

# Price Volatility And Associated Factors For Rise And Drop Of Prices Of Select Crypto Currencies – An Analytical Study

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**Citation:** Dr. S. Kalaiselvi, et al (2024), Price Volatility And Associated Factors For Rise And Drop Of Prices Of Select Crypto Currencies – An Analytical Study, *Educational Administration: Theory and Practice*, 30(5), 10479-10484, Doi: 10.53555/kuey.v30i5.3706

## ARTICLE INFO

## ABSTRACT

The aim of this paper is to find out the factors that influence the investment and usage pattern of crypto currencies and to check how the events happening across in the real world influence the prices of different crypto currencies. Based on the secondary data collected pertaining to the top three e-crypto currencies over the preceding six-month period an in-depth analysis is conducted to examine the volatility of their prices and identify the associated factors if any prevailing.

**Keywords:** Cryptocurrencies, Digital Currency, e-crypto currencies

## INTRODUCTION

A cryptocurrency is a digital or virtual currency protected by cryptography which makes counterfeiting or double spending almost impossible. Most cryptocurrencies are decentralized, blockchain-based networks — a public database operated by a dispersed computing network. One distinguishing characteristic of cryptocurrencies is that they are usually not distributed by any central agency, rendering them potentially resistant to intervention or abuse by the government. Cryptocurrency does not exist in physical form (like paper money). Cryptocurrencies typically use decentralized control as opposed to a central bank digital currency (CBDC). When a cryptocurrency is minted, created prior to issuance, or issued by a single issuer, it is generally considered centralized. When implemented with decentralized control, each cryptocurrency works through distributed ledger technology, typically a blockchain that serves as a public financial transaction database. The first cryptocurrency was Bitcoin, which was first released as open source software in 2009. As of June 2023, there were more than 25,000 in the marketplace, of which more than 40 had a market capitalization exceeding \$1 billion. Increasing dominance of crypto currencies in the market, limited awareness among a significant portion of the population about crypto currencies, pronounced price fluctuations within individual coins and the Escalating regulatory measures and policies are the reasons for undertaking this study.

## OBJECTIVES:

- The study was undertaken with the primary motive of finding out the factors that influence the investment and usage pattern of crypto currencies and to check how the events happening across in the real world influence the prices of different crypto currencies.
- To determine the influential factors when investing or using Cryptocurrency as a medium of Exchange and to check how far the real-world events influence the prices of cryptocurrencies.

## LIMITATION OF THE STUDY:

The data gathered spans the past six months. The study focuses exclusively on the three crypto currencies. The results arrived cannot be generalized for other cryptocurrencies.

## RESEARCH METHODOLOGY:

The study involves the collection of secondary data pertaining to the top three ecrypto currencies namely BITCOIN, TETHER and ETHEREUM over the preceding six-month period and an in-depth analysis is conducted to examine the volatility of their prices and identify any associated factors. The study also aims to

ascertain common factors that contribute to fluctuations incryptocurrency prices.

### LITERATURE REVIEW:

The researcher has effectively investigated a number of research papers relating to the usage and prices of Crypto currencies that are traded in the exchange. The following headings list the research issues and findings from authors at the national levels.

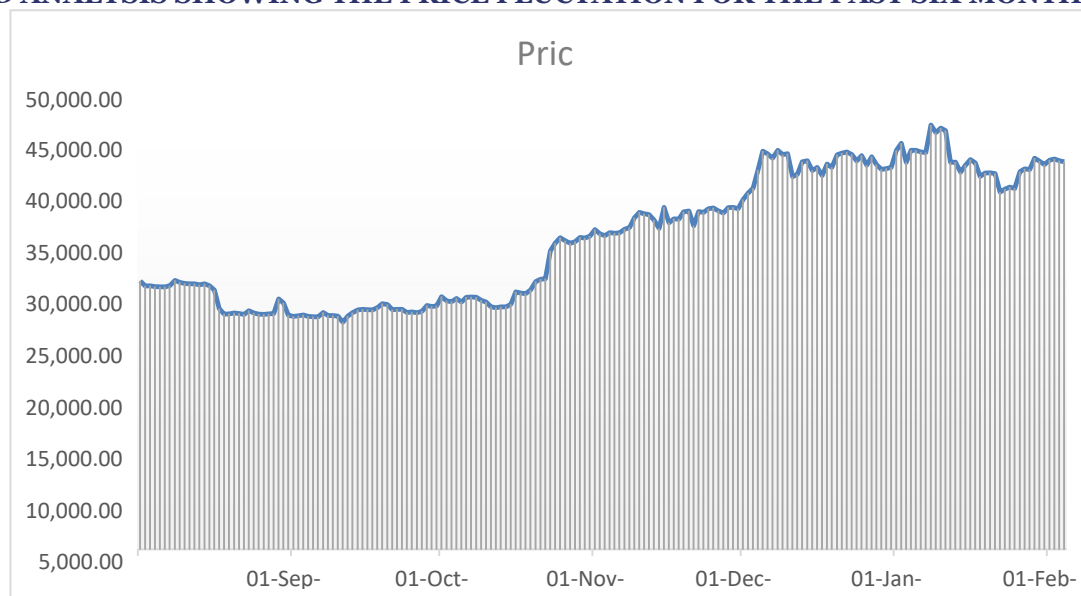
Sandeep Bhattacharjee and Harmeet Kaur (2015) Inferred that the outcomes accomplished by Bitcoin so far may lead to new desires to the two purchasers and advertisers who look for more opportunity as far as volume and instalment strategies. Tara Mandjee (2015), presumed that Bitcoin is presently youthful and trial, anyway in coming occasions it will establish a dependable connection. Mittal Alka (2017) Centres on shippers and brokers who acknowledge this computerized cash as a mechanism of trade to conquer its concern of unpredictability. This accentuates that to get by in the framework. Bitcoin needs to adjust to the necessary specialized and operational developments. Moreover, the public authority ought to force an appropriate lawful system, to secure the purchasers or clients of these computerized monetary forms, as the advancement found in the exchanges in this money during the previous few months is huge.

Shailak Jani (2018) has attempted to clarify how innovation has prompted the birthplace of Cryptocurrency and its development pattern in the worldwide market just as its business in the Indian market. The paper additionally focuses on the assumptions and certainty of the clients towards cryptographic money. It visualizes how 21 nations of the world have responded towards digital currency i.e., regardless of whether Friendly or Neutral or Hostile position towards it. The paper likewise recorded the issues and difficulties looked at by Cryptocurrency. Sudhir Khatwani (2021) examined the situation of Bitcoins and other Cryptocurrencies in the Indian Market after RBI's boycott of exchange of these virtual monetary forms in INR (fiat cash) through its own substances like banks and other monetary foundations. The creator has examined the different ramifications against the boycott of the exchanges of these digital forms of money through banks. He has called attention to that a similar stand was taken by the Chinese Government and it brought about an upsurge interest for cryptographic forms of money by crypto financial backers through different channels.

Jagdish Pandya (2021) (Chairman at Block on Group has said that) "Making this association is essential in getting the industry together, to have a dialogue with stakeholders in the Indian government, regulators and policymakers as their knowledge related to this industry is poor and unclear. Any emerging technology should not be controlled or banned; if it is, the place of the ban is usually punished as other jurisdictions expedite the development."

### BITCOIN

#### TREND ANALYSIS SHOWING THE PRICE FLUCTUATION FOR THE PAST SIX MONTH



### PRICE FLUCTUATION ARE DUE TO THE FOLLOWING:

The following are identified as the factors influencing a drop in prices

**August:** Collapse of Silicon Valley Bank (SVB): When SVB faced significant losses due to a sell-off in US Treasuries, people lost confidence in traditional banks. This highlighted the advantages of decentralized currencies like Bitcoin, pushing its price up to over \$30,000.

**September:** Multiple rules and regulations by the United States. Major cases account.

- SEC v. Kraken – November 2023
- SEC v. Woodbury and Holverson – September 2023
- In the Matter of James Michael Wines – September 2023

**October:** SEC Lawsuits Against Binance and Coinbase: The US SEC sued Binance and Coinbase for offering unregistered securities to the public. This caused uncertainty in the market, leading to drops in the value of many cryptocurrencies, including Bitcoin.

**November:** The proposed ticker for BlackRock's spot Bitcoin ETF appeared on the Depository Trust & Clearing Corp.'s (DTCC) website, indicating progress and causing Bitcoin's price to rise to just shy of \$26,000. Bitcoin ETF Anticipation: Throughout 2023, the crypto community remained abuzz with speculations surrounding Bitcoin ETFs. The potential institutional influx, liquidity boost, and increased accessibility for retail investors created a palpable excitement. While regulatory hurdles persisted, the only discourse around ETFs bolstered Bitcoin's narrative.

**November 9th – 13th:** The Indian Finance Minister expressed optimism regarding cryptocurrency during the G20 summit, highlighting India's readiness to support the global implementation of Financial Action Task Force (FATF) standards, provided that the International Monetary Fund (IMF) and Financial Stability Board (FSB) provide regular updates.

**December:** Throughout 2023, Bitcoin experienced a notable surge. It had impressively risen above \$40,000 by December, reaching a 20-month high. This rise was attributed to the widespread optimism regarding the potential approval of a spot bitcoin ETF by the U.S. securities regulator. DeFi yields a new standard for trust and economic opportunity. Individuals can be in charge and have true financial freedom without depending on a centralized entity. Decentralized finance on Bitcoin is an exciting development for the world's most trusted blockchain.

### TETHER

#### TREND ANALYSIS SHOWING THE PRICE FLUCTUATION FOR THE PAST SIX MONTH



### FACTORS INFLUENCING DROP IN PRICES:

**September 3-5<sup>th</sup>:** It appears that the increase in regulatory scrutiny and the Federal Reserve's plan to regulate stable coins may have played a significant role.

**Rising Interest Rates:** The report mentions that trading volume in the digital-asset sector has fallen as interest rates climb. Higher interest rates can lead to reduced risk appetite among investors, prompting them to move away from riskier assets like cryptocurrencies.

**Regulatory Scrutiny:** Regulatory oversight has increased in the cryptocurrency space. As regulators worldwide focus on ensuring compliance and preventing illicit activities, stablecoins, which are often used for trading and liquidity provision, might face challenges. The mention of the Federal Reserve's plan to regulate stablecoins reflects this regulatory scrutiny.

**Reduced Interest and Trading Activity:** The overall decline in the stablecoin market suggests a reduction in interest and trading activity. Factors such as market sentiment, macroeconomic conditions, and shifts in investor preferences can contribute to decreased participation in the cryptocurrency markets.

**Decreased Activity in the DeFi Space:** The report notes that the decline in Tether's market cap is not only due to low trading volumes on centralized exchanges but also reduced activity in the decentralized finance (DeFi) space. DeFi platforms often use stablecoins for various financial services, and a decrease in DeFi activity can impact stablecoin demand.

**November 20<sup>th</sup>:** Tether reported that together with OKX, it had frozen \$225 million worth of its cryptocurrency which had been linked to a human trafficking group in Southeast Asia responsible for a global pig butchering scam.

**December 9<sup>th</sup>:** Tether introduced a wallet-freezing policy on 9 December 2023. Tether is a major player in the crypto space, known for issuing the Tether token (USDT), which is a type of stablecoin. Stablecoins are cryptocurrencies designed to maintain a stable value by being pegged to another asset, typically a fiat currency.

**December 13/14<sup>th</sup>:** S&P the oldest credit rating platform ranked tether a very bad rating. Decrease in price.

### FACTORS INFLUENCING RISE IN PRICES:

**September 22<sup>nd</sup>:** Increase in price. Tether Reverses 2023 Decision, Returns to USDT Loans with Strong Excess Reserves

**November:** Tether expanded into artificial intelligence by acquiring Northern Data Group.<sup>15</sup> It appointed a new CEO—Paolo Ardoio, its former chief technology officer and a staunch cryptocurrency and blockchain financial solutions advocate. A lengthy lawsuit against Tether and Bitfinex was finally concluded following Judge Laura Swain's dismissal of the claims in November 2023

**December 5<sup>th</sup>:** Increase in Supply in the market.

**December 20 - 22<sup>nd</sup>:** Institutional Adoption: Major companies entering the world of cryptocurrencies have contributed to Tether's surge. The promise of investment opportunities and acceptance as a payment method has attracted institutional interest, leading to increased demand for Tether.

**Record-breaking Prices:** Tether reaching a new all-time high of surpassing \$1.00 has likely fueled additional interest and investment in the stablecoin. Record-breaking prices often attract attention and can lead to a surge in demand.

**Market Dynamics:** The general rise in popularity and adoption of cryptocurrencies, as well as the broader market dynamics, may have played a role in Tether's increased value. Market sentiment, speculation, and overall demand for cryptocurrencies can influence their prices.

### LEGAL FACTORS ACROSS VARIOUS COUNTRIES:

**In October 2023:** Paolo Ardoio, the chief technology officer for Tether, was promoted to CEO. He will lead the company starting in December 2023, succeeding current CEO Jean-Louis van der Velde.

The Wall Street Journal reported that Tether has been increasingly showing up in investigations tied to money laundering, terror financing and sanctions evasion. The report alleges that Tether appears to have been used in financing Hamas, paying Chinese fentanyl suppliers, funding the North Korean nuclear program and buying sanctioned Venezuelan oil for sanctioned Russian oligarchs. In response, the company published a blog post denying inadequate customer due diligence and screening practices, and describing how they have aided governments with criminal investigations, helping freeze a total of \$835 million in assets linked to theft.

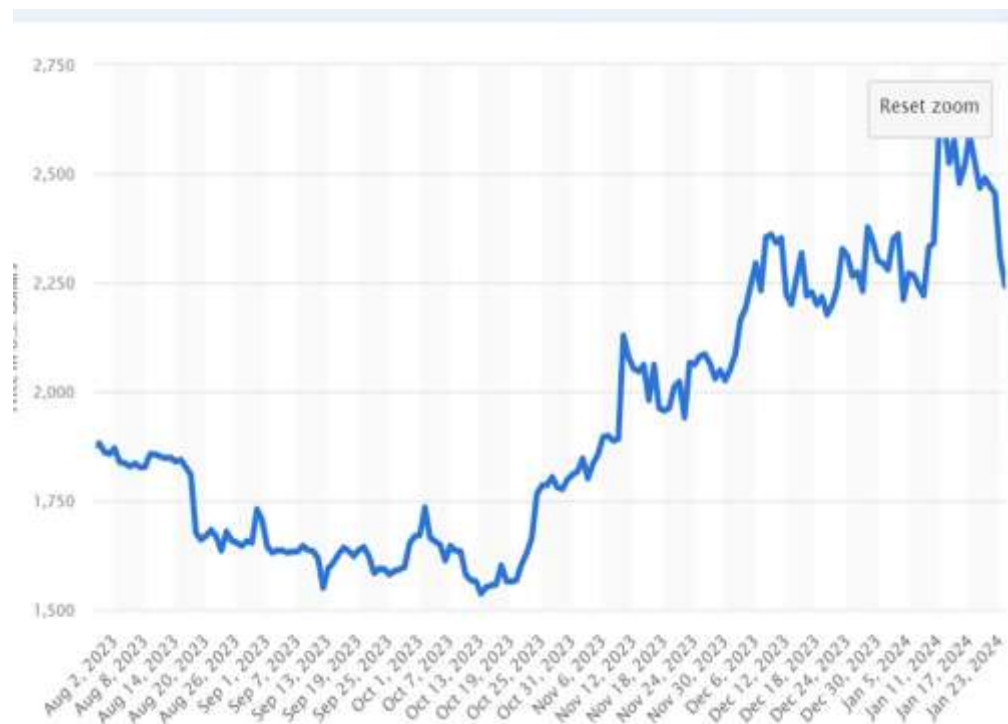
**In June 2023:** Tether Operations Limited held meetings with governmental structures and signed a memorandum with the Government of Georgia. The partnership will create a special fund for local startups and aid in the development of blockchain technologies in Georgia.

**In November 2023:** Tether announced that it plans to invest about half a billion dollars over the next six months to become one of the world's top Bitcoin miners. That investment includes part of a \$610 million credit facility that Tether had extended to publicly-traded Bitcoin mining company Northern Data AG, after acquiring shares in the Frankfurt-based firm in September.

**In December 2023:** Lugano, Switzerland started to accept cryptocurrencies, including the Tether stablecoin, for paying taxes, fines, and all other invoices.

## ETHERUM

### TREND ANALYSIS SHOWING THE PRICE FLUCTUATION FOR THE PAST SIX MONTH



### FACTORS INFLUENCING RISE IN PRICES:

**August 16<sup>th</sup>:** Lost a lot of money to hackers. This can make people skeptical and can, consequently, have a negative impact on the price of ETH.

**September 29<sup>th</sup>:** The “Shapella” upgrade in the crypto world has been introduced to create more opportunities within ETH, transforming it into a user-friendly marketplace supported by investors, visionaries, and developers to generate more robust and distinguished products.

Shapella is a portmanteau of Shanghai and Capella, referring to two network upgrades that will happen simultaneously. These will upgrade the code on Ethereum's two main net layers: the consensus layer (the beacon chain) and the execution layer. Since The Merge, ether staking has been a one-way system. You can stake ether, but you can't withdraw it. Shapella's goal is to fix this and enable validators and users to unstack their ether on the network. This Ethereum Shapella upgrade will enable users to access and potentially unstack over 18 million ETH staked on the beacon chain, Ethereum's consensus layer network.

**October:** Became the 2nd largest coin after bitcoin and Coinbase was sued in USA feudal court. Ethereum value grew.

**October 25-31<sup>st</sup>:** At the end of October the whole of the crypto market received a boost from the expectation that a Bitcoin ETF would be approved in the coming months and ETH finished the year at \$2282.11, 91% up from January 1st. On Bitcoin ETF approval day, January 10th, 2024, Ethereum gained as much as 12% on the expectation that it would be the next token to have an ETF approved. After a brief slump, the crypto markets and Ethereum rallied. This sent the price of ETH climbing, and just 2 months after ETF approval Ethereum topped \$4,000.



**November:** Ethereum Upgrades in 2023: Ethereum is undergoing crucial upgrades, including Ethereum 2.0, Beacon Chain docking, EIP-1559, Layer-2 Scaling, and Ethereum whitepaper updates aimed at enhancing scalability and functionality.

Ethereum 2.0 Phase 1: Ethereum 2.0 is one of the most anticipated upgrades in the crypto world. It represents a transition from the current Proof of Work (PoW) consensus mechanism to Proof of Stake (PoS). This upgrade is implemented in multiple phases, with Phase 1 being particularly noteworthy. Ethereum 2.0 aims to improve scalability, security, and sustainability by allowing users to “stake” their Ether to help validate transactions and create new blocks. This change will significantly reduce energy consumption, making Ethereum more environmentally friendly.

## CONCLUSION

In conclusion, the price volatility of cryptocurrencies is influenced by a multitude of factors, ranging from market sentiment and investor behaviours to regulatory developments and technological advancements. While the inherent volatility poses challenges, it also presents opportunities for traders and investors. Understanding these factors and their interplay is crucial for navigating the cryptocurrency market effectively and managing risk. Moving forward, continued monitoring and analysis of these factors will be essential for stakeholders to adapt to the dynamic nature of the cryptocurrency landscape and make informed decisions in an evolving market environment.

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