



Integration Of Crypto Currency In Traditional Finance Market

1Rinu Reji George, 2Jayesh Patil, 3Jisha Varghese, 4Mayuri Bapat

1Student, 2Student, 3Student, 4Professor

1Sppu,

2Sppu,

3Sppu,

4Sppu

Abstract

Cryptocurrency is basically a digital currency in which transaction are verified and records maintained by a decentralized system using cryptography that is protecting information through the use of codes. We will apply a review method in which we go through prior research and take note of it. Both advantages and disadvantages of cryptocurrency and traditional finance will be covered in the research. Major aspects of these are lower transaction costs, higher efficient ways with maximized security and privacy control. As far as the good side, these also comes with a package of risks that cannot be neglected. The high volatility of the cryptocurrency is one of the main peril along with the risks of criminal activity, shortfall of regulatory standards and high energy cost. The prices of cryptocurrency can fluctuate and this could spill over in the traditional financial Market.

Contents:

- Cryptocurrency
- Cryptography
- Insights of Cryptocurrency
- Dept chart
- Pros & cons
- Financial market
- Diversification in the financial market
- Use of Cryptocurrency in this market
- Conclusion

- Cryptocurrency

A cryptocurrency or crypto is a digital currency specifically designed to work as a medium of exchange through a computer network that is independent of any central authority, such as a government or bank, to uphold or maintain its decentralized system for authenticating that the users to a transaction have the money or fund they claim to have, eliminating the need for intermediaries, such as banks, when funds are being transferred between two parties.

- Cryptography

Cryptography is the process of hiding information so that only the authentic user can see the message. The process of cryptography has been used to code messages for years and continues to remain being used in bank cards, computer passwords, and ecommerce. In this paper we will mainly focus on the encryption and decryption method of the cryptography used in both in securing cryptography as well as in protection of data in the traditional markets.

Sensitive data is protected against unauthorised access using the encryption and decryption processes. Transforming plain text into a message that can only be read by someone who has the key to decrypt it is the process of encryption. Decryption, on the other hand, is the process of restoring the message's original form after encryption.

Data is encrypted using algorithms to make it difficult for anyone who doesn't have the key to decrypt it to understand. Symmetric and asymmetric encryption are the two main varieties. Data is encrypted and decrypted using the same key in symmetric encryption. One key is used for encryption and the other for decryption in asymmetric encryption, commonly referred to as public-key encryption.

A key that is identical to the one used for encryption must be used for decryption. It is nearly hard to decrypt an encrypted message without the proper key. Due of this, encryption is a useful method of safeguarding sensitive information, including financial information, personal information, and secret corporate papers.

- Insights of Cryptocurrency

Digital or virtual currency known as cryptocurrency uses algorithms for security and is not controlled by a central bank. Blockchain, a decentralised technology used by cryptocurrencies, enables safe and open trade without the need of middlemen like banks or governments.

Bitcoin, one of the most well-known cryptocurrencies, was developed in 2009 by an unidentified individual or group operating under the pseudonym Satoshi Nakamoto. Since then, Bitcoin has gained popularity as a means of exchange

and investment, despite its value varying in accordance with consumer demand.

Ethereum, Litecoin, Ripple, and Bitcoin Cash are some other well-liked cryptocurrencies. Although each cryptocurrency has its own distinct advantages and features, all cryptocurrencies use blockchain technology and are decentralised.

Employing cryptocurrencies has a number of benefits. One is that it eliminates the need for mediators and enables quick and secure transactions. Another is that it offers more secrecy and privacy than standard payment methods. Cryptocurrencies are also immune to inflation and other economic issues that can harm traditional currencies because they are not linked to any central authority or government.

However, there are a number of dangers connected to cryptocurrencies. One is that it is highly unpredictable and vulnerable to significant price fluctuations. Another is that it has been utilised for nefarious operations like drug and money laundering. Additionally, funds that disappear or are taken cannot be recovered because cryptocurrency transactions are irreversible. Cryptocurrency has grown despite these dangers.

- Depth chart



A depth chart is a useful tool for determining the prevailing supply and demand for cryptocurrencies across a range of values. It is a visual representation of an order book, which is a structured list of open buy and sell orders for a certain cryptocurrency at various price points. Learning depth charts and how to read them is crucial for crypto traders.

Understanding Depth Charts

An order book's buy orders ("bids") and sell orders ("asks") are represented visually by a depth chart.

The volume (or order size) of pending buy and sell orders in relation to each price level is neatly displayed in this manner.

Although depth charts might vary between cryptocurrency exchanges, they often include the following elements:

- Bid line
- Ask line
- Horizontal "X" axis

- Vertical “Y” axis

Bid line

The total value of the buy orders ("bids") at each price point is shown on the bid line. A green line on the depth chart's left side serves as its representation.

Ask line

The total amount of sell orders (also known as "asks") at each level of price is displayed on the ask line. A red line on the depth chart's right side serves as the indicator.

Horizontal “X” axis

The different prices at which buy and sell orders are being placed are displayed on the horizontal axis.

You can see all the buy limit orders (also known as "bids") that have been submitted on the left (in green). This is the bid side of the order book. You can see all of the sell limit orders (also known as "asks") that have been placed on the right side (in red). This is the ask side of the order book.

- **Vertical “Y” axis**

The amount of orders placed for a cryptocurrency at each price level is shown on the vertical axis.

- Pros of cryptocurrency

1. **Decentralisation:** The decentralised character of cryptocurrencies is one of their main advantages. It is not governed or overseen by any governmental body or financial organisation, thus it is not bound by their rules or guidelines. This provides for increased privacy and security while giving people more control over their finances.

2. **Lower Transaction Fees:** Compared to regular financial transactions, cryptocurrency transactions are often performed significantly faster and at a lower cost. This is so because there aren't any middlemen, like banks or payment processors, who can charge a lot of money for their services.

3. **Global Accessibility:** Anyone with an internet connection can utilise cryptocurrency, no matter where they are in the world. This increases its usability as a form of payment.

- Cons of cryptocurrency

1. **Volatility:** Prices of cryptocurrencies frequently fluctuate quickly and erratically, making them notorious for their volatility. As a result, they could be risky investments because their value might rapidly decline.

2. **Lack of Regulation:** It might be difficult to defend against fraud or other criminal actions because cryptocurrencies are not governed by a single authority or financial organisation. Due to the absence of regulations, users are helpless if they lose money as a result of theft or hacking.

3. **Limited Acceptance:** Although cryptocurrencies are gaining acceptance, they are still not as well known as conventional fiat currencies. This means that using cryptocurrency for regular purchases might be challenging and that many companies do not accept it.

- Financial market

Any spot or system that gives buyers and sellers the ability to trade financial assets, such as bonds, shares, the different currencies around the world, and derivatives, is referred to as a financial market. The connection between people with capital to invest and those who need capital is facilitated by financial markets. Financial markets enable participants to transfer risk (often through derivatives) and advance trade in addition to enabling the raising of capital.

- Diversification in the financial market

In the financial market, diversification is the process of investing in a range of assets to lower risk and boost possible rewards. Investors can reduce the effect of any single investment's success on their whole portfolio by spreading their investments over a variety of asset classes, including stocks, bonds, real estate, and commodities.

Diversification has several advantages, but one of the main ones is that it reduces risk. Different asset types typically behave differently depending on the market environment. Bond prices can be declining, for instance, when stock prices are rising. Investors can lessen the negative effects of any one asset's underperformance on their whole portfolio by holding a variety of assets.

- Integration of crypto currency in traditional finance market

The incorporation of cryptocurrencies into conventional financial markets has been under debate for a while. Cryptocurrencies like Bitcoin, Ethereum, and Litecoin have grown significantly in acceptance and popularity among the general public. Many investors and traders are drawn to the concept of using a decentralised currency that is not governed by any government or financial entity.

The potential of cryptocurrencies to enable quick and safe transactions without the use of middlemen is one of their key benefits. They are now appealing to firms who operate internationally and need quick and effective payment solutions because of this capability. Additionally, cryptocurrencies are a desirable investment since they may be utilised as a hedge against inflation and currency depreciation.

Due to a number of circumstances, the adoption of cryptocurrencies in conventional financial markets has been gradual. Compliance with regulations is one of the major difficulties. Many nations do not yet have cryptocurrency regulations, which makes it challenging for financial institutions to use them. Additionally, because of the volatility of cryptocurrencies, it is challenging for conventional financial institutions to handle the risks involved.

Finally, it should be noted that the adoption of cryptocurrencies in conventional financial markets is still in its infancy. However, it is expected that more financial institutions may incorporate cryptocurrencies in the future as they gain popularity and acceptability.

- Conclusion

The integration of cryptocurrencies into the established financial sector is of interest to many academics and financial analysts. Cryptography is used by cryptocurrency, a type of digital or virtual currency that is not managed by a central bank. It has gained appeal over time because of its decentralised structure and the potential it holds to overturn traditional financial institutions.

One of the key benefits of integrating cryptocurrencies into conventional financial markets is the increased efficiency and speed of transactions. Cryptocurrency transactions are completed almost instantly, eliminating the need for middlemen like banks or payment processors. Particularly for international transactions, this could result in lower transaction costs and faster settlement times.

The improved accessibility to financial services is an additional advantage. With the help of cryptocurrency, people who might not have access to traditional banking services can take part in the global economy. This could aid in encouraging financial inclusion and lowering poverty levels.

However, using cryptocurrencies in the traditional financial industry comes with a number of challenges. One of the biggest challenges is following the rules. Established financial institutions may find it difficult to incorporate cryptocurrency into their current procedures because it is still largely unregulated. There are also worries regarding volatility and security. Consumer losses as a result of numerous high-profile thefts from cryptocurrency exchanges are significant. Bitcoins may be risky investments due to their extreme value volatility

The integration of cryptocurrencies into the traditional finance market has both benefits and drawbacks, but it is clear that this technology has the potential to undermine current financial structures and increase access to financial services.