



GLOBAL EQUITY
INSIGHTS

NO COMPLACENCY IN VOLATILITY

An opportunity for income in a world starved of yield

Van Le | September 2020

EXECUTIVE SUMMARY

- Volatility markets are not complacently priced. The packed catalysts calendar – upcoming corporate earnings, the U.S. general election, and ongoing public health concerns – is incorporated into the elevated prices of longer tenor options. This is true whether one looks at the headline level of implied volatility, volatility risk premium, or the skew or slope of the volatility surface.
- Given this pricing, we are partial to the current volatility regime in the U.S. as both an opportunity relative to history and versus other international stock markets. The elevated premium provides an interesting opportunity to accrue insurance income in a world starved of decent yields. Any such insurance program, however, must carefully calibrate leverage and acceptable levels of risk.
- With necessary rates of return much higher than sovereign risk-free rates for the foreseeable future investors should look for other tools to achieve return targets, insurance provision being one of them.

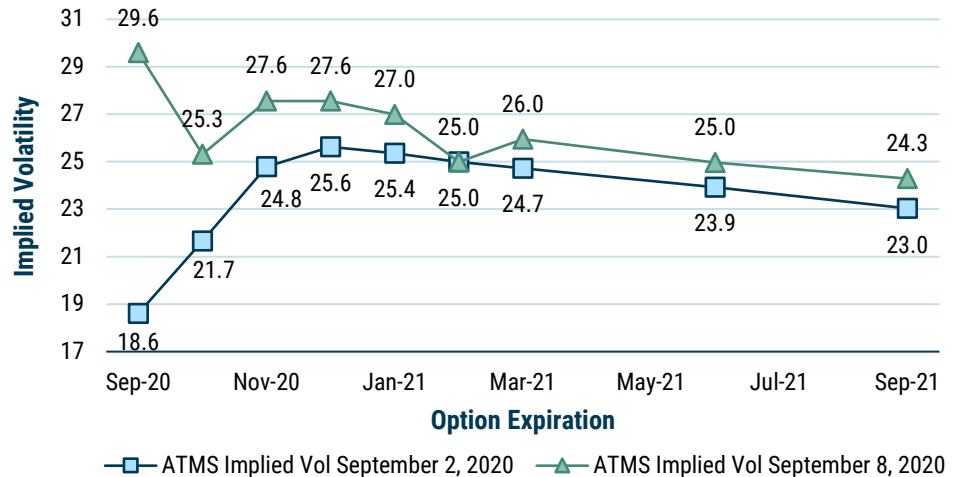
There is a lot of understandable concern about the current pricing of risk assets, including equities and fixed income, with many gauges of market valuation appearing stretched. Despite governments having successfully supported asset prices with unprecedented amounts of both monetary and fiscal stimulus, and the nature of this stimulus morphing from the nominal duration swap of asset purchase programs deployed during the Global Financial Crisis into something more akin to helicopter money, many investors remain uneasy about complacency in markets. After all, we are staring at a fearsome set of potential catalysts over the horizon, from lingering public health and financial repercussions of the Covid-19 pandemic, to the uncertain path of corporate earnings, to the unpredictable outcome of the U.S. general election in November, which may produce extended uncertainty if, as expected, a record number of U.S. voters cast their ballots by mail.

Others can weigh in on what equity multiples or credit spreads the current macro environment can support, but from my vantage point of looking at volatility, option markets are not complacent. Option markets are pricing in plenty of risks and uncertainty in the months ahead. The market price of that uncertainty is implied volatility. For example, consider the volatility surface on the S&P 500 (this is simply implied volatility as a function of tenor and strike). Whether one looks at the headline level of implied volatility, the difference between implied volatility and realized volatility over the last five months including the recent NASDAQ sell-off (the volatility risk premium), skew (the implied volatility of a low strike put less the implied volatility of an at-the-money option) notwithstanding the recent demand for single stock call options on technology names, or the shape of the term structure (inverted in the front, but steep out to November, then flattish; see Exhibit 1), there is a decent amount of premium baked into prices. Option markets are either forecasting larger than average sized moves in the deepest and most liquid risk markets or are charging a premium in case they occur. Indeed, as the S&P 500 and NASDAQ market correction in early September should remind us, an elevated implied volatility is not a free lunch.

The double hump shape of the term structure in the U.S. illustrated in Exhibit 1 is also particularly interesting and signals heightened near-term market risk as well as elevated risk covering the November general election in the U.S. and beyond. This is why we view the U.S. option market as offering the richest opportunity set at the moment.

EXHIBIT 1: S&P 500 ATMS IMPLIED VOLATILITY TERM STRUCTURE

Quoted prices as of September 2, 2020 and September 8, 2020

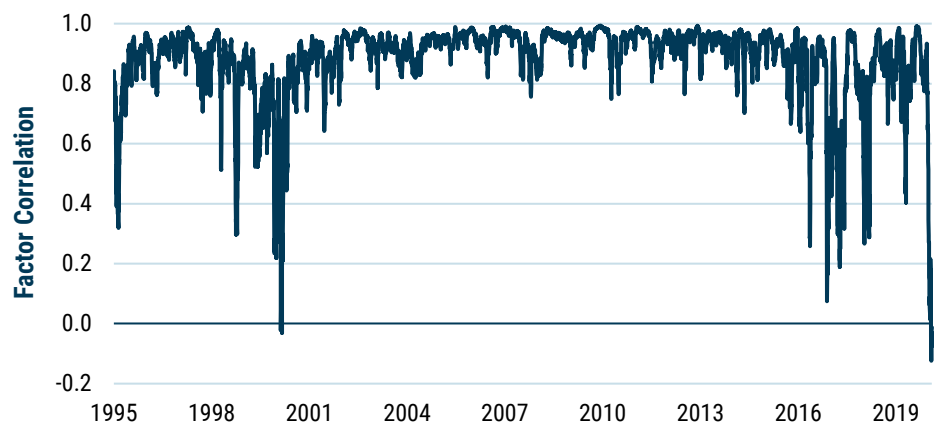


Source: GMO, Bloomberg

Amid this uncertainty, the pattern of delivered volatility in the S&P 500 and the NASDAQ is breathtaking, with extended periods of uneasy tranquility punctuated by sharp bursts of elevated volatility. Coincident to this, growth and value decorrelation has now touched historical lows, pushed even lower by the recent technology stock unwind (see Exhibit 2). This is another milestone in a year full of them.

EXHIBIT 2: CORRELATION BETWEEN S&P 500 GROWTH AND S&P 500 VALUE

Correlation between total log returns, not adjusted for market beta

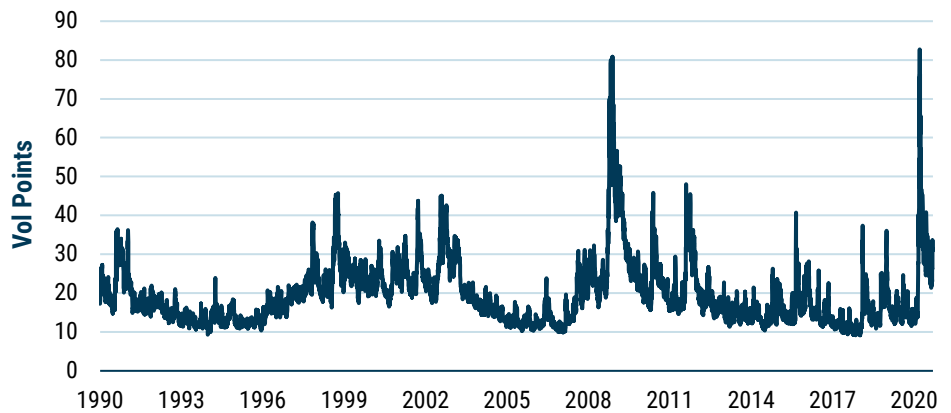


Source: GMO, Bloomberg

Current levels suggest implied volatility should revert to more normal levels following a historic rally (see Exhibit 3). Indeed, the headline level of implied volatility has already peaked. However, this does not imply that volatility is “cheap.” Equity index volatility trades in a broader macro context and it remains elevated because of these drivers.

EXHIBIT 3: VIX SPOT IS OFF THE PEAKS BUT NOT LOW

VIX spot

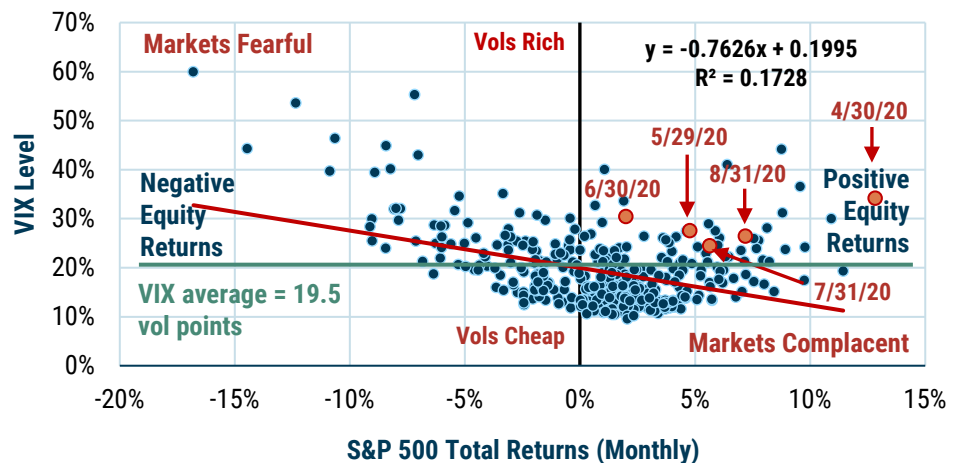


Source: GMO, Bloomberg

In Exhibit 4 we have plotted the level of the VIX against the monthly returns of the S&P 500 since 1990. The green horizontal line is the average level of the VIX at about 19.5 volatility points. The upper left-hand quadrant represents fearful or risk-averse markets (negative equity returns with high implied volatility). On the other hand, the bottom right-hand quadrant represents complacent markets (high equity returns and low implied volatility). We have charted the most recent data points since the Covid-19 bear market (the orange dots). Notice that none of these data lie in the bottom right “complacent” quadrant. Moreover, they are all “rich” when adjusted for the monthly returns of the S&P 500 (the maroon regression line). In other words, adjusted for the systematic component of the market, volatility is trading at a premium.

EXHIBIT 4: WHERE IS THE COMPLACENCY?

VIX spot against monthly returns of the S&P 500 total returns. Most recent months are marked with orange circles. The green line is the average VIX level since 1990. Regression line is $y = -0.76x + 0.20$.



Source: GMO

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This simple back-of-the-envelope exercise implies volatility is trading over 10 volatility points higher than that predicted by a single beta factor (see Exhibit 5).

EXHIBIT 5: VOLATILITY IS PRICING IN A JUSTIFIED RISK PREMIUM

VIX adjusted for the monthly returns of the S&P 500 total returns. Higher values indicate “richness” and lower values indicate “cheapness.” This should not be interpreted as a fair value for the VIX because values also incorporate expected risks.



Source: GMO

Some humility in how to interpret the current premium is warranted. The reasoning above does not mean that equity index options are somehow trading above their “fair value” because risk premia are embedded into market prices. However, more risk premium in volatility is often associated with more market dislocations. That should be abundantly clear after the recent sharp correction in technology stocks. But the premium on offer is why we are partial to the current volatility regime in the U.S. as both an opportunity relative to history and compared to other international stock markets. The elevated premium provides an interesting opportunity to accrue insurance income in a world starved of decent yields. Any such insurance program, however, must carefully calibrate leverage and acceptable levels of risk. At GMO, we still favor a conservative approach to both of these with fully collateralized positions and we advise our clients to do the same. With necessary rates of return much higher than what sovereign risk-free rates will offer for the foreseeable future, and significant portions of institutional portfolios allocated to low yielding instruments, investors should look for other tools to achieve return targets, insurance provision being one of them.