

A Study On “Comparative Analysis Of Crypto Currency And Share Market”

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Abstract

This paper compares the potential for developing indicators of critical and crash events in the volatile cryptocurrency market and established stock market. Modern Fintech innovation, cryptocurrency is currently popular all over the world. Its rapid evolution has already led to a number of public security-related incidents worldwide. Cryptocurrency was first developed as a potential digital currency implementation, after which many derivatives were produced for use in a range of industries, including capital management, business transactions, and even non-monetary applications. This study seeks to provide analytical insights to compare the cryptocurrency and stock market.

Keywords: Cryptocurrency, Stock market, asset tree.

Introduction

The modern world is experiencing a level of financial penetration unlike any other time in history as a direct result of unrivalled technological development occurring simultaneously with internationalization. Investors discovered share market to be a safe refuge for their investments during the global financial crisis and the European debt crisis. However, the expansion of the internet, which quickly connected smart devices all over the world, spurred the creation of a number of virtual currencies as a substitute for real money for both commerce and speculation. Cryptocurrencies had a market capitalization of more than USD 2.3 trillion as of April 2021. For context, the major four—Apple, Amazon, Facebook, and Microsoft—have respective market values of USD 2.2 trillion, USD 1.7 trillion, USD 0.9 trillion, and USD 1.9 trillion. Numerous studies directly compared bitcoin and the stock market, both based on volatility. There is still much discussion about the possibility of bitcoin replacing the stock market. By conducting portfolio analysis with the use of stocks share market and cryptocurrencies across the biggest economies in the world, this article aims to further this area of research. Due to the erratic nature of virtual currencies, we aim to identify the cryptocurrency with the lowest volatility in terms of tail-end features and use a non-linear optimization methodology to evaluate the risk-adjusted returns of the created portfolios in the current study.

Scope of the study

In recent years the habit of increased by 10 folds among the public. At the same time the public needs some considerable return from this savings amount in the force of investments. The short term investments such as cryptocurrencies and share market are the most preferred choice of the public. This study is about to analyse the best return by using the comparative study method taking cryptocurrency and share market as the variable.

Cryptocurrency

A blockchain is a distributed ledger technology that is used to record cryptocurrency, an immaterial digital token. These tokens grant a variety of usage privileges. For instance, cryptocurrencies are intended to be used as a kind of exchange. Other digital tokens grant access to other resources or services, or they can stand in for ownership stakes.

An organisation that controls the key that enables it to add a new record to the ledger is the owner of these tokens. The ownership of the token may be changed with access to the ledger. These tokens are not kept on an organization's IT infrastructure because the organisation only keeps the Blockchain access keys (as opposed to the token itself). They reflect particular sums of digital assets that the entity possesses.

Objectives of the study

- To study the theoretical concepts of cryptocurrency and stock market.
- To analysis the comparative opportunities investment in cryptocurrency and stock market.

Different types of Cyrptocurrency in India

Cash Bitcoin

The sub-currency of bitcoin known as Bitcoin Cash is ranked fourth on the market and has a market worth of over \$10 billion.

Ethereum

The second most used cryptocurrency platform is Ethereum. The author is Joseph Lubin. Its strength stems from the fact that application programmes that run on the Ether network can be written. As a result, the platform offers limitless potential for programming for various needs. According to hacked.com (2018), Ethereum may soon take the lead in the cryptocurrency market and surpass Bitcoin in market share. Ethereum is the second-largest coin on the market with a 21 billion dollar market valuation.

Ripple

Both a cryptocurrency and a digital payment mechanism, ripple can be regarded. It is introduced in 2012 by Chris Larsen, a technology entrepreneur. XRP, Ripple's currency component, has mathematical modeling very much like Bitcoin. With its more than 21 billion \$ market cap, XRP is now 3rd largest coin in the market.

Litecoin

Litecoin seems to be one of the leading competitors of Bitcoin. A lot of computer power is required for Bitcoin mining. On the other hand, Litecoin can be etched with a normal desktop computer. With its more than 3 billion \$ market cap, Litecoin is now 7th largest coin in the market.

Table 1.1

Data – Base Analysis

Types of Cryptocurrency	Mean	Median	Standard Deviation	Kurtosis	Skewness
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Bitcoin (BTC)	0.009	0.0091	0.0521	3.6745	0.5503
Ethereum (ET)	0.023	0.0042	0.0823	4.0143	1.2674
RIPPLE	0.0345	0.0006	0.2345	68.8843	6.2874
Cardano (ADA)	0.0523	0.0120	0.34567	15.4036	1.8734
LITE (LTC)	0.0143	0.0031	0.09702	13.3551	2.3300

Source: Collected from Secondary data

Share Market

To gradually increase our money, we make stock investments. Many studies have shown that investing in the correct shares for a long time (five to ten years) may produce returns that beat inflation and are a better option than real estate and gold, despite the fact that some people perceive shares as a dangerous investment.

People who invest in the stock market also have short-term plans. Investing in the right shares can help traders generate quick profits even if shares might be volatile over a short period of time.



In the past, stockbrokers would gather around Banyan trees to transact stock deals. They were forced to move from one location to another as the number of brokers grew and the streets became crowded. Finally, in 1854, they moved to Dalal Street, which is today home to the Bombay Stock Market (BSE), the oldest stock exchange in Asia. The first stock exchange in India, it has subsequently played a significant role in the Indian capital markets. The BSE Sensex continues to be one of the metrics used to gauge how healthy the Indian economy and financial system are today. Trading on both exchanges transitioned from an open outcry system to an automated trading environment within a short period of time.

This demonstrates the long history of Indian stock markets. But on the surface, especially when you consider investing in the stock market, it frequently appears to be a maze. But once you get going, you'll see that the basics of investing are really not that difficult. Financial planning is one of the pillars of investing.

Basics of Share market

A share market is where shares are either issued or traded in.

A stock market is similar to a share market. The key difference is that a stock market helps you trade financial instruments like bonds, mutual funds, derivatives as well as shares of companies. A share market only allows trading of shares.

The key factor is the stock exchange – the basic platform that provides the facilities used to trade company stocks and other securities. A stock may be bought or sold only if it is listed on an exchange. Thus, it is the meeting place of the stock buyers and sellers. India's premier stock exchanges are the Bombay Stock Exchange and the National Stock Exchange.



THERE ARE TWO KINDS OF SHARE MARKETS – PRIMARY AND SECOND MARKETS.

First Market

This is the process through which a business registers to issue a specific number of shares and obtain capital. A stock exchange listing is another name for this.

A business accesses the primary markets to raise money. It is referred to as main market if the company is selling shares for the first time.

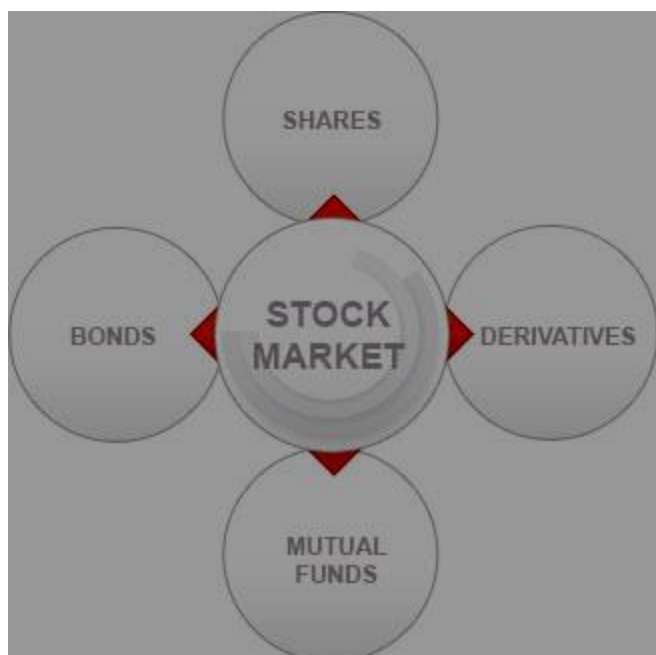
Primary Market

Shares of newly issued securities are exchanged on the secondary market after they have been sold in the primary market. This is done to provide investors an opportunity to sell their shares and get their money back. Trades when one investor purchases shares from another investor at the going market price or at a price that both parties agree upon are referred to as secondary market transactions.

Financial Instruments in Stock Market

Below are the main four key financial instruments that are traded in Stock market:

1. Bonds
2. Shares
3. Derivatives
4. Mutual Fund



Bonds

For projects, businesses require money. The money they have made from the enterprise is then used to repay them. Bonds are one method of raising money. A loan is what a business obtains from a bank in exchange for recurrent interest payments. Similar to this, a bond is what a business issues when it borrows money from numerous investors in return for periodic interest payments.

Consequently, a bond is a way to invest money by making loans to other people. It is called a debt instrument for this reason. When you purchase bonds, they will list the face value, which is the amount borrowed, the coupon rate, also known as yield, which is the interest rate the borrower must pay, the coupon payments, and the maturity date.

Mutual Funds

These are investment instruments that let you make indirect investments in bonds or the stock market. It collects funds from a number of investors and invests the whole amount in financial instruments. The professional fund manager is in charge of this.

Every mutual fund programme issues units, which are valued similarly to shares. This means that when you invest, you become a unit-holder. You receive money as a unit holder when the investments made by the MF plan are profitable.

Either the value of the units increases, or money is distributed to all unit holders in the form of dividends.

Derivatives

Financial instruments like shares constantly fluctuate in value. Therefore, it is challenging to set a certain price. Here, derivatives instruments are useful.

These are tools that enable you to trade in the future at a fixed price today. You just engage into a contract to purchase or sell a share or other financial instrument at a predetermined set price.

Table 1.2

Share Market	Mean	Median	Standard Deviation	Kurtosis	Skewness
Bonds	0.0342	0.0313	0.0156	5.345	0.0124
Mutual Fund	0.3463	0.0023	0.0453	4.921	0.0034
Derivatives	0.4212	0.0034	0.0764	5.234	0.0045

Source: Compiled from secondary data

Results and Findings

Table 2.1

Market size/Growth

Variables	2020	2021
Cryptocurrency	35%	46%
Share Market	13.64%	17.04%

The market size of cryptocurrency and share market is in non – linear progress. Since, the growth rate is different in sequence. Cryptocurrency posses maximum market share with (46%) and share market (17.04%)

Table 2.2

Performance & Size

Variables	Strategy	
	2020	2021
Cryptocurrency	+294%	+129%
Share Market	+31%	+29.6%
	Multi Strategy	
Cryptocurrency	+114%	+72%
Share Market	+9.8%	+10%

To measure the performance and efficiency in two strategy and multi strategy of two variables, earning per share is employed strategy in cryptocurrency provide maximum return (+129%) then sharemarket.

In Multistrategy measure earning per share cryptocurrency provide maximum return (+72%) then Sharemarket.

Table 2.3

Pearson’s Correlation of FOUR Indicators between Correlation Matrix and Asset Tree

	Mean	Variance	Kurtosis	Skewness
Stock Market	-0.965	0.742	0.696	-0.797
Cryptocurrency Market	-0.984	0.428	0.438	-0.897

The normalized tree length and the mean correlation coefficient of -0.984 are substantially anti-correlated, as the table demonstrates. Both financial markets exhibit the same temporal volatility in their asset trees. While there is a negative association between mean and skewness, there is a positive link between variance and kurtosis.

Table 2.4

Survival Ratios among Markets

	Single Step	T ½	T 1/3	T (< 0.1)
Stock Market	0.834	14	36	148
Cryptocurrency Market	0.893	13	25	85

The table above demonstrates that when comparing the average value of single step ratios, we can see that the two marketplaces have high values. The cryptocurrency market value is lowest, while the value of the stock market is largest, which partially reflects the difference in market stability. Therefore, in terms of the single step ratio, the cryptocurrency market behaves similarly to the stock market.

Suggestions

- Share market should improve similar as cryptocurrency to make linearity.
- The SEBI regulated instruction should liberal for share market to improve EPS.
- The policy and returns are on similar basics but the deviation occurs by investors. The deviation can explored by improve the return of share market equal to cryptocurrency.
- The stock should decentralize and digitalized to explore the government and SEBI regularities.
- Cryptocurrency enables the investors to predict the fair returns likewise stock market should also assist the investor with application who predicts fair return.

CONCLUSION

Although this fundamental component of the cryptocurrency sector has come under attack as it has gained greater popularity, cryptocurrencies are virtually always designed to be immune from government manipulation and control. The currencies that are based on bitcoin are collectively known as "altcoins," or "shitcoins," and they frequently attempt to position themselves as improved or modified versions of bitcoins. Additionally, just like money made from purchasing and selling other commodities, money made from purchasing and selling Bitcoin must be declared as capital gains.

In the stock market, risk is reduced by spreading investments across a number of different companies, which is accomplished by combining several little investments into a single, sizable investment. The stock market provides the option to invest in a diversified, expertly managed portfolio at a relatively cheap cost, making it the most suited investment for the average person.

The researchers' final finding is that the dynamics of cryptocurrencies are more comparable to stock market dynamics. Our data reveals that the cryptocurrency market is more liberal than the stock market in terms of resilience and clustering structure. In order to analyse cryptocurrencies and share market, the researcher Cryptocurrency enables the investors to predict the fair returns likewise stock market should also assist the investor with application who predicts fair return. This may provide some insight into monetary policy, regulation, and legislation.

Reference

1. Jiaqi Liang, Linjing, Weiyun Chen, Daniel Zeng, Towards an Understanding of Cryptocurrency: A Comparative Analysis of Cryptocurrency, Foreign Exchange and Stock –
2. Sameer Yadav – Researcher Scholar, Department of Commerce and Business Administration, University of Allahabad, Uttar Pradesh Stock Market Volatility – A Study of INDIAN STOCK Market – Volume – 6, Issue – 4, April – 2017 – ISSN No2277 – 8160 – GJRA – Global Journal For Research Analysis pg.No. 629

3. Ankit Som, parthajit Kayal – Madras School of economics, A Multicountry Comparison of Cryptocurrency vs gold: Portfolio optimization through generalized simulated annealing – [https:// doi.org/10.1016/j.bera.2022.100075](https://doi.org/10.1016/j.bera.2022.100075), Received 11 June 2021; received in revised form 21 January 2022; Accepted 8 March 2022 – 2096 – 7209/2022.
4. R.Logeshwari, K.Madhu mitha – The conceptual Analysis of cryptocurrency and Bitcoins – Wesleyan journal of research, Vol.14 no.1 (XIX) pg. No. 48 To 52
5. S.P.Gupta – Statistical Methods – Forty third revised Edition, 2014 – ISBN 978 -81 – 8054 – 989 -2 published by Sultan Chand & Sons.