S&P Dow Jones Indices

A Division of S&P Global

Index Dashboard: Dispersion, Volatility & Correlation

November 30, 2017

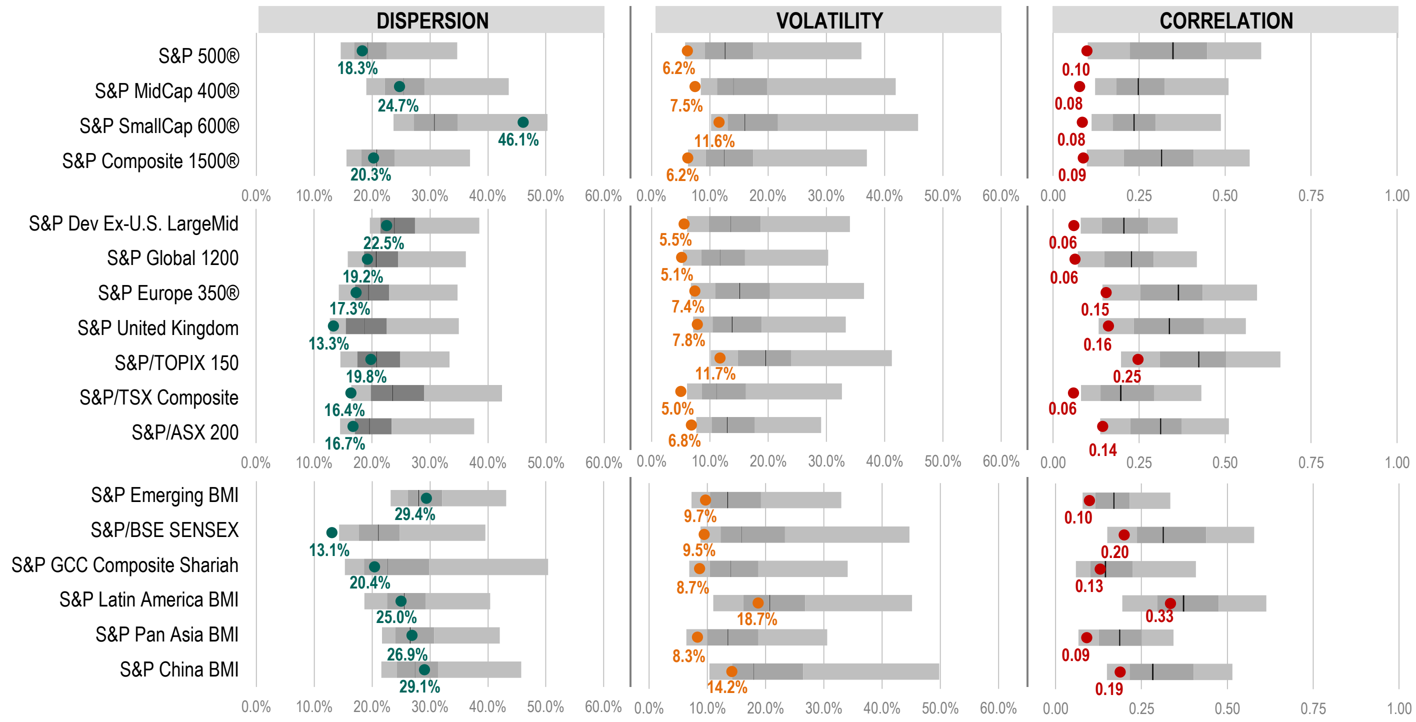
COMMENTARY

In what looked to be a return to company-specific drivers of performance, "stock pickers" rummaging around in the U.S. small-cap market should have found much to excite or disappoint them this month.

Dispersion in the S&P SmallCap 600 rose to an annualized 46.1% in November, the highest monthly reading since May 2009. Remarkably, the benchmark's volatility remained low, and most of the S&P 600 sectors performed similarly - meaning a majority of the rise in dispersion was due to differences *within* sectors.

Most other markets saw a smaller rise in dispersion this month, to stand at moderate if slightly below-average levels. Otherwise correlations and volatility continued at unusually low levels, nearly everywhere.

GLOBAL DASHBOARD



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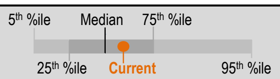
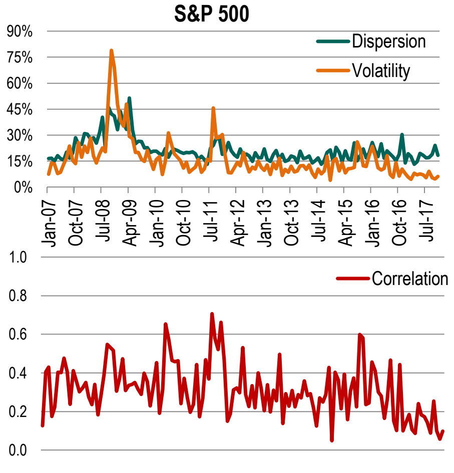
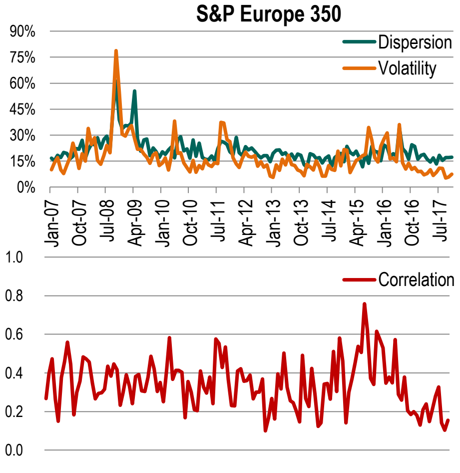
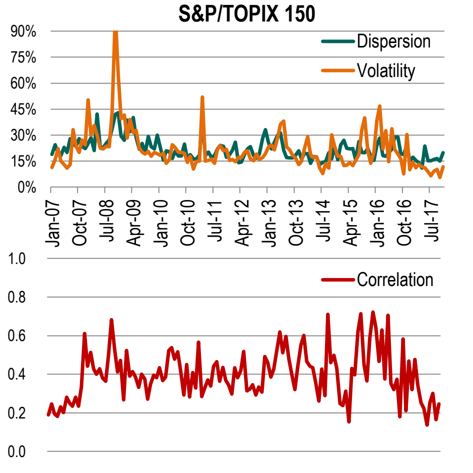


Dispersion, correlation and volatility shown in relation to the median and 5th, 25th, 75th and 95th percentile of monthly values (over the period Jan 2007 to date). Dispersion and volatility are annualized, correlation is the absolute level during the past month.

MAJOR BENCHMARKS JAN 2007 TO DATE

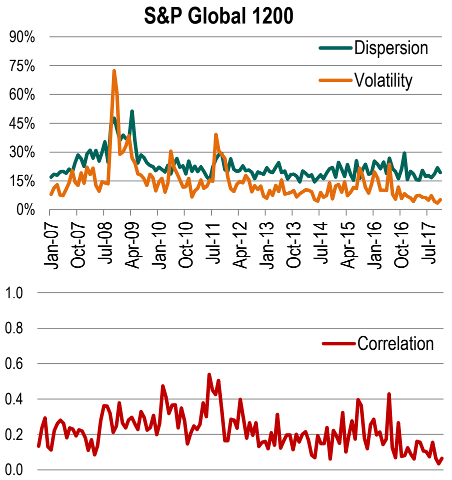


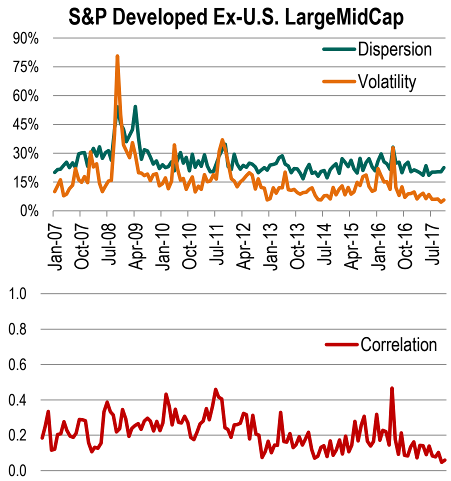


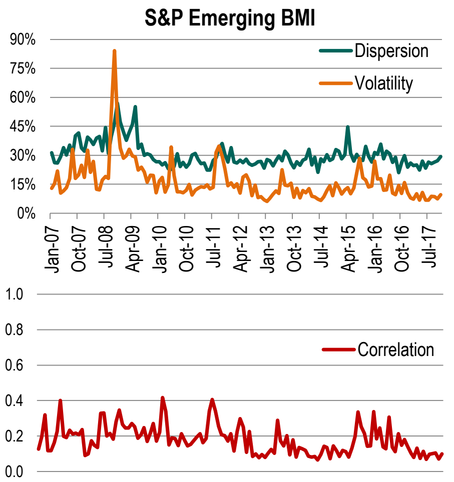


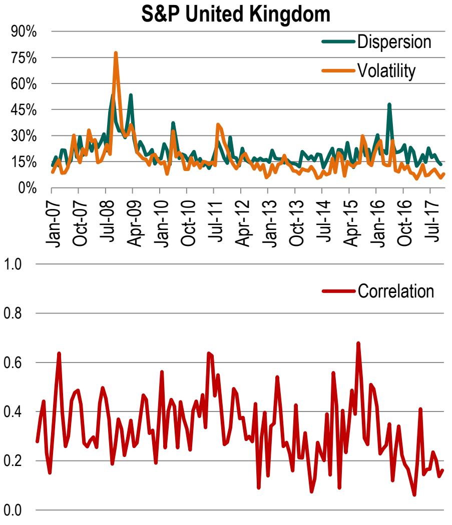
Source: S&P Dow Jones Indices as of November 30, 2017

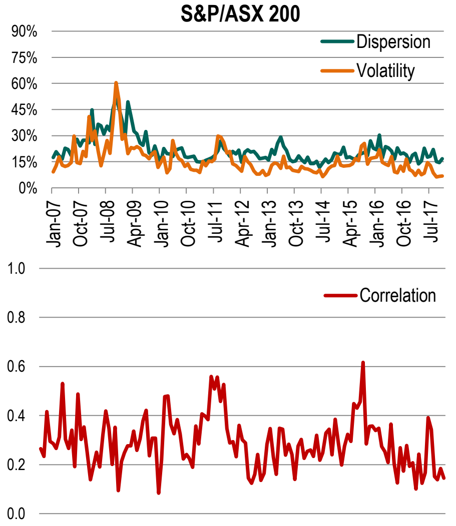
MAJOR BENCHMARKS JAN 2007 TO DATE (cont'd)

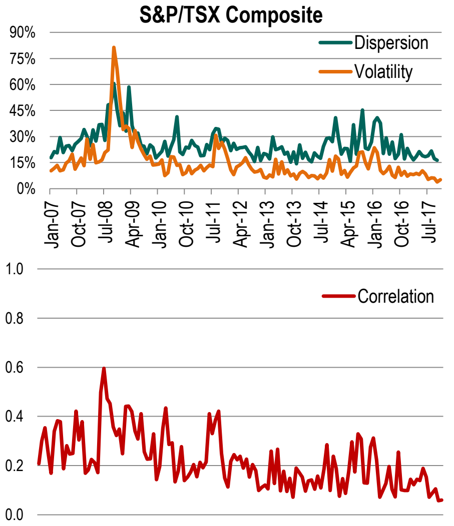












NOTES

Definitions

Dispersion for each index is the annualized, index-weighted standard deviation of the index constituents' full-month total returns. See "Dispersion: Measuring Market Opportunity" for a formal definition of dispersion and more information on its uses.

Correlation for each index measures the correlation among the daily returns of the index constituents during the month, calculated via the ratio of index variance to the index-weighted average constituent variance. See "At the Intersection of Diversification, Volatility and Correlation" for a more detailed explanation of the calculation.

Volatility for each index is the annualized standard deviation of daily index price returns during the month. See "The Landscape of Risk" for details on the relationship of correlation, volatility and dispersion.

Historical Measurement Periods

The time period over which the median and percentiles of dispersion and correlation are measured begins with January, 2007 and ends with the current month except in the case of the S&P GCC Composite Shariah (which has a history to April, 2007).

Source: S&P Dow Jones Indices as of November 30, 2017

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Charts and graphs are provided for illustrative purposes. Past performance is not an indication or guarantee of future results. The charts and graphs may reflect hypothetical historical performance. All information presented prior to the launch date is back-tested. Back-tested performance is not actual performance, but is hypothetical. The back-test calculations are based on the same methodology that was in effect when the index(es) was officially launched. However, it should be noted that the historic calculations of an Economic Index may change from month to month based on revisions to the underlying economic data used in the calculation of the index. Complete index methodology details are available at www.spdji.com. It is not possible to invest directly in any index.

S&P Dow Jones Indices defines various dates to assist our clients in providing transparency on their products. The First Value Date is the first day for which there is a calculated value (either live or back-tested) for a given index. The Base Date is the date at which a given index is set at a fixed value for calculation purposes. The Launch Date designates the date upon which the values of a given index are first considered live: index values provided for any date or time period prior to the index's Launch Date are considered back-tested. S&P Dow Jones Indices defines the Launch Date as the date by which the values of an index are known to have been released to the public, for example via S&P Dow Jones Indices's public website or its datafeed to external parties. For Dow Jones-branded indices introduced prior to May 31, 2013, the Launch Date (which prior to May 31, 2013, was termed "Date of introduction") is set at a date upon which no further changes were permitted to be made to the index methodology, but that may have been prior to the index's public release date.

Prospective application of the methodology used to construct the index(es) as well as revisions to economic data may not result in performance commensurate with the back-test returns shown. The back-test period does not necessarily correspond to the entire available history of the index(es). Please refer to the index methodology for the particular index in question, available at www.spdji.com, for more details about such index, including the manner in which it is rebalanced, the timing of such rebalancing, criteria for additions and deletions, as well as all index calculations.

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