Project Dissertation

A STUDY ON FINANCIAL DERIVATIVES IN INDIA (FUTURES AND OPTIONS)

Submitted By:

Suraj Soni

2K14/MBA/74

Under the Guidance of:

Dr. Archana Singh

Assistant Professor

DELHI SCHOOL OF MANAGEMENT

Delhi Technological University

Bawana Road Delhi 110042

CERTIFICATE FROM THE INSTITUTE

This is to certify that the Project titled **A Study on Financial Derivatives in India (Futures and Options),** is a bonafied work carried out by **Mr. Suraj Soni** of MBA 2014-16 and submitted to Delhi School of Management, Delhi Technological University, Bawana Road, Delhi-42 in partial fulfillment of the requirement for the award of the Degree of Masters of Business Administration.

Signature of Guide

Dr. Archana Singh

Ms. Khushbu Madan

Signature of HOD

Prof. P.K. Suri

Seal of Head

Place:

Date:

Declaration

I ,**Suraj Soni**, student of MBA 2014-16 of Delhi School of Management, Delhi Technological University, Bawana Road, Delhi-42 declare that the Project Report on "**A Study on Financial Derivatives in India (Fututres and Options)**" submitted in partial fulfillment of Degree of Masters of Business Administration is the original work conducted by me.

The information and data given in the report is authentic to the best of my knowledge.

This Report is not being submitted to any other University for award of any other Degree, Diploma and Fellowship.

Suraj Soni

Place:

Date:

Acknowledgement

On the very outset of this report, I would like to extend my sincere and heartfelt obligation toward all the persons who have helped me in this Endeavour. Without their active guidance, help, cooperation and encouragement, I would not have made headway in the project.

I express my sincere thanks to my project mentor Dr. Archana Singh, Assistant Professor, Delhi School of Management, DTU for being constant source of encouragement.

I am also thankful to Prof. P.K. Suri, Head of Department and all the faculty members of Delhi School of Management, DTU Delhi.

I extend my gratitude to Delhi School of Management (Delhi Technological University), for giving me this opportunity.

Lastly, I thank Almighty, my family and friends for their constant encouragement.

Suraj Soni

2K14/MBA/74

ABSTRACT

The emergence of the market for derivatives products, most notably forwards, futures and options, can be tracked back to the willingness of risk-averse economic agents to guard themselves against uncertainties arising out of fluctuations in asset prices. Derivatives are risk management instruments, which derive their value from an underlying asset. The following are three broad categories of participants in the derivatives market Hedgers, Speculators and Arbitragers. Prices in an organized derivatives market reflect the perception of market participants about the future and lead the price of underlying to the perceived future level. In recent times the Derivative markets have gained importance in terms of their vital role in the economy. The increasing investments in stocks (domestic as well as overseas) have attracted my interest in this area. Numerous studies on the effects of futures and options listing on the underlying cash market volatility have been done in the developed markets. The derivative market is newly started in India and it is not known by every investor, so SEBI has to take steps to create awareness among the investors about the derivative segment. In cash market the profit/loss of the investor depends on the market price of the underlying asset. The investor may incur huge profit or he may incur huge loss. But in derivatives segment the investor enjoys huge profits with limited downside. Derivatives are mostly used for hedging purpose. In order to increase the derivatives market in India, SEBI should revise some of their regulations like contract size, participation of FII in the derivatives market. In a nutshell the study throws a light on the derivatives market.

TABLE OF CONTENT

LIST OF GRAPHS:

LIST OF TABLES:

1. INTRODUCTION:

The emergence of the market for derivatives products, most notably forwards, futures and options, can be tracked back to the willingness of risk1. -averse economic agents to guard themselves against uncertainties arising out of fluctuations in asset prices. By their very nature, the financial markets are marked by a very high degree of volatility. Through the use of derivative products, it is possible to partially or fully transfer price risks by locking-in asset prices. As instruments of risk management, these generally do not influence the fluctuations in the underlying asset prices. However, by locking-in asset prices, derivative product minimizes the impact of fluctuations in asset prices on the profitability and cash flow situation of risk-averse investors.

Derivatives are risk management instruments, which derive their value from an underlying asset. The underlying asset can be bullion, index, share, bonds, currency, interest, etc. Banks, Securities firms, companies and investors to hedge risks, to gain access to cheaper money and to make profit, use derivatives. Derivatives are likely to grow even at a faster rate in future.

1.1 Development of Global Derivative market:

The derivatives market has grown rapidly in recent years as the benefits of using derivatives, such as effective risk mitigation and risk transfer, have become increasingly important. Europe is by far the most important region for derivatives that have become a major part of the European financial services sector and a major direct and indirect contributor to economic growth.

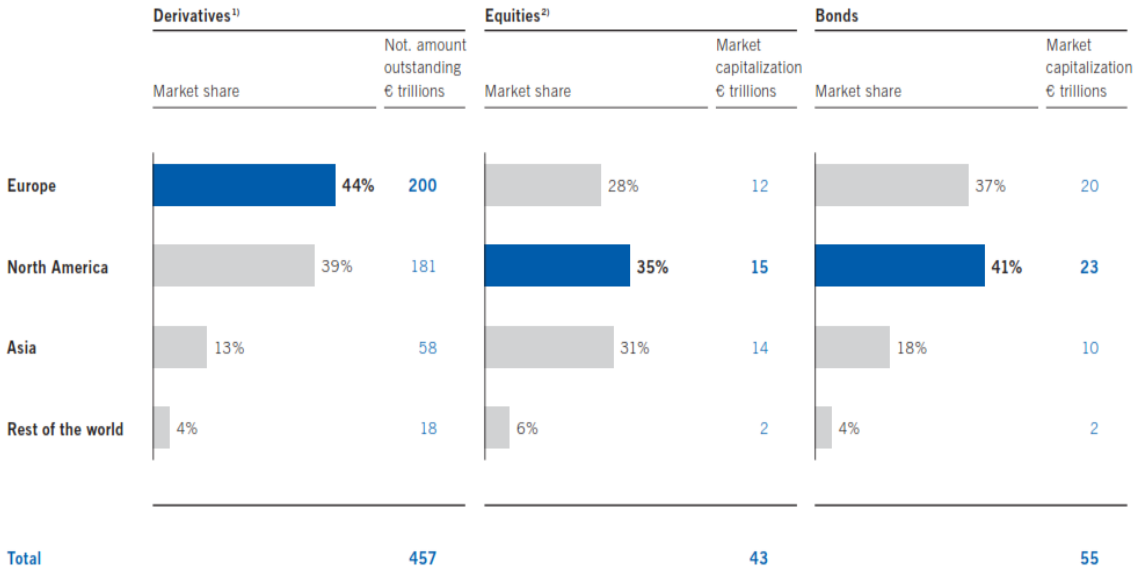
Global nature of the market:

The OTC segment operates with almost complete disregard of national borders. Derivatives exchanges themselves provide equal access to customers worldwide. As long as local market regulation does not impose access barriers, participants can connect and trade remotely and seamlessly from around the world (e.g. from their London trading desk to the Eurex exchange in Frankfurt). The fully integrated, single derivatives market is clearly a reality within the European Union. Taken as a whole, the derivatives

market is truly global. For example, today almost 80 percent of the turnover at Eurex, one of Europe's major derivatives exchanges, is generated outside its home markets of Germany and Switzerland, up from only 18 percent ten years ago.

Europe's leading role within the derivatives market:

Today, Europe is the most important region in the global derivatives market, with 44 percent of the global outstanding volume – significantly higher than its share in equities and bonds. The global OTC derivatives segment is mainly based in London. Primarily due to principle-based regulation, which provides legal certainty as well as flexibility, the OTC segment has developed especially favourably in the UK's capital. The unrestricted pan-European provision of investment services, in place since the introduction of the European Union's Investment Services Directive (ISD) in January 1996, has strengthened the competitive position of Europe in the global market environment. Many European banks are currently global leaders in derivatives.



Graph 1: Regional breakdown of the global derivatives, equity and bond markets (Source: https://www.math.nyu.edu/faculty/avellane/global_derivatives_market.pdf)

The derivatives trading value chain:

Derivatives trading and clearing is organized differently for OTC and on-exchange derivatives. The main distinguishing feature is the multilateral market organization with the use of safe and efficient central counterparty clearing for derivatives being traded on exchanges.

Functions in derivatives trading:

The derivatives value chain can be broken down into derivatives pre-trading, derivatives trading and clearing (including the rare exercise of derivatives), and (also rare) payment and delivery. These functions are organized differently for OTC and exchange-traded derivatives. Broker-dealers (large investment or universal banks), exchanges and clearing houses are the main service providers along the value chain. Pre-trading comprises the origination and channelling of derivatives orders to marketplaces for the execution of transactions. Trading consists of the matching of buyers and sellers in derivatives contracts. Execution means that the buyer and the seller respectively enter into the derivatives contract. Often dedicated derivatives dealers constantly provide price offers for contracts. This is called market making and is also a part of trading.

A derivatives trade creates an "open" derivatives contract. Derivatives clearing manages these "open" contracts until their termination, and is closely linked to derivatives trading as "open" contracts can be traded again and need to be managed throughout the contracts' – potentially very long – maturities. An essential element of derivatives clearing is therefore position management, which deals with keeping track of open derivatives contracts. This usually also includes managing the risks present during the life of a contract. Part of derivatives clearing is also the termination of a derivatives contract, which can be triggered by four actions or events: (1) cancelling out the original contract with an offsetting contract, (2) giving up the contract to another trading party, (3) expiry, or (4) exercise – the only event that requires settlement.

Two alternatives exist for settlement: either exchanging the net value of the contract when exercised via a cash payment or the physical delivery of the underlying against the payment of the agreed price. Most derivatives contracts are not settled physically or do

not even foresee physical settlement, as is the case for interest rate, credit default swaps and most exotic derivatives. Only about 2 percent of all transactions (in terms of notional amount) are physically settled at Eurex.

Graph 2: Value Chain and Function

(Source: https://www.math.nyu.edu/faculty/avellane/global_derivatives_market.pdf)

1.2 Development in India:

Derivatives trading commenced in Indian market in 2000 with the introduction of Index futures at BSE, and subsequently, on National Stock Exchange (NSE). Since then, derivatives market in India has witnessed tremendous growth in terms of trading value and number of traded contracts.

Derivatives Products Traded in Derivatives Segment of BSE:

The BSE created history on June 9, 2000 when it launched trading in Sensex based futures contract for the first time. It was followed by trading in index options on June 1, 2001; in stock options and single stock futures (31 stocks) on July 9, 2001 and November 9, 2002, respectively. Currently, the number of stocks under single futures and options is 1096. BSE achieved another milestone on September 13, 2004 when it launched Weekly Options, a unique product unparalleled worldwide in the derivatives markets. It permitted trading in the stocks of four leading companies namely; Satyam, State Bank of India, Reliance Industries and TISCO (renamed now Tata Steel). Chhota (mini) SENSEX7 was launched on January 1, 2008. With a small or 'mini' market lot of 5, it allows for comparatively lower capital outlay, lower trading costs, more precise hedging and flexible trading. Currency futures were introduced on October 1, 2008 to enable participants to hedge their currency risks through trading in the U.S. dollar-rupee future platforms. Table below summarily specifies the derivative products and their date of introduction on 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

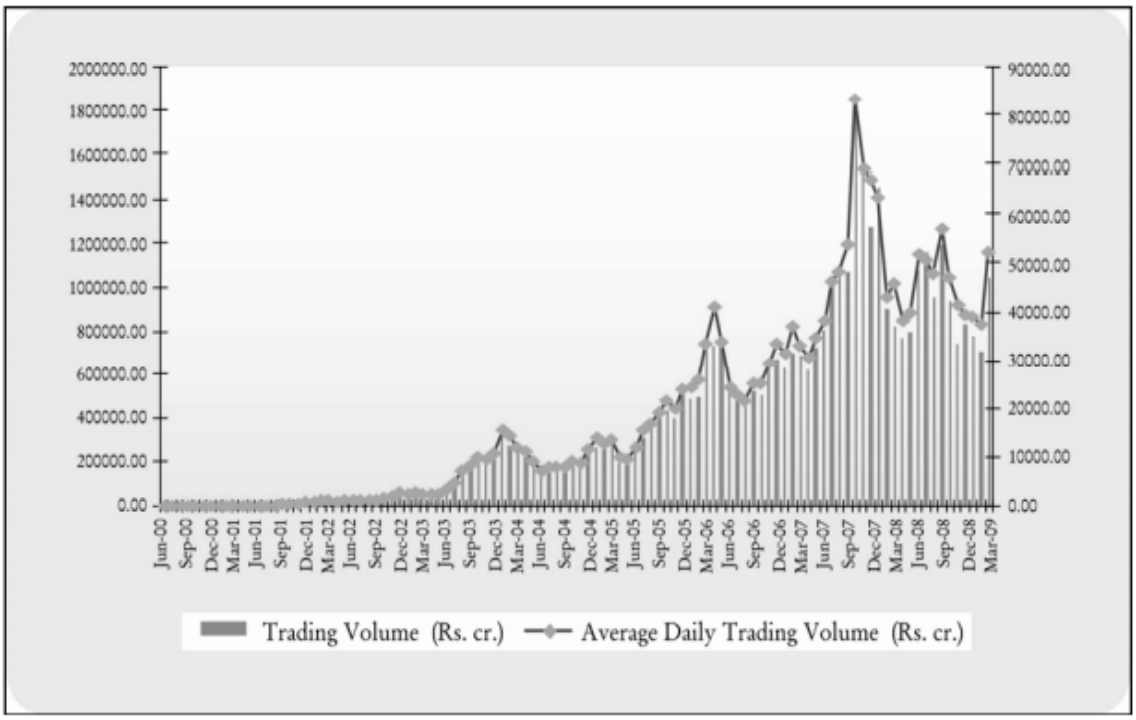
Table 1: Products Traded in Derivatives Segment of the BSE

(Source: Compiled from BSE website)

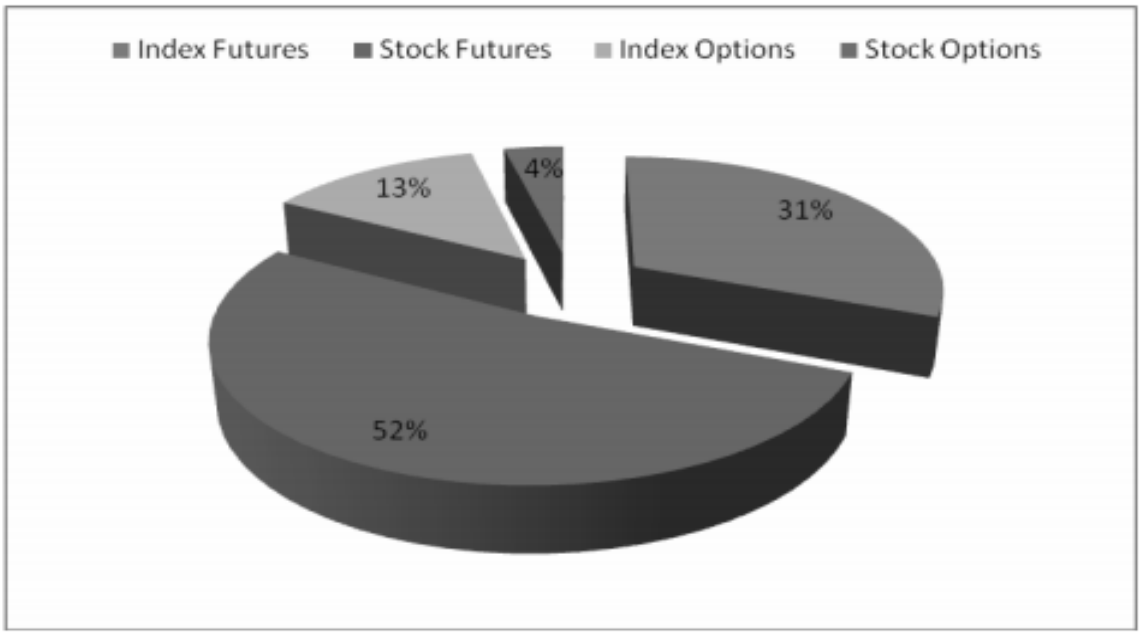
Growth of Derivatives Market in India:

Equity derivatives market in India has registered an "explosive growth" and is expected to continue the same in the years to come. Introduced in 2000, financial derivatives market in India has shown a remarkable growth both in terms of volumes and numbers of traded contracts. NSE alone accounts for 99 percent of the derivatives trading in Indian markets. The introduction of derivatives has been well received by stock market players. Trading in derivatives gained popularity soon after its introduction. In due course, the turnover of the NSE derivatives market exceeded the turnover of the NSE cash market. For example, in 2008, the value of the NSE derivatives markets was Rs. 130, 90,477.75 Cr. whereas the value of the NSE cash markets was only Rs. 3,551,038 Cr. If we compare the trading figures of NSE and BSE, performance of BSE is not encouraging both in terms of volumes and numbers of contracts traded in all product categories. Among all the products traded on NSE in F& O segment, single stock futures also known as equity futures, are most popular in terms of volumes and number of contract traded, followed by index futures with turnover shares of 52 percent and 31 percent, respectively. In case of BSE, index futures outperform stock futures. An important feature of the derivative segment of is the huge gap between average daily transactions of its derivatives segment and cash segment.

Despite of encouraging growth and developments, industry analyst feels that the derivatives market has not yet, realized its full potential in terms of growth & trading. Analysts points out that the equity derivative markets on the BSE and NSE has been limited to only four products- index futures, index options and individual stock futures and options, which in turn, are limited to certain select stocks only. Although recently NSE and BSE has added more products in their derivatives segment (Weekly Options, Currency futures, Mini Index etc.) but still it is far less than the depth and variety of products prevailing across many developed capital markets.



Graph 3: Business Growth of Derivatives at NSE



Graph 4: Product wise Turnover of F&O at NSE

(Source of Graph 3 &4: https://casi.sas.upenn.edu/sites/casi.sas.upenn.edu/files/iit/Derivatives%20-%20Vashishtha.pdf)

1.3 Objective:

The objective of this project is to analyze the operations of futures and options and to understand the market behavior of financial/derivative market. In recent times the Derivative markets have gained importance in terms of their vital role in the economy. The increasing investments in derivatives (domestic as well as overseas) have attracted my interest in this area. Through the use of derivative products, it is possible to partially or fully transfer price risks by locking-in asset prices. As the volume of trading is tremendously increasing in derivatives market, this analysis will be of immense help to the investors.

This study helps to find the profit/loss position of futures buyer and seller and also the option writer and option holder. The profits and losses of a futures contract depend on the daily movements of the market for that contract and are calculated on a daily basis. As the market moves every day, adjustments are made accordingly. Unlike the stock market, futures positions are settled on a daily basis, which means that gains and losses from a day's trading are deducted or credited to a person's account each day. In the stock market, the capital gains or losses from movements in price aren't realized until the investor decides to sell the stock or cover his or her short position.

Also, Derivative contracts are used to risk management with the help of derivatives. Derivatives could be used in risk management by hedging a position to protect against the risk of an adverse move in an asset. Hedging is the act of taking an offsetting position in a related security, which helps to mitigate against adverse price movements. A derivative is a financial instrument in which the price depends on the underlying asset. A derivative is a contractual agreement between two parties that indicates which party is obligated to buy or sell the underlying security and which party has the right to buy or sell the underlying security.

- To study the operations of futures and options.
- To find the profit/loss position of futures buyer and seller and also the option writer and option holder.
- To analyze the risk when derivatives are used for profit motive.

2. LITERATURE REVIEW:

Golaka C Nath, Research Paper (NSE) Financial market liberalization since early 1990s has brought about major changes in the financial markets in India. The creation and empowerment of Securities and Exchange Board of India (SEBI) has helped in providing higher level accountability in the market. New institutions like National Stock Exchange of India (NSEIL), National Securities Clearing Corporation (NSCCL), and National Securities Depository (NSDL) have been the change agents and helped cleaning the system and provided safety to investing public at large. With modern technology in hand, these institutions did set benchmarks and standards for others to follow. Microstructure changes brought about reduction in transaction cost that helped investors to lock in a deal faster and cheaper.

One decade of reforms saw implementation of policies that have improved transparency in the system, provided for cheaper mode of information dissemination without much time delay, better corporate governance, etc. The capital market witnessed a major transformation and structural change during the period. The reforms process have helped to improve efficiency in information dissemination, enhancing transparency, prohibiting unfair trade practices like insider trading and price rigging. Introduction of derivatives in Indian capital market was initiated by the Government through L C Gupta Committee report. The L.C. Gupta Committee on Derivatives had recommended in December 1997 the introduction of stock index futures in the first place to be followed by other products once the market matures. The preparation of regulatory framework for the operations of the index futures contracts took some more time and finally futures on benchmark indices were introduced in June 2000 followed by options on indices in June 2001 followed by options on individual stocks in July 2001 and finally followed by futures on individual stocks in November 2001.

<u>Do Futures and Options trading increase stock market volatility?</u>

Dr. Premalata Shenbagaraman, Research Paper (NSE) numerous studies on the effects of futures and options listing on the underlying cash market volatility have been done in the developed markets. The empirical evidence is mixed and most suggest that the introduction of derivatives do not destabilize the underlying market. The studies also

show that the introduction of derivative contracts improves liquidity and reduces informational asymmetries in the market. In the late nineties, many emerging and transition economies have introduced derivative contracts, raising interesting issues unique to these markets. Emerging stock markets operate in very different economic, political, technological and social environments than markets in developed countries like the USA or the UK. This paper explores the impact of the introduction of derivative trading on cash market volatility using data on stock index futures and options contracts traded on the S & P CNX Nifty (India). The results suggest that futures and options trading have not led to a change in the volatility of the underlying stock index, but the nature of volatility seems to have changed post-futures. We also examine whether greater futures trading activity (volume and open interest) is associated with greater spot market volatility. We find no evidence of any link between trading activity variables in the futures market and spot market volatility. The results of this study are especially important to stock exchange officials and regulators in designing trading mechanisms and contract specifications for derivative contracts, thereby enhancing their value as risk management tools

3. RESEARCH METHODOLOGY:

The data for the study has been collected in two ways. These are Secondary method and different books. Secondary analysis involves the use of existing data, collected for the purposes of a prior study, in order to pursue a research interest which is distinct from that of the original work; this may be a new research question or an alternative perspective on the original question. In this respect, secondary analysis differs from systematic reviews and meta-analyses of qualitative studies which aim instead to compile and assess the evidence relating to a common concern or area of practice. Secondary analysis can involve the use of single or multiple qualitative data sets, as well as mixed qualitative and quantitative data sets. In addition, the approach may either be employed by researchers to re-use their own data or by independent analysts using previously established qualitative data sets.

Secondary data is available from other sources and may already have been used in previous research, making it easier to carry out further research. It is time-saving and cost-efficient: the data was collected by someone other than the researcher. Administrative data and census data may cover both larger and much smaller samples of the population in detail. A clear benefit of using secondary data is that much of the background work needed has already been carried out, such as literature reviews or case studies. The data may have been used in published texts and statistics elsewhere, and the data could already be promoted in the media or bring in useful personal contacts. Secondary data generally have a pre-established degree of validity and reliability which need not be re-examined by the researcher who is re-using such data.

Secondary data can provide a baseline for primary research to compare the collected primary data results to and it can also be helpful in research design.However, secondary data can present problems, too. The data may be out of date or inaccurate. If using data collected for different research purposes, it may not cover those samples of the population researchers want to examine, or not in sufficient detail. Administrative data, which is not originally collected for research, may not be available in the usual research formats or may be difficult to get access to.

3.1 Need of Study:

In recent times the Derivative markets have gained importance in terms of their vital role in the economy. The increasing investments in derivatives (domestic as well as overseas) have attracted my interest in this area. Through the use of derivative products, it is possible to partially or fully transfer price risks by locking-in asset prices. As the volume of trading is tremendously increasing in derivatives market, this analysis will be of immense help to the investors.

Today's sophisticated international markets have helped foster the rapid growth in derivative instruments. In the hands of knowledgeable investors, derivatives can derive profit from:

- Changes in interest rates and equity markets around the world
- Currency exchange rate shifts
- Changes in global supply and demand for commodities such as agricultural products, precious and industrial metals, and energy products such as oil and natural gas

Adding some of the wide variety of derivative instruments available to a traditional portfolio of investments can provide global diversification in financial instruments and currencies, help hedge against inflation and deflation, and generate returns that are not correlated with more traditional investments. The two most widely recognized benefits attributed to derivative instruments are price discovery and risk management.

1. Price Discovery
2. Risk Management
3. They Improve Market Efficiency for the Underlying Asset
4. Derivatives Also Help Reduce Market Transaction Costs

3.2 Scope of the Study:

The study is limited to "Derivatives" with special reference to futures and option in the Indian context and the Inter-Connected Stock Exchange has been taken as a representative sample for the study. The study can't be said as totally perfect. Any alteration may come. The study has only made a humble attempt at evaluation derivatives market only in India context. The study is not based on the international perspective of derivatives markets, which exists in NASDAQ, CBOT etc.

In the forex market, there are brighter chances of introducing derivatives on a large scale. Infact, the necessary groundwork for the introduction of derivatives in forex market was prepared by a high-level expert committee appointed by the RBI. It was headed by Mr. O.P. Sodhani. Committee's report was already submitted to the Government in 1995. As it is, a few derivative products such as interest rate swaps, coupon swaps, currency swaps and fixed rate agreements are available on a limited scale. It is easier to introduce derivatives in forex market because most of these products are OTC products (Over-the-counter) and they are highly flexible. These are always between two parties and one among them is always a financial intermediary.

Now, derivatives have been introduced in the Indian Market in the form of index options and index futures. Index options and index futures are basically derivate tools based on stock index. They are really the risk management tools. Since derivates are permitted legally, one can use them to insulate his equity portfolio against the vagaries of the market.

3.3 Data Collection:

The data for the study has been collected in two ways. These are Secondary method and different books. Secondary analysis involves the use of existing data, collected for the purposes of a prior study, in order to pursue a research interest which is distinct from that of the original work; this may be a new research question or an alternative perspective on the original question. In this respect, secondary analysis differs from systematic reviews and meta-analyses of qualitative studies which aim instead to compile and assess the evidence relating to a common concern or area of practice. Secondary analysis can involve the use of single or multiple qualitative data sets, as well as mixed qualitative and quantitative data sets. In addition, the approach may either be employed by researchers to re-use their own data or by independent analysts using previously established qualitative data sets.

Despite the fact that thus far secondary analysis of qualitative data has not been widely undertaken, there have been a few reviews of the approach. Classification of different types of secondary analysis of qualitative data is not straightforward as there are almost as many types as there are examples. It is made more difficult by the fact that some researchers may not define their work as secondary analysis.

Data is collected from portal of official NSE website i.e. www.nseindia.com and from newspapers like Economics times.
Data has been collected for three banks, which are explained in details with company profile:

ICICI Bank:

ICICI Bank (Industrial Credit and Investment Corporation of India) is an Indian multinational banking and financial services company headquartered in Mumbai, Maharashtra, India, with its registered office in Vadodara. In 2014, it was the second largest bank in India in terms of assets and third in term of market capitalisation. It offers a wide range of banking products and financial services for corporate and retail customers through a variety of delivery channels and specialised

subsidiaries in the areas of investment banking, life, non-life insurance, venture capital and asset management. The bank has a network of 4,183 branches and 13,498 ATMs in India, and has a presence in 17 countries including India.

ICICI Bank is one of the Big Four banks of India, along with State Bank of India, Bank of Baroda and Punjab National Bank. The bank has subsidiaries in the United Kingdom and Canada; branches in United States, Singapore, Bahrain, Hong Kong, Sri Lanka, Qatar, Oman, Dubai International Finance Centre, China and South Africa; and representative offices in United Arab Emirates, Bangladesh, Malaysia and Indonesia. The company's UK subsidiary has also established branches in Belgium and Germany.

ICICI Bank was established by the Industrial Credit and Investment Corporation of India (ICICI), an Indian financial institution, as a wholly owned subsidiary in 1994. The parent company was formed in 1955 as a joint-venture of the World Bank, India's public-sector banks and public-sector insurance companies to provide project financing to Indian industry. The bank was founded as the Industrial Credit and Investment Corporation of India Bank, before it changed its name to the abbreviated ICICI Bank. The parent company was later merged with the bank.

ICICI Bank launched internet banking operations in 1998.

ICICI's shareholding in ICICI Bank was reduced to 46 percent, through a public offering of shares in India in 1998, followed by an equity offering in the form of American Depositary Receipts on the NYSE in 2000 ICICI Bank acquired the Bank of Madura Limited in an all-stock deal in 2001 and sold additional stakes to institutional investors during 2001-02.

In the 1990s, ICICI transformed its business from a development financial institution offering only project finance to a diversified financial services group, offering a wide variety of products and services, both directly and through a number of subsidiaries and affiliates like ICICI Bank. In 1999, ICICI become the first Indian company and the first bank or financial institution from non-Japan Asia to be listed on the NYSE.

In 2000, ICICI Bank became the first Indian bank to list on the New York Stock Exchange with its five million American depository shares issue generating a demand book 13 times the offer size.

In October 2001, the Boards of Directors of ICICI and ICICI Bank approved the merger of ICICI and two of its wholly owned retail finance subsidiaries, ICICI Personal Financial Services Limited and ICICI Capital Services Limited, with ICICI Bank. The merger was approved by shareholders of ICICI and ICICI Bank in January 2002, by the High Court of Gujarat at Ahmedabad in March 2002 and by the High Court of Judicature at Mumbai and the Reserve Bank of India in April 2002.

In 2008, following the 2008 financial crisis, customers rushed to ICICI ATMs and branches in some locations due to rumours of adverse financial position of ICICI Bank. The Reserve Bank of India issued a clarification on the financial strength of ICICI Bank to dispel the rumours

YES Bank:

Yes Bank, is India's fifth largest private sector Bank, co-founded by Rana Kapoor in 2004 Yes Bank is the only Greenfield Bank licence awarded by the RBI in the last two decades. Yes Bank is a “Full Service Commercial Bank”, has steadily built a Corporate, Retail & SME Banking franchise, Financial Markets, Investment Banking, Corporate Finance, Branch Banking, Business and Transaction Banking, and Wealth Management business lines across the country.

Yes bank performance in the Q3FY15 Financial Results. Net Profit grew by 30.0% y-o-y to ₹ 540.3 Cr in Q3FY15, Net Interest Income up 36.6% to ₹ 909.0 Cr, Non-Interest Income of ₹ 536.8 Cr, Net Interest Margin expanded to 3.2%, Advances up 32.4% to ₹ 66,606.9 Cr and Deposits up 21.0% to ₹ 82,370.0 Cr as of 31 Dec 2014. In FY2015, the Bank has so far raised US$500 Mn Equity through QIP and Long term Funding of US$422 Mn through Dual Currency Syndicated Facility and US$200 Mn from Asian Development Bank aggregating to approximately US$1.2 Bn. CASA Ratio improves steadily to 22.6% from 20.9% a year ago. SA deposits grew by 42.8% y-o-y.

Products and services:

- Corporate and Institutional Banking-The Corporate & Institutional Banking (C&IB) division at Yes Bank contribute a major part of the bank with a turnover of over ₹ 1,000 crores.
- Commercial Banking
- Investment Banking-Yes Bank's is a major player in Investment Banking in India and is involved in the identification, structuring and execution of transactions for its clients in diverse industries and geographies. Some of the typical transactions include mergers & acquisitions, divestitures, private equity syndication and IPO advisory.
- Corporate Finance-YES BANK's Corporate Finance practice offers a combination of advisory services and customized products to optimize risk based on "Knowledge Arbitrage"
- Financial Marketing-The Financial Markets (FM) business model provides Risk Management solutions related to foreign currency and interest rate exposures of clients.
- Retail Banking-YES BANK has banking network of over 600 branches and 2,000 ATMs giving it a major presence in urban India. Yes bank is one of the fastest growing private bank in India.

State Bank of India:

State Bank of India is an Indian multinational, public sector banking and financial services company. It is a government-owned corporation with its headquarters in Mumbai, Maharashtra. As of 2014-15, it has assets of INR 20,48,080 crores and more than 14000 branches, including 191 foreign offices spread across 36 countries, making it the largest banking and financial services company in India by assets.

State Bank of India is one of the Big Four banks of India, along with ICICI Bank, Bank of Baroda and Punjab National Bank.

The bank traces its ancestry to British India, through the Imperial Bank of India, to the founding, in 1806, of the Bank of Calcutta, making it the oldest commercial bank in the Indian Subcontinent. Bank of Madras merged into the other two "presidency banks" in British India, Bank of Calcutta and Bank of Bombay, to form the Imperial Bank of India, which in turn became the State Bank of India. Government of India owned the Imperial Bank of India in 1955, with Reserve Bank of India (India's Central Bank) taking a 60% stake, and renamed it the State Bank of India. In 2008, the government took over the stake held by the Reserve Bank of India.

State Bank of India is a regional banking behemoth and has 20% market share in deposits and loans among Indian commercial banks.

SBI has acquired local banks in rescues. The first was the Bank of Bihar (est. 1911), which SBI acquired in 1969, together with its 28 branches. The next year SBI acquired National Bank of Lahore (est. 1942), which had 24 branches. Five years later, in 1975, SBI acquired Krishnaram Baldeo Bank, which had been established in 1916 in Gwalior State, under the patronage of Maharaja Madho Rao Scindia. The bank had been the Dukan Pichadi, a small moneylender, owned by the Maharaja. The new bank's first manager was Jall N. Broacha, a Parsi. In 1985, SBI acquired the Bank of Cochin in Kerala, which had 120 branches. SBI was the acquirer as its affiliate, the State Bank of Travancore, already had an extensive network in Kerala.

There has been a proposal to merge all the associate banks into SBI to create a "mega bank" and streamline the group's operations.

The first step towards unification occurred on 13 August 2008 when State Bank of Saurashtra merged with SBI, reducing the number of associate state banks from seven to six. Then on 19 June 2009 the SBI board approved the absorption of State Bank of Indore. SBI holds 98.3% in State Bank of Indore. (Individuals who held the shares prior to its takeover by the government hold the balance of 1.7 %.)

The acquisition of State Bank of Indore added 470 branches to SBI's existing network of branches. Also, following the acquisition, SBI's total assets will inch very close to the ₹10 trillion mark (10 billion long scale). The total assets of SBI and the State Bank of Indore stood at ₹9,981,190 million as of March 2009. The process of merging of State

Bank of Indore was completed by April 2010, and the SBI Indore branches started functioning as SBI branches on 26 August 2010.

On 7 October 2013, Arundhati Bhattacharya became the first woman to be appointed Chairperson of the bank.

4. DATA ANALYSIS AND INTERPRETATION

4.1 Operation of Futures and Options:

4.1.1 How Futures and Options Markets Work:

A futures market, like any market, is a place where buyers and sellers meet in order to transact. For every buyer, there is a seller and for every seller, there is a buyer. Matching these two together so that a trade can be consummated requires the participation of a host of individuals and organizations, each having specific roles, which in the aggregate make the futures market the efficient mechanism that it is today. Throughout this section, reference is made solely to the futures market only for convenience and simplicity of presentation. The market for options on futures is structured in very much the same manner.

4.1.2 The Futures and Options Exchange:

The central player of a futures market is a futures exchange. A futures exchange is a meeting place where futures contracts are bought and sold. Trading occurs against a background of regulatory surveillance and guidelines from the exchange itself and from the Commodity Futures Trading Commission (CFTC). Each exchange has its own list of products that it trades, and each product is traded in a designated futures trading pit. A trading pit is an area of floor, usually round with concentric steps leading down into the center. The trading pits are each divided into a number of sections designated for trading in particular contract months. No trading may occur outside a contract's assigned pit, nor is trading permitted at any time other than during those hours which have been designated by the exchange. (Some exchanges also use automated trading facilities or computer networks which serve as trading pits.)

In addition to providing the market place for trading futures and regulating trading within its pits, futures exchanges also design and specify their futures contracts. Futures contracts are very specific in terms of the quality and quantity of goods underlying the contract. You may have wondered who determines these specifications. The answer is

the futures exchange. Working with participants in the industry such as traders, fund managers and natural hedgers, a futures exchange designs a contract to meet the greatest need. If the exchange succeeds, it will have designed a futures product that many players can use or trade, and volume in the futures will grow. Contract specifications can sometimes be changed by the exchange, and is usually done to keep the contract viable.

4.1.3 The Future Broker:

Buying or selling a futures contract or an option on a futures contract can only be done in one place: the trading pit on the floor of a futures exchange. To stand in a trading pit, a trader needs to buy an exchange membership, pay annual dues, and register with various regulatory agencies. Naturally, few people would trade futures if it required that they stand in the trading pit. To solve this problem, in steps the futures broker. A futures broker acts as a communication link between the trading pit and the trader, taking orders from the customer, and executing them in the futures pit. By law, futures brokers do not have the authority to take customer funds and hold them in deposit. Only an FCM can do this. For this reason, a futures broker needs to team up with an FCM in order to provide order execution services to its customers.

4.1.4 The Futures Commission Merchant:

The Futures Commission Merchant (FCM) is responsible for holding customer funds of the margin account, clearing the futures trade, and performing all back-office recording functions such as marking-to-market a customer's futures account, sending trade confirmations and account summaries, and year-end tax forms.

4.1.5 The Clearing Corporation:

The clearing corporation guarantees the performance of every buyer and seller of a futures or options contract**.** In a literal sense, it stands as a buyer to every seller and a seller to every buyer. That means that a futures trader does not have to worry about any default of a futures counterparty. For example, say that trader purchase several Swiss franc futures and the price goes up so that she has accrued a $4,500 profit. Whoever sold

those futures contracts (and there is a seller for every buyer, and vice-versa) has incurred a loss of $4,500. What happens if that person cannot pay? Does A sacrifice her profit? The answer is "NO". The clearing corporation guarantees the transaction. The clearing corporation's elimination of such counterparty credit risk provides a great benefit to the futures and options markets. One may wonder how the clearing corporation does this. The answer lies in the margin deposit that every other futures trader must make before trading any contract. This margin is available to the clearing corporation and, together with other reserve cash and various protection funds, are used to cover any customer default. A clearing corporation is composed of clearing members, most of which are large FCM's. It is a mark of distinction for an FCM to be a clearing member.

4.1.6 Regulation of the Futures Market:

All futures industry-related operations, including exchanges, brokers and FCMs are regulated and licensed by the Commodity Futures Trading Commission (CFTC), a federal agency with jurisdiction over the United States commodities markets. The CFTC regulates in conjunction with the National Futures Association (NFA), the industry's only national association. The primary purpose of the NFA is to ensure, through self-regulation, high standards of professional conduct and financial responsibility on the part of the individuals and organizations that are its members: Futures Commission Merchants, Introducing Brokers, Commodity Trading Advisors, Commodity Pool Operators, and Associated Persons. In connection with its regulatory responsibilities, the NFA conducts periodic audits of its members' financial and other records, monitors sales practices and provides a mechanism for the arbitration of futures related disputes between NFA members and the investing public.

4.1.7 Trading mechanism of NSE:

The Futures and Options Trading System provides a fully automated trading environment for screen-based, floor-less trading on a nationwide basis and an online monitoring and surveillance mechanism. The system supports an order driven market and provides complete transparency of trading operations.

Orders, as and when they are received, are first time stamped and then immediately processed for potential match. If a match is not found, then the orders are stored in different 'books'. Orders are stored in price-time priority in various books in the following sequence:

- Best Price
- Within Price, by time priority.

Order Matching Rules

The best buy order will match with the best sell order. An order may match partially with another order resulting in multiple trades. For order matching, the best buy order is the one with highest price and the best sell order is the one with lowest price. This is because the computer views all buy orders available from the point of view of a seller and all sell orders from the point of view of the buyers in the market. So, of all buy orders available in the market at any point of time, a seller would obviously like to sell at the highest possible buy price that is offered. Hence, the best buy order is the order with highest price and vice-versa.

Members can pro actively enter orders in the system which will be displayed in the system till the full quantity is matched by one or more of counter-orders and result into trade(s). Alternatively members may be reactive and put in orders that match with existing orders in the system. Orders lying unmatched in the system are 'passive' orders and orders that come in to match the existing orders are called 'active' orders. Orders are always matched at the passive order price. This ensures that the earlier orders get priority over the orders that come in later.

Order Conditions

A Trading Member can enter various types of orders depending upon his/her requirements. These conditions are broadly classified into 2 categories: time related conditions and price-related conditions.

Time Conditions

DAY - A Day order, as the name suggests, is an order which is valid for the day on which it is entered. If the order is not matched during the day, the order gets cancelled automatically at the end of the trading day.

IOC - An Immediate or Cancel (IOC) order allows a Trading Member to buy or sell a security as soon as the order is released into the market, failing which the order will be removed from the market. Partial match is possible for the order, and the unmatched portion of the order is cancelled immediately.

Price Conditions

Limit Price/Order - An order that allows the price to be specified while entering the order into the system.

Market Price/Order - An order to buy or sell securities at the best price obtainable at the time of entering the order.

Stop Loss (SL) Price/Order - The one that allows the Trading Member to place an order which gets activated only when the market price of the relevant security reaches or crosses a threshold price. Until then the order does not enter the market.

A sell order in the Stop Loss book gets triggered when the last traded price in the normal market reaches or falls below the trigger price of the order. A buy order in the Stop Loss book gets triggered when the last traded price in the normal market reaches or exceeds the trigger price of the order.

E.g. If for stop loss buy order, the trigger is 93.00, the limit price is 95.00 and the market (last traded) price is 90.00, then this order is released into the system once the market price reaches or exceeds 93.00. This order is added to the regular lot book with time of triggering as the time stamp, as a limit order of 95.00

Internet Trading:

The Securities & Exchange Board of India (SEBI) approved the report on Internet Trading brought out by the SEBI Committee on Internet Based Trading and Services. Internet trading can take place through order routing systems, which will route client orders to exchange trading systems for execution. Thus a client sitting in any part of the country would now be able to trade using the Internet as a medium through brokers' Internet trading systems.

SEBI-registered brokers can introduce Internet based trading after obtaining permission from respective Stock Exchanges. SEBI has stipulated the minimum conditions to be fulfilled by trading members to start Internet based trading and services, vide their circular no. SMDRP/POLICY/CIR-06/2000 dated January 31, 2000.

NSE became the first exchange to grant approval to its members for providing Internet based trading services. In line with SEBI directives, NSE has issued circulars detailing the requirements and procedures to be complied with by members desirous of providing Internet based trading and services. Members can procure the Internet trading software from software vendors who are empanelled with NSE or they may develop the software through their own in-house development team or may procure the software from other non-empanelled vendors.

Adjustments in case of Corporate Actions:

The basis for any adjustment for corporate actions shall be such that the value of the position of the market participants, on the cum and ex-dates for the corporate action, shall continue to remain the same as far as possible. This will facilitate in retaining the relative status of positions viz. in-the-money, at-the-money and out-of-money. This will also address issues related to exercise and assignments.

Corporate Actions to be adjusted:

The corporate actions may be broadly classified under stock benefits and cash benefits.

The various stock benefits declared by the issuer of capital are Bonus, Rights, Merger / De-merger, Amalgamation, Splits, Consolidations, Hive-off, Warrants, and Secured

Premium Notes (SPNs) among others. The cash benefit declared by the issuer of capital is cash dividend.

Time of Adjustment:

Any adjustment for corporate actions would be carried out on the last day on which a security is traded on a cum basis in the underlying equities market, after the close of trading hours.

Adjustment:

Adjustments may entail modifications to positions and / or contract specifications as listed below, such that the basic premise of adjustment laid down above is satisfied:

- Strike Price
- Position
- Market Lot / Multiplier

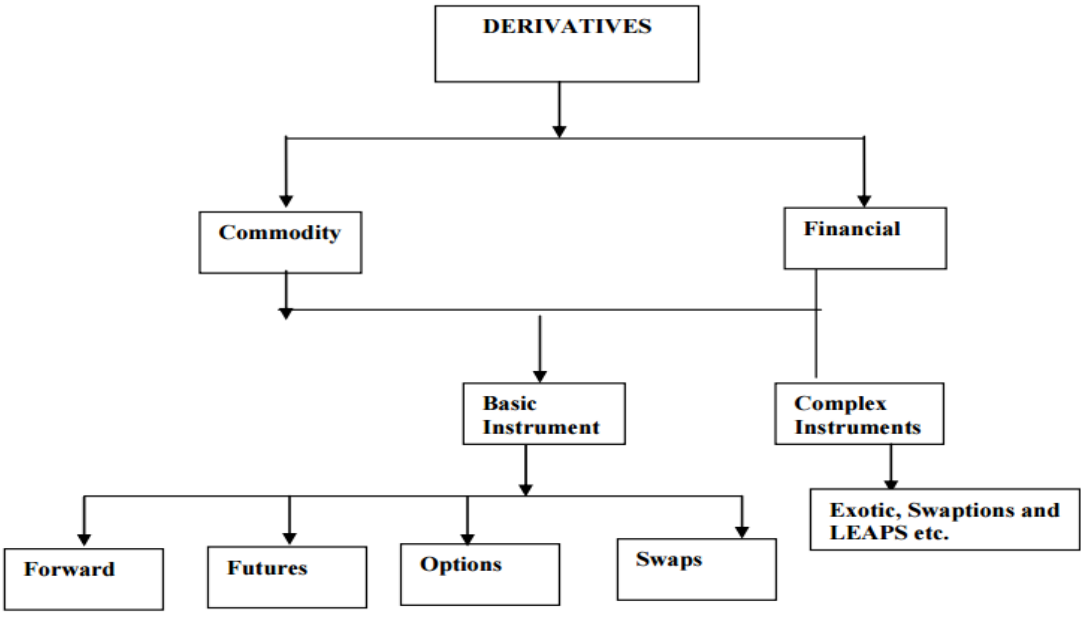
The adjustments would be carried out on any or all of the above, based on the nature of the corporate action. The adjustments for corporate actions would be carried out on all open positions.

4.1.8 Theoretical Background:

4.1.8.1 Derivatives:

The emergence of the market for derivatives products, most notably forwards, futures and options, can be tracked back to the willingness of risk-averse economic agents to guard themselves against uncertainties arising out of fluctuations in asset prices. By their very nature, the financial markets are marked by a very high degree of volatility. Through the use of derivative products, it is possible to partially or fully transfer price risks by locking-in asset prices. As instruments of risk management, these generally do not influence the fluctuations in the underlying asset prices. However, by locking-in asset prices, derivative product minimizes the impact of fluctuations in asset prices on the profitability and cash flow situation of risk-averse investors.

Derivatives are risk management instruments, which derive their value from an underlying asset. The underlying asset can be bullion, index, share, bonds, currency, interest, etc. Banks, Securities firms, companies and investors to hedge risks, to gain access to cheaper money and to make profit, use derivatives. Derivatives are likely to grow even at a faster rate in future.



Graph 5: Classification of Derivatives

(Source:https://casi.sas.upenn.edu/sites/casi.sas.upenn.edu/files/iit/Derivatives%20-%20Vashishtha.pdf)

Emergence of financial derivative products:

Derivative products initially emerged as hedging devices against fluctuations in commodity prices, and commodity-linked derivatives remained the sole form of such products for almost three hundred years. Financial derivatives came into spotlight in the post-1970 period due to growing instability in the financial markets. However, since their emergence, these products have become very popular and by 1990s, they accounted for about two-thirds of total transactions in derivative products. In recent years, the market for financial derivatives has grown tremendously in terms of variety of instruments available, their complexity and also turnover. In the class of equity derivatives the world over, futures and options on stock indices have gained more popularity than on individual stocks, especially among institutional investors, who are major users of index-linked derivatives. Even small investors find these useful due to high correlation of the popular indexes with various portfolios and ease of use. The lower costs associated with index derivatives vis–a–vis derivative products based on individual securities is another reason for their growing use.

Participants:

The following three broad categories of participants in the derivatives market.

i. Hedgers:

Hedgers face risk associated with the price of an asset. They use futures or options markets to reduce or eliminate this risk.

ii. Speculators:

Speculators wish to bet on future movements in the price of an asset. Futures and options contracts can give them an extra leverage; that is, they can increase both the potential gains and potential losses in a speculative venture.

iii. Arbitrageurs:

Arbitrageurs are in business to take of a discrepancy between prices in two 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 position in the two markets to lock in a profit.

Functions of Derivatives Market:

The following are the various functions that are performed by the derivatives markets. They are:

- Prices in an organized derivatives market reflect the perception of market participants about the future and lead the price of underlying to the perceived future level.
- Derivatives market helps to transfer risks from those who have them but may not like them to those who have an appetite for them.
- Derivatives trading acts as a catalyst for new entrepreneurial activity.
- Derivatives markets help increase saving and investment in long run.

Rationale behind the development of derivative:

Holding portfolios of securities is associated with the risk of the possibility that the investor may realize his returns, which would be much lesser than what he expected to get. There are various factors, which affect the returns:

- Price or dividend (interest)
- Some are internal to the firm like-
- Industrial policy
- Management capabilities
- Consumer's preference
- Labour strike, etc.

These forces are to a large extent controllable and are termed as non systematic risks. An investor can easily manage such non-systematic by having a well-diversified portfolio spread across the companies, industries and groups so that a loss in one may easily be compensated with a gain in other.

There are yet other of influence which are external to the firm, cannot be controlled and affect large number of securities. They are termed as systematic risk. They are:

1. Economic
2. Political

3. Sociological changes are sources of systematic risk.

For instance, inflation, interest rate, etc. their effect is to cause prices of nearly all-individual stocks to move together in the same manner. We therefore quite often find stock prices falling from time to time in spite of company's earnings rising and vice versa.

Rational Behind the development of derivatives market is to manage this systematic risk, liquidity in the sense of being able to buy and sell relatively large amounts quickly without substantial price concession.

In debt market, a large position of the total risk of securities is systematic. Debt instruments are also finite life securities with limited marketability due to their small size relative to many common stocks. Those factors favour for the purpose of both portfolio hedging and speculation, the introduction of a derivatives securities that is on some broader market rather than an individual security.

Regulatory framework:

The trading of derivatives is governed by the provisions contained in the SC R A, the SEBI Act, and the regulations framed there under the rules and byelaws of stock exchanges.

Regulation for Derivative Trading:

SEBI set up a 24 member committed under Chairmanship of Dr. L. C. Gupta develop the appropriate regulatory framework for derivative trading in India. The committee submitted its report in March 1998. On May 11, 1998 SEBI accepted the recommendations of the committee and approved the phased introduction of derivatives trading in India beginning with stock index Futures. SEBI also approved he "suggestive bye-laws" recommended by the committee for regulation and control of trading and settlement of Derivative contract.

The provision in the SCR Act governs the trading in the securities. The amendment of the SCR Act to include "DERIVATIVES" within the ambit of securities in the SCR Act made trading in Derivatives possible within the framework of the Act.

1. Eligibility criteria as prescribed in the L. C. Gupta committee report may apply to SEBI for grant of recognition under section 4 of the SCR Act, 1956 to start Derivatives Trading. The derivative exchange/segment should have a separate governing council and representation of trading/clearing member shall be limited to maximum 40% of the total members of the governing council. The exchange shall regulate the sales practices of its members and will obtain approval of SEBI before start of Trading in any derivative contract.
2. The exchange shall have minimum 50 members.
3. The members of an existing segment of the exchange will not automatically become the members of the derivatives segment. The members of the derivatives segment need to fulfill the eligibility conditions as lay down by the L. C. Gupta committee.
4. The clearing and settlement of derivatives trades shall be through a SEBI approved clearing corporation/clearing house. Clearing Corporation/Clearing House complying with the eligibility conditions as lay down By the committee have to apply to SEBI for grant of approval.
5. Derivatives broker/dealers and Clearing members are required to seek registration from SEBI.
6. The Minimum contract value shall not be less than Rs.2 Lakh. Exchange should also submit details of the futures contract they purpose to introduce.
7. The trading members are required to have qualified approved user and sales persons who have passed a certification programme approved by SEBI

4.1.8.2 Introduction to futures and options:

In recent years, derivatives have become increasingly important in the field of finance. While futures and options are now actively traded on many exchanges, forward contracts are popular on the OTC market. In this chapter we shall study in detail these three derivative contracts.

Futures Contracts:

Futures markets were designed to solve the problems that exist in forward markets. A futures contract is an agreement between two parties to buy or sell an asset at a certain time in the future at a certain price. But unlike forward contracts, the futures contracts are standardized and exchange traded. To facilitate liquidity in the futures contracts, the exchange specifies certain standard features of the contract. It is a standardized contract with standard underlying instrument, a standard quantity and quality of the underlying instrument that can be delivered, (or which can be used for reference purposes in settlement) and a standard timing of such settlement. A futures contract may be offset prior to maturity by entering into an equal and opposite transaction. More than 99% of futures transactions are offset this way.

Options:

Option is a type of contract between two persons where one grants the other the right to buy a specific asset at a specific price within a specific time period. Alternatively the contract may grant the other person the right to sell a specific asset at a specific price within a specific time period. In order to have this right. The option buyer has to pay the seller of the option premium

The assets on which option can be derived are stocks, commodities, indexes etc. If the underlying asset is the financial asset, then the option are financial option like stock options, currency options, index options etc, and if options like commodity option.

Types of options:

The options are classified into various types on the basis of various variables. The following are the various types of options.

1. On the basis of the underlying asset:

On the basis of the underlying asset the option are divided in to two types:

INDEX OPTIONS:

The index options have the underlying asset as the index

STOCK OPTIONS:

A stock option gives the buyer of the option the right to buy/sell stock at a specified price. Stock option are options on the individual stocks, there are currently more than 150 stocks, there are currently more than 150 stocks are trading in the segment.

2. On the basis of the market movements:

On the basis of the market movements the option are divided into two types. They are:

CALL OPTION:

A call option is bought by an investor when he seems that the stock price moves upwards. A call option gives the holder of the option the right but not the obligation to buy an asset by a certain date for a certain price.

PUT OPTION:

A put option is bought by an investor when he seems that the stock price moves downwards. A put options gives the holder of the option right but not the obligation to sell an asset by a certain date for a certain price.

3. On the basis of exercise of option:

On the basis of the exercising of the option, the options are classified into two categories.

AMERICAN OPTION:

American options are options that can be exercised at any time up to the expiration date, all stock options at NSE are American.

EUOROPEAN OPTION:

European options are options that can be exercised only on the expiration date itself. European options are easier to analyze than American options. All index options at NSE are European.

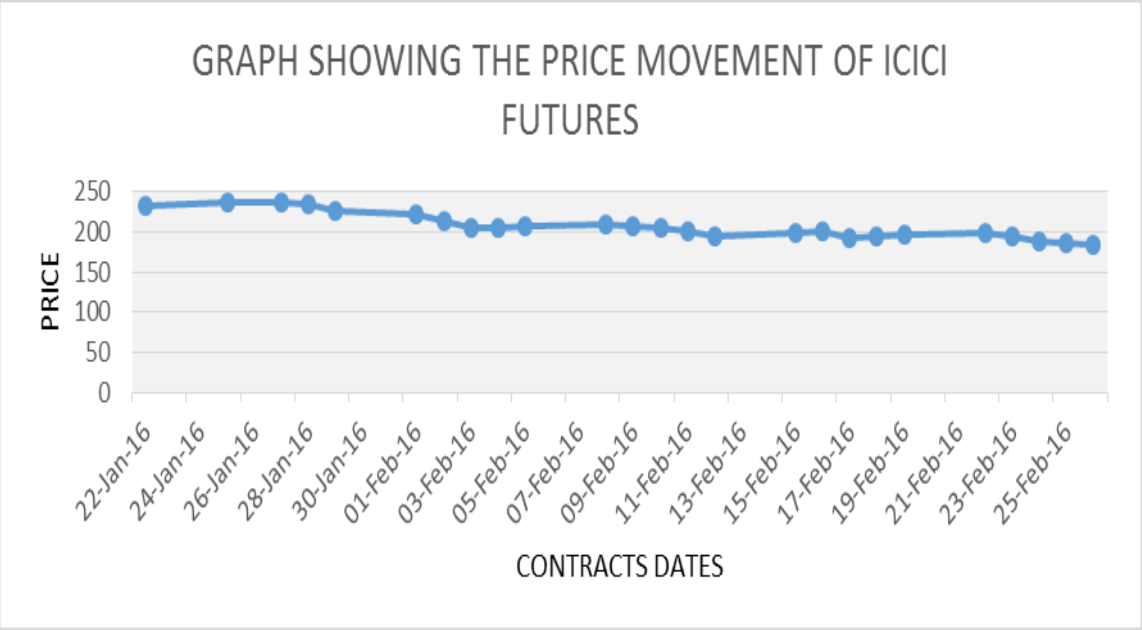
4.2 Analysis of ICICI Bank:

Date	Market Price	Future Options
26-Feb-16	183.95	184.9875
25-Feb-16	185.3125	185.975
24-Feb-16	188.2625	188.825
23-Feb-16	195.2625	194.825
22-Feb-16	198.425	198.3625
19-Feb-16	197.825	197.4375
18-Feb-16	195.4625	195.3875
17-Feb-16	193.3125	192.325
16-Feb-16	201.525	200.25
15-Feb-16	199.65	199.4875
12-Feb-16	194.7625	194.6375
11-Feb-16	201.9875	201.0625
10-Feb-16	205.4625	205.6
09-Feb-16	206.4125	206.125
08-Feb-16	210.3	210.3125
05-Feb-16	207.375	207.8
04-Feb-16	204.3125	204.475
03-Feb-16	205.6	205.425
02-Feb-16	214.45	214.35
01-Feb-16	221.8625	220.8875
29-Jan-16	225.6125	225.175
28-Jan-16	235.6375	234.8125
27-Jan-16	237.325	235.95
25-Jan-16	236.175	235.3125
22-Jan-16	232.5125	232.2375

Table 2: Table showing the market and future prices of ICICI bank

Market price for the ICICI Stocks are taken as the average of Open, High, Low, Close price.

The objective of this analysis is to evaluate the profit/loss position of futures and options. This analysis is based on sample data taken of ICICI BANK scrip. This analysis considered the Feb 2016 contract of ICICI BANK. The lot size of ICICI BANK is 1700, the time period in which this analysis done is from 22-.1-2.16 to 26-02-2016.



Graph 6

(Source: Plotted using the data from nse website using excel)

Observations and Findings:

If a person buys 1 lot i.e. 1700 futures of ICICI BANK on 22 Jan, 2016 and sells on 25 Jan, 2016 then he will get a profit of 235.3125 -232.2375= 3.075 per share. So he will get a profit of 5227.50 i.e. 3.075 * 1700

If he sells on 1 Feb, 2016 then he will get a loss of 220.8875-232.2375 = -8.35 i.e. a loss of 8.35 per share. So his total loss is 14195 i.e. 8.35 * 175

The closing price of ICICI BANK at the end of the contract period is 184.8 and this is considered as settlement price.

4.1.2 Call options:

Date	Market Price	200	210	220	240	250	270
26-Feb-16	183.95	4.8	2.8	1.4	0.45	0.35	0.2
25-Feb-16	185.3125	5.1	2.95	1.65	0.5	0.35	0.05
24-Feb-16	188.2625	6.3	3.75	2.1	0.75	0.3	0.3
23-Feb-16	195.2625	7.65	4.75	2.8	0.65	0.5	0.3
22-Feb-16	198.425	10.25	6.45	3.9	1.1	0.9	0.25
19-Feb-16	197.825	10.6	6.6	4.1	1.25	0.95	0.25
18-Feb-16	195.4625	9	5.6	3.4	1.1	0.95	0.25
17-Feb-16	193.3125	7.5	4.6	2.65	0.9	0.9	0.25
16-Feb-16	201.525	9.2	5.55	3.3	0.95	1	0.25
15-Feb-16	199.65	14.5	8.2	5.05	1.65	1	0.25
12-Feb-16	194.7625	9.2	6.15	3.6	1.4	0.85	0.25
11-Feb-16	201.9875	12.25	8.05	5.05	1.65	1.95	0.25
10-Feb-16	205.4625	15.6	11.7	7.5	2.5	1.95	0.25
09-Feb-16	206.4125	15.6	12	7.5	2.8	1.85	0.8
08-Feb-16	210.3	19.5	13.05	6.85	2.75	2	0.9
05-Feb-16	207.375	13.5	11.3	7.8	2.95	1.95	0.9
04-Feb-16	204.3125	13.5	8.5	6.1	2.2	2.8	0.9
03-Feb-16	205.6	16.1	11.3	6.4	2.85	2.8	0.9
02-Feb-16	214.45	65.35	56	12.55	3.15	3	2.25
01-Feb-16	221.8625	65.35	56	12	8.05	3.1	2.25
29-Jan-16	225.6125	65.35	56	47	8.05	24.2	2.25
28-Jan-16	235.6375	65.35	56	47	30.95	24.2	2.25
27-Jan-16	237.325	65.35	56	47	30.95	24.2	3.75
25-Jan-16	236.175	65.35	56	47	30.95	24.2	4.25
22-Jan-16	232.5125	65.35	56	47	30.95	24.2	7.1

Table 3: Table showing the call prices of ICICI bank

The following table explains the market price and premiums of calls.

- The first column explains trading date
- Second column explains the SPOT market price in cash segment on that date.
- The third column explains call premiums amounting at these strike prices; 200, 210, 220, 240, 250, 270.

Observations and Findings:

Call Option:

Buyers Pay-off:

- Those who have purchase call option at a strike price of 220, the premium payable is 47.
- On the expiry date the spot market price enclosed at 183.95. As it is out of the money for the buyer and in the money for the seller, hence the buyer is in loss.
- So the buyer will lose only premium i.e. 47 per share.
- Loss of 47*1700 = 79900

Sellers Pay-off:

- As Seller is entitled only for premium if he is in profit.
- So his profit is only premium i.e. 47*1700 = 79900

4.1.3 Put options:

Date	Market Price	190	200	210	220	230	240
26-Feb-16	183.95	12.1	18	26.5	35.2	44.7	54.1
25-Feb-16	185.3125	14.05	20.5	26.85	37.6	46.8	54.5
24-Feb-16	188.2625	12.55	17.85	26.85	33.8	41	50.8
23-Feb-16	195.2625	10.7	15.6	22.35	30	38	47.8
22-Feb-16	198.425	7.4	11.85	18.4	25.85	33.5	42.05
19-Feb-16	197.825	7.5	11.9	16.75	25	33.3	41.7
18-Feb-16	195.4625	8.8	13.55	20.7	27.8	35	44.15
17-Feb-16	193.3125	10.9	16.5	22	29.4	40	48.85
16-Feb-16	201.525	9.2	14.25	20.7	22.5	34	43.8
15-Feb-16	199.65	6.1	9.95	16.55	20.5	30.05	38
12-Feb-16	194.7625	9.75	15.45	21.15	29.55	36.9	45.65
11-Feb-16	201.9875	7.6	13.75	18.5	27.5	32.25	40.65
10-Feb-16	205.4625	4.75	8.65	12.6	22.5	25.75	33.6
09-Feb-16	206.4125	4.6	7.8	12.6	17.9	24.6	32.2
08-Feb-16	210.3	5.15	8.55	10.55	19.95	25.6	28.75
05-Feb-16	207.375	5.55	9	13.5	19.1	25.7	33.1
04-Feb-16	204.3125	6.95	10.95	16.05	22.25	29.35	36.65
03-Feb-16	205.6	7.4	11	16.6	22.7	29.75	37.55
02-Feb-16	214.45	5.6	9	8.6	16	25.35	32.65
01-Feb-16	221.8625	4	6.7	7.5	14.7	21	27.7
29-Jan-16	225.6125	1.1	2.3	4.4	9.15	11.7	17.1
28-Jan-16	235.6375	1	2.1	4	8.4	10.75	15.8
27-Jan-16	237.325	0.8	1.75	3.35	7.65	9.35	13.95
25-Jan-16	236.175	1.05	2.15	3.95	6.65	10.35	15.15
22-Jan-16	232.5125	1.45	2.85	5	8.05	12.1	17.25

Table 4: Table showing the put prices of ICICI bank

Observations and Findings:

Buyers Payoff:

- As brought 1 lot of ICICI that is 1700, those who buy for 190 paid 1.45 premium per share.
- Settlement price is 183.95

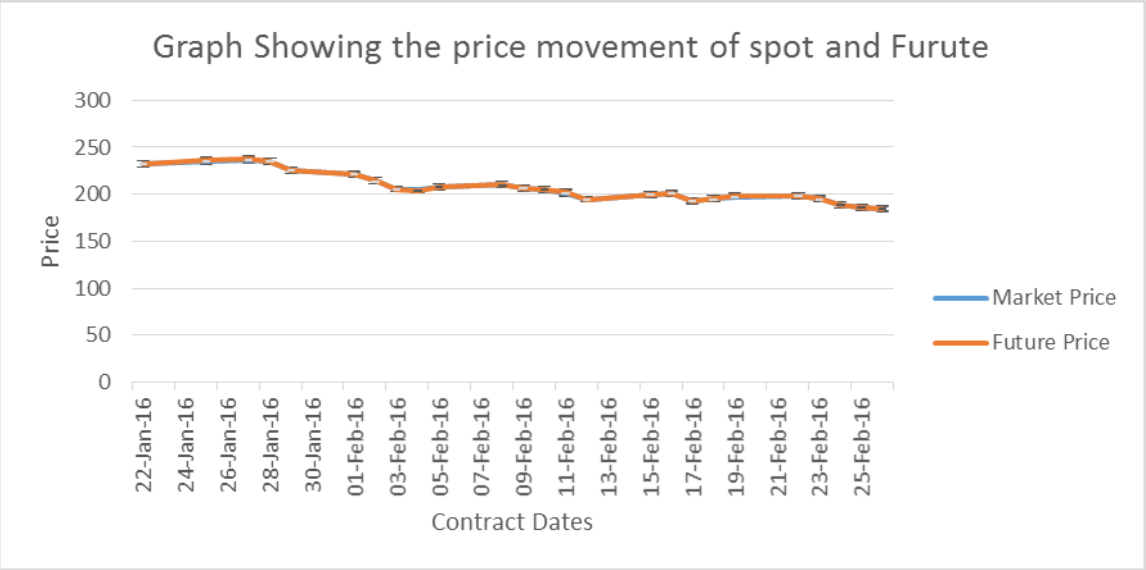
Strike price	190.00
Spot price	183.95
	6.05
Premium (-)	1.45
	4.6 x 1700= 7820

Buyer profit = Rs. 7820

Because it is positive it is in the money contract hence buyer will get more profit, incase spot price decreases, buyer's profit will increase.

Sellers Payoff:

- It is in the money for the buyer so it is out of the money for the seller, hence he is in loss.
- The loss is equal to the profit of buyer i.e. Rs. 7820.



Graph 7

(Source: Plotted using the data from nse website using excel)

Observations and Findings:

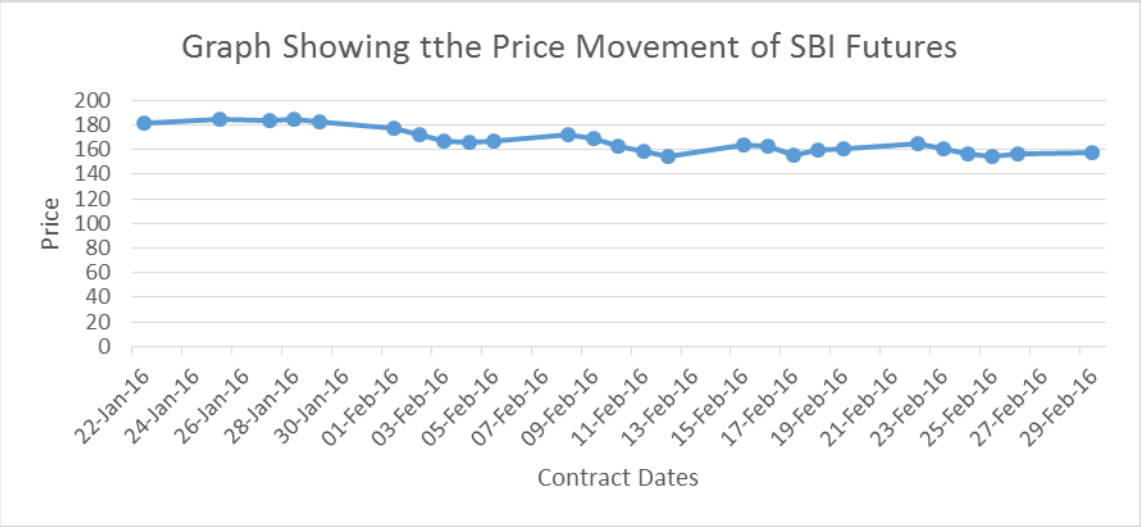
- The future price of ICICI is moving along with the market price.
- If the buy price of the future is less than the settlement price, than the buyer of a future gets profit.
- If the selling price of the future is less than the settlement price, than the seller incur losses.

4.2.1 Analysis of SBI Bank:

Date	Market Price	Future Price
26-Feb-16	155.6625	156.225
25-Feb-16	154.625	154.675
24-Feb-16	157.075	156.75
23-Feb-16	161.625	161.025
22-Feb-16	165.35	164.7125
19-Feb-16	161.25	160.8125
18-Feb-16	160.4625	159.8625
17-Feb-16	156.2625	155.8375
16-Feb-16	163.3875	162.425
15-Feb-16	163.7125	163.475
12-Feb-16	154.2125	153.9375
11-Feb-16	158.3625	158.6
10-Feb-16	162.05	162.65
09-Feb-16	168.3875	168.875
08-Feb-16	171.7625	172.275
05-Feb-16	165.85	166.4875
04-Feb-16	165.5375	165.9375
03-Feb-16	166.225	166.425
02-Feb-16	172.125	172.575
01-Feb-16	177.1875	177.05
29-Jan-16	181.9875	182.25
28-Jan-16	184.4625	184.875
27-Jan-16	184.0125	183.2875
25-Jan-16	185.5375	184.7875
22-Jan-16	182.05	181.5625

Table 5: Table showing the market and future prices of SBI

The objective of this analysis is to evaluate the profit/loss position of futures and options. This analysis is based on sample data taken of SBI scrip. This analysis considered the Feb 2016 contract of SBI. The lot size of SBI is 2000, the time period in which this analysis done is from 22-01-2016 to 26-02-2016.



Graph 8

(Source: Plotted using the data from nse website using excel)

Observations and Findings:

If a person buys 1 lot i.e. 2000 futures of SBI on 22 Jan, 2016 and sells on 26 Feb, 2016 then he will get a loss of 181.5625-156.225 = 25.3375 per share. So he will get a loss of 50675 i.e. 25.3375*2000

If he sells on 12 Feb, 2016 then he will get a loss of 181.5625-153.9375 = 27.625 i.e. a loss of 27.625 per share. So his total loss is 55250 i.e. 27.625 * 2000

The closing price of SBI at the end of the contract period is 155.6625 and this is considered as settlement price.

4.2.2 Call options:

The following table explains the market price and premiums of calls.

Date	Market Price	130	140	150	160	170	180
26-Feb-16	155.6625	28.1	20.5	13.25	8.2	4.65	2.5
25-Feb-16	154.625	25.2	17.05	11.35	7	4.05	2.3
24-Feb-16	157.075	29.75	20.3	13.8	9.05	5.45	3.1
23-Feb-16	161.625	31.95	21.5	14.6	9.55	5.75	3.3
22-Feb-16	165.35	37.7	26.8	18.9	12.7	8.15	4.9
19-Feb-16	161.25	37.95	30	19.7	13.15	8.45	5.1
18-Feb-16	160.4625	33.8	26.35	16.15	10.5	6.55	3.95
17-Feb-16	156.2625	24	19.5	16	10.6	6.65	3.9
16-Feb-16	163.3875	31.65	27	12.75	8.65	5.2	3.05
15-Feb-16	163.7125	40.95	29	23	14.8	9.7	6
12-Feb-16	154.2125	28.4	20	15	9.15	5.45	3.3
11-Feb-16	158.3625	28.2	20.9	14	9.15	5.55	3.5
10-Feb-16	162.05	32.4	24.6	18	11.8	7.5	5.05
09-Feb-16	168.3875	39.4	30.8	23.15	16.75	10.85	7.25
08-Feb-16	171.7625	44.25	35.3	27.2	21	12.85	8.75
05-Feb-16	165.85	40.7	32.1	24.45	17.9	10.95	7.35
04-Feb-16	165.5375	35.75	27.45	21.5	12.3	8.65	5.7
03-Feb-16	166.225	38.8	30.35	21.05	14.75	10.5	6.6
02-Feb-16	172.125	42	33.4	25.7	19.1	11.7	7.55
01-Feb-16	177.1875	45.25	36.5	28.6	21.7	13.85	9.65
29-Jan-16	181.9875	52.1	42.95	34.45	26.85	20.3	12.85
28-Jan-16	184.4625	57.3	47.95	39.15	31.1	24	18
27-Jan-16	184.0125	56.6	47.35	38.65	30.75	23.85	18
25-Jan-16	185.5375	55.35	46.25	37.75	30.1	23.4	17.75
22-Jan-16	182.05	57.15	48.1	39.65	32	25.3	15.5

Table 6: Table showing the call prices of SBI

- The first column explains trading date
- Second column explains the SPOT market price in cash segment on that date.
- The third column explains call premiums amounting at these strike prices; 130, 140, 150, 160, 170, 180.

Observations and Findings:

Buyers Payoff:

- Those who have purchased call option at a strike price of 140, the premium payable is 48.1
- On the expiry date the spot market price enclosed at 155.6625. As it is in the money for the buyer and out of the money for the seller, hence the buyer is in profit.
- So the buyer will gain 155.6625-140 = 15.665
- After deducting premium buyer is at loss of (15.665-48.1) * 2000 = 64875

Sellers Payoff:

- Loss for the buyer is same as profit for the seller.
- So seller gain is 64875.

4.2.3 Put options:

Date	Market Price	170	180	190	200	210	220
26-Feb-16	155.6625	9.86	28.1	33.5	43.05	53.85	64
25-Feb-16	154.625	21.45	29.25	37.95	47.35	56	66.5
24-Feb-16	157.075	19	26.6	32.5	44.25	52.25	59.8
23-Feb-16	161.625	17.8	25.1	33.65	41.5	51.5	61.5
22-Feb-16	165.35	13.6	20	27.2	36.05	45.5	55
19-Feb-16	161.25	13.9	22.7	29.9	37.85	46	55
18-Feb-16	160.4625	17	26	33.6	41.85	50.6	62
17-Feb-16	156.2625	19	27.1	34.7	44.55	51.65	60.7
16-Feb-16	163.3875	17.65	24.25	26	45.3	54.1	63.2
15-Feb-16	163.7125	11.5	18	27.75	35.4	43.65	52.4
12-Feb-16	154.2125	25	29.3	35.65	44.55	53.8	63.35
11-Feb-16	158.3625	21.9	30	33	38.05	54.45	63.95
10-Feb-16	162.05	18.55	23	32.55	39.7	50.1	59.45
09-Feb-16	168.3875	12.1	20	25.9	33.9	42.55	51.65
08-Feb-16	171.7625	10.55	15.8	20	29.9	38.15	47
05-Feb-16	165.85	13	19	25.3	33.1	41.6	50.6
04-Feb-16	165.5375	15	21.45	29	37.3	46.15	55.4
03-Feb-16	166.225	12.7	19.65	26.85	34.85	43.45	52.5
02-Feb-16	172.125	11.45	17.95	24.75	32.4	40.75	49.6
01-Feb-16	177.1875	10.5	15.5	22.8	30.15	38.2	46.8
29-Jan-16	181.9875	7.1	11.05	18.2	24.8	32.3	40.5
28-Jan-16	184.4625	6.45	10.35	15.35	21.4	28.4	36.2
27-Jan-16	184.0125	7.15	11.15	16.25	22.4	29.45	37.25
25-Jan-16	185.5375	8.1	12.3	17.6	23.85	30.95	38.75
22-Jan-16	182.05	8.25	12.35	17.5	23.55	30.45	38.05

Table 7: Table showing the put prices of SBI

Observations and Findings:

Buyers Payoff:

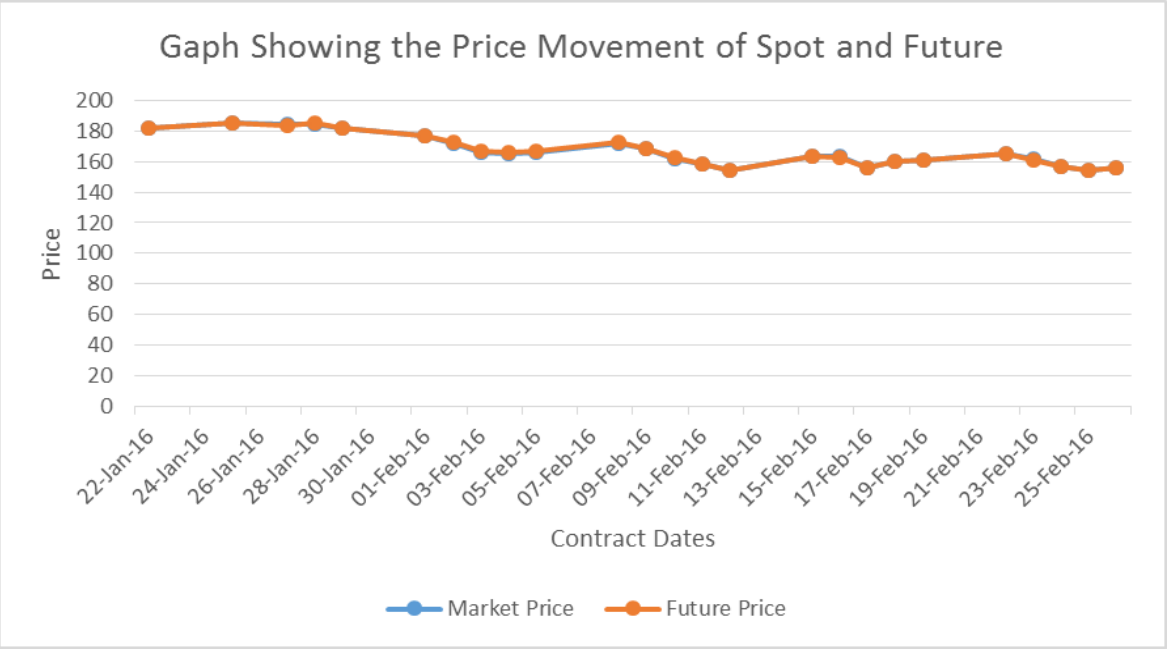
- As brought 1 lot of SBI that is 2000, those who buy for 170 paid 8.25 premium per share.
- Settlement price is 155.6625

Spot price	155.6625
Strike price	170.00
	14.3375
Premium (-)	8.25
	6.125 x 2000= 12250
	Buyer Profit = Rs. 12250

Because it is positive it is in the money contract hence buyer will get more profit, incase spot price increase buyer profit also increase.

Sellers Payoff:

- It is in the money for the buyer so it is in out of the money for the seller, hence he is in loss.
- The loss is equal to the profit of buyer i.e. 8955.



Graph 9

(Source: Plotted using the data from nse website using excel)

Observations and Findings:

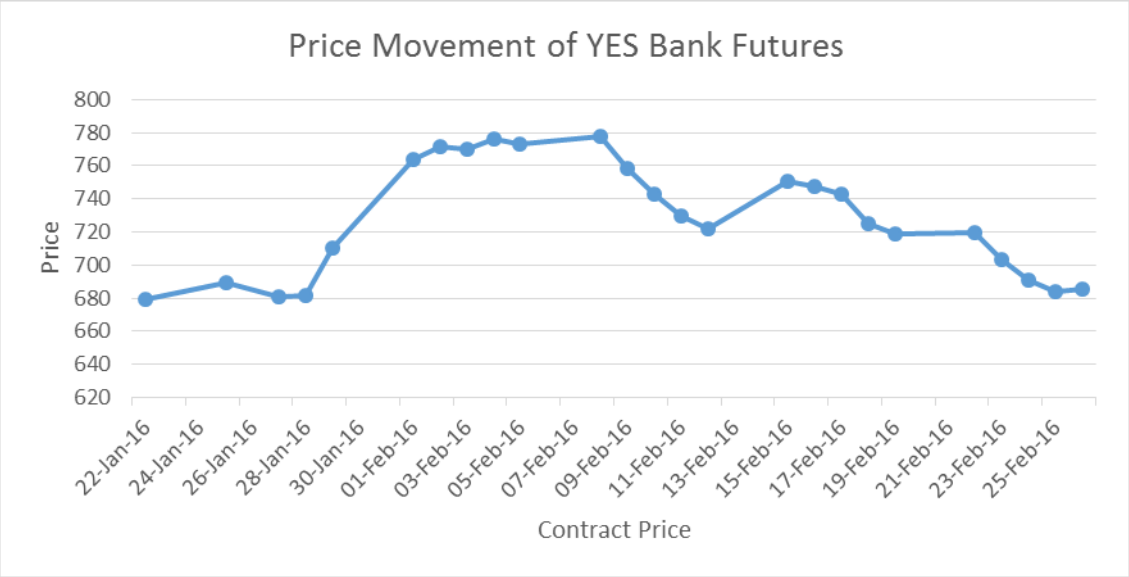
- The future price of SBI is moving along with the market price.
- If the buy price of the future is less than the settlement price, than the buyer of a future gets profit.
- If the selling price of the future is less than the settlement price, than the seller incur losses

4.3.1 Analysis of YES Bank:

Date	Market Price	Future Price
26-Feb-16	682.4375	685.8125
25-Feb-16	681.7375	684.075
24-Feb-16	687.575	691.025
23-Feb-16	699.325	703.475
22-Feb-16	714.6125	719.85
19-Feb-16	713.925	718.75
18-Feb-16	721.1375	724.9
17-Feb-16	721.8375	743.025
16-Feb-16	745.65	747.1375
15-Feb-16	746.3875	750.925
12-Feb-16	718.4	721.65
11-Feb-16	724.7125	729.45
10-Feb-16	737.95	742.5
09-Feb-16	753.95	758.3875
08-Feb-16	774.5125	777.5
05-Feb-16	768.8375	772.9125
04-Feb-16	771.5625	776.1
03-Feb-16	767.025	770.375
02-Feb-16	770.525	771.225
01-Feb-16	761.775	763.7
29-Jan-16	702.6125	710.1375
28-Jan-16	676.3625	681.65
27-Jan-16	676.9875	680.825
25-Jan-16	684.5	689.7
22-Jan-16	675.6125	679.6

Table 8: Table showing the market and future prices of YES bank

The objective of this analysis is to evaluate the profit/loss position of futures and options. This analysis is based on sample data taken of YES BANK scrip. This analysis considered the Feb 2016 contract of YES BANK. The lot size of YES BANK is 700, the time period in which this analysis done is from 22-01-2016 to 26-02-2016.



Graph 10

(Source: Plotted using the data from nse website using excel)

Observations and Findings:

If a person buys 1 lot i.e. 700 futures of YES BANK on 22 Jan, 2016 and sells on 26 Feb, 2016 then he will get a profit of 685.8125 – 679.6 = 6.2125 per share. So he will get a profit of 4348.75 i.e. 6.2125 * 700

The closing price of YES BANK at the end of the contract period is 682.4375 and this is considered as settlement price.

4.3.2 Call options:

Date	Market Price	700	740	760	780	800	820
26-Feb-16	682.4375	29.2	11.9	8.35	5.6	4.65	3
25-Feb-16	681.7375	23.7	17.65	12.35	8.75	4.15	2.65
24-Feb-16	687.575	33.4	17.5	11.8	8	5.5	4.25
23-Feb-16	699.325	30.7	26.8	18.95	14.95	5.5	4
22-Feb-16	714.6125	45	27	21	15.9	9.5	7.45
19-Feb-16	713.925	47	26.6	22.7	14	11.05	17.05
18-Feb-16	721.1375	49.05	31.35	24	19.5	12.55	9
17-Feb-16	721.8375	45	57.1	27.3	21.85	14	22.8
16-Feb-16	745.65	60	47.55	39	30.15	19	12
15-Feb-16	746.3875	76	41	21.8	41	24	19
12-Feb-16	718.4	60	36.55	43.65	22	11.7	11
11-Feb-16	724.7125	68	43.45	33.5	26.45	13.2	26.05
10-Feb-16	737.95	83.55	71.6	39	30.55	19.75	15
09-Feb-16	753.95	93.15	85.6	75.3	39.65	23.85	16.85
08-Feb-16	774.5125	109.1	95	84.4	40.5	29.8	30.2
05-Feb-16	768.8375	118.9	85.55	75.8	66.9	33.1	27.45
04-Feb-16	771.5625	107.75	98.7	88.2	78.55	28.05	20
03-Feb-16	767.025	85.45	92.5	82.6	73.55	33.5	61.7
02-Feb-16	770.525	114.8	100.3	90.2	80.85	30	57.8
01-Feb-16	761.775	123.05	46	77.75	69.45	33	25
29-Jan-16	702.6125	107.45	25.55	20.4	16.15	23.25	54.95
28-Jan-16	676.3625	39.1	29.45	23.85	19.2	12.65	9.85
27-Jan-16	676.9875	43.9	31.6	25.85	21.1	15.25	12.1
25-Jan-16	684.5	46.1	36.8	30.6	25.35	17	13.65
22-Jan-16	675.6125	52.15	14.6	10.05	6.95	20.85	17.05

Table 9: Table showing the call prices of YES bank

The following table explains the market price and premiums of calls.

- The first column explains trading date
- Second column explains the SPOT market price in cash segment on that date.
- The third column explains call premiums amounting at these strike prices; 700, 740, 760, 780, 800, 820

Observations and Findings:

Buyers Payoff:

- As brought 1 lot of YES BANK that is 700, those who buy for 700 paid 52.15 premium per share.
- Settlement price is 682.4375

Spot price	700
Strike price	682.4375
	17.5625
Premium (-)	52.15
	34.5875 x 700= 24211.25
	Buyer loss = Rs. 24211.25

Because it is negative it is out the money contract hence buyer will get more lose, incase spot price increase buyer loss also increase.

Sellers Payoff:

- It is out of the money for the buyer so it is in the money for the seller, hence he is in profit.
- The profit is equal to the loss of buyer i.e. 24211.25

4.3.3 Put options:

Date	Market Price	740	760	780	800	820	840
26-Feb-16	682.4375	65.35	80	101.35	116.5	134.9	152.7
25-Feb-16	681.7375	73.55	89.25	102.05	127.05	136	167.3
24-Feb-16	687.575	57.5	90	96	100	131.9	149.45
23-Feb-16	699.325	56.2	76	82.6	108.15	136.6	154.1
22-Feb-16	714.6125	57.9	70.45	84.2	99.05	114.8	131.35
19-Feb-16	713.925	60.95	62.8	87	101.65	117.1	133.35
18-Feb-16	721.1375	43.6	63	87.8	93.5	117.45	127.95
17-Feb-16	721.8375	50.5	72.95	85.95	99.85	114.7	130.3
16-Feb-16	745.65	38.5	50	79.5	92.65	106.75	121.7
15-Feb-16	746.3875	31	43	69.85	82	95.1	109.05
12-Feb-16	718.4	60.55	70	84.35	97.7	111.9	126.9
11-Feb-16	724.7125	42.7	48.6	66	108.05	122.8	138.25
10-Feb-16	737.95	59.55	55	82.6	95.55	109.3	123.9
09-Feb-16	753.95	56.55	43.6	78.45	90.8	104	117.95
08-Feb-16	774.5125	24	28	68.7	80.05	92.25	105.3
05-Feb-16	768.8375	27.9	58.25	68.3	79.25	91	103.6
04-Feb-16	771.5625	32	67.15	78	89.7	102.2	115.45
03-Feb-16	767.025	30	61.1	71.2	82.15	93.9	106.35
02-Feb-16	770.525	28	68.8	79.5	91	103.25	116.2
01-Feb-16	761.775	58.55	68.2	78.6	89.8	101.7	114.35
29-Jan-16	702.6125	70.2	80.85	92.3	104.4	117.25	130.75
28-Jan-16	676.3625	84.1	98.7	114.15	130.4	147.3	164.8
27-Jan-16	676.9875	81.4	95.5	110.6	126.4	142.95	160.1
25-Jan-16	684.5	83.8	97.8	112.75	128.4	144.75	161.7
22-Jan-16	675.6125	82.1	95.65	110.1	125.3	141.2	157.75

Table 10: Table showing the put prices of YES bank

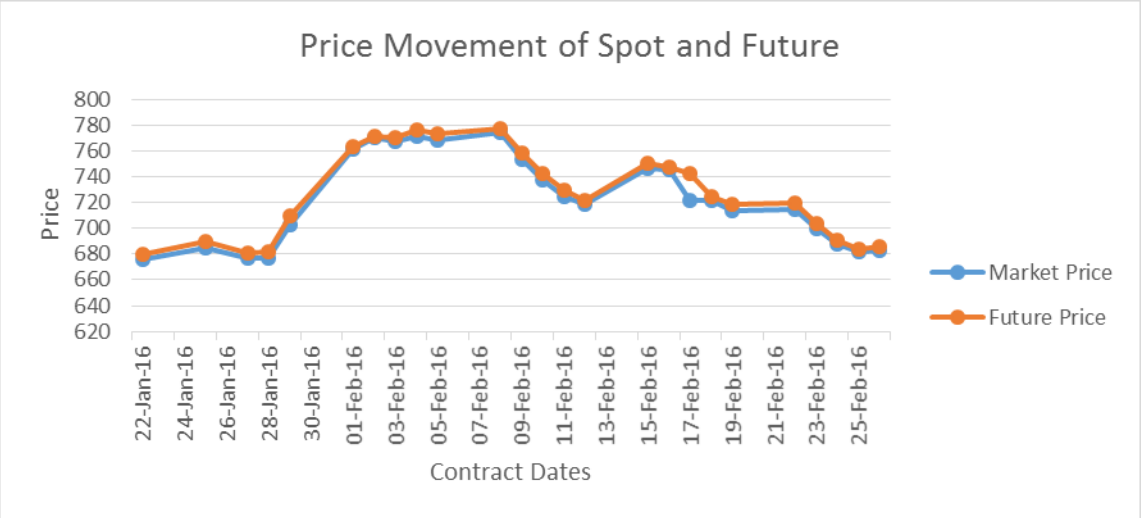
Observations and Findings:

Buyers Payoff:

- Those who have purchase put option at a strike price of 760, the premium payable is 95.65
- On the expiry date the spot market price enclosed at 682.4375. As it is in the money for the buyer and out of the money for the seller, hence the buyer is in profit.
- So the buyer will gain 760 – 682.4375 = 77.5625 per share
- Since premium is grater then profit per share buyer incurs a loss.
- So the total loss will be 12661.25 i.e. (77.5625 – 95.65) * 700

Sellers Payoff:

- Seller has a total profit of Rs. 12661.25



Graph 11

(Source: Plotted using the data from nse website using excel)

Observations and Findings:

- The future price of YES BANK is moving along with the market price.
- If the buy price of the future is less than the settlement price, than the buyer of a future gets profit.
- If the selling price of the future is less than the settlement price, than the seller incur losses.

4.3 Risks Associated With Trading in Derivatives:

The different types of risks associated with derivative instruments are as follows:

1. Credit Risk :

These are the usual risks associated with counterparty default and which must be assessed as part of any financial transaction. However, in India the two major stock exchanges that offer equity derivative products have Settlement / Trade Guarantee Funds that address this risk

2. Market Risk :

These are associated with all market variables that may affect the value of the contract, for e.g. A change in price of the underlying instrument.

3. Operational Risk :

These are the risks associated with the general course of business operations and include:

- Settlement Risk arises as a result of the timing differences between when an institution either pays out funds or deliverables assets before receiving assets or payments from a counterparty and it occurs at a specific point in the life of the contract.
- Legal Risk arises when a contract is not legally enforceable, reason being the different laws that may be applicable in different jurisdictions - relevant in case of cross border trades.
- Deficiencies in information, monitoring and control systems, which result in fraud, human error, system failures, management failures etc. Famous examples of these risks are the Nick Lesson case, Barings' losses in derivatives, Society General's debacle etc.

4. Strategic Risk :

These risks arise from activities such as:

- Entrepreneurial behavior of traders in financial institutions
- Misreading client requests
- Costs getting out of control
- Trading with inappropriate counterparties

5. Systemic Risk :

This risk manifests itself when there is a large and complex organization of financial positions in the economy. "Systemic risk" is said to arise when the failure of one big player or of one clearing corporation somehow puts all other clearing corporations in the economy at risk. At the simplest, suppose that an index arbitrageur is long the index on one exchange and short the futures on another exchange. Such a position generates a mechanism for transmission of failure - the failure of one of the exchanges could possibly influence the other. Systemic risk also appears when very large positions are taken on the OTC derivatives market by any one player. Neither of these scenarios is in the offing in India. Hence it is hard to visualize how exchange traded derivatives could generate systemic risk in India.

Options have characteristics that may make them less attractive for certain investors.

- Options are very time sensitive investments. An options contract is for a short period - generally a few months. The buyer of an option could lose his or her entire investment even with a correct prediction about the direction and magnitude of a particular price change if the price change does not occur in the relevant time period (i.e., before the option expires).
- Some investors are more comfortable with a longer term investment generating ongoing income - a "buy and hold" investment strategy.

- Options are less tangible than some other investments. Stocks offer certificates, as do bank Certificates of Deposit, but an option is a "book-entry" only investment without a paper certificate of ownership.

Options aren't right for every investor and are just right for others. Options can be risky but can also provide substantial opportunities to profit for those who properly use this very flexible and powerful financial instrument.

Summary:

- Derivatives market is an innovation to cash market. Approximately its daily turnover reaches to the equal stage of cash market. The average daily turnover of the NSE derivative segments

- In cash market the profit/loss of the investor depends on the market price of the underlying asset. The investor may incur huge profits or he may incur huge losses. But in derivatives segment the investor enjoys huge profits with limited downside.

- In cash market the investor has to pay the total money, but in derivatives the investor has to pay premiums or margins, which are some percentage of total contract.

- Derivatives are mostly used for hedging purpose.

- In derivative segment the profit/loss of the option writer purely depends on the fluctuations of the underlying asset.

5.1 RECOMMENDATIONS:

- The derivatives market is newly started in India and it is not known by every investor, so SEBI has to take steps to create awareness among the investors about the derivative segment.
- In order to increase the derivatives market in India, SEBI should revise some of their regulations like contract size, participation of FII in the derivatives market.
- Contract size should be minimized because small investors cannot afford this much of huge premiums.
- SEBI has to take further steps in the risk management mechanism.
- SEBI has to take measures to use effectively the derivatives segment as a tool of hedging.

5.2 CONCLUSION:

- In bullish market the call option writer incurs more losses so the investor is suggested to go for a call option to hold, where as the put option holder suffers in a bullish market, so he is suggested to write a put option.
- In bearish market the call option holder will incur more losses so the investor is suggested to go for a call option to write, where as the put option writer will get more losses, so he is suggested to hold a put option.
- In the above analysis the market price of YES bank is having higher volatility, so the put option writer enjoys more profits.
- The future price of SBI is moving along with the market price. If the buy price of the future is less than the settlement price, than the buyer of a future gets profit. If the selling price of the future is less than the settlement price, than the seller incur losses.
- The future price of ICICI is moving along with the market price. If the buy price of the future is less than the settlement price, than the buyer of a future gets profit. If the selling price of the future is less than the settlement price, than the seller incur losses.

6. LIMITATIONS OF THE STUDY:

The following are the limitation of this study.

- The script chosen for analysis is ICICI BANK, SBI & YES BANK and the contract taken is February 2016 ending one –month contract.
- The data collected is completely restricted to ICICI BANK, SBI & YES BANK of February 2016; hence this analysis cannot be taken universal.

7. BIBILOGRAPHY:

- Golaka C Nath, Behaviour of Stock Market Volatility after Derivatives, Retrieved from: http://www.nseindia.com/content/press/nov2003a.pdf
- Dr. Premalata Shenbagaraman, Do Futures and Options trading increase stock market volatility, Retrieved from: http://www.nse-india.com/content/press/jan2003a.pdf
- Banikanta Mishra, Sarat Malik and Laltu Pore, Impact of Increased Derivatives-Trading in India on the Price-Discovery Process, Retrieved from: http://www.sebi.gov.in/cms/sebi_data/DRG_Study/Pricediscovery.pdf
- Ahuja, L. Narender (2005). Commodity Derivatives Market in India: Development, Regulation and Future Prospects. IBRC Athens 2005.
- Fitch Ratings (2004). Fixed Income Derivatives---A Survey of the Indian Market, retrieved from: www.fitchratings.com
- Patwari D.C. and Bhargava A.(2006). Options and Futures An Indian Perspective, Jaico Publishing, Mumbai
- http://www.nseindia.com/
- https://www1.nseindia.com/live_market/dynaContent/live_watch/get_quote/GetQuote.jsp?symbol=ICICIBANK&illiquid=0&smeFlag=0&itpFlag=0
- https://www1.nseindia.com/live_market/dynaContent/live_watch/get_quote/GetQuote.jsp?symbol=YESBANK&illiquid=0&smeFlag=0&itpFlag=0
- https://www1.nseindia.com/live_market/dynaContent/live_watch/get_quote/GetQuote.jsp?symbol=SBIN&illiquid=0&smeFlag=0&itpFlag=0
- https://www1.nseindia.com/live_market/dynaContent/live_watch/get_quote/GetQuoteFO.jsp?underlying=ICICIBANK&instrument=FUTSTK&type=-&strike=-&expiry=28APR2016
- https://www1.nseindia.com/live_market/dynaContent/live_watch/get_quote/GetQuoteFO.jsp?underlying=YESBANK&instrument=FUTSTK&type=-&strike=-&expiry=28APR2016

- https://www1.nseindia.com/live_market/dynaContent/live_watch/get_quote/GetQuoteFO.jsp?underlying=SBIN&instrument=FUTSTK&type=-&strike=-&expiry=28APR2016
- http://www.investopedia.com/ask/answers/052615/how-can-derivatives-be-used-risk-management.asp
- http://www.investopedia.com/exam-guide/cfa-level-1/derivatives/purposes-benefits-derivatives.asp
- https://www.math.nyu.edu/faculty/avellane/global_derivatives_market.pdf
- https://casi.sas.upenn.edu/sites/casi.sas.upenn.edu/files/iit/Derivatives%20-%20Vashishtha.pdf
- http://www.bseindia.com/markets/Derivatives/DeriReports/FaqsRiskInDerivativesMarkets.aspx?expandable=5
- http://www.nasdaq.com/investing/options-guide/options-benefits-risk.aspx