

# Will Cryptocurrency be the Money of the Future?

## Learning from the Past

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## CONTENTS

Introduction	3
The Laws of Currency	4
Isaac Newton's Great Idea	7
Before the Dollar was Green	8
The First and Second Bank of the United States	9
The Free Banking Era	10
Goldbugs & Free Silver	12
Challenging the Gold Standard	13
Collective Faith in Currency	15
A Digital System of Currency	17
Cryptocurrency's Viability as a Currency	19
Who Loses?	21
Closing Thoughts	22
About the Author	23
References & Further Reading	24

## Introduction

History has an interesting way of repeating itself. While many people believe that **Cryptocurrency** is new and will be the money of the future, more than 150 years ago there was a surprisingly similar monetary system in the United States. Between 1837 and 1862 there were as many as 8,370 different currencies in use with differing values, many created by private individuals or companies - does this sound familiar?

During this period, sometimes called the era of **free banking**, anyone who wanted to buy or sell with different currencies had to consult a bank note reporter. Bank note reporters were periodicals published to identify counterfeit bank notes and determine the discount rate for notes from distant banks. These lists were surprisingly similar to the lists on [cryptocurrency exchanges](#) we see today.

We are going to take a deeper look at how money has changed over time to better understand the advantages and disadvantages of different types of currencies. Interestingly, change in money systems has been constant throughout history, and often multiple forms of money have competed with each other. Sometimes something new replaced the old, and sometimes, tried-and-true moneys were the safest bet.

The past shows us that current investors should be skeptical of any claim about “the future of money.” Many times, throughout history, people have invested in certain systems of money, only to see that system fail, and their money become worthless. Informed skepticism, based in history, will help guide good investment choices.



# The Laws of Currency

To begin to understand the history of money, we have to go back to ancient times between 710 and 995 AD in the Chinese province of Sichuan where they used iron coins. This is known as **species currency**. Species means the money's value is derived from the value of the material it is made out of.

Iron was useful for making many things so it had some value but it wasn't very rare so it didn't have much value. Its lack of value meant people needed to carry around a lot of iron to buy common items. For instance, it took one and a half pounds of iron coins to buy one pound of salt!

These coins didn't meet the modern standards for a **viable currency**. For money to be viable it needs to meet three criteria:

1. Viable currency needs to **hold value over time**. This is generally true for iron. The worth of iron might shift a little over time as more is discovered but all currency will shift in value over time. Iron coins will remain valuable for a long time, though they will eventually rust.
2. A viable currency needs to **be a generally agreed upon medium of exchange**. Iron met that standard too in Sichuan at the time. The government declared it legal tender and everyone agreed to use it.
3. A viable currency has to **be easy to handle and exchange**. Here is the problem with iron. You need too much of it to buy things. We still have metallic currency today, quarters, dimes, nickels, and pennies. These are of little use to most people because you need so much to buy anything. It would be a challenge to buy all of your groceries with just change.



The problem with using iron coins as currency was evident to people in Sichuan. That is why a wealthy merchant came up with an idea to improve financial transactions. The merchant started taking people's heavy iron coins, and holding them. He would then give a person or depositor a receipt or **an IOU** that said he owed the depositor a number of coins.



The depositor could retrieve the coins from the merchant at some point in the future. These IOUs were **interchangeable** and anyone holding them could exchange them for iron coins with the

merchant. People quickly realized that these receipts were much easier to carry around and use than the coins.

Because the merchant was very wealthy, people had faith in him because they believed that he wasn't going to suddenly run out of iron. These IOUs were essentially paper money and this idea of using paper to represent species currency was so popular that other wealthy merchants in China started doing the same thing.

The system was eventually adopted by the Chinese government. They started issuing paper money and importantly they declared that taxes could be paid with coins or this paper. As the saying goes, the only certainties in life are death and taxes.

Being able to pay taxes with a specific money, meant that many people wanted the money to use. It also meant the money held value, since every year people needed to pay their taxes at a set rate. Paper money worked so well in China that eventually the government realized there was no need to make it redeemable for iron or any other metal.

In 1287 the Chinese government, now under control of the Mongols, printed money with pictures of bronze coins on them, but this money wasn't redeemable for anything. It was just paper. People began to use the money just because the government said it was valuable. This is called **fiat currency**, or currency that is valuable because of a government declaration.

The problem for people holding a lot of iron, bronze, or gold coins after this declaration, was that the coins were not as valuable as they had been. People didn't need them in order to perform financial transactions. Soon everyone in the world decided to use paper money.

You might think that this is the end of the story for coin currency, but as we pointed out early change in money systems has been a constant over time.



In 1368, the Mongols were pushed north of The Great Wall and by the middle of the 1400s the Chinese government had reverted back to traditional money with coins made of metal and paper backed by metal. If you were holding a lot of the old paper money with the bronze coins printed on it when this transition was happening, you might have lost a lot.

Over the years, gold has been used as money and it seems to solve the problem that inspired the original transition to paper money in Sichuan. Gold is rare and valuable and you don't need much of it to buy the basics of life. However, there is a problem with using gold and silver coins.

Let's look at a scenario to uncover the challenge:

*Pretend you are an old-time store keeper, and you bought 100 gold coins worth of scythes (a real old-timey farming tool), and you bought it on credit at no interest. Now let's say you aren't a smart store keeper so you sell all your scythes for the price you bought them. At the end of the day, you have 100 coins. Once your creditor gets their money back, you have netted zero profit but at one point during that day, you had 100 coins made out of precious metal in your hands.*

If you were really devious, you could still make money by taking some metal shears and clipping a little bit of gold off of the edge of each coin, ideally so little that nobody noticed. You could pass on

those clipped coins to your creditor and if they didn't notice, your debt would be paid, but you would still have 100 little gold clippings.

If you **clipped coins** many days in a row, you would eventually get a lot of gold. This was a species currency "hack" called **debasing**. Coin clipping or debasing was a real problem for cultures using species currency.

At one that time, coin clipping or debasing was so pervasive that people didn't trust that coins had the actual amount of metal in them compared to what the coins' face value said they had. These coins were no longer an agreed upon medium of exchange. To use the coins, people would have to weigh them and this meant the coins were not quick and easy to use.



# Isaac Newton's Great Idea



Luckily, the English had a really bright gentleman called Sir Isaac Newton who was [Master of the Mint](#) in 1699 (yes he

was the guy who helped us understand gravity!). He made it high treason to debase currency, which meant that anyone caught could be severally punished.

As part of his job, he disguised himself as a barkeeper to snoop around to catch debasers, eventually convicting twenty-eight people. He also had expert engravers come in to design coins with beveled edges and detailed engravings so it was easy to tell when a coin was debased.

However, the people were shrewd. Rather than clipping the coins, they used files to take even smaller amounts of metal off the coins. Others placed a bunch of coins in a leather bag and shook the bag. The coins hitting against each other would create gold dust that could be collected. This was called **sweating** and was more difficult to catch because it emulated the process of the natural wear of coins over time.

There was a solution to the problem of debasing. It's what the Chinese merchant did. A government could issue papers that could be redeemed at any time for gold or silver. A person could clip, file, or shake the papers as much as they wanted, but they are just going to get the same amount of gold back. If you destroy the paper then you get nothing.

This is the idea behind the **gold standard**. Coins of precious metal, like gold, were minted, but paper representing metal was used for day-to-day transactions.

The gold standard made it very easy to complete transactions across state or country borders because regardless of the money used to represent the gold, everyone knew what the currency would buy. The **gold standard met all the criteria of a viable currency** and most major economies in the world adopted it by the late 1800s.



## Before the Dollar was Green

Interestingly, there were problems with the gold standard. To make it work, it was necessary to have a lot of gold, which colonial America didn't have. There was also a large trade imbalance, with more money going out of the colonies than coming in. For the most part, it was illegal for the colonies to mint their own money.

Colonists mostly used species coins from Europe, and could only get hold of large denominations and so they had to improvise. The Spanish pillar gold dollar



was very popular in the colonies. Colonists would divide this large coin into pieces, typically 8, so they could have smaller denominations. This coin became known as **pieces of 8**.

Though it was illegal, some colonies did make their own money. In 1690, Massachusetts started using **pine tree money**. They created little pieces of paper with pine trees printed on them to use as currency. Technically the notes said they were redeemable for species currency or other goods but the government was broken and everyone knew it.

There was little faith that the money could be redeemed for gold but people still wanted it because the government declared that anyone could use it to pay their taxes. Historians often consider this the first instance of modern **fiat currency** in the western hemisphere, though as we know, this was already an old idea.

In colonial Virginia, colonists came up with a different plan to make up for the lack of coins. Their major export was tobacco, largely grown by indentured servants and slaves.

Tobacco is addictive so there was a steady demand for it in Europe. The government set up warehouses to store and dry the leaves for export. If farmers brought their tobacco to the warehouse, then the officials who ran it would give them a receipt.



They could use this receipt to take the tobacco out and sell it whenever they wanted. Importantly, tobacco was interchangeable or **fungible**, meaning one leaf was pretty much the same as another and it didn't matter if you got someone else's tobacco when you went to turn in your receipt. As you might have guessed, these receipts became money.

## The First and Second Bank of the United States

Pine tree money and tobacco receipts were the exception not the rule. In 1791 when the administration of George Washington established a national bank called **The Bank of the United States**, it had some \$10 million in gold or notes backed in gold.



Like most banks, it issued more notes than it had gold or gold equivalent on hand at any time. This is called **fractional reserve banking** because the banks keep only a fraction of the gold in their vaults compared with the money they issue.

The bank would also make loans above and beyond their reserves, collecting interest which is how the bank made money. This is still how banks operate today. In reality, the bank doesn't actually have the money you give it, at least not all of it. It seems dishonest, but it actually works as long as everyone who holds notes doesn't come to redeem them all at the same time.

The Bank of the United States was not the only bank issuing currency at this time. There were state banks, and even private banks, all issuing different dollars using the fractional reserve system. Since all the money was good for gold, having different forms of money wasn't an issue.

Problems arose if banks overextended themselves meaning they issued dramatically more notes than they had gold on hand. If banks were issuing a lot of notes, but only had a small amount of gold, there was a problem because it would diminish faith that people could turn that money in for gold. The money wouldn't be valuable because people wouldn't trust it.

In 1816 **The Second Bank of the United States** was chartered with the purpose of regulating other banks. It did this by accepting notes from all the banks around the country. When the Second Bank got enough notes from a specific state or private bank they would demand gold payment. This action restored people's faith that all money in the US was "good as gold." Regulation was essential.



## The Free Banking Era



This system worked well in America until the election of Andrew Jackson, the hero of the Battle of New Orleans after the War of 1812. Jackson believed that the Second Bank of the United States had

backed his political opponent, John Quincy Adams, and that this financial backing resulted in his loss of the 1824 election.

Jackson also disagreed with centralized national finance. Jackson and his supporters thought that the people should control the money without interference by global or national elites. This democratized currency was the future of money, according to the Jacksonians.

Jackson defunded the Second Bank, taking its gold reserves and distributing it into his “pet banks,” mostly state banks located across the country. In 1833 the Second Bank of the United States was gone, along with its power to regulate banking in the country. This is when America entered into the era of **free banking**.

Most states made it very easy for any person to set up a bank if they had enough gold and if they agreed to buy some government bonds to secure their debt. These banks could then issue their own currencies, and they did. During this time, some 8,000 different moneys existed in the country.

Having a plethora of currencies was not new in America but without the Second Bank regulating the system, fractional reserve was taken to the extreme. Banks could lend money way beyond the amount of gold they had in reserve. This devalued the money and reduced people’s faith in it.

When people got word that a particular currency was worthless it was called **shinplaster**, the term for the paper used to make casts for broken bones. Bank notes could also be devalued if the bank was run poorly or wasn’t making enough money off its loans.

Worse yet, some private banks might set up with little or no gold at all called **wildcat banks**. These were usually set up by a **conman** who would come to a small town typically in newly settled parts of the west.



The conman would build a structure, put a big empty safe in it, claim it was full of gold and

start printing money. They would take deposits of real gold, silver, or other precious items from the unsuspecting citizens, and collect interest on loans.

One day they would pack up and leave town with all the deposits and interest payments! This was illegal but the conman was only punished if they were caught. A person left holding a note from one of these banks found it was useless. They might have worked hard for this money, or sold something important to get it.

The era of free banking wasn't a complete disaster. Failed banks and wild cats were rare. People used the Bank Note Registries to perform daily transactions. These registries were published to identify counterfeit bank notes and to determine the discount rate for notes from different banks.

If a bank was overextended or the bank was solvent but far away from where the transaction was taking place, the currency was typically just discounted a few percentages. For example, we pay money to take money out of an ATM that is not owned by our own bank. If you take \$20 out of an ATM and the fee is \$2.00 that is a 10% discount for the issuing bank.

The era of free banking continued up into the Civil War. Fighting any war is expensive and the Civil War was so expensive that the Union government didn't actually have enough gold to pay for everything they needed. They started printing green money, or **greenbacks**, that were not always redeemable for gold.

After the war, the government kept printing greenbacks and they also started taxing other paper currencies in the country. Greenbacks became the most commonly used money in the nation.



There were still many savings banks available. One of them was the Freedman's Savings Bank which Congress established to help black Americans who were recently freed from slavery. This bank didn't issue money, but they did claim to keep deposits safe and pay interest on them.

The Freedman's Savings Bank marketed their services in black newspapers, churches, and social organizations. Thousands of black Americans, and in particular black men who had served in the Union Army, deposited money in the bank. The board of directors of the bank, all of whom were white, used the deposits to make risky investments. In 1874 the bank closed with thousands of depositors losing nearly all their money.

## Goldbugs and Free Silver



By this time, most Americans had experience with different types of currency. There was an understanding that currency could be many different things. Despite this realization, in 1873 the country went back on the gold standard and many people like this policy decision.

Supporters of gold at this time were called **goldbugs**. They argued that paper was worthless unless it was backed by gold. Why would people attribute any value to a piece of paper unless they knew they could get the exact amount of gold in return?

Just because congress said paper had value didn't mean anything. The goldbug's arguments got philosophical and religious. Goldbugs argued that gold had "natural" value and that people across the world and across time saw gold as valuable. They even argued that God ordained that gold had value!

Other Americans disliked the gold standard. There was only a limited amount of gold in the world and it was only mined slowly over time. If a person didn't have any gold, it was hard to get much.

People who had gold wanted to keep it because they could make money on it by lending notes on it and collecting interest from loans. The idea that one could make money just by having money offended many, particularly the poor and middle classes who made up a majority of the population.

While there was limited gold, the amount of working people and the amount of goods produced increased very quickly over time. With gold growing slowly and goods and labor growing fast, a person had to make a lot of goods or work a lot to get a little bit of gold. This is a **deflationary economy**, where the price of goods and wages decreased over time.



Deflation was bad for workers and producers, so it was often producers and workers who argued for the return to greenbacks. Greenback supporters argued that if the government printed money that was not backed by gold but by fiat only, the government could print a lot of money and stop deflation. There was even a political party called the **Greenback party** that existed between 1874 and 1884 and advocated for this idea nearly exclusively.

## Challenging The Gold Standard

So, there were goldbugs, greenbacks, and also a third group called the **free silver** advocates. They were kind of a mix between the two other camps. These people, who were typically farmers, were convinced by the arguments of the goldbugs that a species back currency was important. They also agreed with the Greenbacks, arguing that the gold standard was deflationary and supported the rich.

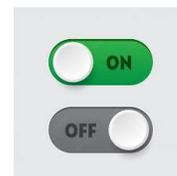
Free silver advocates wanted to expand the money supply by forcing the government to use silver alongside gold to back their currency. Like the Greenbacks this group wanted to grow the money supply and make money worth less over time. This is called **inflation**. In 2022, we are living through a period of inflation.



From roughly 1873 to 1900 it was anyone's guess what might happen to the nation's money. Different parties and politicians were saying if they got elected they would change the currency. Political activist Jacob S. Coxey Sr. believed so strongly in greenback fiat currency he named one of his sons **Legal Tender**.

The future was uncertain. An investor might be convinced to buy a lot of silver, thinking it was about to be legitimate currency. Or, that same investor might believe that gold was a better option. Unsure of what the currencies of the future would be, it was challenging for an investor to know what was the right call to make.

In 1900, unfortunately for the Greenbacks and the free silver advocates, president William McKinley signed the Gold Standard Act which formalized and solidified the gold standard. That isn't the end of the story though. During World War I the US went off the gold standard, then back on the gold standard, then off the gold standard again during the Great Depression.



The Depression challenged the idea of the natural value of gold. In 1932-33 France worried that the US economy was ruined. They asked for all their money and bonds in the Federal Reserve Bank of New York to be converted to gold and transferred back to France.

On the gold standard paying national debts meant moving a lot of heavy, sinkable gold long distances over deep turbulent seas. Why risk it? A country didn't actually need gold within their borders, they only needed the claim to the gold.

So, the bank in New York simply moved some gold bars around in their vault and put a label on the correct drawer that said something like “France’s Gold.” Clearly, having gold wasn’t really necessary to use gold as money. What is the point of the gold standard then?

People’s faith in the necessity of the gold standard diminished as the twentieth century progressed. After World War II the United States went on the gold standard partially. While Americans couldn’t trade their money for gold, other governments around the world could trade US dollars for gold.

This put the US in a great position globally. While the US owned two-thirds of all the gold in the world, the rest of the industrialized world was in shambles because of the war. Due to diplomatic moves at the Bretton Woods conference in New Hampshire in 1944, the US dollar essentially became the currency of international trade.



Many countries pegged the value of their money to the price of the dollar. Others just used US dollars as their currency. There was near unanimous global faith in the value of the dollar. A form of the gold standard remained in place in the US until 1971 when

President Richard Nixon took the US off the gold standard.

Since 1971, we have used fiat currency, and there have been few changes in currency. For example, the use of **credit cards** exploded along with electronic payments. Credit cards are just small loans. Electronic payments and transfers are similar to using dollars as a gold standard minus the fractional reserve. Banks move numbers around on computers, but each digital dollar is backed by one real US dollar that you can get from the bank at any time.



## Collective Faith in Currency

Today we are in a place similar to where we have been many times before. Our economy depends on trading pieces of paper that are both valueless and tremendously valuable at the same time. So, if there is nothing backing the dollar, why does everyone in the world still desperately want it?

Remember, a currency needs to meet three standards to be viable and the US dollar meets those standards:

- Money needs to be **easy to use**.
- Viable money also needs to **hold its value over time**.
- People need to have faith in it as an **agreed upon medium of exchange**.

These last two characteristics are related especially when we are talking about fiat currency.

If a currency fluctuates in value too much, it is difficult to use because no one can agree on its value at the time of a transaction. If a country is printing too much money, then the money will decrease in value. This happens when a country doesn't have a healthy economy behind the money, and it isn't producing things people want to buy using money.

Other currencies across the world meet the criteria of a viable currency so why is the US dollar so desirable? After World War II people across the world had tremendous faith in the US dollar. This was partially because the US had a lot of gold but, as we saw above, having gold didn't really matter.



What was more important was that the US was producing things that people across the world wanted. GM sedans, Coca-Cola, Levi jeans, and Elvis records could all be bought with dollars.

If people lose faith that the money can buy things they want, like people did with wildcat bank money, that money's value will go down. People want to trade that devalued money for other money or things that people want. When this happens, the devalued money is no longer an agreed upon medium of exchange.

The US economy still produces a lot of goods and services that people want, and it also has a legitimate government and financial institutions that people across the world trust. The value of a country's fiat currency is largely a measure of the collective belief in the health of that country's economic and political institutions.

Collective faith is really what has given all types of money value across time:

- The people in Sichuan had faith in the merchant to keep their coins and give them back when they asked for them. Throughout most of history, people had faith that other people had faith that gold was valuable.

- Colonial Massachusetts citizens had faith they could pay taxes with pine tree printed paper.
- Americans had faith in many institutions during the Free Banking era, though some more than others, so they discounted currency based on their faith in the institution.
- The argument between the goldbugs, Greenbacks and free silver advocates was an argument about faith. This is why the goldbugs appealed to religion in their advocacy for species currency.

After the devastation of World War II, America was so strong and other modern economies so weak that everyone in the world had faith in the dollar.



So, should we have faith in crypto? To answer this question, we need to understand how this digital money works.

In 2008, in the middle of the greatest financial disaster in the US since the Great Depression a person going by the pseudonym Satoshi Nakamoto wrote a paper called *Bitcoin: A Peer-to-Peer Electronic Cash System*. Nakamoto had similar ideas to Andrew Jackson in that they didn't like the government control of money and they didn't trust banks.

Nakamoto proposed that we use computers to create a type of money that governments and banks couldn't control. To explain how they did this I want you to reach into your pocket, wallet, or purse, and find a receipt (an email receipt will work too.)

Why did you keep this receipt? It shows how much you paid, what you got, and when this happened. Seems useless. Typically, we only keep receipts to return the item we bought if we want to, or if we are paying for a service, like a concert, we might want a receipt in case the artist never shows. If we have the receipt we can ask for our money back.

Sometimes we keep receipts to show the IRS or an accountant what we bought, and to prove we didn't steal something. A receipt is proof that the transaction occurred. It's a record to prevent fraud. This type of record keeping is actually very similar to the IOU of the Chinese merchant, or the tobacco receipts in colonial Virginia.



# A Digital System of Currency

There are problems with our current system of using receipts. People lose receipts and others forge receipts for stolen goods so they can return them for cash. But what if the receipt was impossible to forge or lose? What if every transaction that happened across the entire economy had a receipt and everyone in the economy got a copy of every receipt?

Then it wouldn't matter if you lost the receipt, or if someone tried to forge one, because there are thousands or millions of copies you could use to prove the transaction occurred. In reality it would be impossible to print a paper receipt for every transaction and distribute it to everyone. Digital information makes what was impossible, possible.



This is what Nakamoto did. He invented a digital system of money called where all information about every exchange that happened was recorded forever and distributed to everyone using the coin. This digital system of money is called **bitcoin**. To understand if this is a viable system of money, we must accept the fact that fiat currency is acceptable.

Money doesn't need anything backing it for people to have faith in it and we have seen many examples of this in history. Once we understand that, we can see that ideally bitcoin meets the criteria for a good currency:

- 1) It is super easy to use, it's just transferring information on computers.
- 2) People have faith in the currency precisely because of the transparency and it is difficult to forge. There is essentially a large digital billboard with every receipt posted on it so anyone can go online and check to make sure they got the exact amount of money they were supposed to when they were supposed to.
- 3) In Nakamoto's head, this currency would hold its value because, like gold, there would only be a limited amount of this coin online.

There is one essential part of the system left out of the description above. It is easy to move a lot of information from computer to computer but as more and more bitcoin transactions take place over time, more and more information gets added to this huge collection of receipts. Over time, distributing this huge amount of information takes a lot of computer power.



Who would devote all this power to bitcoin? When it comes to digital transactions through established banks, the banks have incentives to hold information and transfer it because they make money off of those services (remember the ATM fees we talked about earlier). With bitcoin, there is no government or company in charge, nobody to profit off moving and storing the information.

Nakamoto designed the system to give users incentives to use their own personal computer power to manage the data. Those who put computer power towards the **block chain**, another term for the collection of digital receipts, are rewarded with the privilege of adding new information to the chain and distributing it. People who do this are called **miners** and they get 6.25 bitcoin for every new block, or collection of digital receipts, that is added to the chain. A new block is added every 10 minutes.



Over time, it takes more computer power to create the block chain and there is only a limited amount of this bitcoin to be mined. This means that more computer power has to be used to maintain bitcoin, but as the value of bitcoin rises the reward given to process this information is greater.

Because it takes a lot of time and computer power to process the blockchain, few hackers would put forth

the effort in order to steal money or otherwise mess with the blockchain. If they wanted to make money off the system they would just become miners instead. This computer power intensity is what makes the system secure.

Right now, one bitcoin can be traded for \$21,208.03, wait no \$21,200.20, now \$21,196.79, hang on \$20,217.02. The value moves a lot, but right now 6.25 bitcoin is still a lot of money. Today, there are many different types of coins and many different types of blockchains but they all rely on these basic concepts.



# Cryptocurrency's Viability as a Currency

Depending on who you ask, cryptocurrencies and their variants like NFTs (non-fungible tokens) have been either a great failure or a great success. For our purposes, we want to assess crypto's viability as a currency in the context of 2,000 years of the history of money.

So, let's see if cryptocurrency meets the three different criteria to make a currency viable.

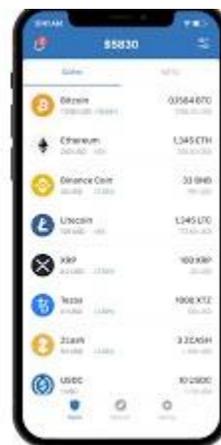
- 1) It needs to hold value,
- 2) it has to be a generally agreed upon medium of exchange,
- 3) it has to be easy to use, handle, and exchange.

For Nakamoto, bitcoin theoretically met all those criteria.

**Does crypto hold value?** The value of bitcoin is high but it varies a lot. In a week its value can change by thousands of dollars and between April and July of 2022 the value of crypto worldwide dropped 56%. There are so-called **stable coins** which are designed to have less variation in value. The coin Terra, for example, was designed to be tied one-to-one with the US dollar. But in the first half of 2022, people lost faith that the value was actually pegged to real dollars and the value started to drop. It is now worth a fraction of a penny. A person who does not have a lot of money would not want to put a lot of their US dollars in bitcoin because it could be worth a lot less when you need to use it to buy something.

**Is crypto a generally agreed upon medium of exchange?** For the most part no. You can buy some online items using it, but you can't buy groceries with it and you can't pay your bills with it. Importantly, you can't pay taxes with it. If you remember, what has often given people faith in fiat currency was the ability to pay taxes.

**Is crypto easy to use?** Nakamoto designed bitcoin specifically to be easy to use and handle. In practice, that is not the case yet. Few people have the technical skills to set up an account to mine coins or access them independently.



Most people who use crypto use a **coin wallet**, a company that creates a user-friendly way to access and use crypto. But this means that the coins aren't decentralized and they are more susceptible to fraud.

A recent report by the US government showed that coins managed by coin wallets [can easily be hacked](#) and both individuals and countries are vulnerable.

Finally, this decentralized mode of moving information isn't very efficient. The bitcoin infrastructure can only perform three to seven transactions per second. That might sound like a lot but the Visa Credit Card company [processes 24,000 transactions per second!](#)

So generally crypto doesn't meet the standards of a viable currency. But what's wrong with having this new type of payment? Well, the first problem is the power usage. Crypto was designed to use a lot of computer power and computers require electricity.

The amount of electricity required to process the blockchain for bitcoin is tremendous, perhaps as much as 0.3% of global electricity use annually. That is more electricity than [the country of Belgium uses!](#) Much of that is coal powered electricity which means bitcoin produces a lot of pollution. If the currency is not usable, what is the purpose of adding to the pollution level?

The other problem with crypto is the lack of regulation. In the US, investments are regulated by the Securities and Exchange Commission but they have been slow to regulate crypto. A lot of people are putting money into different coins, only for their dollar value to quickly evaporate.

There is no way to get that money back when those who create the coins fail to follow through on the promises made to investors. For example, the cryptocurrency Tether, which is backed by the company's assets and reserves, was recently [caught lying](#) about the cash reserves it had backing its coin.

Other groups have created coins, hyped them up through publicity on social media to give people faith, only to have founders and promoters cash out in real dollars when the price was high. This is called a **pump-and-dump scam** and it has been illegal for a long time in the stock market but not necessarily in crypto. Some of these coins are not even real.



Mysterious groups have claimed to make new coins, and accepted payment for them, but the coin never goes online, or it goes online for a short period of time and then the creators disappear. The OneCoin was structured as a classical pyramid scheme, with the top 1-5% of investors making money by drawing others into the scheme.

The founder Ruja Ignatova, the so-called "CryptoQueen," is currently on the FBI's Ten most Wanted Fugitive list with a \$100,000 reward for information on her whereabouts. [The OneCoin story](#) is surprisingly similar to the wildcat banks of the 1800s which ruined the lives of many Americans.

## Who Loses?

[According to Pew](#), 16% of all Americans have invested in, traded, or otherwise used a cryptocurrency. Black investors have been quick to adopt crypto in their portfolios. While only 13% of white Americans have invested in this asset, 18% of black Americans have.

Some African Americans believe the decentralized nature of the asset makes it less likely for racist policies or business practices to interrupt investment. Black celebrities like Spike Lee, Megan Thee Stallion, and LeBron James have been promoting these assets.



Advertisements for crypto have appeared on subways in NYC and aired during the Superbowl. Crypto seems to be joining a long history of scam products that [target black Americans](#), with promises of riches that are nearly impossible to actually obtain.

It's not just one particular group that loses using crypto, it's roughly 50% of users. Investing money in a bank or the stock market means an investor is making money because other people are using their money to make valuable things. If you invest in the stock market or a bank, the people who use your

money will give you the amount of money you lent them back to you over time, as well as some percentage of their profits in the form of interest, dividends, and stock buybacks. The borrower benefits by using your money and you benefit with more money: capitalism 101.

With cryptos and NFTs, the only way to make money is to buy at a lower price than you sell at. For every winner--for every person who buys low and sells high--there is one person who lost by selling as the price lower or getting stuck with the coin when the price plummets. Crypto expert and UC Berkeley professor [Nicolas Weaver](#) [said](#), "the profits that are given to the early investors are literally taken from the later investors."



## Closing Thoughts

We have looked at the history of money over time to help us better understand the future of currency. In general, we saw that usable currencies have three important characteristics:

- 1) they hold their value over time
- 2) they are an agreed upon medium of exchange
- 3) they are easy to use, handle, and exchange.

If a currency meets these criteria it means other people want to use it.

However, cryptocurrency does not currently meet these criteria, and as we have seen, there are other issues with the currency aside from the criteria such as added pollution. That is not to say that this will never be a viable currency option in the future.

We have seen that currencies have changed a lot through time. We saw how different mediums of exchange have been used, and often many were used at the same time. People may claim that their money or their idea will be the future of currency but the future is impossible to predict.

For every success story you may have heard about crypto, there have been ten or twenty people who have lost some, or a lot, of real viable dollars investing in this space. Before you put viable dollars

into any type of new or exciting currency or any other medium of exchange you should think about how much money you could potentially lose.



Before you invest in anything claiming to be currency, make sure it meets the three criteria of a viable money. Think about the history of currency and how or why some currency worked well and ended up being very valuable while others didn't. Think about times when changes in currency happened, and think about why these changes took place.

If the crypto seems risky, then avoid it, or don't put more money into it than you can afford to lose. You don't want to end up on the losing side of history.

## About the Author



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