Study of Cryptocurrency In India

Abhishek Jangid¹, Anil Dhankhar², Dr. Saroj Hiranwal³

^{1, 2} Dept of MCA ² Assoc. Professor ³ Professor ^{1, 2, 3} RIET Jaipur

Abstract- Due to the rapid development of information and communication technologies, many activities in our daily life have been merged online and they become more flexible and more effective. A huge growth in number of online users has activated virtual word concepts and created a new business phenomenon which is crypto currency to facilitate the financial activities such as buying, selling and trading. The use of virtual currency has become widespread in many different systems in recent years. Virtual money is not fully controlled and regulated hence most of the countries have not admitted this currency in their economic activities. This paper investigates about crypto currency present legality as well as future government moves impact on these currencies. The paper also analyses investment risks in both Ethereum and Gold countries have responded in terms of regulations & legislations towards crypto currencies to develop a clear picture of its impact on various laws in India in order to regulate it".

Keywords- Types of currency Crypto currency, Investing in Crypto currency, future of Crypto currency in India, Uses of Crypto currency, Risks, Safety legal status, RBI.

I. INTRODUCTION

Today's economies are all money economies, because all economies have accepted certain currencies (money) as medium of exchange. The money supply causes inflation as well as deflation in economies by its excess supply and contraction in money supply, hence currencies of different countries regulated by government in order to combat inflation or deflation situations. Now a day's many countries in the world have focusing towards digital currency and transactions. Even some one doesn't want to regulate their currencies and transactions. This brought greater innovation in new currency that is crypto currency, one of the most advanced, ambiguities, regulation free currency. In this article I made an attempt to study regarding crypto currency and its development and transactions in India.

II. TYPES OF CURRENCY

Digital Currency

Page | 269

To put it simply, digital currency is the electronic form of real-world money. A person can buy products, conduct transactions using digital currency in any part of the world even though digital currency does not have any realworld physical presence. While digital currency does not require encryption, users will need to use unique and secure passwords to protect their digital wallets from theft or hacking.

Crypto currency

Crypto currency runs on block chain technology that records and stores data on all transactions made in a public ledger that can be accessible to anyone. It is a decentralised system that is independent of any centralised regulation. All transactions are recorded in a decentralised ledger that is available to everyone to see, nullifying the need for a central authority. Unlike digital currency, it is protected by strong encryption.

III. ETHEREUM

Ethereum is an open source software platform that uses block chain technology. It allows the application developers to build and deploy their decentralized applications on the platform. Ether is a token that is used for making transactions on Ethereum Platform. Ether token uses ethereum platform for block chain generation. History of Ethereum In 2013 Ethereum was proposed in white paper by Vitalik Buterin who is a crypto currency researcher and programmer with the aim of building decentralized applications. The online crowdsale for funding the development conducted between July 2014 to august 2014. On 30th July 2015, Ethereum platform went live. Before 2015, When the Ethereum didn't come into existence, the block chain applications were designed to perform peer t peer transfer. To increase the functionality of applications offered by Bit coin Mr. Vitalik Buterin developed a new block chain application Ethereum Virtual Machine. EVM runs on the Ethereum Network and enables anybody to run any program. With EVM the block chain application creation becomes more easy and efficient.

How does Ethereum Work?

Each Ethereum is basically a computer file which is stored in a 'digital wallet' app on a smart phone or computer.

People can send Ethereums (or part of one) to your digital wallet, and you can send Ethereums to other people. Every single transaction is recorded in a public list called the block chain.

Ethereum is a block chain-based platform that aims to make it easier to create applications that aren't managed or controlled by one entity. Instead, they are governed by code.

Why are Ethereums valuable?

There are lots of things other than money which we consider valuable like gold and diamonds. The Aztecs used cocoa beans as money. Ethereums are valuable because people are willing to exchange them for real goods and services, and even cash.

Why do people want Ethereums?

Some people like the fact that Ethereum is not controlled by the government or banks. People can also spend their Ethereums fairly anonymously. Although all transactions are recorded, nobody would know which 'account number' was yours unless you told them.

How do people get Ethereum?

- There are three main ways people get Ethereum.
- You can buy Ethereum using 'real' money.
- You can sell things and let people pay you with Ethereum.
- Or they can be created using a computer.

Is it secure?

Every transaction is recorded publicly so it's very difficult to copy Ethereums, make fake ones or spend ones you don't own. It is possible to lose your Ethereum wallet or delete your Ethereums and lose them forever. There have also been thefts from websites that let you store your Ethereums remotely. The value of Ethereums has gone up and down over the years since it was created in 2009 and some people don't think it's safe to turn your 'real' money into Ethereums.

IV. HISTORY OF CRYPTO CURRENCY IN INDIA

In a bid to fight corruption and terrorism, on November 8, 2016, Prime Minister of India Narendra Modi shocked the nation by demonetizing Rs. 500 and Rs. 1000 currency notes - sparking a new interest in the digital currency and other cashless mechanisms such as internet banking, digital wallets, credit cards etc. The demonetized notes amounted to 86% of India's cash in circulation. India is a country where 87% of transactions are done in cash. Chaos was inevitable. This resulted in long queues at the ATMs and banks for weeks. There was not enough cash with the banks to dispense. People holding cash could deposit their money in the bank accounts or exchange for new Rs. 500 and Rs. 2000 notes before 30 December. People who were hoarding "black money" (unaccounted cash) could not deposit money into their accounts because banks were keeping a close eye on suspicious deposits .What options do these people have? Let go all of their money? Well some of them did exactly that. Old notes were found floating in the river .While others turned to look for commodities to hedge the risk of an economic slowdown; some bought gold, some bought silver. What did government do to curb this? They started raiding gold jewellers. When gold wasn't working, people were buying silver which significantly increased the demand of silver. With gold and silver being targeted by authorities, these souls saw crypto currency as a safe haven. Using their connections and by paying up to 30-35% premium they started buying crypto currency with cash. Cryptocurrency price started to surge and weekly volume of crypto currency trading nearly doubled. Not to forget, India is one of the largest remittance markets with a total value of more than \$70 billion. On this a user usually pays up to 15% in bank charges and conversion fees.

How to Buy and Sell Ethereum in India

The downward trend in crypto currency trading in India is mostly due to increased government regulations. However, this does not stop people from trading. Two ways in which many Indians trade are: 1) Exchanges and 2) P2P methods. Both these steps follow the KYC norms and usually require documents like Pan Card, Aadhaar card or passports.

List of Ethereum Exchanges In India

- 1. WazirX
- 2. Unocoin
- 3. CoinDCX
- 4. Zebpay
- 5. CoinSwitch kuber
- 6. Bitbns
- 7. CoinSecure
- 8. Bitxoxo
- 9. Btcxindia
- 10. BuyUcoin
- 11. Flitpay
- 12. Coin Delta

IJSART - Volume 7 Issue 12 – DECEMBER 2021

- 13. CoinSwitch
- 14. PokestBits.in
- 15. Redipay

Ethereum and RBI

India's general attitude towards crypto currency has been negative. In 2017, the central Reserve Bank of India (RBI) considered a now-defunct proposal to introduce its own crypto currency, Lakshmi. It has also been looking into encouraging block chain technology in financial and payment institutions. But the government has shunned crypto currency with policymakers opting to outlaw crypto currency with incarceration and legal petitions. The Banning of Crypto currency and Regulation of Official Digital Currency Bill has been proposed. Unocoin, an India-based exchange, allowed individuals to trade Ethereums but is now disabled. However, Ethereum is still traded in India through digital currency exchanges like WazirX, CoinSwitch Kuber and CoinDCX. Many Ethereum traders usually buy through diaspora networks in countries where it is legal tender.

Is Ethereum Legal in India?

Finance minister Arun Jaitley, in his budget speech on 1 February 2018, stated that the government will do everything to discontinue the use of ethereum and other virtual currencies in India for criminal uses. He reiterated that India does not recognise them as legal tender and will instead encourage block chain technology in payment systems.

"The government does not recognize crypto currency as legal tender or coin and will take all measures to eliminate the use of these crypto assets in financing illegitimate activities or as part of the payments system," Jaitley said.

In early 2018 India's central bank, the Reserve Bank of India (RBI) announced a ban on the sale or purchase of crypto currency for entities regulated by RBI. Banning of Crypto currency and Regulation of Official Digital Currency Bill 2019 draft has proposed a 10-year prison sentence for anyone who mines, generates, holds, sells, transfers, disposes, issues or deals in crypto currencies.

In 2019, a petition has been filed by Internet and Mobile Association of India with the Supreme Court of India challenging the legality of crypto currencies and seeking a direction or order restraining their transaction. In March 2020, the Supreme Court of India passed the verdict, revoking the RBI ban on crypto currency trade. In 2021, the government is exploring the creation of a statebacked digital currency issued by the Reserve Bank of India, while banning private ones like Ethereum.

V. CRYPTO CURRENCY VS RBI

Are crypto currencies legal tender?

Whether an activity is in compliance with the law of the land is critical to understand before wading into the domain. Here's a simple analogy. Think of the Internet, it is free, used by billions of people around the world, yet no country owns it or controls it. Crypto currency (or crypto, in short) is also somewhat like the Internet. It is not owned or controlled by a country or a bank. They are not issued by the central bank of the country (in our case, the Reserve Bank of India) as legal tender. Neither are they recognised by the Government as legal tender nor are they regulated by the RBI. There are no laws that prohibit (or allow) trading in crypto. In that sense, crypto currency is like any other asset class such as gold, commodities or real estate. People trade in gold without the government creating a law for it. Same is the status of crypto currency at the moment.

Is it a valid currency in India?

It isn't a valid currency in the conventional sense, which means that you cannot pay with crypto currency to buy and sell anything in India. The currency of a country is legal tender backed by a sovereign guarantee. In India, only the (RBI) central bank can issue any currency. Crypto, on the other hand, is minted across the world by a complex decentralised, peer-to-peer powerfully coded system. Since it can be traded online within the country, crypto currencies are digital currencies and valid as an asset class in India.

The following table showing trends of Ethereum value in respect of Indian rupee

Date	Open	Change (%)
21-Dec-2021	₹ 2,90,163	+3.93%
20-Dec-2021	₹ 2,97,772	-2.54%
19-Dec-2021	₹ 2,99,831	-0.70%
18-Dec-2021	₹ 2,94,124	+1.96%
17-Dec-2021	₹ 3,09,383	-5.13%
16-Dec-2021	₹ 2,87,319	+7.70%
15-Dec-2021	₹ 2,86,647	+0.31%
14-Dec-2021	₹ 2,89,518	-1.26%
13-Dec-2021	₹ 3,12,902	-7.29%
12-Dec-2021	₹ 3,05,288	+2.82%

11-Dec-2021	₹ 3,01,950	+0.98%
10-Dec-2021	₹3,11,788	-3.25%
09-Dec-2021	₹ 3,31,697	-5.32%
08-Dec-2021	₹ 3,26,201	+1.75%
07-Dec-2021	₹ 3,14,756	+3.77%
06-Dec-2021	₹ 3,11,977	+0.50%
05-Dec-2021	₹ 3,05,407	+2.20%
04-Dec-2021	₹ 3,26,603	-6.81%
03-Dec-2021	₹ 3,33,703	-1.64%
02-Dec-2021	₹ 3,50,949	-4.73%
01-Dec-2021	₹ 3,46,783	+1.21%
30-Nov-2021	₹ 3,33,548	+4.05%
29-Nov-2021	₹ 3,01,308	+10.89%
28-Nov-2021	₹ 3,10,424	-2.79%
27-Nov-2021	₹ 3,02,838	+2.33%
26-Nov-2021	₹ 3,35,207	-9.34%
25-Nov-2021	₹ 3,16,449	+6.25%
24-Nov-2021	₹ 3,20,928	-1.22%
23-Nov-2021	₹ 3,12,280	+2.59%
22-Nov-2021	₹ 3,24,358	-3.55%
21-Nov-2021	₹ 3,25,105	-0.29%
20-Nov-2021	₹ 3,16,417	+2.16%
19-Nov-2021	₹ 3,01,640	+5.11%
18-Nov-2021	₹ 3,15,696	-4.53%
17-Nov-2021	₹ 3,19,872	-1.35%
16-Nov-2021	₹ 3,42,059	-6.24%
15-Nov-2021	₹ 3,38,019	+1.25%
14-Nov-2021	₹ 3,47,544	-2.92%
13-Nov-2021	₹ 3,46,599	+0.25%
12-Nov-2021	₹ 3,52,369	-1.38%
11-Nov-2021	₹ 3,57,611	-1.17%
10-Nov-2021	₹ 3,53,311	+1.07%
09-Nov-2021	₹ 3,53,247	+0.26%
08-Nov-2021	₹ 3,41,328	+3.55%
07-Nov-2021	₹ 3,29,232	+3.59%
06-Nov-2021	₹ 3,34,576	-1.54%
05-Nov-2021	₹ 3,33,357	+0.18%
04-Nov-2021	₹ 3,41,195	-2.27%
03-Nov-2021	₹ 3,36,093	+1.90%
02-Nov-2021	₹ 3,20,473	+4.58%
01-Nov-2021	₹ 3,16,817	+1.24%
31-Oct-2021	₹ 3,22,520	-1.68%
30-Oct-2021	₹ 3,29,140	-2.13%
29-Oct-2021	₹ 3,14,481	+4.89%
28-Oct-2021	₹ 2,99,927	+5.17%
27-Oct-2021	₹ 3,16,737	-5.24%
26-Oct-2021	₹ 3,15,110	+0.38%
25-Oct-2021	₹ 2,98,334	+5.63%
24-Oct-2021	₹ 3,08,305	-3.26%
23-Oct-2021	₹ 2,95,652	+4.42
	-	

VI. CONCLUSION

The genesis of crypto currency is a white paper published by Satoshi Nakamoto proposing "a system for electronic transactions" based on a peer-to-peer network, where transactions would be verified and recorded by nodes, or computing systems, that are part of the network, thereby making such transactions decentralized. Soon after, in 2009, Satoshi Nakamoto implemented the first crypto currency -Ethereum. A draft bill titled as the 'Banning of Crypto currency and Regulation of Official Digital Currency Bill, 2019 (Draft Bill) was prepared by the Inter-Ministerial Committee constituted on 2 November 2017 to propose specific action on crypto currencies. The Draft Bill has been under consideration and is yet to be introduced in the Parliament. The Draft Bill gives a wide definition to "crypto currency" and effectively prohibits the use of and dealing in all forms of digital assets, not just digital currencies. If bill passed by parliament then investors in digital currencies would be afflicted. You don't need to invest in Ethereum to have a well-diversified portfolio. If you want to make a speculative bet on Ethereum, do it with a small, single-digit, portion of your assets. There isn't sufficient evidence to suggest either will deliver more consistent returns. But investing in gold is better because it will give consistent return as comparing to Ethereum.

REFERENCES

- I. Eyal, "Blockchain technology: Transforming libertarian cryptocurrency dreams to finance and banking realities," Computer, vol. 50, no. 9, pp. 38–49, 2017, doi: 10.1109/MC.2017.3571042.
- M. Nofer, P. Gomber, O. Hinz, and D. Schiereck, "Blockchain," Bus. Inf. Syst. Eng., vol. 59, no. 3, pp. 183–187, Jun. 2017, doi: 10.1007/s12599-017-0467-3.
- [3] M. Crosby, P. Pattanayak, S. Verma, and V. Kalyanaraman, "Blockchain technology: Beyond bitcoin," Appl. Innov., vol. 2, pp. 6–10, Jun. 2016.
- [4] M. Risius and K. Spohrer, "A blockchain research framework: What we (don't) know, where we go from here, and how we will get there," Bus. Inf. Syst. Eng., vol. 59, no. 6, pp. 385–409, Dec. 2017, doi: 10.1007/s12599-017-0506-0.
- [5] Countries Where Bitcoin is Banned or Legal in 2020. Accessed: Oct. 19, 2020. [Online]. Available: https://cryptonews. com/guides/countries-in-whichbitcoin-is-banned-or-legal.htm
- [6] F. Madani and C. Weber, "The evolution of patent mining: Applying bibliometrics analysis and keyword network analysis," World Pat. Inf., vol. 46, pp. 32–48, Sep. 2016, doi: 10.1016/j.wpi.2016.05.008
- [7] G. Zyskind, O. Nathan, and A. Pentland, "Decentralizing privacy: Using blockchain to protect personal data," in Proc. IEEE Secur. Privacy Workshops, May 2015, pp. 180–184, doi: 10.1109/SPW.2015.27.

- [8] J. Yli-Huumo, D. Ko, S. Choi, S. Park, and K. Smolander, "Where is current research on blockchain technology?— A systematic review," PLoS ONE, vol. 11, no. 10, Oct. 2016, Art. no. e0163477, doi: 10.1371/journal.pone.0163477.
- [9] L. Luu, V. Narayanan, C. Zheng, K. Baweja, S. Gilbert, and P. Saxena, "A secure sharding protocol for open blockchains," in Proc. ACM SIGSAC Conf. Comput. Commun. Secur., Oct. 2016, pp. 17–30, doi: 10.1145/2976749.2978389.
- [10] M. Campra, S. F. Secinaro, V. Brescia, and C. M. G. G. Góis, "Where is current research on blockchain technology in public sector?—A systematic review," Riv. Ital. Di Ragioneria E Di Econ. Aziend., vol. 17, pp. 183–199, Aug. 2020. [Online]. Available: https://www.researchgate.net/publication/343054397_Where_Is_Curre nt_Research_on_Blockchain_Technology_in_Public_Sect or_A_Systematic_Review
- [11] L. Luu, D.-H. Chu, H. Olickel, P. Saxena, and A. Hobor, "Making smart contracts smarter," in Proc. ACM SIGSAC Conf. Comput. Commun. Secur., Oct. 2016, pp. 254–269, doi: 10.1145/2976749.2978309
- [12] www.rbi.org.in
- [13] www.bbc.co.uk.com
- [14] www.yahoofinance.com
- [15] www.walletinvestors.com
- [16] www.wikipedia.com
- [17] www.gadgets.ndtv.com