

An Investment Value Analysis of Bitcoin Trading

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Abstract. Based on the global economic downturn, the price of Bitcoin has recovered, and new investors are constantly pouring into the Bitcoin market. To ensure that new investors have a basic understanding of Bitcoin and avoid unnecessary losses, this article will analyze Bitcoin's Trading Mechanisms, Price Influencers, and Trading Recommendations. The main research finds that when Bitcoin is used as a currency, commodity, risk asset, and digital gold, the price factors are quite different. For example, when it is used as a risk asset, its price is affected by capital flows, market sentiment, and policy regulation. The multiple nature of Bitcoin will have a greater impact on investors' judgments. Through research, it is found that Bitcoin is still the virtual currency with the largest volume, the largest transaction volume, and the brightest future development prospects. The diversity of its nature brings risks but also brings a variety of advantages of to the single currency or other financial products.

Keywords: Bitcoin transaction mechanism, Bitcoin price factors, Digital currency.

1. Introduction

1.1 Background

Since the price of Bitcoin dropped sharply in 2021 and the attention has decreased, people have reduced their attention to Bitcoin, but the price of Bitcoin once climbed to \$50,000 in 2022. At this time, the global economy is in a downward trend, so more people have set their sights on investing in Bitcoin, but the vast majority of investors are still losing money. There are already many high-level theoretical articles about Bitcoin, but they are not for new traders. To avoid unnecessary losses for new traders due to their lack of understanding of Bitcoin, this article will introduce the basic nature of Bitcoin itself, and trading methods and give some pertinent suggestions.

1.2 Related Research

Nian et al. discussed the evolution of digital currency and the universal characteristics of Bitcoin and its benefits, and also proposed conjectures on the development of Bitcoin. The authors found that the blockchain technology brought by cryptocurrencies such as Bitcoin is undoubtedly huge for the development of the economy and technology, and the government can better promote financial integration through cryptocurrencies. These are the improvements in cryptocurrencies to the world. But at the same time, cryptocurrencies such as Bitcoin also have their shortcomings. Investors must recognize the shortcomings of these cryptocurrencies before they can handle them properly [1]. Feng et al. conducted an in-depth analysis and research on informed trading in the Bitcoin market and used a new indicator designed for the cryptocurrency market and transaction-level data of USD/BTC exchange rates to observe the trading dynamics of informed traders in Bitcoin trading. The authors found that the phenomenon of informed trading does exist in the Bitcoin trading market, and a large number occurred before major events happened in the market. Informed traders use their early understanding of events to turn ordinary traders' losses into profits [2]. Jain et al. analyzed Commonalities in returns and trading volume in Bitcoin markets in different regions. The authors found that although Bitcoin transactions are conducted around the clock like other foreign exchanges, the difference is that Bitcoin does not have a local market, and its trading model depends on the place of trading rather than the location of the assets traded [3]. Blau explored the value and volatility of Bitcoin and tested whether speculative trading is an important cause of Bitcoin's unusual level fluctuations. The author found that even if the government or the people are worried that Bitcoin will

become a source of financing for criminal activities, it is just a speculative investment. But in fact, from all aspects of data, speculative trading does not affect the price fluctuation of Bitcoin, which means that Bitcoin is not a speculative investment as people think, but just a normal currency [4].

Kim analyzed the exchange rate of multiple currencies against Bitcoin and study the empirical transaction costs of Bitcoin in international transactions. The author found that when Bitcoin converts the two currencies as a trading medium, the overall exchange rate is usually better than the exchange rate directly between the two currencies. In addition, the author analyzed the data and found that the high efficiency of the Bitcoin market is the source of its cost advantage [5]. Sapuric et al. financial-related data have been widely collected and studied on this basis. Research on the link between Bitcoin and ordinary currency volatility precisely, assuming that there is a link between the two, that is, the Bitcoin exchange rate has an impact on the volatility of ordinary currencies. The authors found that contrary to traditional belief, the volatility of the Bitcoin exchange rate does not seem to tremble when considering its huge trading volume. On the contrary, it is very stable. In addition, the author also wants to remind people not to be too nervous about exchange rate changes when holding a currency [6]. Gemini et al. analyzed the relationship between transaction volume and price by collecting data on Bitcoin market transactions from January 1, 2012, to April 7, 2018, and conducted symmetric and asymmetric causality tests. The author found that unilateral causality from a negative shock in Bitcoin price to volume and from a positive shock in volume to price was observed at the 1% significance level. In other words, Bitcoin is high-risk, and investors continue to trade and expand their trading volume precisely because Bitcoin assures them that the price will continue to rise. At the same time, the weak effect of Bitcoin trading volume on price also prevents investors from being dissatisfied with Bitcoin's price drop [7].

Gerritsen et al. analyzed daily price data of the Bitcoin market from July 2010 to January 2019 using different trend-following indicators. The authors found the profitability of specific trading rules is stable across the sample and in better trading markets than just buying and holding strategies, which means when investors use a specific trading combination to trade, they often earn far more than the average trader [8]. Sahoo gives a critical analysis of Bitcoin's continued growth as a cryptocurrency in the future. The author found that with the more frequent occurrence of currency transactions with Bitcoin as an intermediary, the transaction volume of Bitcoin also shows a trend of continuous growth. But due to the illegal nature of Bitcoin and the attacks on exchanges by hackers, most governments have not given it legal status. However, it is foreseeable that when Bitcoin stabilizes and is accepted by most governments, its security problems will become easier to solve [9]. Urquhart used trending data on Bitcoin transactions on Google to analyze why Bitcoin is getting a lot of attention. The author found that Bitcoin's volatility and trading volume are the root cause of its widespread attention, which means when Bitcoin has large volatility or a surge in trading volume a day earlier, traders will be swayed by this information. attract more transactions [10].

1.3 Objective

This article studies the trading mechanism of Bitcoin: what platform to trade on, how to do long and short, and under what circumstances to trade. What are the factors that affect the price, and some investment advice for new bitcoin traders?

2. Transaction mechanism of Bitcoin

Satoshi Nakamoto first proposed the concept of Bitcoin on November 1, 2008, and two months later, Bitcoin was officially born. Although Bitcoin is a virtual currency and its quantity is limited, people can still use it to cash out. Most of the countries where the government supports bitcoin allow the use of bitcoin for currency exchange, and people can also use bitcoin to buy some virtual items, such as purchasing props, decorations, etc. in online games. You can even use bitcoin to buy real-life items (with their permission). But Bitcoin is still different from fiat currency in the traditional sense. The biggest difference between Bitcoin and fiat currency is that Bitcoin is issued through the

calculation of network nodes and there is no legal issuer, which also means that Bitcoin is traded and manufactured globally. Everyone is allowed to participate in mining, buying, and selling Bitcoin. As well as accepting other people's bitcoins on an internet-connected computer. The fixed number of Bitcoin itself at 21 million is another reason why it attracts traders to participate in the Bitcoin exchange market.

Bitcoin is electronic cash similar to email, and the concepts of "Bitcoin wallet" and "bitcoin address" were born and reused in transactions. Bitcoin is sent directly to the recipient's address through Internet channels such as computers or smartphones, just like sending and receiving emails. Bitcoin addresses and private keys are like bank card numbers and passwords because they always appear in pairs. Bitcoin addresses can be understood as bank card numbers, and how much Bitcoin people deposit can be tracked at that address. Bitcoin addresses can be generated and used to store Bitcoin at will. At the time of generation, the private key corresponding to its address is also born with one of the Bitcoin addresses. This private key proves that people hold Bitcoin at that address and how much it is. We can simply put the Bitcoin address and the private key of the address like the password of the bank card number and the corresponding bank card number. The money on the bank card number can only be used when the bank PIN code is sent to people's mobile phones. Therefore, the address and private key of the Bitcoin wallet should be safely saved.

The iconic operation of the transaction initially recognized is when the transaction data of Bitcoin is packaged into a "block" or "block". After blocking the link to the previous block, the transaction is further confirmed by linking the block to the previous block. After six consecutive confirmations, the transaction was finalized and irreversible. Blockchain stores all historical transaction records from the Bitcoin peer-to-peer network. Blockchains are continuously extended, and when new blocks are added to the blockchain, they cannot be deleted. Blockchain is a distributed database, which consists of a set of decentralized client nodes and a distributed database composed of all participants, which is the transaction history of all Bitcoins. Satoshi Nakamoto predicts that when the amount of data increases, the client does not want all the data to be stored in its node. In order to achieve this goal, he introduced the hash function mechanism. This mechanism enables clients to automatically eliminate parts that they will never use, such as some very early Bitcoin transaction records.

Bitcoin transactions are constantly being accepted by many technology-oriented websites. There is no doubt that Bitcoin is not a virtual currency like Tencent's Q coin, but a real currency. Many professional Bitcoin third-party companies that can provide API interface services are constantly emerging.

Bitcoin can be purchased directly, and another more cumbersome way is to become a miner and use computers to "excavate" Bitcoin. In order to provide the required numbers for the Bitcoin network, miners use computers to decrypt repeatedly and compete with other miners. If the computer can successfully create a set of numbers, miners will get 12.5 Bitcoin. The number of bitcoins is fixed, and a fixed number of bitcoins is created per unit calculation time, that is, 12.5 bitcoins per 10 minutes. By 2140, the number of Bitcoin in circulation will reach 21 million. In other words, the Bitcoin system is self-sufficient, transcoding to resist inflation and prevent others from destroying it.

3. Bitcoin Price Influencing Factors and Precautions

Of course, these behaviors are only to predict the price of Bitcoin, and cannot give a positive answer to price fluctuations. So why is Bitcoin's price so unpredictable? Next, we will analyze the formation of Bitcoin price and its influencing factors from four angles (currency, commodities, risk assets, and digital gold).

3.1 Currency

First, as we all know, Bitcoin is a decentralized digital currency, while the previous currency, the traditional currency is a generic equivalent and a medium for transactions between people. In ancient times, people adopted the transaction mode of barter. When currency appeared, they used currency

as an intermediate medium for transactions. Taking China as an example, the RMB is issued by the People's Bank of China, and behind the central bank is the military or the government as an authority, or a credit subject. This gives them the right to mint and price the currency. From this, it can be seen that the currency is priced by the government of the region where it is located, such as the US dollar is priced by the Federal Reserve. Traditional currency is a product of long-term depreciation in modern understanding. When people's asset growth rate is lower than that of currency, it means that they will continue to lose money. However, Bitcoin has no such organization to price it. As a brand new currency, Bitcoin has a total circulation of 21 million and will never be issued, which means that it is a deflationary currency rather than an inflationary currency. So when people regard Bitcoin as a currency, its appreciation has its inherent logic.

3.2 Commodity

Second, when Bitcoin is considered a commodity, its price is determined only by supply and demand. In the "commodity" of bitcoin, its supply is its output, that is, relying on "mining" to produce bitcoin, which is its only source. A total of 18 million bitcoins have been produced since 2009. Daily output is constantly deflationary as the total becomes smaller and smaller, which is a classic marginal utility: less and less bitcoin will be produced. The cost of Bitcoin is the cost of mining machines and electricity, and the cost of mining machines far exceeds the cost of electricity. However, supply alone cannot support the price of Bitcoin, so demand is also needed. Among traders' needs for Bitcoin, the first point is to store and store value. Bitcoin is considered the true privatization of personal property that no one person or organization can control. The second point is that some people simply love Bitcoin as a digital currency and believe in blockchain, so these people will buy Bitcoin as a collection. But the biggest demand is gray transactions, such as money laundering, and asset transfer. So until now, as a cryptocurrency, the demand side of Bitcoin is more in a gray area, which also means that its transactions cannot be controlled. To sum up, the cost side is a huge anchor value for the price of Bitcoin.

3.3 Risk asset

Third, what influences the price of Bitcoin when it is viewed as a risky asset? The first and foremost is the flow of funds, that is to say, as long as there is a large-scale inflow of funds into the Bitcoin market, these huge amounts of funds will push its market to continue to rise, and when there is a large-scale outflow of funds, the entire market will fall. The Bitcoin market from 2016 to 2018 is a typical incremental market, and from 2018 to the present, it is a stock market. When referring to the number of funds, the trading volume is an important indicator. The second factor that affects its price is market sentiment. When traders' enthusiasm for trading is high, a bull market may come, and Bitcoin will get more premium, and when traders panic about trading and selling Bitcoin in large quantities, its price will get a negative premium, or even below its intrinsic value.

3.4 Digital gold

Fourth, consider Bitcoin as a kind of digital gold and how its price is affected. Gold in the traditional sense has the properties of being divisible, non-corrosive, and non-renewable, and it also has mining costs. Its high credibility is developed from history, so gold is very valuable. And Bitcoin also has the same properties as divisible, non-corrupt, non-renewable, mining cost, and so on. In theory, Bitcoin can be compared to gold, but the degree and scope of its recognition are too narrow, and it is not as globally recognized as gold. But if people continue to use bitcoin as digital gold, its value will continue to rise.

4. Bitcoin investment advice

4.1 Source of principle

Bitcoin seems to share the dividends of the blockchain in the long run. After all, there is Bitcoin first and then blockchain. In the short term, the entire long-term process will always be accompanied by constant disagreements and games between funds. The long-term inevitability can hardly hide the short-term game, so the source and attributes of the investor's principal determine whether the investor's mentality can withstand short-term fluctuations. Whether the source of the principal is healthy or not should be in the following order: own idle funds > own funds > family funds > other people's funds > borrowed funds.

For a novice, if the principal cannot be self-owned idle funds, at least it must be self-owned funds. Before years of experience have proved that they are fully capable of investing, the latter three options will only add to our future. Endless trouble and risk. We have a relatively high risk of credit and financial bankruptcy.

4.2 Reasonable risk-reward expectations

In the beginning, it is best to have the expectation of the risk-reward ratio. If you want to achieve an amazing rate of return, if you invest in ICO or various altcoins as your profit model, then it will also face the same risk of loss. model. A fool would ask, why not choose a 0-loss 100-times return? Smart people will ask, why not choose a 30% loss 3 times the yield? You just need to ask yourself, as a novice, how can we get excess returns in the market.

4.3 Do not make major decisions in a booming market

The market is like this. There are bull markets and bear markets. When the bear market is long and the market falls, it will slowly try to guide the currency price to appear on the right side. The old birds who have been paying attention to the market for a long time will usually find the signs and actively follow up. response. Amateur investors with relatively unobstructed information channels will follow up again later, and the constant money-making effect has also made players in the field continue to increase their investment, which eventually led to a wave of public investment.

When we must not persuade colleagues, classmates, and family members around us to invest in Bitcoin, this risk cannot be borne by everyone. Of course, this does not mean that you are a selfish person, because the public group is very large, and everyone's ability to resist risks is different, so our investment does not mean that others are also suitable. And it is very likely that when a loss occurs, the relationship between them will be affected.

4.4 Emphasis on information and less on conclusions in the face of investment advice from others

During the investment process, we will be faced with all kinds of investment advice directional or implied. For example, each of us more or less follows some celebrities and big Vs through social platforms and communication software. If you are a big boss, you may have more opportunities to get in touch with investment advice, such as press conferences, market analysis, various Eco-meetings, and more. Smart investors often analyze their conclusions after obtaining various information. In other words, they usually don't care about the other party's conclusions, but only care about the other party's information itself. And the failed investors are not only reluctant to analyze and draw their conclusions, but also care about the other party's conclusions, such as whether they will rise after so much, whether the dealer will pull the market, and if they can't get a positive answer, they will still Angry annoyed. Most people may not believe it, but because of this psychology, the wealth of many people are continuously harvested in the currency market every year.

5. Conclusion

The article explores some basic information about Bitcoin, the trading framework, and the factors that affect the price of Bitcoin. Through the understanding of four different properties, this paper analyzes how the price of Bitcoin is affected as a currency, a commodity, a risk asset, and digital gold. When Bitcoin acts as a currency, the intrinsic reason for its price growth is that it has deflationary properties as a value-adding logic. When Bitcoin is regarded as a commodity, its price influencing factors are the same as ordinary commodities, which are supply (the cost of mining) and demand (stored value, hobby collection, gray transaction). When looking at Bitcoin as a risky asset, its price is affected by capital flows, market sentiment, and policy regulation. When looking at Bitcoin as digital gold, its price is influenced by its level of acceptance. Through the analysis of bitcoin, this article tells new investors and people who want to become bitcoin investors that bitcoin can make higher profits, but due to its diversification, uncertainty in price changes, and large, Therefore, people who choose to invest in Bitcoin should be fully prepared and have a good attitude, otherwise, they will lose themselves in the huge Bitcoin market.

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