

Growing Crypto Derivatives Market in India and the Government Regulations around it.

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Abstract: As the Indian financial market saw its coming of age in the last two decades , various investment techniques and methodologies have surfaced in the Indian financial market landscape. Crypto Derivatives is the most recent phenomenon to emerge in the Indian domain. In general trading methodologies, the profit making strategies have always been very traditional and easy to understand. But with the onset of new concepts like Crypto Derivatives, the entire financial landscape has witnessed a great upheaval. These unlike the conventional methods of trading are not as easy and require detailed analysis and extensive study of the trading rules and regulations. These financial instruments have been offering a very exciting and promising avenue for the Modern day/Millennial trader as the quicker way of making money. This paper explores the current scenario of Crypto Derivatives and crypto currency Market in India in light of the general problems faced and Government Regulation around it.

Keyword: Crypto Derivatives, crypto currency, Government Regulation, Bitcoin, Crypto currency Exchange.

I. Introduction:

As crypto currencies reputation continues to spread like a wildfire amongst millennial traders and investors looking for profitable avenues and endeavors to reap financial benefits beneath one underlying concept. Traders are looking for a new tool with information about the bitcoin and altcoin futures that they can use to simply sign contracts to reduce risk. It is also seen by traders as a way to earn money by referring to low-priced crypto currencies and purchasing and selling as rates rise. It is worth mentioning that this market is highly volatile and the technique highly risky, and can only be successful throughout a bullish market if it is to be enforced. Traders have yet another profit-making strategy, called shorting. This is used in a bearish market or when the market is shrinking. The strategy involves loaning/borrowing and selling third-party assets (such as through brokers or exchanges) when they believe prices will fall and then buying them back at a lower price when the market has hit a new low. The difference in the selling price and the new buying price is locked in as profits and the shares along with a small percentage is offered to the third party asset lender as commission based on the terms of lending already disclosed by the lender at the time of lending.

1.1 History

Ever since the dawn of the internet age, people have wanted a form of money that was native to the internet. This led to the quest for e-money. Netizens believed e-money to be the next best thing. Throughout the 1990s, a number of entrepreneurs made various attempts to create digi currency or e-money.

PayPal led by Elon Musk was the first originally conceived native digital currency. But digi currencies were hard to manage because of the 'double spending' problem. Since they were so easy to replicate, users could buy two goods with a single unit of currency, double spending what they owned. Which in itself becomes a counterfeiting problem.

Attempts were made in the 90s and the system of centralisation was devised, ie introduction of a trusted authority that verified and assured that each transaction had not been double spent. But it had its own downsides such as, the Central authority could become a target for both scammers and nations with the motive of seizing it or corrupting it.

In 2008, a pseudonymous ‘Satoshi Nakamoto’ solved the double spending problem and the Bitcoin network went live in Jan 2009. It’s a digital currency powered by what we call Block Chain, A chain of blocks of transactions strung together in a digital ledger. Interestingly, Bitcoin does not need a central authority to validate transactions, it does it itself. To achieve this it used complex cryptography and peer to peer networking. These in a combination make an extremely efficient, robust and valuable financial asset, accessible to everyone and impossible to censor or seize.

1.2 Comparison between Derivatives and Spot Markets

As to where crypto currencies are traded, there primarily are two main markets, the derivatives market and the spot market. The local market, also known as the spot market, refers to the market which guarantees that transactions will be completed immediately. Both buyers and sellers are present in the spot market and the transaction is made immediately, the seller transfers the crypto currency to the buyer at the price at which the asset is trading at that given point of time, called the spot price. The transaction is regulated and settled immediately by the exchange. There is no delay in this type of market.

Then comes the derivative market, derivative contracts are synthetic and have no intrinsic value of their own, they derive their value from the value of the underlying instrument, which in this case is the Bitcoin. Derivative markets offer a lot of flexibility to investors and traders, who use derivatives markets for different needs. Big players with deeper pockets such as institutional investors, Asset management firms, Banks etc use the derivative markets to hedge their positions and shield their capital against the price volatility of Bitcoin. Bitcoin is innately very volatile, with huge price movements in both the directions. The derivative markets are used to hedge their positions in the spot market. With higher price volatility, Bitcoin also attracts a lot of speculators and scalpers who want to capitalise on the rapid price fluctuations and make some quick profits. People have been successful at making significant profits in a very short span of time, this sparks inquisitiveness and interest into a lot of retail traders who want to make instant profits. Bitcoin derivatives are highly levered, the leverage is provided to you by the exchange. Example- For every dollar movement in the price of Bitcoin, your profits could move 20 times or 25 times. But likewise, any downside movement could result in 20 or 25 times losses too. There are some that see Bitcoin as a great venue for long term investment, which usually includes buying the asset at a dip and holding onto it for a significant period of time till it experiences a capital appraisal in the spot market, upon which it can be sold. All in all, Bitcoin has garnered a lot of attention and appreciation as a profitable avenue. The number of cryptocurrency traders both in India and globally has increased exponentially since its inception.

1.3 The Different Forms of Derivatives

Derivatives are classified into four broad categories: Options, Forwards, Swaps, and Futures.

Options: This contract grants the option buyer the right to execute a trade (Buy or Sell) of a particular asset at a fixed price at a fixed point in the future. The option seller on the other hand is obliged to abide by the decision of the option buyer. These transactions are regulated and are carried out over an exchange.

Forward: Forward is a contract that can be customized to fit the desires of the participants. Trading an instrument between a buyer and seller is customizable in forwards. These are over-the-counter (OTC) trades, i.e.

these do not take place over an exchange or are regulated by an exchange. Risks should also be factored in as there is counterparty risk, risk of non allegiance and default.

Swaps: Swaps occur in the future between two groups which make money by arranging cash flow transactions at a given time. The funds are typically traded for shares, payments, or loans. It often involves exchanging an asset for another at a predetermined price and time in the future.

Future: This contract obliges traders to purchase and sell assets at a predetermined price and time in the future. It is similar to forwards but is regulated by exchange and is carried out over an exchange.

In the case of the crypto currency industry, receivables are deals negotiated between two or more individuals to acquire and sell similar crypto currency properties at a fixed price throughout the future. Any changes in asset cost will have a direct impact on the value of the deal. In a trading exchange a marketer uses an exchange or platform for a customer to customer (C2C). Though the terms of both methods are different, they are still considered important by active traders.

1.4 The Need for Trading Crypto Derivatives

Trading Crypto derivatives offer the following benefits to a skilled investor/trader.

Hedging

The word hedging implies the usage of diversification and taking opposite positions in the same asset to cut both upside and downside risks. Hedging practices are used by institutional operators who have a large sum of money at stake and are focussing on risk management and curtailing losses rather than at making profits. Hedging is used as a way to insure their portfolio of assets. Positions in the spot market can be hedged using positions in the derivative market by taking opposite positions in the two markets. Thus any sharp movement in any market can be compensated for by the opposite position in the other.

Speculation

Derivative also serves as a guessing tool. Traders committed to predicting crypto-currencies prices make use of complex strategies of technical analysis. They gauge the ongoing price action by carefully studying them and hence are capable of predicting the next possible move of the prices, and then they enter appropriate trades with the objective of pure profit making. The justification for market manipulation is to benefit from crypto-asset demand volatility. Speculation appears to be a poor villain in some ways, though, as people fear that speculation would contribute to a further weakening of the currently fragile crypto-currency environment.

Contraction security

The fundamental explanation of the concept is to guarantee that any decline in the economy doesn't impact retailers. Having financial derivatives means traders who formerly sympathized with market fluctuations will now defend themselves from any damage done by the market. In recessionary or stagnant market conditions when people do not have much faith in the markets, people often resort to financial instruments with a bearish outlook and often peg the instrument against the bearish economy, in an attempt to profit even in a falling economy. Numerous examples can be cited from the 2008 Financial crisis, wherein people profited through CDOs by pegging them against the economy.

1.5 Disadvantages of Trading in Crypto Derivatives

There is no regulation on the use of securities in the field of encryption, which in itself poses risks. Crypto also faces the problem of versatility and scalability. It cannot be exchanged and traded at levels on which normal currencies are pegged and traded, it is primarily due to the low supply in the market. Also, the level of technology that is required to facilitate such huge volumes of trades is still not readily available in a large majority of countries. Only a few countries, institutions and banks have accepted bitcoin as an official form of currency and are transacting in them. Lack of intrinsic value can be a huge downside for Bitcoin as it has not real value of itself and is largely dependent on a lot of other factors such as the forex market, US Dollar, commodities markets, Demand and supply. Fluctuations in commodity prices can occur at any time without prior warning, making the crypto-currency economy vulnerable to investors. Any black swan impacting the contributing factors can significantly harm the Bitcoin ecosystem and can even damage global economies. Crypto-currency traders have little trading experience and are mainly governed by their greed for easy profits. 1.7 Million retail Bitcoin traders in India lost all of their wealth in 2016, following the Demonetization news. The news affected a lot of the underlying sectors that contribute to the prices of Bitcoin, sudden splurge in its prices created a huge outcry. For this reason the trading platform and all its functions need to be fully understood. Before starting crypto currency trading, users should complete all the tutorials and master powerful strategies.

II. Background

People are trying and exploring all digital avenues. Crypto currency derivatives are now attracting crowds. The Concept of Virtual currency is appealing to its consumers. The Crypto derivatives industry has witnessed an impressive 883% growth between Jan to May 2020, The COVID lockdown saw a huge surge in its demand, the turnover grew from \$1.5 mn to \$22 mn during the lockdown.

Earlier in 2018, RBI had prohibited banks and financial institutions from providing services supporting digital currencies like bitcoin. After a string of frauds were unearthed post the 2016 demonetisation. Soon after the crypto exchanges filed a lawsuit and won the case in March this year. Even after the ban has been scraped, large banks have not completely supported crypto trading. But the government is trying to implement laws that will ban crypto trading completely, owing to the losses incurred by 1.7 million crypto traders in India. Indian traders were already hurting due to the lack of trading regulations in India in the domain. They waited for clarity from the RBI, meanwhile the industry was flourishing during the lockdown. Even though Crypto has been declared a non legal tender by the RBI.

A government panel has been formed in tandem with the Law Ministry, Ministry of Information and Tech, and the RBI for a framework that will end trading in India. Bill will be discussed in the near future by the federal panel. For long the RBI and the center have emphasised that crypto is not legal tender, in 2017, The government created a panel led by the then Finance secretary, to study the ecosystem of crypto, the panel proposed a ban on all forms of private virtual currencies in its report. However it also suggested to look at the possibility of an official virtual currency. Some analyst reports expect that the government might choose to implement the usage of block chain but might not allow crypto trading, Block chain enables fund transfers and settlement of trades. Bitcoin is only a medium of exchange with no physical form, no intrinsic value, and is not regulated by the RBI. The Govt is losing a significant chunk of revenue by not regulating the sector. Only some payment gateways and mid sized banks are working with crypto. Ex - Ripple, which offers international remittance services through ripple net in partnership with Indian Banks, it has not yet launched its liquidity service in India because of the regulatory issues that ensue. India can take a lesson from countries like Singapore and South Korea that regulate crypto trades and have onboarded them as a conventional form of currency. Off late even China has amended its decision to not trade bitcoin and has joined the bandwagon.

Praful, D. (2019). Study on Indian Bitcoin's legal status. Over the years, the sudden increase in capital gains has been accompanied by enormous risks, posing a difficult problem which the Indian government must answer. It will be difficult for the government to catch up with waves of material inflows but it will be unpleasant if this is not done. There are no specific Bitcoin rules, however, that will still not be deemed legal.

Asset management can be regulated by various legislation (including FEMA, foreign currency, and SOGA). The Bitcoin system delivers instant transactions at a lower price and other benefits. The probability of abuse of technologies cannot be the starting point for dismissing technologies itself. On the one side, a pragmatic solution will be structured to optimize the technological successes and, on the other, to avoid future risks. This paper also looks at the relative position of foreign currencies. Furthermore, the use of digital or virtual currencies is inevitable in the era of digital transactions, so countries must cooperate to establish the necessary institutional framework for accepting and promoting such developments, rather than imposing obstacles in the way of its development.

Marija, T., Yuliya, T., & Elena, E. (2020). analyzed the aspects of crypto-currency taxation in the US and in some countries of Europe, Latin America, and Asia. The authors offer their own vision of crypto-currency as an object of taxation through the prism of various science-based approaches to the concept of crypto-currency and relative operations. The study revealed that using digital assets as a payment mainly implies the income tax usage. Regarding the property assets, the focus is shifted to the profit from crypto-currency sale/storage and its direct taxation. The Draft Law "On Digital Financial Assets" was examined and options for its further refinement and elaboration were suggested.

Kostis, K., & Aggelos, K. (2019), developed a framework in this article to get smart contracts that can read data, display the occurrence of scenes and react to events in one or more smart contracts of their choosing. Even if the smart basic contract is not intended for use with the smart contract that we have received, our machine can work. Unlike standard currencies, receivable accounts get their worth (and are sometimes quoted) by dynamic dependencies. They demonstrate how smart contracts that are accessible in the Ethereum network can be deployed without forking or extra thought. They incorporate all processes of NIPoPoWs (such as Fly Client or Super Block) to get clear evidence of event conflicts, making them more expensive for users to call. The latest construction is particularly interesting since it constructs the first SPV client, the Ethereum SPV client. Finally, they explained the coverage of smart contract-based underwriting that was impossible before they started the work, notably the ability to formulate effective insurance contracts to guarantee chain-based security support (such as ICO, futures and options).

Svitlana, Y., Margaryta, S. (2020). explores the past of crypto currencies development and advancement, its innovative functionality, technology, techniques and surveillance forms. Crypto-currency forecasts in US dollars and aggregate data amount are being developed by early 2020. It highlights the main advantages and disadvantages of using crypto currencies. Carried out international market research and separated the primary and secondary market development indicators in Ukraine. Ukraine is one of five countries according to the reports. Many Bitcoin wallet apps and cryptic financial providers have been made eligible for payment since October 2015. Ukrainian Crypto currency industry control rules are being contemplated. This should be remembered that the judicial cases in this section are in the state of development.

Jacob, T. F. (2020). The aim is to create a forum for contrasting crypto currencies with normal exchange rates, evaluating the state of its foreign controls, illustrating its developments in important nations, reviewing its existing and potential controls and making specific advice for more controls. Regardless of the scope of the issue, secondary qualitative analysis, data obtained from common crypto currency blogs, and general internet news stories are included in the gathered knowledge and details. As to the writing of this paper, for most

nations, the exact concepts of crypto currencies are very few; nevertheless, it is possible that more legislation would be added in the foreseeable future.

Nader, T. (2020). attempts to check whether the Crypto currency is a real financial instrument free of risks. The author used data pertaining to low-income and widely traded asset classes in a strong analysis. They have used the CoCoR model and the Copula process. The results show that the market for crypto-assets plays an important role in the stability of the global market. Appropriately, they found a reliance on the standard model Copula between the minimum price and the oil price explained. The unexpected findings with respect to systemic risk suggest that rapid inflation shifts may have a detrimental effect on capital markets and the gold sector. When currencies fall, the markets for the euro, yen and WTI will have a positive and significant impact. The analyst also pointed out that abrupt market shifts after 2016 may imply typical losses to the financial sector, outside the energy industry. For policymakers and investors, such findings are quite significant.

Arwa, M., Montclair, S. (2020). Investigating the relationship between Decentralisation of Economies and Economic Growth. Decentralisation is considered an important avenue to gain efficiency making a direct association between local taste and provision of goods and services. Since the provision is as per the taste of consumers, it is expected that this results in faster economic growth. The association between decentralisation and economic growth has been identified by many studies in the past using data of different nations associated with GDP. However, empirical literature reviews the association but found that there is no consensus among past researchers over the topic. The state which provides more power to the local government can grow faster in comparison to those having centralized power.

III. Trade with Crypto Derivatives

Crypto loans can't be sold anywhere and platforms are available specifically for them. As an investor, the best place to discover is on the crypto currency exchange, when trading crypto currencies. Other exchanges trade favourites based on BitMEX, Deribit and BaseFEX. One thing to note, of course, crypto exchange transactions still need to be regulated. Therefore anyone who uses these should be prepared, for better or for worse. In alternative trading, multilateral exchanges are usually a better choice for investors.

BitMEX

BitMEX is one of the emerging companies in the crypto derivatives market with good success. The company's product is a tool to track Bitcoin's price movement relative to the US dollar, accounting for over 20 per cent of the crypto currency market's Bitcoin/USD transaction volume.

Deribit

Deribit is just as competitive as BitMEX. Compared to BitMEX, Deribit offers only Bitcoin trading and does not peg them against conventional currencies. Although BitMEX has developed into an altcoin, Deribit has always concentrated on Bitcoin only. It offers highly levered derivative trading positions on Bitcoin, focusing primarily on crypto futures and options.

BaseFEX

This crypto derivatives trading ecosystem is a relatively new one, and it aims to provide traders with a reliable, user-friendly, and transparent derivatives exchange. It supports over ten pairs, which include XRP XBT,

ETHXBT, BTCUSD, and lots more. The supply of crypto-derivatives is growing. Off late, the Chicago Mercantile Exchange (CME) was the first established exchange to launch options on Bitcoin futures. Institutional crypto investors can now trade another crypto-derivative on CME, which they have long known from the traditional financial sector.

IV. Crypto Derivative and its Market

The market for crypto-derivatives has exploded in recent years and the trading volume is now ten to twenty times greater compared to the spot market. However, the supply of derivatives is still limited, especially on regulated exchanges. CME has been one of the few established trading platforms to offer crypto-derivatives like Bitcoin futures have been available.

Options and futures offer similar opportunities

This enables traders to generate profits from future price movements. However, they differ in terms of their risk profile and functionality. Unlike a futures contract, an option contract does not oblige the option holder to buy or sell the underlying asset but merely gives him the option.

Derivatives enable price speculation and risk management

Crypto-derivatives are controversial in the industry. Regulatory authorities have repeatedly pointed out the price manipulation risks in crypto markets. As Bitcoin liquidity is still relatively low, individual market participants can manipulate the spot price by placing large sell orders. At the same time, they bet on falling crypto prices in the derivatives market through the use of futures or options. Block chain analysis firm Arcane Research showed that there is a strong correlation between the monthly expiration of CME futures contracts and falling Bitcoin price. They saw this as evidence of Bitcoin price manipulation but could not prove it. On the other hand, institutional investors also use derivatives for risk management purposes, because futures and options can limit possible losses in Bitcoin trading. A broader supply on an established exchange is therefore a positive development.

V. India attracts the giants of the crypto sector

Local startups are not the only ones to notice India's growing demand for crypto-currency trading options. WazirX, a Mumbai based crypto exchange, grew 400% in March and 270% in April, 2020. After the supreme court on March 4 struck down the virtual ban on trading cryptocurrency announced by RBI in April 2018. WazirX, was acquired by the world's largest investor Binance in November. And it seems that it could be just one of many companies that are trying to develop a presence in India by 2021. In fact, the CEO of Cashaa Kumar Gaurav said that his online banking platform now sees a monthly growth of over 150% in the crypto-currency segment. Therefore, he estimates that Indian customers are involved in trading for a value of 1,000 bitcoins in daily volume, mainly from over-the-counter trading. Indian Banks are seeking to enter the boom of crypto derivatives.

Demand meets supply

Interest rate derivatives are modeled on decentralized finance platforms (DeFi) such as Compound Finance, where traders earn interest on crypto-currency deposits. Pooja Shah, Delta Exchange researcher, said that traders prefer a startup rather than historic operators like BitMEX, because Delta offers more variety. "While

the market leader BitMEX has 10 contracts, this has over 30 contracts available for trading," said Shah. This made us the only platform where people could shorten WRX and block their IEO earnings. "Most of these Delta users are located in Southeast Asia, where incumbent traders such as the Chinese exchange OKEx are also looking to grow their derivative offerings. Lennix Lai, director of financial markets at OKEx, said that derivatives now account for nearly 66% of the platform's daily global volume, over \$ 2 billion in options only. "In all likelihood, 2020 could be the turning point for crypto currency in India," said Uno coin's Vishwanath.

VI. Indian Prospective for Crypto-Derivatives

India has had a complicated relationship with crypto. The number of exchanges is growing in response to the Supreme Court decision, with others expanding their features. The Indian exchange Unocoin is planning to launch crypto derivatives on its platform within a few months. However, many are still concerned over the future of the industry with the nation having stymied many efforts to expand the crypto industry locally while developing a digital rupee is still on hold.

Reference

- Praful, D.** (2019). Untangling the Debate: Analyzing the Legal Status of Bitcoins in India. *National Journal of Cyber Security Law*, 2(2).
- Marija, T., Yuliya, T., & Elena, E.** (2020). Taxation of Digital Financial Assets: International Practices And Comparative Legal Analysis. *Talent Development & Excellence*, 12(2), 1413-1421.
- Kostis, K., & Aggelos, K.** (2019), Smart Contract Derivatives. The abilities of smart contracts today are confined to reading from their own state.
- Svitlana, Y., Margaryta, S.** (2020). Cryptocurrency Market: Problems and Development Prospects in Ukraine. *Advances in Economics, Business and Management Research*, 129.
- Jacob, T. F.** (2020). Cryptocurrencies: An Overview, Investment Investigation, Comparative Analysis, and Regulatory Proposals. *University of Nebraska at Omaha*.
- Nader, T.** (2020). Impact of Crypto-Asset Trade on Financial Stability. *IGI Global*, 1(11), 4018-978.
- Arwa, M., Montclair, S.** (2020). Investigating the relationship between Decentralisation of Economies and Economic Growth. *IEEE-SEM*, 8(4), 2320-9151.