

BITCOIN- NEW INSIGHT OF DIGITAL CURRENCY

*Dr. K.R.Gola **Dr. Mridul Dharwal

**Assistant Professor, Sharda University, kr.gola@sharda.ac.in*

***Associate Professor, Sharda University, mridul.dharwal@sharda.ac.in*

Abstract: Bitcoin is a virtual digital currency that was created in 2009. In Bitcoin the transactions of digital currency can be performed without any links with banking system. The Bitcoin technology – the protocol and the cryptography, which runs under a strong security track record and this network, is known to be as one of the largest distributing computing project in the world. Under Bitcoin system, person can transfer money from one pool to another without transaction charges. Bitcoin is a latest way of currency transaction throughout the world economic market but not in use of every person due to lack of understanding of its concept. Bitcoin has emerged as the most successful cryptographic currency in history. The study examines to analyze the conceptual framework and strengths and weakness of Bitcoin when it is being utilized in e-commerce in place of real money. Also review the issues in Bitcoin and explores the effect of Bitcoin on India economy.

Keywords: Digital currency, Bitcoin, Crypto-currencies, virtual currency and E-commerce

Introduction

Bitcoin is a new Cryptocurrency that was created in 2009. Transactions are made with no middle men- means no banking required and there are no transaction fees. Today, there is a flood of such digital transactions in the country. The digital currency, Bitcoin is a kind of crypto currency, in the sense of them being conceptual. The idea of Bitcoin emerged in October 2008 from a research paper by someone or someone's by the name of Satoshi Nakamoto. The purchase process using Bitcoin is so secure that it isn't possible to hack the system. Only a money transfer can be seen, but nothing can be known about the sender and the recipient. This type of anonymity, with its strong crypto logical security, is ensured by those dealing with Bitcoin. According to the US treasury, the Bitcoin is a 'decentralized virtual currency'. There are some exchanges, which may be treated as mints or a central bank, which are mainly located in China, Hong Kong and Russia. There are various companies called 'miners' under each exchange. The Bitcoin ecosystem uses a function called the 'hash function'. A 'hash' is given for every transaction, along with a 'public key' and a 'private key'. Each of these keys is inverse to each other, but it is never easy to derive one from the other. The 'public keys' are openly available in the public domain.

The details of each transaction report are available in a ledger called 'block chain'. From this open source, anybody can tell how many Bitcoins are traded at some specified public key. But nobody can know the owner of those Bitcoins, as the security of the ledger cannot be easily broken, making the system's character of anonymity and privacy also its drawback. The Bitcoin's popularity in India has grown after demonetization. At the time of its announcement in November, the price of one Bitcoin in India was \$757. It was lingering between \$866 and \$896 during the early days of demonetization. It reached \$1,020 18 days after Prime Minister Narendra Modi announced demonetization on November 8, 2016. The Bitcoin was valued at around \$770 in the US the same day. On May 27, 2017, the market price of Bitcoin in India reached \$2,096.68. There has been a clear surge in Bitcoin transactions after demonetization. So is this a purely temporary phenomenon? Should the government need to control this market? The digital economy may well be the future. Transactions through Bitcoins have been legalized in the US, the EU, Japan and Singapore, but there is enough effort being made to control the Bitcoin economy. In this context, there is no law yet in India.

Why Bitcoin

Bitcoin can be used to buy merchandise anonymously. In addition, international payments are easy and cheap because Bitcoins are not tied to any country or subject to regulation. Small business may like them because there are no credit card fees. Some people just buy Bitcoin as an investment. Several marketplaces called 'Bitcoin exchange' allow people to buy or sell Bitcoin using different currencies. People can transfer Bitcoin to each other using mobile apps or computers to sending cash digitally. Bitcoin are stored in a digital wallet which exists either in the cloud or on a user's computer. The wallet is kind of virtual bank account, pay for goods or save money. Though each Bitcoin transaction is recorded in a public log, names of buyer and seller are never revealed- only their wallet IDs. While that keeps Bitcoin users' transactions private. Nobody knows that what will become of Bitcoin in future because its mostly unregulated, but could change. Government is concerned about taxation and their lack of control over currency.

Objectives of the Study

- To know the concept of Bitcoin
- To study the process of working of Bitcoin in E-commerce
- To evaluate the effects of Bitcoins on the Indian economy

Research Methodology

Secondary data has been used which were collected and compiled from journals, newspapers and magazines. Being a new concept, and as not being used too frequently. Secondary data were not also readily available. The study conducted with objectives to find the conceptual framework of Bitcoin currency in the economy.

Conceptual Framework of Bitcoin

Bitcoin started to make its presence felt in global finance during late 2013 and early 2014. It is well known to the public at large, the quantities as well as the growth rates of Bitcoins with certainty, so its circulation cannot be affected by monetary policies. The review of the literature reveals that while the study of Bitcoin on a standalone basis is done exhaustively, there is a lot of scopes to do a comprehensive research covering all the aspects of Bitcoin in its current state and how the users would like to see. Bitcoin explored by the financial systems, financial Institutions, businesses around the world and most importantly the regulators. The current scenario suggests there is a lot of opportunities available in the field of Cryptocurrency and that Bitcoin is the front-runner. However, the technology needs utilization in a manner that we see a new legitimate Cryptocurrency, which is recognized and accepted globally, i.e. Single Global Currency which is borderless and without any exchange rates.

The technical aspect of Bitcoin is unknown to the general public. The attributes of the Bitcoin are as follows

- A Bitcoin has no physical attribute. It is string of data which retains its uniqueness, and it has own method to remain unique
- Bitcoin can be purchased and stored online in a digital wallet
- Buyers need to first choose from any of the Bitcoin exchanges in India, such as Unicorn, Bitxoxo and Coinbase.
- Creation an account with the chosen Bitcoin service provider. This will allow storing Bitcoin and converting them into local currency.
- The services provider will get you access to the exchange. Even through a Bitcoin costs several lakh, which can be invested in small amounts by buying a fraction.
- When account opens with a service provider, the investor gets a public key (Password credentials) if it's lost the Bitcoin account cannot be explored.
- A Bitcoin is protected through a system of digital signature, chain block and time stamps.
- There is no need to establish a trusted third party (like RBI for Indian Rupee) as is done with normal currencies. In Bitcoin, a peer to peer network ensures that the Bitcoin remain unique.

- A Bitcoin is not denominated in any national currency; its basic unit is 1 Bitcoin. Public can trade it for any value even infractions.

Effect of Bitcoin on India economy

Cryptocurrency has led to the emergence of new markets. A currency like Bitcoin has opened gates for a new kind of market which unlike present money market is controlled by no one. For trading you need a convenient medium of exchange that is currency and to issue a currency you need a trusted party like government and central bank. That's where Bitcoin is challenging the traditional methods. Cryptocurrency Bitcoin may be eyeing a record \$20,000, but the RBI is not impressed. The RBI has cautioned Bitcoin and other Cryptocurrency enthusiasts that they face potential risks, including financial legal and those related to customer protection. In India RBI not given any licence or authorization to any entry to operate schemes or deal with Bitcoin or any virtual currency. Indian is not only country to express caution on Bitcoins. Several Countries have placed restrictions on them as well, including Russia, China, Bangladesh, Sweden Vietnam etc. However the USA and UK have a much more positive approach to Bitcoins. In June 2015, the Bitcoin exchange BTCX India was shut down. While Bitcoin is purely digital currency that has no physical existence and can also be on target of hackers. Despite, use of Bitcoin has been increased in India. Using Indian currency one can buy and sell it Bitcoin exchange. In India, some of the Bitcoin exchanges in India are Bitcoin.in, unocoin and indiabitcoin.com etc. the responsibility for the regulation of currency in India rests with the RBI. As per RBI, the use of Bitcoin as a source for payment is not authorized by any central bank or monetary authority. In fact no legislative or Law has been passed in India as yet.

Strengths of Bitcoin as digital currency

- Freedom in payment, Information is transparent, Low fees, Fewer risks for merchants

Weakness of Bitcoin as digital Currency

- Lack of awareness and Understanding , Risk and volatility, Still developing , Lack of proper regulation in India

Conclusions

Bitcoin has a huge potential, but it cannot in its current form, affect the USD though it can harm it significantly, if its exchange rate versus USD increases drastically. Bitcoin success depends on, more people need to understand what it is, and then decide what you want to do with it. The positive message that can be seen is that people are willing to explore technology and is open to adopting different formats of the virtual currency provided they get some reasonable assurance that the underlying virtual currency has a regulatory backing and therefore will also have some stability in its value. While Cryptocurrency have not been legalized, there are no laws against investing or dealing in Bitcoins. Cryptocurrency is disruptive economic innovation that has the

potential to revolutionize the current economic structure and change how banks and financial institutions operate

References

1. Androulaki, E., Karame, G. and Roechlin, M., titled “Evaluating user privacy in bitcoin” IACR Cryptology E-print Archive, (2012) PP. 105-109.
2. Beanland, C., titled “Bitcoin: The New Gold Standard” (2013). PP 38. ISSN 09519467.
3. Bayern, S titled “Dynamic common law and technological change: the classification of Bitcoin”. Wash. & Lee L.Rev. (2014). Online, 71, 22.
4. Moore, T. and Christin, N Beware titled “empirical analysis of Bitcoin Exchange risk, in proceeding of financial cryptography” (2014),.
5. Malhotra, Yogesh titled “Bitcoin protocol: Model of Cryptographic proof based global crypto currency and electronic payment system” (2014).
6. Nakamoto, Satoshi titled “Bitcoin: A peer to peer electronic cash system” (2008).
7. Reserve Bank of India, RBI cautions users of virtual currencies against risks, press release. (2013)
8. Ron, D, and Shamir, A titled “Quantitative Analysis of the full Bitcoin Transaction Grapf, in proceedings of financials Cryptography” (2013)