

# International Journal of Research Publication and Reviews

Journal homepage: www.ijrpr.com ISSN 2582-7421

# UNDERSTANDING DERIVATIVE MARKET OF INDIA

## Mr. Bhavesh Raut<sup>1</sup>

Student- Final Year, Bachelors of Business Administration (UG)
Dr. Ambedkar Institute of Management Studies and Research, Nagpur.

#### ABSTRACT:

The derivative market is an important part of India's financial environment, allowing for risk management and price discovery. This study provides a detailed evaluation of the structure and operations of the Indian derivatives market. The Indian derivatives market comprises a wide range of derivatives based on various underlying assets such as stocks, commodities, currencies, and interest rates, including futures, options, and swaps. Hedgers, individual traders, and institutional investors play an essential role in this market. The Securities and Exchange Board of India (SEBI) oversees regulatory compliance to ensure investor safety and market integrity. The study aims to address the key objectives of the study, which include studying the overall derivative market of India, analyzing market trends, understanding market participants, exploring different derivative products, and examining the functioning of specific derivative instruments. By systematically addressing these aspects, the research aims to offer valuable insights into the intricacies of the Indian derivative market and inform effective decision-making for both individual investors and industry stakeholders.

Keywords: Derivatives, Stock Market, Futures, Forwards, Options, Swaps, Risk

#### INTRODUCTION:

Rapid fluctuations in interest rates, exchange rates, and stock prices have increased the financial risk that corporations face in the financial markets. A corporation that is otherwise successful suffers losses when its level of financial risk increases. This highlights the fact that, although risk cannot be totally eliminated, it may be decreased by prudent risk management in order to guard against uncertainty. This presents the idea of derivatives to the market, providing a useful means of lowering the risks related to the volatility and unpredictability of the underlying asset. Examining the derivatives market, the various derivatives products that are traded, the regulatory body, market players, and the challenges the Indian derivatives market faces are the objectives of this study.

## **Basic Concept on Derivatives:**

One of the most complex financial products is a derivative. The verb derive is the root of the word derivative. It suggests that it lacks any independent significance. An underlying asset, which could be a share, an index of the stock market, an interest rate, a commodity, a currency, or any other reference rate, is the source of the value of a derivative contract. For a derivative contract, the underlying is its unique identifier. The value of the derivative varies along with changes in the underlying's price. Derivatives are meaningless in the absence of an underlying asset.

For instance, the value of the underlying item, or crude oil, determines the value of a crude oil futures contract. The spot or cash market price of the underlying asset, in this case crude oil, determines the pricing in the derivatives market. The fundamental goal of these instruments is to lower the degree of financial risk by offering commitments to prices for future dates, which safeguard against unfavourable price fluctuations. A derivative's primary goal is to manage risk, particularly to reduce it. One party to a derivative contract usually enters the agreement with the intention of relieving itself of a particular risk, associated with its business operations, such as interest rate or currency risk, for a predetermined amount of time. Contracts for derivatives can be exchanged OTC or on the financial markets.

## LITERATURE REVIEW:

A number of factors, such as firm size, debt to equity, turnover, price-earnings ratio, and foreign transactions, have driven the adoption of derivatives by enterprises, contributing to the substantial growth and expansion of the Indian derivatives market (Sahoo, 2020). The financial derivatives market, where volume and the number of contracts traded have expanded dramatically, has been a prime example of this expansion (Sandra, 2021). New developments, like as the expanding cryptocurrency derivatives market, have also emerged in the industry, bringing with them both potential and difficulties (Bharadwaj, 2021). Even though there is a chance for big returns, investors still need to learn more about the derivatives market and be informed of any prospective regulatory changes that could improve the market (Hussain, 2021). Due to a lack of knowledge and comprehension of the products, retail investor engagement in the Indian derivatives market has been limited (B 2022, Ms. TejashwiniK 2022). Derivatives performance on the NSE is far better than on the BSE, emphasizing the need for additional regulation and reinforcement

## RESEARCH METHODOLOGY

This research paper adopts a secondary data with qualitative analysis of regulatory documents, market reports, and academic literature.

#### **OBJECTIVES OF THE STUDY**

- To study the derivative market of India
- To study and analyse the market trend of derivative market
- To study market participants
- To study different type of derivative products

## Overview of the Derivative Market of India:

Over time, changes in market dynamics, technical improvements, and regulatory reforms have all contributed to a substantial evolution of the derivative market in India. It includes well-known exchanges like the National Stock Exchange (NSE) and the Bombay Stock Exchange (BSE) and runs under a clear regulatory framework set by the Securities and Exchange Board of India (SEBI).

- Between April 2022 and March 2024, the exchange-traded currency derivative (ETCD) market saw an average monthly turnover of Rs 1.51
  lakh crore. The primary contributors of this are transactions from the proprietary trading desks of financial institutions and individual
  investors.
- A startling 99.6% of trading activity on the Indian stock market is comprised of equity derivatives, with daily volumes exceeding \$4.3 trillion. This amounts to over 125% of the market capitalization of the underlying companies or over 200% of all free float traded.
- This indicates that 1.25 times the total market capitalization of the Indian stock market is traded in derivatives on a daily basis.
- Currently, the volume of derivatives is 400 times higher than cash equities and 900 times more than delivery-based trading volumes.
- The OTC derivatives industry is growing significantly; by 2022, its notional value will have increased to approximately \$9.27 trillion, ranking it as the 20th largest OTC derivatives market worldwide.

#### **Evolution of the Derivative Market in India:**

The history of the Indian derivatives market from its founding to the present. It examines significant turning points, legislative actions, and market advancements that have influenced the nation's derivatives trading environment. Indian derivatives markets have been around for a while, in one way or another. The Bombay Cotton Trade Association initiated futures trading in the commodities market in 1875. When the Indian government outlawed option trading and cash settlement in 1952, trade in derivatives moved to unofficial forwards markets. Government policy has changed in recent years to support more market-based pricing and less dubious derivatives trading.

The Securities Laws (Amendment) Ordinance, 1995, was the first step towards the implementation of financial derivatives trading in India. This allowed for the lifting of the securities options ban. Beginning in 2000, the prohibition on trading futures in numerous commodities was repealed during the previous ten years. National Electronic Commodity Exchanges were established at the same time. Following the L. C. Gupta committee's suggestion and SEBI's ultimate clearance in May 2001, derivatives trading began in India in June 2000. The NSE and BSE derivative divisions, as well as their clearing house or corporation, have been given permission by the Securities and Exchange Board of India (SEBI) to start trading and settlement in derivatives contracts that have been approved. Trading in index futures contracts based on different stock market indexes, including S&P CNX, Nifty, and Sensex, was initially permitted by SEBI. Index-based trading was thereafter allowed for both individual securities and options.

#### Structure and Regulatory Framework:

The Securities and Exchange Board of India (SEBI) established a clear regulatory framework that governs the operations of the derivative market in India. The derivative market's organizational structure, including exchanges, clearinghouses, and regulatory agencies, is described in this section. In addition, it covers position limitations, margin requirements, regulatory framework governing derivative instruments, and other pertinent legislation. The L.C. Gupta Committee Report and the J.R. Varma Committee Report serve as the foundation for India's regulatory system. It covers the common issues of investor protection, market efficiency and integrity, and financial integrity and is mostly in line with the IOSCO5 principles. A viewpoint on how the exchange and SEBI split up regulatory duties is given in the L.C. Gupta Committee Report. It recommends restricting SEBI's authority to certifying a derivatives exchange's bylaws, regulations, and norms as well as approving proposed derivatives contracts prior to the start of trading. It highlights SEBI's advisory and supervisory responsibilities in order to minimize regulatory costs, maximize regulatory efficacy, and provide for desired flexibility. Derivatives brokers and dealers must comply with regulations regarding capital sufficiency, net worth, certification criteria, and initial registration with SEBI in order to be authorized. In addition, it recommends the creation of a distinct clearing business, upper bounds on exposure, mark-to-market margins, client margin collection and fund segregation, control over sales practices, and accounting and disclosure standards for trading in derivatives. A methodology for risk containment measures for index-based futures and options, stock options, and single stock futures is proposed by the J.R. Varma committee. The computation of margins, position limits, exposure limitations, reporting, and disclosure are some of the risk containment strategies.

## UNDERLYING ASSETS IN DERIVATIVES

- Interest rates: Interest rates are a measure of the return on investment or the cost of borrowing money. The monetary policies of central banks have an impact on them and might be either fixed or flexible. Interest rate swaps, futures, and options are examples of interest rate derivatives. Companies and investors use them to adjust the risk-return profile of debt portfolios, hedge against interest rate swings, and control interest rate exposure.
- **Bonds:** Governments and businesses issue bonds as debt securities to raise money. Purchasing a bond is equivalent to lending the issuer money. in return for the principle amount being returned at maturity and regular interest payments. Derivatives on bonds might be futures, swaps, and options. Bond derivatives can be used by investors as a hedge against interest rate risk, a way to speculate on interest rate movements, or an effective way to manage bond portfolios.
- Stocks: A publicly traded company's ownership is represented by its stocks. Purchasing a stock entitles you to ownership in the company,
  with your ownership position being determined by the quantity of shares you possess. Swaps, futures contracts, and options contracts are
  examples of stock-based derivative agreements. Stock derivatives can be used by investors for portfolio diversification, hedging, and
  speculating.
- Commodities: Commodities, including gold, crude oil, wheat, and coffee, are main agricultural products or raw materials that are traded. Commodity derivatives are frequently utilized for both speculation and hedging against market swings. Commodity futures contracts are especially popular because they let suppliers and buyers fix prices for future delivery or purchases.
- Market indices: Indices are metrics used to assess an asset class's performance, including stocks and bonds. They offer a standard by which
  to evaluate the market as a whole or a particular industry. Contracts for futures and options are index derivatives. They can be used for
  hedging, speculating, and portfolio management, giving investors exposure to a wide range of markets or sectors without requiring them to
  hold specific assets.
- Currencies: Currencies reflect various countries' monetary units. They get traded on the foreign exchange (forex) markets. Currency derivatives include forward contracts, options, and futures. These derivatives are used to hedge against exchange rate risk in international trade and investment, as well as to speculate on future currency changes.

## CLASSIFICATION OF DERIVATIVES

**Futures:** A futures contract, or simply futures, is an arrangement between two parties for the purchase and delivery of an item at a specific price at a later time. Futures are standardized contracts that are exchanged on an exchange. Traders utilize futures contracts to hedge or speculate on the price of an underlying asset. The parties must fulfill their obligation to buy or sell the underlying asset.

**Options:** An options contract is similar to a futures contract in that it involves an agreement between two parties to buy or sell an asset at a specific future date for a predetermined price. The main difference between futures and options is that the buyer in a futures transaction is not obligated to fulfill their purchase or sale agreement. This is just an opportunity, as opposed to futures, which are commitments. Like futures, options can be used for speculating or as a hedge against changes in the price of the underlying asset. In this case, there is a nominal fee known as the premium.

Forwards: Forwards contracts, also called forwards, are similar to futures even though they are not traded on an exchange. These contracts can only be exchanged over-the-counter. When a forward contract is made, the buyer and seller have the ability to change the terms, amount, and settlement process. In forward contracts, both parties are more vulnerable to counterparty default because they are over-the-counter items. The potential for the parties to be unable to uphold their half of the agreement is one type of credit risk. We call this a counterparty risk. Insolvency of one party may leave the other with no recourse and cause it to lose value in its position.

Swaps: Swaps are another common kind of derivative that are used to exchange one kind of cash flow for another. A trader might, for example, utilize an interest rate swap to switch from a variable interest rate loan to a fixed interest rate loan or the other way around.

## PARTICIPANTS IN DERIVATIVE MARKET

- Speculators: Market risk is borne by speculators. To make a profit, they take on risk. Compared to the hedgers, they hold a different viewpoint. If the bets pay out, this difference in opinion enables them to generate enormous gains. For example, you may have purchased a put option to protect yourself against a decline in stock prices. It will be up to the speculator, your counterparty, to wager that the stock price will rise. Should that be the case, you will not exercise your put option. The speculator profitably retains the premium as a result.
- Hedgers: Hedgers are stock market traders that are risk cautious. Their goal with the derivative markets is to protect their investment
  portfolio from fluctuating prices and market risk. They accomplish this by entering the derivatives market with the exact opposite position.
  They shift the risk on those who are willing to take it on in this way. They must, however, pay the risk-taker more for the available hedging.
- Margin Traders: Margin is the bare minimum that you must deposit with the broker in order to trade derivatives. It is used to record daily
  gains and losses in response to changes in the market. In the derivatives market, it provides leverage and keeps a sizable outstanding
  position.
- **Arbitrageurs:** These profit on low-risk market flaws. Typically, they will concurrently purchase low-priced stocks in one market and sell them in another market for a greater price. This is only possible, though, if the same asset is quoted in multiple markets at various prices.
- Individual investors: Individual investors are those who trade derivatives through brokerage firms as retail traders or investors.
- Institutional investors: Institutional investors that use derivative trading for portfolio management, hedging, and speculative objectives include mutual funds, insurance companies, pension funds, and hedge funds.

- Foreign Institutional Investors (FIIS): Foreign companies that participate in Indian derivative markets and are registered with the Securities and Exchange Board of India (SEBI).
- Domestic Institutional Investors (DIIS): These are the Indian companies that engage in derivative trading include banks, financial
  institutions, and local mutual funds.
- Proprietary trading firms: Instead of carrying out trades on behalf of clients, these trading companies trade on their own accounts.
- Market makers: organizations that quote bid and ask prices for derivatives in order to provide market liquidity. They ensure that there are always buyers and sellers in the market, which facilitates trading.
- Brokerage firms: These intermediaries help to make derivative trading easier by offering clients research, trading platforms, execution services, and advisory services.
- Clearing corporations: Clearing corporations are organizations tasked with settling and clearing derivative contracts, maintaining market stability, and reducing counterparty risk.
- Regulators: To guarantee fair and orderly trading, safeguard investors, and preserve market integrity, regulatory agencies like as the Securities and Exchange Board of India (SEBI) supervise and regulate the derivative markets.

#### FACTORS AFFECTING DERIVATIVES

- Global market trends: A number of factors, including inflation, interest rates, GDP growth rates, and geopolitical developments, can affect
  the mood of investors and have an impact on derivative pricing in India. Global market movements frequently cause swings in equities
  indices, commodities prices, and exchange rates, which in turn affect related derivative instruments.
- Domestic economic indicators: The derivative market is significantly shaped by economic indicators such as GDP growth, inflation rates, industrial production, and government-set fiscal policies. While negative economic indicators can cause risk aversion and have an impact on derivative prices, positive indicators can boost investor confidence.
- Corporate performance: Derivative prices linked to certain stocks and industries are directly impacted by the financial condition and
  performance of corporations listed on Indian stock markets. Investor sentiment and derivative valuations can be impacted by various factors,
  including revenue forecasts, corporate governance concerns, and earnings releases.
- Market liquidity and volatility: Trading volumes and pricing efficiency are impacted by the liquidity and volatility levels in the underlying
  cash markets and derivative markets. While lower liquidity and volatility may result in wider bid-ask spreads and less trading activity,
  higher liquidity and volatility typically draw more participants to the derivative market.
- Regulatory changes: The Securities and Exchange Board's actions and policies can have an effect on how the derivatives market operates,
  what products are offered, and how risk is managed. Market dynamics and trading tactics may be impacted by changes to trading
  regulations, position limits, and margin requirements.
- Interest rate movements: Derivative instruments like interest rate futures and options are impacted by shifts in the central bank's interest rates. Interest rate changes have an effect on bond yields, borrowing costs, and investment choices, which in turn has an effect on derivative pricing and hedging techniques.
- Currency fluctuations: Derivative products like currency futures and options are impacted by changes in exchange rates, particularly when
  a currency's value fluctuates in relation to major global currencies. Exchange rate fluctuations impact foreign portfolio investments, importexport dynamics, and corporate earnings, which in turn impacts derivative pricing.
- Commodity prices: Global market trends, weather patterns, geopolitical tensions, supply-demand dynamics, and other factors all have an
  impact on commodity prices and the derivative instruments linked to them. Commodity futures and options market trading methods and
  derivative valuations are impacted by price fluctuations.

#### **Challenges and Future Outlook:**

Despite its growth and significance, the derivative market in India faces several challenges, including regulatory compliance, market integrity, liquidity risk, and technological infrastructure.

- · Political influence and regulatory capture pose substantial hurdles for India's financial system, limiting market development.
- Investors face challenges in long-term risk hedging due to limited price recovery and risk-bearing capacity of option writers.
- Small retail investors can benefit greatly from index derivatives, which are less volatile than individual stock prices. Index futures are cash
  settled globally because they do not reflect physically deliverable assets, requiring less margin capital and inviting more players to the
  market.
- Increase product development, innovation, and diversification. This can be achieved by creating standardized term benchmarks to lower basis risk, enabling onshore OTC commodity and equity derivatives markets, and extending the reach of the credit derivatives market beyond the current narrow range of bonds, debentures, and money market instruments.
- Expanding the derivative market may attract more foreign institutional investment (FII) and foreign direct investment (FDI). Introducing
  dollar-rupee futures and options, as well as index futures and options, could help these investors manage currency and nation risks.
- · Risks to unrestricted trading in derivative markets include RBI regulations that ban entry into specific areas and other tight norms.
- Improve market access and participant diversification in the over-the-counter derivatives market by organizing focused educational and awareness campaigns, regulators and industry players can collaborate to foster the growth of knowledge and proficiency throughout the market.

- India lags behind developed financial markets due to poor per capita income, insufficient infrastructure, basic public services, and weak
  political and judicial institutions.
- Investors have challenges due to insufficient training in this market, which requires certification unlike the cash market.

## **Conclusion:**

In conclusion, the derivative market in India is a dynamic and integral part of the financial system, offering participants a wide range of instruments for risk management, speculation, and investment. The derivative market plays a critical role in India's financial system, offering participants efficient tools for risk management and price discovery. Understanding the intricacies of the derivative market is essential for investors, traders, and policymakers to navigate the complexities of modern financial markets effectively. The derivative market of India presents significant opportunities for investors to manage risk, enhance returns, and diversify portfolios. By studying various aspects of the derivative market, including market trends, participants, products, and operational procedures, investors can make informed decisions and strategize the complexities of derivative trading effectively.

#### Acknowledgement:

The researcher wants to thank Prof. Chaitanya A. Sakhare, Assistant Professor, Dr. Ambedkar Institute of Management Studies and Research, Nagpur, for his support and guidance during the accomplishment of research paper.

#### REFERENCE:

- Sahoo, A. (2015). Derivative and Risk Management: A New Dimension of Indian Financial Market. Asian Journal of Technology & Management Research, 05(02), 01-07.
- 2. B.C., S., & Suresh, N. (2022). Indian Derivatives Market Evolution and Challenge.
- 3. Bharadwaj, V. (2021). Growing Crypto Derivatives Market in India and the Government Regulations around it.
- 4. Hussain, M.M. (2021). A Study of Derivative Market in India. *International Journal for Research in Applied Science and Engineering Technology*.
- 5. Ms.TejashwiniK, C. (2022). The Relationship between Awareness and Retail Investors' Investment Intentions in the Derivatives Market.
- 6. Sandra, S. (2021). A Study of Indian Derivatives Market and its Current Position in Global Financial Derivatives Market.
- 7. Sahoo, A., & Sahoo, S. (2020). What Drives Derivatives: An Indian Perspective. Journal of Risk and Financial Management.
- 8. Vashishtha, Ashutosh & Kumar, Satish. (2010). Development of Financial Derivatives Market in India-A Case Study. 37.
- Yadav Phd, Sudhir. (2016). Derivative market in India: Prospects & Issues. International Multidiciplenery e-Journal/ISSN 2277-4262. Vol-II., Sept -2013. 90-111.
- https://economictimes.indiatimes.com/markets/forex/currency-derivatives-volumes-dry-up-ahead-of-rbi-deadline/articleshow/109766717.cms?from=mdr
- 11. https://www.fortuneindia.com/investing/alert-derivatives-now-996-of-market-volumes-weekly-expiries-spawn-options-warriors/114566