



Quarterly Market Review Third Quarter 2014



### **Quarterly Market Review**

Third Quarter 2014

This report features topics of interest as well as world capital market performance and a timeline of events for the past quarter.

The world capital market performance discussion begins with a global overview, then features the returns of stock and bond asset classes in the US and international markets.

The report also illustrates the performance of globally diversified portfolios.

### Overview:

Quarterly Topics: The Markets, They Will Fluctuate CAPE Fear—Valuation Ratios and Market Timing

Market Summary

World Stock Market Performance

World Asset Classes

**US Stocks** 

International Developed Stocks

**Emerging Markets Stocks** 

Select Country Performance

Real Estate Investment Trusts (REITs)

**Fixed Income** 

**Global Diversification** 

30.00

25.00K

### The Markets, They Will Fluctuate

Third Quarter 2014

Time and again it's been proven that attempting to time the market is a really bad idea, but hindsight, confirmation, fear, greed, regret, recency, and other innate emotional biases cause many of us to try. To combat the inclination to base our investment decisions on emotion we should arm ourselves with information and a well thought out investment process.

I was recently asked what we can expect from the market going forward and whether or not we will regain what's been lost since the peak in the S&P500 mid-September 2014.

The latter part of the question is quite interesting from a psychological perspective in that it's a classic case of mental "anchoring". Completely ignored in the question is that the S&P500 has had a remarkable run since the beginning of 2009, with each year since then yielding a positive return. Instead, the question merely anchors itself on recent a high and completely ignores the fact that market history has repeatedly shown us that not every year yields a positive return. The following graph<sup>1</sup> of the Vanguard S&P500 Index Admiral Fund helps to give some perspective on the current pullback as of October 14, 2014.

small the recent dip (circled in 'red') looks when compared against all the other movements. The second thing that should be striking is that someone would be distressed about losing a relatively small amount when what has been gained over the past 5+ years has been phenomenal.

As to the first part of the question, well, going forward we can expect higher returns in the stock market now than were expected just a few weeks ago. This is simply because stock prices are lower now. This said, the market still appears relatively expensive on a fundamental basis so returns going forward will likely be less than the historical average.

Will the market regain what's been lost? The knee-jerk response from most of us will be "yes" since we are aware of graphs like the one below from Dimensional Fund Advisors. It is true that the stock market has rewarded investors much more than the bond market has over long periods of time, but this is not the whole story. We should also seek to understand what has happened during interim periods along this fairly long timeline.

Looking back at S&P500 returns since 1926, the longest period of losses was from 1929-1942, a period of 13 years. After that the losses turned to gains (and would have likely turned to gains sooner had money been invested in the interim). However, if we adjust for inflation we find the longest period of real loss in the S&P500 was from 1966-1982. A whopping 16 years! In fact, 1966 was historically the absolutely worse year in the US to retire (assuming a 30-year retirement). Over that same time period the lowly T-bill outperformed by returning 0% inflation adjusted!

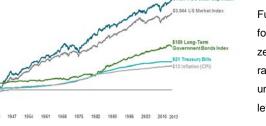
Again, will the market regain what's been lost? Likely. Will that happen relatively soon? Probably, but it could also be a long time. If history is any guide the market should return to recent valuation within 16 years, unless we are entering a period worse that which began in 1966, but that was a fairly extreme outlier period.

Why not just invest in "safe" T-Bills? Well, the worse time for T-bills since 1926 has been the period of 1933-2013. Over that period of time T-bills suffered an inflation adjusted annual return of negative .1% over the entire 80 years!1

Further, real T-bill rates are currently negative when adjusted for inflation, with the non-inflation adjusted rate being right at zero, and has been since 2009. The last period time T-bill rates were this low began in 1933 and those low rates lasted until 1948, at which time they finally broke the .5% interest level. A very long time indeed.

The first thing you'll likely notice about the graph is just how





## COMMENCEMENT FINANCIAL PLANNING LLC

# The Markets, They Will Fluctuate (cont'd)

By now you should be starting to understand what I call the "rolling return problem". In other words, it sounds nice and neat to think about S&P500 returning 10.1% annualized since 1926, but real world investor returns varied greatly from this depending on when portfolios were accumulated and when they drawn upon to meet retirement needs.

To deal with the rolling return problem William Bengen, a feeonly CFP® solo-practitioner, published his seminal study in the October 1994 *Journal of Financial Planning* <u>"Determining</u> <u>Withdrawal Rates Using Historical Data"</u>. The main output of this study resulted in what is now called "The 4% Rule". The 4% Rule deals with the volatility in the markets and inflation by looking at how much could have been withdrawn from portfolios over each 30-year rolling period since January 1926 before running out of money.

The first graph that follows (source: <u>Wade Pfau's Blog</u>) tells the story of Mr. Bengen's findings. The x-axis depicts the year of retirement, while the y-axis shows how much that retiree could have initially withdrawn from his portfolio and then adjusted that number upward each year for inflation without running out of money over 30 years. You'll notice the data point that Dr. Pfau calls "SAFEMAX". The SAFEMAX retirement point is 1966 (recall that's been the worst year to retire) and is the driver of The 4% Rule.

Mr. Bengen used a 50/50 portfolio in his study, but what would have happened had he used other allocations? Dr. Pfau helps us with this question with the second graph that follows. You will notice that up until stocks exceeded 75% of a portfolio there was very little downside in portfolio survival rates, even over the horrendous 30-year period which began in 1966. Instead, portfolios with 50-75% stocks had only upside withdrawal rate potential according to this study. This finding led Mr. Bengen to write, "I think it is appropriate to advise the client to accept a stock allocation as close to 75 percent as possible, and in no cases less than 50 percent."

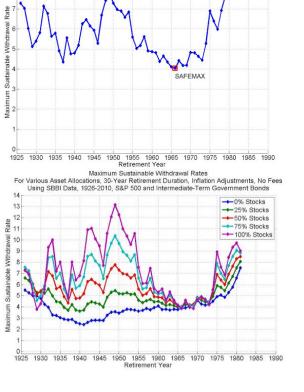
You may also notice that the S&P500 was the only market used in the studies. This is because there is not good data going back to 1926 for other markets around the world, but what if we had good data? Let's turn to more recent times for guidance.

**COMMENCEMENT** FINANCIAL PLANNING LLC

The worst 10-year period for the S&P500 since 1926 was 1999-2009 which saw an annualized *negative* return of 1.4%. This period was even worse than 1929-1939 which saw an annualized *negative* return of .8%! We indeed lived through a horrible market, which is now called "The Lost Decade" by many, but was it "lost"? After all, over 50% of the world's investible stock universe exists outside the S&P500.

According to Dimensional Fund Advisors<sup>2</sup> a 100% global stock portfolio tilted into value and small cap stocks returned an annualized **positive** return of 5.6% over 1999-2009. That result reflects the power of diversification and had good global stock return information been available back to 1926 the withdrawal rate studies may have had different results.

Don't let your emotions get in the way of sound investment decisions. At no point in time does it seem safe to invest except maybe when markets are at their highest. Develop a prudent investment program based on your goals, risk tolerance, and time horizon using real data; not hype, fear, or greed. Chances are good the prudent data driven approach will greatly improve your probability of successfully meeting your goals.



Maximum Sustainable Withdrawal Rates

For 50/50 Asset Allocation, 30-Year Retirement Duration, Inflation Adjustments, No Fees Using SBBI Data, 1926-2010, S&P 500 and Intermediate-Term Government Bonds

Δ

#### **COMMENCEMENT** FINANCIAL PLANNING LLC

# CAPE Fear: Valuation Ratios and Market Timing

Third Quarter 2014

As broad market indices such as the S&P 500 have set new record highs in recent weeks, many investors have become apprehensive. They fear another major decline is likely to occur and are eager to find strategies that promise to avoid the pain of an extended downturn while preserving the opportunity to profit in up markets. One approach that has attracted considerable attention in recent years is adjusting investments based on the CAPE ratio–the Cyclically Adjusted Price / Earnings ratio.

Developed by Robert Shiller of Yale University and John Campbell of Harvard University, the CAPE ratio seeks to provide a road map of stock market valuation by comparing current prices to average inflationadjusted earnings over the previous 10 years.<sup>1</sup> The idea is to smooth out the peaks and valleys of the business cycle and arrive at a more stable measure of corporate earning power. Shiller suggests that investors can improve their portfolio performance relative to a static equity allocation by overweighting stocks during periods of low valuation and underweighting stocks during periods of high valuation.

A CAPE-based strategy has the virtue of using clearly defined quantitative measures rather than vague assessments of investor exuberance or despair. From January 1926 through December 2013, the CAPE ratio has ranged from a low of 5.57 in June 1932 to 44.20 in December 1999, with an average of 17.54.

Using the CAPE ratio might appear to offer a sensible way to improve portfolio results by periodically adjusting equity exposure, and many financial writers have focused on this methodology in recent years. As an example, a timing newsletter publisher earlier this year

observed, "For the S&P 500, this ratio currently exceeds 25.6, which is higher than what prevailed at 29 of the 35 tops since 1900."<sup>2</sup>

Many investors find such an approach very appealing. Does it work?

The challenge of profiting from CAPE measures or any other quantitative indicator is to come up with a trading rule to identify the correct time to underweight or overweight stocks. It is not enough to know that stocks are above or below their long-run average valuation. How far above average should the indicator be before investors should reduce equity exposure? And at what point will stocks be sufficiently attractive for repurchase–below average? Average? Slightly above average? It may be easy to find rules that have worked in the past, but much more difficult to achieve success following the same rule in the future.

This implementation challenge appears to be the Achilles' heel of timing-based strategies. A study in 2013 by professors at the London Business School applied CAPE ratios to time market entry and exit points. "Sadly," they concluded, "we learn far less from valuation ratios about how to make profits in the future than about how we might have profited in the past."<sup>3</sup> As an example of the potential difficulty, consider the CAPE data as of year-end 1996. The CAPE ratio stood at 27.72, 82% above its long-run average of 15.23 at that point. Federal Reserve Chairman Alan Greenspan had delivered his much-discussed "irrational exuberance" speech just three weeks earlier. The last time the CAPE ratio had flirted with this number was October 1929; the CAPE was at 28.96 as stock prices were about to head over the cliff. It seems plausible that followers of the CAPE strategy would have been easily persuaded that investing at yearend 1996 would be a painful experience.

The actual result was more cheerful. The next three years were especially rewarding, with total return of over 107% for the S&P 500 Index. For the period January 1997–June 2014, the annualized return for the S&P 500 Index was 7.67%, compared to 2.42% for one-month US Treasury bills. Stock returns were modestly below their long-run average for this period, but the equity premium was still strongly positive.

By comparison, a timing strategy over the same period that was fully invested in stocks only during periods when the CAPE ratio was below its long-run average produced an annualized return of 3.09%. All timing strategies face a fundamental problem: Since markets have generally gone up more often than they have gone down in the last 90 years, avoiding losses in a down market runs the risk of avoiding even heftier gains associated with an up market.

A successful timing strategy is the fountain of youth of the investment world. For decades, financial researchers have explored dozens of quantitative indicators as well as various measures of investor sentiment in an effort to discover the ones with predictive value. The performance record of professional money managers over the past 50 years offers compelling evidence that this effort has failed.

Despite this evidence, the potential rewards of successful market timing are so great that each new generation sees a fresh group of market participants eager to try. Searching for the key to outwitting other investors may be fun for those with a sense of adventure and time on their hands. For those seeking the highest probability of a successful investment experience, maintaining a consistent allocation strategy is likely to be the sounder choice.

1. CAPE data available at http://www.econ.yale.edu/~shiller/data.htm; 2. Mark Hulbert, "This Bull Market is Starting to Look Long in the Tooth," *Wall Street Journal*, January 18, 2014; 3. John Authers, "Clash of the CAPE Crusaders," *Financial Times*, September 3, 2013. Adapted from "CAPE Fear: Valuation Ratios and Market Timing" by Weston Wellington, Down to the Wire column on Dimensional's website, September 2014. Dimensional Fund Advisors LP ("Dimensional") is an investment advisor registered with the Securities and Exchange Commission. All expressions of opinion are subject to change without notice in reaction to shifting market conditions. This content is provided for informational purposes, and it is not to be construed as an offer, solicitation, recommendation or endorsement of any particular security, products, or services.

### **Market Summary**

Third Quarter 2014 Index Returns

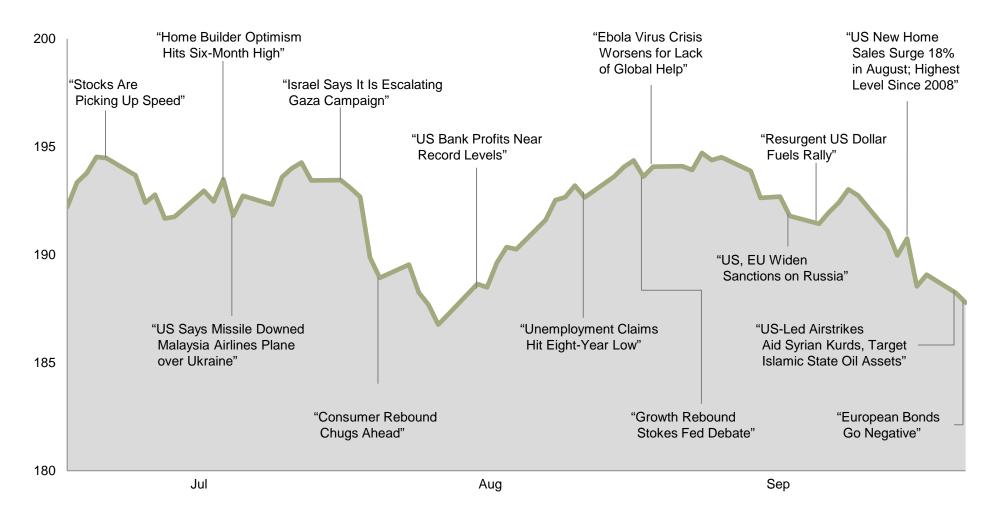


Past performance is not a guarantee of future results. Indices are not available for direct investment. Index performance does not reflect the expenses associated with the management of an actual portfolio. Market segment (index representation) as follows: US Stock Market (Russell 3000 Index), International Developed Stocks (MSCI World ex USA Index [net div.]), Emerging Markets (MSCI Emerging Markets Index [net div.]), Global Real Estate (S&P Global REIT Index), US Bond Market (Barclays US Aggregate Bond Index), and Global Bond ex US Market (Citigroup WGBI ex USA 1–30 Years [Hedged to USD]). The S&P data are provided by Standard & Poor's Index Services Group. Russell data © Russell Investment Group 1995–2014, all rights reserved. MSCI 2014, all rights reserved. Barclays data provided by Barclays Bank PLC. Citigroup bond indices © 2014 by Citigroup.



### World Stock Market Performance

MSCI All Country World Index with selected headlines from Q3 2014



### These headlines are not offered to explain market returns. Instead, they serve as a reminder that investors should view daily events from a longer-term perspective and avoid making investment decisions based solely on the news.

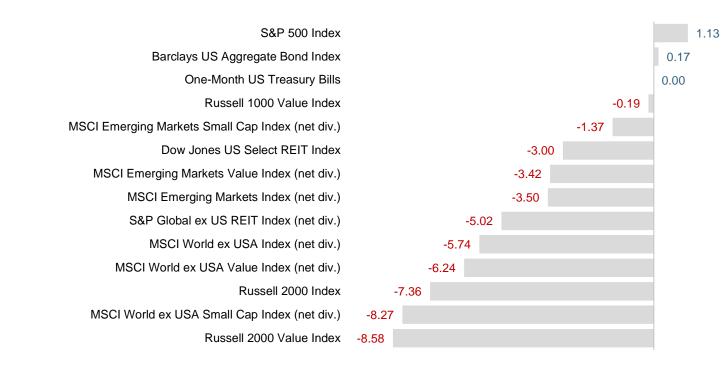
Graph Source: MSCI ACWI Index. MSCI data © MSCI 2014, all rights reserved.

It is not possible to invest directly in an index. Performance does not reflect the expenses associated with management of an actual portfolio. Past performance is not a guarantee of future results.

### World Asset Classes

Third Quarter 2014 Index Returns (%)

The broad US equity market had flat-to-slightly-positive returns for the quarter. Small cap stocks in the US underperformed large cap stocks, with US small cap indices posting negative returns. Most equity markets outside the US had negative performance in US dollar terms. Currency movements played a role; the dollar appreciated against most currencies. In developed markets outside the US, large cap indices outperformed small cap indices. In the emerging markets, however, small cap indices outperformed large cap indices. Value underperformed growth indices in developed markets across size ranges, but in emerging markets value outperformed growth in large caps but underperformed in small caps. REITs recorded negative returns in the US and in developed non-US markets.



Past performance is not a guarantee of future results. Indices are not available for direct investment. Index performance does not reflect the expenses associated with the management of an actual portfolio. The S&P data is provided by Standard & Poor's Index Services Group. Russell lata © Russell Investment Group 1995–2014, all rights reserved. MSCI data © MSCI 2014, all rights reserved. Dow Jones data (formerly Dow Jones Wilshire) provided by Dow Jones Indexes. Barclays data provided by Barclays Bank PLC.

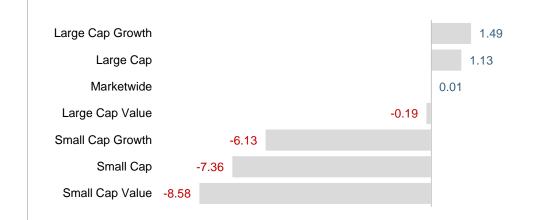


### US Stocks Third Quarter 2014 Index Returns

The US equity market recorded slightly positive performance, and large caps significantly outperformed small caps for the quarter.

Value underperformed growth across all size ranges, with the exception of micro cap indices.

#### Ranked Returns for the Quarter (%)



#### World Market Capitalization—US



#### Period Returns (%)

#### Asset Class 1 Year 10 Years\* YTD 3 Years\* 5 Years\* Marketwide 6.95 17.76 23.08 15.78 8.44 Large Cap 8.34 19.73 22.99 15.70 8.11 Large Cap Value 8.07 18.89 23.93 15.26 7.84 Large Cap Growth 7.89 19.15 22.45 16.50 8.94 Small Cap -4.41 3.93 21.26 14.29 8.19 Small Cap Value -4.74 4.13 20.61 13.02 7.25 Small Cap Growth -4.05 3.79 21.91 15.51 9.03

Past performance is not a guarantee of future results. Indices are not available for direct investment. Index performance does not reflect the expenses associated with the management of an actual portfolio. Market segment (index representation) as follows: Marketwide (Russell 3000 Index), Large Cap (S&P 500 Index), Large Cap Value (Russell 1000 Value Index), Large Cap Growth (Russell 1000 Growth Index), Small Cap (Russell 2000 Index), Small Cap Value (Russell 2000 Value Index), and Small Cap Growth (Russell 2000 Growth Index). World Market Cap represented by Russell 3000 Index, MSCI World ex USA IMI Index, and MSCI Emerging Markets IMI Index. Russell 3000 Index is used as the proxy for the US market. Russell data © Russell Investment Group 1995–2014, all rights reserved. The S&P data are provided by Standard & Poor's Index Services Group. \* Annualized

6.74

## **International Developed Stocks**

Third Quarter 2014 Index Returns

International developed broad market indices measured in US dollars underperformed both the US and emerging markets. Large caps continued to outperform small caps.

Value underperformed growth across all size segments.

The US dollar strengthened against most currencies during the quarter.

World Market Capitalization—International Developed

38% International Developed Market \$16.3 trillion

Past performance is not a guarantee of future results. Indices are not available for direct investment. Index performance does not reflect the expenses associated with the management of an actual portfolio. Market segment (index representation) as follows: Large Cap (MSCI World ex USA Index), Small Cap (MSCI World ex USA Small Cap Index), Value (MSCI World ex USA Value Index), and Growth (MSCI World ex USA Growth). All index returns are net of withholding tax on dividends. World Market Cap represented by Russell 3000 Index, MSCI World ex USA IMI Index, and MSCI Emerging Markets IMI Index. MSCI World ex USA IMI Index used as the proxy for the International Developed market. MSCI 2014, all rights reserved.

Growth

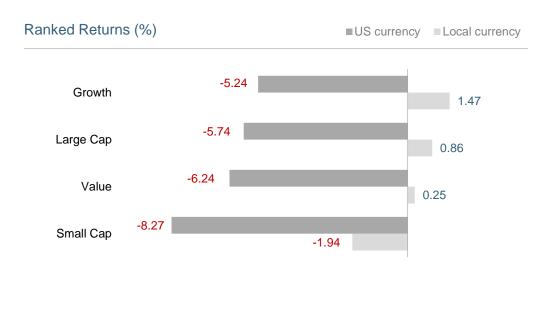


3.96

12.71

7.23

-1.06



### **COMMENCEMENT** FINANCIAL PLANNING LLC

### **Emerging Markets Stocks**

Third Quarter 2014 Index Returns

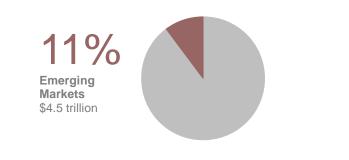
Broad market emerging markets indices outperformed developed markets outside the US.

Unlike their developed markets counterparts, small cap indices outperformed large cap indices for the quarter. Value indices outperformed growth indices in large caps but underperformed in small caps.

The US dollar strengthened against most currencies during the quarter.



#### World Market Capitalization—Emerging Markets

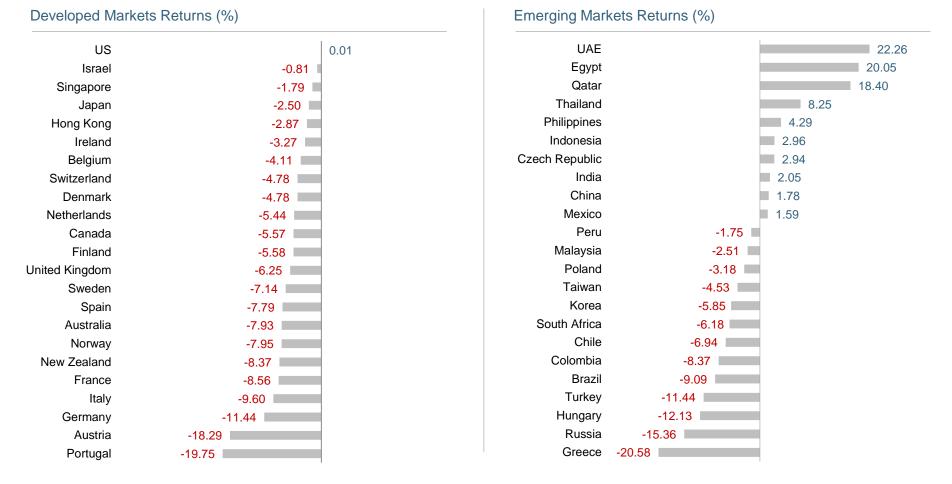


Past performance is not a guarantee of future results. Indices are not available for direct investment. Index performance does not reflect the expenses associated with the management of an actual portfolio. Market segment (index representation) as follows: Large Cap (MSCI Emerging Markets Index), Small Cap (MSCI Emerging Markets Small Cap Index), Value (MSCI Emerging Markets Value Index), and Growth (MSCI Emerging Markets Growth Index). All index returns are net of withholding tax on dividends. World Market Cap represented by Russell 3000 Index, MSCI World ex USA IMI Index, and MSCI Emerging Markets IMI Index. MSCI Emerging Markets IMI Index used as the proxy for the emerging market portion of the market. MSCI data © MSCI 2014, all rights reserved.

### **Select Country Performance**

Third Quarter 2014 Index Returns

In US dollar terms, the US recorded the highest performance in developed markets as the dollar rose. European countries recorded some of the lowest performance among developed market countries. In emerging markets, Middle Eastern countries posted strong positive returns. However, relative underperformance in the materials and energy sectors negatively affected some of the larger emerging markets countries, which had a bigger impact on emerging markets indices.







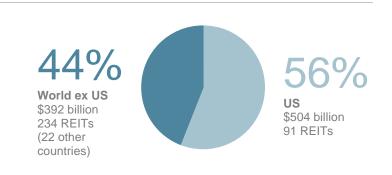
### Real Estate Investment Trusts (REITs)

Third Quarter 2014 Index Returns

REITs lost ground for the quarter in the US and non-US markets.



#### Total Value of REIT Stocks



Period Returns (%)	* Annualized				
Asset Class	YTD	1 Year	3 Years*	5 Years*	10 Years*
US REITs	14.69	13.44	16.19	15.77	8.21
Global REITs (ex US)	7.73	6.64	13.74	9.26	5.81

Past performance is not a guarantee of future results. Indices are not available for direct investment. Index performance does not reflect the expenses associated with the management of an actual portfolio. Number of REIT stocks and total value based on the two indices. All index returns are net of withholding tax on dividends. Total value of REIT stocks represented by Dow Jones US Select REIT Index and the S&P Global ex US REIT Index. Dow Jones US Select REIT Index used as proxy for the US market and S&P Global ex US REIT Index used as proxy for the World ex US market. Dow Jones US Select REIT Index data provided by Dow Jones ©. S&P Global ex US REIT Index data provided by Standard and Poor's © 2014.

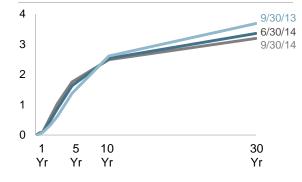
### Fixed Income Third Quarter 2014 Index Returns

Interest rates across all US fixed income markets were mixed during the third quarter. The 10-year Treasury note ended the period at 2.49%, generally unchanged from the previous quarter. The 30-year Treasury bond finished with a yield of 3.21%, registering a decline of 13 basis points. While intermediate- and long-term rates declined, short-term rates increased. The 5-year Treasury note ended the period at 1.78%, up 16 basis points, while the 2-year Treasury note was up 13 basis points, finishing at 0.59%.

Long-term corporate bonds returned just 7 basis points in the quarter but are ahead 11.30% for the year. Intermediate-term corporate bonds lost 14 basis points in the quarter but are still ahead 3.47% for the year.

Municipal revenue bonds slightly outpaced municipal general obligation bonds by 1.97% vs. 1.48% for the quarter. Long-term municipal bonds continue to outperform all other areas of the curve, returning 2.69% for the period and 13.01% for the year.

### US Treasury Yield Curve

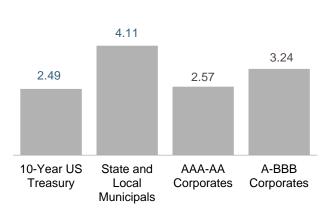


#### Period Returns (%)

Asset Class	YTD	1 Year	3 Years*
BofA Merrill Lynch Three-Month US Treasury Bill Index	0.03	0.05	0.07
BofA Merrill Lynch 1-Year US Treasury Note Index	0.25	0.26	0.28
Citigroup WGBI 1-5 Years (hedged to USD)	1.42	1.64	1.52
Long-Term Government Bonds	13.62	10.51	2.32
Barclays US Aggregate Bond Index	4.10	3.96	2.44
Barclays US Corporate High Yield Index	3.49	7.20	11.09
Barclays Municipal Bond Index	7.58	7.93	4.56
Barclays US TIPS Index	3.67	1.59	1.34

# Past performance is not a guarantee of future results. Indices are not available for direct investment. Index performance does not reflect the expenses associated with the management of an actual portfolio. Yield curve data from Federal Reserve. State and local bonds are from the Bond Buyer Index, general obligation, 20 years to maturity, mixed quality. AAA-AA Corporates represent the Bank of America Merrill Lynch US Corporates, AA-AAA rated. A-BBB Corporates represent the Bank of America Merrill Lynch US Corporates, BBB-A rated. Barclays data provided by Barclays Bank PLC. US long-term bonds, bills, inflation, and fixed income factor data © Stocks, Bonds, Bills, and Inflation (SBBI) Yearbook<sup>TM</sup>, Ibbotson Associates, Chicago (annually updated work by Roger G. Ibbotson and Rex A. Sinquefield). Citigroup bond indices © 2014 by Citigroup. The BofA Merrill Lynch Indices are used with permission; © 2014 Merrill Lynch, Pierce, Fenner & Smith Incorporated; all rights reserved. Merrill Lynch, Pierce, Fenner & Smith Incorporated is a wholly owned subsidiary of Bank of America Corporation.

### Bond Yields across Issuers (%)



#### \* Annualized 10 Years\*

1.59

2.03

3.15

6.73

4.62

8.33

4.73 4.64

5 Years\*

0.10

0.46

1.74

6.78

4.12

10.57

4.67

4.48

## **Global Diversification**

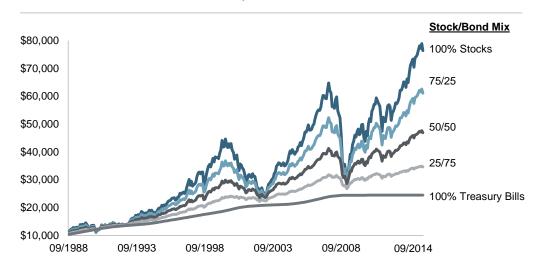
Third Quarter 2014 Index Returns

These portfolios illustrate the performance of different global stock/bond mixes and highlight the benefits of diversification. Mixes with larger allocations to stocks are considered riskier but have higher expected returns over time.

#### Ranked Returns (%)



#### Growth of Wealth: The Relationship between Risk and Return



#### Asset Class YTD 1 Year 3 Years\* 5 Years\* 10 Years\* 100% Stocks 4.16 11.89 17.24 10.65 75/25 3.17 8.88 12.85 8.12 50/50 2.15 5.90 8.51 5.50 25/75 1.10 2.95 4.24 2.81

0.02

0.03

0.05

0.01

Period Returns (%)

100% Treasury Bills

Diversification does not eliminate the risk of market loss. Past performance is not a guarantee of future results. Indices are not available for direct investment. Index performance does not reflect expenses associated with the management an actual portfolio. Asset allocations and the hypothetical index portfolio returns are for illustrative purposes only and do not represent actual performance. Global Stocks represented by MSCI All Country World Index (gross div.) and Treasury Bills represented by US One-Month Treasury Bills. Globally diversified allocations rebalanced monthly, no withdrawals. Data @ MSCI 2014, all rights reserved. Treasury bills © Stocks, Bonds, Bills, and Inflation Yearbook<sup>TM</sup>, Ibbotson Associates, Chicago (annually updated work by Roger G. Ibbotson and Rex A. Singuefield).

\* Annualized

7.84

6.50

4.98

3.30

1.47



### In Closing Third Quarter 2014

**Remember:** Develop a financial plan according to your unique situation and manage your investment portfolio according to a well thought out and documented investment policy. Doing so will greatly increase the probability you will actually meet your financial goals.

Troy Sapp, CFP® Commencement Financial Planning LLC <u>www.commencefp.com</u>

This letter is intended to address broadly defined financial planning issues. If you need assistance developing a wealth management program tailored to your unique situation, then seek the assistance of a fee-only NAPFA registered financial advisor who is also a CERTIFIED FINANCIAL PLANNER<sup>™</sup> professional having the proper education and experience. Consult with your tax advisor before implementing a particular tax strategy.