PORTAL DIGITAL FUND

Market Commentary March 2022

Volatility, Correlation and Crypto Assets

Cryptocurrencies and digital assets ("crypto assets") have now been embraced as a conventional asset class by most investment professionals and are now discussed daily in all major financial media outlets. Investors are embracing crypto assets as they begin to understand the potential they have to provide secure, unbiased, and decentralised access to a new world of financial opportunity and innovation for billions. This is particularly true with the disintermediation that Web 3.0 represents and current concerns around government overreach in the traditional banking sector.

In addition, crypto assets have been the best performing investments in the past decade, even taking into account their tremendous volatility. For a variety of reasons, including; diversification benefits, the potential of massive upside returns and the continued debasement of fiat, crypto assets should be included in all portfolios and just sized appropriately taking into account their volatility.

Understanding Volatility

Many investors confuse volatility with risk. We view volatility as opportunity, and risk as the risk of sustained or permanent capital loss. Volatility in its simplest form is a statistical measure of the dispersion of returns for a given security. In most cases, the higher the volatility, the riskier the security. Volatility is often measured as either the standard deviation or variance between returns from that same security, relative to its mean or average.

Thus, in the securities markets, volatility is often associated with big swings in either direction. Volatility therefore represents how large an asset's prices swing around the mean price as it is a statistical measure of its dispersion of returns. Volatile assets are often considered riskier than less volatile assets because the price is expected to be less predictable. As above, we believe that this is not an accurate representation of what real risk is.

Applying Volatility in Asset Allocation

All investors like to categorize investments on a risk and return spectrum. This helps them frame portfolio decisions when deciding how to allocate their assets with the understanding that higher returns come with more expected volatility. The chart below is an example of how the traditional risk-return spectrum is currently represented:

Because of their historical volatility, BTC, ETH, and other popular crypto assets are placed firmly at the high end of that risk spectrum. We know that they are volatile, but what about their correlation? This is the basis of their inclusion in managing risk via diversification.

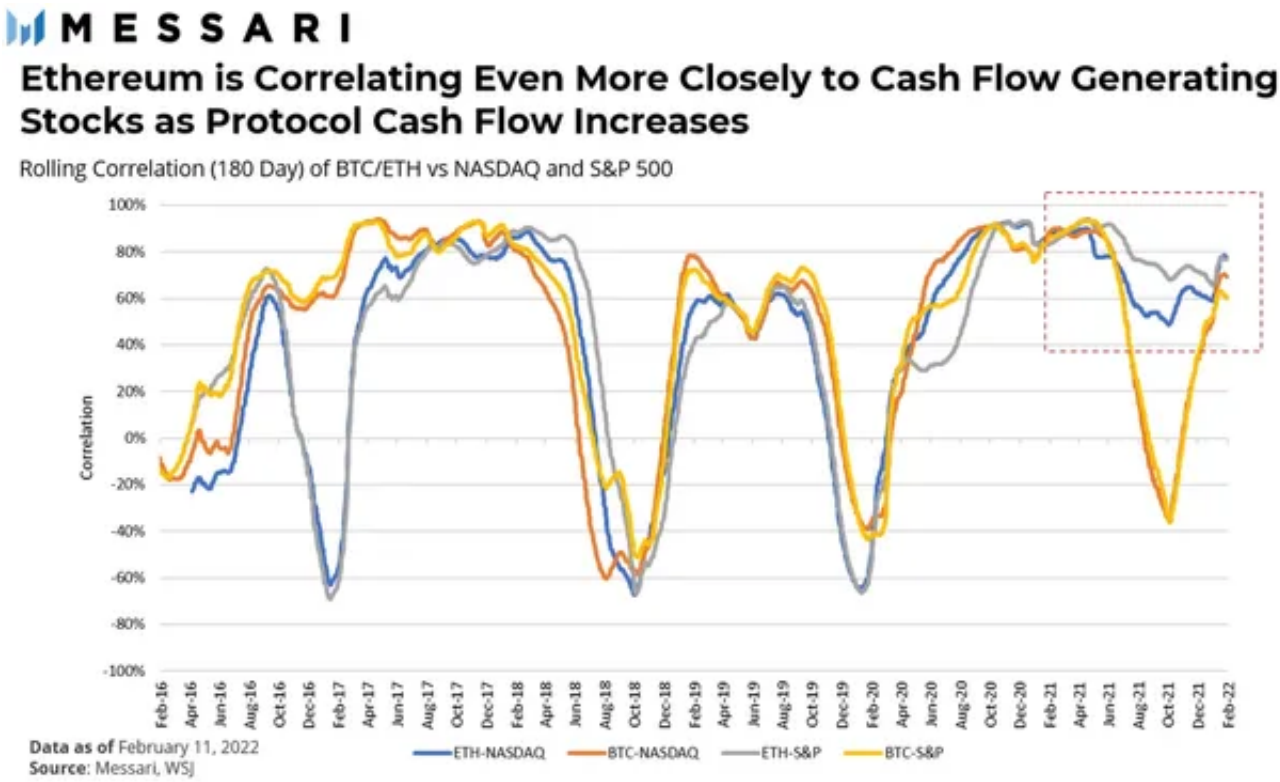
On Correlation

When deciding on tactical asset allocation, a prime consideration for investors is the correlation between the underlying assets in their portfolios. Negative correlation implies assets that move in different directions and so one part of the portfolio is positive while the other is negative in various market conditions. The intention of this is to provide a smoother overall return pattern for the investor.

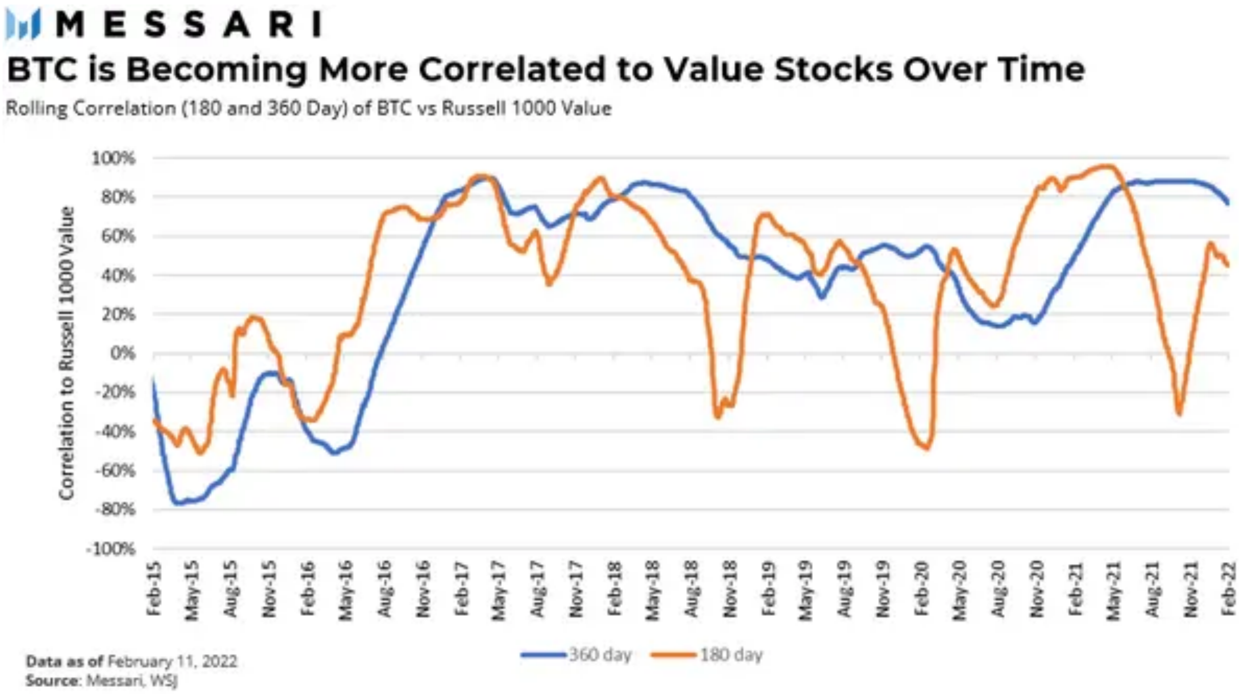
Based on a Messari research paper[1] that used the Russell 2000 growth index as a proxy for small-cap growth stocks, BTC averages about a 35% correlation over the last four years while ETH averages about a 30% correlation over the same time period. The correlation has also moved deeply negative on multiple occasions, mostly during strong equity markets. Strong positive correlations are seen during risk-off events as per the chart below.

[1] Re-evaluating Cryptocurrency as a Risky Asset Class, Tom Dunleavy
https://messari.io/article/re-evaluating-cryptocurrency-as-a-risky-asset-class

This relationship persists if we compare BTC and ETH to the major market indices of the S&P 500 and NASDAQ (technology heavy). ETH has more recently begun to track much more like a stock than BTC, with higher correlations to both major indices than BTC. Overall, BTC averages about a 40% correlation to both indices while ETH averages a 45% correlation. This makes sense given ETH has generated $10bn in cash flows in 2021.



The top four names in both the S&P 500 and NASDAQ are actually the same: Apple, Microsoft, Amazon, and Alphabet. So while ETH is tracking like a cash-flow positive technology stock, BTC is actually tracking closer to a large-cap value stock. The chart below is the correlation of BTC to the Russell 1000 value index. It averages a 60%+ positive correlation in most trailing periods.



Therefore, crypto assets should be a little lower on the risk-return spectrum than they are currently viewed. BTC may be viewed like a value stock as it matures as an asset. ETH's recent performance makes it more comparable with large-cap technology stocks. As a caveat, these relationships are newly developing, and likely don't hold for prior periods.

Caution!

If we are moving into a period of rising rates, and higher real yields given the spike in iunflation, risk assets should suffer based on historical data. During sell offs, BTC and ETH still seem to find themselves firmly in that category. In addition, rate hiking cycles typically cause the broader market to enter into a downturn, which can be observed by the below chart from Bank of America.

Source: Bank of America

Conclusion and takeaways

The bottom line is BTC and ETH are performing less and less like risky assets during normal times, with BTC in particular exhibiting similar price patterns to value stocks or risky bonds in environments where yields are stable or declining.

However, when sell-offs do occur, cryptocurrencies move in line with the riskiest segments of the market. Throughout these downturns builders keep building and network activity remains robust. This will likely increase use cases and overall cash flow moving forward, leading to less protracted downturns, even in broader macro bear markets, as the market catches on.

Intuitively this makes sense, BTC and crypto assets are moving down the risk spectrum towards a more stable asset profile while still maintaining a risky bent. For this lower risk profile, investors would expect a lower return profile than a binary asset, especially if the earnings visibility of many of these crypto assets is improving and they are generating cash flows, as we see ETH rapidly becoming

Contact: E: mark.witten@firstdegree.asia W: www.portal.am