EMERALD ASSET ADVISORS, LLC

Investment Strategists for **Successful Families**



### October 6, 2017

Thank you for reading GreenThought$. It is our privilege to provide you with our insight on current financial market events and our outlook on topics relevant to you.

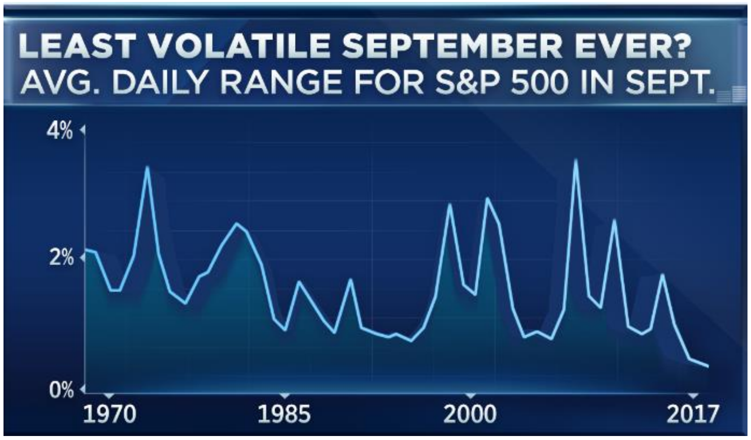
## Third Quarter 2017: Investment Market Summary

Well, another quarter has closed out, and the markets continue their grind higher.

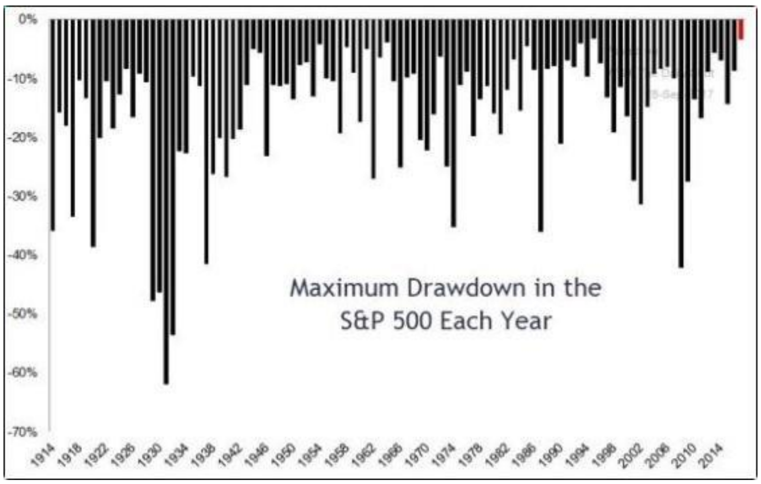
In the third quarter, the S&P 500 was up 4.9% bringing its year to date gain to 14.2%. The developed international market index (EAFE) tacked on 6.2% for the quarter and is now up 20% for the year. The best performing equity index continues to be the MSCI Emerging Market index, up 27.8% for the year after adding 9.4% for the quarter. The U.S. bond market, as measured by the Barclays Aggregate index, gained .8% for the quarter and 3.1% so far this year.

It's interesting to look a little closer at the S&P 500 index, perhaps the most widely followed of the stock market indices, and in particular, the volatility of that index. Volatility is a statistical measure of the dispersion of returns for a given security or market index. A simple way of thinking about this: Suppose you have a choice of investing in Fund A or Fund B. Fund A gained 9% one year, 10% one year and 11% one year. Fund B gained 25% one year, was flat one year and lost 20% one year. While both funds then show an average annual gain of 10% for the 3-year period, Fund B was much more volatile. As an investor, in which fund would you be more comfortable investing?

The S&P 500 has shown an unusual lack of volatility this year. Per the chart below from CNBC, the intraday range for the value of the S&P in September averaged 40 basis points (.4%), the lowest in over 40 years.




This was not just a monthly phenomenon. The red bar on the far right in the chart below (courtesy Schwab) shows maximum drawdown of the S&P 500 so far in 2017. Note that it is the smallest in over 100 years!




There are different explanations for this lack of volatility. Some attribute it to the liquidity being created by Central Banks around the world (our Federal Reserve has started to withdraw that liquidity). Another explanation is what some call the T.I.N.A. effect, or "There Is No Alternative." Interest rates are so low, investors who don't want to hold cash or pension plans which have minimum return goals, may feel compelled to invest in the stock market, and so every little dip in prices is bought. And still others attribute the lack of volatility to the preference of many investors for passive investments instead of active, where money is put into a basket of stocks that match an index, often agnostic as to the quality of those stocks. Regardless of which explanation you favor, lack of volatility is clear.

Along with this discussion of volatility, it is important to understand correlation. Correlation is a statistic that measures the degree to which two securities, or asset classes, move in relation to each other. Correlation is measured on a scale of -1 to +1. If one asset class gains 5% each year and another also gains 5% each year, they would have a +1 correlation. One the other hand, if one asset class gains 5% and the other loses 5%, they would have a correlation of -1. Perfect positive or negative correlations rarely happen. The chart below from Bespoke is an illustration of correlation. Just looking at the left-hand column labeled S&P, you'll note that the long bond has a -.37 correlation to the S&P 500.

**Correlation Matrix: Daily % Change Correlation Over Last Ten Years**

| Ticker | S&P 500 | C. Disc. | C. Stap | Energy | Finan. | H Care | Indust. | Mater. | Tech | Telcom | Utilit. | Oil | Gold | Dollar | L Bnd |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S&P 500 | 1.00 | 0.94 | 0.85 | 0.81 | 0.88 | 0.86 | 0.94 | 0.89 | 0.90 | 0.78 | 0.76 | 0.24 | -0.01 | -0.17 | -0.37 |
| Cons. Disc. | 0.94 | 1.00 | 0.81 | 0.68 | 0.82 | 0.78 | 0.90 | 0.82 | 0.85 | 0.72 | 0.67 | 0.16 | -0.07 | -0.12 | -0.34 |
| Cons. Stap. | 0.85 | 0.81 | 1.00 | 0.65 | 0.67 | 0.81 | 0.78 | 0.71 | 0.70 | 0.69 | 0.71 | 0.12 | -0.06 | -0.10 | -0.28 |
| Energy | 0.81 | 0.68 | 0.65 | 1.00 | 0.62 | 0.66 | 0.73 | 0.81 | 0.66 | 0.59 | 0.70 | 0.48 | 0.16 | -0.28 | -0.30 |
| Financials | 0.88 | 0.82 | 0.67 | 0.62 | 1.00 | 0.68 | 0.82 | 0.73 | 0.72 | 0.64 | 0.57 | 0.16 | -0.06 | -0.13 | -0.31 |
| H Care | 0.86 | 0.78 | 0.81 | 0.66 | 0.68 | 1.00 | 0.78 | 0.71 | 0.73 | 0.68 | 0.69 | 0.14 | -0.04 | -0.12 | -0.29 |
| Industrials | 0.94 | 0.90 | 0.78 | 0.73 | 0.82 | 0.78 | 1.00 | 0.87 | 0.84 | 0.70 | 0.68 | 0.21 | -0.01 | -0.18 | -0.37 |
| Materials | 0.89 | 0.82 | 0.71 | 0.81 | 0.73 | 0.71 | 0.87 | 1.00 | 0.79 | 0.65 | 0.67 | 0.29 | 0.15 | -0.27 | -0.35 |
| Technology | 0.90 | 0.85 | 0.70 | 0.66 | 0.72 | 0.73 | 0.84 | 0.79 | 1.00 | 0.71 | 0.63 | 0.16 | -0.04 | -0.10 | -0.35 |
| Telecom | 0.78 | 0.72 | 0.69 | 0.59 | 0.64 | 0.68 | 0.70 | 0.65 | 0.71 | 1.00 | 0.63 | 0.12 | -0.05 | -0.10 | -0.25 |
| Utilities | 0.76 | 0.67 | 0.71 | 0.70 | 0.57 | 0.69 | 0.68 | 0.67 | 0.63 | 0.63 | 1.00 | 0.19 | 0.02 | -0.15 | -0.22 |
| Oil | 0.24 | 0.16 | 0.12 | 0.48 | 0.16 | 0.14 | 0.21 | 0.29 | 0.16 | 0.12 | 0.19 | 1.00 | 0.29 | -0.30 | -0.22 |
| Gold | -0.01 | -0.07 | -0.06 | 0.16 | -0.06 | -0.04 | -0.01 | 0.15 | -0.04 | -0.05 | 0.02 | 0.29 | 1.00 | -0.43 | 0.07 |
| Dollar | -0.17 | -0.12 | -0.10 | -0.28 | -0.13 | -0.12 | -0.18 | -0.27 | -0.10 | -0.10 | -0.15 | -0.30 | -0.43 | 1.00 | -0.05 |
| Long Bond | -0.37 | -0.34 | -0.28 | -0.30 | -0.31 | -0.29 | -0.37 | -0.35 | -0.35 | -0.25 | -0.22 | -0.22 | 0.07 | -0.05 | 1.00 |

The reason this discussion is relevant is that with the S&P 500 volatility so low, it is likely that we will see a return to a more "normal" environment in the coming weeks and months. When we are constructing portfolios for clients, we are mindful of correlations. If your portfolio contains asset classes that are highly positively correlated, you can expect most of your investments to move in the same direction. For instance, the S&P 500 historically has drawdowns of at least 5% three times every year. So far we've had none. Hopefully that trend continues but if/when it ends and we have a 5% correction, we want to have some investments that will be insulated from that, or may be negatively correlated and might gain in value even if the S&P is dropping. And of course a negative correlation becomes even more important when the stock market has large drawdowns.

We believe the way to grow and maintain your portfolio is to avoid the large drawdowns. So when you're reviewing your portfolio with your advisor, and maybe note that some investments have not done as well as others, remember this discussion of volatility and correlation. It's very rare that every holding in the portfolio moves in the same direction by the same amount, and the laggards in a strong market may be the investments that do the best when the market turns.

As always, we invite your thoughts and feedback.

Regards from the Emerald Team



## About Emerald

Emerald Asset Advisors, LLC is a Registered Investment Advisor (RIA) founded in 1998. For more information, please visit our website.
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