Article

Mitigating Risks in India's Derivative Market – Analysing Current Regulatory Framework and Future Needs

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ABSTRACT

The derivatives market in India has undergone significant expansion, becoming a crucial element of the nation's financial terrain. Since its inception in June 2000, the volume and quantity of trading contracts have experienced exponential growth. This research article thoroughly examines the future trajectory and the elements that will shape this expansion, including a detailed analysis of the past, regulatory examination, market dynamics, and the overall economic consequences of derivatives trading in India. This text examines the historical development of derivatives trading in India, focusing on important milestones and regulatory interventions that have influenced the current market situation. In addition, the article discusses the difficulties encountered by the derivatives market in India and offers a forward-thinking viewpoint on possible changes and developing patterns that may impact its future course. The results of this analysis enhance our understanding of the expansion of derivatives trading in India, providing vital insights into the market's development and its consequences for the wider financial system. The article is informative and substantially incorporates secondary material from diverse sources, such as articles, websites, and journals, to thoroughly evaluate derivatives trading in India, providing a comprehensive viewpoint on the subject.

INTRODUCTION

Derivatives market in India has really evolved and it forms an integral part of the country’s financial system. This market offers various kinds of goods such as futures and options on stocks, commodities, currencies, as well as interest rate futures. Derivatives are defined as links; products whose price depends on an underlying asset. The derivatives market has evolved significantly in India over the past two decades due to factors like globalisation, investors’ choices and economic liberalisations. At the same time, the legal requirements have been provided to protect the market participants, minimise risks, and increase the transparency level.

The essence of commodity and capital markets is that risk is an inalienable characteristic of it. In the long-run, volatility of the relative prices of agricultural and non-agricultural commodities occurs because of the demand and supply forces. Indeed, in the last two decades alone, there has been increased internationalisation and liberalisation of the global economy with an up surge in international trade and business. Therefore, interest and exchange rates, and stock market prices have faced rapid volatility in the financial markets, which in turn directed the corporate sector into an aggravated state of financial risk.[1]

Heightened financial risk leads to financial losses for an otherwise profitable organisation. This emphasises the significance of risk management as a means to mitigate uncertainty. Derivatives offer a viable answer to the issue of risk arising from uncertainty and volatility in the underlying asset. Derivatives are instruments used for risk management that facilitate the efficient transfer of risk within an enterprise. Derivatives are financial instruments that lack intrinsic value. Their worth is contingent upon the fundamental asset. The underlying asset can be either financial or non-financial in nature.[2]

CONCEPT OF DERIVATIVES

Derivative as pertains to financial instrument is one whose value gives reference to a single asset or a portfolio of assets. As applied to futures trading, the underlying asset may be a currency, commodity, an interest rate, stock index or a share. Its value is going to be an oscillatory value depending upon the change in the price of the asset. It is a confrontation between two entities and one of the parties agrees to buy or sell an asset at some future particular point in time. Derivatives are in fact similar to Insurance. Whereas derivatives are used to minimise risks faced in markets, insurance provides safeguard against particular perils for instance fire, flood and accidents.

The term 'derivatives' refer to a broad class of financial tools and mainly involves options and futures. These instruments obtain their value from the price and other associated factors of the underlying asset. These entities lack inherent value and instead derive their worth from the ownership claim they confer upon their owners for other financial assets or securities. An elementary illustration of a derivative is butter, which is derived from milk. The price of butter is contingent upon the price of milk, which is in turn contingent upon the demand and supply of milk. The general definition of derivatives refers to the process of obtaining or deriving one quantity from another. A derivative might be based on either a commodity or a financial asset. Derivatives are financial instruments that draw their value from other assets. For instance, the future price of gold to be supplied in two months will be influenced by various factors, including the current and anticipated price of this commodity.

[1] Bhagwat, S., Omre, R., & Chand, D. (2012). An Analysis of Indian Financial Derivatives Market and its Position in Global Financial Derivatives Market. Journal of Business Management & Social Sciences Research (JBM&SSR) ISSN, (2319-5614), 45-59.

[2] Reddy, Y. V. and Sebastin, A. (2008), 'Interaction between Equity and Derivatives Markets in India: An Entropy Approach', *The Icfai Journal of Derivatives Markets*, Vol. V, No.1, pp.18- 32.

❖ Classification of Derivatives

Broadly derivatives can be classified in to two categories - Commodity derivatives and Financial derivatives. In case of commodity derivatives, underlying asset can be commodities like wheat, gold, silver etc., whereas in case of financial derivatives underlying assets are stocks, currencies, bonds and other interest rates bearing securities etc.

1) Futures Contract - Futures are contractual agreements to purchase (long) or sell (short) a certain underlying asset at a predetermined price on a specified future date, facilitated through a designated exchange. Futures contracts are exchanged on trading platforms where they operate as intermediaries, facilitating transactions between buyers and sellers. Exchange establishes the standardised phrases in relation to quality, quantity, price, and desired delivery date and location. The characteristics of a futures contract can be defined as follows:

- **i)** These are traded on an organised exchange like IMM, LIFFE, NSE, BSE, CBOT etc.
- **ii)** These involve standardised contract terms viz. the underlying asset, the time of maturity and the manner of maturity etc.
- **iii)** These are associated with a clearing house to ensure smooth functioning of the market.
- **iv)** There are margin requirements and daily settlement to act as further safeguard.
- **v)** These provide for supervision and monitoring of contract by a regulatory authority.
- **vi)** Almost ninety percent future contracts are settled via cash settlement instead of actual delivery of underlying asset.

The trading of futures contracts on organised exchanges enhances the liquidity of the transaction. The clearing house, acting as the counterparty for both parties involved in a transaction, offers a mechanism that ensures the fulfilment of the contract and maintains a minimal risk of default. Some of the important types of financial futures contract are - Stock or Equity Futures, Stock Index Futures, Currency Futures and Interest rate bearing securities like Bonds, T-Bill Futures.

To give an example of a futures contract, suppose in November 2017 Ankit holds 1000 shares of ABC Ltd. Current (spot) price of ABC Ltd shares is Rs. 115 at National Stock Exchange (NSE). Ankit has the fear that the share price of ABC Ltd may fall in next two months resulting in a substantial loss to him. Ankit decides to enter into futures market to protect his position at Rs. 115 per share for delivery in January 2018. Each contract in futures market is of 100 Shares. This is an example of equity future in which Ankit takes short position on ABC Ltd. shares by selling 1000 shares at Rs. 115 and locks into future price.

2) <u>Options Contract</u> - In a situation where a futures contract is involved then the two parties have legal responsibilities to meet their obligations as provided in the contract. As its name suggests, an options contract is in fact a contract through the terms of which the holder has the right not to exercise the contract and does not need to exercise it either. An option is a legal agreement giving the buyer the possibility to buy or sell an object at a fixed price and on a fixed date but is not obligatory. A “call option” simply gives the holder the right to buy an asset at a fixed and predetermined price while a “put option” gives the holder the right to sell the asset at a certain fixed price. Futures are financial contracts through which the buyer (holder) has an opportunity to buy (call futures) or sell (put futures) a particular asset at a stipulated price at or before a given date through exchanges. For this right, the buyer pays an option premium.

Another type of derivative’s instruments is options, and, in fact, options contracts could be divided into two major types, namely, call options and put options. Apart from this, options are also classified into two major types: namely OTC or Over the Counter options and Exchange Traded Options. Exchange traded options involve standardised options contracts executable through a recognised exchange while options are non-standardised individual bargained-for contracts between the parties. A call option shall permit the holder (buyer/long call) to acquire a specified amount of the underlying asset at the specific price known as strike price before the expiry date or on the date. The seller on the other hand who is short the call option is required to sell the underlying asset if the buyer decides to exercise his/her option.

Assume that an investor purchases a single call option on Infosys with a strike price of Rs. 3500, paying a premium of Rs. 100. If the market price of Infosys on the day of expiry exceeds Rs. 3500, the options will be exercised. On the other hand, a put option grants the holder (buyer/long put) the privilege to sell a specific amount of the underlying asset at the striking price on or before a stated expiration date. The seller of the put options, also known as being short put, is obligated to purchase the underlying asset at the strike price if the buyer chooses to exercise their option to sell. A Put Option is the term used to refer to the right to sell. Let's assume that X possesses 100 shares of Bajaj Auto Limited. The present price (as of March) of Bajaj auto shares is Rs 700 per share. X need funding to meet its financial needs in two months, which will be obtained by selling 100 shares at that time. However, he is concerned that the share price may decrease during the next two months. The individual makes the decision to participate in the option market by purchasing a Put Option (which grants the right to sell) with a May expiration date. The option has a strike price of Rs 685 per share and a premium of Rs 15 per share.

3) <u>Forward Contract</u> - A forward contract is a contractual agreement between two parties to purchase or sell an item at a predetermined future date. For a forward contract, the price that is exchanged between the parties is determined at the time of entering into the contract. A derivative contract that is commonly engaged into by individuals in their daily lives is the most basic type of such contracts. A forward contract is a transaction in the cash market where the delivery of the item is postponed until the deal is finalised. Despite the fact that the delivery occurs at a later date, the price is established on the original trade date. In a forward contract, one party takes on a long position as the buyer and commits to purchasing the underlying asset at a predetermined price on a specific future date. The counterparty in the contract, referred to as the seller, takes a short position and commits to selling the asset on the same day and at the same price. The designated price is commonly known as the delivery price. The parties to the deal have mutually agreed upon the contract conditions, including delivery price and quantity. Typically, neither party is required to pay any margins to the other. Forward contracts are transacted in the over-the-counter market and are not exchanged like futures contracts. The primary disadvantages of a forward contract are the absence of sufficient liquidity and the potential for counterparty default risks. Let's take the example of a US-based corporation purchasing textiles from an exporter in England for a value of £1 million, with a payment deadline of 90 days. The Importer is experiencing a shortage of Pounds as it has outstanding obligations for future delivery.

Assume that the current spot price of the pound is US $1.32. The importer is concerned that over the following 90 days, the value of the pound may increase relative to the dollar, resulting in higher costs for the textiles in dollars. To mitigate this risk, the importer can promptly engage in negotiations with Citi Bank to establish a 90-day forward contract at a predetermined exchange rate, such as £1 = $1.32. As per the terms of the forward contract, the City Bank will provide £1 million to the US Importer in 90 days. The Importer will then give the bank $1.32 million, which is the equivalent dollar value of £1 million at the forward rate of $1.32. This amount will be used by the Importer to pay for their textile order.

4) <u>Swaps Contract</u> - A swap can be defined as a reciprocal trade or interchange. A swap is a contractual arrangement in which parties agree to trade the obligations they have under their respective underlying contracts. It involves the exchange of cash flows over a certain period of time in the future. The entities that mutually agree to engage in the swap are referred to as counter parties. There are two types of swaps commonly used: i) Interest rate swaps, which involve exchanging only the cash flows related to interest between the parties in the same currency, and ii) Currency swaps, which involve exchanging both the principal and interest between the parties, with the cash flows in one direction being in a different currency than the cash flows in the opposite direction.

❖ Application of Derivatives[3]

1) <u>Management of risk</u> - This is the most important function of derivatives. Risk management is not about the elimination of risk rather it is about the management of risk. Financial derivatives provide a powerful tool for limiting risks that individuals and organisations face in the ordinary conduct of their businesses. It requires a thorough understanding of the basic principles that regulate the pricing of financial derivatives. Effective use of derivatives can save cost, and it can increase returns for the organisations.

2) <u>Efficiency in trading</u> - Financial derivatives allow for free trading of risk components and that leads to improving market efficiency. Traders can use a position in one or more financial derivatives as a substitute for a position in the underlying instruments. In many instances, traders find financial derivatives to be a more attractive instrument than the underlying security. This is mainly because of the greater amount of liquidity in the market offered by derivatives as well as the lower transaction costs associated with trading a financial derivative as compared to the costs of trading the underlying instrument in cash market.

3) <u>Speculation</u> - This is not the only use, and probably not the most important use, of financial derivatives. Financial derivatives are considered to be risky. If not used properly, these can leads to financial destruction in an organisation like what happened in Barings Plc. However, these instruments act as a powerful instrument for knowledgeable traders to expose themselves to calculated and well understood risks in search of a reward, that is, profit.

4) <u>Price discovery</u> - Another important application of derivatives is the price discovery which means revealing information about future cash market prices through the futures market. Derivatives markets provide a mechanism by which diverse and scattered opinions of future are collected into one readily discernible number which provides a consensus of knowledgeable thinking.[4]

5) <u>Price stabilisation function</u> - Derivative market helps to keep a stabilising influence on spot prices by reducing the short-term fluctuations. In other words, derivative reduces both peak and depths and leads to price stabilisation effect in the cash market for underlying asset.

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[3] Misra Dheeraj and Misra Sangeeta D (2005), 'Growth of Derivatives in the Indian Stock Market: Hedging v/s Speculation', *The Indian Journal of Economics*, Vol. LXXXV, No. 340

[4] Greenspan, A. (1998). Testimony of Chairman Alan Greenspan to the Commodity Exchange Act and OTC Derivatives before the Committee on Agriculture, Nutrition, and Forestry, US Senate July 30, 1998

❖ Participants in Derivative Markets[5]

- **Hedgers** - They use derivatives markets to reduce or eliminate the risk associated with price of an asset. Majority of the participants in derivatives market belong to this category

- **Speculators** - They transact *futures* and *options* contracts to get extra leverage in betting on future movements in the price of an asset. They can increase both the potential gains and potential losses by usage of derivatives in a speculative venture.

- **Arbitrageurs** - Their behaviour is guided by the desire to take advantage of a discrepancy between prices of more or less the same assets or competing assets in different markets. If, for example, they see the *futures* price of an asset getting out of line with the cash price, they will take offsetting positions in the two markets to lock in a profit.

HISTORY AND EVOLUTION OF DERIVATIVE MARKET IN INDIA

Derivatives markets in India have existed in various forms for a considerable duration. The Bombay Cotton Trade Association initiated futures trading in the field of commodities as early as 1875. The Government of India implemented a prohibition on cash settlement and options trading in 1952. Derivatives trade transitioned to informal markets for forward contracts. Government policy has recently changed to support greater reliance on market-based pricing and reduced involvement in speculative derivatives trading. The initiation of financial derivatives trading in India began with the enactment of the Securities Laws (Amendment) Ordinance, 1995. It allowed for the removal of the prohibition on options in securities. In the past decade, starting in 2000, there was a removal of the prohibition on futures trading in numerous commodities. During the same time frame, national electronic commodity exchanges were established.[6]

Derivatives trading in India began in June 2000 after receiving final approval from SEBI in May 2001, based on the suggestion of the L.C. Gupta committee. The Securities and Exchange Board of India (SEBI) has authorised the derivative divisions of the National Stock Exchange (NSE) and Bombay Stock Exchange (BSE), as well as their clearing house/corporation, to begin trading and settling approved derivatives transactions.

[5] Harish, A. S. (2001) 'Potential of Derivatives Market in India', *The ICFAI Journal of Applied Finance*, Vol. 7, No.5, pp 1-24

[6] Chauhan, D. (2013). "Performance of Stock Exchanges in India". International Journal of Conceptions on Management and Social Sciences; ISSN: 2357 - 2787 Vol. 1; Issue. 1.

SEBI initially granted approval for trading in index futures contracts that were based on different stock market indexes, including S&P CNX, Nifty, and Sensex. Later on, the trading of options and individual stocks was allowed to be based on an index.

The trading of BSE Sensex options began on June 4, 2001, while the trading of options on individual equities started in July 2001. Individual stock futures contracts were introduced in November 2001. The trading of derivatives on the National Stock Exchange (NSE) began on June 12, 2000, specifically with the trade of S&P CNX Nifty Index futures. Trading of index options began on June 4, 2001, while trading of options on individual equities began on July 2, 2001. The introduction of single stock futures occurred on November 9, 2001. The NSE index futures and options contract are derived from the S&P CNX index. In June 2003, the National Stock Exchange (NSE) implemented Interest Rate Futures, however they were later prohibited due to pricing concerns.

F&O Products Traded at NSE

Sr. No.	Product with underlying asset	Start Date
1	Index Futures (S&P CNX Nifty)	12th June 2000
2	Index Options (S&P CNX Nifty)	4th June 2001
3	Individual Stock Options	2nd July 2001
4	Individual Stock Futures	9th November 2001
5	Interest Rate Futures	23rd June 2003
6	IT Futures & Options (CNX IT)	29th August 2003
7	Nifty Futures & Options (Bank)	13th June 2005
8	Nifty Junior Futures & Options	1st June 2007
9	Futures & Options (CNX)	1st June 2007
10	Midcap 50 Nifty Futures & Options (Nifty)	5th October 2007
11	Mini Index Futures & Options (S&P CNX Nifty Index)	1st January 2008
12	Long term Options Contract (S&P CNX Nifty Index)	3rd March 2008
13	Currency Futures (USD - INR)	29th August 2008
14	Currency Options (USD - INR)	29th October 2010
15	Cross-currency Futures & Options (GBPINR, EURINR and JPYINR)	27th February 2018

Source - NSE, 2023

❖ **Development and Growth of India's Derivative Market**

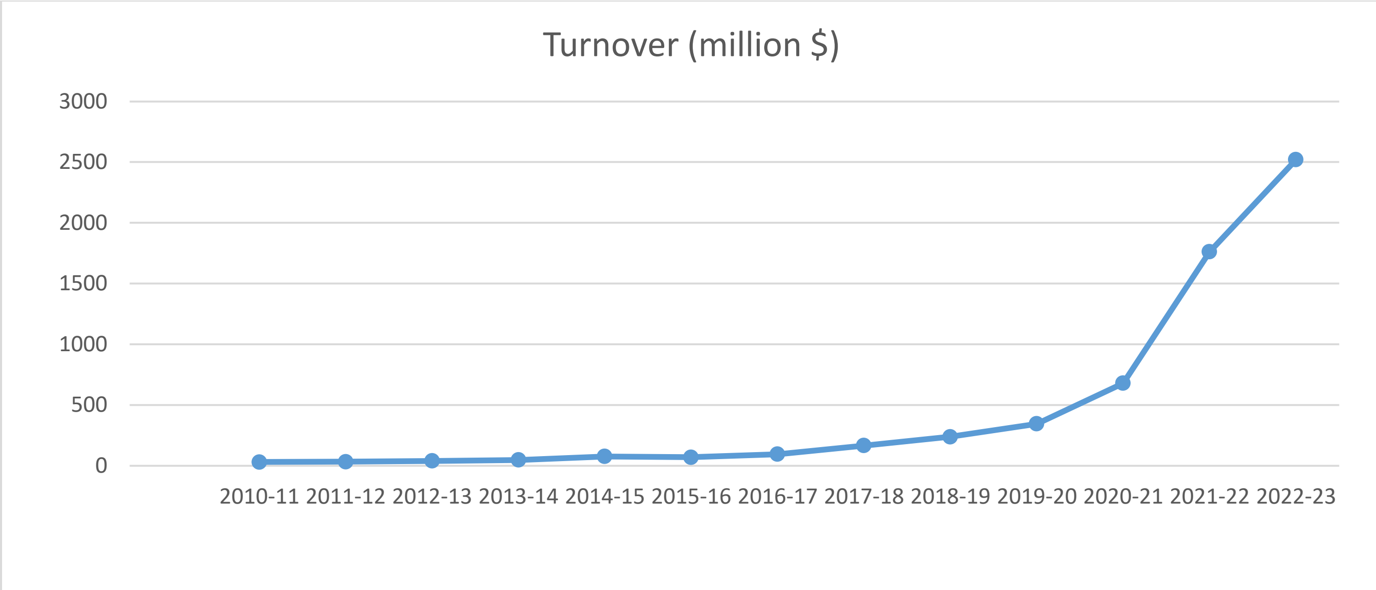
The trading volume and the number of players in the derivatives market in India have experienced a substantial increase. The derivatives market in India has grown progressively to encompass a broader range of derivative products, such as interest rate derivatives, commodity derivatives, stock futures, and index options. The emergence of currency derivatives, such as currency futures and options, has played a crucial role in driving growth. Investors have been granted access to the foreign exchange market, enabling them to efficiently mitigate currency risk by hedging. Exchanges and market regulators have endorsed and facilitated the advancement of product creation and innovation in the derivatives industry.[7]

Period	**Turnover (million $)**
2010-11	29.25
2011-12	32.16
2012-13	38.72
2013-14	47.43
2014-15	75.97
2015-16	69.30
2016-17	94.34
2017-18	164.99
2018-19	237.60
2019-20	344.80
2020-21	678.68
2021-22	1761.32
2022-23	2519.76

Source - SEBI Annual Report, 2023[8]

[7] Francis, G. (2019). A Study on Emerging Trends in Indian Derivative Market. International Research Journal of Engineering and Technology. 6 (4), pp. 1074-1078

[8] SEBI, 2023. *Annual Report 2022-23.* Retrieved from *https://www.sebi.gov.in/reports-and-statistics/publications/aug-2023/annual-report-2022-23_74990.html*



EVOLUTION OF REGULATORY FRAMEWORK OF DERIVATIVE MARKETS IN INDIA

India's whole capital market relies heavily on the regulatory structure governing the derivatives market. Having a robust regulatory framework that clearly defines the financial landscape, product design, and capacity for innovation is expected and can be anticipated. The L.C. Gupta Committee Report, published in 1998, and the J.R. Verma Committee Report provide the fundamental basis for India's regulatory framework. The Securities Exchange Board of India (SEBI) formed a committee consisting of 24 members, led by Dr. L.C. Gupta, with the main objective of creating a highly effective regulatory structure for the trading of derivatives in India. The report submitted by this committee provides a comprehensive understanding of the division of responsibilities between the exchange and SEBI in terms of regulatory functions. SEBI granted approval on May 11, 1998, for the gradual introduction of derivatives trading in India, commencing with a stock index future, after accepting the recommendations of the committee. The SEBI Advisory Committee (2002) focused on the expansion and oversight of the derivatives market in India after noting a substantial increase in this industry. This committee focusses on various important matters, such as the actual completion of stock options and stock futures contracts, an assessment of the criteria for stocks eligible for derivative products, the involvement of sub brokers in the derivative market, and guidelines for the use of derivatives by mutual funds. In 2006, the RBI formulated extensive recommendations for derivative goods, which encompass the majority of the laws and regulations governing derivative markets.[9]

[9] Gakhar D. & Meetu M. (2013). Derivatives Market in India: Evolution, Trading Mechanism and Futures prospects. International Journal of Marketing, Financial Services & Management Research, 2(3)

Financial derivatives gained prominence after 1970. In 1875, the Bombay Cotton Trade Association initiated the practice of trading futures contracts, which marked the inception of the conceptual development of derivatives. Conversely, the Indian government implemented a prohibition on option trading and cash settlement in 1952. The Indian government began endorsing derivatives in June 2000 after receiving approval from the Security and Exchange Board of India. Analysis of the growth trend of the financial derivatives market over the recent past shows that the market has expanded in terms of the number of instruments, the complexity of the instruments, and their size. Derivatives have dramatically impacted the finance industry by changing the ways in which risks are defined, measured, and managed. The history of trading in derivatives in the Indian Market initiated from the calendar year of 2000 when equity derivative trading was introduced both in NSE and BSE. Index futures, the first type of equity derivative products, were introduced in June 2000. Following that, in June 2001, July 2001, and November 2001, index options, individual stock options, and futures for single stock derivatives were gradually implemented. As data shows it, the interest on equity futures has steadily grown over time. India has thus witnessed the development of equity derivatives through decreased product proliferation, increased number of eligible investors, increasing trading turnover, and robust risk management of exchange-traded derivatives. The BSE which is based in Mumbai, Maharashtra occupies a significant place in the financial market of the country. Established in 1875, it is the earliest stock exchange in south Asia and very much famous for its high response time that is only 200 microseconds. Additionally, it holds a major position among India's exchange groups.

In India, the ban on “options in securities” was lifted by Securities Laws (Amendment) Ordinance, 1995 that helped in allowing the derivatives trading NSEIL, 2001). This inhibited development was caused by the failure to develop a legal infrastructure for securities trading, which bled the derivatives market dry.

In November 1996, SEBI constituted a committee under the chairmanship of Dr. L. C. Gupta with the specific mandate of recommending an appropriate framework for the regulation of trading in derivatives. The committee stated that based on the definition provided in the SCRA, through the qualification of derivatives as ‘securities’, the rules governing the sale of ‘securities’ may also apply to the derivatives. Earlier in 1998, SEBI formed a 4-member panel headed by Prof. J. R. Verma to recommend certain preventive measures to contain risks related to derivatives trading.

The Government was convinced that a change to the laws governing securities was necessary in order to give the Indian market a legal framework within which to conduct derivatives trading. Consequently, the Securities Contracts (Regulation) Amendment Bill 1998 was moved to the Lok Sabha in July 1998, and the Bill was referred to the Parliamentary Standing Committee on Finance for consideration and report. The Bill suggested that derivatives should be included in defining the meaning of “securities” under the SCRA so that trading in derivatives can be facilitated under the provisions of that Act. The aforementioned committee submitted the report on March 1999.

The Committee believed that the implementation of derivatives, along with appropriate safeguards and risk containment measures, would undoubtedly boost the declining market, lead to increased investment activity, and foster better trust among investors/participants.[10] The Committee believed that cash settled contracts could potentially be categorised as "wagering agreements," which are subject to being null and void under Section 30 of the Indian Contracts Act, 1872. Since index futures contracts are always settled in cash, there is a possibility of legal disputes arising from such futures contracts. Hence, the Committee proposed an overriding provision out of an abundance of caution - "Regardless of any provisions in other Acts, contracts in derivatives, as defined by the SCRA, shall be deemed legal and enforceable."

Additionally, the Committee was convinced that stock exchanges, due to their advanced capabilities, should be the exclusive entities allowed to engage in derivatives trading in a sophisticated environment. The Committee proposed a language stating that the derivative should be traded and settled on stock exchanges and clearing houses of the stock exchanges, respectively, in line with the regulations and bye-laws of the stock exchange. The Proposed Bill, which included the suggestions of the aforementioned Parliamentary Committee, was ultimately passed into law in December 1999. The Committee also proposed many operational and legal actions to ensure the integrity of the capital market and preserve the interests of investors. These measures, among other things, include the following:

1. The Committee noted that the SEBI-appointed Dr. L.C. Gupta Committee had developed comprehensive guidelines for the regulatory framework of derivatives. These guidelines outlined the necessary requirements that should be met before introducing derivatives. The Committee, thus, advised complete adherence to these recommendations.

2. The Committee recognised the pressing necessity of educating Indian investors through the implementation of rigorous educational programs in order to raise investing awareness. This would enable them to gain a deeper understanding of their risk profiles.

3. Steps should be implemented to enhance the robustness and efficiency of the cash market.

4. The Committee believed that it is crucial for the regulatory authorities to establish a robust system for monitoring, vigilance, and enforcement.

5. The Committee recommended that SEBI, in collaboration with the stock exchanges, should organise a certification program on derivatives trading. This program aims to educate investors

[10] Gautam, I., & Kavidayal, P. (2016). Evolution and Future Prospects of Indian Derivative Market. *International Journal in Management and Social Science*, 4 (3)

and market intermediaries, as derivatives trading requires a significant number of knowledgeable investors and the support of credit and stock analysts.

6. Recognising the fast transfer of money and the intricate nature of derivatives transactions, the committee concluded that it was necessary to safeguard small investors by prohibiting them from participating in the options and futures market. This is to prevent them from being enticed by the potential speculative profits. The Committee proposed setting the threshold limit for transactions at a minimum of Rs. 2 lakhs.

7. The Committee believed that it is crucial to establish clear accounting standards for investors/dealers and back-office standards for intermediaries in order to minimise the risk of hiding losses and committing fraud by companies/intermediaries. The Committee further acknowledged that the necessity of accounting disclosure had been acknowledged by the Dr. L.C. Gupta Committee. The committee advised that the Institute of Chartered Accountants of India, in collaboration with the stock exchanges, should develop appropriate accounting standards. SEBI should then mandate the implementation of these standards before trading in derivatives begins.

8. The Committee requested the Government to contemplate excluding derivatives transactions from the application of stamp duty.

The proposals and recommendations of the Committee were implemented by the statutory regulators. The Securities Laws (Amendment) Act of 1999 and the revocation of the 1969 notification established a legal framework for trading securities-based derivatives on stock exchanges in India. This framework aligns with the trading structure for other types of securities permitted under the SCRA. The commencement of stock index futures trading occurred in June 2000. Subsequently, the trade of other products, including stock index options, stock options, and single stock futures, was also permitted. The derivatives are officially defined in accordance with the Act of 1999 to encompass: (a) a financial instrument derived from a debt instrument, share, secured or unsecured loan, risk instrument, or contract for differences, or any other type of security, and (b) a contract whose value is derived from the prices or index of prices or underlying securities.

The Act explicitly stated that contracts in derivatives will only be considered legal and valid if they are traded on a recognised stock exchange and settled through a clearing entity of that stock exchange, following the rules and bye-laws of the exchange. This means that over-the-counter (OTC) derivatives are not considered legally valid, as discussed later. The L.C. Gupta Committee on derivatives proposed a comprehensive legal framework for trading derivatives on stock exchanges. The committee delivered its report in March 1998. The text not only established a theoretical foundation for several regulatory aspects, but also proposed regulations for derivatives exchanges and clearing organisations. Prior to commencing derivatives business within their jurisdiction, the stock exchange and clearing companies were obligated to enact these bye-laws.[11]

REGULATORY GAPS & CHALLENGES AND AREAS FOR IMPROVEMENT

The derivatives market in India, particularly the futures market which emerged as one of the most active globally, functions and evolves with time. But other weaknesses and difficulties have not been resolved yet to enhance its stability, openness, and participation.

- **Fragmented Regulatory Framework -** The Indian derivatives market is governed based on the derivative form and by many regulators. SEBI regulates stock derivatives, while RBI regulates interest rate and foreign exchange derivatives. The earlier FMC regulated the commodities derivatives, which is now merged with SEBI. The result is a fragmented regulatory system in which market participants have to abide by several sets of rules, depending upon which form of derivative they are trading. Fragmentation of markets allows for regulatory arbitrage, in which market participants gravitate to those markets on which there is the lightest form of regulation. This, in turn, encourages distortions and risks. In other cases, inconsistencies in policies, complemented by overlapping regulations and duplicated efforts across multiple regulatory agencies, create confusion in the market, characterized by inefficiencies. In this regard, the necessity for having a unified regulatory body for overseeing the entire derivative markets in a country, like the CFTC in the USA, is worth considering to bring in harmonious regulatory authority. Given that no single unified body exists, greater coordination and cooperation on regulatory matters between SEBI and RBI, supported by joint committees or working groups, could promote further regulatory consistency.

- **Regulatory Overlaps and Inconsistencies -** Various regulatory bodies have established their own regulations regarding derivatives, resulting in instances of duplication. Both SEBI and RBI impose margin requirements for derivatives, however there may be variations in terms of computation methodologies and reporting criteria. Market participants frequently encounter difficulties in adhering to these overlapping requirements, which might exhibit inconsistencies or contradictions. Market participants, particularly those engaged in cross-market transactions, experience a significant compliance burden as a result of the necessity to comply with numerous regulatory requirements. These inconsistencies can result in inefficiencies, such as increased

[11] Singh, M. (2022), "Evolution of Derivatives Market in India", International Journal for Research in Applied Science & Engineering Technology, Vol. 10

transaction costs and decreased market liquidity, since participants may choose to avoid specific markets because of complicated regulatory regimes. Regulators should strive to achieve uniformity in regulations across various markets. Implementing a standardised margin requirement framework that is applicable to all types of derivatives could alleviate the difficulty of compliance. Providing more explicit and comprehensive recommendations that address conflicts between overlapping regulations will assist market participants in effectively navigating the regulatory environment.

- **Lack of Market Depth and Liquidity -** Although equities derivatives exhibit high levels of liquidity, other areas such as currency and interest rate derivatives lack the same depth. The level of involvement in these markets is restricted, primarily because of stringent laws that limit the range of participants and products accessible. Regulations frequently impose restrictions on the involvement of significant institutional investors, such as mutual funds, insurance companies, and pension funds, in specific derivative markets. This diminishes the total market liquidity. The Indian market offers a limited selection of derivative goods compared to more advanced markets, which hampers investors' capacity to efficiently manage risk. Loosening regulations on the eligibility criteria for participating in derivative markets could improve the availability of funds. For instance, granting mutual funds and insurance companies expanded entry to currency and interest rate derivatives. Promoting the creation of customised derivative products that cater to the specific requirements of various market players has the potential to enhance the depth of the market. This may involve the introduction of financial instruments such as credit derivatives, weather derivatives, or more complex interest rate contracts.[12]

- **Inadequate Risk Management Framework -** The market is exposed to considerable systemic risks due to the concentration of trade in a limited number of popular derivative instruments, such as index futures and options. Margin requirements that are a part of the existing risk management framework are viewed as overly stringent or overly lenient depending on the particular market segment. If there is a high degree of specialization in a small number of derivative products, a shock that will disproportionately affect the specific products may lead to a high level of systematic risk. Although essential for risk management, imposing high margin requirements might discourage smaller investors and diminish total market involvement, especially in less liquid markets. Promoting the exchange of a broader range of financial instruments helps mitigate the risk associated with a high level of focus on a particular type of

[12] Cuny, C.J. (1993), "The Role of Liquidity in Futures Market Innovations", Review of Financial Studies, Vol. 6, and pp. 57–78

derivative. Regulators have the ability to provide incentives for the development and adoption of alternative products. Implementing a margining system that is more equitable and adaptable to market conditions and the risk profiles of players could encourage increased participation while maintaining effective risk management.

- **Transparency and Reporting Issues -** Exchange-traded derivatives are typically more transparent because they are standardised and regulated by exchanges. Nevertheless, the OTC derivatives market lacks transparency, presenting difficulties in ensuring precise and prompt reporting. There are already reporting requirements specifically for trades entered in the over-the-counter (OTC) markets; however, the reporting structures and the tools for data gathering are as yet under construction. Moreover, the OTC derivatives market often attracts criticism due to the lack of transparency, which makes the evaluation of market risks by the regulators and the participants complicated. Even in cases where reporting is required, the data given to trade repositories is occasionally insufficient, resulting in deficiencies in market surveillance and risk evaluation. Enhancing reporting standards, specifically for over-the-counter derivatives, and allocating resources towards improved data collecting and analytic tools will enhance transparency. Integrating real-time or almost real-time reporting obligations could greatly improve market transparency and enable more efficient supervision by regulators.

- **Legal and Regulatory Uncertainty -** The legal system regulating derivatives in India is currently developing, however it still contains uncertainties, particularly about the enforceability of contracts, netting arrangements, and the handling of collateral. Legal complications may occur due to uncertainties in the interpretation of regulatory regulations, resulting in disputes and instability in the market.[13] Ambiguous legal definitions and regulatory regulations can result in conflicts, particularly in unstable market settings where contracts may be disputed. The absence of explicit regulatory rules for netting and collateral arrangements can amplify counterparty risk, especially in the over-the-counter derivatives market. Implementing more precise legal definitions and frameworks, particularly regarding netting and collateral, would decrease legal ambiguities and bolster market confidence. Providing education to judges and legal practitioners about the intricacies of derivatives markets could facilitate faster and more knowledgeable settlement of conflicts.

[13] Upputuri, S., Prasad, M., & Sri, S., (2021). An Empirical Analysis of the Growth of Indian Derivative Market. Journal of Contemporary Issues in Business and Government. 27(1), pp. 4118- 4136

- **Global Alignment and Competitiveness** - India has endeavoured to harmonise its legislation for the derivatives market with international standards. Nevertheless, there are still sectors in which domestic legislation are not up to date or deviate from international standards. International investors frequently evaluate Indian rules in relation to those in other economies, which impacts their inclination to engage in the Indian derivatives market. [14] Discrepancies between Indian legislation and global norms can discourage international involvement and result in market inefficiencies. If Indian regulations are seen as more stringent or less in line with international standards, it can place Indian markets at a disadvantage in terms of competition. Indian 'voice' in the international economy could be further strengthened by enjoying the benefits of increasing the compliance with the international standards like IOSCO or Basel accords. Improving the cross-border regulatory coordination can ensure that the Indian policies are in sync with global developments and avoid chances of regulatory arbitrage opportunity.

- **Technology and Infrastructure -** The technology framework underpinning the Indian derivatives market, namely in domains such as trade reporting, monitoring, and risk management, requires modernisation in order to align with the expanding industry. The growing digitisation of the financial markets has also amplified the significance of cybersecurity. Prominent with the current technology systems might struggle to manage the increasing number and complexities of derivative trades and this may lead to inefficiencies and even dangers. As the market gets more digitized, there are more cases of cyber incidence, and the current structure may not be effective in handling the emerging challenges. The implementation of modern technologies like blockchain, artificial intelligence and big data analytics may enhance the effectiveness, transparency and security of the derivatives market. The following should fashioned out a comprehensive cybersecurity even that adequately addresses to the specifications of the derivatives market. It is crucial to create a thorough cybersecurity framework specifically designed for the requirements of the derivatives market. Possible measures could encompass routine stress testing, more stringent data protection legislation, and enhanced cooperation with international cybersecurity organisations.

However, the regulatory environment for the Indian derivatives market is not perfect; there are still several gaps and problems even as markets matured over time. The solution to these problems requires collective effort of regulators, markets and various stakeholders. Where some have claimed that India's derivatives markets are inefficient due to the presence of small retail investors,

[14] Vashishtha, A., Kumar, S. (2010). "Development of Financial Derivatives Market in India- A Case Study". International Research Journal of Finance and Economics. ISSN 1450-2887; Issue 37

inadequate regulation, and legal uncertainty, there are still opportunities for the country to strengthen its derivatives markets in the future to remain efficient, sustainable, and vibrant – through effective coordination, development of markets, legal certainty, transparency, technology enhancements, and meeting international standards.

RECOMMENDATIONS FOR REGULATORY CHANGES TO MEET FUTURE NEEDS

The market for derivatives has rapidly grown in the last few years of operation and particularly in the area of option trading they have emerged as an issue of speculation manipulation organizations and protecting the rights of investors. To address these challenges, some reforms and enhancements of the related laws and regulations are needed.

PROPOSED REFORMS FOR FUTURE REQUIREMENTS

1) Enhancing Regulatory Framework

SEBI has been considering increasing margins on options contracts as a way of mitigating the risks inherent in large volumes of speculative positions. It is capable of bars retail investors from using high levels of leverage hence minimising the risks of getting huge losses when there are flips on the stock markets. The so-called proposed regulation is to link the trading of options to the real-money volumes of the stocks on which it is linked. The purpose of this technique is to avoid an excessive number of open positions in equities with little trading volume, as this might result in market manipulation and heightened volatility. Implementing more stringent position limitations for individual stock derivatives, depending on liquidity and trading activity, can effectively reduce speculative trading and guarantee that derivatives are only accessible for stocks with sufficient market interest. This is especially crucial considering the significant surge in volumes of derivatives trading compared to cash trading.

2) Improving Market Transparency

SEBI also plans on enhancing the transparency standards for the derivatives trading by prompting comprehensive reports on open interest. Higher transparency can help investors make informed decisions and reduce the likelihood of fraud in the market. The establishment of reporting standards in the OTC derivatives market can improve monitoring and encourage better risk management strategies among market players.

3) Promoting Investor Education and Protection

In order to safeguard retail investors, it is imperative to implement comprehensive educational programs that effectively communicate the potential dangers involved with trading derivatives. This involves comprehending the intricacies of the product and the possibility of incurring losses, similar to engaging in gambling activities.

Regulators should enforce more explicit risk disclosures for all derivatives products, guaranteeing that investors possess comprehensive understanding of the risks involved in trading options and futures.

4) Encouraging Market Participation and Liquidity

Promoting Market Participation and Liquidity Expansion of the repertoire of derivative products, such as credit and commodities derivatives, can entice greater involvement from institutional investors and bolster market liquidity. This can also contribute to the diversification of risk profiles in the derivatives market.

Encouraging the involvement of institutional investors, such as pension funds and insurance firms, in derivatives trading can promote stability and improve the depth of the market. This may require the synchronisation of legislation to enable these companies to have increased accessibility to a wide range of derivative products.

5) Regular Review and Adoption of Regulations

It will be essential to establish a dedicated committee that will consistently evaluate the efficacy of existing laws and modify them to align with evolving market realities. The committee shall be responsible for examining trading patterns, leverage ratios, and the influence of new financial products on the stability of the market.

In addition to that, aligning India's derivatives legislation with international best practices can bolster the market's credibility and attract foreign investment. This entails implementing standardised methods for managing counterparty credit risk and other risk management strategies commonly used in developed markets.

CONCLUSION

Derivatives market has become important segment of financial market in India after it was introduced in the year 2000. The expansion has been occasioned by globalisation, increased investors' participation and the need to deal with an operating risk environment. The current market offers a great number of products, such as futures and options on stocks, commodities, currencies as well as interest rate. These products are made with an aim of catering for different categories of market players consisting of hedgers, speculators and arbitrageurs. Government regulating bodies such as the SEBI and other affiliated members have played a major role in dictating the market by introducing and implementing strict polices which emphasise on transparency, protect investors, and minimise on potential threats to the market. That being said, there are issues that have to be addressed even today: the need for investor's enlightenment, the improved market turnover, and permanent changes in regulation, which is to address appeared complexities of the modern trading environment. The historical of Derivatives trading in India focuses on major events that have influenced the current trading practices some of which include transitioning from Informal trading to formal controlled environment that supports high market integrity. As the market progresses, it is crucial to prioritise reforms that improve risk management skills, expand product options, and conform to international standards. Future regulatory requirements are expected to encompass increased margin requirements, stronger position restrictions, and enhanced transparency standards in order to promote a more secure trading environment. Moreover, enhancements of the investor awareness and development of institutional investment can expand the stability of the market. The fact shows that derivatives market plays a voluntary role in setting price and controlling risks that make it occupy a strategic place in the financial system. This entails collaboration between the regulators and participants in the market with a view of correcting the imperfections that are persisting at the moment, and enhancing the framework. Ultimately, the future direction of India's derivatives market depends on effectively implementing these changes and continuously adjusting regulatory measures to address the changing needs of a dynamic financial environment. By giving priority to these improvements, India may strengthen its position as a prominent participant in the worldwide derivatives market, guaranteeing its ability to withstand and adapt to economic changes, both within the country and internationally.