

Crypto Quarterly Market Update

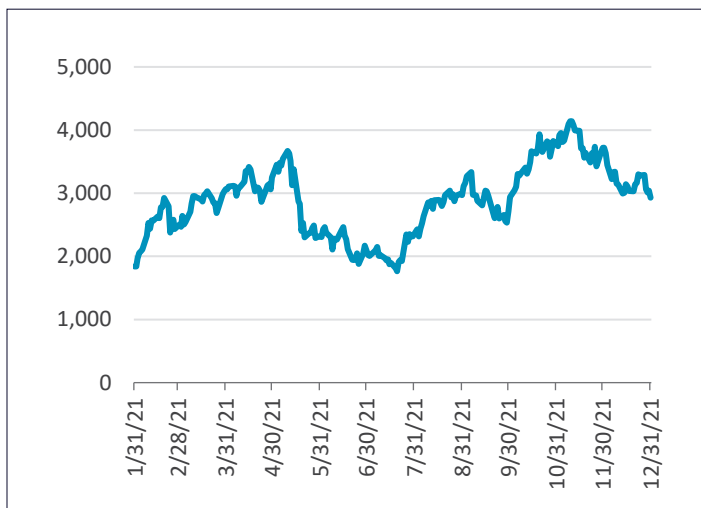
Nasdaq Crypto™ Index (NCITM) Review: February 1, 2021, to December 31, 2021

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Investment Performance

The Nasdaq Crypto Index Settlement Price™ (NCIS™) has returned 59.3% since its launch on February 1, 2021, through December 31, 2021. Including the backtest history that dates back to June 1, 2020, NCIS returned 102.1% for calendar year (CY) 2021, and a whopping 513.3% since backtest commencement. NCIS performance peaked in early November, with the Index posting a modest gain of 8.0% for 4Q21.

Nasdaq Crypto Index (NCIS) Since Launch



Source: Nasdaq

The NCIS traded within a particularly wide range throughout CY 2021. The Index increased from a low of 1,763.9 on July 20 to a high of 4,140.2 on November 9, an increase of 134.7%, before retracing over half of this gain to close out the year¹. This is fairly extreme performance in the context of traditional asset classes. In comparison, Spot Gold (XAU) was up 3.7%, down 2.0%, and down 4.1%, during 4Q, since February, and

throughout CY 2021, respectively. The S&P 500 Total Return Index (SPXT) gained 11.0%, 28.0%, and 28.7%, respectively, during the same time frames. Although the Bloomberg Commodity Index (BCOM) was down 1.6% in Q4, the Index is up 21.5% since February, and 27.1% during CY 2021. The NCIS easily outperformed these traditional asset classes in all three periods except for Q4, during which the SPXT outperformed the rest.

Performance Measure (Dec. 31, 2021)

Asset	Since February	CY 2021	4Q21
NCIS	59.3%	102.1%	8.0%
Gold	-2.0%	-4.1%	3.7%
S&P 500	28.0%	28.7%	11.0%
Commodity	21.5%	27.1%	-1.6%

Source: Nasdaq, Factset

Of course, it is expected that with high return potential comes high levels of risk. NCIS' exceptional return is partially offset by its substantial risk, as measured by volatility and drawdown. During the last 11 months since its February launch, the NCIS realized annual volatility of 74.9% and a maximum drawdown of 51.9%; both are significantly higher than those of the other assets displayed herein.

¹ Excludes simulated performance during January 2021.

Risk Measure (Feb. 1 to Dec. 31, 2021)

Asset	Volatility	Max Drawdown	Correlation
NCIS	74.9%	51.9%	-
Gold	13.1%	9.5%	0.01
S&P 500	12.7%	5.1%	0.22
Commodity	15.6%	10.1%	0.17

Source: Nasdaq, Factset. Volatility figures are annualized.

Throughout the time since launch, NCIS' largest allocations have been to Bitcoin (XBT), at 61% to 80%, and to Ethereum (ETH), at 17% to 36%. As a result, its risk and return profiles are heavily influenced by these two major cryptocurrencies.

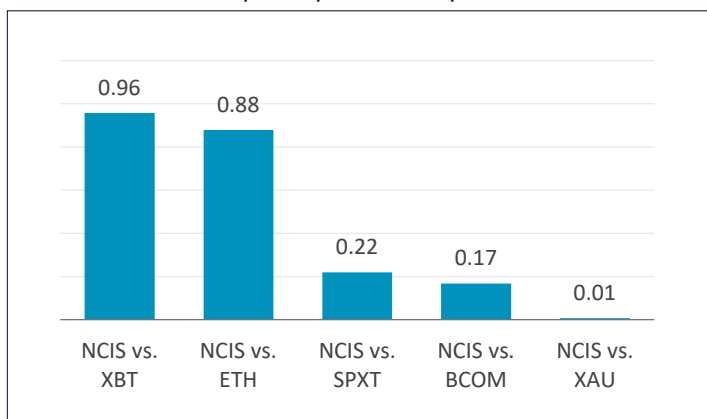
NCIS, XBT, ETH (Feb. 1 to Dec. 31, 2021)

Asset	Return	Volatility	Max Drawdown
NCIS	59.3%	74.9%	51.9%
Bitcoin (XBT)	35.3%	73.0%	52.9%
Ethereum (ETH)	171.8%	92.0%	55.9%

Source: Nasdaq, Factset

NCIS' correlation remains high with Bitcoin and Ethereum, and low with other traditional asset classes. While correlations with XBT and ETH have increased as compared to the 3Q21 YTD period, correlations with other asset classes remain low and relatively stable. This makes NCIS very compelling as a diversification instrument in the context of holistic investor portfolios.

Correlations (Feb. 1, 2021, to Dec. 31, 2021)



Source: Nasdaq, Factset

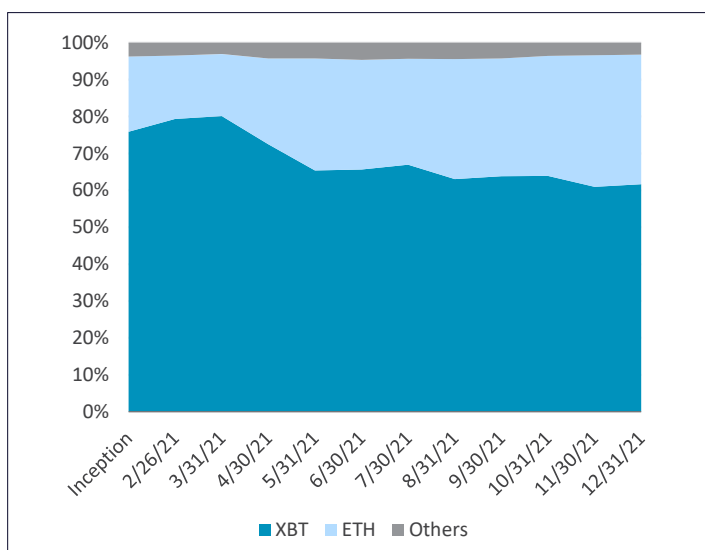
Portfolio Update

NCIS is weighted by Free Float Market Capitalization and rebalanced quarterly on the first business day of March, June, September, and December. The Free Float Market Capitalization of a digital asset is determined by its Circulating Supply, which is an important data element to maintain in order to preserve an investable and accurate representation of the asset class.

At its launch in February, NCIS held 75.91% of Bitcoin (XBT) and 20.34% Ethereum (ETH). All four other crypto assets [Bitcoin Cash (BCH), Litecoin (LTC), Chainlink (LINK), and Stellar Lumens (XLM)] comprised the remaining 3.75% of the NCIS portfolio. The relative XBT allocation has gradually decreased since the launch, due primarily to the significant increase in the price of ETH.

In June, two new crypto assets were added to the NCIS: Uniswap (UNI), an Ethereum-based, decentralized exchange protocol that leverages automated market making technology, and Filecoin (FIL), an algorithmic data storage network. At year-end, NCIS was comprised of these eight crypto assets, with 61.7% in XBT, 35.1% in ETH, and 3.2% across the remaining six.

Bitcoin (XBT) Weights are Gradually Reducing

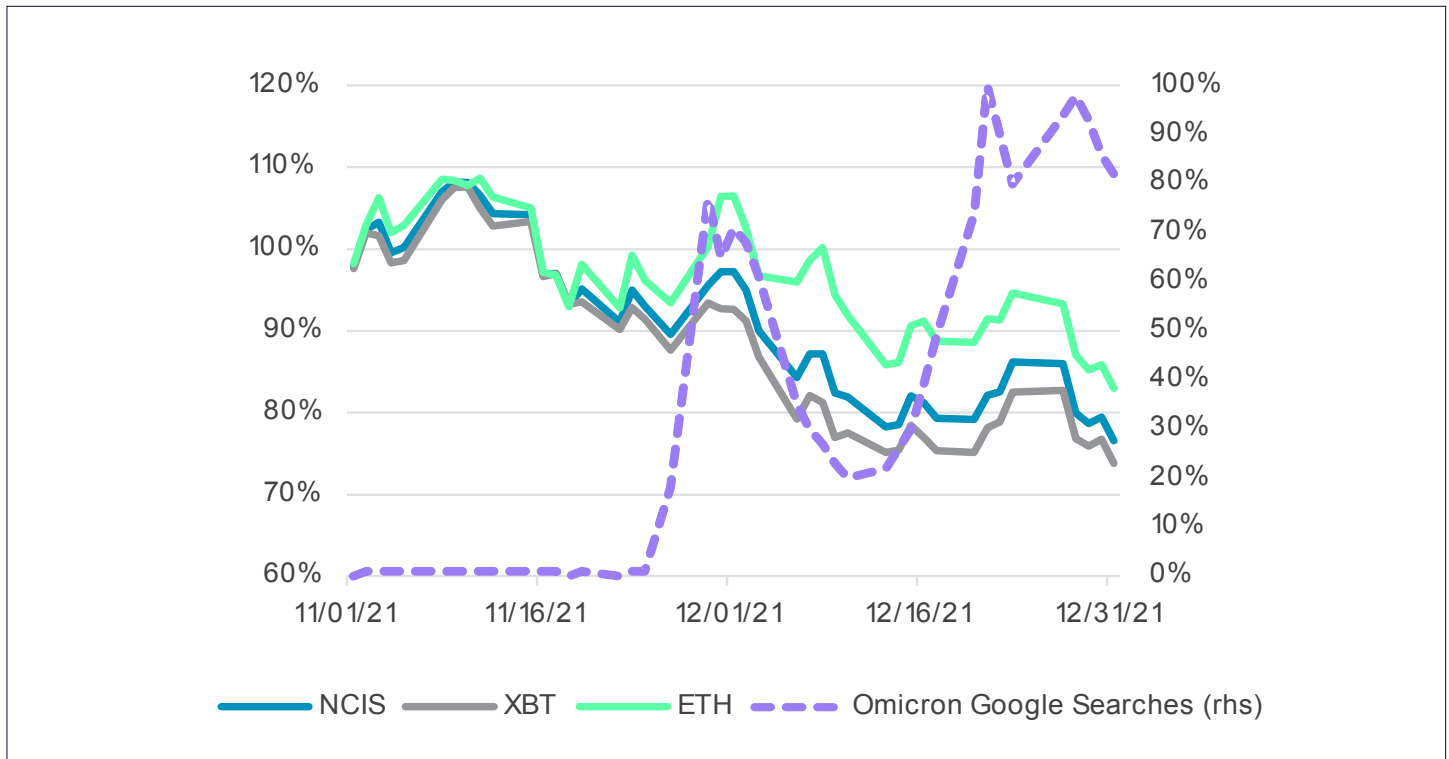


Source: Nasdaq

Market Update

The crypto market had a volatile Q4. Driven initially by positive narratives surrounding the anticipation of an approved, U.S.-listed Bitcoin ETF, the rally culminated with Bitcoin approaching \$69,000 intraday (with a corresponding NQBTCS closing print of \$66,838) on November 10. The peak coincided with a U.S. CPI reading that was hotter-than-expected, a reaction that supports the thesis that investors believe Bitcoin can serve as an effective hedge against inflation. Following the asset's November zenith, Bitcoin experienced a significant retracement, down 31.5% from its peak. This was driven by a combination of factors, including anticipated Fed hawkishness necessary to manage increasing levels of inflation.

In addition to the considerations surrounding U.S. monetary policy, it is likely that the emergence of COVID-19's Omicron variant also contributed to the precipitous decline in crypto markets. The below chart overlays the relative number of Google searches for the word "omicron" on top of the NCIS and its two top holdings. While causation is certainly up for debate, it is conceivable that a connection exists.



Source: Nasdaq, Google Trends

While the crypto markets overall were down during this period in aggregate — the NCIS Index was similarly down 29.3% from its peak on November 9 — some assets performed better than others. Ethereum, for example, was able to weather the storm more effectively, with a draw of only 23.6% from its peak on November 11. Primarily because of NCIS' substantial exposure to Ethereum, the Index was able to outperform Bitcoin by 220 bps when measured from respective peak through December 31. As 2022 begins to unfold, it will be interesting to see which narratives appear to drive performance, and which assets will outperform the rest.

Sources:

<https://indexes.nasdaqomx.com/Index/Overview/NCIS>

<https://coinmarketcap.com>

<https://www.bloomberg.com/news/articles/2021-10-11/bitcoin-pierces-57-000-as-traders-resume-push-for-record-highs>

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