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**A Comparative Study of Top Five Cryptocurrencies in India.**  
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**ABSTRACT**

*The present research examines the most prominent five cryptocurrencies—Bitcoin, Ethereum, Bianca Coin, Tether, and Solana—that are accessible in India according on the value of their market caps. It additionally highlights the benefits and drawbacks of each type of cryptocurrency as well as the advantages of some over alternatives. The article additionally outlines important aspects of the prominent digital currencies that are accessible in India. The study also concentrates on price assessment of the top five cryptocurrencies during the last year (1 years) as well as this study also indicate the contrasting of prices volatility of cryptocurrencies.*

**KEYWORDS:** Cryptocurrencies, Market Capitalization, Key feature, Price Analysis

**1. INTRODUCTION**

Cryptocurrency is a form of electronic money created using technology that controls its creation and facilitates transactions while concealing the user's identity. The term "crypto" refers to encryption, and cryptography is a computer technology used for security, information hiding, and identification. Money simply represents the amount needed for transactions. Cryptocurrencies are digital currencies that offer faster, cheaper, and more reliable transactions compared to government-issued currencies. They allow direct transactions between users without intermediaries, making transactions affordable and fast.

To prevent fraud and manipulation, each cryptocurrency user can simultaneously record and verify their transactions with others on a public ledger called a blockchain. This ledger is publicly available, ensuring efficient, sustainable, secure, and transparent transactions. Cryptocurrencies operate using blockchain technology, which enables their existence. Bitcoin, the most famous cryptocurrency, was created using blockchain technology. Blockchain is a decentralized ledger of all transactions on a peer-to-peer network, allowing participants to confirm transactions without the need for a central clearinghouse.

Blockchain technology offers advantages such as increased transparency, accurate tracking, a permanent ledger, and reduced costs. However, it also has disadvantages, including complex technology, legal implications, implementation challenges, and competition from other

platforms. Despite these drawbacks, blockchain technology continues to evolve and has the potential to revolutionize industries by enabling secure, transparent, and efficient transactions and operations.

## **2. REVIEW OF LITERATURE**

(Malik, 2020) had conducted research on “Drivers of Bit coin Prices: An Empirical Analysis of India” with an objective of evaluating the price of Bit coin in India during 156 weeks starting from 2017- to 2019 through Vector Error Correction. At the end researcher concluded that Bit coin price is affected by Bit coin supply, gold prices, money supply, and Bit coin trade volume. (Ayub & Abrar, 2020) had carried out “A Comparative Study on Top Five Digital Currencies in India: Crypto currencies' ". Here in this research researcher comparatively examined five crypto currencies: Bit coin, Ethereum, Ripple, Tether and Bit coin Cash which were selected based on the market capitalization rate. Research period is six months from October 2019 to March 2020. The result concluded by the researcher that the decline in price of crypto currencies in March 2020 due to the world Pandemic Covid-19. (Bhosale & Mavale, 2018) had analysed “Volatility of select Crypto-currencies: A comparison of Bit coin, Ethereum and Lit coin”. The researcher tried to compare the price of three crypto currencies - Bitcoin, Ethereum and Lit coin from December 2017 and January 2018 using Graph and Descriptive statistics. Research concluded that Bit coin was much steadier than other two coins during the selected period. (Kaur & Kaur, 2018) had done “A Comparative Study of Bit coin and Other Crypto currencies”. Researchers compared Bit coin Vs Lit coin, Ethereum, Ripple and Dash considering some factors like Usage, YTD Performance, Total Supply, Public Awareness, Community and Rank according to market capitalization and overall result obtained showed that Bit coin is performing well in all aspects as Compared to others. (Blesson & Manjari, 2018) had written an article entitled “Crypto- currency: An Overview on Its Impact on Indian Economy”. The researcher empathized on studying about crypto- currency and how it affects the Indian economy furthermore researcher also described the present state of affairs and future projections of crypto currencies in India. (V & P, 2019) conducted “A Study on Opportunities and Challenges of Crypto- currency in India with Special Reference to Bit coin”. It was a conceptual article discussing history, types, its working, advantages and disadvantages, challenges and opportunities. Moreover, researchers tried to scrutinize Bit coin in India.

## **3. METHODOLOGY**

The present study focuses on descriptive research and is based on secondary data collected from reports in Economic Times, CoinGecko, CryptoList.com, Money Control and other research papers as well as websites their respective websites. Cryptocurrency information has been selected based on available data over the past 8 years to analyse the returns of different cryptocurrencies. This method of selecting crypto information is called convenience sampling, where data is selected based on the convenience of the researcher.

### **Objective of the study**

- To analyse the attributes of the five leading cryptocurrencies chosen based on their market capitalization.
- To conduct a comparative price analysis of the top five cryptocurrencies over the past year (For 1 Year).

### **History and Features of top five cryptocurrencies**

**Bitcoin:** Bitcoin's rise over the past year has been a major financial story. Bitcoin, the first cryptocurrency to be established, was designed to transform peer-to-peer transactions. Although Bitcoin has a reputation for innovation, previous efforts such as B-money and Bit gold to create crypto-secured online currencies have not been fully realized. In 2008, an article titled “Bitcoin: Peer-to-Peer Electronic Cash System” was published on cryptocurrency forums. Then, in 2009, the Bitcoin software was released to the public, starting the mining

process responsible for creating new Bitcoins and validating transactions on the blockchain. Initially, Bitcoin had no market value as it was only mined, which posed a problem in assigning monetary value to this emerging unit of cryptocurrency. Bitcoin's journey from conceptualization to becoming a widely traded digital asset highlights the cryptocurrency's growth and impact on the financial landscape.

### **Key Features of Bitcoin:**

**Blockchain Technology:** Transactions are documented on the blockchain, which is a publicly accessible record that offers confidentiality and visibility.

**Mining:** In order to verify transactions and safeguard the network, powerful machines must solve intricate mathematical puzzles in order to produce new bitcoins.

**Security:** The independent network of miners that maintains Bitcoin's blockchain makes it impervious to counterfeiting and intimidation.

**Ethereum:** After Vitalik Buterin presented the idea to the Bitcoin community in 2013, the Ethereum white paper outlining the protocol's fundamental technical framework was published.

Buterin is driven by his conviction believes the issue is not being sufficiently addressed by the Bitcoin community. Ethereum's primary objective is to use blockchain technology to do away with the need for middlemen in a number of procedures, including archiving information, mortgage transfers, and the monitoring of intricate financial instruments. Intelligent contracts, which are self-executing scripts that enable value exchange on the network, are a key component of Ethereum. for as long as the Ethereum network is operational, these contracts will continue to function since they are permanently stored on the blockchain and will execute continuously under present circumstances without external intervention.

That virtual machine illustrates the versatility of the infrastructure and the potential it has for many applications within the system decentralized ecosystem by enabling the deployment of any program on the Ethereum blockchain, independent of the programming language employed.

### **Key Features of Ethereum:**

**Ether (ETH):** Ethereum's cryptocurrency, used to pay for computational resources and transactions. **Smart Contracts:** Ethereum allows the creation and deployment of smart contracts, enabling self-executing contracts with the terms of the agreement directly written into code.

**Ethereum Virtual Machine (EVM):** It is a runtime environment for smart contracts in Ethereum. It provides the necessary resources to execute smart contracts. **Decentralized Applications (DApps):** Ethereum enables the creation of decentralized applications, allowing participants to interact without a central authority.

**Binance Coin:** The cryptocurrency known as Binance Coin (BNB) has been released by the trading platform Binance and is denoted by the sign BNB. The native currency of Binance's Binance Chain, BNB was initially built on the Ethereum network. It covers listing costs, trading and exchange fees, and various additional fees on the Binance platform, among other things. BNB may also be traded for various other digital currencies and used to invest in certain first-time coin offerings. The restricted quantity of Binance Coin is one of its unique features; a percentage of Binance's revenues are used to buy back and destroy BNB permanently, which lowers the total supply.

Originally created in 2017 as a utility token to lower transaction fees, BNB's use has grown to encompass a wide range of applications, including as web-based services, banking services, make trips booking, entertainment, including payment of fees for transactions on the Binance Chain. With a market valuation of more than 36 billion USD as of November 2023, Binance Coin ranks among the biggest digital currencies globally. BNB is already a major participant in the cryptocurrency world, closely ranking Bitcoin, Ethereum, and USD Tether when it comes to of market value thanks to its adaptability and broad acceptance.

**Key Features of Binance Coin:**

*Fee Payment:* At the Binance exchange, BNB is mostly utilized to cover transaction charges. Token Burns: Binance decreases the total quantity of BNB and may raise its value by using a piece of its earnings to buy it back and eliminate it forever.

*Broad Range of Uses:* BNB is now used for a variety of purposes, including as internet services, financial services, recreational activities, travel reservations, and processing fees for transactions on the Binance Chain.

*Market size and Trading:* BNB comprised one of the biggest cryptocurrencies by market capitalization as of November 2023, with an aggregate market size of more than \$36 billion.

*Backing as an Ecosystem:* BNB is the digital currencies that runs the Binance Chain ecosystem as a whole. It may be spent on a number of things, including paying Binance Smart Chain transaction fees, taking part in token sales, receiving awards, and beyond.

*The Tether USDT:* Tether (USDT) is a secure crypto that has been protected by Tether's dollar reserve funds, which provide sustainability. It was introduced in 2014 and issued by iFinex-owned Tether. As of March 2024, USDT has a market valuation of around \$99 billion, making it the world's biggest stablecoin and the third- largest coinage. The bulk of the 4,444 Tether tokens, which are tied to US dollars, are linked to precious metals and other conventional currencies. Although Tether's reserves disclosure and auditing procedures have generated criticism, the stable currency market still uses it extensively. With tokens being created or melted in response to consumer demand, it is intended to preserve a constant 1:1 conversion rate with the US dollars. regardless of whether it doesn't provide revenues, Tether offers a reliable means of storing assets and becomes available on several blockchains. About 80% of all transactions involving Bitcoin are made through Tether, which plays a crucial role in supplying liquidity to the market for digital currencies.

**Key Features of Tether:**

*Currency Stabilization:* The tokens used for Tether have a steady and readily apparent value since they are carefully correlated with major official currencies like the EUR and the US dollar. Because of the stability it provides, Tether is a great option for investing and a reliable repository of money.

*Accessibility and Availability:* For crypto buyers and sellers, Tether is a trustworthy supply of liquidity that makes it possible to move in and out of different digital currency investments with ease and without being exposed to unforeseen profits or losses. Additionally, it offers a low-volatility way to effectively unwind market holdings.

*Supported by Reserves:* The company's reserves of conventional currency function as a systematic 1:1 backing for each Tether (USDT).

*International Network and Adoption:* Due to Tether tokens' integration into several blockchain systems, they are widely used and have unmatched liquidity. This worldwide presence improves accessibility and ease of use for users in various geographical locations. Developed in 2017, Solana is a third-generation publicly available blockchain technology designed to offer a strong basis for extensible and autonomous applications. Solana, which is renowned for its superior efficiency, seeks to address the problems with scalability using blockchain-based technologies. In comparison with other alternatives like Ethereum, it is notable for its low transaction expenses as well as rapid transaction productivity, which can execute beyond 65,000 transactions per second.

**Key Features of Solana:**

*Strong Transmission rate:* It is arguably of the most rapidly networks for blockchain because to its special consensus process, and additional cutting-edge technology.

reasonably priced Transaction Costs: In contrast with various other blockchain architectures, Solana's topology enables affordable transaction charges.

*Evidence of History (PoH):* Whenever transactions are uploaded to the the blockchain system, Solana uses the concept of the Proof of History agreement process for organizing them.

*Proof-of-Stake (PoS) procedure:* To protect the network's integrity and authenticate operations Solana applies a Proof-of-Stake method.

Designers may create and run decentralized application programs (DApps) on Solana owing to its ability to enable intelligent contract generation and implementation. Its blockchain's capacity for application possibilities are increased by this attribute.

#### 4. DATA ANALYSIS & FINDINGS

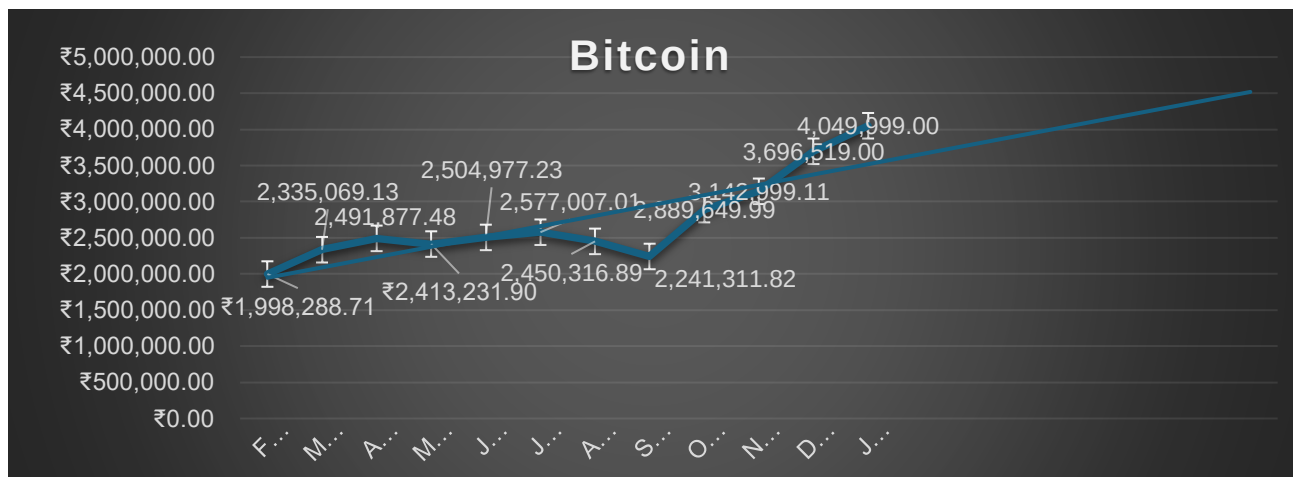
##### A Comparative Analysis of Cryptocurrencies

The world of cryptocurrencies is constantly changing due to new developments. Bitcoin, Ethereum, Binance Coin, Solana, and Tether are notable participants in this dynamic landscape that draw interest from both investors and fans. The most well-known and recognized digital money is still Bitcoin, the forerunner in the cryptocurrency space. With its cutting-edge smart contract features, Ethereum, a strong competitor, seriously challenges Bitcoin's dominance. Since its October 2014 launch and subsequent rebranding, Tether has established itself as a stablecoin. During July 2017, Binance Coin made its debut with a novel product that combined the benefits of Bitcoin with lower transaction prices and quicker transaction speeds. Each cryptocurrency in this carefully chosen collection has unique characteristics, but they all have one thing in common: a tendency to fluctuate in value. Prominent industry leaders keep going to influence the direction of the digital currency environment as the crypto family grows and diversifies, each adding unique advantages and traits to the developing story of decentralized banking. Despite their differences, all cryptocurrencies have one thing in common: their volatile pricing. An overview of the cryptocurrency price fluctuations during a one-year period, from February to January 2024, is shown in the table below.

**Table 1: Bitcoin's price fluctuation of bitcoin during January 2023 to January 2024**

| Months   | Bitcoin         |
|----------|-----------------|
| Feb 2023 | ₹19,98,288.705  |
| Mar 2023 | ₹23,35,069.134  |
| Apr 2023 | ₹24,91,877.483  |
| May 2023 | ₹24,13,231.903  |
| Jun 2023 | ₹25,04,977.227  |
| Jul 2023 | ₹25,77,007.007  |
| Aug 2023 | ₹24,50,316.894  |
| Sep 2023 | ₹22,41,311.82   |
| Oct 2023 | ₹28,83,649.993  |
| Nov 2023 | ₹31,42,999.112  |
| Dec 2023 | ₹ 36,96,519.000 |

|          |                |
|----------|----------------|
| Jan 2024 | ₹40,49,999.000 |
|----------|----------------|

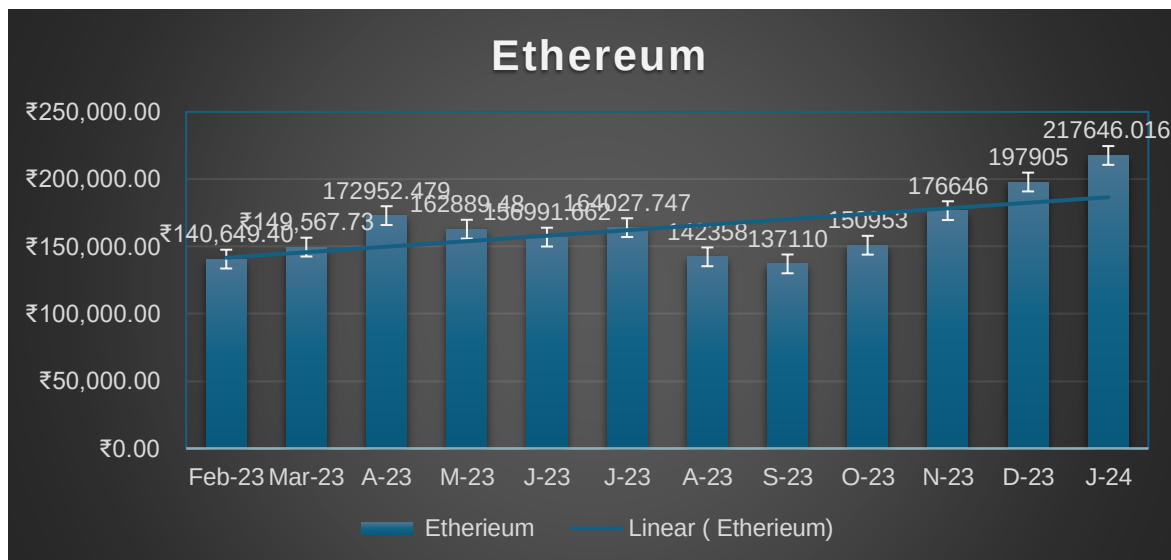


**Table 2: Ethereum's price fluctuations of bitcoin during January 2023 to January 2024.**

| Months   | Ethereum     |
|----------|--------------|
| Feb 2023 | ₹14,649.404  |
| Mar 2023 | ₹14,9567.728 |
| Apr 2023 | ₹172952.479  |
| May 2023 | ₹162889.069  |
| Jun 2023 | ₹156991.662  |
| Jul 2023 | ₹164027.747  |
| Aug 2023 | ₹142358.149  |
| Sep 2023 | ₹137110.006  |
| Oct 2023 | ₹150953.793  |
| Nov 2023 | 17646.243    |
| Dec 2023 | ₹197904.006  |
| Jan 2024 | ₹217649.016  |

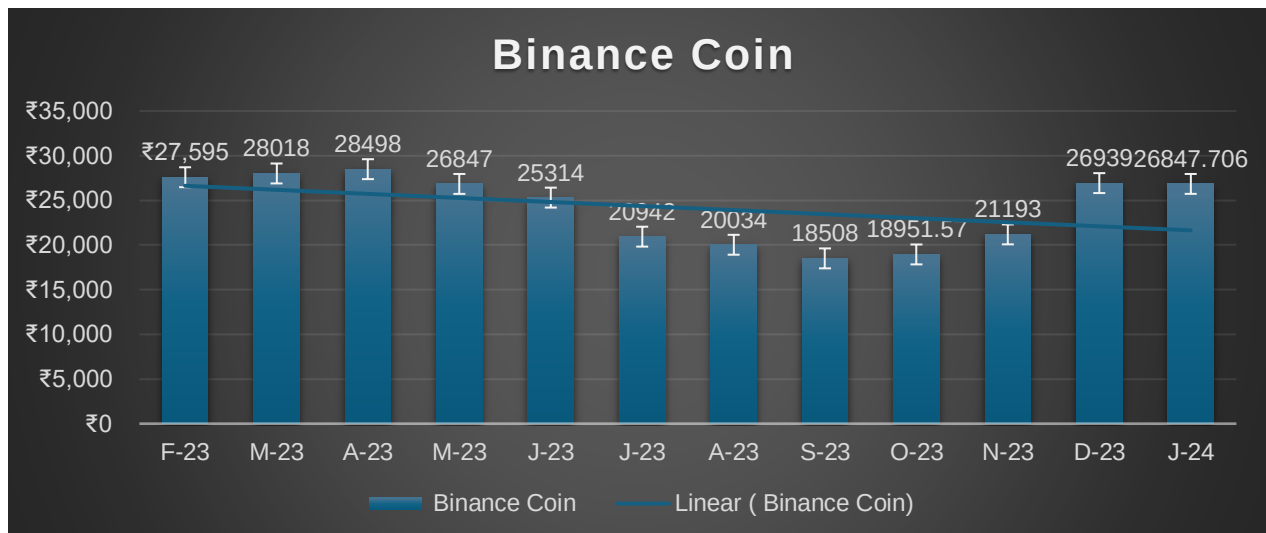
**Figure 2: Price Fluctuation in Ethereum during February 2023 to January 2024**





**Table3: Binance Coin's Price Fluctuation of Bitcoin during January 2023 to January 2024.**

| Months   | Binance Coin |
|----------|--------------|
| Feb 2023 | ₹2759.71     |
| Mar 2023 | ₹2818.833    |
| Apr 2023 | ₹28498.849   |
| May 2023 | ₹26847.41    |
| Jun 2023 | ₹25314.325   |
| Jul 2023 | ₹20942.52    |
| Aug 2023 | ₹20034.352   |
| Sep 2023 | ₹18508.417   |
| Oct 2023 | ₹18951.57    |
| Nov 2023 | 21193.056    |
| Dec 2023 | ₹26939.608   |
| Jan 2024 | ₹26846.706   |

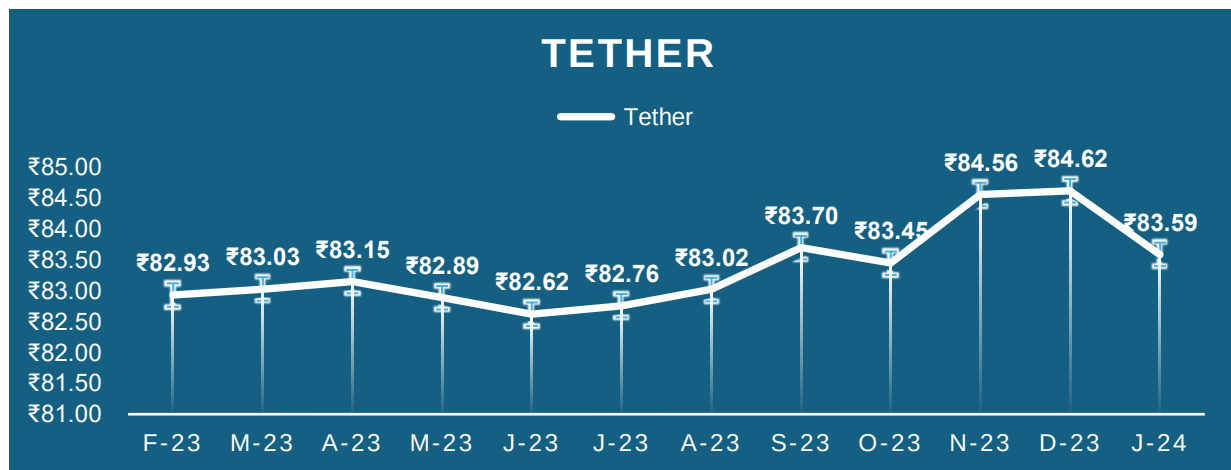


**Figure 3: Price Fluctuation in Binance coin during February 2023 to January 2024**

**Table 4: Tether's Price Fluctuation of Bitcoin during January 2023 to January 2024.**

| Months   | Tether   |
|----------|----------|
| Feb 2023 | ₹82.93   |
| Mar 2023 | ₹83.03   |
| Apr 2023 | ₹83.149  |
| May 2023 | ₹82.887  |
| Jun 2023 | ₹82.621  |
| Jul 2023 | ₹82.759  |
| Aug 2023 | ₹83.02   |
| Sep 2023 | ₹ 83.70  |
| Oct 2023 | ₹ 83.446 |
| Nov 2023 | ₹84.561  |
| Dec 2023 | ₹84.62   |
| Jan 2024 | ₹83.59   |

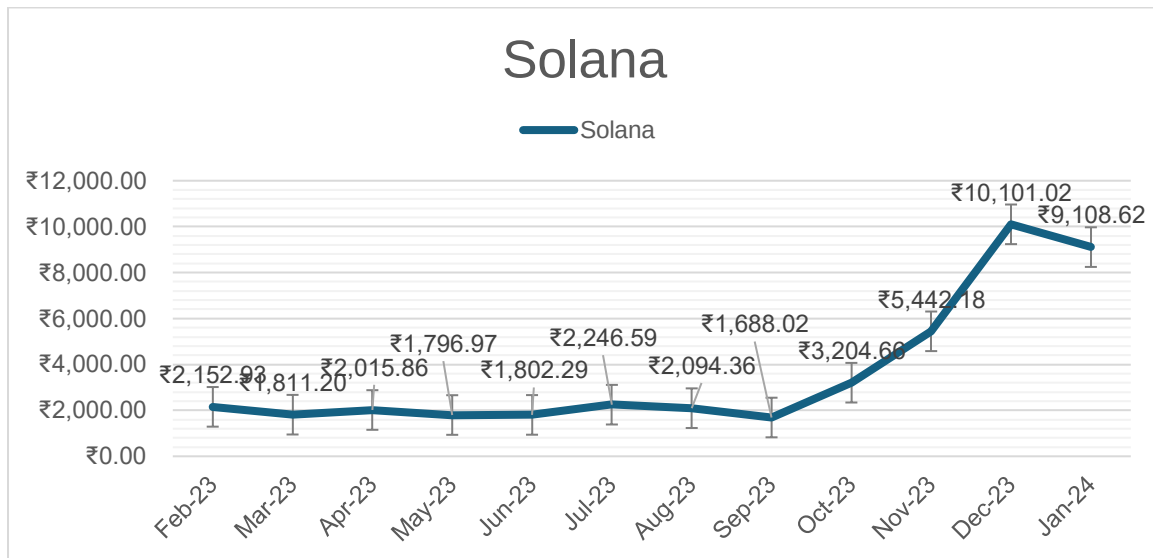




**Figure 4: Changing price of Tether's during February 2023 to January 2024**

**Table 4: Solana's Price Fluctuation of Bitcoin during January 2023 to January 2024.**

| Months   | Solana     |
|----------|------------|
| Feb 2023 | ₹ 2152.93  |
| Mar 2023 | ₹ 1811.2   |
| Apr 2023 | ₹ 2015.86  |
| May 2023 | ₹ 1796.97  |
| Jun 2023 | ₹ 1802.29  |
| Jul 2023 | ₹ 2246.59  |
| Aug 2023 | ₹2094.36   |
| Sep 2023 | ₹ 1688.02  |
| Oct 2023 | ₹ 3204.66  |
| Nov 2023 | ₹ 5442.18  |
| Dec 2023 | ₹ 10101.02 |
| Jan 2024 | ₹ 9108.62  |



**Figure 5: Changing price of Solana's during February 2023 to January 2024**

**Table 5: Compare the Price of the Top Five Cryptocurrencies in India and the Fluctuation in it During February 2023 to January 2024.**

| Months /Cryptocurrencies | Feb 2023       | Mar 2023       | Apr 2023       | May 2023       | Jun 2023       | Jul 2023       | Aug 2023       | Sep 2023      | Oct 2023       | Nov 2023       | Dec 2023       | Jan 2024       |
|--------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|----------------|----------------|----------------|----------------|
| <b>Bitcoin</b>           | ₹19,98,288.705 | ₹23,35,069.134 | ₹24,91,877.483 | ₹24,13,231.903 | ₹25,04,977.227 | ₹25,77,007.007 | ₹24,50,316.894 | ₹22,41,311.82 | ₹28,83,649.993 | ₹31,42,999.112 | ₹36,96,519.000 | ₹40,49,999.000 |
| <b>Ethereum</b>          | ₹14,649.404    | 14,956.728     | ₹17,295.2479   | ₹16,288.9069   | ₹15,699.1662   | ₹16,402.7747   | ₹14,235.8149   | ₹13,711.006   | ₹15,095.3793   | ₹17,646.243    | ₹19,790.4006   | ₹21,764.9016   |
| <b>Binance Coin</b>      | ₹2759.71       | ₹2818.833      | ₹28498.849     | ₹26847.41      | ₹25314.325     | ₹20942.52      | ₹20034.352     | ₹18508.417    | ₹18951.57      | ₹21193.056     | ₹26939.608     | ₹26846.706     |
| <b>Tether</b>            | ₹82.93         | ₹83.03         | ₹83.149        | ₹82.887        | ₹82.621        | ₹82.759        | ₹83.02         | ₹83.70        | ₹83.446        | ₹84.561        | ₹84.62         | ₹83.59         |

|               |                  |             |                  |                  |                  |                  |                  |                  |                  |                  |                   |                  |
|---------------|------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-------------------|------------------|
| <b>Solana</b> | ₹21<br>52.9<br>3 | ₹18<br>11.2 | ₹20<br>15.8<br>6 | ₹17<br>96.9<br>7 | ₹18<br>02.2<br>9 | ₹22<br>46.5<br>9 | ₹20<br>94.3<br>6 | ₹16<br>88.<br>02 | ₹32<br>04.6<br>6 | ₹54<br>42.1<br>8 | ₹10<br>101.<br>02 | ₹91<br>08.6<br>2 |
|---------------|------------------|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-------------------|------------------|

As we can see that in the above table and all chart, which have been selected top five cryptocurrencies in India as well as we are comparing the price of the top cryptocurrencies in India, During the period from February 2023 to January 2024, the table provides a detailed comparison of the prices of the top five cryptocurrencies in India, namely Bitcoin, Ethereum, Binance Coin, Tether, and Solana. the notable price movements and fluctuations observed for each cryptocurrency:

### **Bitcoin (BTC):**

Lowest Price: ₹19,98,288.705 (Feb-23)

Highest Price: ₹40,49,999.000 (Jan-24)

**Significant Increase:** Bitcoin exhibited substantial growth, more than doubling in value from its lowest observed price in February 2023 to the highest point in January 2024. The aforementioned demonstrates Bitcoin's fluctuations as well as potential for substantial gains in an extremely brief amount of time.

### **Ethereum (ETH):**

Lowest Price: ₹137,110.006 (Sep-23)

Highest Price: ₹217,649.016 (Jan-24)

**Noteworthy Growth:** Remarkable Growth: Although Ethereum showed considerable volatility, its value increased considerably, peaking in January 2024. The increase in Ethereum's value indicates that there will likely be continued demand for this cryptocurrency.

### **Binance Coin (BNB):**

Lowest Price: ₹20,034.352 (Aug-23)

Highest Price: ₹28,498.849 (Apr-23)

**Fluctuations:** The price of Binance Coin fluctuated all year long, peaking in April 2023 and then continuing to fluctuate. It also implies that throughout the investigated period, values fluctuated as a result of market fundamentals and sentiment between investors influencing BNB's value.

### **Tether (USDT):**

Lowest Price: ₹82.621 (Jun-23)

Highest Price: ₹84.62 (Dec-23)

**Stablecoin Characteristics:** Because Tether is a stablecoin that is based on the value of fiat money, its values have remained comparatively steady. In contrast to more erratic cryptocurrencies, its position as a steady repository of wealth is consistent with the little gain seen over the months as well.

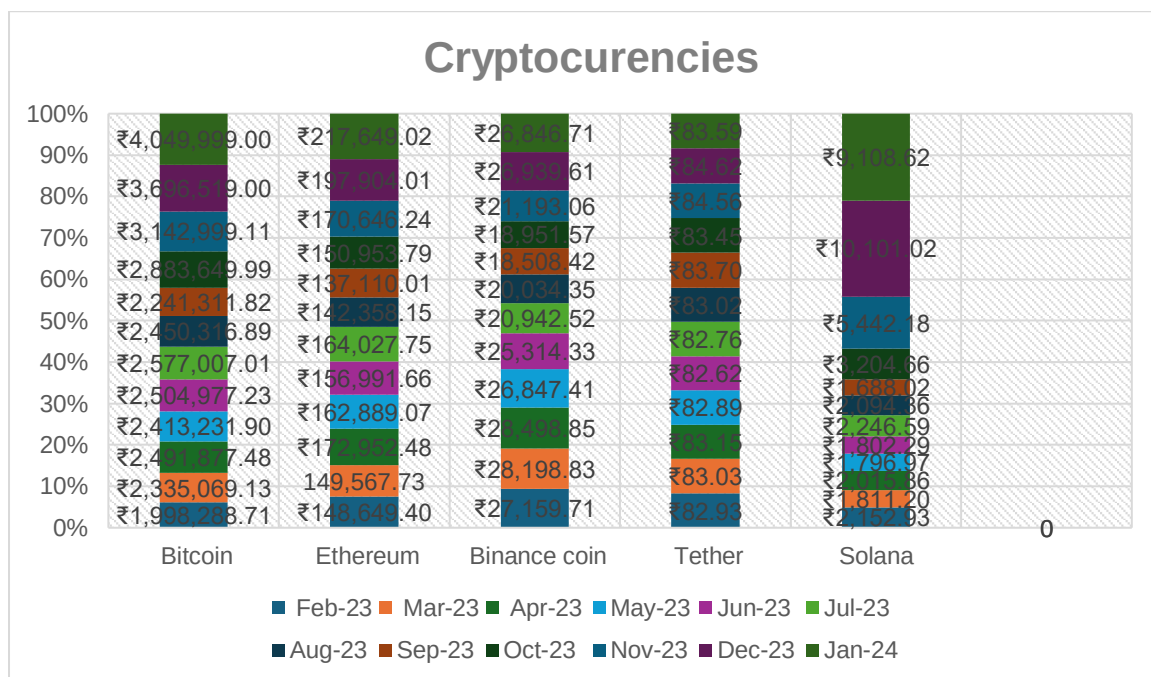
### Solana (SOL):

Lowest Price: ₹1,688.02 (Sep-23)

Highest Price: ₹10,101.02 (Dec-23)

**Remarkable Surge:** Around the end of the year, Solana's value had increased dramatically, with a notable spike in price. This suggests increased interest in and funding for Solana, maybe as a result of advancements in technology or other elements that enhance its value offer. Considering every digital currency exhibiting particular trends of development, stability, or fluctuations, the research emphasizes the market's dynamic character. A wide variety of price changes would have been seen by investors and cryptocurrency aficionados in the Indian market, highlighting the need of being knowledgeable and flexible to market trends throughout this period.

Comparative price analysis of the top five cryptocurrencies over the past year (For 1 Year).



**Figure 6: Comparative 12-Month Price Analysis**

The graphs as shown above reflect changes in price over 12 months of individual cryptocurrencies (Figure 1 to Figure 5) as well as of all cryptocurrencies taken together (Figure 6). the cryptocurrency market experienced a downward trend in December 2023, attributed to the pre-Christmas market conditions. However, there was no specific regulatory or market development identified as the cause for this decline. Subsequently, in January 2024, there was a significant increase in the prices of the selected cryptocurrencies, driven by favourable market conditions.

The narrative then indicates a change in the market dynamics in February and March 2024, affecting both the cryptocurrency market and the stock market. The cause for this change is attributed to government restrictions imposed in India, which started in December 2023. Let's break down the key points:

**December 2023 Decline:** Cryptocurrencies experienced a downward trend in December 2023. The cause for this decline is associated with pre-Christmas market conditions.

**January 2024 Surge:** Cryptocurrencies saw a significant increase in prices in January 2024. This surge is attributed to positive market conditions.

**February and March 2024 Impact:** Both the cryptocurrency market and the stock market were affected. The cause for this impact is linked to government restrictions imposed by the Indian government, starting in December 2023.

**Government Restrictions:** The specific details of the government restrictions are not provided. However, it is stated that these restrictions affected the entire country, impacting both the traditional stock market and the cryptocurrency market.

In order to provide a more detailed explanation, it would be helpful to know the specific nature of the government restrictions imposed in India in December 2023 and how they affected both markets. Additionally, understanding any subsequent developments or changes in the regulatory environment could further clarify the situation.

### **Results and Findings**

**Bitcoin (BTC):** Experienced significant growth, more than doubling from ₹19,98,288.705 (Feb-23) to ₹40,49,999.000 (Jan-24). Highlighted Bitcoin's volatility and its ability to undergo substantial value increases.

**Ethereum (ETH):** Showed noteworthy growth, with the lowest at ₹137,110.006 (Sep-23) and the highest at ₹217,649.016 (Jan-24). Indicated continued interest and demand for Ethereum.

**Binance Coin (BNB):** Displayed price fluctuations, reaching the lowest at ₹20,034.352 (Aug-23) and the highest at ₹28,498.849 (Apr-23). The volatility suggested susceptibility to market dynamics and investor sentiment.

**Tether (USDT):** Maintained stable prices, with a modest increase from ₹82.621 (Jun-23) to ₹84.62 (Dec-23). Characteristic of a stablecoin, Tether served as a stable store of value amid the volatility of other cryptocurrencies.

**Solana (SOL):** Witnessed a remarkable surge, with the lowest at ₹1,688.02 (Sep-23) and the highest at ₹10,101.02 (Dec-23). The surge indicated heightened interest and potential investment, possibly driven by technological developments.

**Market Trends:** Cryptocurrency market experienced a downward trend in December 2023, attributed to pre-Christmas conditions. January 2024 saw a significant surge in cryptocurrency prices due to positive market conditions.

**Government Restrictions (February and March 2024):**

Both cryptocurrency and stock markets were impacted by government restrictions imposed in India, starting in December 2023. Specific details of the restrictions and subsequent developments are not provided.

In summary, the analysed period showcased diverse patterns in cryptocurrency prices, with some experiencing significant growth, stability, or volatility. The market dynamics changed in February and March 2024, attributed to government restrictions in India, impacting both traditional and cryptocurrency markets. However, detailed information on the nature of these restrictions and any regulatory changes would be essential for a comprehensive understanding of the situation.

## **5. CONCLUSION**

The quote by the CEO of the Ripple “If the cryptocurrency market overall or a digital asset is solving a problem, it's going to drive some value. — Brad Garlinghouse.” This sentiment reflects a growing concern as the number of investors in cryptocurrencies continues to rise. The trajectory of Bitcoin, as well as the broader spectrum of cryptocurrencies, suggests a shifting landscape. The surge in Bitcoin and Ethereum prices since 2017, culminating in record market capitalizations, was followed by a downturn attributed partly to regulatory actions such as the banning of initial coin offerings by some platforms. Other cryptocurrencies like Binance Coin, Tether, Solana experienced major growth in cryptocurrencies in 2023 and 2024. A significant challenge faced by cryptocurrencies is the lack of transparency regarding trading parties, exposing investors to various risks, including compliance breaches with anti-money laundering and counter-terrorism financing laws. In developing countries like ours, where literacy levels remain low, the risks associated with cryptocurrency investment outweigh the potential benefits. Evaluating the characteristics of cryptocurrencies against various criteria underscores the reasons why many individuals opt against investing in them, prioritizing safety and security in financial transactions.

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