



The Future of Cryptocurrency

An Investor's Comparison of Bitcoin and Ethereum

Abstract

Bitcoin and Ethereum are two highly disruptive cryptocurrencies looking to leverage blockchain technologies to drive innovation across numerous industries. The objective was to analyze each cryptocurrency to develop the ideal investment strategy for a \$1,000,000 investment which must be held for five years without any additional trading.

To develop an ideal investment strategy, we analyzed both currencies. After looking at the qualitative similarities and differences between each currency, we analyzed the historical performances of each and extrapolated these values to form a five-year projection. Conversations with industry professionals helped to identify the most probable and impactful factors for the future demand of both currencies. After incorporating our results and accounting for variance, we ran simulations to predict the expected values given a range of inputs and factors.

After weighing these findings, the appropriate investment ratio proved to be 69:31 for Bitcoin and Ethereum respectively. Bitcoin offered a higher expected value, but the volatility and speculative nature of cryptocurrencies indicated a need for diversification across platforms.

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What is Money Anyway?

Since societies transitioned from a barter economy to using a money as a medium of exchange, individuals have tried to devise systems that allow for rational ways to exchange value. In order to help make goods and services commensurable the Greek philosopher Aristotle came up with four criteria that help to dictate what is considered to be ‘good money’ (Lee, 2009):

1. It must be **durable**
2. It must be **portable**
3. It must be **divisible**
4. It must have **intrinsic value**

Originally the preferred medium of exchange was gold as it was able to fulfill all four of these criteria. As economies grew and the demand for a medium of exchange increased, governments were forced to create a more accessible medium of exchange that they could control and regulate. This was the birth of fiat currency. This particular medium of exchange has been adopted worldwide, however it has come with its own set of issues.

In order to help fix some of these issues, cryptocurrencies began to emerge in 2009, leveraging a disruptive technology called blockchain. A cryptocurrency is a digital currency that uses cryptography for security (Investopedia, 2016). Blockchain specifically deals with the way in which data is structured and allows for the existence of decentralized digital ledgers where single organizations are not able to effect transactions (Hackett, 2016). Currently the two most widely adopted cryptocurrencies are Bitcoin and Ether, the currency that is used to power the Ethereum blockchain.

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