

CURRENT STATUS OF VIRTUAL CURRENCY

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ABSTRACT

Along with the strong development of the Industrial Revolution 4.0, "virtual currency" was born and used as a means of payment increasingly popular in many countries around the world. Besides, there are many different interpretations of "virtual currency". There are also many problems raised around the use, payment, or investment of cryptocurrencies in the economy. The article focuses on clarifying how to understand other virtual currencies that people easily confuse, or learn more about other issues around "virtual currency" through the fluctuations in some countries that have been using virtual currency.

Keywords: virtual currency; virtual money; bitcoin; digital currency; industrial revolution 4.0.

INTRODUCTION

"Virtual currency" is a term that may not be too new in the current period. But in fact, many people do not understand the concept and its nature. In the context of the information technology boom, especially the recent implementation of digital banking in Vietnam, the management of virtual money is very necessary. To manage virtual currency well, we need to understand its nature. The introduction to the concept as well as distinguishing virtual money from other currencies that are easily confused with it is introduced in the following article. In addition, the article introduces some popular virtual currencies today, reflects the current situation of virtual currencies in Vietnam, and provides some recommendations for good management of virtual currencies.

THEORETICAL FOUNDATIONS AND RESEARCH METHODS

Theoretical basis

Virtual currency concept

There are many different concepts of virtual currency. It is often said that virtual currency: "is an inanimate currency, used in the electronic environment. ". Or in another concept: "Is money that has no real value, and is often used to pay, buy items and services in video games, each game type will have a different currency and they do not can be used to exchange or buy and sell outside the electronic environment. "

Currently, according to the latest concept of the EU directive 2018/843 of the European Parliament and the Council comes into force. The directive defines the term "virtual currency" to mean "a digital representation of value that is not issued or guaranteed by a central bank or public authority, not necessarily tied to a currency that is legally established and has no legal status of currency or money, but is accepted by natural or legal entities as a medium of exchange and can be transferred, stored and transacted electronically."

In addition to virtual currencies, there are concepts of cryptocurrencies and cryptocurrencies. First, let's talk about electronic money, it is conceptualized as follows: "Cryptocurrency is a type of digital currency, designed to be an alternative medium of exchange for fiat money. Cryptocurrencies use algorithms to secure and confirm transactions as well as control the creation of new units in a given cryptocurrency network. ". We can own and use digital currency as a means of payment when buying goods and services... we can even transfer or exchange it for another currency. In particular, the digital currency has no geographical and political limitations, can be used as a means of payment for all transactions taking place anytime, anywhere in the world.

Electronic money is used and paid over the internet. Electronic payments date back to the 1870s when Western Union introduced an electronic money transfer system in 1871. Since then, people have focused on the idea of sending money to pay for goods and services without not necessarily present at the point of sale. Cryptocurrency payment systems have the same advantages as cash payments, namely anonymity, and convenience. The process of buying and selling goods and making payments becomes easier, or in other words, contributes to the improvement and development of e-commerce, making the operation of online shopping sites operate more smoothly and simply. Ensure the interests of the parties involved and minimize the risks of cash payment such as loss, lack of money, forgetting wallet, ...especially for transactions of great value. When using electronic payment, all transactions will be performed accurately to each number, transparent and clear. Contribute to the modernization of the payment system and make transactions faster and safer. Despite having many such advantages, to operate this currency in the economy, it is necessary to set up a system of computers, card machines, and communication networks for electronic payments, which is extremely expensive to do so.

About cryptocurrency has the following concept: "Algorithm is a digital currency, generated by complex cryptographic algorithms in the form of open-source software. Cryptocurrencies are exchanged through internet-connected devices without any intermediary or country."

In the world today, there are countless digital currencies (digital currencies), the most prominent and most well-known is Bitcoin, in addition to other digital currencies such as Ethereum, Litecoin, Ripple, Storjcoin X, Mailsafecoin, Virtual currency Bitcoin and other digital currencies help individuals transfer money and pay bills for goods and services similar to current online payment transactions. Banks can mine Bitcoin and other virtual currencies to support capital, international transactions, and reduce dependence on the use of foreign currencies. However, it is necessary to apply the blockchain distribution model (Blockchain) to financial technology (Fintech) solutions, thereby exploiting the advantages of digital currencies reasonably, following the monetary and banking regulations, to prevent the risk of rampant and free development.

Blockchain.com (formerly Blockchain.info) is a cryptocurrency blockchain explorer service, as well as a cryptocurrency wallet and cryptocurrency exchange that supports Bitcoin, Bitcoin Cash, and Ethereum. They also provide Bitcoin data charts, statistics, and market information. Blockchain.com was launched in August 2011 and was founded by Ben Reeves, a founding team member at cryptocurrency exchange Coinbase.

In the financial world, the applications are clearer and revolutionary changes are imminent. Blockchain technology will change the way stock exchanges work. Loans and insurance contracts. Blockchain technology will eliminate bank accounts and services provided by banks. Almost every financial institution will go bankrupt or be forced to radically change. Once the advantages of a secure ledger with no transaction fees are widely understood and implemented. After all, the financial system is built on cutting a small amount of your money for one transaction. The banker will become a mere advisor, not a treasurer. Stockbrokers will no longer be able to earn commissions and the buy/sell spread will disappear.

Blockchain technology is described: A party to a transaction begins the process by creating a block. This block is verified by thousands, perhaps millions of computers distributed across the network. The verified block is added to a chain. Stored on the network, creating more than a single record. Which is a single record with a unique history. Blockchain technology does not create transaction costs (Infrastructure costs are there, but there are no transaction costs). Blockchain is a simple yet ingenious way to transmit word information automatically and securely. The blockchain database is not stored in any location. That means the records it keeps are truly public and verifiable. There is no centralized version of this information for hacker access.

Reasons why blockchain has become a 4.0 technology trend:

- + It is not owned by a particular entity
- + Data is stored in encrypted form
- + Blockchain is immutable, so no one can tamper with the data inside the blockchain
- + Blockchain is transparent so people can track data if they want

Currently, Blockchain has 3 versions below:

1. Blockchain 1.0 – Currency and Payment: The main application of this version is cryptocurrency: including currency conversion, remittance, and creation of a digital payment system. This is also the area most familiar to us that sometimes quite a lot of people mistakenly believe that Bitcoin and Blockchain are the same.
2. Blockchain 2.0 – Finance and Markets: Banking and Financial Processing: Scaling up Blockchain, bringing in financial and market applications. Assets include stocks, checks, debit, title, and anything related to an agreement or contract.
3. Blockchain 3.0 – Design and Oversight: Bringing Blockchain beyond financial borders, and into fields such as education, government, healthcare, and the arts. In these fields, there will be many types such as physical, digital, or human.

Blockchain cannot forge, cannot destroy Blockchain chains: in theory, only quantum computers can decipher Blockchain, and Blockchain technology disappears when there is no Internet in the world.

Perhaps Blockchain technology is the most outstanding invention from the Internet itself so far. It allows the exchange of value without the need for trust or credible evidence.

The most known and discussed application of blockchain technology is Bitcoin. A digital currency that can be used to exchange products and services, like the US dollar (USD), Euro (EUR), dong (Vietnam), and other national currencies. Use this first application of blockchain technology to learn how it works.

Research Methods

The article uses a qualitative method: a combination of the analytical method based on the collected secondary data with the method of analysis and synthesis to make judgments and conclusions.

RESULTS AND EVALUATE

Results

There are some popular virtual currencies below.

- **Bitcoins**

Bitcoin (symbol: BTC, XBT,) is a cryptocurrency, invented by Satoshi Nakamoto as open-source software in 2009. Bitcoin can be exchanged directly by an Internet-connected device without the need to go through an intermediary financial institution. Bitcoin works differently from typical currencies: there is no central bank to manage it, and the system is based on a peer-to-peer network protocol on the Internet. Bitcoin supply is automatic, limited, distributed on a predetermined schedule based on algorithms.

Currently, there are no regulations or legal frameworks to manage Bitcoin transactions from the Government: In February 2014, the State Bank of Vietnam issued a press release, stating: Using Bitcoin as a means of payment is not recognized and protected by law. In addition, the Ministry of Industry and Trade has not yet recognized Bitcoin as a good or service, denying its authority over Bitcoin. This also abolishes the basis for collecting tax on Bitcoin because Bitcoin cannot be included in the list of goods or services for tax collection in the first case in Vietnam related to virtual currency that occurred in Ben Tre in 2018. 2017. On August 21, 2017, the Prime Minister signed and approved the project to complete the legal framework to manage virtual assets, cryptocurrencies, virtual currencies, including Bitcoin. This is the official signal from the Government that Bitcoin transactions will be legalized in August 2018 with the possibility of classifying Bitcoin into the category of virtual assets.

Thus, trading, owning, and mining Bitcoin in Vietnam is not a violation of the law but has not been regulated. In fact, "unregulated" is the best legal form for business because it is not bound by regulations. The "payment" using Bitcoin is also not illegal, because not recognizing Bitcoin as a means of payment means that the exchange between goods and Bitcoin is not paid as defined by the Bank. Government. However, in reality, domestic Bitcoin businesses have been restricted by other administrative methods from the Government.

Currently, the Bitcoin price is at 1,017,317,000 VND per Bitcoin as of February 8, 2021. Transaction fees may apply for new transactions depending on network resources. In addition to transaction fees, miners are also paid for creating blocks that contain transaction logs. Every 10 minutes, a new block is generated with a certain amount of Bitcoin allocated. The number of bitcoins allocated per block depends on the uptime of the network. In May 2020, 6.25 bitcoins are allocated for each new block. The rate of inflation will halve to 3,125 bitcoins around May 2024 and continue to halve every 4 years until a total of 21 million Bitcoins are issued by 2140. In addition to Bitcoin mining, Users can obtain Bitcoins by exchanging them for Bitcoins when selling other currencies, goods, or services.

Bitcoin is the most typical, firstborn, and most widely used cryptocurrency in e-commerce. Businesses tend to want to pay in Bitcoin to minimize costs. By February 2021, Bitcoin's base currency is valued at more than \$805 billion - the largest cryptocurrency by market value. Large fluctuations in the value of each bitcoin have prompted criticism of Bitcoin's economic suitability as a currency. On February 8, 2021, after the exchange between two billionaires Michael Saylor and Elon Musk on Twitter earlier, Tesla announced it had bought \$1.5 billion in Bitcoin in the filing with the SEC and will receive payment. in Bitcoin for electric cars Tesla - promises a chain of events accepting Bitcoins from other major tech corporations. At the same time, the price of Bitcoin surpassed 1 billion dong.

In 2016, the number of businesses accepting Bitcoin surpassed 122,000. As of December 2014, major companies accepting Bitcoin payments include Atomic Mall, Clearly Canadian, Dell, Dish Network, Dynamite Entertainment, Expedia, Microsoft, Newegg, PrivateFly, Overstock.com, Sacramento Kings, TigerDirect, Time Inc., Virgin Galactic, Valve, and Zynga. As of September 2014, PayPal allowed businesses in North America to use their system to receive payments in Bitcoin. In Vietnam, only a handful of services accept Bitcoin. However, many global businesses allow Vietnamese people to pay with Bitcoin for their services, typically: BitRefill phone card recharge service, flight ticketing service, hotel booking, and car rental service. at Expedia, buy online

In addition, unlike the currencies issued by the government (fiat currency), Bitcoin has the following additional advantages:

- No central bank: Avoiding inflation when the central bank prints money for financial institutions and corporations to borrow money when doing business at a loss. For example, in 1986, the base amount of Vietnam's currency was 55 billion VND, in 2016, this amount was 726,559 billion VND.
- No need to transact through intermediaries: Minimize banking costs and intermediary financial channels. Trade at any time including holidays. No one has the right to freeze any account or stop trading.
- It is almost impossible to create Bitcoin by yourself, but it is possible to mine Bitcoin - an important characteristic of gold.
- Cannot be counterfeited. The cost of verifying the quality of gold is very high, and the verification of Bitcoin does not cost anything.
- Currencies are divisible to near infinity, making accurate payments very easy.
- Less dangerous for stores that accept Bitcoin transactions because the transaction cannot be charged back.
- Protect the environment by not having to produce cash. The computer system that processes Bitcoin transactions consumes much less electricity than the current global financial system.
- As a smart currency: Able to program into each satoshi to spend money or self-activating with smart contract to avoid corruption or fraud.

According to the director of the Institute of Currency, Technology, and Finance at the University of California - Irvine, there is still debate as to whether Bitcoin is a currency or not. Bitcoin is often referred to by the terms: Digital currency, virtual money, electronic money, cryptocurrency. Journalists and pundits are also debating what to call Bitcoin. Some newspapers seek to distinguish "real" money from Bitcoin, while others call Bitcoin the real currency.

- **Ethereum**

Ethereum (ETH) is a decentralized open-source blockchain system that has its cryptocurrency, Ether. ETH acts as a foundation for many other cryptocurrencies, as well as for decentralized smart contract execution.

Origin and Formation: Ethereum was invented by a young Russian talent named Vitalik Buterin in 2013 and brought to market with a beta version in July 2015 with the capitalization of the first sale up to \$25 million. Ethereum works similar to Bitcoin, you can mine, exchange, trade through the currency Ether. Accordingly, in some respects, Ethereum can be considered as a useful application, because Ethereum has created its own distributed financial ecosystem.

Unique Features: Ethereum has pioneered the concept of a blockchain smart contract platform. Smart contracts are computer programs that automatically perform the necessary actions to execute an agreement between several parties on the internet. They are designed to reduce the need for trusted intermediaries between parties to a contract, thereby reducing transaction costs while increasing transaction reliability.

As of March 12, 2021, the amount of Ether issued is up to 115,016,580 ETH. The market capitalization reached \$205,070,460,267 (2nd in the market just behind Bitcoin). Currently, the price of 1 ETH fluctuates in the range of \$1700-\$1900 and is on a steady growth trend. Additionally, ETH trading pairs are listed on nearly all major crypto exchanges. Some of the biggest exchanges include Binance, Coinbase Pro, OKEx, Kraken, Huobi Global.

Ethereum was invented and appeared on the market much later than many other virtual currencies, but with the current development rate, many experts believe that Eth will be able to surpass Bitcoin, a cryptocurrency. current greatest value.

- **Litecoin**

Litecoin (LTC): is one of the popular cryptocurrencies today after Bitcoin. Litecoin is based on a peer-to-peer or peer-to-peer (Peer-to-Peer) platform, and uses the Scrypt algorithm as Pow (Proof of Work) instead of SHA256 like Bitcoin, because of this feature it helps virtual currency miners and when it is possible to mine Bitcoin and Litecoin. This cryptocurrency was released via an open-source crypto application on GitHub on October 7, 2011, by Charlie Lee - a Googler who later became the Chief Technical Officer at Coinbase, the Litecoin network. went live on October 13, 2011, and it was created as a Bitcoin alternative. Litecoin has a faster payment speed (blockchain processing speed of about 2.3 minutes), cheaper, more modern than Bitcoin, so users can mine or use it to exchange for products and services. . As of January 2021, Litecoin's market cap is \$10.1 billion and each token's value is \$153.88. Litecoin is an open-source and pure distributed global payment network that does not require any central governing entity. The network is secured by the laws of mathematics and puts each person in control of his or her finances. Because of significant industry support, trading volume, and liquidity, Litecoin is a proven medium of commerce alongside Bitcoin.

- **Ripple**

Apple (XRP): is the collective name of a cryptocurrency that allows the connection of banks around the world to facilitate cross-border payment and transaction systems. XRP is a token used to represent the value of the Ripple coin. The origin of the Ripple coin is older than the "king" of virtual currency Bitcoin. Starting in 2004, the founder, Mr. Ryan Fugger, who first laid the foundation or developed the prototype of Ripple coin as a decentralized digital currency system (Ripple Pay) and has been working, officially launched in 2005. By 2012, Jed McCaleb Arthur Britto and David Schwartz joined and implemented Ryan's idea through a company called OpenCoin, with pretty much the same functionality as Blockchain. Since then, Ripple was built as a protocol focused on global payment solutions. In 2013, the company OpenCoin changed its name to Ripple Labs and Ripple in 2015. Since its creation, Ripple has had a total supply of 100 billion coins, with a value of about 10,275 VND 1 Ripple coin. Ripple owns a very large capitalization, so Ripple coin is not randomly ranked 3rd in the world in terms of virtual currencies according to Coinmarketcap's rankings. Ripple coin has been competing with the big players in the virtual currency market to become a huge force in the trading market.

The current situation of virtual currency in Vietnam

According to the results of Statista's global consumer survey 2020, it shows that Vietnam ranks second in popularity of virtual currencies after Nigeria. In Vietnam, there are many forums and closed groups about virtual currency with tens of thousands, even hundreds of thousands of people participating more and more. According to unofficial information compiled from statistics of foreign digital sites, it is estimated that Vietnam also has more than 10 million virtual currency investment accounts, at least 5 times higher than the current number of securities accounts. now on. In Vietnam today, investing in virtual money is becoming a fever. There are countless websites offered by brokers to Vietnamese investors such as Ethtrade, Bitcoinnect, LargoBit, CoinReum, Questra, Iseiko... Based on Blockchain blockchain technology, virtual money is developing like a storm. Since 2016, a machine similar to an ATM but Bitcoin transactions has appeared in Ho Chi Minh City. FPT University has become the first university in Vietnam to announce that it accepts students to pay tuition fees in Bitcoin. In the immediate future, this form will apply to foreign students. Students first use Bitcoin to transfer money to Vietnam, then can exchange from Bitcoin to cash to submit to the school. Although the investment and use in payment with virtual money in our country have existed, since 2013, the State Bank (SBV) has confirmed that Bitcoin and similar cryptocurrencies are not currencies. legal and not legal means of payment in Vietnam. Recently, the State Bank continued to reaffirm that virtual money is not accepted as a means of payment. On July 21, 2017, the

State Bank of Vietnam issued Official Letter No. 5747/NHNN-PC to the Government Office to reply on the issue of bitcoin and Litecoin with content 5 identifying virtual currencies as above are not currencies and are not legal means of payment. Previously, this agency has repeatedly warned people and investors about the risks of virtual currency investment. Just like before, the SBV has submitted to the Government for promulgation Decree 80/2016/ND-CP amending and supplementing several articles of Decree 101/2014/ND-CP on non-cash payments. In particular, supplementing regulations on legal means of payment in Vietnam (excluding bitcoin and virtual currencies) and supplementing regulations prohibiting the issuance, supply, and use of illegal means of payment. such as Bitcoin and similar virtual currencies). Never before, in Vietnam, has the appearance of virtual money been as rampant as it is now. Although virtual currency is becoming a difficult trend of the 4.0 technology revolution, in Vietnam, even if it has not been accepted yet, virtual money has had many scary variations, especially Multi-level business general, online gambling. According to the provisions of the 2014 Investment Law on the State's policies for business investment activities, the subject is allowed to conduct investment and business activities in sectors and trades that are not prohibited by the Investment Law. In the industries banned from business investment specified in Article 6 and conditional business lines specified in Article 7 of the Law on Investment 2014, neither business activities related to virtual currency are listed. Thus, according to the provisions of the Investment Law 2014, business activities related to virtual currency are not considered as prohibited business lines. Fundraising activities with virtual money (ICO) or virtual currency exchanges still take place, subjects still conduct business activities, transfer, contribute capital, mobilize investment capital ... with virtual currencies. However, the process of establishment, establishment registration, tax code issuance, responsibilities or activities, or sanctions related to virtual currency is currently still open to the law, along with the settlement of legal issues. Disputes related to these activities also do not have an appropriate mechanism to settle them. This is a fertile ground for fraudulent ICO activities, multi-level business and happened in our country, typically the cases of virtual currency iFan, AOC or VNCOINS... The State bank has mentioned two reasons for not accepting virtual currency are: Firstly, if accepting it as a currency or a legal means of payment, the national sovereignty over the issuance of the currency is infringed, affecting the effectiveness of regulation. monetary policy (virtual currency is outside the scope of management and regulation of the central bank). Second, if the virtual currency is accepted, it will facilitate tax evasion, illegal money transfer, payment, financing of illegal transactions because payment transactions in virtual currency are anonymous, with no traces. Worth mentioning, most of the virtual currency investment trust mobilization floors have overseas addresses, unclear identities. This affects and poses a great risk to the protection of interests of virtual currency investors. Thus, in Vietnam, virtual currencies are not recognized as a means of payment. If they issue, store, supply them and use as a means of payment, they may be prosecuted for criminal liability. However, currently, there is no regulation in Vietnamese law regarding the consideration of virtual currency as a commodity, an object for exchange and purchase. Therefore, investment activities in virtual currency can still take place, but at the same time, it also brings great risks to investors.

Evaluate

Three main disadvantages still exist.

First, the most basic as well as the biggest problem with today's virtual currency in the world is the legal issue. Regarding not being recognized as an official currency in some countries and territories. For example, China has banned Bitcoin, with the assessment that this virtual currency contains many risks. In the Russian Federation, the Federal Prosecutor's Office issued a regulation, prohibiting the use of Bitcoin virtual currency as well as other digital currencies. In Vietnam, the State Bank of Vietnam has a document prohibiting credit institutions from using Bitcoin and other similar virtual currencies as a currency or means of payment. Credit institutions may not use Bitcoin and other similar currencies as a currency or means of payment when providing services to customers. One of the main reasons for the above-mentioned countries not to recognize virtual currencies is that this currency is difficult to manage or there is no clear legal basis for the state to base and manage the circulation of the currency. this. Some of the reasons why virtual currencies have been banned from circulation and use in the above countries are that they are circulated on the Internet, not through any intermediaries, and can be circulated. the cross country easily. This has created an opportunity for criminals to use virtual currencies to make payments with each other, or virtual currencies to be used as a method of money laundering. Because there is no transaction intermediary, the legal authorities in the above countries cannot control and review the information of the buyer and seller of this currency.

Second, virtual currencies are stored in an encrypted form, so it is not easy to store and preserve these virtual currencies. Virtual currency is a high-tech currency with its coding, so it tends to choose users. Only those who understand and have a good grasp of it can safely use these virtual currencies. So it can be said that not everyone can use virtual currency, so this currency is still quite inadequate for most users in the world. Another reason is that the cost of storing this currency is also quite expensive, so users do not choose it.

Third, the prices of these virtual currencies fluctuate wildly depending on the age of technology. Or some event caused by an individual or organization can boost the price of this virtual currency or the price of that virtual currency will not stop. For example, billionaire Elon Musk just dropped a single word "Bitcoin" on his Twitter page, immediately the value of this digital currency increased by 17% in just a few minutes, an unprecedented phenomenon. Elon Musk is considered the billionaire of futuristic inventions. Therefore, whatever he touches, it is immediately considered a wise investment. It can be said that in the past 1 month, Elon Musk's Tesla company and Bitcoin are close- friends despite being in two unrelated fields. In the past few days, when this digital currency fell in value, Tesla's electric car company's stock immediately dropped 5%. This shows how the value of Bitcoin depends and is easily tied to the fringes. What many predicted has finally come, on February 23, Bitcoin left the \$ 58,000 mark, plummeted to \$ 45,000, temporarily stopped here, and "crawled" slowly to the \$ 50,000 mark. In general, the price of virtual currencies also depends on several events associated with the development of technology. It is difficult to know how erratic the price of this currency is. This is also a major inadequacy for investors who choose to invest in these virtual currencies. We can liken the price movement of these virtual currencies to a roller coaster.

RECOMMENDATIONS

First, the State needs to invest in building and developing information technology infrastructure, building and improving the qualifications of a team of financial experts, encryption, and security experts to be able to easily control.

Second, it is necessary to disseminate knowledge about the use of this currency to users. To prevent bad actors from using them for criminal purposes or trading in prohibited goods.

In addition, for investors, it is necessary to learn carefully and be very knowledgeable about the field as well as the place where they intend to invest to avoid investing in ghost companies or losing money during the investment process creates other consequences. As well as a need to be careful in choosing the area of trustworthy people to invest in, not following the crowd or trend.

REFERENCES

Legislation:

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2. Decree 80/2016/ND-CP amending and supplementing some articles of Decree 101/2014/ND-CP on non-cash payment
3. Decision 1255 dated August 21, 2017, approving the Scheme on Completing the legal framework for the management and handling of virtual assets, cryptocurrencies, and virtual currencies

Some websites

- <https://thanhnien.vn/>
- <https://nld.com.vn/>
- <http://www.div.gov.vn/>
- <https://vov.vn/>
- <https://vneconomy.vn/>

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