# Analysis of Whether Bitcoin Can Help Individual Investors Hedge Their Risks as a Safe-haven Asset

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*Abstract:* Nowadays, investment in Bitcoin has become the focus of many investors. Many researchers have conducted a lot of research and discussion on the value of Bitcoin. To this day, there is still a lot of debate about the investment value of Bitcoin. This paper mainly reviews the origin of Bitcoin, its development degree in today's economic life, and some of its advantages and disadvantages based on relevant literature research. The author compares it to Safe-Haven Asset from an investor's point of view. Bitcoin investments are still, in many ways, less safe-haven and valuable than traditional gold, for example. Finally, it is concluded that investors should not use Bitcoin as a safe-haven asset to make a lot of inappropriate investments.

Keywords: Bitcoin, safe-haven assets, digital currency, economics

#### 1. Introduction

Since the advent of Bitcoin, the development of Bitcoin and the research on Bitcoin have been of great significance in the fields of electronic information technology, finance, society, and so on. So far, cryptocurrency derivatives markets, while in their relative youth have portrayed evidence of stabilization and price discovery [1]. Bitcoin has had meteoric growth over the past decade It is everywhere and nowhere, and it is an element of both the virtual and the real [2]. At the same time, the cyber security and risk crisis brought by Bitcoin is also threatening people who are interested in it[3]. This paper reviews some previous studies on virtual currency and Bitcoin, and collects and sorts out some characteristics and development trends of current Bitcoin, and provides some suggestions for investors.

#### 2. Definition of Bitcoin

Since Satoshi Nakamoto proposed the Bitcoin system in 2008, blockchain technology has made great progress. So far, the currency is still the world's most widely used within the scope of virtual currency. The currency relies on technology transfer between the addresses, such as cryptography, to complete decentralized peer-to-peer transactions.

Bitcoin is called "digital gold" by some investors. They believe that due to the scarcity, encryption and limited supply of Bitcoin, Bitcoin is a better hedge asset than gold and can hedge losses in economic recession and major crises. In popular terms, Bitcoin is like a kind of digital medal, with a limited stock. It exists in a series of blockchains, where miners violently solve by computer and obtain the correct hash value to obtain the correct account for one Bitcoin, to be specific.

### 3. Reasons for Becoming Popular

The reason why Bitcoin can be recognized by many investors is due to some of its advantages. First, due to its characteristics of "decentralization", Bitcoin does not need to have a specific currency issuing institution like legal currencies of other countries. According to its operation principle, the "issuance" and circulation of currency are based on peer-to-peer technology and the Internet as the medium to realize the whole process. That means it can somehow bypass the supervision of relevant government departments. Also, Bitcoin can be global in nature and can be transferred around the world via the Internet. It is not necessary to change the currency they use into the corresponding foreign currency according to the current exchange rate when they go to a country with different currencies, like the currencies of all countries today, thus reducing the cost of using the currency. What is more, Bitcoin's data record is indelible, which is because every Bitcoin user can find the details of every transaction in the database. All transaction histories from the time the first Bitcoin was mined up to the present are stored on every machine that handles Bitcoin [4].

The hype around virtual currencies is hard to root out, not least because virtual currencies are still viewed by some investors as a safe-haven asset, providing a hedge against sharp market corrections as part of a portfolio. Bitcoin is a method of internet communication that makes it easier to use virtual currencies and make payments online. In the 109 million accounts it has supplied since its launch in 2009 by an unidentified group of developers, Bitcoin has processed about 62.5 million transactions. At market exchange rates, the daily transaction volume stood at around 200,000 Bitcoins as of March 2015, and the market value of all Bitcoins in circulation was \$3.5 billion [5].

#### 4. Safe-haven Assets

But can Bitcoin really be treated as a safe-haven asset, as some individual investors do? According to the definition, during times of a market crisis, a safe-haven asset is one that has a negative correlation with other assets or portfolios. Safe-haven assets, unlike hedges, typically allow for the co-movement of other assets; they are only required to display safe asset characteristics during periods of extreme financial instability. These are the times when it is anticipated that investors will buy safe-haven assets, raising their prices and yields [6]. The price of these assets won't produce too much volatility. In the economic downturn, safety is particularly favored by investors. At this point, the safety is often because of the buyer's demand, causing prices to rise sharply.

### 5. Can Bitcoin Become a Safe-asset?

### 5.1. Lacks of Stable Purchasing Power

For now, Bitcoin doesn't have the same effective role as gold and other safe-haven assets. First, Bitcoin does not have stable purchasing power. Bitcoin lacks real value support, sovereign credit, and commercial credit, and is fundamentally different from other financial products. The fact that Bitcoin's purchasing power swings greatly makes it dangerous to store for short periods of time, and it is one of the challenges it needs to confront in expanding its payment use. From about \$13 on January 1 to a peak of \$1132 on November 28, 2013, the price of Bitcoin largely increased. But between April and May 2014, it closed each day between \$363 and \$530, with an average price of around \$463. Large daily fluctuations in value make it a dangerous way to hold the rent money that is due next week [7]. Whether such digital assets, which are outside the economic system and lack actual use value, have actual intrinsic value is highly controversial. Recently, Makarov and Schoar

studied the ownership and concentration of Bitcoin holdings. They found that 2,258 addresses control about 7.9 million Bitcoins, which is equivalent to nearly half of all Bitcoins currently in circulation, and that the top 10 percent people control close to 90 percent of miners [8]. All of this makes it so easy to manipulate Bitcoin's price boom and bust, and at the same time makes it so easy to manipulate Bitcoin's price crash.

# 5.2. High Volatility

Secondly, Bitcoin is too volatile to maintain price stability in the face of market turbulence. The Bitcoin market is highly volatile and subject to manipulation of market sentiment, making it unstable as a store of value and a risk hedging tool. For example, Elon Musk is one of the most prominent proponents of Bitcoin, and his tweets can have a major impact on the price of the virtual currency. The presence of Elon Musk's tweets, which are related to the digital currency market, increases the possibility of a sharp increase in the price of Bitcoin. For example, on January 29, 2021, Elon changed his Twitter bio to "Bitcoin," which resulted in a 2% jump in minute-by-minute returns. It's not even just Bitcoin. Elon Musk's tweets have had a considerable impact on other digital currencies. For example, Elon's tweet about Dogecoin "I only sell Doge" drove up the price of Dogecoin. His other tweet claiming that Dogecoin is a joke caused a positive reaction in the Dogecoin market. This means that Elon's tweets, whether serious or humorous, affect the Dogecoin market. 'We can see that Elon's tweets about Dogecoin price bubbles', from Syed Jawad Hussain Shahzad and other researchers [9]. It can be seen that Bitcoin and other digital currencies are highly susceptible to external information, and these uncertainties increase the uncertainty of their investment.

# 5.3. The Policy Risky of Bitcoin

Finally, Bitcoin's policy is risky and lacks official international recognition. In addition to speculative risks, the regulatory risks of virtual currencies also prevent them from being a safe -haven asset, due to their anonymity, unregulated and free transactions, and leave no verifiable records of payments or transfers. Back in 2013, the notorious underground trading site Silk Road shocked the world. This website is a Bitcoin intermediary platform, but it is incredible that it provides a way for users to conduct illegal transactions such as drugs and weapons, which seriously affects the security and order of the world [10]. The main reason why it and other such websites survive is that the anonymity of Bitcoin transactions makes many criminals use Bitcoin to conduct illegal transactions through the dark web. The anonymous transaction of Bitcoins also makes the FBI's investigation of such crimes full of challenges and difficulties. At the same time, hackers attack the digital currency platform and theft of digital currency events often occur, causing a great risk to investors' asset security. In August 2016, digital currency exchange platform Bitfinex was hacked, and nearly 120,000 Bitcoins were stolen, resulting in losses of up to \$72 million. As a result of these events, the price of Bitcoin fell sharply in the period after the event. "With users' funds secured using multi-signature technology in partnership with BitGo, a lot more is at stake for the backbone of the Bitcoin industry, with its stalwarts and prided tech under fire," said Charles Hayter, chief executive and founder of digital currency website CryptoCompare [11].

# 6. Discussion

The author thinks that it is inappropriate for some investors to compare Bitcoin to digital gold. When Bitcoin was first designed, it was designed to be in limited supply, just like gold, which is in short supply. But in reality, the scarcity of the economy does not refer to the quantity of goods, but rather to the long-term "demand", which cannot be easily obtained. The "mining" incentive mechanism devised by Bitcoin should, on the one hand, show that "mining" to obtain Bitcoin involves high costs

and costs just like gold mining, on the other hand it can attract more participants and followers, forming storms on the internet and increasing the value of Bitcoin. In fact, if digital currencies can be valued with fiat money at low cost and make a huge profit, they will expand rapidly in a short time and there will be no scarcity at all. The rules for the initial supply of Bitcoins are likely to be constantly revised if they can be issued for windfall profits. When people think about it, because of the anonymity of the address and the backroom nature of the initial supply, the number of Bitcoins that were issued, how many Bitcoins are in circulation, and who holds them, everything is anonymous and not public. Missing this information is dangerous for investors and makes investing more like a gamble. Although the market price of Bitcoin is more volatile, it is now possible to use Bitcoin instead of money for payments. Customers can spend Bitcoin more easily thanks to market exchange pricing capabilities, and shops can take Bitcoin faster due to instantaneous exchange facilities. The instant exchange mechanism allows retailers to accept Bitcoins as payment without actually receiving Bitcoins. When you process a transaction, payment service providers like Coinbase and BitPay receive the Bitcoins from the merchant but convert them into the local currency equivalent (minus the fee) to the merchant at the current market rate. Because sellers don't actually receive Bitcoins, they avoid the exchange risk of holding Bitcoins. As a result, retailers can accept Bitcoin as a payment medium without worrying about fluctuations in its exchange value [7]. All of this has raised expectations about the richness of Bitcoin's future impact on the world.

### 7. Conclusion

In today's era of big data, the digitization of money is the advance of history. The emergence of Bitcoin and the widespread application of new technologies have many characteristics that currencies do not have, but also some defects. At this stage, it is both impractical and unrealistic to invest in Bitcoin with the expectation that it will possess safe-haven assets. Investors should be aware of the opportunities and risks of Bitcoin's current development rather than just follow the trend. But some of the recommendations described in this article are more intentional for individual investors. In the future, some investment institutions may combine database and more electronic information and quantitative technology to conduct more detailed research on the development trend of Bitcoin.

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