Understanding Volatility: Which metrics and patterns matter

Volatility is an investment term that describes when a market or security experiences significant price fluctuations. These fluctuations can be both positive and negative. Understanding volatility is essential for both novice and seasoned investors, as it can significantly impact investment decisions, risk management, and overall portfolio performance.

Let's look at the various metrics used to measure volatility, the patterns investors should be aware of, and how to interpret these indicators to navigate market fluctuations effectively.

What is Volatility?

At its core, volatility refers to the degree of variation in a financial market's price over a given period. It is often associated with risk – typically the higher the volatility, the greater the potential for rapid price changes, either upward or downward. Volatility can be driven by a variety of factors, including economic data releases, geopolitical events, market sentiment, and changes in monetary policy. Understanding how to measure and interpret volatility can help investors make informed decisions regarding their investments.

Key Metrics for Measuring Volatility

Several key metrics are commonly used to gauge volatility in financial markets:

1. Standard deviation:

Standard deviation is a statistical measure that quantifies the amount of variation in a set of values. A higher standard deviation indicates a greater variance in the price of an asset, suggesting higher volatility. For example, if a stock has a standard deviation of 20%, this means that the stock's returns can deviate from the average return by 20% in either direction.

2. Beta:

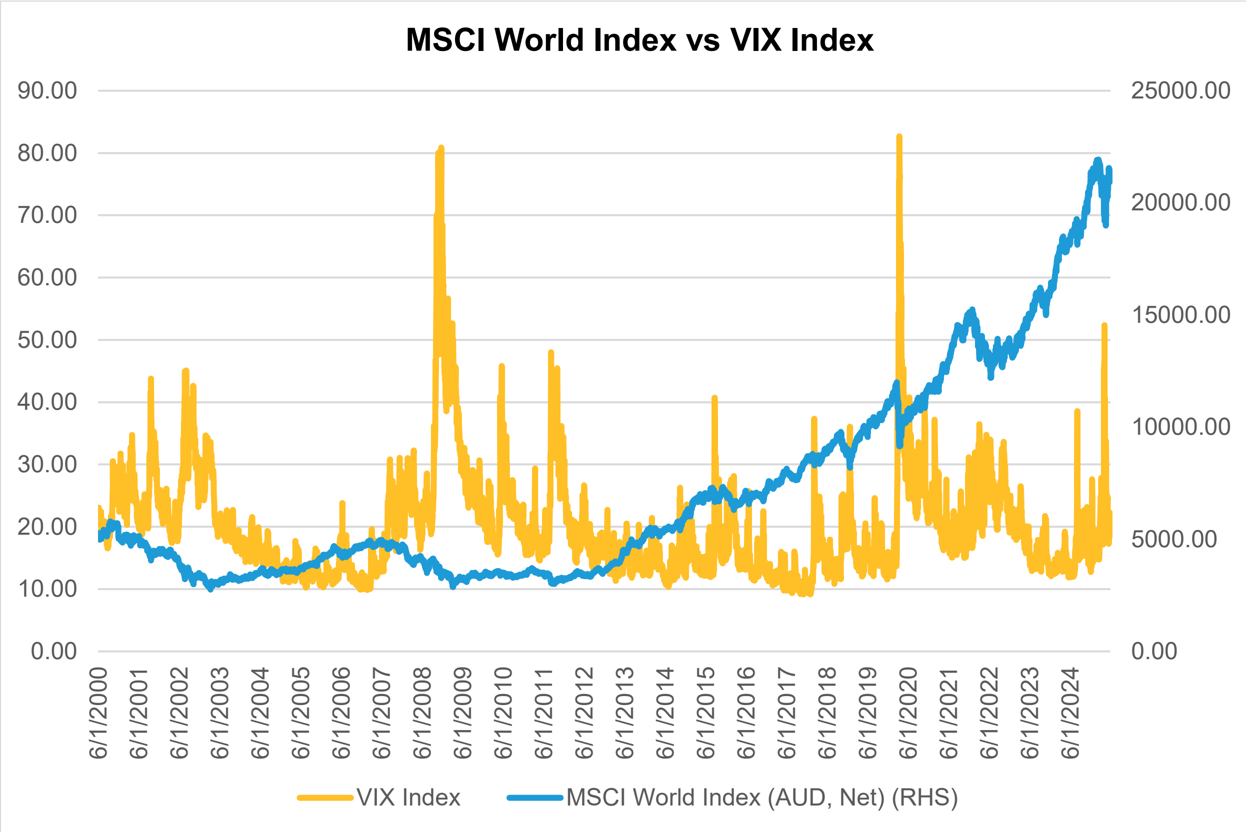
Beta is a measure of a security's sensitivity to market movements, providing insight into how much a stock's price may change in relation to the overall market. A beta of 1 indicates that the asset's price moves in line with the market, while a beta greater than 1 suggests that the asset is more volatile than the market. Conversely, a beta less than 1 indicates lower volatility. For example, a stock with a beta of 1.5 is expected to increase by 1.5% when the market increases by 1%.

3. VIX (Volatility Index):

Known as the "fear index," the VIX measures the market's expectations of future volatility based on options prices for the S&P 500 index. It can serve as a helpful sentiment index. When the VIX is high, it indicates that investors expect significant price fluctuations, often associated with uncertainty and fear in the market. Conversely, a low VIX suggests a more stable, less volatile environment.

Chart 1 illustrates the movement of the MSCI World Index against the VIX Index, and you can see the VIX index often spikes before and during a market correction.

CHART 1



Source: AB 2025

4. Historical volatility:
Historical volatility refers to the actual volatility of an asset's price over a historical period, calculated by taking the standard deviation of past returns. This metric allows investors to identify trends in volatility and assess how an asset has reacted to market conditions in the past.

5. Implied volatility:
Implied volatility reflects the market's expectations of future volatility as implied by options prices. It is derived from the Black-Scholes model and indicates how much the market expects the stock price to fluctuate over a specific period. Higher implied volatility typically suggests that the market anticipates larger price swings, which can be an indication of market uncertainty or impending significant events.

At AB, we are committed to handling risk. Our professional investment managers look at a range of risk metrics on a daily basis – assessing the market and individual companies to ensure a balanced approach to risk in our portfolios.

Ask your adviser for more information on AB's range of strategies that are designed to deliver strong long-term returns by reducing the impact of market volatility.

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