

S&P Dow Jones Indices

A Division of **S&P Global**

Index Dashboard: Dispersion, Volatility & Correlation

June 30, 2020

COMMENTARY

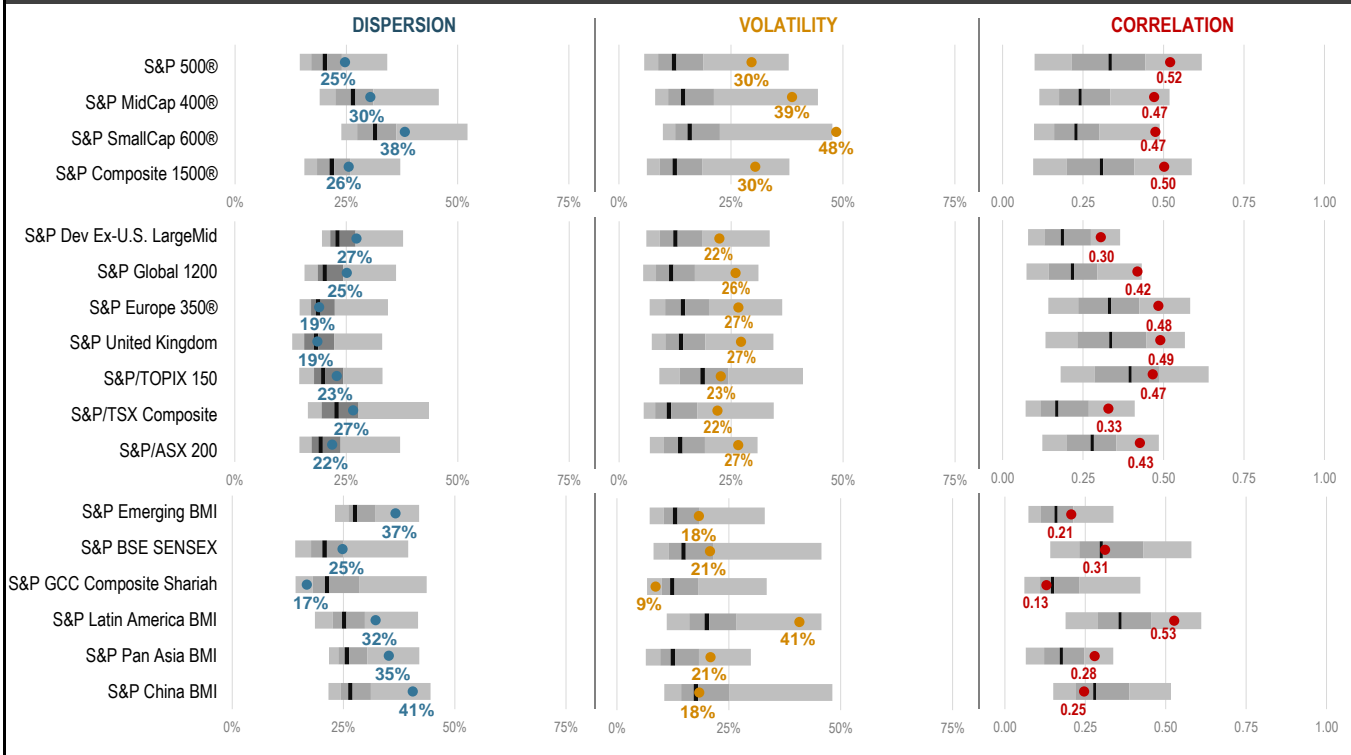
Strong gains earlier in the month followed by a choppy finish meant that, unusually, both the S&P 500 and its volatility rose in June.

Correlations among the S&P 500's constituents rose in June and are currently well above average. High correlations indicate a market potentially vulnerable to sudden sell-offs and, should overall sentiment worsen, there may be few places to hide in U.S. large caps.

Globally, it's a similar picture for developed equities, with correlations particularly high relative to history, volatility elevated, and dispersion at least above average, if not at the extremes. Conversely, diversification effects have been stronger in the S&P Emerging BMI, visible in higher dispersion, lower correlations, and lower volatility than many developed equity benchmarks.

Current conditions - moderate dispersion accompanied by continued high correlations - could favor concentrated active stock-picking in U.S. equities: there are rewards to be found by selecting individual stock winners, with less diversification benefit sacrificed by concentrated portfolios.

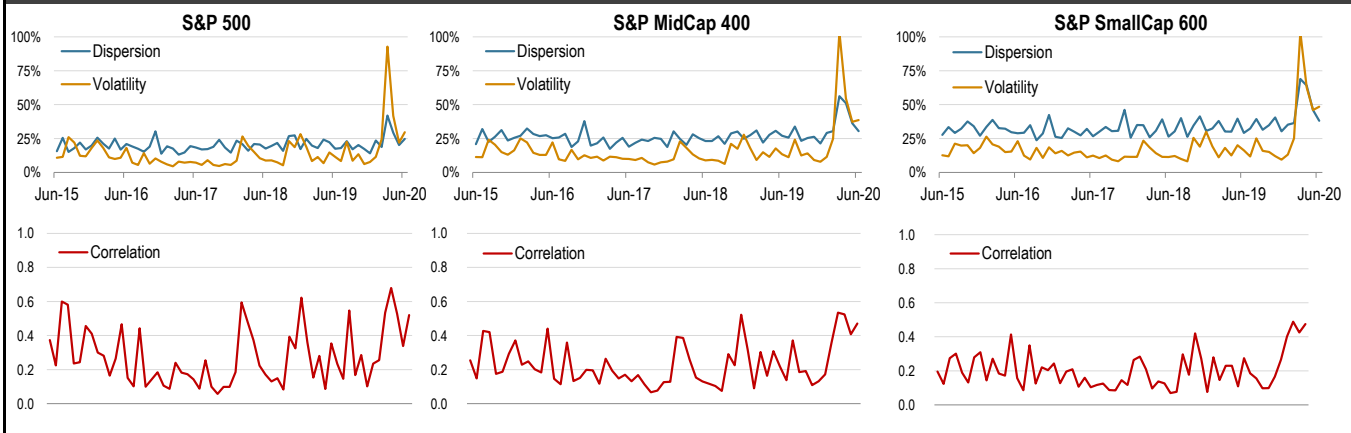
GLOBAL DASHBOARD



KEY 5th %ile Median 75th %ile
25th %ile Current 95th %ile

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 - PAST FIVE YEARS



Source: S&P Dow Jones Indices as of Jun 30, 2020 * See "Notes" for explanations and definitions.

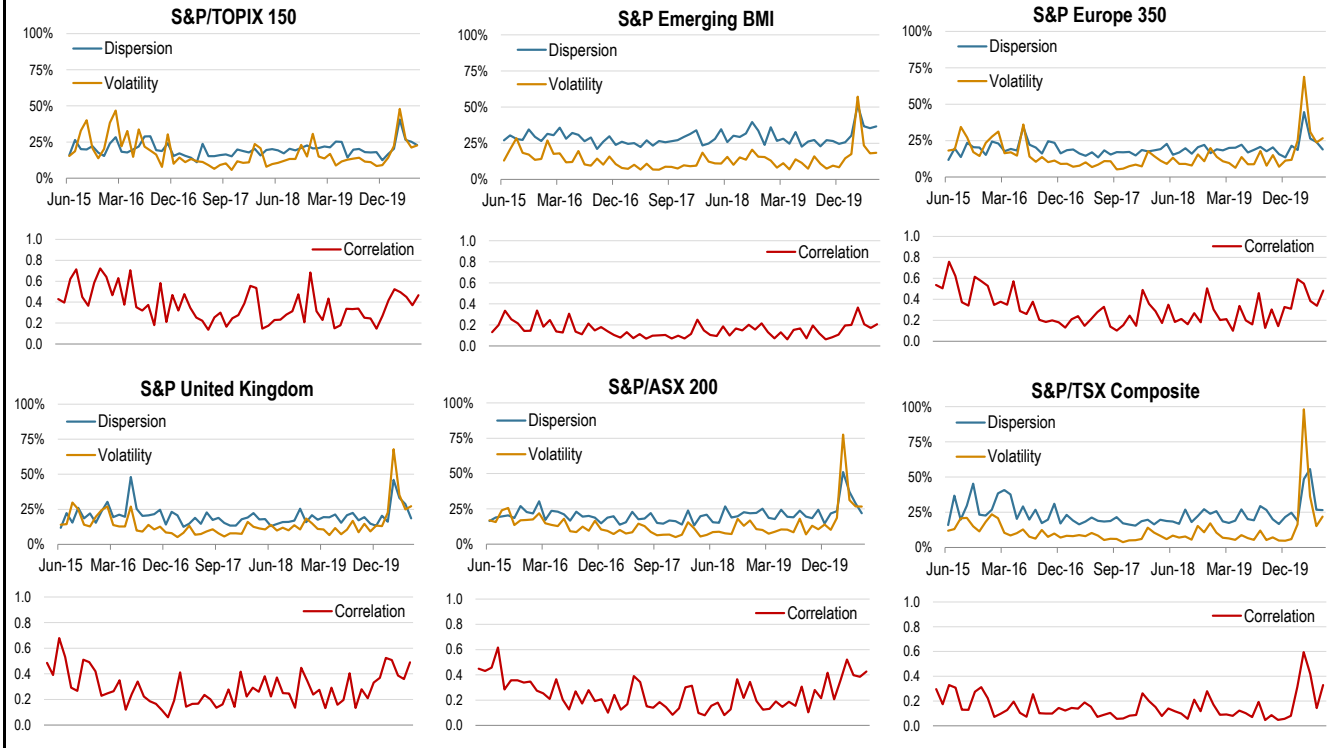
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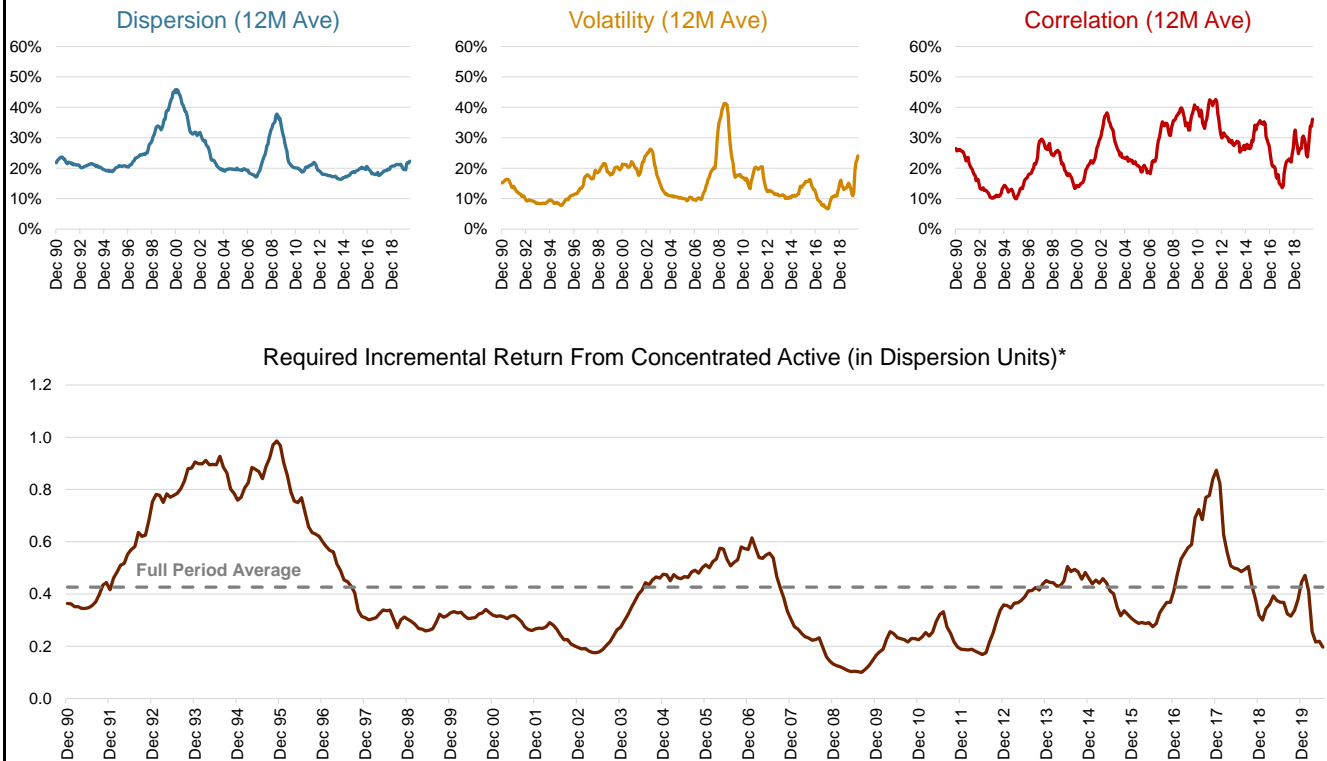
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June 30, 2020

MAJOR BENCHMARKS - PAST FIVE YEARS (cont'd)



S&P 500 - 12M TRAILING AVERAGES & ACTIVE RETURN DIFFICULTY



Source: S&P Dow Jones Indices as of Jun 30, 2020 * See "Notes" for explanations and definitions.

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.

Required Incremental Return From Concentrated Active (in Dispersion Units) provides the excess return, in multiples of 12M trailing average dispersion, required from a concentrated position in a single index constituent with 12M trailing volatility equal to the index-weighted average, such that the ratio of return to volatility of the position matches that of an investment with volatility matching the index's trailing 12M volatility, and an annual return of 10%. For further details, see "[The Active Manager's Conundrum](#)".

Measurement Periods For Historical Ranges (p1)

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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