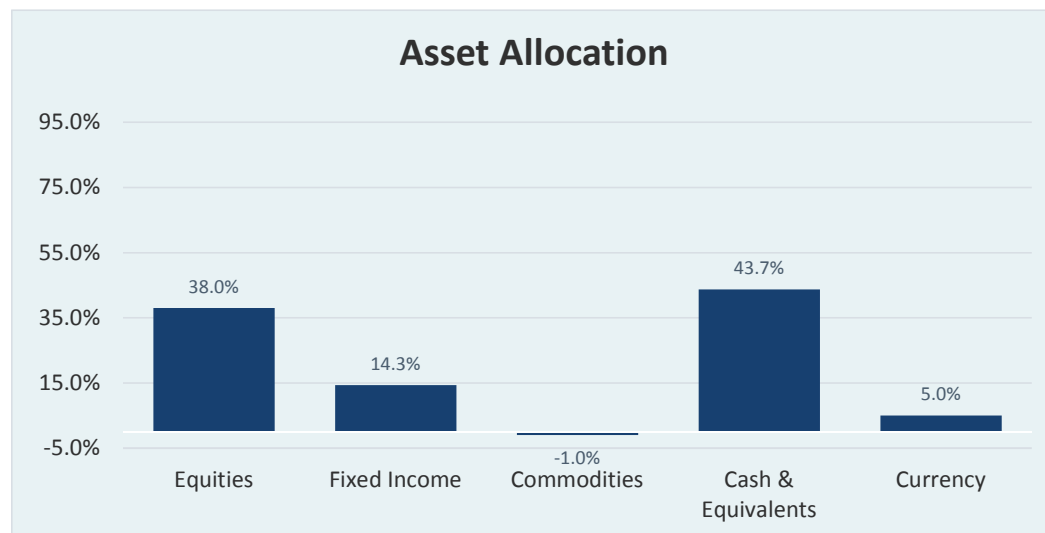


# Wellington Total Return Manager Portfolio Overview

Period Ending: September 30, 2015

Tactical multi-asset class real return strategy with a focus on managing risk of active strategies used to gain exposure to attractive assets of markets.

Wellington Total Return	
Number of Equity Holdings	514
Number of Commodity Holdings	107.00
Effective Duration (Years)	5.30
Average Quality	Aa1



## Real Estate Managers

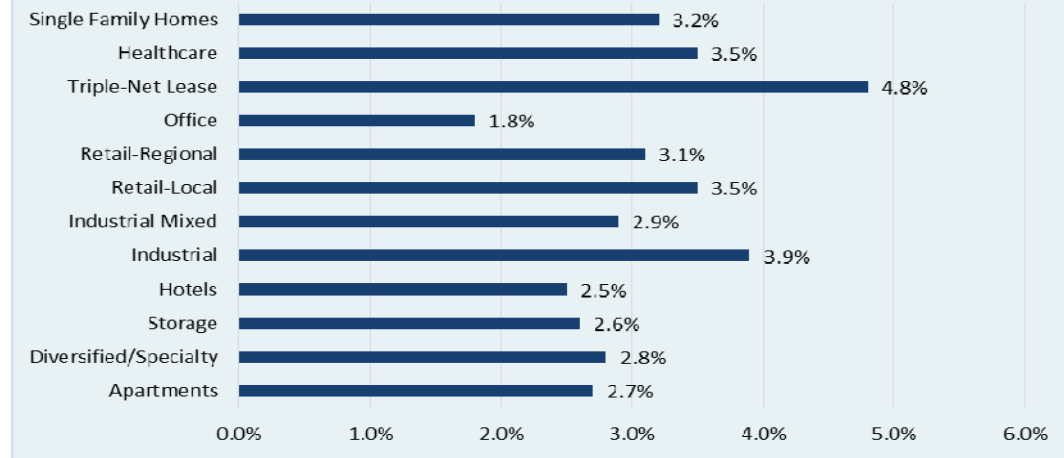
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Diversified portfolio of U.S. REITs with a focus on the underlying real estate assets

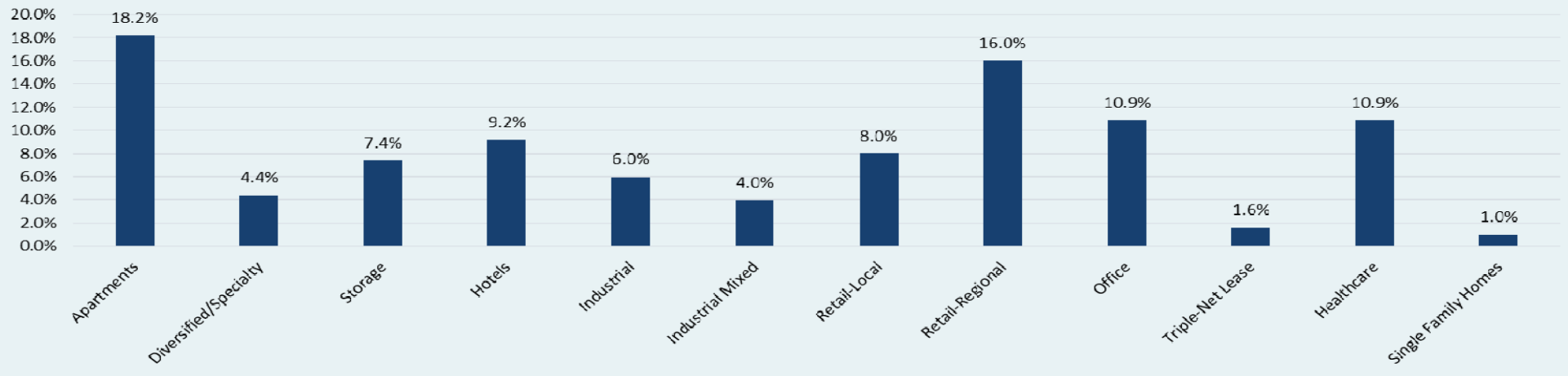
**Top Five Holdings**

Company	Property Type	Allocation
Simon Property Group	Retail-Regional	11.1%
Equity Residential	Apartment	7.1%
Welltower Inc.	Healthcare	5.9%
Avalon Bay Communities Inc.	Apartment	4.7%
Public Storage	Storage	4.7%

**Dividend Yield by Property Type**



**Property Type Allocation**





# Invesco Global ex-US Real Estate Manager Portfolio Overview

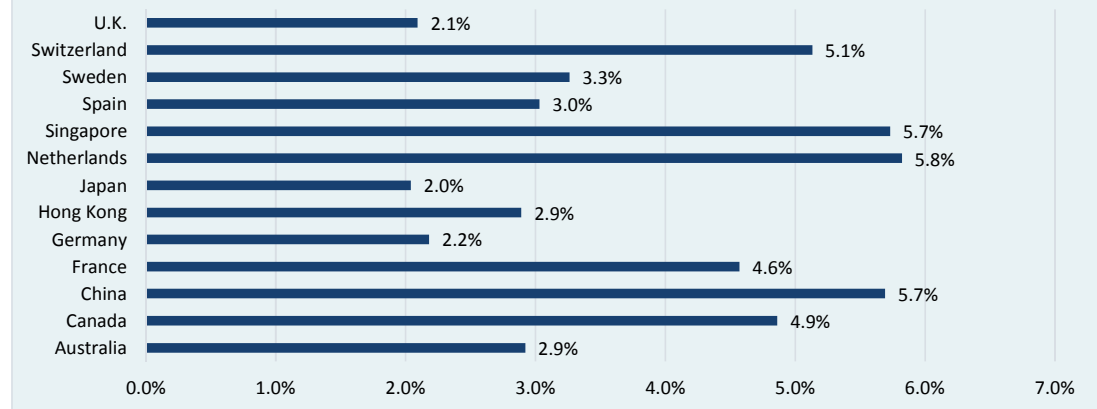
Period Ending: September 30, 2015

Diversified portfolio of non-US REITs with a focus on cash flow and dividends

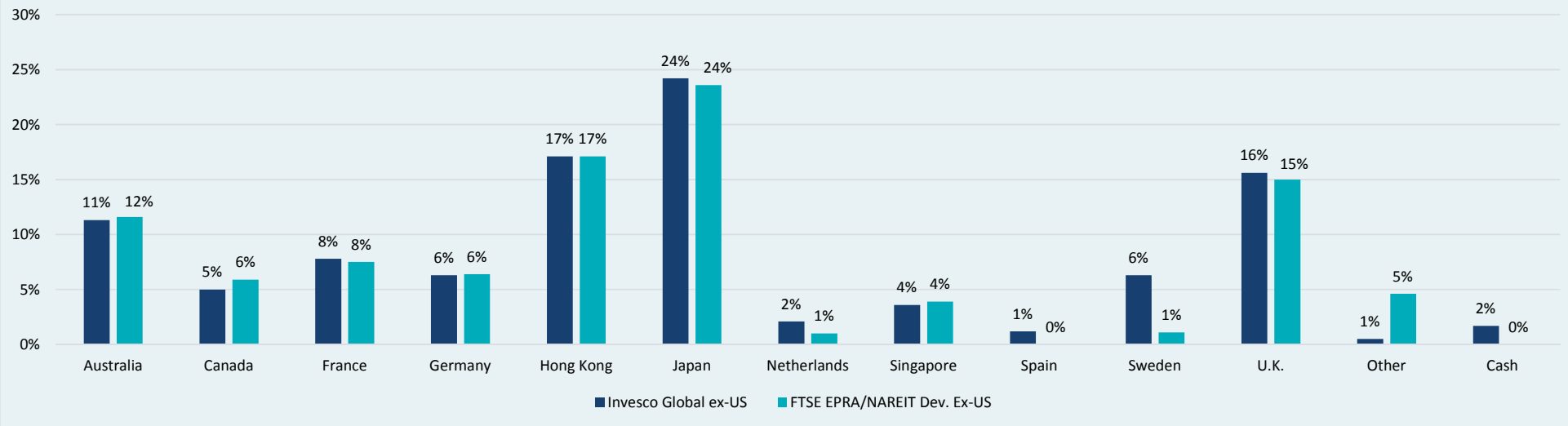
## Top Five Holdings

Holding	Country	Allocation
Land Securities PLC	U.K.	6.8%
Mitsui Fudosan Co.	Japan	6.7%
Mitsubishi Estate	Japan	6.6%
Unibail-Rodamco SE	France	4.7%
Sun Hung Kai Property	Hong Kong	4.1%

## Dividend Yield by Country



## Country Allocation vs. Benchmark



# Total Fund Explanatory Notes

Period Ending: September 30, 2015

## Performance Return Calculations

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

## Data Source

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

## Illiquid Alternatives

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

## Manager Line Up

Manager	Inception Date	Data Source	Manager	Inception Date	Data Source
Intech Large Cap Core	11/10/2006	State Street	LaSalle Income & Growth VI	07/16/2013	LaSalle
PIMCO Stocks+ AR	08/31/2002	State Street	Long Wharf Fund II	03/10/2004	Long Wharf
Jackson Square Partners	05/01/2005	State Street	Long Wharf Fund III	03/30/2007	Long Wharf
Robeco Boston Partners	06/01/1995	State Street	Long Wharf Fund IV	07/03/2013	Long Wharf
Emerald Advisors	04/07/2003	State Street	Hearthstone II	06/17/1998	Hearthstone
Ceredex	11/06/2011	State Street	Invesco Real Estate I	02/01/2005	Invesco
Pyrford	04/25/2014	State Street	Invesco Real Estate II	11/26/2007	Invesco
William Blair	10/29/2010	William Blair	Invesco Real Estate III	06/30/2013	Invesco
Artisan Partners	10/01/2012	SEI Trust	Invesco Real Estate IV	06/30/2014	Invesco
First Eagle	01/18/2011	State Street	Oaktree REOF V	12/31/2011	Oaktree
Intech Global Low Vol	05/06/2012	State Street	Oaktree REOF VI	09/30/2013	Oaktree
JP Morgan Global Opportunities	01/31/2010	JP Morgan	Oaktree REOF VII	04/01/2015	Oaktree
AFL-CIO	06/30/1991	AFL-CIO	Siguler Guff DREOF	01/25/2012	Siguler Guff
Goldman Sachs Core Plus	11/01/2008	State Street	Siguler Guff DREOF II	08/31/2013	Siguler Guff
Lord Abbett	10/22/2008	State Street	Paulson Real Estate Fund II	11/10/2013	State Street
PIMCO Total Return	05/31/2002	State Street	Adams Street Partners	03/18/1996	Adams Street
Torchlight II	09/30/2006	Torchlight	Adams Street Partners II	01/16/2009	Adams Street
Torchlight III	12/31/2008	Torchlight	Adams Street Partners - BFP	01/18/1996	Adams Street
Torchlight IV	07/01/2012	Torchlight	Adams Street Partners - Fund 5	09/21/2012	Adams Street
Torchlight V	07/01/2012	Torchlight	Bay Area Equity Fund	06/14/2004	DBL Investors
Allianz Global Investors	04/25/2000	State Street	Bay Area Equity Fund II	12/07/2009	DBL Investors
Lazard	12/31/2007	State Street	Carpenter Bancfund	01/31/2008	Carpenter Bancfund
PIMCO All Asset Fund	02/26/2013	State Street	EIF US Power Fund I	11/26/2003	Ares Management
Wellington Real Total Return	02/26/2013	State Street	EIF US Power Fund II	08/16/2005	Ares Management
Aether Real Assets III	11/27/2013	Aether	EIF US Power Fund III	05/30/2007	Ares Management
Commonfund	06/28/2013	Commonfund	EIF US Power Fund IV	11/28/2011	Ares Management
Adelante	09/30/2001	State Street	Nogales	02/15/2004	Nogales
Invesco International REIT	06/30/2008	Invesco	Paladin III	11/30/2007	Paladin
Angelo Gordon Realty Fund VIII	01/23/2012	Angelo Gordon	Ocean Avenue Fund II	06/11/2014	Ocean Avenue
Angelo Gordon Realty Fund IX	12/08/2014	Angelo Gordon	Pathway	11/09/1998	Pathway
DLJ RECP II	09/24/1999	DLJ	Pathway 2008	12/26/2008	Pathway
DLJ RECP III	06/23/2005	DLJ	Pathway 6	05/24/2011	Pathway
DLJ RECP IV	02/11/2008	DLJ	Pathway 7	02/07/2013	Pathway
DLJ RECP V	07/01/2014	DLJ	Siguler Guff CCCERA Opps	06/03/2014	Siguler Guff
Willows Office	-	Transwestern	Cash	-	State Street

**Policy & Custom Index Composition**

Policy Index (4/1/2012-Current) 27.7% Russell 3000, 10.6% MSCI ACWI ex-US (Gross), 12.3% MSCI ACWI (Net), 19.6% Barclays U.S. Aggregate, 5% Bank of America High Yield Master II, 4% Barclays Global Aggregate, 13.5% Real Estate Benchmark, 6.8% S&P 500 +4% (Lagged), 0.5% 91-Day T-Bills.

Real Estate Benchmark 40% Wilshire REIT, 50% NCREIF Property Index, 10% FTSE/EPRA NAREIT Developed ex-USA.

**Other Disclosures**

All data prior to 12/31/2014 was provided by previous consultant.

# Glossary

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

**Alpha:** The excess return of a portfolio after adjusting for market risk. This excess return is attributable to the selection skill of the portfolio manager. Alpha is calculated as: Portfolio Return - [Risk-free Rate + 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:** A measure of systematic, or market risk; the part of risk in a portfolio or security that is attributable to general market movements. Beta is calculated by dividing the covariance of a security by the variance of the market.

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

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

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

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

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

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

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

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

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

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

**Sharpe Ratio:** A measure of portfolio efficiency. The Sharpe Ratio indicates excess portfolio return for each unit of risk associated with achieving the excess return. The higher the Sharpe Ratio, the more efficient the portfolio. Sharpe ratio is calculated as: 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:** 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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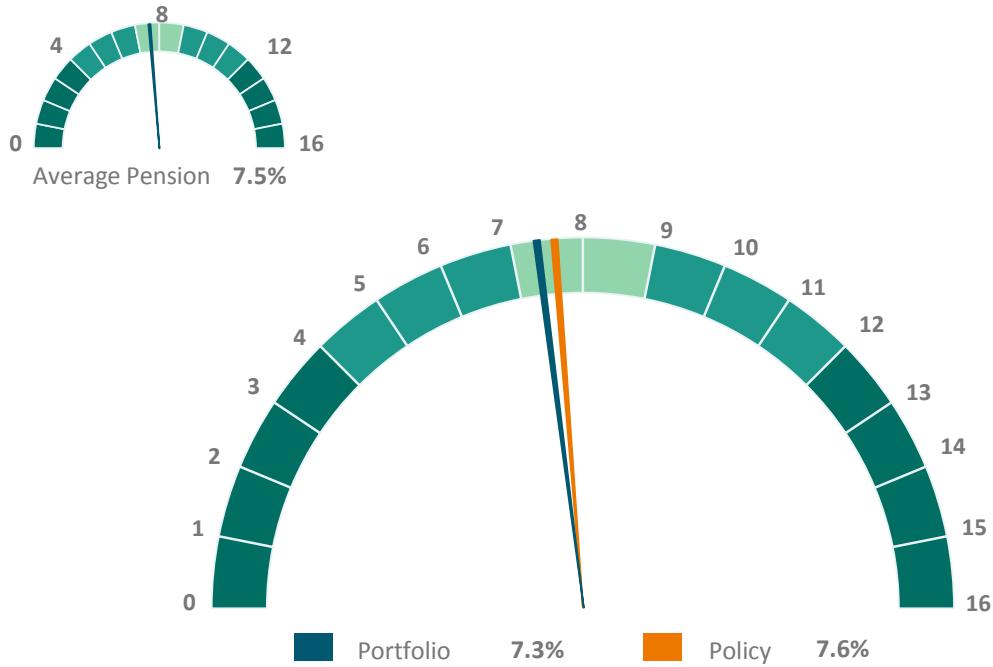
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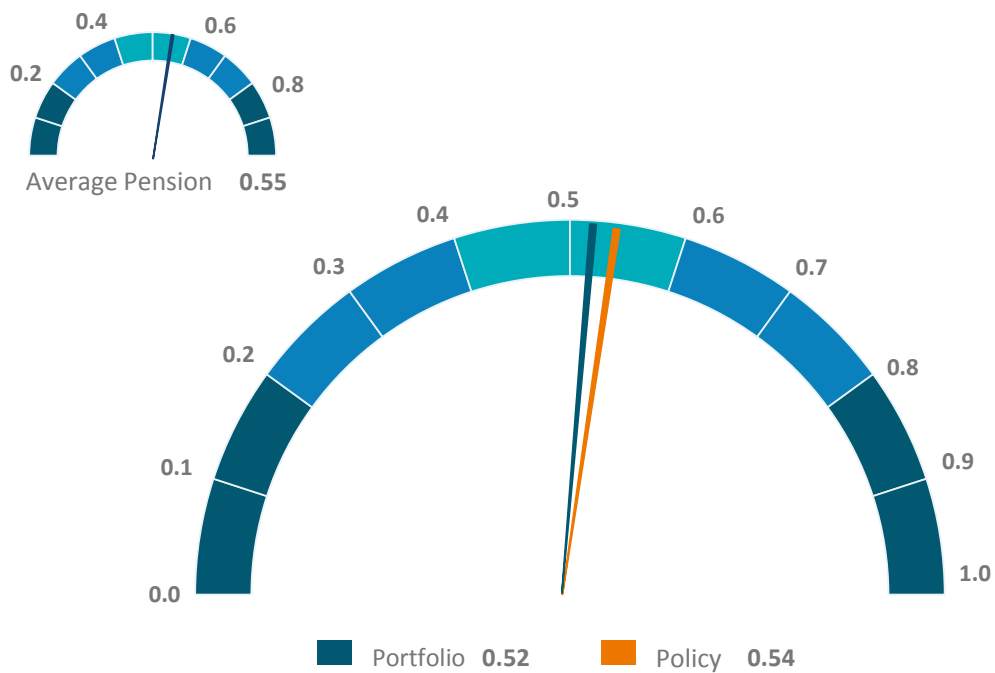
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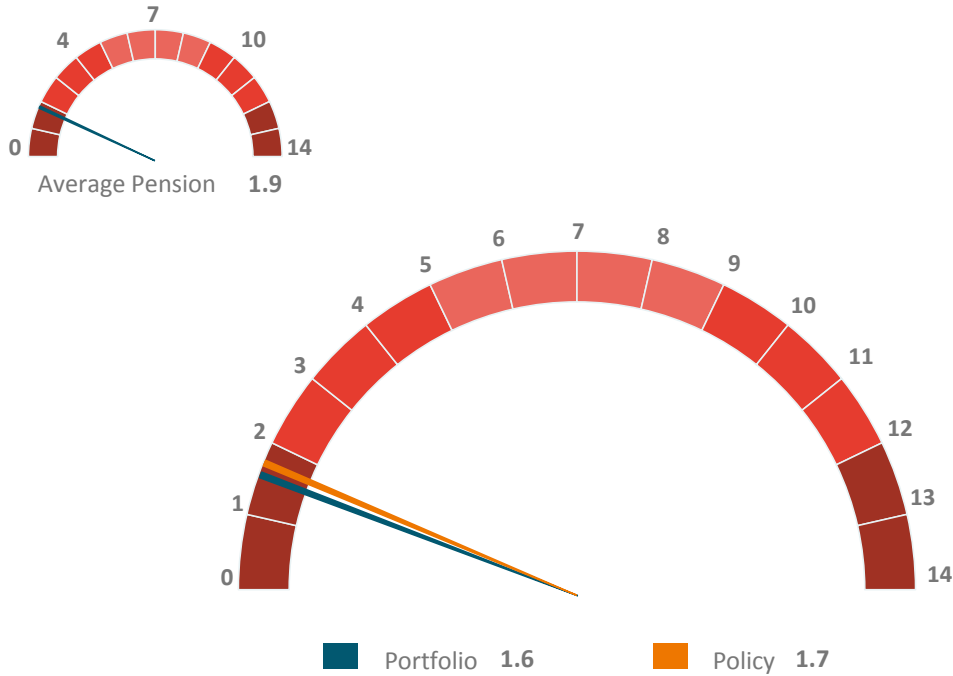
## 1 Portfolio risk



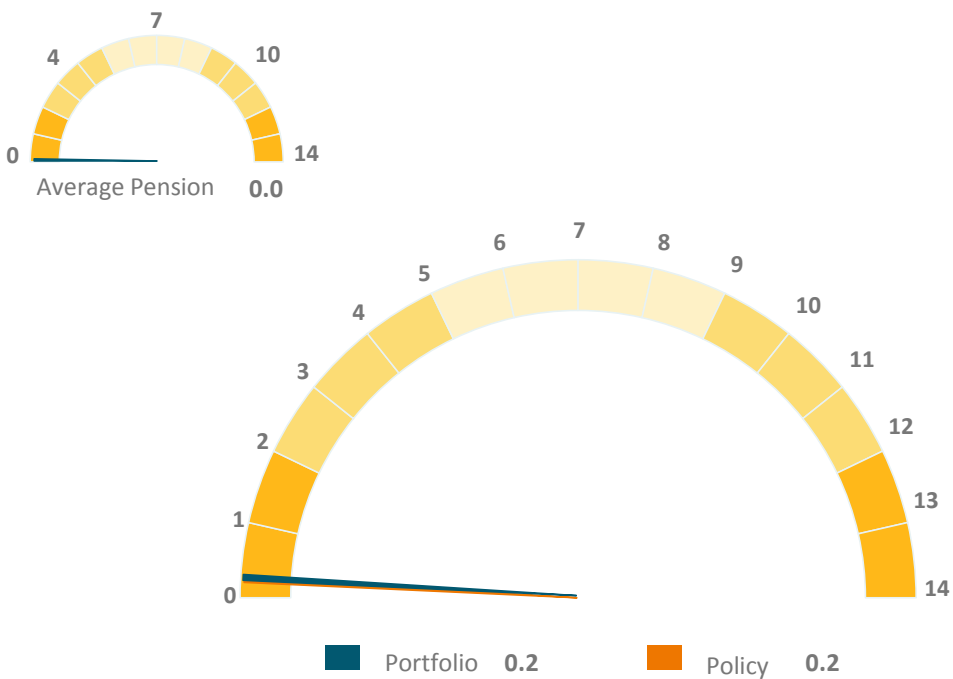
## 2 Portfolio equity beta



### 3 Portfolio interest rate risk - duration



### 4 Portfolio credit risk - spread duration



## 5 Exposure allocation by asset class

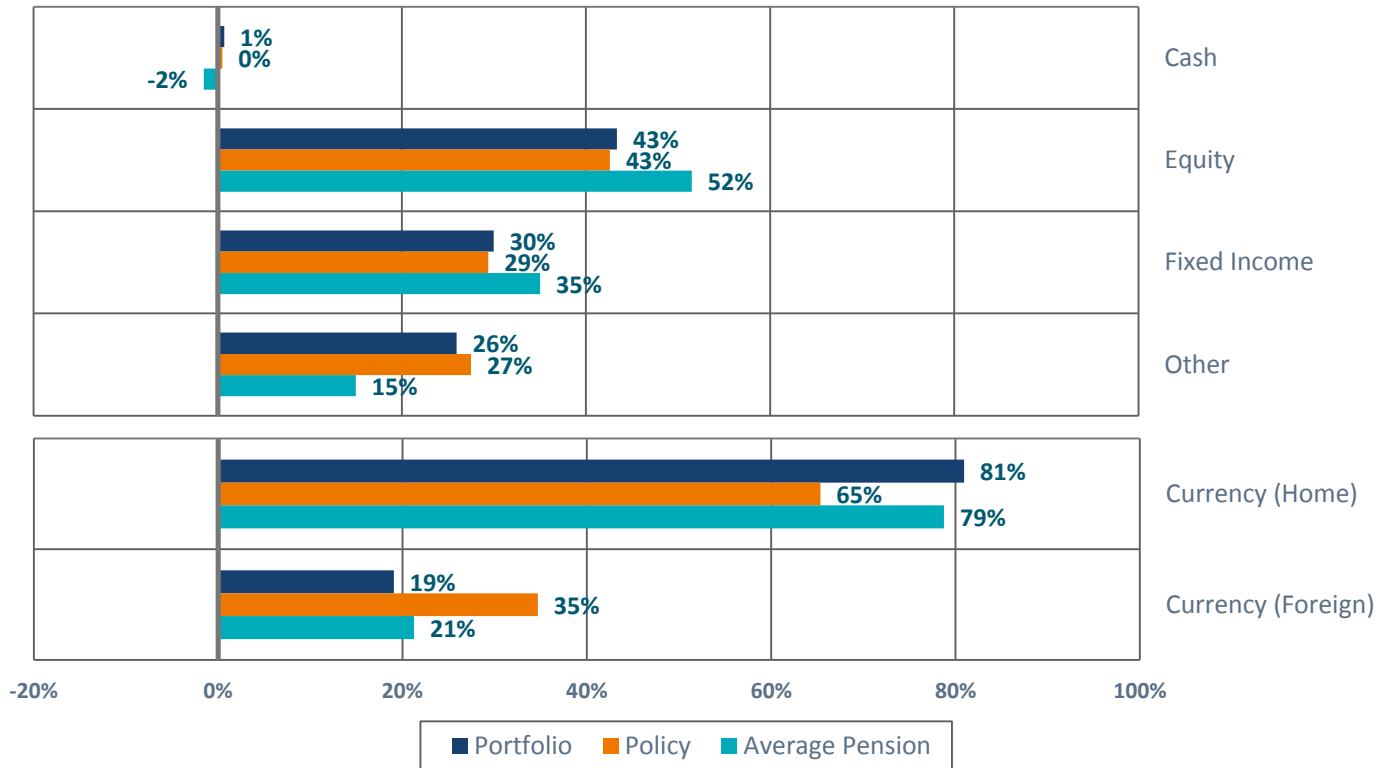
		Portfolio	Policy	Average Pension
Cash	Cash	0.7%	0.5%	-1.5%
<b>Cash Total</b>		<b>0.7%</b>	<b>0.5%</b>	<b>-1.5%</b>
Equity	Global Equity	11.7%	42.6%	45.0%
	Private Equity			6.5%
	Domestic Equity	21.5%		
	International Equity	10.1%		
<b>Equity Total</b>		<b>43.4%</b>	<b>42.6%</b>	<b>51.5%</b>
Fixed Income	Global Bonds	4.2%	24.4%	
	High Yield Bonds	5.0%	5.0%	
	US Bonds	20.8%		35.0%
<b>Fixed Income Total</b>		<b>30.0%</b>	<b>29.4%</b>	<b>35.0%</b>
Other	Real Estate	13.0%	12.5%	5.0%
	Hedge Fund	7.5%	10.0%	5.0%
	Commodities			5.0%
	Opportunistic	0.4%	0.0%	
	Real Assets	5.0%	5.0%	
<b>Other Total</b>		<b>26.0%</b>	<b>27.5%</b>	<b>15.0%</b>
<b>Total Portfolio</b>		<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>



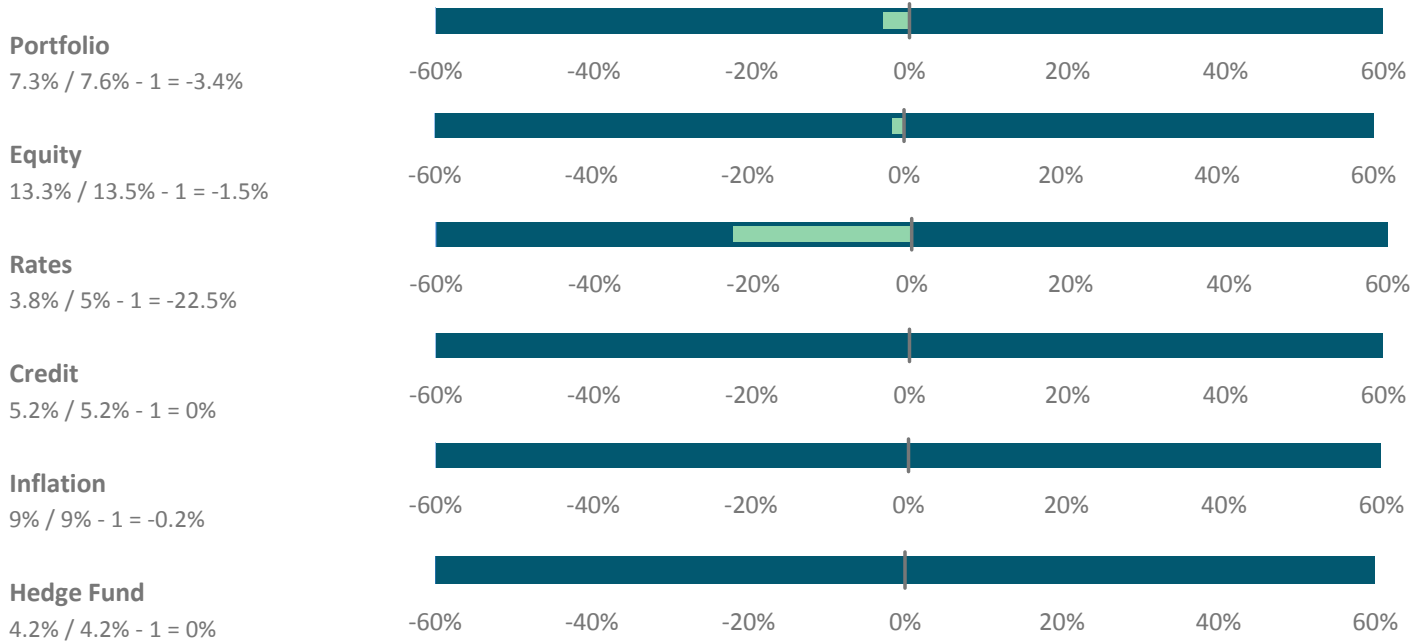
# Risk dashboard

Preliminary

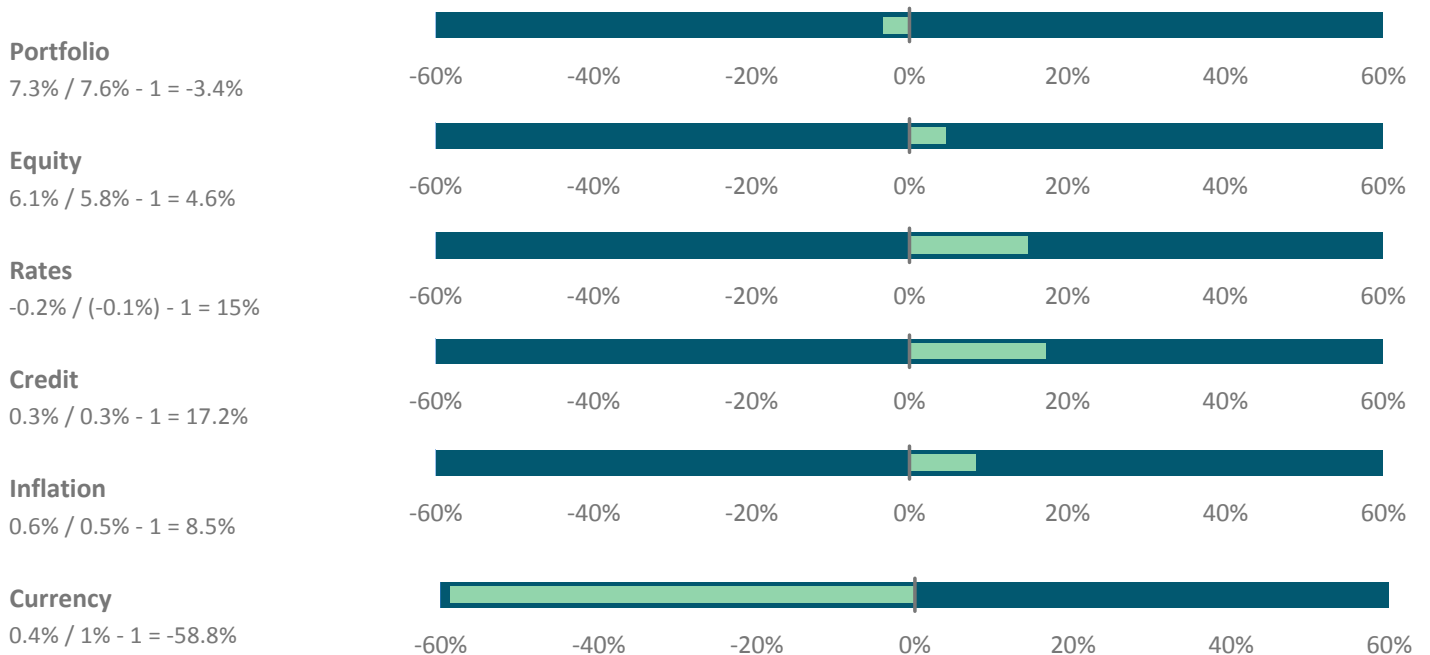
## 6 Exposure allocation



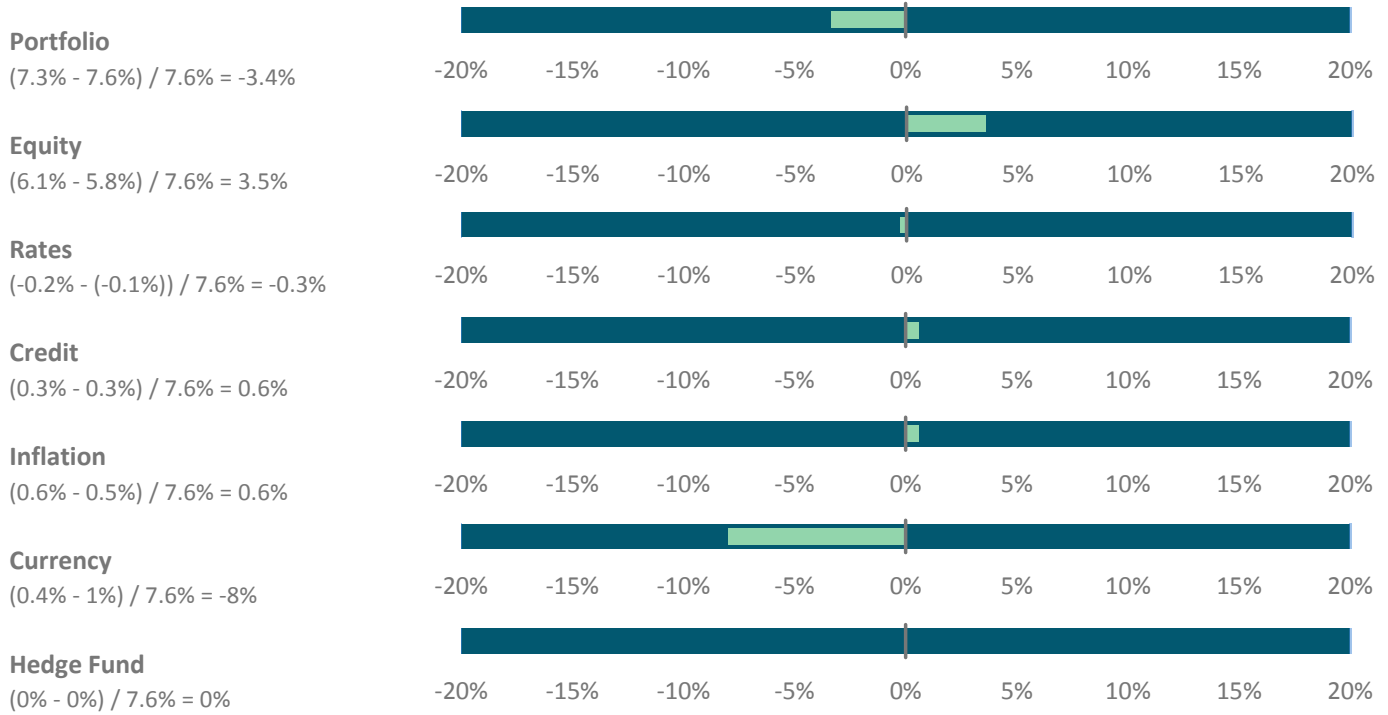
### 7 Relative risk vs target by bucket



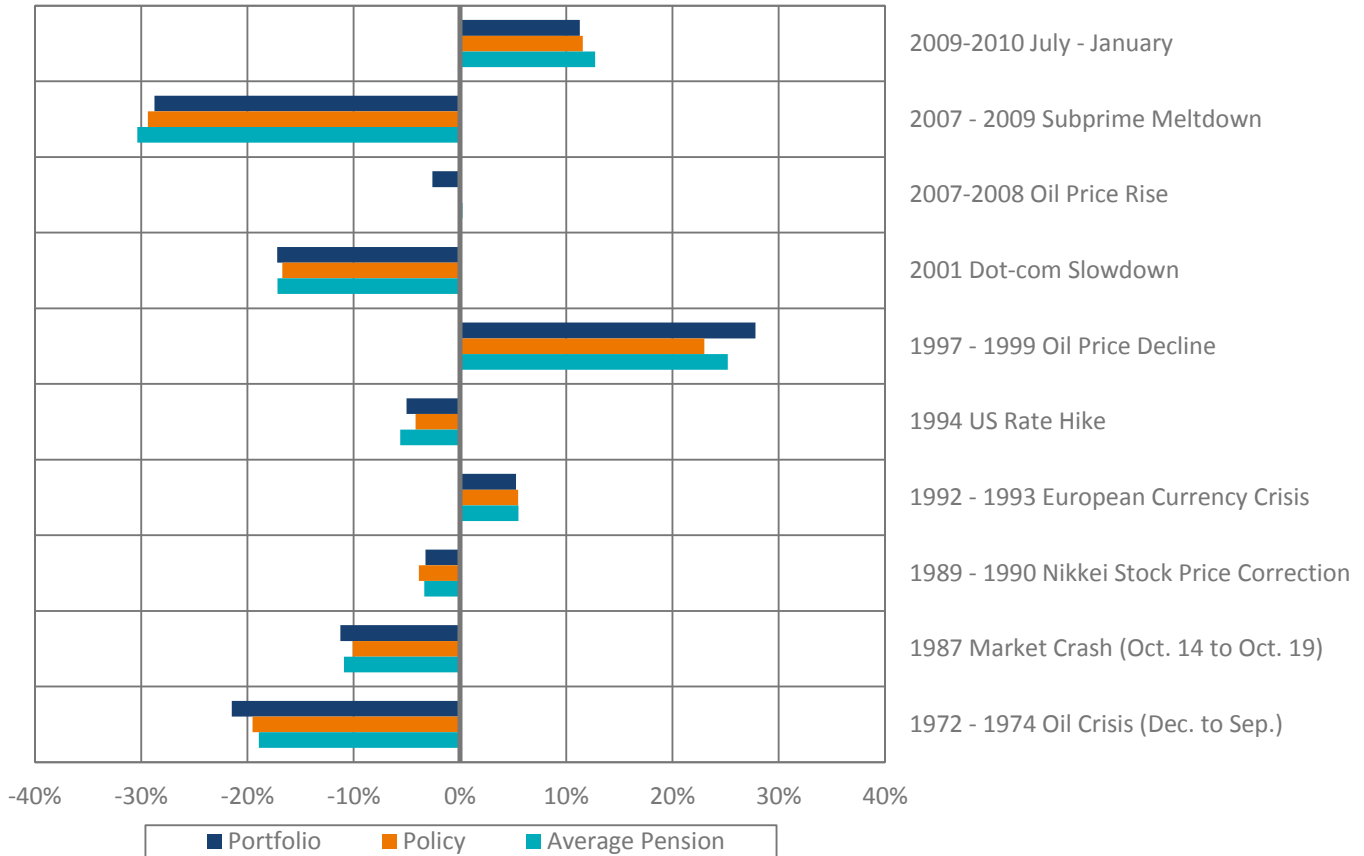
### 8 Relative risk vs target by risk factor



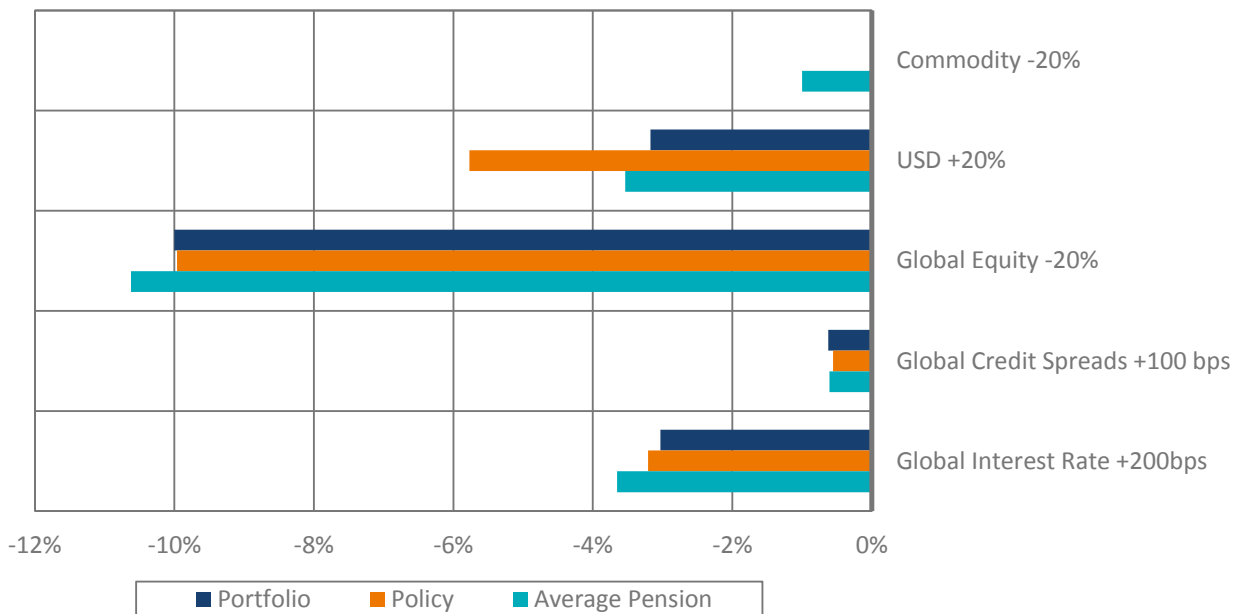
9 Risk factor weight relative to target



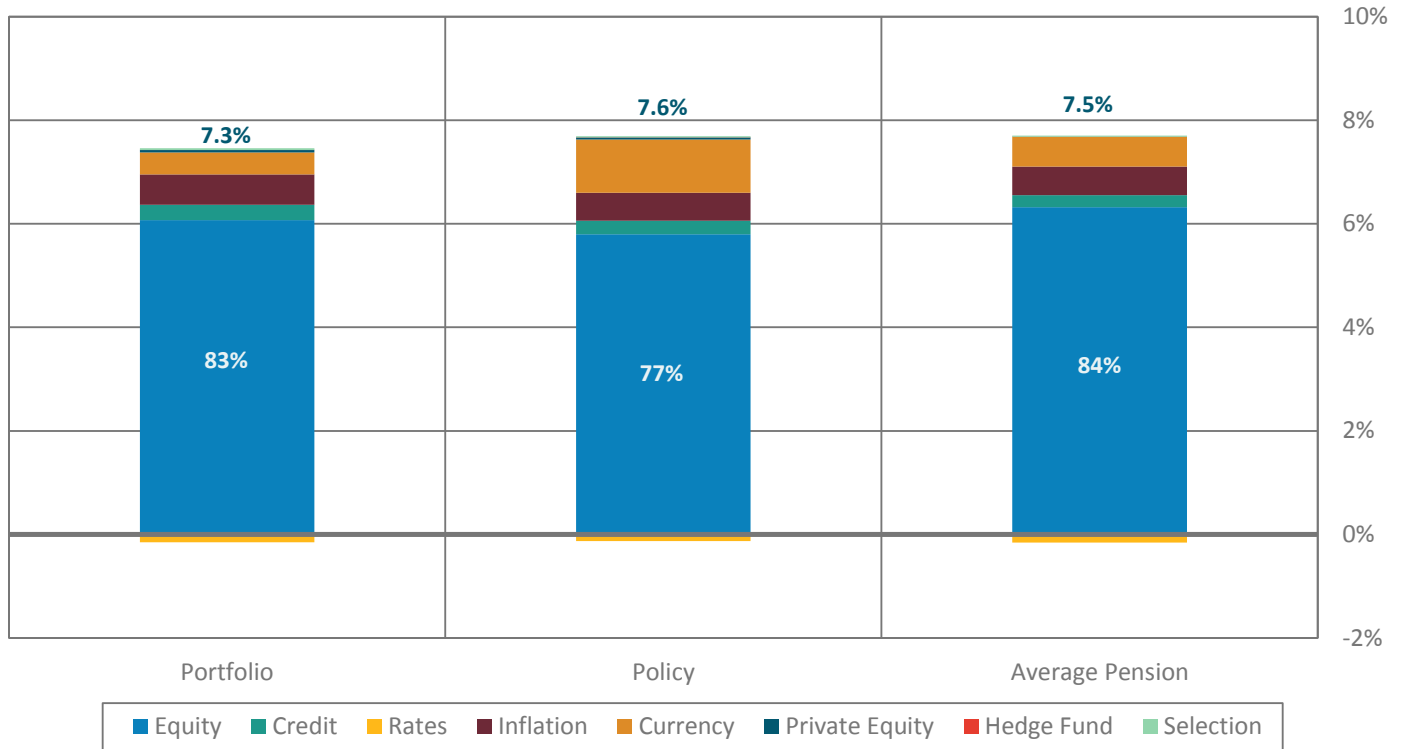
### 10 Tail risk - scenario analysis



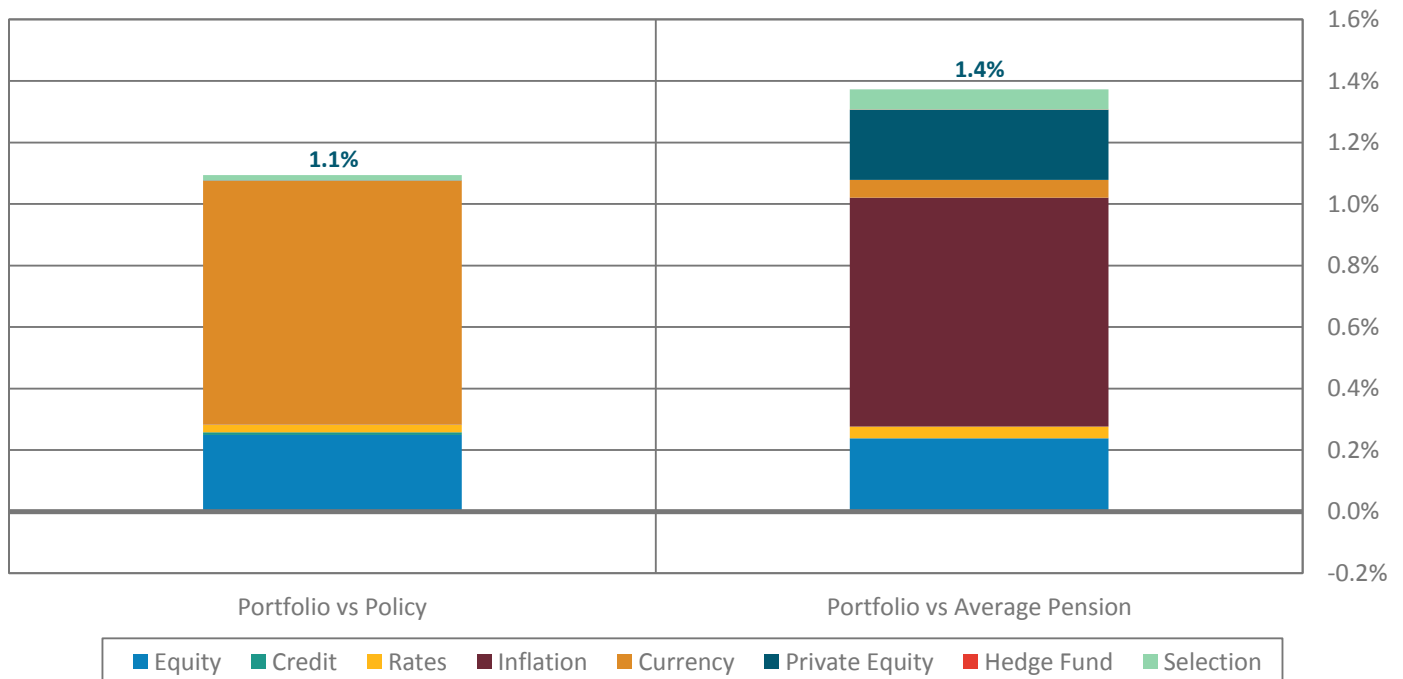
### 11 Tail risk - stress tests



## 12 Risk contribution by risk factor



## 13 Active risk contribution by risk factor

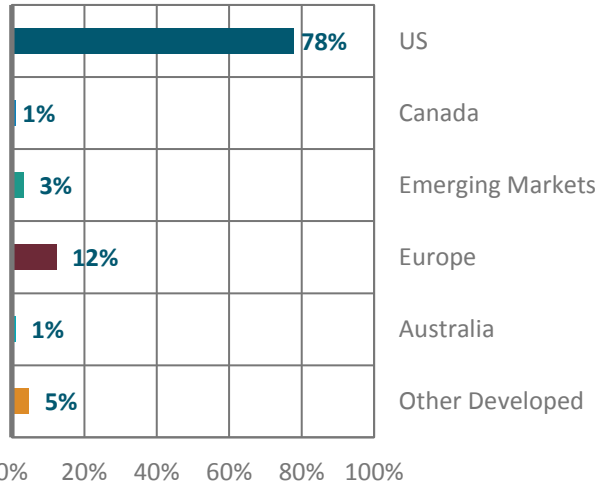


# Risk dashboard

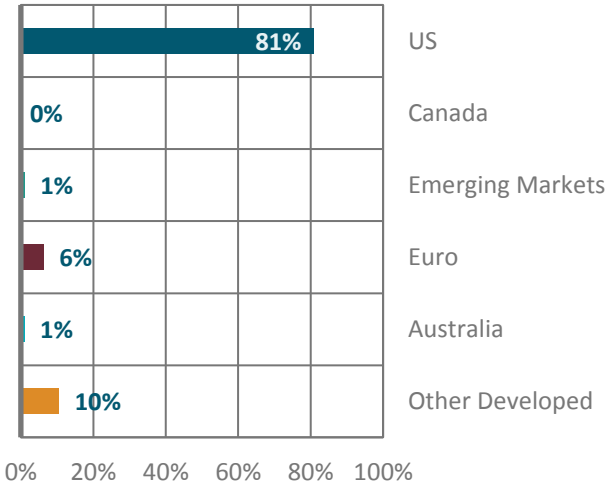
# Preliminary

SEPTEMBER 30, 2015  
 DIVERSIFICATION RISKS

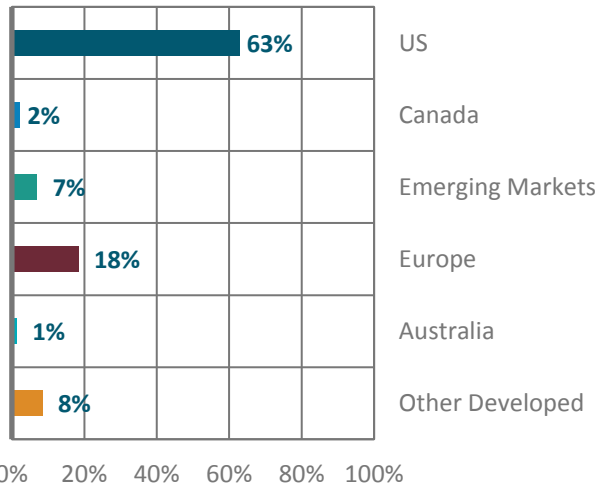
## 14 Geographic portfolio allocation



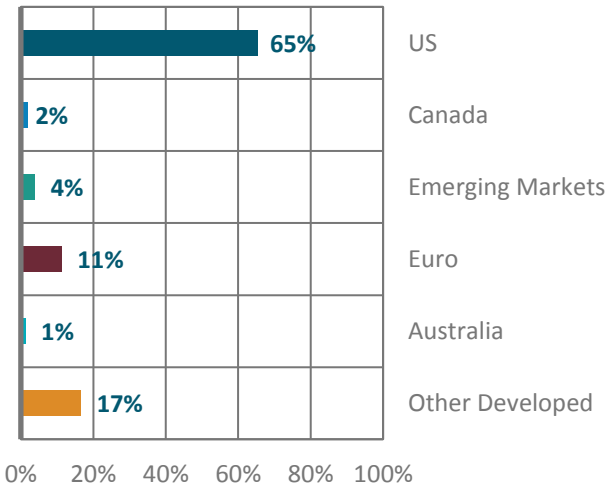
## 15 Currency portfolio allocation



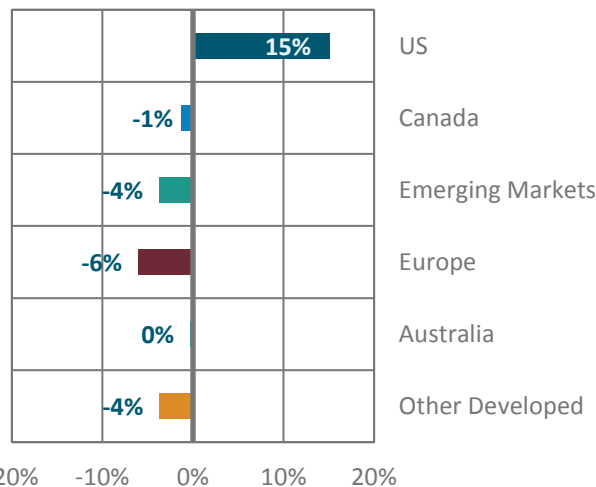
## 16 Geographic target allocation



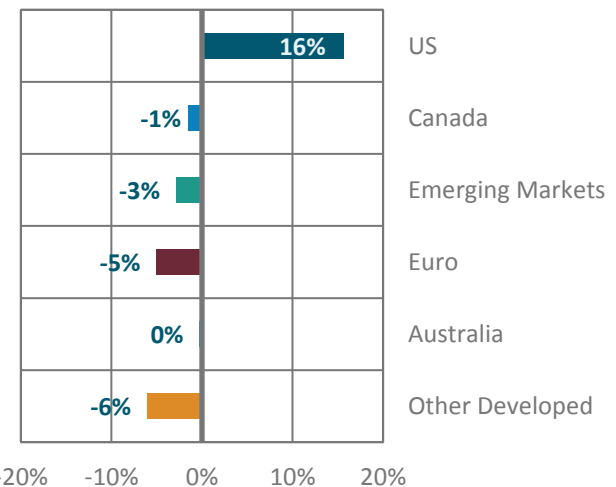
## 17 Currency target allocation



## 18 Net geographic exposure



## 19 Net currency exposure



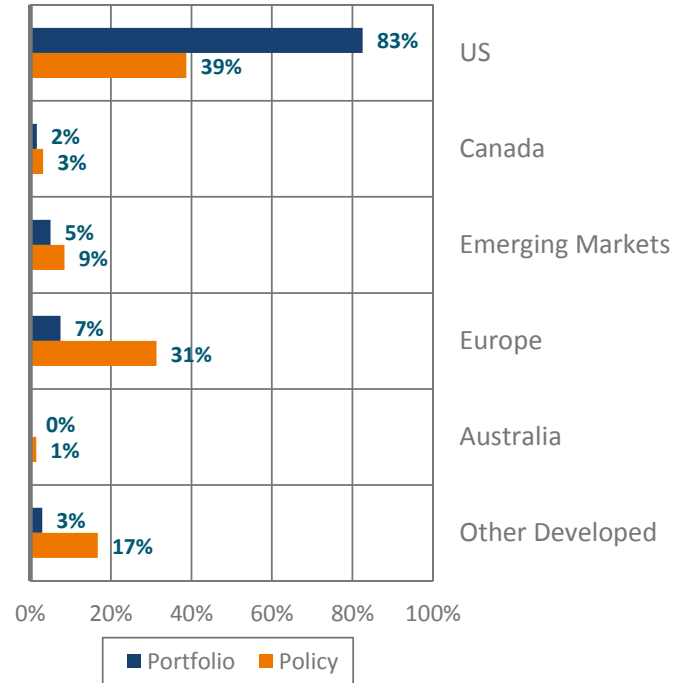
# Risk dashboard

Preliminary

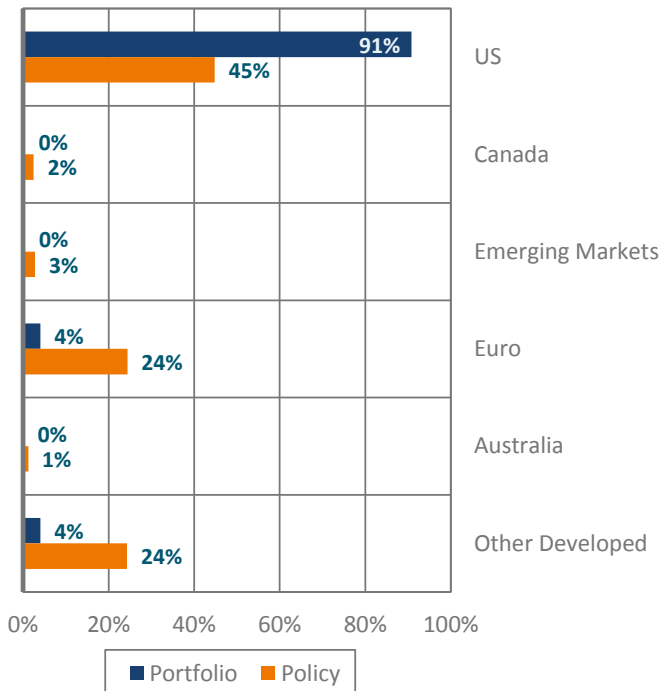
## 20 Interest rate bucket

	Portfolio	Policy	Difference
Duration	5.5	6.3	-0.8
Yield to Maturity	2.7%	2.0%	0.7%
Wt. Avg. Rating	Aa1 / Aa2	Aa2 / Aa3	-

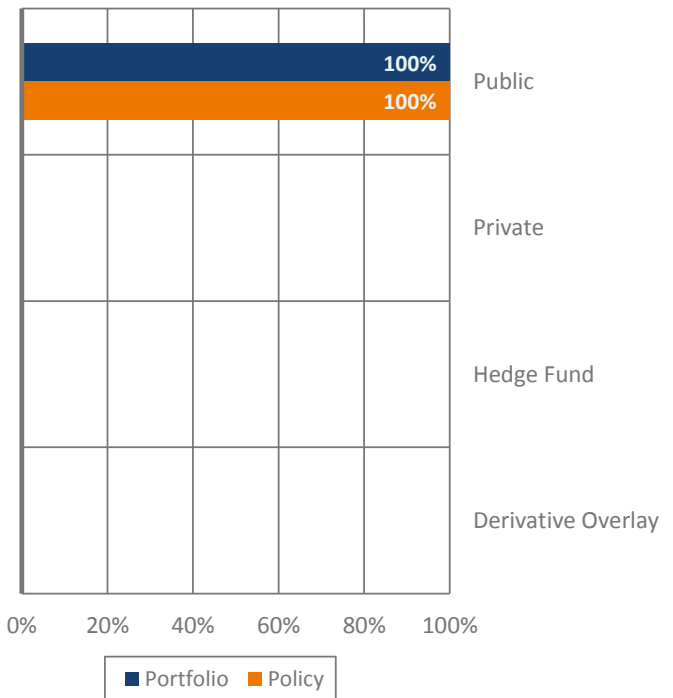
## 21 Country allocation



## 22 Currency allocation



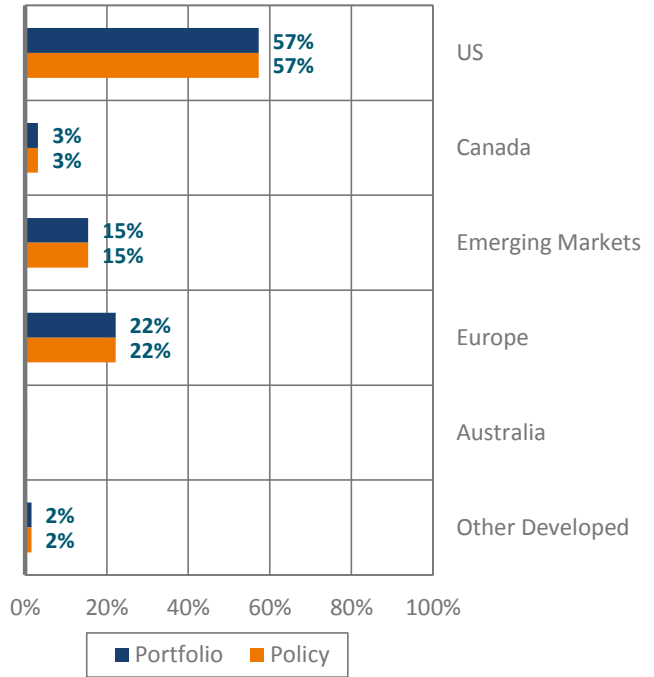
## 23 Security type



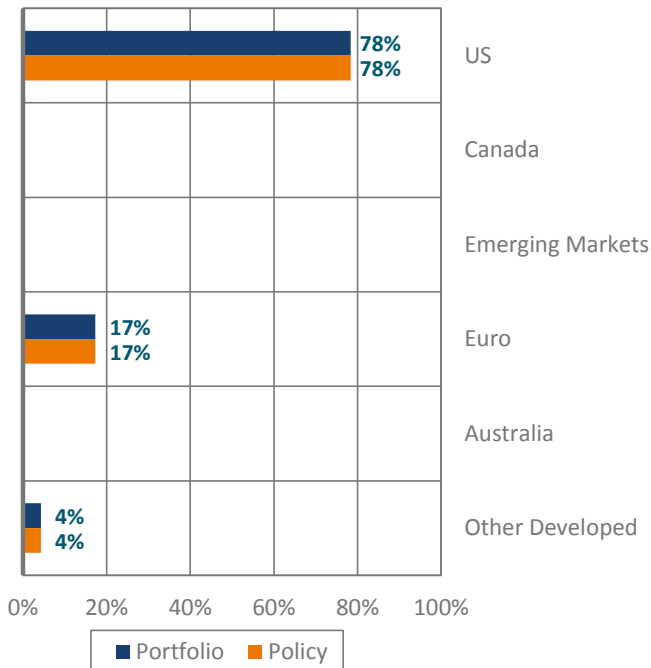
## 24 Credit bucket

	Portfolio	Policy	Difference
Duration	4.1	4.1	0.0
Coupon Yield	7.0%	7.0%	0.0%
Yield to Maturity	7.3%	7.3%	0.0%
Wt. Avg. Rating	Ba3 / B1	Ba3 / B1	-

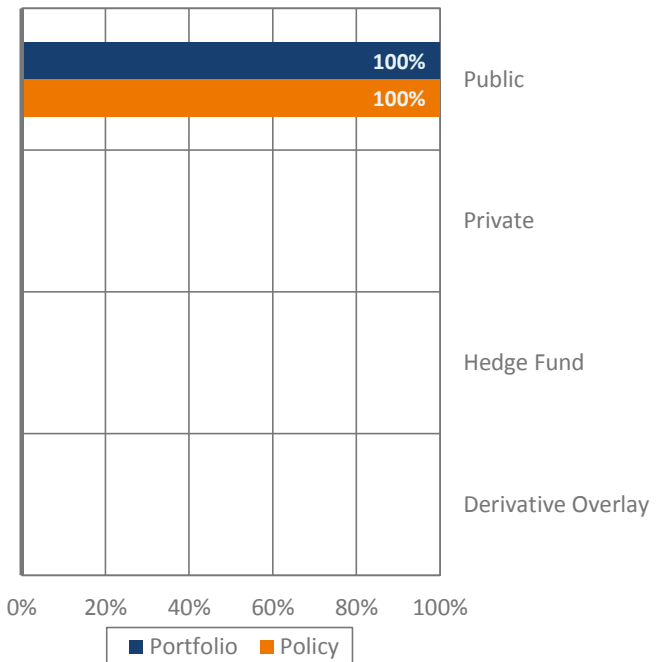
## 25 Country allocation



## 26 Currency allocation



## 27 Security type

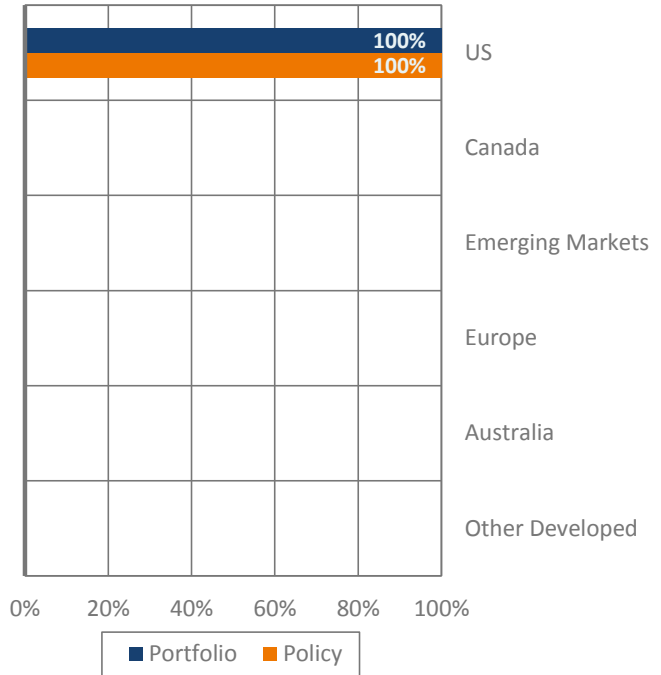




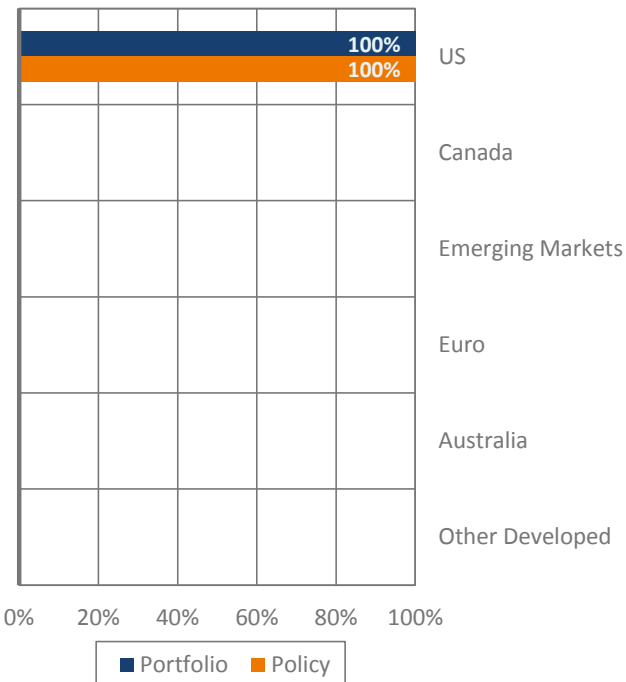
### 28 Inflation bucket

	Portfolio	Policy	Difference
Real Estate Allocation	13.0%	12.5%	0.5%
Other Real Assets	5.0%	5.0%	0.0%

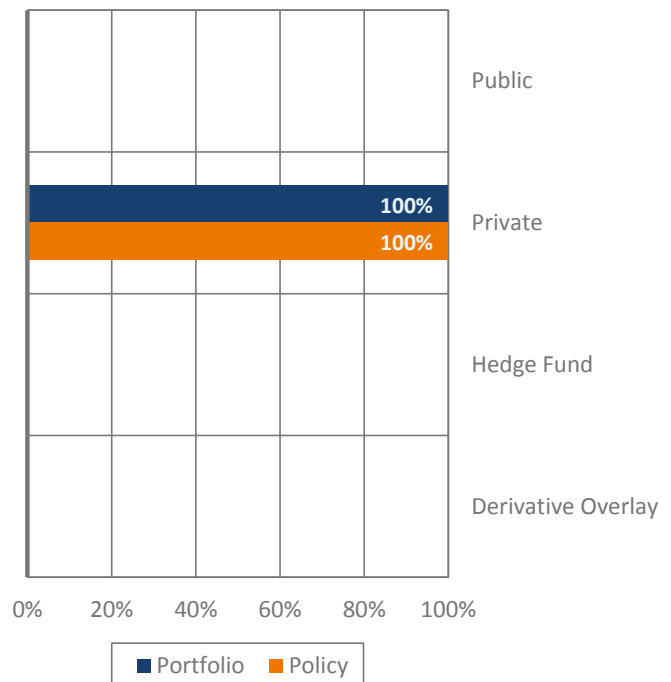
### 29 Country allocation



### 30 Currency allocation



### 31 Security type



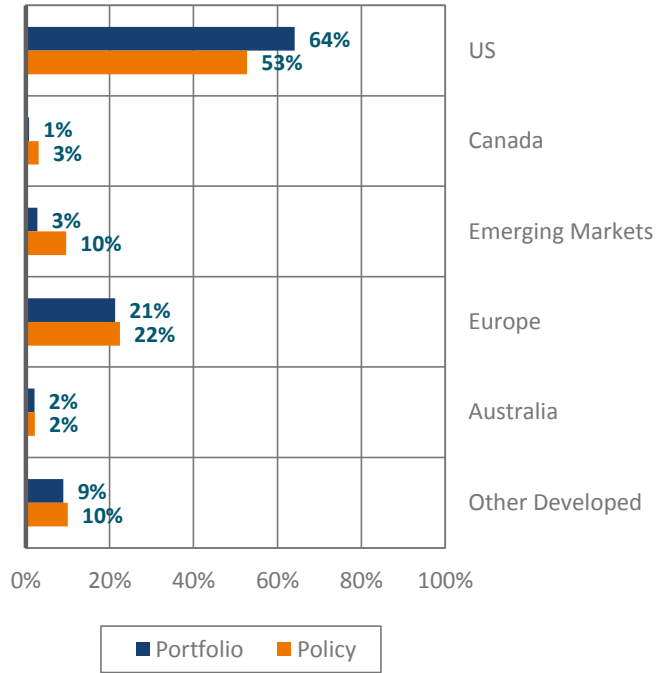
# Risk dashboard

Preliminary

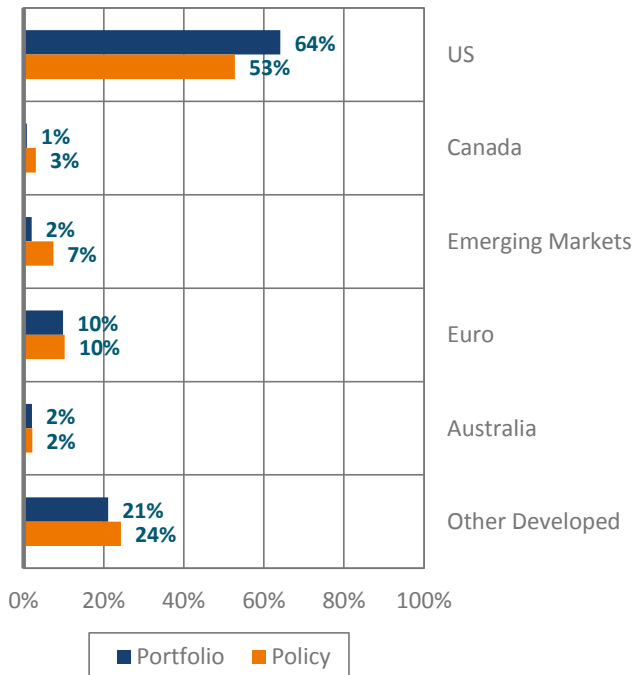
## 32 Equity bucket

	Portfolio	Policy	Difference
Beta	1.0	1.0	0.0
Dividend Yield	2.6%	2.6%	0.0%
PE Ratio	16.8	16.3	0.5

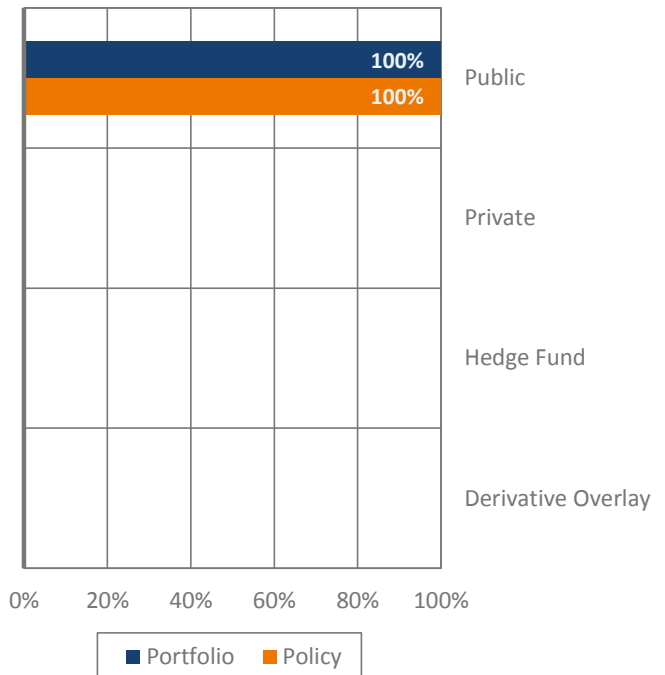
## 33 Country allocation



## 34 Currency allocation



## 35 Security type



- 1 Total risk comparison of portfolio, Policy, and Avg. Pension. Policy is composed of 42.6% MSCI ACWI, 24.4% BC Global Agg, 5% BC Global HY, 12.5% NFI ODCE, 5% Real Assets, 10% HFRI FOF, 0.5% Cash. Avg. Pension is composed of: 45% MSCI ACWI; 35% Barclays US Agg; 5% MSCI USA, Levered 30% (Private Equity); 5% NCREIF ODCE; 5% HFRI Fund of Funds and 5% Bloomberg Commodities. Liability is modeled using CCCERA's Projected Benefit Payments and discounted using the Treasury Curve.
- 2 Equity risk presented by equity beta to market. Equity beta is a measure describing the sensitivity of portfolio returns with returns of the equity market (MSCI ACWI).
- 3 Interest rate risk presented by duration and dollar movement of portfolios. Duration of a financial asset that consists of fixed cash flows is the weighted average of the times until those fixed cash flows are received (measured in years). It also measures the percentage change in price for a given change in yields (the price sensitivity to yield). DV01 \$ (dollar duration) is the change in price in dollars of a financial instrument resulting from a one basis point change in yield.
- 4 Credit risk presented by spread duration and dollar movement of portfolios. Spread duration measures the percentage change in price for a one percentage point change in spreads.
- 5 Exposure allocation among various asset classes.
- 6 Exposure allocation among major risk buckets (rates, credit, equity, inflation, currency) and net currency exposure (domestic vs. foreign). Full Cash collateral is assumed for all derivatives.
- 7 Comparative riskiness of Portfolio vs. Policy on total portfolio and risk bucket levels: For example, equity bucket relative risk compares the riskiness of the Portfolio equity bucket vs the Policy equity bucket.
- 8 Comparative riskiness of Portfolio vs. Policy on a total portfolio level and major risk factor levels.
- 9 Contribution by factor to total relative risk of the Portfolio vs the Policy: For example, Equity is equity risk contribution to Portfolio minus equity risk contribution to the Policy, divided by total risk of the Policy. The factor overweights are additive to the total relative risk at the top line.
- 10 Expected performance under various historical scenarios. For each historical scenario, the current market value is recalculated to determine total return under identical market conditions. Tail risk is a form of risk that arises when the possibility that an investment will have losses greater than what the normal distribution would suggest.
- 11 Expected performance under various one-risk-factor stress tests. Directly affected asset classes are revalued at the factor levels.
- 12 Risk contribution by risk factor. Volatility measures the price variation of a portfolio or financial instrument over time.
- 13 Active risk in terms of annual tracking error: Tracking Error (TE) measures how closely a portfolio follows its benchmark. It is the standard deviation of the difference between the portfolio and benchmark returns.
- 14 Portfolio allocation among major geographic areas. Country exposures of derivatives are included, but currency derivatives are excluded. The calculation uses
- 15 Currency portfolio allocation. Currency exposures from both the underlying securities and the purchasing currency of the futures contract are included.
- 16 Policy allocation among major geographic areas.
- 17 Currency policy allocation.
- 18 Difference between portfolio and policy allocation among major geographic areas.
- 19 Difference between portfolio and policy allocation among major currencies.
- 20 Coupon yield (nominal yield) of a fixed income security is a fixed percentage of the par value that does not vary with the market price of the security. Yield to Maturity (YTM) is the interest rate of return earned by an investor who buys a fixed-interest security today at the market price and holds it until maturity. Ratings indicate credit quality of a security and the issuer's ability to make payments of interest and principal.
- 21 Country allocation of interest rate instruments. Country exposures of derivatives are included, but currency derivatives are excluded. The calculation uses notional exposure as a percentage of market value.
- 22 Currency allocation of interest rate instruments.
- 23 Allocation of interest rate instruments among different security types.
- 24 Various characteristics of credit instruments.
- 25 Country allocation of credit instruments. Country exposures of derivatives are included, but currency derivatives are excluded. The calculation uses notional exposure as a percentage of market value.
- 26 Currency allocation of credit instruments.
- 27 Allocation of credit instruments among different security types.
- 28 Composition of inflation hedging instruments in portfolio and benchmark. Notional duration of real rates instruments is also included.
- 29 Country allocation of inflation instruments. Country exposures of derivatives are included, but currency derivatives are excluded. The calculation uses notional exposure as a percentage of market value.
- 30 Currency allocation of inflation instruments.
- 31 Allocation of inflation instruments among different security types.
- 32 P/E ratio is a valuation ratio of a company's current share price compared to its per-share earnings. Beta measures sensitivity to Global Equities.
- 33 Country allocation of equity assets. Country exposures of derivatives are included, but currency derivatives are excluded. The calculation uses notional exposure as a percentage of market value.
- 34 Currency allocation of equity assets.
- 35 Allocation of equity assets among different security types.

Title	Start Date	End Date	Description
<b>1997-1999 Oil Price Decline</b>	1/8/1997	2/16/1999	The combined effect of OPEC overproduction and lower oil demand due to the Asia economic crisis sent oil prices into a downward spiral.
<b>2007-2008 Oil Price Rise</b>	1/18/2007	6/27/2008	Oil prices spiked from around \$60/bbl in 2007 to a record high of \$145/bbl on 3 July 2008.
<b>2001 Dot-com Slowdown</b>	3/10/2001	10/9/2002	Upon the burst of the tech bubble in 2000, more and more internet companies went out of business as the stock market plummeted further.
<b>1994 US Rate Hike</b>	1/31/1994	12/13/1994	In combating inflation, the U.S. Federal Reserve raised its interest rate from 3.25% in February to 5.5% in November 1994.
<b>1987 Market Crash (Oct. 14 to Oct. 19)</b>	10/14/1987	10/19/1987	The U.S. stock market began to topple on October 14, 1987 after reaching a record high. It was triggered by reports of a larger trade deficit and the elimination of the tax benefits of financing mergers. The aggravating selling pressure in October 19, from confused and fearful investors, and the failing portfolio insurers' models led to a substantial global market sell-off.
<b>1992-1993 European Currency Crisis</b>	9/1/1992	8/13/1993	Upon Germany's reunification, the German mark appreciated rapidly, which destabilized exchange rates between European countries under the European Monetary System. It led to a series of European currency devaluations, interest rate increases, and the widening range of exchange rates in 1992.
<b>1989-1990 Nikkei Stock Price Correction</b>	12/29/1989	3/30/1990	After hitting the Nikkei stock index's all-time high on December 29, 1989, the Japan financial market crashed and plunged to a low in March 1990.
<b>1972-1974 Oil Crisis (Dec. to Sep.)</b>	12/1/1972	9/30/1974	Many developed countries suffered in this energy crisis as OPEC members placed an oil embargo on the U.S. and Israel's allies during the Yom Kippur War in October 1973, which sent global oil prices soaring.
<b>2009-2010 July-January</b>	7/1/2009	12/31/2009	As global economic woes persisted, many countries were saddled with widening budget deficits, rising borrowing costs, slowing growth, higher unemployment, and higher inflation, which made monetary stimulus difficult. Dubai World sought to delay its huge debt repayments, shocking the global market, while the financial distress in Greece and Ireland began to emerge in late 2009.
<b>2007-2009 Subprime Meltdown</b>	1/10/2007	2/27/2009	The burst of the housing bubble in mid-2007 marked the beginning of the years-long subprime mortgage crisis, rooted from the easy credit, low interest rates, and loose regulatory environment in the early 2000s, which made low quality (subprime) mortgaging extremely easy. The contagious meltdown quickly led to plunging asset prices in the financial markets, rising bankruptcies, delinquencies, and foreclosures, and central bank monetary rescues and fiscal interventions by governments around the globe.

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