

Tales from the Crypto: A Brief Q&A

March 2021

As most investors are aware, Bitcoin has generated a significant amount of interest in the past year, to a large extent because of its explosive price appreciation as depicted in the chart below. Currently trading around \$56,777, the cryptocurrency has jumped nearly 93% in 2021 after soaring 249% in 2020. While by far the most well-known and widely adopted digital currency, Bitcoin is one of several that have been created to facilitate transactions throughout the world without having to pass through traditional banking systems. Just as cash transactions can take place without any record of payment, cryptocurrencies (or “cryptos”) accomplish the same goal via the internet.

Bitcoin’s Remarkable Climb

Bitcoin to United States Dollar

BTC / USD

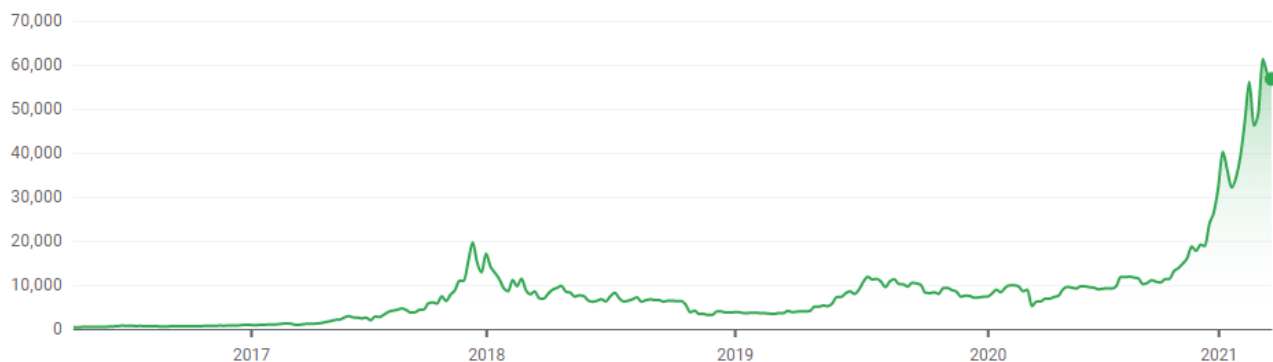
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1D 5D 1M 6M YTD 1Y 5Y MAX



Source: Google Finance

The following Q&A may help clarify some of the complex issues involving cryptocurrencies and Bitcoin.

Q. Let’s start at the beginning. What are cryptocurrencies?

Cryptocurrencies are digital currencies available online or through a smartphone app. The “crypto” part of their name comes from the fact that cryptography—the use of secret coding to make messages secure from tampering—is a vital element of their design. A cryptocurrency can be used to buy goods and services, using a digital ledger with strong cryptography to secure online transactions. Cryptocurrencies are kept in an online digital ‘wallet’ accessed using a private key to verify ownership and to allow crypto owners to access and spend their digital currency.

Bitcoin was the first cryptocurrency, introduced in a 2008 paper by an anonymous developer or group using the pseudonym Satoshi Nakamoto, as an alternative currency that is not controlled by central governments. It entered circulation in 2009. Nakamoto also invented blockchain, the potentially revolutionary technology underlying cryptocurrency transactions.

Q. How are cryptocurrencies different from traditional currencies like the dollar?

Cryptocurrencies differ from traditional currencies in several key ways. For example, cryptocurrencies are not regulated by governments or central authorities such as the Federal Reserve. They are recognized globally, unlike currencies that are affiliated with specific countries or regions. They do not exist in tangible form like paper money or coins. Buyers and sellers using cryptocurrencies rely on pseudonyms (passwords and keys), usually do not know each other's identities, and their exchanges do not require the involvement of banks. Unlike traditional coins, you do not have to buy a whole Bitcoin, you can buy any fraction of a Bitcoin. A single unit represents one hundred millionth of a Bitcoin, or 0.00000001 BTC.

Also, the supply of cryptos is typically limited to a predetermined amount in circulation. Lastly, not all cryptos are intended for use as money: some give their owners the right to use a product or service or to obtain certain assets in the future.

Q. How are transactions involving Bitcoin tracked and kept secure?

Every Bitcoin transaction since the network launched —billions of them—has been recorded and stored in a permanent, inalterable public ledger, which anybody can view and analyze at any time. All participants in the network have identical records, and there is no bank involved to credit and debit an account. This ledger is called the blockchain, the automated digital accounting system used by Bitcoin, as well as other cryptocurrencies. The name comes from its structure, in which individual records, called blocks, are linked together in a single list, called a chain.

These records of financial transactions cannot be modified, but can be simultaneously used with the shared ledger updated in real-time, across publicly accessible networks. Each block of information, such as facts or transaction details, proceed using a cryptographic value, hence the functionality of blockchain technology ensures that no one can intrude in the system or alter the data saved to the block.

Q. What are cryptocurrencies' main functions?

Cryptocurrencies have several functions. Most often, they can be a medium of exchange ("digital cash") or a store of value ("digital gold").

Digital cash. In their role as digital cash for exchanging goods and services, cryptos potentially are a substitute for traditional currencies, which are backed by the taxing and revenue power of their governments.

Because crypto transactions do not use the banking sector, they are untraceable—and thus not subject to government monitoring. Transactions in the gray economy, where informal legal transfer of money that previously used cash or gold, can now be conducted digitally using cryptos, removing the need for physical interaction. We believe this is cryptos' primary current use but also an area that likely will be subject to greater regulatory scrutiny in order to prevent any transactions in activities that are illegal.

In our view, the argument for cryptos to take on greater importance as a method of payment, essentially replacing existing currencies, appears weak. In fact, they solve a problem that does not exist: poor execution in global payment systems. While these systems process a huge volume of transactions quickly and with exceptional accuracy, every transaction in Bitcoin—due to its lack both of oversight and of a centralized settlement ledger—must be verified by other Bitcoin-network participants.

Crypto transactions take an average of about 10 minutes, as determined by Satoshi Nakamoto, to be completed and verified, compared to only fractions of a second on existing global payment networks. This crypto transaction process leverages the blockchain technology, a distributed ledger, as mentioned above. For further clarity, a distributed ledger is a digital computer file/database that is consensually shared and synchronized across multiple sites, institutions, or geographies by multiple people. It allows these transactions to have public witnesses, allowing verification by all Bitcoin users.

We note as well that many central banks are already examining the possibility of creating central bank digital currencies (CBDCs), which would function similarly to Bitcoin's use as digital cash. CBDCs could operate as centrally-bank issued currencies, but with the anonymity provided by cash. If central bank digital currencies gain traction given

that their value, stability, liquidity, and convertibility are already recognized and utilized globally, we think this could decrease the use of Bitcoin as a replacement for cash.

Digital gold. Another way to consider cryptocurrencies is as digital gold, essentially an asset that will hold its value in the face of volatile financial markets or investor concern about possible runaway inflation.

The key to cryptocurrencies' potential use as a gold-like inflation hedge is the nature of its supply: whereas traditional currencies can be printed in unlimited amounts, cryptos' supply is intentionally limited. In other words, they should hold their value better simply because their quantity cannot increase above a predetermined amount.

Bitcoin is a great example. Its developer fixed the total number of Bitcoin at 21 million, of which approximately 18.5 million already have been created, or "mined". Mining is the processing of transactions in the digital currency system, in which the records of current Bitcoin transactions, a block, are added to the records of past transactions, creating the blockchain. Miners solve a computer puzzle and verify the solution on a computer network. The remaining 2.5 million Bitcoin will be mined over time but at a declining rate so that there are fewer new Bitcoin with every passing year. Currently, it is estimated that all possible Bitcoin will be mined by 2140. Once miners have generated all coins, there will be no more Bitcoin available for mining. Having additional supply will only be possible if Bitcoin's protocol is altered and allows for a more abundant supply. Otherwise, the cap will remain at 21 million Bitcoins.

Q. How can we buy and use cryptocurrencies to make purchases?

To buy cryptocurrencies, you'll need a "digital wallet," an online app on your smartphone that can hold your currency. Generally, you create an account on an exchange, and then you can transfer real money to buy cryptocurrencies. Last year some major retailers started accepting cryptocurrency payments from users of mobile wallet applications, but many companies are still testing.

Q. How can we invest in cryptocurrencies?

Investing in cryptos is not as straightforward as investing in other financial assets. Cryptos are not readily investable using mutual funds or via most registered investment advisers. The majority are available on various websites, such as Bitfinex or Coinbase, that offer to exchange dollars or other currencies into and out of various cryptos.

A pure play on Bitcoin is the passive investment vehicle Grayscale Bitcoin Trust (OTC: GBTC), which offers investors a simple way to invest in Bitcoin without worrying about security and physical storage. As we write, GBTC has a market cap of approximately \$31 billion and around 685 million shares outstanding. Additionally, it levies an annual fee of 2%.

Q. What are cryptocurrencies' key benefits and investment risks?

The following are some of the key benefits of owning cryptocurrencies:

- **Limited supply.** This may enable cryptos to act as a hedge against inflation. However, since there is an unlimited number of other cryptos in circulation, the inflation hedge could be tarnished with increased supply.
- **Anonymity.** Cryptos—which do not require the identification of buyers and sellers—can be used for transactions outside the banking system. These characteristics are attractive for those to whom privacy is especially important.
- **No government or banking affiliation.** Cryptos are neither issued by governments nor processed through banks.

Investors thinking about owning cryptos should consider these key risks:

- **Volatility.** Bitcoin's historical price volatility illustrates how cryptos can experience extreme fluctuation. Between December 2017 and December 2018, for example, Bitcoin fell from a high of \$19,041 to a low of \$3,157—a stomach-churning 83% decline.

- **Poor liquidity.** Ownership of Bitcoin is highly concentrated: Approximately 2% of accounts control 95% of assets¹. In other words, the depth of market trading is relatively thin relative to the existing supply, such that activity by a large owner could materially influence prices.
- **Physical loss.** Keeping large amounts invested in cryptos exposes investors to risk of physical loss. Unlike stocks, there is no central record for cryptos. So if a crypto is lost, it is gone forever, i.e., there is no way to trace, track or restore lost funds. There are increasing reports of crypto investors dying without passing on their blockchain passwords or other information about their accounts, or losing cryptos because of damaged storage drives.
- **Regulation.** Tighter regulation is a high risk. Although the lack of a centralized government authority makes regulation more difficult, we believe that governments can—and will—demand more information about the ownership and trading of cryptos as they grow in value and acceptance. Elevated disclosure, tracking or regulatory restrictions could lessen their appeal.
- **No income.** The purpose of a financial asset comes down to two things: income generation and/or appreciation in value. While many financial assets (e.g., fixed income, dividend-paying stocks, real estate, and savings accounts) generate income, cryptos do not.

Looking Ahead

Cryptocurrencies—both as a tool and an investment idea—will continue to evolve. Investors can largely obtain cryptocurrencies' potential benefits via other asset classes, but without the extreme volatility. That said, our outlook for companies that benefit from blockchain technology, is positive. We see great potential for blockchain to underpin further digital disruption and, at present, believe it is best to focus on investments that provide opportunities for blockchain applications

We recommend that investors who are considering Bitcoin or other cryptos for their portfolios carefully consider the risks involved and consult with their 1919 advisor about whether to own them.

About 1919 Investment Counsel

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The views expressed are subject to change. Any data cited have been obtained from sources believed to be reliable. The accuracy and completeness of data cannot be guaranteed.

¹ Kharif, Olga. "Bitcoin Whales' Ownership Concentration is Rising During Rally," Bloomberg News, November 18, 2020.