DIGITAL ASSETS
AUGUST 2024

Why Bitcoin Isn't Just a Tech Stock on Steroids

A Closer Look at Correlation Myths

Martin Leinweber, CFA
Director of Digital Asset Research & Strategy
Jonas Weber
Digital Asses Analyst

MarketVector™

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Why Bitcoin Isn't Just a Tech Stock on Steroids: A Closer Look at Correlation Myths

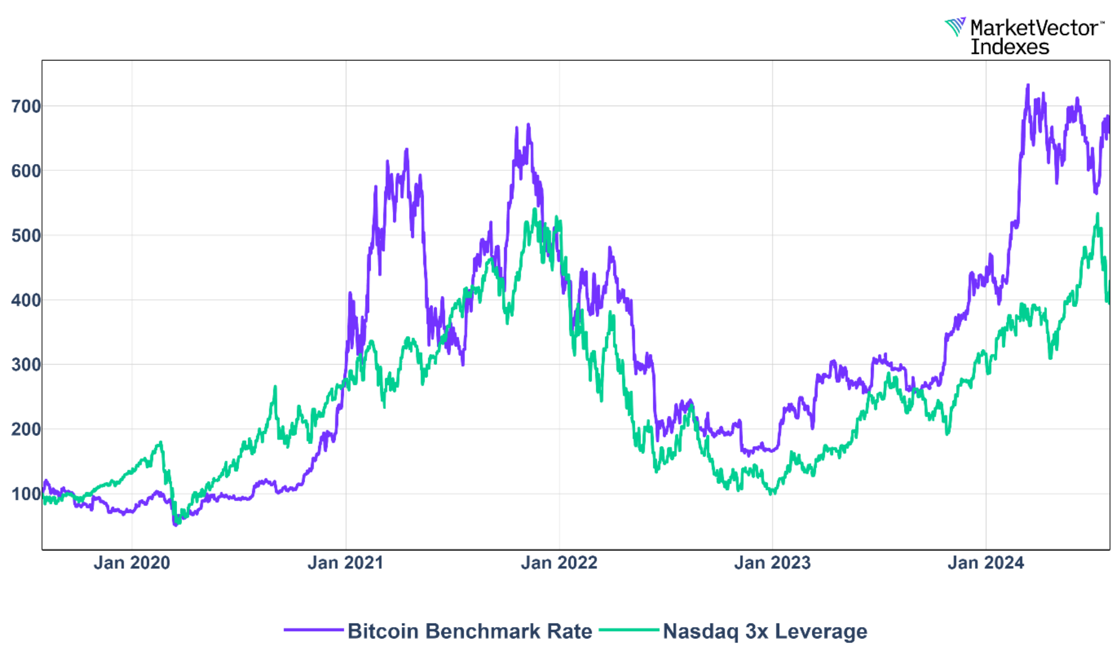
Is Bitcoin just a turbocharged version of the Nasdaq? Many headlines would have you believe so, pointing to strikingly similar charts that seem to move in lockstep. But before you fall for the hype, consider this: Over the past decade, the correlation between Bitcoin and the 3x leveraged Nasdaq ETF has averaged just 0.04—essentially no relationship at all. This raises a critical question: Are we oversimplifying Bitcoin's role in the financial landscape?

Understanding why Bitcoin is more than just a high-risk Nasdaq proxy requires examining their correlation, the drivers behind their performance, and the unique traits that differentiate Bitcoin from traditional financial assets.

Visual Similarity vs. Actual Correlation

At first glance, the total return performance of Bitcoin might appear to mirror that of a 3x leveraged Nasdaq ETF (Exhibit 1). This has led some to believe that Bitcoin's price movements are highly correlated with the tech-heavy stock index. However, a deeper statistical analysis tells a different story.

Exhibit 1: Total Return Performance indexed to 100



Source: MarketVector Research.

Why Should Bitcoin Be Correlated with the Nasdaq?

The notion that Bitcoin should be correlated with the Nasdaq overlooks the fundamental differences between these two assets. The Nasdaq is a stock market index that primarily tracks the performance of technology companies. These companies' valuations are driven by earnings reports, market sentiment, technological advancements, and broader economic indicators.

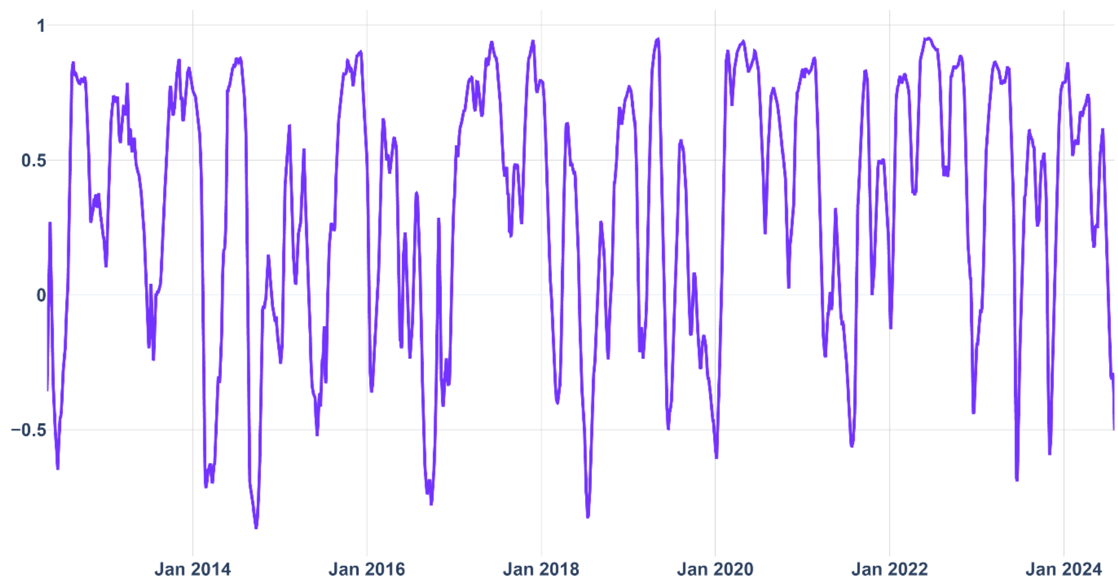
Bitcoin, on the other hand, is a decentralized digital currency with no underlying earnings, dividends, or traditional financial metrics to anchor its value. Its price is determined by supply and demand dynamics and network effects, which are influenced by factors such as regulatory developments, adoption rates, technological improvements within the blockchain ecosystem, and macroeconomic trends like inflation and currency devaluation.

Understanding Correlation Metrics

Do you think a strong visual similarity automatically means two assets are closely correlated? Let's break down what correlation really means.

Correlation measures the degree to which two assets move in relation to each other. A value of 1 indicates perfect correlation, 0 indicates no correlation, and -1 indicates perfect negative correlation. The observed correlation of 0.04 between Bitcoin and the 3X-Nasdaq, spanning the longest available timeframe since February 2012, suggests no relationship at all. Even over the past five years, the correlation is only 0.21, indicating at best a weak relationship. This means that while there may be periods when their prices move together, there are also significant stretches when they do not. Knowing that Bitcoin doesn't move in sync with the Nasdaq could make it more appealing as a diversifying asset, especially for those with tech-heavy portfolios. It emphasizes Bitcoin's potential role as an independent addition to a broader investment strategy.

Exhibit 2: Rolling 90-Day correlation coefficient between Bitcoin and TQQQ (3x leveraged Nasdaq)



Source: MarketVector Research

The rolling correlation chart clearly illustrates that there are several periods where Bitcoin and the 3X-Nasdaq exhibit nearly identical movements. However, these periods are brief, and there are also many instances of high negative correlation. Based on this chart alone, there is no substantial evidence to suggest that the correlation pattern has significantly changed in recent years compared to the entire observed timeframe.

Fluctuating Correlation Levels

Let's take a closer look at how the correlation between Bitcoin and the Nasdaq fluctuates over time. The correlation between Bitcoin and the Nasdaq is notably inconsistent. Over the entire observed period, the correlation exceeds 0.8 only about 17% of the time, rising to 34.7% in the last five years. These figures suggest a moderate and possibly growing connection. However, this still means that for roughly two-thirds of the time, Bitcoin and the 3X-Nasdaq move independently, sometimes even in opposite directions. This variability underscores the complexity of Bitcoin's price dynamics, driven by a distinct set of factors compared to those influencing the Nasdaq.

Table 1: Correlation Profile

Starting Date	Feb-12	Jul-19
Pct of 0.8 or higher correlation	17.05%	34.71%
Average	0.32	0.43

Source: MarketVector Research.

The Role of the Macro Cycle and Liquidity

The key reason why Bitcoin's performance sometimes appears similar to that of a 3x leveraged Nasdaq ETF lies in their shared sensitivity to the macroeconomic environment, particularly the liquidity cycle. To understand this, we need to explore how periods of high and low liquidity impact these two assets and examine historical examples that illustrate these dynamics.

Understanding Liquidity Cycles

Liquidity refers to the availability of cash or easily convertible assets in the financial system. Central banks, such as the Federal Reserve, influence liquidity through their monetary policies. When central banks implement loose monetary policies—like lowering interest rates or engaging in quantitative easing—liquidity in the market increases. Conversely, tightening monetary policies—such as raising interest rates or reducing asset purchases—can drain liquidity from the market. However, it's a bit more complex, as the repo market, fiscal stimulus, and collateral values also play a role in influencing liquidity. But the reader can grasp the concept through the big picture: liquidity is the driver of asset values.

Impact on Bitcoin and the Nasdaq

Both Bitcoin and the Nasdaq are considered risk assets, meaning they tend to perform well when liquidity is abundant and investors are more willing to take on risk. Conversely, when liquidity tightens, both assets often suffer as investors seek safer havens.

Historical Example 1: 2020 COVID-19 Pandemic

- Loose Monetary Policy and Liquidity Surge: In response to the COVID-19 pandemic, central banks around the world, including the Federal Reserve, slashed interest rates and injected massive amounts of liquidity into the financial system through various stimulus measures. This period of abundant liquidity created a risk-on environment where investors flocked to high-growth tech stocks and speculative assets like Bitcoin.

- Impact on the Nasdaq: The Nasdaq surged as tech companies benefited from the shift to digital and remote work, bolstered by investors' appetite for growth stocks.

- Impact on Bitcoin: Bitcoin also experienced a dramatic rise, driven by increased demand as a potential hedge against inflation and currency devaluation, alongside growing institutional interest. The influx of liquidity fueled Bitcoin's meteoric rise from around $5,000 in March 2020 to over USD 60,000 by April 2021.

Historical Example 2: 2018 Market Correction

Tightening Monetary Policy and Liquidity Drain: In 2018, the Federal Reserve raised interest rates several times and began reducing its balance sheet, effectively tightening liquidity in the market. This shift towards a more restrictive monetary policy led to increased market volatility and a risk-off sentiment among investors.

Impact on the Nasdaq: The Nasdaq, heavily weighted with high-growth tech stocks, experienced a significant correction, with many tech giants seeing sharp declines in their stock prices.

Impact on Bitcoin: Bitcoin, which had reached an all-time high of nearly USD 20,000 in late 2017, entered a prolonged bear market, falling to as low as USD 3,000 by the end of 2018. The reduction in liquidity contributed to this downturn, as speculative assets like Bitcoin were hit particularly hard during this period of risk aversion.

Shared Sensitivity to Liquidity: A Superficial Correlation

These historical examples illustrate how both Bitcoin and the Nasdaq can be influenced by the same liquidity cycles. During periods of loose monetary policy and abundant liquidity, both assets tend to perform well as capital flows into riskier investments. Conversely, during periods of tight liquidity, both can suffer as investors retreat to safer assets.

However, it's crucial to note that this shared sensitivity to liquidity creates only a superficial correlation. The underlying reasons for the price movements of Bitcoin and the Nasdaq remain distinct. The Nasdaq's performance is tied to the earnings, growth prospects, and market sentiment surrounding technology companies, while Bitcoin's price is driven by factors such as adoption rates, regulatory developments, and broader trends in the crypto market.

Performance Comparison

As an investor, it's crucial to determine which asset is preferable, especially since they appear to offer similar returns. Even more important is evaluating the risk-return profile of both assets.

Table 2: Performance Ratios last 5 Years

	Max Drawdown	Total Return	CAGR	Sharpe Ratio	Sortino Ratio	Annualized Volatility
Bitcoin	-77%	563%	46%	0.84	1.22	64%
Nasdaq 3x Leverage	-82%	329%	34%	0.70	0.99	75%

Source: MarketVector Research

Table 2 displays the metrics for the past five years. It is evident that Bitcoin has a slightly higher annualized return, coupled with a lower maximum drawdown and lower volatility. This results in higher Sharpe and Sortino ratios. Overall, the decision on which asset to include becomes clear, as Bitcoin outperforms in every metric. In fact, since 2012, the numbers have been so beneficial to Bitcoin that we were happy to show the more favorable shorter period for the Nasdaq to ensure a balanced comparison.

It's also important to note that leveraged ETFs, like the 3x Nasdaq, are typically not suitable for long-term investments due to the daily reset of leverage, which leads to what is known as volatility drag. While these ETFs can perform well during strong upward trends, they are not ideal for buy-and-hold strategies, especially in volatile, sideways markets. Bitcoin, on the other hand, is "the" buy-and-hold investment, designed for long-term holding and potentially offering more consistent growth over time.

Conclusion: Bitcoin's Unique Position in the Financial Ecosystem

Bitcoin is not a 3x leveraged Nasdaq ETF, despite superficial similarities in their performance. The weak and inconsistent correlation between Bitcoin and the Nasdaq reflects their fundamentally different natures. Bitcoin is a decentralized, digital asset that operates independently of the traditional financial system, while the Nasdaq is a market index driven by the fortunes of technology companies.

While both Bitcoin and the Nasdaq are influenced by the broader macroeconomic environment, particularly the liquidity cycle, their price movements are not intrinsically linked. Investors and analysts should be cautious about drawing simplistic parallels between Bitcoin and traditional financial assets, as doing so can obscure the unique factors that drive Bitcoin's value.

Understanding these nuances is crucial for anyone looking to invest in Bitcoin or the Nasdaq, as it highlights the importance of considering the distinct risk profiles and potential rewards associated with each. By recognizing Bitcoin's independence from traditional financial markets, investors can better appreciate its role as a potentially diversifying asset within a broader investment portfolio.

To find out more about MarketVector™ Bitcoin Benchmark Rate (BBR), contact: sales@marketvector.com.

Please see our index website for the specific methodology of our indexes here.

Contact

info@marketvector.com

Martin Leinweber, CFA

mleinweber@marketvector.com

Martin Leinweber works as the Director of Digital Asset Research and Strategy at MarketVector providing thought leadership in an emerging asset class. His role encompasses product development, research, and communication with the client base of MarketVector. Before joining MarketVector, he worked as a Portfolio Manager for equities, fixed-income, and alternative investments for almost 20 years. Martin was responsible for the management of active funds for institutional investors such as insurance companies, pension funds, and sovereign wealth funds at the leading German quantitative asset manager Quoniam. Previously, he held various positions at one of Germany's largest asset managers, MEAG, the asset manager of Munich Re and ERGO. Among other things, he contributed his expertise and international experience to the establishment of a joint venture with the largest Chinese insurance company PICC in Shanghai and Beijing. Martin is co-author of "Asset-Allokation mit Kryptoassets. Das Handbuch "(Wiley Finance, 2021). It's the first handbook about integrating digital assets into traditional portfolios. He has a Master of Economics from the University of Hohenheim and is a CFA Charter holder.

Jonas Weber

jweber@marketvector.com

Jonas Weber is an emerging expert in digital assets and investment strategies. As a Digital Asset Analyst at MarketVector, he excels in generating innovative index ideas, conducting in-depth research, and supporting client communications. Before joining MarketVector, Jonas honed his skills as a working student in Investment Consulting. At Lurse AG, a pension consultancy firm, he was instrumental in developing new investment strategies and analyzing the risk and performance of model portfolios. His collaboration with Lurse AG also extended to his master's thesis, which he completed summa cum laude, focusing on various investment strategies and deriving optimal guarantee levels.

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