Market Attributes: Correlation & Dispersion

April 1, 2015

Index Investment Strategy

COMMENTARY

- March’s figures show a reduction in U.S. equity dispersion, which returned close to the recent lows in the case of the S&P 500® and fell back to well below average in the S&P MidCap 400® and the S&P SmallCap 600®.

- There was a small increase in the S&P Europe 350® dispersion, as well as among emerging market equities. The large decrease in multi-asset dispersions was driven in part by the importance of U.S. dollar variations over the past month.

- Correlations in the S&P 500 rose above average but remained within the central quartiles. Correlations also rose between smaller U.S. stocks, but remained close to (in the case of mid caps) or below average (small caps).

- In the S&P Europe 350 and for our Emerging and Ex-U.S. Developed equity indices, correlations remained below average; the decreasing asset dispersion via U.S. dollar effects was also reflected in higher multi-asset correlations.

DISPERSION


Dispersion Levels versus Historical Range

Source: S&P Dow Jones Indices LLC and/or its affiliates as of April 1, 2015. 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
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CORRELATION

Index-Weighted Average Pairwise Stock Correlation Jan. 2007 - Mar. 2015

- **Correlation Levels versus Historical Range**

\[
\begin{array}{ccccccc}
\text{Index} & \text{Current} & \text{Min} & \text{90th Percentile} & \text{Quartile Range} \\
\hline
\text{S&P 500} & 0.49 & 0.14 & 0.33 & 0.48 \\
\text{S&P MidCap 400} & 0.38 & 0.30 & 0.34 & 0.38 \\
\text{S&P SmallCap 600} & 0.33 & 0.26 & 0.34 & 0.33 \\
\text{S&P Europe 350} & 0.34 & 0.26 & 0.33 & 0.34 \\
\text{S&P Developed Ex-U.S. LargeMidCap} & 0.29 & 0.15 & 0.25 & 0.29 \\
\text{S&P Emerging BMI} & 0.14 & 0.08 & 0.25 & 0.14 \\
\text{Multi-Asset Portfolio} & 0.30 & 0.17 & 0.29 & 0.30 \\
\end{array}
\]

NOTES

- Index dispersions shown based on calendar month stock-level index-weighted dispersion. See “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 “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.

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Dispersion

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