

A Study on the Perception of Cryptocurrency in Chennai

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Abstract:- With easy accessibility to the internet, digital transactions are gaining momentum and businesses are shifting towards online transactions. This has also led to the emergence of cryptocurrency, a decentralized system to enable financial transactions. Cryptocurrency claims to make digital transactions more secure than before using digital ledgers and ensuring transparency. The number of cryptocurrencies has increased manifold in the last year and as of April 2023, there were more than 9,000 cryptocurrencies in the market. Given this rapid growth, it is important to analyze its perception in the Indian market, in our case, Chennai. This study aims at understanding (i) Customer's acceptance of cryptocurrency(ii) Understand if cryptocurrency is considered one of the investment options (iii) Future of cryptocurrency in India based on the government policy and to gauge the growth of cryptocurrency in the current environment.

Keywords: Bitcoin, Cryptocurrency, Cryptography, Finance, Investment

1. Introduction

Digital money is growing in transaction volumes with each passing day. Every vendor – be it a multinational brand or a roadside fruit seller, digital payments are a very common option. But there is also another monetary framework gaining popularity in recent days – cryptocurrency. Wikipedia defines cryptocurrency as “A cryptocurrency, crypto-currency, crypto, or coin is a digital currency designed to work as a medium of exchange through a computer network that is not reliant on any central authority, such as a government or bank, to uphold or maintain it.” However, the first cryptocurrency dates back to 2009, which is Bitcoin, by the pseudonymous developer Satoshi Nakamoto. Various governments have been conducting studies to see if they can adopt cryptocurrency, if so, what would be the economic and legal bindings that they would come with.

El Salvador became the first country to accept Bitcoin, one of the cryptocurrencies, a legal tender followed by Cuba. However, China, the single largest market for cryptocurrency, declared all transactions on cryptocurrency illegal shortly after it was recognized by the above-mentioned countries. But India has not legalized cryptocurrency while also not issued a ban. In the Union Budget 2022-2023, it is announced by the finance minister that a tax of 30% will be levied on income from cryptocurrency. This can give rise to either of the two possibilities – either the end of cryptocurrency in India or India launching its own digital currency.

The major driver for cryptocurrency is the transparency of distributed ledger technology. This has created opportunities in both developing and developed countries with a significant growth in the number of companies operating in the cryptocurrency market. But the restraint it faces is the uncertain status of regulations, which raises concerns on security, privacy, and control. This study tries to understand the awareness of cryptocurrency in Chennai, the influence of policies in cryptocurrency and hence in investing patterns, what lies next for cryptocurrency.

2. Scope of the study

The study aims at understanding the general awareness on cryptocurrency in Chennai. It aims at identifying the growth opportunities for cryptocurrency in Chennai, Tamilnadu, India.

2.1 Literature Review

Dawood (2019) Identified that Bitcoins, regulated effectively, could help the future generations to meet the challenges comprising of issues pertaining to financial transactions in various forms.

Reema Varghese (2021) found that Cryptocurrency is a digital or virtual currency, which is molded to use as a medium of exchange used by a strong cryptography (used for solving coding) to secure financial transactions and verify the transfer of assets. They are one such future development of Block chain technology.

Yadav (2021) found that some countries have banned it, and some have not. Researchers also try to understand India's stance on Cryptocurrency and the implications of the Cryptocurrency and Regulation of Official Digital Currency Bill, 2021, which puts a blanket ban on 'private' Cryptocurrencies such as Bitcoin and suggested introducing its own digitalcurrency which is often termed as 'Central Bank Digital Currency' ('CBDC')

Singh (2018) discovered that Cryptocurrencies are a type of digital money that rely on distributed networks and shared transaction ledgers to combine the core ideas of cryptography with a monetary system to create an anonymous, traceable, secure, and potentially stable virtual currency and it will be effective in India. Bitcoin and Ethereum are two highly disruptive cryptocurrencies looking to leverage block chain technologies to drive innovation across numerous industries in India. With regards to the Blockchain,) India can't be overlooked. It is an incredible country with more than a billion people who recently experienced demonetization.

Chaturvedi (2022) assumed that Investors are started saying that India is following China by giving sole authority to RBI to launch and promote digital currencies. The government of India will present a fresh bill on cryptocurrency.

2.2 Limitations:

Major gaps commonly observed in the cryptocurrency market are the influence of market trends on cryptocurrency price. Also, the unexpected regulations by various governments on cryptocurrency trading, and purchases using them make the prices very volatile. This research aims at understanding the awareness of cryptocurrency, percentage of investments made and the probable number of people willing to make risky investments in the nascent market of virtual currency.

3. Research Methodology

The methodology employed to understand the perception can be divided into four distinct stages namely, identification, selection, evaluation, and validation. This study analyzes the awareness and the factors influencing investment decisions on cryptocurrency considering the market trends, income, and economic analysis. Both primary and secondary data were used in the study. Primary data was collected by means of a structured questionnaire shared to people within Chennai. Secondary data used in the study were referenced from articles, journals, research websites, magazines, newspapers, periodicals, and Daily's. The sample size was chosen based on a lottery method (simple random sampling) and the sample size used was 113 respondents. The analysis followed a heuristics model to draw conclusions on the study.

4. Results and Discussions

4.1 Relationship between age, income and factors affecting investment in cryptocurrency:

From the sample of 113 respondents, about 52.21% (59) of them were in the segment of 21-30 age group. In this segment, 38.94% (44) people had an income of about 10-20 Lakhs per annum.

	Income Range				
Age group	< 5 Lakhs	5 - 10 Lakhs	10 - 20 Lakhs	> 20 Lakhs	Grand Total
18-20	2				2
21-30		19	34	6	59
31-40	2	4	6	17	29
41-50	1	1		6	8
>50	3		4	8	15
Grand Total	8	24	44	37	113

Table 1. Distribution Of Income Across Various Age Groups

From the distribution as shown in the table, we infer that the study is influenced more by people in the age range 21 – 40 with most people earning between 10-20 Lakhs per annum on average.

4.2 Relationship between age and generation of investors in share market and

Other financial instruments:

From the respondents, it is observed that the distribution of investors in share market and other financial instruments is fairly even though 78% of them lie in the 21-40 age group (88/113 respondents).

	First Generation investor?		
Age Group	No	Yes	Grand Total
18-20	2		2
21-30	35	24	59
31-40	11	18	29
41-50	2	6	8
>50	3	12	15
Grand Total	53	60	113

Table 2. Distribution Of Generational Investors Across Age

GROUPS

4.3 Relationship between age, awareness and investments made in cryptocurrency

sofar:

About 95% of the respondents (107/113) are aware of cryptocurrency. Out of the 107 people who are aware, only 20% (21/86) have already invested and of these, 17/21 respondents are in the age group 21-40, contributing to 81% of the total sample who have invested in it already.

	Awareness on cryptocurrency		
Age Group	Aware	Not aware	Grand Total
18-20		2	2
21-30	1	58	59
31-40	2	27	29
41-50		8	8
>50	3	12	15
Grand Total	6	107	113

Table 3. Awareness On Cryptocurrency Across Age Groups

	Invested in cryptocurrency		
Age Group	Yes	No	Grand Total
18-20		2	2
21-30	9	49	58
31-40	8	19	27
41-50	2	6	8
>50	2	10	12
Grand Total	21	86	107

Table 4. Distribution Of Investments Made In Cryptocurrency By Various Age Groups.

The above tables show that although 95% of the respondents are aware of cryptocurrency, 80% of them are skeptical on investing in it and have not made investments yet.

4.4 Relationship between age, legal status in India as of today and decentralization:

From the survey conducted, it is inferred that about 74% (84/113) of the respondents are hesitant to invest as cryptocurrency is still not legal. Further, 57% (64/113) are willing to invest in cryptocurrency only if it remains decentralized.

	Are you hesitant to invest since it is not legal yet?		
Age Group	Yes	No	Grand Total
18-20		2	2
21-30	12	47	59
31-40	5	24	29

41-50	4	4	8
>50	8	7	15
Grand Total	29	84	113

**Table 5. Effect Of Legal Status Of Cryptocurrency On
INVESTMENT DECISIONS**

Willingness to invest if cryptocurrency remains decentralized			
Age Group	Yes	No	Grand Total
18-20		2	2
21-30	17	42	59
31-40	14	15	29
41-50	6	2	8
>50	12	3	15
Grand Total	49	64	113

Table 6. Willingness To Invest Indecentralized

Cryptocurrency

From the above tables, we infer that people are ready to invest only if cryptocurrency is made legal and remains free from the hands of a centralized regulator.

4.5 Relationship between income percentage allocated to cryptocurrency investments and risk tolerance levels:

Of the 113 respondents, 87 are willing to invest in cryptocurrency if it is made legal in India. However, 85% of them (74/87) would allocate only 1-5% of their income for investments in the cryptocurrency segment. 55% (48/87) of them would invest even if the risk associated is at 10-20%.

Respondents who will invest in made legal (87/113)	Risk tolerance percentage				
Income % to be invested	< 10%	10-20%	20-30%	> 50%	Grand Total
1-5 %	33	39	2		74
5-10%		9	2	2	13
Grand Total	33	48	4	2	87

**Table 7. Percentage Of Income To Be Allocated For Crypto
Investments And Risk Tolerance Level**

The study shows that people intend to invest up to 10% on cryptocurrency with a maximum risk tolerance level of 20%.

4.6 Relationship between willingness to invest in cryptocurrency and perception of risk associated with cryptocurrency:

Of the 87 people willing to invest in cryptocurrency, 95% (83/87) perceive it to be a very high to high-risk investment. Also, it is inferred that 94% (106/113) perceive the same way.

	Willingness to invest in cryptocurrency		
Perception of risk associated	No	Yes	Grand Total
Very High	16	24	40
High	7	59	66
Medium	3	4	7
Grand Total	26	87	113

Table 8. Perception Of Risk Associated Withcryptocurrency

Conclusion

The study is conducted to understand the perception of cryptocurrency against various demographic factors like age, family income, legal binding, and risk aversion. The fact that cryptocurrency is not officially legal in India makes it a concern for people seeking high returns despite the high risk. This can also be attributed to the recent turbulence in certain cryptocurrency firms like Celsius, Luna, Axie, Vauld, and Voyager which demonstrates how much damage unregulated economy can cause is also high. This comes at a time when multiple companies, both small and large including Meta (parent company of Facebook) has announced shutting down of digital wallet for cryptocurrency in this year. This study helps investors and portfolio managers understand the importance of economic, financial and market conditions, risk aversion and intuition in building investment portfolios.

References

- [1] Afzalur Rahman and Ayub Khan Dawood (2019), 'Bitcoin and Future of Cryptocurrency', Ushus-Journal of Business Management, Vol. 18, No. 1, 61-66, ISSN: 0975-3311. <https://doi.org/10.12725/ujbm.46.5>
- [2] Dr R.B. Ayeswarya and Ms. Reema Varghese (2021), 'A Study on Going Cashless With Cryptocurrency' In India and Its Impact in Banking Industry', IT in Industry, Vol. 9, No.3.
- [3] Aman Kumar Yadav (2021), 'Cryptocurrency in India: To ban or not to ban',
- [4] The RMLNLU Law Review Blog. <https://doi.org/10.2139/ssrn.3803471>
- [5] Dr. Arvind Kumar Singh and Karan Veer Singh (2018), 'Cryptocurrency in India – Its Effect and Future on Economy with Special Reference to Bitcoin', IJRESS, Vol. 8 Issue 3, March - 2018, ISSN 2249-7382.
- [6] Fanny Grace S, Dr. Florence John (2018), 'Types, Uses and Regulations of Cryptocurrency: A study', IJRAR September 2018, Volume 5, Issue 3.
- [7] MinulWimalagunaratne and GuhanathanPoravi (2018), 'A Predictive Model Forthe Global Cryptocurrency Market; A Holistic Approach to Predicting
- [8] Cryptocurrency Prices', 8th International Conference on Intelligent Systems, Modelling and Simulation, 978-1-5386-6539-8/18/\$31.00. <https://doi.org/10.1109/ISMS.2018.00024>
- [9] Martin Angerer, Christian Hoffmann, Florian Neitzert, Sascha Kraus (2020),
- [10] 'Objective and Subjective Risks of Investing into Cryptocurrencies', Finance
- [11] Research Letters, FRL 101737. <https://doi.org/10.1016/j.frl.2020.101737>
- [12] Mathuraswamy, P and Rajendran, G (2015), 'Investment Rationality in Equity
- [13] Market: An Empirical Study', International Journal of Economic Perspectives, ISSN:1307-1637, vol.9, no. 4, pp-49-59.

- [14] Poongodi M, Ashutosh Sharma, Vijayakumar V, Vaibhav Bhardwaj, Abhinav Parkash Sharma, Razi Iqbal, Rajiv Kumar (2020), 'Prediction of the price of
- [15] Ethereum blockchain cryptocurrency in an industrial finance system', Computers and Electrical Engineering 81 (2020) 106527. <https://doi.org/10.1016/j.compeleceng.2019.106527>
- [16] S, Padmavarthini, Portfolio Diversification using Cryptocurrency (March 6, 2021). Available at <http://dx.doi.org/10.2139/ssrn.3799026> or <https://doi.org/10.2139/ssrn.3799026>
- [17] Rahul J. Nikam (2018), 'Model Draft Regulation on Cryptocurrency in India', Hasanuddin Law Review, Volume 4 Issue 2, August 2018, P-ISSN: 2442-9880, <https://doi.org/10.20956/halrev.v4i2.1466> E-ISSN: 2442-9899
- [18] Vaibhav Shakya, PVGN Pavan Kumar, Lakshay Tewari, Pronika (2021),
- [19] 'Blockchain based Cryptocurrency Scope in India', ICICCS 2021, IEEE Xplore Part Number: CFP21K74-ART, ISBN 978-0-7381-1327-2 <https://doi.org/10.1109/ICICCS51141.2021.9432143>
- [20] Dr. VijetaBanwari (2017), 'Cryptocurrency - Scope in India', IRJMSH Vol 8, Issue 12, ISSN: 2277 - 9809 (online) 2348-9359 (Print).
- [21] Varun Shukla, Manoj Kumar Misra, Atul Chaturvedi (2022), 'Journey of Cryptocurrency in India in View of Financial Budget 2022-23'.