Dimensional

CLIENT QUESTION OF THE Month: How should I think about cryptocurrency?

"Everything you don't understand about money combined with everything you don't understand about computers."—HBO's Last Week Tonight with John Oliver, March 11, 2018

- As cryptocurrencies are in the headlines more and more, some investors are wondering if they should dedicate a portion of their portfolio to these new types of electronic monies. Cryptocurrencies represent innovation within financial services, but there are still many uncertainties about the future of their technology and their returns.
- **Technology** – One of the more popularized cryptocurrencies is bitcoin, which is represented by a string of code, or a token, that is stored in a digital wallet. Every record of transaction is stored in a decentralized ledger, with complex algorithms to validate these entries. Bitcoin is perhaps the most famous example, but there are actually thousands of alternatives. There are several variables to consider when evaluating cryptocurrencies, and it is highly debated which of these options is the best. While this field is continuing to expand, it can be difficult to navigate the nuances of the technology.
- **Headlines** – The increase in the value of bitcoin over the past few months has enchanted potential investors[1]. But cryptocurrencies have made headlines for other reasons as well. A recent New York Times article highlighted the rising issue of 'lost' bitcoins. Some users have lost access to millions of dollars' worth of bitcoin due to forgotten passwords that can't be rectified.[2] This sort of risk is one that traditional investors in stocks and bonds are likely not accustomed to. The environmental impact of mining for bitcoin has gained attention as well. 'Mining' involves using powerful computers to compile recent transactions into new blocks of the transaction chain through solving a highly complex mathematical puzzle, which delivers new coins into circulation. Investors who are concerned with sustainability may worry about the amount of energy required to mine for coins.[3]
- **Regulations** – With the increasing attention towards cryptocurrencies over the last few years, they've received additional scrutiny from regulators. In 2014, the SEC warned that any new investment appearing to be spearheading innovation has the potential to give rise to fraud and false "guarantees" of high investment returns.[4] Similarly, the UK Financial Conduct Authority listed several concerns while prohibiting the sale of "cryptoasset" investment products to retail investors last summer including: the lack of reliability in evaluating the underlaying assets, financial crimes, price volatility, and inadequate understanding by retail consumers.[5] There is still great uncertainty and speculation around the future of cryptocurrencies and related investment assets; regulations could evolve over time and vary greatly between jurisdictions.
- **Central Bank Digital Currency**? China has recently made headlines with its embrace of the digitalization of money by creating a cyber yuan. This will allow them to track spending, thus removing one of the primary benefits proponents that cryptocurrencies tout– anonymity. Additionally, this move could shift the dynamics of the global financial system away from the domination of the US dollar. The Fed's Jerome Powell has recently asserted that researching the digitalization of the US dollar is a "very high-priority project."[6] This news brings about more ambiguity as it is unclear how cryptocurrencies and centralized bank digital currencies can or will coexist.

- **Expected returns** – So how should investors think about the expected returns of cryptocurrencies? It's helpful to start with a framework of securities that we do have expectations about.
  - Corporate bonds and stocks can provide investors with positive expected returns because they allow investors to participate in the future profit earned by corporations. Government bonds provide more clarity around future value. Investors in each of these securities are agreeing to exchange their cash today for a greater, although uncertain, amount of cash in the future. But bitcoins do not entitle holders to an expected future stream of income. Even if bitcoin is held for decades, the owner may never receive more, and unlike stocks and bonds, it is not clear that bitcoin offers investors positive expected returns.
  - On the other hand, cash does not provide an expected future cash flow. Unless we can predict how currencies will appreciate or depreciate relative to each other, which research shows we cannot reliably do, we do not expect a positive return from holding cash. While cash does not have positive expected returns, it still has a purpose for investors – as a store of value and as a medium of exchange. However, the exchange rates between bitcoins and traditional currencies has experienced a lot of volatility. Bitcoin has at times gained or lost more than 40% in price in a month or two. This combined with high transaction costs leads to heightened uncertainty around the amount of goods and services you will be able to purchase in the near and long-term using cryptocurrencies. So, it seems like bitcoin does not act like cash either.
  - Some have argued that bitcoin is like gold. Even if held for decades, owners may never receive more of the asset, and it is unclear if they provide positive returns.
- **Goals** - When considering any investment, it is important to consider one's goals. If your goal is to pay for future expenditures, then cash may be more fitting. If your goal is to grow your wealth, then we believe stocks and bonds may be more appropriate as they have helped investors do just that for decades.[7] Adding cryptocurrencies to your portfolio may mean decreasing your allocation towards other investments like stocks or bonds. We do not know if the expected returns on bitcoin is positive, much less whether it will outperform other types of securities.
- **Weighting** - With that being said, some investors are excited by the thrill of speculation or believe bitcoin *is* suited to meet their goals. If that is the case, it's important to consider what percentage it will make up in their total portfolio. The total value of bitcoin in circulation is less than half of a percent of the aggregate value of global stocks and bonds, so we believe its weight in a diversified portfolio should be relatively small.[7]
- **Bottom-line**: Cryptocurrencies represent innovation as well as uncertainty. When reading the latest headline or experiencing FOMO from your friend of a friend who got rich quick, consider your goals for investing. A goals-based approach using stocks, bonds, and traditional currencies has helped investors grow their wealth and achieve their goals for decades.

Have a great week and please reach out if there is any way we can enhance our support of your business.

[1]Per *Bloomberg*, the end-of-day market value of bitcoin was $57,624.01 USD on March 11, 2021.
[2]Nathaniel Popper, "Lost Passwords Lock Millionaires Out of Their Bitcoin Fortunes," *New York Times*, January 12, 2021.
[3]Ryan Browne, "Bitcoin's wild ride renews worries about its massive carbon footprint," *CNBC,* February 5, 2021.
[4]"Investor Alert: Bitcoin and Other Virtual Currency-Related Investments," *SEC*, 7 May 2014.

[5]"Prohibiting the sale to retail clients of investment products that reference cryptoassets," Financial Conduct Authority, June 10, 2020.
[6]James Areddy, "China Creates Its Own Digital Currency, a First for Major Economy," *The Wall Street Journal*, April 5, 2021
[7]Investors should discuss the risks and other attributes of any security or currency with their advisor prior to making any investment.