Assessing the Investment Opportunity in Cryptocurrency

February 2021

OVERVIEW

- **The cryptocurrency market, and specifically Bitcoin, has grown significantly and offers investors high potential returns**
- **It is commonly argued that Bitcoin should be considered by investors as a store of value and portfolio hedge**
- **Bitcoin behaves more like an alternative risk asset, and there are key non-investment risks that investors should evaluate**

Background

Cryptocurrency ("crypto") is digital currency supported by blockchain technology, which allows users to confidentially transact without an intermediary. This has high potential value, particularly in developing economies, in that crypto can provide an avenue for more consumers to access the global financial system. This has helped drive strong investor interest in crypto, along with its high potential return and low correlation to traditional assets. However, there are a number of risks that investors should evaluate before considering an allocation.

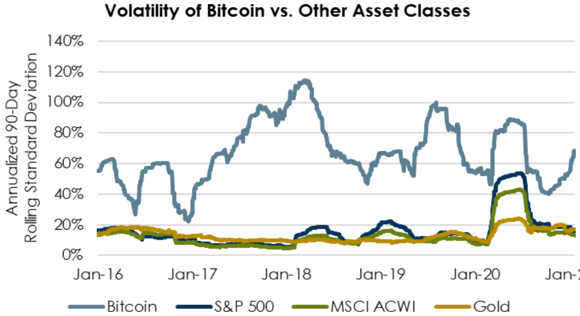
Overview of the Cryptocurrency Market

The crypto market has grown to nearly $1 trillion, which compares to an estimated $1.8 trillion of hard dollars in circulation as of year-end 2019. There are thousands of different cryptocurrencies, but Bitcoin is by far the market leader with over 60% share. Retail investors have long been the primary investors in crypto, but institutions have recently shown stronger support that is partially driven by an increase in professional custody solutions.

Cryptocurrency as a Store of Value

A common argument made in favor of Bitcoin is that it can function as a store of value akin to gold, since its supply is explicitly finite. This idea has gained momentum as economic stimulus tied to the Covid-19 pandemic has deepened investor concern around depreciation of the US dollar. One way to view Bitcoin's role as a store of value is to look at its realized volatility. Since January 2016, Bitcoin has exhibited an average annualized volatility of 67%, versus 13% for gold and 16% for the S&P 500. This included one annual period when Bitcoin's price fell 74%. While Bitcoin may still be a viable store of value for consumers in developing countries with high levels of inflation, its volatility likely remains too high for it to play this role for many investors today.

Volatility of Bitcoin vs. Other Asset Classes



Source: Bloomberg, ACG Research; data as of 1/25/2021.

Cryptocurrency as a Portfolio Hedge

Proponents of Bitcoin also point to its low correlation with traditional assets and its ability to act as a hedge in the portfolio. While this may have been true previously, it was not the case in 2020 when Bitcoin's correlation to other assets increased meaningfully. When paired with the relatively short performance history of Bitcoin, this recent rise in correlation suggests that, at the very least, crypto's hedging characteristics are still unproven.

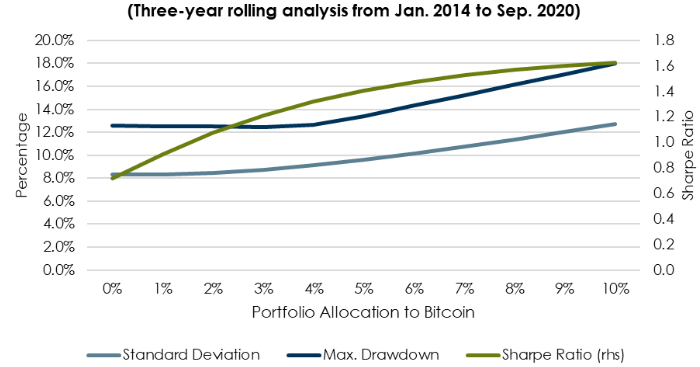
Other Key Considerations

One of the key non-investment risks for crypto is uncertainty regarding future competition and regulation. From a competitive standpoint, potential risks include the launch of a new digital currency that enhances speed and flexibility versus Bitcoin or traditional financial institutions adapting their technology to weed out current inefficiencies. Regarding regulation, the US government has recently taken a softer tone toward crypto, but it remains reasonable to expect some degree of future regulation for the purposes of anti-money laundering efforts, mitigating market manipulation, etc. At a minimum, this could reduce market liquidity and increase transaction costs.

Cryptocurrency's Role in a Diversified Portfolio

Historical data suggests that Bitcoin would have been additive to a traditional 60/40 portfolio in small amounts of 5% or less due to its low correlation and high expected return. Beyond this level, Bitcoin's volatility would have increased the average expected maximum drawdown for the total portfolio. In saying this, investors considering an allocation to Bitcoin should consider several key elements, including: 1) Given Bitcoin's volatility, short holding periods focused on market timing could result in significant losses; 2) Programmatic rebalancing is critical to controlling risk; and 3) If the correlation increases between Bitcoin and other assets or if future returns moderate, the benefits of an allocation could diminish.

Key Portfolio Metrics by Bitcoin Allocation
(Three-year rolling analysis from Jan. 2014 to Sep. 2020)



Source: CFA Institute, Bitwise Asset Management; data assumes quarterly rebalancing.

ACG's Position

Crypto has the ability to improve global payments, and it has become a popular alternative asset that has garnered support from both retail and institutional investors. However, its investment characteristics suggest that it should not be relied upon as a store of value or portfolio hedge. Crypto also possesses material non-investment risks that could negatively impact future market adoption and pricing. As a result, investors considering an allocation to crypto should only do so if they have a diversified portfolio, a long-term investment horizon, and they are willing to consider a small allocation in order to control total portfolio risk.

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