

**BITCOINS: CURRENCY OF THE FUTURE?****G.S. Lande and A. Mohture**

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**ABSTRACT**

Bitcoins are a virtual and digital cryptocurrency. Each Bitcoin is fundamentally a computer file which is stored in a 'digital wallet' app on a smartphone or computer. Day by day bitcoins are becoming popular as a currency and there is increased acceptance of the same. There are several benefits of using bitcoins such as, they can be used anytime and anywhere, they cost lower fees, they are a safer medium of transfer for the merchants, there is no personal information tied to the transaction and they are transparent and neutral medium of exchange. They also suffer from certain disadvantages such as lower degree of acceptance, volatility and that they are yet to mature in terms of technology. All in all, bitcoins have the potential to become the currency of the future.

**Keywords:** Bitcoins, blockchain, digital wallet, currency, security

**Introduction**

Bitcoin (BTC) is one of the primary cryptocurrencies to rise to prominence. Invented in 2008, it is currently the biggest cryptocurrency by market share. As a cryptocurrency, Bitcoin is a store of value that is turning out to be more and more commonly acknowledged. Online stores and eCommerce organizations are turning out to probably acknowledge BTC for installment. There are likewise physical stores that have taken to accept the cryptocurrency (Corporate Finance Institute, 2021).

Each Bitcoin is fundamentally a computer file which is stored in a 'digital wallet' app on a smartphone or computer. Individuals can send Bitcoins (or part of one) to the digital wallet, and can send Bitcoins to others. Each and every exchange is recorded in a public-list called the blockchain. This makes it conceivable to follow the history of Bitcoins to stop individuals from spending coins they don't own, making copies or undo-ing transactions (BBC, 2021).

BTCs can be bought or invested through the following means:

1. Dealers buy and sell BTC, and give liquidity to the market. These dealers make a profit through the spread between their bid and ask cost. By buying through a dealer, will require paying a somewhat higher charge than the current market rate.

2. Exchanges are automated, digital marketplaces that interface BTC buyers with BTC sellers. There are various backend Exchanges and even a lot more frontend/UI Exchanges. On account of the assortment of Exchanges accessible, there will by and large somewhat different market rates for BTC.
3. Local purchases are increasingly normal. There are sites that go about as "craigslist" or "eBays" that interface neighborhood clients willing to exchange their BTC for local currency.

**Literature Review**

There is ample research available on the topic of bitcoins. Below are a few abstracts from the recent literature.

Baek and Elbeck (2015), have posited that, we use Bitcoin and S&P 500 Index daily return data to analyze relative volatility utilizing detrended ratios. We then, at that point model returns of Bitcoin market with select economic variables to examine the drivers of Bitcoin market returns. We report solid proof to propose that volatility in Bitcoins is internally (buyer & seller) driven prompting the conclusion that the Bitcoin market is profoundly speculative as of now.

Meiklejohn et al. (2013), have argued that, bitcoin is a purely online virtual-currency, that is not backed by either physical commodities or any sovereign obligation; all things being equal, it depends on a combination of

cryptographic protection & a peer-to-peer protocol for witnessing settlements. Subsequently, Bitcoin has the unintuitive property that while the money ownership is implicitly anonymous, its flow is still globally visible. In this research we further explore this unique characteristic, utilizing heuristic clustering to bunch Bitcoin wallets dependent on proof of shared authority, and then, at that point utilizing re-identification attacks (i.e., empirical purchasing of goods and services) to order the operators of those clusters. From this analysis, we portray longitudinal changes in the Bitcoin market, the stresses these changes are setting on the system, and the difficulties for those trying to utilize Bitcoin for criminal or fraudulent purposes at scale.

Aggarwal (2019), has opined that, bitcoins have become a fad among investors regardless of the uncertainty encompassing on its nature and characteristics. This examination intends to add to the existing literature of inspecting bitcoin returns under a financial asset purview. Through multiple robust tests, the market efficiency of daily bitcoin returns is examined for the time period of July 2010 till March 2018. Solid proof of market inefficiency characterized by nonattendance of random walk model is found. The market inefficiency was found owing to the presence of asymmetric volatility clustering. More investigations are expected to analyze the temporal dynamics of bitcoin returns.

According to Arratia and Lopez-Barrantes (2021), in mid-2018, Bitcoin prices topped at US\$ 20,000 and, just about two years after the fact, we actually keep debating if cryptocurrencies can really turn into a currency for the regular daily existence or not. According to the economic perspective, and in the field of behavioral-finance, this study investigates the relation between Bitcoin price & the search interest on Bitcoin since 2014. We scrutinized the forecasting ability of Google Bitcoin-Trends for the behavior of price of Bitcoin by performing linear & nonlinear dependency tests, & exploring performance of ARIMA & Neural Network models enhanced with this social sentiment indicator. Our investigations and models are established upon a bunch of statistical properties normal to financial returns that we

establish for Ethereum, Bitcoin, Litecoin and Ripple.

According to Bhullar and Bhatnagar (2020), this present paper expects to analyze the relationship between price development of Bitcoin cryptocurrency & stock exchange movements of two major worldwide economies for example India and China. 1,133 number of observations on a daily basis were taken from first January 2015 to 29th November 2019 and investigated utilizing statistical software E-views. Statistical procedures like Johnsen Co-integration, Granger Causality, and VECM have been utilized to accomplish the target of the paper. The empirical results of the paper portray that since a long time ago relationship exists among Bitcoin & stock exchanges of India & China. Sensex has the unidirectional causality with Bitcoin. The significant t-statistics suggest an influential role of Sensex in Bitcoin value development. The results further demonstrate that there is no proof of any causal relationship among Bitcoin and Chinese Stock trade, which proposes a superior risk-return mechanism for the worldwide investors and policy makers. The discoveries of the paper can be granted as rules for the worldwide investors for diversifying their portfolios.

Moreover, Pelucio-Grecco et al. (2020) and Rana et al. (2019) have dealt with various aspects of bitcoins.

### **Advantages of Bitcoins**

1. Payment freedom: It is feasible to send & receive bitcoins anywhere in the world whenever. No bank holidays. No borders. No bureaucracy. Bitcoin permits its clients to be in full control of their money.
2. Choose own fees: There is no expense to receive bitcoins, and numerous wallets let customers control how huge a fee to pay when spending. The higher fees can empower quicker affirmation of the transactions. Fees are unrelated to the sum transferred, so it's feasible to send 100,000 bitcoins for a similar charge it costs to send 1 bitcoin. Also, merchant processors exist to assist merchants in handling transactions, changing over bitcoins to fiat currency and storing reserves directly into merchants' bank accounts daily. As these

services depend on Bitcoin, they are offered at much lower fees as compared to PayPal or credit card networks.

3. Fewer risks for merchants: Bitcoin transactions are secure, irreversible, and don't contain customers' sensitive or personal information. This shields merchants from misfortunes brought about by fraud or fraudulent chargebacks. Merchants can without much of a stretch expand to newer markets where the credit cards are not accessible. The net results are lower fees, bigger markets, and fewer administrative costs.
4. Security and control: Bitcoin clients are fully in control of the transactions; it is incomprehensible for merchants to force un-wanted or un-noticed charges as can happen with other payment techniques. Bitcoin payments are made without personal information tied to the transaction. This offers solid protection against identity theft. Bitcoin clients can likewise ensure their money with backup and encryption.
5. Transparent & neutral: All information concerning the Bitcoin money supply is readily accessible on the block chain for anyone to verify and use in real-time. No individual or organization can control or control the Bitcoin protocol since it is cryptographically secure. This permits the core of Bitcoin to be trusted for being totally neutral, transparent and predictable (Bitcoin.org, 2021).

### Disadvantages of Bitcoins

1. Degree of acceptance: Many individuals are as yet unaware of Bitcoin. Consistently, more businesses acknowledge bitcoins on the grounds that they need the advantages of doing as such, however the list remains small and still necessities to fill to benefit with network effects.
2. Volatility: Total value of the bitcoins in circulation & the quantity of businesses

utilizing Bitcoin are still tiny compared to what they could be. Therefore, relatively small trades, events, or business activities can fundamentally influence the price. In theory, such volatility will decrease as Bitcoin markets & the technology matures.

3. Progressing development: Bitcoin software is as yet in beta with numerous deficient features in active development. New features, tools, and services are being created to make Bitcoin more secure and available to the majority. A portion of these are as yet not ready for everybody. Most Bitcoin businesses are new & still offer no insurance. As a rule, Bitcoin is as yet in the process of maturing.

### Conclusion

Bitcoin is a virtual and digital cryptocurrency. It is the most famous and largest cryptocurrency. Each Bitcoin is fundamentally a computer-file that is stored in a 'digital wallet' app on a smartphone or a computer. Individuals can send Bitcoins (or part of one) to the digital wallet, and can send Bitcoins to others. Each and every exchange is recorded in a public-list called the blockchain. Day by day bitcoins are becoming popular as a currency and there is increased acceptance of the same. There are several advantages of using bitcoins. First, it is possible to send and receive bitcoins anytime and anywhere in the world. Second, it can be transferred with lower fees compared to other modes of payment. Third, with lower chances of fraud it offers less risks to the merchants. Fourth, bitcoin payments are made without personal information tied to the transaction. And lastly, it is transparent and neutral mode of payment. That said, there are certain disadvantages of bitcoins such as lower degree of acceptance, volatility and that they are yet to mature in terms of technology. All in all, bitcoins have the potential to become the currency of the future.

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