

Bitcoin Brief

MARKET UPDATE

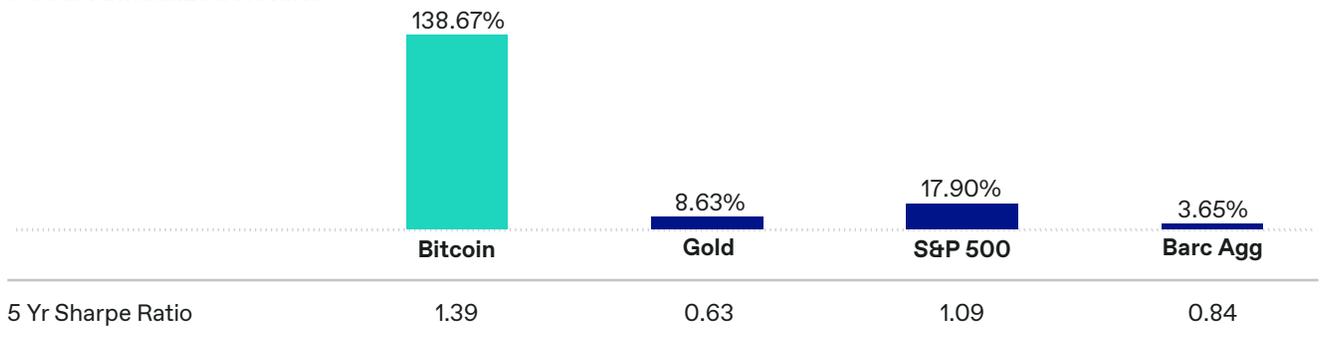
November was a tale of two halves for bitcoin. The asset reached a 4:00 PM ET all-time high of \$67,372 on November 9th, the day prior to the U.S. Labor Department’s higher-than-expected inflation print. However, bitcoin ended the month down 8% as concerns over the COVID-19 Omicron variant weighed on risk assets. Bitcoin is up 97% YTD.

On November 10th, U.S. Core CPI surpassed what were already high expectations, increasing 4.6% year-over-year (4.3% expected) and 0.6% month-over-month (0.4% expected). This was the highest Core CPI rate measured in over 30 years. Bitcoin, an asset commonly held as a store of value, jumped on the news. The report was released by the Labor Department at 8:30 AM ET on November 10th, and bitcoin was up 2.4% from 8:00 AM to 9:00 AM ET that day.

Historically, CPI surprises have not resulted in such a large price reaction for bitcoin. Previously, the market may have shrugged off higher-than-expected CPI prints that were believed to be “transitory,” but moving forward, the relationship between CPI and bitcoin’s price may continue to strengthen as the inflationary environment appears more sustained.

As month-end approached, investor focus shifted from supply chain bottlenecks and other inflationary dynamics to COVID-19 concerns. Developments related to the new Omicron variant led to a flight to safety on the day after Thanksgiving and may continue to weigh on investor sentiment as the year closes out.

5 Year Annualized Return



HIGHLIGHTS.

- Turkey case study
- Bitcoin’s performance after new all-time high
- Taproot activation

MARKET STATS.

As of 11/30/21

BTC Price	\$57,471
BTC Market Cap	\$1.08T
% of BTC Total Supply in Circulation	90%
3M Average Daily Bitcoin Transactions	~267K

NOTEWORTHY HEADLINES.

[Houston Rockets Announce Partnership with NYDIG](#)

[Bitcoin Hits Record as Inflation Hedge Drumbeat Grows Louder](#)

[NYDIG Partners with Landry's on Bitcoin Rewards Program](#)

[Eric Adams Aims to Make NYC Crypto-Friendly](#)

[Bitcoin Futures ETF Mania Cools as Wall Street Hits Pause Button](#)

Turkey Case Study

Turkish interest in and use of bitcoin has accelerated over recent months as the country faces an inflationary environment that dwarfs the situation in the United States. Turkey, a country of nearly 85M people with a storied history as a global power, has fallen victim to the unorthodox economic policies of President Recep Tayyip Erdogan. President Erdogan has pressured the central bank to cut interest rates by 400 basis points since September, with the most recent cut on November 18th.¹ Turkey has added monetary stimulus despite inflation reaching 20% in October and the Turkish Lira losing 40% of its value this year.² Erdogan has fired three central bank chiefs who presumably would not follow his policies which run counter to economic theory.

Turkey is only the most recent example of a monetary system being influenced by political pressures. Throughout history, those in power have used the monetary system for their own gain which may conflict with what's in the best interests of the public. The result: 1.2 billion people are estimated to live in double- or triple-digit inflation.³

Bitcoin is shielded from government mismanagement. The rules for the world's open-source monetary system are clear, hard-coded, and inflexible. Bitcoin provides the opportunity for people to opt out of their country's fiat monetary system when it proves to be dysfunctional. Like Nigeria, Zimbabwe, and many other developing nations before it, Turkish citizens have sought out bitcoin as a way to safeguard their savings from the whims of political leaders. No wonder Istanbul's famous Grand Bazaar is now littered with bitcoin storefronts.⁴

Bitcoin's Performance After New All-Time High

History shows that buying bitcoin even once it hits a new all-time high has been a profitable strategy. With bitcoin up over 90% from a 55%+ drawdown earlier in the year, investors routinely ask whether now is an appropriate time to buy. With the caveat that bitcoin investments have historically been highly volatile, and that past performance is not indicative of future results, a historical analysis of past cycles indicates that buying when bitcoin makes a new all-time high has generally yielded strong returns.

Returns After New All-Time High

Cycle Start Date Following Drawdown Recovery ⁵	Bitcoin Price	Return			
		1MO	3MO	6MO	12MO
2/20/2013	\$30	133%	292%	268%	1,773%
11/5/2013	\$243	322%	233%	76%	39%
2/23/2017	\$1,188	-20%	104%	262%	756%
11/30/2020	\$19,440	48%	131%	90%	196%
10/19/2021	\$64,201	-10%			
Average		95%	190%	174%	691%
Median		48%	182%	176%	476%

Taproot Activation

On November 14, 2021, a series of technology upgrades collectively known as “Taproot” became part of Bitcoin’s code without any network interruption or issue. Taproot represents the most notable update to the Bitcoin software in over four years. It’s designed to enhance the network’s security, privacy, and throughput rate while reducing fees and laying a foundation for future upgrades. It should improve layer two solutions such as the Lightning Network, which increases the speed and lowers the cost of sending bitcoin payments.

Bitcoin at its core is simply open-source software. All software requires updates, although Bitcoin stands out relative to other digital assets as having far fewer significant changes to its original code and requiring significant developer consensus before changes are implemented. For example, the Taproot update was informally proposed in 2018 to the Bitcoin developer community, debated vigorously, developed, and carefully tested for over three years before it gained widespread support and was implemented. This high bar ensures network security and fidelity, critical characteristics for users and investors.

Performance	1MO	3MO	YTD	1YR	3YR*	5YR*
Bitcoin	-8.13%	21.51%	96.92%	195.64%	143.97%	138.67%
Gold	-0.50%	-2.16%	-6.52%	-0.14%	13.29%	8.63%
S&P 500	-0.69%	1.32%	23.18%	27.92%	20.38%	17.90%
Barclays Agg	0.30%	-0.60%	-1.29%	-1.15%	5.52%	3.65%

*Returns greater than 1 year are annualized.

	5YR Standard Deviation	5YR Sharpe Ratio	5YR Correlation to BTC
Bitcoin	90.8%	1.39	-
Gold	12.7%	0.63	0.12
S&P 500	15.3%	1.09	0.27
Barclays Agg	3.1%	0.84	0.14

Sources:

NYDIG, Bloomberg as of 11/30/21, unless noted otherwise. All prices are 4:00 pm ET prices on the last business day of each month. Barclays Agg represents the Bloomberg Barclays US Aggregate Total Return Bond Index. Bitcoin returns based on month-end 4pm prices. Monthly bitcoin prices prior to October 2018 are based on Coinbase 4pm pricing. In October 2018, NYDIG began generating bitcoin prices in accordance with NYDIG Asset Management’s valuation policy for its bitcoin funds. The monthly bitcoin prices used after October 2018 reflect 4pm prices determined in accordance with such valuation policy, which is the same valuation policy that is used for NYDIG’s funds. As there are two different pricing sources for bitcoin reflected, the historical performance of bitcoin shown may be different if the bitcoin prices in accordance with NYDIG Asset Management’s valuation policy were used for the entire period or if the Coinbase pricing were used for the entire period. Performance data quoted represents past performance of bitcoin. Past performance of bitcoin is not indicative of future results. Bitcoin has historically exhibited high price volatility relative to more traditional asset classes. The value of an investment in bitcoin or the funds could decline rapidly, including to zero.

¹Bloomberg, [Turkish Lira in Freefall After Central Bank Cuts Rates Again](#), Nov 18, 2021. ²Wall Street Journal, [Turkish Central Bank Props Up Collapsing Lira](#), Dec 1, 2021. ³Bitcoin Magazine, [Check Your Financial Privilege](#), Sep 21, 2021. ⁴The Guardian, [Turkey's Economic Turmoil Drives Bitcoin Frenzy](#), Apr 13, 2021. ⁵Cycle start date reflects the first time an all-time high is reached after a drawdown recovery and is at least six months after the last all-time high.

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