



Cryptocurrency and The Pro's and Con's of This Asset Class

Introduction:

A **cryptocurrency** is a new form of digital money. You can transfer your traditional, non-cryptocurrency money like the U.S. dollar digitally, but that's not quite the same as how cryptocurrencies work. When cryptocurrencies become mainstream, you may be able to use them to pay for stuff electronically, just like you do with traditional currencies.

However, what sets cryptocurrencies apart is the technology behind them. You may say, "Who cares about the technology behind my money? I only care about how much of it there is in my wallet!" The issue is that the world's current money systems have a bunch of problems. Here are some examples:

- Payment systems such as credit cards and wire transfers are outdated.
- In most cases, a bunch of middlemen like banks and brokers take a cut in the process, making transactions expensive and slow.
- Financial inequality is growing around the globe.
- Around 3 billion unbanked or underbanked people can't access financial services. That's approximately half the population on the planet!

The Definition of Money

Before getting into the nitty-gritty of cryptocurrencies, you need to understand the definition of money itself. The philosophy behind money is a bit like the whole "which came first: the chicken or the egg?" thing. For money to be valuable, it must have a number of characteristics, such as the following:

- Enough people must have it.
- Merchants must accept it as a form of payment.
- Society must trust that it's valuable and that it will remain valuable in the future.

Of course, in the old days, when you traded your chicken for shoes, the values of the exchanged materials were inherent to their nature. But when coins, cash, and credit cards came into play, the definition of money and, more importantly, the trust model of money changed.

Another key change in money has been its ease of transaction. The hassle of carrying a ton of gold bars from one country to another was one of the main reasons cash was invented. Then, when people got even lazier, credit cards were invented. But credit cards carry the money that your government controls. As the world becomes more interconnected and more concerned about authorities who may or may not have people's best interests in mind, cryptocurrencies may offer a valuable alternative.

Here's a fun fact: Your normal, government-backed currency, such as the U.S. dollar, must go by its fancy name, *fiat currency now that cryptocurrencies are around*. Fiat is described as a legal tender like coins and banknotes that have value only because the government says so.

Some Cryptocurrency History

The first ever cryptocurrency was Bitcoin! You probably have heard of Bitcoin more than any other thing in the crypto industry. Bitcoin was the first product of the first blockchain developed by some anonymous entity who went by the name Satoshi Nakamoto. Satoshi released the idea of Bitcoin in 2008 and described it as a "purely peer-to-peer version" of electronic money.

Cryptocurrencies like Bitcoin are created through a process called *mining*. Very different than mining ore, mining cryptocurrencies involves powerful computers solving complicated problems.

Bitcoin remained the only cryptocurrency until 2011. Then Bitcoin enthusiasts started noticing flaws in it, so they decided to create alternative coins, also known as *altcoins*, to improve Bitcoin's design for things like speed, security, anonymity, and more. Among the first altcoins was Litecoin, which aimed to become the silver to Bitcoin's gold. But as of the time of writing, more than 1,600 cryptocurrencies are available, and the number is expected to increase in the future.

The Basics:

You know how your everyday, government-based currency is reserved in banks? And that you need an ATM or a connection to a bank to get more of it or transfer it to other people? Well, with cryptocurrencies, you may be able to get rid of banks and other centralized middlemen altogether. That's because cryptocurrencies rely on a technology called *blockchain*, which is *decentralized* (meaning no single entity is in charge of it). Instead, every computer in the network confirms the transactions.

Key Cryptocurrency Benefits

Still not convinced that cryptocurrencies (or any other sort of decentralized money) are a better solution than traditional government-based money? Here are a number of solutions that cryptocurrencies may be able to provide through their decentralized nature:

- **Reducing corruption:** With great power comes great responsibility. But when you give a ton of power to only one person or entity, the chances of their abusing that power increase. The 19th-century British politician Lord Acton said it best: "Power tends to corrupt, and absolute power corrupts absolutely." Cryptocurrencies aim to resolve the issue of absolute power by distributing power among many people or, better yet, among all the members of the network. That's the key idea behind blockchain technology anyway.
- **Eliminating extreme money printing:** Governments have central banks, and central banks have the ability to simply print money when they're faced with a serious economic problem. This process is also called *quantitative easing*. By printing more money, a government may be able to bail out debt or devalue its currency. However, this approach is like putting a bandage on a broken leg. Not only does it rarely solve the problem, but the negative side effects also can sometimes surpass the original issue.

For example, when a country like Iran or Venezuela prints too much money, the value of its currency drops so much that inflation skyrockets and people can't even afford to buy everyday goods and services. Their cash becomes barely as valuable as rolls of toilet paper. Most cryptocurrencies have a limited, set amount of coins available. When all those coins are in circulation, a central entity or the company behind the blockchain has no easy way to simply create more coins or add on to its supply.

- **Giving people charge of their own money:** With traditional cash, you're basically giving away all your control to central banks and the government. If you trust your government, that's great, but keep in mind that at any point, your government is able to simply freeze your bank account and deny your access to your funds. For example, in

the United States, if you don't have a legal will and own a business, the government has the right to all your assets if you pass away. Some governments can even simply abolish bank notes the way India did in 2016. With cryptocurrencies, you and only you can access your funds.

- **Cutting out the middleman:** With traditional money, every time you make a transfer, a middleman like your bank or a digital payment service takes a cut. With cryptocurrencies, all the network members in the blockchain are that middleman; their compensation is formulated differently from that of fiat money middlemen's and therefore is minimal in comparison.
- **Serving the unbanked:** A vast portion of the world's citizens has no access or limited access to payment systems like banks. Cryptocurrencies aim to resolve this issue by spreading digital commerce around the globe so that anyone with a mobile phone can start making payments. And yes, more people have access to mobile phones than to banks. In fact, more people have mobile phones than have toilets, but at this point the blockchain technology may not be able to resolve the latter issue.

Common Crypto and Blockchain Myths

During the 2017 Bitcoin hype, a lot of misconceptions about the whole industry started to circulate. These myths may have played a role in the cryptocurrency crash that followed the surge. The important thing to remember is that both the blockchain technology and its by product, the cryptocurrency market, are still in their infancy, and things are rapidly changing.

Let me get some of the most common misunderstandings out of the way:

- **Cryptocurrencies are good only for criminals.** Some cryptocurrencies boast anonymity as one of their key features. That means your identity isn't revealed when you're making transactions. Other cryptocurrencies are based on a decentralized blockchain, meaning a central government isn't the sole power behind them. These features do make such cryptocurrencies attractive for criminals; however, law-abiding citizens in corrupt countries can also benefit from them. For example, if you don't trust your local bank or country because of corruption and political instability, the best way to store your money may be through the blockchain and cryptocurrency assets.
- **You can make anonymous transactions using all cryptocurrencies.** For some reason, many people equate Bitcoin with anonymity. But Bitcoin, along with many other cryptocurrencies, doesn't incorporate anonymity at all. All transactions made using such cryptocurrencies are made on public blockchain. Some cryptocurrencies, such as Monero, do prioritize privacy, meaning no outsider can find the source, amount, or

destination of transactions. However, most other cryptocurrencies, including Bitcoin, don't operate that way.

- **The only application of blockchain is Bitcoin.** This idea couldn't be further from the truth. Bitcoin and other cryptocurrencies are a tiny byproduct of the blockchain revolution. Many believe Satoshi created Bitcoin simply to provide an example of how the blockchain technology can work.
- **All blockchain activity is private.** Many people falsely believe that the blockchain technology isn't open to the public and is accessible only to its network of common users. Although some companies create their own private blockchains to be used only among employees and business partners, the majority of the blockchains behind famous cryptocurrencies such as Bitcoin are accessible by the public. Literally anyone with a computer can access the transactions in real time. For example, you can view the [real-time Bitcoin transactions](#).

Negatives on Cryptocurrency:

Drawback #1: Scalability

Probably the biggest concerns with cryptocurrencies are the problems with scaling that are posed. While the number of digital coins and adoption is increasing rapidly, it is still dwarfed by the number of transactions that payment giant, VISA, processes each day. Additionally, the speed of a transaction is another important metric that cryptocurrencies cannot compete with on the same level as players like VISA and Mastercard until the infrastructure delivering these technologies is massively scaled. Such an evolution is complex and difficult to do seamlessly. However, some have already proposed several solutions, including lightning networks, and staking as options to overcome the scalability issue.

Drawback #2: Cybersecurity issues

As a digital technology, cryptocurrencies will be subject to cybersecurity breaches, and may fall into the hands of hackers. We have already seen evidence of this, with multiple ICOs getting breached and costing investors hundreds of millions of dollars this summer alone (one of these attacks by itself resulted in the loss of \$473 million). Mitigating this will require continuous upkeep of security infrastructure, but we are already seeing many players dealing with this directly and using enhanced cybersecurity measures that go beyond those used in the traditional banking industries.

Drawback #3: Price volatility and lack of inherent value

Price volatility, tied to a lack in inherent value, is a major problem, and one of the specifics that Buffet referred to specifically when he characterized the cryptocurrency ecosystem as a bubble. It is an important concern, but one which can be overcome by linking the cryptocurrency value

directly to tangible and intangible assets (as we have seen some new players do with diamonds or energy derivatives). Increased adoption should also increase consumer confidence and decrease this volatility.

Drawback #4: Regulations

Buffet also touched on this problem in his talk:

“It doesn’t make sense. This thing is not regulated. It’s not under control. It’s not under the supervision [of] any...United States Federal Reserve or any other central bank. I don’t believe in this whole thing at all. I think it’s going to implode.”

Even if we perfect the technology and get rid of all the problems listed above, until the technology is adopted by federal governments and regulated, there will be increased risk in investing in this technology.

Other concerns with the technology are mostly logistical in nature. For example, changing protocols, which becomes necessary when the tech is being improved, can take quite a long time, and interrupt the normal flow of operations.

The Takeaway:

With all the potential barriers to mass adoption, it is logical that experienced investors like Warren Buffet choose to err on the safe side of this technology. And yet, we know that cryptocurrencies (and the blockchain technology) will be here to stay. They offer too many of the advantages that consumers seek in a currency today; decentralization, transparency, and flexibility being chief among these. Expanding the discussion to everything that blockchain can accomplish across numerous industries doubly reinforces this point.

Source: Bloomberg, Yahoo Finance