

## THE ADVANTAGES AND DISADVANTAGES OF BITCOIN PAYMENTS IN THE NEW ECONOMY

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### **Abstract**

*In the Internet economy, with the help of cryptography, a branch of mathematics dealing with the security of information, as well as authentication and restriction of access to a computer system, a new digital coin as an alternative to national currencies appeared.*

*In accomplishing this, using both mathematical methods (taking advantage of, for example, the difficulty of factorizing very large numbers), and quantum encryption methods.*

*Throughout the world, information technology companies are focusing on information protection, inventing day-to-day methods with greater durability.*

*In the horizon of Information Security, Quantum Cryptography has emerged, generating new possibilities in that field, hoping that data will be better protected and that the digital currency will resist over time and eventually evolve in the future, although Kurzweil, Bitcoin's pioneering technology is unlikely to be used in this respect.*

*The idea of virtual alternatives to national currencies is not new, with advantages and disadvantages.*

*The advantages of this coin are high payment freedom, transparency of information, high security, reduced risks for traders. Among the disadvantages we highlight the risk and volatility, the lack of notification and understanding, with incomplete functions, but which are developing, so Bitcoin is not perfect.*

**Keywords:** *bitcoin, criptografie, methodology, economic growth, economic agent, branch production, virtual economy, monedă digitală*

**Classification JEL:** F60, F61, F62, F63

### **1. Introduction**

The idea of virtual alternatives to national currencies is not a new one, Iceland being a country that in April issued its own virtual modular Auroracoin, distributing it to the population. The Indian Lakota tribe in the Dakota state of America began adopting MazaCoin, a virtual currency developed by a US minority rights activist. Last but not least, an official of the Central Bank of Russia said on June 2 that it is time for the government to develop its own virtual currency. Moreover, Russian President Vladimir Putin recently met with Vitalik Buterin, creator of one of the most successful virtual coins, Ethereum, just days after the Central Bank's statements.

There are alternatives to national currencies that appear in the future, algorithmic ones being a possibility, but the correct algorithm has not yet been reached.

Bitcoin uses complex algorithms to guarantee the credibility of currency issuance, basically the "mining" process involves solving complex mathematical problems by network computers, and in exchange for the work of specialized processors and electricity costs, miners get back Bitcoin.

The society of the future and, implicitly, the company's future environment will be focused on knowledge, on the best use of it. Based on this theory, we can think there is an application in which a finite number of coins is available to no one.

The volatility of the main virtual currency is the reason cited by Kurzweil, noting that the paradigm of "minat", namely the process of issuing it, can not provide stability. The mining paradigm is the process of generating new digital coins on the market, this process is at the heart of the blockchain technology, an architecture that allows non-technical language to share files and spread them quickly over the Internet, the utility of the technology has become evident in financial context.

It is not feasible for you to create a cryptomon to share it with no discrimination. Any coin (either fiat or electronic money) must come as a reward for more or less simple activity. So in case of cryptomonas, the miner who wants to get coins needs to send proof that he did that activity and only then is he rewarded. The activity in question is mining. I mean, you connect a device to the outlet and consume power, and that device automatically sends proof of work and is rewarded.

When we talk about proof of work, we are not just talking about a consummation of current, just for the sake of consuming current to do something, anything, to exchange for cryptomonas. It is an activity that is itself productive, because that miner actively keeps a node in the network. Each active node in the network checks and records the transactions made at each moment, thus ensuring network security. In other words, each miner is a piece of a super computer that contributes processing power to the network that checks the legitimacy of each transaction.

In a nutshell, mining is an active job where work is done by the equipment we invest in and plays a police role in the cryptomonas ecosystem. From this job, the working miner receives a sum of coins according to the effort, but mining is not effective in countries where energy costs are high.

## **2. Advantages and disadvantages bitcoin**

Bitcoin is not the only currency on the market, but some of the advantages of this digital coin make it more distinctive than other coins, but as nothing is perfect, it also has flaws.

Among the benefits of Bitcoin, we can list payment freedom. With Bitcoin, we have the ability to send and receive money anywhere in the world at any time. We do not have to worry about crossing borders, rescheduling for linked holidays, or other limitations that might occur during the money transfer. With Bitcoin, we have total control over your money, and there is no form of central authority in the Bitcoin network.

Another advantage is security and control. Allowing users to control their transactions, helps keep Bitcoin safe for the network. Traders can not charge additional charges without being notified. They need to talk to the consumer before adding any kind of toll. Bitcoin payments can be made and completed without personal information being linked to the transaction. Due to the fact that personal information is hidden from indiscreet eyes, Bitcoin protects against identity theft, the bitcoin wallet can be encrypted and backed up to ensure money safety.

Another very important advantage is that the information is transparent. With the blockchain, all completed transactions are visible to everyone, but personal information is hidden. The public address is visible, but personal information is not related to it, anyone can check transactions at any time in the Bitcoin block chain.

The Bitcoin protocol can not be manipulated by anyone, organization or government, because Bitcoin is cryptographically safe.

Very low fees are another advantage, at present, within the Bitcoin payments, no commissions are charged or very small. Users may include fees to process transactions faster. The higher the charge, the more priority it gets in the network and it will process faster.

Digital currency exchanges help the trader to process operations by converting bitcoins into fictitious coins. These services generally have lower fees than credit cards and PayPal.

Due to the fact that Bitcoin transactions can not be reversed, they do not contain personal information, and they are safe, traders are protected from potential losses due to fraud, it involves far fewer risks for traders.

With Bitcoin, traders can do business where crime and fraud rates are high. That's because it's very hard to mislead someone in Bitcoin thanks to the public register, also known as blockchain.

Now that we have reviewed the basic advantages, we can move on to the disadvantages. There are three main drawbacks that need to be highlighted, so we can give you an overview of what we can expect from Bitcoin.

Thus, among the disadvantages of Bitcoin we can list lack of notification and understanding. Many people still do not have the existence of digital coins and Bitcoin. People need to be informed about what Bitcoin means in order to apply it to their lives. Networking is the best way to promote Bitcoin.

Companies accept bitcoins because of the benefits, but the list is relatively short compared to physical coins.

Companies like TigerDirect, Dell, NewEgg and Overstock accept Bitcoin as a form of payment, which is great. Employees should be trained on Bitcoin to help their customers. This will certainly require some time and effort.

Risk and volatility are two elements that pose a big disadvantage to Bitcoin. This is volatile, especially because there is a limited amount of coins and the demand for them that increases with every passing day.

However, volatility is expected to decrease as time passes. Given that many companies, media and shopping centers have begun to accept Bitcoin, its price will eventually stabilize.

Currently, the Bitcoin price jumps from day to day, especially due to the events associated with digital coins.

Bitcoin is still in its infancy, with incomplete but emerging functions. To make the digital currency safer and more accessible, new features, tools and services are currently under development.

Bitcoin has yet to grow until it reaches its full potential. This is because Bitcoin is just starting out and has to manage its problems just like any other coin in the beginning.

The construction of the Bitcoin allows anonymous ownership and transfer. Bitcoins can be saved on a personal computer in the form of a wallet file or stored with a third-party wallet service, and in both cases bitcoins can be sent via the internet to anyone with a Bitcoin address. Peer-to-peer topology and the lack of a central administration make it unfeasible as an authority, a government, etc. manipulate the value of Bitcoin or introduce inflation by producing them.

The Bitcoin coin also exists in physical form through "Casascius Bitcoin" created by American entrepreneur Mike Caldwell, the unique code of Bitcoin being embedded in a gold-plated coin, also subdivided.

Satoshi is the smallest subdivision of a BTC equivalent to 10 BTC (0.000000000 BTC). Other subdivisions are microbitoin ( $\mu$ BTC) equivalent to 10 BTC (0.000001 BTC), milibitcoin or bitmil (mBTC) equivalent to 10 BTC (0.001 BTC) and centibitcoin or bitcent (cBTC) .

Bitcoin makes it possible to transfer value in a very easy way and allows you to control your money, but your wallet as in real life must be kept secure.

## Conclusions

Due to the fact that the economy is still young, the innovative nature and the markets that sometimes are not liquidated, the price of a bitcoin can rise or fall unpredictably over a short period of time. Consequently, it is not recommended that savings be all put into Bitcoin.

Bitcoin must be seen as a high risk, and you should not invest more money in Bitcoin than you can afford to lose. If you receive payments in Bitcoin, you can convert them quite simply into RON.

Bitcoin transactions can not be reversed, they can only be surrendered by the person who received the money. This means that trading should only be done with people or organizations that you know and trust, or that already have a recognized reputation. It is their responsibility to maintain control over the payment requests that they display to their customers. Bitcoin can detect typing errors and usually will not let you monetize money to an invalid address. Additional services may exist in the future to provide more power for decision-makers and consumers.

Bitcoin is a new and experimental currency in continuous development. Although it becomes less experimental as its use becomes more and more popular, it must be borne in mind that Bitcoin is a new invention that explores ideas in a way that has not been tried so far. For this reason, no one can foresee the future of this coin.

The Bitcoin price is also quite dependent on the size of its mining network, because the larger the network, the more difficult and thus the more expensive it is, the production of new bitcoins. As a result, bitcoin commodity prices need to increase, as production costs also increase. The aggregate power of the Bitcoin mining network has increased more than three times over the past twelve months.

As an essential feature of money, we can remember that the objective exchange value they derive from recurring social customs differs fundamentally from the intrinsic primary value of the currency-operated object. The objective value can be doubled by an intrinsic value more recognized for precious metals, or less for stones used as coins by indigenous peoples in Yap islands.

Whatever the object was used as money in transactions, it had a physical existence, was material, palpable, and in most cases had an intrinsic value independent of the exchange value.

The next fundamental step in the evolution of this concept was the renunciation of intrinsic value.

The dematerialisation of money represents the beginning of the modern concept, starting with the renunciation of precious metals as money and the transformation of money into a dematerial exchange environment, thus creating a modern monetary paradigm, fiat money, immaterial creation of money by the central-commercial banks system the required reserves mechanism.

The only value that this kind of money retains is the trust of the population in the institutions that emit the money and so.

Modern financial crises are based on the deterioration of confidence in the mechanisms whereby the curtains of money lie higher or lower depending on the perceived needs of the economy, the issuance of which depends on a series of monetary and economic policies that are not intuitive and ultimately depend on the decisions of some people about how much money should be in circulation. Theoretically the money that can be issued can not be limited (with the inflationary consequences of rigor and systemic risk).

Following these considerations, bitcoin could be defined as a virtual form of limited electronic crypt-coin that eliminates the problem of "trust" characteristic of normal currencies through a decentralized, encoded and depersonalized transaction system.

The emphasis here is not on the currency itself, which is just a convention, but on the global payment network that represents the bitcoin infrastructure. Just as Mastercard or Paypal networks allow the transmission of electronic money between parties, the bitcoin network also transfers electronic payments between exchange participants.

A fundamental difference from the current normal electronic payment system is that the bitcoin network is decentralized, with no central authority, institution or person to manage such transactions, such as the European Central Bank for Euro transactions.

Another difference is that e-commerce transactions in the bitcoin network are not based on a normal currency, such as Paypal where you can only pay through one of the coins accepted by the world financial system but has its own account unit called "bitcoin" .

The maximum number of bitcoins that can be created at any time can not exceed 21 million. Unlike dollars, for example, which theoretically can be created in an unlimited volume, the bitcoin network can produce no more than 21 million units, currently circulating around 15.2 million euros.

The emergence of bitcoin is still shrouded in mystery, credited with this creation being the mysterious Satoshi Nakamoto, whose true identity is unknown.

Although, seen as a currency of the future, bitcoin acts as an exotic asset, common transactions are still limited, although there are sites that contain this currency, but most use it for its speculative and volatile nature. In the past three years, the bitcoin value (in US dollars) fluctuated, this being the main critic of this system.

Being decentralized, there is no assurance on the value of the investment, and if the risk factors materialize your investment in bitcoin turns into a final loss without the possibility of being saved by any central bank or guarantee fund, as happens for example with bank deposits common.

And the risk factors can be the intrinsic reliability of the system, the possibility of hacking or the emergence of competing platforms.

In addition, as the network becomes more popular, problems arise over the time that transactions are processed; if a transaction is normally processed in less than an hour, there have been cases where sellers have waited for up to 12 hours.

Given that competing platforms such as Mastercard or Visa perform millions of transactions per hour, bitcoin is limited to a few thousand, far too little for now.

On the other hand, the independent nature of this coin makes it sympathetic to the nostalgics of the gold standard and to the Austrian School of Economics because bitcoin is basically a free currency extracted from the guardianship of any regulatory authority and whose issuance does not depend of any monetary policy.

In this sense, bitcoin is seen as an antithesis to the modern financial institution, which may suffer fatal systemic crises like the one in 2008, on which the very nature of the inflationary currency of the official electronic currency is based.

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Knowing both sides of Bitcoin, we conclude that this is not perfect. It has many advantages that physical money does not provide to its users, however, it also has disadvantages. That's because Bitcoin is still a relatively young coin. People are beginning to perceive their existence more and more. For Bitcoin to be successful, more people should understand what this is and not leave the preconceived notions to distort the concept of digital coin.

There are always pros and cons, as in any situation. In order to make the right decision, we must weigh good and bad before the final election.

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