

Research Paper

Considerations for Bitcoin Investors

An analysis of the cryptocurrency's merits and risks following its recent rally

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June 2021

Key Observations

Recent returns, greater accessibility and broader backing of Bitcoin have led to broader adoption by investors, custodians and developers. While recent returns, low correlations and significant network growth are promising, significant risks from other cryptocurrencies, regulators and geographic concentration must be assessed carefully. Investors should consider the suitability of Bitcoin in the context of their specific situation and portfolio.

Introduction

In 2017, investors around the world were captivated by the rise of Bitcoin, a digital currency decentralized from government intervention. At the time, Bitcoin was largely relegated as an asset for day traders. Fast forward to today, and interest from other investing parties has grown, predicating many questions. This research paper seeks to address Bitcoin's merits and risks as an institutional-quality investment. For an introduction to Bitcoin and cryptocurrency, we encourage you to revisit our research paper published in 2018: [Cryptocurrency Q&A](#).

Overview

Some investors see the role of Bitcoin and other cryptocurrencies as a store of value to protect against rising inflation and to mitigate the risk of currency debasement amid the substantial increases in global money supplies. Its unique technology and momentum-driven characteristics add a speculative growth element but have provided a historically low correlation to other assets. Some of these characteristics may also be captured in other assets, though in a very different way. Real assets like real estate or commodities may also provide a hedge against inflation, while allocations to private equity or technology stocks can capture similar growth and momentum characteristics. While these assets have similar top line objectives, they likely achieve those objectives in different ways. Gold often serves as a store of

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value, retaining its monetary worth. It proved to be a haven asset in periods of market stress and inflation. Bitcoin has been compared to gold due to its perceived role as an inflation-hedging asset, sometimes referred to as “digital gold,” since both assets are divisible, free from intervention by any single government, verifiable, portable and transferable.

The recent run-up and subsequent crash in Bitcoin prices happened before, most notably in 2017. However, a proliferation in the type of investment solutions separates this cycle from earlier ones. Solutions like crypto mining, wallets, exchange-traded futures contracts and crypto-specific exchanges existed for many years, but newer options include institutional-grade custody solutions from firms such as Fidelity and BNY Mellon. There have also been cryptocurrency ETFs launched in Canada. If interest in cryptocurrencies continue to rise, it is likely the marketplace for institutional-grade solutions will evolve with it. With such evolution, there may be an opportunity for the quality and cost of solutions for investment to become more appealing.

From a regulatory standpoint, there are important considerations around investing in cryptocurrencies. At the time of this writing, the IRS recognizes crypto-asset investments as property and therefore they are taxed with traditional short- and long-term capital gains based on the holding period. Crypto futures contracts, however, are treated as futures and taxed as ordinary income. In late 2020, the Office of the Comptroller of the Currency (OCC) permitted all national banks to participate in cryptocurrency networks to process transactions and provide custody solutions. Investors considering crypto assets should consult with a tax professional around details and impacts on after-tax returns.

Bull Case

Bitcoin’s price behavior continues to follow a boom-and-bust cycle, with each cycle reaching new peaks. Each cycle featured a similar dialogue about Bitcoins merits and shortcomings.

Prior to 2021, Bitcoin reached a peak in 2010, 2013 and 2017, rising suddenly and then losing nearly two-thirds of its value in the subsequent year. This pattern played out soon after a Bitcoin ‘halving event,’ which has occurred about every four years when the reward for mining a Bitcoin block is halved: from 50 to 25 in 2012; 25 to 12.5 in 2016; and from 12.5 to 6.25 in 2020. While this level of volatility is concerning, Bitcoin supporters have pointed to this algorithmic predictability in the Bitcoin supply as a positive compared to the irregular and highly expansionary growth in money supply of fiat currencies, especially in recent years. Supporters argue the predicted supply growth provides transparency and that, paired with the growth in the number of participants in the Bitcoin network, a limited supply will continue to exert upward pressure on Bitcoin’s price. The Stock-to-Flow model is often pointed to as capturing this longer-term trend, with short-term deviations around the trendline but a broadly accurate movement over a longer horizon.

The argument around increased network participation is based on the usefulness of Bitcoin, and cryptocurrencies more broadly, as a transparent, globally accessible, rapid and efficient payments networks. This contrasts with the slow-moving bank networks that exist today, which are often restricted to individual countries. The belief is that as more developers build decentralized apps (DApps) on the Bitcoin network, its network value will increase and draw in more participants and more developers, a self-perpetuating cycle. These network effects are reminiscent of the rise of telephones or the internet. Recent developments, such as acceptance of Bitcoin by payments processors like PayPal or vendors such as Whole Foods, highlight the growth in Bitcoin's payments network and its wider acceptance.¹

Although Bitcoin's primary function is as a payments network, the rise of Bitcoin as an investment is equally important. Its returns in recent years dramatically outpaced those of other asset classes, which the bulls would argue make it a promising addition to one's portfolio on a forward-looking basis. Perhaps this is magnified by its historically low correlation to traditional asset classes. From a portfolio construction standpoint, that combination of high returns and low correlation would improve the portfolio's risk-adjusted return. Increasing adoption among institutional investors could provide investors more security around Bitcoin as an investment, compared to previous cycles when widespread institutional investment was lacking.

Major investment firms, such as Fidelity and BNY Mellon, have introduced Bitcoin solutions, and reputed hedge fund managers such as Stanley Druckenmiller voiced their support for Bitcoin, primarily as a hedge to inflation and as a store of value given the rise in money supply among fiat currencies.

Bear Case

An obvious risk to investing in Bitcoin is its extremely high volatility. Volatility is inherent to the asset. It has been roughly five times as volatile as Gold and the MSCI ACWI, four times as volatile as the S&P 500 and almost nine times more volatile than the S&P Real Assets index from 2014 to 2020.² The recent price run-up to over \$60,000 and subsequent crash to below \$35,000 is a recent stark example.

What may be prudent for an investor depends on their specific circumstances. While some proponents argue that rising institutional adoption could smooth returns and reduce volatility, the possible downward pressure that an end-of-period portfolio rebalancing (by institutional investors) could force liquidations among highly leveraged investors in the market and amplify volatility.

Another risk is the waning leadership of Bitcoin. While continues to draw the most attention of all cryptocurrencies and occupies the largest market share of the cryptocurrency market, its market share has fallen from a recent peak of roughly 70 percent of the cryptocurrency market cap to under 50 percent. Alternatives such as Ethereum, Ripple and

¹ Forbes. "Retailers are accepting crypto. Should loyalty programs be next?" <https://www.forbes.com/sites/bryanpearson/2021/05/24/retailers-are-accepting-crypto-should-loyalty-programs-be-next/?sh=53b4cd4f1368>

² Source: Bloomberg.

even Dogecoin have eclipsed Bitcoin in terms of growth rate. Alternative cryptocurrencies may present more flexible platforms upon which to build DApps for a wider number of uses. By comparison, Bitcoin is rather limited as a payment solution. Bitcoin's leadership is at risk as these new cryptocurrencies outpace Bitcoin in growth rate.

A similar competitive risk is presented by the promise of Central Bank Digital Currencies (CBDCs), most notably the Digital Yuan pilot being conducted by the People's Bank of China. While cryptocurrencies rose as a challenge to traditional fiat currencies, regulatory risks continue to be significant. These CBDCs come with similar technology as cryptocurrencies, yet also have the backing of governments and the regulatory push to force adoption. Although this risk is faced by the entire non-governmental cryptocurrency complex, the mitigant is that these CBDCs would be national and not global like Bitcoin or other incumbents. Broader global acceptance of Bitcoin, Ethereum and others would reduce this competitive risk.

Although these risks already exist in the marketplace, continued uncertainty continues to plague the space. Regulatory risk remains significant as various governments have proposed blanket bans on cryptocurrencies altogether. Other risks include the risk of hacking, although hacks have generally targeted cryptocurrency exchanges and wallets by exploiting poor security systems on the part of these service providers.³

Hacking the Bitcoin network would require control of over 50 percent of the total mining power. A recent power outage at a major mining location in the Xinjiang region of China led to a precipitous fall in Bitcoin prices over the following two weeks as highly leveraged investors faced margin calls and liquidated. Although the Bitcoin network is decentralized, various estimates claim that nearly 50 percent of mining happens in China, which presents significant concentration risk.⁴

A recurring criticism of Bitcoin has been its association with illegal or illicit uses. While holding a currency responsible for its use seems to be a double standard, some additional clarification is required in this regard.

Unlike cash, Bitcoin transactions are recorded and coded into the transaction ledger, verified by the network and permanently registered. The record of transactions on the Bitcoin network cannot be changed. Since Bitcoin is pseudonymous, not anonymous, participants in Bitcoin transactions can be traced and pursued by the relevant authorities. The FBI and other agencies have successfully tracked down various participants tied to illicit Bitcoin transactions and taken subsequent action. One such recent event included a seizure of \$1 billion worth of Bitcoin.⁵ While no assurances can be made that Bitcoin will not be used for illicit activity, its reputation for nefarious transactions may not fully reflect the facts.

³ Forbes. "Massive hack exposes Bitcoin's greatest weakness." <https://www.forbes.com/sites/billybambrough/2020/12/23/massive-hack-exposes-bitcoins-greatest-weakness/?sh=ab97c14da7d7>

⁴ Nasdaq. "Bitcoin mining hash rate drops as blackouts instituted in China." <https://www.nasdaq.com/articles/bitcoin-mining-hash-rate-drops-as-blackouts-instituted-in-china-2021-04-16>

⁵ CBS News. "Feds seize stolen bitcoin worth more than \$1 billion." <https://www.cbsnews.com/news/doj-seize-69k-bitcoin-1-billion-dollars/>

Bitcoin mining operations require significant energy consumption, which has drawn recent scrutiny. Some estimates show the energy consumed to “mine” Bitcoin has surpassed the total energy consumption of Argentina.⁶ Additionally, there is a feedback loop with the price of Bitcoin: as prices rise, mining economics become more favorable, incentivizing more miners to enter the market. The Bitcoin mining algorithm automatically increases the mining complexity as new miners enter. This increases the amount of energy consumed to mine the same amount of Bitcoin as before. Total energy consumption continues to rise. This could lead to various concerns, chiefly the potential environmental impact. However, there are complicating factors such as whether the energy was produced from renewable resources or the opportunity cost of a digital currency versus the breadth of energy consumption from our current financial system. While energy usage is certainly an issue to be aware of, we do not view it as central to the discussion of using or investing in Bitcoin and other digital assets.

Closing Thoughts

Bitcoin grabbed the attention of many investors during its most recent rally in the context of forward-looking inflationary pressures and the rapid expansion of money supply. Its outsized historical returns and historically low correlation to other asset classes and growing support by institutions and famed investors has understandably drawn interest. However, investors considering Bitcoin as an investment should operate with the full set of facts.

If considered an asset class, Bitcoin carries significant risk. If treated with the same considerations as other asset classes, it should have a limited size in portfolio allocations. Additionally, a dynamic landscape for other cryptocurrencies, regulation, taxation and the significant uncertainties must be considered carefully prior to investment.

For more information, please contact any of the professionals at Fiducient Advisors.

⁶ BBC. “Bitcoin consumes ‘more electricity than Argentina.’” <https://www.bbc.com/news/technology-56012952>

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