Artemis
FINANCIAL ADVISORS LLC

Market Outlook & Strategy

Second Quarter of 2015

Leigh Bivings, Ph.D., CFP®

Artemis Financial Advisors, LLC

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

Artemis
FINANCIAL ADVISORS LLC

Executive Summary

- **Global equity market returns were lackluster in Q2.** The U.S. market was flat at +0.1%; international developed market returns returned +0.5%, and emerging market equities returned +0.7%.

- **Equities hit a pothole at the end of the quarter largely due to the unresolved crisis in Greece.** Greece's precarious finances dominated the headlines in June and obfuscated the fact that the euro area economic data largely showed improvement over the period.

- **Investors did not get any support from fixed income markets. Bond prices fell sharply due to ebbing deflationary fears in Europe**. The European bond rout spilled over to the U.S., and U.S. bond prices declined across the board. Real estate also had a very tough quarter.

- **In this issue, we review the conclusions we made a year ago about low prospective market returns for both stocks and bonds over the next decade and expand on some of their implications for investors.** One key consideration is sequence-of-returns risk, which is the risk that if a portfolio is depleted too severely by withdrawals and poor returns in the early years of retirement, there won't be enough money left over for when the good returns do arrive.

- **We also discuss the implications for those who are still in the accumulation phase and suggest that for some, the right answer may be to actually take on more equity risk.** For others, the right answer may be to find reasonable ways to diversify away from the stock market. If both of these choices are unpalatable, the only other choices available are to save more and/or retire later, unless you have sufficient wealth to begin with.

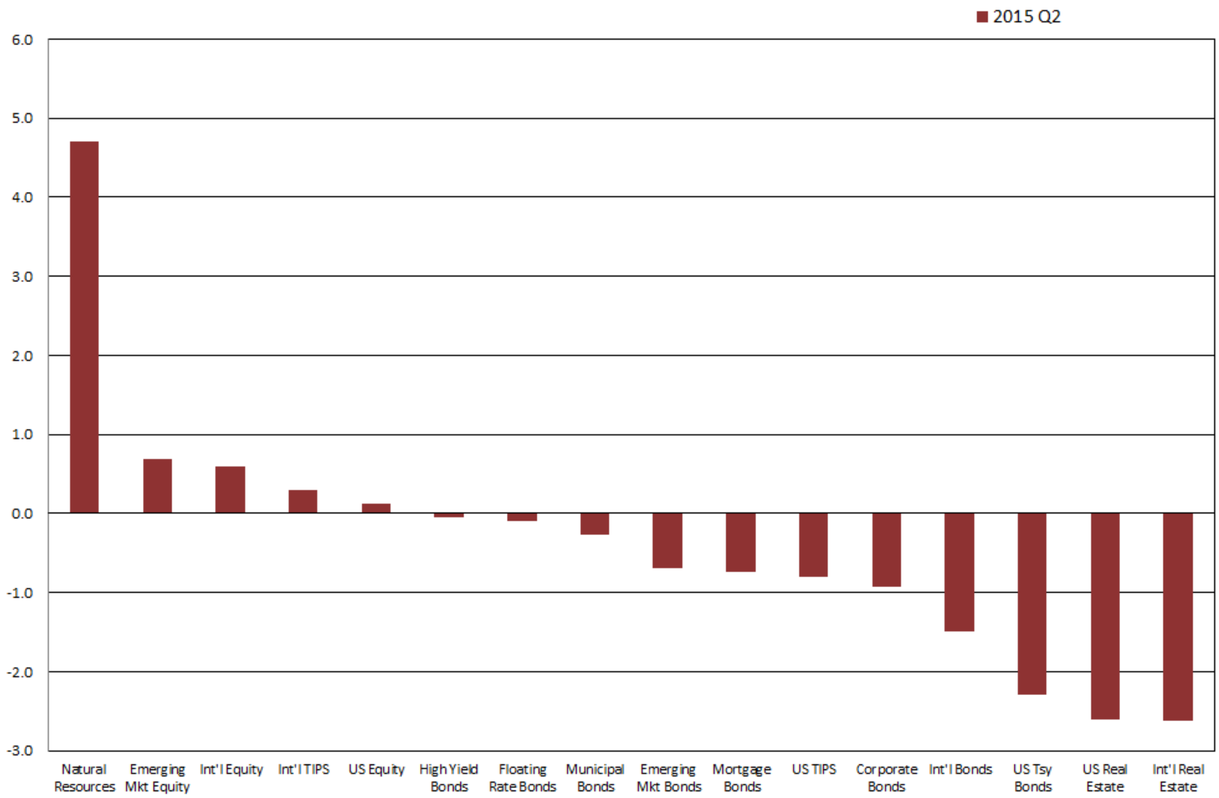
- **This quarter we modestly added to our international equity allocation, tilted toward Japan.** Japan is in the throes of a multi-year economic reform program, and Prime Minister Shinzo Abe recently implemented an impressive series of structural reforms. The bet is that Japanese equities, although already substantively up in the last year or so, have more room to run, especially relative to U.S. assets. We'll see.

- **We also further tweaked our bond allocations down in areas we think are vulnerable to interest rate increases**, which our Federal Reserve chief Janet Yellen is strongly hinting will come this year.

Markets in Review

Global equity market returns were very lackluster in Q2. In the U.S., the overall market returned a measly +0.1%, with the S&P 500 modestly outperforming returning with a gain of +0.3%. Macroeconomic data was mixed over the period, and picked up toward its end, but the Greek saga took the wind out of the market's sails in June, and equity indices erased most of their gains for the quarter. See Figure 1.

Figure 1: Asset Class Performance in Q2 2015 (percentage points)



European equities hit an even bigger pothole at the end of the quarter due to the unresolved crisis in Greece and declined by -3.0% in U.S. dollar terms in June, but still managed to eke out a +0.7% gain for the quarter. Greece's precarious finances dominated the headlines in June, culminating in the Greek government calling a referendum at the end of the month. In July, a compromise was reached that will require further belt-tightening in Greece, which will likely continue to hurt its economy in the short term.

Nevertheless, Greece aside, euro area growth is currently benefiting from the combination of lower oil prices, a weaker currency, a thawing in credit markets, and the ECB's liquidity program. Economic data largely showed improvement over the quarter. Eurozone GDP growth was 0.4% in Q1, the highest it has been in a while. Inflation was low, but positive allaying deflationary fears, and even more encouragingly, a key manufacturing index hit a four-year high.

Despite the falloff in European indices, the international developed market index (two-thirds of which is European stocks and one-third of which is developed countries in Asia and the Far East) still managed to beat the U.S. by returning +0.5%.

The surprise winners this quarter were the emerging markets, which in the aggregate returned +0.7 percent. Latin America was the strongest performing region, for a change. Brazil led the way, due to a presidential veto on increasing retirement benefits, which signaled to the investment community the president's willingness to improve policy and to achieve a big surplus. Russia also did well, supported by a 14% percent rally in the price of oil.

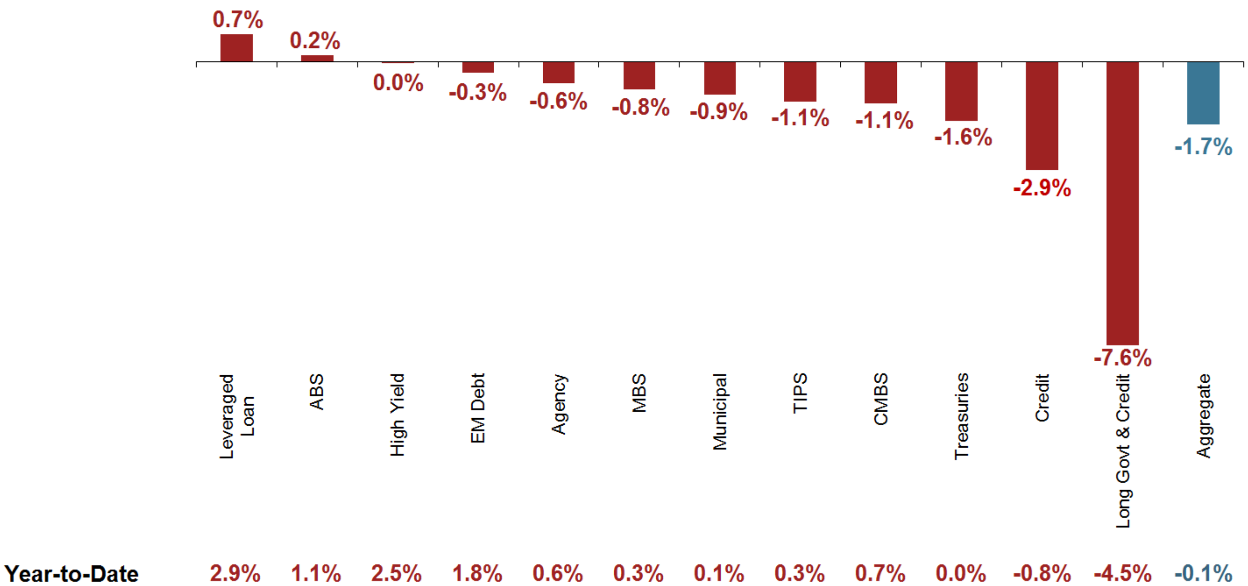
Investors did not get any support from fixed income markets. Indeed, bond prices fell sharply due to ebbing deflationary fears in Europe. The shift was somewhat surprising, given that the European Central Bank had just initiated a bond-buying program, which all else being equal, should have increased bond prices. As bond markets are tightly linked, bond prices declined across the board in the U.S. with long-dated securities taking the biggest hit. See Figure 2 (next page). They will likely continue to struggle over the next six months if U.S. and European growth surprise to the upside and the Fed pushes forward with its plan to start hiking rates this year.

Real estate also had a rough quarter, largely for the same reasons fixed income declined. In contrast, commodities increased, due to the increase in oil prices during the quarter. Neither of these trends is expected to persist.

Sequence-of-Return Risk in a Low Return World

In last year's Q2 Strategy and Market Outlook report, we took you through our methodology for periodically updating our asset class forecasts. This exercise is important because these forecasts help us to refine our strategic portfolio recommendations and financial plan projections.

Figure 2. Q2 2015 U.S Bond Returns



Source: FactSet, Fidelity Investments (AART), as of 6/30/15.

Our key result was that for both equities and bonds, annualized nominal returns over the next 7-10 years will fall short of the historical average. Specifically, we projected that typical balanced portfolios will be lucky to return 6.0% over the next 10 years, and possibly less. Judging by this year's market returns this far, it certainly feels like the future has arrived.

The key issue is what is an investor to do? As you might imagine, a lot depends on how close one is to retirement because investors early in their retirement years are vulnerable to sequence-of-returns risk.

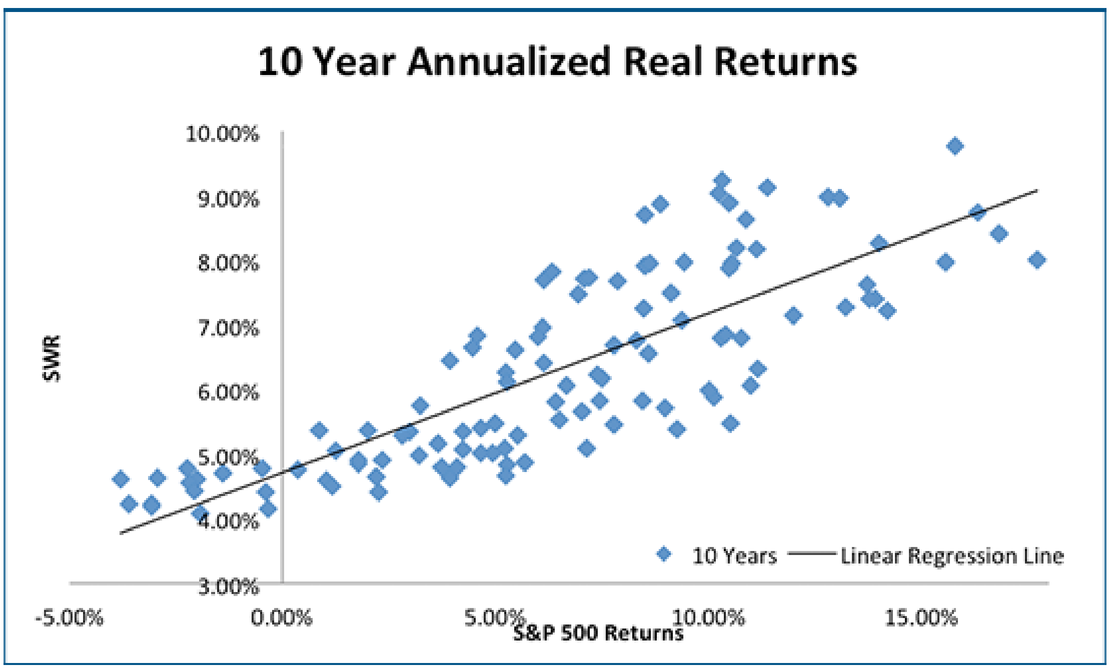
What is sequence-of-returns risk?

Sequence-of-returns risk refers to the risk of a retiree experiencing a string of poor returns early in their retirement withdrawal years, such that the portfolio does not recover leading to a retirement spending shortfall. Research has shown that the true driver of sequence-of-returns risk is the *real* return realized in the portfolio in the first decade of retirement. If the real return is low, then cumulative withdrawals may add up to something more significant and the portfolio in the aggregate starts to get winnowed down. As a result, the portfolio simply may no longer be able to produce enough real growth to keep up with inflation-adjusted spending for the rest of retirement.

Note that the driver is the real return realized in the first decade of retirement, not the first year or two. This is because a couple of bad years won't destroy a portfolio because the retiree will have (or should have) other sources such as cash and bonds to draw upon. In contrast, a bad decade will outlast most cash reserve strategies, and many bucket strategies (i.e., having a short-term cash management bucket, a second bucket of bonds and a third of risky assets).

Figure 3 below shows the strong relationship between the safe withdrawal rate (defined as the amount of inflation-adjusted dollars a retiree can safely withdraw annually from a 60/40 portfolio without fear of running out of money in 30 years) and 10-year real annualized returns in the first decade of retirement. As the chart indicates, at lower projected real rates of return, the less the retiree can safely withdraw from their portfolio during this period. The opposite is true as well—a great first decade in terms of returns enables a retiree to safely spend at a much higher rate throughout their retirement.

Figure 3. Relationship between the Safe Withdrawal Rate (SWR) and Future Real Returns



Source: Kitces.com March 2015 blog

Fortunately, decades of low real returns can be reasonably predicted by long-term market valuation trends, giving the retiree the opportunity to adjust their portfolio allocation and/or spending in the first decade. As you may recall, we looked long and hard at prospective long-term returns in last year's Q2 report and came to the conclusion shown in Figure 4 below. The bottom line is that folks retiring this decade will need to be very mindful of the risk and adjust their withdrawal rate accordingly.

Figure 4. Real (Inflation-Adjusted) 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: History: Richard Marston (2014 IMCA Conference), MSCI; Prospective: Artemis Advisors

One might argue that it is going to be very hard for new retirees to hold conservative portfolios over the next decade, as such portfolios will barely keep up with inflation. Indeed, new research points to the conclusion that if the goal is to maximize the probability of success (success defined as not running out of money), then retirees are going to be compelled to take significant equity risk. Yet for those trying to manage a potential shortfall, *controlling for material risk exposure*, a rising equity glidepath—whereby the retiree enters retirement with a conservative portfolio and actually increases equity exposure in the later years of retirement—will minimize the magnitude of shortfall even while increasing the likelihood.[1] There is no one right answer here, and much depends on the initial portfolio size relative to spending needs and one's tolerance for taking risk.

The important point is that as long as the retiree truly doesn't have to take any withdrawals from equities in the early years and allows time for any early retirement bear markets to recover, the primary sequence risk of the portfolio can be avoided.

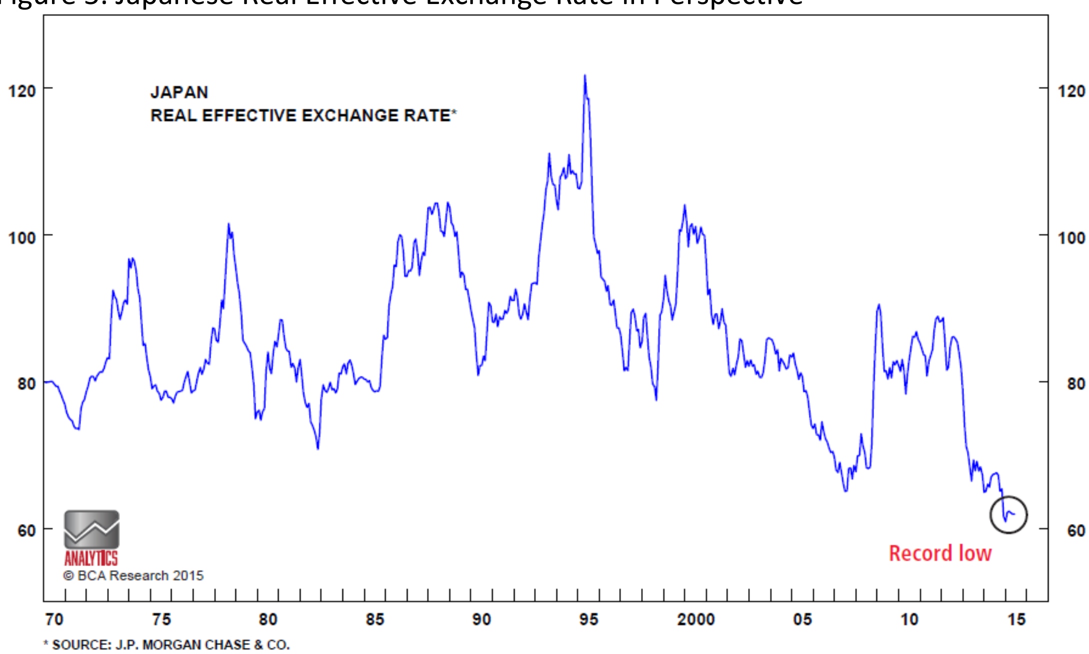
[1] Phau, Wade D., and Michael Kitces. "Reducing Retirement Risk with a Rising Equity Glide Path." *Journal of Financial Planning* 27 (1): 38-45.

What about those who will still be in the accumulation phase over the next decade? The short answer is to take on more equity risk to maximize growth in the portfolio and learn to live with the volatility. If that is unacceptable, your other choices are a combination of working longer, spending less and saving more.

Artemis Strategy

We made a few changes to our portfolios this quarter. First, we continued to build our international developed market exposure, tilting our allocation toward Japan. Japan is currently enjoying the benefits of "Abenomics," the so-called economic reform program instituted by Prime Minister Shinzo Abe. Late last year, voters gave Abe the green light to implement a wide variety of structural reforms, which will boost GDP and continue to support rising share prices. He has followed through, and the list of changes being implemented is impressive. He has also implemented a liquidity program, which has helped to achieve positive growth and inflation (sorely needed in Japan), primarily by making the exchange rate much cheaper. Indeed, the Japanese real effective exchange rate is now trading at multi-decade lows. See Figure 5.

Figure 5. Japanese Real Effective Exchange Rate in Perspective



Despite the fact that the Japanese market has been on a tear for the last year (largely due to increasing corporate earnings), it is not too late to remain bullish about Japanese equities going forward. Moreover, with the yen estimated to be almost 30% undervalued relative to the dollar, U.S. investors do not face much currency risk at this point. In fact, over time the currency effect may well be a positive for U.S. investors.

We have also modestly trimmed some fixed income in many of our portfolios, focusing on segments that we believe are vulnerable in the current environment in favor of developed market equities. The central dilemma facing investors at the moment is the point made earlier: stocks and, especially, bonds are overvalued and prospective returns look meek for the next years. Favoring equities over bonds is a reasonable choice. Many of you are years away from retirement and can afford to take reasonable risk; you don't need the money and can wait out any market correction. And some of you are sufficiently wealthy that with proper planning, the volatility won't materially add to a shortfall risk. However, some clients near and in the early stages of retirement shouldn't be adding too much risk due to the sequence-of-returns risk discussed in the previous section. **I am also very mindful of the fact that, irrespective of one's wealth, it can be extremely unnerving to watch one's portfolio decline just after making what for most is an irreversible retirement decision.**

For others of you, the right answer might be to diversify away from the public markets. The obvious alternative is purchasing some real estate. This can be an excellent idea. Of course, a lot depends on the location, purchase price, and how much "sweat equity" one is willing to put into finding and managing such a property.

Other ideas clients have recently asked us about include angel investing (investing in incubator companies), peer-to-peer lending (lending money to consumers with high interest rate credit card debt to enable them to pay off the card and pay you a lower but still very attractive rate), buying precious gems, farmland and artwork. We at Artemis are not experts in these areas but we know enough to tell you that finding the right opportunity takes a lot of time, and the risks can be high. But so, too, can be the rewards. Such is the nature of investing!