

A CRITICAL REVIEW OF CRYPTOCURRENCIES IN EMERGING MARKETS

¹Dr. Satyam Prakash Srivastava, Assistant Professor, Graphic Era Deemed to be University, Dehradun, (U.K), Email: satyamprakash07@gmail.com

²Dr. Rupa Khanna, Professor, Graphic Era Deemed to be University, Dehradun, (U.K)
, Email: dr.rupakhanna@gmail.com

³Oshin Prashar, Assistant Professor, Department of Fashion Design, Graphic Era Hill University, Dehradun(UK)

Abstract: In the recent past years, trading of cryptocurrencies has taken good amount of pace in trading patterns of investors. Over the due course of time Bitcoins have gained utmost relevance in form of currency and providing ample opportunities for young investors. This is the first asset envisage as digital asset that become part of fund manager portfolio. Although the trading pattern of digital currencies are similar to share market but there are anomalies in different areas of concern. The research provides an extensive review of cryptocurrency market, its trading pattern, different exchange platforms, trading strategy and signals. The paper also analyses the conditions of volatility and returns along with trends used for the purpose of taking decisions of investments. The paper also interprets the potential of investment through trends and graph charts involved into portfolio design.

Keywords: Cryptocurrencies, Bitcoins, trading pattern, portfolio design

1. Introduction:

Cryptocurrency is a digital currency which is designed and encrypted through peer-to-peer network and had been into inception for 8 years. Bitcoin, the foremost cryptocurrency is acting as disruptive technology that is taking over conventional payment system in the current decade. Although these currencies are unlikely to remove conventional fiat currency rather opening massive barriers for clearance in global markets that involves exchange rates. It's a revolution that will bring paradigm shift and transformation in usage of currencies. With pace of technology driven market conditions the digital platforms have furnished user-friendly trading system without charging fees. The concept of Bitcoin works on encryption algorithms that create unique hashes and finite in count. As and when they come into range of computer networks it verifies transactions, that works like exchange of physical form of currency. The users of Bitcoin have faith in making use of digital currency for the purpose of exchange or payments (Kelly, 2014). Bitcoin don't possess any intrinsic value though gold have in the market, such currencies in virtual world have acceptance on account of faith. Over the duration of time these currencies have gained global presence and could be acting as single disruptive technology in all kind of international trade and settlements. Number of Multinational companies are showing their inclination and invested in cryptocurrencies and blockchain in 2021. Asset Management Companies have already announced accepting payments in form of digital currencies by the end of this year. Fintech companies like PayPal and Square are trying to betting on crypto by permitting individuals to accept payments in Bitcoins. Companies like Amazon are going to make great moves by sharing job posting for a digital currency and blockchain product lead. Walmart also engaging people as crypto experts to developing blockchain strategies.

2. Literature Review:

According to (Doran, 2014) Cryptocurrency works on cryptography functions, controlled and regulated through decentralised network and facilitate financial payments or transactions. These payments are controlled and regulated through Blockchain technology (Meunier 2018). The security

of cryptocurrencies is based on the concept of cryptography and not on any belief or individuals (Narayanan et al. 2016). According to (Wang et al. 2017) security of transactions are regulated through “Elliptic Curve Cryptography” that works on discipline of mathematics that ensures safety of financial dealings. Any endeavour to encrypt by any compulsion it will take one tenth the age of the universe to match a value when attempting 250 billion possibilities every second (Grayblock 2018). As per the research of (Harwick 2016) cryptocurrencies will be eliminating the role of financial intermediaries which will mitigate the transaction cost for investors. The supply of cryptocurrencies is limited and it will reduce overtime and finish up by 2140. In case the database of bank is lost due to any reason of hacking then it will try to recover through its backup whereas in case of cryptocurrencies if the network got hampered then the remaining will get it verified from other nodes correctly. According to (Rose 2015) cryptocurrencies are not regulated and controlled by any central committee. The crypto market had evolved since 2009 with initiation of first digital currency Bitcoin (Kaal 2020) and this reason of calling it as first digital asset. By December 2019 there were 4960 cryptocurrencies and 20326 market with the market cap of 200 billion dollars (Coin Market Cap 2019).

3. Objectives of the study:

- i) To study the contribution of crypto currencies in financial market
- ii) To study the performance of digital currencies
- iii) To examine the portfolio of crypto market
- iv) To study the trading pattern of crypto currencies

4. Evolution of Cryptocurrency:

In recent past particularly Bitcoin in terms of value has gained 14 million Bitcoins in circulation. Lot of investors have speculated about future potential of Bitcoins which is technology driven and could be influencing recent market capitalization. The concept of cryptocurrency works through blockchain technology wherein it is considered that information saved in blocks through algorithms formed in hash pattern which saves data in this code form. The entire network works in decentralised form. It has the feasibility to disrupt range of transactions beside conventional payment system. It further includes financial assets, stocks, bonds whose records are retained and required for verification by the third party. In this phase of evolution market factors that play role are stakeholders, consumers, financial institutes, technocrats and regulators.

a. Stakeholders: They seems to be surer about the potential in cryptocurrencies and its market. The inherent value of the stated technology provides adequate reason for the investors to be positive for investment decisions. Institutional investors have gained more attention towards their stake in these cryptocurrencies.

b. Consumers: Cryptocurrency provide reasonable and easy peer-to-peer payment platforms than conventional system without sharing any personal information. Although they have gained consideration for payment options, price fluctuations have aroused interest of investors to go for speculative trading in such market.

c. Financial Institutions: Conventionally, banks have acting as a mediator between borrower and lender but now the role of mediator is getting dissolved and disintermediation has initiated gradually in banking segment. Increased usage of multiple payment options like Flipkart gift card, Google pay, Amazon gift cards or Apple pay have facilitated transactions

d. Technocrats: Number of technical experts have spent their endless efforts in cryptocurrency mining, others have devoted in developing exchanges, e-wallets and other cryptocurrencies. The

market has attained the attention of young talents and taking the entire focus towards Industry 5.0 i.e to the next level. In order to gain unanimous acceptance, companies and users should find cryptocurrency as easy solution for financial transactions, though cyber security should ensure the safety measures.

e. Government regulators: The behaviour of regulators are indifferent in the entire world when it comes to define a legitimate framework for cryptocurrencies. Recently the government has given a green signal for cryptocurrency trading and all income generated through it would be liable for taxation up to 30%.

5. Regulations of cryptocurrency:

U.S officials have shown their inclination in cryptocurrency and considering for a stable regulation in such coins. In Washington D.C the legal pursuits have appealed for secure guidelines for trading in cryptocurrency market. According to Jeffrey Wang, head of Americas at Amber group which is a Canada-based crypto finance firm have demanded precise regulations upon it. Federal Reserve Chair Jerome Powell stated that they have no inclination to restrain cryptocurrency trading in the United States. Security and Exchange Commission Chairman Gary Gensler has also advised to put cryptocurrency trading under regulations so that investors are likely to hurt if these virtual currencies are not under regulations. In month of November the \$ 1.2 trillion bipartisan infrastructure bill has been signed by the president covers crypto tax provisions that would make easier to track crypto activity among Americans and reporting their crypto transactions. Researchers and experts believe that regulatory framework is a good thing in such volatile market of cryptocurrency.

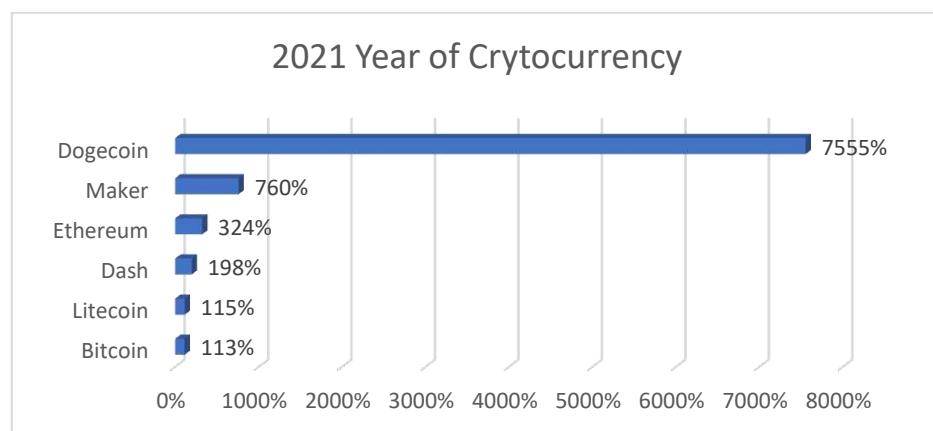


Figure: 1 Year of Cryptocurrency

Source: CoinDesk

In the Figure 1 the status of cryptocurrency has been depicted. Out of which Dogecoin has offered tremendous returns to the investors followed by Maker and Ethereum. Year 2021 envisage as the year of cryptocurrencies where most of them had been offering enormous returns to the investors and scale up the growth of investors' wealth to incredible returns. Out of it Dogecoin cryptocurrency have offered 7555% returns when compared the 7-day average price from the end of 2020 till 2021. Of course, lot of fluctuations have been tremendous between January to May but overall trends for most of them had been on the upper side. Maker coin has reflected the growth of 760%, Dash reflected the growth of 324%, Litecoin reflected 115% followed by Bitcoin 113%. Lot of young investors have plenty of capital investment gains in such coins of trading.

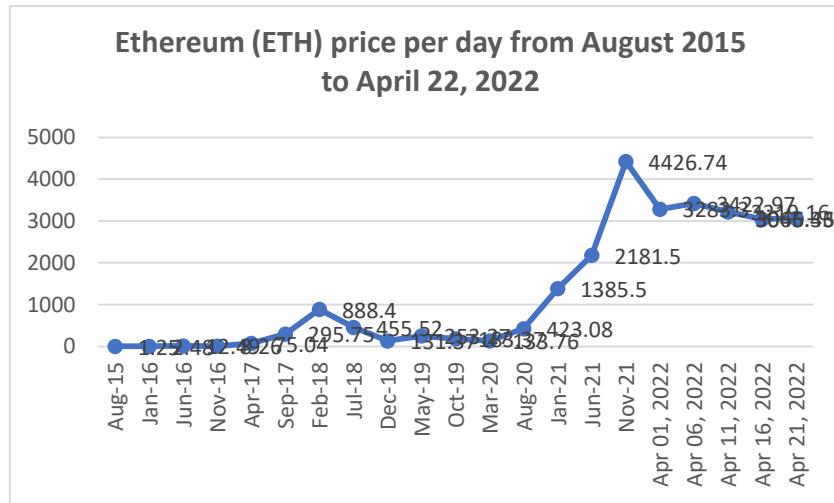


Figure 2: Ethereum price August 2015 to April 2022

Source: <https://www.statista.com/statistics/806453/price-of-ethereum/#professional>

In the Figure 2 the price per day from August 2015 to April 2022. The Ethereum (ETH) price in USD rise to the new levels in month of November,2021 over 4800 U.S dollars. It happened because of the news that floated into market about digital art piece was sold as the world's most expensive NFT for over 38,000 ETH. The price of Bitcoin also increased due to IPO of the U.S crypto trader Coinbase. It is difficult to forecast the future prices of Ethereum and it is not feasible without decentralised finance. Non-fungible (NFTs) tokens have grown more than ten times during 2018 to 2020 and are legible in the entire world. They function in form of unique code and are digitally connected. The application is especially common in gaming, sports and other areas.

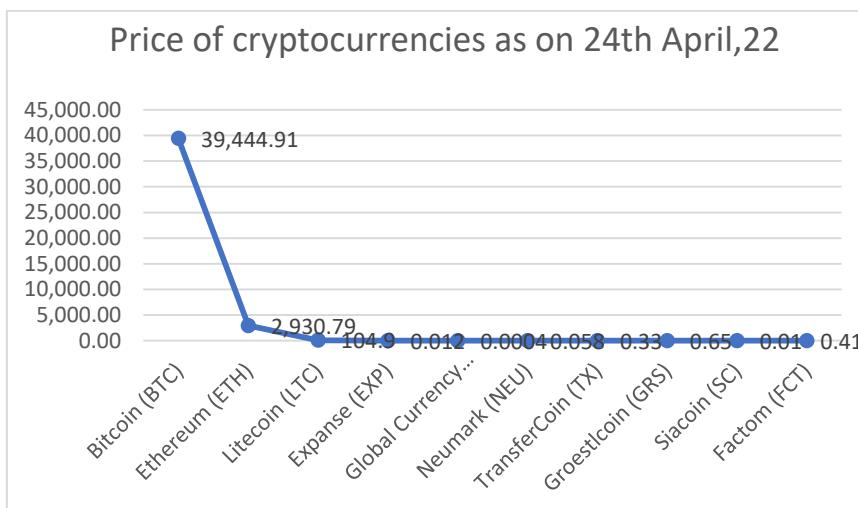


Figure 3: Price of cryptocurrencies

Source: <https://www.cointracker.io/price>

In the above Figure 3 price of cryptocurrencies as on 24th April, 22 has been shown. The price of Bitcoin is \$39444.91 followed by Ethereum \$2930.79, Litecoin \$104.9, Expanse \$0.012. Through the figure it is shown that the value of cryptocurrencies has been great enough for the potential investors to tap the fluctuations and go for speculative trading.

6. Conclusions

The Bitcoin are encouraging more and more innovations and resolving the traditional issues. Number of currencies based on certain projects are emerging different from Bitcoins. In fact Iceland have started their own digital currencies (Hofman, 2014). It may be feasible that most of business solutions are handled by cryptocurrencies and Bitcoins will furnish platforms and pave way for number of other currencies to explore and grow. European and Latin America markets are exploring this market more and more with Bitcoin transactions. Over the duration of time cryptocurrency market are anticipated to perform nominal transactions and would bridge the gap that conventional fiat currencies had not been able to perform. The backbone of Bitcoin's Blockchain technology will develop more potential for smart contracts (Hileman, 2016) which occur when certain conditions occur.

References:

- [1] Kelly, B. (2014). The Bitcoin Big Bang : How Alternative Currencies Are About to Change the World.
- [2] Doran MD (2014) A forensic look at bitcoin cryptocurrency. PhD thesis, Utica College
- [3] Meunier S (2018) Blockchain 101: What is blockchain and how does this revolutionary technology work? In: Transforming Climate Finance and Green Investment with Blockchains. Elsevier, pp 23–34
- [4] Narayanan A, Bonneau J, Felten E, Miller A, Goldfeder S (2016) Bitcoin and cryptocurrency technologies: a comprehensive introduction. Princeton University Press, Princeton
- [5] Wang H, He D, Ji Y (2017) Designated-verifier proof of assets for bitcoin exchange using elliptic curve cryptography. Future Generat Computer System
- [6] Grayblock: Elliptic-Curve Cryptography. <https://medium.com/coinmonks/elliptic-curve-cryptography-6de8fc748b8b>. [Online, Accessed April 25, 2022]
- [7] Harwick C (2016) Cryptocurrency and the problem of intermediation. Independ Rev 20(4):569–588
- [8] Rose C (2015) The evolution of digital currencies: Bitcoin, a cryptocurrency causing a monetary revolution. Int Bus Econ Res J (IBER) 14(4):617–622
- [9] Kaal WA (2020) Digital asset market evolution. J Corp Law 20–02
- [10] CoinMarketCap: Top 100 cryptocurrencies by market capitalization (2019)
- [11] Hofman, A. (2014, March 6). The Dawn of the National Currency – An Exploration of Country-Based Cryptocurrencies. Retrieved from Bitcoin Magazine
- [12] Website: <https://bitcoinmagazine.com/articles/dawnnational-currency-exploration-country-based-cryptocurrencies-1394146138>
- [13] Hileman, G. (2016) State of Bitcoin and Blockchain 2016: Blockchain Hits Critical Mass. Retrieved from Coindesk Website: <http://www.coindesk.com/state-of-bitcoin-blockchain/>
- [14] <https://www.statista.com/chart/13520/the-top-ten-cryptocurrencies/>
- [15] <https://www.statista.com/statistics/655511/leading-virtual-currencies-globally-by-purchase-volume/>
- [16] <https://www.statista.com/statistics/806453/price-of-ethereum/#professional>
- [17] <https://www.pwc.com/us/en/industries/financialservices/library/cryptocurrency-evolution.html>
- [18] <https://time.com/nextadvisor/investing/cryptocurrency/future-of-cryptocurrency/>
- [19] <https://www.pwc.com/us/en/industries/financialservices/library/cryptocurrency-evolution.html>