# The Benefits and Obstacles of Cryptocurrency

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# **ABSTRACT:**

Cryptocurrencies, including Bitcoin, challenge the global financial control system established after the Bretton Woods agreement. Bitcoin, a digital currency, is decentralized, meaning no government issues it and is not stored in a central location. Bitcoin and other decentralized monetary systems utilize a publicly accessible distributed ledger, eliminating the need for a trustworthy intermediary. This paper seeks to ascertain the benefits and obstacles associated with cryptocurrencies. This paper was written following an extensive examination of the pertinent literature. Based on the research, utilizing Bitcoin entails various risks, including the susceptibility of its value to substantial price volatility. This currency can be used for illicit transactions, such as illegally trading goods violating the law. It can facilitate illicit activities such as evading taxes and laundering money. Bitcoin users' accounts are susceptible to hacking. Consequently, there is a potential for Bitcoin units to be misplaced or stolen. There is a prevailing notion that Bitcoin is closely linked to gambling

## **KEYWORDS:** Cryptocurrency, Bitcoin, Virtual Currency, Advantages, and Challenges **Introduction**

Virtual money is considered one of the most significant advancements in the history of money (Suryono et al., 2020; Parikh, 2018; Perdana et al., 2021). Because of its advantages and traits, it has gained widespread acceptance. For example, it can respond quickly to its consumers' needs (Adrian & Griffoli, 2019; Peters et al., 2015; He et al., 2016; Böhme et al., 2015).

First, the concept of money must be defined in general terms before discussing virtual money. Money is defined as a means of exchange and a measure of value (Tcherneva, 2006; Lilley et al., 2022; Kitamura, 2022). The several sorts of money are as follows: Commodities, coins, paper money, and electronic money are the first four categories (Masithoh & Hambali, 2022; Bankov, 2022; De Bonis & Ferrero, 2022; Peneder, 2022).

In terms of virtual money, there is no precise definition for this concept (Gawron & Strzelecki, 2021). Because virtual money is so complicated, this is ascribed to the fact. Additionally, it has explained the frequent changes with virtual currency. Virtual money is a medium of exchange that functions similarly to any other currency (Dyhrberg, 2016; Ciaian et al., 2016; Vaz et al., 2022; Srouji, 2022).

On the other hand, it only possesses the qualities of different forms of money. It is a form of currency traded between individuals with a unique code. In the opinion of some experts, virtual currency can be defined as a digital representation of actual money issued by a central bank that is not backed by any physical assets (Koka, 2022 & Shi, 2022). People's trust in virtual currency and the extent they use it determine its worth. A virtual platform is used to facilitate the exchange of funds. It is a digital asset that can be used for exchange in the financial world. A code ensures that the virtual currency is utilized with the most significant security. Individuals are accountable for guaranteeing the long-term viability of virtual currencies (Mukherjee et al., 2022).

Virtual currency, as previously said, is a currency that does not have a tangible presence in the real world. No official organization has authorized it (Jaiswal, 2022; Abdeldayem et al., 2020; Miller &

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Horst, 2020; Denardis, 2020). In actuality, it is generated by sophisticated computer programs that are constantly evolving. Neither it nor any other tangible currency is tied to this digital asset. Rather than being controlled or supervised by the government, it can be purchased, sold, or exchanged through electronic platforms without restrictions.

Bitcoin is widely regarded as the first virtual currency created in 2009 (Davison et al., 2022; Peters et al., 2022; Luther & Sridhar, 2022; Panda & Giri, 2022). The introduction of Bitcoin also paved the way for the opening of other virtual currencies. In 2008, Satoshi Nakamoto created Bitcoin. The latter person published an investigation of the use of Bitcoin. Nakamoto describes the objectives that he hopes to achieve through the use of Bitcoin in his research. He also suggested the usage of Bitcoin as a medium of exchange in certain circumstances. He argues that the evolution of Bitcoin will eventually render a broker unnecessary in conducting commercial transactional activities.

Using Bitcoin, the parties involved in a transaction can avoid dealing with financial institutions like banks and brokers (Turpin, 2014; Crosby et al., 2016; Lin, 2015). On the other hand, many others are concerned about using Bitcoin. Such individuals contend that Bitcoin's development has been influenced by factors that have yet to be revealed. In 2009, Satoshi Nakamoto published the first version of Bitcoin. On the other hand, Bitcoin was used for the first time in 2010 when it was introduced. To be more exact, a person purchased a pizza in 2010 in return for 10000 units of Bitcoin. One US dollar was worth 1309.03 Bitcoin units during the latter part of the year. The latter's value is decided by the cost of the electricity required to produce the currency in question. The first electronic market for trading Bitcoin for other currencies was launched in 2010 and was known as the Bitcoin Exchange Market. In 2012, the European Union (EU) approved permission to establish a bank associated with a European institution used to exchange Bitcoin. Following that, a Texas judge decided that it was permissible to invest in Bitcoin. The courts in Germany and Switzerland have also accepted the validity of this position. In 2016, the first Bitcoin-to-Dollar exchange agency in the United States was founded to facilitate Bitcoin conversion into dollars. According to the Bitcoin Foundation, the nominal worth of the Bitcoin units available in 2018 was 167 billion dollars (Khalaf & Alnwairan, 2020; Nelson, 2019).

The creation of the first cryptocurrency, Bitcoin, led to the development of several additional cryptocurrencies (Lee et al., 2018). These cryptocurrencies use comparable cryptographic technologies, but their algorithmic designs differ. Other types of virtual currencies include Litecoins, Peercoins, Dogecoins, Counterparty, Ethereum, and Ripple, as some examples (Franco, 2015). Bitcoin, Ethereum, and Ripple (XRP) are the three cryptocurrencies with the highest market capitalization (CoinMarketCap c, n.d.). Bitcoin was the first cryptocurrency ever created, and as a result, it remains the most widely used illustration of how blockchain technology can be applied (Crosby et al., 2016). When describing the workings of the technology that underpins cryptocurrencies and the development of cryptocurrencies over time, the vast majority of the written material about cryptocurrencies uses Bitcoins as an example of cryptocurrency.

#### **Cryptocurrency's Characteristics**

First and foremost, bitcoins can be owned and used for transactions by any legal or natural physical person (Abubakar et al., 2018; Murphy et al., 2015; Amsyar et al., 2020; Crosby et al., 2016). The client must download and install a specific software program on his computer to open a wallet to store his bitcoins. The client can purchase bitcoins in a particular cryptocurrency market using ordinary fiat money (USD, EUR) and then deposit them in his wallet once purchased.

Another point to mention is that bitcoins can be created or released: The user must first download onto his computer a particular software program that solves complex mathematical equations/puzzles generated by the Bitcoin system to accomplish this. Bitcoin is awarded to the individual whose computer was the first to solve the equation/puzzle (hash). In the figurative sense, a mining operation creates or emits bitcoins (similar to a miner's operation in which something valuable, such as gold, is extracted). A significant amount of electricity is required to complete the process, which requires time

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and effort. When bitcoins were first introduced, the market value of the cryptocurrency was significantly lower than the price of electricity for an extended period.

However, the reality is that only those with specialized, high-powered apparatus will have a better chance of profitably mining bitcoins than home miners in the current environment. They can only compete in a hostile market with access to free or highly low-cost electricity.

Third, by completing a complex mathematical equation/puzzle faster than the other participants, the user earns the ability to participate in transactions carried out by Bitcoin holders at that specific time. Owners of bitcoins can complete transactions with or without paying a commission. In around 10 minutes, the user proposes a commission to prioritize his sale, but conventional transactions without commission can take several hours. Bitcoins are protected with high security and encryption through blockchain technology (decentralized maintenance of registries). In other words, each Bitcoin owner has a complete history of all transactions with Bitcoins dating back to their inception. The comprehensive database contains information on all Bitcoin transactions, the amount sent, and the approximate location of the payer; however, the database is anonymous, making it nearly impossible to determine the specific area of Bitcoin holders in most cases.

#### 2.1 Transaction Mechanism

For instance, a person could sell something and receive bitcoins in his wallet. The Bitcoin system automatically sends a record of this transaction to all computers linked to it. All bitcoin owners are notified that a specific owner of an electronic wallet with a particular number has acquired a particular amount of bitcoins from that wallet. After a while, this individual chooses to spend his bitcoins on something. In this situation, he asks his wallet to send a specified amount of bitcoins to an address/wallet set by him. At this moment, his computer sends a message to all computers linked to the Bitcoin system, requesting confirmation of the transaction's authenticity. Other participants' computers perform record checks. They are secure when they determine that this buyer (using his electronic wallet and the name/code) holds the required bitcoins. After receiving a specified amount of confirmations, the second-level participants create a unique record. Following that, the claimed amount is transmitted. All of the system's computers receive a message instructing them to add a new description to the database: deduct bitcoins from this individual's wallet and add them to his partner's wallet (Wang & Kogan, 2018; Huang et al., 2017).

Assume someone chose to defraud by creating duplicates of his bitcoins before selling the originals. Following that, he attempts to sell the duplicated/copied item. However, the other participants' computers will not authenticate their possession of those bitcoins because, during the sale of the actual bitcoins, all participants recorded the deduction of a specified quantity from person A and added it to the wallet of person B. As a result, the hacker could not perpetuate this fraud or forgery. Thus, to make a double payment using the same bitcoins, a person must hack all of the system's computers and modify the system's whole database to imply that his account was not paid.

Moreover, that is highly improbable, if possible, given the expected participation of 3 million people at the start of 2017. According to various estimations, it is claimed that a scam of this magnitude would require the mobilization of computing power equal to half of the world's existing computers. According to some analysts, hacking the system with more than 400 billion machines will create no significant interruption other than delaying specific transactions for up to ten minutes.

# **2.2** Cryptocurrencies Are Physical Assets That Do Not Provide Financial Support for Digital Assets

Cryptocurrencies are unbacked by physical assets. However, because no one has been able to hack the system – at least not yet – we may conclude that cryptocurrencies are relatively distinctive and, as such, may be of interest to consumers looking for a substitute for fiat money. We occasionally hear of attempts to back cryptocurrencies with specific assets, most notably gold. However, in this event, the asset-backed cryptocurrency will devolve into a conventional mechanism for soliciting investments

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secured by real-world collateral and cease to be a cryptocurrency (Murialdo & Belof, 2022; Radu, 2022; Marthinsen & Gordon, 2020; Shepherd et al., 2018).

Bitcoin's maximum supply is restricted to 21 million. Additionally, "generating/mining" is subject to transitory and quantitative limitations. As a result, system participants are always aware of the number of fresh bitcoins entering the market at any time. At the moment, the majority of bitcoins are exchanged for US dollars. Simultaneously, their currency's exchange rate exhibits an abnormal amount of fluctuation (for example, the most significant drop in the rate of bitcoins in 24 hours - 80 percent - occurred in April 2013, and on the night of August 13th, 2017, its value increased by 11.8 percent). It demonstrates that bitcoins are more frequently used for speculation than actual transactions. When bitcoins achieve a stable price and the speculative frenzy surrounding them subsides, the rules mentioned above will assist in lowering inflationary expectations.

# 2.3 How Cryptocurrency is Operated

The cryptocurrency system's operation is entirely automated and occurs without human interference. The system's founders launched it in 2008 (the first transaction occurred in January 2009), and they have made no changes to the system since then, except for a few minor modifications to the software code. The absence of interfering parties ensures high transparency for independent programmers. However, one of this approach's drawbacks is that specific issues must be solvable. For instance, if a user needs to remember his wallet password, he or anybody else can never access his funds. If bitcoins have been stolen (in any way), you will never be able to recover them. A well-known story about a Bitcoin owner who accidentally revealed his wallet password (QR code) on television during a news program and promptly lost money (Tarasova et al., 2020; Savelyev, 2017; Sandner et al., 2020; Kundu, 2019).

Other instances of Bitcoin theft have been documented as well. For example, while making a payment, a person needed clarification on the fields (the area for sending the amount needed to be clarified with the price commission). The Central Bank can cancel any transfer and refund the funds to the victim in the traditional banking system. The Bitcoin system, on the other hand, is devoid of regulators. Additionally, heirs face hazards associated with cryptocurrency. For instance, if someone passes away without notifying their family members about their Bitcoin wallet.

Despite the Bitcoin system's commitment to social justice, it has demonstrated an apathy toward social inequity. According to various estimations, bitcoins are distributed unevenly regarding volume among their owners. For instance, it is stated that only 927 persons hold 50% of all bitcoins, even though there are several million bitcoin owners. Additional studies corroborate this viewpoint. Perhaps this is because the difficulty of mathematical equations/puzzles solved by "miners" will increase.

Furthermore, unsurprisingly, the system's creators and early "miners" found themselves in the most profitable position in terms of earning bitcoins in terms of speed and volume as more users joined the system, the time required to "mine" a single bitcoin increased, and the "reward" decreases. Without a doubt, bitcoin's developers are entitled to compensation. However, they should not be granted it because of their unique status as the first "miners." It should be mentioned here that bitcoins have nothing to do with the financial pyramid scheme, in which certain players earn money by recruiting new members.

#### **Cryptocurrency's Disadvantages**

Among the primary disadvantages of cryptocurrencies is their potential for tax evasion. Indeed, Bitcoin owners' high degree of anonymity enables them to conduct transactions, avoiding paying taxes or even reporting to tax authorities fearlessly. This issue is not as evident because Bitcoin has yet to establish itself as a full-fledged payment method (primarily due to the significant volatility of the exchange rate). However, the state may lose part of its taxable earnings. This scenario is impressive due to the absence of technology countermeasures against tax evasion. State authorities will be forced to adopt new revenue-collecting strategies to maintain budgetary institutions, law



enforcement agencies, and other government functions. They may develop electronic currency to complement the national currency (Amsyar et al., 2020; Tarasova et al., 2020).

Another aggravating factor is geographical location. In reality, none of the world's countries control the Internet. Numerous businesses from various nations utilize the Internet while adhering to their country's laws. However, cyberspace as a whole is independent of any authority. Thus, any government will perceive the cryptocurrencies emitted on the Internet in a decentralized manner as a product performed outside its jurisdiction, namely as an imported commodity, with all the attendant consequences, such as customs clearance and taxation, but accounting for the cryptocurrencies' specific characteristics. After the state legalizes it, cryptocurrency can be freely circulated throughout the economy and purchased and sold as a high-liquidity investment commodity. However, in the short term, cryptocurrency should have a different status than a payment to the existing national currency; otherwise, it will have detrimental implications by introducing unnecessary competition between the two currencies (Rice, 2019; Alqaryouti et al., 2019; Cheng, 2019).

#### **Bitcoin is a Cryptocurrency**

Bitcoin combines two words: bit and coin. "Bit" refers to any small item, whereas "coin" refers to metal money (Khalaf & Alnwairan, 2020; Desan, 2010; Antonopoulos, 2017). Bitcoin is a decentralized digital currency. Bitcoin is a cryptocurrency that is created and distributed by specialized developers. It is readily available and can be stored electronically. It may be used to conduct a transaction if both parties agree. It is a digitized version of physical currency. It is neither a central bank nor government-issued cash. It is not tethered to any tangible medium of exchange.

On the other hand, natural and legal persons accept virtual currencies as a mode of payment. Virtual currencies can be stored, exchanged, and transferred electronically (Kubát. 2015; Lim et al., 2014). A government or other governmental entity does not issue a virtual currency. Indeed, software developers make extensive use of it.

Bitcoin can be characterized as an encrypted virtual currency with a monetary value in light of earlier concepts. It is physically absent from the world. An unidentified individual made it. It is not a government-issued document. It is administered electronically without the assistance of a broker or a regulatory authority. The current restriction on the supply of Bitcoin units is 21 million.

A Bitcoin trading platform can be used to purchase Bitcoin units. Gdax and Bitstamp are two such platforms. Additionally, Bitcoin units can be purchased directly from those who possess them (Segendorf, 2014). Bitcoin was initially used in Amman, Jordan, to pay for a meal at a restaurant.

#### **3.1Bitcoin's Advantages**

Bitcoin possesses several qualities. The following are a few of these characteristics:

Bitcoin is a decentralized digital currency, which implies it has no physical presence. Bitcoin is a decentralized electronic payment system that utilizes electronic devices. It is well-known in a specific community. Its popularity continues to grow. Its value fluctuates because it is used to speculate (Zhang & Huang, 2022).

Bitcoin is a secure cryptocurrency encrypted to ensure its security. Data is encrypted using cuttingedge modern technology designed to safeguard and detect any breach. Unless one knows the number the other party knows, the encryption cannot be decrypted (i.e., the public key). The cryptographic system efficacy has been demonstrated. As a result, governments, public entities, and financial organizations all use Bitcoin (Al-Shaarani & Gutub, 2022).

There are a limited number of available Bitcoin units. Money or physical effort is required to obtain Bitcoin units (Choi & Shin, 2022).

It is a stable currency: For example, it can be utilized for an extended time (Barber et al., 2012).

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It is transferable: Within a short period, it can be transported to any location on the planet. It is relatively inexpensive to transfer it. It is transferrable without the assistance of a broker (Shcherbak, 2014).

It can be subdivided into smaller or more significant sums (Van Wijk, 2013).

Bitcoin's legitimacy may be verified to guarantee that no electronic forgery occurred (Li et al., 2018).

Bitcoin forging necessitates using difficult-to-acquire advanced skills (Lakafosis et al., 2011).

Bitcoin can be exchanged for physical or electronic currency (Kalbaugh, 2016).

Bitcoin usage has spread rapidly worldwide (Karame et al., 2012).

Bitcoins can be securely stored in various locations, including the Blockchain (Sharples & Domingue, 2016).

Bitcoin mining is permissible. Bitcoin mining is the act of creating new Bitcoins. It is a complicated procedure that consumes a significant amount of electricity. The miner is in charge of solving mathematical equations. When bitcoin was first mined, mining a single block earned 50 bitcoins. Every four years, the mining rewards for bitcoin are halved (Islam et al., 2021).

Bitcoin's supply is finite: At writing, the Bitcoin supply is limited to 21 million units (Barnett, 2022).

## **Virtual Currencies**

The trade of virtual currencies on a global scale takes various forms. Each sort is distinct depending on how well-known and widely used they are. In reality, the other virtual currencies serve as a replica or a copycat of the Bitcoin digital currency. With this in mind, there are no significant distinctions between Bitcoin and other virtual currencies in exchange and mining procedures or the encryption algorithms employed (Perdana et al., 2021). Among the most well-known virtual currencies, we give below five that we believe are worth studying:

- 1. Bitcoin: This virtual money is often regarded as the most well-known. As a coded virtual currency, it is considered to be such. In 2009, an anonymous individual went public under the name (Satoshi Nakamoto). To make it, a process is known as (mining).
- 2. The second virtual currency is Bitcoin Cash, generated from the first virtual money, Bitcoin. The software was created in 2017 and is available online. As a result of the slowness with which Bitcoin processes financial transactions, it was created. Due to the hefty fees associated with Bitcoin transfers, this technology was developed.
- 3. It is utilized and transferred through Ripple's open payment network. It was created in 2012 and is a hybrid of several technologies. In terms of popularity, it is the second most widely used virtual currency behind Bitcoin. Many banks, including Abu Dhabi Bank and CIBC Bank, accept this money as a payment method. About 10 billion dollars worth of transactions were carried out last year with the help of this digital money. This virtual currency is the only one that does not operate on a unit-based system. It makes use of a specialized worldwide network that is comparable to the Blockchain technology used by Bitcoin. The validity and authenticity of a transaction involving this currency must be ensured by the agreement of all parties involved in the transaction before it can be considered valid. This currency is intended to achieve a goal distinct from that gained through Bitcoin. Ripple may convert any currency into another as a real-time gross settlement system, and it is considered a very secure technology. It can process 1000 transactions per second, whereas Bitcoin can process 3-7. Transactions involving services, business, and finance can be completed using Ripple.
- 4. Ethereum is the fourth option for digital money and is a decentralized platform. A year later, Vitalik made the announcement. It is a sophisticated platform for the conclusion of business transactions. It is based on the Blockchain technology platform. Because of this, it offers an excellent level of protection.
- 5. To conclude, intelligent contracts are utilized as a digital signature. When it comes to Ethereum, the people who created it have already become well-known. In addition to sales and purchases, Ethereum may be used to conduct any form of financial transaction imaginable.

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- 6. In 2011, Charlie Lee invented the cryptocurrency known as Litecoin. You can swap it for other currencies with an open web platform. It is a licensed currency. When exchanging this currency, there are no fees or commissions charged. What distinguishes this money is its ability to devalue it. Compared to Bitcoin, this currency can be used in a timelier manner. The Seqwit mechanism is required for both the issuance and exchange of Litecoins. The mining method is used to generate this currency.
- 7. Regarding market value, it was recognized as one of the top five virtual currencies in 2017. If Bitcoin is the equivalent of gold, Litecoin is the equivalent of silver." According to professionals in this subject, the latter assertion is well-known.
- 8. Furthermore, it should be remembered that the ranking of each virtual currency in terms of the extent to which it is traded and its spread is constantly changing. The shift in such a ranking can be linked to the transformations in this industry. The latter changes may include the rise and fall of the exchange rate of the relevant virtual money and the increase or decrease in the time spent using it. The following table summarizes the distinctions between virtual currency and paper currency.

No.	Comparability feature	Paper currency	Virtual currency
1	Affective presence	It is physically present.	It has no physical presence.
2	Regulation	A central authority is responsible for enforcing control over this currency's use.	No central authority is accountable for enforcing control over this currency's use.
3	Issuing	It is a government-issued document (i.e., the central bank)	It is created due to the mining process conducted by a natural person or a legal body.
4	Achievement of worth	Its value is determined by the degree to which supply and demand balance.	Its value is determined by the degree to which supply and demand exist.
5	Self-value	None	None
6	Recognizability on a global scale	It is well-known throughout the world.	It is partially acknowledged on a global scale, but only partially.
7	Extent of dissemination	High	Medium
8	Difficulty in obtaining	Its forging difficulty ranges from moderate to high.	The extent to which it is exchanged is limited. It is technologically advanced.
9	Technologies	It does not necessitate extensive use of technology.	It necessitates the application of technology.
10	Issuer's fee	Low	High
11	Users who will benefit	The state and its citizens	Users online
12	Price stability	Prices are only somewhat steady.	Prices are somewhat volatile.

# The distinctions between virtual currency and paper currency are as follows:

# **Challenges to Cryptocurrency**

### 5.1 Legal Tendering Status

In terms of legal tender, it is true that when a government declares anything legal tender, it automatically gains acceptance among the local populace. Something is not required to be legal tender to qualify as money. The primary criterion for money is its acceptability by people - whether through coercion or widespread voluntary acceptance (Partanen, 2018).

# 5.2 Cryptocurrencies are Riskier



Additionally, academics who argue that Bitcoin and cryptocurrency are illegal frequently point out that Bitcoin's exchange rate is highly erratic and unstable. Speculation is an uncontrollable external entity without interest in deciding what constitutes sound money and currency. As with all other assets, including gold, silver, and fiat currencies, prices are always determined by supply and demand. It is worth noting that the exchange rate of Bitcoin and other cryptocurrencies is more volatile than that of many fiat currencies at the time of writing. As a result, trading Bitcoin and other cryptocurrencies is riskier (Zhao & Zhang, 2021).

#### **5.3Slow Processing**

Processing is sluggish so as not to compromise the integrity of the blockchain technology, which gives digital currency its exceptional level of safety. Because of this, there are practical limits on the number of transactions that can be completed in a day, which causes even the most straightforward transactions to take days to complete. About seven transactions are processed by blockchain networks every single second. Wait times will increase in tandem with the number of users. More capacity is available, but a large credit card company processes nearly 150 million transactions daily, approximately 1,700 per second. Scalability is significantly hindered by the slow processing speed required for digital currency transactions. Moreover, Bitcoin is significantly slower than other currencies (Phillip et al., 2018).

#### 5.4 The Fees for Transactions are Excessively High

The first version of the system did not include any fees associated with transactions. Because of Bitcoin's increased popularity over the past decade, users must wait significantly longer for their transactions to be added to the blockchain. The current transaction fees provided users with an incentive to cut in front of the line. Even though this could benefit a select few, it does nothing to address the issue of slow transaction processing or the enormous amount of power required for blockchain transactions in general. In addition, while the fees might assist in prioritizing some business transactions, the costs themselves might render most business transactions impractical (Vejačka, 2014).

#### Conclusion

In recent years, virtual currencies have become increasingly popular for various purposes. According to the latest estimates, virtual currencies were reportedly utilized in transactions worth approximately 505 billion USD in 2018. In most nations, the use of virtual currencies for financial transactions is on the rise. The expansion of modern technologies and the rise of globalism are credited with enabling people to adopt alternative currencies.

Bitcoin is decentralized digital money that has no central authority or physical form. Bitcoin is a cryptocurrency that uses cryptography to drive encryption mechanisms that establish ownership and verify transaction data. Satoshi Nakamoto defined the Bitcoin encryption protocol (2008). Nakamoto invented Bitcoin to eventually create 21 million bitcoins as a reward for solving mathematical formulas (required to maintain the Bitcoin ledger) through a process known as mining. Once a bitcoin—or fraction thereof—has been mined, it can be sold, used as payment for retail transactions, or held as an investment to be traded later. Bitcoin is purchased and sold through trading websites referred to as "exchanges," each of which is independently maintained and accessible to a global audience 24 hours a day, much like traditional foreign exchange trading and brokerage platforms.

Utilizing Bitcoin has numerous hazards, including that this currency's exchange rate is subject to significant fluctuation. This currency may be used in illegal transactions, such as the illicit exchange of commodities. It is possible to use it in money laundering and tax evasion operations. Bitcoin users' accounts could be compromised. It could result in Bitcoin units being lost or stolen. Bitcoin has a gambling stigma attached to it. To show further, one worker engaged in Bitcoin mining accomplishes it every ten minutes. On the other hand, other Bitcoin miners fail and forfeit their money and efforts. Most countries do not acknowledge its use, which affects the currency's value.

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