

# S&P Dow Jones Indices

A Division of **S&P Global**

INDEX INVESTMENT STRATEGY

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Index Dashboard: Dispersion, Volatility & Correlation

September 30, 2021

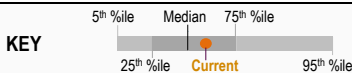
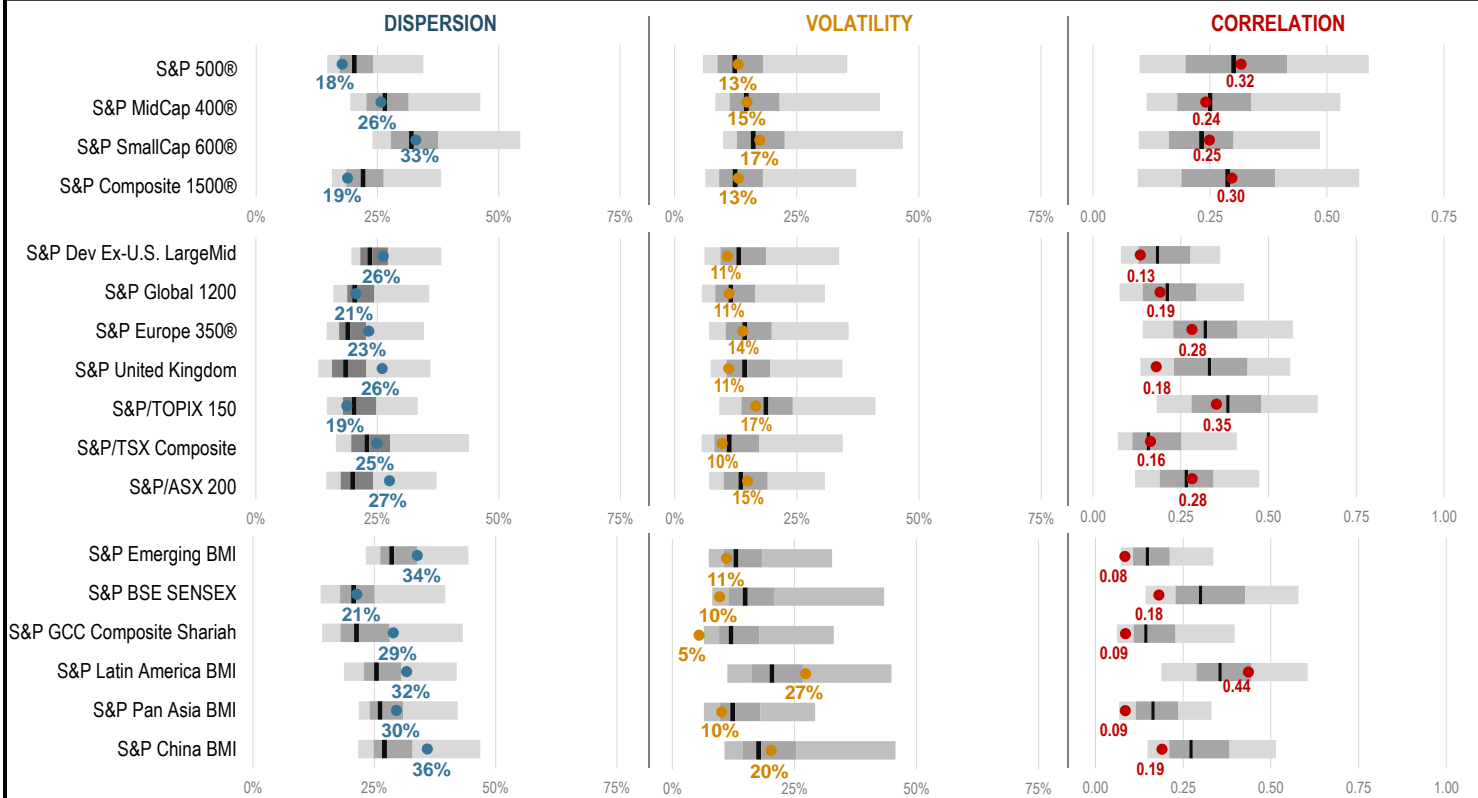
## COMMENTARY

As the S&P 500 first wobbled and then fell to mark its first 5% drawdown of the year, September brought a reminder that volatility is, after all, normal in equities. Correlation and index volatility were close to their long-term medians across the S&P Composite 1500; dispersion was a little lower than average.

Volatility, correlation, and dispersion also rose back towards historical norms in the S&P Global 1200, and in many of the world's single-country stock markets. China's equity troubles continued, with a collapse in property giant Evergrande helping to make dispersion in the S&P China BMI the highest among our reported indices this month.

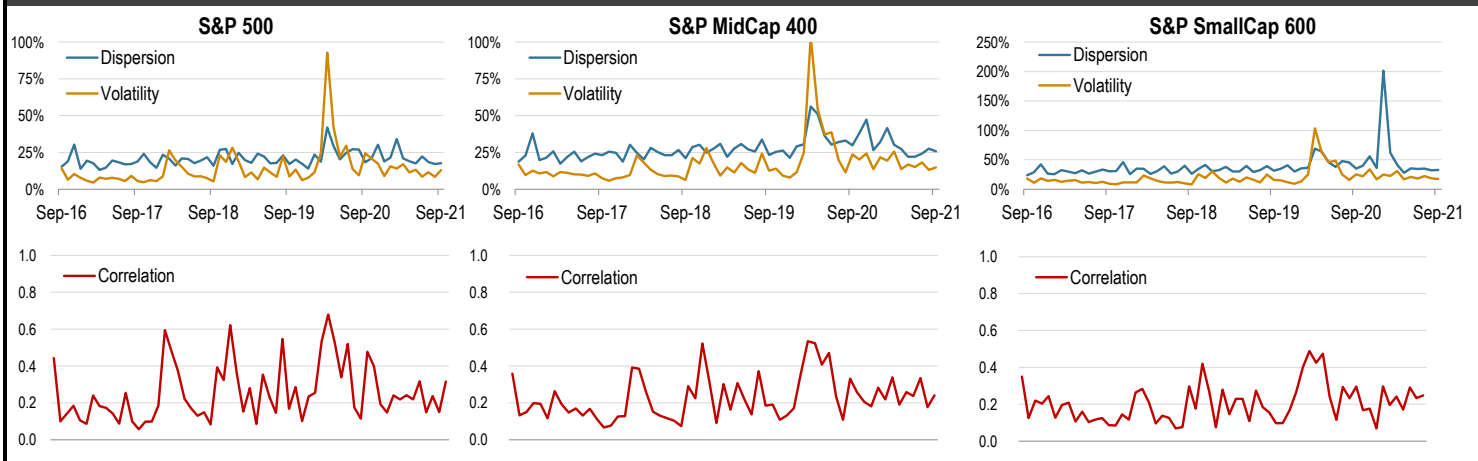
Dispersion was also unusually high in the United Kingdom, which was buffeted by fuel shortages and turmoil in the Utilities sector, and in countries with large Materials and Energy sectors, such as Australia and across Latin America.

## GLOBAL DASHBOARD



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 Sep 30, 2021 \* See "Notes" for explanations and definitions.

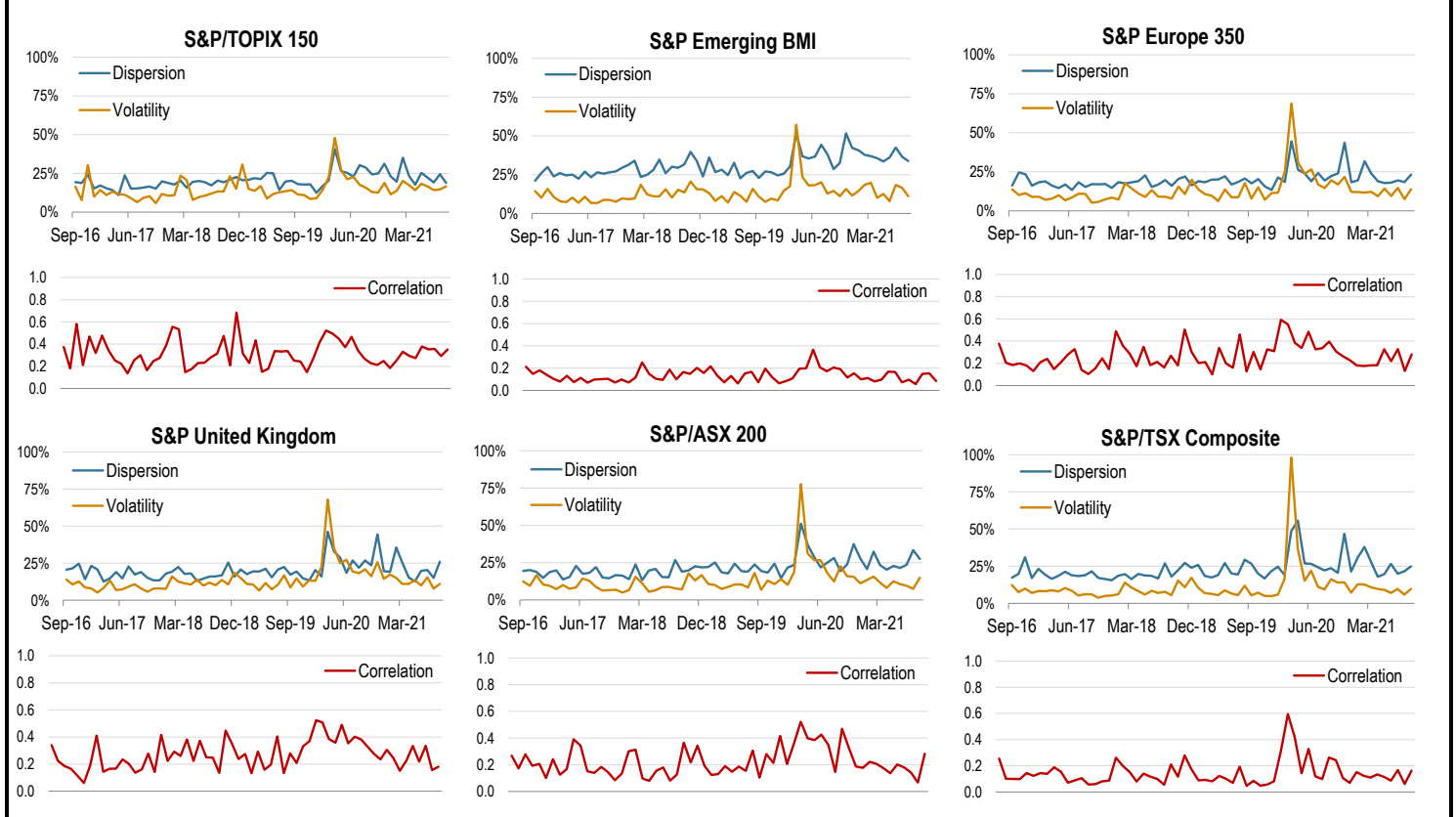
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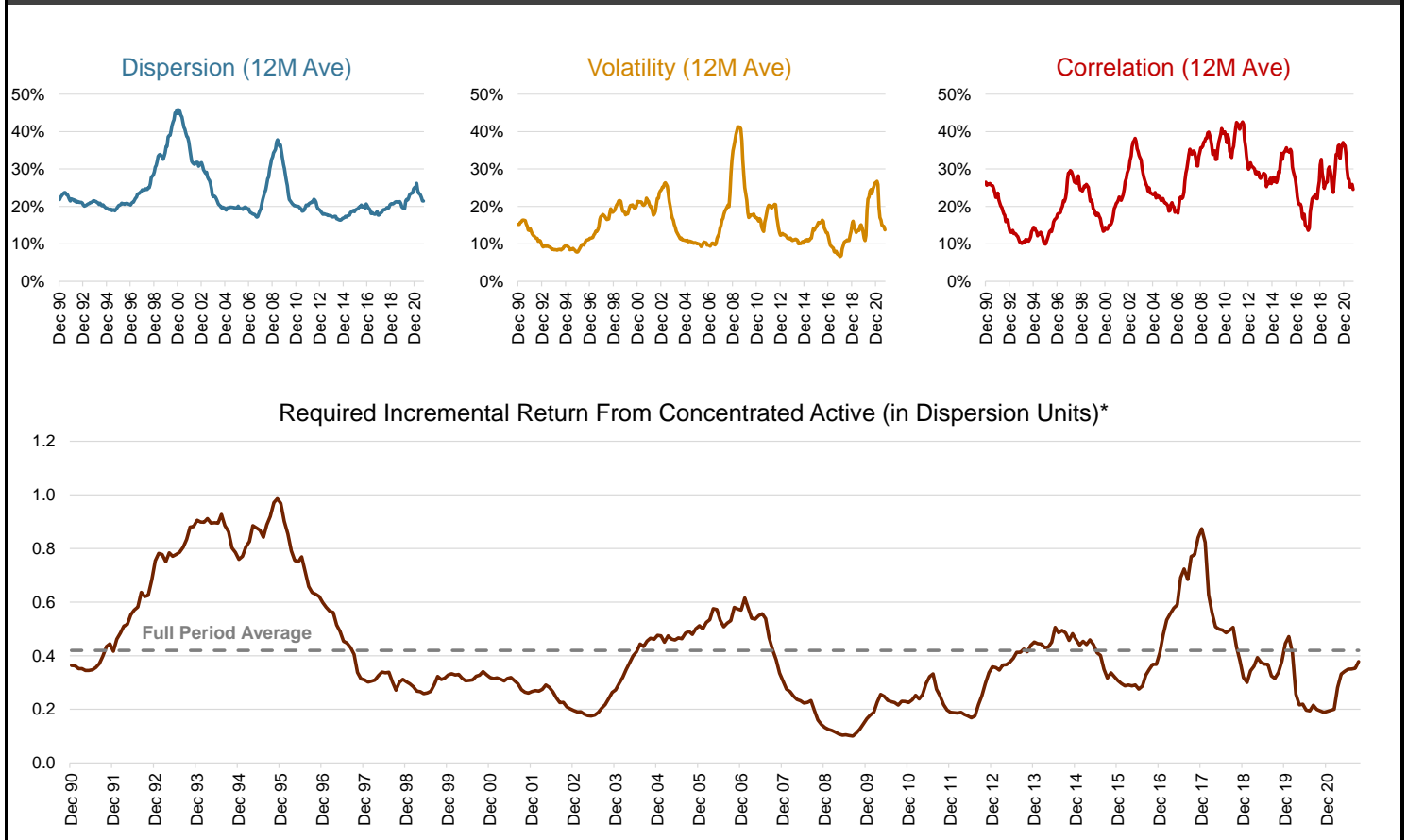
## Index Dashboard: Dispersion, Volatility & Correlation

September 30, 2021

### MAJOR BENCHMARKS - PAST FIVE YEARS (cont'd)



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



Source: S&P Dow Jones Indices as of Sep 30, 2021 \* 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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