

INDIAN DERIVATIVES MARKET - GLOBAL PERSPECTIVE

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ABSTRACT

The presence of risk is a defining feature of most financial and commodity markets. The dynamics of demand and supply are the forces that, over the course of time, are responsible for causing price fluctuations in a variety of goods, including agricultural and non-agricultural products. The amount of international trade and business has significantly increased as a result of the globalisation and liberalisation wave that has been sweeping the globe over the course of the last two decades. Due to the quick and unpredictable changes in interest rates, exchange rates, and price of financial assets as a result of this, the business world is now exposed to an uncontrollable amount of financial risk. Given the current climate of extreme uncertainty in the business world, risk management is more crucial than ever. An impressive feat of financial engineering was the creation of the derivatives market. Risk associated with the underlying asset's fluctuating value was mitigated in a way that was both cost-effective and time-efficient. It has been relatively recent for India to experience the emergence and growth of a derivatives market. The derivatives market has grown exponentially in terms of both the number of contracts traded and the volume of contracts since it first opened in June of 2000. From Rs. 2365 crore in the previous fiscal year, 2000-2001, the market's revenue increased to Rs. 110,104,82.20 crore in 2008-2009. In just eight years, India's derivatives market has grown to become one of the world's largest. This rapid expansion has allowed it to surpass the cash segment in terms of both turnover and the number of contracts traded. This research looks at the development of derivative trading, the nature of derivative products, the history of related policies and regulations, the current state of the derivatives market in India, and its potential in the years to come. Some of the space is also devoted to a discussion of the global derivatives markets and how they stack up against India's derivatives market.

KEYWORDS: Forward, Futures, Options, Financial Derivatives, Risk Management, Exchange rates

INTRODUCTION

The commodity market and the stock market both contain an innate quality known as risk. Over time, the prices of both agricultural and non-agricultural commodities will fluctuate due to the interplay of demand and supply. Both causes and effects can be responsible for these swings. The volume of international trade and business has increased dramatically as a result of the globalisation and liberalisation wave that has been sweeping the globe for the past two decades. One explanation for this growth is the increasing globalisation of trade and industry. This has increased financial risk in the business world as a direct result of significant shifts in interest and exchange rates and fluctuations in stock market prices across the financial markets. Increased financial risk causes losses for a company that would otherwise be profitable. The significance of risk management as a hedge against uncertainty is highlighted by this evidence. The risk that can arise from the unpredictability and swings in value of the underlying asset can be effectively mitigated through the use of derivatives. A company's ability to effectively transfer risk is facilitated by the use of derivatives, which are tools for risk management. Derivatives are financial instruments that do not have any value of their own independently. Their value is determined by the asset that they are based on. The underlying asset could be a financial one or it could be something else entirely. The purpose of this study is to investigate the origins of derivatives trading by tracing its historical development, the different types of traded derivatives products, the evolution of regulation and policy, the trend and growth of the derivative market in India, as well as future prospects and challenges facing the derivative market. The investigation is broken down into those four categories. The first section examines the ideas behind financial derivatives, as well as their characteristics and the various forms they can take. The second section is devoted to a discussion of the development of regulation and policy, as well as the growth of the derivatives market. In Section III, we compare the current state of the derivatives market in India to the rest of the world. An overview and some final thoughts are presented here.

LITERATURE REVIEW

The use of derivatives by banks was the subject of investigation in a number of studies. According to Deshmukh, Greenbaum, and Kanatas (1983), an increase in interest rate uncertainty encourages depository institutions to reduce their lending activities, which are associated with interest rate risk, and to increase their fee-for-service activities, which are not associated with interest rate risk. They argue that this is the case because fee-for-service activities do not involve interest rate risk. Consequently, they argue that if derivatives can be used to manage interest rate risk, then perhaps banks that employ derivatives would feel less interest rate uncertainty and be able to increase lending activities, resulting in greater returns compared to the return on fixed fee for service activities. Banks that make use of derivatives may be less vulnerable to fluctuations in interest rates if these instruments prove effective in mitigating interest rate risk. Therefore, their overall profitability would be higher when compared to the profitability of banks that do not utilise derivatives as a means of controlling for the uncertainty of interest rate fluctuations. (Brewer 482) The researchers Brewer, Jackson, Moser, and Saunders discovered that there is an inverse relationship between the amount of risk an institution faces and the amount of derivatives it uses.

In point of fact, research has shown that S&Ls that make use of derivatives enjoy a relatively greater expansion of the fixed rate mortgage portion of their portfolios. (Brewer 481) These findings point to the use of derivatives in the hedging strategies of financial institutions, which would explain why there was a decrease in the risk of volatility associated with an increase in the use of derivatives. Both Jason and Taylor (1994) and Stern and Linan (1994) discovered that trading derivatives for profit is fraught with peril and puts businesses at risk of suffering significant financial setbacks. (Brewer 482) In an earlier study, Katerina Simmons analysed the pattern of derivative use by financial institutions between the years 1988 and 1993 by using data from quarterly Call Reports. Her research showed that banks with lower asset quality had a greater propensity to make extensive use of derivatives compared to banks with higher asset quality. Simmons discovered that there was no correlation between the duration gap measures and the use of derivatives. Therefore, there is no evidence to suggest either that banks use derivatives to increase or reduce interest rate risk from the findings of her study. (Simmons 104).

OBJECTIVES OF STUDY:

The objectives of the study are as follows:

- To have an overview of the Indian Derivative Market.
- To assess risk management tools and its strategies.
- To evaluate products of derivatives i.e. Forwards, Futures, Swaps and Options.
- To critically analyse its participants i.e. Hedgers, Speculators and Arbitrageurs.
- To evaluate the functions of derivatives.

RESEARCH QUESTIONS

- What are various types of derivative instruments traded at NSE?
- What are various products available for trading in Futures and Options segment at NSE?
- What are derivatives?
- What are the problems of forward markets?

RESEARCH METHODOLOGY

Research Methodology It is always important to be critical of the information presented in sources, especially since the material might have been gathered to address a different problem area. Moreover, many secondary sources do not clearly describe issues such as the purpose of a study, how the data has been gathered, analysed and interpreted making it difficult for the researcher to assess their usefulness. In order to address this problem I have tried to triangulate the secondary data by using numerous independent sources.

The information about the problem is collected from the Research Journals, Trade Magazines, Annual Reports of Banks and the Internet. For evaluating „Evolution of derivatives and important factors!“, I have focused on as recent material as possible. In order to get access to the latest developments in this area I have used a number of articles published in academic journals and trade magazines. We have also used secondary information from Internet based discussion forums.

1. CONCEPT OF DERIVATIVES

Options and futures contracts are the main types of "derivatives," a broad category of financial instruments. The umbrella term for all of these things is "derivatives." These instruments derive their worth from the underlying asset's price and other factors related to it. They have no intrinsic value, but rather provide their owners with the right to claim ownership of another financial asset or security. They're worthless on their own. Butter, a product derived from milk, is a simple example of a derivative. Butter prices are set by the market's equilibrium for milk, which in turn is based on supply and demand. The term "derivatives" refers to anything that can be derived from another thing or idea. Derivatives of words can also carry the following additional connotations: As the end result of mathematical differentiation, a derived function represents an instantaneous change in one quantity in relation to another. b, $df(x)/dx$, $df(x)$ Derivative financial instrument: a security whose value is derived from the value of another; c a word derived from another word; "electric" is the root word from which "electricity" was spawned. A derivative's underlying asset can be a commodity or a financial asset. Derivatives are financial instruments whose value is calculated from that of underlying assets. For example, the cost of gold with a delivery date in two months will be determined in part by the current and anticipated market value of this commodity. Options and futures contracts are the main types of "derivatives," a broad category of financial instruments. The umbrella term for all of these things is "derivatives." These instruments derive their worth from the underlying asset's price and other factors related to it. They have no intrinsic value, but rather provide their owners with the right to claim ownership of another financial asset or security. They're worthless on their own. Butter, a product derived from milk, is a simple example of a derivative. Butter prices are set by the market's equilibrium for milk, which in turn is based on supply and demand. The term "derivatives" refers to anything that can be derived from another thing or idea. Derivatives of words can also carry the following additional connotations: As the end result of mathematical differentiation, a derived function represents an instantaneous change in one quantity in relation to another. b, $df(x)/dx$, $df(x)$ Derivative financial instrument: a security whose value is derived from the value of another; c a word derived from another word; "electric" is the root word from which "electricity" was spawned. A derivative's underlying asset can be a commodity or a financial asset. Derivatives are financial instruments whose value is calculated from that of underlying assets. For example, the cost of gold with a delivery date

in two months will be determined in part by the current and anticipated market value of this commodity. is just one of the many factors that go into determining the price of a commodity.

1.1.DEFINITION OF FINANCIAL DERIVATIVES

Derivative is defined as "a security derived from a debt instrument, share, loan whether secured or unsecured, risk instrument, contract for differences, or any other form of security" and "a contract which derives its value from the prices, or index of prices, of underlying securities" in Section 2(ac) of the Securities Contract Regulation Act (SCRA) of 1956.

1.2. UNDERLYING ASSET IN A DERIVATIVES CONTRACT

A derivative instrument's value is derived from that of the underlying asset, as described above. The underlying asset can take on a variety of forms, including the following:

Bonds are a type of negotiable debt security issued by a government, company, or other entity for a medium to long term. Wheat, coffee, and orange juice are examples of commodities; gold and silver are examples of precious metals; and foreign exchange rates and currencies are examples of ;. the stocks and warrants on shares of companies that are traded on established stock markets and the Stock Index Money market products include loans and deposits, as well as OTC2 products like T-bills and other short-term securities.

1.3 PARTICIPANTS IN DERIVATIVES MARKET

1. The price risk that is associated with the assets that hedge funds and other hedging strategies are responsible for managing can be reduced or eliminated thanks to the use of derivatives markets by hedge funds and other hedging strategies. This category contains the vast majority of the people who participate in the derivatives market.

2. Speculators: Speculators engage in the trading of futures and options contracts in order to gain additional leverage for the purpose of betting on the price movements that will occur in the future of an asset. By utilising derivatives in a speculative endeavor, one can increase both the potential gains and the potential losses that could occur.

3. Arbitrageurs: Their actions are motivated by the intention to profit from the existence of a price differential assets that are nearly identical and assets that are significantly different compete with one another in various markets. If they observe, for instance, that the price of

an asset's futures contract is moving in a direction that is not consistent with the cash price, they will take positions in opposing directions in both markets in order to ensure a profit.

1.4. APPLICATIONS OF FINANCIAL DERIVATIVES

The following is a list of some of the applications that can be made with financial derivatives:

1. Derivatives are most useful for managing risk, which is the most important function they perform. The elimination of risk is not the goal of risk management; rather, the goal of risk management is the management of risk. The use of financial derivatives is an effective method for reducing the risks that are encountered by individuals and organisations during the normal course of their business operations. It is necessary to have an in-depth knowledge of the fundamental principles that govern the pricing of financial derivatives in order to accomplish this. The efficient use of derivatives can result in cost reductions and increased returns for the organisations that make use of them.

2. Increased market efficiency as a result of financial derivatives' free trading of risk components Financial derivatives make it possible for risk components to be traded freely, which leads to increased market efficiency. Traders can hedge their bets against price fluctuations in the underlying instruments by instead taking a position in one or more financial derivatives. In most deals, the underlying security is not as attractive to traders as the financial derivative being traded. The main reason for this is that the derivatives market is more liquid than the cash market. Trading a financial derivative also results in much lower transaction costs than trading the underlying instrument in a cash market.

3. The practise of speculation is not the only use of financial derivatives, nor is it likely the most important use of these instruments. Derivatives in the financial market are viewed as high-risk investments. These have the potential to bring about the monetary collapse of an organisation if they are not utilised appropriately, just as Barings Plc experienced. Nevertheless, these instruments serve as a potent instrument for experienced traders to use in order to put themselves at risk in a manner that is both calculated and well understood in the pursuit of a reward, which is to say, a profit.

4. Price discovery, or the act of making available information about future cash market prices through the futures market, is another important application of derivatives. The derivatives

markets provide a system that aggregates widely divergent predictions into a single, transparent number, thereby providing a consensus of expert opinion.

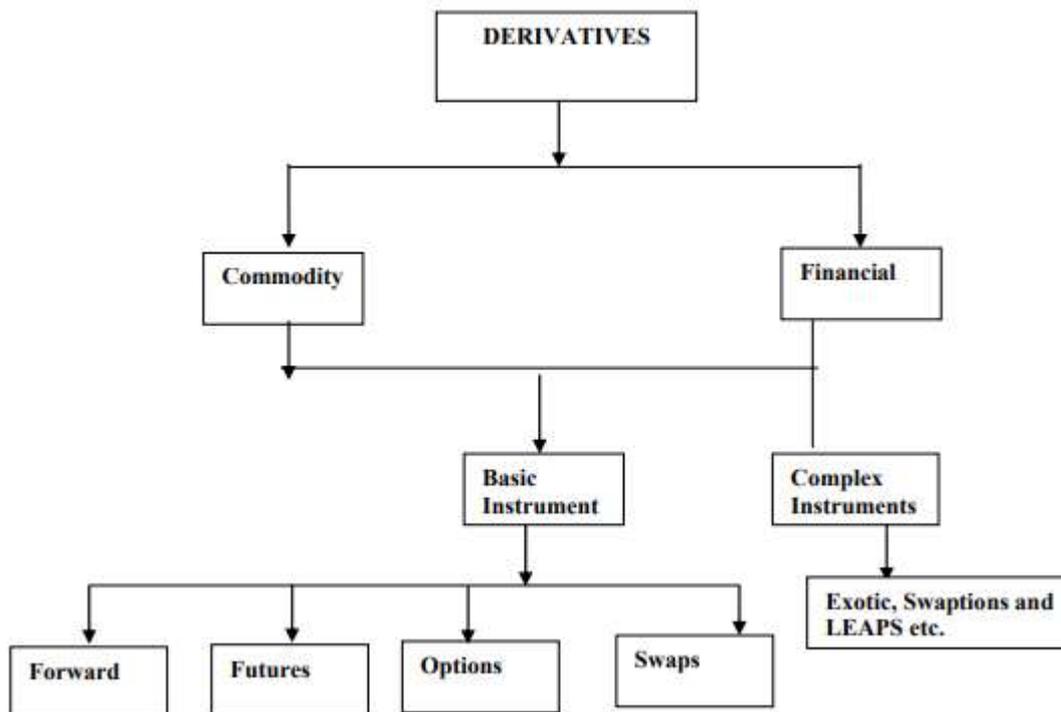
5. Fifth, the derivatives market serves as a price stabiliser by lowering the frequency and magnitude of price swings. To put it another way, derivatives have the effect of lowering both peaks and depths in the market and leading to price stability for the underlying asset in the cash market.

1.5. CLASSIFICATION OF DERIVATIVES

Derivatives can be roughly classified into the two groups shown in Fig.1: Commodity derivatives and financial instrument derivatives. Commodity derivatives have commodities like wheat, gold, and silver as their underlying asset. However, in the case of financial derivatives, the underlying asset could be anything from stocks and currencies to bonds and other interest-bearing securities. Due to the singularity of financial derivatives in this case study, our discussion will be limited to these instruments alone.

Forward Contract

An asset purchase or sale agreement for a future date is called a forwards contract. We call this instant in time the "forward point." The price that either party will pay or receive under a forwards contract is settled upon at the time the contract is signed. This type of derivative contract is the most fundamental and common in everyday interactions between parties.

Figure 1: Classification of Derivatives

When the delivery of the instrument is postponed until after the contract has been finalized, the resulting cash market transaction is known as a forwards contract. Even though delivery won't occur until much later, the price is set on the day of the initial trade. In a forwards contract, the buyer takes the long position and agrees to buy the underlying asset at a specified future date and price. In order to fulfil their contractual obligations, the other party to the agreement, known as the seller, commits to selling the asset at the same time and for the same price by taking a short position and agreeing to sell the asset. The price that has been specified is what is known as the delivery price. The parties to the contract come to an agreement among themselves regarding the terms of the contract, such as the delivery price and the quantity. In most cases, neither party is responsible for paying any margins to the other party. Forwards contracts, on the other hand, are not traded on an exchange like futures contracts are; rather, they are transacted face to face between two parties. This is in contrast to futures contracts, which are traded on an exchange. Forwards contracts have major drawbacks, chief among them being low liquidity and counter-party default risks. Take for example a company in the United States that buys textiles from an exporter in England for a total of one million pounds with the payment being due in ninety days. The importer is short

on pounds because it must pay pounds for deliveries in the near future. Assume that the price of one pound in the spot market (also known as the cash market) is currently \$1.71 US dollars, and an importer is concerned that in the next ninety days, the value of one pound might increase in relation to one dollar, which would result in an increase in the cost of one dollar worth of textiles. The importer can mitigate this risk by right away negotiating with City Bank a forwards contract for a duration of ninety days at a forwards rate of, for instance, one pound equals one dollar and seventy-two cents. In accordance with the terms of the forwards contract, the City Bank will transfer £1 million to the US Importer in 90 days (which the importer will use to pay for the textile order), and the importer will transfer £1 million to the bank, which is equal to the dollar cost of £1 million based on the forwards rate of \$1.72.

Swaps Contract

A swap can be either a barter or an exchange. One definition of a swap is an arrangement in which two or more parties agree to swap future cash flows. Swaps are contracts in which two parties agree to swap the obligations they have under separate contracts. Swaps can also be defined as an agreement between two parties to swap the obligations they have under their underlying contracts. The counterparties to a transaction are the parties involved in and bound by its terms. While both parties to a currency swap exchange cash flows, the cash flows from one party to the other are denominated in a different currency than the cash flows from the other party, whereas in an interest rate swap, only the cash flows related to interest are exchanged between the parties in the same currency.

HISTORY OF DERIVATIVES MARKETS IN INDIA

India's derivatives markets have been around for a long time, and they've taken on a few different forms over the years. In 1875, the Bombay Cotton Trade Association was the first to introduce futures trading in the commodities market. In 1952, India's government outlawed cash settlement and options trading. Derivatives trading has shifted to the less regulated forwards markets. The role of market-determined pricing has expanded in recent years, and the regulatory climate for derivatives trading has relaxed. The Securities Laws (Amendment) Ordinance, 1995, which was passed by the Indian Parliament, was the first step towards allowing the trading of financial derivatives in the country. The prohibition on using options

in connection with securities was thus lifted. In the year 2000, the government finally allowed futures trading in a wide variety of commodities that had previously been illegal. The first nationwide electronic commodity exchanges went live around the same time.

After a committee headed by L. C. Gupta recommended it, the Securities and Exchange Board of India (SEBI) gave its final approval in May 2001, and derivative trading began in June 2000. The NSE3 and BSE4 derivatives markets of India's two stock exchanges received approval from the Securities and Exchange Board of India (SEBI) to begin trading and settlement in approved derivatives contracts. Both exchanges' clearing houses and corporations were involved. Stock market indices like the S&P CNX, Nifty, and Sensex were eligible for trading in index futures contracts after initial approval from the Securities and Exchange Board of India (SEBI). After that, options trading on indexes became acceptable alongside trading in individual securities.

On July 4, 2001, trading began for options on the BSE Sensex, and on June 4, 2001, trading began for options on individual securities. Futures contracts on specific stocks were first made available to the general public in the month of November 2001. Derivatives trading on the National Stock Exchange (NSE) began with the S&P CNX Nifty Index futures on June 12, 2000. Options on equities and stock indices were both introduced for trading on June 4, 2001, with individual stock options following on July 2. These two sales periods both occurred in 2001. Single-stock futures trading began on November 9, 2001. The index futures and options contract on the NSE are based on the S&P CNX. Interest rate futures trading began on the NSE in June of 2003, but was later halted due to pricing problems. In Table 1 we see the development of derivatives in India over time.

Table 1: Derivatives in India: A Chronology

Date	Progress
14 December 1995	NSE asked SEBI for permission to trade index futures.
18 November 1996	SEBI setup L. C. Gupta Committee to draft a policy framework for index futures.
11 May 1998	L. C. Gupta Committee submitted report.
7 July 1999	RBI gave permission for OTC forward rate agreements (FRAs) and interest rate swaps
24 May 2000	SIMEX chose Nifty for trading futures and options on an Indian index.
25 May 2000	SEBI gave permission to NSE and BSE to do index futures trading.
9 June 2000	Trading of BSE Sensex futures commenced at BSE.
12 June 2000	Trading of Nifty futures commenced at NSE.
31 August 2000	Trading of futures and options on Nifty to commence at SIMEX.
June 2001	Trading of Equity Index Options at NSE
July 2001	Trading of Stock Options at NSE
November 9, 2002	Trading of Single Stock futures at BSE
June 2003	Trading of Interest Rate Futures at NSE
September 13, 2004	Weekly Options at BSE
January 1, 2008	Trading of Chhota(Mini) Sensex at BSE
January 1, 2008	Trading of Mini Index Futures & Options at NSE
August 29,2008	Trading of Currency Futures at NSE
October 2,2008	Trading of Currency Futures at BSE

Source: Compiled from BSE and NSE

REGULATION OF DERIVATIVES TRADING IN INDIA

The current regulatory framework in India was inspired by both the L.C. Gupta Committee Report and the J.R. Varma Committee Report. It's generally in line with the IOSCO5 principles and aims to ensure the protection of investors, the efficacy and integrity of markets, and the security of the financial system. The Securities and Exchange Board of India (SEBI) and the exchange both have regulatory responsibilities, and the L.C. Gupta Committee Report provides one committee's perspective on how those responsibilities should be divided. According to the report, SEBI's involvement should be constrained to the preliminary review of proposed derivatives contracts and the approval of the derivatives exchange's rules, bylaws, and regulations. In this case, this is the suggested approach.

It places a strong emphasis on the supervisory and advisory roles that SEBI plays with the goals of allowing for desirable flexibility, maximising the effectiveness of regulation, and minimising the cost of regulation. Capital sufficiency, nett worth, meeting certification requirements, and initial registration with SEBI are some of the regulatory requirements for authorisation of derivatives brokers and dealers. It also proposes the formation of a separate clearing corporation, exposure caps, mark-to-market margins, margin collection from customers, and segregation of customer funds, in addition to regulating sales practises and accounting and disclosure needs for derivatives trading. The J.R. Varma committee has

developed a methodology that they propose should be used for risk containment measures. This method can be used for index futures and options, single-stock futures, and options. Risk containment measures include the calculation of margins, position and exposure limits, exposure limits, reporting and disclosure..

DERIVATIVES MARKET INDIA

In 2000, the Bombay Stock Exchange (BSE) and the National Stock Exchange (NSE) introduced index futures, which marked the beginning of derivatives trading in the Indian market. (NSE). (NSE). Since that time, the derivatives market in India has seen an extraordinary increase in both the trading value and the number of contracts that have been transacted. In this section, we are going to talk about how derivatives products have performed in India's markets.

Derivatives Products Traded in Derivatives Segment of BSE

On June 9, 2000, the BSE pioneered the trading of a futures contract based on the Sensex. Stock options (on July 9, 2001), single stock futures (on 31 stocks), and index options (on June 1, 2001) all followed. Single futures and options contracts cover 1096 stocks as of this writing. When the BSE introduced Weekly Options on September 13, 2004, it marked another first for the global derivatives markets. Stocks in four major Indian corporations—Satyam, State Bank of India, Reliance Industries, and TISCO—were made available for trading. (renamed now Tata Steel). On January 1, 2008, Chhota SENSEX7 began trading for the first time. Trading with a mini, or small, market lot of 5 permits more precise hedging, greater trading flexibility, and a smaller initial capital investment. On October 1, 2008, currency futures were introduced so that market participants could trade in the U.S. dollar-rupee futures platforms in an effort to hedge their currency risk. The derivative products and their BSE debut dates are listed in Table 2.

Table 2: Products Traded in Derivatives Segment of the BSE

S.no	Product Traded with underlying asset	Introduction Date
1	Index Futures- Sensex	June 9,2000
2	Index Options- Sensex	June 1,2001
3	Stock Option on 109 Stocks	July 9, 2001
4	Stock futures on 109 Stocks	November 9,2002
5	Weekly Option on 4 Stocks	September 13,2004
6	Chhota (mini) SENSEX	January 1, 2008
7	Futures & Options on Sectoral indices namely BSE TECK, BSE FMCG, BSE Metal, BSE Bankex and BSE Oil & Gas.	N.A.
8	Currency Futures on US Dollar Rupee	October 1,2008

Source: Compiled from BSE website

Derivatives Products Traded in Derivatives Segment of NSE

On June 12, 2000, NSE launched its first derivatives product: index futures based on the widely followed S&P CNX Index. The index options market opened for business on June 4, 2001. Futures contracts for individual stocks first traded on November 9, 2001. In total, 2338 different securities have been cleared for futures trading by the Securities and Exchange Board of India. (SEBI). Options on individual stocks were first made available to traders on July 2, 2001. There are 233 different securities that can be traded using the cash-settled American-style options contracts. A pricing issue led to the closure of interest rate futures trading, which began on June 24, 2003. The introduction of Mini Index Futures & Options by the NSE, with a minimum contract size of Rs 1 lac, represents yet another landmark in the history of the exchange's product introductions. On August 29, 2008, the NSE made headlines when it became the first Indian exchange to offer a futures contract on the value of the US dollar relative to the Indian rupee. Products traded on the NSE's Futures and Options (F&O) market are listed in Table 3.

Table 3: Products Traded in F&O Segment of NSE

S.no	Product Traded with underlying asset	Introduction Date
1	Index Futures- S&P CNX Nifty	June 12,2000
2	Index Options- S&P CNX Nifty	June 4,2001
3	Stock Option on 233 Stocks	July 2, 2001
4	Stock futures on 233 Stocks	November 9,2001
5	Interest Rate Futures- T – Bills and 10 Years Bond	June 23,2003
6	CNX IT Futures & Options	August 29,2003
7	Bank Nifty Futures & Options	June 13,2005
8	CNX Nifty Junior Futures & Options	June 1,2007
9	CNX 100 Futures & Options	June 1,2007
10	Nifty Midcap 50 Futures & Options	October 5,2007
11	Mini index Futures & Options - S&P CNX Nifty index	January 1, 2008
12	long Term Option contracts on S&P CNX Nifty Index	March 3,2008
13	Currency Futures on US Dollar Rupee	August 29,2008
14	S& P CNX Defty Futures & Options	December 10, 2008

Source: Compiled from NSE website

SUMMARY AND CONCLUDING REMARKS

The derivatives market has been revolutionised by the innovations that have occurred within the market, and derivatives now hold a place of prominence among all financial products. Numerous stakeholders can benefit from using derivatives as a risk management tool. Derivatives allow risk to be transferred from those who would rather not take it to those who are willing to do so. Positive and enthusiastic responses have greeted the launch of India's equity derivatives market. The volume of transactions on NSE derivatives has recently surpassed that of NSE equities. It has grown at a much faster rate than its global counterpart in recent years.

From Rs. 23,654 million (US \$ 207 million) in derivatives turnover in 2000-01 to Rs. 130,904,779 million (US \$ 3,275,076 million) in 2007-08 is an impressive increase. When it comes to an active market for exchange-traded derivatives, India ranks among the world's most prosperous developing nations. This highlights the benefits of India's modern development in the securities market, which are based on retail trading, anonymity, and the convenience of electronic transactions. The equity derivatives market is increasingly seen as having a significant impact on how prices are set. The global expansion of financial derivatives can be traced back to a number of factors, including rising price volatility in financial assets, deeper connections between domestic and global financial markets, improved risk management tools, more options for economic agents, and breakthroughs in financial engineering. "Although the benefits and costs of derivatives remain the subject of spirited debate, the performance of the economy and the financial system in recent years suggests that those benefits have materially exceeded the costs," said Alan Greenspan, the longest serving Governor of the Federal Reserve.

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