
An Empirical Analysis of the Growth of Indian Derivative Market

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ABSTRACT

The term risk is a characteristic feature of most commodity and capital markets. Variations in the prices of agricultural and non-agricultural commodities are induced, over time, by demand- supply dynamics. The last two decades have witnessed many-fold increase in the volume of international trade and business due to the wave of globalization and liberalization sweeping across the world. This has led to rapid and unpredictable variations in financial assets prices, interest rates and exchange rates, and subsequently, to exposing the corporate world to an unwieldy financial risk. In the present highly uncertain business scenario, the importance of risk management is much greater than ever before. The emergence of derivatives market is an ingenious feat of financial engineering that provides an effective and less costly solution to the problem of risk that is embedded in the price unpredictability of the underlying asset.

India's experience with the equity derivatives market has been extremely positive over the years. The Study conducted has been an attempt to analyse the derivative market over the years and an analysis and a comparative study of the NSE and BSE has been attempted with the help of percentage analysis, trend and CAGR.

1. INTRODUCTION

The Increased financial risk causes losses to an otherwise profitable organisation. This underlines the importance of risk management to hedge against uncertainty.

“Risk is like fire: If controlled it will help you; if uncontrolled it will rise up and destroy you.” Theodore Roosevelt

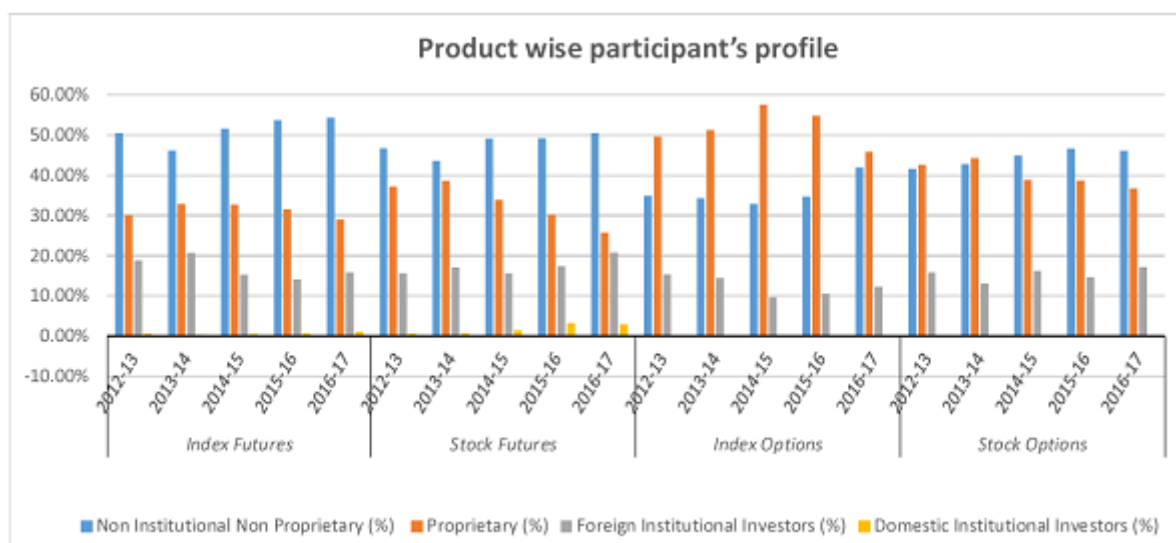
Derivatives provide an effective solution to the problem of risk caused by uncertainty and volatility in underlying asset. Derivatives are risk management tools that help an organization to effectively transfer risk. Derivatives are instruments which have no independent value. Their value depends upon the underlying asset. The underlying asset may be financial or non-financial. A derivative security is a financial contract whose value is derived from the value of

something else, such as a stock price, a commodity price, an exchange rate, an interest rate, or even an index of prices. Derivatives may be traded for a variety of reasons. A derivative enables a trader to hedge some preexisting risk by taking positions in derivatives markets that offset potential losses in the underlying or spot market.

Derivatives markets have been in existence in India in some form or other for a long time. Bombay Stock Exchange (BSE) is an Indian stock exchange located in Mumbai, Maharashtra, India. Established in 1875 and is considered to be one of Asia’s fastest stock exchanges, with a speed of 200 microseconds and one of India’s leading exchange groups and the oldest stock exchange in the South Asia region. The National Stock Exchange of India Limited (NSE) is the leading stock exchange of India, located in Mumbai. NSE was established in 1992 as the first demutualized electronic exchange in the country. NSE was the first exchange in the country to provide a modern, fully automated screen-based electronic trading system which offered easy trading facility to the investors spread across the length and breadth of the country.

Derivatives are traded products whose price is based on another market. Derivatives are security, whose value is based on other basic variables in the base. In recent years, derivative security has become increasingly important in the field of finance. The world of investing has a variety of financial instruments with unusual sounding names. In fact, they make up a large part of the market and as such, it is crucial to understand what they really are.

Derivatives are nothing but financial products whose value depends on the value of another asset. These assets we are talking about can be individual assets or they can be a group of assets of joint ventures. Some examples of these assets include items that many of us will be familiar with - stocks, bonds, commodities, etc.



Sources: Tax Guru

The above chart picturises the product wise participant's profile with respect to the Index futures, stock futures, index options and stock options from the year 2013 to the year 2017. It also elaborates the percentages of non institutional non proprietary, proprietary, foreign institutional investors and domestic institutional investors with the corresponding years respectively.

Derivatives are often used as a tool to hedge the risk of one party to a contract while offering a high return to the other party. Derivatives have been established to mitigate a significant number of risks: fluctuations in stock, bond, commodity and index prices; changes in foreign exchange rates; changes in interest rates; and weather events, to name a few.

RESEARCH OBJECTIVES

- To have an overview of the evolution of the derivatives market in India.
- To identify the trend and the growth rate of derivative market in India
- To compare the performance of derivative market of BSE and NSE

2. REVIEW OF LITERATURE

- Suchismita Bose(2006) in her research paper “The Indian Derivatives Market Revisited” presented accounts of the major developments in the Indian commodity, exchange rate and financial derivatives markets, and outlines the regulatory provisions that have been introduced to minimise misuse of derivatives.
- Ashutosh Vashishtha and Satish Kumar (2010) in their research paper “Development of Financial Derivatives Market in India- A Case Study” studied the historical roots of derivative trading, types of derivative products, regulation and policy developments, trend and growth, future prospects and challenges of derivative market in India and concluded that there is an increasing sense that the equity derivatives market is playing a major role in shaping price discovery. Factors like increased volatility in financial asset prices; growing integration of national financial markets with international markets; development of more sophisticated risk management tools; wider choices of risk management strategies to economic agents and innovations in financial engineering, have been driving the growth of financial derivatives worldwide and have also fuelled the growth of derivatives here, in India.
- Dr. Kamlesh Gakhar and Ms. Meetu (2013) in their research paper “Derivatives Market in India: Evolution, Trading Mechanism and Future Prospects” said that there are many issue (e.g., the lack of economies of scale, tax and legal bottlenecks, increased off-balance sheet exposure of Indian banks need for an independent regulator etc), which need to be immediately resolved to enhance the investors' confidence in the Indian derivative market.

- Dr. Daksha Pratapsinh Chauhan (2013) in her research paper “Performance Of Stock Exchanges In India” has studied the financial performances of BSE and NSE over the last one decade. And has tried to find out of the two stock exchanges which one is performing better financially on various basis and concluded that BSE and NSE are the icons of Indian capital market they are not rivals, both of them are the pillars of Indian economy. Both must be try to be complimentary to each other. If both will go hand in hand than it will result in rapid growth and upliftment of the nation.
- Ms. Shalini H and Dr. Raveendra P (2014) in their research paper “ A Study of Derivatives Market in India and its Current Position in Global Financial Derivatives Markets” studied the scope, history, concept, definition, types, features, regulation, market, trend, growth, Future prospects and challenges of derivatives in India and status of Indian derivatives market vis-à-vis global derivative market and concluded that there is big significance and contribution of derivatives to financial system.
- **Gupta and Mokshmar (2018)**, in her study shows that India’s most of the investment avenues are termed to be risky by the investors. The major feature of investment as perceived by the investors is income stability, principal amount, liquidity, easy transferability and approval. there are a number of investment avenues available in India such as share, silver, real estate, gold, Life Insurance, Bank, postal savings, etc. The desired level of Return and the tolerance for risk help in deciding the choice of the investor. The investment may differ from provident fund, national saving certificate, chit funds, insurance schemes, company fixed deposits, government securities, bonds, equity, mutual fund schemes and derivatives. It can be concluded that every investor want to save extra, be added risk directs to more profit. This is the major reason why the perception of the investor changes when it comes to the investment in equity and derivatives. There is lot confusion in the investment patterns and the investment avenues to be decided between equity and derivatives.
- **Gautami and Nalla Bala Kalyan (2018)** in their reveal that as part of financial market reforms, new instruments and financial reengineering have been introduced in India since 1991. One area where the growth and innovation is slow is in the introduction of derivatives. In India, the appearance and enlargement of derivatives market is moderately a recent phenomenon. Since its beginning in June 2000, derivatives market has exhibited exponential enlargement both in terms of volume and number of traded contracts. The term derivatives, refers to a broad class of financial instruments which mainly include options and futures. These instruments derive their value from the price and other related variables of the underlying asset. They do not have worth of their own and derive their value from the claim they give to their owners to own some other financial assets or security.

3. METHODOLOGY

The study conducted is based on descriptive research design, meaning a description of the state of affairs as it exists at present. Secondary data for the last 17 years has been collected from the websites of BSE, NSE, other websites, books, journals and other articles. Analysis

of the secondary data has been done both on historical and quantitative basis. No sample has been chosen as the entire data provided has been included for the study. The tools used in the study include percentage analysis, trend and Compound Annual Growth Rate (CAGR).

LIMITATIONS OF THE STUDY

Every research conducted has its limitations. These limitations are being brought forward such that when any further research is conducted the limitations given below may be taken into consideration.

- An attempt has been made to conduct a detailed study, still there are areas which have not been covered.
- The period of study is restricted to 17 years.

4. ANALYSIS AND INTERPRETATION EVOLUTION OF THE DERIVATIVES MARKET IN INDIA

The financial derivatives gained prominence after 1970. In recent years, the market for financial derivatives has grown in terms of the variety of instruments available, as well as their complexity and turnover. Financial derivatives have changed the world of finance through the creation of innovative ways to comprehend, measure, and manage risks.

India's tryst with derivatives began in 2000 when both the NSE and the BSE commenced trading in equity derivatives. In June 2000, index futures became the first type of derivative instruments to be launched in the Indian markets, followed by index options in June 2001, options in individual stocks in July 2001, and futures in single stock derivatives in November 2001. Since then, equity derivatives have come a long way. New products, an expanding list of eligible investors, rising volumes, and the best risk management framework for exchange-traded derivatives have been the hallmark of the journey of equity derivatives in India so far.

BSE

Bombay Stock Exchange Limited is the oldest stock exchange in Asia with a rich heritage. Popularly known as "BSE", it was established as "The Native Share & Stock Brokers Association" in 1875. It was the first stock exchange in the country to obtain permanent recognition in 1956 from the Government of India under the Securities Contracts (Regulation) Act, 1956. Earlier an Association of Persons (AOP), the Exchange is now a demutualised and corporatised entity incorporated under the provisions of the Companies Act, 1956, pursuant to the BSE(Corporatisation and Demutualisation) Scheme, 2005 notified by the Securities and Exchange Board of India (SEBI).Bombay Stock Exchange Limited received its Certificate of Incorporation on 8th August, 2005 and Certificate of Commencement of Business on 12th August, 2005. The Exchange has succeeded the business and operations of BSE on going concern basis and its recognition as an Exchange has been continued by SEBI.

NSE

The National Stock Exchange of India was promoted by leading financial institutions at the behest of the Government of India, and was incorporated in November 1992 as a tax-paying company. In April 1993, it was recognized as a stock exchange under the Securities Contracts (Regulation) Act, 1956. NSE commenced operations in the Wholesale Debt Market (WDM) segment in June 1994. The Capital Market (Equities) segment of the NSE commenced operations in November 1994, while operations in the Derivatives segment commenced in June 2000.

IDENTIFICATION AND COMPARISON OF THE PROFILE OF THE BSE AND NSE

| BASIS | BSE | NSE |
|----------------------------|-----------------------------------|--|
| Number of listed companies | 5638 | 1407 |
| Main Index | BSE SENSEX | CNX NIFTY |
| Index value | 29025(as on march 2015) | 8108(as on march 2015) |
| Location | Mumbai, India | Mumbai, India |
| Claim to fame | Oldest stock exchange in India | Largest stock exchange in terms of trading volume in India |
| Key Person | Mr. Ashishkumar Chauhan(MD & CEO) | Ms. Chitra Ramakrishna (MD & CEO) |
| Website | www.bseindia.com | www.nseindia.com |
| Geographical spread | 417 cities | 1486 cities |
| Number of members | 1390 | 1414 |

| | | |
|--|--|--|
| Established in | 1875 | 1992 |
| Name | Bombay Stock Exchange | National Stock Exchange |
| Awards won | Golden Peacock Global CSR Award in financial sector | The Asian Banker Financial Derivative Exchange of the Year Award |
| Ranking w.r.t. market capitalization (Jan 2015) | 11th | 12th |
| Top trading companies | Shreecem,UNION bank,MARICO,UNITDSPR,CONCOR,TORNT power,EDELWEISS, UPS,RALLIS,ALSTOMT&D | SSLT, Tata Steel, HindalCo, NTPC, BHEL, PNB, ITC, BankBaroda, Hindunilvr, ONGC |

QUANTITATIVE ANALYSIS OF THE NSE AND BSE

A qualitative analysis of the BSE and NSE only shows a description of its merits and a fairly vague view of its quantitative working. The quantitative analysis performed is based on the number of contracts and turnover of the futures and options of the BSE and NSE.

Table No: 1 Number of Contracts and Turnover of BSE

| SL. No. | Year | Total Contracts | Total Turnover (In crores) |
|---------|-----------|-----------------|----------------------------|
| 1 | 2004-2005 | 531,719.00 | 16112.32 |
| 2 | 2005-2006 | 203.00 | 8.78 |
| 3 | 2006-2007 | 1,781,220.00 | 59006.62 |

| | | | |
|----|-----------|----------------|--------------|
| 4 | 2007-2008 | 7,453,371.00 | 242308.41 |
| 5 | 2008-2009 | 496,502.00 | 11774.83 |
| 6 | 2009-2010 | 9,028.00 | 234.06 |
| 7 | 2010-2011 | 5,623.00 | 154.33 |
| 8 | 2011-2012 | 32,222,825.00 | 808475.99 |
| 9 | 2012-2013 | 262,440,691.00 | 7163576.66 |
| 10 | 2013-2014 | 301,942,441.00 | 9219434.32 |
| 11 | 2014-2015 | 30,91,76,043 | 19,08,543,46 |
| 12 | 2015-2016 | 42,02,56,542 | 27,63,926.13 |
| 13 | 2016-2017 | 47,04,25,202 | 31,71,647.94 |
| 14 | 2017-2018 | 69,02,33,859 | 44,36,430.43 |
| 15 | 2018-2019 | 105,24,52,157 | 73,52,274.40 |
| 16 | 2019-2020 | 94,45,17,559 | 66,83,273.75 |
| 17 | 2020-2021 | 63,49,53,395 | 47,18,408.05 |

Source : BSE reports No. of Contracts Interpretation

The number of contracts received by BSE over the last 17 years has had a rising trend from the years 2012 onwards before which the number of contracts received has been significantly less. In the year 2005 the contracts received stood at 531,719 for the rest of the years till 2011 the number of contracts was significantly low, with the contracts received in 2011 standing at 5,623 after which the number of contracts received had a sudden rise in 2012 the amount stood at 32,222,825 in 2013 again a rise amounting to 262,440,691. Year 2013 witnessed the highest number of contracts amounting to 301,942,441.

INTERPRETATION VOLUME OF CONTRACTS

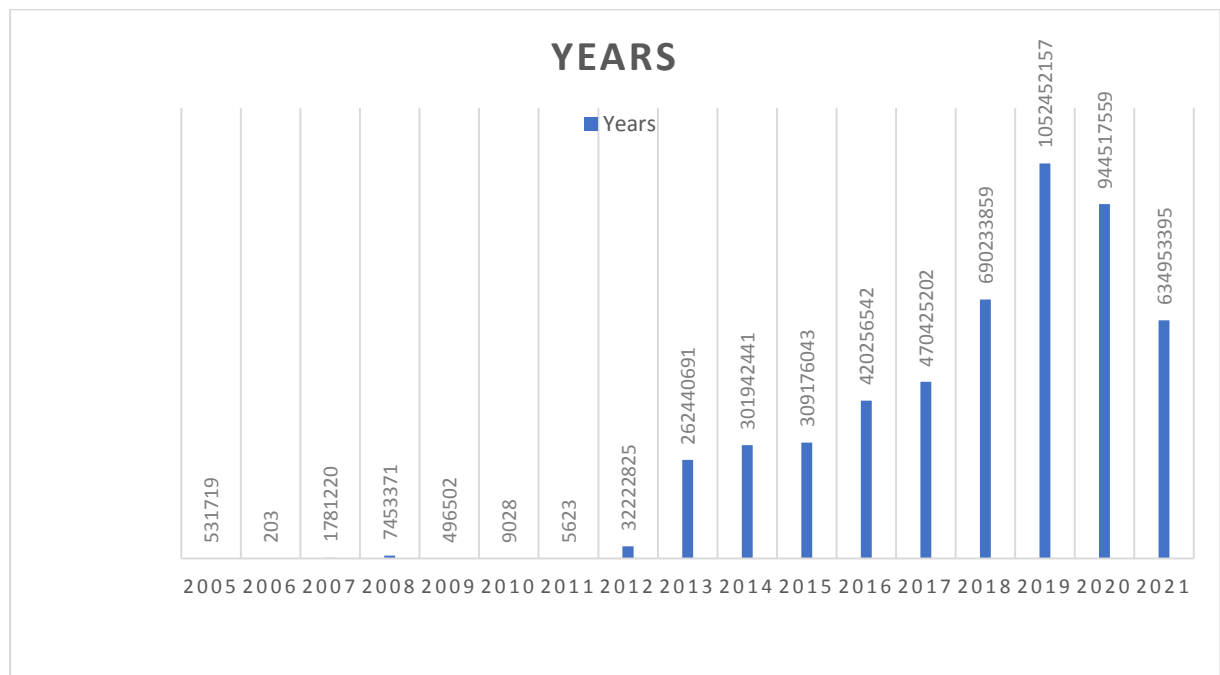
The value of turnover of the BSE over the last 17 years has had a rising trend from the years 2012 onwards before which the number of contracts received has been significantly less. It can be observed that the value of turnover in 2006 stood at 8.78 which is the lowest of all the 17 years. In the year 2012 onwards, there was a sudden rise in the turnover amounting to

808475.99 and the year 2014 witnessed the highest turnover amounting to 9219434.32.

Table No: 2 Compound Annual Growth Rate

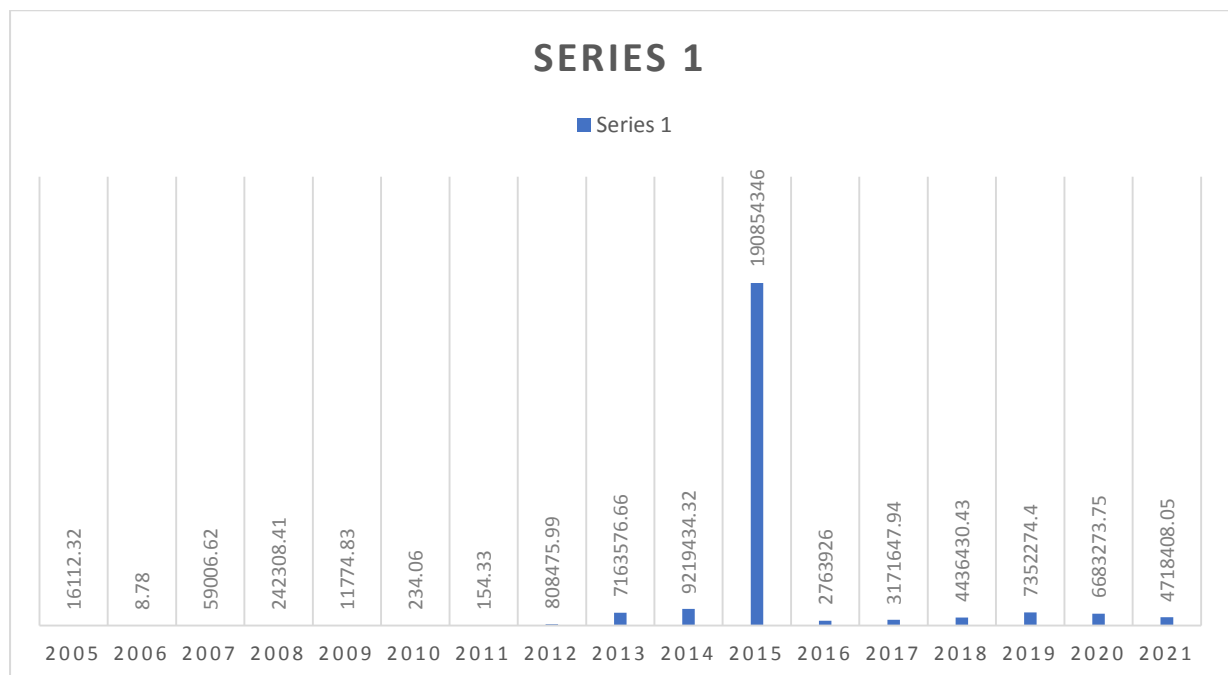
| BSE | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|-----------------|-----------|-----------|-------------|-----------|------------|-----------|-----------|------------|-------------|-------------|
| No of contracts | 531,719 | 203 | 1,781,220 | 7,453,371 | 496,502 | 9,028 | 5,623 | 32,222,825 | 262,440,691 | 301,942,441 |
| | | -100% | 877348% | 318% | -93% | -98% | -38% | 572954% | 714% | 15% |
| | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | | | |
| | 309176043 | 420256542 | 42470425202 | 690233859 | 1052452157 | 944517559 | 634953395 | | | |
| | 2% | 36% | 12% | 47% | 52% | -10% | -33% | | | |

CAGR:0.51706



| BSE | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|-----------------------|-----------|------------|------------|------------|-----------|------------|------------|------------|--------------|--------------|
| Total turnover | 16,112.32 | 8.78 | 59,006.62 | 242,308.41 | 11,774.83 | 234.06 | 154.33 | 808,475.99 | 7,163,576.66 | 9,219,434.32 |
| | | -100% | 671957% | 311% | -95% | -98% | -34% | 523762% | 786% | 29% |
| | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | | | |
| | 190854346 | 2763926.13 | 3171647.94 | 4436430.43 | 7352274.4 | 6683273.75 | 4718408.05 | | | |
| | 1970% | -98% | 14% | 40% | 66 | -9% | -29% | | | |

CAGR: 0.39667



INTERPRETATION

The CAGR for the number of contracts stands at 102 % which seems to be a very good percentage on the onset but the average annual growth rate has had tremendous fluctuation over the years. While in some years the percentage has shown a huge rise in some years there has been a negative growth. For instance in the year 2008 the percentage stands at 318 while in

2009 at 98%. In the year 2014 the average annual growth rate stood at 15 % In the case of total turnover CARG stands at 102 again with a highly fluctuating average annual growth rate. There has been tremendous fluctuation over the years in the average annual growth rate, with the percentage standing at 311 in 2008 and drastically falling down to -95 followed again by a rise to 29 in 2014 and there is a drastic rise to 1970 in the year 2015 and drastic fall to -98.55% in the immediate year 2016. There is a highly fluctuating annual growth rate in terms of total turnover.

NATIONAL STOCK EXCHANGE (NSE)

Table No: 3 Number of Contracts and Turnover of NSE

| SL. NO. | Year | No. of contracts | Turnover |
|---------|---------|------------------|---------------|
| | | | Rs in Crores |
| 1 | 2004-05 | 77,017,185.00 | 2,546,982.00 |
| 2 | 2005-06 | 157,619,271.00 | 4,824,174.00 |
| 3 | 2006-07 | 216,883,573.00 | 7,356,242.00 |
| 4 | 2007-08 | 425,013,200.00 | 13,090,477.93 |
| 5 | 2008-09 | 657,390,497.00 | 11,010,482.17 |
| 6 | 2009-10 | 679,293,922.00 | 17,663,664.69 |
| 7 | 2010-11 | 1,034,212,062.00 | 29,248,221.20 |
| 8 | 2011-12 | 1,205,045,464.00 | 31,349,731.91 |
| 9 | 2012-13 | 1,131,467,418.00 | 31,533,004.21 |
| 10 | 2013-14 | 1,284,406,775.00 | 38,209,214.81 |
| 11 | 2014-15 | 1837041131.00 | 55606453.39 |
| 12 | 2015-16 | 2098610395.00 | 64825834.30 |
| 13 | 2016-17 | 1399746129.00 | 94370301.61 |

| | | | |
|----|---------|---------------|--------------|
| 14 | 2017-18 | 1913878548.00 | 164984859.05 |
| 15 | 2018-19 | 3167183212.00 | 237590973.69 |
| 16 | 2019-20 | 5137228372.00 | 345391355.46 |
| 17 | 2020-21 | 7675766337.00 | 561009224.37 |

Source : NSE reports

INTERPRETATION

The number of contracts awarded to NSE over the years has had a rising trend till the year 2011-2012 after which there has been a decline and again a rise. In the year 2005 the number of contracts stood at 77,017,185 followed by a constant increase over the years from 2006 to 2012, in the year 2012 the number of contracts received stood at 1,205,045,464 followed by a decline in 2013 at 1,131,467,418 and again an increase to 1,284,406,775 . On the whole we could say that the trend has been fluctuating after the year 2011-2012.

INTERPRETATION

The total turnover of NSE has been on a rise from the years 2005 to 2008 with the amounts being 2,546,982.00 , 4,824,174.00 ,7,356,242.00 ,13,090,477.93 respectively after which there has been a sudden fall in the turnover in the year 2009 the amount being 11,010,482.17 and from the year 2010 to 2014 there has again been a rise in the turnover and the highest turnover recorded in all the years has been in the year 2014 the amount being 38,209,214.81 . Overall again a fluctuating trend in the turnover of NSE.

Table No: 4 Compound Annual Growth Rate

| NSE | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|-------------------------|---------------|-------------|-------------|-------------|-------------|-------------|---------------|---------------|---------------|
| NO. of Contracts | 77,017,185 | 157,619,271 | 216,883,573 | 425,013,200 | 657,390,497 | 679,293,922 | 1,034,212,062 | 1,205,045,464 | 1,131,467,418 |
| | | 105% | 38% | 96% | 55% | 3% | 52% | 17% | -6% |
| | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | |
| | 1,284,406,775 | 18370 | 20986 | 13997 | 19138 | 31671 | 513722 | 767576 | |

| | | | | | | | | | |
|-------------|----------------|-------|-------|-------|-------|-------|------|------|--|
| | 06,775 | 41131 | 10395 | 46129 | 78548 | 83212 | 8372 | 6337 | |
| | 14 | 43% | 14% | -33% | 37% | 65% | 62% | 49% | |
| CAGR | 0.31087 | | | | | | | | |

| NSE | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|---------------------------|--------------|-------------|-------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Total Turnover | 2,546,982 | 4,824,113 | 7,356,242 | 13,090,477.93 | 11,010,482.17 | 17,663,664.69 | 29,248,221.20 | 31,349,731.91 | 31,533,004.21 |
| | | 89% | 52% | 78% | -16% | 60% | 66% | 7% | 1% |
| | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | |
| | 38,209,214.8 | 55606453.39 | 64825834.30 | 94370301.61 | 164984859.05 | 237590973.69 | 345391355.46 | 561009224.37 | |

| | | | | | | | | | |
|--------------|----------------|-----|-----|-----|-----|-----|-----|-----|--|
| | 1 | | | | | | | | |
| | 17% | 45% | 17% | 46% | 75% | 44% | 45% | 62% | |
| CA GR | 0.37347 | | | | | | | | |

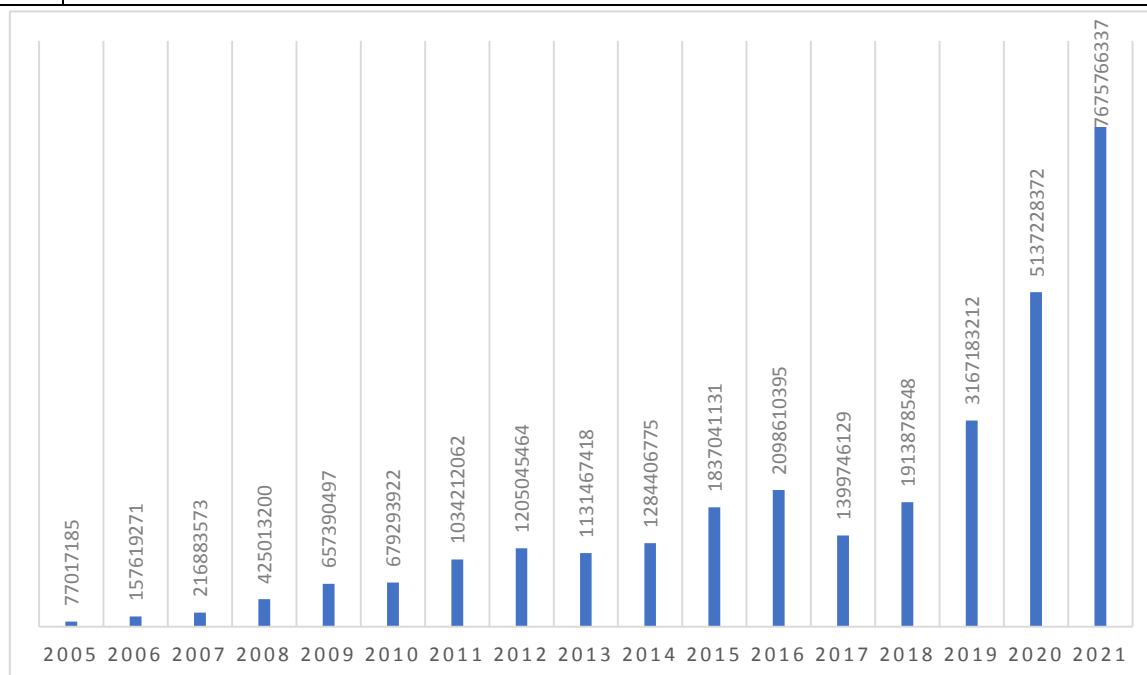
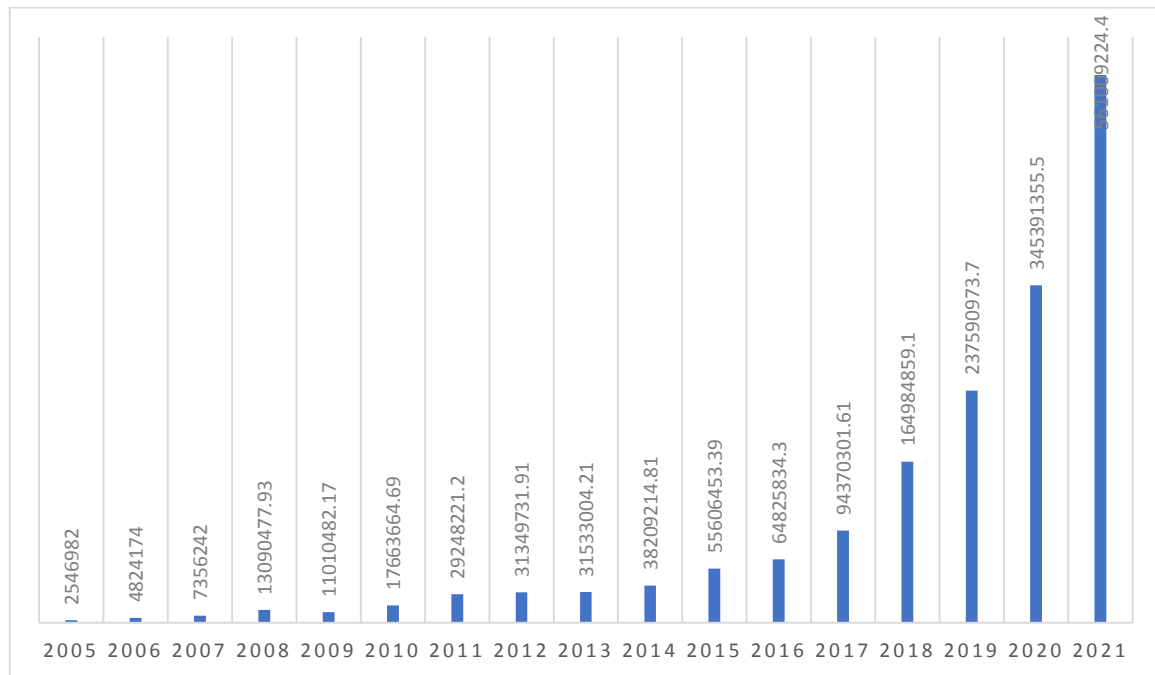


Table No: 4 Compound Annual Growth Rate



INTERPRETATION

The CAGR for the number of contracts stands at 37% , over the years from 2005 to 2014 the average annual growth rate has been fluctuating and irregular. While in the year 2006 the percentage stood at its highest with 105 in the year 2007 it can be observed that there was a huge drop in the growth rate to 38%. In the year 2008 again a rise there was a rise in the average annual growth rate to 96% . Year 2010 saw one of the lowest percentages of the average annual growth the percentage being 3 In 2011 there was a drastic increase to 52% followed by again a decrease to 17% . While in the year 2013 there was a negative growth rate of -6% . In the year 2014 the average annual growth rate stood at 14%. There is rise in year 2015 with 43% of annual growth rate and there is high fluctuation in 2017.

The CAGR for the total turnover for the years 2005 to 2014 stands at 35%, the average annual growth rate has been fluctuating and irregular. In the year 2006 the average annual growth rate stood at 89%. In 2007 there was a drop in the percentage to 52% . In 2008 again there was a rise in the percentage to 78% . Year 2009 saw a negative annual growth rate to the extent of -16%. Followed by a drastic rise in the year 2010 with an average annual growth rate to the extent of 60% . Again there was a significant decline in the years 2012 and 2013 to the extent of 7% and 1% respectively. In the year 2014 the percentage stood at 21%. Where as there is a rise in year 2018 with a average annual growth rate of 75% and followed by the fall in the year 2019 with 44% respectively.

5. FINDINGS

Evolution Of The Derivatives Market In India:-

- ✧ The overview of the evolution of the stock exchange in India shows that there are been a positive upsurge in the derivative market over the last 17 years.
- ✧ The BSE and the NSE have been the backbone of the derivative market in India.

Bombay Stock Exchange:-

- ✧ BSE is the oldest stock exchange in India but however both the number of contracts and the total turnover of the exchange have been fluctuating over the past 17 years. The total turnover and the number of contracts are less as compared to that of the NSE.
- ✧ The CAGR on the whole for both the number of contracts and the turnover seems good but the average annual growth rate has been fluctuating in an haphazard manner with a huge rise in some years and a sudden fall in some years.

National Stock Exchange:

- ✧ NSE over the past 17 years and till date manages to hold the title of largest exchange in terms of trade volume. This is evident from the data given above as the number of contracts and the total turnover have been high for the last 17 years.
- ✧ However it is to be observed that the average annual growth rate shows an inconsistent rise in the number of contracts and the amount of turnover over the past 17 years while the overall CAGR has been satisfactory the yearly growth has shown a rise in some years and a fall in the other years proving the inconsistency in the growth.

6. RECCOMENDATIONS

- ✓ The BSE needs to concentrate on increasing its contracts and turnover since its performance as compared to the NSE seems quite less.
- ✓ Increasing its turnover and contracts would not be sufficient for the BSE since it needs to concentrate on constant and rising average annual growth instead of haphazard and fluctuation average annual growth.
- ✓ The NSE has been performing comparatively well but there is always scope for further improvement.
- ✓ An attempt to have a constant and rising average annual growth would be a favorable option for the NSE.
- ✓ To have a constant and rising turnover and an increasing number of contracts both

the stock exchanges need to market and advertise the need to trade in derivatives.

✓ The traders need to be educated on the risk and return element attached to trading in derivatives.

SCOPE FOR FURTHER STUDY

The stock market in India is restricted to the BSE and NSE, but scope for further study is huge and further study can be conducted in the following areas:

- Products traded in the derivative market.
- The key players in the derivative market and their observations of the market they are trading in.
- Perceptions of the stock exchange employees to improve the overall performance of the Indian Stock Exchanges.
- The position of India's derivative market as compared to the other countries in the world.
- Investor's perception towards trading with derivatives because of its risk return element.
- How technology can be both a boon and a bane to the derivative market.

7. CONCLUSION

India is one of the most successful developing countries in terms of a vibrant market for exchange-traded derivatives. This reiterates the strengths of the modern development in India's securities markets, which are based on nationwide market access, anonymous electronic trading, and a predominant retail market. There is an increasing sense that the equity derivatives market plays a major role in shaping price discovery as well.

The BSE and NSE have been key sources in the trading of derivatives. But the overall performance of both the exchanges needs to be improved. It can be clearly seen that most traders are reluctant to trade in derivatives because of its risk factor. But we need to note that:

"To win without risk is to triumph without glory." Pierre Corneille

Derivatives are considered very risky and most people trade with derivatives only for its return. It would be nice to conclude this study with the quote given below:

"Derivatives in and of themselves are not evil. There's nothing evil about how they're traded, how they're accounted for, and how they're financed, like any other financial instrument, if done properly." James Chanos

8. REFERENCE

BOOKS

1. M.YKhan and P.K.Jain “Financial Management”, McGraw Hill (India) Private Ltd, 2013
2. S.Shajahan “Research Methods For Management”, Jaico publishing house, 2010.

E-R SOURCES

1. http://en.wikipedia.org/wiki/Bombay_Stock_Exchange
2. http://en.wikipedia.org/wiki/National_Stock_Exchange_of_India
3. <http://www.bseindia.com/>
4. <http://www.nse-india.com/>

ARTICLES

1. Suchismita Bose (2006) “The Indian Derivatives Market Revisited”; I C R A B U L L E T I N ;Money& Finance; jan-jun 2006.
2. Ashutosh Vashishtha and Satish Kumar (2010) “Development of Financial Derivatives Market in India- A Case Study”; International Research Journal of Finance and Economics; ISSN 1450-2887; Issue 37.
3. Dr. Kamlesh Gakhar and Ms. Meetu (2013) “Derivatives Market in India: Evolution, Trading Mechanism and Future Prospects”; International Journal of Marketing, Financial Services & Management Research; ISSN 2277-3622; Vol.2; No. 3.
4. Dr. Daksha Pratapsinh Chauhan (2013) “Performance Of Stock Exchanges In India” ;International Journal of Conceptions on Management and Social Sciences; ISSN: 2357 - 2787 Vol. 1; Issue. 1.
5. Ms. Shalini H and Dr. Raveendra P (2014) “A Study of Derivatives Market in India and its Current Position in Global Financial Derivatives Markets”; IOSR Journal of Economics and Finance ; e-ISSN: 2321-5933; p-ISSN: 2321- 5925; Volume 3, Issue 3.
6. Bansi Rajnikant Shah(2012) “A Comparative Study of Bombay Stock Exchange (BSE) and National Stock Exchange(NSE)” ;INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH; ISSN:2277-8179; Volume 1, Issue 7.
7. Gupta, D., & Mokshmar, P. (2018). Factors Affecting the Perception of Investors towards Equity and Derivatives in Indore city. International Journal of Research - Granthaalayah, 6(2), 274-282.
8. Gautami, D. S., & Kalyan, D. N. B. (2018). A Comparative Study on Risk & Return Analysis of Selected Stocks in India. International Journal of Management and Economics Invention, 4(05), 1730-1736.

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