

Understanding the VIX: A Practical Guide

The VIX is a widely watched metric that tracks expected volatility in the stock market. How you can use it to gauge potential market turning points.

BY WAYNE THORP, CFA

The stock market is full of uncertainty, and if you've been investing for a while, you've likely experienced moments of extreme market swings. Some days, everything seems to be climbing steadily, while on others, volatility sends stocks tumbling. What if you could predict the next market meltdown before it happens? Imagine knowing when fear is at its peak—just before a massive rebound. That's exactly what the CBOE Volatility Index (VIX) aims to do.

Often called the “fear gauge,” the VIX is a widely watched metric that tracks expected volatility in the stock market. But while many investors have heard of it, few know how to interpret it or use it in their investing strategy.

Let's break down the VIX, how it works and how to apply it to make more informed investment decisions.

What Is the VIX?

The VIX measures expected stock market volatility over the next 30 days based on S&P 500 index options prices. Higher options prices signal fear, pushing the VIX up; lower prices suggest stability, bringing the VIX down.

Options give investors the right to buy or sell an asset at a preset price by a specific date in the future. When the price of the asset (the S&P 500 in this case) is expected to be more volatile, the odds of the option contract being exercised increases. Expectations for decreasing volatility make the option contract less likely to be exercised and thereby less volatile.

- » A low level for the VIX—typically below 15—suggests investor confidence and a stable market.
- » A high level for the VIX—above 30—indicates heightened uncertainty and potential market turmoil.



Wayne A. Thorp, CFA, is the senior financial analyst and vice president at AAI. Find out more at www.aai.com/authors/wayne-thorp.

How Has the VIX Reacted in Recent Market Events?

Historically, spikes up in the VIX have aligned with significant market downturns:

- » **The Great Recession of 2008:** The VIX soared above 80 as panic selling took over.
- » **2018 “Volmageddon”:** A sudden rise in the VIX led to a collapse in volatility-linked products.
- » **2020 Pandemic Crash:** The VIX hit an all-time high of 82.69 in March 2020.
- » **2022 Bear Market:** As inflation fears and Federal Reserve interest rate hikes rattled markets, the VIX consistently spiked above 30.

Investor Takeaway: The VIX reflects investor fear. Sharp spikes often signal major bottoms, while extremely low levels suggest complacency and potential pullbacks.

Interpreting the VIX

Figures 1, 2 and 3 plot the daily S&P 500 (stock market performance; top section of charts) against the VIX (market volatility index; bottom section) since 2007. The charts show how investor sentiment shifts in response to major market events. Here's how to interpret the VIX using specific points in time from the charts.

Inverse Relationship: The VIX Spikes When the Market Drops

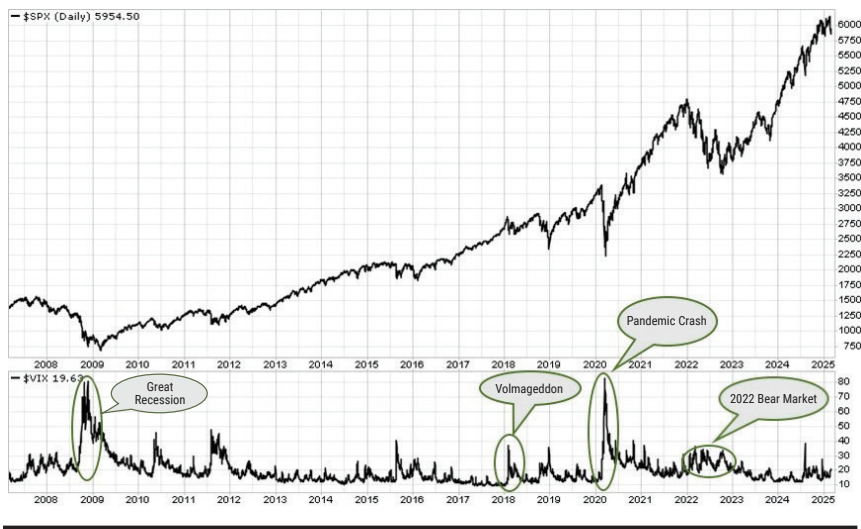
March 2020 (Pandemic Crash): The S&P 500 plunged rapidly as global lockdowns sparked panic selling. As shown in Figure 1, the VIX soared above 80, signaling peak investor panic—a historically strong buying opportunity. Contrarians who bought stocks during this period saw major gains in the recovery rally that followed.

October 2008 (the Great Recession): In the depths of the financial crisis, investors dumped stocks in sheer panic. The VIX exploded past 80—one of its highest readings ever—signaling extreme fear. Those who dared to buy at this moment saw massive gains as markets rebounded.

Market Stability: Pullbacks Preceded by Periods of Low Volatility

Late 2017 to Early 2018 (Pre-Volmageddon): The VIX stayed below 12 for an extended period, signaling market

FIGURE 1
The VIX During Significant Market Downturns



Source: StockCharts.com.

complacency. In February 2018, a sudden VIX spike coincided with a sharp S&P 500 pullback (Figure 2). The spike caused short-term volatility exchange-traded products to lose more than 90% of their value, leading to the term Volmageddon.

Mid-2021 (Post-Pandemic Rally): The S&P 500 was climbing steadily, while the VIX remained suppressed around 15. By early 2022, inflation fears and interest rate hikes triggered a sell-off, proving that prolonged low volatility doesn't mean risk-free markets.

Early Warning Signals: The VIX's Gradual Rise Before Market Sell-Offs

August 2015 (China's Market Crash and Flash Crash): The VIX started rising in mid-2015, even before the S&P 500 sell-off in August (Figure 3). Investors paying attention to this early uptick in the VIX could have adjusted their portfolios ahead of the downturn.

Late 2021 (Prior to the 2022 Bear Market): The VIX trended slightly upward in late 2021, hinting at increasing uncertainty as inflation concerns grew. By early 2022, markets reacted violently, leading to a significant bear market decline.

VIX Futures & Trend Signals: When to Be Cautious or Opportunistic

March 2009 (Recovery Begins After Great Recession): The VIX gradually declined from its peak, while the S&P 500 found a bottom and started recovering. This confirmed that

fear was subsiding, and long-term investors who bought in at this point were rewarded in the following years.

October 2022 (Bear Market Bottoming Process): The VIX spiked above 30 multiple times throughout 2022, reflecting fear as markets adjusted to aggressive interest rate hikes. By fourth-quarter 2022, the VIX began declining, indicating that market sentiment was stabilizing, leading to the bullish recovery of 2023.

Takeaways From the Charts

VIX Spikes = Investor Fear: October 2008, March 2020 and October 2022 illustrate that major market bottoms often happen when the VIX reaches extreme highs.

Low VIX ≠ Risk-Free Markets: 2017 and 2021 show that a prolonged low VIX can precede corrections when complacency builds up.

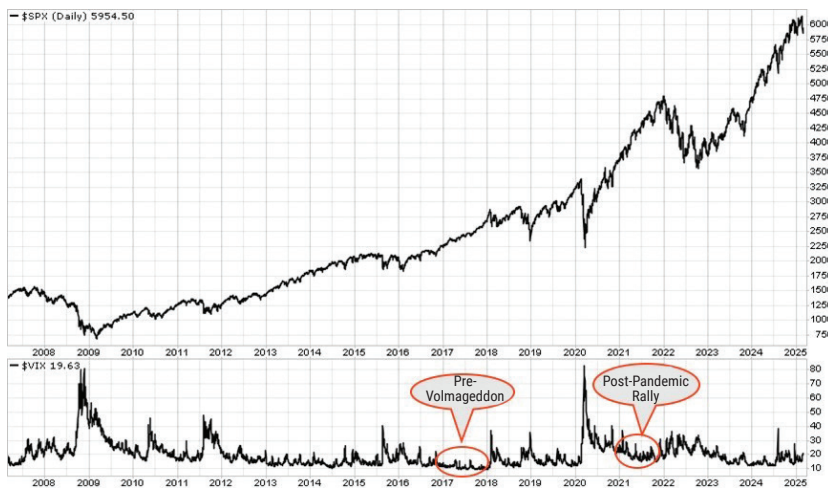
Rising VIX Can Be a Warning Signal: August 2015 and late 2021 demonstrate that a gradually increasing VIX can signal upcoming market stress.

How to Use the VIX in Your Investing Strategy

The VIX's most significant value lies in understanding investor emotions to gauge market sentiment. Generally:

- » When the VIX is high, fear dominates and markets are often at or near a bottom.
- » When the VIX is low, complacency sets in, and markets may be at risk of a pullback.

FIGURE 2
Periods of Low Volatility Precede Pullbacks



Source: StockCharts.com.

A common contrarian approach is to buy when fear is high (VIX spikes) and be cautious when complacency dominates (VIX is low).

Investor Takeaway: A high VIX isn't necessarily bad—it can present buying opportunities when fear is excessive.

The VIX and Market Timing

Research on the term structure of VIX futures suggests that the way VIX futures are priced can provide additional signals about market direction. Here's what to watch:

- » Contango (Upward-Sloping VIX Futures Curve): This is when long-term VIX futures trade at higher prices than short-term ones. It often signals a continuation of a bull market as investors expect near-term volatility to be lower than future volatility.
- » Backwardation (Downward-Sloping VIX Futures Curve): This occurs when short-term VIX futures are priced higher than long-term ones. It often suggests that a market correction or bear market is underway, and volatility is expected to remain elevated over the near term and fall in the future.

Think of VIX futures like airline tickets. If flights for next year cost more than flights for next month, it means that people expect future demand (and volatility) to rise—this is contango. But if last-minute flights surge in price while future ones remain cheap, it means demand is spiking now—this is backwardation.

Investor Takeaway: When the VIX futures term structure flattens or inverts, it may signal a market turning point—a potential warning sign for stock investors.

Common VIX Misconceptions

- » Myth #1: A high level for the VIX always means a market crash is coming.
- » Reality: A high level for the VIX often signals market bottoms, not crashes.
- » Myth #2: A low level for the VIX guarantees smooth markets ahead.
- » Reality: A low level for the VIX can signal complacency, which sometimes precedes a pullback.

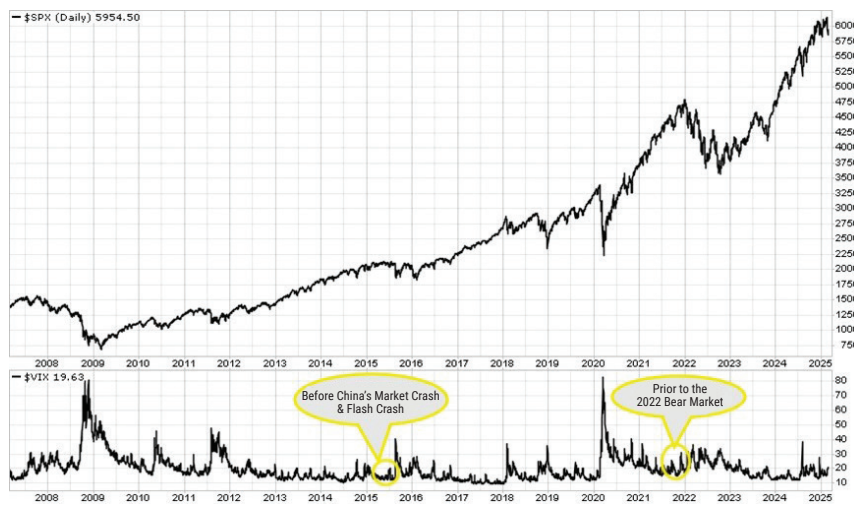
Investor Takeaway: Don't assume the VIX predicts exact market moves—it is a tool for gauging sentiment.

The VIX Is a Tool, Not a Crystal Ball

The VIX is a valuable indicator of market sentiment and

FIGURE 3

Early Warning Signals of Market Sell-Offs



Source: StockCharts.com.

potential turning points, but it should never be used in isolation. Instead, consider it one piece of a broader investing strategy that includes fundamental analysis, asset allocation and risk management.

Key Takeaways:

- » The VIX measures market volatility expectations—higher levels signal fear, while lower levels suggest complacency.
- » Historically, the VIX moves in the opposite direction of the market—spiking during downturns and falling during stable periods.
- » The shape of the VIX futures curve (contango vs. backwardation) can provide clues about market direction.
- » Using the VIX as part of a broader investing strategy—whether for risk management or identifying opportunities—can help investors navigate uncertainty.

The VIX is more than just a number—it's a signal. The next time the VIX spikes or drops, don't just watch. Instead, ask yourself: Is the market panicking? Is complacency setting in? Use this tool to position yourself ahead of the crowd. ■

JOIN THE CONVERSATION ONLINE
Visit AAIL.com/journal to comment on this article.

MORE AT AAIL.COM/JOURNAL
Measuring Market Volatility Trends With the VIX by Brian Haughey, CFA, FRM, CAIA, June 2022
The Relationship Between Stock Market Volatility and Returns by Craig Israelsen, Ph.D., October 2023
Missing the Market's Worst and Best Months by Adam Butler, CFA, CAIA, October 2017