

S&P Dow Jones Indices

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INDEX INVESTMENT STRATEGY

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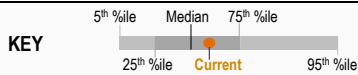
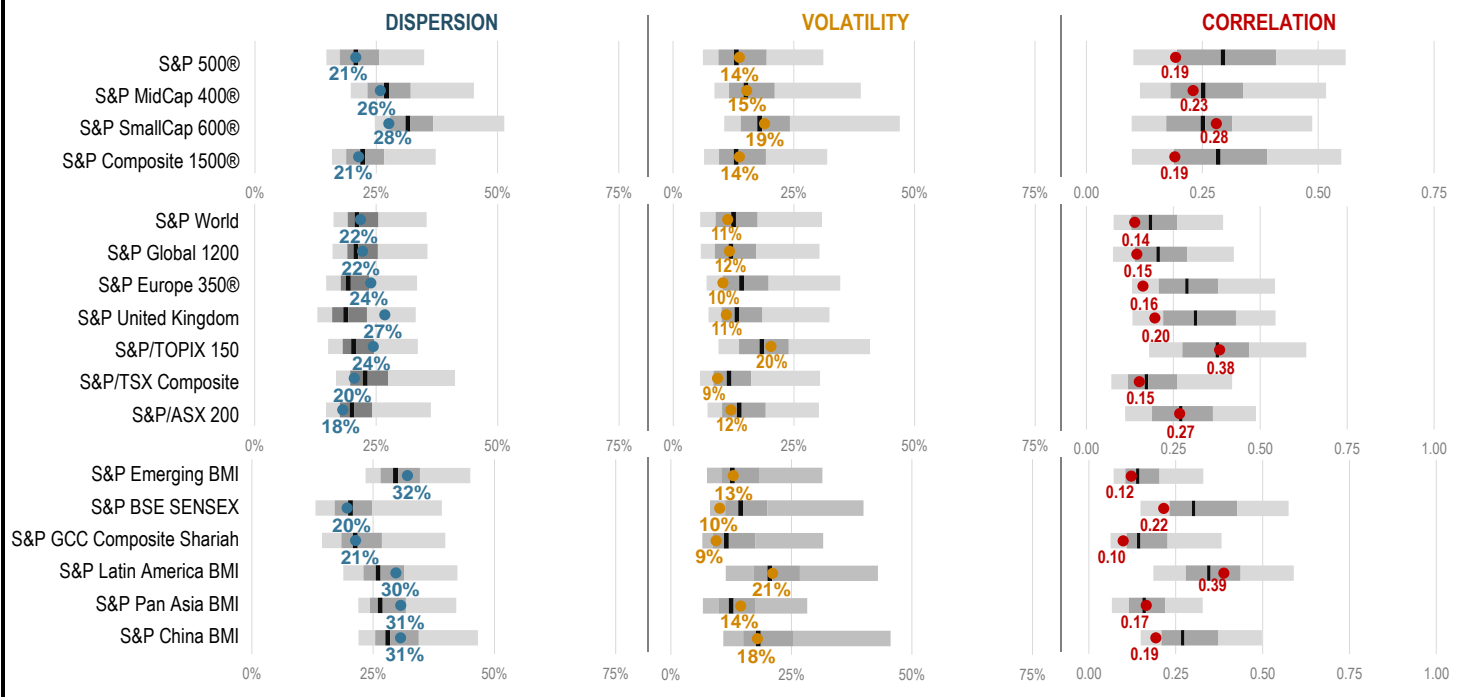
Index Dashboard: Dispersion, Volatility & Correlation

April 30, 2024

COMMENTARY

- Differentiated responses to a highly varied set of quarterly earnings reported from the S&P 500's giants saw implied dispersion spike in April; DSPX recorded a post-launch record high close of 32.77 before retreating to close the month at 30.80.
- Meanwhile, signs that higher inflation could prove less transient than hoped triggered a pullback and a moderate if brief bout of index-level volatility in global equity benchmarks.
- Low correlations continued to act as a volatility dampener in large cap U.S. and global equities, via stronger than usual diversification effects.

GLOBAL DASHBOARD



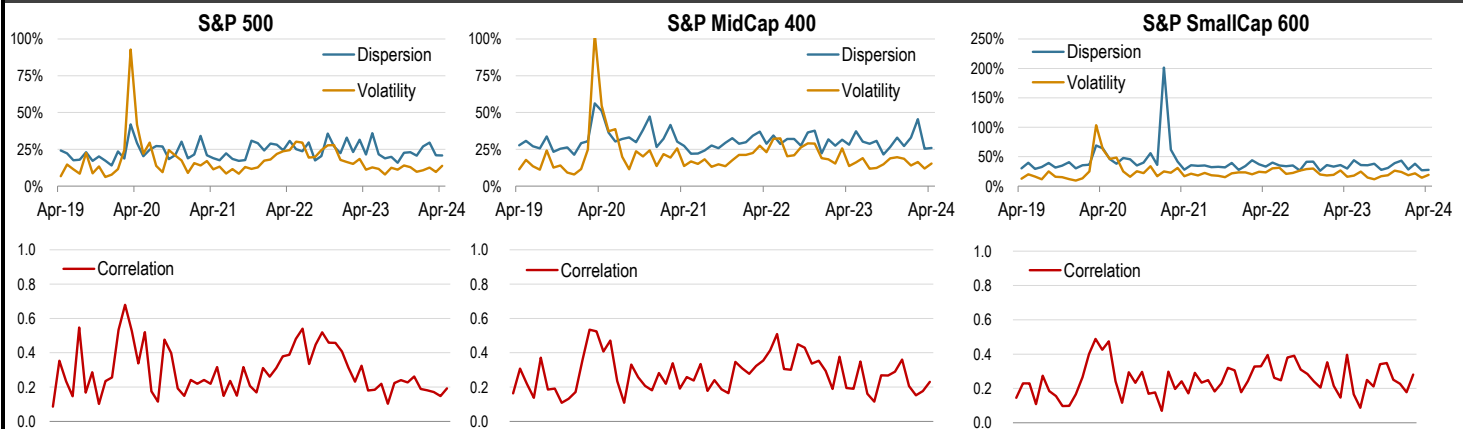
Dispersion, correlation and volatility shown in relation to the median and 5th, 25th, 75th and 95th percentile of monthly values (over the period Jan 2007 to date). Dispersion and volatility are annualized, correlation is the absolute level during the past month.

S&P 500 Implied Indicators

	Level	1M +/-
Volatility Index (VIX®)	15.65	↑ 2.64
Dispersion Index (DSPX)	30.8	↑ 3.78

The Cboe Volatility Index (VIX) and the Cboe S&P 500 Dispersion Index (DSPX) measure market expectations for S&P 500 index volatility and dispersion, respectively, over the next 30 days. The Dispersion Index was launched on September 27, 2023.

MAJOR BENCHMARKS - PAST FIVE YEARS



Source: S&P Dow Jones Indices as of Apr 30, 2024 * See "Notes" for explanations and definitions.

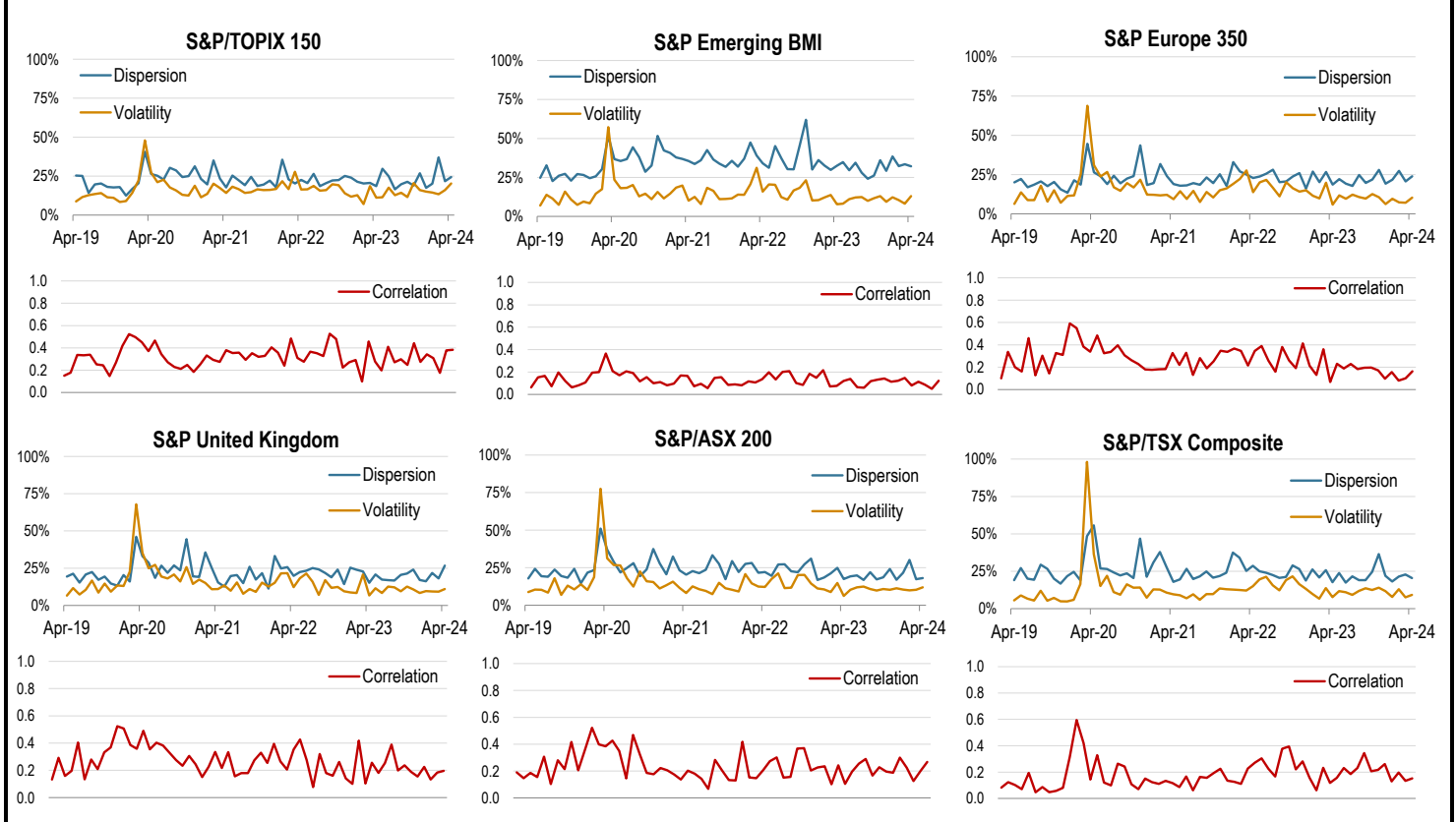
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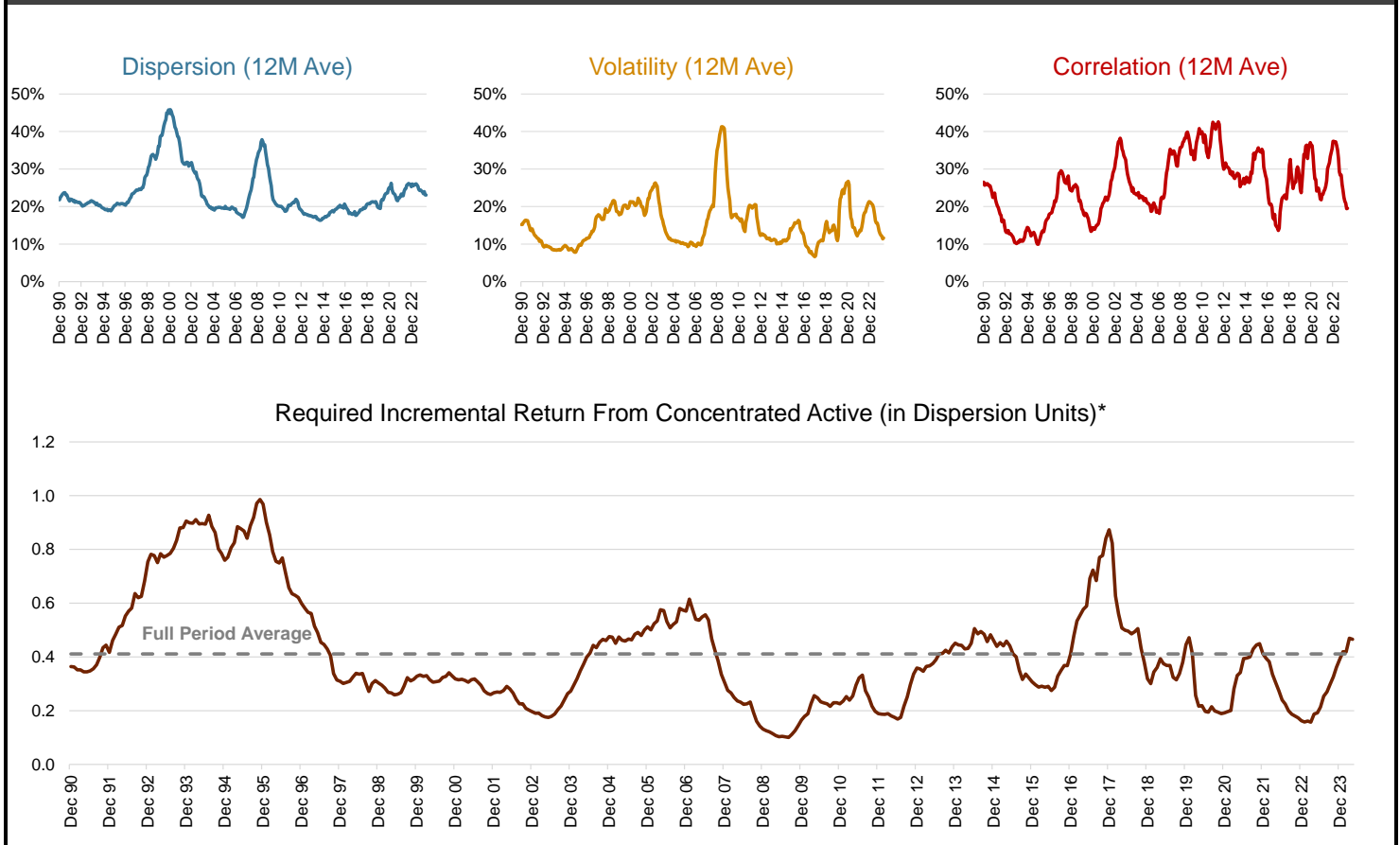
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MAJOR BENCHMARKS - PAST FIVE YEARS (cont'd)



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



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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