What’s the Big Deal With Bitcoin?

Cryptocurrencies 101
Aristotle understood, among many other things, the concept of money. According to the classical philosopher, the ideal form of money should be durable, portable, divisible, and have intrinsic value.

Now in those days, around 360 B.C., Greek coins had been in existence for barely 100 years. But the most ideal form of money in Aristotle’s view was gold. It would be interesting to know what he would have thought about a good cryptocurrency (i.e., a digital or virtual currency based on cryptography).

Cryptocurrencies’ intrinsic value is debatable, so gold still scores highest in all four of Aristotle’s key categories. But gold, despite being the ideal form of money, has one serious weakness: It can be physically confiscated.

In the ancient world, when you crossed a border or a checkpoint, or perhaps just ran into a dolt with a sharp instrument pointed in your direction, you were likely to be relieved of your gold and silver, and hopefully not your life.

Today, anytime you’re stopped by the police, a TSA agent, or some other governmental official, they’re likely – thanks to civil asset forfeiture laws – to confiscate any “suspiciously” large sums of gold or cash. What’s worse, in most states, the burden of proof is on you to establish your innocence. And even if you do, what you end up with is significantly less than what was taken due to all of the costs incurred to recover your own property.

In the case of a cryptocurrency, like Bitcoin, that problem does not exist. The “wallet” that carries your cryptocurrency exists only in cyberspace. No one can physically take it from you. You can cross borders and anonymously transfer funds to yourself or anyone else. Your money is yours to do with as you like.

But what exactly is a cryptocurrency?

Here’s Investopedia with a solid explanation:
A digital or virtual currency that uses cryptography for security.
A defining feature of a cryptocurrency is that it is not issued by any central authority, rendering it theoretically immune to government interference or manipulation.

And where do they come from?
While the detailed description is far more complex than is necessary for this discussion, what is important to know is that cryptocurrencies must be “mined” into existence, just like gold. To create a unit of a cryptocurrency, a “miner” solves enough cryptographic equations to “confirm” and complete a block in the block chain. Once a block is complete, a reward of 12.5 Bitcoins is issued to the miner. The reward, over time, decreases as the number of Bitcoins that have been mined nears the maximum of 21 million.

Significant capital expenditures are required in the form of expensive servers and computing systems, and large amounts of energy are required to run these mining platforms.

As of this year, it is quite difficult to be profitable as a miner if you have small scale. Even the large-scale miners are typically seeing profit margins only in the single digits. The actual margins vary as the more people that mine, the harder it is to mine the coins. The system self-regulates to avoid manipulation.

Furthermore, at least in the case of Bitcoin, there is a limit to how many coins can be produced. Today, 16.7 million of the 21 million possible Bitcoins have been created. That means every additional Bitcoin is harder to mine, again, not unlike mining for gold.
In short, cryptocurrencies are not produced by a keystroke in the way that dollars are produced by the Federal Reserve; they require real-world inputs to create. That gives cryptocurrencies a value, flexibility, a security that even gold cannot match. And it makes them an important part of the current and future monetary discussion.

The 800-Pound Gorilla of Cryptocurrencies

In the world of cryptocurrencies, Bitcoin stands far above all others. Below you’ll see a chart of the top 10 cryptocurrencies, ranked by market cap:

As you can see, Bitcoin dwarfs all others. And its next closest rival, Ethereum, has a market cap that is less than one-third of Bitcoin’s.

<table>
<thead>
<tr>
<th>#</th>
<th>Name</th>
<th>Symbol</th>
<th>Market Cap</th>
<th>Price</th>
<th>Available Supply</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bitcoin</td>
<td>BTC</td>
<td>$109,472,411,822</td>
<td>$6,563.35</td>
<td>16,679,350</td>
</tr>
<tr>
<td>2</td>
<td>Ethereum</td>
<td>ETH</td>
<td>$31,740,395,642</td>
<td>$331.59</td>
<td>95,722,967</td>
</tr>
<tr>
<td>3</td>
<td>Bitcoin Cash</td>
<td>BCH</td>
<td>$22,573,355,601</td>
<td>$1,343.47</td>
<td>16,802,263</td>
</tr>
<tr>
<td>4</td>
<td>Ripple</td>
<td>XRP</td>
<td>$8,046,070,856</td>
<td>$0.21</td>
<td>38,622,870,411*</td>
</tr>
<tr>
<td>5</td>
<td>Litecoin</td>
<td>LTC</td>
<td>$3,326,973,797</td>
<td>$61.81</td>
<td>53,825,382</td>
</tr>
<tr>
<td>6</td>
<td>Dash</td>
<td>DASH</td>
<td>$3,290,657,088</td>
<td>$428.01</td>
<td>7,688,182</td>
</tr>
<tr>
<td>7</td>
<td>NEO</td>
<td>NEO</td>
<td>$1,903,941,000</td>
<td>$29.29</td>
<td>65,000,000*</td>
</tr>
<tr>
<td>8</td>
<td>Monero</td>
<td>XMR</td>
<td>$1,893,666,591</td>
<td>$123.36</td>
<td>15,351,232</td>
</tr>
<tr>
<td>9</td>
<td>NEM</td>
<td>XEM</td>
<td>$1,727,568,000</td>
<td>$0.19</td>
<td>8,999,999,999*</td>
</tr>
<tr>
<td>10</td>
<td>IOTA</td>
<td>MIOTA</td>
<td>$1,703,927,111</td>
<td>$0.61</td>
<td>2,779,530,283*</td>
</tr>
</tbody>
</table>

*Not Mineable

The growth in cryptocurrencies has been remarkable. Two years ago, the total market cap for bitcoin was about $3 billion. As you can see above, it’s well over $100 billion.

And there is a tremendous amount of venture capital investments flowing into blockchain technologies. Blockchain technology is the decentralized ledger technology underpinning cryptocurrencies like bitcoin. We can think of a distributed ledger in its simplest form as a distributed database. Essentially, a store of exactly the same records of transactions, in thousands, or tens of thousands of locations.

That’s why Bitcoin-related compa-
nies are attracting such a tremendous amount of venture capital investment. In fact, the number of dollars flowing into this area exceeds the amount of early stage venture capital investing that flooded into Internet technology during the key years of 1995 and 1996.

We can see clearly that in nominal terms, investment in blockchain-related ventures during 2015 was almost $200 million more than investments in internet technology during 1995.

And in 2016, investments in blockchain companies was about $300 million more than investments made in internet-related companies in 1996.

Those numbers speak to a dramatic difference in the two technologies. That difference is even more noteworthy when you consider that it was significantly harder and more expensive to develop and produce technology during the Internet’s early days.

The cost of starting a company and prototyping, launching, and producing a product has dropped dramatically since the mid-90s. Today investment dollars are dramatically more productive than they used to be, so we get significantly more leverage from invested dollars than we used to.

This is important because widespread adoption of a new form of currency requires the creation of a worldwide payment system. We’ll need companies that manage, store, and secure Bitcoin wallets; companies that provide payment processing for merchants who accept Bitcoin; companies that mine Bitcoin and keep the network running; Bitcoin-based financial services companies; Bitcoin exchanges; and other infrastructure companies.

Why Bitcoin

The development of Bitcoin is moving fast!

The theory behind it was developed only in 2008. And the first open-source software release that enabled the Bitcoin network and its underlying technology to be established was just one year later.

Before we get into why it’s moving so quickly, it is important to ask: Why was Bitcoin established in the first place?

Say the word “Bitcoin” to the average person, and he’ll most likely start thinking of shady characters. He’ll imagine them leveraging the technology’s anonymity to hide their illicit activities.

But that’s not what cryptocurrencies are all about. In fact, it’s quite the opposite...

With the exception of cryptocurrencies, all currencies and financial transactions today require a “trusted” third party, such as a bank. Herein lies the problem.

After so many high-profile “rigging” incidents in the world’s equity, currency, and interest rate markets – not to mention hundreds of billions of dollars in fines – can we really trust the banks anymore?

Bitcoin was designed to be a “trustless” network. While that might sound negative, it’s not. “Trustless” merely means that trust is not necessary in Bitcoin transactions because they do not require a third party. A Bitcoin transaction exists solely between the seller and buyer.

That means it’s as close to cash as you can possibly get. Only it’s even safer.

In terms of technology, Bitcoin is a consensus-based network that requires multiple parties to confirm every financial transaction. The parties do not facilitate or execute the transactions; they merely review the transactions and confirm their legitimacy.

If consensus is not reached, a transaction will not be confirmed. All confirmed transactions become part of the “blockchain.” I mentioned a bit about blockchain above. In the case of bit-
coin, it is a constantly growing public record of every Bitcoin transaction that has ever been made.

The fact that this public ledger exists is one of the reasons that the Bitcoin network is so resistant to fraud or manipulation. Every transaction that has taken place with Bitcoin is recorded and available for those who want to access the record.

That said, all of these publicly recorded transactions are anonymous. There is no way to link a Bitcoin transaction to an actual individual in the block chain. So the people involved in the transactions maintain their anonymity.

**Freedom from the Feds**

When we think of a currency, or money, we think of something that we use to buy goods and services. Thinking of Bitcoin only as money, however, would be missing the real utility of the currency.

The real utility is to have the financial flexibility to be able to send and receive currency in a safe, secure way that occurs completely outside of the financial system.

What happens to your Bitcoins when the banking system freezes up? Nothing! Why? Because your Bitcoin wallet and the Bitcoin network resides completely outside the financial system.

During a financial freeze, you would still be able to send and receive Bitcoins. Bitcoins connect with banking institutions only when you want to exchange them for a fiat currency or vice versa.

This may be part of the reason why Bitcoin usage has been extremely high in countries with strong capital controls, like Argentina, China, Zimbabwe, and Venezuela. In recent years, citizens of these countries have been eager to move their funds outside of their local currencies and out of the reach of their governments.

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### The First Step

It takes very little time and costs very little to start buying bitcoin. And the experience you’ll gain is very valuable.

My recommendation is to go to Coinbase ([https://www.coinbase.com](https://www.coinbase.com)) to establish your Bitcoin wallet. You’ll be surprised at how easy it is to do.

In my opinion, Coinbase is the best service provider for providing third-party, secured Bitcoin wallets. Coinbase has raised about $250 million to date and is valued at about $1.6 billion. Some of the backers of Coinbase are from leading venture capital funds such as Andreessen Horowitz, and DFJ Growth, as well as the New York Stock Exchange. It provides payment processing to merchants as well. It is the most established “universal” service provider available today.

Once you create your Bitcoin wallet on Coinbase, you can purchase your first bitcoin, or portion of bitcoin. This can typically be done via a credit card or through an ACH (Automated Clearing House) bank account direct debit. Currently, Coinbase can be linked to bank accounts located in the United States, Austria, Belgium, Cyprus, Denmark, Finland, France, Greece, Ireland, Italy, Malta, Netherlands, Latvia, Poland, Portugal, Slovakia, Spain, Sweden, Switzerland, and the United Kingdom.

Typically, for the first 30 days after you open your account, you are restricted in how many Bitcoins you can purchase on any given day. After 30 days, however, the restrictions are lifted.

At that point, you will have a very valuable, flexible financial account that will enable you to transfer funds anywhere in the world quickly and at very limited cost.

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### Bitcoin Trading Volume (Top Four Currencies)

*After China’s crackdown, the U.S. dollar now drives 70% of Bitcoin exchange volume*

Source: [BitInfo.org](https://www.bitinfo.org)
governments for fear of confiscation or dramatic devaluations of their local currencies.

In Venezuela, in particular, residents are fast-learning the value of bitcoin. The Venezuelan bolívar is expected to hit a 2,300% inflation rate by 2018. Citizens are desperate to protect their wealth before it is inflated out of existence.

China also experienced explosive growth in Bitcoin mining and trading in late 2013. This was a primary driver of Bitcoin’s dramatic rise from $200 per Bitcoin to well over $1,000 within a matter of months. The drivers were similar to those in Venezuela, but on a less extreme scale. Unfortunately, in late 2017, the Chinese governments banned public cryptocurrency exchanges. As you can see above, the majority of volume for bitcoin transactions is now conducted in U.S. dollars.

Despite the Chinese government’s efforts to ban bitcoin, Chinese citizens are still trading bitcoin. This is, of course, possible because these transactions take place outside the traditional banking system. The key is that the Bitcoin network is a safe, secure, and highly functional means to transfer and exchange money irrespective of capital controls.

Final Thought
Investing in global currencies has long been a fairly standard approach for both investment diversification and capital appreciation. However, in an era of increasingly volatile currency swings, this practice has become more risky than it once was.

Bitcoin provides an important solution, as it is not affected by inflation, deflation, or devaluation.

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**Why BitGold May Not Be Such a Good Idea**

While doing research, I came upon a company called “BitGold.” ([www.bitgold.com](http://www.bitgold.com)).

“Bitgold is electronically accessible gold, bringing all the convenience and innovation that happening in fiat or digital currencies to the one commodity money that’s passed all tests of time,” writes Robert D. Mitchell of Portal Capital. “Customers will now be able to seamlessly and effortlessly house their monetary assets in a safer jurisdiction of their choice on a platform host to 10 languages and 160 global currencies.”

Perhaps this would be the perfect combination, I thought... the reliability of gold and the serviceability of the Internet. Gold, without weight. Gold, without storage costs. Gold that can’t be confiscated or stolen.

So, I asked Jeff Brown to check it out.

His report:

- BitGold is exactly the opposite of BitCoin, as it is a “trusted” network. Unfortunately, there is only one party that is trusted: BitGold.
- BitGold is essentially a software trading platform for gold. The platform technology is called “Aurum” and it is patent pending.
- BitGold makes money by marking up the best bid or offer when its customers try to buy or sell gold on its platform. It is an exchange and it wants to route as much buying and selling through its exchange... hence its interest in GoldMoney’s customer base.
- It does not yet have a mobile app for its platform; it is only available online.
- The service is not available to people domiciled in the U.S.
- Those outside the U.S. can open an account and buy gold via credit card, wire transfer, debit, etc. They can also use Bitcoin, which seems to be the only connection to the name BitGold.
- BitGold can issue a “gold” debit card that allows you to make purchases against your gold. Merchants charge you in local currency, but your gold is debited from your account at current exchange rates (minus BitGold’s markup fee of course).
- You can also use your BitGold debit card to withdraw fiat currency out of an ATM.
- The only thing you can genuinely do for free is to send gold to another BitGold account holder.
A Step-by-Step Guide to Buying Bitcoin

By Jeff Brown

[Editor’s Note: Steps will vary depending on where you’re located and which bank you use.]

Step 1

Go to www.coinbase.com and enter your details – first name, last name, email, password – in the Sign Up box.

Click the blue “Sign Up” button.

Tip: I recommend a password with at least 10 characters composed of both lowercase and uppercase characters, numbers, and at least one symbol such as: # $ % & ( ) =.

You will see the word “excellent” in green if your password is considered “strong” enough, i.e., a good combination of characters that should not be easy for hackers to guess. If you don’t see this, consider entering a different password.

Step 2

You will see the screen below indicating that a confirmation email will be sent to you at the email address you provided in the Sign Up box.

Go to your email account and locate the email. It should look something like the email to the right.

Click on the “Verify My Email Address” blue box. This will send an email back to Coinbase confirming your email address.

Step 2
Tip: I recommend opening your email account in a different browser window so that you can leave the Coinbase screen open to return to after this step.

Step 3
Return to the Coinbase screen that you initially used to sign up on www.coinbase.com. You will see the home page of your new Coinbase Bitcoin account.

Click on the “Welcome <<your name>> – Let’s get started” text link at the top of the page.

Step 4
Choose your country of residence from the drop-down list provided.
Then, enter your cellphone number in the next box.

Click the blue “Next” box.

Step 5
You will receive a text message to your cellphone with a seven-digit authentication code. Enter the code in the box on the screen to the right and click the blue “Verify Phone Number” box.

Step 6
Select the bank you would like to use to purchase your first Bitcoin. This must be a bank with which you already have an active account with online access.
Step 7a

Enter your account verification details – the username and password you use to access your online banking account with the bank selected in the previous step.

Click the blue “Next” box.

Note: Coinbase uses the most advanced security technology to keep its customers’ bank account information safe. It uses an encrypted connection (SSL) which prevents third parties from intercepting any data shared by customers. It also stores all customer data with AES-256, the same advanced encryption technology used by the government.

The example shown below is for Citibank.

Step 7b

If you have multiple accounts in the bank you selected, select the account from which you would like to withdraw funds to purchase your first Bitcoin – simply click on the circular button to the left of the account you wish to select.

Click the blue “Next” box.

Step 8

To verify your identity, simply click the blue “Start Verification” box.
Step 9
In the “Country” box, enter the country in which your ID was issued.

Then, select the ID type you would like to use for verification. The most common selection is a driver’s license.

Note: Coinbase uses the most advanced security technology to keep its customers’ bank account information safe. It uses an encrypted connection (SSL) which prevents third parties from intercepting any data shared by customers. It also stores all customer data with AES-256, the same advanced encryption technology used by the government.

Step 10a
You can either scan your ID using your webcam, or upload a photo of it from the files on your computer. Simply click either the blue “Use webcam to scan document” button or the gray “Upload existing image” button.

Step 10b
If you have opted to upload an image of your ID from the files on your computer, you will see the screen to the right.

If you do not yet have a photo of your driver’s license, the easiest way is to take a photo of your license with your phone, email it to yourself, then save it as a file on your computer.

Then, click the gray “Choose File” button, and select the file from your computer to be uploaded to Coinbase.

After the photo has been uploaded, you will see the image on the screen. Click the gray “Continue” button.

If you are uploading your driver’s license, you will also be asked to
upload an image of the reverse side of it. Simply repeat the step above.

After the photo has been uploaded, you will see the image on the screen. Click the gray “Confirm” button.

**Step 11**
You will then see a screen that says “Your document has been uploaded.”

Once your document has been uploaded, which can take up to one minute, a new screen will appear. You do not need to click anything here.

**Step 12**
Next, you will see a screen that indicates Coinbase is “Verifying Identity.”

Again, you do not need to click anything. Just wait for this process to complete. It usually takes less than one minute.

Once your identity has been verified, you will receive a confirmation email like this to the email address you provided in Step 1:

**Step 13**
Congratulations! You are now ready to buy Bitcoin.

Once your identity has been verified, you will see the following screen enabling you to purchase Bitcoin.

In the “Amount” field, you will see “USD” for U.S. dollars and “BTC” for Bitcoin.

Initially, when you are setting up your Coinbase account, there is a $25.00 limit on your initial purchase of Bitcoin.

Your payment method is pre-populated from the information you provided in a previous registration step.

I recommend you enter $25.00 in the amount field and then select the blue
“Buy Bitcoin” button at the bottom of the page.

**Note:** You are offered the option to repeat this purchase on a regular basis (daily, weekly, etc.). I recommend you ignore this option for now. You can change your account settings at a later stage once you have completed the account setup. To ignore this option, simply leave the circular button to the left unchecked.

**Step 14**
You will see a final confirmation screen for your purchase. This screen summarizes your transaction and lets you know when your Bitcoins will arrive in your Coinbase account.

Select the blue “Confirm” button.

**Step 15**
The final screen indicates that your purchase has been completed.

There is an option to “Get your Bitcoin faster.” This involves using a credit card for the purchase. I don’t recommend doing this as you will be charged a handling fee – usually about 3% – for using a credit card. To skip this option, simply click on “Take me to my account,” just below the blue button.

**Note:** It takes about three to five business days for the Bitcoin to arrive in your account when using funds from your bank account. The process is explained in this diagram:
Step 16

You will be taken to your account balance screen, which will look something like the screen to the right.

If you would like to increase your daily limit for purchasing Bitcoin, click on “Settings” in the menu on the left-hand side.

Step 17

Enter your personal details, specifically birthday and mailing address, in the fields shown.

Then, click the blue “Save” button at the bottom of the screen.

Congratulations! You have successfully set up your account and completed your first Bitcoin purchase!

Note: Online funds held by Coinbase are fully covered – through highly rated, third-party insurance firms – against any employee theft or hacking. Additionally, 98% of funds are stored offline, which provides added security against theft or loss.
Bill Bonner Tries Bitcoin (Video)