

# **Market Outlook & Strategy**

Second Quarter of 2014

Leigh Bivings, Ph.D., CFP®



Artemis Financial Advisors, LLC

54 Chandler Street Boston, MA 02116 617-542-2420



# **Executive Summary**

- Equity markets picked up steam in Q2, in spite of ongoing geopolitical uncertainty. The U.S. market returned +4.9% and international developed markets returned +4.1%. For the first time in a while, emerging market equities led with +6.6%.
- In the U.S., macroeconomic data generally pointed to an improvement in economic growth in the second quarter, following a disappointing first quarter when GDP contracted by an annualized -2.9%. Eurozone equities were supported by expectations that the European Central Bank would take steps to ease monetary policy in order to stimulate growth and fend off the specter of deflation.
- Fixed income prices also continued their march upward in Q2. Interest rates (which move inversely to bond prices) across all U.S. fixed income markets declined during the second quarter. Finally, global real estate also had a good quarter, even surpassing equity returns, as investors continued their search for yield.
- Every 18 months or so we take a hard look at the assumptions we are using to develop and refine our dynamic and strategic asset allocation recommendations for our clients.
   Our special focus this quarter is to share our approach to generating updated asset class return forecasts. We also compare them to those generated by select investment banks and point out some of the implications of the results we obtain for global balanced portfolio investors (i.e., you).
- For the key U.S. equity forecast, our process leads us to believe the S&P 500 will return in the range of 7.0% in nominal terms over the next 7-10 years, or just under 5.0% in real terms. This is much lower than what investors have experienced over the last 30 years, when the S&P 500 delivered a whopping 8.6% in real terms. Our forecasts for other equity markets are similar, with only emerging markets standing out.
- The key implications are that balanced portfolios are fated to generate much lower returns over the next decade than they have in recent decades and that younger investors are going to have to save more to meet their retirement goals.
- We are not making any major changes to our clients' portfolios currently. Our focus is
  on ensuring cash is invested, that we have sufficient inflation protection, and that we
  have created the right mix of exposure to developed and emerging markets.

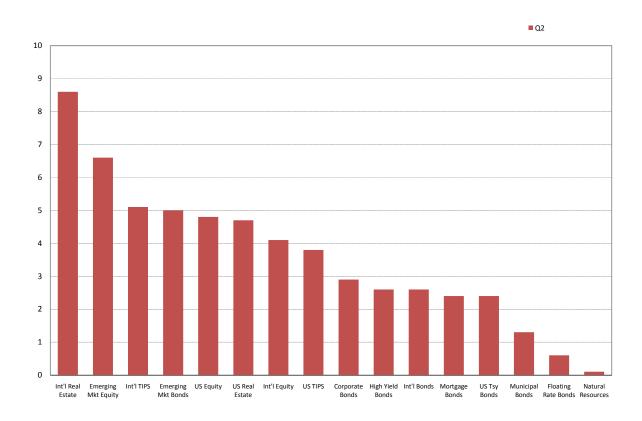


#### Markets in Review

Equity markets picked up steam in Q2, despite ongoing geopolitical uncertainty. The U.S. market returned +4.9% and international developed markets returned +4.1%. For the first time in a while, emerging market equities led with +6.6%. In brief, the global rally reflected market resilience amid uneven U.S. growth and political and economic unrest in the Middle East, Ukraine and elsewhere. See Figure 1.

In the U.S., data releases generally pointed to an improvement in economic growth in the second quarter, following a disappointing first quarter, when GDP contracted by an annualized -2.9%. The Fed continued tapering, reducing its monthly bond purchase program by a further \$10 billion each month over the quarter. The U.S. housing market appeared to pick up after the weather-related weakness during the winter. The Conference Board's Consumer Confidence Index reached its highest level since January 2008. Best of all, jobless claims fell to levels not seen since before the crisis.

Figure 1: Asset Class Performance in Q2 2014 (percentage points)





Eurozone equities were supported by expectations that the European Central Bank (ECB) would take steps to ease monetary policy in order to stimulate growth and fend off the specter of deflation. In early June, the ECB announced a range of measures, including introducing a negative deposit rate and announcing cheap four-year loans designed to boost lending to small businesses. Most importantly, the ECB signaled a willingness to undertake additional stimulus measures, such as an asset purchase plan, to contain deflation and facilitate growth. Inflation in the Eurozone was just +0.5% in both May and June, but growth was slow, too, with Eurozone GDP growth logging in at just +0.2%.

Emerging markets rebounded during the quarter, with emerging Asia leading from a regional perspective. Gains were largely due to investors rotating out of U.S. equity into emerging markets due to the valuation differential.

Fixed income prices continued their march upward in Q2. Interest rates (which move inversely to bond prices) across all U.S. fixed income markets declined during the second quarter. In particular, the 10-year Treasury note ended the quarter at 2.53%, a decline of 20 basis points over the period.

Global real estate also had a good quarter, even surpassing equity returns as investors continued their search for yield. At the other end of the spectrum were commodities, which eked out only a +0.08% return for the quarter, despite increases in energy prices.

#### **Prospective Asset Class Returns**

Every 18 months or so we take a hard look at the assumptions we are using to develop and refine our dynamic and strategic asset allocation recommendations for our clients. In the world of modern portfolio theory, the key assumptions (forecasts) we need to make are prospective asset market returns, their volatilities and their correlations with each other.

Our usual starting point is to examine existing forecasts made by the large investment and research firms. We then add some analytical rigor to select key forecasts by decomposing them into their underlying drivers, apply ranges to those drivers, and ultimately generate our own estimates. Our methodology is presented below. We also discuss the U.S. equity return forecast in more detail to help you understand what is driving the result. Finally, we

<sup>&</sup>lt;sup>1</sup> Our approach is adapted from that used by the Bank Credit Analyst. See their February 2014 monthly report.



point out some of the implications of the results we obtain for global balanced portfolio investors (i.e., you).

Most of the major banks, independent research houses and large asset management firms periodically publish their asset class return forecasts. For the purposes of this cycle, we had access to forecasts from Fidelity, J.P. Morgan, GMO, Bank Credit Analyst, MRB Partners Inc. and Schroder's. Each of the firms' forecasts fell within the 7-10 year time frame, except Fidelity's so we decided against using its numbers.

Figure 2 shows the simple average of the forecasts from the above-named firms for key asset classes and the range of the actual forecasts made. The key result is that for both equities and bonds, annualized nominal returns over the next 7-10 years will fall short of the historical average. But what really matters are real returns, i.e., the returns the investor receives after accounting for inflation. After all, one might argue that a 5.8% nominal return forecast for U.S. equity is not so horrible if inflation remains at its current low rate.

Figure 2: Prospective Asset Class Returns, Nominal, 7-10 Years (USD)

Asset Class	Nominal Return (%) I-Bank Average	Range (%)
U.S. Equity (Large Cap)	5.8	4.7-7.3
International Equity	5.8	3.0-7.8
Emerging Market Equity	9.3	6.8-11.4
Emerging Market Bonds	5.8	4.4-7.7
U.S. Corporate Bonds	3.7	2.5-4.3
High Yield Bonds	5.6	3.3-6.9
Commodities	3.8	2.2-5.8
Intermediate Treasuries	2.8	2.5-3.0
Long-term Treasuries	2.2	2.0-2.4
Inflation	2.2	2.1-2.5

Sources: GMO, Schroders, BCA, MRB, J.P. Morgan



With this in mind, notice in Figure 2 that each of the firms also reported its forecast for inflation, which averages to 2.2% around a tight band of 2.1-2.5%<sup>2</sup>.

In Figure 3, we report the average prospective *real* return for U.S. equity and long-dated U.S. Treasuries, and compare them with historical returns over different time frames.

Figure 3. Real Annualized Returns in Perspective

Time Period	S&P 500 (%)	Long-term Treasury (%)
The Old Normal (1926-2012)	6.5	2.5
Post 1950 (1951-2012)	6.8	2.6
The Last 30 Years (1982-2012)	8.6	7.5
The Next 7-10 Years	3.6	0.0

Source: Richard Marston (2014 IMCA Conference), MSCI, Figure 2.

Forecast Drivers – S&P 500

Before we discuss the implications of such a forecast, it may be helpful to understand the underlying drivers of the key U.S. equity forecast. Our own analysis of the drivers of the prospective return of the S&P 500 leads us to believe the average result reported above may be a bit pessimistic.

The key drivers of the S&P 500 return are:

- 1. The projected earnings growth per share of the S&P 500 companies, comprised of:
  - a. the prospective profit margins of the 500 companies in the S&P
  - b. the prospective revenue growth of the companies
  - c. the prospective number of shares outstanding
- 2. The change in the price-to-earnings ratio of the companies;
- 3. The prospective average dividend yield of the 500 companies.

### *1a. Prospective Profit Margins*

<sup>&</sup>lt;sup>2</sup> The tight forecast range is no surprise because the consensus inflation forecast at any given time over different time periods is readily available by examining TIPS breakeven rates.

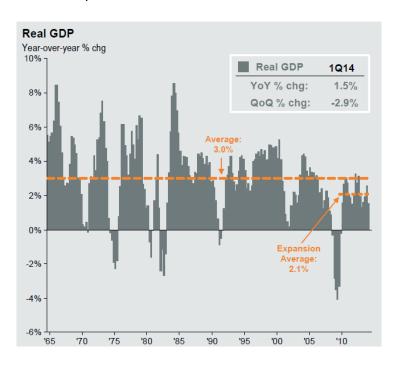


Starting with the first component, one of the salient features of the current recovery is that while earnings of S&P 500 companies have been healthy throughout the recovery, earnings growth has largely been due to an increase in profit margins, rather than an increase in sales growth. (See our Q2 2013 Market Outlook and Strategy Report for a detailed discussion.) There is a widespread view that profit margins cannot keep growing because many of the reasons for recent high margin growth (e.g., slow wage growth, historically low interest rates, high depreciation and amortization expenses due to weak capex spending) will dissipate as the economy gains steam.

### 1b. Prospective Revenue Growth

As for prospective revenue growth, aggregate sales in real terms of large, well-established companies of the type in the S&P 500 historically have grown in line with real GDP growth. The key issue going forward is that almost no one is expecting real GDP growth in the U.S. to match its rate in the recent past. Indeed, probably the most salient feature of the post-2008 recovery is that real GDP growth in the U.S. has been almost a full percentage point lower than the historical average (see Figure 4). This is happening at a time during which one would expect above-average growth as the economy rebounds from a deep recession.

Figure 4. U.S. Growth in Perspective



Source: J.P. Morgan, BEA, FactSet



The structural causes of prospective slow growth are a topic of great debate currently, but most explanations point to various demographic challenges and other headwinds in the U.S. economy. Chief among them is slowing population growth overall and an aging population. Combined, they have reduced the growth rate of the working-age population from 1.1% in 2007 to 0.6% in 2013. According to projections by the United Nations, this rate will fall to 0.1% by 2025. This population deceleration trims the potential growth rate of real GDP by an equivalent amount.

Low productivity is another factor constraining growth. Measures of U.S output per worker and total factor productivity have been subpar in the recovery so far -- and may persist. This is consistent with the fact that the U.S. real capital stock per worker has not grown in five years, due to low capital spending. Moreover, several economists have made the case that productivity gains from recent innovations pale in comparison to transformational technologies like electricity and that the benefits from Internet-rated technology may be moderating as well.

#### 1c. Prospective Number of Shares Outstanding

What about overall earnings/share growth? While aggregate S&P 500 sales have tended to track nominal GDP growth over the long haul, sales per share have not. Since 1980, sales per share have grown, on average, 1.1 percentage points per year slower than nominal GDP. The gap between aggregate sales and sales per share growth is explained by the increase in the number of shares outstanding.

Recently, however, the trend has changed because of increased share buyback activity, interrupted only briefly by the financial crisis. Yet most analysts suspect this trend will revert to the historical pattern, as the effective buyback yield will decline compared with the past few years, since firms will be buying back shares at higher prices. Indeed, buybacks actually peaked in February 2013, and have been trending lower ever since, now running at almost one-third less than just a year ago.

#### 2. Change in the Price-to-Earnings Ratio

The second major component, the change in the price-to-earnings ratio (P/E ratio) of companies is where I believe there is room for being more optimistic than many investment analysts. As discussed in previous Outlook and Strategy Reports, the predictive value of P/E ratios increases with time; in particular, for five-year or longer return projections, they do begin to matter. Thus, we need to ascertain whether and to what degree the stock market may be overvalued.



As shown in Figure 5, most stock valuation measures continue to indicate that the market is fairly valued, but not overvalued. The only exception is the Shiller P/E, which remains a more controversial measure because the denominator is calculated by averaging the last 10 years of earnings, thus giving greater weight to the Great Recession, when earnings collapsed. When viewed over a 25-year horizon, the degree of overvaluation is much smaller.

Figure 5. Stock Valuation Measures: S&P 500 Index – as of 6/30/2014

U.S Equity: Valuation Measures		Historical Averages				
Valuation	Description	Latest	1-year	5-year	10-year	25-year
Measure			ago	average	average	average
P/E (Frd.)	Price to Earnings	15.6x	13.8x	13.4x	13.8x	15.6
CAPE	Shiller's P/E	<mark>25.6</mark>	24.4	21.7	22.9	<mark>25.1</mark>
Div. Yield	Dividend Yield	1.9%	2.0%	2.0%	2.0%	2.1%
PEG	Price/Earnings to Growth	1.5	0.8	1.1	1.7	1.4
P/B	Price to Book	2.8	2.6	2.2	2.4	2.9
P/CF	Price to Cash Flow	11.0	10.3	8.9	9.5	10.6
EY Spread	EY minus Baa Yield	1.7%	1.5%	2.0%	1.2%	-0.7%

Source: J.P. Morgan, BEA, FactSet

The above discussion overlooks the fact that while U.S. equities are increasingly fully valued, they are cheap relative to bonds and will remain so for some time due to rising interest rates. Hence, investors may drive up the P/E ratio because there isn't any other place to invest their money. P/E expansion may also occur simply because the world economy is moving into a synchronized expansionary phase with few major economic risks in sight.

#### 3. Prospective Dividend Yield

Finally, the last component of the prospective return for S&P companies is the dividend yield. Most investment experts are predicting that the dividend yield on the S&P will stay near its current level of about 2.1% over the next 7-10 years, as companies continue to remain under pressure to return cash to their shareholders.



Putting this all together does suggest that U.S. equity returns are going to be lower than they have been historically, but higher than the forecasted average. We project earnings growth per share will average +4.4% in the future. This, together with a dividend yield of +2.1%, should produce expected returns for the S&P 500 of about 6.5% over time. And if we see some modest P/E expansion (for the reasons cited above), we may see returns closer to ~7.0% in nominal terms, or 4.8% in real terms over the next 7-10 years. 4

What about fixed income? In general, our approach to develop our own estimates uses the historic relationship between U.S. real GDP growth and credit spread over 'risk-free' assets (government bonds) for both investment grade and high yield. A similar methodology is used for emerging market debt. For government bonds, we forecast Treasury returns by making explicit yield assumptions during the period. Our forecasts are low due to low income and negative market-to-market returns from rising rates over the projection period.

The end result of all of this work is our point of view on the prospective returns of key asset classes over the next 7-10 years. See Figure 6 (next pgae).

This analysis does not say anything about the path the market will take to register these returns. Our view is that equity price-to-earnings multiples could rise above their historical average over the next few years as the global economic recovery gathers momentum and investors seek equities as bond yields remain low. That is, equity valuations could overshoot and boost returns for several years, followed by a period of weaker performance.

<sup>&</sup>lt;sup>3</sup> Breaking this down, 4.4% earnings per share growth is derived assuming 5.2% nominal sales growth of S&P 500 companies, minus 0.5% for increased shares outstanding and minus 0.3% for a projected decline in profit margins. The 5.2% forecast assumes the output gap is closed in the next few years

<sup>&</sup>lt;sup>4</sup> It's important to note that this is a medium-run forecast for U.S. equity returns, not the forecast for this year. By most estimates, this year's forecast is in the 9-11% range due to overseas earnings growth, some continuing share buybacks, and via changing capital structures due to low interest rates.



Figure 6: Prospective Asset Class Returns, Nominal, 7-10 Years (USD)

Asset Class	Nominal Return (%) I-Bank average	Artemis Forecast
U.S. Equity (Large Cap)	5.8	7.0
International Equity	5.8	6.8
Emerging Market Equity	9.3	9.6
Emerging Market Bonds	5.8	6.5
U.S. Corporate Bonds	3.7	3.9
High Yield Bonds	5.6	5.9
Commodities	3.8	2.5
Intermediate Treasuries	2.8	2.8
Long-term Treasuries	2.2	2.2
Inflation	2.2	2.2

### *Implications*

One of the principal implications is that balanced portfolios of global equities, bonds and cash are fated to generate mediocre returns over the coming decade, nowhere near the levels attained in the recovery from the Great Recession. For example, a simple balanced portfolio of 30% U.S. equity, 20% international equity, 10% emerging market equity and 40% diversified bonds will return about 6.0% in nominal terms. A meaningful overweight to emerging market equity can boost the return somewhat, but it may not be worth the increase in volatility for many.

Thus, if you are depending on high single digit investment returns over the next decade or more to make your financial plan work, you will need to take a closer look at your other options. You will need to consider working longer, spending less and saving more.

Of course, no one really knows what the future will bring. Nevertheless, in my view it is incumbent upon advisors to envision a scenario with their clients in which returns on financial assets trail historical returns for an extended period. If low returns do persist, it will call into question whether the "safe" withdrawal rate of 4% will continue to work. If "the 4% rule" doesn't work, advisors will need to adopt a more dynamic approach with their clients to help them adjust their spending in retirement as the market goes through its ups and downs, and their time horizon decreases.



I think the other major implication is that while baby-boomers have enjoyed a 30-year bond rally **and** an 8.6% real return on the S&P 500, many of these investors still haven't saved enough. This does not bode well for those currently in their 30s and 40s, many of whom are saddled with college debt. The message for them is clear: save, save and save more.

# **Artemis Strategy**

We made very few adjustments to client portfolios this quarter, focusing most of our attention on simply assuring that all available cash was invested. Those investors who have been holding cash for the last year or more in the hopes that they would have a better market entry point after the market corrected, have paid dearly in terms of lost returns.

We continue to believe the path of least resistance for global equities is still higher, but increasingly stretched valuations in many markets and near record low volatility do warrant not getting too greedy. The strong stock market reflects the powerful combination of hyper-easy money and good earnings, and so equities will be vulnerable to anything that alters the prospect of either of these supports.

One area of concern is that there is a very good chance that central banks ultimately will err on the side of staying too easy for too long, allowing some increase in inflation. We are currently evaluating the different ways to increase our real assets allocation to ensure portfolios have adequate inflation protection.

We are also considering reducing our underweight position to emerging market equity in our more aggressive portfolios, now that emerging markets have stabilized. We also still like European equities, where growth is trying to take hold despite a strong currency. European equity valuations are appealing relative to U.S. equities, as large Eurozone companies are trading at levels even lower than the normal discount to their U.S. counterparts. Small and mid-sized companies in Europe have particularly attractive valuations, supporting our move last quarter to lighten up on small U.S. companies in favor of their European brethren. However, we are reducing our overweight position to Germany because the Ukraine crisis is adding too much volatility to returns.

As for fixed income, we have already trimmed some high-yield exposure and will be doing more as we rotate into emerging market equity (aggressive portfolios). For less-aggressive portfolios, we still like municipal income and plan to add to our holdings as we lighten up on high yield.



In summary, we still have a positive view of the future, even though the U.S. market is definitely overdue for a technical correction. Trying to predict when it will occur is impossible and is tantamount to worrying about the wrong thing. Market turbulence only matters if you need the money for other purposes; if you don't, then the appropriate response is to sit tight. This is our strategy.