

## A STUDY ON CRYPTOCURRENCY POTENTIAL IN INDIA

*Shuvendu Dey, Paramita Choudhury & Santana Guha*

*Assistant Professor, Department of Business Administration, Siliguri Institute of Technology, Siliguri, West Bengal, India*

**Received: 18 Dec 2018**

**Accepted: 27 Dec 2018**

**Published: 31 Dec 2018**

### **ABSTRACT**

*The recent boom in cryptocurrencies has gathered a lot of attention from everyone around the globe. The year 2017 saw a hefty rise in the value of Bitcoins making it a household name. However, this wasn't enough for India to accept it as a legal tender and the future of cryptocurrency in India is still uncertain. This study was conducted to understand the potential of Bitcoins in India. Bitcoin is a unique exchange mode compared to a typical bank as the transactions are verified by network nodes and written in a publicly distributed book called Blockchain. The price of the bit currency is variable and they are considered high-risk assets as transactions can be reimbursed but cannot be reversed. Bitcoin was born in January 2009 when Nakamoto Satoshi extracted the first block of the Bitco Block. Since then, many followers have made deals and received coins of little value. Countries around the world began to accept small currencies as legitimate forms of currency. But India has not legitimized the use of this call for a variety of reasons. The purpose of this document is to understand the recognition of the existence of bit currencies and to evaluate the potential of bit currencies in India*

**KEYWORDS:** *Bitcoins, Cryptocurrency, Blockchain, India*

### **INTRODUCTION**

The world came to know about cryptocurrency when Satoshi Nakamoto published a paper about a new type of currency called Bitcoins (Nakamoto, 2008). Therefore it can be surmised that Bitcoin was founded by the anonymous Satoshi Nakamoto in a white paper and released in 2009. A cryptocurrency is a digital asset intended as a medium of exchange that uses cryptography to secure its transactions, to control the creation of additional units, and to validate the transfer of assets. Bitcoin is a cryptocurrency and worldwide payment system. It is the first digital currency to work as a decentralized system works without any central bank control and the network is peer-to-peer with the transactions taking place between users without an intermediary. These transactions are confirmed by network nodes using cryptography and recorded in a public distributed ledger called a Blockchain.

Bitcoin transactions are considered unstable and the price of this currency is very volatile which increases or decreases without notice. Transactions made with cryptocurrency cannot be reversed and the person who receives the money can only make a refund. Hence, if deals are not made with people who are familiar and reliable, the money sent by people from their accounts is not guaranteed. Also, every bit currency transaction is stored on the network, and anyone can see the transaction and the balance, although the identity of the user behind a particular currency address is concealed unless the user discloses the information.

Nevertheless, Bitcoin is a huge success that legitimizes the use of aggression, especially in some developed countries like the USA, Denmark, Japan, Sweden etc. Transactions initiating purchase and sales are made using bit currencies in digital wallets such as GreenAddress, GreenBits, and Mycelium as Bitcoin possesses the same money like features such as durability, portability, acceptability etc. Several merchants are already accepting Bitcoin as digital payment despite Bitcoin being illegal in many countries. Bitcoin has had one of the greatest appreciations on a percentage basis of anything in the financial history of the world.

## REVIEW OF LITERATURE

Bitcoins is perceived as peer-to-peer electronic cash that permits online payments transferred directly without routing through any financial institution (Nakamoto, 2017). Although cryptocurrency use is not very prevalent now, it is considered to be an alternate to equity market investments not directly affected by the financial crisis (Wayne, 2017). People in developing countries, people tend to prefer new and better technology as they have limited access to traditional technology (Metz, 2016). Governmental entities have made uncoordinated efforts to provide guidance on the treatment of bitcoins, and the courts have been largely silent on this classification issue (Deppert and Chelsea, 2015). Therefore, whether bitcoin or not, a major part of transactions in the future will happen through the use of cryptocurrencies (Trivedi, 2018). For a country like India, educating the general public about the use and importance of Bitcoins will pave way for the implementation of cryptocurrencies in the country (Mehrotra and Vanishree, 2018).

Hencic and Gourieroux (2014) demonstrated that the daily Bitcoin/USD exchange rate shows local trends which could indicate periods of speculative behavior from online trading. Sapuric and Kokkinaki (2014) investigate the volatility of Bitcoin, using data from July 2010 to April 2014, by comparing it to the volatility of the exchange rates of major global currencies. Their analysis indicates that the exchange rate of Bitcoin has high annualized volatility, however, it can be considered more stable when transaction volume is taken into consideration. Briere et al. (2015) found that Bitcoin is extremely volatile and shows large average returns. The earliest statistical analysis of the exchange rate of Bitcoin was proposed by Chu et al. (2015). They are in sync with fifteen of the most frequently used distributions in finance for the log returns of the exchange rate of Bitcoin against the U.S. Dollar. Dai et al. (2017) study the impact of exchange rates on economic growth in East Asian countries. Parlapiano et al. (2017) investigate the vulnerability of the European firms on their exchange rate risk exposure. Schroeder (2017) looked into the macroeconomic performance of developing countries taking in to account the fluctuations in exchange rate investigates. Seyyedi (2017) scrutinizes the interactive linkage among gold prices, oil prices, and the exchange rate in India. As of today, Bitcoin is undeniably the most popular and well-known cryptocurrency in India. It was the first realization of the idea of a new type of money, mentioned over two decades ago, that “uses cryptography to control its creation and transactions, rather than a central authority” (Bitcoin Project, 2017). Bitcoin uses Blockchain technology, which keeps a record of every single transaction, and the processing and authentication of transactions are carried out by the network of users (Bitcoin Project, 2017).

## **Indian Scenario**

The government of India has not formally approved the use of Bitcoin despite considerable public demand. Reserve Bank of India has warned users, owners and merchants of cryptocurrencies about possible financial and security risks. There is no regulation in India for virtual currency. Due to this, some Bitcoin exchanges such as Zebpay, Unocoin, and Coinsecure have initiated operating with trading platforms which are self-regulated along with Know Your Customer (KYC) system. Coimama, LocalBitcoins, VirWox, Mycelium Local Trader, ShapeShift, Bitcoin-otc are some other India's popular Bitcoin exchanges. Initially, in 2013, Reserve Bank of India gave warning against the usage of Bitcoin. But in 2014, RBI had shown interest in Blockchain technology to minimize the paper currency. In 2015, a financial stability report was published by RBI to identify the importance of private Blockchain. In 2016, ICICI bank with Emirates NBD executed transactions and remittance using Blockchain technology. Then in 2017, a white paper had been issued by the Institute for Development and Research in Banking Technology (IDRBT) of RBI and also a pilot test was taken. An increasing exigency for acceptance of a substantial regulatory policy pertaining to crypto-currency is now perceptible in India. The central bank or any other financial authority does not recognize the composition, trading or application of crypto-currency as a moderate for payout.

In India, the Central Government has authority to legislate and regulate matters according to the Indian Constitution. An analysis of the Indian Constitution has been undertaken to recognize if crypto-currency is competent of government observation. In Constitution, entry 36 of Seventh Schedule (List I) states that the Central Government is allowed to legislate pertaining to currency, coinage and legal tender, and foreign exchanges and entry 46 is related to bills of exchange, cheques, and promissory notes, and other such instruments (Nishith Desai Associates, 2015). Central Government would have pecuniary authority to legislate if any crypto-currency or Bitcoin falls within any of the above categories of the modality. As discussed earlier, Bitcoin system practices the Blockchain technology to keep the records of transactions. Bringing cryptocurrency underneath the present Indian laws could be complex as it is intangible. KYC norms could be capable of regulating the system of Bitcoin (Nishith Desai Associates, 2015) as it would effectively keep money laundering under control. There is long-standing demand from a section of the money market investors to legalize cryptocurrency in India even as the government focuses on Digital India and promotes cashless transactions. The future of crypto-currency looks more promising due to increment in its users per year in India (Zameer and Chaurasia, 2018).

## **Future of Crypto-Currency in India**

Crypto-currency is such an invention which has become a global phenomenon. Earlier RBI warned the Indians against using crypto-currency as it is supposed to be associated with money laundering and terror financing. In September 2017, RBI said that it is not comfortable with non-fiat crypto-currencies like Bitcoin and a group of people has been assigned with the task of studying and analyzing the fiat crypto-currencies that is a substitute to the Indian rupee. Today, cryptocurrency offers a modern technology which needs to be taken up for further study. But unfortunately, it still has no legislative response from the Indian Government even though the number of investors trading in Bitcoins has been increasing at a fast pace over the last few years. So it is increasingly being felt that the Indian government should take responsible steps immediately to

regulate such alternate mode of transactions.

However, it should also be told that the finance ministry has been working towards making regulations and laws for the use of Bitcoin (Vishal Gupta, “The Future of Bitcoin Industry in India”, Business World, May, 2017) even though the pace has been a bit restricted, as there are so many confusions in the market about its application, demand, and supply in the wake of demonetization. As Bitcoins are not issued by any bank or authority, people do not know the tax implications of their investments and due to the absence of a regulator, there is no legal support. Because of these shortcomings, some crypto startups introduced Digital Asset and Blockchain Foundation of India (DABFI). They are Unocoin, Zebpay, Coinsecure, and Search trade which have conjointly launched DABFI (Vishal Gupta, “The Future of Bitcoin Industry in India”, Business World, May 2017). Like the internet, crypto-currency has also witnessed exponential growth in India. There is a probability that in future banks could become virtual in India with the help of internet and Blockchain technology. Now cryptocurrency is everywhere and it will develop over time. Farfetched it might seem, but even if due to some reasons, Bitcoin loses its prominence, then to replace it a new virtual currency will come out. Therefore as a part of advance planning, RBI has hinted to make its own cryptocurrency to be tentatively named as “Lakshmi”. However, it is still too early to predict the future of cryptocurrency in India until the government steps in with meaningful measures, even though it seems to be the future of world currency. In conclusion, it can be said that the future of cryptocurrency looks promising in India as hope abounds that Indian government will soon provide an admissible framework of cryptocurrency to service providers

## REFERENCES

1. Nishith Desai Associates (2015). *Bitcoins - A Global Perspective*, 2015: 17.
2. Gupta, V. (2017). *The Future of Bitcoin Industry in India*, Available at <http://bwdisrupt.businessworld.in/article/The-Future-of-Bitcoin-Industry-in-India> accessed on 20.11.2018
3. Trivedi, M. (2018). *Bitcoin in India: A Deep Down Scenario*. *Journal of Management Science, Operations & Strategies*, 2(1): 21-26.
4. Wayne, T. (2017). *What is cryptocurrency*, available at <https://www.nytimes.com/what-is-cryptocurrency>. *Html* accessed on 18.11.2018
5. Metz, C. (2016). *Why bitcoin will thrive first in the developing world*, available at <https://www.wired.com/why-bitcoin-will-thrive-first-in-the-developing-world/> at accessed on 25.11.2018
6. Bitcoin Project (2017). *Frequently Asked Questions*, available at <https://bitcoin.org/en/faq#what-is-bitcoin> accessed on 26.11.2017
7. Briere, M., Oosterlinck, K, & Szafarz, A. (2015). *Virtual currency, tangible return: Portfolio diversification with Bitcoins*, *Journal of Asset Management*, 16: 365–73.
8. Dai, P. V., Delpachitra, S., & Cottrell, S. (2017). *Real exchange rate and economic growth in east Asian countries, The role of financial integration*. *The Singapore Economic Review*, 62(1): 163-177.
9. Hencic, A., & Gouriéroux, C. (2015). *Noncausal autoregressive model in application to bitcoin/usd exchange rates*, In *Econometrics of Risk* (pp. 17-40). Springer, Cham.

10. Parlapiano, F., Alexeev, V., & Dungey, M. (2017). Exchange rate risk exposure and the value of European Firms, *European Journal of Finance*, 23: 111–29.
11. Svetlana S. & Kokkinaki, A. (2014). Bitcoin is volatile! Isn't that right? In *Business Information Systems Workshops, Lecture Notes in Business Information Processing*. Berlin: Springer, pp. 255–65.
12. Schroeder, M. (2017). The equilibrium real exchange rate and macroeconomic performance in developing countries, *Applied Economics Letters*, 24: 506–9.
13. Seyyedi, S. (2017). Analysis of the interactive linkages between gold prices, oil prices, and exchange rate in India, *Global Economic Review*, 46: 65–79.
14. Mehrotra, A., & Vanishree, M. R. (2018). A Study to Understand the Awareness about Bitcoins among the Youth Population in Bangalore, *International Journal of Engineering Technology Science and Research*, 5(3):210-213

