

## Cryptocurrency Markets Are In Flux And You Have Valuation Questions

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Over the past year, various cryptocurrency projects have seen massive declines in market value. Bitcoin (“BTC”) and Ethereum (“ETH”), the standard bearers of cryptocurrencies, have seen their respective prices decline roughly by half. As it has been widely documented, other cryptocurrencies have demonstrated a high correlation to the price movements of BTC and ETH, and, as such, have also seen a significant decline in market value. However, is the listed market price the only consideration that should be taken into account when determining the fair market value of a cryptocurrency position? As of the writing of this article, there are just under 9,000 different cryptocurrencies trading across roughly 240 separate exchanges, according to one of the most popular crypto price-tracking websites, CoinMarketCap. This article will list other key points that should be included in any analysis of such a position and how Empire can provide the help you and your clients could need.

BTC was invented in 2008 by an unknown person or persons using the name Satoshi Nakamoto, with the first transactions on the blockchain occurring in the following year. ETH came later, launching in 2015, and is best known for its smart contracts. These smart contracts can be programmed to create transactions when certain predetermined conditions are met, such as sporting event results or real estate closings. Both are decentralized currencies to various extents, meaning the tracking of transactional data takes place across a peer-to-peer network of computers known as nodes. This type of blockchain network allows for a “trustless environment,” in that no one has to know or trust any other member. Each member has a copy of the distributed ledger, and if any one member’s ledger is corrupted, it will be rejected by a majority of the other members in the greater network. On the other hand, currencies based on centralized networks, such as XRP created in 2012 by Ripple Labs, have their respective ledgers maintained and controlled by either a single entity or multiple trusted nodes as designated by the originating entity.

When determining the fair market value of a cryptocurrency position, Empire believes the following major factors should be taken into account:

1. Size of the position relative to a currency’s typical daily trading volume.
2. Whether the currency is centralized or decentralized.
3. Whether the currency could potentially be regulated by the Securities and Exchange Commission (“SEC”) as a security, rather than a currency (also known as the “Howey Test”).
4. The reliability of the exchange being utilized.



### Size of position relative to respective currency's active trading volume:

High-net worth individuals who own a material amount of one particular currency should consider a blockage discount when determining the fair market value of their position. It is not uncommon for a newly launched cryptocurrency's distribution to be concentrated with a few small originators and other sponsors. According to River Financial<sup>1</sup>, as of June 2022, the top 2,107 addresses (or wallets) own roughly 42% of all the outstanding BTC.



When taking materiality into consideration, the time it would take to sell the person's holdings without affecting the market price (i.e., lowering the market value of the position) should be determined using the currency's historic trading volume. The fair market value can then be determined by calculating a hypothetical liquidation schedule and discounting the cash flows back to the present time.

### Centralized vs Decentralized and a Lost Key:

As noted earlier, decentralized currencies provide owners of the currency a higher level of security and reliance as the supporting blockchain is shared by all members. However, when owning a centralized currency, if a key is lost, there is a potential opportunity to locate the position through its controlling company. For example, the estate of Matthew Mellon included an investment in XRP reportedly worth \$193 million when Mellon died. However, the estate's attorneys had a major issue because the decedent had not disclosed the location of his keys to his XRP holdings prior to passing. With Ripple Lab's help, the attorneys were able to circumvent and get access to the decedent's account<sup>2</sup>.

An executor of an estate that does not have access to a cryptocurrency key should consider whether the position is ever recoverable. Two major BTC owners, Stefan Thomas (lost password) and Gabriel Abed (reformatted laptop) both famously lost BTC fortunes due to an inability to access their accounts<sup>3</sup>.

### Cryptocurrency as a Security; The Howey Test

A desired feature of cryptocurrencies is their lack of oversight by a regulatory body, such as the SEC. The risk of such oversight can have a significantly adverse impact on the market value of a particular cryptocurrency. Regulated securities tend to have lower prices, lower traded volume, and a longer time to complete a sale.

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<sup>1</sup>“Who Owns The Most Bitcoin?” River Financial, <https://river.com/learn/who-owns-the-most-bitcoin/>. June 2022.

<sup>2</sup> Grace Ferguson. “How a Cryptocurrency Fortune Crippled a Deceased Billionaire’s Estate.” The Daily Dot, <https://www.dailydot.com/debug/death-internet-cryptocurrency-matthew-mellon/>. December 23, 2021.

<sup>3</sup> Nathaniel Popper. “Lost Passwords Lock Millionaires Out of Their Bitcoin Fortunes.” The New York Times, <https://www.nytimes.com/2021/01/12/technology/bitcoin-passwords-wallets-fortunes.html>. January 12, 2021.

Below is a list of questions, otherwise known as the Howey Test, which are applied to a new investment in determining whether it falls under regulation by the SEC<sup>4</sup>:



1. Is it an investment of money/assets?
2. Is there an expectation of profits from the investment?
3. Is the investment of money/assets in a common enterprise?
4. Do any profits come from the efforts of a promoter or third party?

Whenever valuing a cryptocurrency, these questions should be asked when considering the risk of future regulation.

### Exchange Reliability

An issue that has become an almost common refrain; can an investor's chosen exchange be trusted? Mt. Gox was one of the first major exchanges to fall, leaving investors reeling. As of late 2013, Mt. Gox handled over 70% of all BTC trades. Yet, in February 2014, the exchange had to halt all withdrawals after roughly 850,000 BTC were stolen, leading to a bankruptcy filing by April<sup>5</sup>.

More recently, and more famously, the cryptocurrency exchange FTX went from a \$32 billion company to insolvency nearly overnight after a run on client deposits left the firm with an \$8 billion shortfall. Withdrawals from the exchange were halted and investors were left to wonder whether any value would be recoverable<sup>6</sup>.

If you or your clients own cryptocurrency and are considering estate planning with such an investment, Empire can work with you to determine the fair market value for gift tax purposes. Please reach out to set up a free consultation.

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<sup>4</sup> "Framework for 'Investment Contract' Analysis of Digital Assets." U.S. Securities and Exchange Commission, <https://www.sec.gov/corpfin/framework-investment-contract-analysis-digital-assets>.

<sup>5</sup> Vincenzo Cacioppoli. "Story of the Mt. Gox Exchange." The Cryptonomist, <https://en.cryptonomist.ch/2022/08/28/story-mt-gox-exchange/#:~:text=birth%20to%20failure-,Mt.,%3A%20The%20Gathering%20Online%20Exchange.%E2%80%9D>. August 28, 2022.

<sup>6</sup> David Yaffe-Bellany. "How Sam Bankman-Fried's Crypto Empire Collapsed." The New York Times, <https://www.nytimes.com/2022/11/14/technology/ftx-sam-bankman-fried-crypto-bankruptcy.html>. November 14, 2022.



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Dave has extensive expertise in valuations of estate and gift tax reporting, for which he has valued limited partnership interests and limited liability company interests of privately held companies across a diverse range of industries. In addition, he has valued intangible assets (including trademarks/names, technologies, patents, etc.) pursuant to business combinations (ASC 805), debt instruments, and non-performing loans, as well as goodwill impairment testing (ASC 350) and the impairment or disposal of long-lived assets (ASC 360).

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