

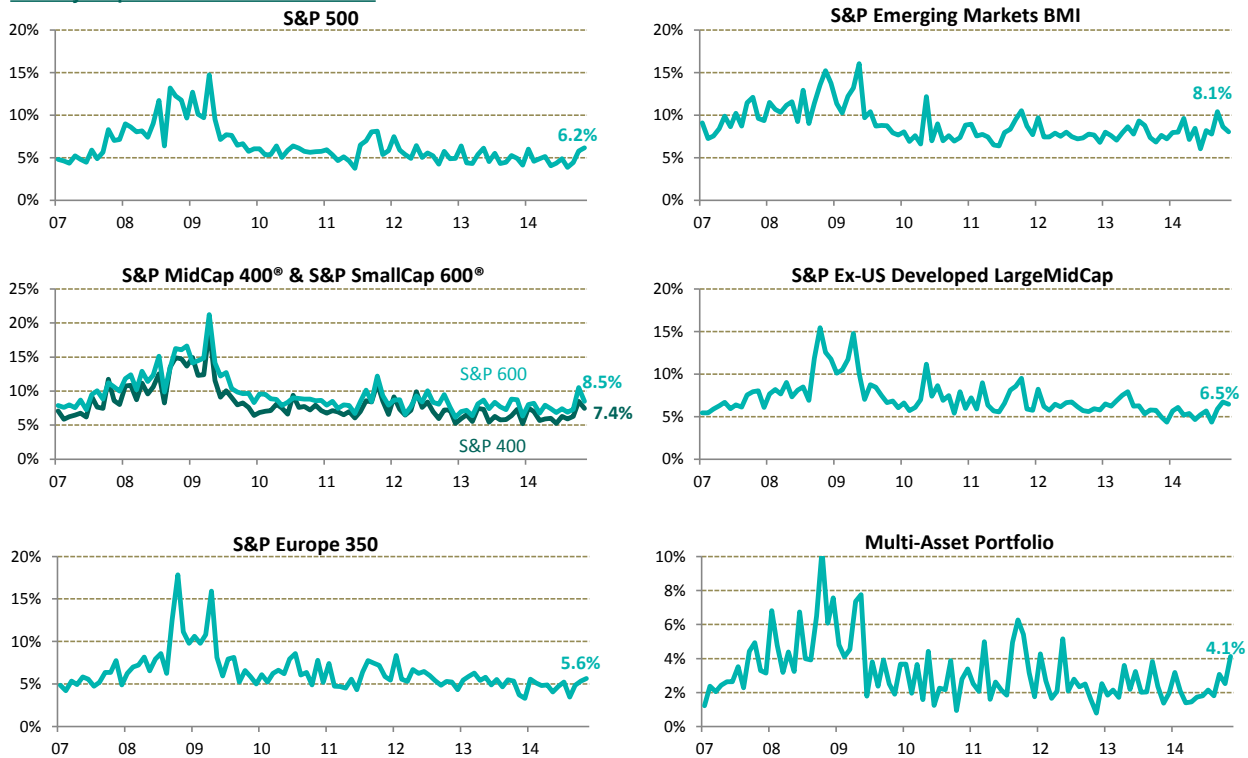
**Index Investment Strategy**

**COMMENTARY**

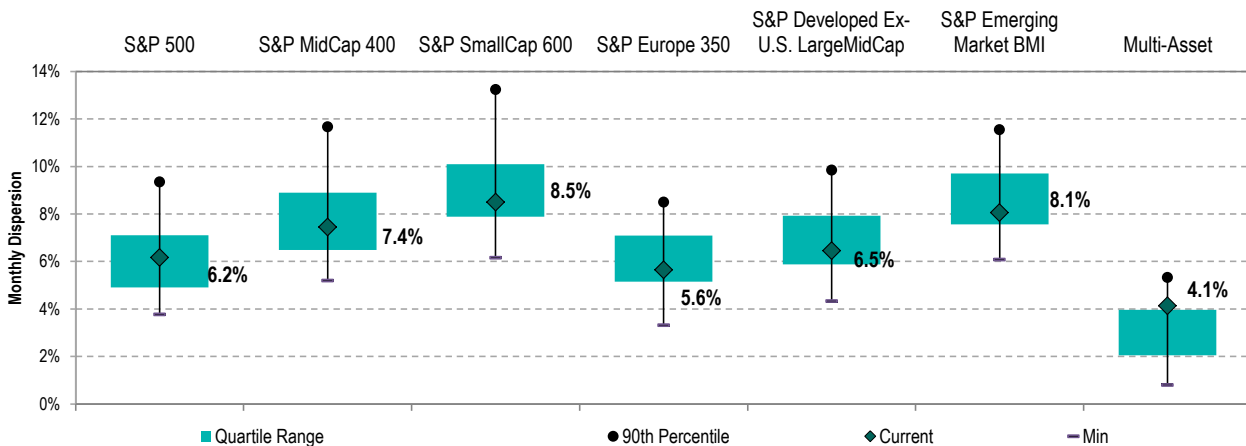
- October's bout of equity volatility was not unusual, but the collapse in U.S. volatility measures since has been extraordinary. Robust diversification effects and dramatically reduced correlations were the source of the reduction in volatility.
- Notably, the correlation among S&P 500® components during November was less than 10% and the lowest since January 2001. Correlations in the S&P MidCap 400® and S&P SmallCap 600® also registered multi-year lows.
- Dispersion in the major equity benchmarks did not change much in November; dispersion increased slightly in the S&P 500 and S&P Europe 350 and decreased slightly elsewhere. Cross-asset dispersion increased to its highest level since Summer 2012.
- On a relative basis, European markets remain the most correlated. The S&P Europe 350's correlation has climbed down from its elevated levels of October, but remains above average.

**DISPERSION**

Monthly Dispersion Jan. 2007 - Oct. 2014



Dispersion Levels versus Historical Range

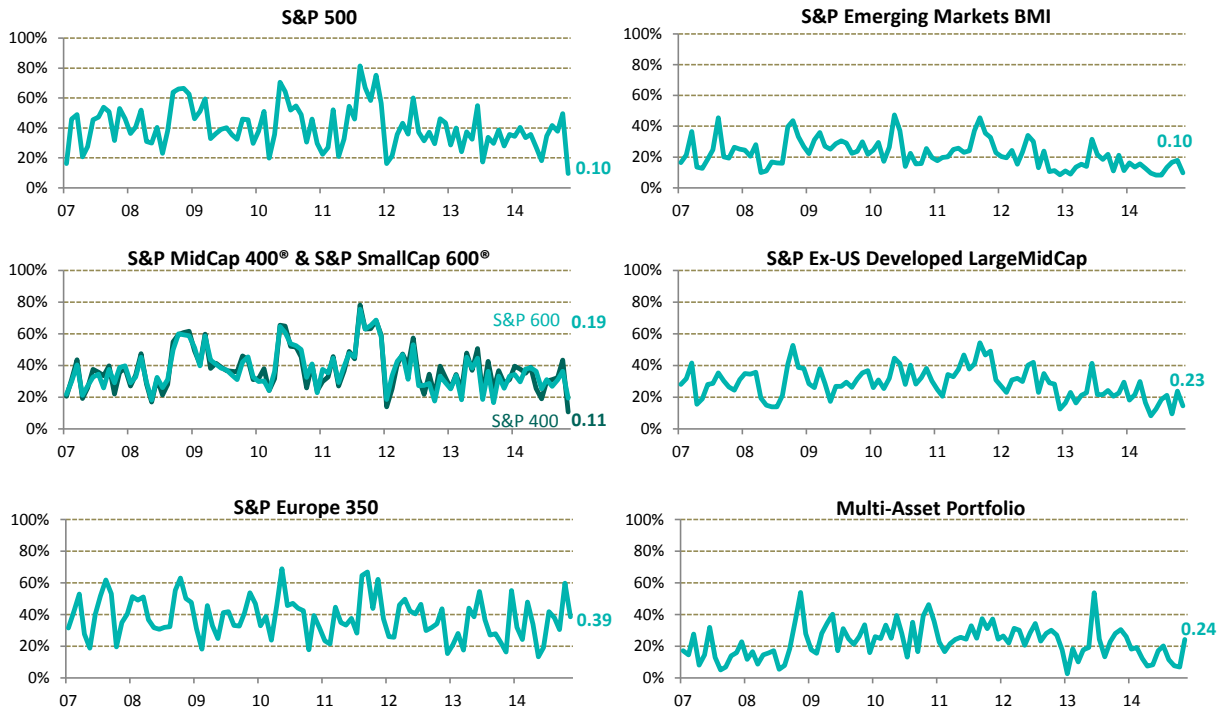


Source: S&P Dow Jones Indices LLC and/or its affiliates as of December 1, 2014. Charts and graphs are provided for illustrative purposes. Past performance is no guarantee of future results. For more information, please visit our website at [www.spdji.com](http://www.spdji.com)

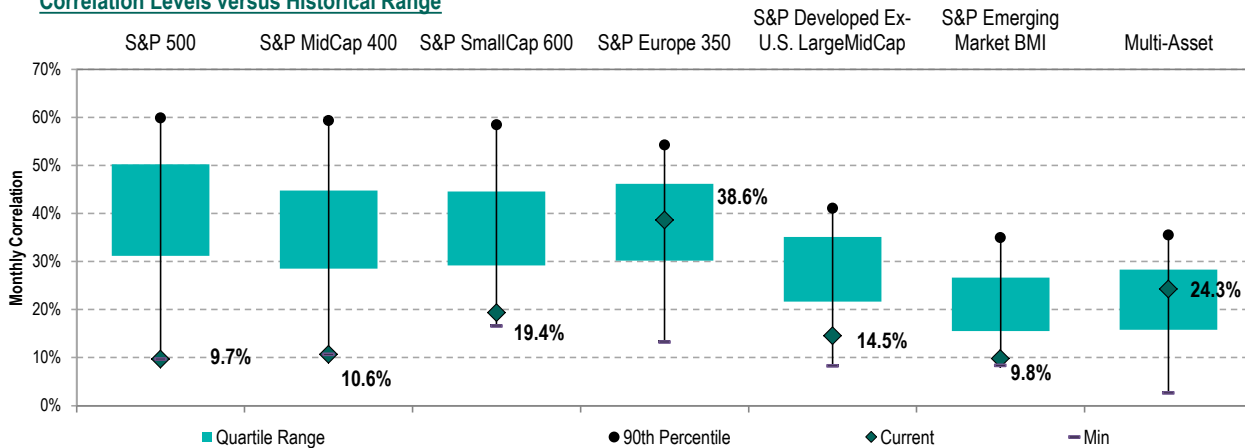
**Index Investment Strategy**

**CORRELATION**

**Index-Weighted Average Pairwise Stock Correlation Jan. 2007 - Oct. 2014**



**Correlation Levels versus Historical Range**



**NOTES**

- Index dispersions shown based on calendar month stock-level index-weighted dispersion. See the paper "[Dispersion: Measuring Market Opportunity](#)" for the definition of index dispersion and more information on the uses of dispersion.
- Index correlation based on single stock daily total returns during each calendar month. See the paper "[At the Intersection of Diversification, Volatility and Correlation](#)" for details on the relationship between correlation and dispersion.
- All calculations based total return indices in USD unhedged except in the case of the S&P Europe 350, the latter provided in EUR total returns.
- The Multi-Asset Portfolio comprises equal weights in each of: the S&P 500, S&P Europe 350, S&P Emerging Market BMI, S&P GSCI®, S&P TOPIX 150, Barclays Aggregate U.S. Corporate High Yield, Barclays Aggregate U.S. Bond and S&P / Citigroup International Treasury Bond Ex-US Indices. All returns are total returns in USD unhedged. Multi-Asset Portfolio dispersion and correlation are based on equally-weighted total monthly returns in the case of the former and equally weighted pairwise daily returns over in calendar month for the latter.

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