

S&P Dow Jones Indices

A Division of **S&P Global**

Index Dashboard: Dispersion, Volatility & Correlation

31 December 2018

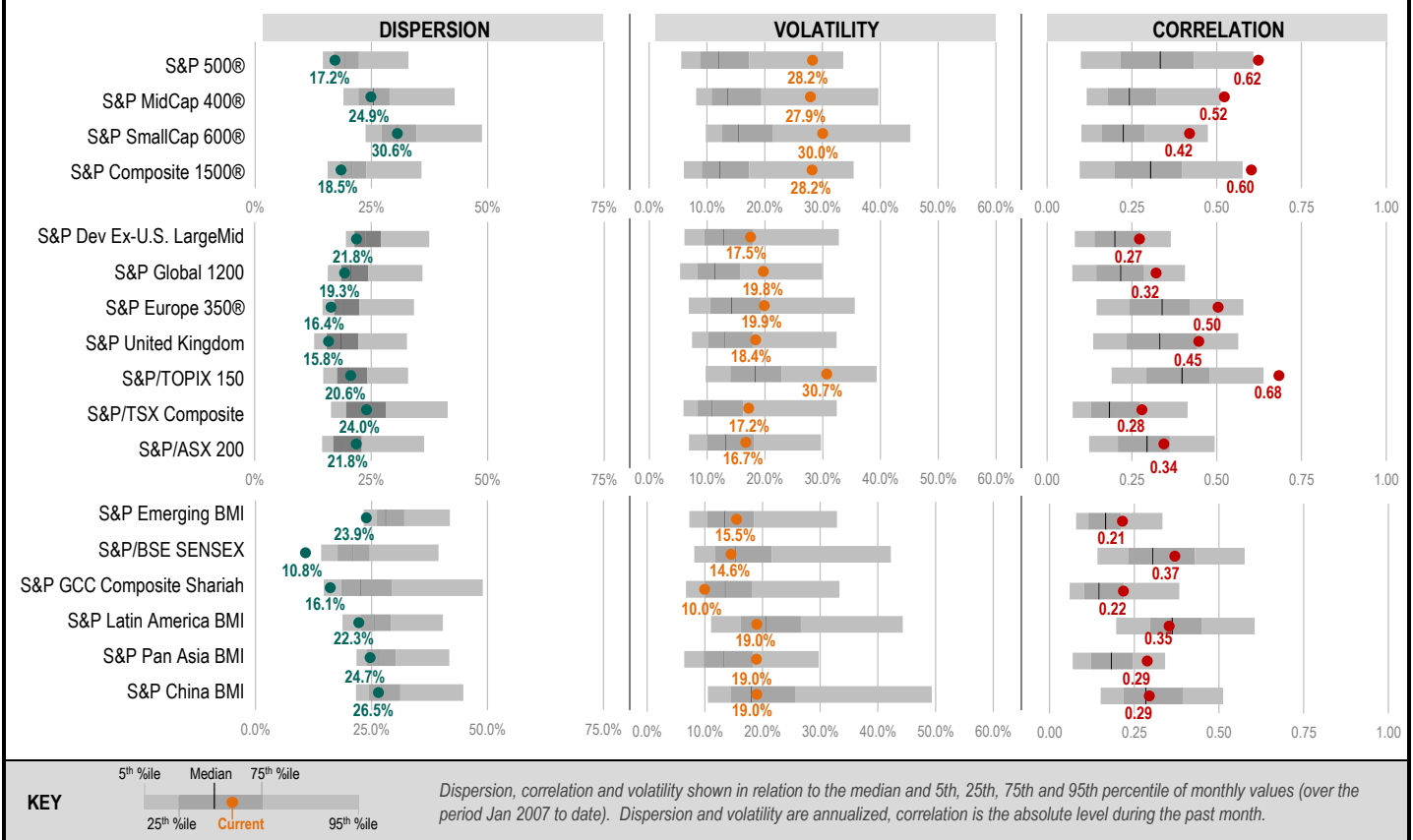
COMMENTARY

Elevated trading volumes in U.S. equities, coupled with December's usual decline in liquidity, produced a five-year high in both monthly index volatility and average constituent correlations for the S&P 500®. We report above-average volatilities and correlations in a majority of our indices for the final month of 2018.

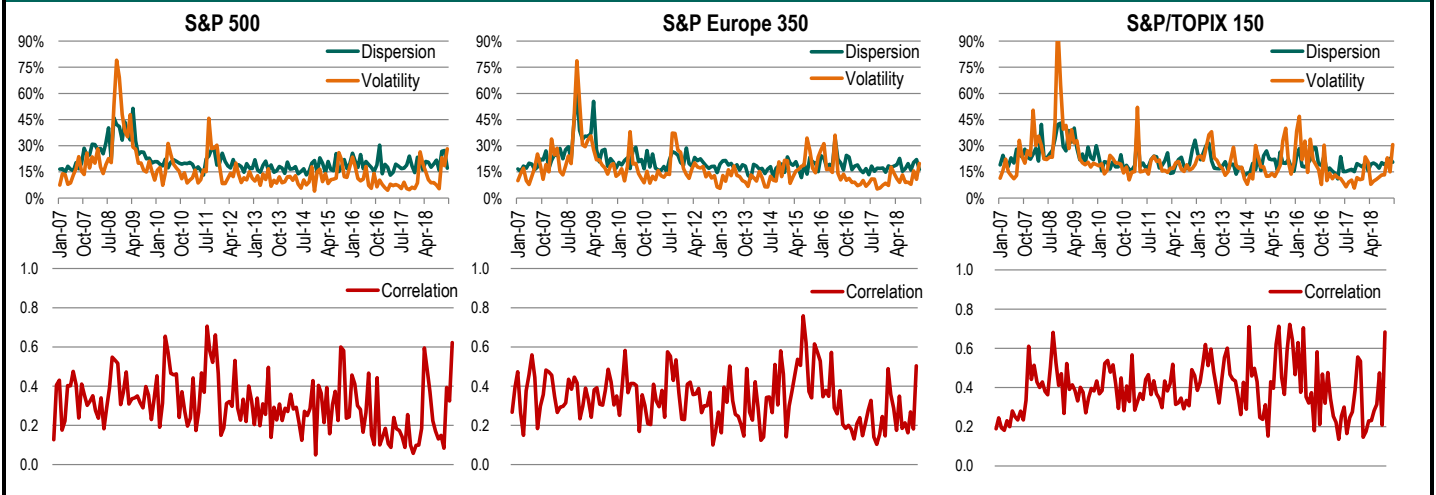
With earnings reports largely completed and broader themes dominating sentiment, dispersion declined in December in every one of our reported equity benchmarks. The largest decline in dispersion came in the mega-cap Dow Jones Industrial Average, where dispersion more than halved from November.

Compared to 2017, we observed higher volatility, higher correlations and higher dispersion this year, with monthly correlations and volatility in the S&P 500 averaging more than double last year's levels.

GLOBAL DASHBOARD



MAJOR BENCHMARKS JAN 2007 TO DATE



Source: S&P Dow Jones Indices as of December 31, 2018

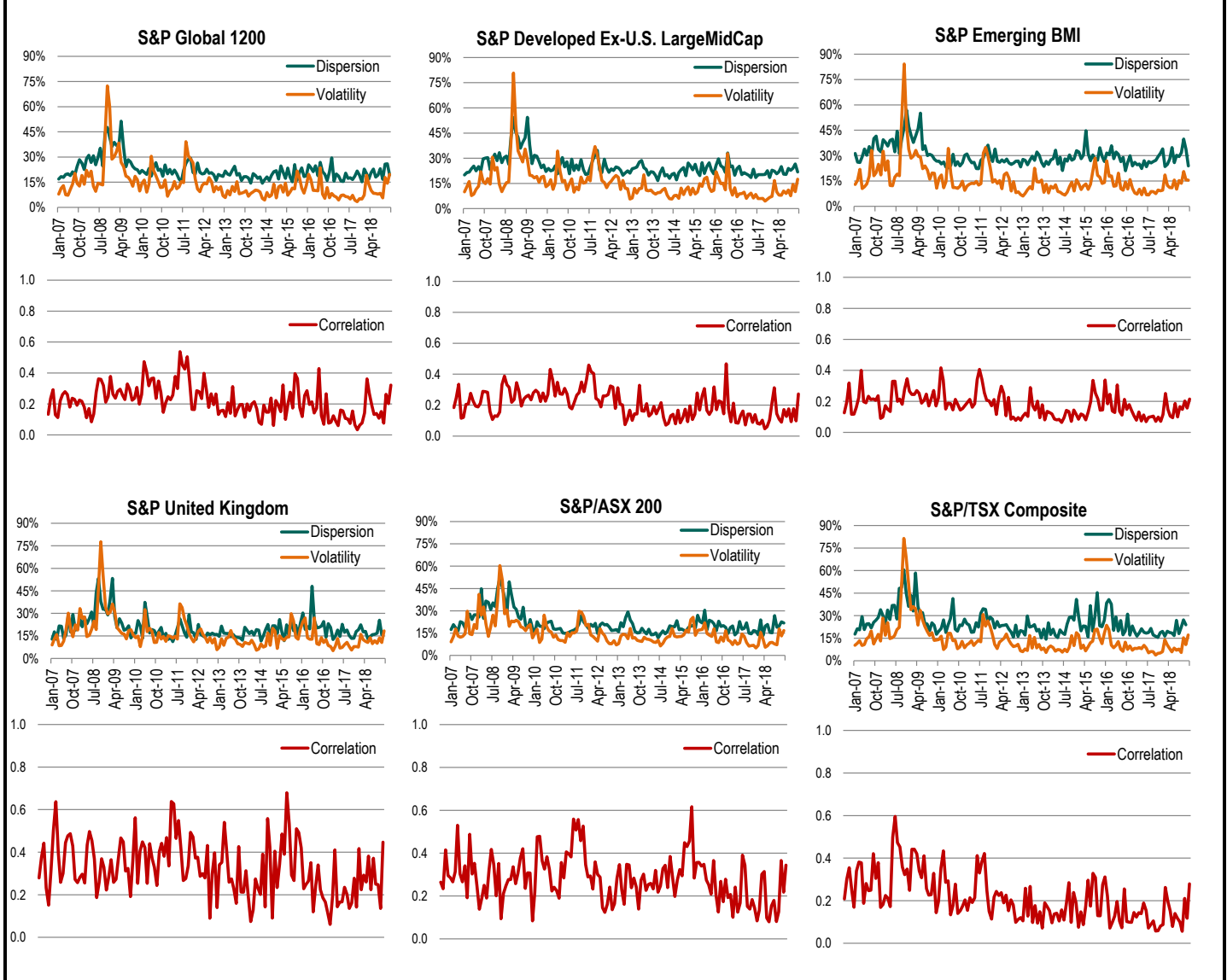
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MAJOR BENCHMARKS JAN 2007 TO DATE (cont'd)



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).

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